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PHASE IV SAMPLING FIELD INVESTIGATION REPORT FOR OPEN BURNING/OPEN DETONATION UNIT SITE 2 NWS EARLE NJ

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TETRA TECH

Phase IV Sampling
Field Investigation Report

for

Open Burning/Open Detonation Unit (Site 2)

Naval Weapons Station Earle
Colts Neck, New Jersey

Naval Facilities Engineering Command Mid-Atlantic

Contract Number N62470-08-D-1001
Contract Task Order WE72

June 2012

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PHASE IV SAMPLING - FIELD INVESTIGATION REPORT FOR OPEN BURNING/OPEN DETONATION UNIT (SITE 2)

NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

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Naval Facilities Engineering Command Mid-Atlantic
9742 Maryland Avenue
Norfolk, Virginia 23511

Submitted by:
Tetra Tech
234 Mall Boulevard, Suite 260
King of Prussia, Pennsylvania 19406

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PREPARED UNDER DIRECTION OF:

JENNIFER LAMBERT, P.G.
PROJECT MANAGER
TETRA TECH
KING OF PRUSSIA, PENNSYLVANIA

APPROVED FOR SUBMISSION BY:

JOHN J. TREPANOWSKI, P.E.
PROGRAM MANAGER
TETRA TECH
KING OF PRUSSIA, PENNSYLVANIA

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ACRONYMS AND ABBREVIATIONS

µg/L	Micrograms per liter
^{o}C	Degrees Celsius
ATV	All-Terrain Vehicle
BEMP	Baseline Environmental Monitoring Plan
bgs	below ground surface
COC	Chain-of-custody
CTO	Contract Task Order
DO	Dissolved oxygen
DPT	Direct push technology
DQI	Data quality indicator
EOD	Explosive Ordnance Disposal
FOL	Field Operations Leader
ft	feet
FW2	Fresh Water Criteria
GWQS	Groundwater Quality Standard
HSA	Hollow stem auger
HASP	Health and Safety Plan
HMX	Cyclotetramethylenetetranitramine
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
msl	above mean sea level
NAD	North American Datum
NAVD	North American Vertical Datum
NAVFAC	Naval Facilities Engineering Command
NFESC	Naval Facilities Engineering Service Center
NJDEP	New Jersey Department of Environmental Protection
NTU	nephelometric turbidity unit
NWS	Naval Weapons Station
OB	Open Burning
OD	Open Detonation
ORNL	Oak Ridge National Laboratory
ORP	Oxidation-reduction Potential
PID	Photoionization Detector
PPE	Personal Protective Equipment
PQL	Practical Quantitation Limit

ACRONYMS AND ABBREVIATIONS (Continued)

PVC	Polyvinyl Chloride
QA	Quality assurance
QC	Quality control
R1	Round 1
R2	Round 2
RCRA	Resource Conservation and Recovery Act
RDX	Cyclotrimethylenetrinitramine
RSL	Regional Screening Level
SMCL	Secondary Maximum Contaminant Level
SOP	Standard operating procedure
SVOC	semi-volatile organic compound
TAL	Target Analyte List
Tetra Tech	Tetra Tech, Inc.
TNT	2,4,6 trinitrotoluene
TNX	hexahydro-1,3,5-trinitroso-1,3,5-triazine
USEPA	United States Environmental Protection Agency
USCS	Unified Soil Classification System
UTL	Upper Tolerance Limit
UXO	Unexploded Ordnance
VOC	Volatile organic compounds

1.0 INTRODUCTION

This Field Investigation Report describes the results of the Phase IV Environmental Monitoring at the Naval Weapons Station (NWS) Earle Open Burn/Open Detonation (OB/OD) Unit (Site 2). This report presents the field work documentation and the results of validated data for Phase IV groundwater and surface water sampling activities under the modified sampling program as detailed in the April 2003 Baseline Environmental Monitoring Plan (BEMP) for the OB/OD Unit (Tetra Tech, 2003) located NWS Earle, Colts Neck, New Jersey, as modified during the July 2011 meeting on site with the New Jersey Department of Environmental Protection (NJDEP) and the BEMP Addendum dated October 2011 (Tetra Tech, 2011). Tetra Tech, Inc. (Tetra Tech) prepared this report for the Department of the Navy, Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic under Contract Number N62470-08-D-1001 and Contract Task Order (CTO) WE72.

1.1 SITE DESCRIPTION

1.1.1 Naval Weapons Station Earle

NWS Earle is located in the central coastal region of Monmouth County, New Jersey; approximately 35 miles south of New York City and 70 miles northeast of Philadelphia (see Figure 1-1). The facility, located in Colts Neck, consists of two separate land parcels, the inland area and the waterfront area, which have a combined total surface area of approximately 10,865 acres. The inland area encompasses magazine storage, production, and industrial support facilities as well as administrative and personnel support services. The waterfront area contains barricaded rail sidings for staging ordnance material, home porting facilities, and a pier/trestle complex.

NWS Earle has treated hazardous waste munitions and explosives by OB/OD since 1974. In 1980, the OB/OD Unit became subject to Resource Conservation and Recovery Act (RCRA) regulations and has since been operating under interim status. The original RCRA Part B Permit application was submitted in November 1988. Various modifications to address NJDEP comments have been made. The most recent modifications were submitted during April 2001.

Because current usage of the OB/OD Unit for treatment of hazardous waste is very low, on April 15, 2011, NWS Earle requested withdrawal of the RCRA Subpart X permit application. The OB/OD Unit will remain in operation under delay of closure and continue to be utilized for RCRA exempt activities including training and emergency response.

1.1.2 Open Burning/Open Detonation Unit

The OB/OD Unit is located in the Explosive Ordnance Disposal (EOD) Area at NWS Earle (see Figure 1-2). The EOD Area is approximately 15.5 acres and is a shallow, open, non-vegetated, oval-shaped area surrounded by a berm ranging from approximately 2 to 10 feet (ft.) in height. It is bordered by woodlands consisting of mixed pine and deciduous forest. Surface water flow out of the EOD Area is generally limited by the berm. The primary access route to the OB/OD Unit is from the south via a developed dirt road. Two undeveloped dirt roads access the OB/OD Unit, one from the east and one from the west. The topography at the OB/OD Unit slopes gently towards the north from approximately 90 ft. above mean sea level (msl) at the bunker, located near the main (southern) entrance, to approximately 85 ft. above msl along the northern side of the bermed area. An elongated sand berm, approximately 270 ft. long and 15 ft. high, with northeast to southwest orientation, is situated in the center of the OB/OD Unit and is the dominant physical feature.

1.2 WORK PLANS

Work plans for the environmental investigations at the Site include the BEMP and subsequent modifications.

1.2.1 Baseline Environmental Monitoring Plan

In April 2003, NWS Earle submitted the BEMP to NJDEP (Tetra Tech, 2003). The BEMP outlined the overall scope of baseline environmental monitoring at the NWS Earle OB/OD Unit. The objectives of baseline monitoring were as follows:

- Establish baseline concentrations of hazardous waste and hazardous constituents in environmental media.
- Establish vertical and horizontal distributions of contaminants in soil and groundwater.
- Determine if any contaminants are migrating off site through groundwater or through surface water runoff.
- Provide information for use in the development of future monitoring requirements as permit conditions.

Three phases of baseline monitoring were presented in the BEMP. Phase I focused on soil and groundwater locations in close proximity to the OB or OD Units. Phase II sampling focused on soil and

groundwater locations surrounding the soil locations that were sampled during the Phase I monitoring. The results of Phase II groundwater monitoring were used to guide the development of a Phase III groundwater-monitoring program.

The BEMP presented the locations for biased soil, sediment, surface water, and groundwater samples at the OB/OD Unit. Additionally, biased background soil sample locations were presented to provide information on background concentrations of metals and perchlorates in similar formations as those at the OB/OD Unit.

1.2.2 Modified BEMP

1.2.2.1 Phase I Sampling

On October 21, 2003, a meeting was held at the NJDEP Trenton, New Jersey office. The objective of the October meeting was to discuss the status of the NJDEP review of the BEMP (Tetra Tech, 2003) and the Navy proposal to phase sampling at the OB/OD Unit. The proposed phased approach in the BEMP was to remain intact, with the Navy to initiate limited sampling to the extent allowed by available funding (i.e., Phase I sampling). The NJDEP and Navy achieved a consensus on the Phase I sampling locations as well as the target parameters [explosives, metals, perchlorates, and volatile organic compounds (VOCs)] at this meeting. A target date of early to mid-December 2003 was established for the Phase I sampling.

On November 20, 2003, a pre-bid site visit for the drillers was conducted. Also in attendance at the pre-bid site visit were representatives from NWS Earle, NAVFAC, NJDEP, and Tetra Tech. The Phase I soil sampling locations established at the October 21, 2003 meeting were finalized and used as the basis to determine the first set of BEMP sampling locations.

1.2.2.2 Phase II Sampling

On July 14 and September 14, 2005, meetings were held at the NJDEP Trenton, New Jersey office. The objective of these meetings was to discuss the Navy's proposal for Phase II sampling at the OB/OD Unit. The NJDEP and Navy achieved a consensus on the Phase II sampling locations as well as the target parameters [dioxins/furans, explosives including perchlorate, metals, VOCs, and semivolatile organic compounds (SVOCs)] at this meeting.

1.2.2.3 Phase III Sampling

On December 9, 2009, a meeting was held at the NJDEP Trenton, New Jersey office. The objective of this meeting was to discuss the Navy's proposal for Phase III sampling at the OB/OD Unit. The NJDEP

and Navy achieved a consensus on the Phase III sampling locations as well as the target parameters: explosives [2, 4, 6 trinitrotoluene (TNT), cyclotrimethylenetrinitramine (RDX)]; perchlorate; and select total metals [aluminum, antimony, arsenic, beryllium, cadmium, chromium, iron, lead, manganese, and thallium] at this meeting.

1.2.2.4 Phase IV Sampling

In response to NJDEP's comments on the Phase III Sampling – Field Investigation Report and a site inspection during July 2011, the BEMP was modified to address additional monitoring well installations and groundwater and surface water sampling and analyses. The Navy agreed to construct a cluster of three monitoring wells (shallow, intermediate, and deep) down gradient of the OB/OD Unit near the base boundary and a cluster of three monitoring wells near existing monitoring well 02MW01. The newly installed wells, along with surface water samples down gradient of the OB/OD Unit, would be sampled and analyzed for explosive compound and degradation products, perchlorate, and select total metals (antimony, arsenic, chromium, copper, iron, lead, and zinc).

1.3 FIELD INVESTIGATIONS

An in-depth discussion of field investigation activities is presented in Section 2.0. The following is an overview of these activities.

1.3.1 Phase I Sampling

The Phase I field activities began in December 2003; however, due to adverse weather conditions, the work was postponed. Field activities took place from February 3 through February 12, 2004. All work was performed in accordance with the procedures and methodologies described in the BEMP (Tetra Tech, 2003), as well as modifications to the plan as agreed upon during meetings between the Navy, NJDEP, and Tetra Tech personnel on October 21, 2003 and November 20, 2003.

1.3.2 Phase II Sampling

The Phase II field activities were conducted in November and December 2005, and January 2006. All work was performed in accordance with the procedures and methodologies described in the BEMP (Tetra Tech, 2003), as well as modifications to the plan as agreed upon during meetings between the Navy, NJDEP, and Tetra Tech personnel on July 14 and September 14, 2005.

1.3.3 Phase III Sampling

The Phase III field activities were conducted from January 19 through February 2010 [Round 1 ([R1)], and May 2010 [Round 2 (R2)]. The installation of the permanent monitoring wells was conducted from January 19 through 29, 2010. The R1 surface water and groundwater sampling was conducted in two mobilizations (February 8 and 9, 2010, and February 22 through 24, 2010) due to inclement weather. The R2 surface water and groundwater sampling was conducted from May 3 through 7, 2010.

All work was performed in accordance with the procedures and methodologies described in the BEMP (Tetra Tech, 2003), as well as modifications to the plan as agreed upon during meetings between the Navy, NJDEP, and Tetra Tech personnel on July 14 and September 14, 2005.

1.3.4 Phase IV Sampling

The Phase IV field activities were conducted from December 19, 2011 through February 14, 2012. Installation and development of monitoring well clusters near existing monitoring well 02MW01 and near the base boundary, down gradient of the OB/OD Unit, occurred from December 19 through December 23, 2011. The surface water and groundwater sampling was conducted January 17 through January 19, 2012. The synoptic water level round and well survey were conducted on February 14, 2012.

All work was performed in accordance with the procedures and methodologies described in the BEMP (Tetra Tech, 2003), as well as the BEMP Addendum (Tetra Tech, 2011).

1.4 DISCUSSION OF PREVIOUS SAMPLING RESULTS

This section summarizes the Phase I through Phase III sampling results. A detailed report regarding the sample results is presented in the Phase III Sampling – Field Investigation Report (Tetra Tech, 2010).

1.4.1 Soil Sampling

Phase I soil samples collected via direct push technology (DPT) were collected at four primary depths; 1) approximately 0 to 0.5 ft. below ground surface (bgs); 2) between the boring mid-depth and the water table; 3) immediately above the water table; and 4) when possible, immediately below the water table. The detection of explosives in soil samples was limited in distribution in the OB/OD Unit with the majority of the detections occurring within or adjacent to those areas that support the OB and OD operations. The three most frequently detected explosives in soil were TNT, RDX, and perchlorate. Metals concentrations in soil were detected at levels less than applicable screening criterion, except for one soil sample containing an estimated concentration of thallium that was marginally above the screening criterion.

1.4.2 Groundwater Sampling

Initial groundwater samples were collected via temporary wells installed by DPT, at three depth ranges including at the water table, approximately 20 feet below the water table, and approximately 40 feet below the water table. The samples contained total (unfiltered) metals concentrations in one or more samples greater than applicable screening levels for aluminum, antimony, arsenic, beryllium, cadmium, chromium, iron, lead, manganese, and thallium. Most DPT samples had elevated concentrations of suspended solids. Explosive compounds were also detected in DPT groundwater samples. The distribution of the DPT locations with detectable explosives concentrations was focused within the OB and OD operational areas and to adjacent down gradient areas to the north. The three more frequently detected explosives in groundwater were cyclotetramethylenetetranitramine (HMX), RDX, and perchlorate. Only RDX exceeded NJDEP criterion.

As part of the Phase III investigation, two rounds of groundwater samples were collected from all existing monitoring wells, which ranged in depth from 15 feet to 55 feet bgs. The groundwater analytical results indicated that the highest concentrations of explosives are present near the OB/OD Unit and that the concentrations decreased along the prevailing groundwater flow directions. The data indicated that shallow groundwater is discharging to surface water, as seen by detectable concentrations of RDX and perchlorate in surface water down gradient of the OB/OD Unit. The Phase III groundwater sampling and analyses detected numerous exceedances of metals concentrations in the groundwater beneath the OB/OD Unit. However, there is no definitive pattern associating the exceedances with OB/OD treatment activities. Comparison of maximum metals concentrations to the 95 percent upper tolerance limit (UTL) for the NWS Earle Facility indicated that although project screening criteria were exceeded, the concentrations of metals in groundwater was within background levels; and no wells located outside of the OB/OD Unit (e.g. the cleared area of the range) had concentrations in excess of facility-wide background concentrations as defined by the 95% upper tolerance limit (Table 31-4) of the 1996 Remedial Investigation Report (Brown & Root Environmental).

1.4.3 Sediment Sampling

Sediment samples were collected from 0 to 1 foot bgs and 1 to 2 feet bgs within the OB/OD Unit co-located with surface water samples collected from standing water within the bermed area. Explosive compounds and perchlorate were not detected in sediment samples. SVOCs and metals concentrations in the sediment samples collected at the OB/OD Unit were less than applicable screening levels. Analytical sediment samples were not collected during the Phase III events.

1.4.4 Surface Water Sampling

Surface water samples were collected in two locations. In the first two phases of work, surface water samples were collected in standing water within the OB/OD berm and contained total (unfiltered) metals concentrations in one or more samples greater than applicable screening levels for aluminum, arsenic, cadmium, iron, and lead. In Phase III, surface water samples were collected from the observed surface water leaving the OB/OD Unit. RDX and perchlorate were detected in low concentrations (near the detection limit), and both lead and arsenic were detected above screening levels in one sample location each.

As part of the Phase III sampling, surface water was collected from streams near the down gradient property boundary. RDX and perchlorate were detected in low concentrations near the detection limit in surface water samples down gradient of the OB/OD Unit. Concentrations of RDX ranged from 0.19 micrograms per liter (µg/L) to 0.28 µg/L. Concentrations of perchlorate ranged from 0.14 J µg/L to 0.16 J µg/L. There are no project screening criteria for RDX and perchlorate in surface water, but these concentrations are less than the groundwater screening criteria of 0.5 µg/L for RDX and 5 µg/L for perchlorate. RDX and perchlorate concentrations at the surface water sample locations are consistent between R1 and R2.

Concentrations of lead and arsenic exceeded project screening criteria in several of the surface water samples. The concentrations of lead and arsenic in surface water were consistent with their concentrations detected in groundwater in the OB/OD Unit.

Based on the results of Phases I through III, the Phase IV sampling effort was proposed to determine:

- The horizontal and vertical distribution of explosives compounds and metals down gradient of the OB/OD Unit.
- If groundwater is bypassing the stream near the base boundary.
- Whether metal concentrations in the groundwater are from an up-gradient source.

2.0 FIELD INVESTIGATIONS

This section presents sampling activities, procedures, and documentation utilized during the Phase IV field operations performed in 2011 to 2012 at the NWS Earle OB/OD Unit (Site 2).

2.1 OVERVIEW

2.1.1 Phase IV Field Investigation

The Phase IV investigation began December 19, 2011. Field activities included:

- Installation and development of six new permanent groundwater monitoring wells.
- Abandonment of one monitoring well, 02MW01.
- Repair and redevelopment of an existing monitoring well (02MW06C well casing was shortened by removing damaged section).
- Sampling groundwater from six newly installed monitoring wells and two surface water locations.
- New wells locations survey.

Well repair, installation, and development began on December 19, 2011 and completed on December 28, 2011. Groundwater and surface water sampling began on January 17, 2012 and completed on January 19, 2012. The well survey and synoptic water level round were conducted on February 14, 2012. All work was performed in accordance with the procedures and methodologies described in the BEMP (Tetra Tech, 2003), as well as the BEMP Addendum (Tetra Tech, 2011). Copies of all field forms, records, and field logbooks associated with the field investigation are provided in Appendices A through F of this document.

2.1.2 One-Mile Well Search

Tetra Tech requested a one-mile radius well search from NJDEP Bureau of Water Systems and Well Permitting in late September 2011, which was received by the department on October 3, 2011. The department provided the well records and electronic files of the well locations in November 2011. Tetra Tech's well search request is provided in Appendix A.1. The well records received are provided in Appendix A.2; the plotted locations of those wells are provided in Appendix A.3.

2.2 MOBILIZATION/DEMOBILIZATION

2.2.1 Phase IV Mobilization

Following approval of the BEMP Addendum by NWS Earle and NJDEP, Tetra Tech began mobilization activities. All field team members reviewed the approved BEMP and Addendum, relevant sections of the associated appendices, and the Health and Safety Plan (HASP) prior to the start of field activities. In addition, the Field Operations Leader (FOL) held field-team orientation meetings to ensure that personnel were familiar with the scope of the field activities.

2.2.2 Permitting

The FOL obtained weekly Hot Work Permits from the NWS Earle Fire Department. The drilling contractor (Talon Drilling) obtained well drilling permits for the new monitoring wells from NJDEP.

2.3 METHODOLOGIES AND PROCEDURES

2.3.1 Drilling

Talon Drilling completed all drilling activities with a track mounted Acker Soil XLS All Terrain Vehicle (ATV) Drill Rig. A hollow stem auger (HSA) and split spoon sampler were used to collect soil for lithologic logging and monitoring well installation. The driller's daily job reports are included in Appendix B.1.

All drilling and monitoring well installation locations within the OB/OD Unit required unexploded ordnance (UXO) clearance to a depth of 6 ft. bgs. The UXO clearance was conducted by a Tetra Tech UXO Technician. Every 2 ft. during drilling, the drilling auger was withdrawn from the borehole and a downhole magnetometer was used to check for magnetic anomalies, which represent potential UXO. No UXO was encountered during the field investigation.

2.3.2 Borehole and Sample Logging

A Tetra Tech geologist maintained a log for each boring. At a minimum, the boring logs contain the following information:

- Boring identification.
- Name of geologist logging the boring.
- Name of drilling contractor.
- Sample numbers and types.

- Sample depths.
- Sample recovery and sample intervals.
- Soil density or cohesiveness.
- Soil color.
- Unified Soil Classification System (USCS) and Burmister's System of Soil Identification material descriptions.
- Locations of borings.
- Drilling and/or well construction problems or deviations from the BEMP.
- Date(s) of drilling.
- Screening instrument readings.

In addition, depths of changes in lithology, sample moisture observations, depth to water, organic vapor meter photoionization detector (PID) readings, drilling methods, and total depths of each borehole were included on each log, as well as any other pertinent observations. All borings were drilled and logged in accordance with the appropriate Tetra Tech Standard Operating Procedures (SOPs) and NJDEP requirements. Logs for the borings drilled are included in Appendix B.2. One boring log was completed for each well cluster. Based on the proximity of the monitoring wells minimal lithologic change is expected between the overlapping intervals of the A (shallow, approximately 15 ft. bgs), B (intermediate, approximately 35 ft. bgs), or C (deep, approximately 55 ft. bgs) borings.

As a result of the heaving sands, continuous logging was not possible for all monitoring well locations. Heaving sand is loose or unconsolidated sand in a confined water-bearing zone or aquifer, which tends to flow up into the drill stem when the unit confining the aquifer is breached by the drill bit. The aquifer is under enough pressure to cause upward flow of water into the drill stem with enough velocity to overcome the weight of the sand, creating a "quick-sand" condition, carrying sand into the drill stem. This is usually associated with hollow stem auger drilling and is avoided by using a closed or plugged drill bit, allowing the sand unit under pressure to be bypassed. This technique allows the target depth of the boring to be reached but does not allow continuous logging of the soil in the intervals bypassed.

2.3.3 Monitoring Well Installation

Six permanent polyvinyl chloride (PVC) monitoring wells were installed utilizing an HSA drilling rig equipped with a 4.25-inch HSA and a roller bit. Clusters of 2-inch diameter monitoring wells were installed with 10-ft. long. 0.01-inch slot screens at three depths (5 to 15 ft. bgs, 25 to 35 ft. bgs, and 45 to 55 ft. bgs). Table 2-1 contains construction details for existing (02MW02 through 02MW12) and newly installed wells clusters 02MW01 and 02MW13. Wells construction logs for the newly installed monitoring wells are provided in Appendix B.3.

2.3.4 Synoptic Water Level

A synoptic water level measurement was collected from each monitoring well on February 14, 2012. Table 2-2 contains the groundwater elevation data and Figure 2-1 shows the potentiometric surface contours. The synoptic water-level measurements were collected within a short time period (less than 3 hours). Measurements were taken with an electric water-level indicator using the top of the riser as the reference point for determining depths to water in each well. Water-level measurements were recorded to the nearest 0.01 ft. on the groundwater-level measurement form provided in Appendix C. The groundwater potentiometric contours are similar to those generated during Phase III. Groundwater flow is generally to the north across most of the OB/OD Unit. The observed groundwater level patterns were similar to historical patterns. The groundwater flow direction is generally northward; on the eastern side of the Site groundwater flows in a more northeasterly direction towards small, unnamed surface water drainage in the wetland area northeast of the Site. The general horizontal groundwater flow gradient is approximately 0.005. The groundwater elevations measured in the monitoring well clusters indicate a downward flow gradient of approximately 0.004 to 0.007.

2.4 SAMPLING OPERATIONS

This section discusses the sampling methodology for all sampling activities performed at NWS Earle OB/OD Unit during the fieldwork events. A summary of analyses is included in Table 2-3.

2.4.1 Soil Sampling

No soil samples were collected for laboratory analyses during Phase IV. Soil was collected in 2-ft. intervals with a split spoon sampler for lithologic logging at the OB/OD Unit. All soil samples obtained from the boreholes were screened with a PID immediately upon opening. All PID readings were recorded on the boring logs. The soil borings were installed and logged in accordance Tetra Tech SOPs and NJDEP requirements. Boring logs can be found in Appendix B.2.

2.4.2 Groundwater Sampling

Prior to sampling, the newly installed monitoring wells were developed and purged via low-flow sampling techniques. Well development records are provided in Appendix B.4. Groundwater samples were collected using the low-flow purge method until field parameters stabilized. Groundwater-sample log sheets are included in Appendix D.1. Appendix D.2 provides the low-flow purge data sheets and Appendix D.3 provides the QA Sample data sheet. The groundwater samples were subject to analyses as presented in Table 2-3. All samples had turbidity below 10 Nephelometric turbidity units (NTU); none of the samples were filtered.

2.4.3 Surface Water Sampling

Two surface water samples were collected during the Phase IV sampling. The one surface water sample (02SW101) was collected from an unnamed stream along the facility boundary north of the OB/OD Unit. The other surface water sample (02SW102) was collected from water in a wetland area southwest of monitoring well cluster 02MW13. Surface water sample locations were based on visual observation of surface water features leaving the OB/OD Unit and accessibility of the locations. Sampling was accomplished in accordance with the general procedures found in Section 6.8.2.2.3 of the NJDEP Field Sampling Procedures Manual dated August 2005. Surface water sample log sheets are included in Appendix D.4. The surface water samples were subject to analyses as presented in Table 2-3. Figure 2-1 shows the surface water sample locations.

2.5 FIELD SAMPLE DOCUMENTATION

Sample documentation consisted of the completion of boring logs, matrix-specific sample log sheets, sample bottle tags, chain-of-custody (COC) records, equipment calibration log sheets, field logbooks, and health and safety documentation. Field documentation was completed as discussed in the BEMP (Tetra Tech, 2003) and Tetra Tech SOP 6-154. Boring logs were completed as discussed in Section 2.3.2 and can be found in Appendix B.2 of this document.

The groundwater and surface water sample log sheets contain information such as sample location and identification, container requirements and analyses to be performed, sample type, time, date, and method of sample collection. Any unusual circumstances encountered during sample collection were noted on the form. Sample log sheets can be found in Appendices D.1, D.3, and D.4 of this document. COC records (Appendix D.5) were used to track each sample from collection to receipt and analysis at the laboratory. Equipment calibration log sheets are discussed in Section 2.8.1 and can be found in Appendix D.6 of this document. A copy of the field logbook is provided in Appendix E.

2.6 SAMPLE HANDLING, PACKAGING, AND SHIPPING

Sample handling activities included field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, sample custody, and maintaining samples at the appropriate storage temperature. Sampling containers were sealed in Ziploc® plastic bags, and glass containers were wrapped in plastic bubble wrap to minimize the possibility of breakage during transport. The sample containers were then placed into a cooler lined with a large plastic garbage bag. The cooler was packed with a cushioning material to prevent container breakage. Samples were cooled immediately after collection with ice placed over the sample containers. The plastic garbage bag was sealed with a knot, and the COC form was sealed in a Ziploc® bag and taped to the inside of the cooler lid. A signed

and dated custody seal was applied to each end of the cooler and then covered with strapping tape to provide a tamper-evident seal. A Federal Express® airbill was applied to the shipping cooler. Tetra Tech maintained custody of the samples until they were relinquished to Federal Express®. The Federal Express® tracking number (airbill number) was recorded on the COC form, and the sender's copy of the airbill was maintained for shipment tracking, if needed. All samples were shipped to the laboratory for overnight delivery. The procedures for sample preservation, shipping, and handling can be found in Section 3.8 of the BEMP (Tetra Tech, 2003). The procedure used for sample labeling can be found in Section 3.7 of the BEMP (Tetra Tech, 2003) and Tetra Tech SOP 5-154. The procedures used to maintain sample custody requirements are described in Section 3.9 of the BEMP (Tetra Tech, 2003).

2.7 QUALITY CONTROL SAMPLES

Quality assurance/quality control (QA/QC) samples were collected during sampling activities to monitor both field and laboratory procedures. These procedures are detailed in Section 3.12 of the BEMP (Tetra Tech, 2003). QA/QC samples included field duplicates, field blanks, equipment rinsate blanks, trip blanks, and temperature blanks. These types of QA/QC samples are briefly described below:

- Field Blanks - A field blank was obtained by sampling the analyte-free water and/or potable water source used for decontamination of sampling equipment. The field blank was used to determine whether the analyte-free water or potable water used for sampling equipment decontamination procedures contributed to sample contamination. One source water blank was collected during this field investigation from distilled water purchased for use in equipment decontamination.

- Field Duplicates - Field duplicates were collected by filling the bottleware for each analyte in turn in accordance with the procedures outlined in SOP 10-154. Field duplicates were obtained during a single act of sampling. Field duplicates were collected at a frequency of one per 20 samples. Field duplicates are not applicable for field analyses. The field duplicates were analyzed for the same parameters in the laboratory and were labeled to make the identity of the duplicate unknown to the laboratory.

- Equipment Rinsate Blanks - Equipment rinsate blanks were obtained under representative field conditions by running analyte-free water through sample collection equipment (e.g., submersible pump) after decontamination and then placing it in the appropriate sample containers for analysis. Equipment rinsate blanks were used to assess the effectiveness of decontamination procedures. Equipment rinsate blanks were collected at a frequency of one per day of sampling, per sampling device/instrument. For pre-cleaned, dedicated, and/or disposable equipment (i.e., disposable polyethylene trowels, etc.), one rinsate blank was collected and analyzed at a frequency of one per lot or “batch blank” for a specific equipment type. During the Phase IV sampling an equipment rinsate

blank was used to assess the cleanliness of the purge/sampling pump. Rinsate blanks are not applicable for field analyses.

- Temperature blanks were used to determine if samples were adequately cooled during shipment. Temperature blanks consisted of analyte-free water poured into a clean sample container at the site or supplied by the fixed-base laboratory. One temperature blank per cooler was submitted to the laboratory, and the temperature was checked upon receipt at the laboratory. Laboratory data package documentation (Appendix F) indicates that, upon receipt, the samples temperatures were within the required temperature range.

2.8 FIELD INSTRUMENT MEASUREMENTS

Field measurements taken and recorded during field sampling operations included water temperature, pH, specific conductance, oxidation-reduction potential (ORP), dissolved oxygen (DO), turbidity, and groundwater level measurements. The water quality summary field parameters are provided in Table 2-4. All field measurements were taken by certified analytical laboratory personnel. During the Phase IV fieldwork, Chemtech was responsible for field measurements. Ambient air measurements were collected by the Tetra Tech geologist during borings. These measurements included monitoring organic vapors in the breathing zone during intrusive field investigation activities, and monitoring organic vapors emanating from site sources such as soil samples and well casings. Several instruments were used during field activities to obtain these measurements, including the following:

- PID
- Horiba U22, Multi-Parameter Water Quality Meter
- M-scope water level meter

2.8.1 Equipment Calibration

Instruments used in the field were calibrated daily prior to use, according to manufacturer requirements and in accordance with the Quality Assurance Plan of Chemtech (water quality meter) or in accordance with applicable SOPs (PID). Equipment calibration logs for both field events can be found in Appendix D.6.

2.8.2 Field Investigation Preventive Maintenance Procedures/Schedule

The field instruments for this project included the PID, UXO Magnetometer, Horiba water quality meter, and water level indicator. The specific preventive maintenance procedures followed for field equipment were those recommended by the equipment manufacturers and the Chemtech Quality Assurance Plan.

2.9 SURVEYING

The horizontal locations of the surface water samples and the locations and elevations of the newly installed monitoring wells were surveyed under the supervision of a New Jersey-licensed land surveyor. Horizontal control was established using the North American Datum of 1983 (NAD 83). The North American Vertical Datum of 1988 (NAVD 88) was used to establish the elevations of the tops of the well casings and the elevation of ground level at the base of the wells. Copies of the survey data can be found in Appendix G.

2.10 DECONTAMINATION

The nondedicated, nondisposable equipment involved in field sampling activities was decontaminated before beginning work, during drilling and sampling activities, and at the completion of investigative activities in accordance with SOP 7-154, included in Appendix C of the BEMP. This equipment included drilling rigs, down-hole tools, augers, and groundwater sampling equipment.

2.10.1 Major Equipment

All down-hole equipment, including down-hole drilling tools, were steam cleaned with high-pressure hot water prior to beginning work, between borings, and at the conclusion of each shift of drilling at a centralized decontamination pad.

2.10.2 Sampling Equipment

During the groundwater sampling, the only non-dedicated (reusable) equipment used for collecting groundwater samples was the Grundfos® Redi Flo pump and Horiba® multi-parameter water quality meter. This equipment was decontaminated after each use in accordance with SOP 7-154, included in Appendix C of the BEMP.

2.11 INVESTIGATION-DERIVED WASTE HANDLING

The field investigations generated several types of potentially contaminated wastes including personal protective equipment (PPE), decontamination fluids from the drill rig, sampling equipment decontamination fluids, and soil cuttings. Management of each residue was performed as follows.

- **PPE** - All PPE was double bagged and placed in NWS Earle trash receptacles (i.e., dumpsters).

- **Drill and Sampling Equipment Decontamination Fluids** - All equipment decontamination fluids were collected, monitored with the PID, and discharged onto the ground surface at the OB/OD Unit.

- **Waste Cuttings from Drilling Activities** - For each boring, soil cuttings produced were scanned for VOCs using a PID. All soils had VOC readings at or below background levels and were spread on the ground in the immediate vicinity of the boring.

2.12 SITE MANAGEMENT AND FACILITY SUPPORT

The FOL was designated as the lead in coordinating all day-to-day activities during the investigations. The FOL was responsible for ensuring that all field team members (including subcontractors) were familiar with the approved BEMP and the site-specific HASP. Additionally, the FOL was responsible for all sampling operations, QA/QC, field documentation requirements, and field change orders. The FOL reported to the Project Manager on a daily basis regarding the status of fieldwork.

All site preparation, mobilization/demobilization, and sampling activities were coordinated through NWS Earle personnel.

2.13 RECORDKEEPING

A bound record book was maintained for the field activity in accordance with SOP 6-154 and served as the overall record of field activities. Information recorded daily in the Site Logbook included daily field activities, weather conditions, identity of and arrival and departure times of personnel, management issues, etc. A copy of the field logbook is provided in Appendix E.

The FOL was responsible for the maintenance and security of all field records. Field records, COC forms, sample log sheets, field forms, logbooks, and notebooks have been docketed and incorporated in the central project file.

3.0 PHASE IV DATA

This section presents the results of the Phase IV groundwater and surface water sampling conducted in January 2012 at the NWS Earle OB/OD Unit. The groundwater in monitoring wells 02MW01A, 02MW01B, 02MW01C, 02MW013A, 02MW013B, and 02MW013C along with surface water at two locations (02SW101 and 02SW102) down gradient of the OB/OD Unit was sampled and analyzed at a New Jersey-certified laboratory. The analytes were explosive compounds, perchlorate and Target Analyte List (TAL) metals.

3.1 ANALYTICAL METHODS

Chemical analysis of select explosives (SW-846 8330) and perchlorate (SW-846 6850) were performed by TestAmerica Laboratories of West Sacramento, California. Select TAL metals (unfiltered) (SW-846 6020) analysis was performed by Test America Laboratories of Pittsburgh, Pennsylvania. Both Laboratories were Naval Facilities Engineering Service Center (NFESC) and NJDEP approved for their respective analytes. Table 2-3 summarizes the samples and analyses.

3.2 PROJECT SCREENING CRITERIA

The project screening criteria are presented in Table 3-1. The project screening criteria for groundwater were selected from the July 27, 2011 NJDEP Ground Water Quality Standards (GWQS) if available, and from the November 2011 Oak Ridge National Laboratory (ORNL) Regional Screening Level (RSL) if not. The project screening criteria for surface water are the July 2011 NJDEP Surface Water Quality Standards.

3.3 DATA VALIDATION

Based on the data validation, the Phase IV data are of acceptable quality to make decisions on the path forward for the NWS Earle OB/OD Unit. The following summarizes the evaluation for the individual data quality indicators (DQIs) for the analytical results.

The data review processes were used to determine whether analytical laboratory data were of acceptable technical quality for use in decision-making. The data for the analyses performed were reviewed with reference to the NJDEP document titled “Quality Assurance Data Validation of Analytical Deliverables for Inorganics (based on USEPA SW-846 Methods SOP5.A.16)” (5/2002); United States Environmental Protection Agency (USEPA) Region II explosives residue SOP HW-16 (September, 2006); SW-846 Method 6850 Perchlorate in water, soils, and solid wastes using high performance liquid chromatography/electrospray ionization/mass spectrometry (HPLC/ESI/MS or HPLC/ESOI/MS/MS)

(January 2007); and the DoD document entitled "Quality Systems Manual (QSM) for environmental laboratories" (January 2006). The data was qualified and is acceptable for use in the decision-making process.

The review began with data validation, which is a comparison of DQIs to prescribed acceptance criteria. DQIs include data completeness, holding times, initial/continuing calibrations, laboratory method and field blank results, surrogate spike recoveries, internal standard recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, field duplicate results, compound identification, compound quantitation, and detection limits. The DQIs used are measures to assess the bias and precision of the analytical calibrations and sample analyses. The output of this review was a set of alphabetic flags such as "U," "J," "R," or combinations thereof, that may have been assigned to individual results based on the validation effort. These flags were used to infer the general quality of the data. Also evaluated were the measures of data completeness, holding times, calibrations, field duplicate results sensitivity, comparability, and representativeness. Data validation reports, validated analytical results, and laboratory data packages are provided in Appendix F. Appendix F is on a CD due to the size of the files.

3.4 RESULTS

Phase IV sampling results for groundwater and surface water and comparison of these results to the project screening criteria are discussed in this section. The project screening criteria are presented in Table 3-1. Table 3-2 presents a summary of the analytical results for the groundwater and surface water samples collected in January 2012. Appendix F contains the complete analytical data set for these samples. Table 3-3 lists only the positively detected analytes. Sample locations are shown on Figure 2-1.

3.4.1 Soil

No soil samples were analyzed for chemical analytes. However, soil logging data collected during the installation of the Phase IV groundwater monitoring wells indicated that the soil from 0 to 55 ft. bgs (approximately) is composed primarily of a loose silty sand mixture. Flowing or heaving sands were encountered in both locations at depth (starting at 42 ft. at 02MW01 and 36 ft. at 02MW13). The sands are generally olive to light brown with indications of iron staining in all locations. Logs for the borings drilled for this investigation are included in Appendix B.2.

3.4.2 Groundwater

3.4.2.1 Explosives and Perchlorate Data

Only two explosives, 1,3,5-trinitrobenzene (02MW01A) and hexahydro-1,3,5-trinitroso-1,3,5-triazine (TNX) (02MW01C), were positively detected in the groundwater samples. The concentration of 1,3,5-trinitrobenzene did not exceed its respective NJDEP GWQS. A standard is not listed for TNX which is a degradation product of RDX. Perchlorate was detected at estimated concentrations well below its NJDEP GWQS in monitoring wells 02MW01A and 02MW01B. No explosives compounds or perchlorate were detected down gradient of the OB/OD Unit at monitoring well cluster 02MW13.

3.4.2.2 Metals Data

Metals were generally detected in the monitoring wells at concentrations below their respective NJDEP GWQS. The exception was iron, which was detected in all the monitoring wells samples at concentrations ranging from 590 µg/L to 2,500 µg/L, above the GWQS of 300 µg/L.

Comparison of maximum metals concentrations to the 95 percent UTL developed in the Remedial Investigation Report (BRE, 1996) for the NWS Earle Facility indicates that although there are exceedances of project screening criteria, the concentrations of iron in groundwater are within facility-wide background levels (95% UTL of 6,670 µg/L). It is concluded that the iron concentrations detected in the groundwater are likely naturally occurring. The conclusion is supported by the statement that, “Iron in samples of ground water from Monmouth County ranges from 0 to 33 ppm. Only 9 of 76 samples contained 0.3 ppm or less.” (Ground-Water Resources of Monmouth County, New Jersey, Special Report No. 23, by L. A. Jablonski, US Geological Survey, 1968, p.34). The conclusion is also supported by the statement, found in the “New Jersey Ambient Ground Water Quality Monitoring Network: Status of Shallow Ground-Water Quality, 1999-2004”, New Jersey Geological Survey Information Circular, “In southern New Jersey, aluminum and iron appear to be mostly natural in origin.”

3.4.3 Surface Water

3.4.3.1 Explosives and Perchlorate Data

RDX was the only explosive detected and only in one surface water sample (02SW101). The RDX concentration, 0.27 µg/L, was below the GWQS of 0.61 µg/L. Perchlorate was also detected only in 02SW101 at an estimated concentration of 0.2J µg/L, well below the GWQS of 5 µg/L. NJDEP surface water criteria are not available for these compounds.

3.4.3.2 Metals Data

Metals were generally detected in the surface water samples at concentrations below their respective Fresh Water Criteria (FW2). The exceptions were arsenic and lead. Arsenic was detected at a concentration of 1.3 µg/L in 02SW102, exceeding the NJDEP Fresh Water Criteria (0.017 µg/L). This concentration is below its groundwater criterion. Lead was detected at a concentration of 12 µg/L in 02SW102, exceeding both the GWQS (5 µg/L) and the NJDEP Fresh Water Criteria (5 µg/L).

In the report "New Jersey Ambient Ground Water Quality Monitoring Network: Status of Shallow Ground-Water Quality, 1999-2004", New Jersey Geological Survey Information Circular, arsenic is addressed by the following statement, "The elevated arsenic concentrations are likely related to an unusually high degree of iron-oxide dissolution, although the ultimate source of the arsenic is unknown." The lead concentration in 02SW102 is similar to concentrations detected in previous rounds.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

This section presents the conclusions for groundwater action items resulting from the groundwater and surface water monitoring during Phase IV at the NWS Earle OB/OD Unit and the one-mile well search.

4.1.1 Analytical Results

The Phase I sampling (February 2004), the Phase II sampling (November – December 2005 and January 2006), and the Phase III sampling (February and May 2010) investigations provided the hydrologic and water quality information necessary to plan and implement a focused groundwater and surface water sampling program (Phase IV). The following presents the conclusions based on the Phase IV data.

Hydrogeologic and Hydrologic Data: Local groundwater generally flows from the south through the silty sand soil of the OB/OD Unit and continues to the north towards surface water discharge locations north and northeast of the OB/OD Unit at a horizontal gradient of approximately 0.005. The groundwater elevations measured in the monitoring well clusters indicate a downward flow gradient of approximately 0.004 to 0.007.

Explosives and Perchlorate Data: The analytical results from the previous investigation phases indicated that the highest concentrations of explosives are present near the OB/OD Unit. The concentrations decrease along the prevailing groundwater flow directions and decrease with depth in the saturated zone. The Phase III analytical results indicated that detected concentrations of explosives and perchlorate, and exceedances of the GWQS are generally limited to the shallow saturated zone (5 ft. to 15 ft. bgs) within the OB/OD Unit. Detected concentrations of explosives and perchlorate in the intermediate groundwater interval (15 ft. to 35 ft. bgs) appear to be limited to the central active portion, the OB/OD Unit. The downward flow gradient suggests that explosives may move vertically deeper into the aquifer; however, the Phase III analytical results did not indicate any exceedance of the GWQS for explosives or perchlorate in the intermediate zone well 02MW09B or in monitoring well 02MW03 (total depth of 24 ft.). The Phase III groundwater analytical results did not indicate any exceedance of the GWQS in the deeper saturated zone (35 ft. to 55 ft. bgs).

The Phase IV groundwater analytical results for the new up gradient well cluster 02MW01 and new down gradient well cluster 02MW13 indicated few detections of explosives and perchlorate and no exceedance of project screening criteria.

The groundwater analytical results from the Phase III and Phase IV sampling events indicate that the down gradient edge of the contaminant plume in the shallow zone is between monitoring well clusters 02MW09 and 02MW03. In the intermediate zone, the edge of the plume does not extend past monitoring well 02MW09B.

Up gradient detection of perchlorate, only in estimated low concentrations (below the GWQS), in monitoring wells 02MW01A and 02MW01B suggests that the plume does not extend beyond that well cluster.

The Phase IV analytical data indicate that shallow groundwater is discharging to surface water, as seen by detection of RDX (below the GWQS) in one down gradient surface water sample (02SW101). The surface water locations have had consistently low detections (below drinking water standards) when detected at all.

Metals Data: The Phase III analytical results indicated that there were numerous exceedances of metals throughout the OB/OD Unit (Tetra Tech, 2010). However, there was no definitive pattern associating the exceedances with OB/OD treatment activities. Comparison of maximum metals concentrations to the 95 percent UTL for the NWS Earle Facility indicates that although there are exceedances of project screening criteria, the concentrations of metals in groundwater are within background levels; and no wells, which are located outside of the OB/OD Unit, had concentrations in excess of facility-wide background concentrations.

The Phase IV analytical results indicate that the only exceedance of the GWQS was iron in the groundwater and surface water samples, and lead in one surface water sample. As explained in Section 3.4.2.2, the literature documents elevated iron concentrations as a regional condition. The lead exceedance has a similar concentration to previous surface water results, which also exceeded the GWQS and surface water standards.

The Phase IV analytical results indicate that the arsenic concentration in surface water sample 02SW102 exceeded the NJDEP Fresh Water Criteria, but not the GWQS. Arsenic was not detected in the down gradient surface water samples during the Phase III sampling (Tetra Tech, 2010).

4.1.2 <u>One-Mile Radius Well Search</u>

Tetra Tech requested a one-mile radius well search from NJDEP Bureau of Water Systems and Well Permitting in late September 2011, which was received by the department on October 3, 2011. The department provided the well records and electronic files of the well locations in November 2011. Tetra Tech's well search request is in Appendix A.1. The well records received are in Appendix A.2; the locations of those wells are in Appendix A.3, Figure 1.

The well search indicated that within a one-mile radius of the center of the OB/OD Unit there are:

- 25 borings/piezometers;
- 34 monitoring wells;
- 10 domestic wells;
- 3 irrigation wells; and
- 1 geothermal well.

Given the northward groundwater flow direction, the potential down gradient wells are:

- 1 geothermal well;
- 2 irrigation wells;
- 9 domestic wells; and
- 15 monitoring wells (including the new wells in the 02MW13 cluster).

Given the groundwater analytical results, the contaminant plume has not reached the 02MW13 cluster that are the closest down gradient wells. Allowing for plume diffusion and dispersion, none of the other down gradient wells are likely to be affected by the explosives/perchlorate/metals plume (see Figure 1 in Appendix A.3).

4.2 RECOMMENDATIONS

Based on the results of the Phases I through IV investigations, the horizontal and vertical extent of the explosives/perchlorate/metals plume exceeding NJDEP GWQS have been defined. The very low upgradient concentrations of perchlorate and explosive compounds and the data qualification for these results suggest that additional monitoring is needed to confirm these results.

NJDEP commented on the Phase III report in a memorandum dated July 19, 2011. The memorandum is included in Appendix H. The memorandum suggested future work including quarterly monitoring, monthly well inspections, and protection of monitoring wells by adding sandbags and raising the inner casings to avoid site runoff. These suggestions were taken into account with the analytical data from this investigation to recommend that:

- The monitoring wells at the OB/OD Unit should be sampled quarterly for four quarters to identify any trends in contaminant distribution up gradient and down gradient of the OB/OD unit. These wells include the 02MW01 and 02MW13 clusters. After further discussion with NJDEP, the following additional wells should be included in the four quarterly sampling events based on previous elevated chromium results: 02MW06B, 02MW06C, 02MW07, 02MW09B, and 02MW10C.

- Groundwater analytes should include the explosives compounds, perchlorate and metals (lead, arsenic, antimony, copper, zinc, iron, and chromium) analyzed for in the previous investigations.

- The monitoring wells should be inspected monthly for damage due to site operations. Any damage observed, such as punctured casings or missing lids, should be repaired. This inspection may be conducted by NWS Earle personnel if groundwater sampling is not scheduled for that month.

- The flush-mount monitoring wells within the center of the EOD range (02MW11A, B, C and 02MW12B) are more likely to be impacted by surface water runoff. Therefore, abandonment of these four wells is recommended.

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TABLES

TABLE 2-1

WELL CONSTRUCTION SUMMARY
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE
COLTS NECK, NEW JERSEY

Well Number	Ground Surface Elevation (ft amsl)	Top of Riser Elevation (ft amsl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Screen Length (ft)	Top of Screen Elevation (ft amsl)	Bottom of Screen Elevation (ft amsl)	Well Diameter (in)	Date Installed
02MW01*	101.081	101.26	30	15 - 30	15	86.08	71.08	4	02/27/86
02MW01A	102.48	104.76	19	9 - 19	10	93.48	83.48	2	12/22/11
02MW01B	102.01	104.2	35	25 - 35	10	77.01	67.01	2	12/21/11
02MW01C	101.68	103.67	55	45 - 55	10	56.68	46.68	2	12/21/11
02MW02	93.118	94.76	20	5 - 20	15	88.12	73.12	4	02/28/86
02MW03	87.643	88.48	24	4 - 24	20	83.64	63.64	4	02/21/86
02MW04	87.532	88.72	19	4 - 19	15	83.53	68.53	4	02/27/86
02MW05	91.521	93.49	19.5	4 - 19	15	87.52	72.52	4	01/25/91
02MW06	91.706	93.8	20	5 - 20	15	86.71	71.71	4	01/23/91
02MW06B	91.263	93.08	35	25 - 35	10	66.26	56.26	2	01/20/10
02MW06C	91.624	94	55	45 - 55	10	46.62	36.62	2	01/20/10
02MW07	91.697	93.65	20.5	5 - 20	15	86.70	71.70	4	01/25/91
02MW08A	92.202	94.17	5	5 - 15	10	87.20	77.20	2	1/21/2010
02MW08B	91.99	94.04	35	25 - 35	10	66.99	56.99	2	1/21/2010
02MW08C	91.606	93.39	55	45 - 55	10	46.61	36.61	2	1/21/2010
02MW09A	88.143	89.9	5	5 - 15	10	83.14	73.14	2	1/22/2010
02MW09B	88.414	90.34	34.7	24.7 - 34.7	10	63.71	53.71	2	1/22/2010
02MW09C	88.347	89.81	55.5	45.5 - 55.5	10	42.85	32.85	2	1/26/2010
02MW10A	88.295	90.18	15	5 - 15	10	83.30	73.30	2	1/25/2010
02MW10B	88.316	90.29	35	25 - 35	10	63.32	53.32	2	1/25/2010
02MW10C	88.08	90.35	55	45 - 55	10	43.08	33.08	2	1/27/2010
02MW11A	93.03	92.67	15	5 - 15	10	88.03	78.03	2	1/26/2010
02MW11B	92.94	92.53	35	25 - 35	10	67.94	57.94	2	1/26/2010
02MW11C	92.84	92.36	55	45 - 55	10	47.84	37.84	2	1/28/2010
02MW12B	93.63	93.28	35	25 - 35	10	68.63	58.63	2	1/20/2010
02MW13A	79.46	82.09	14	4 - 14	10	75.46	65.46	2	12/23/2011
02MW13B	79.35	81.68	35	25 - 35	10	54.35	44.35	2	12/28/2011
02MW13C	79.09	81.63	55	45 - 55	10	34.09	24.09	2	12/23/2011

amsl = Above Mean Sea Level
bgs = Below Ground Surface
ft = Feet
in = Inches
*well abandoned on 12/19/11

TABLE 2-2

GROUNDWATER ELEVATIONS
PHASE IV SAMPLING
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE
COLTS NECK, NEW JERSEY

Well Number	Top of Riser Elevation (ft amsl)	Depth to Water (ft tor)	Groundwater Elevation (ft amsl)
02MW01A	104.76	15.41	89.35
02MW01B	104.2	14.9	89.3
02MW01C	103.67	14.41	89.26
02MW02	94.76	8.08	86.68
02MW03	88.48	4.71	83.77
02MW04	88.72	2.83	85.89
02MW05	93.49	7.92	85.57
02MW06	93.8	7.42	86.38
02MW06B	93.08	6.76	86.32
02MW06C	93.54	7.23	86.31
02MW07	93.65	7.58	86.07
02MW08A	94.17	8.31	85.86
02MW08B	94.04	8.15	85.89
02MW08C	93.39	7.53	85.86
02MW09A	89.9	4.92	84.98
02MW09B	90.34	5.26	85.08
02MW09C	89.81	4.6	85.21
02MW10A	90.18	4.19	85.99
02MW10B	90.29	5	85.29
02MW10C	90.35	5.1	85.25
02MW11A	92.67	5.62	87.05
02MW11B	92.53	5.66	86.87
02MW11C	92.36	5.51	86.85
02MW12B	93.28	6.81	86.47
02MW13A	82.09	4.99	77.1
02MW13B	81.68	4.64	77.04
02MW13C	81.63	4.7	76.93

All elevations are referenced to NAVD 88.
amsl = Above Mean Sea level
ft = Feet
tor - Top of PVC Riser

TABLE 2-3

SUMMARY OF PHASE IV WATER SAMPLES
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE
COLTS NECK, NEW JERSEY

Location	Sample Number	Sample Date	Depth (ft bgs)	Analyses			
				Explosives SW-846 8330	TAL Metals SW-846 Method 6020		Perchlorate SW-846 6850
Groundwater					(Total)	(Dissolved)	
02MW01A	02MW01A	1/18/2012	9 -- 19	✓	✓	NA	✓
02MW01B	02MW01B	1/17/2012	25 -- 35	✓	✓	NA	✓
02MW01C	02MW01C	1/17/2012	45 -- 55	✓	✓	NA	✓
02MW13A	02MW13A	1/19/2012	4 -- 14	✓	✓	NA	✓
02MW13B	02MW13B	1/18/2012	25 -- 35	✓	✓	NA	✓
02MW13C	02MW13C	1/18/2012	45 -- 55	✓	✓	NA	✓
Surface Water							
02SW101	02SW101	2/23/2010	NA	✓	✓	NA	✓
02SW102	02SW102	2/23/2010	NA	✓	✓	NA	✓

bgs = below ground surface
ft = feet
NA = Not Analyzed
TAL = Target Analyte List.

TABLE 2-4

WATER QUALITY SUMMARY
FIELD PARAMETERS
PHASE IV SAMPLING
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE
COLTS NECK, NEW JERSEY

Sample Location	Date	pH	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
02SW01	1/19/2012	5.52	0.061	3.14	1.2	8.97	105
02SW02	1/19/2012	4.31	0.055	1.85	2.35	5.02	129
02MW01A	1/17/2012	4.72	0.056	14.16	1.0	9.31	313
02MW01B	1/17/2012	5.39	0.068	13.82	8.86	6.63	230
02MW01C	1/17/2012	4.72	0.158	12.89	6.15	1.25	286
02MW13A	1/18/2012	4.16	0.052	7.33	6.02	0.0	135
02MW13B	1/18/2012	5.31	0.077	11.99	5.97	0.7	204
02MW13C	1/18/2012	6.47	0.143	11.5	8.63	0.0	104

°C = Degrees Celsius
mg/L = milligram per liter
mS/cm = microSiemens per centimeter
mV = millivolt
NTU = nephelometric turbidity units

TABLE 3-1

CHEMICALS OF CONCERN IN GROUNDWATER AND PROJECT SCREENING CRITERIA
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE
COLTS NECK, NEW JERSEY

	Chemicals of Concern[1]	CAS Number	Method	NJDEP Groundwater Remediation Standards		ORNL Regional Screening Level (RSL)		NJDEP - Surface Water Quality Criteria for Toxic Substances (µg/L)
				Specific Ground Water Quality Criteria (µg/L)	Interim Ground Water Quality Criteria (µg/L)	Tap water (µg/L)	MCL (µg/L)	Human Health (µg/L)
Explosives	**2,4,6-Trinitrotoluene (TNT)**	118-96-7	SW-846 8330 / 8330A	NA	**1**	2.2	NA	NA
	1,3,5-Trinitrobenzene	99-35-4		NA	NA	**460**	NA	NA
	1,3-Dinitrobenzene	99-65-0		NA	NA	**1.5**	NA	NA
	2,4-Dinitrotoluene	121-14-2		0.05 (mixture)	NA	**0.2**	NA	**0.11 (hc)**
	2,6-Dinitrotoluene	606-20-2			NA	**15**	NA	NA
	2-Amino-4,6-dinitrotoluene	35572-78-2		NA	NA	**30**	NA	NA
	4-Amino-2,6-dinitrotoluene	19406-51-0		NA	NA	**30**	NA	NA
	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4		NA	**0.5[2]**	0.61	NA	NA
	1,3,5-Trinitroso-1,3,5-hexahydrotriazine (TNX)	13980-04-6		NA	NA	NA	NA	NA
	1-Nitroso-3,5-dinitro-1,3,5-hexahydrotriazine (MNX)	5755-27-1		NA	NA	NA	NA	NA
	Perchlorate	014797-73-0	SW-846 331	NA	**5**	11	15	NA
Metals	Antimony	007440-36-0		**6**	NA	6	6	**5.6**
	Arsenic	7440-38-2		**3**	NA	0.05	10	**0.017**
	Chromium (Total)	7440-47-3		**70**	NA	NA	100	**92**
	Copper	7440-50-8		**1300**	NA	620	1300[4]	**1300**
	Iron	7439-89-6		**300**	NA	11,000	300[3]	NA
	Lead	7439-92-1		**5**	NA	NA	15[4]	5
	Zinc	9029-97-4		**2000**	NA	4,700	5000[3]	**7400**

(hc) = Human health carcinogen
mg/kg = milligrams per kilogram
NA = Not Available
µg/l = micrograms per liter

Notes:
Shaded cells indicated the parameter criterion selected for preliminary screening of environmental data.
1. Bold Chemicals indicate primary COCs and *italic* compounds are secondary degradation products.
2. The Interim Groundwater Quality Standard (0.3 µg/L) is less than the Practical Quantitation Level (PQL) of 0.5 µg/L which is the numerical standard to be applied for each constituent in Class II-A
3. MCL for zinc and iron based on secondary criteria (SMCL)
4. MCL for copper and lead are the MCLG

References

NJDEP - New Jersey Groundwater Quality Standards (µg/L), downloaded March 2012
http://www.nj.gov/dep/standards/groundwater.pdf
Higher of PQL and groundwater quality criterion
NJDEP - Interim Ground Water Quality Criteria (µg/L), downloaded December 2009
http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm
Higher of PQL and groundwater quality criterion
NJDEP - NJDEP - Surface Water Quality Criteria for Toxic Substances (µg/L), downloaded March 2012
http://www.nj.gov/dep/rules/rules/njac7_9b.pdf
ORNL Regional Screening Level (RSL) (µg/L), April 2009
http://www.epa.gov/region09/superfund/prg/index.html

TABLE 3-2

SUMMARY OF ANALYTICAL RESULTS
PHASE IV SAMPLING
SITE 2 OPEN BURN/OPEN DETONATION UNIT
NWS EARLE, COLTS NECK, NEW JERSEY

Sample ID:	**02MW01A-20120118**		**02MW01B-20120117**		**02MW01C-20120117**		**02MW13A-20120119**		**02MW13A-20120119-D**		**02MW13B-20120118**		**02MW13C-20120118**	
Sample Date:	**01/18/12**		**01/17/12**		**01/17/12**		**01/19/12**		**01/19/12**		**01/18/12**		**01/18/12**	
Duplicate:									**02MW13A-20120119**					
EXPLOSIVES	**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**	
1,3,5-Trinitrobenzene	0.034	NJ	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
1,3-Dinitrobenzene	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
2,4,6-Trinitrotoluene	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
2,4-Dinitrotoluene	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
2,6-Dinitrotoluene	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
2-Amino-4,6-dinitrotoluene	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
4-Amino-2,6-dinitrotoluene	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
MNX	1	U	1	U	1	U	1	U	1	U	1	U	1	U
RDX	0.052	U	0.05	U	0.05	U	0.051	U	0.05	U	0.051	U	0.05	U
TNX	0.15	U	0.15	U	0.22	NJ	0.15	U	0.15	U	0.15	U	0.15	U
INORGANICS	**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**	
Antimony	0.9	U	0.9	U	0.9	U	0.9	U	1.4	J	0.9	U	0.9	U
Arsenic	0.5	U	0.5	U	0.5	U	0.54	J	0.78	J	0.5	U	0.5	U
Chromium	18		26		11		7.8	BJ	7.6	BJ	5.3		5.6	
Copper	13		3.7		12		1.3	BJ	1.3	BJ	0.6	J	0.6	J
Iron	870		1400		1300		2500		2400		590		1000	
Lead	1.3		0.59	J	2		1		0.99	J	0.38	J	0.41	J
Zinc	37	J	15	J	48	J	31	J	31	J	6.9	J	3.6	J
OTHER	**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**	
Perchlorate	0.1	J	0.12	J	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U

TABLE 3-2

SUMMARY OF ANALYTICAL RESULTS
PHASE IV SAMPLING
SITE 2 OPEN BURN/OPEN DETONATION UNIT
NWS EARLE, COLTS NECK, NEW JERSEY

Sample ID:	**02SW101-20120119**		**02SW102-20120119**		**02FB01-20120119**		**02RB01-20120119**	
Sample Date:	**01/19/12**		**01/19/12**		**01/19/12**		**01/19/12**	
Duplicate:								
EXPLOSIVES	**ug/L**		**ug/L**		**ug/L**		**ug/L**	
1,3,5-Trinitrobenzene	0.05	U	0.051	U	0.05	J	0.053	U
1,3-Dinitrobenzene	0.05	U	0.051	U	0.051	U	0.053	U
2,4,6-Trinitrotoluene	0.05	U	0.051	U	0.051	U	0.053	U
2,4-Dinitrotoluene	0.05	U	0.051	U	0.051	U	0.053	U
2,6-Dinitrotoluene	0.05	U	0.051	U	0.051	U	0.053	U
2-Amino-4,6-dinitrotoluene	0.1	U	0.1	U	0.1	U	0.11	U
4-Amino-2,6-dinitrotoluene	0.05	U	0.051	U	0.051	U	0.053	U
MNX	1	U	1	U	1	U	1.1	U
RDX	0.27		0.051	U	0.051	U	0.053	U
TNX	0.15	U	0.15	U	0.15	U	0.16	U
INORGANICS	**ug/L**		**ug/L**		**ug/L**		**ug/L**	
Antimony	0.9	U	1.3	J	0.9	U	0.9	U
Arsenic	0.5	U	1.3		0.5	U	0.5	U
Chromium	4.3	BJ	5.7	BJ	1.3	J	1.4	J
Copper	1.1	BU	3.3	BJ	0.39	J	0.27	J
Iron	470		2600		20	U	14	J
Lead	1		12		0.3	U	0.3	U
Zinc	9.1	J	24	J	2	U	2	U
OTHER	**ug/L**		**ug/L**		**ug/L**		**ug/L**	
Perchlorate	0.2	J	0.25	U	0.25	U	0.25	U

Data Qualifiers:
BJ -- Positive result reported at less than CRQL (estimated value). Laboratory reported same compound in associated blank.
BU -- Positive result reported considered negated due to similar concentration of the same compound in associated blank.
J -- Value is considered estimated due to exceedance of technical quality control criteria or because result is less than the Contract Required Quantitation Limit (CRQL).
NJ -- Positive result is considered tentatively identified and estimated due to exceedance of technical quality control criteria.
U -- Value is a non-detected result as reported by the laboratory.
NA -- No result is available/applicable for this parameter in this sample.

Database source file: H:\EARLE\SITE 2\SITE2.DBF data retrieved on: 03/13/12

TABLE 3-3

SUMMARY OF POSITIVE DETECTIONS
PHASE IV SAMPLING
SITE 2 - OPEN BURN/OPEN DETONATION UNIT
NWS EARLE, COLTS NECK, NEW JERSEY

	GROUNDWATER															SURFACE WATER				
Location:	**NJDEP**	**02MW01A**		**02MW01B**		**02MW01C**		**02MW13A**		**02MW13A-D**		**02MW13B**		**02MW13C**		**NJDEP**	**02SW101**		**02SW102**	
Sample Date:	**GWQS**	**01/18/12**		**01/17/12**		**01/17/12**		**01/19/12**		**01/19/12**		**01/18/12**		**01/18/12**		**SWQC**	**01/19/12**		**01/19/12**	
Duplicate:										**02MW13A**										
UNSPECIFIED FRACTION		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**			**ug/L**		**ug/L**	
1,3,5-Trinitrobenzene	460(SL)	0.034	NJ																	
RDX	0.5*																0.27			
TNX	NA					0.22	NJ													
INORGANICS		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**			**ug/L**		**ug/L**	
Antimony	6									1.4	J					5.6			1.3	J
Arsenic	3							0.54	J	0.78	J					0.17			1.3	
Chromium	70	18		26		11		7.8	BJ	7.6	BJ	5.3		5.6		92	4.3	BJ	5.7	BJ
Copper	1300	13		3.7		12		1.3	BJ	1.3	BJ	0.6	J	0.6	J	1300			3.3	BJ
Iron	300	870		1400		1300		2500		2400		590		1000			470		2600	
Lead	5	1.3		0.59	J	2		1		0.99	J	0.38	J	0.41	J	5	1		12	
Zinc	2000	37	J	15	J	48	J	31	J	31	J	6.9	J	3.6	J	7400	9.1	J	24	J
PESTICIDES/PCBS		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**		**ug/L**			**ug/L**		**ug/L**	
Perchlorate	5	0.1	J	0.12	J												0.2	J		

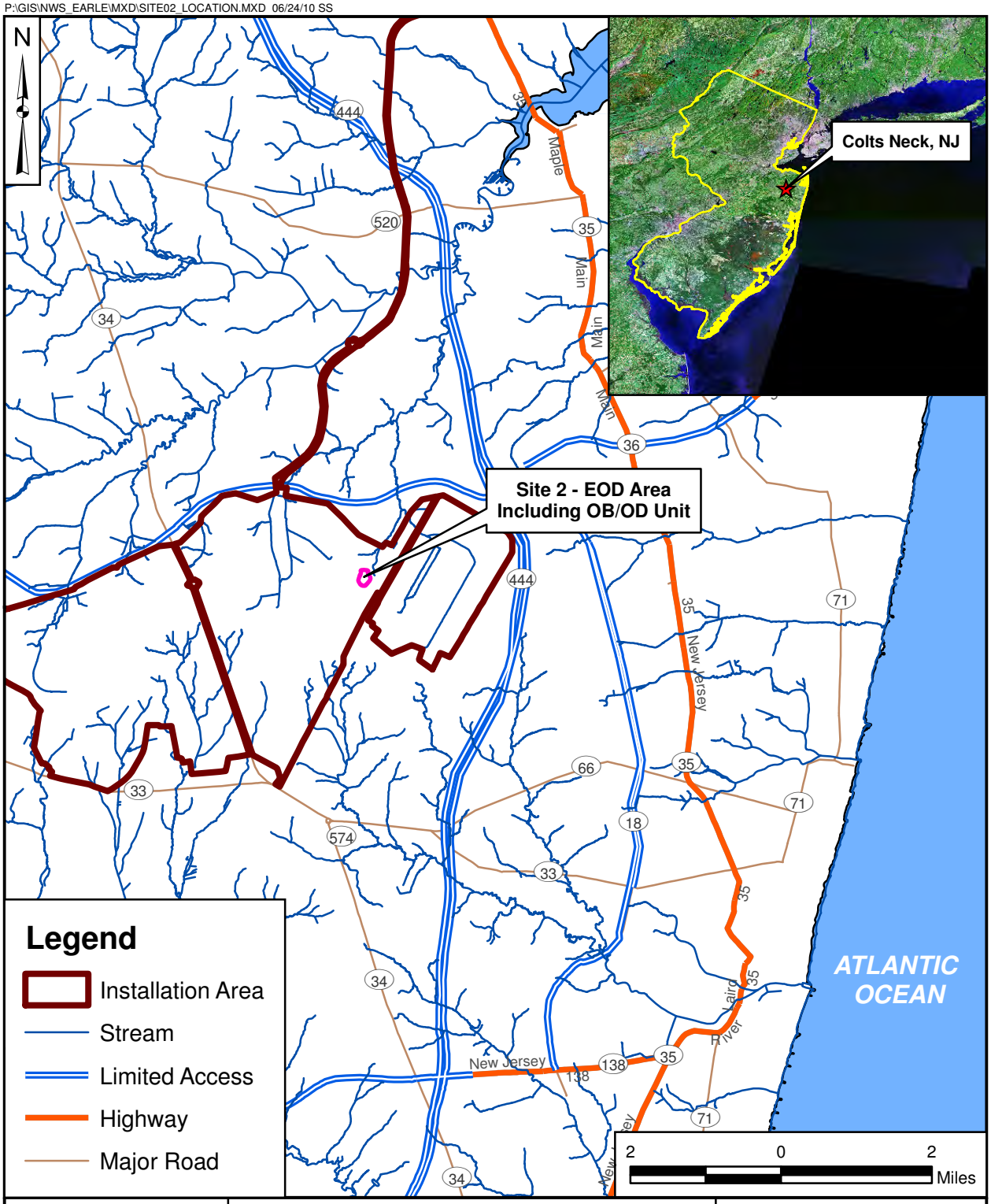
Data Qualifiers:
BJ -- Positive result reported at less than CRQL (estimated value). Laboratory reported same compound in associated blank.
J -- Value is considered estimated due to exceedance of technical quality control criteria or because result is less than the Contract Required Quantitation Limit (CRQL).
NJ -- Positive result is considered tentatively identified and estimated due to exceedance of technical quality control criteria.
(Blank value) -- Result is non-detected. Detection limits are omitted for clarity.
NA -- No result is available/applicable for this parameter in this sample.

Shading indicates exceedance of criteria
NJDEP SWQC -- New Jersey Surface Water Quality Criteria (human health), N.J.A.C 7:9C, April 2011. http://www.nj.gov/dep/rules/rules/njac7_9b.pdf
NJDEP GWQS -- New Jersey Groundwater Quality Standards, N.J.A.C 7:9C, July 2011. http://www.nj.gov/dep/standards/groundwater.pdf
SL -- Regions 3, 6, and 9 Risk-based Screening Levels, November 2011. http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm
* -- Interim Groundwater Quality Criteria; value is the highest of the PQL or the interim standards

Database source file: H:\EARLE\SITE 2\SITE2.DBF data retrieved on: 03/13/12

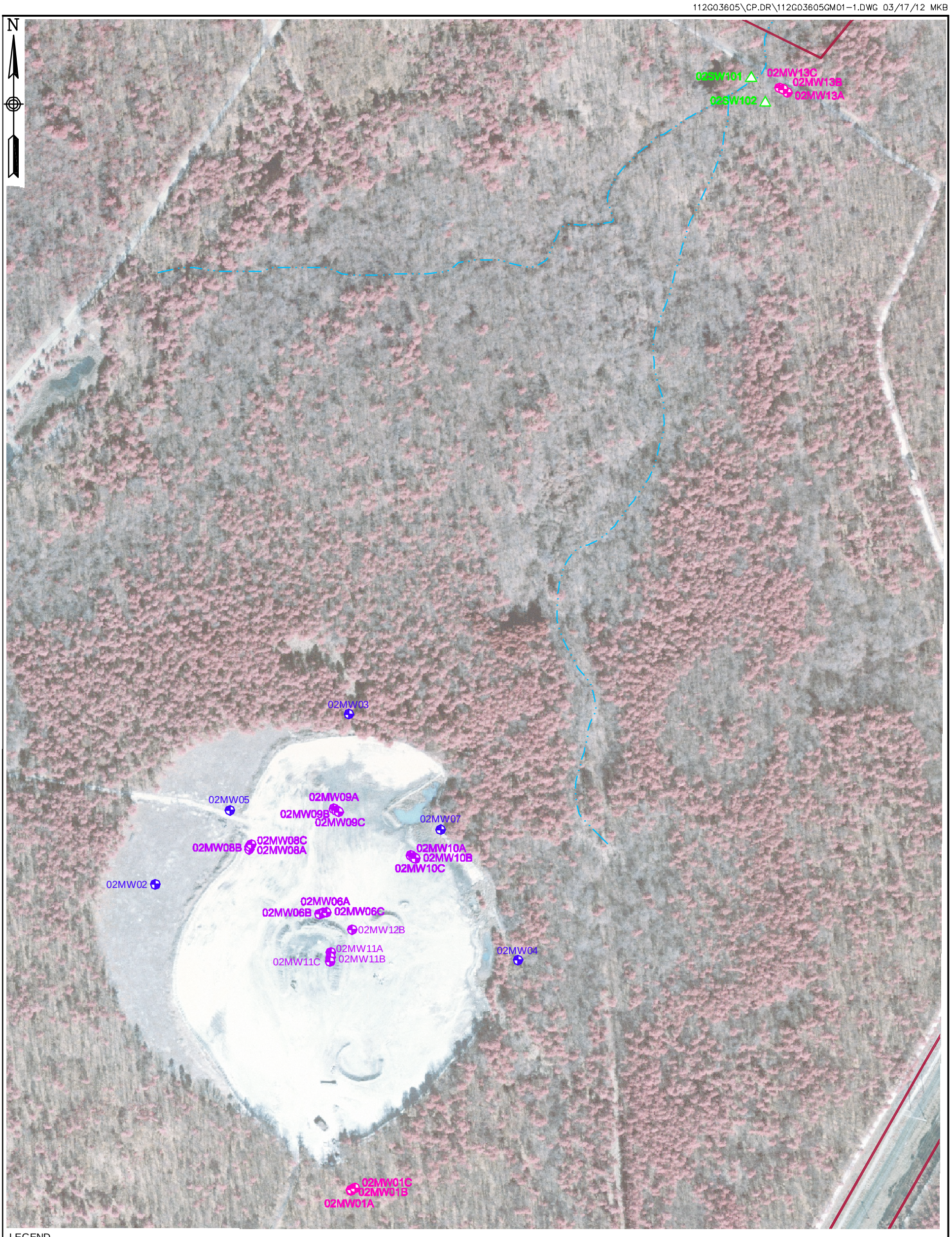
FIGURES

P:\GIS\NWS_EARLE\MXD\SITE02_LOCATION.MXD 06/24/10 SS



DRAWN BY T. WHEATON	DATE 06/18/10	TETRA TECH	CONTRACT NUMBER CTO 0009
CHECKED BY V. PLACHY	DATE 06/23/10	SITE LOCATION SITE 2 - OPEN BURNING OPEN DETONATION UNIT NAVAL WEAPONS STATION EARLE COLTS NECK, NEW JERSEY	APPROVED BY ___ DATE ___
REVISED BY ___	DATE ___		APPROVED BY ___ DATE ___
SCALE AS NOTED			FIGURE NO. FIGURE 1-1 / REV 0

112G03605\CP.DR\112G03605GM01-1.DWG 03/17/12 MKB



LEGEND

- SURFACE WATER SAMPLE LOCATION
- PHASE IV WELL LOCATION (INSTALLED 2011)
- EXISTING WELL (INSTALLED 1986-1991)
- PHASE III WELLS (INSTALLED 2010)
- A — SHALLOW WELL (5 TO 15-20 FEET, MSL)
- B — INTERMEDIATE WELL (25 TO 35 FEET, MSL)
- C — DEEP WELL (45 TO 55 FEET, MSL)
- INSTALLATION BOUNDARY
- STREAM

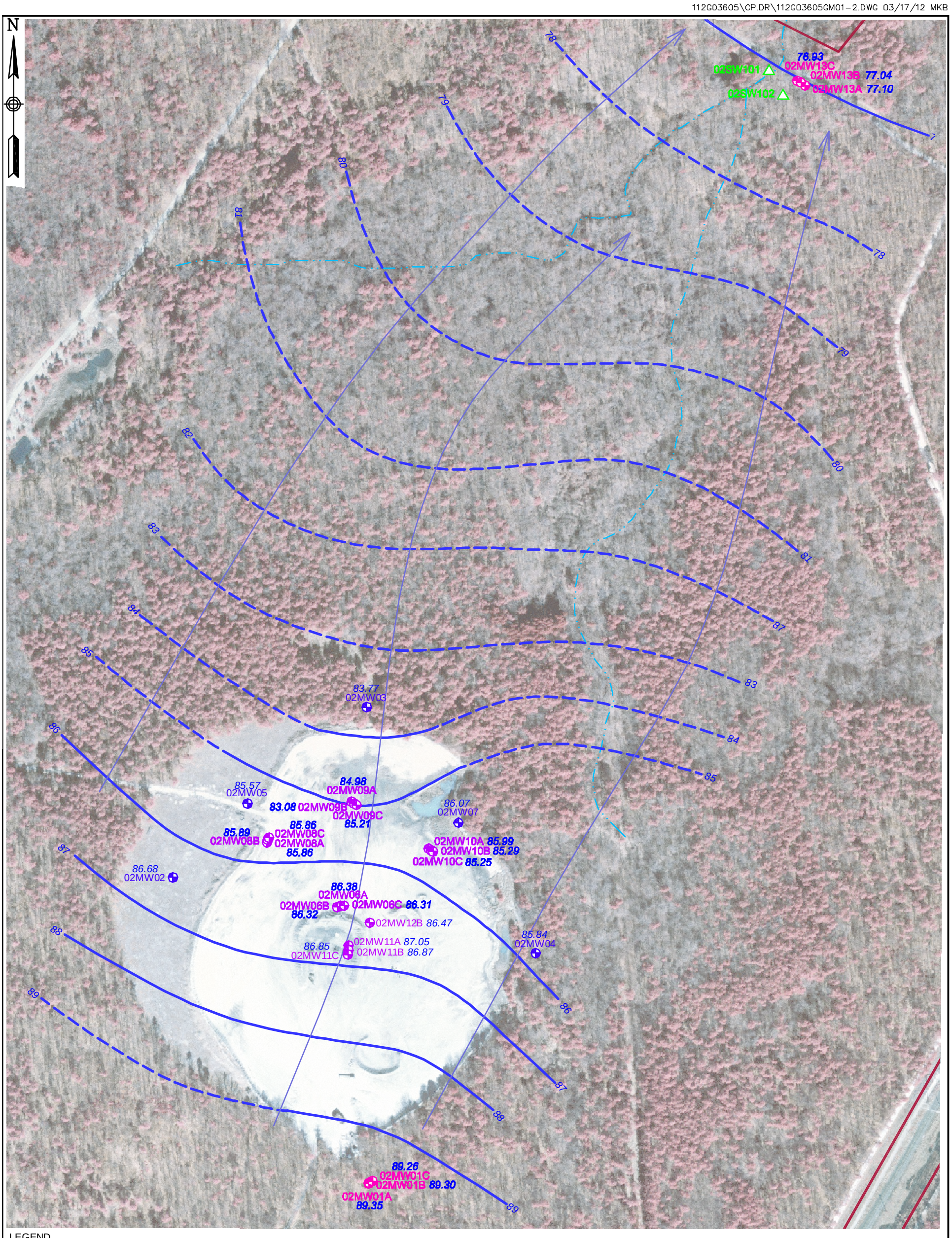
0 240 480
SCALE IN FEET

TETRA TECH

SITE LAYOUT
SITE 2
OPEN BURNING/OPEN DETONATION UNIT
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

FILE	SCALE
112G03605GM01-1	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 1-2	0 / 03/17/12

112G03605\CP.DR\112G03605GM01-2.DWG 03/17/12 MKB



LEGEND

- SURFACE WATER SAMPLE LOCATION
- PHASE IV WELL LOCATION (INSTALLED 2011)
- EXISTING WELL (INSTALLED 1986-1991)
- PHASE III WELLS (INSTALLED 2010)
- A SHALLOW WELL (5 TO 15-20 FEET, MSL)
- B INTERMEDIATE WELL (25 TO 35 FEET, MSL)
- C DEEP WELL (45 TO 55 FEET, MSL)
- INSTALLATION BOUNDARY
- STREAM

- 83.77 GROUNDWATER ELEVATION (FEET, MSL)
- 84 GROUNDWATER ELEVATION CONTOUR (FEET, MSL) (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

0 240 480
SCALE IN FEET

TETRA TECH

GROUNDWATER ELEVATION CONTOURS
FEBRUARY 14, 2012
SITE 2
OPEN BURNING/OPEN DETONATION UNIT
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

FILE	SCALE
112G03605GM01-2	AS NOTED
FIGURE NUMBER	REV / DATE
FIGURE 2-1	0 / 03/17/12

APPENDIX A

ONE-MILE RADIUS WELL SEARCH

A.1 WELL SEARCH REQUEST

#1001101 $230.— 1 mile

TETRA TECH

CTO file copy
03605-3.1-002

RECEIVED
2011 OCT -3 PM 3:54
WATER SUPPLY PERMITTING

PHIL-24506

September 28, 2011

Project Number 03605

Ms. Donna Petinos
New Jersey Department of Environmental Protection
Bureau of Water Systems and Well Permitting
Radius Well Search Requests
P.O. Box 426
Trenton, New Jersey 08625-0426

Reference: CLEAN Contract No. N62470-08-D-1001
Contract Task Order (CTO) No. WE72

Subject: One-Mile Radius Manual Well Search
NWS Earle
Colts Neck, New Jersey

Dear Ms. Petinos:

Tetra Tech NUS, Inc. (Tetra Tech) is requesting a radius well search for Site 2 at the Naval Weapons Station (NWS) Earle, Colts Neck, New Jersey. Attached are the site history, the radius well search form, corresponding USGS and site location map, and a check for $230. This one-mile radius manual well search for potable and non-potable wells at and in the vicinity of NWS Earle will be conducted in Colts Neck Township, New Jersey. The latitudes and longitude for each well search are provided on the attached forms.

If you have any questions, please call me at (610) 382-3779.

Sincerely,

Jennifer Lambert
Project Manager

Enclosures

c: File

Tetra Tech NUS, Inc.
234 Mall Boulevard, Suite 260, King of Prussia, PA 19406-2954
Tel 610.491.9688 Fax 610.491.9645 www.ttnus.com

1.0 INTRODUCTION

Tetra Tech NUS, Inc. (Tetra Tech) is requesting a 1-mile radius computer well search at the request of the NJDEP for the Naval Weapons Station (NWS) Earle facility located in Colts Neck, New Jersey. NWS Earle was commissioned in 1943 and its primary mission is to supply ammunition to the naval fleet. NWS Earle was named to the United States Environmental Protection Agency's (EPA) National Priority List (NPL) on August 30, 1990.

The Navy maintains responsibility for environmental restoration, including preservation of institutional and/or engineering controls (IC/EC) specific to the facility. The Department of Navy is the lead regulatory agency.

1.1 SITE LOCATION

The NWS Earle is located in Monmouth County, New Jersey, approximately 47 miles southeast of New York City. The Station consists of two areas, the 10,248 acre Main Base (Main Base), located inland, and the 706-acre Waterfront Area. The two areas are connected by a Navy-controlled right-of-way containing a private road and rail line. Site 2, the Open Burning/Open Detonation (OB/OD) unit, is located within the Explosive Ordnance Disposal (EOD) Area. The site is within the Mainside area of NWS Earle, in the Township of Colts Neck. The site latitude is 40° 15' 56.595" and longitude is -74° 7' 9.282".

1.2 SITE SUMMARY

The EOD area covers approximately 15.5 acres and consists of a slightly sloping, open, non-vegetated sandy area surrounded by a berm ranging from approximately 2 to 10 feet (ft) in height. The OB/OD unit is surrounded by mixed pine and deciduous forest. Two undeveloped and unpaved roads, one from the east and one from the west, provide access to the OB/OD area.

The OB/OD unit contains two bermed operational areas used to contain the OB and OD operations. EOD training activities are conducted outside the bermed OB and OD treatment areas.

State of New Jersey
Department of Environmental Protection
Division of Water Supply
Bureau of Water Systems and Well Permitting
401 East State Street – P.O. Box 426 Trenton, NJ 08625-0426
FAX# (609) 633-1231

WELL SEARCHES SUBMITTED INCOMPLETE WILL BE RETURNED FOR MORE INFORMATION

Radius Well Search Request Form

SEARCH IS NEEDED FOR:
- ☐ Aquifer Evaluation for a Water Allocation Permit Application
- ☐ SRP Biannual Re-certification
- ☒ Ground Water Contamination Evaluation
- ☐ Brownfields Redevelopment
- ☐ Other (Specify) _____

RECEIVED
2011 OCT -3 PM 3:55
WATER SUPPLY PERMITTING

CHECK TYPE OF RADIUS SEARCH: ☐ ¼ Mile ☐ ½ Mile ☒ 1 Mile ☐ 2 Mile ☐ 5 Mile ☐ 10 Mile

REQUESTOR'S NAME: Jennifer Lambert
ADDRESS/CITY/STATE/ZIP: 234 Mall Boulevard, Suite 260 / King of Prussia / PA / 19406
TELEPHONE #: 610-382-3779 FAX #: 6109-491-9645
E-MAIL ADDRESS: jennifer.lambert@tetratech.com

SITE LOCATION: Coordinates: Latitude 40 deg. 15 min. 57 sec. (accurate to one degree)
Longitude -74 deg. 7 min. 9 sec. (accurate to one deg.)
Municipality: Colts Neck Township County: Monmouth
Street Address: Base Address: 201 Highway 34 South, Colts Neck, NJ 07722-5031; Site 2

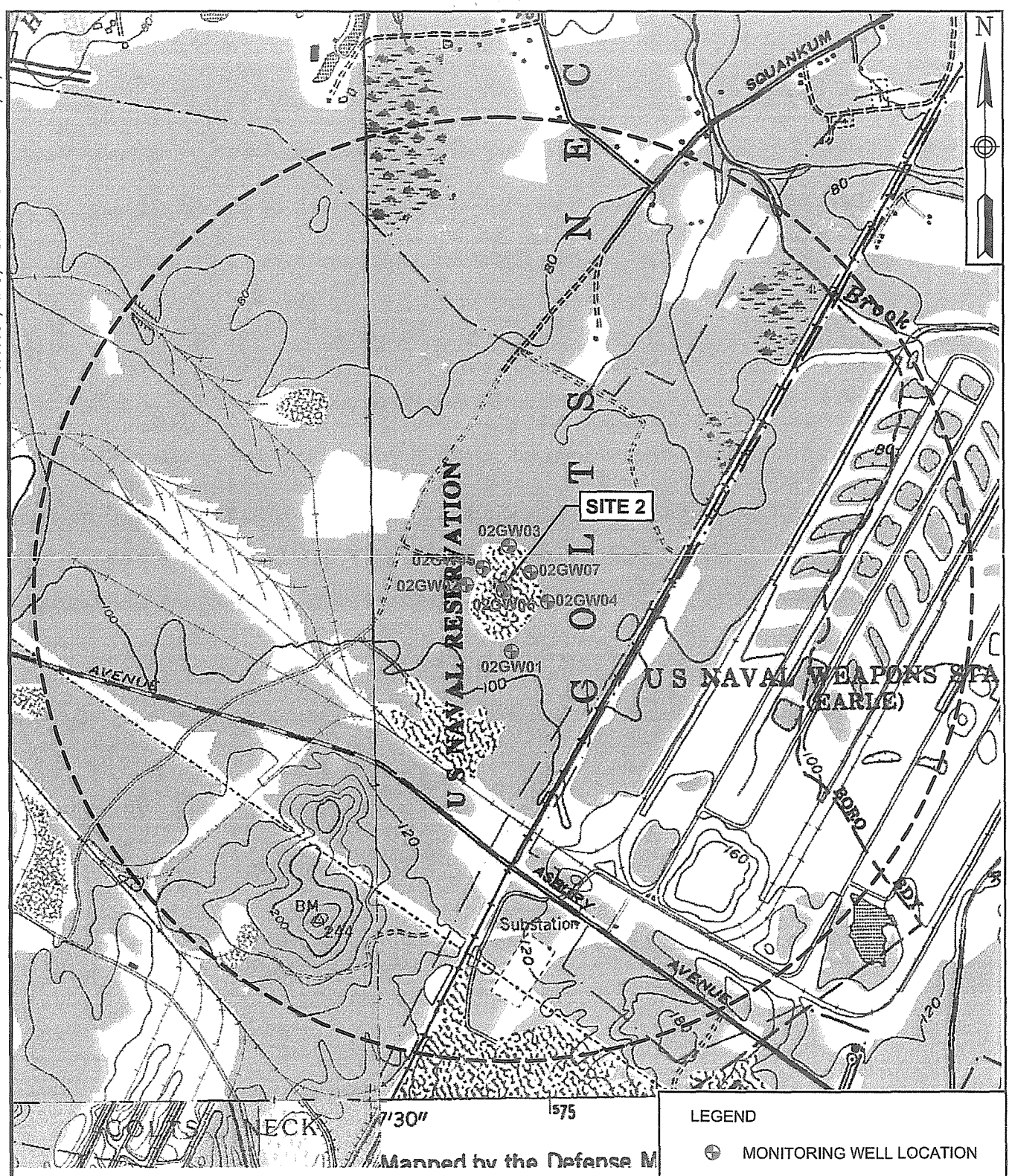
Manual Radius Well Searches (Wells are not Plotted)		
¼ Mile	$55.00	**Service Provided**
½ Mile	$115.00	A photocopy of Atlas sheet search area, all well records and logs or other information on file.
1 Mile	$230.00	
2 Mile	$430.00	
Computer Radius Well Searches (Wells are Plotted)		
5 Mile	$50.00*	A printout of 100,000 gpd diversions and reference information & atlas sheet scale showing locations. Map is ½ atlas sheet scale. * No charge if needed for a water allocation permit application
10 Mile	$50.00*	

NJDEP BWSWP USE ONLY

Date Received: _____ Approximate Expected Date to Be Completed: _____

Date Fee Requested: _____ Date Fee Paid: _____ Fee Amount: $ _____ Date Search Completed: _____

112G03605/FI.MD/112G03605BM01.DWG 09/19/11 MKB



REFERNCES:
USGS TOPOGRAPHIC QUADRANGLES: ASBURY PARK, NJ EDITED 1989;
MARLBORO, NJ EDITED 1954, PHOTOREVISED 1981;
LONG BRANCH, NJ EDITED 1954, PHOTOREVISED 1981 AND
FARMINGDALE, NJ; EDITED 1989.

LEGEND

MONITORING WELL LOCATION

0 1,600 3,200

SCALE IN FEET

TETRA TECH

1-MILE SEARCH RADIUS
SITE 2 – OPEN BURNING/OPEN DETONATION UNIT
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

SCALE	AS NOTED
FILE	112G03605BM01
REV	0
DATE	09/19/11
FIGURE NUMBER	FIGURE 1

Chukker
State Hwy 18
US Government
Obre
Phipps
Sam
Daniel
Pinebrook
Exit 105
Park
Garden State
Garden State
Garden State
Squankum
Porter
Mayberry
Bowles
Stavbro
State Hwy 18
Ruffin
Wingo
Exit 15B
Exit 15A
Drift
Koala
Iroquois
Driveway
Driveway
County Hwy 38
Ramp
Brown
Lockette
Asbury
Unnamed Street
Unnamed Street
County Hwy 547
Macassar
Gela
Memorial
Esperance
Oran
Driveway
Driveway
Hamilton
Park
Park
Madison
Austin
Annapolis
Heritage
Des Moines
Augusta
Little Rock
Williamsburg
Liberty
Cheyenne
Laurie
Bernard
Diane
Revere
Jonathan
Trent
Cranberry
Charles
Pilgrim
Garrison
Roslyn
Danbury
Pioneer
Cannonball
Pointe
Driveway
State Hwy 34
Unnamed Street
Munda

A.2 WELL RECORDS

DWR-138 M
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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -42015

Atlas Sheet Coordinates 29 : 12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-7
County MONMOUTH Municipality COLTS NECK TWP Lot No. 38 Block No. 48
Address 77 STATE HWY 34

DATE WELL STARTED 1/25/00
DATE WELL COMPLETED 1/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E.M.A - MIKE KNUBECKER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 13 ft.

Water level was measured using GAUGE

Well was developed for 0 hours
at 0 gpm

Method of development 0

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	5	2	PVC	Schd 40
Middle Casing (for triple cased wells only)	0	0	—	—	—
Outer Casing (largest diameter)	0	0	—	—	—
Open Hole or Screen (No. Used, 010")	5	20	2	PVC	Sch 40
Blank Casings (No. Used)	0	0	—	—	—
Tail Piece	0	0	—	—	—
Gravel Pack	3	20	8	#1 MORIE SAND	450
Grout	-6"	3	8	Neat Cement Bentonite	50 lbs. 5 lbs.

Grouting Method BUCKET
Drilling Method H.S.A.

Was permanent pumping equipment installed? ☐ Yes ☐ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig FAILING S-15

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. 000 1143 Date 1/25/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5 Orange RED Fine Sand
5-8' Orange-Red Silty Sand
8-15 Brown/Black Clayey Sand
15-20 Brown/Black Clay Some Sand

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42016

Atlas Sheet Coordinates 29 : 12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 8
County MONMOUTH Municipality COLTS NECK TWP Lot No. 38 Block No. 48
Address 77 STATE HWY 34

DATE WELL STARTED 1/25/00
DATE WELL COMPLETED 1/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) EMA - MIKE KNEUKER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 20 ft.
Well finished to 20 ft.

Borehole diameter:
Top 8 in.
Bottom 8 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 13 ft.
Water level was measured using GAUGE

Well was developed for 0 hours
at 0 gpm

Method of development 0

Was permanent pumping equipment installed? ☐ Yes ☐ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig Failing S-15

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	5	2	PVC	Sched 40
Middle Casing (for triple cased wells only)	0	0	—	—	—
Outer Casing (largest diameter)	0	0	—	—	—
Open Hole or Screen (No. Used .010")	5	20	2	PVC	Sched 40
Blank Casings (No. Used)	0	0	—	—	—
Tail Piece	0	0	—	—	—
Gravel Pack	3	20	8	#1 Morie Sand	500
Grout	-6"	3	8	Neat Cement Bentonite	50 lbs. 5 lbs.

Grouting Method Bucket
Drilling Method H.S.A

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' Orange/Red Fine Sand
5-8' Orange/Red Silty Sand
8-20' Green/Black Clayish Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. 000 1143 Date 1/25/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -43540

Atlas Sheet Coordinates 29 : 12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-9
County MONMOUTH Municipality COLTS NECK TWP Lot No. 44 Block No. 48
Address 73 HWY 34

DATE WELL STARTED 9/12/00
DATE WELL COMPLETED 9/12/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 89-10-23-1443

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E.M.A. MIKE KUEUCHER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 7 in.
Bottom 7 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 12 ft.

Water level was measured using Tape

Well was developed for 1/2 hours
at 1/4 gpm

Method of development WHAL PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig SS-5 FAILING

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	10	2	PVC	Sched 40
Middle Casing (for triple cased wells only)	0	—	—	—	—
Outer Casing (largest diameter)	0	—	—	—	—
Open Hole or Screen (No. Used .010)	10	25	2	PVC	Sched 40
Blank Casings (No. Used)	0	—	—	—	—
Tail Piece	0	—	—	—	—
Gravel Pack	8	25	7	Morie #15 sand	600 LBS
Grout	-6"	8'	7	Neat Cement Bentonite	150 lbs. 7 lbs.

Grouting Method TREMIE PIPE
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' Fine Brownish-Orange Sand
5-10' SAME
10'-15' MOIST TANCLAY
15-20' MOIST DARK GREY CLAY
20-25 Blackish Green Sandy Clay

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. JD1383 Date 9/18/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 43541

Atlas Sheet Coordinates 29 12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1-R
County MONMOUTH Municipality COLTS NECK TWP Lot No. 38 Block No. 48
Address 77 STATE HWY 34

DATE WELL STARTED 9/12/00
DATE WELL COMPLETED 9/12/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 89-10-23-1443

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E.M.A. MIKE KNUECHER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 7 in.
Bottom 7 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 14 ft.

Water level was measured using TAPE

Well was developed for 1/2 hours
at 1/4 gpm

Method of development WHAL PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig FAILING SS-5

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	10	2	PVC	Sched 40
Middle Casing (for triple cased wells only)	0	—	—	—	—
Outer Casing (largest diameter)	0	—	—	—	—
Open Hole or Screen (No. Used .010")	10	25	2	PVC	Sched 40
Blank Casings (No. Used)	0	—	—	—	—
Tail Piece	0	—	—	—	—
Gravel Pack	8	25	7	Morey #1 Sand	600 LBS
Grout	-6"	8'	7	Neat Cement Bentonite	150 lbs. 7 lbs.

Grouting Method TREMIE
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' Brown Fine Sand.
5-10' Tan Med Silty Clay.
10-15' Med Green Silty Clay.
15-20' Med Sand Silty Green Clay.
20-25 Black Med Sand Claysish

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. JD 1383 Date 9/18/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -43542

Atlas Sheet Coordinates 29 : 12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-6-R
County MONMOUTH Municipality COLTS NECK TWP Lot No. 38 Block No. 48
Address 77 STATE HWY 34

DATE WELL STARTED 9/12/00
DATE WELL COMPLETED 9/12/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 89-10-23-1443

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) E.M.A. MIKE KUEOCHER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 7 in.
Bottom 7 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 14 ft.

Water level was measured using Tape

Well was developed for 1/2 hours
at 1/4 gpm

Method of development WHAL Pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig FAILING 55-5

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	10	2	PVC	Sched 40
Middle Casing (for triple cased wells only)	0	—	—	—	—
Outer Casing (largest diameter)	0	—	—	—	—
Open Hole or Screen (No. Used .010")	10	25	2	PVC	Sched 40
Blank Casings (No. Used)	0	—	—	—	—
Tail Piece	0	—	—	—	—
Gravel Pack	8	25	7	Morey #1 Sand	600 lbs
Grout	-6"	8'	7	Neat Cement Bentonite	150 lbs. 7 lbs.

Grouting Method TREMIE
Drilling Method H.S.A.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15' Orange Brown Fine/Med Sand Fill
15-20 Blackish-Green Med Silty Sand/Clay
20-25' Green Med Sandy Clay

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. JD 1383 Date 9/18/00

COPIES: White DEP Canary Driller Pink Owner Goldenrod Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 -43543

Atlas Sheet Coordinates 29 :12 998

OWNER IDENTIFICATION - Owner SCHANCK, STANLEY
Address 260 PHALANX RD
City COLTS NECK State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5-R
County MONMOUTH Municipality COLTS NECK TWP Lot No. 38 Block No. 48
Address 77 STATE HWY 34

DATE WELL STARTED 9/12/00
DATE WELL COMPLETED 9/12/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well UST Case I.D.# 89-10-23-1443

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) EMA, Mike KNEECHER Tele. # 732-919-0595

WELL CONSTRUCTION

Total depth drilled 25 ft.
Well finished to 25 ft.

Borehole diameter:
Top 7 in.
Bottom 7 in.

Well was finished: ☐ above grade
☒ flush mounted

If finished above grade, casing height (stick up) above land surface 0 ft.

Was steel protective casing installed?
☐ Yes ☒ No

Static water level after drilling 14 ft.

Water level was measured using Tape

Well was developed for 1/2 hours
at 4/4 gpm

Method of development WHAL PUMP

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity 0 gpm

Pump type: 0

Drilling Fluid 0 Type of Rig Failing SS-5

Health and Safety Plan submitted? ☐ Yes ☒ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	-6"	10	2	PVC	Sched 40
Middle Casing (for triple cased wells only)	0	—	—	—	—
Outer Casing (largest diameter)	0	—	—	—	—
Open Hole or Screen (No. Used .010")	10	25	2	PVC	Sched 40
Blank Casings (No. Used)	0	—	—	—	—
Tail Piece	0	—	—	—	—
Gravel Pack	8	25	7	morey #1 Sand	600 lbs
Grout	-6"	8	7	Neat Cement Bentonite	150 lbs. 7 lbs.

Grouting Method TREMIE
Drilling Method H.S.A

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-15' Orange Brown Fine/Med Sand Fill
15-20' Blackish-Green Med Silty Sand/Clay.
20-25' Green Med Sandy Clay.

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company ENVIRONMENTAL MANAGEMENT ASSOC

Well Driller (Print) JOE RADEMACHER

Driller's Signature Joe Rademacher

Registration No. JD 1383 Date 9/18/00

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
29 — 40010

Atlas Sheet Coordinates
29 13 : 758

OWNER PICCO, JOSEPH L
Address 251 ALBERT PLACE
City ELBERON State NJ Zip Code

WELL LOCATION ADDRESS #7 IROQUIOS CT **Owner's Well No.**
County MONMOUTH Municipality COLTS NECK TWP Lot No. 5.04 Block No. 50.01

WELL USE DOMESTIC

DATE WELL STARTED 3 / 13 / 99
DATE WELL COMPLETED 3 / 14 / 99

WELL CONSTRUCTION

Total Depth Drilled 340 ft.

Finished Well Depth 340 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
1 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	320	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .015)	320	340	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	310	340	8	#2 Sand	
Grout	0	310	8	Neat Cement / Bentonite	____ lbs / 1050 lbs

RECORD OF TEST
Test Date 3 / 14 / 99
Static Water Level 40 ft. below land surface
Water Level Measured Using ruler
Pumping Water Level 200 ft. below land surface
Well Was Pumped Using submersible
Well Yield 30 gpm
If Pump Tested: Discharge Rate 25 gpm
Duration of Test 12 hours

Grouting Method Tremie
Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT
Installed by Chris Mayer Reg. No. JD1536
Pump Type submersible
Depth of Pump below land surface 300 ft.
Capacity 20 gpm Horsepower 2

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company RAYMOND P. MAYER
Well Driller (Print) CHRIS S MAYER
Driller's Signature [signature]
Registration No. JD 1536 Date 4 / 1 / 99

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-20 yellow fine to med. sand
20-30 yellow green med. sand w/ black specs
30-40 ~~yel~~ orange coarse sand w/ black specs
40-70 yellow sand w/ clay + black specs
70-80 Black sand + clay
80-100 fine black sand green clay
100-130 green clay
130-180 gray clay w/ fine black sand
180-210 black + gray sand some shell
210-300 gray clay
300-310 fine gray sand
310-330 med. gray sand
330-340 gray clay

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
2900052203

Atlas Sheet Coordinates
2913758

OWNER RON WERNER

Address 98 OBRE ROAD

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION ADDRESS 98 OBRE ROAD Owner's Well No. _____

County Monmouth Municipality Colts Neck Twp Lot No. 3 Block No. 50.01

WELL USE Domestic DATE WELL STARTED 6-28-05

DATE WELL COMPLETED 6-28-05

WELL CONSTRUCTION

Total Depth Drilled 340 ft.

Finished Well Depth 340 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well Casing Begins:

+1 ft. above grade or

_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1	320	4	pvc	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 10)	320	340	4	pvc	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	320	340		#2 gravel	
Grout	3	320		~~xNeat Cement xx~~ Bentonite	_____ lbs ~~1600~~ lbs

RECORD OF TEST

Test Date 7 / 27 / 05

Static Water Level 68 ft. below land surface

Water Level Measured Using bailor

Pumping Water Level 215 ft. below land surface

Well Was Pumped Using air compressor

Well Yield 25-30 gpm

If Pump Tested Discharge Rate _____ gpm

Duration of Test _____ hours

Grouting Method pressure grout w/tremiepipe

Drilling Method mud rotary

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-20 fine yellow/orange sand (hard)

20-60 fine yellow/blk sands

60-140 fine blk/green sands green clay & shells

140-200 fine blk sand & gray clay

~~200-300 fine gray sand & gray clay~~

300-340 fine-coarse blk/gray sands mic

PERMANENT PUMPING EQUIPMENT

Installed by CharlesF.Okerson Reg. No. JB202914

Pump Type ~~submersible~~

Depth of Pump below land surface 280 ft.

Capacity ~~12~~ gpm Horsepower ~~1½~~

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company MCCURDY WELL DRILLING

Well Driller (Print) Charles F. Okerson

Driller's Signature Charles F. Okerson

Registration No. JB202914 Date 7 / 28 / 05

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: _____ EASTING: _____

OR

LATITUDE: ___° ___' ___.__" LONGITUDE: ___° ___' ___.__"

ORIGINAL: DEP COPIES: DRILLER OWNER HEALTH DEPARTMENT

E

New Jersey Department of Environmental Protection
Bureau of Water Systems and Well Permitting

WELL RECORD

Well Permit Number
2900054305

Atlas Sheet Coordinates
2913758

OWNER LUCILLE SCOTT

Address 103 OBRE ROAD

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION ADDRESS 103 OBRE ROAD Owner's Well No.

County Monmouth Municipality Colts Neck Twp Lot No. 4 Block No. 53.01

WELL USE Domestic Replacement

DATE WELL STARTED 7/14/06

DATE WELL COMPLETED 7/14/06

WELL CONSTRUCTION

Total Depth Drilled 280' ft.

Finished Well Depth 280' ft.

Borehole Diameter:

Top 8" in.

Bottom 8" in.

Well Casing Begins:

+12" ft. above grade or

N/A ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+12"	260'	4"	PVC	Sch 40
Middle Casing (for triple cased wells only)	N/A				
Outer Casing (largest diameter)	N/A				
Open Hole or Screen (No. Used 15 Slot)	260'	280'	4"	PVC	Sch 40 15 Slot.
Blank Casings (No. Used)	N/A				
Tail Piece	N/A				
Gravel Pack	260'	280'		Filter Sand	—
Grout	0	260'		~~Neat Cement~~ Bentonite	2444 lbs ___ lbs

RECORD OF TEST

Test Date 7/14/06

Static Water Level 130' ft. below land surface

Water Level Measured Using Drop Line / Tape.

Pumping Water Level 139' ft. below land surface

Well Was Pumped Using Air Lift

Well Yield 20 gpm

If Pump Tested Discharge Rate 20 gpm

Duration of Test 1 hours

Grouting Method Pressure Thru Trim Pipe.

Drilling Method Mud Rotary.

PERMANENT PUMPING EQUIPMENT

Installed by John Ricigliano Reg. No. # 1336

Pump Type Sub

Depth of Pump below land surface 200' ft.

Capacity 20 gpm Horsepower 1 HP

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company RICIGLIANO JOHN

Well Driller (Print) John Ricigliano.

Driller's Signature John Ricigliano

Registration No. # 1336 Date 7/25/06

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0'-30' Tan Med/Coa Sand
30'-50' Tan Med Sand
50'-60' Tan Coa Sand
60'-90' Brown Med Sand
90'-150' Green Clay
150'-240' Black Clay
240'-260' Black Fine Sand
260'-280' Black Med Sand / Shell

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: _____ EASTING: _____

OR

LATITUDE: __ ° __ ' __.__ " LONGITUDE: __ ° __ ' __.__ "

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

W

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051453

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-07

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-8-04

DATE WELL COMPLETED 12-8-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [✓] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? [✓] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (iargest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement Bentonite	___ lbs 25 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0 - 1 Root Matting

1 - 3 Soft clay

3 - 15 Fine to med sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/8/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ **EASTING:**_____

OR

LATITUDE: ___° ___ ' ___.__ " **LONGITUDE:** ___° ___ ' ___.__ "

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051454

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-08

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-8-04

DATE WELL COMPLETED 12-8-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [✓] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? [✓] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement / Bentonite	___ lbs / 25 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 Soft Clay

3-15 Fine to Med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/8/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE:___°___'___.__" LONGITUDE:___°___'___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

6

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051455

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-09

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-9-04

DATE WELL COMPLETED 12-9-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? ☑ Yes ☐ No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig Cme 750

Health and Safety Plan Submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	2.5	5	2"	PVC	Sch40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used : 010)	5	15	2"	PVC	Sch40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200 lbs
Grout	0	3		Neat Cement Bentonite	___ lbs 25 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0 - 1 Root Matting

1 - 3 Soft Clay

3 - 15 Fine to Med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/9/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE:___°___'___.__" LONGITUDE:___°___'___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

W

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051456

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-10

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-10-04

DATE WELL COMPLETED 12-10-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [X] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement / Bentonite	lbs / 25 lbs

Grouting Method Pressure Trenie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 Soft Clay

3-15 Fine to Med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. JD23171 Date 12/10/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE: ___° ___' ___.___" LONGITUDE: ___° ___' ___.___"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051457

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-11

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-10-04

DATE WELL COMPLETED 12-10-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface ____ ft.

Steel protective casing installed? [✓] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for ____ hours

at ____ gpm

Method of development N/A

Pump Capacity ____ gpm

Pump Type ____

Drilling Fluid None Type of Rig CME 750

Health and Safety Plan Submitted? [✓] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement ____ lbs Bentonite 25 lbs	

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 Soft Clay

3-15 Fine to med. sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/10/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE: ___° ___' ___.___" LONGITUDE: ___° ___' ___.___"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051458

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-14

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-10-04

DATE WELL COMPLETED 12-10-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [✓] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? [✓] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement ____ lbs Bentonite 25 lbs	

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 Soft Clay

3-15 Fine to med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/10/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE:___°___'___.__" LONGITUDE:___°___'___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051459

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-13

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-13-04

DATE WELL COMPLETED 12-13-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [✓] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? [✓] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement / Bentonite	lbs / 25 lbs

Grouting Method Pressure Trenie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0 - 1 Root Matting

1 - 3 Soft Clay

3 - 15 Fine to Med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/13/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE:___°___'___.__" LONGITUDE:___°___'___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051460

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-15

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-13-04

DATE WELL COMPLETED 12-13-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? ☑ Yes ☐ No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	20
Grout	0	3		Neat Cement Bentonite	lbs 25 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 soft clay

3-15 Fine to Med sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. VD23171 Date 12/13/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE:___°___'___.__" LONGITUDE:___°___'___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051461

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-16

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-13-04

DATE WELL COMPLETED 12-13-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? ☑ Yes ☐ No

Static Water Level after drilling 2 ft.

Water Level was Measured Using tape

Well was developed for N/A hours

at _____ gpm

Method of development _____

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid NONE Type of Rig CME 750

Health and Safety Plan Submitted? ☑ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement / Bentonite	___ lbs / 25 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0 - 1 Root Matting

1 - 3 Soft Clay

3 - 15 Fine to med Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Easflack

Driller's Signature Richard Easflack

Registration No. ID 23171 Date 12/13/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ **EASTING:**_____

OR

LATITUDE: ___° ___' ___.__" **LONGITUDE:** ___° ___' ___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051462

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HWY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** MW-12

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HWY 34 SOUTH

WELL USE Monitoring

DATE WELL STARTED 12-14-04

DATE WELL COMPLETED 12-14-04

WELL CONSTRUCTION

Total Depth Drilled 15 ft.

Finished Well Depth 15 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? ☑ Yes ☐ No

Static Water Level after drilling 2 ft.

Water Level was Measured Using Tape

Well was developed for _____ hours

at _____ gpm

Method of development none

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid None Type of Rig CME 750

Health and Safety Plan Submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	5	2"	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	2"	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15		#1 Sand	200
Grout	0	3		Neat Cement Bentonite	lbs 25 lbs

Grouting Method Pressure Trenie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-1 Root Matting

1-3 Soft Clay

3-15 Fine to Med. Sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) Richard Eastlack

Driller's Signature Richard Eastlack

Registration No. 23171 Date 12/14/04

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ EASTING:_____

OR

LATITUDE: ___° ___' ___.__" LONGITUDE: ___° ___' ___.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number 2900051660

Atlas Sheet Coordinates 2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HIGHWAY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** 13TW/MW-17

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HIGHWAY 34 SOUTH NAVAL WEAPONS STATION EARLE

WELL USE Monitoring

DATE WELL STARTED 2-22-05

DATE WELL COMPLETED 2-22-05

WELL CONSTRUCTION

Total Depth Drilled 50 ft.

Finished Well Depth 50 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [X] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid none Type of Rig CME 750

Health and Safety Plan Submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	40	2"	PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	40	50	2"	PVC	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	37	50		#1 Sand	200 lbs
Grout	0	37		Neat Cement / Bentonite	lbs / 75 lbs

Grouting Method Pressure Tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-5 Peat Fine Sand

5-10 Dk Bn Peat Grn F Sand Tr silt

10-40 Gn Brn Fine Sand Tr silt

40-50 Dk Gr Sandy Silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) William Leach

Driller's Signature William Leach

Registration No. LD203651 Date 2/22/05

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ **EASTING:**_____

OR

LATITUDE: ___° ___' ___.___" **LONGITUDE:** ___° ___' ___.___"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit Number
2900051661

Atlas Sheet Coordinates
2913773

OWNER IDENTIFICATION NAVAL WEAPONS STATION EARLE

Address 201 HIGHWAY 34 SOUTH

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION - If not the same as owner please give address **Owner's Well No.** 13TW / MW 18

County Monmouth Municipality Colts Neck Twp Lot No. 01 Block No. 56

Address 201 HIGHWAY 34 SOUTH NAVAL WEAPONS STATION EARLE

WELL USE Monitoring

DATE WELL STARTED 2-23-05

DATE WELL COMPLETED 2-23-05

WELL CONSTRUCTION

Total Depth Drilled 32 ft.

Finished Well Depth 32 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Steel protective casing installed? [X] Yes [ ] No

Static Water Level after drilling 2 ft.

Water Level was Measured Using tape

Well was developed for _____ hours

at _____ gpm

Method of development N/A

Pump Capacity _____ gpm

Pump Type _____

Drilling Fluid none Type of Rig CME 750

Health and Safety Plan Submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None (D) C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+2.5	22	2"	PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (iargest diameter)					
Open Hole or Screen (No. Used .010)	22	32	2"	PVC	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	19	32		#1 Sand	200
Grout	0	19		Neat Cement / Bentonite	lbs / 75 lbs

Grouting Method Pressure tremie

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-7 Peat Fine Sand
Tr silt

7-32 Brn F. Sand
Tr silt

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING CO INC

Well Driller (Print) William Leach

Driller's Signature William Leach

Registration No. VD203651 Date 2 23 05

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ **EASTING:**_____

OR

LATITUDE: __° __' __.__" **LONGITUDE:** __° __' __.__"

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 2900053622 E

Atlas Sheet Coordinates 2913782

OWNER LEW MERCHANTANTI

Address 24 SQUANKUM RD

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION ADDRESS 24 SQUANKUM RD **Owner's Well No.**

County Monmouth Municipality Colts Neck Twp Lot No. 5 Block No. 54

WELL USE Irrigation **DATE WELL STARTED** 4/28/06

DATE WELL COMPLETED 4/28/06

WELL CONSTRUCTION

Total Depth Drilled 330' ft.

Finished Well Depth 330' ft.

Borehole Diameter:

Top 8" in.

Bottom 8" in.

Well Casing Begins:

+12" ft. above grade or

N/A ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+12"	320'	4"	PVC	Sch 40
Middle Casing (for triple cased wells only)	N/A				
Outer Casing (largest diameter)	N/A				
Open Hole or Screen (No. Used 15 Slot)	320'	330'	4"	PVC	Sch 40 15 Slot
Blank Casings (No. Used)	N/A				
Tail Piece	N/A				
Gravel Pack	320'	330'		Filter Sand	
Grout	X	320'		~~Neat Cement~~ Bentonite	3000 lbs ___ lbs

RECORD OF TEST

Test Date 4/28/06

Static Water Level 82' ft. below land surface

Water Level Measured Using Drop Line / Tape

Pumping Water Level 91' ft. below land surface

Well Was Pumped Using Air Lift

Well Yield 20 gpm

If Pump Tested Discharge Rate 20 gpm

Duration of Test 1 hours

Grouting Method Pressure Thru Trim Pipe

Drilling Method Mud Rotary

PERMANENT PUMPING EQUIPMENT

Installed by John Ricigliano Reg. No. #1336

Pump Type sub

Depth of Pump below land surface 200' ft.

Capacity 20 gpm Horsepower 1

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company RICIGLIANO JOHN

Well Driller (Print) John Ricigliano

Driller's Signature John Ricigliano

Registration No. # 1336 Date 5/8/06

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0'-80' Tan Cor Sand
80'-110' Green Med sand
110'-150' Green Clay
150'-160' Gray Clay
160'-190' Dark Clay & Pepper Sand
190'-210' Pepper Sand
210'-230' Pepper Sand / Shell
230'-250' Pepper Sand
250'-280' Gray Fine / Med Sand
280'-310' Green Cor Sand
310'-330' Gray Cor Sand

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING:_____ **EASTING:**_____

OR

LATITUDE:__ ° __ ' __._ " **LONGITUDE:**__ ° __ ' __._ "

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

E
DMQ

Well Permit Number
2900053133

Atlas Sheet Coordinates
2913783

OWNER JOSEPH IOIO

Address 139 HOCKHOCKSON ROAD

City Colts Neck State New Jersey Zip Code 07722

WELL LOCATION ADDRESS 139 HOCKHOCKSON ROAD **Owner's Well No.**

County Monmouth Municipality Colts Neck Twp Lot No. 14 Block No. 51

WELL USE Domestic Replacement **DATE WELL STARTED** 10-21-05

DATE WELL COMPLETED 10-21-05

WELL CONSTRUCTION

Total Depth Drilled 300 ft.

Finished Well Depth 295 ft.

Borehole Diameter:

Top 8 in.

Bottom 8 in.

Well Casing Begins:

1 ft. above grade or

ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	1	275	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	275	295	4	PVC	Sch 40 .012 SLOT
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	272	295		#1 Morie	
Grout	4	272		Neat Cement / Bentonite	lbs / 550 lbs

RECORD OF TEST

Test Date 10/21/05

Static Water Level 57 ft. below land surface

Water Level Measured Using ELEC. TAPE

Pumping Water Level 176 ft. below land surface

Well Was Pumped Using AIR LIFT

Well Yield 100 gpm

If Pump Tested Discharge Rate gpm

Duration of Test hours

Grouting Method Pressure Grout Thru Rem

Drilling Method mud Rotary

PERMANENT PUMPING EQUIPMENT

Installed by G. Colancelo Reg. No. JD1395

Pump Type SUB

Depth of Pump below land surface 100 ft.

Capacity 10 gpm Horsepower 1/2

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company TILTON PUMP SERVICE

Well Driller (Print) David Van Brunt JR.

Driller's Signature David Van Brunt JR.

Registration No. JD1414 Date 11/3/05

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-19 yellow Sandy Clay & Gravel
19-31 Grey Silt
31-76 Grey Clay Fine Black Sand
~~76-116 Med. Gry/ Med. Gry/ Blk Snd~~
76-116 Med Gry Blk Snd
116-197 Fine Blk Gry Snd Silty Clay
197-265 Fine gry snd
265-300 Med. gry Snd And wood

AS-BUILT WELL LOCATION
(NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: _____ **EASTING:** _____

OR

LATITUDE: ___ ° ___ ' ___.__ " **LONGITUDE:** ___ ° ___ ' ___.__ "

ORIGINAL: DEP *COPIES: DRILLER* *OWNER* *HEALTH DEPARTMENT*

DWR-138
5/95

E
MES

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number
29 — 30807

Atlas Sheet Coordinates
29 13 : 704

OWNER LONG, KEVIN
Address 4 NASHVILLE CT
City TINTON FALLS State NJ Zip Code

WELL LOCATION ADDRESS SCHANKUM RD **Owner's Well No.**
County MONMOUTH Municipality COLTS NECK TWP Lot No. 4 Block No. 54

WELL USE DOMESTIC

DATE WELL STARTED 12/10/98
DATE WELL COMPLETED 12/10/98

WELL CONSTRUCTION

Total Depth Drilled 360 ft.
Finished Well Depth 358 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
1½ ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1.5	338	4	PVC	Sch40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)	338	358	4	PVC	Sch40 .012 SLOT
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	335	358		#1 Marie	
Grout	4	335		Neat Cement / Bentonite	lbs / 100 lbs

RECORD OF TEST
Test Date 12/10/98
Static Water Level 68 ft. below land surface
Water Level Measured Using ELECT. TAPE
Pumping Water Level 213 ft. below land surface
Well Was Pumped Using AIR LIFT
Well Yield 200 gpm
If Pump Tested: Discharge Rate _____ gpm
Duration of Test _____ hours

Grouting Method Pres. thru tremmie
Drilling Method MUD ROTARY

PERMANENT PUMPING EQUIPMENT
Installed by G. COLANGELO Reg. No. JD1395
Pump Type SUB
Depth of Pump below land surface 151 ft.
Capacity 30 gpm Horsepower 3

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company G. COLANGELO/TITUSTON WELL & PUMP
Well Driller (Print) David VanBrunt Jr
Driller's Signature David VanBrunt Jr
Registration No. JD1414 Date 12/30/98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-13 Yell. Med Snd gravel
13-62 Yell. fine snd
62-87 gray silty clay
87-116 Med Blk snd gray clay
116-175 gray clay
175-335 gray clay fine snd
335-360 Med gray snd + wood

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept

DWR-138
5/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 — 40711

Atlas Sheet Coordinates 29 : 13 : 788

OWNER PICCO, JOSEPH L.

Address 251 ALBERT PLACE

City ELBERON State NJ Zip Code

WELL LOCATION ADDRESS #7 IROQUIOS CT **Owner's Well No.**

County MONMOUTH Municipality COLTS NECK TWP Lot No. 5.04 Block No. 50.01

WELL USE GEOTHERMAL/HEAT PUMP

DATE WELL STARTED 3 / 11 / 99

DATE WELL COMPLETED 3 / 12 / 99

WELL CONSTRUCTION

Total Depth Drilled 350 ft.

Finished Well Depth 350 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
1 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	0	330	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .025)	330	350	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	320	350	8	#2 Sand	
Grout	0	320	8	Neat Cement / Bentonite	____ lbs / 1100 lbs

RECORD OF TEST

Test Date 3 / 13 / 99

Static Water Level 40 ft. below land surface

Water Level Measured Using ruler

Pumping Water Level 60 ft. below land surface

Well Was Pumped Using submersible

Well Yield 100+ gpm

If Pump Tested: Discharge Rate 25 gpm

Duration of Test 12 hours

Grouting Method Tremie

Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by _____ Reg. No. _____

Pump Type _____

Depth of Pump below land surface _____ ft.

Capacity _____ gpm Horsepower _____

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-20 yellow fine to med. sand
20-30 yellow green med. sand w/ black specs
30-40 orange coarse sand w/ black specs
40-70 yellow sand w/ clay w/ black specs
70-80 Black sand + clay
80-100 fine black sand green clay
100-130 green clay
130-180 gray clay w/ fine black sand
180-210 black + gray sand some shell
210-300 gray clay
300-310 fine gray sand
310-330 med. gray sand
330-350 med gray sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company RAYMOND P. MAYER

Well Driller (Print) CHRIS S MAYER

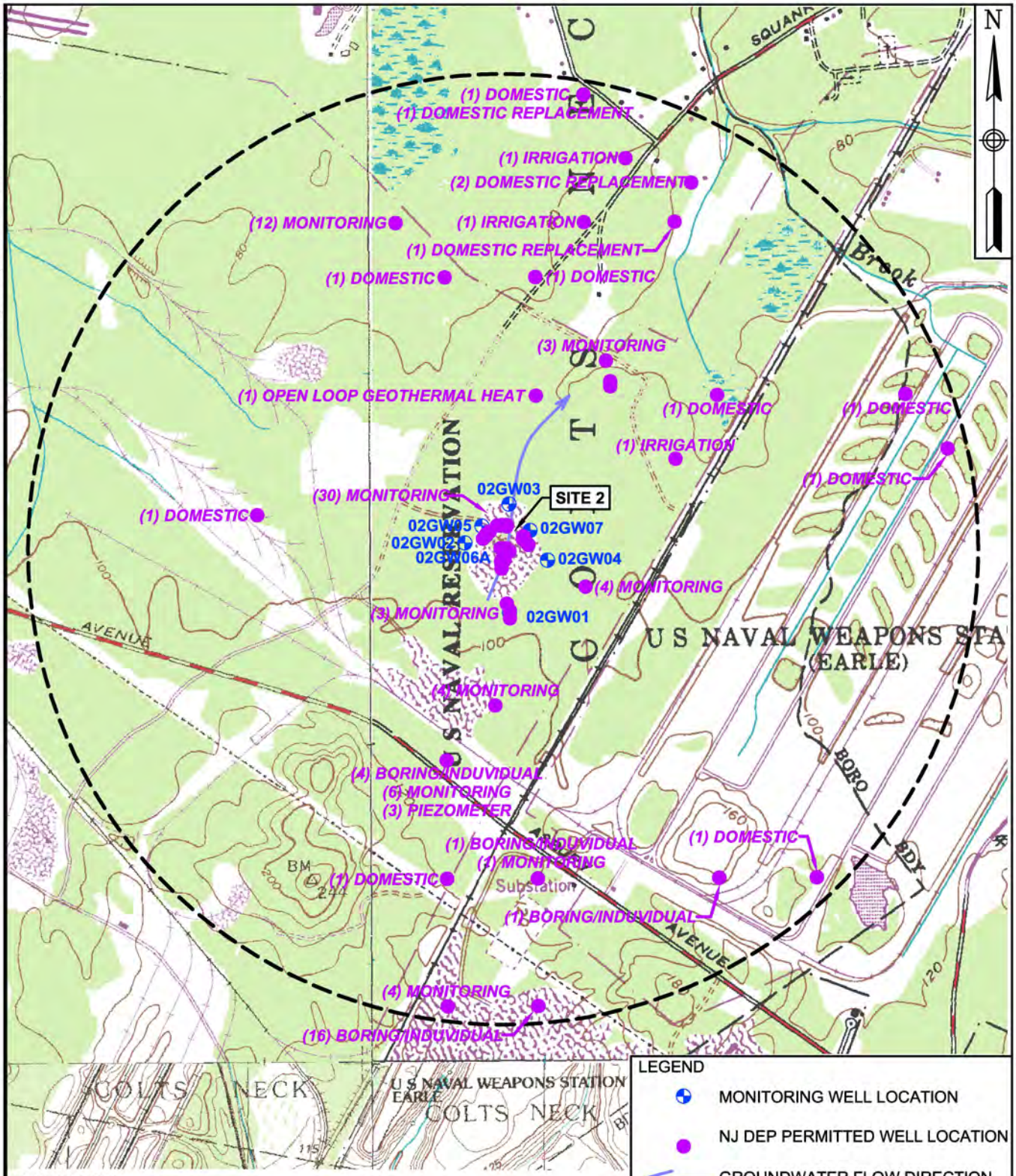
Driller's Signature [signature]

Registration No. 30 1536 Date 4 / 1 / 99

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

A.3 FIGURE 1 WELL LOCATIONS

112G03605/FI.MD/112G03605BM04.DWG 03/19/12 MKB



LEGEND

- MONITORING WELL LOCATION
- NJ DEP PERMITTED WELL LOCATION
- GROUNDWATER FLOW DIRECTION

0 1,600 3,200

SCALE IN FEET

REFERENCES:
USGS TOPOGRAPHIC QUADRANGLES: ASBURY PARK, NJ EDITED 1989;
MARLBORO, NJ EDITED 1954, PHOTOREVISED 1981;
LONG BRANCH, NJ EDITED 1954, PHOTOREVISED 1981 AND
FARMINGDALE, NJ; EDITED 1989.

TETRA TECH

1-MILE SEARCH RADIUS
SITE 2 – OPEN BURNING/OPEN DETONATION UNIT
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

SCALE	AS NOTED
FILE	112G03605BM04
REV	0
DATE	03/19/12
FIGURE NUMBER	FIGURE 1

APPENDIX B

BORING LOGS AND OTHER MATERIALS

B.1 DAILY JOB REPORTS

DAILY JOB REPORT

Talon Drilling Company
100 Lexington Ave. Trenton, NJ 08618 (609) 538-0580 FAX (609) 538-0575

CLIENT: Tetra Tech

DATE: 12-19-11 **JOB#:** 11-099

JOB LOCATION: Colts Neck NJ **RIG#:** ATV

MEN ON JOB: Don / Scott

HOLE NUMBER	START TIME	FINISH TIME	
	6:00		Travel Meet / Safety
		12:00	Hot work permit
			gate clearence
			Abdon ① 4" well 30'
	12:00		
		4:00	Drill + Sample To 40'

	SIZE	TOTAL		TOTAL	ADDITIONS	
HSA	4 1/4	40	"FLUSH MOUNT"		SCREENS	
SPLIT SPOONS	2	20	"PRO-TOP"		DRIVE PTS	
MUD ROTARY			SAND		POLY TUBE	
AIR ROTARY			CONCRETE		MC LINERS	
CORE DRILLING			BENTONITE	1	LEVEL C	
PVC SCREEN			PORTLAND	4	STEAM CLEAN	
PVC RISER			DRUMS		DEVELOPMENT	
SURFACE CASING			GROUT IN FT.		STAND BY	

JOB TIME:

TRAVEL TIME: _____

LOAD & ON SITE HOURS _____

TOTAL HOURS _____

CLIENT: [illegible]

DATE: 12/19/11

START TIME:

FINISH TIME:

DAILY JOB REPORT

Talon Drilling Company
100 Lexington Ave. Trenton, NJ 08618 (609) 538-0580 FAX (609) 538-0575

CLIENT: Tetra Tech

DATE: 12-20-11 **JOB#:** 11-099

JOB LOCATION: **RIG#:** ATV

MEN ON JOB: Dan +

HOLE NUMBER	START TIME	FINISH TIME	
	6:00		
		9:00	Travel + Gate Clear
	9:00		Auger + Sample 40 - 55
		4:00	

	SIZE	TOTAL		TOTAL	ADDITIONS	
HSA	4/4	15	"FLUSH MOUNT"		SCREENS	
SPLIT SPOONS	2	3	"PRO-TOP"		DRIVE PTS	
MUD ROTARY			SAND		POLY TUBE	
AIR ROTARY			CONCRETE		MC LINERS	
CORE DRILLING			BENTONITE		LEVEL C	
PVC SCREEN			PORTLAND		STEAM CLEAN	
PVC RISER			DRUMS		DEVELOPMENT	
SURFACE CASING			GROUT IN FT.		STAND BY	

JOB TIME:

TRAVEL TIME: _____

LOAD & ON SITE HOURS _____

TOTAL HOURS _____

CLIENT: Daniel Wahler

DATE: 12/20/11

START TIME:

FINISH TIME:

DAILY JOB REPORT

Talon Drilling Company
100 Lexington Ave. Trenton, NJ 08618 (609) 538-0580 FAX (609) 538-0575

CLIENT: Tetra Tech

DATE: 12-21-11 **JOB#:** 11-099

JOB LOCATION: Cattle Neck NJ **RIG#:** ATV

MEN ON JOB:

HOLE NUMBER	START TIME	FINISH TIME	
	6:30		
		9:00	Travel + Gate Clear
	9:00		Set 55' well with 3' stick up
			Set 35' well with 3' stick up
		4:00	

	SIZE	TOTAL		TOTAL	ADDITIONS	
HSA	4 1/4	35'	"FLUSH MOUNT"		SCREENS	
SPLIT SPOONS			"PRO-TOP"		DRIVE PTS	
MUD ROTARY			SAND	12	POLY TUBE	
AIR ROTARY			CONCRETE		MC LINERS	
CORE DRILLING			BENTONITE		LEVEL C	
PVC SCREEN	2"	20'	PORTLAND	5	STEAM CLEAN	
PVC RISER		76'	DRUMS		DEVELOPMENT	
SURFACE CASING			GROUT IN FT.		STAND BY	

JOB TIME:

TRAVEL TIME: _____

LOAD & ON SITE HOURS _____

TOTAL HOURS _____

CLIENT: Donald White

DATE: 12/21/11

START TIME:

FINISH TIME:

DAILY JOB REPORT

Talon Drilling Company
100 Lexington Ave. Trenton, NJ 08618 (609) 538-0580 FAX (609) 538-0575

CLIENT: Tetra tech

DATE: 12-22-11 **JOB#:** 11-091

JOB LOCATION: Cotts neck NJ **RIG#:** ATV

MEN ON JOB: Dan + Scott

HOLE NUMBER	START TIME	FINISH TIME	
	6:00		
		7:30	Travel
	7:30	11:00	Drill + Set 19 + 3 stick up
			Set 3 stick ups
	11:00		
		3:00	Develop + Clean Auger's
	3:00	4:30	move Rig To other side of site

	SIZE	TOTAL		TOTAL	ADDITIONS	
HSA	4 1/4	19	"FLUSH MOUNT"		SCREENS	
SPLIT SPOONS			"PRO-TOP"	3	DRIVE PTS	
MUD ROTARY			SAND	6	POLY TUBE	
AIR ROTARY			CONCRETE	6	MC LINERS	
CORE DRILLING			BENTONITE	1	LEVEL C	
PVC SCREEN	2"	10'	PORTLAND	5	STEAM CLEAN	
PVC RISER	2	12'	DRUMS		DEVELOPMENT	
SURFACE CASING			GROUT IN FT.		STAND BY	

JOB TIME:

TRAVEL TIME: _____

LOAD & ON SITE HOURS _____

TOTAL HOURS _____

CLIENT: Dalelinski

DATE: 12/22/11

START TIME:

FINISH TIME:

DAILY JOB REPORT

Talon Drilling Company
100 Lexington Ave. Trenton, NJ 08618 (609) 538-0580 FAX (609) 538-0575

CLIENT: Tetra tech

DATE: 12-23-11 **JOB#:** 11-099

JOB LOCATION: Colts Neck NJ **RIG#:** ATV

MEN ON JOB: Dan + Scott

HOLE NUMBER	START TIME	FINISH TIME	
	6:00		
		8:00	Travel
	8:00		Auger + Sample Deep Hole 55'
			Set 2" pvc well 10' Screen
			48 Riser
			Auger 14' set 2" pvc well 10' Screen
			2 Riser
		3:00	

	SIZE	TOTAL		TOTAL	ADDITIONS	
HSA	4 1/4	68	"FLUSH MOUNT"		SCREENS	
SPLIT SPOONS	2	17	"PRO-TOP"		DRIVE PTS	
MUD ROTARY			SAND	11	POLY TUBE	
AIR ROTARY			CONCRETE		MC LINERS	
CORE DRILLING			BENTONITE	1	LEVEL C	
PVC SCREEN	2"	20	PORTLAND	4	STEAM CLEAN	
PVC RISER	2	55	DRUMS		DEVELOPMENT	
SURFACE CASING			GROUT IN FT.		STAND BY	

JOB TIME:

TRAVEL TIME: _____

LOAD & ON SITE HOURS _____

TOTAL HOURS _____

CLIENT: Drill Hole

DATE: 12/23/11

START TIME:

FINISH TIME:

B.2 BORING LOGS

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV
BORING NUMBER: 02MW01C
DATE: 12/19/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-1 @		1/2	18/		V. LOOSE	DK BRN ORANGE	SILTY FGR SAND FGR SAND some SILT	SM	moist	0	0		
1256	2	2/1	/24		↓	BRN SLEEP BROWN	some F GRAVEL clayey SAND(F)	SC	↓	0	0		
S-2 @		4/6	15/		LOOSE	↓	↓	↓	↓	0	0		
1300	4	6/7	/24		↓	↓	↓	↓	↓	0	0		
S-3 @		6/7	17/		↓	↓	↓	↓	↓	0		0	0
1305	6	6/12	/24		↓	↓	↓	↓	↓	0			
S-4 @		6/5	21/		↓	↓	↓	↓	↓	0	0		
1309	8	6/5	/24		↓	↓	SILTY F SAND tr. CLAY	SM	↓	0			
S-5 @		4/5	18/		↓	↓	↓	↓	↓	0			
1316	10	5/5	/24		↓	↓	SILTY F-C SAND	↓	↓	0	0	0	0
S-6 @		3/2	20/		V. LOOSE	↓	SILTY F-M SAND tr. clay	↓	↓	0			
1347	12	2/2	/24		↓	↓	↓	↓	WET @ -11.4'	0	0		
S-7 @		2/2	17/		↓	↓	SILTY F SAND tr. clay	↓	SATURATED	0			
1350	14	2/4	/24		↓	↓	↓ some coarse sand	↓	↓	0	0		
S-8 @		3/4	17/		↓	↓	↓	↓	↓	0		0	0
1410	16	6/5	/24		LOOSE	↓	↓	↓	↓	0	0		
S-9 @		3/3	22/		V. LOOSE	↓	SILTY F-M SAND some C. SAND, tr. CLAY	↓	↓	0			
1416	18	4/4	/24		↓	↓	↓	↓	↓	0	0		
S-10 @		6/6	24/		LOOSE	OLIVE BRN	SILTY F SAND, some CLAY	↓	↓	0			
1428	20	2/2	/24		↓	↓	↓	↓	↓	0	0	0	0
S-11 @		4/10	24/		↓	↓	↓	↓	↓	0			
1434	22	13/18	/24		M. DENSE	↓	SILTY F-M SAND, some C SAND tr ~~[illegible]~~ CLAY	↓	↓	0	0		
S-12		11/9	24/		↓	↓	SILTY F SAND some CLAY	↓	↓	0			
1458	24	9/9	/24		LOOSE	↓	↓	↓	↓	0	0		
S13	25	1/1	15/24		V. LOOSE	↓	SILTY F SAND	↓	↓	0		0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0-1

Remarks: 2" x 24" split spoons, 140 lb. hammer
4 1/4" ID HSA

Converted to Well: Yes ✓ No _____ Well I.D. #: 02MW01C

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV
BORING NUMBER: 02MW01C
DATE: 12/19/11, 12/20/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
@ 1430	26	1/1			V. LOOSE	OLIVE BRN	SILTY F SAND	SM		0			0
S-14 @		2/4	18/		↓		SILTY F-M SAND			0	0		
1455	28	6/6	/24		LOOSE		↓			0			
S-15 @		5/7	24/				SILTY F SAND some clay			0	0		
1458	30	5/5	/24				↓			0			0
S-16 @			24/				SILTY F-M SAND			0	0		
1514	32		/24			↓	↓			0			
S-17 @		5/6	24/			OLIVE BRN	SILTY F SAND			0	0		
1514	34	6/8	/24				↓			0			
S-18 @		3/6	22/		↓	OLIVE BRN	SILTY F-M SAND + tr. CLAY			0	0		
1532	36	11/13	/24		M. DENSE					0			0
S-19 @		5/5	24/		LOOSE								
1536	38	7/8	/24				SOME CLAY						
S-20 @		5/5	24/		↓								
1544	40	4/4	/24		V. LOOSE		↓ tr. CLAY						
12/20 S-21 @		4/4	24/		M. DENSE					0			
1002	42	16/20	/24		↓	↓	SILTY F SAND			0	0		0
							⟨Auger to 45'⟩						
	45						↓	↓					
S-22 @		7/18	24/		M. DENSE	LT. BRN	F-M SAND	SW		0			
1103	47	22/32	/24		↓	↓		↓		0	0		0
							⟨Auger to 50'⟩						
	50						↓						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: 2x24" split spoons 140 lb. hammer
4 1/4" Hollow stem Auger

Converted to Well: Yes ✓ No _____ Well I.D. #: 02MW01C

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV

BORING NUMBER: 02MW01C
DATE: 12/20/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
S-23 @		1/2	24/		V. LOOSE	Olive Brn	F-M SAND tr. SILT	SM		0			
1113	52	7/10	/24		LOOSE	↓	↓	↓		0	0		0
							<no samples>		auger to 55'				
							↓		↓				
	55												
				TD=55'									

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: 2x 24" split spoons, 140 lb. hammer
4 1/4" Hollow Stem Auger

Converted to Well: Yes ✓ No _____ Well I.D. #: 02MW01C

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV
BORING NUMBER: 02NAW13C
DATE: 12/22 11:12/23/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
S-1		3/4	17/24		V. LOOSE	Brn Dk	SILTY F SAND	SM	moist	0			
	2	3/3	24		↓	Brn lt. Brn gray	SILT SILT/F SAND	ML	↓	0			
S-2		3/5	15/24		LOOSE				WET SATURATED	0.1			
1547	4	5/5	24		LOOSE		↓			0			
S-3		3/4	17/24						slight swamp odor	0.2	0	0	0
1554	6	8/8	24		LOOSE	↓	↓	↓	sulfurous	0.3			
S-4		5/6	24/24			lt. Olive Gray	F SAND	SP	"	0.2			
1554	8	8/9	24				F-M SAND some	SW	"	0.1			
		6/8	24/24			Green	F-C SAND pebbles some	↓	"	0.1			
1600	10	8/9	24		↓	white Green	F GRAVEL white quartz	GP	"	0	0	0	0
		3/3	17/24		V. LOOSE	Green	F-C SAND F SAND tr. silt	SP	"	0			
0824	12	3/3	24						"	0			
		3/4	18/24		↓				"	0			
0826	14	7/9	24		LOOSE				"	0			
		4/5	16/24						"	0	0	0	0
0830	16	7/7	24		↓				"	0			
		3/4	13/24		V. LOOSE				"	0			
0840	18	4/5	24		LOOSE				"	0			
		5/5	21/24			↓			"	0			
0843	20	7/9	24			Olive Brn				0	0	0	0
		4/7	20/24							0			
0833	22	9/12	24							0			
		7/9	19/24			↓				0			
0856	24	9/9	17/24			lt. Brn				0			
		7/11	24		↓	↓	↓	↓		0	0	0	0

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: 2x24" split spoons, 140 lb. hammer
4 1/4" Hollow stem auger

Drilling Area Background (ppm): 0.0

Converted to Well: Yes ✓ No _____ Well I.D. #: 02NAW13C

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV

BORING NUMBER: 02MW13C
DATE: 12/23/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
0907	26	15/14	20/		M. DENSE	lt. brn	F SAND, tr. silt	SP		0			
		17/18	/24							0			
0916	28	20/25	21/							0			
		12/15	/24							0			
0931	30	18/22	18/						1's and in sample	0	0	0	0
		10/12	/24							0			
0941	32	14/14	20/							0			
		6/6	/24		LOOSE					0			
0956	34	10/14	21/		M. DENSE					0	0	0	0
		11/12	/24										
							NO SAMPLES COLLECTED		STOP split spoon due to running SANDS				
	40												
							NO SAMPLES COLLECTED						
	45												
							NO SAMPLES collected						
	50												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: 2-24" split spoons, 140 lb. hammer
4 1/4" Hollow stem Auger
STOP split spooning at

Converted to Well: Yes ✓ No _____ Well I.D. #: 02MW13C

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605
DRILLING COMPANY: Talon
DRILLING RIG: Acker ATV

BORING NUMBER: 02MW13C
DATE: 12/23/11
GEOLOGIST: D. Whalen
DRILLER: D. Burgess

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
							NO SAMPLES collected					0	0
							↓						
~~1032~~	55												
1032	56						↓					0	0
				EOB									

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

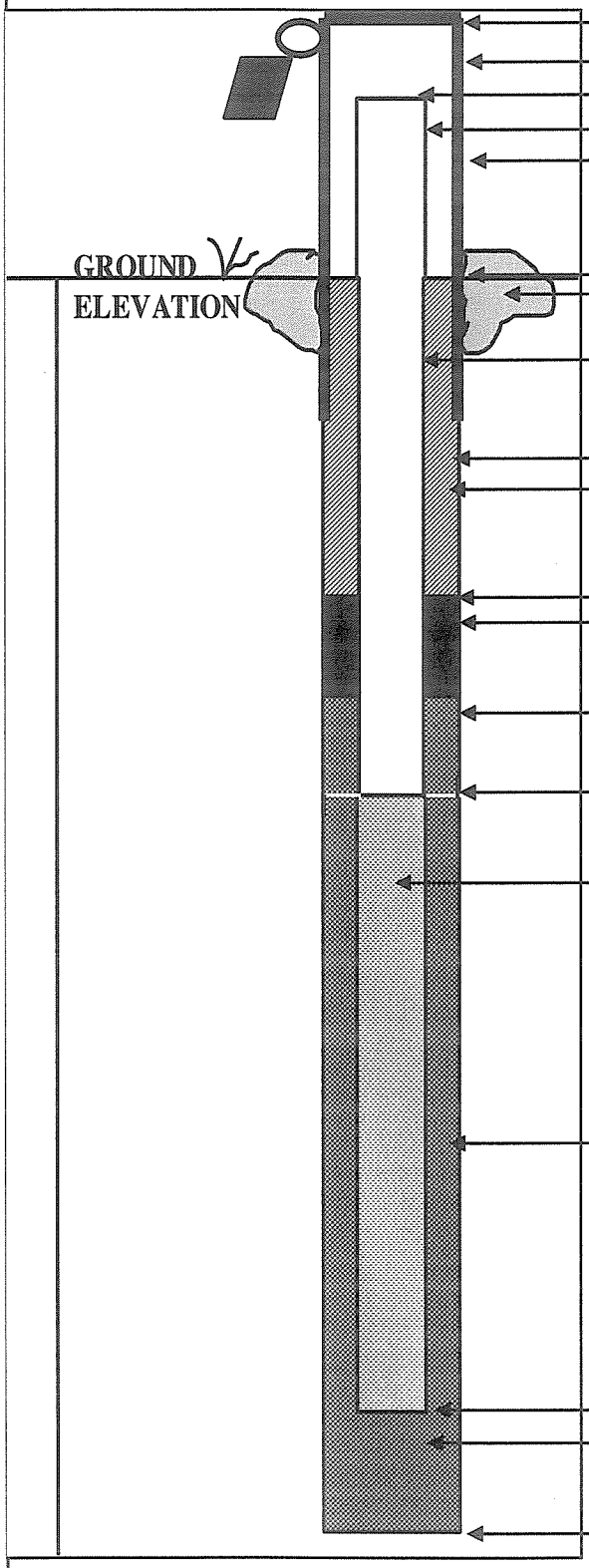
Converted to Well: Yes ✓ No _____ Well I.D. #: 02MW13C

B.3 WELL CONSTRUCTION SHEETS

BORING NO.: 02MW01A

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW01A
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/22/11
SITE:	Site 2 - EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 105.18

STICK -UP TOP OF SURFACE CASING: 2.7

ELEVATION OF TOP OF RISER PIPE: 104.76

RISER STICK-UP ABOVE GROUND SURFACE: 2.28

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 102.48

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: Cement / Bentonite Grout

ELEVATION / DEPTH OF SEAL: 14

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 16

ELEVATION / DEPTH TOP OF SCREEN: 19

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" X 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 119

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 119

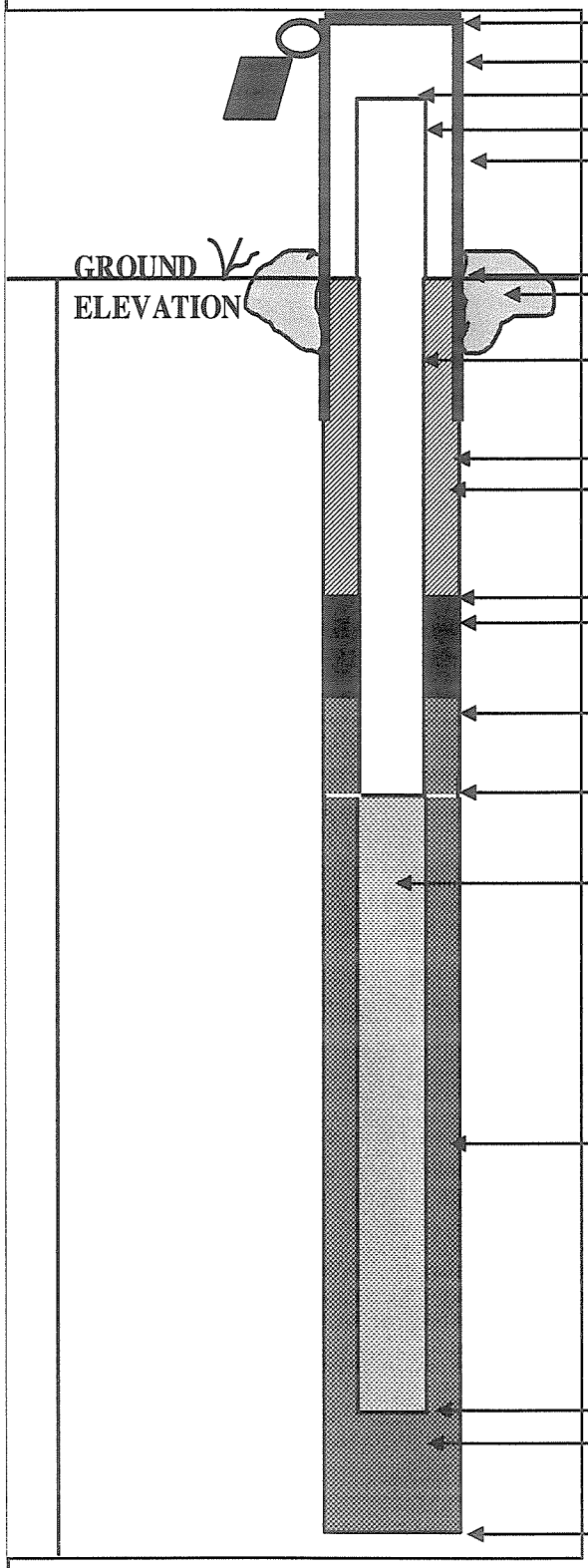
TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 119

BORING NO.: 02MW01B

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW01B
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/21/11
SITE:	Site 2-EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 104.69

STICK -UP TOP OF SURFACE CASING: 2.59

ELEVATION OF TOP OF RISER PIPE: 104.20

RISER STICK-UP ABOVE GROUND SURFACE: 2.19

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 102.01

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: Cement / bentonite Grout

ELEVATION / DEPTH OF SEAL: 120

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 122

ELEVATION / DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" X 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 135

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 135

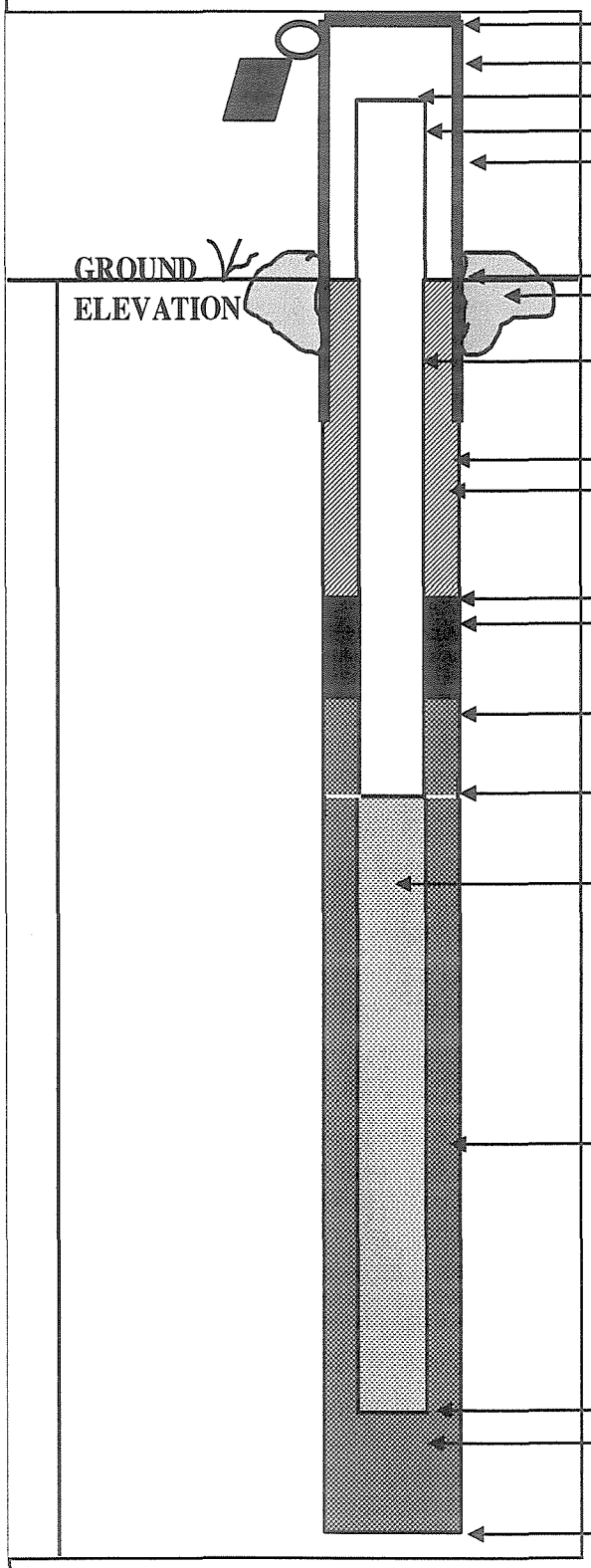
TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 135

BORING NO.: 02MW01C

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW01C
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/21/11
SITE:	Site 2 - EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 104.16

STICK -UP TOP OF SURFACE CASING: 2.48

ELEVATION OF TOP OF RISER PIPE: 103.67

RISER STICK-UP ABOVE GROUND SURFACE: 1.99

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 101.68

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: cement/bentonite grout

ELEVATION / DEPTH OF SEAL: 139.5

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 142

ELEVATION / DEPTH TOP OF SCREEN: 145

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" x 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 155

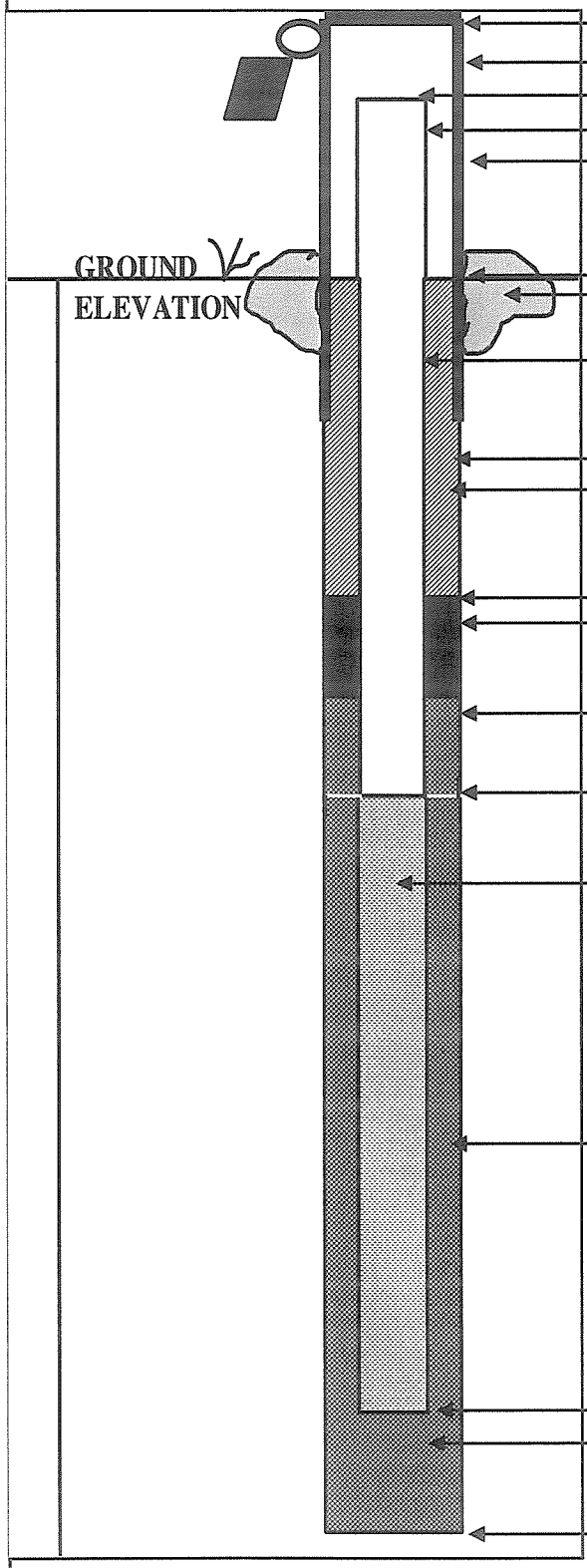
TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 155

BORING NO.: 02MW13A

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW13A
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/23/11
SITE:	Site 2 - EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 82.61

STICK -UP TOP OF SURFACE CASING: 3.15

ELEVATION OF TOP OF RISER PIPE: 82.09

RISER STICK-UP ABOVE GROUND SURFACE: 2.63

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 79.46

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: Concrete

ELEVATION / DEPTH OF SEAL: 12.5

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 13

ELEVATION / DEPTH TOP OF SCREEN: 14

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" X 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 14

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 14

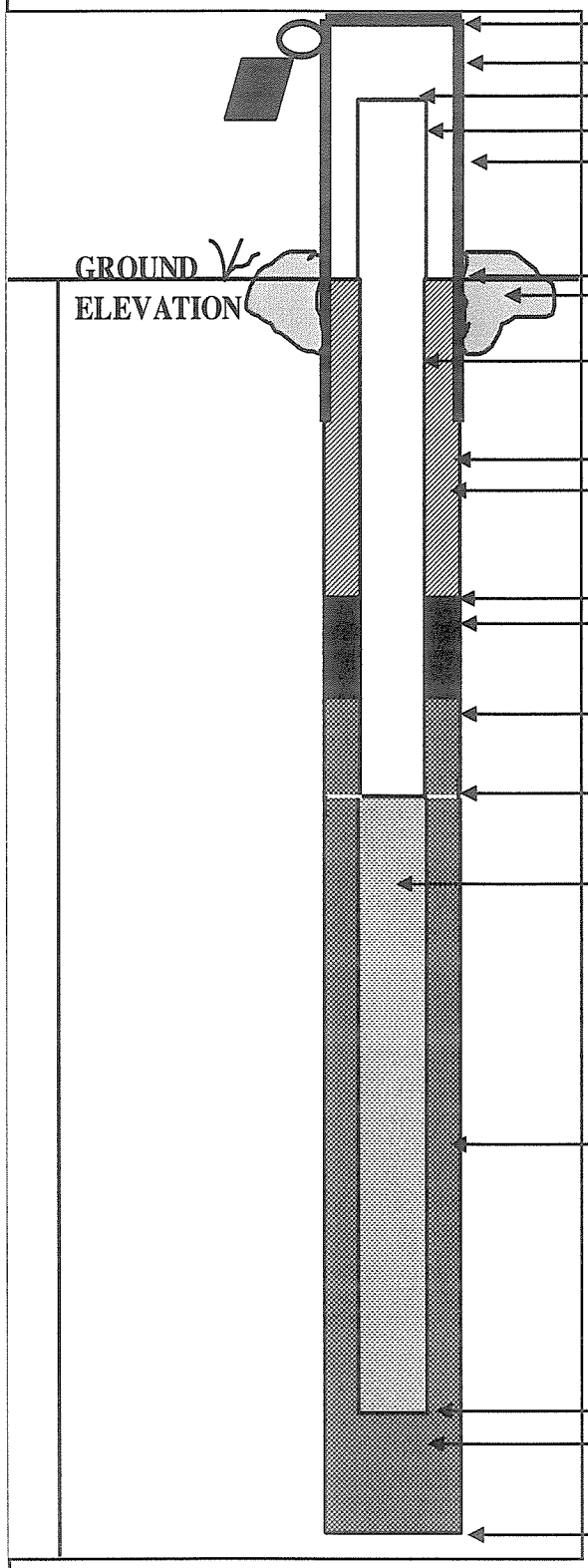
TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 14

BORING NO.: 02MW13B

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW13B
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/28/11
SITE:	Site 2 - EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 82.12

STICK -UP TOP OF SURFACE CASING: 2.77

ELEVATION OF TOP OF RISER PIPE: 81.68

RISER STICK-UP ABOVE GROUND SURFACE: 2.33

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 79.35

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: Cement / Bentonite Grout

ELEVATION / DEPTH OF SEAL: 120

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 122

ELEVATION / DEPTH TOP OF SCREEN: 125

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" X 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 135

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 135

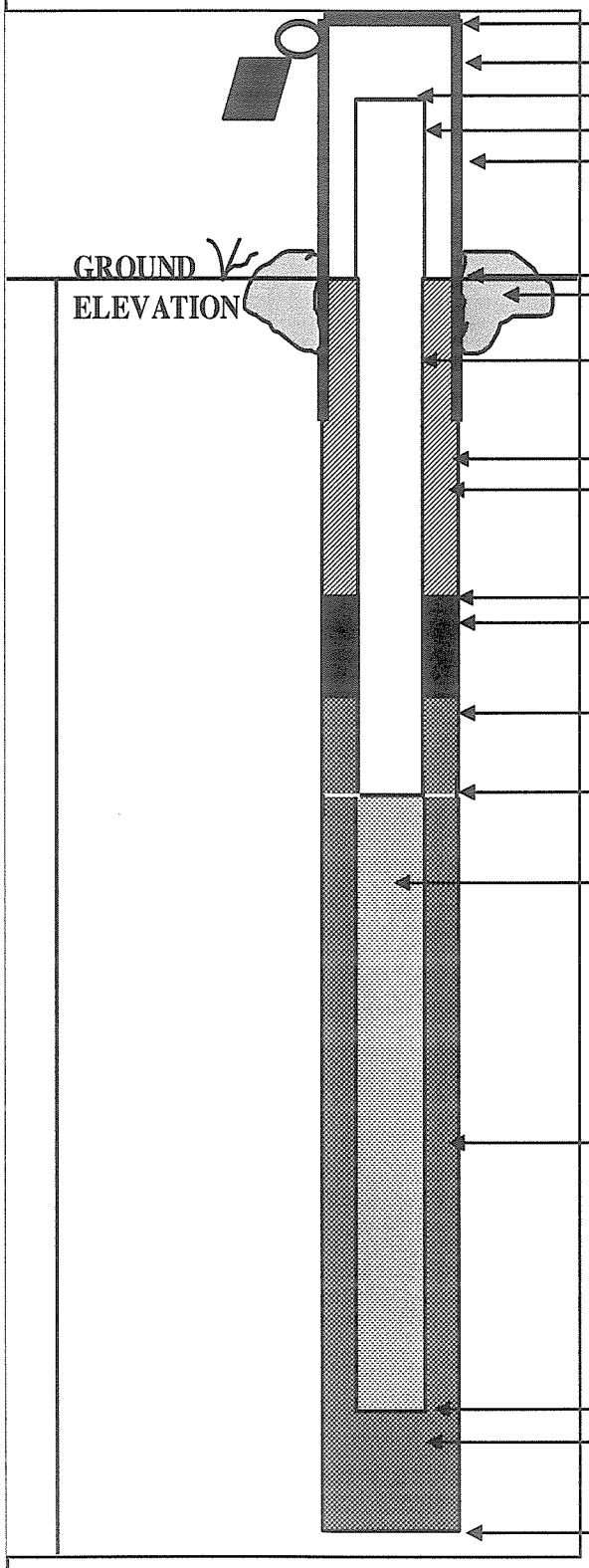
TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 135

BORING NO.: 02MW13C

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	Phase IV	DRILLING Co.:	Talon	BORING No.:	02MW13C
PROJECT No.:	112G03605	DRILLER:	D. Burgess	DATE COMPLETED:	12/23/11
SITE:	Site 2-EOD Range	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	D. Whalen	DEV. METHOD:	Pump	EASTING:	



ELEVATION OF TOP OF SURFACE CASING: 82.14

STICK -UP TOP OF SURFACE CASING: 3.05

ELEVATION OF TOP OF RISER PIPE: 81.63

RISER STICK-UP ABOVE GROUND SURFACE: 2.54

I.D. OF SURFACE CASING: 6"

TYPE OF SURFACE CASING: Steel

GROUND ELEVATION: 79.09

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Schedule 40 PVC

BOREHOLE DIAMETER: 8"

TYPE OF SEAL: Cement/bentonite Grout

ELEVATION / DEPTH OF SEAL: 139.5

TYPE OF SEAL: No. 0 Sand

ELEVATION / DEPTH TOP OF FILTER PACK: 141.5

ELEVATION / DEPTH TOP OF SCREEN: 145

TYPE OF SCREEN: Schedule 40 PVC

SLOT SIZE X LENGTH: 0.010" X 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: No. 1 Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: 155

ELEVATION / DEPTH BOTTOM OF FILTER PACK: 155

TYPE OF BACKFILL BELOW WELL: NA

ELEVATION / DEPTH OF BOREHOLE: 155

B.4 MONITORING WELL DEVELOPMENT RECORDS

0

Page ___ of _____

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02AAW01A
Site: Site 2
Date Installed: _____
Date Developed: 12/22/11
Dev. Method: submers. pump
Pump Type: whale pump

Depth to Bottom (ft.): _____
Static Water Level Before (ft.): 15.24
Static Water Level After (ft.): 15.24
Screen Length (ft.): 10
Specific Capacity: _____
Casing ID (in.): 2"

Responsible Personnel: D. Whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112G03605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) ORP
1040		0	15.24	—	—	—	—	1.5 Gpm
1059		29	16.90	13.60	3.98	0.136	653	279 lt. Brown
1105		38	16.65	13.85	4.32	0.068	132	303 " "
1110		45	16.63	13.90	4.44	0.057	19	313 clear
1115		53	16.63	13.85	4.50	0.054	12.5	324 clear
1120		60	16.63	13.83	4.52	0.053	11.2	324 "
1125		68	16.63	13.78	4.59	0.052	9.65	324 "
1130		75	16.63	13.77	4.61	0.052	10.5	327 "
								STOP

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02MW01B
Site: Site 2
Date Installed:
Date Developed: 12/22/11
Dev. Method: submers. pump
Pump Type: whale pump

Depth to Bottom (ft.):
Static Water Level Before (ft.): 14.70
Static Water Level After (ft.): 14.70
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2"

Responsible Personnel: D. Whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112603605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units _____)	Turbidity (NTU)	Remarks (odor, color, etc.) ORP
1340		0	14.70	—	—	—	>1000	lt. Brown 1.5 gpm
1350			15.35	12.98	5.95	0.153	93	133
1400		30	15.35	12.99	5.97	0.108	22	133
1405			—	—	—	—	750	lt. Brown SURGE
1410		45		12.95	5.87	0.105	245	160 "
1415				12.81	5.80	0.091	52	163 cloudy
1420		60	15.33	12.70	5.82	0.087	14	168 clear
1422			—	—	—	—	4706	SURGE
1425			15.33				1354	
1430		75	15.33	12.77	5.81	0.088	130	174
1435			15.33	12.77	5.75	0.082	48	cloudy
1440			15.33	12.77	5.70	0.078	15	181 clear
1445		97.5					8.5	stop

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02 MW 01 C
Site: Site 2
Date Installed:
Date Developed: 12/22/11
Dev. Method: submers. pump
Pump Type: whale pump

Depth to Bottom (ft.): 14.39
Static Water Level Before (ft.): 14.39
Static Water Level After (ft.):
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2"

Responsible Personnel: D. whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112G03605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) ORP
1140		0	14.39	—	—	—	—	lt. Brown, v. turbid
1150		15	15.90	13.37	4.92	0.145	381	257 1.5 GPM
1154			—	—	—	—	>1000	SURGE pump
1200		30	15.88	13.22	4.83	0.148	219	199 lt. Brown
1210		45	15.80	13.13	4.80	0.149	144	179
1211			—	—	—	—	>1000	SURGE
1220		60	15.80	13.03	4.78	0.151	126	174 cloudy
1221			—	—	—	—	>1000	SURGE
1230		75	15.75	13.07	4.76	0.150	135	
1240		90	15.75	12.93	4.74	0.151	92	166
1250		105	15.73	12.89	4.74	0.153	100	176
1300		120	—	—	—	—	87	
1330		165	15.70	13.08	4.73	0.150	62	170
1340		180	15.70	13.05	4.79	0.150	63	172 STOP

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02 MW 6C
Site: Site 2
Date Installed:
Date Developed: 1-18-12
Dev. Method: bailer + submers pump
Pump Type: Redi Flo 2

Depth to Bottom (ft.): 59.98
Static Water Level Before (ft.): 6.65
Static Water Level After (ft.):
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: D. Whalen
Drilling Co.: N
Project Name: Site 2
Project Number: 112G03605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) ORP	
1030		0	6.65	12.15	5.83	.068	—	lt Brown 191	500 ml/12sec
1040			—	12.12	5.03	.068	—	" 0.7gpm 233	
1045			6.85	12.39	4.64	.057	245	" 246	
1050		11	6.83	12.45	4.47	.058	181	" 257	5 gal/7min
1055		15	6.83	12.24	4.45	.058	158	" 254	
1100		18	6.85	12.37	4.51	.056	119	" 262	
1105		20.5	6.83	12.31	4.49	.057	113	" 273	
1110		25	6.83	12.21	4.58	.057	107	" 264	
1115		30	6.83	12.21	4.61	.057	93	" 269	
1120		30	6.83	12.09	4.52	.057	88	" 267	
1125		35	6.83	11.97	4.51	.057	85	" 274	
1130			6.83	12.39	4.53	.057	75	" 268	
1135		42	6.83	12.19	4.55	.057	66	" 270	
1140		45	6.83	12.08	4.57	.056	59	" cloudy 278	

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02MW13A
Site: Site 2
Date Installed: 12/28/11
Date Developed: 12/28/11
Dev. Method: Submersible pump
Pump Type: whale pump

Depth to Bottom (ft.):
Static Water Level Before (ft.): 4.09
Static Water Level After (ft.): 4.09
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: D. Whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112603605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units uS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.) ORP
1113		0	4.09	—	—	—	—	— 1.75 gpm
1124			6.90	9.39	4.59	0.178	>1000	— GRAY w turbidity
1130		30	~6.90	9.43	4.89	0.080	—	— GRAY SURGE
1140		48	6.90	9.19	4.97	0.069	—	68
1150		66		9.32	5.02	0.065	742	59 lt. GRN-BRN
1200		84		9.39	5.15	0.065	553	47 " "
1205				9.42	5.21	0.066	>1000	39 SURGE
1210		102		9.49	5.29	0.065	680	28
1215				9.46	5.35	0.065	520	25
1225		120		9.47	5.41	0.065	337	23
1235		138		9.44	5.43	0.065	241	14 lt. GRN
1245		156		9.44	5.44	0.064	206	8 "
1250				9.51	5.45	0.065	194	8 "
1255		174		9.46	5.46	0.065	187	10 "
1300				9.41	5.47	0.065	173	10 "
1310		200		9.42	5.45	0.065	162	7 "

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02MW13B
Site: Site 2
Date Installed:
Date Developed: 12/28/11
Dev. Method: submers. pump
Pump Type: whale pump

Depth to Bottom (ft.):
Static Water Level Before (ft.): 3.81
Static Water Level After (ft.): 3.75
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: D. whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112G03605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1440		0	3.81	—	—	—	—	lt. BRN 2GPM
1445		10		10.87	6.55	0.165	>1000	" "
1450		20	5.42	10.82	5.80	0.124	510	" "
1451		22		—	—	—	>1000	" " SURGE
1455		30		10.96	5.60	0.111	974	" "
1500		40		10.97	5.56	0.112	206	122
1501		42		—	—	—	>1000	lt. BRN SURGE
1510		60	5.19	10.97	5.51	0.102	134	131 2GPM
1520		80		11.19	5.57	0.102	130	137
1525		90		11.23	5.55	0.101	124	137
1530		100		11.22	5.54	0.099	110	142 cloudy
1535		110		11.25	5.54	0.101	112	143 sl. cloudy
1540		120		11.22	5.53	0.098	101	148 sl. cloudy

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: 02MW13C
Site: Site 2
Date Installed:
Date Developed: 12/28/11
Dev. Method: submers. pump
Pump Type: whale pump

Depth to Bottom (ft.):
Static Water Level Before (ft.): 3.83
Static Water Level After (ft.): 3.83
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2

Responsible Personnel: D. whalen
Drilling Co.: Talon
Project Name: OB/OD unit BEMP
Project Number: 112G03605

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1315		0	3.83	10.37	6.18	.177	>1000	-25 lt. BRN 29ppm
1320		30	6.29	10.84	6.66	.194	>1000	-18 "
1335		40	9.26	10.98	6.79	0.194	410	-13 "
1336		42	—	—	—	—	—	— SURGE
1340		50	9.29	11.16	6.84	0.195	>1000	-16
1345		60		11.07	6.90	0.193	817	-19
1350		70		11.15	6.90	0.191	309	-8
1355		80		11.24	6.94	0.190	135	2
1400		90		11.29	6.96	0.191	99	8 cloudy
1405		100	9.34	11.19	6.97	0.198	>1000	11 lt BRN SURGE
1410		110		11.18	7.00	0.190	501	17
1415		120	9.34	11.22	7.01	0.190	144	21 cloudy
1420		130		11.21	7.00	0.189	88	23 cloudy
1425		140	9.34	11.14	7.00	0.188	57	28 clear
1430		150		11.13	7.01	0.189	56	30 "
1435		160	9.34	11.21	7.02	0.189	39	35 "
								STOP

APPENDIX C

GROUNDWATER LEVEL MEASUREMENT SHEET

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NWS Earle Site 2 **Project No.:** 112G03605
Location: **Personnel:** D. Whalen, M. Carr
Weather Conditions: cloudy **Measuring Device:**
Tidally Influenced: Yes ___ No __X_ **Remarks:**

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
02MW01A	2/14/12	0929			15.41			
02MW01B		0931			14.90			
02MW01C		0935			14.41			
02MW02		1105			8.08			
02MW03		1050			4.71			
02MW04		1120			2.83			
02MW05		1100			7.92			
02MW06A		0914			7.42			
02MW06B		0916			6.76			
02MW06C		0918			7.23			
02MW07		1040			7.58			
02MW08A		1055			8.31			
02MW08B		1058			8.15			
02MW08C		1059			7.53			
02MW09A		1045			4.92			
02MW09B		1047			5.26			
02MW09C		1049			4.60			
02MW10A		1035			4.19			
02MW10B		1038			5.00			
02MW10C		1040			5.10			
02MW11A		0952			5.62			
02MW11B		0954			5.66			
02MW11C		0955			5.51			
02MW12B		1024			6.81			
02MW13A		1155			4.99			
02MW13B		1158			4.64			
02MW13C	↓	1200			4.70			

* All measurements to the nearest 0.01 foot

APPENDIX D

FIELD FORMS

D.1 GROUNDWATER SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW01A-20120117
Sample Location: 02MW01A
Sampled By: DW/MAK
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Date: 1-18-12	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Time: 0920								
Method: Redi Flo 2	clear	4.72	0.056	14.16	1.0	9.31	313	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Date: 1-18-12								
Method: Redi Flo 2								
Monitor Reading (ppm): 0	— SEE LOW FLOW PURGE DATA SHEET —							
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 21.6 toc								
Static Water Level (WL): 14.85								
One Casing Volume(gal/L):								
Start Purge (hrs): 0815								
End Purge (hrs): 0915								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW01B-20120117
Sample Location: 02MW01B
Sampled By: DW/MM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1-17-12								
Time: 1505								
Method: RediFlo 2	clear	7.39	.068	13.82	8.86	6.63	230	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Date: 1-17-12								
Method: RediFlo2								
Monitor Reading (ppm):		SEE LOW FLOW PURGE DATA SHEET						
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 35'								
Static Water Level (WL): 14.27								
One Casing Volume(gal/L):								
Start Purge (hrs): 1322								
End Purge (hrs): 1502								
Total Purge Time (min): 100								
Total Vol. Purged (gal/L): 10								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW01C-20120117
Sample Location: 02MW01C
Sampled By: DW/MM
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Other NA
Date: 1-17-12								
Time: 1215								
Method: Redi Flo2	clear	4.72	.158	12.79	6.15	1.25	1286	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Date: 1-17-12								
Method: Redi Flo2								
Monitor Reading (ppm):	—	SEE	LOW	FLOW	PURGE	DATA	SHEET	—
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 55								
Static Water Level (WL): 13.78								
One Casing Volume(gal/L):								
Start Purge (hrs): 1000								
End Purge (hrs): 1210								
Total Purge Time (min): 130								
Total Vol. Purged (gal/L): 15								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Dullmuhln

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW13A
Sample Location: 02MW13A
Sampled By: DW
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Redi Flo 2 Pump	pale yellow	4.16	0.052	7.33	6.02	0.0	135	

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Method: Redi Flo 2								
Monitor Reading (ppm): 0	—	SEE	LOW	FLOW	PURGE	DATA	SHEET	—
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 14'								
Static Water Level (WL): 4.40								
One Casing Volume(gal/L):								
Start Purge (hrs): 0820								
End Purge (hrs): 0920								
Total Purge Time (min): 60								
Total Vol. Purged (gal/L): 6								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD

Duplicate ID No.: 02DUP01-20120119 (1015)

Signature(s): Donald Whalen

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW13B
Sample Location: 02MW13B
Sampled By: DW
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time: 1420	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Redi Flo 2 Pump	clear	5.31	0.077	11.99	5.97	0.70	204	

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Method: Redi Flo 2 pump								
Monitor Reading (ppm): 0	—	SEE	LOW	FLOW	PURGE	DATA	SHEET	—
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 35'								
Static Water Level (WL): 4.03								
One Casing Volume(gal/L):								
Start Purge (hrs): 1235								
End Purge (hrs): 1415								
Total Purge Time (min): 100								
Total Vol. Purged (gal/L): 9								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Donald Whalen

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: 02MW13C
Sample Location: 02MW13C
Sampled By: DW
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 1-18-12	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	Visual	Standard	mS/cm	^{0}C	NTU	mg/l	mV	NA
Method: RediFlo 2	clear	6.47	0.143	11.50	8.63	0.0	104	

PURGE DATA:

Date: 1-18-12	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	ORP	Other
Method: RediFlo 2								
Monitor Reading (ppm):	—	SEE	LOW	FLOW	PURGE	DATA	SHEET	—
Well Casing Diameter & Material								
Type: 2" PVC								
Total Well Depth (TD): 55'								
Static Water Level (WL): 4.00								
One Casing Volume(gal/L):								
Start Purge (hrs): 1515								
End Purge (hrs): 1620								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 6								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1 L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): David Whalen

D.2 LOW-FLOW PURGE DATA SHEETS

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02MW01A
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0820	14.83	250	6.24	.074	434.0	8.97	12.51	222	lt. brown
0825	14.86	250	5.39	.068	218.0	9.13	13.53	241	
0830	14.88	250	5.22	.063	161.0	9.15	14.04	252	
0835	14.92	250	4.81	.057	111.0	9.16	14.65	270	
0840	14.90	250	4.76	.058	64.4	9.24	13.57	277	
0845	14.90	250	4.70	.058	55.4	9.22	13.84	287	
0850	14.90	250	4.66	.057	40.0	9.26	13.70	301	
0855	14.90	250	4.67	.056	32.0	9.15	14.02	302	cloudy
0900	14.92	250	4.74	.057	22.0	8.94	13.87	296	
0905	14.94	250	4.72	.057	14.6	9.20	14.29	305	clear
0910	14.94	250	4.70	.056	1.77	9.01	14.12	314	"
0915	14.93	250	4.72	.056	1.00	9.31	14.16	313	clear

SIGNATURE(S): Donald W Kalen

PAGE___OF___

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02MW01B
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1322	14.27	300	6.62	.102	168.0	7.21	12.61	212	lt. Brown
1327	14.33	300	6.01	.096	166.0	7.56	13.15	204	↓
1332	14.33	300	5.65	.090	180.0	7.88	13.34	203	↓
1337	14.33	300	5.52	.081	127.0	7.98	13.38	210	↓
1342	14.33	300	5.46	.077	71.1	7.78	13.46	215	cloudy
1347	14.33	300	5.43	.076	48.6	7.55	13.54	218	
1352	14.33	300	5.41	.074	29.1	7.40	13.52	221	↓
1357	14.33	300	5.41	.073	30.1	7.19	13.59	221	↓
1402	14.33	300	5.41	.072	30.9	6.94	13.75	221	↓
1407	14.33	300	5.40	.072	26.2	6.83	13.73	224	↓
1412	14.33	300	5.39	.071	20.6	6.73	13.82	224	↓
1417	14.32	300	5.39	.071	12.6	6.63	13.77	226	clear
1422	14.32	300	5.39	.072	16.15	6.56	13.73	228	
1427	14.32	300	5.39	.069	6.99	6.56	13.73	231	
1432	14.32	300	5.40	.069	14.3	6.46	13.77	230	
1437	14.32	300	5.41	.070	15.8	6.44	13.81	229	
1442	14.32	300	5.41	.070	13.5	6.44	13.78	228	clear
1447	14.32	300	5.40	.069	12.7	6.45	13.77	228	"
1452	14.32	300	5.42	.076	11.6	6.46	13.76	227	"
1457	14.32	300	5.40	.068	12.3	6.54	13.81	229	"
1502	14.32	300	5.39	.068	8.86	6.63	13.82	230	"

SIGNATURE(S): David Webster

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02MW01C
DATE: 1-17-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1000	13.78	200	5.92	.190	-5.0	3.20	11.63	191	
1005	13.83	200	5.05	.186	-5.0	3.71	11.81	208	
1010	13.83	200	4.77	.179	-5.0	3.82	12.40	226	
1015	13.83	200	4.71	.174	-5.0	4.37	12.85	239	
1020	13.84	200	4.70	.172	-5.0	3.80	12.95	244	
1025	13.84	200	4.71	.171	-5.0	3.46	12.99	247	
1030	13.84	200	4.71	.171	-5.0	3.44	12.98	251	
1035	13.84	200	4.71	.169	-5.0	3.39	13.05	256	
1040	13.84	200	4.68	.164	633.0	3.29	13.10	260	
1045	13.84	200	4.67	.165	491.0	3.21	13.01	264	
1050	13.84	200	4.67	.164	404.0	3.19	13.02	266	
1055	13.84	200	4.68	.164	332.0	2.86	13.01	271	
1100	13.85	200	4.68	.163	268.0	2.90	12.98	273	
1105	13.85	200	4.68	.163	223.0	2.89	12.93	275	
1110	13.85	200	4.69	.162	210.0	2.74	12.94	277	
1115	13.85	200	4.70	.162	188.0	3.02	12.97	279	
1120	13.85	200	4.69	.161	167.0	3.04	12.93	281	
1125	13.85	200	4.69	.161	155.0	2.87	12.96	282	
1130	13.85	200	4.70	.160	142.0	2.50	12.96	284	
1135	13.85	200	4.69	.160	131.0	2.20	12.89	285	
1140	13.85	200	4.69	.159	42.8	2.03	12.95	285	
1145	13.85	200	4.69	.159	37.6	1.87	12.89	286	
1150	13.85	200	4.70	.159	28.8	1.68	12.90	286	
1155	13.85	200	4.70	.159	22.0	1.57	12.94	286	
1200	13.85	200	4.70	.159	15.6	1.44	12.94	286	
1205	13.85	200	4.70	.158	9.54	1.32	12.96	286	
1210	13.85	200	4.72	.158	6.15	1.25	12.89	286	

SIGNATURE(S): [signature]

PAGE___OF___

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02 MW 13 A
DATE: 4-19-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0820	4.41								START PURGING
0825	4.47	350	5.11	.063	151.0	0.0	5.78	153	
0830	4.46	350	4.84	.059	147.0	0.0	5.14	152	
0835	4.47	350	4.35	.057	109.0	0.0	6.37	155	
0840	4.47	350	4.16	.055	116.0	0.0	6.77	156	
0845	4.47	350	4.16	.055	77.1	0.0	7.03	150	
0850	4.47	350	4.09	.055	58.3	0.0	7.09	146	
0855	4.47	350	4.10	.053	10.60	0.0	6.99	141	clear, pale yellow
0900	4.46	350	4.12	.053	9.46	0.0	7.10	140	" "
0905	4.46	350	4.12	.052	8.50	0.0	7.18	139	" "
0910	4.46	350	4.14	.052	6.94	0.0	7.28	139	" "
0915	4.46	350	4.15	.051	7.08	0.0	7.33	138	" "
0920	4.47	350	4.16	.052	6.02	0.0	7.33	135	" "

SIGNATURE(S): David Wheeler

PAGE ___ **OF** ___

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02MW13B
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1235	4.03		5.22	.078		0.056	11.53	213	
1240	4.10	370	5.21	.076	415	0.16	11.54	210	
1245	4.08	370	5.24	.076	351.0	0.10	11.66	209	
1250	4.08	370	5.27	.075	234.0	0.02	11.84	207	
1255	4.08	370	5.28	.074	151.0	0.00	11.98	206	
1300	4.08	370	5.28	.076	31.9	0.00	11.96	205	
1305	4.09	370	5.29	.077	28.2	0.00	12.01	205	
1310	4.09	370	5.32	.077	25.3	0.00	12.13	204	
1315	4.09	370	5.32	.078	25.9	0.00	12.14	203	
1320	4.09	370	5.33	.077	25.3	0.00	12.15	202	
1325	4.09	370	5.32	.078	24.7	0.00	12.14	202	
1330	4.09	370	5.32	.078	21.4	0.06	12.17	202	
1335	4.09	370	5.32	.078	20.3	0.12	12.25	201	
1340	4.09	370	5.32	.078	17.8	0.20	12.21	201	
1345	4.08	370	5.36	.079	14.2	0.29	12.19	199	
1350	4.08	370	5.32	.079	6.95	0.33	12.02	200	
1355	4.09	370	5.30	.078	8.93	0.46	12.25	204	
1400	4.09	370	5.29	.078		0.50	12.29	202	
1405	4.09	370	5.30	.078		0.58	12.06	202	
1410	4.09	370	5.31	.078	8.65	0.62	11.97	202	
1415	4.09	370	5.31	.077	5.97	0.70	11.99	204	

SIGNATURE(S): Donald Wheeler

PAGE___OF___

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NWS Earle Site 2
PROJECT NUMBER: 112G03605

WELL ID.: 02MW13C
DATE: 1-18-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1515	4.00	380	6.03	.126	107.0	0.20	10.99	154	
1520	4.28	380	6.06	.128	66.0	0.11	11.14	150	
1525	4.29	380	6.08	.128	42.7	0.00	11.21	141	
1530	4.29	380	6.17	.131	59.6	0.00	11.31	130	
1535	4.30	380	6.26	.133	45.9	0.00	11.34	123	
1540	4.30	380	6.27	.134	36.5	0.00	11.47	121	
1545	4.30	380	6.32	.136	25.8	0.00	11.43	116	
1550	4.30	380	6.35	.137	21.7	0.00	11.49	114	
1555	4.30	380	6.37	.139	17.9	0.00	11.48	112	
1600	4.30	380	6.39	.139	13.8	0.00	11.56	110	
1605	4.31	380	6.42	.141	11.8	0.00	11.52	108	
1610	4.31	380	6.44	.142	10.6	0.00	11.50	107	
1615	4.32	380	6.45	.143	9.17	0.00	11.51	105	
1620	4.32	380	6.47	.143	8.63	0.00	11.50	104	

SIGNATURE(S): David Wheeler

PAGE___OF___

D.3 QUALITY ASSURANCE SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project Number: 112G03605
Sample Location:
QA Sample Type:

Sample ID Number: 02RB01-20120119
Sampled By: D. Whalen
C.O.C. Number:

[] Trip Blank
[] Source Water Blank
[X] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1/19/12
Time: 1245
Method:

WATER SOURCE:

[] Laboratory Prepared
[X] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name: Acadia Pure Steam Distilled Water
Supplier: Giant
Manufacturer: DS Waters of America
Order Number: —
Lot Number: Btld. 1/12/12
Expiration Date: 1/12/14

RINSATE INFORMATION (If Applicable):

Media Type: Groundwater
Equipment Used: Redi Flo-2 Pump
Equipment Type:
[] Dedicated
[X] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	Cool 4°C	2 x 1L amber	YES / NO
Perchlorate	Cool 4°C	250 ml poly	YES / NO
Total metals	Cool 4°C & HNO_3	500ml poly	YES / NO

OBSERVATIONS / NOTES:

Signature(s): David Whalen

Tetra Tech NUS, Inc.

QA SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project Number: 112G03605
Sample Location:
QA Sample Type:

[] Trip Blank
[X] Source Water Blank

Sample ID Number: 02FB01-20120119
Sampled By: D. whalen
C.O.C. Number:

[] Rinsate Blank
[] Other Blank

SAMPLING DATA:

Date: 1/19/12
Time: 1230
Method:

WATER SOURCE:

[] Laboratory Prepared
[X] Purchased
[] Other
[] Tap
[] Fire Hydrant

PURCHASED WATER INFORMATION (If Applicable as Source or Rinsate Water):

Product Name: Acadia Pure Steam Distilled water
Supplier: Giant
Manufacturer: DS waters of America
Order Number: —
Lot Number: Btld. 1/12/12
Expiration Date: 1/12/14

RINSATE INFORMATION (If Applicable):

Media Type:
Equipment Used:
Equipment Type:
[] Dedicated
[] Reusable

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	Cool 4°C	2 x 1L amber	(YES)/ NO
Perchlorate	Cool 4°C	250 ml poly	(YES)/ NO
Total metals	Cool 4°C & HNO_3	500ml poly	(YES)/ NO

OBSERVATIONS / NOTES:

Signature(s): David W. Whalen

Tetra Tech NUS, Inc.

DOCUMENTATION OF FIELD CALIBRATION

PROJECT NAME : Willow Grove

SITE NAME: Site 12

PROJECT No.: 112G02014

INSTRUMENT NAME/MODEL: miniRAE

MANUFACTURER: RAE

SERIAL NUMBER:

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
				Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
12/19/11		110 014 506	DW	—	—	97.1	100.0	LTAN021-MD-CM	100 ppm isobutylene
12/20/11		"	"	—	—	94.6	100.0		
12/21/11		"	"	—	—	95.4	100.0		
12/22/11		"	"	—	—		100.0		
12/23/11		"	"	—	—		100.0		

D.4 SURFACE WATER SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[X] Stream
[] Spring
[] Pond
[] Lake
[] Other:
[] QA Sample Type:

Sample ID No.: 02SW101
Sample Location: 02SW101
Sampled By: DW
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	Salinity %	Other NA ORP
Date: 1-19-12								
Time: 1030								
Depth: 4"	clear yellow	5.52	.061	3.14	1.2	8.97	—	105
Method: direct fill								

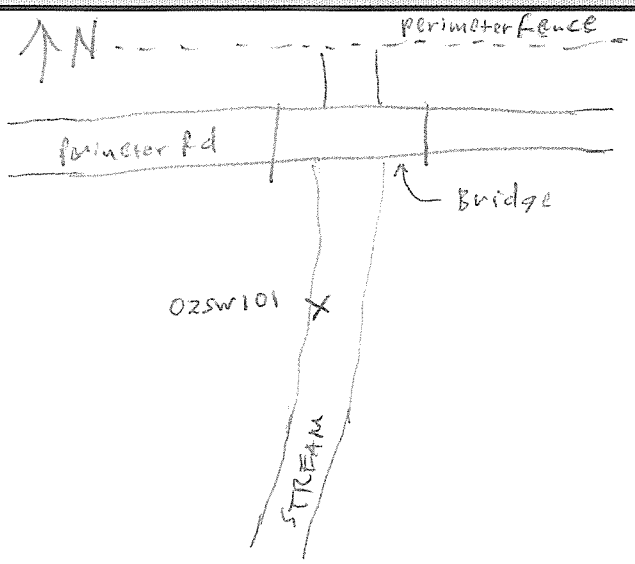
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Collected from stream ~25' upstream from ~~the~~ perimeter rd. bridge.
stream ~ 7' wide 9" deep and flowing.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): David Whalen

Tetra Tech NUS, Inc.

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NWS Earle Site 2
Project No.: 112G03605

[X] Stream
[] Spring
[] Pond
[] Lake
[] Other:
[] QA Sample Type:

Sample ID No.: 02SW102
Sample Location: 02SW102
Sampled By: DW
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 1-19-12	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA 0.55
Time: 1110								
Depth: 3"	clear yellow	4.31	.055	1.85	2.35	5.02	—	129
Method: direct fill								

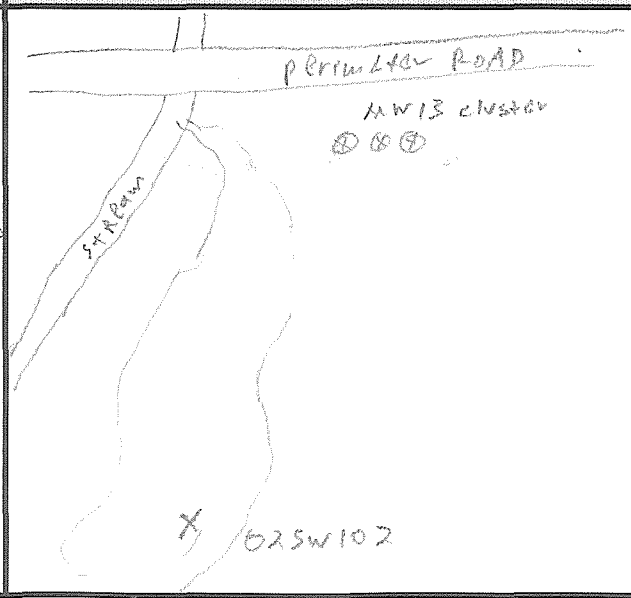
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Explosives	---	2 x 1L amber	✓
Perchlorate	---	250 ml poly	✓
Total metals	HNO3	500 ml poly	✓
Dissolved metals	HNO3	500 ml poly	

OBSERVATIONS / NOTES:

Collected from wetland area near well cluster 13.
water was ~ 6" deep with ~ 1/2" to 1" ice on surface
Had to break ice to collect sample.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Donald Whalen

D.5 CHAIN-OF-CUSTODY RECORDS

TETRA TECH NUS, INC. | CHAIN OF CUSTODY | NUMBER 2745 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G03005 - WE72	NWS Earle	Jennifer Lambert	610 382 3779	Test America Linda Lever
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Ronald Whalen	610 382 1336	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 3963 9584		West Sacramento, CA

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Explosives	Pesticides	Total Metals						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)									G	P	P						
PRESERVATIVE USED									–	–	HNO3						
1/19	0925	02MW13A-20120119				GW	G	4	X	X	X						
	1015	02DUP01-20120119				GW	G	4	X	X	X						
	1030	02SW101-20120119				SW	G	4	X	X	X						
	1110	02SW102-20120119				SW	G	4	X	X	X						
	1230	02FB01-20120119				QC	G	4	X	X	X						Field Blank
↓	1245	02RB01-20120119				QC	G	4	X	X	X						Rinsate Blank

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
Donald Whalen	1/19/12	1200			
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2741 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
1126 03605	NWS Earle	Jennifer Lambert		Test America Linda Lover

SAMPLERS (SIGNATURE)	FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
[signature]	Ronald Whalen	610 282 1536	880 Riverside Pkwy
	CARRIER/WAYBILL NUMBER		CITY, STATE
	Fed Ex 8744 5963 9562		West Sacramento, CA

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G, P, P
PRESERVATIVE USED: —, —, HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	Explosives	Perchlorate	Total metals						COMMENTS
1/17	1215	02MW01C-20120117				GW	G	4	X	X	X						
1/17	1505	02MW01B-20120117				GW	G	4	X	X	X						
1/18	0920	02MW01A-20120118				GW	G	4	X	X	X						
1/18	1420	02MW13B-20120118				GW	G	12	X	X	X						Do MS/MSD
1/18	1625	02MW13C-20120118				GW	G	4	X	X	X						

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY [signature]	1/18/12	1830	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

D.6 EQUIPMENT CALIBRATION LOGS

Form 001 for SOP-LAB-007

DO CHECK SHEET

DATE: 1/10/12

TIME: 1300

NAME OF TECHNICIAN:
Mike Mandras

SAMPLE COLLECTION ORIGIN:
Tap

DO METER READING 8.67 mg/L used Horiba U-22 # 811002

USING WINKLER MODIFICATION RESULT 8.73 mg/L

ADJUSTMENT (if needed) MADE TO METER: ___ yes X no

If no why?
Reading is within accepted parameters.

I certify that I have completed this check sheet and that the information is correct. The information collected is based on the results obtained following Arecon's Standard Operating Procedures.

DATE: 1/10/12

SIGNATURE: [signature]

Field Intrument Calibration Log

Job Label Gale NWS

Ph Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: pH 4.0 Lot# C148273 Exp 11/30/12
Calibration Sol'n Lot # and Exp. Date: pH 7.0 Lot# 211040 Exp 9/13
Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Calibration Range	Buffer Check Solution	Check Value	Notes
1/17/12	0930	M.Munoz	4.0	4.0	4.0	
			7.0	7.0	7.0	Cal check 6.98@ 1305

Dissolved Oxygen Calibration
Meter #: ~~#~~

Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Cal Span Value	Zero	Zero Check	Notes

Conductivity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot# C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/17/12	0930	M.Munoz	4.49 mS	4.49 mS	4.49	

Turbidity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot# C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/17/12	0930	M.Munoz	0.0	0.0	0.0	

Temperature Calibration
Meter #:

Quarterly Calibration Date:

Date	Time	Technician	Temperature Celsius	NIST Thermometer Celsius	Adjustment	Notes

Note: pH Buffer Check must be performed with a pH buffer within every three hours of instrument use.
Duplicate sample analysis must be performed every eight sample analyzed.

Field Intrument Calibration Log

Job Label Earle NWS

Ph Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: pH 4.0 Lot # C148273 exp 11/30/12
Calibration Sol'n Lot # and Exp. Date: pH 7.0 Lot # 2110040 exp 9/12
Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Calibration Range	Buffer Check Solution	Check Value	Notes
1/18/12	0745	M. Mandras	4.00	4.00	4.00	
			7.00	7.00	7.00	
						Cal check - 6.95 @ 1205
						Cal check - 6.97 @ 1300

Dissolved Oxygen Calibration
Meter #:

Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Cal Span Value	Zero	Zero Check	Notes

Conductivity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot # C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/18/12	0745	M. Mandras	4.49	4.49	4.49 ms	

Turbidity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot # C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/18/12	0745	M. Mandras	0.0	0.0	0.0	

Temperature Calibration
Meter #:

Quarterly Calibration Date:

Date	Time	Technician	Temperature Celsius	NIST Thermometer Celsius	Adjustment	Notes

Note: pH Buffer Check must be performed with a pH buffer within every three hours of instrument use.
Duplicate sample analysis must be performed every eight sample analyzed.

Field Intrument Calibration Log

Job Label Earle NWS

Ph Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: pH 4.0 Lot # C148273 exp 11/30/12
Calibration Sol'n Lot # and Exp. Date: pH 7.0 Lot # 2110040 exp 9/13
Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Calibration Range	Buffer Check Solution	Check Value	Notes
1/19/12	0750	M. Mundras	4.00	4.00	4.00	
			7.00	7.00	7.00	

Dissolved Oxygen Calibration
Meter #:

Calibration Sol'n Lot # and Exp. Date:

Date	Time	Technician	Cal Span Value	Zero	Zero Check	Notes

Conductivity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot # C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/19/12	0750	M. Mundras	4.49 mS	4.49 mS	4.49 mS	

Turbidity Calibration
Meter #: #811002

Calibration Sol'n Lot # and Exp. Date: Lot # C148273 exp 11/30/12

Date	Time	Technician	Standard Solution	Standard Check Solution	Check Value	Notes
1/19/12	0750	M. Mundras	0.0	0.0	0.0	

Temperature Calibration
Meter #:

Quarterly Calibration Date:

Date	Time	Technician	Temperature Celsius	NIST Thermometer Celsius	Adjustment	Notes

Note: pH Buffer Check must be performed with a pH buffer within every three hours of instrument use.
Duplicate sample analysis must be performed every eight sample analyzed.

Tetra Tech

EQUIPMENT CALIBRATION LOG

PROJECT NAME : NWS EARLE

INSTRUMENT NAME/MODEL: MINIRAE

SITE NAME: OB/OD UNIT

MANUFACTURER: RAE

PROJECT No.: 112G03605

SERIAL NUMBER:

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
12/19/11	110019026	D.W	—	—	97.1	100.0	LTN021-MD-CM	100 ppm Isobutylene
12/20/11	"	"	—	—	94.6	100		
12/21/11	"	"	—	—	95.4	100		
12/22/11	"	"	—	—		100		
12/23/11	"	"	—	—		100		

APPENDIX E

FIELD NOTES

12/19/11 Monday

0900 Don Whalen (DW) arrives at Front Gate. meet Mark Carr (Cative Tech)
Get pass. Rapid Gate will not be valid for 24 hrs.
Scott Fleming arrives at Gate

0910 Drillers arrive Dan Burgess (Talon Drilling)
Scott

0930 DW to 11MW03, open well for VSGS.

0945 Scott F. escorts crew to Fire station to get Hot work permit.
SF takes VSGS to 11MW03

1030 at EOD Range
SF leaves site
DW conducts HOS training

Donald Whalen
12/19/11

12/19/11 Monday

1105 02MW01 WL = 12.92 TOC
11.5 BGS
TD = 29.4 BGS
permit # 29-15752
4" PVC

1120 pull steel casing at MW01

1130 Driller gate call from PSE&G
- they are at Gate need escort
DW calls Scott F.
Scott will escort them in.
Drillers unable to pull PVC at 02MW01

1155 Scott arrives w/ PSE&G
- MW1 area is clear
Scott leaves - escorts PSE&G personnel to MW13 location

1240 Grout 02MW01 using tremie pipe.

1252 set up on 02MW01C

Donald Whalen
12/19/11

12/19/11 Monday

1505 Scott F. and Eric Helms stop by. Eric suggests we wear orange vests due to hunters. Scott will see what time EOD personnel will open gate tomorrow

1540 S F calls. Gate will be open at 0730 tomorrow

1547 Rods are stuck in auger due to running sands

1600 All personnel leave site

No PID readings > BGD. recorded

DW 12/20/11

12/20/11 Tuesday

weather: overcast, lite rain 45°

0710 DW arrives at pass office
office not open yet

0730 Pass office opens. DW gets pass for vehicle. Mark Cam arrives.
- waiting for drillers

0800 Drillers arrive. Dan Burgess and Evgeni Yakkov

0830 Drillers get passes

0840 at Site 2
DW gives Health and Safety training to Evgeni
recon 02MW06C - well to be repaired

0905 DW calibrates PID
see calib. log sheet

0910 Resume attempt to free rods from augers

0920 use tremie pipe to pump water into ~~between~~ auger. Free rods

0940 Auger to 40'
rods jammed
free rods with water

DW 02/20/11

12/20/11 Tuesday

Scott F arrives to check on flush mount wells within berm area

1050 SF leaves

auger to 45', sample 45'-47'

1120 auger to 50'

1140 auger to 55'

1158 Install screen 45-55'

2" sch. 40 PVC 0.010" slot

1215 need to jet bottom of borehole to get screen down to 55'

Fill water tank in rig from trailer using garden hose

1300 Continue trying to set well

1350 Scott arrives to check flush mount wells

1430 Drillers still working on 02MW1C - pulled PVC

1435 Scott leaves

Drillers pulling augers

1500 Augers pulled

~~B~~ ~~A~~-lengths of tremie pipe are jammed inside bottom of augers.

Dalel Calvelo
12/20/11

12/20/11 Tuesday

Insert bottom plug

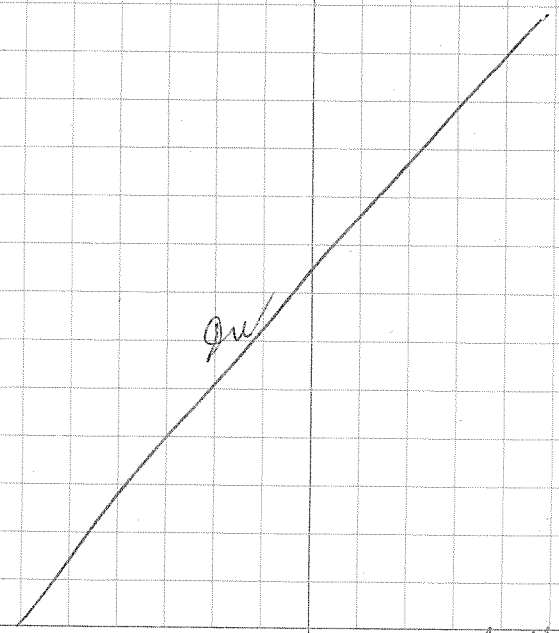
1540 EOD personnel arrives to lock gate behind us when we leave

1555 augers down to 35'

Stop drilling

1605 All personnel leave site

No PID readings > BGD. today



Dalel Calvelo
12/20/11

12-21-11 Wednesday

weather: overcast 50°

0710 Don Whalen arrives at front gate
wait for drillers.

0750 Drillers arrive
Get daily vehicle pass for drillers
- must go to to security to fill out lost badge report for Scott (lost his badge on Monday)

0805 at security, fill out lost badge report

0815 return form to front gate
- Scott is issued replacement badge

0830 at Site 2
Resume augering at 0700 PIC

0900 at 55'
fill augers w/ water
lower drill bit to push out plug
- can't get bit to bottom - ~15' sand in augers
- plug did not seal augers - auger may be too worn.

09 turn off rig. Driller making

Dulelwhe
12/21/11

12/21/11 Wednesday

phone call

0920 restarted rig
try to push out sand.

0948 Stop. Driller calls shop to get something to help
unable to get sand out, drill bit stuck in augers

0958 - have remove 10' of augers
rods still stuck inside
Shop can't send anything out

1030 try jetting sand in augers with tremie pipe

1040 rods are free, pull rods
Drillers were able to get center plug down to bottom w/ 40' of augers in hole, but sand got in again when they pulled plug to add rod.

1130 continue drilling w/ center plug

1145 at 55'
~~tryg~~ pulling plug - plug is stuck
pull plug

Dulelwhe
12/21/11

12/21/11 Wednesday

1205 install 10' screen 45-55'
add #1 Sand 55'-42'
Filpro Filtration Sand
U.S. Silica
#1

1245 Break for Lunch

1250 Call Scott F. - inform him
we will need access to EOD range
tomorrow

1310 add #0 sand to 39.5'

1327 start mixing grout
add grout

1400 start augering at 02MW01B

Scott Flemmons and Eric Helms
arrive.
- Gate will be open tomorrow
at 0730.
- to get to 13 we must get
Gate 8 open by security
(x 2291)

1435 Scott and Eric leave

Dodd Walsh
12/21/11

12/21/11 Wednesday

1500 augered down to 35' with bottom
~~Install~~ plug. Punch out plug.
Install 10' screen 0.010 slot
25-35' bgs.
add sand 35-22'
add Sand 22-20'

1555 Stop site activities

1600 All personnel leave site

No PID readings > Bkgd. recorded

Dw 12/21/11

6189 809 919

Dodd Walsh
12/21/11

12/22/11 Thursday

weather: p. cloudy 50°

0710 Don Wheeler arrives at Front Gate wait for drillers. Mark Carr is there.

0747 Drillers arrive - get clearly vehicle pass
proceed to Site 2

0810 Drillers repair 02 MW 06C
- cut down PVC below broken section at top.

TD = 55.25' BGS, feels soft

0838 Start auger at 02MW01A
Mark clears borehole down to 10'

0910 Scott Fleming arrives to show us the 02MW13 location
DW, Mark, and Scott leave site 2 to recon MW13 location
Scott calls security to open swing gate 8

0920 security arrives, opens gate
proceed to 02MW13 location

Dale Lutes
12/22/11

12/22/11 Thursday

Hand auger three well locations
Mark clears with instruments
- all three locations are clear of ordnance

1020 DW, MC back to site 2
Drillers have finished installing 02MW01A
screen 9-19'
no. 1 sand 6-19
no. 0 sand 4-6
grout to surface

1045 Mark C. leaves site

1050 DW leave to open Gate
DW returns

Drillers developing 02MW01A
stop development

1140 develop 02 MW 01C
stop development
develop 02MW 01 B
stop development

Dale Lutes
12/22/11

12/22/11 Thursday

1450 leave EOD range to transport rig to MW13 cluster
DW calls Scott F. to have EOD gate closed

1505 at MW 13 cluster
start spooning at 13C

1605 STOP at 10'

1610 Drillers fill rig tank with water from tender

1630 leave MW13 location

No PID rdgs. > Bkgd. recorded

DW 12/22/11

Dold Whalen 12/22/11

12/23/11 Friday

weather: overcast, lt. rain 45°

0710 Don Whalen arrives at front gate. - wait for drillers

0720 DW calibrates PID - see cal log sheet

0730 Drillers arrive at Gate, vehicle being inspected

0755 at SG-08, gate is locked
call Ginny (Scott's secretary)
she will re-call security

0802 Security arrives

0815 at MW13 location
continue drilling MW13C

0936 at 30'

0956 at 34'
stop split spooning

1032 at 55'
pull center plug

1050 install 10' 0.01" screen 45'-55'
have to jet bottom to place screen to 55'
no. 1 sand 55' - 41.0
no. 0 sand 41.5 - 39.5

Dold Whalen 12/23/11

12/23/11 Friday

1145 Drillers break for lunch

1230 mix cement/bentonite grout

1245 add grout to augers with tremie pipe

1255 pull augers

1325 Start augering at 13A
auger to 14'
set 10' screen 4-14'
no. 1 sand 3-14'

1350 ~~Start~~ auger to 5' at 13B
Stop augering
drillers fill rig tank up w/ water
secure site

1440 leave drill location

1450 DW calls security to lock SG-08

1500 leave Base
NO PID rdgs > Bkgd. recorded

DW 12/23/11

Donald Whalen 12/23/11

12/28/11 Wednesday

weather: sunny ~40°

0845 Don Whalen arrives at Grout gate. Get vehicle pass.
Drillers are there Dan Burgess
Scott

0850 DW calls security - to get SG-08 opened

0910 DW, drillers at NW 13 cluster.

0922 Resume drilling NW 13B

0942 at 35' with augers
try to punch out bottom plug with center plug - 5' sand in bottom

0955 Jet bottom with tremie pipe
Install 10' 0.010 slot screen 25'-35'
no. 1 sand 22'-35'
no. 0 20'-22'
Grout to surface
Construct stick up completions on 13A and 13C

Donald Whalen 12/28/11

12/28/11 Wednesday

Start developing MW 13A

1310 Stop

1315 Start developing MW 13C

Stop

1440 Start developing MW 13B

1540 Stop

1600 load ATV rig on trailer

1620 Leave site

1630 Security locks gate

Drillers, DW leave site

No PID readings > Bkgd. recorded

DW 12/28/11

Dudd Whalen
12/28/11

1-17-12

weather: overcast 40°

0850 Don Whalen arrives at gate, meet Mike Mundras (Arcon) Mark Carr

Get pass

Stop at Fire Station to get hot work permit

0915 at Range, meet Scott Fleming

0920 Scott leave

DW gives health and safety training to Mike

calibrate instruments

set up on 02MW01C

1000 Start purging 02MW01C with Redi Flo 2 Pump

1030 DW lowers magnet ~~to~~ to bottom of 02MW6C to see if shrapnel is inside

– magnet does not pick up anything

Dudd Whalen
1/17/12

1/17/12

1215 Collect sample 02MW01C-20120117
See sample log sheet
decon pump
Start purging 02MW01B
1505 Collect sample 02MW01B-20120117
See log sheet for details
1545 DW calls Scott Fleming
inform him we are leaving
Range
1550 All personnel leave site
No PID rdgs. > Bkgd recorded

Dw 1/17/12

Dale Wahl
1/17/12

1-18-12

weather: sunny, windy ~40°

0655 Don Whalen arrives at front gate. Meet Mark Carr and Mike Meadows (MM)
Get pass for MM
0735 at site 2

02MW01A
WL = 14.83 TD = 21.6
0215 Start purging
0920 Collect sample 02MW01A-20120118
- see sample log sheet for details
DW at 02MW06C
WL = 6.65' TOC
TD = 59.98'
pull 4 bails from well
water was lt. Brown, turbid

1030 ~~Start~~ Start developing with submersible pump
Scott Fleming and Joe Marchesani (PADEP) arrive to observe activities

Dale Wahl
1-18/12

1/18/12

0827 02MW01C 13.83
B 14.32

1120 Scott and Joe leave site
1140 stop developing 02MW06C
1

1221 02MW13B
wL = 4.03
TD = 37.4' TOC
1230 Start purging 02MW13B

1305 Scott Fleming and Joe
arrive to observe.
Scott Fleming and Joe
1350 leave
collect sample 02MW13B-20120118
see sample log sheet
1515 start purging 02MW13C
1625 collect sample 02MW13C-20120118
see sample log sheet
1650 All personnel leave site

Dwl
Daniel Walsh
1/18/12

1-19-12

weather: sunny Cold 25°

0720 Don Walsh arrives at
main gate, meet
Mike Saundras (Arscon)
Get pass for Mike
0735 at SG 8
Scott F. is there with
security - lock is frozen
thaw lock with cigarette
lighter
SF leaves site
0745 at 02MW13
calibrate instruments

02MW13A
wL = 4.40' TOC
TD = 16.40' TOC
2.3' stickup
0820 Start purging 02MW13A
0920 End purging
0925 DW collects sample 02MW13A -
20120119
- see sample log sheet for details

Daniel Walsh
1-19-12

1-19-12

1030 DW collects Surface water sample 02SW101
see sample log

1110 DW collects Surface water sample 02SW102
see sample log

1200 Mike Mandras leaves site

1230 DW pours Field Blank 02FB01-20120119
see sample log

1245 DW pours Rinsate Blank using Redi Flo 2 pump
See sample log sheet

1340 DW leaves site
call Scott F. to let him know OK to lock SG-08

DW

Dall Walsh
1-19-12

2/14/12

weather: cloudy ~45°

0805 Don Whalen arrives at Main Gate. Surveyors are there - Dennis Sklar and Jim Stewart. Also there is Mark Carr (~~EOD~~ UXO clearance)
DW gets vehicle pass

0820 at Environmental. Get keys to Site 2 MW's from Scott Fleming

0835 at Site 2 - give Health and Safety briefing to Surveyors. Surveyors set up control

0900 DW starts w.l. round with Mark C.

1200 Finish collecting w.l. measurements
- Surveyors survey MW01 cluster
- survey elevation of MW06C and MW08, 09, and 10 as a check for elevation
- survey MW13 cluster and SW101 and SW102

1500 leave EOD Range
DW returns keys to Scott F.

1570 leave site

Dall Walsh
2/14/12

APPENDIX F

ANALYTICAL VALIDATION AND LABORATORY DATA PACKAGE

F.1 TETRA TECH DATA VALIDATION REPORTS

TETRA TECH NUS

PHIL-24700

TO:	**JENNIFER LAMBERT**	**DATE:**	**MARCH 6, 2012**
FROM:	**MEGAN RITCHIE**	**COPIES:**	**FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – PERCHLORATE, EXPLOSIVES, AND METALS**
CTO WE072 - NWS EARLE SITE 2, COLTS NECK, NEW JERSEY
SDG NO. G2A190474

SAMPLES: **5/Aqueous/**

02MW01A	02MW01C	02MW13C
02MW01B	02MW13B	

*Sample dates were truncated from the sample names for clarity.

OVERVIEW

The sample set for the NWS Earle Site 2 – Colts Neck, New Jersey, SDG G2A190474 consists of 5 aqueous environmental samples (designated 02MW01- and 02MW13-). Sample 02MW13B was designated for matrix spike/matrix spike duplicate (MS/MSD) analyses. All samples were analyzed for perchlorate, select explosives, and select total metals.

The samples were collected by Tetra Tech on January 17 and 18, 2012 and analyzed by TestAmerica Laboratories, Inc. of West Sacramento, California for perchlorate and explosives analyses and by TestAmerica Laboratories, Inc. of Pittsburgh, Pennsylvania for metals analysis.

The analyses were conducted using EPA SW-846 Method 6850 for perchlorate (DoD Perchlorate Handbook), 8330 for explosives, and 6020 for metals.

The data received limited review according to the following parameters:

* • Data completeness
* • Holding Times
• Laboratory method blank results
* • Initial and continuing calibrations
* • CRDL Standards
• ICP Interference Check Samples
* • Surrogate spike Recoveries
* • Internal Standard Recoveries
* • Matrix Spike/Matrix Spike Duplicate results
* • Laboratory Control Sample recoveries
* • ICP Serial Dilution
* • Compound Identification
* • Compound Quantitation
• Reporting/Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B,

the Region II data validation checklist for metals is presented in Appendix C, and supporting documentation is presented in Appendix D.

METALS

ICP Interference Check Samples

A positive zinc concentration was detected in the ICSA solution above the Limit of Quantitation (LOQ) which may indicate a bias due to interference from a nutrient metal. All positive zinc concentrations in the associated samples greater than the detection limit (DL) were qualified as estimated (J).

Reporting Limits

Positive results at concentrations less than the LOQs were qualified as estimated (J).

EXPLOSIVES

Confirmation Analysis

The percent difference (%D) between the positive results on two columns for explosives analysis exceeded the QC criterion of 25%. The positive 1,3,5-trinitrobenzene result for sample 02MW01A and the positive trinitroxylene (TNX) result for sample 02MW01C are considered “tentatively identified” and qualified as estimated (NJ).

Reporting Limits

Positive results at concentrations less than the LOQs were qualified as estimated (J).

Notes

Iron was detected in the laboratory method blank. No qualifications were made for iron in the associated samples because the associated sample concentrations were greater than 10X the blank concentration.

The internal standard (IS) for the beginning level of detection verification (LODV) was below the 50% acceptance limit. The LODV recovery was within acceptance limits; as well as the opening continuing calibration verification (CCV) for both the internal standard and native recoveries. The laboratory corrective action was to reanalyze samples 02MW01A and 02MW01C because these samples had a positive concentration below the LOQ. The results are reported from the reanalysis.

Surrogate recoveries for 3,4-dinitrotoluene exceeded the upper QC limit in the confirmation column analyses. Results were reported from the primary column. No qualifications were made based on the surrogate exceedances.

The perchlorate data were acceptable as reported by the laboratory.

EXECUTIVE SUMMARY

Laboratory Performance: Iron was detected in the laboratory method blank. One analyte was detected in the ICSA solution above the QC criterion. Two %Ds for positive explosives results exceeded the QC criterion.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the following documents:

- NJDEP document titled "Quality Assurance Data Validation of Analytical Deliverables for Inorganics (based on USEPA SW-846 methods SOP5.A.16)" (5/2002),
- USEPA Region 2 Standard Operating Procedure (SOP) HW-2 for the Evaluation of Metals Data for the Contract Laboratory Program (CLP) (September 2006) modified for use with NJDEP guidelines,
- USEPA Region 2 SOP HW-16 for Validation of Nitroaromatics and Nitroamines by HPLC, SW-846 Method 8330A (September 2006),
- Department of Defense (DoD) Perchlorate Handbook (March 2006), and the
- DoD Quality Systems Manual (QSM) for Environmental Laboratories Version 4.2 (October 2010).

The text of this report has been formulated to address only those problem areas affecting data quality.

Megan Ritchie

Megan N. Ritchie
Chemist

Russell Sloboda

Tetra Tech NUS, Inc.
Russell Sloboda
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A – Qualified Analytical Results
2. Appendix B – Results as Reported by the Laboratory
3. Appendix C – Region II Data Validation Forms
4. Appendix D – Support Documentation

APPENDIX A

Qualified Analytical Results

PROJ_NO: 03605 SDG: G2A190474 FRACTION: MISC MEDIA: WATER	NSAMPLE	02MW01A-20120118			02MW01B-20120117			02MW01C-20120117			02MW13B-20120118		
	LAB_ID	G2A190474003			G2A190474002			G2A190474001			G2A190474004		
	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/18/2012		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.1	J	P	0.12	J	P	0.25	U		0.25	U	

PROJ_NO: 03605	NSAMPLE	02MW13C-20120118		
SDG: G2A190474	LAB_ID	G2A190474005		
FRACTION: MISC	SAMP_DATE	1/18/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
PERCHLORATE		0.25	U	

PROJ_NO: 03605	NSAMPLE	02MW01A-20120118DL			02MW01B-20120117			02MW01C-20120117DL			02MW13B-20120118		
SDG: G2A190474	LAB_ID	G2A190474003			G2A190474002			G2A190474001			G2A190474004		
FRACTION: EXP	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,3,5-TRINITROBENZENE		0.034	NJ	PU	0.05	U		0.05	U		0.051	U	
1,3-DINITROBENZENE		0.052	U		0.05	U		0.05	U		0.051	U	
2,4,6-TRINITROTOLUENE		0.052	U		0.05	U		0.05	U		0.051	U	
2,4-DINITROTOLUENE		0.052	U		0.05	U		0.05	U		0.051	U	
2,6-DINITROTOLUENE		0.052	U		0.05	U		0.05	U		0.051	U	
2-AMINO-4,6-DINITROTOLUENE		0.1	U		0.1	U		0.1	U		0.1	U	
4-AMINO-2,6-DINITROTOLUENE		0.052	U		0.05	U		0.05	U		0.051	U	
MNX		1	U		1	U		1	U		1	U	
RDX		0.052	U		0.05	U		0.05	U		0.051	U	
TNX		0.15	U		0.15	U		0.22	NJ	PU	0.15	U	

PROJ_NO: 03605	NSAMPLE	02MW13C-20120118		
SDG: G2A190474	LAB_ID	G2A190474005		
FRACTION: EXP	SAMP_DATE	1/18/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,3,5-TRINITROBENZENE		0.05	U	
1,3-DINITROBENZENE		0.05	U	
2,4,6-TRINITROTOLUENE		0.05	U	
2,4-DINITROTOLUENE		0.05	U	
2,6-DINITROTOLUENE		0.05	U	
2-AMINO-4,6-DINITROTOLUENE		0.1	U	
4-AMINO-2,6-DINITROTOLUENE		0.05	U	
MNX		1	U	
RDX		0.05	U	
TNX		0.15	U	

PROJ_NO: 03605	NSAMPLE	02MW01A-20120118			02MW01B-20120117			02MW01C-20120117			02MW13B-20120118		
SDG: G2A190474	LAB_ID	180-7794-9			180-7794-8			180-7794-7			180-7794-10		
FRACTION: M	SAMP_DATE	1/18/2012			1/17/2012			1/17/2012			1/18/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.9	U		0.9	U		0.9	U		0.9	U	
ARSENIC		0.5	U		0.5	U		0.5	U		0.5	U	
CHROMIUM		18			26			11			5.3		
COPPER		13			3.7			12			0.6	J	P
IRON		870			1400			1300			590		
LEAD		1.3			0.59	J	P	2			0.38	J	P
ZINC		37	J	K	15	J	K	48	J	K	6.9	J	K

PROJ_NO: 03605	NSAMPLE	02MW13C-20120118		
SDG: G2A190474	LAB_ID	180-7794-11		
FRACTION: M	SAMP_DATE	1/18/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
ANTIMONY		0.9	U	
ARSENIC		0.5	U	
CHROMIUM		5.6		
COPPER		0.6	J	P
IRON		1000		
LEAD		0.41	J	P
ZINC		3.6	J	KP

Qualifier Codes:

a	=	Lab Blank Contamination
b	=	Field Blank Contamination
c	=	Calibration (i.e., %RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
d	=	MS/MSD Noncompliance
e	=	LSC/LSCD Noncompliance
f	=	Laboratory Duplicate Imprecision
g	=	Field Duplicate Imprecision
h	=	Holding Time Exceedance
i	=	ICP Serial Dilution Noncompliance
j	=	GFAA PDS – GFAA MSA's r<0.995 (correlation coefficient)
k	=	ICP Interference – include ICSAB %Rs
l	=	Instrument Calibration Range Exceedance
m	=	Sample Preservation
n	=	Internal Standard Noncompliance
o	=	Poor Instrument Performance (i.e. baseline drifting)
p	=	Uncertainty Near Detection Limit (<2 x IDL for inorganics and < CRQL for organics)
q	=	Other Problems (can encompass of number of issues)
r	=	Surrogates Recovery Noncompliance
s	=	Pesticide/PCB Resolution
t	=	% Breakdown Noncompliance for DDT and Endrin
u	=	Pesticide/PCB % Difference Between Columns for Positive Results
v	=	Non-linear Calibrations, Tuning r <0.995 (correlation coefficient)

Data Qualifier Key:

J - Value is considered estimated due to exceedance of technical quality control or because result is less than the Contract Required Quantitation Limit (CRQL).

U - Value is a non-detected result as reported by the laboratory.

APPENDIX B

Results as Reported by the Laboratory

White Water Associates

Client Sample ID: 02MW01C-20120117

Dissolved HPLC

Lot-Sample #...: G2A190474-001 Work Order #...: MQAVQ1AJ Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW01B-20120117

Dissolved HPLC

Lot-Sample #...:	G2A190474-002	Work Order #...:	MQAVR1AJ	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/30/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.12 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02MW01A-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 02/09/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.10 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02MW13B-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-004 Work Order #...: MQAVV1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW13C-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-005 Work Order #...: MQAVW1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...: G2A190474-001 Work Order #...: MQAVQ1AK Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.22 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...: G2A190474-001	Work Order #...: MQAVQ2AK	Matrix.....: WATER
Date Sampled...: 01/17/12	Date Received..: 01/19/12	
Prep Date.....: 01/24/12	Analysis Date..: 02/02/12	
Prep Batch #...: 2024017		
Dilution Factor: 1.01	Method.....: SW846 8330/8330A	

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.093 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	117 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01B-20120117

HPLC

Lot-Sample #...: G2A190474-002 Work Order #...: MQAVR1AK Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...:	G2A190474-003	Work Order #...:	MQAVT1AK	Matrix.....:	WATER
Date Sampled...:	01/18/12	Date Received..:	01/19/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/01/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.03	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.034 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT2AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.03 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U CON	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.081 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW13B-20120118

HPLC

Lot-Sample #...: G2A190474-004 Work Order #...: MQAVV1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

White Water Associates

Client Sample ID: 02MW13C-20120118

HPLC

Lot-Sample #...: G2A190474-005 Work Order #...: MQAVW1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01C-20120117
Lab Sample ID: 180-7794-7
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/17/2012 12:15
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	11	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	12	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	1300	50	20	11	ug/L			1	6020/DOD
Lead	2.0	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	48	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01B-20120117
Lab Sample ID: 180-7794-8
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/17/2012 15:05
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	26	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	3.7	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	1400	50	20	11	ug/L			1	6020/DOD
Lead	0.59	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	15	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01A-20120118
Lab Sample ID: 180-7794-9
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 09:20
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	18	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	13	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	870	50	20	11	ug/L			1	6020/DOD
Lead	1.3	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	37	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW13B-20120118
Lab Sample ID: 180-7794-10
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 14:20
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	5.3	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	0.60	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	590	50	20	11	ug/L			1	6020/DOD
Lead	0.38	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	6.9	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW13C-20120118
Lab Sample ID: 180-7794-11
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 16:25
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	5.6	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	0.60	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	1000	50	20	11	ug/L			1	6020/DOD
Lead	0.41	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	3.6	5.0	2.0	0.96	ug/L	J	Q	1	6020/DOD

APPENDIX C

Region II Metals Checklist

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: — SDG# G2A190474

LAB: Test America SITE: NWS Earle Site 2

1.0 Introduction

1.1 The attached Standard Operating Procedure (SOP) is applicable to nitro substituted aromatic and nitro substituted amines by High Performance Liquid Chromatography (HPLC)data. Its scope is not only to facilitate the data validation process of the data reported by the contracting laboratory, but also to ensure the data is being reviewed in a uniform manner.

1.2 This SOP is based upon the quality control assurance requirements specified in analytical SW 846 Method 8330A Revision 1, January 1998, and the National Function Guidlines, January 2005.

2.0 Responsibilities

2.1 The reviewer must be knowledgeable of the analytical method and its criteria.

2.2 The reviewer must complete and/or file the following:

Data Assessment Checklist - The data reviewer evaluates Each criterion carefully and checks if data is in compliance, non-compliace or not applicable.

Data Assessment Narrative - The data reviewer must present professional judgement, address areas of concern and comment on the validity of the overall data package. The reviewer must explain the reasons for rejecting and or qualifing the data.

Telephone Record Log - All phone conservations must be transcribed by the reviewer. Upon completion of the data review,

	YES	NO	N/A
the original telephone log is attached to the data assessment narrative.			

	YES	NO	N/A
3.0 Data Completeness and Deliverables			
3.1 Has all the data been submitted in CLP deliverable format?	[✓]		
3.2 Have any missing deliverables been received and added to the data package?	[ ]		✓

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

	YES	NO	N/A
4.0 Cover Letter, SDG Narrative			
4.1 Is a laboratory narrative or cover letter present?	[✓]		
4.2 Are the case number and/or SDG number contained in the narrative or cover letter?	[✓]		

	YES	NO	N/A
5.0 Data Validation Checklist			
5.1 Does this data package contain:			
Water data?	[✓]		
Waste data?	[ ]	✓	
Soil/solid data?	[ ]	✓	

	YES	NO	N/A
6.0 Traffic Reports and Laboratory Narrative			
6.1 Are traffic report and chain-of-custody forms present for all samples?	[✓]		

YES NO N/A

ACTION: If no, contact lab for replacement of missing or illegible copies.

6.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

7.0 Special QC

7.1 Prior to preparation of stock solutions; acetonitrile, methanol, and water should be analyzed to determine possible interferences with analyte peaks. A different batch of solvent should be used if contamination is present.

7.2 Chromatograms are to be submitted showing that there are no interferences with analyte peaks.

Are these chromatograms present in package? [✓] ___ ___

Are the chromatograms free of interferences? [✓] ___ ___

Action: Ask lab for resubmittals. If deliverables are unavailable, judge the effect of the validity of the data. If questionable, contact SMO and note in data assessment.

8.0 Holding Times

8.1 Have any nitroaromatics and nitroamines technical

YES NO N/A

holding times, determined from date of collection to date of extraction, been exceeded? ___ [✓] ___

Water and waste samples must be properly perseved (cooled to 4° +/- 2°), and nitro substituted aromatics and amines analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R." (Table 1)

Table 1. Holding Time Criteria

Matrix	Preserved	Criteria	Action	
			Detected compounds	Non-detected compounds
Aqueous	No	≤ 7 days(extraction) ≤ 40 days(analysis)	Use professional judgement	
	No	> 7 days(extraction) > 14 days(analysis)	Use professional judgement	
	Yes	≤ 7 days(extraction) ≤ 40 days(analysis)	No qualification	
	Yes	> 7 days(extraction) > 40 days(analysis)	J	UJ
	Yes/No	Grossly exceeded	J	UJ or R

YES NO N/A

Non-aqueous	No	≤ 14days(extraction) ≤ 40 days (analysis)	Use professional judgement	
	No	> 14days(extraction) >40 days(analysis)	Use professional judgement	
	Yes	≤ 14days(extraction) ≤ 40 days(analysis)	No qualification	
	Yes	> 14days(extraction) > 40 days(analysis)	J	UJ
	Yes/No	Grossly Exceeded	J	UJ or R

YES NO N/A

9.0 Surrogate Recovery (Form II)

9.1 The analyst most monitor the performance of the extraction and analytical system as well as the effectiveness of the method in dealing with each sample matrix by spiking each sample, standard and reagent water blank with one or two surrogates (e.g., analytes not expected to be present in the samle).

9.2 Were the recoveries of the surrogate spikes presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices? Reported on individual sample sheets

a. Water/Waste [✓] ___ ___

b. Soil/Solid [ ] ___ ✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables or information are unavailable, document the effect in the data assessment.

9.3 Are all the pesticide samples listed on the appropriate surrogate recovery form for each of the following matrices?

a. Water [✓] ___ ___

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

YES NO N/A

9.4 The laboratory must evaluate the surrogate data from individual samples versus the surrogate control limits developed by the laboratory. Method 8000C, Sec 9.0 details evaluating surrogate data and updating surrogate limits. If laboratory established recovery limits are not established, use surrogate recovery between 70 - 130% for all samples, including MS, MSDs, LCSs, and all blanks. Are surrogate recovery limits met? [ ] ✓ ___

Confirmation column recoveries exceed upper limit. Results reported from primary column

ACTION: Circle all outliers in red. Follow surrogate action Table 2.

9.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [✓] ___ ___

ACTION: Follow surrogate action, Table 2 below.

Table 2. Surrogate Recovery Criteria

Criteria	Action	
	Detected Target Compounds	Non-detected Target Compounds
%R > 200%	J	Use professional judgement
130% < %R ≤ 200%	J	No qualification
70% ≤ %R ≤ 130%	No qualification	
10% ≤ %R < 70%	J	UJ
%R < 10% (sample dilution not a factor)	J	R
%R < 10% (sample dilution is a factor)	Use professional judgement	
RT out of RT window	Use professional judgement	
RT within RT window	No qualification	

YES NO N/A

9.6 Are there any transcription/calculation errors between raw data and Form II? [ ] [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

10.0 Laboratory Control Sample

10.1 Is the LCS prepared, extracted, analyzed, and reported once for every 20 field samples of a similar matrix, per SDG. [✓] ___ ___

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation/ resubmittals. Make note in the data assessment.

10.2 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000C (section 9.5). [✓] ___ ___

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation/ resubmittals. Make note in the data assessment.

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

10.3 Were the Laboratory Control Samples analyzed for all the nitroaromatics and nitroamines analytes that the samples are analyzed for. [✓] ___ ___

10.4 Were Laboratory Control Samples analyzed at the required concentration as specified in Method

YES NO N/A

8000C(sec 9.5)(near the middle of the calibration range) for all target analytes. [✓] ___ ___

(low-level)

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

10.5 Did laboratory calculate in-house performance criteria for LCS recoveries according to Method 8000C section 9.7, and were recoveries met? [✓] ___ ___

10.6 If in house LCS recoveries performance criteria were not generated, the laboratory should use 70 - 130% criteria, and was this criteria met? [*] ___ ✓

10.7 If LCS recovery criteria were not met, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use Table 3 recovery actions criteria.

Table 3. LCS Recovery Actions

Criteria	Action	
	Detected Associated Compounds	Non-Detected Compounds
%R > Upper Acceptance Limit	J	No qualification
%R < Lower Acceptance Limit	J	R
Lower Acceptance Limit ≤ %R ≤ Upper Acceptance Limit	No qualifications	

11.0 Matrix Spikes (Form III)

11.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix. [✓] ___ ___

YES NO N/A

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike spike.

11.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [✓] ___ ___

ACTION: If any data are missing take action as specified in section 3.2 above.

11.3 Were matrix spikes analyzed at the required frequency for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level.

a. Water [✓] ___ ___

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

11.4 Were the Matrix Spike Samples spiked and analyzed for all the nitroaromatics and nitroamines analytes that the samples are analyzed for (Same analytes as LCS). [✓] ___ ___

ACTION: If no, did the lab use the optional QC acceptance criteria discussed in Method 8000C(section 9.7)?

List the criteria used and make note in data assessment.

Criteria used _____

11.5 Were Laboratory Control Samples analyzed at the required concentration as specified in Method 8000C(sec (9.5)(Same concentration as LCS) for all target analytes. [✓] ___ ___

11.6 Did laboratory calculate in-house performance criteria for matrix spike recoveries according to Method 8000C section 9.7, and were recoveries met? [✓] ___ ___

11.7 If in house LCS recoveries performance criteria were not generated, the laboratory should use 70 - 130% criteria, and was this criteria met? [ ] ___ ✓

YES NO N/A

11.8 How many matrix spike recoveries are outside the in-house performance criteria or QC limits of 70 - 130%?

N/A Water ___out of ___ N/A Soil ___out of _

11.9 How many RPDs for the Matrix Spike and Matrix Spike Duplicate (if applicable)recoveries are greater than the QC limit of 20%?

N/A Water ___out of___ N/A Soil ___out of___

11.8 Were the matrix spike and matrix spike duplicate recovery and RPD limits met as specified in Table 4. Note: No qualification of the data is necessary on MS and MSD data alone. Use professional judgement to use the MS and MSD results in conjunction with other QC criteria to determine the need for some qualification of the data. If any MS and MSD, percent recovery, or RPD results in the nitroaromatics and nitroamines fraction is out of specification (Table 4), use professional judgement to qualify data to include the consideration of the existence interference in the raw data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples. Use professional judgement to determine the need for qualification of detects of non-spiked compounds.

Table 4. MS/MSD Actions for Analysis

Criteria	Action	
	Detected Associated Compounds	Non-Detected Compounds
%R or RPD > Upper Acceptance Limit	J	No qualification
20% ≤ %R < Lower Acceptance Limit	J	UJ
%R < 20%	J	Use professional judgement
Lower Acceptance Limit ≤ %R ≤ Upper Acceptance Limit	No qualifications	

YES NO N/A

12.0 Blanks (Form IV)

12.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)? [✓] ___ ___

12.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch? [✓] ___ ___

ACTION: If any blank data are missing, take action as specified above (section 3.2). If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

12.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts.

Is the chromatographic performance (baseline stability) for each instrument acceptable for nitroaromatics and nitramines? [✓] ___ ___

13.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

13.1 Do any method/instrument/reagent/cleanup blanks have positive results for nitroaromatics or nitramines? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary. ___ [✓] ___

13.2 Do any field/rinse blanks have positive nitroaromatics or nitramines results? ___ [ ] [✓]

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

YES NO N/A

ACTION: Follow the directions in Table 5 below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Table 5. Blank Contamination Criteria

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Clean up, Instrument, Field	Detects	Not detected	No qualification
	< CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL	Use professional judgement
	> CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL and < blank contamination	Report the concentration for the sample with a U, or quanity the data as unusable R
		≥ CRQL and ≥ blank contamination	Use professional judgement
	= CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL	Use professional judgement
	Gross contamination	Detects	Qualify results as unusable R

NOTE: If gross blank contamination exists(e.g., saturated peaks, "hump-o-grams," "junk" peaks), all affected positive compounds in the associated samples should be qualified as unusable "R", due to interference. Non-detected pesticide target compounds do not require qualification unless the contamination is so high that it interferes with the analyses of non-detected compounds.

13.3 Are there field/rinse/equipment blanks associated with every sample? ✓ ✗ 4/1/12

Included in associated SDG

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/ equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

YES NO N/A

14.0 HPLC Apparatus and Materials

14 .1 Was the proper HPLC chromatographic column used for the analysis of nitroaromatics or nitramines?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8330A, section 4.1) [✓] ___ ___

14.2 Indicate the specific type of HPLC column.

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 14.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

15.0 Calibration and HPLC Performance

15.1 Are the following liquid chromatograms and data systems printouts for both columns present for all samples, blanks, MS, replicates?

a. Samples [✓] ___ ___

b. All blanks [✓] ___ ___

c. Matrix spike samples [✓] ___ ___

d. 5 pt. initial calibration standards [✓] ___ ___

e. Calibration verification standards [✓] ___ ___

f. Laboratory Control samples (LCS) [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

15.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? [✓] ___ ___

NOTE: External standard calibration procedures are used (Method 8000C (section 11.4.2), therefore calibration factors must be used.

YES NO N/A

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

15.3 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and document the effect in data assessments.

15.4 Are standard retention time (RT) windows for each nitroaromatics and nitramines peak of interest presented on modified CLP summary forms? [✓] ___ ___

Shown on individual quant forms

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all nitroaromatics and nitramines are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000C section 11.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

15.5 Were RT windows on the confirmation column established using three standards as described above? [✓] ___ ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 15.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

15.6 Do all standard retention times in each level of the initial 5 pt. calibrations for nitroaromatics and nitramines fall within the windows established during the initial calibration sequence? [✓] ___ ___

YES NO N/A

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standards spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 80000C(section 11.6).

ii. Alternatively, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

15.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD for the calibration factors (CFs)must be < 20.0% for all analytes). [✓] ___ ___

ACTION: If no, follow Table 6 criteria.

Table 6. Initial Calibration CF Action for Nitroaromatic and Nitramine Analysis

Criteria	Action	
	Detected Associated Compounds	Non-Detected Associatedd Compounds
% RSD > 20%	J	UJ
% RSD within allowable limits	No qualifications	

15.8 Does the calibration verification/continuing calibration standard contain the nitroaromatics or nitramines peaks of interest, analyzed on each working day, prior to sample analyses? [✓] ___ ___

15.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above.

15.10 Has the percent difference (%D) between the

YES NO N/A

Calibration Factor (CF) of the peaks used to identify the nitroaromatics and nitramines in the CCV and the CF from these peaks in the initial calibration exceeded ± 15%. ___ [✓] ___

15.11 Has a new 5 pt. initial calibration curve been generated for those nitroaromatics and nitramines analytes which failed in the calibration verification/continuing calibration standard (8000C, section 11.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration standard? [ ] ___ [✓]

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". (Table 7)

15.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000C, section 11.6), using RTs from the associated calibration verification/continuing standard? [✓] ___ ___

ACTION: If no, take action specified in section 3.2 above

15.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence? [✓] ___ ___

15.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the daily RT windows. [✓] ___ ___

ACTION: If the answer to either 15.12 or 15.13 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria). If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the

YES NO N/A

retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

15.15 Has no more than 14 hours elapsed from the injection of the opening CCV and the end of the analytical sequence (closing CCV). (Table 7) [ ] ___ ✓

SW-846 method does not specify.

Table 7. CCV Criteria

Criteria	Action	
	Detected Associated Compounds	Non-Detected Associated Compounds
RT out of RT window	Use professional judgement (Sec 15.14)	
%D not within +/- 15%	J	UJ
Time elapsed greater than section 15.15 criteria.	R	
%D, time elapsed, RT are all within acceptable limits.	No qualifications	

15.16 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exists call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

16.0 Analytical Sequence Check (Form VIII-nitroaromatics and nitramines)

16.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

16.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses? [✓] ___ ___

YES NO N/A

Note: Sequence is as follows: 5 point initial calibration, method blank, LCS, CCS, 10 sample extracts, CCV, 10 sample extract, and so on. The sequence must always end with a CCV. As long as the first CCV is within QC, the initial calibration does not have to be rerun.

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

16.3 Were the surrogate RTs for the samples within the mean surrogate RT from the initial calibration? [✓] ___ ___

Action: If no, see "Action" in section 15.14 above

17.0 Extraction Techniques for Sample Preparation

Method 8330A permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

17.1 Aqueous samples:

1. Low Level (salting-out extraction)) [ ] ___ ✓
2. High-level (Sample filtration) [✓] ___ ___
3. Solid phase extraction (Method 3535) [ ] ___ ✓
4. Other [ ] ___ ✓

17.2 Soil and sediment samples:

1. Sonication [ ] ___ ✓
2. Other [ ] ___ ✓

18.0 Nitroaromatics and Nitramines Identification

18.1 Has CLP Form X or equivalent, showing retention time data for positive results on the two HPLC columns, been completed for every sample in which a nitroaromatics or nitramines was detected? [ ] ✓ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

YES NO N/A

18.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries. ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

18.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [✓] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second HPLC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

18.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently. Were there any false negatives? ___ [✓] ___

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

18.5 Is the percent difference (%D) calculated for the positive sample results on the two HPLC columns <25.0%? [ ] [✓] ___

All results are reported from primary column.

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier

YES NO N/A

0-25%		none
26-70%		"J"
71-100%		"NJ"
101-200%	(No Interference)	"R"
101-200%	(Interference detected)**	"NJ"
>50%	(Analyte value is <CRQL)	"U"
>200%		"R"

Note: The lower of the two values is reported on Form I. If using professional judgement,the reviewer determines that he higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the data assessment.

19.0 Compound Quantitation and Reported Detection Limits

19.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? ___ [✓] ___

NOTE: Nitroaromatics and Nitramines peak results can be checked for rough agreement between quantitative results obtained on the two HPLC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 18.5 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

19.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? [✓] ___ ___

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with

YES NO N/A

data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable? [✓] ___ ___

14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen? ___ [✓] ___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for Nitroaromatics and Nitramines. [ ] ✓ ___

See associated SDG.

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

DATA DELIVERABLE REQUIREMENTS

Site Name Site 2 Job Code

Location NWS Earle Date of Review

Laboratory Name Lead Division/Bureau

Reviewer Megan Ritchie Methodology Review

Site/Case Manager

GENERAL REQUIREMENTS: Circle YES or NO and list the deviations at the bottom:

~~A. Permanently Bound~~ NA - PDF copy	~~Yes~~	~~No~~	G. Methodology Review	Yes	No
B. Paginated	Yes	No	H. Uninitialed Strikeovers	Yes	No
C. Title Page	Yes	No	I. Legible Photocopies	Yes	No
D. Table of Contents	Yes	No	J. Consistent Dates	Yes	No
E. Chain of Custody	Yes	No	K. Digestion Log	Yes	No
F. Non-conformance Summa	Yes	No			

Describe any deviations from the requirements

HOLDING TIMES FOR METALS

Matrix: Aqueous ( ) or Nonaqueous ( )

SAMPLE ID FIELD or LAB	DATE of SAMPLE COLLECTION	ICP ANALYSIS DATE	MERCURY ANALYSIS DATE	FURNACE ANALYSIS DATE	HOLDING TIME EXCEEDED
1 02MW01A	1/18/12	2/5/12			NO
2 B	1/17/12	2/5/12			
3 C	1/17/12	2/5/12			
4 02MW13 B	1/18/12	2/5/12			
5 C	1/18/12	2/5/12			
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

COMMENTS_____

TEMP_____ COOLER

PRESERVATION_____

TIME_____ HANDLING

INSTRUMENT CALIBRATION, INITIAL CALIBRATION CHECK (ICC) and INITIAL CALIBRATION VERIFICATION (ICV)

Part 1 of 2

ASSOCIATED SAMPLES

1. a. Was the ICP instrument (6010B) properly standardized? Yes No N/A

If no, explain and list action.

b. Was the AA instrument (7000 Methods) properly standardized? Yes No N/A

If no, explain and list action.

c. Was the instrument used for Mercury properly standardized? Yes No N/A

If no, explain and list action.

2. Was the ICV/ICC analyzed immediately after the systems were calibrated? Yes No

If no, explain and list action.

3. Was the ICV/ICC analyzed for every analyte? Yes No

If no, explain and list action.

4. Do all ICV/ICC analytes meet the QC requirements for % recovery? Yes No

If no, list affected analytes, their % recovery, associated samples, and action.

5. a. Show calculation for the % recovery of one ICV analyte analyzed by ICP.

Analyte Sb Found 83.7 / True 80 Lab

Value 105%

INSTRUMENT CALIBRATION, INITIAL CALIBRATION CHECK (ICC) and INITIAL CALIBRATION VERIFICATION (ICV)

Part 2 of 2

N/A b. Show calculation for the % recovery of one ICC analyte analyzed by AA.

Analyte_____ Lab

Value_____

c. Show calculation for the ICV % recovery of Mercury.

N/A

Lab

Value_____

6. SPECIFIC COMMENTS_____

CONTINUING CALIBRATION VERIFICATION (CCV) and CALIBRATION CHECK STANDARD (CCS)

Part 1 of 2

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. a. Was the CCV/CCS performed at the minimum frequency of 10%? Yes No

If no, list action._____

b. Was the CCV/CCS performed after ten samples and at the end of sample analysis? Yes No

If no, list action._____

2. Were the CCV/CCS standards analyzed for all analytes? Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

3. Was the CCV/CCS concentration near the midpoint of the calibration curve? Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

4. Do all CCV/CCS analytes meet the QC requirement for % recovery? Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

CONTINUING CALIBRATION VERIFICATION (CCV) and CALIBRATION CHECK STANDARD (CCS)

Part 2 of 2

5. a. Show calculation for the % recovery of one CCV analyte analyzed by ICP.

Analyte Sb Found / True $\frac{94.1}{100}$ = 94% Lab value _____

N/A b. Show calculation for the % recovery of one CCS analyte analyzed by AA.

Analyte _____ Lab value_____

N/A c. Show calculation for the % recovery of one CCV analyte for Mercury.

Lab value_____

6. SPECIFIC COMMENTS_____

METHOD BLANK SUMMARY

Method Blank ID MB 180-27202/1-A

Sample matrix: Soil Water

Units: mg/kg ug/L

Did the frequency of the method blank analysis meet method requirements? Yes No

If no, explain and note action

ANALYTE	CONCENTRATION	<MDL	COMMENTS / ACTION
As	0.5 U	/	
Cr	1 U	/	
Cu	0.5 U	/	
Fe	21.6 J		Check sample concentrations
Pb	0.3 U	/	
Sb	0.9 U	/	
Zn	2 U	/	

ASSOCIATED All samples in SDG SAMPLES

CALIBRATION BLANKS

ASSOCIATED SAMPLES

All Samples in SDG

1. Were the initial calibration blanks analyzed for all analytes and run after the ICV/ICC? (Yes) No

   If no, list affected analytes, and action.

2. Was the absolute value for all analytes in the calibration blank below the MDL? Yes (No)

   If no, list affected analytes and qualify them.

   Sb 0.648 J
   Pb 0.255 J

3. Were the continuing calibration blanks analyzed for all analytes and run after the CCV/CCS? (Yes) No

   If no, list affected analytes, associated samples and action.

4. Was the frequency for the continuing calibration blanks correct? (Yes) No

   If no, list affected analytes, associated samples and action.

ICP INTERFERENCE CHECK SAMPLE

ASSOCIATED SAMPLES

1. Was an ICP interference check sample performed at the correct frequency? (Yes) No

If no, note any deviations and action.

2. Were the analytes interest and interferents for ICS reported? (Yes) No

If no, note deviations.

3. Did all the required analytes of interest in the ICS meet the QC limit of 80-120%? (Yes) No

If no, list the analytes, the % recovery, associated samples and the action.

4. Show the calculation for the % recovery for one analyte in the ICS.

Zinc Found / True $\frac{24.9}{25} = 100\%$

5.

COMMENTS_____

_____

_____

MATRIX SPIKE (MS) and MATRIX SPIKE DUPLICATE (MSD)

Part 1 of 2

Spike Analysis performed on sample 02MW13B %
Solids N/A

Sample matrix: Soil (Water)

Units: mg/kg (ug/L)

ASSOCIATED SAMPLES
All samples in SDG

1. Was the MS/MSD performed at the correct frequency? (Yes) No

If no, note deviations and action

2. Was the MS/MSD analyses performed on a field sample? (Yes) (No) MA 3/6/12

If no, reject all associated samples.

3. a. Were two (2) analytical methods used to obtain reported values for one analyte (i.e., ICP and AA) ? Yes (No)

If yes, list analytes

b. Was MS/MSD analysis performed using both methods for that analyte? Yes No

If no, reject affected sample(s) which did not have spike analysis performed.

MATRIX SPIKE (MS) and MATRIX SPIKE DUPLICATE (MSD)

Part 2 of 2

4. Did the % recovery for all analytes meet the criteria of 75-125 %? Yes No

If no, list % recovery in parenthesis next to the analyte out and action.

5. Did the Relative Percent Difference (RPD) for all analytes meet the requirement of 20% RPD? Yes No N/A

If no, list analytes and action.

6. a. Show calculation for % recovery for one analyte.

Analyte As $\frac{37.7}{40} = 94\%$ Lab value _____

b. Show calculation for % RPD for one analyte.

Analyte As MS 37.7 MSD 37.1 $\frac{0.6}{37.4} = 1.6\%$ Lab value _____

POST-DIGESTION SPIKE ANALYSIS

Post Digestion Spike Analysis performed on sample N/A

Sample matrix: Soil Water % Solids _____

Units: mg/kg ug/L

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. Was post-digestion spike analysis performed at the correct frequency? Yes No

   If no, list the analyte(s) and action.

   _____

   _____

2. Was post-digestion spike performed on a field sample? Yes No

   If no, list analytes and qualify them.

   _____

   _____

3. List the analyte(s), and their % recovery where post-digestion spike analysis was performed but still did not meet the QC criteria and action. N/A

   _____

   _____

4. Show the calculation for % recovery for at least one analyte where post-digestion spike analysis was performed.

   Analyte _____ Lab value _____

5. Comments:

LABORATORY CONTROL SAMPLE (LCS)

Sample matrix: Soil (Water)

Units: mg/kg (ug/L)

ASSOCIATED SAMPLES

All sample in SDG

1. Was the laboratory control sample performed at the correct frequency? (Yes) No

If no, give action.

2. Do all analytes meet the QC limits of 80-120 %? (Yes) No

If no, list analytes, their % recovery and action.

3. Show the calculation for % recovery for one analyte.

Analyte As $\frac{37.7}{40} = 94\%$ Lab Value

Soil limits

4. Comments:

SERIAL DILUTION ANALYSIS

Serial Dilution performed on sample 02MW13B Dilution Factor 5x

Sample matrix: Soil (Water) Units: mg/kg (ug/L)

ASSOCIATED SAMPLES

All samples in SDG

1. Was a serial dilution performed at the correct frequency? (Yes) No

If no, give action

2. Was a field sample used for serial dilution? (Yes) No

If no, give action

3. For all analytes greater than ten times the IDL after dilution for 6010B and 25 times the EDL for 7000A methods, was a serial dilution performed? (Yes) No

If no, list analytes and reject them.

4. For all analytes that needed serial dilution analysis, was the QC limit of 10 % D met? (Yes) No

If no, list those analytes outside the limits and qualify them. _____

5. Show calculation for % D for one analyte analyzed by ICP.

Analyte Fe Initial Result 590 Lab value _____

Diluted Result 573

%D = 2.4

METHOD OF STANDARD ADDITION (MSA)

ASSOCIATED SAMPLES

_____

_____

_____

_____

_____

1. If the post digestion spike recovery for Methods 7000A was outside the QC limit, was the MSA performed? Yes No

   If no, explain and list action.

   _____

   _____

2. Was the MSA within the linear range of the instrument? Yes No

   If no, explain and list action.

   _____

   _____

3. Was the MSA sample and spikes analyzed consecutively? Yes No

   If no, explain and list action.

   _____

   _____

4. Was the slope of the MSA plot less than 20% difference of the slope of the standard curve? Yes No

   If no, explain and list action.

   _____

   _____

5. Comments:

SAMPLE RESULT VERIFICATION

ASSOCIATED SAMPLES

_____

_____

1. Were all sample results reported within the calibration range? Yes No

   If no, list affected samples and action.

   _____

2. Was the raw data free of any anomalies? Yes No

   If no, list affected samples and action.

   _____

3. Was the data package free of any computational or transcription errors? Yes No

   If no, list affected samples and action.

   _____

4. Was the % solids analysis performed for all nonaqueous samples? Yes No N/A

   If no, list affected samples and action.

   _____

5. Show the calculation for % solids for one sample. N/A

   Lab value _____

6. Verify that nonaqueous samples were reported on a dry weight basis by recalculating the result for one analyte in a sample. N/A

Sample _____ Analyte _____ Lab value _____

APPENDIX D

Support Documentation

62A190474

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2741 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
1126 03605	HWS Earle	Jennifer Lambert		Test America Linda Laver
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Donald Whalen	610 382 1536	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 5963 9562		West Sacramento, CA

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: / / HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: Explosives	Perchlorate	Total Metals						COMMENTS
1/17	1215	02MW01C-20120117				GW	G	4	X	X	X						
1/17	1505	02MW01B-20120117				GW	G	4	X	X	X						
1/18	0920	02MW01A-20120118				GW	G	4	X	X	X						
1/18	1420	02MW13B-20120118				GW	G	12	X	X	X						DO MS/MSD
1/18	1625	02MW13C-2012018				GW	G	4	X	X	X						

1. RELINQUISHED BY Donald Whalen	DATE 1/18/12	TIME 1830	1. RECEIVED BY Cathy	DATE 1-19-12	TIME 1230
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS 2°-12°C

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Case Narrative

TestAmerica West Sacramento Project Number G2A190474

General Comments

Contract Task Order – N62472-08-D-1001, CTO WE72
Site Name – NWS Earle
Tetra Tech Project Manager – Jennifer Lambert

Manual integrations are performed only when necessary and in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. Detailed information can be found in the Manual Integration Addendum section of this report.

“U” definition: Analyte was not detected and is reported as less than the LOD.

The containers for the metals were forwarded to TestAmerica Pittsburgh for analysis. Please see Report # 180-7794-1 for analytical results and any anomalies that might pertain to the data.

WATER, 6850_DOD Handbook, Perchlorate
Samples: 1, 2, 3, 4, 5
Per method guidelines, a laboratory control sample (LCS) and a synthetic matrix check sample (SMCS) have been analyzed with this analytical batch. Each set of data is reported as an LCS with the following work order numbers assigned:

LCS: MQE631AC
SMCS: MQE631AD

The internal standard (IS) for the beginning level of detection verification (LODV) analyzed on January 28, 2012 is 48%, which is below the 50% acceptance limit. The native compound in the LODV is within acceptance limits. Also, the opening continuing calibration verification (CCV) is within acceptance limits for both the internal standard and native recoveries. Thus, corrective action was to re-analyze sample 3 as it has a concentration that is between the LOQ and the DL.

Sample: 3
The ending blank for the re-analysis of this sample did not have a recovery for the IS. The vial was discovered to be empty. The instrument was re-started on a standard and closed with another ending blank. This closing standard and blank are within acceptance limits and the data is reported.

Case Narrative

TestAmerica West Sacramento Project Number G2A190474

WATER, 8330A, Explosives
Samples: 1, 2, 3, 4, 5
Manual integrations were performed and detailed information can be found in the Manual Integration Addendum section of this report.

Samples: 1, 3
CONFIRMATION COLUMN ONLY:
The surrogate recoveries for 3,4-Dinitrotoluene are above the acceptance limits. The recoveries are within limits in the primary column analyses which is the data used for quality control purposes. Additional action is not required.

There are no other anomalies associated with this project.

CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: WhiteWater Metals 6020 DOD

Report Number: 180-7794-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This report was revised to correct sample ID for sample number eight.

RECEIPT

The samples were received on 01/27/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

METALS (ICPMS)

Samples 02MW01C-20120117 (180-7794-7), 02MW01B-20120117 (180-7794-8), 02MW01A-20120118 (180-7794-9), 02MW13B-20120118 (180-7794-10) and 02MW13C-20120118 (180-7794-11) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/30/2012 and analyzed on 02/05/2012.

Iron was detected in method blank MB 180-27202/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-27202/1-A

Instrument Code: M Batch No.: 27774

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6020_DoD
7440-47-3	Chromium	1.0	U		6020_DoD
7440-50-8	Copper	0.50	U	Q	6020_DoD
7439-89-6	Iron	21.6	J		6020_DoD
7439-92-1	Lead	0.30	U	Q	6020_DoD
7440-36-0	Antimony	0.90	U		6020_DoD
7440-66-6	Zinc	2.0	U	Q	6020_DoD

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Lab Sample ID: ICSA 180-27774/8 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSAX_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.537**	
Arsenic		**0.442**	
Chromium		**0.350**	
Copper		**0.962**	
Iron	**100000**	**102000**	**102**
Lead		**0.672**	
Zinc		**8.14**	
Aluminum	*100000*	*100700*	*101*
Barium		*0.270*	
Beryllium		*0.0070*	
Boron		*2.21*	
Cadmium		*0.696*	
Calcium	*100000*	*101800*	*102*
Cobalt		*0.111*	
Magnesium	*100000*	*106400*	*106*
Manganese		*0.647*	
Molybdenum	*2000*	*2100*	*105*
Nickel		*-0.0110*	
Potassium	*100000*	*98030*	*98*
Selenium		*0.312*	
Silicon		*16.7*	
Silver		*0.149*	
Sodium	*100000*	*95920*	*96*
Strontium		*0.514*	
Thallium		*0.0360*	
Tin		*0.300*	
Titanium	*2000*	*2219*	*111*
Vanadium		*-0.218*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

TETRA TECH NUS

PHIL-24701

TO:	**JENNIFER LAMBERT**	**DATE:**	**MARCH 6, 2012**
FROM:	**MEGAN RITCHIE**	**COPIES:**	**FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – PERCHLORATE, EXPLOSIVES, AND METALS**
CTO WE072 - NWS EARLE SITE 2, COLTS NECK, NEW JERSEY
SDG NO. G2A200474

SAMPLES: **6/Aqueous/**

02MW13A	02SW101	02FB01
02DUP01	02SW102	02RB01

*Sample dates were truncated from the sample names for clarity.

OVERVIEW

The sample set for the NWS Earle Site 2 – Colts Neck, New Jersey, SDG G2A200474 consists of 4 aqueous environmental samples (designated 02MW13-, 02SW-, and 02DUP01) and two field quality control (QC) blanks (designated 02FB- and 02RB-). One field duplicate pair (02MW13A and 02DUP01) was included in this sample set. All samples were analyzed for perchlorate, select explosives, and select total metals.

The samples were collected by Tetra Tech on January 19, 2012 and analyzed by TestAmerica Laboratories, Inc. of West Sacramento, California for perchlorate and explosives analysis and by TestAmerica Laboratories, Inc. of Pittsburgh, Pennsylvania for metals analysis.

The analyses were conducted using EPA SW-846 Method 6850 for perchlorate (DoD Perchlorate Handbook), 8330 for explosives, and 6020 for metals.

The data received limited review according to the following parameters:

* • Data completeness
* • Holding Times
• Laboratory method and field QC blank results
* • Initial and continuing calibrations
* • CRDL Standards
• ICP Interference Check Samples
* • Surrogate spike Recoveries
* • Internal Standard Recoveries
* • Matrix Spike/Matrix Spike Duplicate results
* • Laboratory Control Sample recoveries
* • Field Duplicate Results
* • ICP Serial Dilution
* • Compound Identification
* • Compound Quantitation
• Reporting/Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, the Region II data validation checklist for metals is presented in Appendix C, and supporting documentation is presented in Appendix D.

METALS

Blank Results

The following table summarizes the analytes detected as contaminants in a field QC blank. If the concentration of any analyte in a sample is ≤3X the concentration of that analyte in the associated field blank, the presence of that analyte in the sample is negated (BU) due to field contamination, as indicated by the field blank. If the concentration of any analyte in a sample is >3X but ≤10X the concentration of that analyte in the associated field blank, the presence of that analyte in the sample is considered "real". The concentration must be reported with the "BJ" qualifier and is quantitatively qualified due to field blank contamination.

Contaminant	Maximum Concentration	3X Action Level	10X Action Level
Chromium	1.4 µg/L	4.2 µg/L	14 µg/L
Copper	0.39 µg/L	1.17 µg/L	3.9 µg/L

ICP Interference Check Samples

A positive zinc concentration was detected in the ICSA solution above the Limit of Quantitation (LOQ) which may indicate a bias due to interference from a nutrient metal. All positive zinc concentrations in the associated samples greater than the detection limit (DL) were qualified as estimated (J).

Reporting Limits

Positive results at concentrations less than the LOQs were qualified as estimated (J).

Notes

Iron was detected in the laboratory method blank. No qualifications were made for iron in the associated samples because the associated sample concentrations were greater than 10X the blank concentration.

The internal standard (IS) for the beginning level of detection verification (LODV) was below the 50% acceptance limit. The LODV recovery was within acceptance limits; as well as the opening continuing calibration verification (CCV) for both the internal standard and native recoveries. The laboratory corrective action was to reanalyze sample 02SW101 because it had a positive concentration below the LOQ. The result is reported from the reanalysis.

Surrogate recoveries for 3,4-dinitrotoluene exceeded the upper QC limit in the confirmation column analyses. Results were reported from the primary column. No qualifications were made based on the surrogate exceedances.

The perchlorate and explosives data were acceptable as reported by the laboratory.

EXECUTIVE SUMMARY

Laboratory Performance: Iron was detected in the laboratory method blank. One analyte was detected in the ICSA solution above the QC criterion.

Other Factors Affecting Data Quality: Two analytes were detected in the field QC blanks.

The data for these analyses were reviewed with reference to the following documents:

- NJDEP document titled "Quality Assurance Data Validation of Analytical Deliverables for Inorganics (based on USEPA SW-846 methods SOP5.A.16)" (5/2002),
- USEPA Region 2 Standard Operating Procedure (SOP) HW-2 for the Evaluation of Metals Data for the Contract Laboratory Program (CLP) (September 2006) modified for use with NJDEP guidelines,
- USEPA Region 2 SOP HW-16 for Validation of Nitroaromatics and Nitroamines by HPLC, SW-846 Method 8330A (September 2006),
- Department of Defense (DoD) Perchlorate Handbook (March 2006), and the
- DoD Quality Systems Manual (QSM) for Environmental Laboratories Version 4.2 (October 2010).

The text of this report has been formulated to address only those problem areas affecting data quality.

Megan Ritchie

Megan N. Ritchie
Chemist

Russell Sloboda

Tetra Tech NUS, Inc.
Russell Sloboda
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A – Qualified Analytical Results
2. Appendix B – Results as Reported by the Laboratory
3. Appendix C – Region II Data Validation Forms
4. Appendix D – Support Documentation

APPENDIX A

Qualified Analytical Results

PROJ_NO: 03605 SDG: G2A200474 FRACTION: MISC MEDIA: WATER	NSAMPLE	02DUP01-20120119			02FB01-20120119			02MW13A-20120119			02RB01-20120119		
	LAB_ID	G2A200474002			G2A200474005			G2A200474001			G2A200474006		
	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
	QC_TYPE	FD			FB			NM			RB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	02MW13A-20120119											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.25	U		0.25	U		0.25	U		0.25	U	

PROJ_NO: 03605	NSAMPLE	02SW101-20120119			02SW102-20120119		
SDG: G2A200474	LAB_ID	G2A200474003			G2A200474004		
FRACTION: MISC	SAMP_DATE	1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.2	J	P	0.25	U	

PROJ_NO: 03605	NSAMPLE	02DUP01-20120119DL			02FB01-20120119DL			02MW13A-20120119DL			02RB01-20120119DL		
SDG: G2A200474	LAB_ID	G2A200474002			G2A200474005			G2A200474001			G2A200474006		
FRACTION: EXP	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	FD			FB			NM			RB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	02MW13A-20120119DL											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,3,5-TRINITROBENZENE		0.05	U		0.05	J	P	0.051	U		0.053	U	
1,3-DINITROBENZENE		0.05	U		0.051	U		0.051	U		0.053	U	
2,4,6-TRINITROTOLUENE		0.05	U		0.051	U		0.051	U		0.053	U	
2,4-DINITROTOLUENE		0.05	U		0.051	U		0.051	U		0.053	U	
2,6-DINITROTOLUENE		0.05	U		0.051	U		0.051	U		0.053	U	
2-AMINO-4,6-DINITROTOLUENE		0.1	U		0.1	U		0.1	U		0.11	U	
4-AMINO-2,6-DINITROTOLUENE		0.05	U		0.051	U		0.051	U		0.053	U	
MNX		1	U		1	U		1	U		1.1	U	
RDX		0.05	U		0.051	U		0.051	U		0.053	U	
TNX		0.15	U		0.15	U		0.15	U		0.16	U	

PROJ_NO: 03605 SDG: G2A200474 FRACTION: EXP MEDIA: WATER	NSAMPLE	02SW101-20120119DL			02SW102-20120119DL		
	LAB_ID	G2A200474003			G2A200474004		
	SAMP_DATE	1/19/2012			1/19/2012		
	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,3,5-TRINITROBENZENE		0.05	U		0.051	U	
1,3-DINITROBENZENE		0.05	U		0.051	U	
2,4,6-TRINITROTOLUENE		0.05	U		0.051	U	
2,4-DINITROTOLUENE		0.05	U		0.051	U	
2,6-DINITROTOLUENE		0.05	U		0.051	U	
2-AMINO-4,6-DINITROTOLUENE		0.1	U		0.1	U	
4-AMINO-2,6-DINITROTOLUENE		0.05	U		0.051	U	
MNX		1	U		1	U	
RDX		0.27			0.051	U	
TNX		0.15	U		0.15	U	

PROJ_NO: 03605	NSAMPLE	02DUP01-20120119			02FB01-20120119			02MW13A-20120119			02RB01-20120119		
SDG: G2A200474	LAB_ID	180-7794-2			180-7794-5			180-7794-1			180-7794-6		
FRACTION: M	SAMP_DATE	1/19/2012			1/19/2012			1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	FD			FB			NM			RB		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	02MW13A-20120119											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	J	P	0.9	U		0.9	U		0.9	U	
ARSENIC		0.78	J	P	0.5	U		0.54	J	P	0.5	U	
CHROMIUM		7.6	BJ	B	1.3	J	P	7.8	BJ	B	1.4	J	P
COPPER		1.3	BJ	BP	0.39	J	P	1.3	BJ	BP	0.27	J	P
IRON		2400			20	U		2500			14	J	P
LEAD		0.99	J	P	0.3	U		1			0.3	U	
ZINC		31	J	K	2	U		31	J	K	2	U	

PROJ_NO: 03605	NSAMPLE	02SW101-20120119			02SW102-20120119		
SDG: G2A200474	LAB_ID	180-7794-3			180-7794-4		
FRACTION: M	SAMP_DATE	1/19/2012			1/19/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.9	U		1.3	J	P
ARSENIC		0.5	U		1.3		
CHROMIUM		4.3	BJ	B	5.7	BJ	B
COPPER		1.1	BU	B	3.3	BJ	BP
IRON		470			2600		
LEAD		1			12		
ZINC		9.1	J	K	24	J	K

Qualifier Codes:

a	=	Lab Blank Contamination
b	=	Field Blank Contamination
c	=	Calibration (i.e., %RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
d	=	MS/MSD Noncompliance
e	=	LSC/LSCD Noncompliance
f	=	Laboratory Duplicate Imprecision
g	=	Field Duplicate Imprecision
h	=	Holding Time Exceedance
i	=	ICP Serial Dilution Noncompliance
j	=	GFAA PDS – GFAA MSA's r<0.995 (correlation coefficient)
k	=	ICP Interference – include ICSAB %Rs
l	=	Instrument Calibration Range Exceedance
m	=	Sample Preservation
n	=	Internal Standard Noncompliance
o	=	Poor Instrument Performance (i.e. baseline drifting)
p	=	Uncertainty Near Detection Limit (<2 x IDL for inorganics and < CRQL for organics)
q	=	Other Problems (can encompass of number of issues)
r	=	Surrogates Recovery Noncompliance
s	=	Pesticide/PCB Resolution
t	=	% Breakdown Noncompliance for DDT and Endrin
u	=	Pesticide/PCB % Difference Between Columns for Positive Results
v	=	Non-linear Calibrations, Tuning r <0.995 (correlation coefficient)

Data Qualifier Key:

B	-	Value is negated due to similar concentrations in an associated blank sample.
J	-	Value is considered estimated due to exceedance of technical quality control or because result is less than the Contract Required Quantitation Limit (CRQL).
U	-	Value is a non-detected result as reported by the laboratory.

APPENDIX B

Results as Reported by the Laboratory

White Water Associates

Client Sample ID: 02MW13A-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-001	Work Order #...:	MQCM31AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02DUP01-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM41AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02SW101-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM51AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 02/09/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.20 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02SW102-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-004	Work Order #...:	MQCM61AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02FB01-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-005	Work Order #...:	MQCM71AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02RB01-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM81AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM31AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM32AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	116 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM41AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM42AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	113 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM51AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...:	G2A200474-003	Work Order #...:	MQCM52AK	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.01	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	114 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis

White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...: G2A200474-004 Work Order #...: MQCM61AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...: G2A200474-004 Work Order #...: MQCM62AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	118 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits

CON Confirmation analysis

White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...: G2A200474-005 Work Order #...: MQCM71AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result Result is less than RL.

White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...: G2A200474-005 Work Order #...: MQCM72AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.054 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM81AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	0.11 U	0.21	ug/L	0.11
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM82AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
2-Amino-4,6-dinitrotoluene	0.11 U CON	0.21	ug/L	0.11
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02MW13A-20120119**

Lab Sample ID: 180-7794-1

Client Matrix: Water

Date Sampled: 01/19/2012 0925

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1748			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.54	J	0.29	1.0
Chromium	7.8		0.54	2.0
Copper	1.3	J Q	0.24	2.0
Iron	2500		11	50
Lead	1.0	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	31	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02DUP01-20120119**

Lab Sample ID: 180-7794-2

Client Matrix: Water

Date Sampled: 01/19/2012 1015

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1807			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.78	J	0.29	1.0
Chromium	7.6		0.54	2.0
Copper	1.3	J Q	0.24	2.0
Iron	2400		11	50
Lead	0.99	J Q	0.15	1.0
Antimony	1.4	J	0.46	2.0
Zinc	31	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02SW101-20120119**

Lab Sample ID: 180-7794-3

Client Matrix: Water

Date Sampled: 01/19/2012 1030

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1811			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	4.3		0.54	2.0
Copper	1.1	J Q	0.24	2.0
Iron	470		11	50
Lead	1.0	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	9.1	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Client Sample ID: **02SW102-20120119**

Lab Sample ID: 180-7794-4 Date Sampled: 01/19/2012 1110
Client Matrix: Water Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1815			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	1.3		0.29	1.0
Chromium	5.7		0.54	2.0
Copper	3.3	Q	0.24	2.0
Iron	2600		11	50
Lead	12	Q	0.15	1.0
Antimony	1.3	J	0.46	2.0
Zinc	24	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02FB01-20120119**

Lab Sample ID: 180-7794-5

Client Matrix: Water

Date Sampled: 01/19/2012 1230

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1820			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.3	J	0.54	2.0
Copper	0.39	J Q	0.24	2.0
Iron	20	U	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02RB01-20120119**

Lab Sample ID: 180-7794-6

Client Matrix: Water

Date Sampled: 01/19/2012 1245

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1824			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.4	J	0.54	2.0
Copper	0.27	J Q	0.24	2.0
Iron	14	J	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

APPENDIX C

Region II Metals Checklist

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: — SDG# G2A200474

LAB: Test America SITE: NWS Earle Site 2

1.0 Introduction

1.1 The attached Standard Operating Procedure (SOP) is applicable to nitro substituted aromatic and nitro substituted amines by High Performance Liquid Chromatography (HPLC)data. Its scope is not only to facilitate the data validation process of the data reported by the contracting laboratory, but also to ensure the data is being reviewed in a uniform manner.

1.2 This SOP is based upon the quality control assurance requirements specified in analytical SW 846 Method 8330A Revision 1, January 1998, and the National Function Guidlines, January 2005.

2.0 Responsibilities

2.1 The reviewer must be knowledgeable of the analytical method and its criteria.

2.2 The reviewer must complete and/or file the following:

Data Assessment Checklist - The data reviewer evaluates Each criterion carefully and checks if data is in compliance, non-compliace or not applicable.

Data Assessment Narrative - The data reviewer must present professional judgement, address areas of concern and comment on the validity of the overall data package. The reviewer must explain the reasons for rejecting and or qualifing the data.

Telephone Record Log - All phone conservations must be transcribed by the reviewer. Upon completion of the data review,

	YES	NO	N/A
the original telephone log is attached to the data assessment narrative.			

	YES	NO	N/A
3.0 Data Completeness and Deliverables			
3.1 Has all the data been submitted in CLP deliverable format?	[✓]	___	___
3.2 Have any missing deliverables been received and added to the data package?	[ ]	___	✓

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

	YES	NO	N/A
4.0 Cover Letter, SDG Narrative			
4.1 Is a laboratory narrative or cover letter present?	[✓]	___	___
4.2 Are the case number and/or SDG number contained in the narrative or cover letter?	[✓]	___	___

	YES	NO	N/A
5.0 Data Validation Checklist			
5.1 Does this data package contain:			
Water data?	[✓]	___	___
Waste data?	[ ]	✓	✓
Soil/solid data?	[ ]	✓	___

	YES	NO	N/A
6.0 Traffic Reports and Laboratory Narrative			
6.1 Are traffic report and chain-of-custody forms present for all samples?	[✓]	___	___

YES NO N/A

ACTION: If no, contact lab for replacement of missing or illegible copies.

6.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

7.0 Special QC

7.1 Prior to preparation of stock solutions; acetonitrile, methanol, and water should be analyzed to determine possible interferences with analyte peaks. A different batch of solvent should be used if contamination is present.

7.2 Chromatograms are to be submitted showing that there are no interferences with analyte peaks.

Are these chromatograms present in package? [ ] ___ ___

Are the chromatograms free of interferences? [ ] ___ ___

Action: Ask lab for resubmittals. If deliverables are unavailable, judge the effect of the validity of the data. If questionable, contact SMO and note in data assessment.

8.0 Holding Times

8.1 Have any nitroaromatics and nitroamines technical

YES NO N/A

holding times, determined from date of collection to date of extraction, been exceeded? ___ [✓] ___

Water and waste samples must be properly perseved (cooled to 4° +/- 2°), and nitro substituted aromatics and amines analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R." (Table 1)

Table 1. Holding Time Criteria

Matrix	Preserved	Criteria	Action	
			Detected compounds	Non-detected compounds
Aqueous	No	≤ 7 days(extraction) ≤ 40 days(analysis)	Use professional judgement	
	No	> 7 days(extraction) > 14 days(analysis)	Use professional judgement	
	Yes	≤ 7 days(extraction) ≤ 40 days(analysis)	No qualification	
	Yes	> 7 days(extraction) > 40 days(analysis)	J	UJ
	Yes/No	Grossly exceeded	J	UJ or R

YES NO N/A

Non-aqueous	No	≤ 14days(extraction) ≤ 40 days (analysis)	Use professional judgement	
	No	> 14days(extraction) >40 days(analysis)	Use professional judgement	
	Yes	≤ 14days(extraction) ≤ 40 days(analysis)	No qualification	
	Yes	> 14days(extraction) > 40 days(analysis)	J	UJ
	Yes/No	Grossly Exceeded	J	UJ or R

YES NO N/A

9.0 Surrogate Recovery (Form II)

9.1 The analyst most monitor the performance of the extraction and analytical system as well as the effectiveness of the method in dealing with each sample matrix by spiking each sample, standard and reagent water blank with one or two surrogates (e.g., analytes not expected to be present in the samle).

9.2 Were the recoveries of the surrogate spikes presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?

a. Water/Waste [✓] ___ ___

b. Soil/Solid [ ] ___ ✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables or information are unavailable, document the effect in the data assessment.

9.3 Are all the pesticide samples listed on the appropriate surrogate recovery form for each of the following matrices?

a. Water [✓] ___ ___

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

YES NO N/A

9.4 The laboratory must evaluate the surrogate data from individual samples versus the surrogate control limits developed by the laboratory. Method 8000C, Sec 9.0 details evaluating surrogate data and updating surrogate limits. If laboratory established recovery limits are not established, use surrogate recovery between 70 - 130% for all samples, including MS, MSDs, LCSs, and all blanks. Are surrogate recovery limits met? [ ] ✓ ___

Surrogates exceeded QC limit for second column confirmation. Results reported from primary column. No qualification.

ACTION: Circle all outliers in red. Follow surrogate action Table 2.

9.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [✓] ___ ___

ACTION: Follow surrogate action, Table 2 below.

Table 2. Surrogate Recovery Criteria

Criteria	Action	
	Detected Target Compounds	Non-detected Target Compounds
%R > 200%	J	Use professional judgement
130% < %R ≤ 200%	J	No qualification
70% ≤ %R ≤ 130%	No qualification	
10% ≤ %R < 70%	J	UJ
%R < 10% (sample dilution not a factor)	J	R
%R < 10% (sample dilution is a factor)	Use professional judgement	
RT out of RT window	Use professional judgement	
RT within RT window	No qualification	

YES NO N/A

9.6 Are there any transcription/calculation errors between raw data and Form II? [ ] [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

10.0 Laboratory Control Sample

10.1 Is the LCS prepared, extracted, analyzed, and reported once for every 20 field samples of a similar matrix, per SDG. [✓] ___ ___

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation/ resubmittals. Make note in the data assessment.

10.2 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000C (section 9.5). [✓] ___ ___

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation/ resubmittals. Make note in the data assessment.

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

10.3 Were the Laboratory Control Samples analyzed for all the nitroaromatics and nitroamines analytes that the samples are analyzed for. [✓] ___ ___

10.4 Were Laboratory Control Samples analyzed at the required concentration as specified in Method

YES NO N/A

8000C(sec 9.5)(near the middle of the calibration range) for all target analytes. [ ] ___ ✓ (SW-846 method)

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

10.5 Did laboratory calculate in-house performance criteria for LCS recoveries according to Method 8000C section 9.7, and were recoveries met? [✓] ___ ___

10.6 If in house LCS recoveries performance criteria were not generated, the laboratory should use 70 - 130% criteria, and was this criteria met? [ ] ___ ✓

10.7 If LCS recovery criteria were not met, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use Table 3 recovery actions criteria.

Table 3. LCS Recovery Actions

Criteria	Action	
	Detected Associated Compounds	Non-Detected Compounds
%R > Upper Acceptance Limit	J	No qualification
%R < Lower Acceptance Limit	J	R
Lower Acceptance Limit ≤ %R ≤ Upper Acceptance Limit	No qualifications	

11.0 Matrix Spikes (Form III)

11.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix. [✓] ___ ___

YES NO N/A

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike spike.

11.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [✓] ___ ___

ACTION: If any data are missing take action as specified in section 3.2 above.

11.3 Were matrix spikes analyzed at the required frequency for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level.

a. Water [✓] ___ ___

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

11.4 Were the Matrix Spike Samples spiked and analyzed for all the nitroaromatics and nitroamines analytes that the samples are analyzed for (Same analytes as LCS). [✓] ___ ___

ACTION: If no, did the lab use the optional QC acceptance criteria discussed in Method 8000C(section 9.7)?

List the criteria used and make note in data assessment.

Criteria used _____

11.5 Were Laboratory Control Samples analyzed at the required concentration as specified in Method 8000C(sec (9.5)(Same concentration as LCS) for all target analytes. [ ] ___ ✓

11.6 Did laboratory calculate in-house performance criteria for matrix spike recoveries according to Method 8000C section 9.7, and were recoveries met? [✓] ___ ___

11.7 If in house LCS recoveries performance criteria were not generated, the laboratory should use 70 - 130% criteria, and was this criteria met? [ ] ___ ✓

YES NO N/A

11.8 How many matrix spike recoveries are outside the in-house performance criteria or QC limits of 70 - 130%?

N/A Water ___out of ___ Soil ___out of _

11.9 How many RPDs for the Matrix Spike and Matrix Spike Duplicate (if applicable) recoveries are greater than the QC limit of 20%?

N/A Water ___out of___ Soil ___out of___

11.8 Were the matrix spike and matrix spike duplicate recovery and RPD limits met as specified in Table 4. Note: No qualification of the data is necessary on MS and MSD data alone. Use professional judgement to use the MS and MSD results in conjunction with other QC criteria to determine the need for some qualification of the data. If any MS and MSD, percent recovery, or RPD results in the nitroaromatics and nitroamines fraction is out of specification (Table 4), use professional judgement to qualify data to include the consideration of the existence interference in the raw data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples. Use professional judgement to determine the need for qualification of detects of non-spiked compounds.

Table 4. MS/MSD Actions for Analysis

Criteria	Action	
	Detected Associated Compounds	Non-Detected Compounds
%R or RPD > Upper Acceptance Limit	J	No qualification
20% ≤ %R < Lower Acceptance Limit	J	UJ
%R < 20%	J	Use professional judgement
Lower Acceptance Limit ≤ %R ≤ Upper Acceptance Limit	No qualifications	

YES NO N/A

12.0 Blanks (Form IV)

12.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)? [✓] ___ ___

12.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch? [✓] ___ ___

ACTION: If any blank data are missing, take action as specified above (section 3.2). If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

12.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts.

Is the chromatographic performance (baseline stability) for each instrument acceptable for nitroaromatics and nitramines? [✓] ___ ___

13.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

13.1 Do any method/instrument/reagent/cleanup blanks have positive results for nitroaromatics or nitramines? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary. [✓] [✓] ___

13.2 Do any field/rinse blanks have positive nitroaromatics or nitramines results? [✓] [ ] ___

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

YES NO N/A

ACTION: Follow the directions in Table 5 below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Table 5. Blank Contamination Criteria

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Clean up, Instrument, Field	Detects	Not detected	No qualification
	< CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL	Use professional judgement
	> CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL and < blank contamination	Report the concentration for the sample with a U, or quanity the data as unusable R
		≥ CRQL and ≥ blank contamination	Use professional judgement
	= CRQL	< CRQL	Report CRQL value with a U
		≥ CRQL	Use professional judgement
	Gross contamination	Detects	Qualify results as unusable R

NOTE: If gross blank contamination exists(e.g., saturated peaks, "hump-o-grams," "junk" peaks), all affected positive compounds in the associated samples should be qualified as unusable "R", due to interference. Non-detected pesticide target compounds do not require qualification unless the contamination is so high that it interferes with the analyses of non-detected compounds.

13.3 Are there field/rinse/equipment blanks associated with every sample? [✓] ___ ___

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/ equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

YES NO N/A

14.0 HPLC Apparatus and Materials

14 .1 Was the proper HPLC chromatographic column used for the analysis of nitroaromatics or nitramines?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8330A, section 4.1) [ ] ___ ___

14.2 Indicate the specific type of HPLC column.

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 14.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

15.0 Calibration and HPLC Performance

15.1 Are the following liquid chromatograms and data systems printouts for both columns present for all samples, blanks, MS, replicates?

a. Samples [✓] ___ ___

b. All blanks [✓] ___ ___

c. Matrix spike samples [✓] ___ ___

d. 5 pt. initial calibration standards [✓] ___ ___

e. Calibration verification standards [✓] ___ ___

f. Laboratory Control samples (LCS) [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

15.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? [✓] ___ ___

NOTE: External standard calibration procedures are used (Method 8000C (section 11.4.2), therefore calibration factors must be used.

YES NO N/A

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

15.3 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and document the effect in data assessments.

15.4 Are standard retention time (RT) windows for each nitroaromatics and nitramines peak of interest presented on modified CLP summary forms? [✓] ___ ___

presented on each sample quatitation summary

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all nitroaromatics and nitramines are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000C section 11.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

15.5 Were RT windows on the confirmation column established using three standards as described above? [✓] ___ ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 15.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

15.6 Do all standard retention times in each level of the initial 5 pt. calibrations for nitroaromatics and nitramines fall within the windows established during the initial calibration sequence? [✓] ___ ___

YES NO N/A

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standards spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 80000C(section 11.6).

ii. Alternatively, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

15.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD for the calibration factors (CFs) must be < 20.0% for all analytes). [✓] ___ ___

ACTION: If no, follow Table 6 criteria.

Table 6. Initial Calibration CF Action for Nitroaromatic and Nitramine Analysis

Criteria	Action	
	Detected Associated Compounds	Non-Detected Associatedd Compounds
% RSD > 20%	J	UJ
% RSD within allowable limits	No qualifications	

15.8 Does the calibration verification/continuing calibration standard contain the nitroaromatics or nitramines peaks of interest, analyzed on each working day, prior to sample analyses? [✓] ___ ___

15.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above.

15.10 Has the percent difference (%D) between the

YES NO N/A

Calibration Factor (CF) of the peaks used to identify the nitroaromatics and nitramines in the CCV and the CF from these peaks in the initial calibration exceeded ± 15%. ___ [✓] ___

15.11 Has a new 5 pt. initial calibration curve been generated for those nitroaromatics and nitramines analytes which failed in the calibration verification/continuing calibration standard (8000C, section 11.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration standard? [ ] ___ ✓

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". (Table 7)

15.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000C, section 11.6), using RTs from the associated calibration verification/continuing standard? [✓] ___ ___

ACTION: If no, take action specified in section 3.2 above

15.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence? [✓] ___ ___

15.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the daily RT windows. [✓] ___ ___

ACTION: If the answer to either 15.12 or 15.13 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria). If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the

YES NO N/A

retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

15.15 Has no more than 14 hours elapsed from the injection of the opening CCV and the end of the analytical sequence (closing CCV). (Table 7) [ ] ___ ✓

no rule in SW-846 method of mindar for calibration.

Table 7. CCV Criteria

Criteria	Action	
	Detected Associated Compounds	Non-Detected Associated Compounds
RT out of RT window	Use professional judgement (Sec 15.14)	
%D not within +/- 15%	J	UJ
Time elapsed greater than section 15.15 criteria.	R	
%D, time elapsed, RT are all within acceptable limits.	No qualifications	

15.16 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exists call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

16.0 Analytical Sequence Check (Form VIII-nitroaromatics and nitramines)

16.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

16.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses? [✓] ___ ___

YES NO N/A

Note: Sequence is as follows: 5 point initial calibration, method blank, LCS, CCS, 10 sample extracts, CCV, 10 sample extract, and so on. The sequence must always end with a CCV. As long as the first CCV is within QC, the initial calibration does not have to be rerun.

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

16.3 Were the surrogate RTs for the samples within the mean surrogate RT from the initial calibration? [✓] ___ ___

Action: If no, see "Action" in section 15.14 above

17.0 Extraction Techniques for Sample Preparation

Method 8330A permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

17.1 Aqueous samples:

1. Low Level (salting-out extraction)) [ ] ___ ___
2. High-level (Sample filtration) [✓] ___ ___
3. Solid phase extraction (Method 3535) [ ] ___ ___
4. Other [ ] ___ ___

17.2 Soil and sediment samples:

1. Sonication [ ] ___ ✓
2. Other [ ] ___ ✓

18.0 Nitroaromatics and Nitramines Identification

18.1 Has CLP Form X or equivalent, showing retention time data for positive results on the two HPLC columns, been completed for every sample in which a nitroaromatics or nitramines was detected? [ ] ___ ✓

only 1 hit in FB

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

YES NO N/A

18.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries. ___ [√] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

18.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [√] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second HPLC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

18.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently. Were there any false negatives? ___ [√] ___

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

18.5 Is the percent difference (%D) calculated for the positive sample results on the two HPLC columns <25.0%? [√] ___ ___

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier

YES NO N/A

0-25%		none
26-70%		"J"
71-100%		"NJ"
101-200%	(No Interference)	"R"
101-200%	(Interference detected)**	"NJ"
>50%	(Analyte value is <CRQL)	"U"
>200%		"R"

Note: The lower of the two values is reported on Form I. If using professional judgement, the reviewer determines that he higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the data assessment.

19.0 Compound Quantitation and Reported Detection Limits

19.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? ___ [✓] ___

NOTE: Nitroaromatics and Nitramines peak results can be checked for rough agreement between quantitative results obtained on the two HPLC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 18.5 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

19.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? [ ] ___ [✓]

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with

YES NO N/A

data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable? [✓] ___ ___

14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen? ___ [✓] ___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for Nitroaromatics and Nitramines. [✓] ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

DATA DELIVERABLE REQUIREMENTS

Site Name Site 2 Job Code G2A200474

Location NWS Earle Date of Review

Laboratory Name Test America Lead Division/Bureau Pittsburgh

Reviewer Megan Ritchie Methodology Review

Site/Case Manager

GENERAL REQUIREMENTS: Circle YES or NO and list the deviations at the bottom:

~~A.~~	~~Permanently Bound~~ N/A – PDF deliverable	~~Yes~~	~~No~~	G.	Methodology Review	Yes	No
B.	Paginated	Yes	No	H.	Uninitialed Strikeovers	Yes	No
C.	Title Page	Yes	No	I.	Legible Photocopies	Yes	No
D.	Table of Contents	Yes	No	J.	Consistent Dates	Yes	No
E.	Chain of Custody	Yes	No	K.	Digestion Log	Yes	No
F.	Non-conformance Summa	Yes	No				

Describe any deviations from the requirements

HOLDING TIMES FOR METALS

Matrix: Aqueous (✓) or Nonaqueous ( )

SAMPLE ID FIELD or LAB	DATE of SAMPLE COLLECTION	ICP ANALYSIS DATE	MERCURY ANALYSIS DATE	FURNACE ANALYSIS DATE	HOLDING TIME EXCEEDED
1 02DUP01	1/19/12	2/5/12			N
2 02FB01					
3 02MW13A					
4 02RB01					
5 02SW101					
6 82SW102					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

COMMENTS_____ COOLER

TEMP_____

PRESERVATION_____

HANDLING

TIME_____

INSTRUMENT CALIBRATION, INITIAL CALIBRATION CHECK (ICC) and INITIAL CALIBRATION VERIFICATION (ICV)

Part 1 of 2

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. a. Was the ICP instrument (6010B) properly standardized? Yes No N/A

If no, explain and list action.

_____

b. Was the AA instrument (7000 Methods) properly standardized? Yes No N/A

If no, explain and list action.

_____

c. Was the instrument used for Mercury properly standardized? Yes No N/A

If no, explain and list action.

_____

2. Was the ICV/ICC analyzed immediately after the systems were calibrated? Yes No

If no, explain and list action._____

3. Was the ICV/ICC analyzed for every analyte? Yes No

If no, explain and list action._____

_____

_____

4. Do all ICV/ICC analytes meet the QC requirements for % recovery? Yes No

If no, list affected analytes, their % recovery, associated samples, and action.

_____

_____

5. a. Show calculation for the % recovery of one ICV analyte analyzed by ICP.

Analyte Sb $\frac{83.7}{80} = 105\%$ Lab Value

INSTRUMENT CALIBRATION, INITIAL CALIBRATION CHECK (ICC) and INITIAL CALIBRATION VERIFICATION (ICV)

Part 2 of 2

b. Show calculation for the % recovery of one ICC analyte analyzed by AA.

Analyte Lab Value

c. Show calculation for the ICV % recovery of Mercury.

Lab Value

6. SPECIFIC COMMENTS

CONTINUING CALIBRATION VERIFICATION (CCV) and CALIBRATION CHECK STANDARD (CCS)

Part 1 of 2

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. a. Was the CCV/CCS performed at the minimum frequency of 10%? Yes No

If no, list action._____

b. Was the CCV/CCS performed after ten samples and at the end of sample analysis? Yes No

If no, list action._____

2. Were the CCV/CCS standards analyzed for all analytes? Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

3. Was the CCV/CCS concentration near the midpoint of the calibration curve?

Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

4. Do all CCV/CCS analytes meet the QC requirement for % recovery? Yes No

If no, list affected analytes, their associated samples and action.

_____

_____

CONTINUING CALIBRATION VERIFICATION (CCV) and CALIBRATION CHECK STANDARD (CCS)

Part 2 of 2

5. a. Show calculation for the % recovery of one CCV analyte analyzed by ICP.

Analyte Sb $\frac{96.1}{100} = 96\%$ Lab value _____

b. Show calculation for the % recovery of one CCS analyte analyzed by AA.

Analyte _____ Lab value_____

c. Show calculation for the % recovery of one CCV analyte for Mercury.

Lab value_____

6. SPECIFIC COMMENTS_____

METHOD BLANK SUMMARY

Method Blank ID MB-180-27202/1-A

Sample matrix: Soil (Water)

Units: mg/kg (ug/l)

Did the frequency of the method blank analysis meet method requirements? (Yes) No

If no, explain and note action

ANALYTE	CONCENTRATION	<MDL	COMMENTS / ACTION
As	0.5 U	✓	
Cr	1 U	✓	
Cu	0.5 U	✓	
Fe	21.6 J		Compare to sample concentrations
Pb	0.3 U	✓	
Sb	0.9 U	✓	
Zn	2 U	✓	

ASSOCIATED SAMPLES

CALIBRATION BLANKS

ASSOCIATED SAMPLES

_____

_____

_____

1. Were the initial calibration blanks analyzed for all analytes and run after the ICV/ICC?

   Yes No

   If no, list affected analytes, and action.

   _____

2. Was the absolute value for all analytes in the calibration blank below the MDL?

   Yes No

   If no, list affected analytes and qualify them.

   _____

3. Were the continuing calibration blanks analyzed for all analytes and run after the CCV/CCS?

   Yes No

   If no, list affected analytes, associated samples and action. _____

   _____

4. Was the frequency for the continuing calibration blanks correct? Yes No

   If no, list affected analytes, associated samples and action._____

ICP INTERFERENCE CHECK SAMPLE

ASSOCIATED SAMPLES

1. Was an ICP interference check sample performed at the correct frequency? (Yes) No

If no, note any deviations and action.

2. Were the analytes interest and interferents for ICS reported? (Yes) No

If no, note deviations.

3. Did all the required analytes of interest in the ICS meet the QC limit of 80-120%? (Yes) No

If no, list the analytes, the % recovery, associated samples and the action.

4. Show the calculation for the % recovery for one analyte in the ICS.

$Zn \frac{25}{24.9} = 100\%$

Analyte _____ Lab value

_____

5.

COMMENTS_____

_____

_____

MATRIX SPIKE (MS) and MATRIX SPIKE DUPLICATE (MSD)

Part 1 of 2

Spike Analysis performed on sample MS/MSD part of associated SDG G2A190474 % Solids_____

Sample matrix: Soil Water

Units: mg/kg ug/L

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. Was the MS/MSD performed at the correct frequency? Yes No

If no, note deviations and action _____

_____

2. Was the MS/MSD analyses performed on a field sample? Yes No

If no, reject all associated samples._____

3. a. Were two (2) analytical methods used to obtain reported values for one analyte (i.e., ICP and AA) ? Yes No

If yes, list analytes _____

_____

b. Was MS/MSD analysis performed using both methods for that analyte? Yes No

If no, reject affected sample(s) which did not have spike analysis performed.

MATRIX SPIKE (MS) and MATRIX SPIKE DUPLICATE (MSD)

Part 2 of 2

4. Did the % recovery for all analytes meet the criteria of 75-125 %? (Yes) No

If no, list % recovery in parenthesis next to the analyte out and action.

_____

_____

_____

_____

5. Did the Relative Percent Difference (RPD) for all analytes meet the requirement of 20% RPD? (Yes) No N/A

If no, list analytes and action.

_____

6. a. Show calculation for % recovery for one analyte.

Analyte _____ Lab value _____

See G2A190474 checklist

b. Show calculation for % RPD for one analyte.

Analyte _____ Lab value _____

POST-DIGESTION SPIKE ANALYSIS

Post Digestion Spike Analysis performed on sample

N/A

Sample matrix: Soil Water % Solids_____

Units: mg/kg ug/L

ASSOCIATED SAMPLES

_____

_____

_____

_____

1. Was post-digestion spike analysis performed at the correct frequency? Yes No

   If no, list the analyte(s) and action.

   _____

   _____

   _____

   _____

2. Was post-digestion spike performed on a field sample? Yes No

   If no, list analytes and qualify them.

   _____

   _____

   _____

   _____

3. List the analyte(s), and their % recovery where post-digestion spike analysis was performed but still did not meet the QC criteria and action. N/A

   _____

   _____

   _____

   _____

4. Show the calculation for % recovery for at least one analyte where post-digestion spike analysis was performed.

   Analyte _____ Lab value _____

5. Comments:

LABORATORY CONTROL SAMPLE (LCS)

Sample matrix: Soil Water

Units: mg/kg ug/L

ASSOCIATED SAMPLES

All samples in SDG

1. Was the laboratory control sample performed at the correct frequency? Yes No

If no, give action.

2. Do all analytes meet the QC limits of 80-120 %? Yes No

If no, list analytes, their % recovery and action.

3. Show the calculation for % recovery for one analyte.

Analyte As $\frac{37.7}{40} = 94\%$ Lab Value

Soil limits

4. Comments:

SERIAL DILUTION ANALYSIS

Serial Dilution performed on sample N/A Dilution Factor

— no positive results > 50x DL

Sample matrix: Soil Water Units: mg/kg ug/L

ASSOCIATED SAMPLES

1. Was a serial dilution performed at the correct frequency? Yes No

If no, give action

2. Was a field sample used for serial dilution? Yes No

If no, give action

3. For all analytes greater than ten times the IDL after dilution for 6010B and 25 times the EDL for 7000A methods, was a serial dilution performed? Yes No

If no, list analytes and reject them.

4. For all analytes that needed serial dilution analysis, was the QC limit of 10 % D met? Yes No

If no, list those analytes outside the limits and qualify them. _____

_____

_____

5. Show calculation for % D for one analyte analyzed by ICP.

Analyte _____ Lab value _____

METHOD OF STANDARD ADDITION (MSA)

ASSOCIATED SAMPLES

_____

_____

_____

1. If the post digestion spike recovery for Methods 7000A was outside the QC limit, was the MSA performed? Yes No

   If no, explain and list action.

   _____

2. Was the MSA within the linear range of the instrument? Yes No

   If no, explain and list action.

   _____

3. Was the MSA sample and spikes analyzed consecutively? Yes No

   If no, explain and list action.

   _____

4. Was the slope of the MSA plot less than 20% difference of the slope of the standard curve? Yes No

   If no, explain and list action.

   _____

5. Comments:

SAMPLE RESULT VERIFICATION

ASSOCIATED SAMPLES

_____

_____

1. Were all sample results reported within the calibration range? Yes No

If no, list affected samples and action.

_____

_____

2. Was the raw data free of any anomalies? Yes No

If no, list affected samples and action.

_____

_____

3. Was the data package free of any computational or transcription errors? Yes No

If no, list affected samples and action.

_____

_____

4. Was the % solids analysis performed for all nonaqueous samples? Yes No N/A

If no, list affected samples and action.

_____

_____

5. Show the calculation for % solids for one sample. N/A

Lab value _____

6. Verify that nonaqueous samples were reported on a dry weight basis by recalculating the result for one analyte in a sample. N/A

Sample _____ Analyte _____ Lab value _____

APPENDIX D

Support Documentation

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2745 G2A200474 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112G03605 CTO WE72	NWS Earle	Jennifer Lambert	610 382 3779	TEst America Linda Lavet
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Donald Whalen	610 382 1536	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 5963 9584		West Sacramento, CA

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: / / HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	Explosives	Perchlorate	Total Metals						COMMENTS
1/19	0925	02MW13A-20120119				GW	G	4	X	X	X						
	1015	02DUP01-20120119				GW	G	4	X	X	X						
	1030	02SW101-20120119				SW	G	4	X	X	X						
	1110	02SW102-20120119				SW	G	4	X	X	X						
	1230	02FB01-20120119				QC	G	4	X	X	X						Field Blank
↓	1245	02RB01-20120119				QC	G	4	X	X	X						Rinsate Blank

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Donald Whalen	1/19/12	1800	1. RECEIVED BY [signature]	1-20-12	1210
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Case Narrative

TestAmerica West Sacramento Project Number G2A200474

General Comments

Contract Task Order – N62472-08-D-1001, CTO WE72
Site Name – NWS Earle
Tetra Tech Project Manager – Jennifer Lambert

Manual integrations are performed only when necessary and in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. Detailed information can be found in the Manual Integration Addendum section of this report.

“U” definition: Analyte was not detected and is reported as less than the LOD.

The containers for the metals were forwarded to TestAmerica Pittsburgh for analysis. Please see Report # 180-7794-2 for analytical results and any anomalies that might pertain to the data.

WATER, 6850_DOD Handbook, Perchlorate
Samples: 1, 2, 3, 4, 5, 6
Per method guidelines, a laboratory control sample (LCS) and a synthetic matrix check sample (SMCS) have been analyzed with this analytical batch. Each set of data is reported as an LCS with the following work order numbers assigned:

LCS: MQE631AC
SMCS: MQE631AD

The internal standard (IS) for the beginning level of detection verification (LODV) analyzed on January 28, 2012 is 48%, which is below the 50% acceptance limit. The native compound in the LODV is within acceptance limits. Also, the opening continuing calibration verification (CCV) is within acceptance limits for both the internal standard and native recoveries. Thus, corrective action was to re-analyze sample 3 as it has a concentration that is between the LOQ and the DL.

Sample: 3
The ending blank for the re-analysis of this sample did not have a recovery for the IS. The vial was discovered to be empty. The instrument was re-started on a standard and closed with another ending blank. This closing standard and blank are within acceptance limits and the data is reported.

Case Narrative

TestAmerica West Sacramento Project Number G2A200474

WATER, 8330A, Explosives
Sample: 1, 2, 3, 4, 5, 6
Manual integrations were performed and detailed information can be found in the Manual Integration Addendum section of this report.

CONFIRMATION COLUMN ONLY:
The surrogate recoveries for 3,4-Dinitrotoluene are above the acceptance limits. The recoveries are within limits in the primary column analyses which is the data used for quality control purposes. Additional action is not required.

There are no other anomalies associated with this project.

CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: WhiteWater Metals 6020 DOD

Report Number: 180-7794-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 01/27/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

METALS (ICPMS)

Samples 02MW13A-20120119 (180-7794-1), 02DUP01-20120119 (180-7794-2), 02SW101-20120119 (180-7794-3), 02SW102-20120119 (180-7794-4), 02FB01-20120119 (180-7794-5) and 02RB01-20120119 (180-7794-6) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/30/2012 and analyzed on 02/05/2012.

Iron was detected in method blank MB 180-27202/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Method Blank - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	MB 180-27202/1-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1736	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.0	U	0.54	2.0
Copper	0.50	U Q	0.24	2.0
Iron	21.6	J	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Lab Control Sample - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	LCS 180-27202/2-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1740	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	40.0	37.7	94	80 - 120	
Chromium	200	202	101	80 - 120	
Copper	250	246	99	80 - 120	Q
Iron	1000	1110	111	80 - 120	
Lead	20.0	20.3	101	80 - 120	Q
Antimony	500	499	100	80 - 120	
Zinc	500	460	92	80 - 120	Q

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Lab Sample ID: ICSA 180-27774/8 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSAX_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.537**	
Arsenic		**0.442**	
Chromium		**0.350**	
Copper		**0.962**	
Iron	**100000**	**102000**	**102**
Lead		**0.672**	
Zinc		**8.14**	
Aluminum	*100000*	*100700*	*101*
Barium		*0.270*	
Beryllium		*0.0070*	
Boron		*2.21*	
Cadmium		*0.696*	
Calcium	*100000*	*101800*	*102*
Cobalt		*0.111*	
Magnesium	*100000*	*106400*	*106*
Manganese		*0.647*	
Molybdenum	*2000*	*2100*	*105*
Nickel		*-0.0110*	
Potassium	*100000*	*98030*	*98*
Selenium		*0.312*	
Silicon		*16.7*	
Silver		*0.149*	
Sodium	*100000*	*95920*	*96*
Strontium		*0.514*	
Thallium		*0.0360*	
Tin		*0.300*	
Titanium	*2000*	*2219*	*111*
Vanadium		*-0.218*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

F.2 TESTAMERICA NEW JERSEY CERTIFICATION

SCOPE OF ACCREDITATION TO ISO/IEC 17025-2005

TESTAMERICA LABORATORIES WEST SACRAMENTO
880 Riverside Parkway
West Sacramento, CA 95605
Douglas Weir Phone: 916 3744 389

ENVIRONMENTAL

Valid To: March 31, 2012 Certificate Number: 2928.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the laboratory's compliance with ISO IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the DoD Environmental Laboratory Accreditation Program (DoD ELAP) as detailed in the current DoD Quality Systems Manual for Environmental Laboratories) accreditation is granted to this laboratory to perform recognized EPA methods using the following testing technologies and in the analyte categories identified below:

Testing Technologies

Inductively Coupled Plasma (ICP), ICP-Mass Spectroscopy, Atomic Absorption Spectroscopy (flame), Gas Chromatography(GC), GC- Mass Spectroscopy, High Resolution Gas Chromatography/High Resolution Mass Spectroscopy, Liquid Chromatography(LC),LC- Mass Spectroscopy, Ion Chromatography, Spectrophotometry, Misc.- Electronic Probes

Parameter/Analyte	**Non potable Water**	**Solid Hazardous Waste**	**Air**	**Associated Prep Methods**
Metals				
Aluminum	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Antimony	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Arsenic	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Barium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Beryllium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Cadmium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Calcium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Chromium (Total)	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Chromium (Hexavalent)	EPA 7196A	EPA 7196A	-------	EPA 3005A/3010A/3050A
Cobalt	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Copper	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Iron	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Lead	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Magnesium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A

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Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Manganese	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Mercury	EPA 7470A	EPA 7471A	-------	EPA 3005A/3010A/3050A
Molybdenum	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Nickel	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Potassium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Selenium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Silver	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Sodium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Thallium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Vanadium	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Zinc	EPA 6010B/6020A	EPA 6010B/6020A	-------	EPA 3005A/3010A/3050A
Nutrients				
Nitrate	EPA 353.2/9056A/300.0	EPA 353.2/9056A/300.0	-------	----------
Nitrate-nitrite	EPA 353.2/ SM4500-NO3 F	EPA 353.2	-------	----------
Nitrite	EPA 353.2/9056A/300.0	EPA 353.2/9056A/300.0	-------	----------
Orthophosphate	EPA 9056A/300.0	EPA 9056A/300.0	-------	----------
Wet Chemistry				
Oil and Grease	EPA 1664/9070	EPA 1664/9071	-------	----------
Nitrocellulose	WS-WC-0050	WS-WC-0050	-------	----------
Perchlorate	EPA 6850	EPA 6850	-------	----------
Chloride	EPA 9056A/300.0	EPA 9056A/300.0	-------	----------
Fluoride	EPA 9056A/300.0	EPA 9056A/300.0	-------	----------
Sulfate	EPA 9056A/300.0	EPA 9056A/300.0	-------	----------
			-------	----------
Hazardous Waste Characteristics				
TCLP Extractables	----------	EPA 1311		
TCLP Inorganics	----------	EPA 1311	-------	----------
			-------	----------
Purgeable Organics				
(volatiles)				
Acetone	EPA 8260B	EPA 8260B		
Acrylonitrile	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Benzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Bromochloromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Bromodichloromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Bromoform	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Bromomethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Carbon disulfide	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Carbon tetrachloride	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Chlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Chloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
2-Chloroethyl vinyl ether	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Chloroform	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Chloromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Dibromochloromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2-Dibromoethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Dibromomethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2-Dichlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,3-Dichlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,4-Dichlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Dichlorodifluoromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1-Dichloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2-Dichloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1-Dichloroethene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
trans-1,2-Dichloroethene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
cis-1,2-Dichloroethene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2-Dichloropropane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,3-Dichloropropane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
2,2-Dichloropropane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1-Dichloropropene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
cis-1,3-Dichloropropene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
trans-1,3-Dichloropropene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,4-Dioxane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Ethylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Hexachlorobutadiene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
2-Hexanone (MBK)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Methyl tert-butyl ether (MTBE)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Methylene chloride	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Methyl ethyl ketone	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Naphthalene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Tetrachloroethene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Toluene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2,3-Trichlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2,4-Trichlorobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1,1-Trichloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,1,2-Trichloroethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Trichloroethene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Trichlorofluoromethane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2,3-Trichloropropane	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Vinyl acetate	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Vinyl chloride	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
m & p xylene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
o-xylene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Xylenes, Total	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
tert-amyl methyl ether (TAME)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
tert-butyl alcohol (TBA)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Ethyl tert-butyl ether (ETBE)	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Bromobenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
n-Butylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
sec-Butylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
tert-Butylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
2-Chlorotoluene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
4-Chlorotoluene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Isopropylbenzene	EPA 8260B	----------	-------	EPA 5030A/5030B/5035/5035A
n-Propylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Styrene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,2,4-Trimethylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
1,3,5-Trimethylbenzene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Oxygenates	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
Gasoline Range Organics (GRO)	EPA 8260B/AK101	EPA 8260B/AK101	-------	EPA 5030A/5030B/5035/5035A
p-Isopropyltoluene	EPA 8260B	EPA 8260B	-------	EPA 5030A/5030B/5035/5035A
			-------	EPA 5030A/5030B/5035/5035A
Extractable Organics				
(semivolatiles)				
Acenaphthene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008		
Acenaphthylene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Aniline	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
Anthracene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/3580A
Benzidine	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
Benzo(a)anthracene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/3580A
Benzo(b)fluoranthene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzo(k)fluoranthene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzo(g,h,i)perylene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzo(a)pyrene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzo(e)pyrene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzoic acid	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Benzyl alcohol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
Benzyl butyl phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
Bis(2-chloroethoxy) Methane	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Bis(2-chloroethyl) ether	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Bis(2-chloroisopropyl) ether	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Di(2-ethylhexyl) phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Bromophenyl phenyl ether	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Carbazole	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Chloroaniline	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Chloro-3-methylphenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2-Chloronaphthalene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2-Chlorophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Chlorophenyl phenyl ether	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Chrysene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
Dibenz(a,h)anthracene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
Dibenzofuran	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/ 3580A Air: 3542/TO-13A
1,2-Dichlorobenzene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
1,3-Dichlorobenzene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
1,4-Dichlorobenzene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
3,3'-Dichlorobenzidine	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2,4-Dichlorophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Diethyl Phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2,4-Dimethylphenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Dimethyl Phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Di-n-butyl phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Di-n-octyl phthalate	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4,6-Dinitro-2-methylphenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2,4-Dinitrophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2,4-Dinitrotoluene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2,6-Dinitrotoluene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
1,4-Dioxane	WS-MS-0011	WS-MS-0011	-------	EPA 3500B/3510C/3550B/ 3580A
1,2-Diphenylhydrazine (as Azobenzene)	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Fluoranthene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
Fluorene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	WS-MS-0006	EPA 3500B/3510C/3550B/ 3580A Air: 3542/TO-13A
Hexachlorobenzene	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/ 3580A Air: 3542/TO-13A
Hexachlorobutadiene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Hexachlorocyclopentadiene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Hexachloroethane	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Indeno(1,2,3-c,d)pyrene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
Isophorone	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/ 3580A Air: 3542/TO-13A
2-Methylnaphthalene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
2-Methylphenol	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/ 3580A Air: 3542/TO-13A
3-Methylphenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Methylphenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/
Naphthalene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A
2-Nitroaniline	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
3-Nitroaniline	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Nitroaniline	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Nitrobenzene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
2-Nitrophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
4-Nitrophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
n-Nitrosodimethylamine	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
n-Nitrosodi-n-propylamine	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
n-Nitrosodiphenylamine	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Pentachlorophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/ 3580A
Phenanthrene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/ 3580A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Phenol	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
Pyrene	EPA 8270C/WS-MS-006/WS-MS-0008	EPA 8270C/WS-MS-006/WS-MS-0008	-------	EPA 3500B/3510C/3550B/3580A
Pyridine	EPA 8270C	EPA 8270C	WS-MS-0006	EPA 3500B/3510C/3550B/3580A Air: 3542/TO-13A
1,2,4-Trichlorobenzene	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
2,4,5-Trichlorophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
2,4,6-Trichlorophenol	EPA 8270C	EPA 8270C	-------	EPA 3500B/3510C/3550B/3580A
Diesel Range Organics (DRO)	EPA 8015B/AK102	EPA 8015B/AK102	-------	EPA 3500B/3510C/3550B/3580A
Residual Range Organics	AK103	AK103	-------	EPA 3500B/3510C/3550B/3580A
			-------	EPA 3500B/3510C/3550B/3580A
Dioxins				
2,3,7,8-TeCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B		
1,2,3,7,8-PeCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,4,7,8-HxCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,6,7,8-HxCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,7,8,9-HxCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,4,6,7,8-HpCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
OCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
2,3,7,8-TeCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,7,8-PeCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
2,3,4,7,8-PeCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,4,7,8-HxCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,6,7,8-HxCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,7,8,9-HxCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
2,3,4,6,7,8-HxCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,4,6,7,8-HpCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
1,2,3,4,7,8,9-HpCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
OCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total TCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total PeCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total HxCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total HeptaCDD	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total TCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total PeCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total HxCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------
Total HpCDF	EPA 8280A/8290/1613B	EPA 8280A/8290/1613B	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Chemical Warfare Degradates				
1,4-Dithiane	WS-MS-0003	WS-MS-0003	-------	----------
Benzothiazole	WS-MS-0003	WS-MS-0003	-------	----------
p-Chlorophenyl methylsulfide	WS-MS-0003	WS-MS-0003	-------	----------
p-Chlorophenyl methylsulfoxide	WS-MS-0003	WS-MS-0003	-------	----------
p-Chlorophenyl methylsulfone	WS-MS-0003	WS-MS-0003	-------	----------
Chloropicrin	WS-MS-0003	WS-MS-0003	-------	----------
Acetophenone	WS-MS-0003	WS-MS-0003	-------	----------
2-Chloroacetophenone	WS-MS-0003	WS-MS-0003	-------	----------
1,4-Oxathiane	WS-MS-0003	WS-MS-0003	-------	----------
Dimethyl Disulfide	WS-MS-0003	WS-MS-0003	-------	----------
Diisopropylmethylphosphate (DIMP)	WS-LC-0004	WS-LC-0004	-------	----------
Dimethylmethylphosphonate (DMMP)	WS-LC-0004	WS-LC-0004	-------	----------
Ethyl methylphosphonic acid (EMPA)	WS-LC-0004	WS-LC-0004	-------	----------
Isopropyl methylphosphonic acid (IMPA)	WS-LC-0004	WS-LC-0004	-------	----------
Methylphosphonic acid (MPA)	WS-LC-0004	WS-LC-0004	-------	----------
Thiodiglycol (2,2'-Thiodiethanol) (TDG)	WS-LC-0004	WS-LC-0004	-------	----------
Nitroaromatics				
2-Amino-4,6-dinitrotoluene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
4-Amino-2,6-dinitrotoluene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
3,5-Dinitroaniline	EPA 8330B	EPA 8330B	-------	----------
1,3-Dinitrobenzene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
2,4-Dinitrotoluene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
2,6-Dinitrotoluene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
Ethylene glycol dinitrate	EPA 8330B	EPA 8330B	-------	----------
Glycerol trinitrate (Nitroglycerin)	EPA 8330B	EPA 8330B	-------	----------
Hexahydro-1,3,5-trinitro-1,3,5-triazine (Hexogen)	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
Methyl-2,4,6-trinitrophenylnitramine	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
Nitrobenzene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
2-Nitrotoluene (o-Nitrotoluene)	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
3-Nitrotoluene (m-Nitrotoluene)	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
4-Nitrotoluene (p-Nitrotoluene)	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
Octahydro-1,3,5,7-tetranitro1,3,5,7-tetracine (Octogen)	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Picric acid	EPA 8330B	EPA 8330B	-------	----------
Pentaerythritol tetranitrate	EPA 8330B	EPA 8330B	-------	----------
1,3,5-Trinitrobenzene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
2,4,6-Trinitrotoluene	EPA 8330A/8330B	EPA 8330A/8330B	-------	----------
Nitroguanidine	WS-LC-0010	WS-LC-0010	-------	----------
Nitrosamines				
N-Nitrosodimethylamine (NDMA)	WS-MS-0012	WS-MS-0012	-------	----------
Perfluoro Compounds				
Perfluorooctanoic acid	WS-LC-0020	WS-LC-0020	-------	----------
Perfluorooctane sulfonate	WS-LC-0020	WS-LC-0020	-------	----------
Pesticides/PCBs				
Aldrin	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
a-BHC	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
b-BHC	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
d-BHC	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
g-BHC (Lindane)	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
a-Chlordane	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
g-Chlordane	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Oxy-Chlordane	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
4,4'-DDD	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
2,4’-DDD	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
4,4'-DDE	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
2,4’-DDE	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
4,4'-DDT	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
2,4'-DDT	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
Dieldrin	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endosulfan I	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endosulfan II	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endosulfan sulfate	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endrin	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endrin aldehyde	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Endrin ketone	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Heptachlor	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Heptachlor epoxide	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Hexachlorobenzene	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
Methoxychlor	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Cis-Nonachlor	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
Trans-Nonachlor	EPA 1699	EPA 1699		EPA 3500B/3510C/3550B/3620B/ 3660A
Toxaphene	EPA 8081A/EPA 1699	EPA 8081A/EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Mirex	EPA 1699	EPA 1699	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
Chlordane (technical)	EPA 8081A	EPA 8081A	-------	EPA 3500B/3510C/3550B/3620B/ 3660A
PCB (Aroclors)				

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
PCB-1016	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1221	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1232	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1242	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1248	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1254	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1260	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1262	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB-1268	EPA 8082	EPA 8082	-------	EPA 3500B/3510C/3550B/3580A/3620B/3660A/3665A
PCB (congeners)				
PCB 1 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 2 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 3 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 4 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 5 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 6 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 7 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 8 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 9 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 10 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 11 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 12 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 13 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 14 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 15 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 16 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 17 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 18 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 19 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 20 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 21 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 22 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 23 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
PCB 24 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 25 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 26 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 27 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 28 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 29 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 30 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 32 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 31 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 33 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 34 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 35 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 36 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 37 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 38 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 39 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 40 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 41 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 42 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 43 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 44 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 45 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 46 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 47 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 48 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 49 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 50 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 51 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 52 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 53 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 54 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 55 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 56 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 57 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 58 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 59 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 60 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 61 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 62 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 63 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 64 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 65 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 66 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 67 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 68 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 69 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 70 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 71 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 72 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 73 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 74 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 75 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
PCB 76 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 77 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 78 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 79 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 80 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 81 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 82 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 83 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 84 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 85 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 86 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 87 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 88 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 89 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 90 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 91 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 92 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 93 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 94 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 95 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 96 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 97 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 98 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 99 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 100 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 101 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 102 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 103 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 104 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 105 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 106 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 108 (BZ)/107 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 109 (BZ)/108 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 107 (BZ)/109 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 110 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 111 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 112 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 113 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 114 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 115 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 116 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 117 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 118 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 119 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 120 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 121 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 122 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 123 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 124 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 125 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 126 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 127 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
PCB 128 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 129 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 130 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 131 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 132 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 133 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 134 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 135 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 136 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 137 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 138 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 139 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 140 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 141 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 142 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 143 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 144 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 145 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 146 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 147 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 148 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 149 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 150 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 151 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 152 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 153 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 154 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 155 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 156 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 157 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 158 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 159 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 160 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 161 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 162 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 163 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 164 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 165 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 166 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 167 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 168 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 169 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 170 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 171 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 172 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 173 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 174 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 175 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 176 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 177 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 178 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 179 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
PCB 180 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 181 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 182 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 183 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 184 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 185 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 186 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 187 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 188 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 189 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 190 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 191 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 192 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 193 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 194 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 195 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 196 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 197 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 198 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 201 (BZ)/199 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 199 (BZ)/200 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 200 (BZ)/201 (IUPAC)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 202 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 203 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 204 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 205 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 206 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 207 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 208 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
PCB 209 (BZ)	EPA 1668A mod	EPA 1668A mod	-------	----------
Hormones,Steroids, Pharmaceuticals and Disinfection Byproducts				
Acetominophen	WS-LC-0024	----------	-------	----------
Atenolol	WS-LC-0024	----------	-------	----------
Azithromycin	WS-LC-0024	----------		
Carbadox	WS-LC-0024	----------	-------	----------
Carbamazepine	WS-LC-0024	----------	-------	----------
Clarithromycin	WS-LC-0024	----------		
Diazepam	WS-LC-0024	----------	-------	----------
Digoxigenin	WS-LC-0024	----------	-------	----------
Digoxin	WS-LC-0024	----------		
Diphenylhydramine	WS-LC-0024	----------	-------	----------
Fluoxetine	WS-LC-0024	----------		
Flumequine	WS-LC-0024	----------	-------	----------
Gemfibrozil	WS-LC-0024	----------		
Ibuprofen	WS-LC-0024	----------	-------	----------
Naproxen	WS-LC-0024	----------	-------	----------
Ormetoprim	WS-LC-0024	----------	-------	----------
Penicillin G	WS-LC-0024	----------		

Parameter/Analyte	Non potable Water	Solid Hazardous Waste	Air	Associated Prep Methods
Sulfachloropyridazine	WS-LC-0024	----------	-------	----------
Sulfadiazine	WS-LC-0024	----------	-------	----------
Sulfamethizole	WS-LC-0024	----------	-------	----------
Sulfamethoxazole	WS-LC-0024	----------	-------	----------
Sulfathiazole	WS-LC-0024	----------	-------	----------
Thiabendazole	WS-LC-0024	----------		
Trimethoprim	WS-LC-0024	----------		
Tris (2-chloro-2-propyl)phosphate (TCPP)	WS-LC-0024	----------	-------	----------
Warfarin	WS-LC-0024	----------	-------	----------

The American Association for Laboratory Accreditation

World Class Accreditation

Accredited DoD ELAP Laboratory

A2LA has accredited

TESTAMERICA LABORATORIES
WEST SACRAMENTO

West Sacramento, CA

for technical competence in the field of

Environmental Testing

In recognition of the successful completion of the A2LA evaluation process that includes an assessment of the laboratory's compliance with ISO/IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the Department of Defense Environmental Laboratory Accreditation Program (DoD ELAP) as detailed in the DoD Quality Systems Manual for Environmental Laboratories (QSM v4.1); accreditation is granted to this laboratory to perform recognized EPA methods as defined on the associated A2LA Environmental Scope of Accreditation. This accreditation demonstrates technical competence for this defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

AMERICAN ASSOCIATION FOR LABORATORY ACCREDITATION
CORPORATE SEAL 1978
DISTRICT OF COLUMBIA
A2LA

Presented this 15th day of December 2009.

President & CEO
For the Accreditation Council
Certificate Number 2928.01
Valid to March 31, 2012
Revised January 20, 2012

For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Environmental Scope of Accreditation.

State of New Jersey
Department of Environmental Protection

Certifies That

TestAmerica West Sacramento

Laboratory Certification ID # CA005

is hereby approved as a

Nationally Accredited Environmental Laboratory

to perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

having duly met the requirements of the

Regulations Governing The Certification Of Laboratories And Environmental Measurements N.J.A.C. 7:18 et. seq.

and

having been found compliant with the standards approved by the

The NELAC Institute

Expiration Date June 30, 2012

NJDEP is a NELAP Recognized Accreditation Body

Joseph F. Aiello, Chief
Office of Quality Assurance

This certificate is to be conspicuously displayed at the laboratory with the annual certified parameter list in a location on the premises visible to the public.
Consumers are urged to verify the laboratory's current accreditation status with the State of NJ, NELAP.

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: CAP03 -- Atmospheric Organic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	CAP03.03640	AE	GC/ECD, HV PUF	[EPA TO-4A]	Aroclor 1242
Certified	Yes	FL	CAP03.03650	AE	GC/ECD, HV PUF	[EPA TO-4A]	Aroclor 1254
Certified	Yes	FL	CAP03.03660	AE	GC/ECD, HV PUF	[EPA TO-4A]	Aroclor 1260
Certified	Yes	FL	CAP03.04840	AE	HRGC/HRMS	[EPA TO-9A]	TCDD (2,3,7,8-)
Certified	Yes	FL	CAP03.04850	AE	HRGC/HRMS	[EPA TO-9A]	TCDF (2,3,7,8-)
Certified	Yes	FL	CAP03.04860	AE	HRGC/HRMS	[EPA TO-9A]	PeCDD (1,2,3,7,8-)
Certified	Yes	FL	CAP03.04870	AE	HRGC/HRMS	[EPA TO-9A]	PeCDF (1,2,3,7,8-)
Certified	Yes	FL	CAP03.04880	AE	HRGC/HRMS	[EPA TO-9A]	PeCDF (2,3,4,7,8-)
Certified	Yes	FL	CAP03.04890	AE	HRGC/HRMS	[EPA TO-9A]	HxCDD (1,2,3,4,7,8-)
Certified	Yes	FL	CAP03.04900	AE	HRGC/HRMS	[EPA TO-9A]	HxCDD (1,2,3,6,7,8-)
Certified	Yes	FL	CAP03.04910	AE	HRGC/HRMS	[EPA TO-9A]	HxCDD (1,2,3,7,8,9-)
Certified	Yes	FL	CAP03.04920	AE	HRGC/HRMS	[EPA TO-9A]	HxCDF (1,2,3,4,7,8-)
Certified	Yes	FL	CAP03.04930	AE	HRGC/HRMS	[EPA TO-9A]	HxCDF (1,2,3,6,7,8-)
Certified	Yes	FL	CAP03.04940	AE	HRGC/HRMS	[EPA TO-9A]	HxCDF (1,2,3,7,8,9-)
Certified	Yes	FL	CAP03.04950	AE	HRGC/HRMS	[EPA TO-9A]	HxCDF (2,3,4,6,7,8-)
Certified	Yes	FL	CAP03.04960	AE	HRGC/HRMS	[EPA TO-9A]	HpCDD (1,2,3,4,6,7,8-)
Certified	Yes	FL	CAP03.04970	AE	HRGC/HRMS	[EPA TO-9A]	HpCDF (1,2,3,4,6,7,8-)
Certified	Yes	FL	CAP03.04980	AE	HRGC/HRMS	[EPA TO-9A]	HpCDF (1,2,3,4,7,8,9-)
Certified	Yes	FL	CAP03.04990	AE	HRGC/HRMS	[EPA TO-9A]	OCDD (1,2,3,4,6,7,8,9-)
Certified	Yes	FL	CAP03.05000	AE	HRGC/HRMS	[EPA TO-9A]	OCDF (1,2,3,4,6,7,8,9-)
Certified	Yes	FL	CAP03.06150	AE	GC/MS	[EPA TO-13A]	Acenaphthene
Certified	Yes	FL	CAP03.06160	AE	GC/MS	[EPA TO-13A]	Acenaphthylene
Certified	Yes	FL	CAP03.06170	AE	GC/MS	[EPA TO-13A]	Anthracene
Certified	Yes	FL	CAP03.06180	AE	GC/MS	[EPA TO-13A]	Benzo(a)anthracene
Certified	Yes	FL	CAP03.06190	AE	GC/MS	[EPA TO-13A]	Benzo(a)pyrene
Certified	Yes	FL	CAP03.06200	AE	GC/MS	[EPA TO-13A]	Benzo(b)fluoranthene
Certified	Yes	FL	CAP03.06210	AE	GC/MS	[EPA TO-13A]	Benzo(k)fluoranthene
Certified	Yes	FL	CAP03.06220	AE	GC/MS	[EPA TO-13A]	Benzo[e]pyrene
Certified	Yes	FL	CAP03.06230	AE	GC/MS	[EPA TO-13A]	Benzo(ghi)perylene
Certified	Yes	FL	CAP03.06240	AE	GC/MS	[EPA TO-13A]	Chrysene
Certified	Yes	FL	CAP03.06260	AE	GC/MS	[EPA TO-13A]	Dibenzo(a,h)anthracene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: CAP03 -- Atmospheric Organic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	CAP03.06270	AE	GC/MS	[EPA TO-13A]	Fluoranthene
Certified	Yes	FL	CAP03.06280	AE	GC/MS	[EPA TO-13A]	Fluorene
Certified	Yes	FL	CAP03.06290	AE	GC/MS	[EPA TO-13A]	Indeno(1,2,3-cd)pyrene
Certified	Yes	FL	CAP03.06300	AE	GC/MS	[EPA TO-13A]	Naphthalene
Certified	Yes	FL	CAP03.06320	AE	GC/MS	[EPA TO-13A]	Phenanthrene
Certified	Yes	FL	CAP03.06330	AE	GC/MS	[EPA TO-13A]	Pyrene

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.04600	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	TCDD (2,3,7,8-)
Certified	Yes	FL	WPP06.04610	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	PeCDD (1,2,3,7,8-)
Certified	Yes	FL	WPP06.04620	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDD (1,2,3,4,7,8-)
Certified	Yes	FL	WPP06.04630	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDD (1,2,3,6,7,8-)
Certified	Yes	FL	WPP06.04640	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDD (1,2,3,7,8,9-)
Certified	Yes	FL	WPP06.04650	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HpCDD (1,2,3,4,6,7,8-)
Certified	Yes	FL	WPP06.04660	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	OCDD (1,2,3,4,6,7,8,9-)
Certified	Yes	FL	WPP06.04670	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	TCDF (2,3,7,8-)
Certified	Yes	FL	WPP06.04680	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	PeCDF (1,2,3,7,8-)
Certified	Yes	FL	WPP06.04690	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	PeCDF (2,3,4,7,8-)
Certified	Yes	FL	WPP06.04700	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDF (1,2,3,4,7,8-)
Certified	Yes	FL	WPP06.04710	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDF (1,2,3,6,7,8-)
Certified	Yes	FL	WPP06.04720	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDF (1,2,3,7,8,9-)
Certified	Yes	FL	WPP06.04730	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HxCDF (2,3,4,6,7,8-)
Certified	Yes	FL	WPP06.04740	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HpCDF (1,2,3,4,6,7,8-)
Certified	Yes	FL	WPP06.04750	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	HpCDF (1,2,3,4,7,8,9-)
Certified	Yes	FL	WPP06.04760	BT, NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	OCDF (1,2,3,4,6,7,8,9-)
Certified	Yes	FL	WPP06.08001	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (2-) (PCB 1)
Certified	Yes	FL	WPP06.08002	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (3-) (PCB 2)
Certified	Yes	FL	WPP06.08003	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Chlorobiphenyl (4-) (PCB 3)

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08005	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,3-) (PCB 5)
Certified	Yes	FL	WPP06.08006	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,3'-) (PCB 6)
Certified	Yes	FL	WPP06.08008	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,4'-) (PCB 8)
Certified	Yes	FL	WPP06.08009	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,5-) (PCB 9)
Certified	Yes	FL	WPP06.08010	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (2,6-) (PCB 10)
Certified	Yes	FL	WPP06.08011	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (3,3'-) (PCB 11)
Certified	Yes	FL	WPP06.08013	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (3,4'-) (PCB 13)
Certified	Yes	FL	WPP06.08014	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (3,5-) (PCB 14)
Certified	Yes	FL	WPP06.08015	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Dichlorobiphenyl (4,4'-) (PCB 15)
Certified	Yes	FL	WPP06.08016	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,2',3-) (PCB 16)
Certified	Yes	FL	WPP06.08017	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,2',4-) (PCB 17)
Certified	Yes	FL	WPP06.08018	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,2',5-) (PCB 18)
Certified	Yes	FL	WPP06.08019	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,2',6-) (PCB 19)
Certified	Yes	FL	WPP06.08022	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3,4'-) (PCB 22)
Certified	Yes	FL	WPP06.08023	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3,5-) (PCB 23)
Certified	Yes	FL	WPP06.08025	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',4-) (PCB 25)
Certified	Yes	FL	WPP06.08026	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',5-) (PCB 26)
Certified	Yes	FL	WPP06.08027	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',6-) (PCB 27)
Certified	Yes	FL	WPP06.08028	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4,4'-) (PCB 28)
Certified	Yes	FL	WPP06.08029	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4,5-) (PCB 29)
Certified	Yes	FL	WPP06.08030	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4,6-) (PCB 30)
Certified	Yes	FL	WPP06.08031	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,4',5-) (PCB 31)
Certified	Yes	FL	WPP06.08033	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',4'-) (PCB 33)
Certified	Yes	FL	WPP06.08034	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (2,3',5'-) (PCB 34)
Certified	Yes	FL	WPP06.08035	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,3',4-) (PCB 35)
Certified	Yes	FL	WPP06.08036	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,3',5-) (PCB 36)
Certified	Yes	FL	WPP06.08037	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,4,4'-) (PCB 37)
Certified	Yes	FL	WPP06.08038	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,4,5-) (PCB 38)
Certified	Yes	FL	WPP06.08039	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Trichlorobiphenyl (3,4',5-) (PCB 39)
Certified	Yes	FL	WPP06.08040	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,3'-) (PCB 40)
Certified	Yes	FL	WPP06.08042	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,4'-) (PCB 42)
Certified	Yes	FL	WPP06.08044	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,5'-) (PCB 44)

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Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08045	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,6-) (PCB 45)
Certified	Yes	FL	WPP06.08046	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',3,6'-) (PCB 46)
Certified	Yes	FL	WPP06.08047	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,4'-) (PCB 47)
Certified	Yes	FL	WPP06.08049	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,5'-) (PCB 49)
Certified	Yes	FL	WPP06.08050	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,6-) (PCB 50)
Certified	Yes	FL	WPP06.08051	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',4,6'-) (PCB 51)
Certified	Yes	FL	WPP06.08052	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',5,5'-) (PCB 52)
Certified	Yes	FL	WPP06.08053	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',5,6'-) (PCB 53)
Certified	Yes	FL	WPP06.08054	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,2',6,6'-) (PCB 54)
Certified	Yes	FL	WPP06.08055	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,3',4-) (PCB 55)
Certified	Yes	FL	WPP06.08057	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,3',5-) (PCB 57)
Certified	Yes	FL	WPP06.08058	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,3',5'-) (PCB 58)
Certified	Yes	FL	WPP06.08059	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,3',6-) (PCB 59)
Certified	Yes	FL	WPP06.08060	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4,4'-) (PCB 60)
Certified	Yes	FL	WPP06.08063	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4',5-) (PCB 63)
Certified	Yes	FL	WPP06.08064	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,4',6-) (PCB 64)
Certified	Yes	FL	WPP06.08065	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3,5,6-) (PCB 65)
Certified	Yes	FL	WPP06.08066	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4,4'-) (PCB 66)
Certified	Yes	FL	WPP06.08067	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4,5-) (PCB 67)
Certified	Yes	FL	WPP06.08069	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4,6-) (PCB 69)
Certified	Yes	FL	WPP06.08070	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4',5-) (PCB 70)
Certified	Yes	FL	WPP06.08071	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',4',6-) (PCB 71)
Certified	Yes	FL	WPP06.08072	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',5,5'-) (PCB 72)
Certified	Yes	FL	WPP06.08073	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,3',5',6-) (PCB 73)
Certified	Yes	FL	WPP06.08074	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,4,4',5-) (PCB 74)
Certified	Yes	FL	WPP06.08075	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (2,4,4',6-) (PCB 75)
Certified	Yes	FL	WPP06.08077	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,4'-) (PCB 77)
Certified	Yes	FL	WPP06.08078	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,5-) (PCB 78)
Certified	Yes	FL	WPP06.08079	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,3',4,5'-) (PCB 79)
Certified	Yes	FL	WPP06.08081	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Tetrachlorobiphenyl (3,4,4',5-) (PCB 81)
Certified	Yes	FL	WPP06.08082	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,3',4-) (PCB 82)
Certified	Yes	FL	WPP06.08083	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,3',5-) (PCB 83)

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08084	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,3',6-) (PCB 84)
Certified	Yes	FL	WPP06.08087	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4,5'-) (PCB 87)
Certified	Yes	FL	WPP06.08088	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4,6-) (PCB 88)
Certified	Yes	FL	WPP06.08091	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,4',6-) (PCB 91)
Certified	Yes	FL	WPP06.08092	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5,5'-) (PCB 92)
Certified	Yes	FL	WPP06.08094	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5,6'-) (PCB 94)
Certified	Yes	FL	WPP06.08095	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,5',6-) (PCB 95)
Certified	Yes	FL	WPP06.08096	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',3,6,6'-) (PCB 96)
Certified	Yes	FL	WPP06.08099	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,4',5-) (PCB 99)
Certified	Yes	FL	WPP06.08100	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,4',6-) (PCB 100)
Certified	Yes	FL	WPP06.08101	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,5,5'-) (PCB 101)
Certified	Yes	FL	WPP06.08102	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,5,6'-) (PCB 102)
Certified	Yes	FL	WPP06.08103	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,5',6-) (PCB 103)
Certified	Yes	FL	WPP06.08104	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,2',4,6,6'-) (PCB 104)
Certified	Yes	FL	WPP06.08105	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,4'-) (PCB 105)
Certified	Yes	FL	WPP06.08109	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4,6-) (PCB 109)
Certified	Yes	FL	WPP06.08110	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4',6-) (PCB 110)
Certified	Yes	FL	WPP06.08112	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',5,6-) (PCB 112)
Certified	Yes	FL	WPP06.08113	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',5',6-) (PCB 113)
Certified	Yes	FL	WPP06.08114	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,4,4',5-) (PCB 114)
Certified	Yes	FL	WPP06.08115	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,4,4',6-) (PCB 115)
Certified	Yes	FL	WPP06.08118	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,4',5-) (PCB 118)
Certified	Yes	FL	WPP06.08119	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,4',6-) (PCB 119)
Certified	Yes	FL	WPP06.08120	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,5,5'-) (PCB 120)
Certified	Yes	FL	WPP06.08122	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3,3',4',5'-) (PCB 122)
Certified	Yes	FL	WPP06.08123	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4,4',5'-) (PCB 123)
Certified	Yes	FL	WPP06.08124	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (2,3',4',5,5'-) (PCB 124)
Certified	Yes	FL	WPP06.08126	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Pentachlorobiphenyl (3,3',4,4',5-) (PCB 126)
Certified	Yes	FL	WPP06.08128	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,4'-) (PCB 128)
Certified	Yes	FL	WPP06.08129	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,5-) (PCB 129)
Certified	Yes	FL	WPP06.08130	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,5'-) (PCB 130)
Certified	Yes	FL	WPP06.08131	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',4,6-) (PCB 131)

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Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08133	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',5,5'-) (PCB 133)
Certified	Yes	FL	WPP06.08134	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',5,6-) (PCB 134)
Certified	Yes	FL	WPP06.08135	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',5,6'-) (PCB 135)
Certified	Yes	FL	WPP06.08136	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,3',6,6'-) (PCB 136)
Certified	Yes	FL	WPP06.08137	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,4',5-) (PCB 137)
Certified	Yes	FL	WPP06.08138	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,4',5'-) (PCB 138)
Certified	Yes	FL	WPP06.08140	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,4',6'-) (PCB 140)
Certified	Yes	FL	WPP06.08141	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,5,5'-) (PCB 141)
Certified	Yes	FL	WPP06.08143	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,5,6'-) (PCB 143)
Certified	Yes	FL	WPP06.08145	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4,6,6'-) (PCB 145)
Certified	Yes	FL	WPP06.08146	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5,5'-) (PCB 146)
Certified	Yes	FL	WPP06.08147	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5,6-) (PCB 147)
Certified	Yes	FL	WPP06.08148	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5,6'-) (PCB 148)
Certified	Yes	FL	WPP06.08149	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',5',6-) (PCB 149)
Certified	Yes	FL	WPP06.08150	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,4',6,6'-) (PCB 150)
Certified	Yes	FL	WPP06.08151	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,5,5',6-) (PCB 151)
Certified	Yes	FL	WPP06.08152	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',3,5,6,6'-) (PCB 152)
Certified	Yes	FL	WPP06.08153	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',4,4',5,5'-) (PCB 153)
Certified	Yes	FL	WPP06.08154	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',4,4',5,6'-) (PCB 154)
Certified	Yes	FL	WPP06.08155	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,2',4,4',6,6'-) (PCB 155)
Certified	Yes	FL	WPP06.08156	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',5-) (PCB 156)
Certified	Yes	FL	WPP06.08157	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',5'-) (PCB 157)
Certified	Yes	FL	WPP06.08158	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,4',6-) (PCB 158)
Certified	Yes	FL	WPP06.08159	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,5,5'-) (PCB 159)
Certified	Yes	FL	WPP06.08161	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4,5',6-) (PCB 161)
Certified	Yes	FL	WPP06.08162	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,3',4',5,5'-) (PCB 162)
Certified	Yes	FL	WPP06.08166	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3,4,4',5,6-) (PCB 166)
Certified	Yes	FL	WPP06.08167	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3',4,4',5,5'-) (PCB 167)
Certified	Yes	FL	WPP06.08168	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (2,3',4,4',5',6-) (PCB 168)
Certified	Yes	FL	WPP06.08169	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Hexachlorobiphenyl (3,3',4,4',5,5'-) (PCB 169)
Certified	Yes	FL	WPP06.08170	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,4',5-) (PCB 170)

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08171	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,4',6-) (PCB 171)
Certified	Yes	FL	WPP06.08172	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,5'-) (PCB 172)
Certified	Yes	FL	WPP06.08173	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,6-) (PCB 173)
Certified	Yes	FL	WPP06.08174	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5,6'-) (PCB 174)
Certified	Yes	FL	WPP06.08175	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5',6-) (PCB 175)
Certified	Yes	FL	WPP06.08176	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,6,6'-) (PCB 176)
Certified	Yes	FL	WPP06.08177	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',4,5',6'-) (PCB 177)
Certified	Yes	FL	WPP06.08178	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',5,5',6-) (PCB 178)
Certified	Yes	FL	WPP06.08179	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,3',5,6,6'-) (PCB 179)
Certified	Yes	FL	WPP06.08180	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5,5'-) (PCB 180)
Certified	Yes	FL	WPP06.08181	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5,6-) (PCB 181)
Certified	Yes	FL	WPP06.08183	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',5',6-) (PCB 183)
Certified	Yes	FL	WPP06.08184	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,4',6,6'-) (PCB 184)
Certified	Yes	FL	WPP06.08185	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,5,5',6-) (PCB 185)
Certified	Yes	FL	WPP06.08186	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4,5,6,6'-) (PCB 186)
Certified	Yes	FL	WPP06.08187	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4',5,5',6-) (PCB 187)
Certified	Yes	FL	WPP06.08188	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,2',3,4',5,6,6'-) (PCB 188)
Certified	Yes	FL	WPP06.08189	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,4',5,5'-) (PCB 189)
Certified	Yes	FL	WPP06.08190	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,4',5,6-) (PCB 190)
Certified	Yes	FL	WPP06.08191	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4,4',5',6-) (PCB 191)
Certified	Yes	FL	WPP06.08193	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Heptachlorobiphenyl (2,3,3',4',5,5',6-) (PCB 193)

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Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	WPP06.08194	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,4',5,5'-) (PCB 194)
Certified	Yes	FL	WPP06.08195	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,4',5,6-) (PCB 195)
Certified	Yes	FL	WPP06.08197	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,4',6,6'-) (PCB 197)
Certified	Yes	FL	WPP06.08198	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,5,5',6-) (PCB 198)
Certified	Yes	FL	WPP06.08199	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,5,5',6'-) (PCB 199)
Certified	Yes	FL	WPP06.08200	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,5,6,6'-) (PCB 200)
Certified	Yes	FL	WPP06.08201	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',4,5',6,6'-) (PCB 201)
Certified	Yes	FL	WPP06.08202	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,3',5,5',6,6'-) (PCB 202)
Certified	Yes	FL	WPP06.08203	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,4,4',5,5',6-) (PCB 203)
Certified	Yes	FL	WPP06.08204	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,2',3,4,4',5,6,6'-) (PCB 204)
Certified	Yes	FL	WPP06.08205	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Octachlorobiphenyl (2,3,3',4,4',5,5',6-) (PCB 205)
Certified	Yes	FL	WPP06.08206	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachlorobiphenyl (2,2',3,3',4,4',5,5',6-) (PCB 206)
Certified	Yes	FL	WPP06.08207	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachlorobiphenyl (2,2',3,3',4,4',5,6,6'-) (PCB 207)
Certified	Yes	FL	WPP06.08208	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Nonachlorobiphenyl (2,2',3,3',4,5,5',6,6'-) (PCB 208)
Certified	Yes	FL	WPP06.08209	BT, NPW, SCM	Extraction, SIM, GC/MS	[EPA 1668A]	Decachlorobiphenyl (PCB 209)

Category: SDW02 -- Inorganic Parameters Including Na + Ca

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SDW02.31120	DW	Ion Chromatography	[EPA 314.0]	Perchlorate
Certified	Yes	CA	SDW02.31125	DW	LC/MS or LC/MS/MS	[EPA 331.0]	Perchlorate

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

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Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SDW06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SDW06.07000	DW	GC/Hi-Res MS, Selected Ion Monitoring	[EPA 1613B]	TCDD (2,3,7,8-)

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.01000	NPW	Acid Digestion/Surface and Groundwater, ICP, FLAA	[SW-846 3005A, Rev. 1, 7/92]	Metals, Total Rec and Dissolved
Certified	Yes	NJ	SHW04.01500	NPW	Acid Digestion/Aqueous Samples, ICP, FLAA	[SW-846 3010A, Rev. 1, 7/92]	Metals, Total

Category: SHW05 -- Organic Parameters, Prep. / Screening

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW05.01000	NPW	Separatory Funnel Extraction	[SW-846 3510C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	NJ	SHW05.03000	NPW	Soxhlet Extraction	[SW-846 3540C, Rev. 3, 12/96]	Semivolatile organics

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	No	FL	SHW06.28045	NPW	HPLC, UV Detector	[USER DEFINED WS-LC-0009/HPLC-UV]	PETN
Certified	No	FL	SHW06.29100	NPW	HPLC, UV Detector	[USER DEFINED WS-LC-0009/HPLC-UV]	Nitroglycerine

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW04.06500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Antimony
Certified	Yes	CA	SHW04.07000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Antimony
Certified	Yes	CA	SHW04.09000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Arsenic

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880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW04 – Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW04.09500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Arsenic
Certified	Yes	CA	SHW04.11500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Barium
Certified	Yes	CA	SHW04.12000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Barium
Certified	Yes	CA	SHW04.13500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Beryllium
Certified	Yes	CA	SHW04.14000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Beryllium
Certified	Yes	CA	SHW04.15500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Cadmium
Certified	Yes	CA	SHW04.16000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Cadmium
Certified	Yes	CA	SHW04.18500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Chromium
Certified	Yes	CA	SHW04.19000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Chromium
Certified	Yes	CA	SHW04.21000	NPW, SCM	Colorimetric	[SW-846 7196A, Rev. 1, 7/92]	Chromium (VI)
Certified	Yes	CA	SHW04.22500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Cobalt
Certified	Yes	CA	SHW04.23000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Cobalt
Certified	Yes	CA	SHW04.24500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Copper
Certified	Yes	CA	SHW04.25000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Copper
Certified	Yes	CA	SHW04.27500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Lead
Certified	Yes	CA	SHW04.28000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Lead
Certified	Yes	CA	SHW04.33000	NPW, SCM	AA, Manual Cold Vapor	[SW-846 7470A, Rev. 1, 9/94]	Mercury - liquid waste
Certified	Yes	CA	SHW04.33500	NPW, SCM	AA, Manual Cold Vapor	[SW-846 7471A, Rev. 1, 9/94]	Mercury - solid waste
Certified	Yes	CA	SHW04.34000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Molybdenum
Certified	Yes	CA	SHW04.34005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Molybdenum
Certified	Yes	CA	SHW04.35500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Nickel
Certified	Yes	CA	SHW04.36000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Nickel
Certified	Yes	CA	SHW04.39000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Selenium
Certified	Yes	CA	SHW04.40600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Selenium
Certified	Yes	CA	SHW04.41000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Silver
Certified	Yes	CA	SHW04.41500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Silver
Certified	Yes	CA	SHW04.43000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Sodium
Certified	Yes	CA	SHW04.45000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Thallium
Certified	Yes	CA	SHW04.45500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Thallium
Certified	Yes	CA	SHW04.47500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Vanadium
Certified	Yes	CA	SHW04.47505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Vanadium
Certified	Yes	CA	SHW04.49000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Zinc

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Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW04.49500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Zinc

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW06.12010	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Aldrin
Certified	Yes	CA	SHW06.12020	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Alpha BHC
Certified	Yes	CA	SHW06.12030	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Beta BHC
Certified	Yes	CA	SHW06.12040	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Delta BHC
Certified	Yes	CA	SHW06.12050	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Lindane (gamma BHC)
Certified	Yes	CA	SHW06.12060	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (technical)
Certified	Yes	CA	SHW06.12070	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (alpha)
Certified	Yes	CA	SHW06.12080	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlordane (gamma)
Certified	Yes	CA	SHW06.12081	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Chlorobenzilate
Certified	Yes	CA	SHW06.12090	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDD (4,4'-)
Certified	Yes	CA	SHW06.12100	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDE (4,4'-)
Certified	Yes	CA	SHW06.12110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	DDT (4,4'-)
Certified	Yes	CA	SHW06.12120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Dieldrin
Certified	Yes	CA	SHW06.12130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan I
Certified	Yes	CA	SHW06.12140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan II
Certified	Yes	CA	SHW06.12150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endosulfan sulfate
Certified	Yes	CA	SHW06.12160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin
Certified	Yes	CA	SHW06.12170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin aldehyde
Certified	Yes	CA	SHW06.12180	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Endrin ketone
Certified	Yes	CA	SHW06.12190	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachlor
Certified	Yes	CA	SHW06.12200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Heptachlor epoxide
Certified	Yes	CA	SHW06.12210	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Methoxychlor
Certified	Yes	CA	SHW06.12220	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96]	Toxaphene
Certified	Yes	CA	SHW06.13110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1016
Certified	Yes	CA	SHW06.13120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1221

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW06.13130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1232
Certified	Yes	CA	SHW06.13140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1242
Certified	Yes	CA	SHW06.13150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1248
Certified	Yes	CA	SHW06.13160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1254
Certified	Yes	CA	SHW06.13170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96]	PCB 1260
Certified	Yes	CA	SHW06.28010	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	HMX
Certified	Yes	CA	SHW06.28020	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	RDX
Certified	Yes	CA	SHW06.28030	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Trinitrobenzene (1,3,5-)
Certified	Yes	CA	SHW06.28040	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Dinitrobenzene (1,3-)
Certified	Yes	CA	SHW06.28050	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Tetryl
Certified	Yes	CA	SHW06.28060	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Nitrobenzene
Certified	Yes	CA	SHW06.28070	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Trinitrotoluene (2,4,6-)
Certified	Yes	CA	SHW06.28080	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Dinitrotoluene (4-amino-2,6-)
Certified	Yes	CA	SHW06.28090	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Dinitrotoluene (2-amino-4,6-)
Certified	Yes	CA	SHW06.28100	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Dinitrotoluene (2,4-)
Certified	Yes	CA	SHW06.28110	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Dinitrotoluene (2,6-)
Certified	Yes	CA	SHW06.28120	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Nitrotoluene (2-)
Certified	Yes	CA	SHW06.28130	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Nitrotoluene (3-)
Certified	Yes	CA	SHW06.28140	NPW, SCM	HPLC, UV Detector	[SW-846 8330] [SW-846 8330A]	Nitrotoluene (4-)

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.04010	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Benzene
Certified	Yes	CA	SHW07.04011	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromobenzene
Certified	Yes	CA	SHW07.04012	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butyl benzene (n-)
Certified	Yes	CA	SHW07.04013	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Sec-butylbenzene
Certified	Yes	CA	SHW07.04014	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tert-butylbenzene
Certified	Yes	CA	SHW07.04020	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorobenzene
Certified	Yes	CA	SHW07.04022	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorotoluene (2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.04023	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorotoluene (4-)
Certified	Yes	CA	SHW07.04030	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	CA	SHW07.04040	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	CA	SHW07.04050	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,4-)
Certified	Yes	CA	SHW07.04060	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethylbenzene
Certified	Yes	CA	SHW07.04065	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Isopropylbenzene
Certified	Yes	CA	SHW07.04067	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Propylbenzene (n-)
Certified	Yes	CA	SHW07.04070	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Toluene
Certified	Yes	CA	SHW07.04072	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,3-)
Certified	Yes	CA	SHW07.04073	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trimethylbenzene (1,2,4-)
Certified	Yes	CA	SHW07.04074	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trimethylbenzene (1,3,5-)
Certified	Yes	CA	SHW07.04080	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylenes (total)
Certified	Yes	CA	SHW07.04087	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	tert-Amylmethyl ether [TAME]
Certified	Yes	CA	SHW07.04088	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Allyl chloride
Certified	Yes	CA	SHW07.04089	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromochloromethane
Certified	Yes	CA	SHW07.04090	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromodichloromethane
Certified	Yes	CA	SHW07.04100	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromoform
Certified	Yes	CA	SHW07.04110	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromomethane
Certified	Yes	CA	SHW07.04120	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes	CA	SHW07.04130	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethane
Certified	Yes	CA	SHW07.04140	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethyl vinyl ether (2-)
Certified	Yes	CA	SHW07.04150	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroform
Certified	Yes	CA	SHW07.04160	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloromethane
Certified	Yes	CA	SHW07.04170	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (trans-1,3-)
Certified	Yes	CA	SHW07.04180	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromochloromethane
Certified	Yes	CA	SHW07.04185	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromoethane (1,2-) (EDB)
Certified	Yes	CA	SHW07.04186	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromomethane
Certified	Yes	CA	SHW07.04187	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	CA	SHW07.04190	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	Yes	CA	SHW07.04200	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes	CA	SHW07.04210	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes	CA	SHW07.04220	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (1,1-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.04230	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (trans-1,2-)
Certified	Yes	CA	SHW07.04235	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes	CA	SHW07.04240	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Yes	CA	SHW07.04241	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,3-)
Certified	Yes	CA	SHW07.04242	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (2,2-)
Certified	Yes	CA	SHW07.04249	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (1,1-)
Certified	Yes	CA	SHW07.04250	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (cis-1,3-)
Certified	Yes	CA	SHW07.04255	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloro-2-butene (trans-1,4-)
Certified	Yes	CA	SHW07.04260	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)
Certified	Yes	CA	SHW07.04270	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	CA	SHW07.04280	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethene
Certified	Yes	CA	SHW07.04290	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)
Certified	Yes	CA	SHW07.04300	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)
Certified	Yes	CA	SHW07.04310	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethene
Certified	Yes	CA	SHW07.04320	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorofluoromethane
Certified	Yes	CA	SHW07.04325	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloropropane (1,2,3-)
Certified	Yes	CA	SHW07.04327	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl acetate
Certified	Yes	CA	SHW07.04330	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl chloride
Certified	Yes	CA	SHW07.04340	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acetone
Certified	Yes	CA	SHW07.04350	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon disulfide
Certified	Yes	CA	SHW07.04360	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butanone (2-)
Certified	Yes	CA	SHW07.04364	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Ethyl-tert-butyl Ether [ETBE]
Certified	Yes	CA	SHW07.04367	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethyl methacrylate
Certified	Yes	CA	SHW07.04370	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexanone (2-)
Certified	Yes	CA	SHW07.04371	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methacrylonitrile
Certified	Yes	CA	SHW07.04373	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl methacrylate
Certified	Yes	CA	SHW07.04375	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl iodide
Certified	Yes	CA	SHW07.04380	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Pentanone (4-methyl-2-) (MIBK)
Certified	Yes	CA	SHW07.04385	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Propionitrile
Certified	Yes	CA	SHW07.04390	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl tert-butyl ether
Certified	Yes	CA	SHW07.04395	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tert-butyl alcohol
Certified	Yes	CA	SHW07.04400	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrolein

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.04410	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrylonitrile
Certified	Yes	CA	SHW07.04500	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes	CA	SHW07.04540	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Naphthalene
Certified	Yes	CA	SHW07.04550	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Styrene
Certified	Yes	CA	SHW07.04560	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,1,2-)
Certified	Yes	CA	SHW07.04570	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	CA	SHW07.04590	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dioxane (1,4-)
Certified	Yes	CA	SHW07.04665	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acetophenone
Certified	Yes	CA	SHW07.04670	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acetylaminofluorene (2-)
Certified	Yes	CA	SHW07.04675	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aminobiphenyl (4-)
Certified	Yes	CA	SHW07.04680	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aramite
Certified	Yes	CA	SHW07.04705	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorobenzilate
Certified	Yes	CA	SHW07.04710	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloronaphthalene (1-)
Certified	Yes	CA	SHW07.04715	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diallate (cis)
Certified	Yes	CA	SHW07.04720	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diallate (trans)
Certified	Yes	CA	SHW07.04740	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenz(a,j)acridine
Certified	Yes	CA	SHW07.04755	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorophenol (2,6-)
Certified	Yes	CA	SHW07.04760	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethoate
Certified	Yes	CA	SHW07.04767	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethylaminoazobenzene
Certified	Yes	CA	SHW07.04770	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethylbenz(a)anthracene (7,12-)
Certified	Yes	CA	SHW07.04780	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrobenzene (1,3-)
Certified	Yes	CA	SHW07.04810	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isodrin
Certified	Yes	CA	SHW07.04815	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isosafrole (cis-)
Certified	Yes	CA	SHW07.04820	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isosafrole (trans-)
Certified	Yes	CA	SHW07.04830	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methanesulfonate (Ethyl-)
Certified	Yes	CA	SHW07.04835	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methanesulfonate (Methyl-)
Certified	Yes	CA	SHW07.04845	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylcholanthrene (3-)
Certified	Yes	CA	SHW07.04850	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Napthoquinone (1,4-)
Certified	Yes	CA	SHW07.04855	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Napththylamine (1-)
Certified	Yes	CA	SHW07.04860	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Napththylamine (2-)
Certified	Yes	CA	SHW07.04870	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitroso-di-n-butylamine
Certified	Yes	CA	SHW07.04875	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosomorpholine

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.04880	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosopiperidine
Certified	Yes	CA	SHW07.04885	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Parathion
Certified	Yes	CA	SHW07.04890	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Parathion methyl
Certified	Yes	CA	SHW07.04895	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachlorobenzene
Certified	Yes	CA	SHW07.04905	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachloronitrobenzene
Certified	Yes	CA	SHW07.04910	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenacetin
Certified	Yes	CA	SHW07.04915	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenylenediamine (1,4-)
Certified	Yes	CA	SHW07.04920	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenylethylamine (alpha, alpha-Dimethyl)
Certified	Yes	CA	SHW07.04925	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phorate
Certified	Yes	CA	SHW07.04930	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phosphorothioate (O,O,O-triethyl)
Certified	Yes	CA	SHW07.04940	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Picoline (2-)
Certified	Yes	CA	SHW07.04955	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Safrole
Certified	Yes	CA	SHW07.04960	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Sulfotepp
Certified	Yes	CA	SHW07.04975	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Tetrachlorobenzene (1,2,4,5-)
Certified	Yes	CA	SHW07.04980	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Tetrachlorophenol (2,3,4,6-)
Applied	No	CA	SHW07.04985	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Toluidine (2-) (2-Methylaniline)
Certified	Yes	CA	SHW07.04990	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Toluidine (5-nitro-2-)
Certified	Yes	CA	SHW07.04995	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trinitrobenzene (1,3,5-)
Certified	Yes	CA	SHW07.05004	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodiethylamine
Certified	Yes	CA	SHW07.05005	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodimethylamine
Certified	Yes	CA	SHW07.05006	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitroso-di-n-propylamine
Certified	Yes	CA	SHW07.05010	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosodiphenylamine
Certified	Yes	CA	SHW07.05011	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosomethylethylamine
Certified	Yes	CA	SHW07.05012	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	N-Nitrosopyrrolidine
Certified	Yes	CA	SHW07.05020	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diphenylamine
Certified	Yes	CA	SHW07.05030	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Carbazole
Certified	Yes	CA	SHW07.05038	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzidine
Certified	Yes	CA	SHW07.05040	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzidine (3,3'-)
Certified	Yes	CA	SHW07.05045	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diphenylhydrazine (1,2-)
Certified	Yes	CA	SHW07.05048	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Aniline
Certified	Yes	CA	SHW07.05050	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloraniline (4-)
Certified	Yes	CA	SHW07.05060	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (2-)

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.05062	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (3-)
Certified	Yes	CA	SHW07.05063	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitroaniline (4-)
Certified	Yes	CA	SHW07.05070	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chloronaphthalene (2-)
Certified	Yes	CA	SHW07.05080	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobenzene
Certified	Yes	CA	SHW07.05090	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes	CA	SHW07.05100	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachlorocyclopentadiene
Certified	Yes	CA	SHW07.05110	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachloroethane
Certified	Yes	CA	SHW07.05115	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Hexachloropropene
Certified	Yes	CA	SHW07.05120	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	CA	SHW07.05130	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroethoxy) methane
Certified	Yes	CA	SHW07.05132	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroethyl) ether
Certified	Yes	CA	SHW07.05140	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-chloroisopropyl) ether
Certified	Yes	CA	SHW07.05150	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenyl-phenyl ether (4-)
Certified	Yes	CA	SHW07.05160	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bromophenyl-phenyl ether (4-)
Certified	Yes	CA	SHW07.05170	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrotoluene (2,4-)
Certified	Yes	CA	SHW07.05180	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrotoluene (2,6-)
Certified	Yes	CA	SHW07.05190	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Isophorone
Certified	Yes	CA	SHW07.05200	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrobenzene
Certified	Yes	CA	SHW07.05210	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Butyl benzyl phthalate
Certified	Yes	CA	SHW07.05220	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Bis (2-ethylhexyl) phthalate
Certified	Yes	CA	SHW07.05230	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Diethyl phthalate
Certified	Yes	CA	SHW07.05240	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethyl phthalate
Certified	Yes	CA	SHW07.05250	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-butyl phthalate
Certified	Yes	CA	SHW07.05260	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Di-n-octyl phthalate
Certified	Yes	CA	SHW07.05270	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acenaphthene
Certified	Yes	CA	SHW07.05280	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Anthracene
Certified	Yes	CA	SHW07.05290	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Acenaphthylene
Certified	Yes	CA	SHW07.05300	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)anthracene
Certified	Yes	CA	SHW07.05310	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(a)pyrene
Certified	Yes	CA	SHW07.05320	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(b)fluoranthene
Certified	Yes	CA	SHW07.05330	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(ghi)perylene
Certified	Yes	CA	SHW07.05340	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzo(k)fluoranthene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW07.05350	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chrysene
Certified	Yes	CA	SHW07.05360	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenzo(a,h)anthracene
Certified	Yes	CA	SHW07.05370	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluoranthene
Certified	Yes	CA	SHW07.05380	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Fluorene
Certified	Yes	CA	SHW07.05390	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Indeno(1,2,3-cd)pyrene
Certified	Yes	CA	SHW07.05400	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylnaphthalene (2-)
Certified	Yes	CA	SHW07.05410	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Naphthalene
Certified	Yes	CA	SHW07.05420	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenanthrene
Certified	Yes	CA	SHW07.05430	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pyrene
Certified	Yes	CA	SHW07.05440	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methyl phenol (4-chloro-3-)
Certified	Yes	CA	SHW07.05450	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Chlorophenol (2-)
Certified	Yes	CA	SHW07.05460	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorophenol (2,4-)
Certified	Yes	CA	SHW07.05470	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dimethylphenol (2,4-)
Certified	Yes	CA	SHW07.05480	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2,4-)
Certified	Yes	CA	SHW07.05490	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	CA	SHW07.05500	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (2-)
Certified	Yes	CA	SHW07.05510	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (4-)
Certified	Yes	CA	SHW07.05520	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (2-)
Certified	Yes	CA	SHW07.05530	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Nitrophenol (4-)
Certified	Yes	CA	SHW07.05540	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pentachlorophenol
Certified	Yes	CA	SHW07.05550	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Phenol
Certified	Yes	CA	SHW07.05560	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorophenol (2,4,5-)
Certified	Yes	CA	SHW07.05570	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Trichlorophenol (2,4,6-)
Certified	Yes	CA	SHW07.05590	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Methylphenol (3-)
Certified	Yes	CA	SHW07.05600	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dibenzofuran
Certified	Yes	CA	SHW07.05691	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	CA	SHW07.05692	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	CA	SHW07.05700	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Dichlorobenzene (1,4-)
Certified	Yes	CA	SHW07.05710	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzoic acid
Certified	Yes	CA	SHW07.05720	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Benzyl alcohol
Certified	Yes	CA	SHW07.05750	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96]	Pyridine

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW08 -- Polychlorinated Dibenzo-dioxins / Furans

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	CA	SHW08.01010	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	TCDD (2,3,7,8-)
Certified	Yes	CA	SHW08.01020	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	PeCDD (1,2,3,7,8-)
Certified	Yes	CA	SHW08.01030	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDD (1,2,3,4,7,8-)
Certified	Yes	CA	SHW08.01040	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDD (1,2,3,6,7,8-)
Certified	Yes	CA	SHW08.01050	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDD (1,2,3,7,8,9-)
Certified	Yes	CA	SHW08.01060	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HpCDD (1,2,3,4,6,7,8-)
Certified	Yes	CA	SHW08.01070	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	OCDD (1,2,3,4,6,7,8,9-)
Certified	Yes	CA	SHW08.01080	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	TCDF (2,3,7,8-)
Certified	Yes	CA	SHW08.01090	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	PeCDF (1,2,3,7,8-)
Certified	Yes	CA	SHW08.01100	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	PeCDF (2,3,4,7,8-)
Certified	Yes	CA	SHW08.01110	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDF (1,2,3,4,7,8-)
Certified	Yes	CA	SHW08.01120	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDF (1,2,3,6,7,8-)
Certified	Yes	CA	SHW08.01130	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDF (1,2,3,7,8,9-)
Certified	Yes	CA	SHW08.01140	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HxCDF (2,3,4,6,7,8-)
Certified	Yes	CA	SHW08.01150	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HpCDF (1,2,3,4,6,7,8-)
Certified	Yes	CA	SHW08.01160	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	HpCDF (1,2,3,4,7,8,9-)
Certified	Yes	CA	SHW08.01170	NPW, SCM	GC/Hi-Res MS, Selected Ion Monitoring	[SW-846 8290, Rev. 0, 9/94]	OCDF (1,2,3,4,6,7,8,9-)

Category: SHW09 -- Miscellaneous Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	FL	SHW09.34165	NPW, SCM	LC/MS or LC/MS/MS	[SW-846 6850]	Perchlorate

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	NJ	SHW04.03000	SCM	Acid Digestion, Soil Sediment & Sludge	[SW-846 3050B, Rev. 2, 12/96]	Metals

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/14/2011 until 06/30/2012

Laboratory Name: TESTAMERICA WEST SACRAMENTO Laboratory Number: CA005 Activity ID: NLC110002
880 RIVERSIDE PKWY
WEST SACRAMENTO, CA 95605

Category: SHW10 -- Facility-Specific Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	No	FL	SHW10.21010	SCM	HPLC, UV Detector	[USER DEFINED WS-LC-0010/HPLC-UV]	Nitroguanidine
Certified	No	FL	SHW10.30015	SCM	Colorimetric, Cadmium Reduction, Automated	[USER DEFINED EPA 353.2 mod. (WS-WC-0050)]	Nitrocellulose

Joseph F. Aiello, Chief

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board/ACLASS

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

TestAmerica - Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238

has been assessed by ACLASS
and meets the requirements of

DoD-ELAP

while demonstrating technical competence in the field(s) of

TESTING

Refer to the accompanying Scope(s) of Accreditation for information regarding the types of tests to which this accreditation applies.

ADE-1442

Certificate Number

ACLASS Approval

Certificate Valid: 03/12/2010-03/12/2012
Version No. 005 Issued: 01/05/2011

SCOPE OF DoD-ELAP ACCREDITATION

TestAmerica - Pittsburgh

301 Alpha Drive, Pittsburgh PA 15238
Nasreen K. DeRubeis Phone: 412-963-7058

TESTING

Valid to: March 12, 2012 Certificate Number: ADE - 1442

I. Environmental

MATRIX	SPECIFIC TEST or ANALYTE GROUP	SPECIFICATION OR STANDARD METHOD (all EPA unless specified)	* KEY EQUIPMENT OR TECHNOLOGY USED
Water and Solids	Metals	6010B / C	ICP-AES
Water and Solids	Metals	6020 / 6020A	ICP-MS
Solids	Mercury	7471A/B	CVAA
Water	Mercury	7470A	CVAA
Water and Solids	Hexavalent Chromium with Alkaline Digestion	7196A	Spectrophotometer
Solids	Cyanide Extraction from Solids	9013	
Water	Total Cyanide	9012A / B 9010B / C	
Water and Solids	Anions	9056A	IC
Solids	Hexane Extractable Material, HEM (Oil and Grease)	9071B	Gravimetric
Water	Hexane Extractable Material	9070A 1664A	Gravimetric
Water / Solids	Organochlorine Pesticides	8081A / B	GC
Water / Solids	Organo-Phosphorus Compounds	8141A / B	GC

MATRIX	SPECIFIC TEST or ANALYTE GROUP	SPECIFICATION OR STANDARD METHOD (all EPA unless specified)	* KEY EQUIPMENT OR TECHNOLOGY USED
Water, Solids, and Oil	PCBs	8082 / 8082A	GC
Water and Solids	Chlorinated Herbicides	8151A	GC
Water and Solids	Volatiles	8260B	GC/MS
Water and Solids	Semi-Volatiles	8270C / D	GC/MS
Water	Total Organic Carbon	9060/9060A	TOC Analyzer
Water	EDB and DBCP	8011	GC
Water and Solids	PAHs	8310	HPLC
Solids	Total Organic Carbon	Lloyd Kahn	TOC Analyzer
Water and Solids	Sulfide	9030B / 9034	Titration
Water	pH	9040B / C	pH Meter
Solids	pH	9045C / D	pH Meter
Water-Organic Liquids	Flashpoint	1020B / ASTM- D3278-96	Setaflash closed tester
Water –Organic Liquids	Flashpoint	1010A / ASTM- D93-08	Pensky-Martens Closed Flash Tester.
Solids	Percent Moisture	SM 2540G	Balance
Water	Acid Digestion	3005A	FLAA / ICP
Water	Acid Digestion	3010A	FLAA / ICP
Solids	Acid Digestion	3050B	
Solids	Alkaline Digestion	3060A	
Water	Purge-and-Trap	5030B	
Solids	Closed-system Purge-and-Trap	5035	
Solids	Waste Dilution	3580A / 3585	

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MATRIX	SPECIFIC TEST or ANALYTE GROUP	SPECIFICATION OR STANDARD METHOD (all EPA unless specified)	* KEY EQUIPMENT OR TECHNOLOGY USED
Solids	Automated Soxhlet Extraction	3541	
Water	Liquid-Liquid Extraction	3510C	
Water	Continuous Liquid-Liquid Extraction	3520C	
Solids	Ultrasonic Extraction	3550C	
Water and Solids	Sulfur Cleanup	3660B	
Water and Solids	Gel Permeation Cleanup	3640A	
Water and Solids	TCLP Toxicity Leaching	1311	
Water and Solids	Chromium Speciation	6800	

Notes:

1. ** = As Applicable*
2. *This scope is part of and must be included with the Certificate of Accreditation No. ADE-1442*

Vice President

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Accredited Analytes/Methods (by matrix)

TestAmerica - Pittsburgh

Pittsburg, PA

NELAC Code	Analyte	Matrix							
		Aqueous				Solid			
	Trace Metals								
1000	Aluminum	6010B/C	6020/A			6010B/C	6020A		
1005	Antimony	6010B/C	6020/A			6010B/C	6020A		
1010	Arsenic	6010B/C	6020/A			6010B/C	6020A		
1015	Barium	6010B/C	6020/A			6010B/C	6020A		
1020	Beryllium	6010B/C	6020/A			6010B/C	6020A		
1025	Boron	6010B/C	6020/A			6010B/C	6020A		
1030	Cadmium	6010B/C	6020/A			6010B/C	6020A		
1035	Calcium	6010B/C	6020/A			6010B/C	6020A		
1040	Chromium, total	6010B/C	6020/A			6010B/C	6020A		
1045	Chromium VI			7196A				7196A	
---	Chromium Speciation			6800				6800	
1050	Cobalt	6010B/C	6020/A			6010B/C	6020A		
1055	Copper	6010B/C	6020/A			6010B/C	6020A		
1070	Iron	6010B/C	6020/A			6010B/C	6020A		
1075	Lead	6010B/C	6020/A			6010B/C	6020A		
1085	Magnesium	6010B/C	6020/A			6010B/C	6020A		
1090	Manganese	6010B/C	6020/A			6010B/C	6020A		
1095	Mercury			7470A				7471A/B	
1100	Molybdenum	6010B/C	6020/A			6010B/C	6020A		
1105	Nickel	6010B/C	6020/A			6010B/C	6020A		
1125	Potassium	6010B/C	6020/A			6010B/C	6020A		
1140	Selenium	6010B/C	6020/A			6010B/C	6020A		
1990	Silicon	6010B/C	6020/A			6010B/C	6020A		
1462	Silica	6010B/C	6020/A			6010B/C	6020/A		
1150	Silver	6010B/C	6020/A			6010B/C	6020A		
1155	Sodium	6010B/C	6020/A			6010B/C	6020A		
1165	Strontium	6010B/C	6020/A			6010B/C	6020A		
1165	Thallium	6010B/C	6020/A			6010B/C	6020A		
1175	Tin	6010B/C	6020/A			6010B/C	6020A		
1180	Titanium	6010B/C	6020/A			6010B/C	6020A		
1185	Vanadium	6010B/C	6020/A			6010B/C	6020A		
1190	Zinc	6010B/C	6020/A			6010B/C	6020A		
	Misc Analytes								
1900	pH	9040C	9040B			9045D	9045C		
1645	Total Cyanide	9012A/B	9010B/C			9012A/B	9013		
2040	Total Organic Carbon	9060/A				Lloyd Kahn			
2005	Sulfide	9030B/9034				9030B/9034			
---	Flashpoint	1020B	ASTM D3278-96	1010A	ASTM D93-08	1020B	ASTM D3278-96	1010A	ASTM D93-08
3850	Percent Moisture					SM 2540G			
1540	Bromide	9056A				9056A			
1575	Chloride	9056A				9056A			
1730	Fluoride	9056A				9056A			
1810	Nitrate as N	9056A				9056A			
1840	Nitrite as N	9056A				9056A			
1820	Nitrate + Nitrite as N	9056A				9056A			
1870	ortho-phosphorus	9056A				9056A			
2000	Sulfate	9056A				9056A			
	Petroleum Hydrocarbons								
1935	Oil & Grease	1664A	9070A			9071B			
1860	Hexane Extractable Material (HEM)	1664A	9070A			9071B			
	VOCs								
4315	Acetone	8260B				8260B			
4375	Benzene	8260B				8260B			
4385	Bromobenzene	8260B				8260B			
4390	Bromochloromethane	8260B				8260B			
4395	Bromodichloromethane	8260B				8260B			
4400	Bromoform	8260B				8260B			
4950	Bromomethane	8260B				8260B			
4410	2-Butanone (MEK)	8260B				8260B			
4435	n-Butylbenzene	8260B				8260B			
4440	sec-Butylbenzene	8260B				8260B			
4445	tert-Butylbenzene	8260B				8260B			
4450	Carbon disulfide	8260B				8260B			
4455	Carbon Tetrachloride	8260B				8260B			
4475	Chlorobenzene	8260B				8260B			
4575	Chlorodibromomethane	8260B				8260B			
4485	Chloroethane	8260B				8260B			
4505	Chloroform	8260B				8260B			
4960	Chloromethane	8260B				8260B			
4535	2-Chlorotoluene	8260B				8260B			
4540	4-Chlorotoluene	8260B				8260B			
4555	Cyclohexane	8260B				8260B			
4570	1,2-Dibromo-3-chloropropane (DBCP)	8260B	8011			8260B			
4585	1,2-Dibromoethane (EDB)	8260B	8011			8260B			
4595	Dibromomethane	8260B				8260B			

Accredited Analytes/Methods (by matrix)									
TestAmerica - Pittsburgh									
Pittsburg, PA									
NELAC Code	Analyte	Matrix							
		Aqueous				Solid			
4610	1,2-Dichlorobenzene	8260B				8260B			
4615	1,3-Dichlorobenzene	8260B				8260B			
4620	1,4-Dichlorobenzene	8260B				8260B			
4625	Dichlorodifluoromethane	8260B				8260B			
4630	1,1-Dichloroethane	8260B				8260B			
4635	1,2-Dichloroethane	8260B				8260B			
4640	1,1-Dichloroethene	8260B				8260B			
4645	*cis* -1,2-Dichloroethene	8260B				8260B			
---	Dichloroethene (total)	8260B				8260B			
4700	trans-1,2-Dichloroethene	8260B				8260B			
4975	Dichloromethane (Methylene Chloride)	8260B				8260B			
4655	1,2-Dichloropropane	8260B				8260B			
4660	1,3-Dichloropropane	8260B				8260B			
4665	2,2-Dichloropropane	8260B				8260B			
4670	1,1-Dichloropropene	8260B				8260B			
4680	cis-1,3-Dichloropropene	8260B				8260B			
4685	*trans* -1,3-Dichloropropene	8260B				8260B			
4765	Ethylbenzene	8260B				8260B			
4835	Hexachlorobutadiene	8260B				8260B			
4860	2-Hexanone	8260B				8260B			
4900	Isopropylbenzene	8260B				8260B			
4910	4-Isopropyltoluene	8260B				8260B			
4940	Methyl Acetate	8260B				8260B			
4965	Methylcyclohexane	8260B				8260B			
4995	4-Methyl-2-pentanone (MIBK)	8260B				8260B			
5000	Methyl-tert-butylether (MTBE)	8260B				8260B			
5005	Naphthalene	8260B				8260B			
5090	n-Propylbenzene	8260B				8260B			
5100	Styrene	8260B				8260B			
5105	1,1,1,2-Tetrachloroethane	8260B				8260B			
5110	1,1,2,2-Tetrachloroethane	8260B				8260B			
5115	Tetrachloroethene	8260B				8260B			
5140	Toluene	8260B				8260B			
5150	1,2,3-Trichlorobenzene	8260B				8260B			
5155	1,2,4-Trichlorobenzene	8260B				8260B			
5160	1,1,1-Trichloroethane	8260B				8260B			
5165	1,1,2-Trichloroethane	8260B				8260B			
5170	Trichloroethene	8260B				8260B			
5175	Trichlorofluoromethane (Freon 11)	8260B				8260B			
5180	1,2,3-Trichloropropane	8260B				8260B			
---	1,1,2-Trichloro-1,2,2-trifluoroethane	8260B				8260B			
5210	1,2,4-Trimethylbenzene	8260B				8260B			
5215	1,3,5-Trimethylbenzene	8260B				8260B			
5235	Vinyl chloride	8260B				8260B			
5250	o-Xylene	8260B				8260B			
5240	m+p-Xylene	8260B				8260B			
5260	Xylenes, total	8260B				8260B			
	SVOCs - Base/Neutrals/Acids								
5500	Acenaphthene	8270C/D				8270C/D			
5505	Acenaphthylene	8270C/D				8270C/D			
5510	Acetophenone	8270C/D				8270C/D			
5545	Aniline	8270C/D				8270C/D			
5555	Anthracene	8270C/D				8270C/D			
7065	Atrazine	8270C/D				8270C/D			
5570	Benzaldehyde	8270C/D				8270C/D			
5575	Benzo(a)anthracene	8270C/D				8270C/D			
5585	Benzo(b)fluoranthene	8270C/D				8270C/D			
5600	Benzo(k)fluoranthene	8270C/D				8270C/D			
5590	Benzo(g,h,i)perylene	8270C/D				8270C/D			
5580	Benzo(a)pyrene	8270C/D				8270C/D			
5595	Benzidine	8270C/D				8270C/D			
5610	Benzoic acid	8270C/D				8270C/D			
5630	Benzyl alcohol	8270C/D				8270C/D			
5640	1,1'-Biphenyl	8270C/D				8270C/D			
5660	4-Bromophenyl-phenylether	8270C/D				8270C/D			
5670	Butyl benzyl phthalate	8270C/D				8270C/D			
7180	Caprolactam	8270C/D				8270C/D			
5680	Carbazole	8270C/D				8270C/D			
5745	4-Chloroaniline	8270C/D				8270C/D			
5760	bis(2-Chloroethoxy)methane	8270C/D				8270C/D			
5765	bis(2-Chloroethyl)ether	8270C/D				8270C/D			
5780	bis(2-Chloroiospropyl) ether	8270C/D				8270C/D			
5700	4-Chloro-3-methylphenol	8270C/D				8270C/D			
5795	2-Chloronaphthalene	8270C/D				8270C/D			
5825	4-Chlorophenyl-phenylether	8270C/D				8270C/D			
5800	2-Chlorophenol	8270C/D				8270C/D			
5855	Chrysene	8270C/D				8270C/D			
5895	Dibenzo(a,h)anthracene	8270C/D				8270C/D			
5905	Dibenzofuran	8270C/D				8270C/D			
5925	Di-n-butylphthalate	8270C/D				8270C/D			

Accredited Analytes/Methods (by matrix)									
TestAmerica - Pittsburgh									
Pittsburg, PA									
NELAC Code	Analyte	Matrix							
		Aqueous				Solid			
4610	1,2-Dichlorobenzene	8270C/D				8270C/D			
4615	1,3-Dichlorobenzene	8270C/D				8270C/D			
4620	1,4-Dichlorobenzene	8270C/D				8270C/D			
5945	3,3'-Dichlorobenzidine	8270C/D				8270C/D			
6000	2,4-Dichlorophenol	8270C/D				8270C/D			
6005	2,6-Dichlorophenol	8270C/D				8270C/D			
6070	Diethyl phthalate	8270C/D				8270C/D			
6130	2,4-Dimethylphenol	8270C/D				8270C/D			
6135	Dimethylphthalate	8270C/D				8270C/D			
6175	2,4-Dinitrophenol	8270C/D				8270C/D			
6185	2,4-Dinitrotoluene	8270C/D				8270C/D			
6190	2,6-Dinitrotoluene	8270C/D				8270C/D			
6200	Di-n-octylphthalate	8270C/D				8270C/D			
4740	p-Dioxane	8270C/D				8270C/D			
---	1,2-Diphenyl hydrazine	8270C/D				8270C/D			
6255	bis(2-ethylhexyl) phthalate	8270C/D				8270C/D			
6265	Fluoranthene	8270C/D				8270C/D			
6270	Fluorene	8270C/D				8270C/D			
6275	Hexachlorobenzene	8270C/D				8270C/D			
4835	Hexachlorobutadiene	8270C/D				8270C/D			
6285	Hexachlorocyclopentadiene	8270C/D				8270C/D			
4840	Hexachloroethane	8270C/D				8270C/D			
6315	Indeno(1,2,3, cd)pyrene	8270C/D				8270C/D			
6320	Isophorone	8270C/D				8270C/D			
6360	2-Methyl-4,6-Dinitrophenol	8270C/D				8270C/D			
6380	1-Methylnaphthalene	8270C/D				8270C/D			
6385	2-Methylnaphthalene	8270C/D				8270C/D			
6400	2-Methylphenol	8270C/D				8270C/D			
6410	4-Methylphenol (and/or 3-Methylphenol)	8270C/D				8270C/D			
5005	Naphthalene	8270C/D				8270C/D			
6460	2-Nitroaniline	8270C/D				8270C/D			
6465	3-Nitroaniline	8270C/D				8270C/D			
6470	4-Nitroaniline	8270C/D				8270C/D			
5015	Nitrobenzene	8270C/D				8270C/D			
6490	2-Nitrophenol	8270C/D				8270C/D			
6500	4-Nitrophenol	8270C/D				8270C/D			
6530	N-Nitrosodimethylamine	8270C/D				8270C/D			
6535	N-Nitrosodiphenylamine	8270C/D				8270C/D			
6545	N-Nitroso-di-n-propylamine	8270C/D				8270C/D			
6565	N-Nitrosopyrrolidine	8270C/D				8270C/D			
4659	2,2-Oxybis(1-chloropropane)	8270C/D				8270C/D			
6605	Pentachlorophenol	8270C/D				8270C/D			
6615	Phenanthrene	8270C/D				8270C/D			
6625	Phenol	8270C/D				8270C/D			
6665	Pyrene	8270C/D				8270C/D			
5095	Pyridine	8270C/D				8270C/D			
6735	2,3,4,6-Tetrachlorophenol	8270C/D				8270C/D			
	2,3,5,6-Tetrachlorophenol	8270C/D				8270C/D			
5155	1,2,4-Trichlorobenzene	8270C/D				8270C/D			
6835	2,4,5-Trichlorophenol	8270C/D				8270C/D			
6840	2,4,6-Trichlorophenol	8270C/D				8270C/D			
	Pesticides								
7025	Aldrin	8081B	8081A			8081B	8081A		
7110	alpha-BHC	8081B	8081A			8081B	8081A		
7115	beta-BHC	8081B	8081A			8081B	8081A		
7105	delta-BHC	8081B	8081A			8081B	8081A		
7120	gamma-BHC (Lindane)	8081B	8081A			8081B	8081A		
7240	alpha-Chlordane	8081B	8081A			8081B	8081A		
7245	gamma-Chlordane	8081B	8081A			8081B	8081A		
7250	Chlordane (total)	8081B	8081A			8081B	8081A		
7355	DDD (4,4)	8081B	8081A			8081B	8081A		
7360	DDE (4,4)	8081B	8081A			8081B	8081A		
7365	DDT (4,4)	8081B	8081A			8081B	8081A		
7470	Dieldrin	8081B	8081A			8081B	8081A		
7510	Endosulfan I	8081B	8081A			8081B	8081A		
7515	Endosulfan II	8081B	8081A			8081B	8081A		
7520	Endosulfan sulfate	8081B	8081A			8081B	8081A		
7540	Endrin	8081B	8081A			8081B	8081A		
7530	Endrin aldehyde	8081B	8081A			8081B	8081A		
7535	Endrin ketone	8081B	8081A			8081B	8081A		
7685	Heptachlor	8081B	8081A			8081B	8081A		
7690	Heptachlor Epoxide (beta)	8081B	8081A			8081B	8081A		
7810	Methoxychlor	8081B	8081A			8081B	8081A		
8250	Toxaphene (total)	8081B	8081A			8081B	8081A		
	Organophoshorus Pesticides								
7075	Azinphos-methyl (Guthion)	8141A	8141B			8141A	8141B		
7125	Bolstar	8141A	8141B			8141A	8141B		
7300	Chlorpyrifos	8141A	8141B			8141A	8141B		
7315	Coumaphos	8141A	8141B			8141A	8141B		

Accredited Analytes/Methods (by matrix)									
TestAmerica - Pittsburgh									
Pittsburg, PA									
NELAC Code	Analyte	Matrix							
		Aqueous				Solid			
7475	Dimethoate	8141A	8141B			8141A	8141B		
7390	Demeton O & S	8141A	8141B			8141A	8141B		
7410	Diazinon	8141A	8141B			8141A	8141B		
8610	Dichlorvos	8141A	8141B			8141A	8141B		
8625	Disulfoton	8141A	8141B			8141A	8141B		
7555	EPN	8141A	8141B			8141A	8141B		
7570	Ethoprop	8141A	8141B			8141A	8141B		
7600	Fensulfothion	8141A	8141B			8141A	8141B		
7605	Fenthion	8141A	8141B			8141A	8141B		
995	Famphur	8141A	8141B			8141A	8141B		
1132	Malathion	8141A	8141B			8141A	8141B		
7850	Mevinphos	8141A	8141B			8141A	8141B		
7955	Parathion, ethyl	8141A	8141B			8141A	8141B		
7825	Parathion, methyl	8141A	8141B			8141A	8141B		
7985	Phorate	8141A	8141B			8141A	8141B		
8110	Ronnel	8141A	8141B			8141A	8141B		
8200	Stirophos	8141A	8141B			8141A	8141B		
8155	Sulfotepp	8141A	8141B			8141A	8141B		
8290	O,O,O-Triethyl phosphorothioate	8141A	8141B			8141A	8141B		
8235	Thionazin	8141A	8141B			8141A	8141B		
8245	Tokuthion (Protothiofos)	8141A	8141B			8141A	8141B		
8275	Trichlornate	8141A	8141B			8141A	8141B		
	Herbicides								
8655	2,4,5-T	8151A				8151A			
8650	2,4,5-TP (Silvex)	8151A				8151A			
8545	2,4-D	8151A				8151A			
8560	2,4-DB	8151A				8151A			
8555	Dalapon	8151A				8151A			
8595	Dicamba	8151A				8151A			
8605	Dichloroprop (2,4-DP)	8151A				8151A			
8620	Dinoseb	8151A				8151A			
7775	MCPA	8151A				8151A			
7780	MCPP	8151A				8151A			
6605	Pentachlorophenol	8151A				8151A			
	PCBs								
8880	Aroclor 1016	8082A	8082			8082A	8082		
8885	Aroclor 1221	8082A	8082			8082A	8082		
8890	Aroclor 1232	8082A	8082			8082A	8082		
8895	Aroclor 1242	8082A	8082			8082A	8082		
8900	Aroclor 1248	8082A	8082			8082A	8082		
8905	Aroclor 1254	8082A	8082			8082A	8082		
8910	Aroclor 1260	8082A	8082			8082A	8082		
8912	Aroclor 1262	8082A	8082			8082A	8082		
8913	Aroclor 1268	8082A	8082			8082A	8082		
---	Aroclor 1016/1260	8082A	8082			8082A	8082		
	PAHs								
5500	Acenaphthene	8310				8310			
5505	Acenaphthylene	8310				8310			
5555	Anthracene	8310				8310			
5575	Benzo(a)anthracene	8310				8310			
5585	Benzo(b)fluoranthene	8310				8310			
5600	Benzo(k)fluoranthene	8310				8310			
5590	Benzo(g,h,i)perylene	8310				8310			
5580	Benzo(a)pyrene	8310				8310			
5855	Chrysene	8310				8310			
5895	Dibenz(a,h)anthracene	8310				8310			
6265	Fluoranthene	8310				8310			
6270	Fluorene	8310				8310			
6315	Indeno(1,2,3-cd)pyrene	8310				8310			
5005	Naphthalene	8310				8310			
6615	Phenanthrene	8310				8310			
6665	Pyrene	8310				8310			

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Office of Quality Assurance
401 East State Street
P.O. Box 420, Mail Code 401-02D
Trenton, New Jersey 08625-0420
Telephone: (609) 292-3950
Facsimile: (609) 777-1774

BOB MARTIN
Commissioner

Nasreen Derubeis
TestAmerica Laboratories Inc / Pittsburgh Lab
301 Alpha Dr
Pittsburgh, PA 15238

Lab ID # PA005

Dear Laboratory Manager:

A Certificate and an Annual Certified Parameter List (ACPL) that reflects the current status of your facility are enclosed. If there are any discrepancies, please contact your Laboratory Certification Officer to verify information and make arrangements for a new ACPL. Effective with the receipt of this letter, your facility's certification status is valid through June 30, 2012. Both the ACPL and Certificate should be conspicuously displayed at your facility in a location on the premises that is visible to the public.

As always, we are available to discuss any comments or questions. Please do not hesitate to contact your Laboratory Certification Officer or me.

Sincerely,

Joseph F. Aiello, Manager

Enclosure(s)

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.29500	NPW	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Lithium

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.02010	NPW	Microextraction, GC, ECD	[SW-846 8011, Rev. 0, 7/92]	Dibromoethane (1,2-) (EDB)
Certified	Yes	PA	SHW06.02020	NPW	Microextraction, GC, ECD	[SW-846 8011, Rev. 0, 7/92]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	PA	SHW06.02030	NPW	Microextraction, GC, ECD	[SW-846 8011]	Trichloropropane (1,2,3-)

Category: SHW09 -- Miscellaneous Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW09.17000	NPW	Wheatstone Bridge	[SW-846 9050A, Rev. 1, 12/96]	Specific conductance
Certified	Yes	PA	SHW09.24100	NPW	Extraction & Gravimetric - LL or SPE	[SW-846 1664A, Rev. 1, 2/99]	Oil & grease - hem
Certified	Yes	PA	SHW09.24150	NPW	Extraction & Gravimetric - LL or SPE	[SW-846 1664A, Rev. 1, 2/99]	Oil & grease - total hem-npm

Category: WPP02 -- Inorg. Parameters, Nutrients and Demands

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP02.01000	NPW	Electrometric or Phenolphthalein	[SM 2310 B(4A)]	Acidity as CaCO3
Certified	Yes	PA	WPP02.01500	NPW	Electrometric or Color Titration	[SM 2320 B]	Alkalinity as CaCO3
Certified	Yes	PA	WPP02.02000	NPW	Automated Titration	[EPA 310.2]	Alkalinity as CaCO3
Certified	Yes	PA	WPP02.05000	NPW	Dissolved Oxygen Depletion	[SM 5210 B]	Biochemical oxygen demand
Certified	Yes	PA	WPP02.06000	NPW	ICP	[EPA 200.7]	Boron
Certified	Yes	PA	WPP02.07100	NPW	Ion Chromatography	[EPA 300.0]	Bromide
Certified	Yes	PA	WPP02.08000	NPW	Digestion, ICP	[EPA 200.7]	Calcium
Certified	Yes	PA	WPP02.08050	NPW	ICP/MS	[EPA 200.8]	Calcium

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

- Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP02 -- Inorg. Parameters, Nutrients and Demands

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP02.09500	NPW	Dissolved Oxygen Depletion, Nitrification Inhibition	[SM 5210 B]	Carbonaceous BOD (CBOD)
Certified	Yes	PA	WPP02.12500	NPW	Colorimetric, Automated (Ferricyanide)	[SM 4500-Cl E]	Chloride
Certified	Yes	PA	WPP02.12600	NPW	Ion Chromatography	[EPA 300.0]	Chloride
Certified	Yes	PA	WPP02.13500	NPW	Colorimetric (Platinum-Cobalt)	[SM 2120 B]	Color
Certified	Yes	PA	WPP02.15500	NPW	Distillation, Spectrophotometric (Auto)	[EPA 335.4]	Cyanide
Certified	Yes	PA	WPP02.16500	NPW	Distillation + Electrode, Manual	[SM 4500-F B, C]	Fluoride
Certified	Yes	PA	WPP02.18100	NPW	Ion Chromatography	[EPA 300.0]	Fluoride
Certified	Yes	PA	WPP02.19000	NPW	Titrimetric, EDTA	[SM 2340 B or C]	Hardness - total as CaCO3
Certified	Yes	PA	WPP02.20100	NPW	Ca + Mg Carbonates, ICP	[EPA 200.7]	Hardness - total as CaCO3
Certified	Yes	PA	WPP02.24000	NPW	Digestion, ICP	[EPA 200.7]	Magnesium
Certified	Yes	PA	WPP02.24050	NPW	ICP/MS	[EPA 200.8]	Magnesium
Certified	Yes	PA	WPP02.26100	NPW	Ion Chromatography	[EPA 300.0]	Nitrate
Certified	Yes	PA	WPP02.27000	NPW	Cadmium Reduction, Automated	[EPA 353.2]	Nitrate - nitrite
Certified	Yes	PA	WPP02.27010	NPW	Ion Chromatography	[EPA 300.0]	Nitrate - nitrite
Certified	Yes	PA	WPP02.28600	NPW	Ion Chromatography	[EPA 300.0]	Nitrite
Certified	Yes	PA	WPP02.29150	NPW	Gravimetric, Hexane Extractable Material-SPE	[EPA 1664A]	Oil & grease - hem-SPE
Certified	Yes	PA	WPP02.29200	NPW	Gravimetric, Silica Gel Treated-Hem	[EPA 1664A]	Oil & grease - sgt-non polar
Certified	Yes	PA	WPP02.29250	NPW	Gravimetric, Silica Gel Treated-Hem-SPE	[EPA 1664A]	Oil & grease - non polar
Certified	Yes	PA	WPP02.30000	NPW	Combustion or Oxidation	[SM 5310 B, C or D]	Total organic carbon (TOC)
Certified	Yes	PA	WPP02.32100	NPW	Ion Chromatography	[EPA 300.0]	Orthophosphate
Certified	Yes	PA	WPP02.32500	NPW	Manual Distillation, Colorimetric 4AAP	[EPA 420.1]	Phenols
Certified	Yes	PA	WPP02.33000	NPW	Manual Distillation, Colorimetric Auto	[USER DEFINED EPA 420.1 + 420.4]	Phenols
Certified	Yes	PA	WPP02.36500	NPW	Digestion, ICP	[EPA 200.7]	Potassium
Certified	Yes	PA	WPP02.36550	NPW	ICP/MS	[EPA 200.8]	Potassium
Certified	Yes	PA	WPP02.38500	NPW	Gravimetric, 180 Degrees C	[SM 2540 C]	Residue - filterable (TDS)
Certified	Yes	PA	WPP02.39000	NPW	Gravimetric, 103-105 Degrees C, Post Washing	[SM 2540 D]	Residue - nonfilterable (TSS)
Certified	Yes	PA	WPP02.39500	NPW	Volumetric (Imhoff Cone) or Gravimetric	[SM 2540 F]	Residue - settleable
Certified	Yes	PA	WPP02.40000	NPW	Gravimetric, 550 Degrees C	[EPA 160.4]	Residue - volatile
Certified	Yes	PA	WPP02.40100	NPW	Gravimetric, 500 Degrees C	[SM 2540 G]	Total, fixed, and volatile solids (SQAR)
Certified	Yes	PA	WPP02.42500	NPW	0.45u Filtration + ICP	[EPA 200.7]	Silica - dissolved
Certified	Yes	PA	WPP02.44000	NPW	Digestion, ICP	[EPA 200.7]	Sodium

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP02 -- Inorg. Parameters, Nutrients and Demands

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP02.44050	NPW	ICP/MS	[EPA 200.8]	Sodium
Certified	Yes	PA	WPP02.45500	NPW	Wheatstone Bridge	[EPA 120.1]	Specific conductance
Certified	Yes	PA	WPP02.47100	NPW	Ion Chromatography	[EPA 300.0]	Sulfate
Certified	Yes	PA	WPP02.47500	NPW	Titrimetric, Iodine	[SM 4500-S E or F]	Sulfides
Certified	Yes	PA	WPP02.50000	NPW	Nephelometric	[EPA 180.1]	Turbidity

Category: WPP03 -- Analyze-Immediately Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP03.09000	NPW	Electrometric	[SM 4500-H B]	pH

Category: WPP04 -- Inorganic Parameters, Metals

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP04.02000	NPW	Digestion, ICP	[EPA 200.7]	Aluminum
Certified	Yes	PA	WPP04.02100	NPW	ICP/MS	[EPA 200.8]	Aluminum
Certified	Yes	PA	WPP04.04500	NPW	Digestion, ICP	[EPA 200.7]	Antimony
Certified	Yes	PA	WPP04.04600	NPW	ICP/MS	[EPA 200.8]	Antimony
Certified	Yes	PA	WPP04.05600	NPW	Digestion, ICP	[EPA 200.7]	Arsenic
Certified	Yes	PA	WPP04.05700	NPW	ICP/MS	[EPA 200.8]	Arsenic
Certified	Yes	PA	WPP04.08000	NPW	Digestion, ICP	[EPA 200.7]	Barium
Certified	Yes	PA	WPP04.08200	NPW	ICP/MS	[EPA 200.8]	Barium
Certified	Yes	PA	WPP04.11000	NPW	Digestion, ICP	[EPA 200.7]	Beryllium
Certified	Yes	PA	WPP04.11100	NPW	ICP/MS	[EPA 200.8]	Beryllium
Certified	Yes	PA	WPP04.13500	NPW	Digestion, ICP	[EPA 200.7]	Cadmium
Certified	Yes	PA	WPP04.13600	NPW	ICP/MS	[EPA 200.8]	Cadmium
Certified	Yes	PA	WPP04.15000	NPW	0.45u Filter, Colorimetric DPC	[SM 3500-Cr B (20th ed)] [SM 3500-Cr D (18/19th ed)]	Chromium (VI)
Certified	Yes	PA	WPP04.18000	NPW	Digestion, ICP	[EPA 200.7]	Chromium
Certified	Yes	PA	WPP04.18100	NPW	ICP/MS	[EPA 200.8]	Chromium

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP04 – Inorganic Parameters, Metals

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP04.19500	NPW	Digestion, ICP	[EPA 200.7]	Cobalt
Certified	Yes	PA	WPP04.19600	NPW	ICP/MS	[EPA 200.8]	Cobalt
Certified	Yes	PA	WPP04.21500	NPW	Digestion, ICP	[EPA 200.7]	Copper
Certified	Yes	PA	WPP04.21600	NPW	ICP/MS	[EPA 200.8]	Copper
Certified	Yes	PA	WPP04.26500	NPW	Digestion, ICP	[EPA 200.7]	Iron
Certified	Yes	PA	WPP04.26550	NPW	ICP/MS	[EPA 200.8]	Iron
Certified	Yes	PA	WPP04.28000	NPW	Digestion, ICP	[EPA 200.7]	Lead
Certified	Yes	PA	WPP04.28100	NPW	ICP/MS	[EPA 200.8]	Lead
Certified	Yes	PA	WPP04.31000	NPW	Digestion, ICP	[EPA 200.7]	Manganese
Certified	Yes	PA	WPP04.31100	NPW	ICP/MS	[EPA 200.8]	Manganese
Certified	Yes	PA	WPP04.33000	NPW	Manual Cold Vapor	[EPA 245.1]	Mercury
Certified	Yes	PA	WPP04.35000	NPW	Digestion, ICP	[EPA 200.7]	Molybdenum
Certified	Yes	PA	WPP04.35200	NPW	ICP/MS	[EPA 200.8]	Molybdenum
Certified	Yes	PA	WPP04.37500	NPW	Digestion, ICP	[EPA 200.7]	Nickel
Certified	Yes	PA	WPP04.37600	NPW	ICP/MS	[EPA 200.8]	Nickel
Certified	Yes	PA	WPP04.45500	NPW	Digestion, ICP	[EPA 200.7]	Selenium
Certified	Yes	PA	WPP04.45600	NPW	ICP/MS	[EPA 200.8]	Selenium
Certified	Yes	PA	WPP04.48000	NPW	Digestion, ICP	[EPA 200.7]	Silver
Certified	Yes	PA	WPP04.48200	NPW	ICP/MS	[EPA 200.8]	Silver
Certified	Yes	PA	WPP04.50000	NPW	Digestion, ICP	[EPA 200.7]	Thallium
Certified	Yes	PA	WPP04.50100	NPW	ICP/MS	[EPA 200.8]	Thallium
Certified	Yes	PA	WPP04.51100	NPW	Digestion, ICP	[EPA 200.7]	Tin
Certified	Yes	PA	WPP04.51200	NPW	ICP/MS	[EPA 200.8]	Tin
Certified	Yes	PA	WPP04.52050	NPW	Digestion, ICP	[EPA 200.7]	Titanium
Certified	Yes	PA	WPP04.52070	NPW	ICP/MS	[EPA 200.8]	Titanium
Certified	Yes	PA	WPP04.54000	NPW	Digestion, ICP	[EPA 200.7]	Vanadium
Certified	Yes	PA	WPP04.54100	NPW	ICP/MS	[EPA 200.8]	Vanadium
Certified	Yes	PA	WPP04.56500	NPW	Digestion, ICP	[EPA 200.7]	Zinc
Certified	Yes	PA	WPP04.56600	NPW	ICP/MS	[EPA 200.8]	Zinc

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP05 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP05.09010	NPW	Extract/GC (ECD)	[EPA 608]	Aldrin
Certified	Yes	PA	WPP05.09020	NPW	Extract/GC (ECD)	[EPA 608]	Alpha BHC
Certified	Yes	PA	WPP05.09030	NPW	Extract/GC (ECD)	[EPA 608]	Beta BHC
Certified	Yes	PA	WPP05.09040	NPW	Extract/GC (ECD)	[EPA 608]	Delta BHC
Certified	Yes	PA	WPP05.09050	NPW	Extract/GC (ECD)	[EPA 608]	Lindane (gamma BHC)
Certified	Yes	PA	WPP05.09060	NPW	Extract/GC (ECD)	[EPA 608]	Chlordane
Certified	Yes	PA	WPP05.09062	NPW	Extract/GC (ECD)	[EPA 608]	Chlordane (alpha)
Certified	Yes	PA	WPP05.09063	NPW	Extract/GC (ECD)	[EPA 608]	Chlordane (gamma)
Certified	Yes	PA	WPP05.09070	NPW	Extract/GC (ECD)	[EPA 608]	DDD (4,4'-)
Certified	Yes	PA	WPP05.09080	NPW	Extract/GC (ECD)	[EPA 608]	DDE (4,4'-)
Certified	Yes	PA	WPP05.09090	NPW	Extract/GC (ECD)	[EPA 608]	DDT (4,4'-)
Certified	Yes	PA	WPP05.09100	NPW	Extract/GC (ECD)	[EPA 608]	Dieldrin
Certified	Yes	PA	WPP05.09110	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan I
Certified	Yes	PA	WPP05.09120	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan II
Certified	Yes	PA	WPP05.09130	NPW	Extract/GC (ECD)	[EPA 608]	Endosulfan sulfate
Certified	Yes	PA	WPP05.09140	NPW	Extract/GC (ECD)	[EPA 608]	Endrin
Certified	Yes	PA	WPP05.09150	NPW	Extract/GC (ECD)	[EPA 608]	Endrin aldehyde
Certified	Yes	PA	WPP05.09160	NPW	Extract/GC (ECD)	[EPA 608]	Endrin ketone
Certified	Yes	PA	WPP05.09170	NPW	Extract/GC (ECD)	[EPA 608]	Heptachlor
Certified	Yes	PA	WPP05.09180	NPW	Extract/GC (ECD)	[EPA 608]	Heptachlor epoxide
Certified	Yes	PA	WPP05.09190	NPW	Extract/GC (ECD)	[EPA 608]	Methoxychlor
Certified	Yes	PA	WPP05.09200	NPW	Extract/GC (ECD)	[EPA 608]	Toxaphene
Certified	Yes	PA	WPP05.11010	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1016
Certified	Yes	PA	WPP05.11020	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1221
Certified	Yes	PA	WPP05.11030	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1232
Certified	Yes	PA	WPP05.11040	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1242
Certified	Yes	PA	WPP05.11050	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1248
Certified	Yes	PA	WPP05.11060	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1254
Certified	Yes	PA	WPP05.11070	NPW	Extract/GC (ECD)	[EPA 608]	PCB 1260
Certified	Yes	PA	WPP05.13010	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Acenaphthene
Certified	Yes	PA	WPP05.13020	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Acenaphthylene
Certified	Yes	PA	WPP05.13030	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Anthracene

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP05 – Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP05.13040	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Benzo(a)anthracene
Certified	Yes	PA	WPP05.13050	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Benzo(a)pyrene
Certified	Yes	PA	WPP05.13060	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Benzo(b)fluoranthene
Certified	Yes	PA	WPP05.13070	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Benzo(ghi)perylene
Certified	Yes	PA	WPP05.13080	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Benzo(k)fluoranthene
Certified	Yes	PA	WPP05.13090	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Chrysene
Certified	Yes	PA	WPP05.13100	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Dibenzo(a,h)anthracene
Certified	Yes	PA	WPP05.13110	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Fluoranthene
Certified	Yes	PA	WPP05.13120	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Fluorene
Certified	Yes	PA	WPP05.13130	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Indeno(1,2,3-cd)pyrene
Certified	Yes	PA	WPP05.13140	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Naphthalene
Certified	Yes	PA	WPP05.13150	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Phenanthrene
Certified	Yes	PA	WPP05.13160	NPW	Extract/HPLC (UV/Fluorescence)	[EPA 610]	Pyrene

Category: WPP06 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP06.02003	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Acetone
Certified	Yes	PA	WPP06.02007	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Acrolein
Certified	Yes	PA	WPP06.02009	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Acrylonitrile
Certified	Yes	PA	WPP06.02010	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Benzene
Certified	Yes	PA	WPP06.02017	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Bromochloromethane
Certified	Yes	PA	WPP06.02020	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Bromodichloromethane
Certified	Yes	PA	WPP06.02030	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Bromoform
Certified	Yes	PA	WPP06.02040	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Bromomethane
Certified	Yes	PA	WPP06.02041	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Butanone (2-)
Certified	Yes	PA	WPP06.02045	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Carbon disulfide
Certified	Yes	PA	WPP06.02050	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Carbon tetrachloride
Certified	Yes	PA	WPP06.02060	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chlorobenzene
Certified	Yes	PA	WPP06.02070	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chloroethane

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP06.02080	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chloroethyl vinyl ether (2-)
Certified	Yes	PA	WPP06.02090	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chloroform
Certified	Yes	PA	WPP06.02100	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Chloromethane
Applied	No	PA	WPP06.02107	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	PA	WPP06.02110	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dibromochloromethane
Certified	Yes	PA	WPP06.02115	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dibromoethane (1,2-) (EDB)
Certified	Yes	PA	WPP06.02120	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichlorobenzene (1,2-)
Certified	Yes	PA	WPP06.02130	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichlorobenzene (1,3-)
Certified	Yes	PA	WPP06.02140	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichlorobenzene (1,4-)
Certified	Yes	PA	WPP06.02145	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichlorodifluoromethane
Certified	Yes	PA	WPP06.02150	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloroethane (1,1-)
Certified	Yes	PA	WPP06.02160	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloroethane (1,2-)
Certified	Yes	PA	WPP06.02170	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloroethene (1,1-)
Certified	Yes	PA	WPP06.02175	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloroethene (cis-1,2-)
Certified	Yes	PA	WPP06.02180	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloroethene (trans-1,2-)
Certified	Yes	PA	WPP06.02190	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloropropane (1,2-)
Certified	Yes	PA	WPP06.02200	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloropropene (cis-1,3-)
Certified	Yes	PA	WPP06.02210	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Dichloropropene (trans-1,3-)
Certified	Yes	PA	WPP06.02220	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Ethylbenzene
Applied	No	PA	WPP06.02223	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Hexane (n-)
Certified	Yes	PA	WPP06.02230	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Methylene chloride (Dichloromethane)
Certified	Yes	PA	WPP06.02232	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Methyl tert-butyl ether
Certified	Yes	PA	WPP06.02233	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Methyl isobutyl ketone (MIBK)
Certified	Yes	PA	WPP06.02238	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Styrene
Certified	Yes	PA	WPP06.02240	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	PA	WPP06.02250	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Tetrachloroethene
Certified	Yes	PA	WPP06.02260	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Toluene
Certified	Yes	PA	WPP06.02270	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichloroethane (1,1,1-)
Certified	Yes	PA	WPP06.02280	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichloroethane (1,1,2-)
Certified	Yes	PA	WPP06.02290	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichloroethene
Certified	Yes	PA	WPP06.02300	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichlorofluoromethane
Certified	Yes	PA	WPP06.02305	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP06 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP06.02310	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Vinyl chloride
Certified	Yes	PA	WPP06.02312	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylenes (total)
Certified	Yes	PA	WPP06.02314	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylene (m-)
Certified	Yes	PA	WPP06.02315	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylene (o-)
Certified	Yes	PA	WPP06.02316	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylene (p-)
Certified	Yes	PA	WPP06.02317	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Xylene (m- + p-)
Certified	Yes	PA	WPP06.02322	NPW	GC/MS, P&T, Capillary Column	[EPA 624]	Cyclohexane
Certified	Yes	PA	WPP06.02325	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Hexanone (2-)
Certified	Yes	PA	WPP06.02326	NPW	GC/MS, P&T, Capillary Column	[EPA 624]	Methyl acetate
Certified	Yes	PA	WPP06.02328	NPW	GC/MS, P&T, Capillary Column	[EPA 624]	Methylcyclohexane
Certified	Yes	PA	WPP06.02460	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Isopropylbenzene
Certified	Yes	PA	WPP06.02620	NPW	GC/MS, P & T, Capillary Column	[EPA 624]	Trichlorobenzene (1,2,4-)
Certified	Yes	PA	WPP06.03010	NPW	Extract, GC/MS	[EPA 625]	Acenaphthene
Certified	Yes	PA	WPP06.03020	NPW	Extract, GC/MS	[EPA 625]	Acenaphthylene
Certified	Yes	PA	WPP06.03030	NPW	Extract, GC/MS	[EPA 625]	Anthracene
Certified	Yes	PA	WPP06.03040	NPW	Extract, GC/MS	[EPA 625]	Benzo(a)anthracene
Certified	Yes	PA	WPP06.03050	NPW	Extract, GC/MS	[EPA 625]	Benzo(b)fluoranthene
Certified	Yes	PA	WPP06.03060	NPW	Extract, GC/MS	[EPA 625]	Benzo(k)fluoranthene
Certified	Yes	PA	WPP06.03070	NPW	Extract, GC/MS	[EPA 625]	Benzo(a)pyrene
Certified	Yes	PA	WPP06.03080	NPW	Extract, GC/MS	[EPA 625]	Benzo(ghi)perylene
Certified	Yes	PA	WPP06.03090	NPW	Extract, GC/MS	[EPA 625]	Butyl benzyl phthalate
Certified	Yes	PA	WPP06.03100	NPW	Extract, GC/MS	[EPA 625]	Bis (2-chloroethyl) ether
Certified	Yes	PA	WPP06.03110	NPW	Extract, GC/MS	[EPA 625]	Bis (2-chloroethoxy) methane
Certified	Yes	PA	WPP06.03120	NPW	Extract, GC/MS	[EPA 625]	Bis (2-ethylhexyl) phthalate
Certified	Yes	PA	WPP06.03130	NPW	Extract, GC/MS	[EPA 625]	Bis (2-chloroisopropyl) ether
Certified	Yes	PA	WPP06.03140	NPW	Extract, GC/MS	[EPA 625]	Bromophenyl-phenyl ether (4-)
Certified	Yes	PA	WPP06.03150	NPW	Extract, GC/MS	[EPA 625]	Chloronaphthalene (2-)
Certified	Yes	PA	WPP06.03160	NPW	Extract, GC/MS	[EPA 625]	Chlorophenyl-phenyl ether (4-)
Certified	Yes	PA	WPP06.03170	NPW	Extract, GC/MS	[EPA 625]	Chrysene
Certified	Yes	PA	WPP06.03180	NPW	Extract, GC/MS	[EPA 625]	Dibenzo(a,h)anthracene
Certified	Yes	PA	WPP06.03186	NPW	Extract, GC/MS	[EPA 625]	Dibenzofuran
Certified	Yes	PA	WPP06.03190	NPW	Extract, GC/MS	[EPA 625]	Di-n-butyl phthalate

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: WPP06 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	No	PA	WPP06.03200	NPW	Extract, GC/MS	[USER DEFINED EPA 625]	Dichlorobenzene (1,3-)
Certified	No	PA	WPP06.03210	NPW	Extract, GC/MS	[USER DEFINED EPA 625]	Dichlorobenzene (1,2-)
Certified	No	PA	WPP06.03220	NPW	Extract, GC/MS	[USER DEFINED EPA 625]	Dichlorobenzene (1,4-)
Certified	Yes	PA	WPP06.03230	NPW	Extract, GC/MS	[EPA 625]	Dichlorobenzidine (3,3'-)
Certified	Yes	PA	WPP06.03240	NPW	Extract, GC/MS	[EPA 625]	Diethyl phthalate
Certified	Yes	PA	WPP06.03250	NPW	Extract, GC/MS	[EPA 625]	Dimethyl phthalate
Certified	Yes	PA	WPP06.03260	NPW	Extract, GC/MS	[EPA 625]	Dinitrotoluene (2,4-)
Certified	Yes	PA	WPP06.03270	NPW	Extract, GC/MS	[EPA 625]	Dinitrotoluene (2,6-)
Certified	Yes	PA	WPP06.03280	NPW	Extract, GC/MS	[EPA 625]	Di-n-octyl phthalate
Certified	Yes	PA	WPP06.03290	NPW	Extract, GC/MS	[EPA 625]	Fluoranthene
Certified	Yes	PA	WPP06.03300	NPW	Extract, GC/MS	[EPA 625]	Fluorene
Certified	Yes	PA	WPP06.03310	NPW	Extract, GC/MS	[EPA 625]	Hexachlorobenzene
Certified	Yes	PA	WPP06.03320	NPW	Extract, GC/MS	[EPA 625]	Hexachlorobutadiene (1,3-)
Certified	Yes	PA	WPP06.03330	NPW	Extract, GC/MS	[EPA 625]	Hexachloroethane
Certified	Yes	PA	WPP06.03340	NPW	Extract, GC/MS	[EPA 625]	Indeno(1,2,3-cd)pyrene
Certified	Yes	PA	WPP06.03350	NPW	Extract, GC/MS	[EPA 625]	Isophorone
Certified	Yes	PA	WPP06.03358	NPW	Extract, GC/MS	[EPA 625]	Methylnaphthalene (2-)
Certified	Yes	PA	WPP06.03360	NPW	Extract, GC/MS	[EPA 625]	Naphthalene
Certified	Yes	PA	WPP06.03366	NPW	Extract, GC/MS	[EPA 625]	Chloroaniline (4-)
Certified	Yes	PA	WPP06.03367	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (2-)
Certified	Yes	PA	WPP06.03368	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (3-)
Certified	Yes	PA	WPP06.03369	NPW	Extract, GC/MS	[EPA 625]	Nitroaniline (4-)
Certified	Yes	PA	WPP06.03370	NPW	Extract, GC/MS	[EPA 625]	Nitrobenzene
Certified	Yes	PA	WPP06.03380	NPW	Extract, GC/MS	[EPA 625]	N-Nitroso-di-n-propylamine
Certified	Yes	PA	WPP06.03390	NPW	Extract, GC/MS	[EPA 625]	Phenanthrene
Certified	Yes	PA	WPP06.03400	NPW	Extract, GC/MS	[EPA 625]	Pyrene
Certified	Yes	PA	WPP06.03410	NPW	Extract, GC/MS	[EPA 625]	Trichlorobenzene (1,2,4-)
Certified	Yes	PA	WPP06.03420	NPW	Extract, GC/MS	[EPA 625]	Methyl phenol (4-chloro-3-)
Certified	Yes	PA	WPP06.03430	NPW	Extract, GC/MS	[EPA 625]	Chlorophenol (2-)
Certified	Yes	PA	WPP06.03440	NPW	Extract, GC/MS	[EPA 625]	Dichlorophenol (2,4-)
Certified	Yes	PA	WPP06.03450	NPW	Extract, GC/MS	[EPA 625]	Dimethylphenol (2,4-)
Certified	Yes	PA	WPP06.03460	NPW	Extract, GC/MS	[EPA 625]	Dinitrophenol (2,4-)

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Certified	Yes	PA	WPP06.03470	NPW	Extract, GC/MS	[EPA 625]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	PA	WPP06.03480	NPW	Extract, GC/MS	[EPA 625]	Nitrophenol (2-)
Certified	Yes	PA	WPP06.03490	NPW	Extract, GC/MS	[EPA 625]	Nitrophenol (4-)
Certified	Yes	PA	WPP06.03500	NPW	Extract, GC/MS	[EPA 625]	Pentachlorophenol
Certified	Yes	PA	WPP06.03510	NPW	Extract, GC/MS	[EPA 625]	Phenol
Certified	Yes	PA	WPP06.03518	NPW	Extract, GC/MS	[EPA 625]	Trichlorophenol (2,4,5-)
Certified	Yes	PA	WPP06.03520	NPW	Extract, GC/MS	[EPA 625]	Trichlorophenol (2,4,6-)
Certified	Yes	PA	WPP06.03540	NPW	Extract, GC/MS	[EPA 625]	Methylphenol (4-)
Certified	Yes	PA	WPP06.03550	NPW	Extract, GC/MS	[EPA 625]	Acetophenone
Certified	Yes	PA	WPP06.03570	NPW	Extract, GC/MS	[EPA 625]	Aniline
Certified	Yes	PA	WPP06.03580	NPW	Extract, GC/MS	[EPA 625]	Benzidine
Certified	Yes	PA	WPP06.03590	NPW	Extract, GC/MS	[EPA 625]	Carbazole
Certified	Yes	PA	WPP06.03605	NPW	Extract, GC/MS	[EPA 625]	Diphenylhydrazine (1,2-)
Certified	Yes	PA	WPP06.03610	NPW	Extract, GC/MS	[EPA 625]	Methylphenol (2-)
Certified	Yes	PA	WPP06.03612	NPW	Extract, GC/MS	[EPA 625]	Methylphenol (3-)
Certified	Yes	PA	WPP06.03660	NPW	Extract, GC/MS	[EPA 625]	Hexachlorocyclopentadiene
Certified	Yes	PA	WPP06.03680	NPW	Extract, GC/MS	[EPA 625]	N-Nitrosodimethylamine
Certified	Yes	PA	WPP06.03690	NPW	Extract, GC/MS	[EPA 625]	N-Nitrosodiphenylamine

Category: SHW02 – Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW02.01000	NPW, SCM	Pensky Martens	[SW-846 1010] [SW-846 1010A]	Ignitability
Certified	Yes	PA	SHW02.03000	NPW, SCM	Aqueous Waste, Potentiometric	[SW-846 9040B] [SW-846 9040C]	Corrosivity - pH waste, >20% water

Category: SHW04 – Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.01000	NPW, SCM	Acid Digestion/Surface and Groundwater, ICP, FLAA	[SW-846 3005A, Rev. 1, 7/92]	Metals, Total Rec and Dissolved

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Category: SHW04 – Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.01500	NPW, SCM	Acid Digestion/Aqueous Samples, ICP, FLAA	[SW-846 3010A, Rev. 1, 7/92]	Metals, Total
Certified	Yes	PA	SHW04.03700	NPW, SCM	Chromium VI Digestion	[SW-846 3060A, Rev. 1, 12/96]	Metals
Certified	Yes	PA	SHW04.05000	NPW, SCM	ICP	[SW-846 6010C] [SW-846 6010B]	Aluminum
Certified	Yes	PA	SHW04.05500	NPW, SCM	ICP/MS	[SW-846 6020A] [SW-846 6020]	Aluminum
Certified	Yes	PA	SHW04.06500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Antimony
Certified	Yes	PA	SHW04.07000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Antimony
Certified	Yes	PA	SHW04.09000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Arsenic
Certified	Yes	PA	SHW04.09500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Arsenic
Certified	Yes	PA	SHW04.11500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Barium
Certified	Yes	PA	SHW04.12000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Barium
Certified	Yes	PA	SHW04.13500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Beryllium
Certified	Yes	PA	SHW04.14000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Beryllium
Certified	Yes	PA	SHW04.15100	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Boron
Certified	Yes	PA	SHW04.15101	NPW, SCM	ICP/MS	[SW-846 6020A] [SW-846 6020]	Boron
Certified	Yes	PA	SHW04.15500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Cadmium
Certified	Yes	PA	SHW04.16000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Cadmium
Certified	Yes	PA	SHW04.17500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Calcium
Certified	Yes	PA	SHW04.17505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Calcium
Certified	Yes	PA	SHW04.18500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Chromium
Certified	Yes	PA	SHW04.19000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Chromium
Certified	Yes	PA	SHW04.21000	NPW, SCM	Colorimetric	[SW-846 7196A, Rev. 1, 7/92]	Chromium (VI)
Certified	Yes	PA	SHW04.22500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Cobalt
Certified	Yes	PA	SHW04.23000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Cobalt
Certified	Yes	PA	SHW04.24500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Copper
Certified	Yes	PA	SHW04.25000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Copper
Certified	Yes	PA	SHW04.26000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Iron
Certified	Yes	PA	SHW04.26005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Iron

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.27500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Lead
Certified	Yes	PA	SHW04.28000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Lead
Certified	Yes	PA	SHW04.30500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Magnesium
Certified	Yes	PA	SHW04.30505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Magnesium
Certified	Yes	PA	SHW04.31500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Manganese
Certified	Yes	PA	SHW04.31600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Manganese
Certified	Yes	PA	SHW04.33000	NPW, SCM	AA, Manual Cold Vapor	[SW-846 7470A, Rev. 1, 9/94]	Mercury - liquid waste
Certified	Yes	PA	SHW04.34000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96]	Molybdenum
Certified	Yes	PA	SHW04.34005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94]	Molybdenum
Certified	Yes	PA	SHW04.35500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Nickel
Certified	Yes	PA	SHW04.36000	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Nickel
Certified	Yes	PA	SHW04.38000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Potassium
Certified	Yes	PA	SHW04.38505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Potassium
Certified	Yes	PA	SHW04.39000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Selenium
Certified	Yes	PA	SHW04.40600	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Selenium
Certified	Yes	PA	SHW04.41000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2 12/96] [SW-846 6010C]	Silver
Certified	Yes	PA	SHW04.41500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Silver
Certified	Yes	PA	SHW04.43000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Sodium
Certified	Yes	PA	SHW04.43005	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Sodium
Certified	Yes	PA	SHW04.44000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Strontium
Certified	Yes	PA	SHW04.44001	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Strontium
Certified	Yes	PA	SHW04.45000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Thallium
Certified	Yes	PA	SHW04.45500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Thallium
Certified	Yes	PA	SHW04.47100	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Tin
Certified	Yes	PA	SHW04.47105	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Tin

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New Jersey Department of Environmental Protection

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW04 -- Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.47145	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Titanium
Certified	Yes	PA	SHW04.47150	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Titanium
Certified	Yes	PA	SHW04.47500	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Vanadium
Certified	Yes	PA	SHW04.47505	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Vanadium
Certified	Yes	PA	SHW04.49000	NPW, SCM	ICP	[SW-846 6010B, Rev. 2, 12/96] [SW-846 6010C]	Zinc
Certified	Yes	PA	SHW04.49500	NPW, SCM	ICP/MS	[SW-846 6020, Rev. 0, 9/94] [SW-846 6020A]	Zinc

Category: SHW05 -- Organic Parameters, Prep. / Screening

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW05.01000	NPW, SCM	Separatory Funnel Extraction	[SW-846 3510C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	PA	SHW05.02000	NPW, SCM	Continuous Liquid-Liquid Extraction	[SW-846 3520C, Rev. 3, 12/96]	Semivolatile organics
Certified	Yes	PA	SHW05.07000	NPW, SCM	Purge & Trap Aqueous	[SW-846 5030B, Rev. 2, 12/96]	Volatile organics
Certified	Yes	PA	SHW05.12000	NPW, SCM	Cleanup-Florisil	[SW-846 3620B, Rev. 2, 12/96] [SW-846 3620C]	Semivolatile organics
Certified	Yes	PA	SHW05.14000	NPW, SCM	Cleanup-Gel Permeation	[SW-846 3640A, Rev. 1, 9/94]	Semivolatile organics
Certified	Yes	PA	SHW05.16000	NPW, SCM	Cleanup-Sulfur Removal	[SW-846 3660B, Rev. 2, 12/96]	Semivolatile organics

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.12010	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Aldrin
Certified	Yes	PA	SHW06.12020	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Alpha BHC
Certified	Yes	PA	SHW06.12030	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Beta BHC
Certified	Yes	PA	SHW06.12040	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Delta BHC

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.12050	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Lindane (gamma BHC)
Certified	Yes	PA	SHW06.12060	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Chlordane (technical)
Certified	Yes	PA	SHW06.12070	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Chlordane (alpha)
Certified	Yes	PA	SHW06.12080	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Chlordane (gamma)
Certified	Yes	PA	SHW06.12081	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Chlorobenzilate
Certified	Yes	PA	SHW06.12090	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	DDD (4,4'-)
Certified	Yes	PA	SHW06.12091	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	DCPA
Certified	Yes	PA	SHW06.12100	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	DDE (4,4'-)
Certified	Yes	PA	SHW06.12110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	DDT (4,4'-)
Certified	Yes	PA	SHW06.12120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Dieldrin
Certified	Yes	PA	SHW06.12130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endosulfan I
Certified	Yes	PA	SHW06.12140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endosulfan II
Certified	Yes	PA	SHW06.12150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endosulfan sulfate
Certified	Yes	PA	SHW06.12160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endrin
Certified	Yes	PA	SHW06.12170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endrin aldehyde
Certified	Yes	PA	SHW06.12180	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Endrin ketone
Certified	Yes	PA	SHW06.12190	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Heptachlor
Certified	Yes	PA	SHW06.12200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Heptachlor epoxide

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Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW06 – Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.12201	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Hexachlorobenzene
Certified	Yes	PA	SHW06.12210	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Methoxychlor
Certified	Yes	PA	SHW06.12212	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Mirex
Certified	Yes	PA	SHW06.12220	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8081A, Rev. 1, 12/96] [SW-846 8081B]	Toxaphene
Certified	Yes	PA	SHW06.13110	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1016
Certified	Yes	PA	SHW06.13120	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1221
Certified	Yes	PA	SHW06.13130	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1232
Certified	Yes	PA	SHW06.13140	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1242
Certified	Yes	PA	SHW06.13150	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1248
Certified	Yes	PA	SHW06.13160	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1254
Certified	Yes	PA	SHW06.13170	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB 1260
Certified	Yes	PA	SHW06.13200	NPW, SCM	GC, Extraction, ECD or HECD, Capillary	[SW-846 8082, Rev. 0, 12/96] [SW-846 8082A]	PCB Congeners (19)
Certified	Yes	PA	SHW06.21012	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Bolstar
Certified	Yes	PA	SHW06.21015	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Chloropyrifos
Certified	Yes	PA	SHW06.21017	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Coumaphos
Certified	Yes	PA	SHW06.21020	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Demeton (o-)
Certified	Yes	PA	SHW06.21030	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Demeton (s-)
Certified	Yes	PA	SHW06.21040	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Diazinon
Certified	Yes	PA	SHW06.21043	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Dichlorvos
Certified	Yes	PA	SHW06.21047	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Dimethoate
Certified	Yes	PA	SHW06.21050	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Disulfoton
Certified	Yes	PA	SHW06.21052	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	EPN
Certified	Yes	PA	SHW06.21054	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Ethoprop
Certified	Yes	PA	SHW06.21056	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Fensulfothion
Certified	Yes	PA	SHW06.21058	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Fenthion
Certified	Yes	PA	SHW06.21060	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Malathion
Certified	Yes	PA	SHW06.21064	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Mevinphos
Certified	Yes	PA	SHW06.21070	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Parathion
Certified	Yes	PA	SHW06.21080	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Parathion methyl

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.21085	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Phorate
Certified	Yes	PA	SHW06.21090	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Ronnel
Certified	Yes	PA	SHW06.21095	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Stirofos
Certified	Yes	PA	SHW06.21098	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Sulfotepp
Certified	Yes	PA	SHW06.21108	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Tokuthion [Protothiofos]
Certified	Yes	PA	SHW06.21112	NPW, SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Trichloronate
Certified	Yes	PA	SHW06.23010	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dalapon
Certified	Yes	PA	SHW06.23020	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	Dicamba
Certified	Yes	PA	SHW06.23021	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dichlorprop
Certified	Yes	PA	SHW06.23030	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Dinoseb
Certified	Yes	PA	SHW06.23040	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	D (2,4-)
Certified	Yes	PA	SHW06.23041	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	DB (2,4-)
Certified	Yes	PA	SHW06.23050	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	T (2,4,5-)
Certified	Yes	PA	SHW06.23060	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev 1, 9/96]	TP (2,4,5-) (Silvex)
Certified	Yes	PA	SHW06.23063	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPA
Certified	Yes	PA	SHW06.23064	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	MCPP
Certified	Yes	PA	SHW06.23066	NPW, SCM	GC, Extraction, ECD, Capillary	[SW-846 8151A, Rev. 1, 9/96]	Pentachlorophenol
Certified	Yes	PA	SHW06.24110	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthene
Certified	Yes	PA	SHW06.24120	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Acenaphthylene
Certified	Yes	PA	SHW06.24130	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Anthracene
Certified	Yes	PA	SHW06.24140	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)anthracene
Certified	Yes	PA	SHW06.24150	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(a)pyrene
Certified	Yes	PA	SHW06.24160	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(b)fluoranthene
Certified	Yes	PA	SHW06.24170	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(ghi)perylene
Certified	Yes	PA	SHW06.24180	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Benzo(k)fluoranthene
Certified	Yes	PA	SHW06.24190	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Chrysene
Certified	Yes	PA	SHW06.24200	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Dibenzo(a,h)anthracene
Certified	Yes	PA	SHW06.24210	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluoranthene
Certified	Yes	PA	SHW06.24220	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Fluorene
Certified	Yes	PA	SHW06.24230	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Indeno(1,2,3-cd)pyrene
Certified	Yes	PA	SHW06.24240	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Naphthalene
Certified	Yes	PA	SHW06.24250	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Phenanthrene

KEY: AE = Air and Emissions, BT = Biological Tissues, DW = Drinking Water, NPW = Non-Potable Water, SCM = Solid and Chemical Materials

New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW06 -- Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.24260	NPW, SCM	Extraction, HPLC	[SW-846 8310, Rev. 0, 9/86]	Pyrene

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04010	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Benzene
Certified	Yes	PA	SHW07.04011	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromobenzene
Certified	Yes	PA	SHW07.04012	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butyl benzene (n-)
Certified	Yes	PA	SHW07.04013	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Sec-butylbenzene
Certified	Yes	PA	SHW07.04014	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tert-butylbenzene
Certified	Yes	PA	SHW07.04020	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorobenzene
Certified	Yes	PA	SHW07.04022	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorotoluene (2-)
Certified	Yes	PA	SHW07.04023	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chlorotoluene (4-)
Certified	Yes	PA	SHW07.04030	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,2-)
Certified	Yes	PA	SHW07.04040	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,3-)
Certified	Yes	PA	SHW07.04050	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorobenzene (1,4-)
Certified	Yes	PA	SHW07.04060	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethylbenzene
Certified	Yes	PA	SHW07.04065	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Isopropylbenzene
Certified	Yes	PA	SHW07.04067	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Propylbenzene (n-)
Certified	Yes	PA	SHW07.04070	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Toluene
Certified	Yes	PA	SHW07.04071	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Isopropyltoluene (4-)
Certified	Yes	PA	SHW07.04072	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,3-)
Certified	Yes	PA	SHW07.04073	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trimethylbenzene (1,2,4-)
Certified	Yes	PA	SHW07.04074	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trimethylbenzene (1,3,5-)
Certified	Yes	PA	SHW07.04080	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylenes (total)
Certified	Yes	PA	SHW07.04081	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylene (m-)
Certified	Yes	PA	SHW07.04082	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylene (o-)
Certified	Yes	PA	SHW07.04083	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Xylene (p-)
Certified	Yes	PA	SHW07.04088	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Allyl chloride
Certified	Yes	PA	SHW07.04089	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromochloromethane

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Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04090	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromodichloromethane
Certified	Yes	PA	SHW07.04100	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromoform
Certified	Yes	PA	SHW07.04110	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Bromomethane
Certified	Yes	PA	SHW07.04115	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butadiene (2-chloro-1,3-)
Certified	Yes	PA	SHW07.04120	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon tetrachloride
Certified	Yes	PA	SHW07.04130	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethane
Certified	Yes	PA	SHW07.04140	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroethyl vinyl ether (2-)
Certified	Yes	PA	SHW07.04150	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloroform
Certified	Yes	PA	SHW07.04160	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Chloromethane
Certified	Yes	PA	SHW07.04165	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Diethyl ether (Ethyl ether)
Certified	Yes	PA	SHW07.04170	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (trans-1,3-)
Certified	Yes	PA	SHW07.04180	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromochloromethane
Certified	Yes	PA	SHW07.04185	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromoethane (1,2-) (EDB)
Certified	Yes	PA	SHW07.04186	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromomethane
Certified	Yes	PA	SHW07.04187	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dibromo-3-chloropropane (1,2-)
Certified	Yes	PA	SHW07.04190	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichlorodifluoromethane
Certified	Yes	PA	SHW07.04200	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,1-)
Certified	Yes	PA	SHW07.04210	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethane (1,2-)
Certified	Yes	PA	SHW07.04220	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (1,1-)
Certified	Yes	PA	SHW07.04230	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (trans-1,2-)
Certified	Yes	PA	SHW07.04235	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloroethene (cis-1,2-)
Certified	Yes	PA	SHW07.04240	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,2-)
Certified	Yes	PA	SHW07.04241	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (1,3-)
Certified	Yes	PA	SHW07.04242	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropane (2,2-)
Certified	Yes	PA	SHW07.04249	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (1,1-)
Certified	Yes	PA	SHW07.04250	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloropropene (cis-1,3-)
Certified	Yes	PA	SHW07.04255	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dichloro-2-butene (trans-1,4-)
Certified	Yes	PA	SHW07.04258	NPW, SCM	GC/MS, P&T, or Direct Injection, Capillary	[SW-846 8260B]	Butanol (1-)
Certified	Yes	PA	SHW07.04260	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methylene chloride (Dichloromethane)
Certified	Yes	PA	SHW07.04270	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,2,2-)
Certified	Yes	PA	SHW07.04280	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethene
Certified	Yes	PA	SHW07.04290	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,1-)

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Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04300	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethane (1,1,2-)
Certified	Yes	PA	SHW07.04310	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloroethene
Certified	Yes	PA	SHW07.04320	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorofluoromethane
Certified	Yes	PA	SHW07.04322	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloro (1,1,2-) trifluoroethane (1,2,2-)
Certified	Yes	PA	SHW07.04325	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichloropropane (1,2,3-)
Certified	Yes	PA	SHW07.04327	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl acetate
Certified	Yes	PA	SHW07.04330	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Vinyl chloride
Certified	Yes	PA	SHW07.04340	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acetone
Certified	Yes	PA	SHW07.04350	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Carbon disulfide
Certified	Yes	PA	SHW07.04360	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Butanone (2-)
Certified	Yes	PA	SHW07.04365	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethyl acetate
Certified	Yes	PA	SHW07.04367	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Ethyl methacrylate
Certified	Yes	PA	SHW07.04370	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexanone (2-)
Certified	Yes	PA	SHW07.04371	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methacrylonitrile
Certified	Yes	PA	SHW07.04373	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl methacrylate
Certified	Yes	PA	SHW07.04374	NPW, SCM	GC/MS, P&T, or Direct Injection, Capillary	[SW-846 8260B]	Methyl acetate
Certified	Yes	PA	SHW07.04375	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl iodide
Certified	Yes	PA	SHW07.04376	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Iso-butyl alcohol
Certified	Yes	PA	SHW07.04380	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Pentanone (4-methyl-2-) (MIBK)
Certified	Yes	PA	SHW07.04385	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Propionitrile
Certified	Yes	PA	SHW07.04390	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Methyl tert-butyl ether
Certified	Yes	PA	SHW07.04395	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tert-butyl alcohol
Certified	Yes	PA	SHW07.04398	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acetonitrile
Certified	Yes	PA	SHW07.04400	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrolein
Certified	Yes	PA	SHW07.04410	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Acrylonitrile
Certified	Yes	PA	SHW07.04500	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Hexachlorobutadiene (1,3-)
Certified	Yes	PA	SHW07.04535	NPW, SCM	GC/MS, P&T, or Direct Injection, Capillary	[SW-846 8260B]	Methylcyclohexane
Certified	Yes	PA	SHW07.04540	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Naphthalene
Certified	Yes	PA	SHW07.04550	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Styrene
Certified	Yes	PA	SHW07.04560	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Tetrachloroethane (1,1,1,2-)
Certified	Yes	PA	SHW07.04570	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Trichlorobenzene (1,2,4-)
Certified	Yes	PA	SHW07.04590	NPW, SCM	GC/MS, P & T or Direct Injection, Capillary	[SW-846 8260B, Rev. 2, 12/96]	Dioxane (1,4-)

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Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04665	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Acetophenone
Certified	Yes	PA	SHW07.04670	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Acetylaminofluorene (2-)
Certified	Yes	PA	SHW07.04675	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Aminobiphenyl (4-)
Certified	Yes	PA	SHW07.04680	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Aramite
Certified	Yes	PA	SHW07.04702	NPW, SCM	GC/MS, Extract, or Direct Injection, Capillary	[SW-846 8270C] [SW-846 8270D]	Biphenyl (1,1'-)
Certified	Yes	PA	SHW07.04705	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Chlorobenzilate
Certified	Yes	PA	SHW07.04710	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chloronaphthalene (1-)
Certified	Yes	PA	SHW07.04715	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Diallate (cis)
Certified	Yes	PA	SHW07.04720	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Diallate (trans)
Certified	Yes	PA	SHW07.04730	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Dibenz(a,h)acridine
Certified	Yes	PA	SHW07.04755	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorophenol (2,6-)
Certified	Yes	PA	SHW07.04760	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethoate
Certified	Yes	PA	SHW07.04767	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethylaminoazobenzene
Certified	Yes	PA	SHW07.04770	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethylbenz(a)anthracene (7,12-)
Certified	Yes	PA	SHW07.04775	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethyl benzidine (3,3-)
Certified	Yes	PA	SHW07.04780	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dinitrobenzene (1,3-)
Certified	Yes	PA	SHW07.04785	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dinoseb
Certified	Yes	PA	SHW07.04790	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Disulfoton
Certified	Yes	PA	SHW07.04795	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Famphur
Certified	Yes	PA	SHW07.04800	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachlorophene

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Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04810	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Isodrin
Certified	Yes	PA	SHW07.04815	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Isosafrole (cis-)
Certified	Yes	PA	SHW07.04820	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Isosafrole (trans-)
Certified	Yes	PA	SHW07.04825	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Kepone
Certified	Yes	PA	SHW07.04830	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methanesulfonate (Ethyl-)
Certified	Yes	PA	SHW07.04835	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methanesulfonate (Methyl-)
Certified	Yes	PA	SHW07.04840	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methapyrilene
Certified	Yes	PA	SHW07.04845	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methylcholanthrene (3-)
Certified	Yes	PA	SHW07.04850	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Napthoquinone (1,4-)
Certified	Yes	PA	SHW07.04855	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Napththylamine (1-)
Certified	Yes	PA	SHW07.04860	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Napththylamine (2-)
Certified	Yes	PA	SHW07.04870	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitroso-di-n-butylamine
Certified	Yes	PA	SHW07.04875	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosomorpholine
Certified	Yes	PA	SHW07.04880	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosopiperidine
Certified	Yes	PA	SHW07.04885	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Parathion
Certified	Yes	PA	SHW07.04890	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Parathion methyl
Certified	Yes	PA	SHW07.04895	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Pentachlorobenzene
Certified	Yes	PA	SHW07.04900	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Pentachloroethane
Certified	Yes	PA	SHW07.04905	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pentachloronitrobenzene

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ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 -- Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04910	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phenacetin
Certified	Yes	PA	SHW07.04915	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phenylenediamine (1,4-)
Certified	Yes	PA	SHW07.04920	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phenylethylamine (alpha, alpha-Dimethyl)
Certified	Yes	PA	SHW07.04925	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phorate
Certified	Yes	PA	SHW07.04930	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phosphorothioate (O,O,O-triethyl)
Certified	Yes	PA	SHW07.04935	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phosphorothioate (O,O-diethyl-O-2-pyrazinyl) [Thionazin]
Certified	Yes	PA	SHW07.04940	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Picoline (2-)
Certified	Yes	PA	SHW07.04945	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pronamide
Certified	Yes	PA	SHW07.04950	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Quinoline -1-Oxide (4-Nitro)
Certified	Yes	PA	SHW07.04955	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Safrole
Certified	Yes	PA	SHW07.04960	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Sulfotepp
Certified	Yes	PA	SHW07.04975	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Tetrachlorobenzene (1,2,4,5-)
Certified	Yes	PA	SHW07.04980	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Tetrachlorophenol (2,3,4,6-)
Certified	Yes	PA	SHW07.04985	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Toluidine (2-) (2-Methylaniline)
Certified	Yes	PA	SHW07.04990	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Toluidine (5-nitro-2-)
Certified	Yes	PA	SHW07.04995	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Trinitrobenzene (1,3,5-)
Certified	Yes	PA	SHW07.05004	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosodiethylamine
Certified	Yes	PA	SHW07.05005	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosodimethylamine

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PITTSBURGH, PA 15238

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Certified	Yes	PA	SHW07.05006	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitroso-di-n-propylamine
Certified	Yes	PA	SHW07.05010	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosodiphenylamine
Certified	Yes	PA	SHW07.05011	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosomethylethylamine
Certified	Yes	PA	SHW07.05012	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	N-Nitrosopyrrolidine
Certified	Yes	PA	SHW07.05020	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Diphenylamine
Certified	Yes	PA	SHW07.05030	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Carbazole
Certified	Yes	PA	SHW07.05038	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzidine
Certified	Yes	PA	SHW07.05040	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorobenzidine (3,3'-)
Certified	Yes	PA	SHW07.05045	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Diphenylhydrazine (1,2-)
Certified	Yes	PA	SHW07.05048	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Aniline
Certified	Yes	PA	SHW07.05050	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chloraniline (4-)
Certified	Yes	PA	SHW07.05060	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitroaniline (2-)
Certified	Yes	PA	SHW07.05062	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitroaniline (3-)
Certified	Yes	PA	SHW07.05063	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitroaniline (4-)
Certified	Yes	PA	SHW07.05070	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chloronaphthalene (2-)
Certified	Yes	PA	SHW07.05080	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachlorobenzene
Certified	Yes	PA	SHW07.05090	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachlorobutadiene (1,3-)
Certified	Yes	PA	SHW07.05100	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachlorocyclopentadiene

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.05110	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachloroethane
Certified	Yes	PA	SHW07.05115	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachloropropene
Certified	Yes	PA	SHW07.05120	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Trichlorobenzene (1,2,4-)
Certified	Yes	PA	SHW07.05130	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Bis (2-chloroethoxy) methane
Certified	Yes	PA	SHW07.05132	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Bis (2-chloroethyl) ether
Certified	Yes	PA	SHW07.05140	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Bis (2-chloroisopropyl) ether
Certified	Yes	PA	SHW07.05150	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chlorophenyl-phenyl ether (4-)
Certified	Yes	PA	SHW07.05160	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Bromophenyl-phenyl ether (4-)
Certified	Yes	PA	SHW07.05170	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dinitrotoluene (2,4-)
Certified	Yes	PA	SHW07.05180	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dinitrotoluene (2,6-)
Certified	Yes	PA	SHW07.05190	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Isophorone
Certified	Yes	PA	SHW07.05200	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitrobenzene
Certified	Yes	PA	SHW07.05210	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Butyl benzyl phthalate
Certified	Yes	PA	SHW07.05220	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Bis (2-ethylhexyl) phthalate
Certified	Yes	PA	SHW07.05230	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Diethyl phthalate
Certified	Yes	PA	SHW07.05240	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethyl phthalate
Certified	Yes	PA	SHW07.05250	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Di-n-butyl phthalate
Certified	Yes	PA	SHW07.05260	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Di-n-octyl phthalate

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 -- Organic Parameters, Chromatography/MS

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Certified	Yes	PA	SHW07.05270	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Acenaphthene
Certified	Yes	PA	SHW07.05280	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Anthracene
Certified	Yes	PA	SHW07.05290	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Acenaphthylene
Certified	Yes	PA	SHW07.05300	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(a)anthracene
Certified	Yes	PA	SHW07.05310	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(a)pyrene
Certified	Yes	PA	SHW07.05320	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(b)fluoranthene
Certified	Yes	PA	SHW07.05330	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(ghi)perylene
Certified	Yes	PA	SHW07.05340	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(k)fluoranthene
Certified	Yes	PA	SHW07.05350	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chrysene
Certified	Yes	PA	SHW07.05360	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dibenzo(a,h)anthracene
Certified	Yes	PA	SHW07.05370	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Fluoranthene
Certified	Yes	PA	SHW07.05380	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Fluorene
Certified	Yes	PA	SHW07.05390	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Indeno(1,2,3-cd)pyrene
Certified	Yes	PA	SHW07.05395	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Methylnaphthalene (1-)
Certified	Yes	PA	SHW07.05400	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methylnaphthalene (2-)
Certified	Yes	PA	SHW07.05410	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Naphthalene
Certified	Yes	PA	SHW07.05420	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phenanthrene
Certified	Yes	PA	SHW07.05430	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pyrene
Certified	Yes	PA	SHW07.05440	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methyl phenol (4-chloro-3-)

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Certified	Yes	PA	SHW07.05450	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Chlorophenol (2-)
Certified	Yes	PA	SHW07.05460	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorophenol (2,4-)
Certified	Yes	PA	SHW07.05470	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dimethylphenol (2,4-)
Certified	Yes	PA	SHW07.05480	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dinitrophenol (2,4-)
Certified	Yes	PA	SHW07.05490	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Dinitrophenol (2-methyl-4,6-)
Certified	Yes	PA	SHW07.05500	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methylphenol (2-)
Certified	Yes	PA	SHW07.05510	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methylphenol (4-)
Certified	Yes	PA	SHW07.05520	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitrophenol (2-)
Certified	Yes	PA	SHW07.05530	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Nitrophenol (4-)
Certified	Yes	PA	SHW07.05540	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pentachlorophenol
Certified	Yes	PA	SHW07.05550	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Phenol
Certified	Yes	PA	SHW07.05560	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Trichlorophenol (2,4,5-)
Certified	Yes	PA	SHW07.05570	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Trichlorophenol (2,4,6-)
Certified	Yes	PA	SHW07.05590	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Methylphenol (3-)
Certified	Yes	PA	SHW07.05600	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dibenzofuran
Certified	Yes	PA	SHW07.05691	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorobenzene (1,2-)
Certified	Yes	PA	SHW07.05692	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorobenzene (1,3-)
Certified	Yes	PA	SHW07.05700	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dichlorobenzene (1,4-)
Certified	Yes	PA	SHW07.05705	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Benzaldehyde

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New Jersey Department of Environmental Protection

National Environmental Laboratory Accreditation Program

ANNUAL CERTIFIED PARAMETER LIST AND CURRENT STATUS

Effective as of 07/01/2011 until 06/30/2012

Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW07 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.05710	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzoic acid
Certified	Yes	PA	SHW07.05720	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzyl alcohol
Certified	Yes	PA	SHW07.05750	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pyridine
Certified	Yes	PA	SHW07.05765	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Caprolactam
Certified	Yes	PA	SHW07.05990	NPW, SCM	GC/MS, Extract or Dir Inj, Capillary	[SW-846 8270C] [SW-846 8270D]	Atrazine
Certified	Yes	PA	SHW07.07584	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(a)anthracene
Certified	Yes	PA	SHW07.07586	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(a)pyrene
Certified	Yes	PA	SHW07.07588	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(b)fluoranthene
Certified	Yes	PA	SHW07.07590	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Benzo(k)fluoranthene
Certified	Yes	PA	SHW07.07594	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Dibenzo(a,h)anthracene
Certified	Yes	PA	SHW07.07596	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Hexachlorobenzene
Certified	Yes	PA	SHW07.07598	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Indeno(1,2,3-cd)pyrene
Certified	Yes	PA	SHW07.07616	NPW, SCM	GC/MS/SIM, Extract or Dir Inj, Capillary	[SW-846 8270C, Rev. 3, 12/96] [SW-846 8270D]	Pentachlorophenol

Category: SHW09 – Miscellaneous Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW09.02000	NPW, SCM	Distillation	[SW-846 9010C]	Cyanide
Certified	Yes	PA	SHW09.05000	NPW, SCM	Colorimetric, Automated	[SW-846 9012B]	Cyanide
Certified	Yes	PA	SHW09.09000	NPW, SCM	Redox Titration	[SW-846 9030B, Rev. 2, 12/96]	Sulfides, acid sol. & insol.
Certified	Yes	PA	SHW09.10100	NPW, SCM	Titration	[SW-846 9034, Rev. 0, 12/96]	Sulfides, acid sol. & insol.
Certified	Yes	PA	SHW09.13050	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Sulfate
Certified	Yes	PA	SHW09.14000	NPW, SCM	Electrometric	[SW-846 9040C]	pH - waste, >20% water

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New Jersey Department of Environmental Protection

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Laboratory Name: TESTAMERICA LABORATORIES INC / PITTSBURGH LAB Laboratory Number: PA005 Activity ID: NLC110001
301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW09 – Miscellaneous Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW09.19000	NPW, SCM	Infrared Spectrometry or FID	[SW-846 9060A]	Total organic carbon (TOC)
Certified	Yes	PA	SHW09.22000	NPW, SCM	Colorimetric, Auto, 4AAP Distillation	[SW-846 9066, Rev. 0, 9/86]	Phenols
Certified	Yes	PA	SHW09.29150	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Nitrite
Certified	Yes	PA	SHW09.30150	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Nitrate
Certified	Yes	PA	SHW09.30250	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Bromide
Certified	Yes	PA	SHW09.33100	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Chloride
Certified	Yes	PA	SHW09.34150	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Fluoride
Certified	Yes	PA	SHW09.54150	NPW, SCM	Ion Chromatography	[SW-846 9056A]	Orthophosphate

Category: WPP02 – Inorg. Parameters, Nutrients and Demands

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP02.04000	NPW, SCM	Automated Phenate	[EPA 350.1]	Ammonia
Certified	Yes	PA	WPP02.10500	NPW, SCM	Spectrophotometric Manual/Auto	[EPA 410.4]	Chemical oxygen demand
Certified	Yes	PA	WPP02.16050	NPW, SCM	Flow Injection, Ligand Exchange	[EPA 1677]	Cyanide - amenable to Cl2
Certified	Yes	PA	WPP02.38000	NPW, SCM	Gravimetric, 103-105 Degrees C	[SM 2540 B]	Residue - total

Category: WPP07 – Organic Parameters, Individual Pesticide

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	WPP07.58000	NPW, SCM	GC	[USER DEFINED SW-846 8081A]	Isodrin

Category: SHW02 – Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW02.02000	SCM	Setaflash	[SW-846 1020B]	Ignitability
Certified	Yes	PA	SHW02.06900	SCM	TCLP, Toxicity Procedure, ZHE	[SW-846 1311]	Volatile organics
Certified	Yes	PA	SHW02.06950	SCM	TCLP, Toxicity Procedure, Shaker	[SW-846 1311]	Semivolatile organics

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW02 – Characteristics of Hazardous Waste

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW02.07000	SCM	TCLP, Toxicity Procedure, Shaker	[SW-846 1311]	Metals
Certified	Yes	PA	SHW02.08000	SCM	Synthetic PPT Leachate Procedure	[SW-846 1312, Rev. 0, 9/94]	Metals - organics
Certified	Yes	PA	SHW02.09000	SCM	Multiple Extractions	[SW-846 1320]	Metals - organics

Category: SHW03 – Analyze-Immediately Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW03.01000	SCM	Aqueous, Electrometric	[SW-846 9040B] [SW-846 9040C]	pH

Category: SHW04 – Inorganic Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW04.03000	SCM	Acid Digestion, Soil Sediment & Sludge	[SW-846 3050B, Rev. 2, 12/96]	Metals
Certified	Yes	PA	SHW04.20105	SCM	Speciated Isotope Dilution MS (SIDMS)	[SW-846 6800, Rev. 0, 1/98]	Chromium (VI)
Certified	Yes	PA	SHW04.33500	SCM	AA, Manual Cold Vapor	[SW-846 7471A, Rev. 1, 9/94] [SW-846 7471B]	Mercury - solid waste

Category: SHW05 – Organic Parameters, Prep. / Screening

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW05.04000	SCM	Automatic Soxhlet Extraction	[SW-846 3541, Rev. 0, 9/94]	Semivolatile organics
Certified	Yes	PA	SHW05.05000	SCM	Ultrasonic Extraction	[SW-846 3550B, Rev. 2, 12/96] [SW-846 3550C]	Semivolatile organics
Certified	Yes	PA	SHW05.06000	SCM	Waste Dilution	[SW-846 3580A, Rev. 1, 7/92]	Organics
Certified	Yes	PA	SHW05.06100	SCM	Waste Dilution, Volatile organics	[SW-846 3585, Rev. 0, 12/96]	Organics
Certified	Yes	PA	SHW05.07300	SCM	Closed System Purge & Trap	[SW-846 5035L, Rev. 0, 12/96]	Volatile organics - low conc.
Certified	Yes	PA	SHW05.07310	SCM	Methanol Extract, Closed System P & T	[SW-846 5035H, Rev. 0, 12/96]	Volatile organics - high conc.
Certified	Yes	PA	SHW05.17000	SCM	Cleanup-Sulfuric Acid/KMnO4	[SW-846 3665A, Rev. 1, 12/96]	Semivolatile organics

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301 ALPHA DR
PITTSBURGH, PA 15238

Category: SHW06 – Organic Parameters, Chromatography

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW06.21010	SCM	GC, Extract or Dir Inj, NPD or FPD,Cap	[SW-846 8141A, Rev. 1, 9/94] [SW-846 8141B]	Azinphos methyl

Category: SHW07 – Organic Parameters, Chromatography/MS

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW07.04111	SCM	GC/MS, P&T, or Direct Injection, Capillary	[SW-846 8260B]	Cyclohexane

Category: SHW09 – Miscellaneous Parameters

Status	Eligible to Report NJ Data	State	Code	Matrix	Technique Description	Approved Method	Parameter Description
Certified	Yes	PA	SHW09.04000	SCM	Extraction, Oils and Solids	[SW-846 9013, Rev. 0, 7/92]	Cyanide
Certified	Yes	PA	SHW09.15000	SCM	Wide Range pH Paper	[SW-846 9041A, Rev. 1, 7/92]	pH
Certified	Yes	PA	SHW09.16000	SCM	Mix with Water or Calcium Chloride	[SW-846 9045D]	pH - soil and waste
Certified	Yes	PA	SHW09.19100	SCM	Pyrolytic	[OTHER Lloyd Kahn]	Total organic carbon (TOC)
Certified	Yes	PA	SHW09.21000	SCM	Colorimetric, Man, 4AAP Distillation	[SW-846 9065, Rev. 0, 9/86]	Phenols
Certified	Yes	PA	SHW09.25000	SCM	Extraction & Gravimetric	[SW-846 9071 B, Rev. 2, 5/99]	Oil & grease - sludge-hem
Certified	Yes	PA	SHW09.25100	SCM	Extraction & Gravimetric - LL or SPE	[SW-846 9071 B, Rev. 2, 5/99]	Oil & grease - sludge-hem-npm
Certified	Yes	PA	SHW09.29000	SCM	Flow-Through Paint Filter, Observation	[SW-846 9095] [SW-846 9095B]	Free liquid

Joseph F. Aiello, Chief

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State of New Jersey
Department of Environmental Protection

Certifies That

TestAmerica Laboratories Inc / Pittsburgh Lab

Laboratory Certification ID # PA005

is hereby approved as a

Nationally Accredited Environmental Laboratory

to perform the analyses as indicated on the Annual Certified Parameter List which must accompany this certificate to be valid

having duly met the requirements of the

Regulations Governing The Certification Of Laboratories And Environmental Measurements N.J.A.C. 7:18 et. seq.

and

having been found compliant with the standards approved by the

The NELAC Institute

Expiration Date June 30, 2012

NJDEP is a NELAP Recognized Accreditation Body

Joseph F. Aiello, Chief
Office of Quality Assurance

This certificate is to be conspicuously displayed at the laboratory with the annual certified parameter list in a location on the premises visible to the public.
Consumers are urged to verify the laboratory's current accreditation status with the State of NJ, NELAP.

F.3 TESTAMERICA DATA PACKAGE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

February 21 2012

TestAmerica Project Number: G2A190474
Contract: N62472-08-D-1001, CTO WE72

Tobrena Skeen
Tetra Tech NUS Inc
Foster Plaza 7, 661 Anderson Drive
Pittsburgh, PA 15220-2745

Dear Ms. Skeen,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on January 19, 2012. These samples are associated with the NWS Earle project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4362.

Sincerely,

Linda C. Laver
Project Manager

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TestAmerica West Sacramento Project Number G2A190474

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Samples: 1, 2, 3, 4, 5

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Performed at TestAmerica Pittsburgh
Samples: 1, 2, 3, 4, 5
Report# 180-7794-1

Case Narrative

TestAmerica West Sacramento Project Number G2A190474

General Comments

Contract Task Order – N62472-08-D-1001, CTO WE72
Site Name – NWS Earle
Tetra Tech Project Manager – Jennifer Lambert

Manual integrations are performed only when necessary and in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. Detailed information can be found in the Manual Integration Addendum section of this report.

“U” definition: Analyte was not detected and is reported as less than the LOD.

The containers for the metals were forwarded to TestAmerica Pittsburgh for analysis. Please see Report # 180-7794-1 for analytical results and any anomalies that might pertain to the data.

WATER, 6850_DOD Handbook, Perchlorate
Samples: 1, 2, 3, 4, 5
Per method guidelines, a laboratory control sample (LCS) and a synthetic matrix check sample (SMCS) have been analyzed with this analytical batch. Each set of data is reported as an LCS with the following work order numbers assigned:

LCS: MQE631AC
SMCS: MQE631AD

The internal standard (IS) for the beginning level of detection verification (LODV) analyzed on January 28, 2012 is 48%, which is below the 50% acceptance limit. The native compound in the LODV is within acceptance limits. Also, the opening continuing calibration verification (CCV) is within acceptance limits for both the internal standard and native recoveries. Thus, corrective action was to re-analyze sample 3 as it has a concentration that is between the LOQ and the DL.

Sample: 3
The ending blank for the re-analysis of this sample did not have a recovery for the IS. The vial was discovered to be empty. The instrument was re-started on a standard and closed with another ending blank. This closing standard and blank are within acceptance limits and the data is reported.

Case Narrative

TestAmerica West Sacramento Project Number G2A190474

WATER, 8330A, Explosives
Samples: 1, 2, 3, 4, 5
Manual integrations were performed and detailed information can be found in the Manual Integration Addendum section of this report.

Samples: 1, 3
CONFIRMATION COLUMN ONLY:
The surrogate recoveries for 3,4-Dinitrotoluene are above the acceptance limits. The recoveries are within limits in the primary column analyses which is the data used for quality control purposes. Additional action is not required.

There are no other anomalies associated with this project.

TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
A2LA (DoD-ELAP)	2928-01	New Mexico	NA
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania*	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas*	T104704399-08-TX
Connecticut	PH-0691	UCMR	CA00044
Florida*	E87570	US Fish & Wildlife	LE148388-0
Georgia	960	USDA Foreign Plant	37-82605
Guam	10-009r	USDA Foreign Soil	P330-09-00055
Hawaii	NA	Utah*	QUAN1
Illinois*	002701	Virginia	178
Kansas*	E-10375	Washington	C581
Louisiana*	01944	West Virginia	9930C, 334
Michigan	9947	Wisconsin	998204680
Nevada	CA44	Wyoming	8TMS-Q
New Jersey*	CA005		

*NELAP accredited. A more detailed parameter list is available upon request. *Updated 5/25/2011*

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Manual Integration Addendum

Manual Integration Record - Method 8330

Instrument : LC11 Lot #: G2A190474

Compound Name	Analysis date:									Analysis date:					Analysis date: 2/1/2012								
	ICAL									CCAL - Prep QC					Samples								
	1	2	3	4	5	6	7	8	ICV	CCV	MB	LCS	LCSD	CCV	4MSD								
1,3,5-Trinitrobenzene															x								
1,3-Dinitrobenzene															x								
HMX															x								
MNX															x								
Nitrobenzene															x								
RDX															x								
Tetryl															x								
2,4,6-Trinitrotoluene																							
2,4-Dinitrotoluene																							
2,6-Dinitrotoluene																							
2-AM-4, 6-DNT																							
2-Nitrotoluene																							
3,5-Dinitroaniline																							
3-Nitrotoluene																							
4-AM-2, 6-DNT																							
4-Nitrotoluene																							
DNX																							
EGDN																							
Nitroglycerin																							
Nitroguanidine																							
PETN																							
Picric Acid																							
TNX																							
3,4-Dinitrotoluene																							

Sample Summary

TestAmerica West Sacramento Project Number G2A190474

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
MQAVQ	1	02MW01C-20120117	1/17/2012 12:15 PM	1/19/2012 09:20 AM
MQAVR	2	02MW01B-20120117	1/17/2012 03:05 PM	1/19/2012 09:20 AM
MQAVT	3	02MW01A-20120118	1/18/2012 09:20 AM	1/19/2012 09:20 AM
MQAVV	4	02MW13B-20120118	1/18/2012 02:20 PM	1/19/2012 09:20 AM
MQAVW	5	02MW13C-20120118	1/18/2012 04:25 PM	1/19/2012 09:20 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

EXECUTIVE SUMMARY - Detection Highlights

G2A190474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02MW01C-20120117 01/17/12 12:15 001				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.22 J,PG	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
	Qualifiers: CON			
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.093	2.0	ug/L	SW846 8330/8330A
	Qualifiers: J,PG			
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
02MW01B-20120117 01/17/12 15:05 002				
Perchlorate	0.12 J	0.50	ug/L	SW846 6850_DOD Ha
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

G2A190474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02MW01A-20120118 01/18/12 09:20 003				
Perchlorate	0.10 J	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
RDX	0.052 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.1	ug/L	SW846 8330/8330A
TNX	0.15 U	2.1	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.034	0.10	ug/L	SW846 8330/8330A
	Qualifiers: J,PG			
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
	Qualifiers: CON			
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
RDX	0.052 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.1	ug/L	SW846 8330/8330A
TNX	0.15 U	2.1	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.081	0.10	ug/L	SW846 8330/8330A
	Qualifiers: J,PG			
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	SW846 8330/8330A
02MW13B-20120118 01/18/12 14:20 004				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

G2A190474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02MW13C-20120118 01/18/12 16:25 005				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A

ANALYTICAL METHODS SUMMARY

G2A190474

PARAMETER	ANALYTICAL METHOD
DOD Perchlorate Handbook (6850)	SW846 6850_DOD Handbook
Nitroaromatics and Nitramines by HPLC	SW846 8330/8330A

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

G2A190474

ANALYTICAL METHOD	ANALYST	ANALYST ID
SW846 6850_DOD Handbook	Dennis Gall	033077
SW846 6850_DOD Handbook	Nathan Shafer	000181
SW846 8330/8330A	Robyn Noonan	003024
SW846 8330/8330A	Victoria Nihart	004470

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

White Water Associates

Client Sample ID: 02MW01C-20120117

Dissolved HPLC

Lot-Sample #...: G2A190474-001 Work Order #...: MQAVQ1AJ Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW01B-20120117

Dissolved HPLC

Lot-Sample #...:	G2A190474-002	Work Order #...:	MQAVR1AJ	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/30/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.12 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02MW01A-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 02/09/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.10 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02MW13B-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-004 Work Order #...: MQAVV1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW13C-20120118

Dissolved HPLC

Lot-Sample #...: G2A190474-005 Work Order #...: MQAVW1AJ Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...: G2A190474-001 Work Order #...: MQAVQ1AK Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.22 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...: G2A190474-001	Work Order #...: MQAVQ2AK	Matrix.....: WATER
Date Sampled...: 01/17/12	Date Received..: 01/19/12	
Prep Date.....: 01/24/12	Analysis Date..: 02/02/12	
Prep Batch #...: 2024017		
Dilution Factor: 1.01	Method.....: SW846 8330/8330A	

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.093 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	117 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01B-20120117

HPLC

Lot-Sample #...: G2A190474-002 Work Order #...: MQAVR1AK Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...:	G2A190474-003	Work Order #...:	MQAVT1AK	Matrix.....:	WATER
Date Sampled...:	01/18/12	Date Received..:	01/19/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/01/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.03	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.034 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT2AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.03 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U CON	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.081 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW13B-20120118

HPLC

Lot-Sample #...: G2A190474-004 Work Order #...: MQAVV1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

White Water Associates

Client Sample ID: 02MW13C-20120118

HPLC

Lot-Sample #...: G2A190474-005 Work Order #...: MQAVW1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)

QC DATA ASSOCIATION SUMMARY

G2A190474

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8330/8330A		2024017	2024007
	WATER	SW846 6850_DOD Ha		2026097	2026051
002	WATER	SW846 8330/8330A		2024017	2024007
	WATER	SW846 6850_DOD Ha		2026097	2026051
003	WATER	SW846 8330/8330A		2024017	2024007
	WATER	SW846 6850_DOD Ha		2026097	2026051
004	WATER	SW846 8330/8330A		2024017	2024007
	WATER	SW846 6850_DOD Ha		2026097	2026051
005	WATER	SW846 8330/8330A		2024017	2024007
	WATER	SW846 6850_DOD Ha		2026097	2026051

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AA Matrix.....: WATER
MB Lot-Sample #: G2A260000-097
Prep Date.....: 01/26/12
Analysis Date..: 01/28/12 Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	0.500	0.486	ug/L	97	SW846 6850_DOD H

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	0.500	0.483	ug/L	97	SW846 6850_DOD H.

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AU-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AU-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AA Matrix.....: WATER
MB Lot-Sample #: G2A240000-017
Prep Date.....: 01/24/12
Analysis Date..: 02/01/12 Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	102	(50 - 155)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	100	(55 - 155)	SW846 8330/8330A
1,3-Dinitrobenzene	105	(45 - 160)	SW846 8330/8330A
2,4-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
2,6-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
RDX	114	(50 - 160)	SW846 8330/8330A
1,3,5-Trinitrobenzene	107	(65 - 140)	SW846 8330/8330A
2,4,6-Trinitrotoluene	79	(50 - 145)	SW846 8330/8330A
MNX	105	(70 - 130)	SW846 8330/8330A
TNX	97	(70 - 130)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	1.00	1.02	ug/L	102	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	1.00	1.00	ug/L	100	SW846 8330/8330A
1,3-Dinitrobenzene	1.00	1.05	ug/L	105	SW846 8330/8330A
2,4-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/8330A
2,6-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/8330A
RDX	1.00	1.14	ug/L	114	SW846 8330/8330A
1,3,5-Trinitrobenzene	1.00	1.07	ug/L	107	SW846 8330/8330A
2,4,6-Trinitrotoluene	1.00	0.794	ug/L	79	SW846 8330/8330A
MNX	4.00	4.21	ug/L	105	SW846 8330/8330A
TNX	4.00	3.87	ug/L	97	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	99	(50 - 155)			SW846 8330/8330A
	100	(50 - 155)	1.8	(0-30)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	97	(55 - 155)			SW846 8330/8330A
	99	(55 - 155)	1.8	(0-30)	SW846 8330/8330A
1,3-Dinitrobenzene	104	(45 - 160)			SW846 8330/8330A
	105	(45 - 160)	1.7	(0-30)	SW846 8330/8330A
2,4-Dinitrotoluene	99	(60 - 135)			SW846 8330/8330A
	100	(60 - 135)	1.9	(0-30)	SW846 8330/8330A
2,6-Dinitrotoluene	98	(60 - 135)			SW846 8330/8330A
	99	(60 - 135)	1.6	(0-30)	SW846 8330/8330A
RDX	118	(50 - 160)			SW846 8330/8330A
	121	(50 - 160)	2.8	(0-30)	SW846 8330/8330A
1,3,5-Trinitrobenzene	106	(65 - 140)			SW846 8330/8330A
	109	(65 - 140)	2.6	(0-30)	SW846 8330/8330A
2,4,6-Trinitrotoluene	78	(50 - 145)			SW846 8330/8330A
	79	(50 - 145)	1.6	(0-30)	SW846 8330/8330A
MNX	106	(70 - 130)			SW846 8330/8330A
	105	(70 - 130)	0.68	(0-30)	SW846 8330/8330A
TNX	98	(70 - 130)			SW846 8330/8330A
	94	(70 - 130)	3.0	(0-30)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	0.10 U	1.01	1.00	ug/L	99		SW846 8330/8330A
	0.10 U	1.01	1.02	ug/L	100	1.8	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U	1.01	0.982	ug/L	97		SW846 8330/8330A
	0.051 U	1.01	0.999	ug/L	99	1.8	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	1.01	1.05	ug/L	104		SW846 8330/8330A
	0.051 U	1.01	1.07	ug/L	105	1.7	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	1.01	0.996	ug/L	99		SW846 8330/8330A
	0.051 U	1.01	1.02	ug/L	100	1.9	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	1.01	0.986	ug/L	98		SW846 8330/8330A
	0.051 U	1.01	1.00	ug/L	99	1.6	SW846 8330/8330A
RDX	0.051 U	1.01	1.20	ug/L	118		SW846 8330/8330A
	0.051 U	1.01	1.23	ug/L	121	2.8	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	1.01	1.08	ug/L	106		SW846 8330/8330A
	0.051 U	1.01	1.10	ug/L	109	2.6	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	1.01	0.789	ug/L	78		SW846 8330/8330A
	0.051 U	1.01	0.802	ug/L	79	1.6	SW846 8330/8330A
MNX	1.0 U	4.04	4.28	ug/L	106		SW846 8330/8330A
	1.0 U	4.06	4.25	ug/L	105	0.68	SW846 8330/8330A
TNX	0.15 U	4.04	3.95	ug/L	98		SW846 8330/8330A
	0.15 U	4.06	3.83	ug/L	94	3.0	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Raw Data Package

WATER, 6850_DOD Handbook, Perchlorate

ICV/CCV Summaries and Run Logs

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

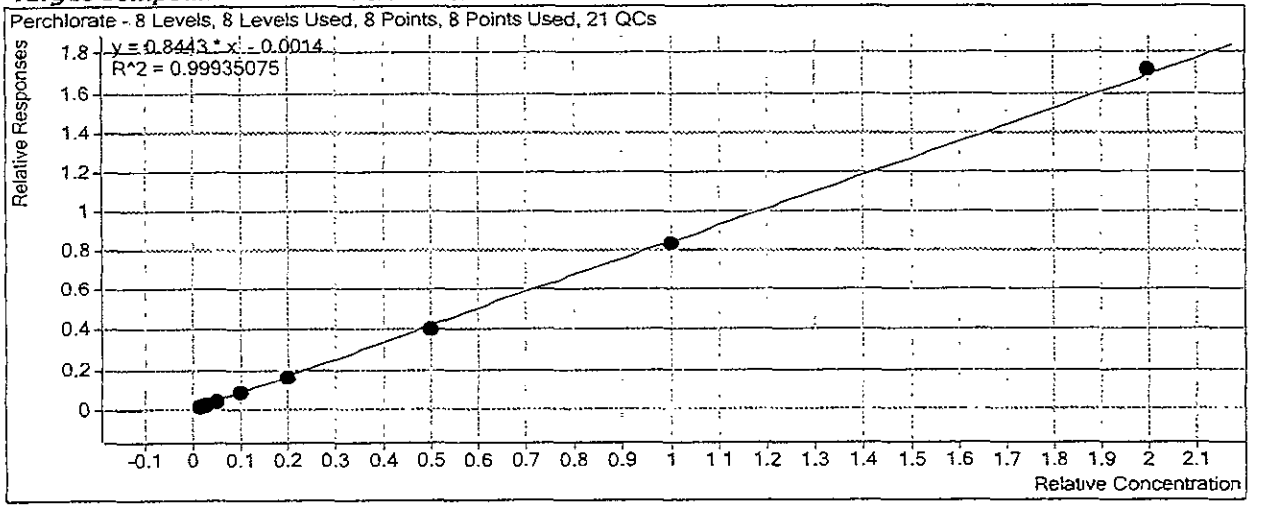
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml		
Analysis Time	1/30/2012 8:39 AM	**Analyst Name**	lores
Report Time	1/30/2012 11:50 AM	**Reporter Name**	lores
Last Calib Update	1/30/2012 8:39 AM	**Batch State**	ResultsDirty

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

mr 2/2/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:38
Analyst	lores
Data File	27JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

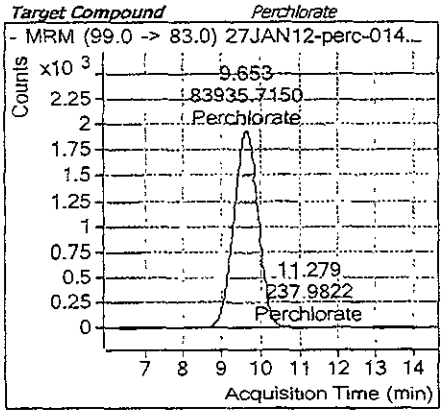
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.653	83936	99	83	5.06371	5.06371	1
Perchlorate-(35Cl18O4)	ISTD	9.639	196970	107	89			1
							1.3 % Deviation	

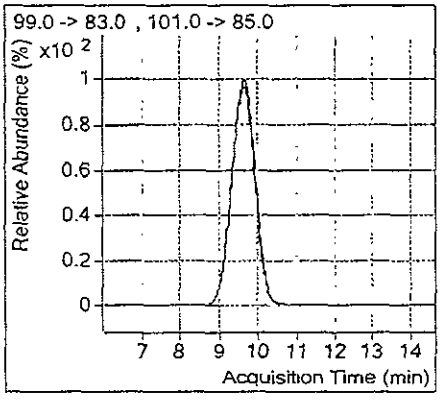
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	27996	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	63293	109	91	3.11	2.30	3.80	In Control

Compound Graphics

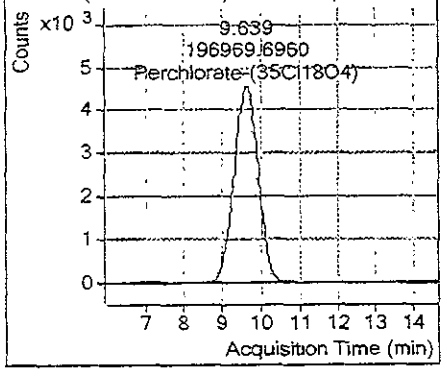
mr 2/2/12

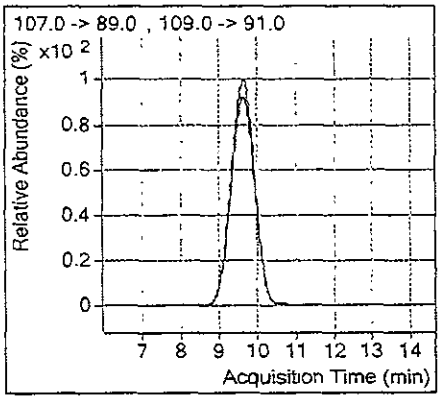
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 02:44
Analyst	lores
Data File	27JAN12-perc-044.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

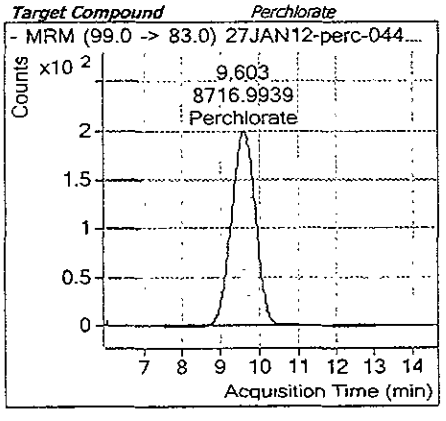
Quantitation Results

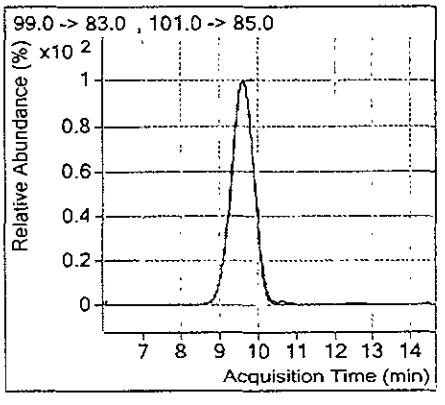
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.603	8717	99	83	0.97742	0.97742	1
Perchlorate-(35Cl18O4)	ISTD	9.608	107420	107	89			1
							-2.3 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2873	101	85	3.03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	33636	109	91	3 19	2.30	3.80	In Control

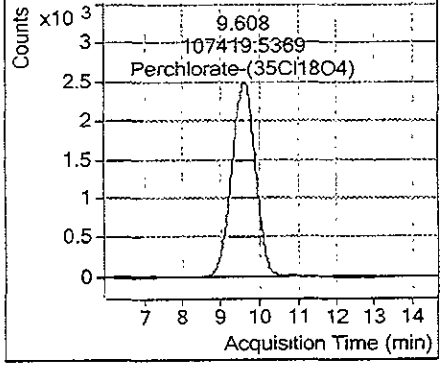
Compound Graphics

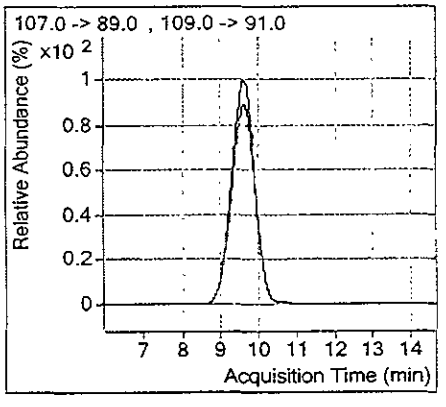
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





m 2/2/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:00
Analyst	lores
Data File	27JAN12-perc-045.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

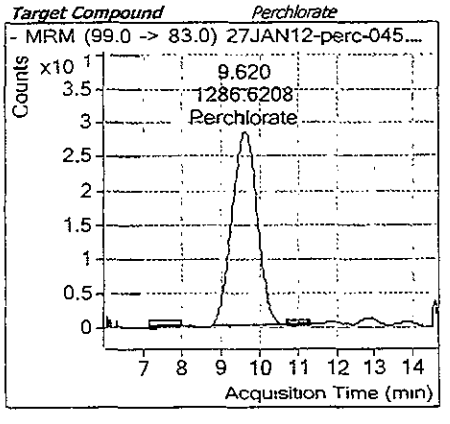
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.620	1287	99	83	0.16412	0.16412	1
Perchlorate-(35Cl18O4)	ISTD	9.617	103051	107	89			1
							9.4 % Deviation	

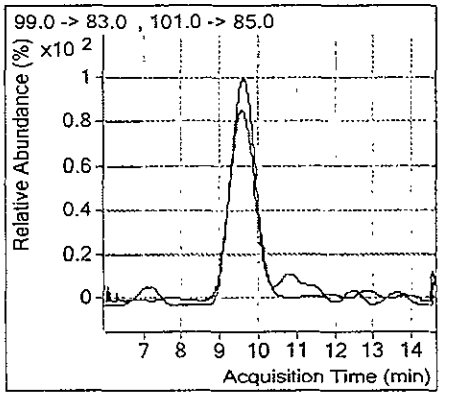
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	438	101	85	2.94	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	32905	109	91	3.13	2 30	3.80	In Control

Compound Graphics

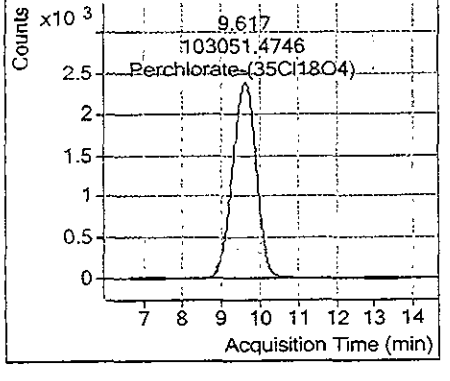
m 2/2/12

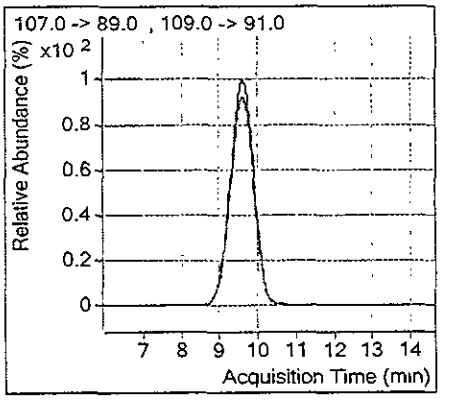
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:17
Analyst	lores
Data File	27JAN12-perc-046.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

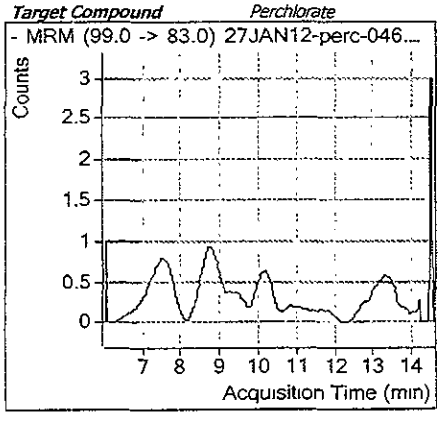
Quantitation Results

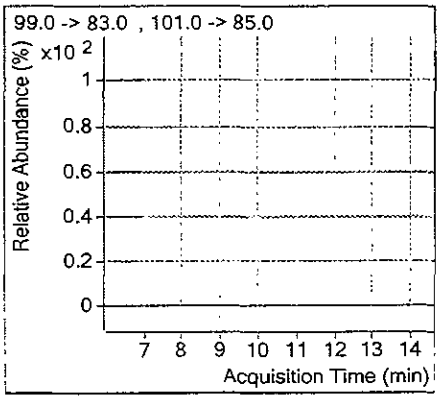
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.616	159119	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	50156	109	91	3.17	2.30	3.80	In Control

Compound Graphics

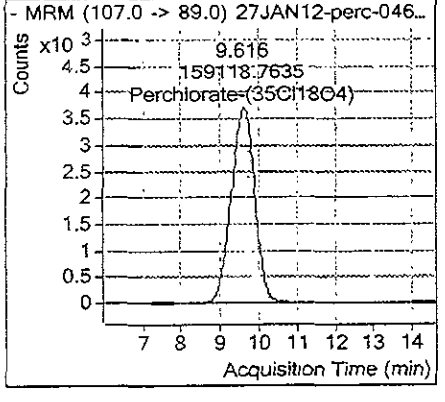
Target Compound *Perchlorate*

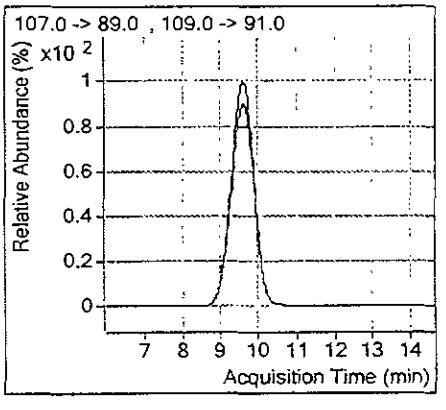




m 2/2/12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:15
Analyst	lores
Data File	27JAN12-perc-057.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2 00
Injection Volume	50

Quantitation Results

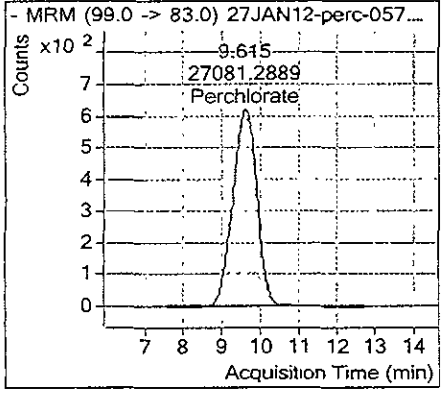
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.615	27081	99	83	1.82370	1.82370	1
Perchlorate-(35Cl18O4)	ISTD	9 607	177470	107	89			1
							-8.8 % Deviation	

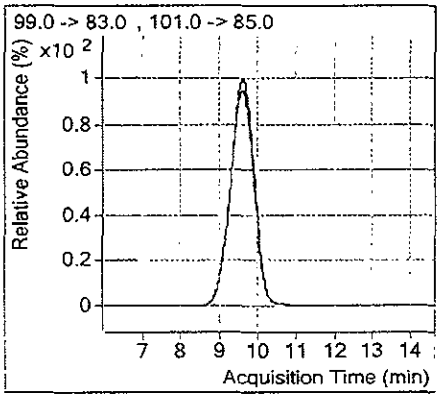
Qualifier Ion	*Area*	*Precursor*	*Product*	*Ratio*	*Min*	*Max*	
Perchlorate	9082	101	85	2 98	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	55608	109	91	3.19	2.30	3 80	In Control

mr 2/2/12

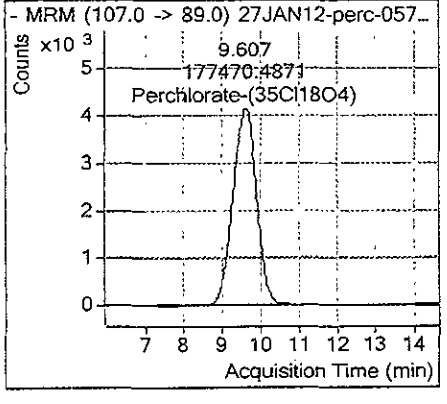
Compound Graphics

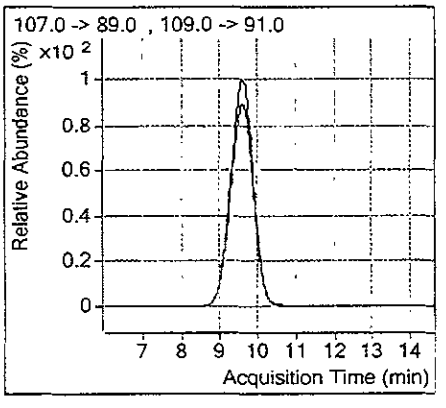
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:31
Analyst	lores
Data File	27JAN12-perc-058.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

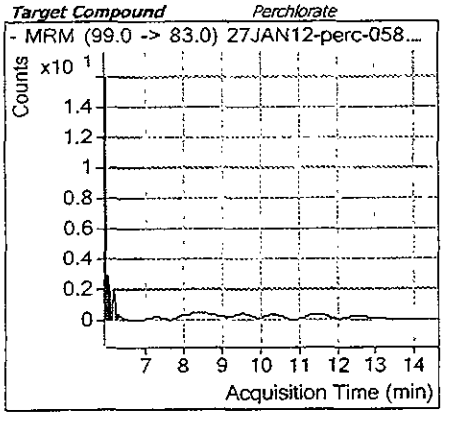
Quantitation Results

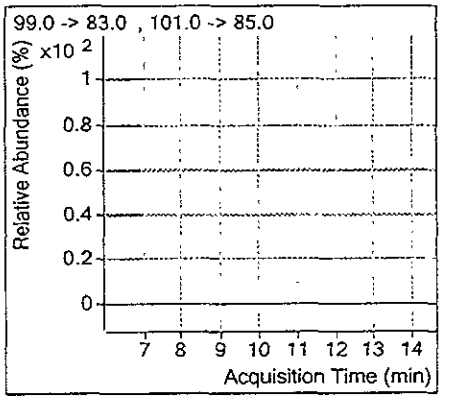
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.608	172615	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53854	109	91	3.21	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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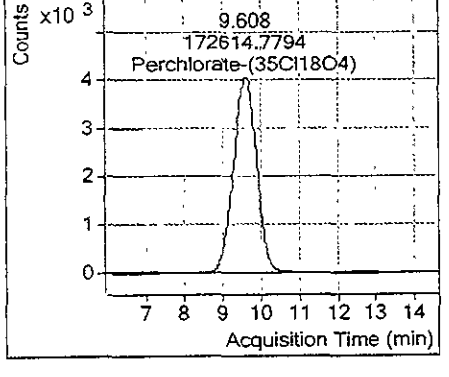
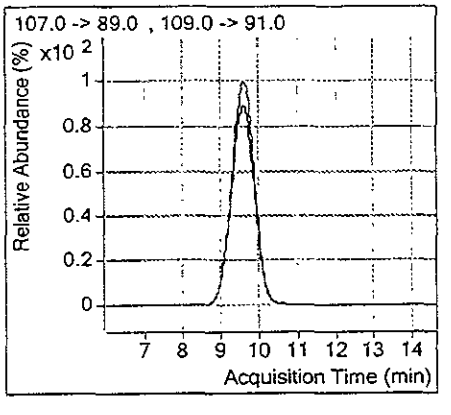
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:25
Analyst	lores
Data File	27JAN12-perc-065.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 607	13752	99	83	0.92952	0.92952	1
Perchlorate-(35Cl18O4)	ISTD	9.602	178353	107	89			1
							-7.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4832	101	85	2.85	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55704	109	91	3.20	2.30	3.80	In Control

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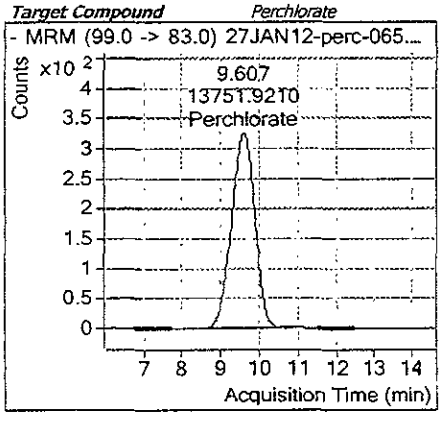
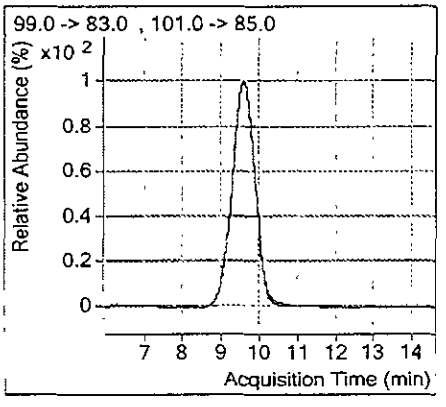
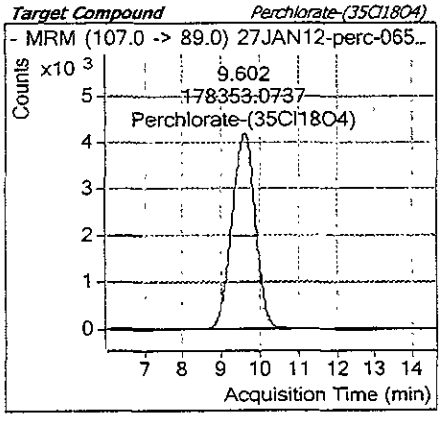
Compound Graphics

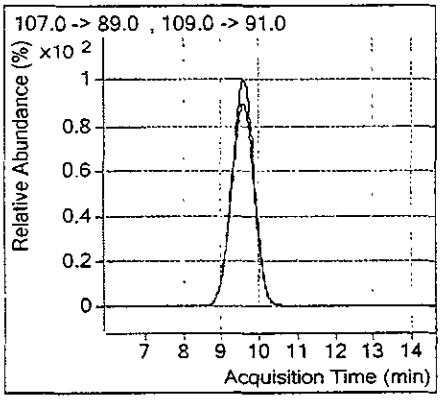
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:41
Analyst	lores
Data File	27JAN12-perc-066.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.595	2043	99	83	0.15376	0.15376	1
Perchlorate-(35Cl18O4)	ISTD	9.603	175950	107	89			1
							2.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	786	101	85	2.60	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54998	109	91	3.20	2.30	3.80	In Control

Compound Graphics

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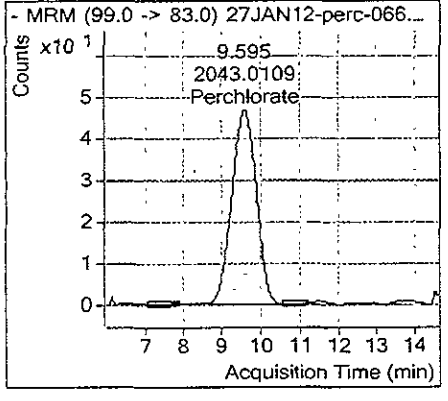
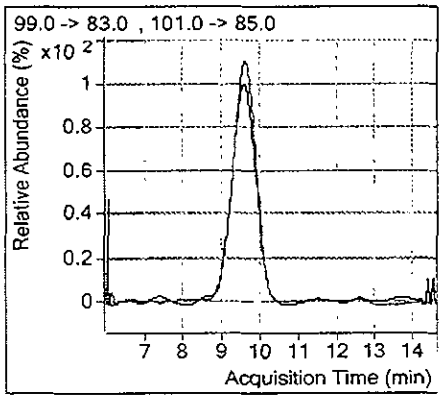
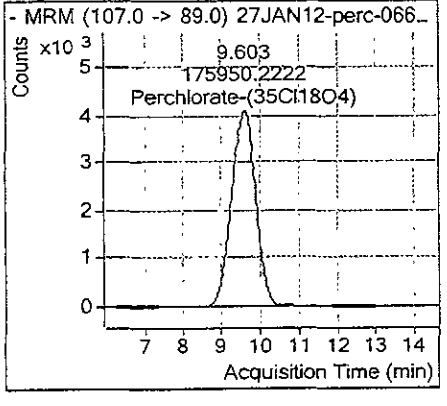
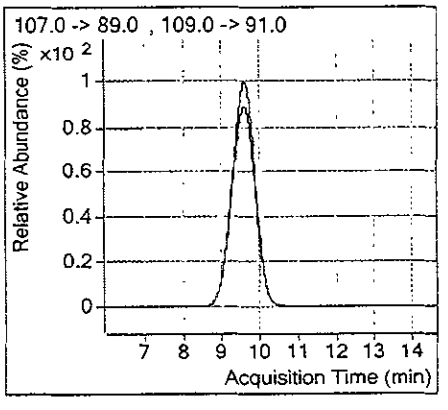
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:57
Analyst	lores
Data File	27JAN12-perc-067.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

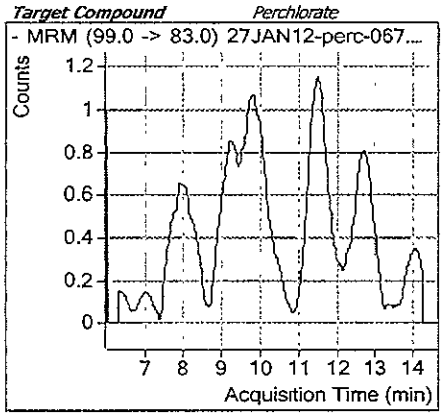
Quantitation Results

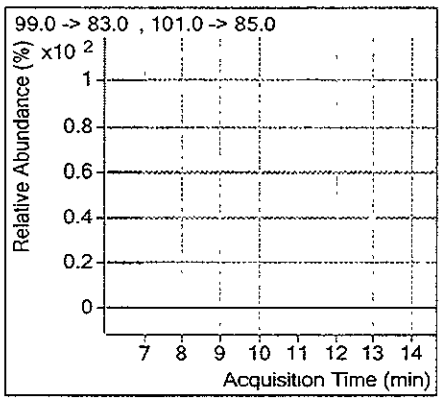
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.602	173900	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54242	109	91	3 21	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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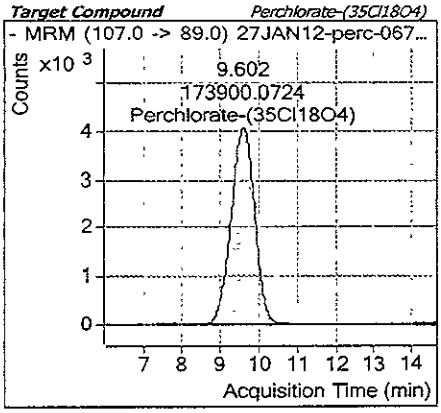
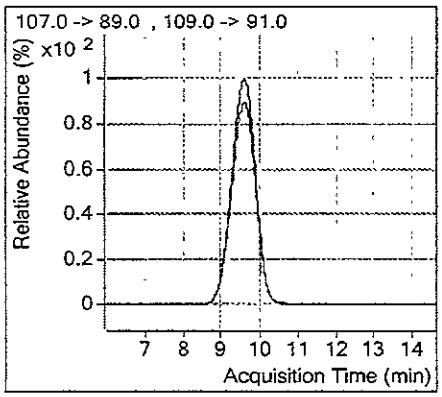
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml		
Analysis Time	1/31/2012 8:33 AM	**Analyst Name**	lores
Report Time	2/1/2012 4:00 PM	**Reporter Name**	lores
Last Calib Update	1/31/2012 8:33 AM	**Batch State**	Processed

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

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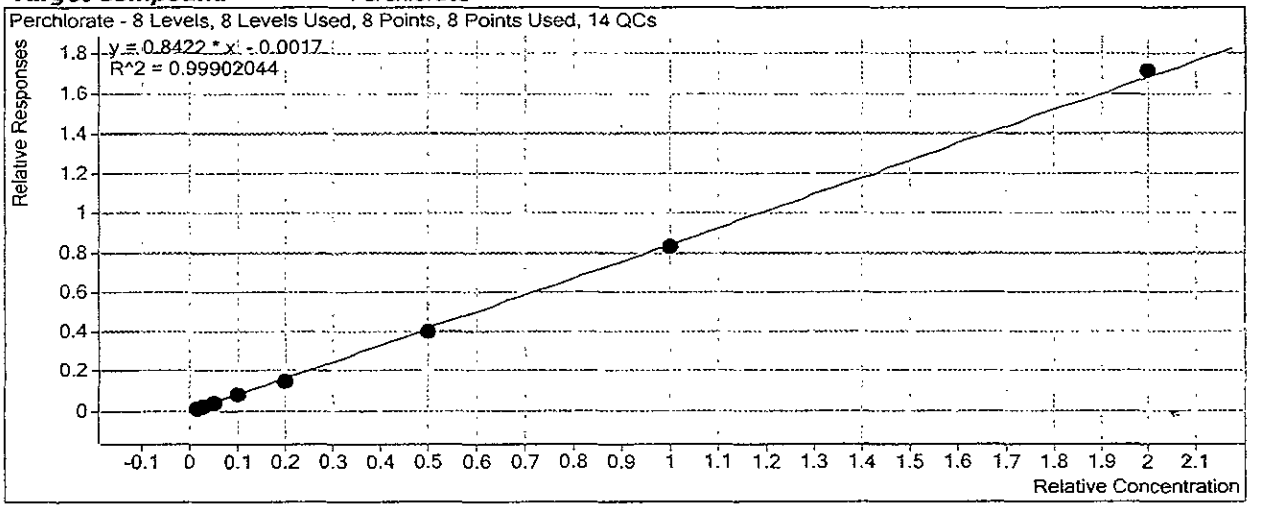
Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:08
Analyst	lores
Data File	30JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.637	73655	99	83	4.96289	4.96289	1
Perchlorate-(35Cl18O4)	ISTD	9.625	176950	107	89			1
							-0.7 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24149	101	85	3.05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54819	109	91	3.23	2.30	3.80	In Control

Compound Graphics

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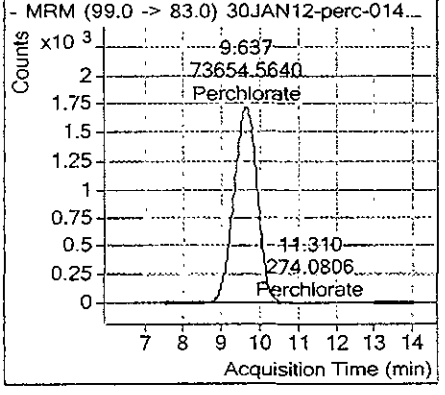
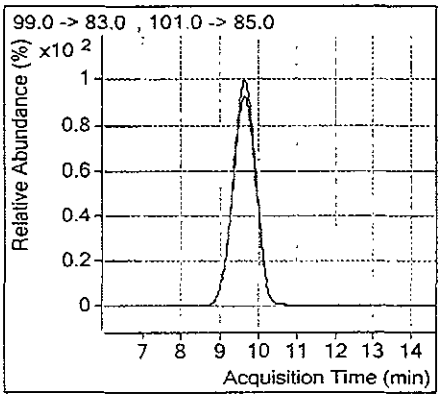
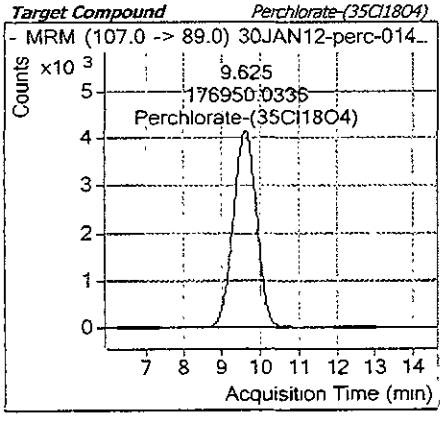
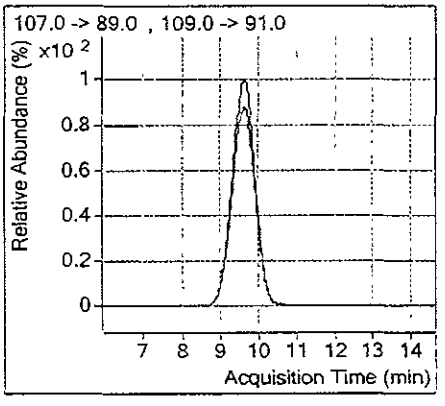
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:25
Analyst	lores
Data File	30JAN12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

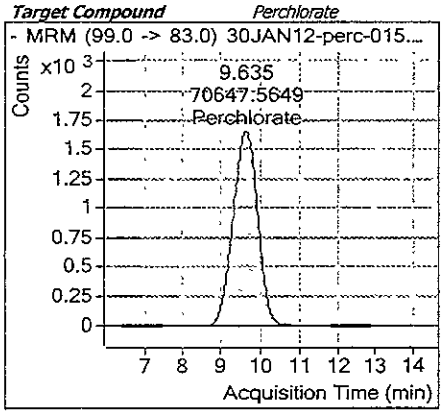
Quantitation Results

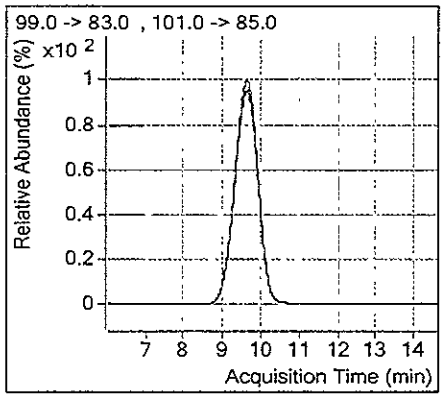
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 635	70648	99	83	4.82526	4.82526	1
Perchlorate-(35Cl18O4)	ISTD	9.633	174587	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23526	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53891	109	91	3.24	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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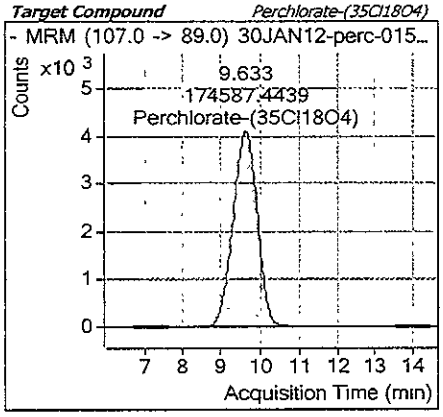
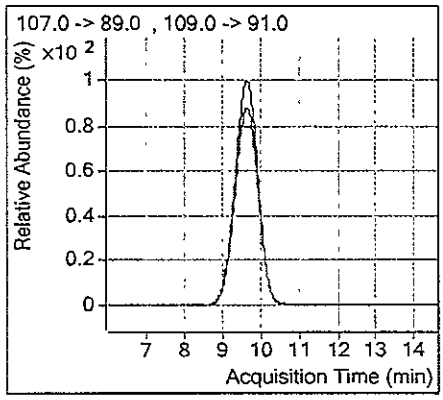
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:41
Analyst	lores
Data File	30JAN12-perc-016.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

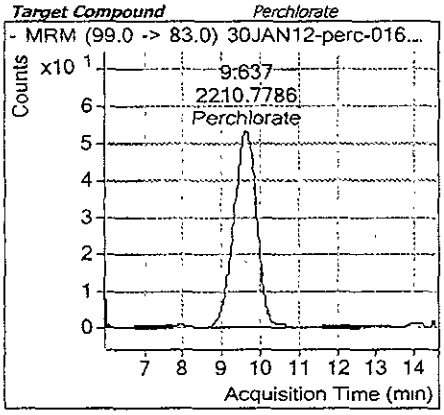
Quantitation Results

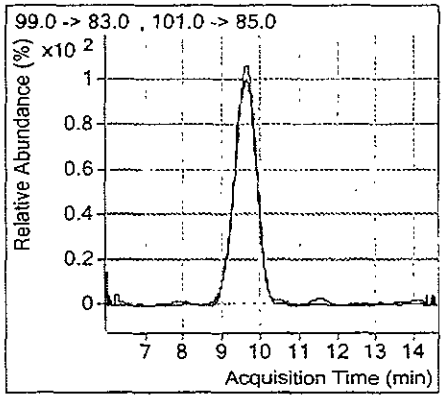
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.637	2211	99	83	0.16957	0.16957	1
Perchlorate-(35Cl18O4)	ISTD	9.626	176047	107	89			1
							13.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	816	101	85	2.71	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56164	109	91	3.13	2.30	3.80	In Control

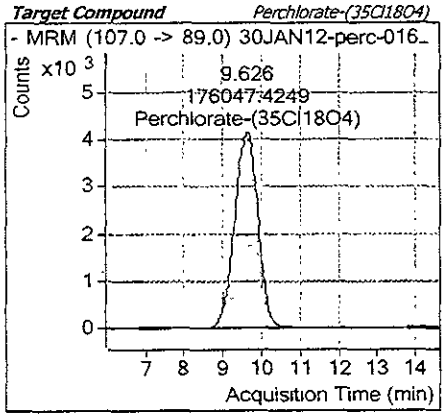
Compound Graphics

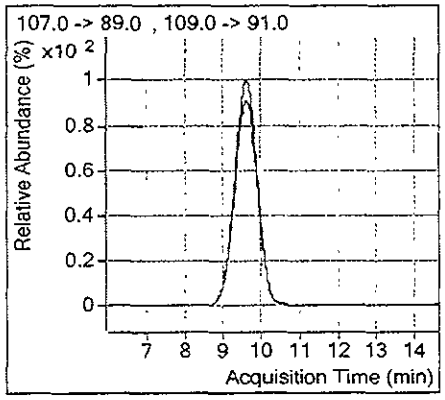
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 22:39
Analyst	lores
Data File	30JAN12-perc-027.d
Acquisition Method	PercMRM_2 m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.623	12992	99	83	0.99592	0.99592	1
Perchlorate-(35Cl18O4)	ISTD	9.621	158141	107	89			1
							-0.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4269	101	85	3.04	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	48975	109	91	3.23	2.30	3.80	In Control

Compound Graphics

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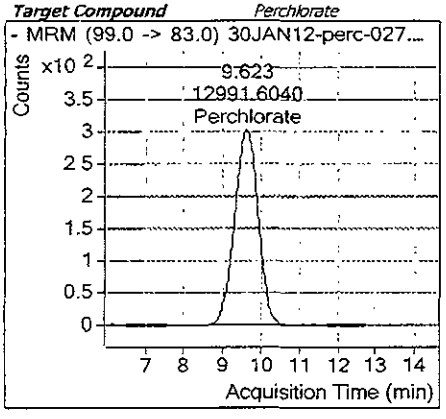
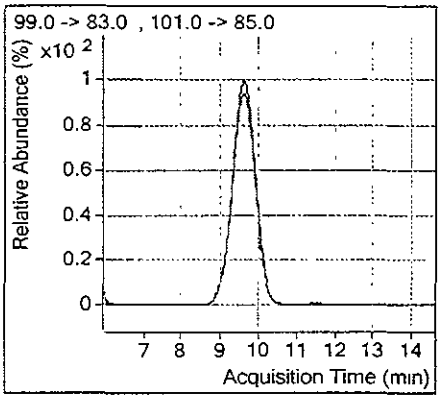
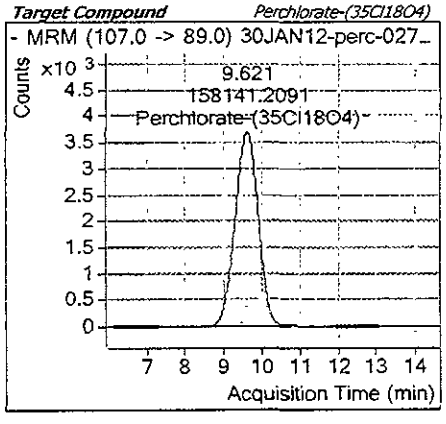
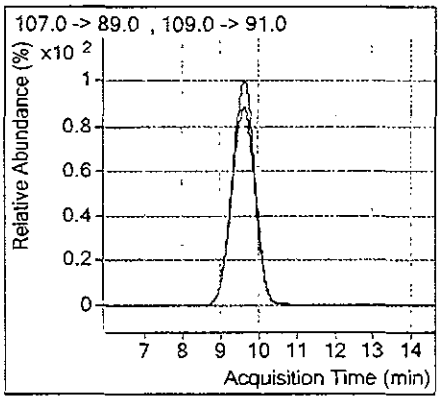
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 22:56
Analyst	lores
Data File	30JAN12-perc-028 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

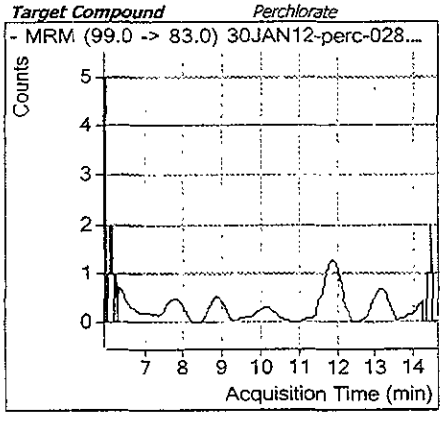
Quantitation Results

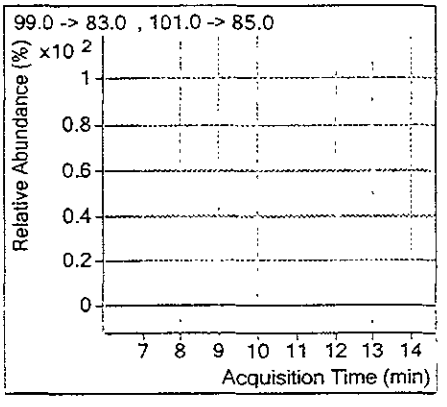
Name	Type	RT	Area	Precursor	Product		Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.623	151830	107	89			Perchlorate = ND	1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	48513	109	91	3.13	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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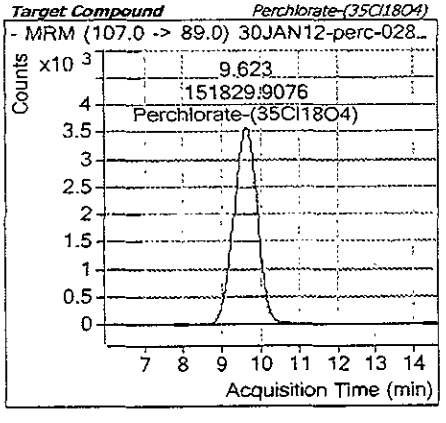
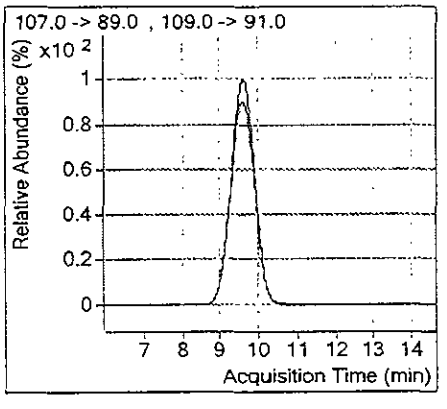
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:05
Analyst	lores
Data File	30JAN12-perc-036.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

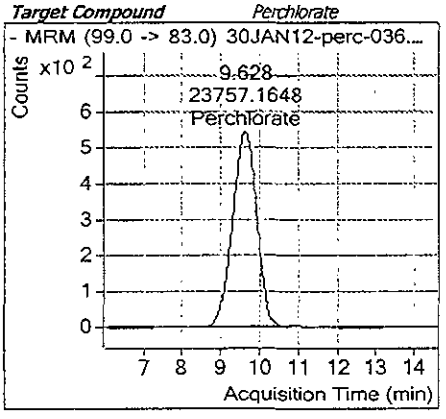
Quantitation Results

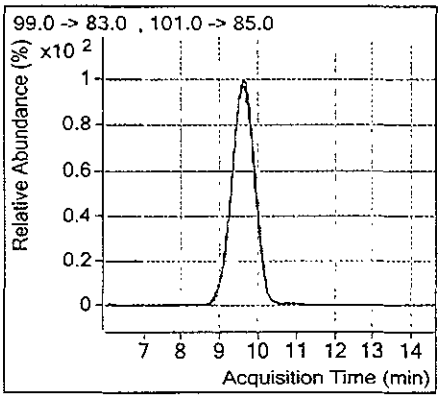
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.628	23757	99	83	1.93650	1.93650	1
Perchlorate-(35Cl18O4)	ISTD	9.619	147226	107	89			1
							-3.2 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	7810	101	85	3.04	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	46754	109	91	3.15	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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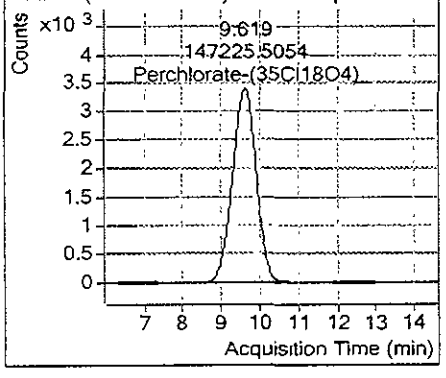
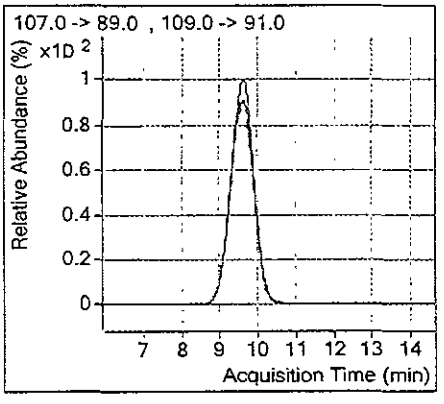
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:22
Analyst	lores
Data File	30JAN12-perc-037.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	CCV3
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0.50
Injection Volume	50

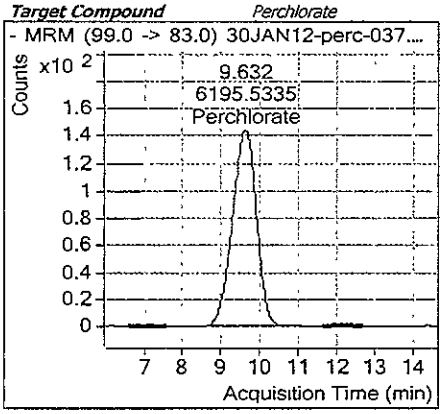
Quantitation Results

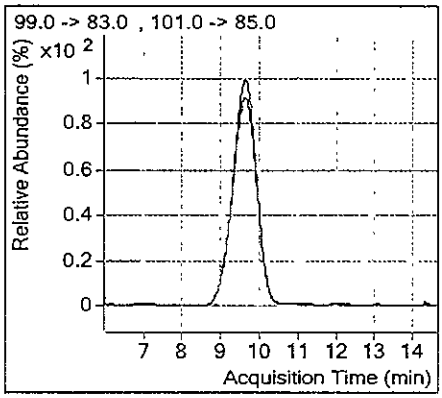
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 632	6196	99	83	**0.51721**	**0.51721**	1
Perchlorate-(35Cl18O4)	ISTD	9.622	148094	107	89			1
							3.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2035	101	85	3.04	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	47408	109	91	3.12	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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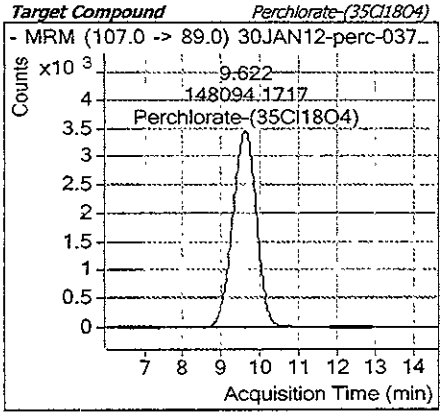
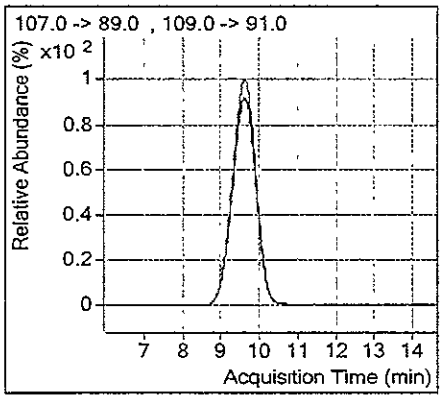
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:38
Analyst	lores
Data File	30JAN12-perc-038 d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

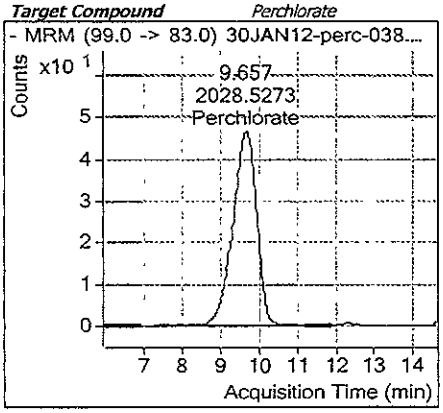
Quantitation Results

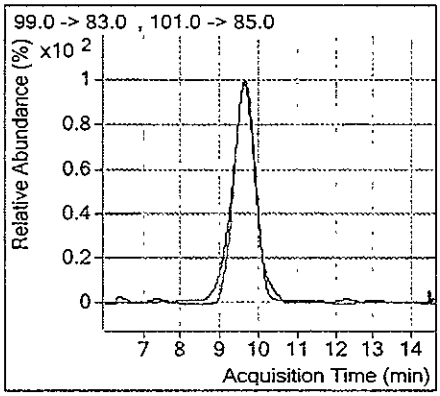
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 657	2029	99	83	0.16384	0.16384	1
Perchlorate-(35Cl18O4)	ISTD	9.633	167999	107	89			1
							9.2 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	640	101	85	3.17	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	53351	109	91	3.15	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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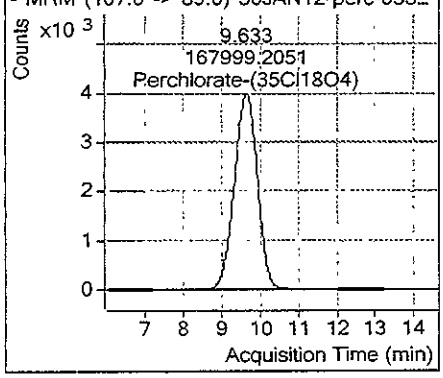
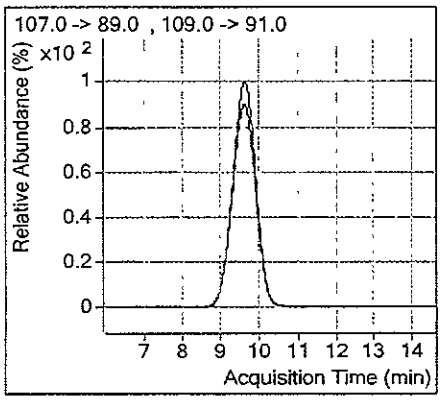
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:54
Analyst	lores
Data File	30JAN12-perc-039.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

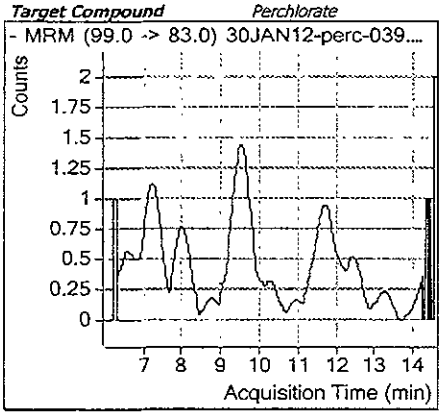
Quantitation Results

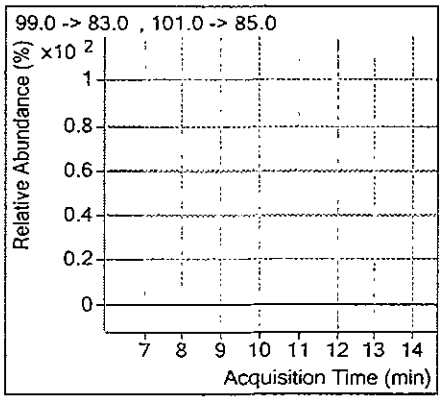
Name	Type	RT	Area	Precursor	Product		Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.636	167895	107	89				1
								Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53123	109	91	3.16	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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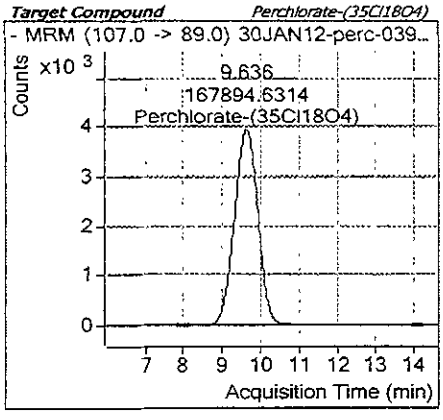
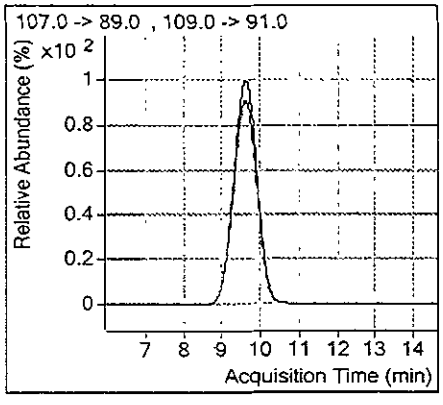
Target Compound *Perchlorate-(35Cl18O4)*





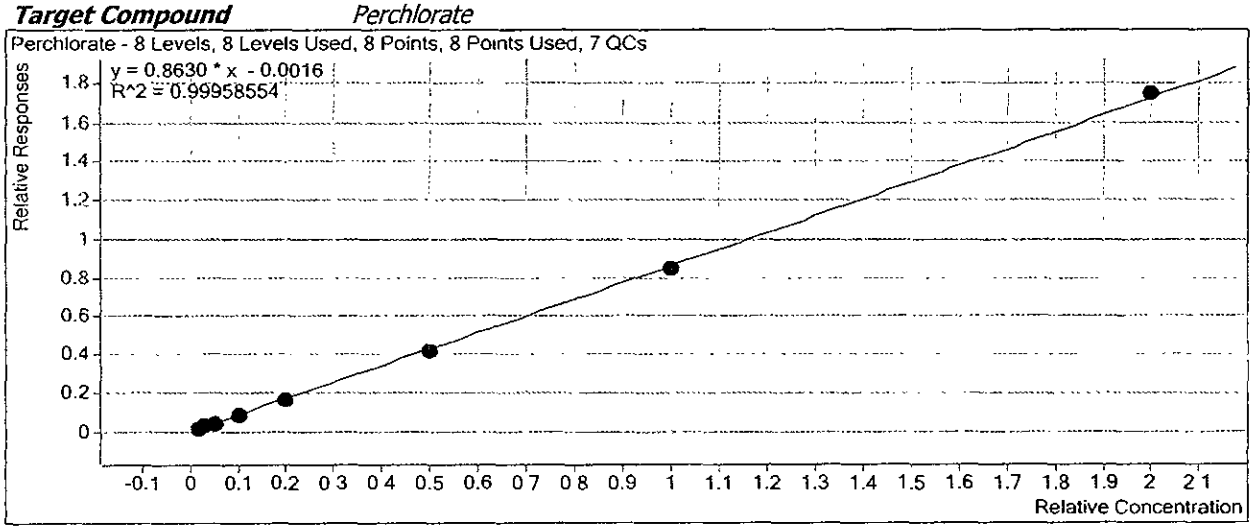
TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml		
Analysis Time	2/9/2012 8:16 PM	**Analyst Name**	lores
Report Time	2/9/2012 8:17 PM	**Reporter Name**	lores
Last Calib Update	2/9/2012 8:16 PM	**Batch State**	Processed

Calibration Info **Linear Fit, 1/x weighting, and origin ignored.**

Target Compound *Perchlorate*



DEG 2-9-2012

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:03
Analyst	lores
Data File	09FEB12-perc-014 d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

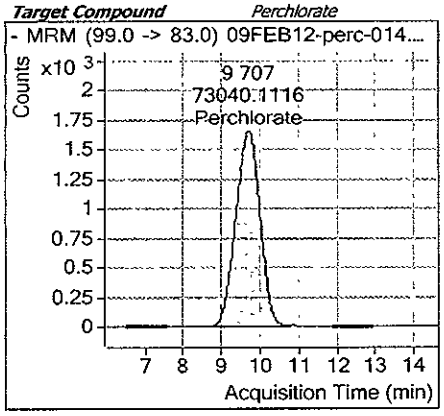
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.707	73040	99	83	4.95006	4.95006	1
Perchlorate-(35Cl18O4)	ISTD	9.705	171605	107	89			1
							-1.0 % Deviation	

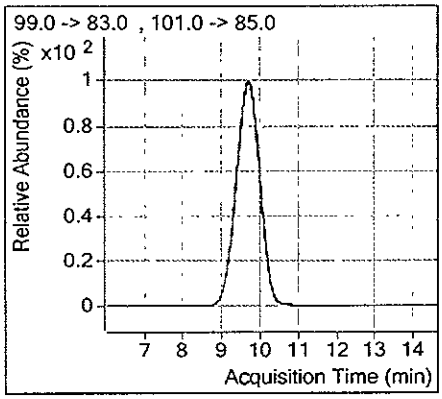
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24318	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53400	109	91	3.21	2.30	3.80	In Control

Compound Graphics

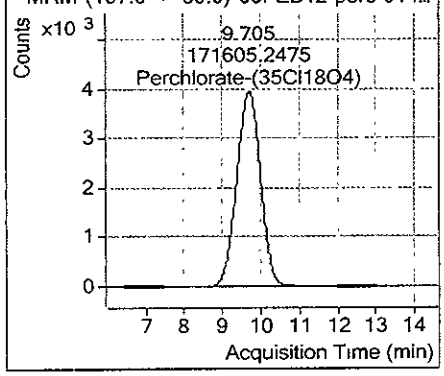
ICV in control
DR 2-9-12

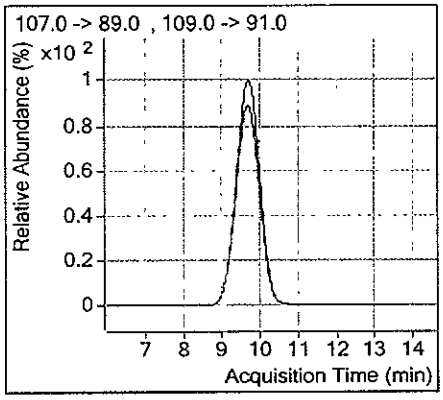
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:20
Analyst	lores
Data File	09FEB12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5 0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

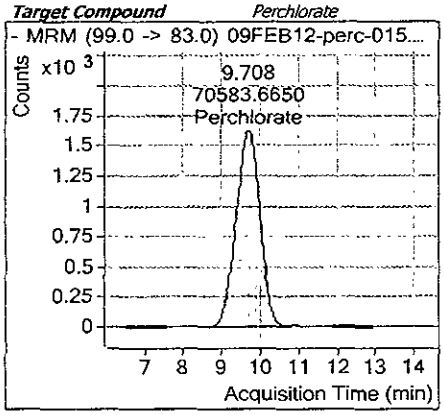
Quantitation Results

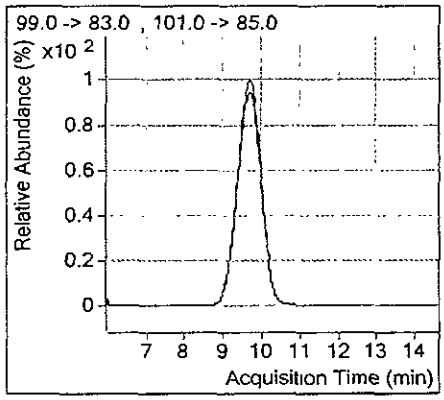
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.708	70584	99	83	4.82348	4.82348	1
Perchlorate-(35Cl18O4)	ISTD	9.698	170202	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23649	101	85	2.98	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55409	109	91	3.07	2.30	3.80	In Control

Compound Graphics

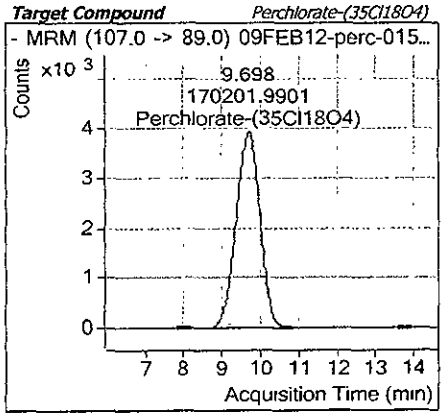
Target Compound *Perchlorate*

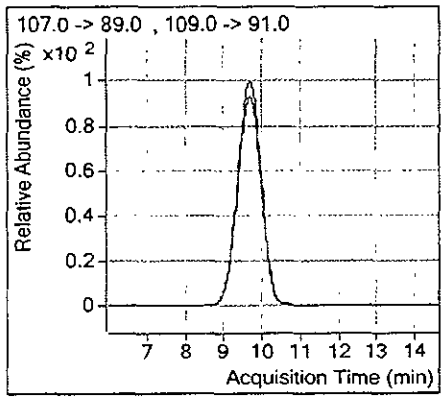




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:36
Analyst	lores
Data File	09FEB12-perc-016.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

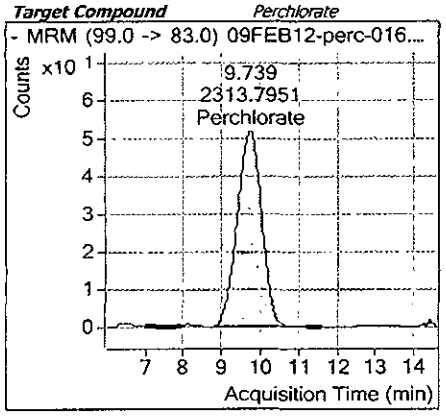
Quantitation Results

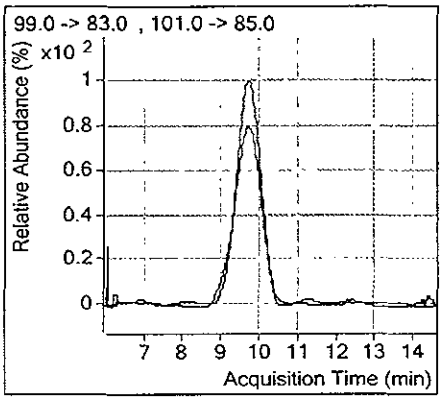
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.739	2314	99	83	0.17082	0.17082	1
Perchlorate-(35Cl18O4)	ISTD	9.704	175607	107	89			1
							13.9 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	699	101	85	3.31	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56496	109	91	3.11	2.30	3.80	In Control

Compound Graphics

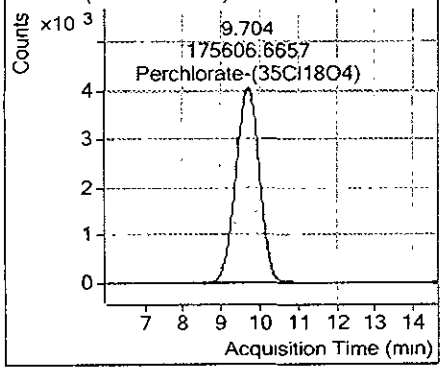
Target Compound *Perchlorate*

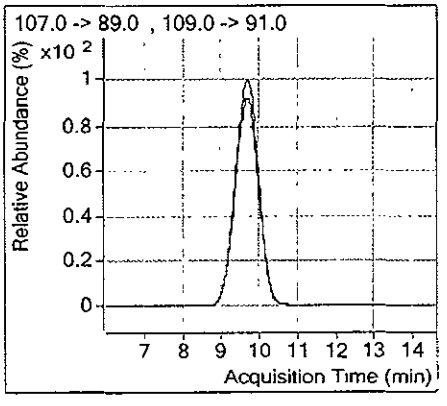




DCL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:57
Analyst	lores
Data File	09FEB12-perc-021.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45'55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

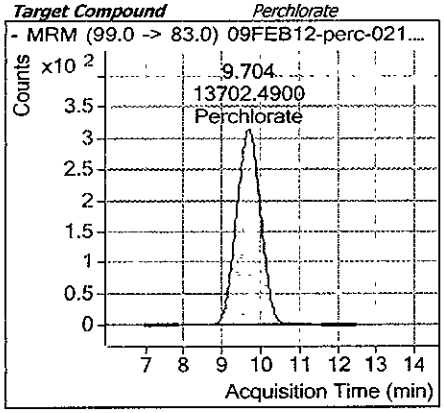
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.704	13702	99	83	**0.95018**	**0.95018**	1
Perchlorate-(35Cl18O4)	ISTD	9 708	170354	107	89			1
							-5.0 % Deviation	

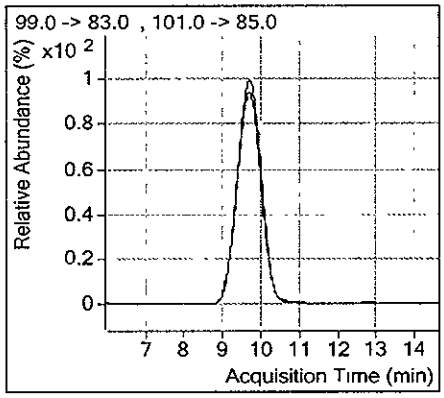
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4477	101	85	3.06	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	53905	109	91	3.16	2 30	3.80	In Control

Compound Graphics

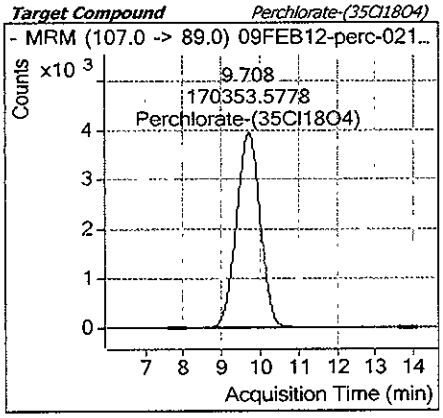
DEL 2-9-12

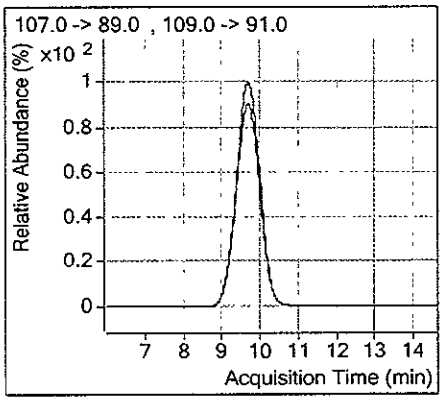
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 14:13
Analyst	lores
Data File	09FEB12-perc-022.d
Acquisition Method	PercMRM_2 m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0 15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

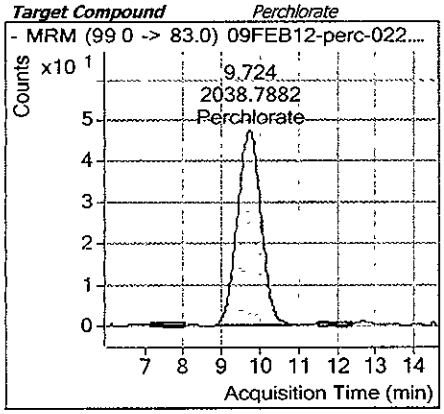
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 724	2039	99	83	0.15800	0.15800	1
Perchlorate-(35Cl18O4)	ISTD	9 713	168912	107	89			1
							5.3 % Deviation	

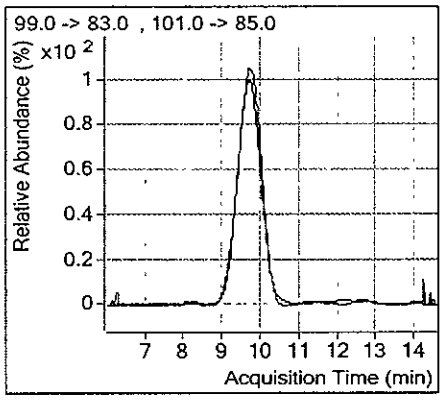
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	756	101	85	2 70	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	53870	109	91	3.14	2.30	3 80	In Control

Compound Graphics

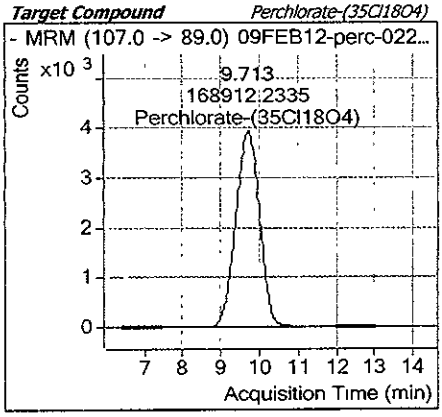
DEL 2-9-12

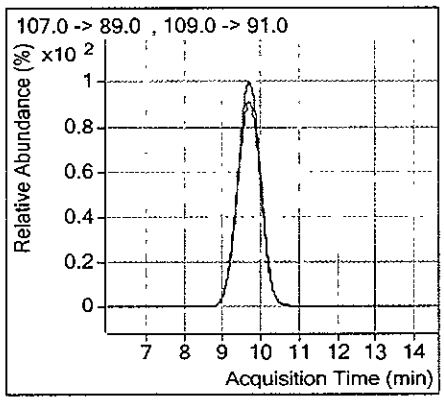
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

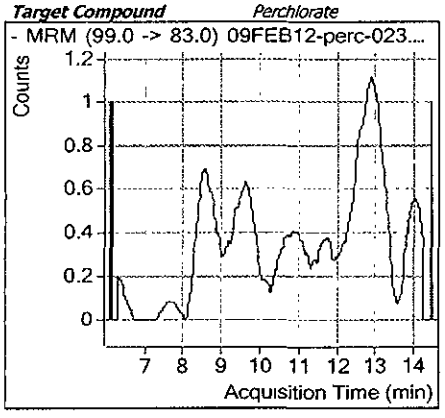
Analysis Information

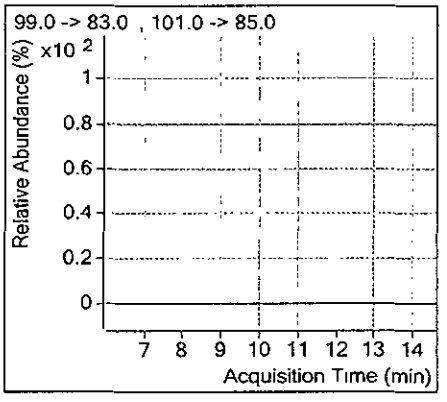
Acquisition Date - Time	2/9/2012 14:29
Analyst	lores
Data File	09FEB12-perc-023.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

No IS recovery - vial was emptied, see RI DGL 2-9-12

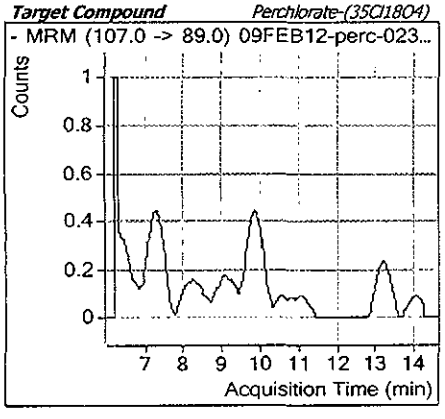
Compound Graphics

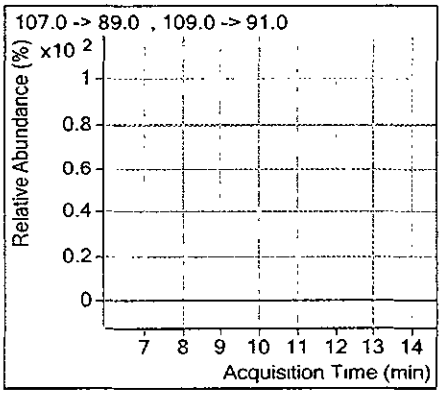
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:15
Analyst	lores
Data File	09FEB12-perc-024 d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1 00
Injection Volume	50

System re-started on standard DSU 2-9-12

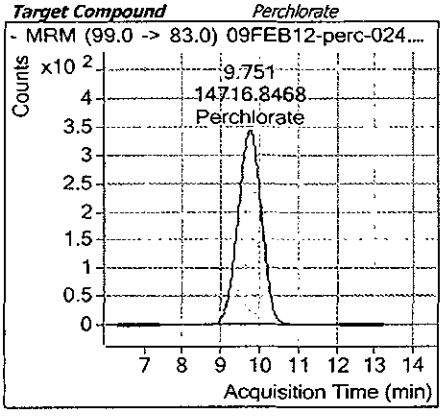
Quantitation Results

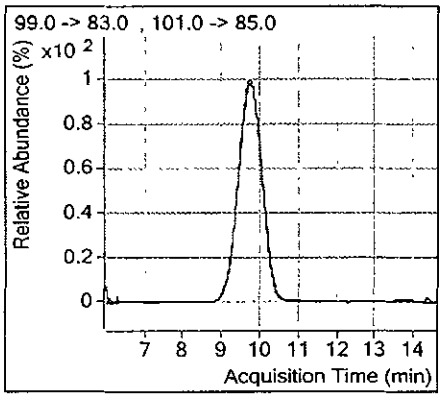
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.751	14717	99	83	0.94154	0.94154	1
Perchlorate-(35Cl18O4)	ISTD	9.754	184677	107	89			1
							-5.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5184	101	85	2.84	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	59614	109	91	3.10	2.30	3.80	In Control

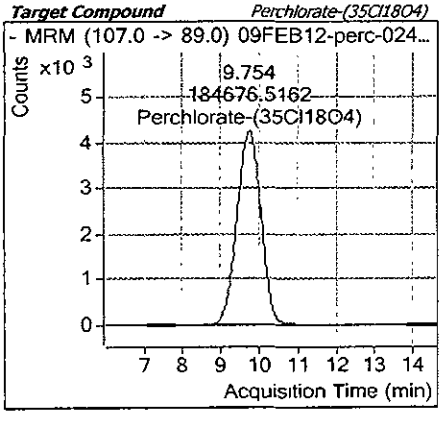
Compound Graphics

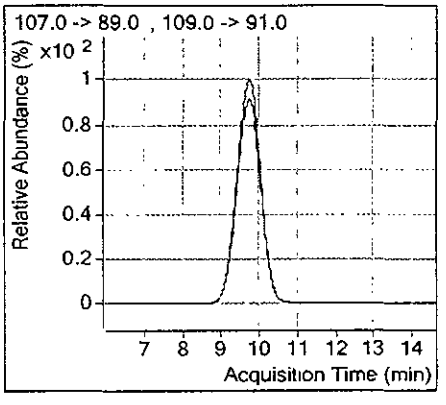
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:31
Analyst	lores
Data File	09FEB12-perc-025.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

Blank + IS in control. DEL 2-9-12

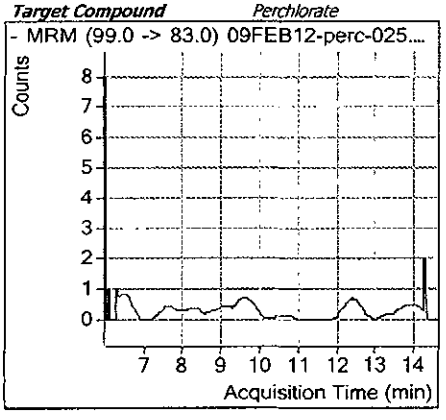
Quantitation Results

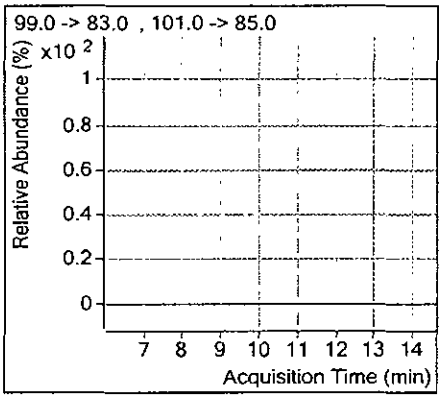
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.754	179947	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56904	109	91	3.16	2.30	3.80	In Control

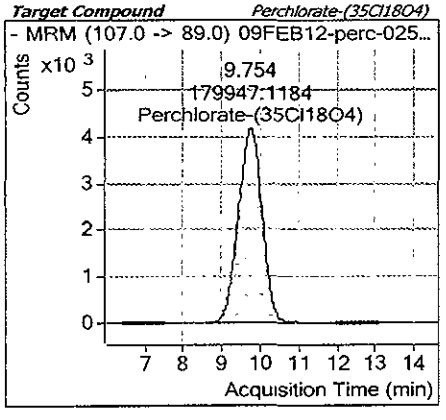
Compound Graphics

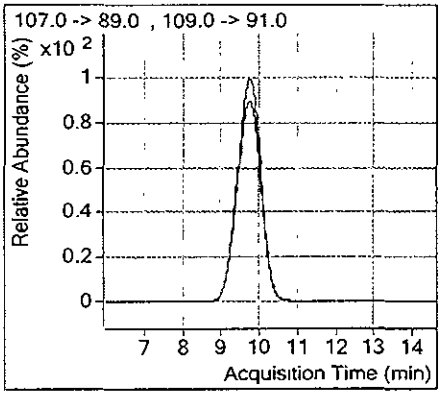
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 2025195, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + IS	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	M5_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate	Sample				
27JAN12-perc-004.d	Perchlorate	Sample				
27JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2801	109.9	
27JAN12-perc-006.d	Perchlorate	Calibration	0.3000	5404	102.3	
27JAN12-perc-007.d	Perchlorate	Calibration	0.5000	9177	99.0	
27JAN12-perc-008.d	Perchlorate	Calibration	1.0000	17438	96.2	
27JAN12-perc-009.d	Perchlorate	Calibration	2.0000	34849	95.2	
27JAN12-perc-010.d	Perchlorate	Calibration	5.0000	87739	96.3	
27JAN12-perc-011.d	Perchlorate	Calibration	10.0000	171805	99.3	
27JAN12-perc-012.d	Perchlorate	Calibration	20.0000	306806	101.9	
27JAN12-perc-013.d	Perchlorate	Sample				
27JAN12-perc-014.d	Perchlorate	QC	5.0000	83936	101.3	
27JAN12-perc-015.d	Perchlorate	QC	5.0000	80689	97.6	
27JAN12-perc-016.d	Perchlorate	QC	0.1500	2565	106.0	
27JAN12-perc-017.d	Perchlorate	Sample				
27JAN12-perc-018.d	Perchlorate	QC	5.0000	23240	29.5	
27JAN12-perc-019.d	Perchlorate	QC	5.0000	22371	30.5	
27JAN12-perc-020.d	Perchlorate	Sample		14534		
27JAN12-perc-021.d	Perchlorate	Sample		34033		
27JAN12-perc-022.d	Perchlorate	Sample		32681		
27JAN12-perc-023.d	Perchlorate	Sample		16035		
27JAN12-perc-024.d	Perchlorate	Sample		15853		
27JAN12-perc-025.d	Perchlorate	Sample		14618		
27JAN12-perc-026.d	Perchlorate	QC	1.0000	14647	96.0	
27JAN12-perc-027.d	Perchlorate	Sample				
27JAN12-perc-028.d	Perchlorate	Sample		3998		

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	Perchlorate	Sample		2751	
27JAN12-perc-030.d	Perchlorate	Sample		6938	
27JAN12-perc-031.d	Perchlorate	Sample		6710	
27JAN12-perc-032.d	Perchlorate	Sample		742	
27JAN12-perc-033.d	Perchlorate	Sample		563	
27JAN12-perc-034.d	Perchlorate	QC	2.0000	27816	94.6
27JAN12-perc-035.d	Perchlorate	QC	0.1500	1981	106.2
27JAN12-perc-036.d	Perchlorate	Sample			
27JAN12-perc-037.d	Perchlorate	Sample			
27JAN12-perc-038.d	Perchlorate	QC	0.5000	7080	100.6
27JAN12-perc-039.d	Perchlorate	QC	0.5000	7079	96.1
27JAN12-perc-040.d	Perchlorate	Sample		196240	
27JAN12-perc-041.d	Perchlorate	Sample		11609	
27JAN12-perc-042.d	Perchlorate	QC	0.5000	18064	250.4
27JAN12-perc-043.d	Perchlorate	QC	0.5000	17693	256.4
27JAN12-perc-044.d	Perchlorate	QC	1.0000	8717	97.7
27JAN12-perc-045.d	Perchlorate	QC	0.1500	1287	109.4
27JAN12-perc-046.d	Perchlorate	Sample			
27JAN12-perc-047.d	Perchlorate	Sample			
27JAN12-perc-048.d	Perchlorate	QC	0.5000	7006	97.1
27JAN12-perc-049.d	Perchlorate	QC	0.5000	6922	96.5
27JAN12-perc-050.d	Perchlorate	Sample		276	
27JAN12-perc-051.d	Perchlorate	Sample		1203	
27JAN12-perc-052.d	Perchlorate	Sample		1180	
27JAN12-perc-053.d	Perchlorate	Sample			
27JAN12-perc-054.d	Perchlorate	QC	0.5000	6724	92.1
27JAN12-perc-055.d	Perchlorate	QC	0.5000	6720	95.2
27JAN12-perc-056.d	Perchlorate	Sample		154	
27JAN12-perc-057.d	Perchlorate	QC	2.0000	27081	91.2

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Perchlorate	Sample			
27JAN12-perc-059.d	Perchlorate	Sample			
27JAN12-perc-060.d	Perchlorate	Sample			
27JAN12-perc-061.d	Perchlorate	Sample		2937	
27JAN12-perc-062.d	Perchlorate	Sample			
27JAN12-perc-063.d	Perchlorate	Sample			
27JAN12-perc-064.d	Perchlorate	Sample			
27JAN12-perc-065.d	Perchlorate	QC	1.0000	13752	93.0
27JAN12-perc-066.d	Perchlorate	QC	0.1500	2043	102.5
27JAN12-perc-067.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
27JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		211488		
27JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	223283		
27JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	220220		
27JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	227031		
27JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218398		
27JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218746		
27JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	216575		
27JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	205344		
27JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178484	213510.2	Averge ICAL IS area response
27JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		215378	0.9	% Dev from average
27JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	196970	-7.7	
27JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	196515	-8.0	
27JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	212887	-0.3	
27JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		195538	-8.4	
27JAN12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	188710	-11.6	
27JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	175846	-17.6	
27JAN12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		153808	-28.0	
27JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		143338	-32.9	
27JAN12-perc-022.d	Perchlorate-(35Cl18O4)	Sample		145700	-31.8	
27JAN12-perc-023.d	Perchlorate-(35Cl18O4)	Sample		149523	-30.0	
27JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		138647	-35.1	
27JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		139526	-34.7	
27JAN12-perc-026.d	Perchlorate-(35Cl18O4)	QC	10.0000	183855	-13.9	
27JAN12-perc-027.d	Perchlorate-(35Cl18O4)	Sample		176320	-17.4	
27JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		163374	-23.5	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		164633	-22.9	
27JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		145400	-31.9	
27JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		152782	-28.4	
27JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		124945	-41.5	
27JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		126496	-40.8	
27JAN12-perc-034.d	Perchlorate-(35Cl18O4)	QC	10.0000	175657	-17.7	
27JAN12-perc-035.d	Perchlorate-(35Cl18O4)	QC	10.0000	164057	-23.2	
27JAN12-perc-036.d	Perchlorate-(35Cl18O4)	Sample		182675	-14.4	
27JAN12-perc-037.d	Perchlorate-(35Cl18O4)	Sample		173391	-18.8	
27JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	172284	-19.3	
27JAN12-perc-039.d	Perchlorate-(35Cl18O4)	QC	10.0000	180536	-15.4	
27JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		156395	-26.8	
27JAN12-perc-041.d	Perchlorate-(35Cl18O4)	Sample		178444	-16.4	
27JAN12-perc-042.d	Perchlorate-(35Cl18O4)	QC	10.0000	173173	-18.9	
27JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	165599	-22.4	
27JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	107420	-49.7	
27JAN12-perc-045.d	Perchlorate-(35Cl18O4)	QC	10.0000	103051	-51.7	— LOW DSK 2-9-12
27JAN12-perc-046.d	Perchlorate-(35Cl18O4)	Sample		159119	-25.5	
27JAN12-perc-047.d	Perchlorate-(35Cl18O4)	Sample		178313	-16.5	
27JAN12-perc-048.d	Perchlorate-(35Cl18O4)	QC	10.0000	176810	-17.2	
27JAN12-perc-049.d	Perchlorate-(35Cl18O4)	QC	10.0000	175833	-17.6	
27JAN12-perc-050.d	Perchlorate-(35Cl18O4)	Sample		183614	-14.0	
27JAN12-perc-051.d	Perchlorate-(35Cl18O4)	Sample		174824	-18.1	
27JAN12-perc-052.d	Perchlorate-(35Cl18O4)	Sample		184680	-13.5	
27JAN12-perc-053.d	Perchlorate-(35Cl18O4)	Sample		178081	-16.6	
27JAN12-perc-054.d	Perchlorate-(35Cl18O4)	QC	10.0000	179192	-16.1	
27JAN12-perc-055.d	Perchlorate-(35Cl18O4)	QC	10.0000	173155	-18.9	
27JAN12-perc-056.d	Perchlorate-(35Cl18O4)	Sample		184409	-13.6	
27JAN12-perc-057.d	Perchlorate-(35Cl18O4)	QC	10.0000	177470	-16.9	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Perchlorate-(35Cl18O4)	Sample		172615	-19.2
27JAN12-perc-059.d	Perchlorate-(35Cl18O4)	Sample		172828	-19.1
27JAN12-perc-060.d	Perchlorate-(35Cl18O4)	Sample		176299	-17.4
27JAN12-perc-061.d	Perchlorate-(35Cl18O4)	Sample		172234	-19.3
27JAN12-perc-062.d	Perchlorate-(35Cl18O4)	Sample		174129	-18.4
27JAN12-perc-063.d	Perchlorate-(35Cl18O4)	Sample		174800	-18.1
27JAN12-perc-064.d	Perchlorate-(35Cl18O4)	Sample		175962	-17.6
27JAN12-perc-065.d	Perchlorate-(35Cl18O4)	QC	10.0000	178353	-16.5
27JAN12-perc-066.d	Perchlorate-(35Cl18O4)	QC	10.0000	175950	-17.6
27JAN12-perc-067.d	Perchlorate-(35Cl18O4)	Sample		173900	-18.6

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
30JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/30/2012 16:10
30JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/30/2012 16:26
30JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/30/2012 16:43
30JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/30/2012 16:59
30JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/30/2012 17:15
30JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/30/2012 17:31
30JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/30/2012 17:47
30JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/30/2012 18:04
30JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/30/2012 18:20
30JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/30/2012 18:36
30JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/30/2012 18:52
30JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/30/2012 19:08
30JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/30/2012 19:25
30JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/30/2012 19:41
30JAN12-perc-017.d	G2A190474-2, 2026097, 20mL/20mL,	P1-A1		Sample	1/30/2012 19:57
30JAN12-perc-018.d	G2A300000-MB, 2030100, 20mL/20mL, 6850-L	P1-A2		Sample	1/30/2012 20:13
30JAN12-perc-019.d	G2A300000-LCS, 2030100, 20mL/20mL	P1-A3	LCS_5	QC	1/30/2012 20:30
30JAN12-perc-020.d	G2A300000-SMCS, 2030100, 20mL/20mL	P1-A4	LCS_5	QC	1/30/2012 20:46
30JAN12-perc-021.d	G2A300411-1, 2030100, 20mL/20mL, See 10X.	P1-A5		Sample	1/30/2012 21:02
30JAN12-perc-022.d	G2A300411-1MS, 2030100, 20mL/20mL, See 10X.	P1-A6	MS_5	QC	1/30/2012 21:18
30JAN12-perc-023.d	G2A300411-1SD, 2030100, 20mL/20mL, See 10X.	P1-A7	MS_5	QC	1/30/2012 21:34
30JAN12-perc-024.d	G2A300411-2, 2030100, 20mL/20mL, See 5X.	P1-A8		Sample	1/30/2012 21:51
30JAN12-perc-025.d	G2A300411-3, 2030100, 20mL/20mL,	P1-A9		Sample	1/30/2012 22:07
30JAN12-perc-026.d	G2A300411-4, 2030100, 20mL/20mL,	P1-B1		Sample	1/30/2012 22:23
30JAN12-perc-027.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/30/2012 22:39
30JAN12-perc-028.d	Blank + IS	P2-B1		Sample	1/30/2012 22:56

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

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30JAN12-perc-029.d	G2A300411-5, 2030100, 20mL/20mL,	P1-B2		Sample	1/30/2012 23:12
30JAN12-perc-030.d	G2A300411-6, 2030100, 20mL/20mL,	P1-B3		Sample	1/30/2012 23:28
30JAN12-perc-031.d	G2A300411-7, 2030100, 20mL/20mL, See 10X	P1-B4		Sample	1/30/2012 23:44
30JAN12-perc-032.d	G2A300411-8, 2030100, 20mL/20mL,	P1-B5		Sample	1/31/2012 00:00
30JAN12-perc-033.d	G2A300411-9, 2030100, 20mL/20mL,	P1-B6		Sample	1/31/2012 00:17
30JAN12-perc-034.d	G2A300411-10, 2030100, 20mL/20mL, See 20X.	P1-B7		Sample	1/31/2012 00:33
30JAN12-perc-035.d	G2A300411-11, 2030100, 20mL/20mL, See 5X.	P1-B8		Sample	1/31/2012 00:49
30JAN12-perc-036.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/31/2012 01:05
30JAN12-perc-037.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 01:22
30JAN12-perc-038.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/31/2012 01:38
30JAN12-perc-039.d	Blank + IS	P2-B1		Sample	1/31/2012 01:54
30JAN12-perc-040.d	G2A240000-MB, 2024070, 20mL/20mL, 8321-L	P1-B9		Sample	1/31/2012 02:10
30JAN12-perc-041.d	G2A240000-LCS, 2024070, 20mL/20mL	P1-C1	LCS_5	QC	1/31/2012 02:27
30JAN12-perc-042.d	G2A140424-2, 2024070, 20mL/20mL,	P1-C2		Sample	1/31/2012 02:43
30JAN12-perc-043.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/31/2012 02:59
30JAN12-perc-044.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 03:15
30JAN12-perc-045.d	Blank + IS	P2-B1		Sample	1/31/2012 03:31

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
30JAN12-perc-003.d	Perchlorate	Sample				
30JAN12-perc-004.d	Perchlorate	Sample				
30JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2026	104.9	
30JAN12-perc-006.d	Perchlorate	Calibration	0.3000	4944	108.9	
30JAN12-perc-007.d	Perchlorate	Calibration	0.5000	7259	95.8	
30JAN12-perc-008.d	Perchlorate	Calibration	1.0000	15254	100.5	
30JAN12-perc-009.d	Perchlorate	Calibration	2.0000	28929	93.3	
30JAN12-perc-010.d	Perchlorate	Calibration	5.0000	72105	95.4	
30JAN12-perc-011.d	Perchlorate	Calibration	10.0000	142254	99.0	
30JAN12-perc-012.d	Perchlorate	Calibration	20.0000	272408	102.2	
30JAN12-perc-013.d	Perchlorate	Sample				
30JAN12-perc-014.d	Perchlorate	QC	5.0000	73655	99.3	
30JAN12-perc-015.d	Perchlorate	QC	5.0000	70648	96.5	
30JAN12-perc-016.d	Perchlorate	QC	0.1500	2211	113.0	
30JAN12-perc-017.d	Perchlorate	Sample		1465		
30JAN12-perc-018.d	Perchlorate	Sample				
30JAN12-perc-019.d	Perchlorate	QC	5.0000	66709	97.5	
30JAN12-perc-020.d	Perchlorate	QC	5.0000	70205	97.4	
30JAN12-perc-021.d	Perchlorate	Sample		956389		
30JAN12-perc-022.d	Perchlorate	QC	5.0000	972901	2339.5	
30JAN12-perc-023.d	Perchlorate	QC	5.0000	868009	2313.7	
30JAN12-perc-024.d	Perchlorate	Sample		283786		
30JAN12-perc-025.d	Perchlorate	Sample		10275		
30JAN12-perc-026.d	Perchlorate	Sample		29669		
30JAN12-perc-027.d	Perchlorate	QC	1.0000	12992	99.6	
30JAN12-perc-028.d	Perchlorate	Sample				

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

30JAN12-perc-029.d	Perchlorate	Sample		3424	
30JAN12-perc-030.d	Perchlorate	Sample		19657	
30JAN12-perc-031.d	Perchlorate	Sample		579758	
30JAN12-perc-032.d	Perchlorate	Sample		30385	
30JAN12-perc-033.d	Perchlorate	Sample		32165	
30JAN12-perc-034.d	Perchlorate	Sample		1039235	
30JAN12-perc-035.d	Perchlorate	Sample		448862	
30JAN12-perc-036.d	Perchlorate	QC	2.0000	23757	96.8
30JAN12-perc-037.d	Perchlorate	QC	0.5000	6196	103.4
30JAN12-perc-038.d	Perchlorate	QC	0.1500	2029	109.2
30JAN12-perc-039.d	Perchlorate	Sample			
30JAN12-perc-040.d	Perchlorate	Sample			
30JAN12-perc-041.d	Perchlorate	QC	5.0000	63643	90.8
30JAN12-perc-042.d	Perchlorate	Sample		189330	
30JAN12-perc-043.d	Perchlorate	QC	1.0000	13861	98.4
30JAN12-perc-044.d	Perchlorate	QC	0.5000	7040	102.0
30JAN12-perc-045.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
30JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
30JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		186900		
30JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	175770		
30JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	191772		
30JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	187952		
30JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	184009		
30JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	186047		
30JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	180252		
30JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	170892		
30JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	158397	179386.6	Averge ICAL IS area response
30JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		181451	1.2	% Dev from average
30JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	176950	-1.4	
30JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	174587	-2.7	
30JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	176047	-1.9	
30JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		182656	1.8	
30JAN12-perc-018.d	Perchlorate-(35Cl18O4)	Sample		167687	-6.5	
30JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	163241	-9.0	
30JAN12-perc-020.d	Perchlorate-(35Cl18O4)	QC	10.0000	171871	-4.2	
30JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		104223	-41.9	
30JAN12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	98773	-44.9	
30JAN12-perc-023.d	Perchlorate-(35Cl18O4)	QC	10.0000	89109	-50.3	See 10X.
30JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		122508	-31.7	
30JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		149538	-16.6	
30JAN12-perc-026.d	Perchlorate-(35Cl18O4)	Sample		143226	-20.2	
30JAN12-perc-027.d	Perchlorate-(35Cl18O4)	QC	10.0000	158141	-11.8	
30JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		151830	-15.4	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

30JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		165587	-7.7	
30JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		163244	-9.0	
30JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		105044	-41.4	
30JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		147192	-17.9	
30JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		147371	-17.8	
30JAN12-perc-034.d	Perchlorate-(35Cl18O4)	Sample		82482	-54.0	See 20X.
30JAN12-perc-035.d	Perchlorate-(35Cl18O4)	Sample		107250	-40.2	
30JAN12-perc-036.d	Perchlorate-(35Cl18O4)	QC	10.0000	147226	-17.9	
30JAN12-perc-037.d	Perchlorate-(35Cl18O4)	QC	10.0000	148094	-17.4	
30JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	167999	-6.3	
30JAN12-perc-039.d	Perchlorate-(35Cl18O4)	Sample		167895	-6.4	
30JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		174636	-2.6	
30JAN12-perc-041.d	Perchlorate-(35Cl18O4)	QC	10.0000	167215	-6.8	
30JAN12-perc-042.d	Perchlorate-(35Cl18O4)	Sample		159377	-11.2	
30JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	170835	-4.8	
30JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	170789	-4.8	
30JAN12-perc-045.d	Perchlorate-(35Cl18O4)	Sample		165876	-7.5	

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCM50070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy
09FEB12-perc-003.d	Perchlorate	Sample			
09FEB12-perc-004.d	Perchlorate	Sample			
09FEB12-perc-005.d	Perchlorate	Calibration	0.1500	1994	98.5
09FEB12-perc-006.d	Perchlorate	Calibration	0.3000	4939	110.2
09FEB12-perc-007.d	Perchlorate	Calibration	0.5000	7366	99.0
09FEB12-perc-008.d	Perchlorate	Calibration	1.0000	14708	97.7
09FEB12-perc-009.d	Perchlorate	Calibration	2.0000	29275	96.8
09FEB12-perc-010.d	Perchlorate	Calibration	5.0000	72149	97.4
09FEB12-perc-011.d	Perchlorate	Calibration	10.0000	142220	99.0
09FEB12-perc-012.d	Perchlorate	Calibration	20.0000	267911	101.4
09FEB12-perc-013.d	Perchlorate	Sample			
09FEB12-perc-014.d	Perchlorate	QC	5.0000	73040	99.0
09FEB12-perc-015.d	Perchlorate	QC	5.0000	70584	96.5
09FEB12-perc-016.d	Perchlorate	QC	0.1500	2314	113.9
09FEB12-perc-017.d	Perchlorate	5ample			
09FEB12-perc-018.d	Perchlorate	QC	0.5000	6429	93.2
09FEB12-perc-019.d	Perchlorate	Sample		1270	
09FEB12-perc-020.d	Perchlorate	Sample		2732	
09FEB12-perc-021.d	Perchlorate	QC	1.0000	13702	95.0
09FEB12-perc-022.d	Perchlorate	QC	0.1500	2039	105.3
09FEB12-perc-023.d	Perchlorate	Sample			
09FEB12-perc-024.d	Perchlorate	QC	1.0000	14717	94.2
09FEB12-perc-025.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response		
09FEB12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
09FEB12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		178134		
09FEB12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178318		
09FEB12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	183239		
09FEB12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	179006		
09FEB12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	177774		
09FEB12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	176957		
09FEB12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	172263		
09FEB12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	166692		
09FEB12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	153143	173423.8	Average ICAL IS area response
09FEB12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		175351	1.1	% Deviation from ICAL IS average
09FEB12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	171605	-1.0	
09FEB12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	170202	-1.9	
09FEB12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	175607	1.3	
09FEB12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		170093	-1.9	
09FEB12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	166351	-4.1	
09FEB12-perc-019.d	Perchlorate-(35Cl18O4)	Sample		179135	3.3	
09FEB12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		17534S	1.1	
09FEB12-perc-021.d	Perchlorate-(35Cl18O4)	QC	10.0000	170354	-1.8	
09FEB12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	168912	-2.6	
09FE812-perc-023.d	Perchlorate-(35Cl18O4)	Sample			-100.0	(vial was emptied)
09FEB12-perc-024.d	Perchlorate-(35Cl18O4)	QC	10.0000	184677	6.5	
09FEB12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		179947	3.8	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

QC Summary

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQE631AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.486**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.483**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQE631AD **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**97**	**(80 - 120)**	**SW846 6850_DOD Handb**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AU-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 2025195, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + I5	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	MS_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCVS	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

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Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
30JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/30/2012 16:10
30JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/30/2012 16:26
30JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/30/2012 16:43
30JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/30/2012 16:59
30JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/30/2012 17:15
30JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/30/2012 17:31
30JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/30/2012 17:47
30JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/30/2012 18:04
30JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/30/2012 18:20
30JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/30/2012 18:36
30JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/30/2012 18:52
30JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/30/2012 19:08
30JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/30/2012 19:25
30JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/30/2012 19:41
30JAN12-perc-017.d ✓	G2A190474-2, 2026097, 20mL/20mL, RI	P1-A1		Sample	1/30/2012 19:57
30JAN12-perc-018.d	G2A300000-MB, 2030100, 20mL/20mL, 6850-L	P1-A2		Sample	1/30/2012 20:13
30JAN12-perc-019.d	G2A300000-LCS, 2030100, 20mL/20mL	P1-A3	LCS_5	QC	1/30/2012 20:30
30JAN12-perc-020.d	G2A300000-SMCS, 2030100, 20mL/20mL	P1-A4	LCS_5	QC	1/30/2012 20:46
30JAN12-perc-021.d	G2A300411-1, 2030100, 20mL/20mL, See 10X.	P1-A5		Sample	1/30/2012 21:02
30JAN12-perc-022.d	G2A300411-1MS, 2030100, 20mL/20mL, See 10X.	P1-A6	MS_5	QC	1/30/2012 21:18
30JAN12-perc-023.d	G2A300411-1SD, 2030100, 20mL/20mL, See 10X.	P1-A7	MS_S	QC	1/30/2012 21:34
30JAN12-perc-024.d	G2A300411-2, 2030100, 20mL/20mL, See 5X.	P1-A8		Sample	1/30/2012 21:51
30JAN12-perc-025.d	G2A300411-3, 2030100, 20mL/20mL,	P1-A9		Sample	1/30/2012 22:07
30JAN12-perc-026.d	G2A300411-4, 2030100, 20mL/20mL,	P1-B1		Sample	1/30/2012 22:23
30JAN12-perc-027.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/30/2012 22:39
30JAN12-perc-028.d	Blank + IS	P2-B1		Sample	1/30/2012 22:56

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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30JAN12-perc-029.d	G2A300411-5, 2030100, 20mL/20mL,	P1-B2		Sample	1/30/2012 23:12
30JAN12-perc-030.d	G2A300411-6, 2030100, 20mL/20mL,	P1-B3		Sample	1/30/2012 23:28
30JAN12-perc-031.d	G2A300411-7, 2030100, 20mL/20mL, See 10X	P1-B4		Sample	1/30/2012 23:44
30JAN12-perc-032.d	G2A300411-8, 2030100, 20mL/20mL,	P1-B5		Sample	1/31/2012 00:00
30JAN12-perc-033.d	G2A300411-9, 2030100, 20mL/20mL,	P1-B6		Sample	1/31/2012 00:17
30JAN12-perc-034.d	G2A300411-10, 2030100, 20mL/20mL, See 20X.	P1-B7		Sample	1/31/2012 00:33
30JAN12-perc-035.d	G2A300411-11, 2030100, 20mL/20mL, See 5X.	P1-B8		Sample	1/31/2012 00:49
30JAN12-perc-036.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/31/2012 01:05
30JAN12-perc-037.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 01:22
30JAN12-perc-038.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/31/2012 01:38
30JAN12-perc-039.d	Blank + IS	P2-81		5ample	1/31/2012 01:54
30JAN12-perc-040.d	G2A240000-MB, 2024070, 20mL/20mL, 8321-L	P1-89		5ample	1/31/2012 02:10
30JAN12-perc-041.d	G2A240000-LCS, 2024070, 20mL/20mL	P1-C1	LCS_5	QC	1/31/2012 02:27
30JAN12-perc-042.d	G2A140424-2, 2024070, 20mL/20mL,	P1-C2		Sample	1/31/2012 02:43
30JAN12-perc-043.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/31/2012 02:59
30JAN12-perc-044.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 03:15
30JAN12-perc-045.d	Blank + IS	P2-B1		Sample	1/31/2012 03:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL, RI	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL, RI	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

Sample Data

White Water Associates

Client Sample ID: 02MW01C-20120117

Dissolved HPLC

Lot-Sample #...:	G2A190474-001	Work Order #...:	MQAVQ1AJ	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D.\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 04:22
Analyst	lores
Data File	27JAN12-perc-050.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-1, 2026097, 20mL/20mL,
Sample Identification	MQAVQ1AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-C9
Exp. Concentration	
Injection Volume	50

Quantitation Results

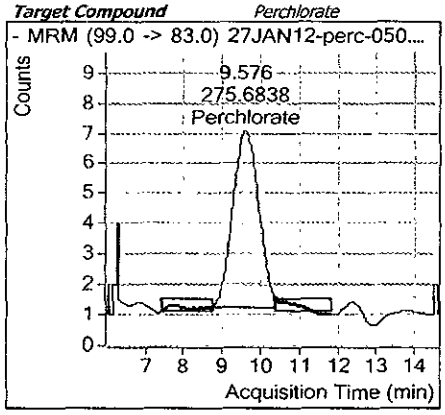
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.576	276	99	83	0.03402	0.03402	1
Perchlorate-(35Cl18O4)	ISTD	9.601	183614	107	89			1

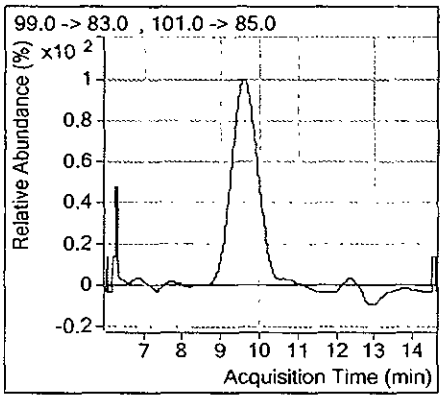
Result is < MDL => ND

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	58023	109	91	3 16	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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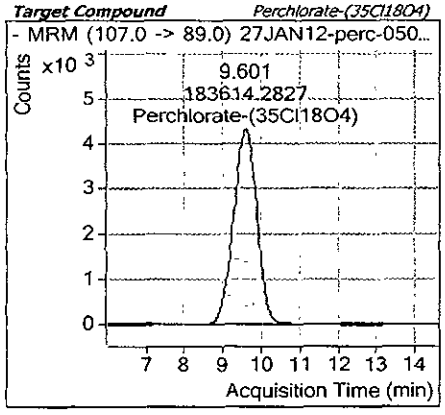
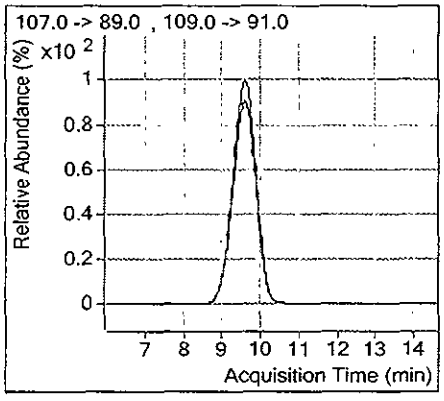
Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02MW01B-20120117

Dissolved HPLC

Lot-Sample #...:	G2A190474-002	Work Order #...:	MQAVR1AJ	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/30/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.12 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:57
Analyst	lores
Data File	30JAN12-perc-017.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-2, 2026097, 20mL/20mL, RI
Sample Identification	MQAVR1AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-A1
Exp. Concentration	
Injection Volume	50

Quantitation Results

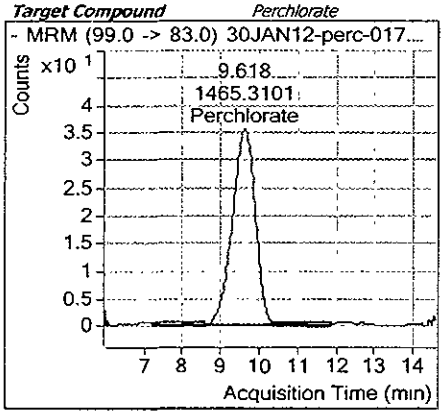
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.618	1465	99	83	0.11572	0.11572	1
Perchlorate-(35Cl18O4)	ISTD	9.623	182656	107	89			1

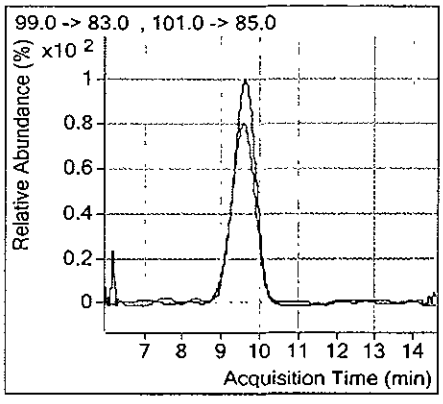
Result is J-Flag

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	425	101	85	3.45	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	57539	109	91	3.17	2.30	3.80	In Control

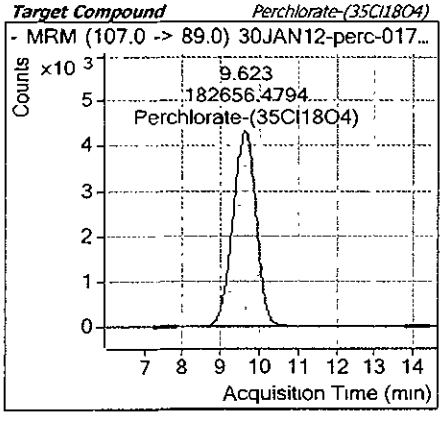
Compound Graphics

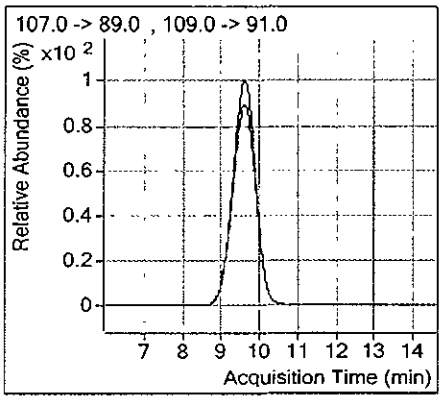
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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White Water Associates

Client Sample ID: 02MW01A-20120118

Dissolved HPLC

Lot-Sample #...:	G2A190474-003	**Work Order #...:**	MQAVT1AJ	**Matrix.....:**	WATER
Date Sampled...:	01/18/12	**Date Received..:**	01/19/12		
Prep Date.....:	01/26/12	**Analysis Date..:**	02/09/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	**Method.....:**	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.10 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:25
Analyst	lores
Data File	09FEB12-perc-019.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-3, 2026097, 20mL/20mL, RI.
Sample Identification	MQAVT1AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D2
Exp. Concentration	
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.725	1270	99	83	0.10029	0.10029	1
Perchlorate-(35Cl18O4)	ISTD	9 706	179135	107	89			1

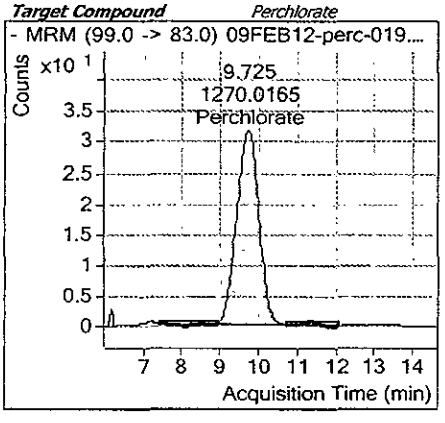
Result is J-Flag ✓

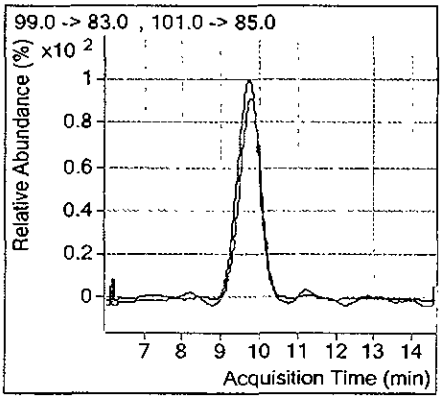
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	395	101	85	3 22	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56501	109	91	3.17	2.30	3.80	In Control

DEL 2-9-12

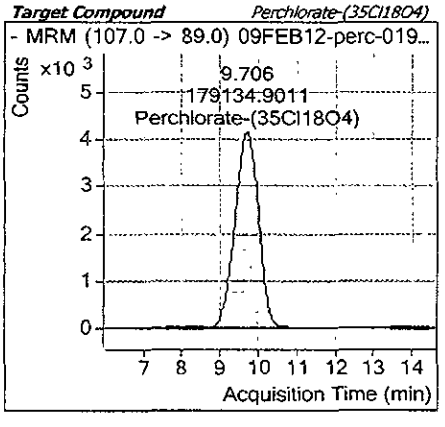
Compound Graphics

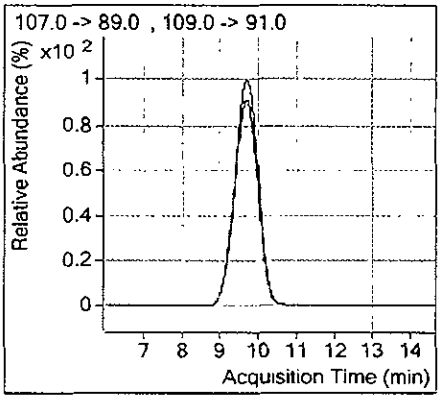
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02MW13B-20120118

Dissolved HPLC

Lot-Sample #...:	G2A190474-004	Work Order #...:	MQAVV1AJ	Matrix.....:	WATER
Date Sampled...:	01/18/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:10
Analyst	lores
Data File	27JAN12-perc-053 d
Acquisition Method	PercMRM_2 m
Sample Name	G2A190474-4, 2026097, 20mL/20mL,
Sample Identification	MQAVV1AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D3
Exp. Concentration	
Injection Volume	50

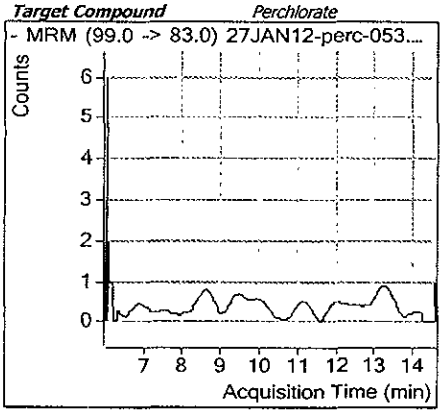
Quantitation Results

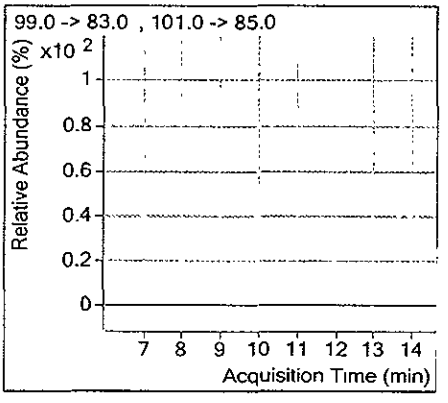
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.606	178081	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54797	109	91	3 25	2.30	3.80	In Control

Compound Graphics

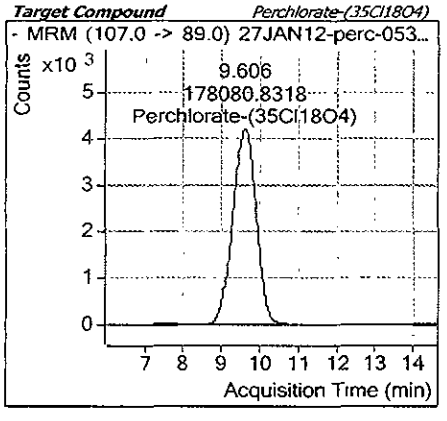
Target Compound *Perchlorate*

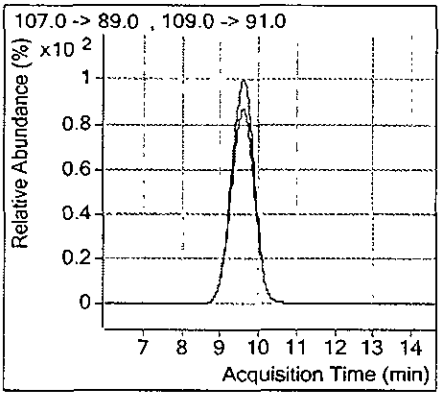




m 2/2/12

Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02MW13C-20120118

Dissolved HPLC

Lot-Sample #...:	G2A190474-005	Work Order #...:	MQAVW1AJ	Matrix.....:	WATER
Date Sampled...:	01/18/12	Date Received..:	01/19/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:59
Analyst	lores
Data File	27JAN12-perc-056.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-5, 2026097, 20mL/20mL,
Sample Identification	MQAVW1AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D6
Exp. Concentration	
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.513	154	99	83	0.02611	0.02611	1
Perchlorate-(35Cl18O4)	ISTD	9 600	184409	107	89			1

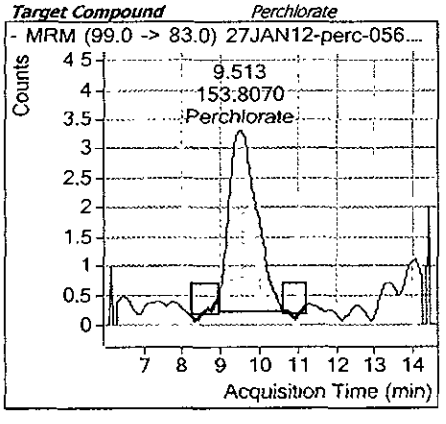
Result is < MDL => ND

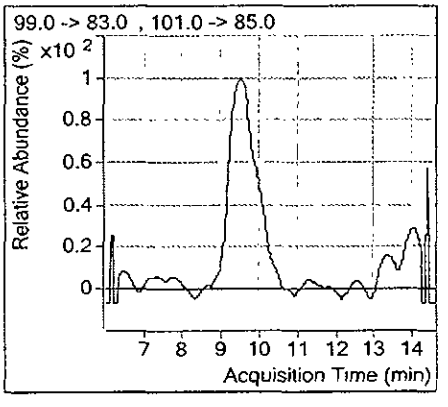
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	57161	109	91	3.23	2.30	3 80	In Control

Compound Graphics

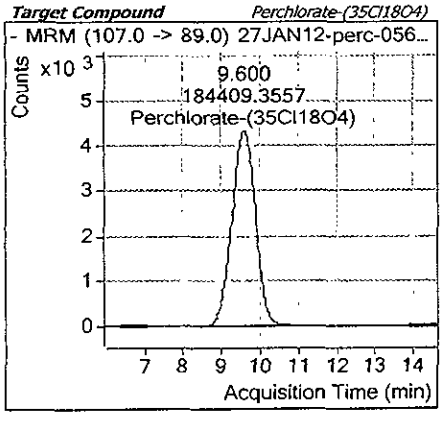
m 2/2/12

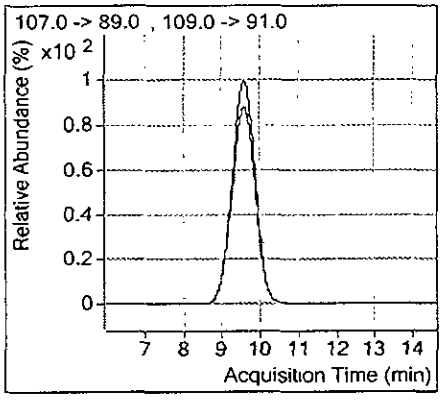
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Standards Data

ICAL Data

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

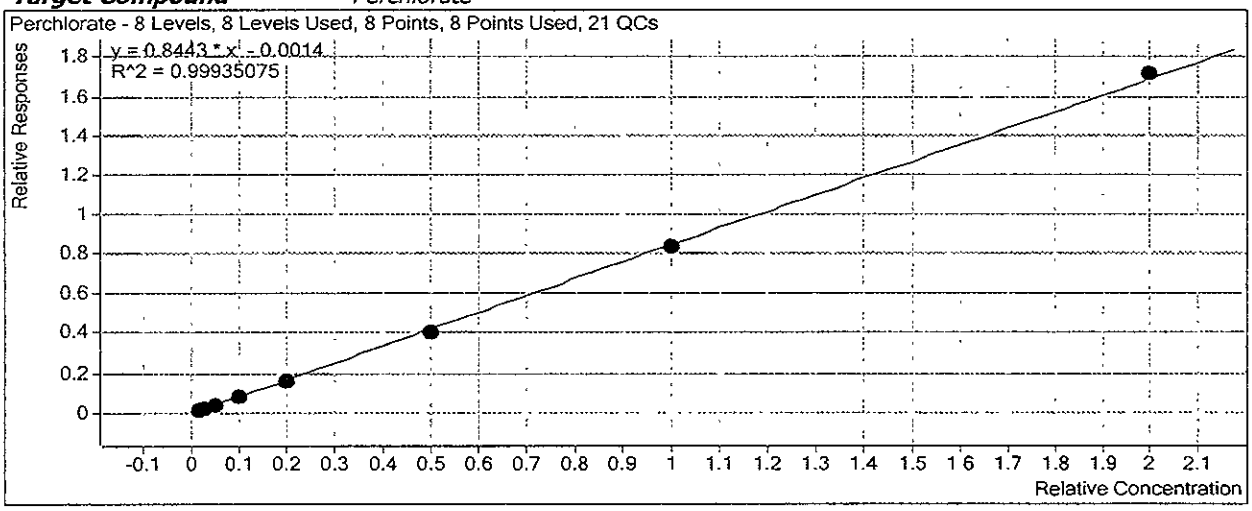
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml		
Analysis Time	1/30/2012 8:39 AM	**Analyst Name**	lores
Report Time	1/30/2012 11:50 AM	**Reporter Name**	lores
Last Calib Update	1/30/2012 8:39 AM	**Batch State**	ResultsDirty

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

mr 2/2/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
27JAN12-perc-005.d	1	☑	2801	0.8364	0.1500
27JAN12-perc-006.d	2	☑	5404	0.8180	0.3000
27JAN12-perc-007.d	3	☑	9177	0.8084	0.5000
27JAN12-perc-008.d	4	☑	17438	0.7985	1.0000
27JAN12-perc-009.d	5	☑	34849	0.7966	2.0000
27JAN12-perc-010.d	6	☑	87739	0.8102	5.0000
27JAN12-perc-011.d	7	☑	171805	0.8367	10.0000
27JAN12-perc-012.d	8	☑	306806	0.8595	20.0000
27JAN12-perc-026.d	CCV4	☑	14647	0.7967	1.0000
27JAN12-perc-044.d	CCV4	☑	8717	0.8115	1.0000
27JAN12-perc-065.d	CCV4	☑	13752	0.7711	1.0000
27JAN12-perc-034.d	CCV5	☑	27816	0.7918	2.0000
27JAN12-perc-057.d	CCV5	☑	27081	0.7630	2.0000
27JAN12-perc-015.d	CCV6	☑	80689	0.8212	5.0000
27JAN12-perc-014.d	ICV	☑	83936	0.8523	5.0000
27JAN12-perc-038.d	LCS_0.5	☑	7080	0.8219	0.5000
27JAN12-perc-039.d	LCS_0.5	☑	7079	0.7842	0.5000
27JAN12-perc-048.d	LCS_0.5	☑	7006	0.7925	0.5000
27JAN12-perc-049.d	LCS_0.5	☑	6922	0.7874	0.5000
27JAN12-perc-018.d	LCS_5	☑	23240	0.2463	5.0000
27JAN12-perc-016.d	LODV	☑	2565	0.8032	0.1500
27JAN12-perc-035.d	LODV	☑	1981	0.8050	0.1500
27JAN12-perc-045.d	LODV	☑	1287	0.8323	0.1500
27JAN12-perc-066.d	LODV	☑	2043	0.7741	0.1500
27JAN12-perc-042.d	MS_0.5	☑	18064	2.0862	0.5000
27JAN12-perc-043.d	MS_0.5	☑	17693	2.1369	0.5000
27JAN12-perc-054.d	MS_0.5	☑	6724	0.7504	0.5000
27JAN12-perc-055.d	MS_0.5	☑	6720	0.7762	0.5000
27JAN12-perc-019.d	SMCS_5	☑	22371	0.2544	5.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate-(35Cl1804)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
27JAN12-perc-005.d	1	☑	223283	22328.3439	10.0000
27JAN12-perc-006.d	2	☑	220220	22021.9775	10.0000
27JAN12-perc-007.d	3	☑	227031	22703.0640	10.0000
27JAN12-perc-008.d	4	☑	218398	21839.7995	10.0000
27JAN12-perc-009.d	5	☑	218746	21874.5646	10.0000
27JAN12-perc-010.d	6	☑	216575	21657.5147	10.0000
27JAN12-perc-011.d	7	☑	205344	20534.4160	10.0000
27JAN12-perc-012.d	8	☑	178484	17848.4489	10.0000
27JAN12-perc-026.d	CCV4	☑	183855	18385.5154	10.0000
27JAN12-perc-044.d	CCV4	☑	107420	10741.9537	10.0000
27JAN12-perc-065.d	CCV4	☑	178353	17835.3074	10.0000
27JAN12-perc-034.d	CCV5	☑	175657	17565.7066	10.0000
27JAN12-perc-057.d	CCV5	☑	177470	17747.0487	10.0000
27JAN12-perc-015.d	CCV6	☑	196515	19651.4754	10.0000
27JAN12-perc-014.d	ICV	☑	196970	19696.9696	10.0000
27JAN12-perc-038.d	LCS_0.5	☑	172284	17228.3545	10.0000
27JAN12-perc-039.d	LCS_0.5	☑	180536	18053.6126	10.0000
27JAN12-perc-048.d	LCS_0.5	☑	176810	17680.9925	10.0000
27JAN12-perc-049.d	LCS_0.5	☑	175833	17583.3074	10.0000
27JAN12-perc-018.d	LCS_5	☑	188710	18870.9781	10.0000
27JAN12-perc-016.d	LODV	☑	212887	21288.7084	10.0000
27JAN12-perc-035.d	LODV	☑	164057	16405.7304	10.0000
27JAN12-perc-045.d	LODV	☑	103051	10305.1475	10.0000
27JAN12-perc-066.d	LODV	☑	175950	17595.0222	10.0000
27JAN12-perc-042.d	MS_0.5	☑	173173	17317.3067	10.0000
27JAN12-perc-043.d	MS_0.5	☑	165599	16559.8879	10.0000
27JAN12-perc-054.d	MS_0.5	☑	179192	17919.1933	10.0000
27JAN12-perc-055.d	MS_0.5	☑	173155	17315.5084	10.0000
27JAN12-perc-019.d	SMCS_5	☑	175846	17584.6275	10.0000

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

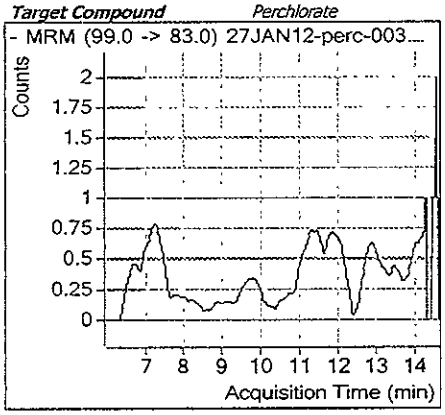
Acquisition Date - Time	1/27/2012 15:39
Analyst	lores
Data File	27JAN12-perc-003 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank No IS
Sample Identification	BLANK
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-A5
Exp. Concentration	
Injection Volume	50

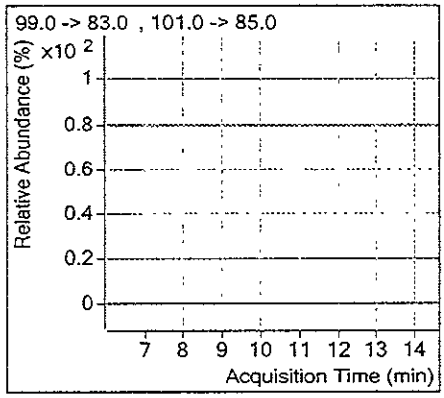
Perchlorate = ND

mr 2/2/12

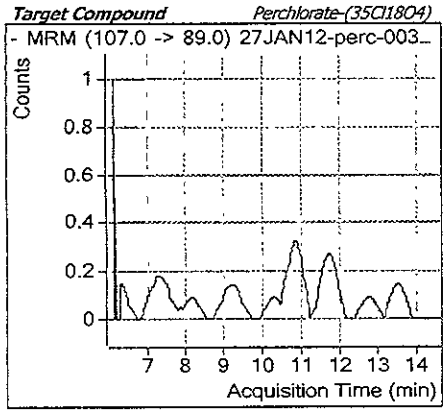
Compound Graphics

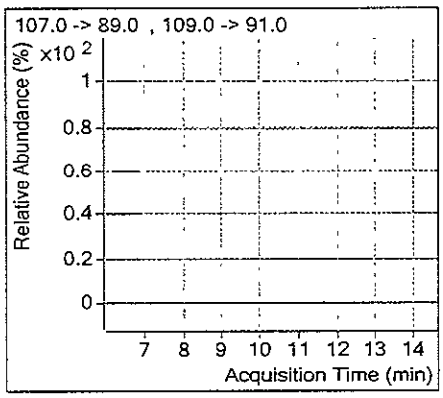
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 15:55
Analyst	lores
Data File	27JAN12-perc-004 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

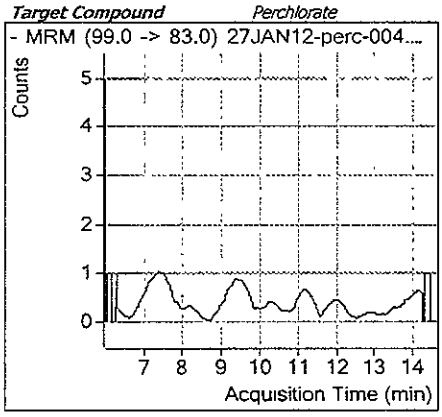
Quantitation Results

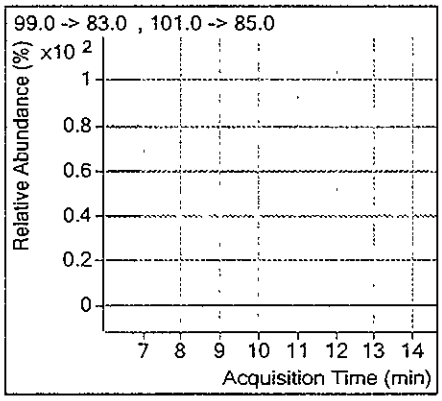
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.740	211488	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	67082	109	91	3.15	2.30	3.80	In Control

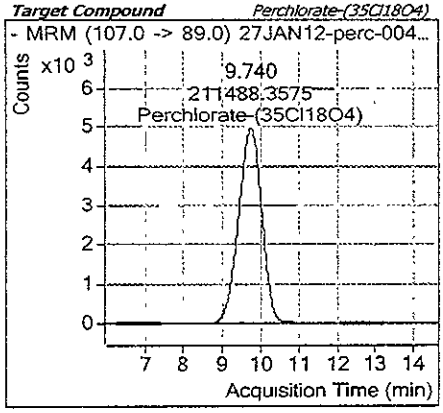
Compound Graphics

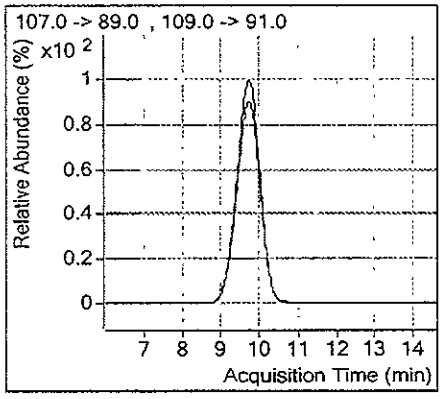
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:12
Analyst	lores
Data File	27JAN12-perc-005.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	ICAL-1
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

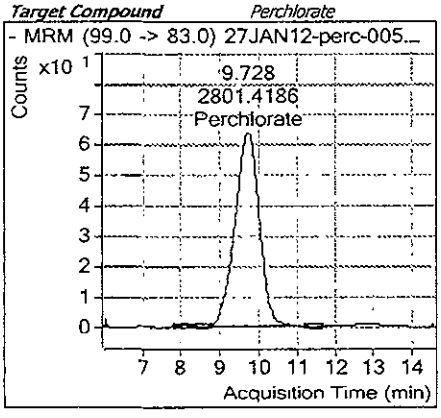
Quantitation Results

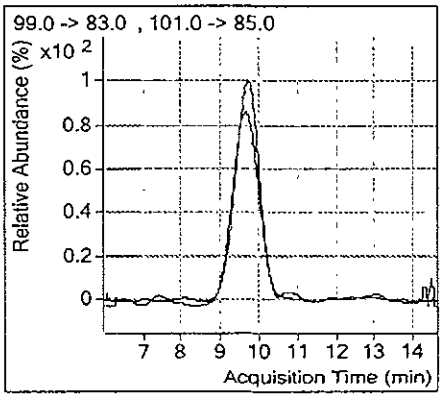
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.728	2801	99	83	0.16484	0.16484	1
Perchlorate-(35Cl18O4)	ISTD	9.716	223283	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	895	101	85	3 13	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	71658	109	91	3.12	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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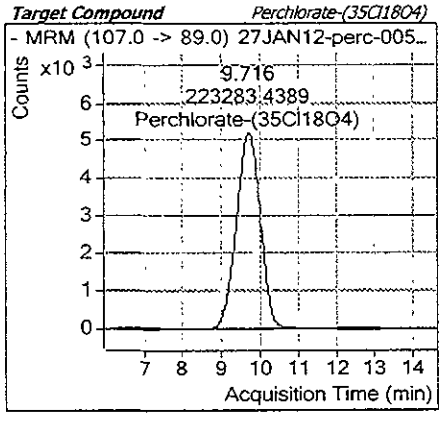
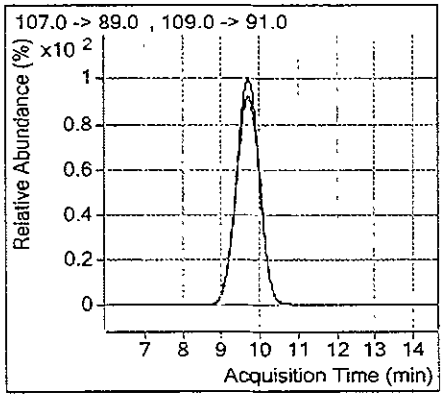
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:28
Analyst	lores
Data File	27JAN12-perc-006 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL
Sample Identification	ICAL-2
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B3
Exp. Concentration	0.30
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 714	5404	99	83	**0.30689**	**0.30689**	1
Perchlorate-(35Cl18O4)	ISTD	9 707	220220	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2038	101	85	2.65	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	68780	109	91	3.20	2.30	3.80	In Control

Compound Graphics

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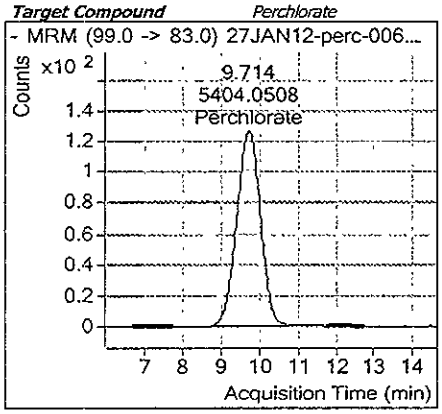
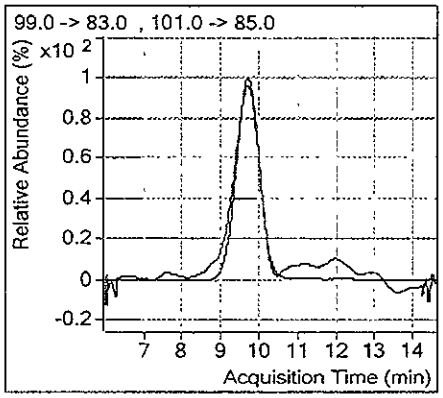
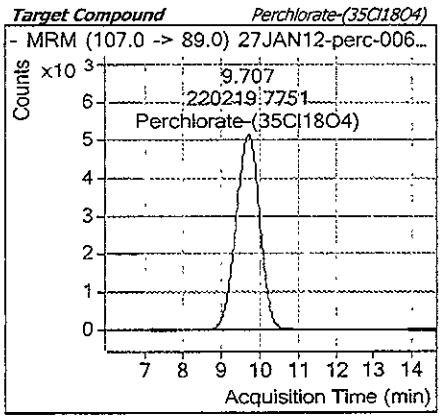
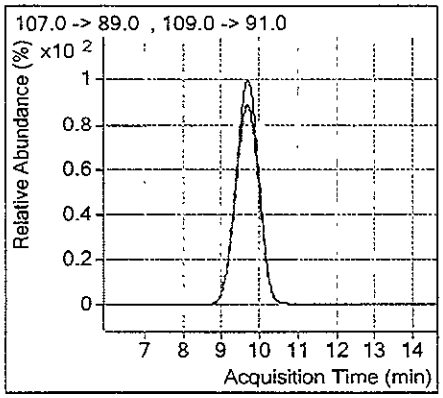
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:44
Analyst	lores
Data File	27JAN12-perc-007 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	ICAL-3
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B4
Exp. Concentration	0.50
Injection Volume	50

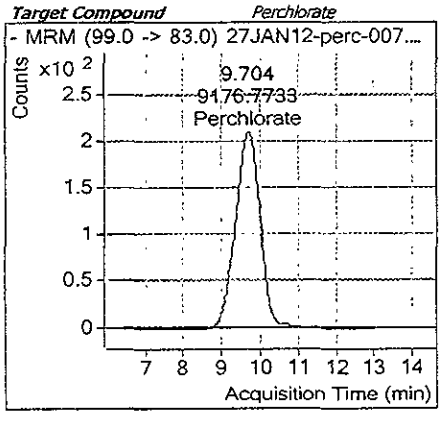
Quantitation Results

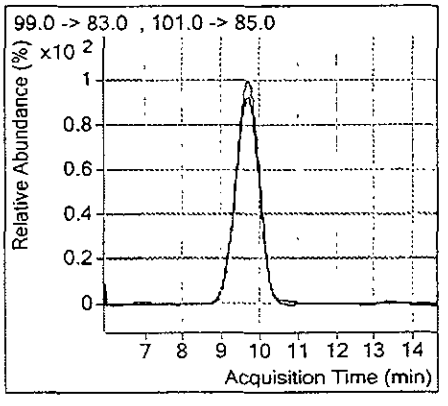
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.704	9177	99	83	0.49501	0.49501	1
Perchlorate-(35Cl18O4)	ISTD	9.693	227031	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2908	101	85	3.16	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	73266	109	91	3.10	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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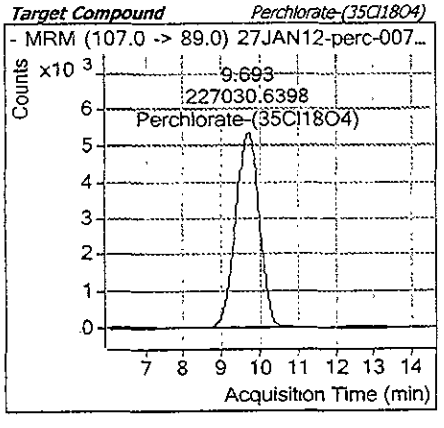
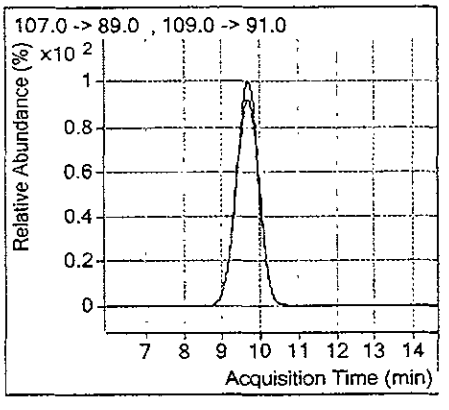
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:00
Analyst	lores
Data File	27JAN12-perc-008.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	ICAL-4
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.690	17438	99	83	0.96199	0.96199	1
Perchlorate-(35Cl18O4)	ISTD	9.683	218398	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	6124	101	85	2.85	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	68833	109	91	3.17	2.30	3.80	In Control

Compound Graphics

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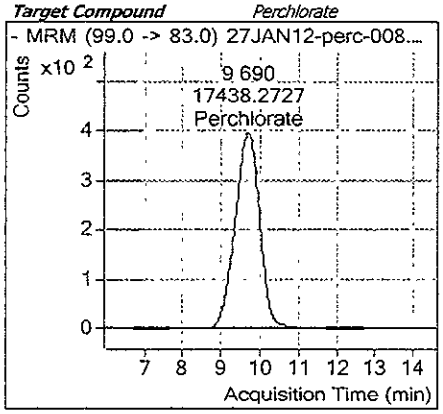
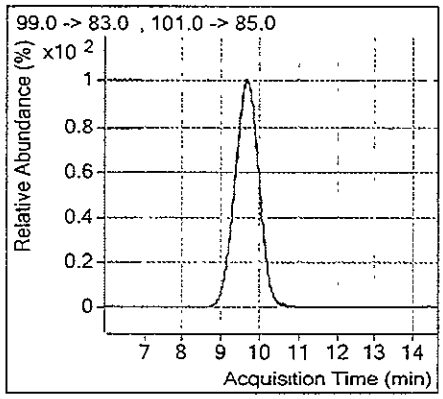
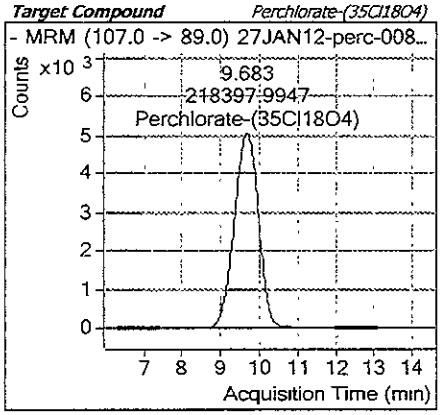
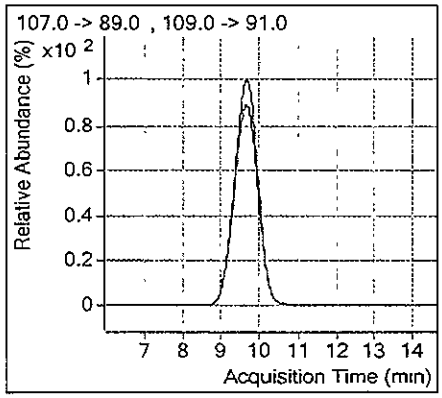
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:16
Analyst	lores
Data File	27JAN12-perc-009.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	ICAL-5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.675	34849	99	83	1.90326	1.90326	1
Perchlorate-(35Cl18O4)	ISTD	9.669	218746	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	11720	101	85	2.97	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	69251	109	91	3.16	2.30	3.80	In Control

Compound Graphics

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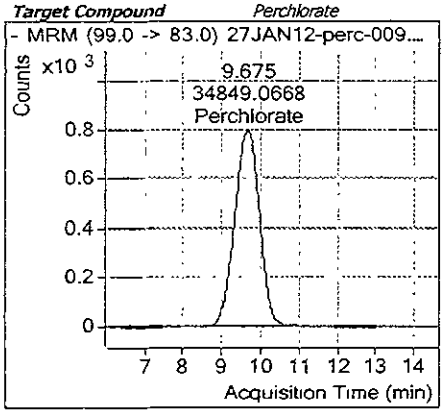
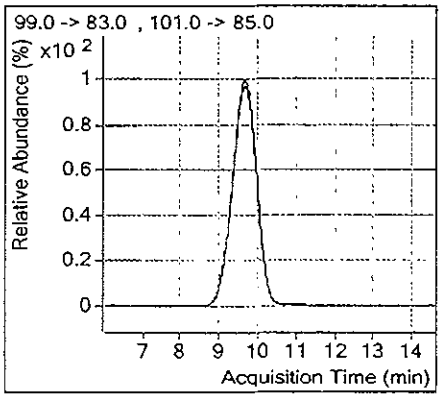
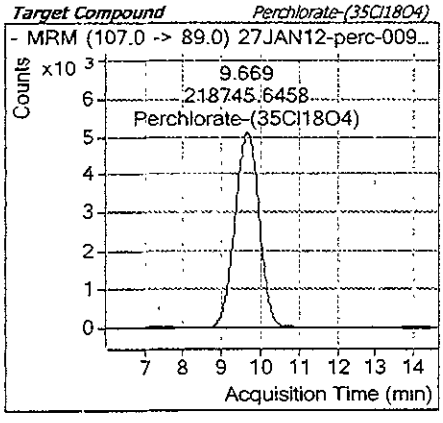
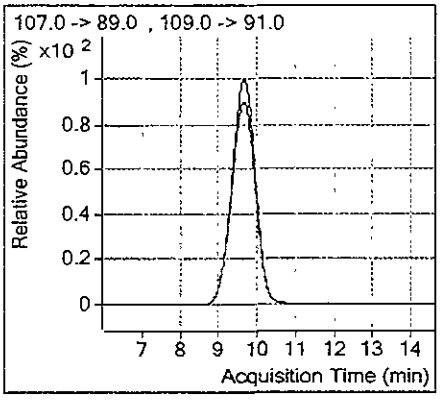
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:33
Analyst	lores
Data File	27JAN12-perc-010.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	ICAL-6
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B7
Exp. Concentration	5.00
Injection Volume	50

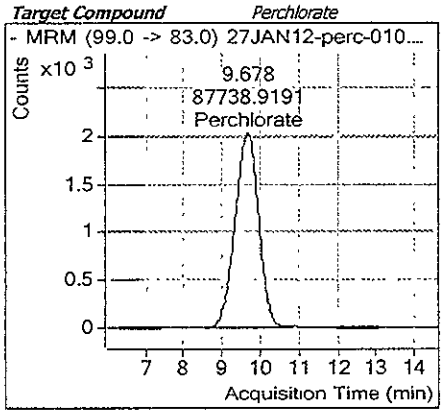
Quantitation Results

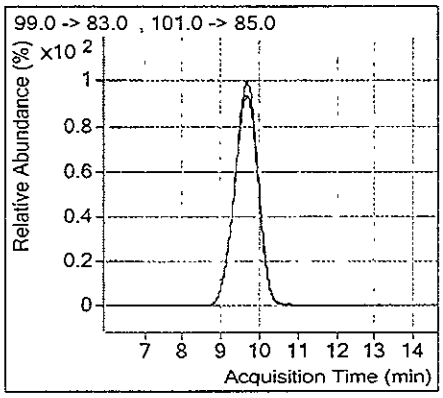
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.678	87739	99	83	4.81479	4.81479	1
Perchlorate-(35Cl18O4)	ISTD	9 665	216575	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	28925	101	85	3.03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	69295	109	91	3.13	2.30	3.80	In Control

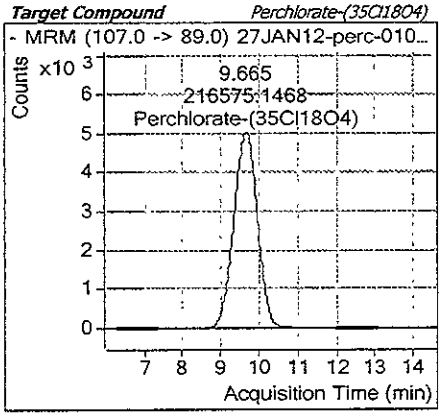
Compound Graphics

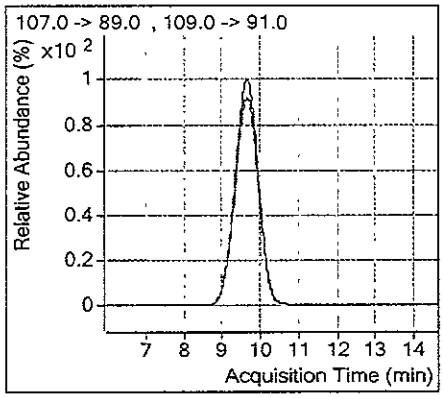
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:49
Analyst	lores
Data File	27JAN12-perc-011.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL
Sample Identification	ICAL-7
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B8
Exp. Concentration	10.00
Injection Volume	50

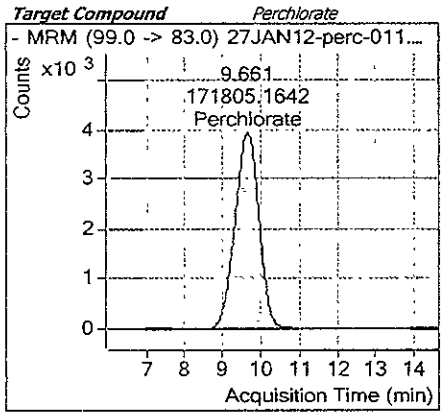
Quantitation Results

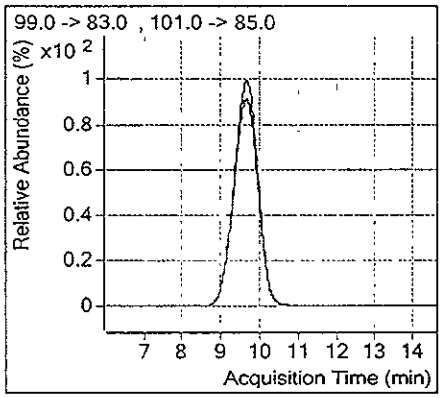
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.661	171805	99	83	9.92640	9.92640	1
Perchlorate-(35Cl18O4)	ISTD	9.659	205344	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	55756	101	85	3.08	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	65469	109	91	3 14	2.30	3.80	In Control

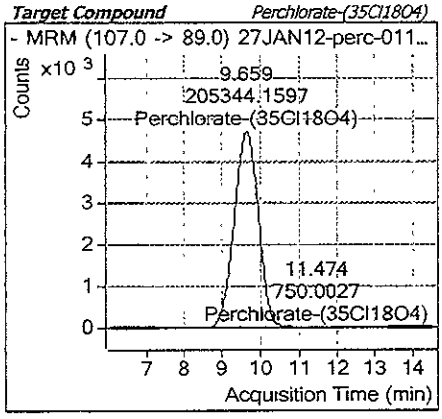
Compound Graphics

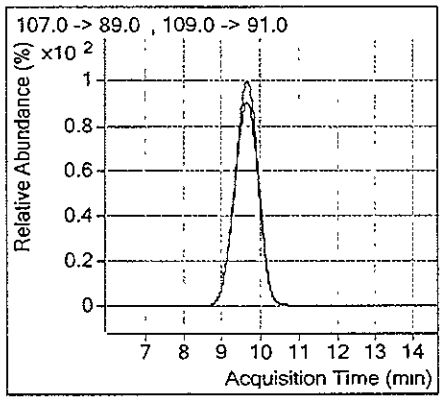
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:05
Analyst	lores
Data File	27JAN12-perc-012 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL
Sample Identification	ICAL-8
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B9
Exp. Concentration	20.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.660	306806	99	83	20.37682	20.37682	1
Perchlorate-(35Cl18O4)	ISTD	9.652	178484	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	97588	101	85	3.14	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56760	109	91	3.14	2.30	3.80	In Control

Compound Graphics

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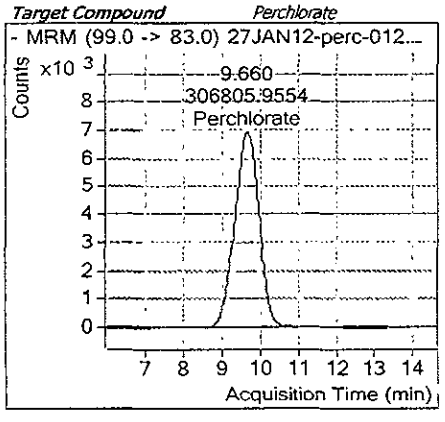
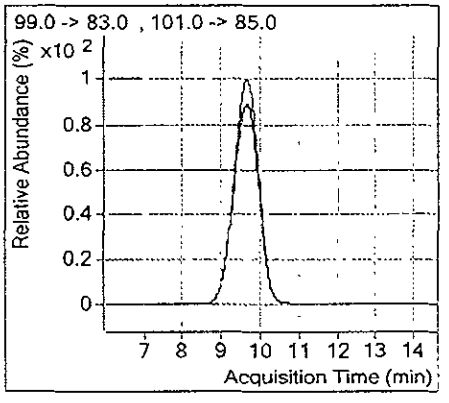
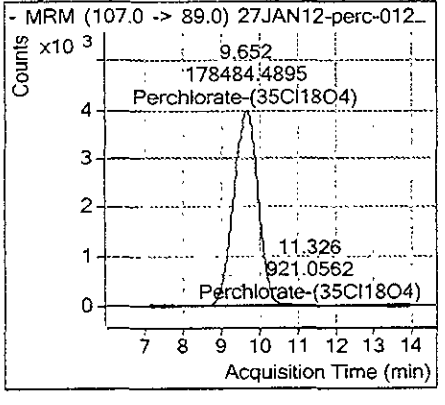
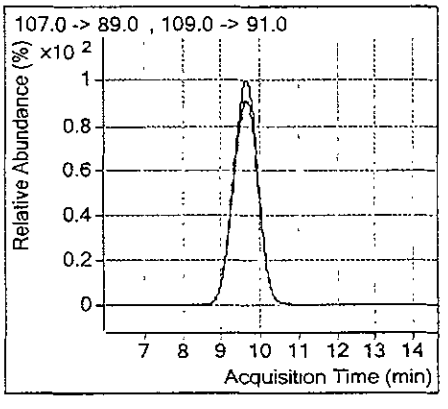
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:21
Analyst	lores
Data File	27JAN12-perc-013.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

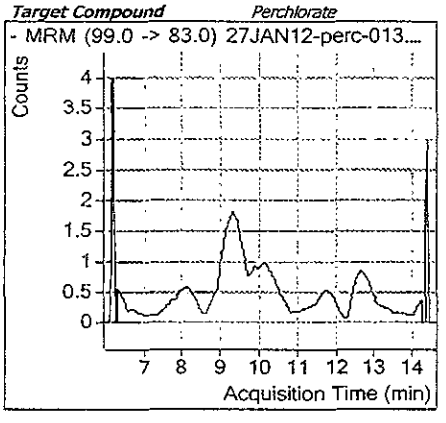
Quantitation Results

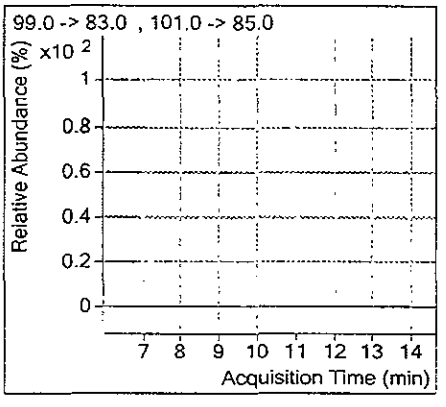
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.652	215378	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	67751	109	91	3.18	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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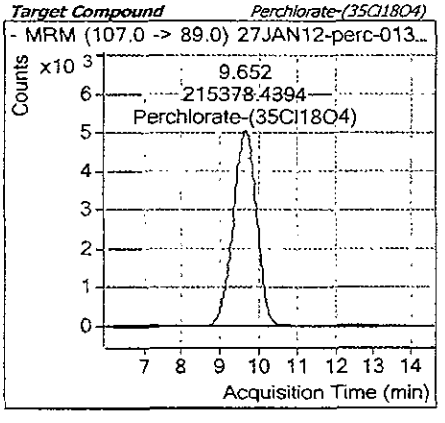
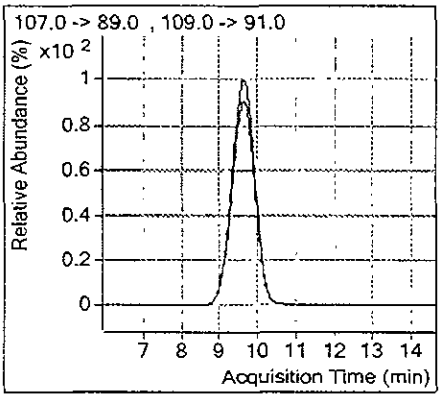
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:38
Analyst	lores
Data File	27JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp Concentration	5.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.653	83936	99	83	**5.06371**	**5.06371**	1
Perchlorate-(35Cl18O4)	ISTD	9.639	196970	107	89			1
							1.3 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	27996	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	63293	109	91	3.11	2.30	3.80	In Control

Compound Graphics

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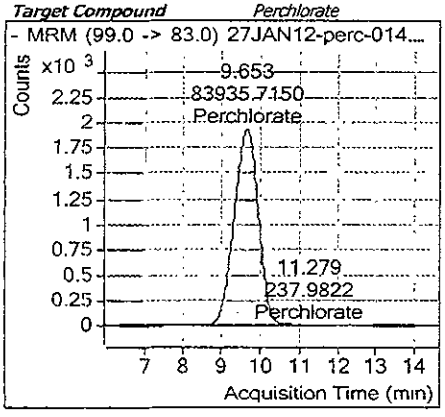
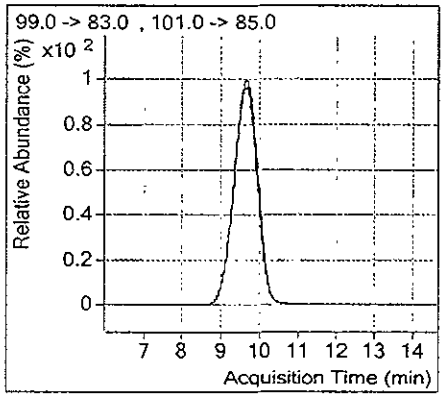
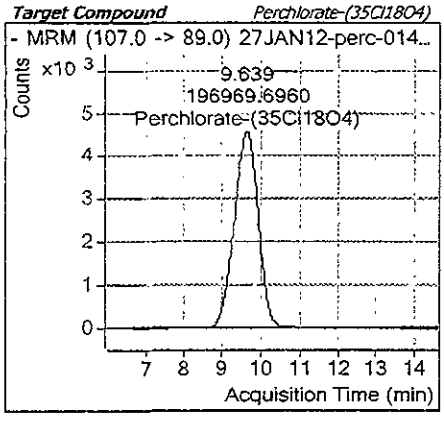
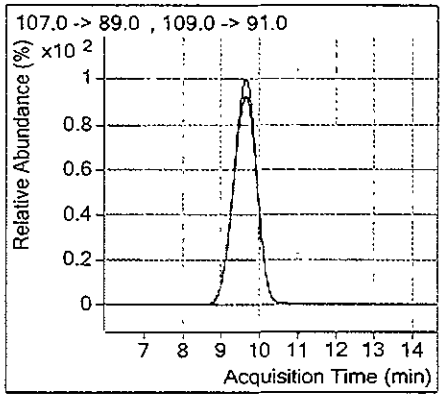
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml		
Analysis Time	1/31/2012 8:33 AM	**Analyst Name**	lores
Report Time	2/1/2012 4:00 PM	**Reporter Name**	lores
Last Calib Update	1/31/2012 8:33 AM	**Batch State**	Processed

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

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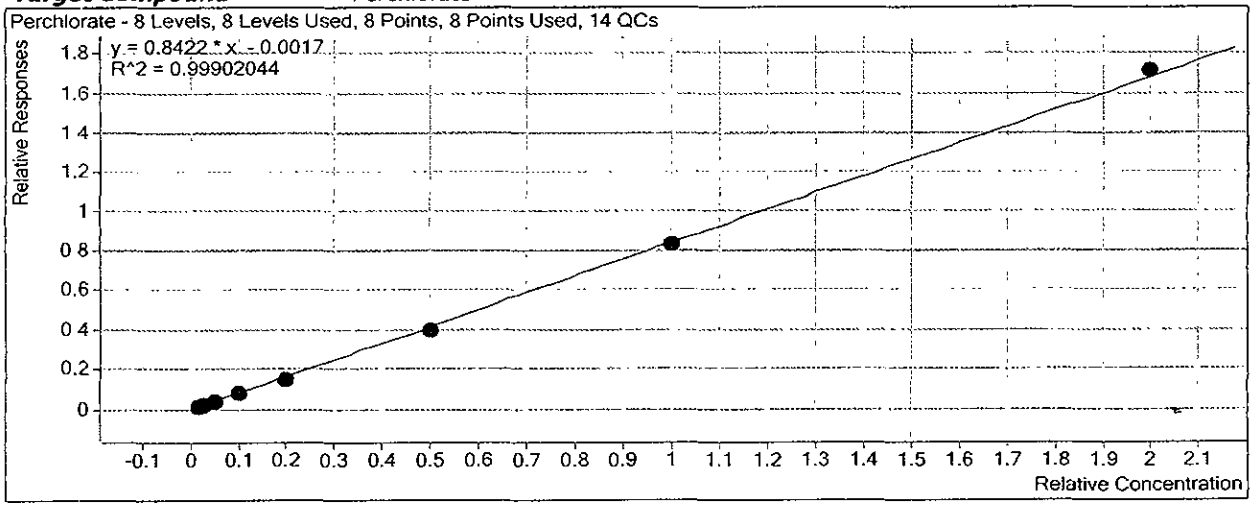
Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
30JAN12-perc-005.d	1	☑	2026	0.7683	0.1500
30JAN12-perc-006.d	2	☑	4944	0.8593	0.3000
30JAN12-perc-007.d	3	☑	7259	0.7725	0.5000
30JAN12-perc-008.d	4	☑	15254	0.8290	1.0000
30JAN12-perc-009.d	5	☑	28929	0.7775	2.0000
30JAN12-perc-010.d	6	☑	72105	0.8000	5.0000
30JAN12-perc-011.d	7	☑	142254	0.8324	10.0000
30JAN12-perc-012.d	8	☑	272408	0.8599	20.0000
30JAN12-perc-037.d	CCV3	☑	6196	0.8367	0.5000
30JAN12-perc-044.d	CCV3	☑	7040	0.8244	0.5000
30JAN12-perc-027.d	CCV4	☑	12992	0.8215	1.0000
30JAN12-perc-043.d	CCV4	☑	13861	0.8114	1.0000
30JAN12-perc-036.d	CCV5	☑	23757	0.8068	2.0000
30JAN12-perc-015.d	CCV6	☑	70648	0.8093	5.0000
30JAN12-perc-014.d	ICV	☑	73655	0.8325	5.0000
30JAN12-perc-019.d	LCS_5	☑	66709	0.8173	5.0000
30JAN12-perc-020.d	LCS_5	☑	70205	0.8169	5.0000
30JAN12-perc-041.d	LCS_5	☑	63643	0.7612	5.0000
30JAN12-perc-016.d	LODV	☑	2211	0.8372	0.1500
30JAN12-perc-038.d	LODV	☑	2029	0.8050	0.1500
30JAN12-perc-022.d	MS_5	☑	972901	19.6997	5.0000
30JAN12-perc-023.d	MS_5	☑	868009	19.4820	5.0000

Target Compound *Perchlorate-(35Cl18O4)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
30JAN12-perc-005.d	1	☑	175770	17576.9798	10.0000
30JAN12-perc-006.d	2	☑	191772	19177.2231	10.0000
30JAN12-perc-007.d	3	☑	187952	18795.2438	10.0000
30JAN12-perc-008.d	4	☑	184009	18400.9452	10.0000
30JAN12-perc-009.d	5	☑	186047	18604.7138	10.0000
30JAN12-perc-010.d	6	☑	180252	18025.2159	10.0000
30JAN12-perc-011.d	7	☑	170892	17089.1964	10.0000
30JAN12-perc-012.d	8	☑	158397	15839.7341	10.0000
30JAN12-perc-037.d	CCV3	☑	148094	14809.4172	10.0000
30JAN12-perc-044.d	CCV3	☑	170789	17078.8526	10.0000
30JAN12-perc-027.d	CCV4	☑	158141	15814.1209	10.0000
30JAN12-perc-043.d	CCV4	☑	170835	17083.4649	10.0000
30JAN12-perc-036.d	CCV5	☑	147226	14722.5505	10.0000
30JAN12-perc-015.d	CCV6	☑	174587	17458.7444	10.0000
30JAN12-perc-014.d	ICV	☑	176950	17695.0034	10.0000
30JAN12-perc-019.d	LCS_5	☑	163241	16324.1194	10.0000
30JAN12-perc-020.d	LCS_5	☑	171871	17187.1326	10.0000
30JAN12-perc-041.d	LCS_5	☑	167215	16721.5064	10.0000
30JAN12-perc-016.d	LODV	☑	176047	17604.7425	10.0000
30JAN12-perc-038.d	LODV	☑	167999	16799.9205	10.0000
30JAN12-perc-022.d	MS_5	☑	98773	9877.3217	10.0000
30JAN12-perc-023.d	MS_5	☑	89109	8910.8883	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 16:10
Analyst	lores
Data File	30JAN12-perc-003.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank No IS
Sample Identification	BLANK
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-A5
Exp. Concentration	
Injection Volume	50

Perchlorate = ND

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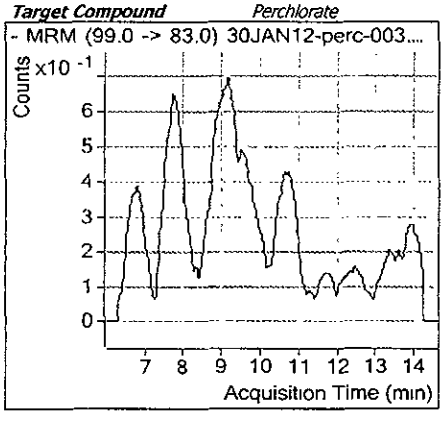
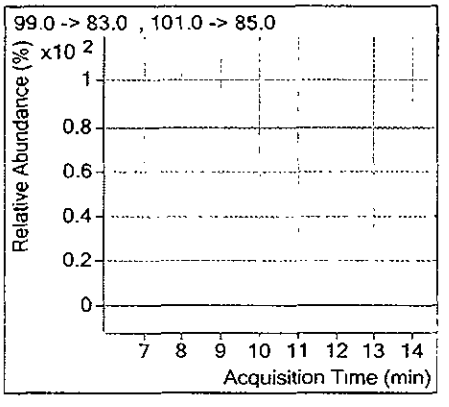
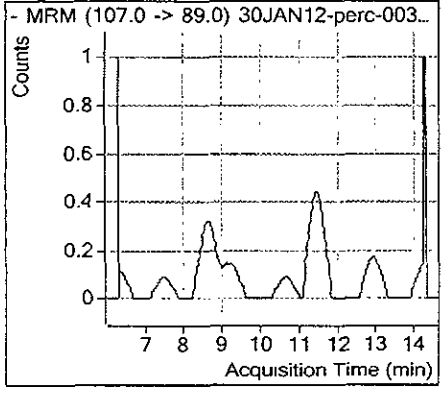
Compound Graphics

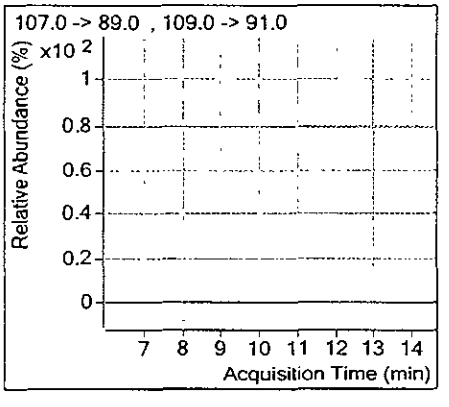
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 16:26
Analyst	lores
Data File	30JAN12-perc-004 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 641	186900	107	89			1
						Perchlorate = ND		

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	58248	109	91	3 21	2.30	3 80	In Control

Compound Graphics

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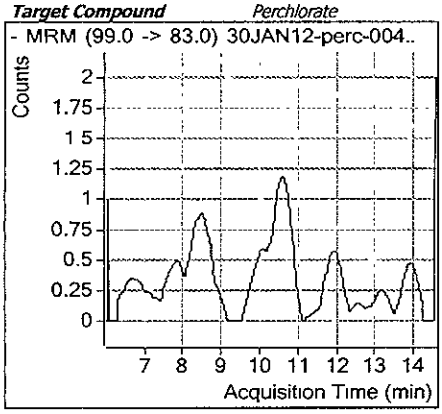
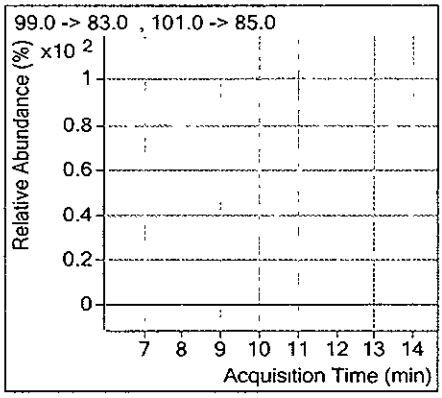
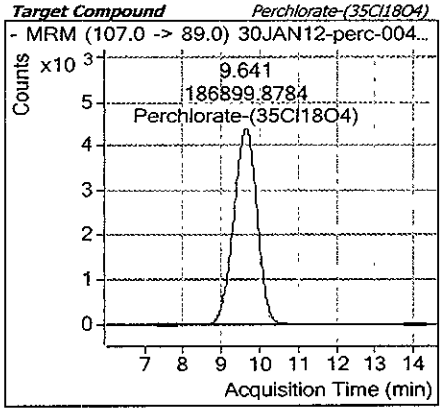
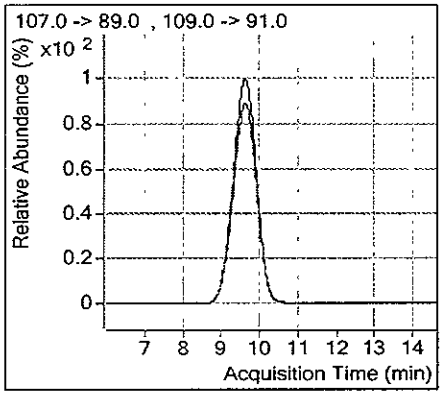
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 16:43
Analyst	lores
Data File	30JAN12-perc-005.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-1 12LCMS0064 Perchlorate Std 0 15ng/mL
Sample Identification	ICAL-1
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 640	2026	99	83	**0.15730**	**0.15730**	1
Perchlorate-(35Cl18O4)	ISTD	9 634	175770	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	589	101	85	3.44	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	55547	109	91	3.16	2.30	3 80	In Control

Compound Graphics

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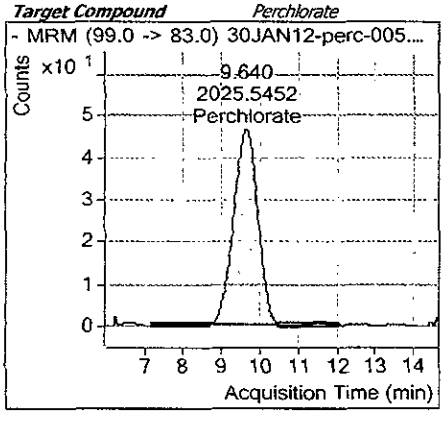
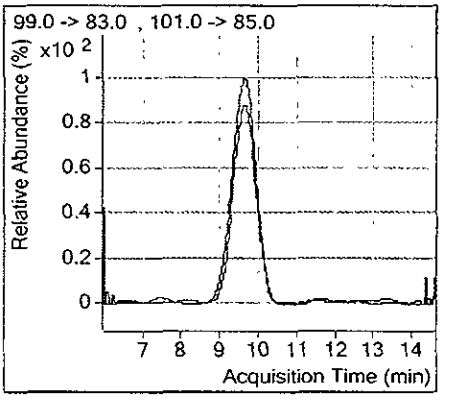
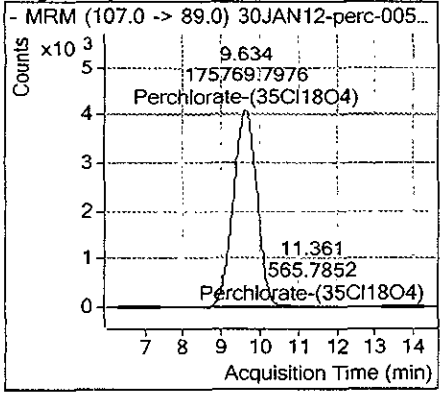
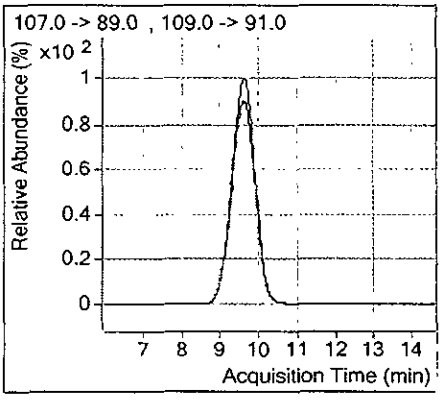
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 16:59
Analyst	lores
Data File	30JAN12-perc-006.d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL
Sample Identification	ICAL-2
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B3
Exp. Concentration	0.30
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.665	4944	99	83	**0.32656**	**0.32656**	1
Perchlorate-(35Cl18O4)	ISTD	9.645	191772	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	1502	101	85	3.29	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	60309	109	91	3.18	2.30	3.80	In Control

Compound Graphics

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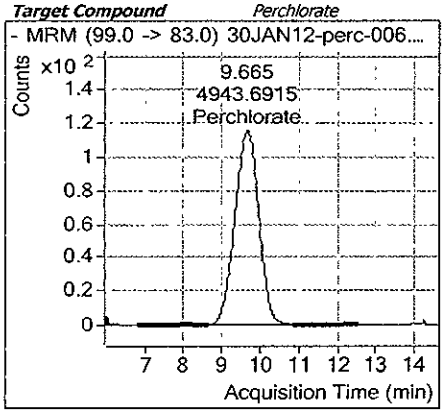
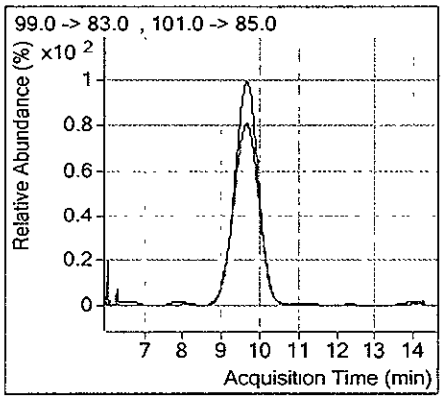
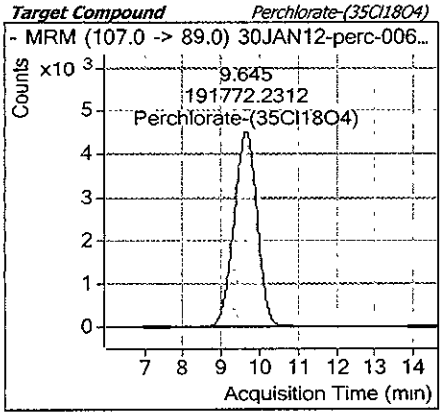
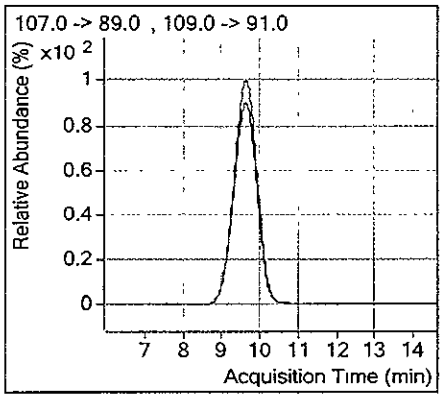
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 17:15
Analyst	lores
Data File	30JAN12-perc-007.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	ICAL-3
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B4
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.649	7259	99	83	0.47907	0.47907	1
Perchlorate-(35Cl18O4)	ISTD	9.636	187952	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2443	101	85	2.97	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	59883	109	91	3.14	2.30	3.80	In Control

Compound Graphics

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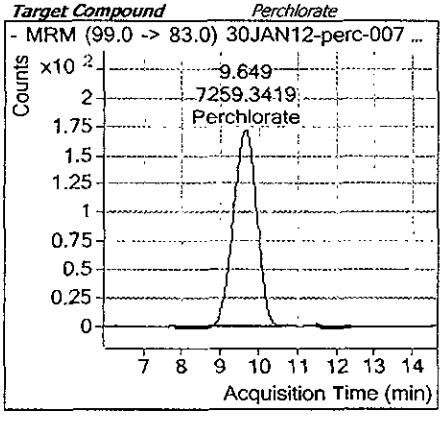
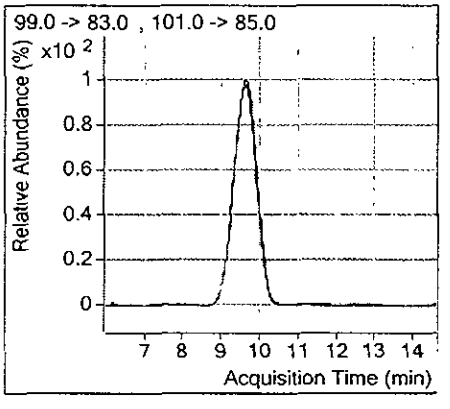
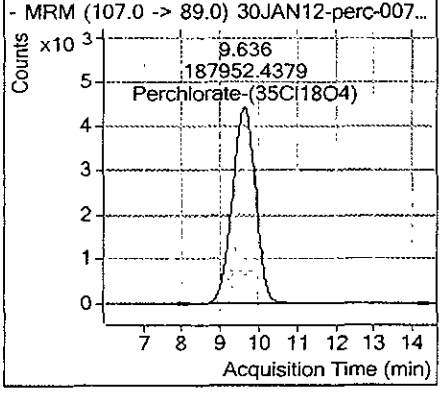
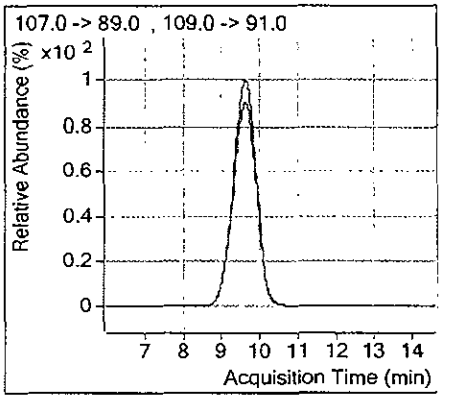
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 17:31
Analyst	lores
Data File	30JAN12-perc-008 d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	ICAL-4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.647	15254	99	83	**1.00476**	**1.00476**	1
Perchlorate-(35Cl18O4)	ISTD	9.637	184009	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4808	101	85	3 17	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	59153	109	91	3.11	2 30	3.80	In Control

Compound Graphics

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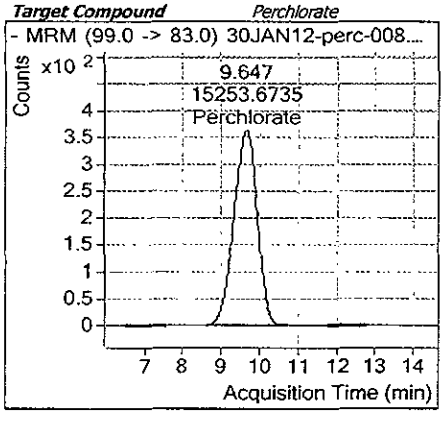
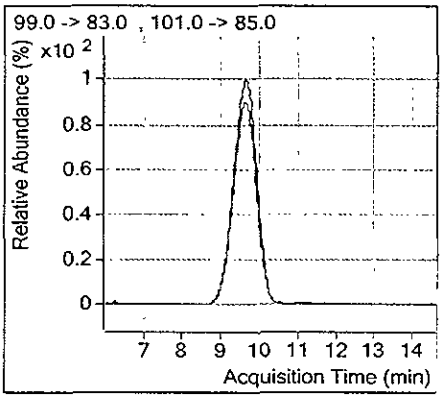
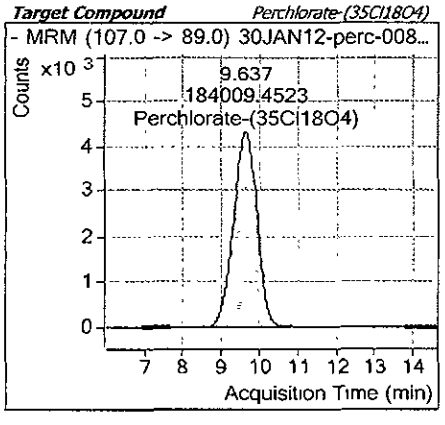
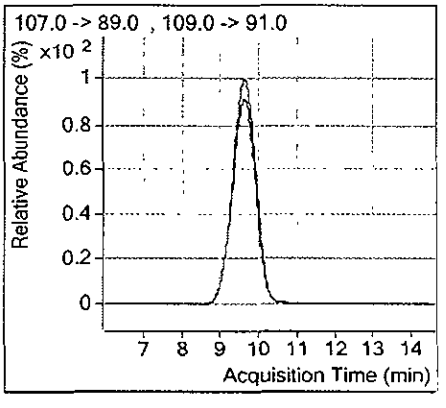
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 17:47
Analyst	lores
Data File	30JAN12-perc-009.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	ICAL-5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B6
Exp. Concentration	2.00
Injection Volume	50

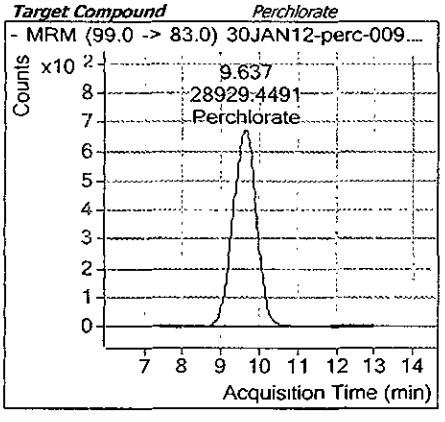
Quantitation Results

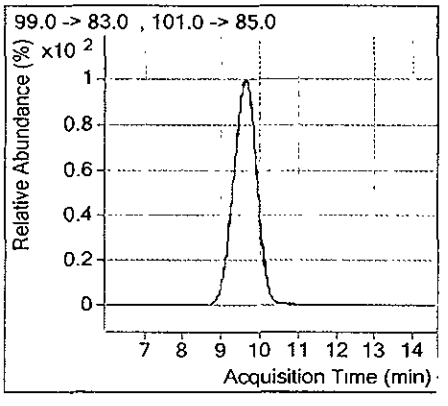
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.637	28929	99	83	**1.86679**	**1.86679**	1
Perchlorate-(35Cl18O4)	ISTD	9.630	186047	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	10011	101	85	2.89	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	59505	109	91	3.13	2.30	3.80	In Control

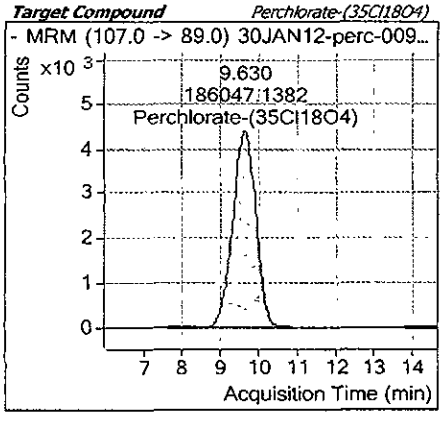
Compound Graphics

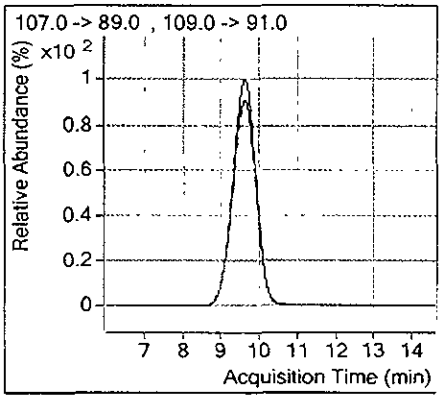
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 18:04
Analyst	lores
Data File	30JAN12-perc-010.d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	ICAL-6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B7
Exp. Concentration	5.00
Injection Volume	50

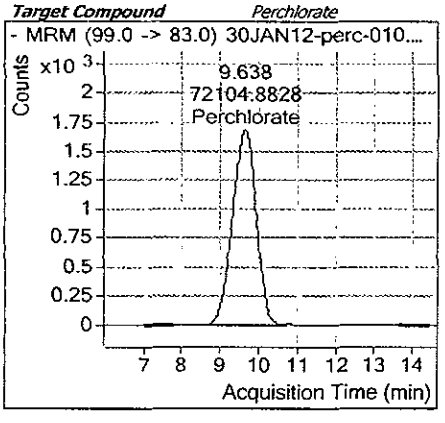
Quantitation Results

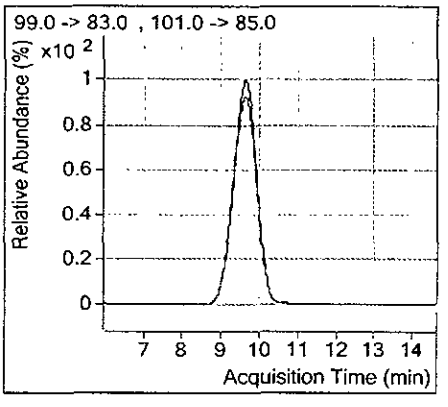
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.638	72105	99	83	4.77026	4.77026	1
Perchlorate-(35Cl18O4)	ISTD	9.631	180252	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23337	101	85	3.09	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	57284	109	91	3.15	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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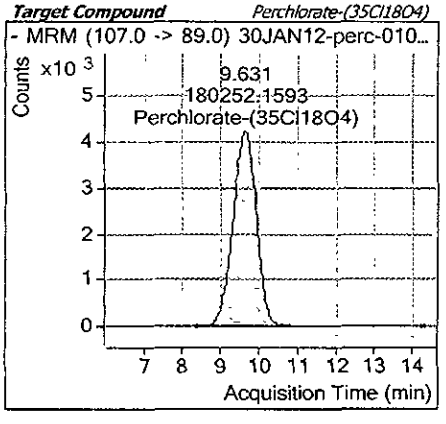
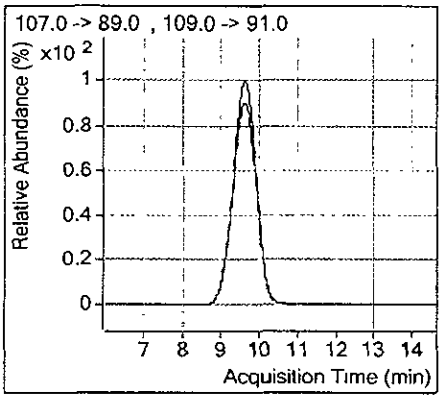
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 18:20
Analyst	lores
Data File	30JAN12-perc-011.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL
Sample Identification	ICAL-7
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B8
Exp. Concentration	10.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.638	142254	99	83	9.90448	9.90448	1
Perchlorate-(35Cl18O4)	ISTD	9.630	170892	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	46645	101	85	3.05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53565	109	91	3.19	2.30	3.80	In Control

Compound Graphics

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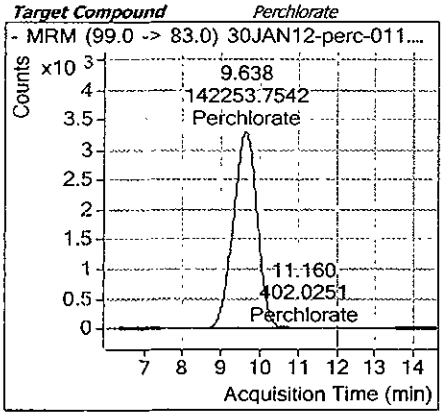
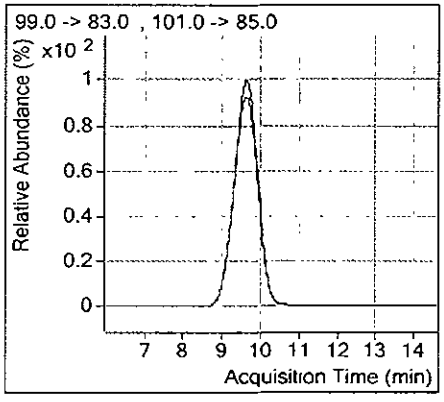
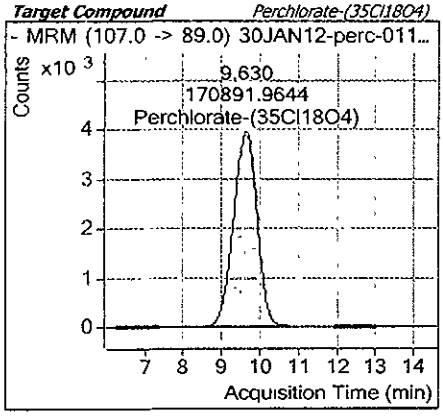
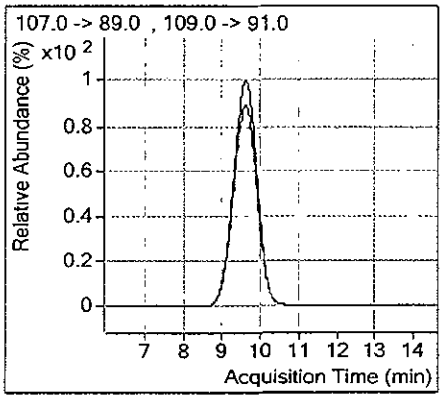
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 18:36
Analyst	lores
Data File	30JAN12-perc-012.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL
Sample Identification	ICAL-8
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B9
Exp. Concentration	20.00
Injection Volume	50

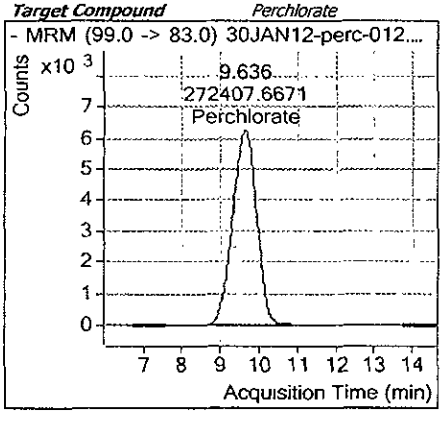
Quantitation Results

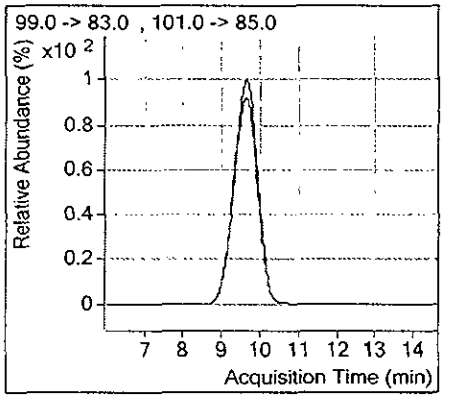
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.636	272408	99	83	**20.44079**	**20.44079**	1
Perchlorate-(35Cl18O4)	ISTD	9 625	158397	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	88181	101	85	3.09	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	49440	109	91	3.20	2 30	3.80	In Control

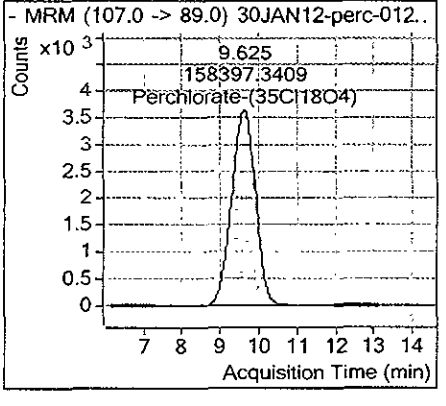
Compound Graphics

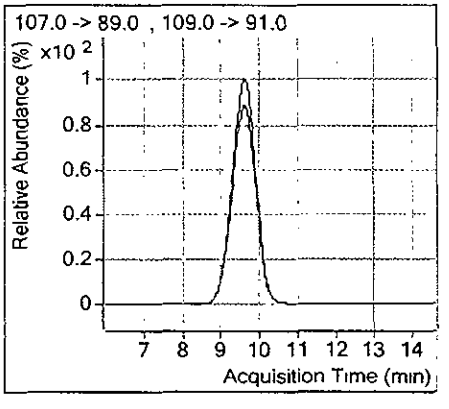
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 18:52
Analyst	lores
Data File	30JAN12-perc-013.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

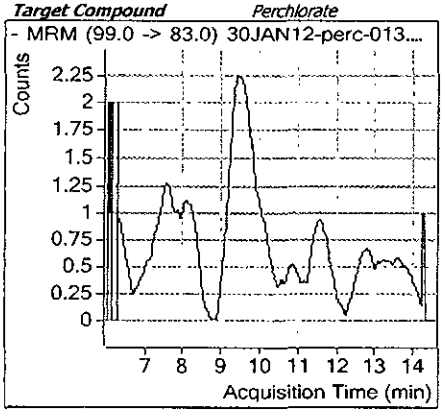
Quantitation Results

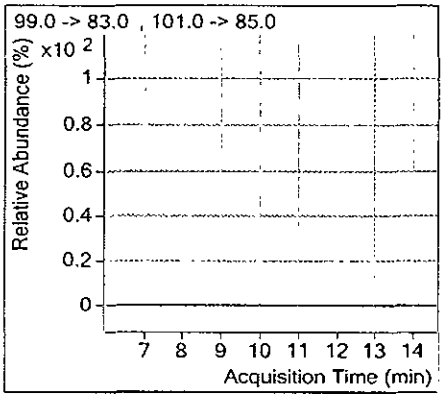
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.630	181451	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	57750	109	91	3.14	2.30	3.80	In Control

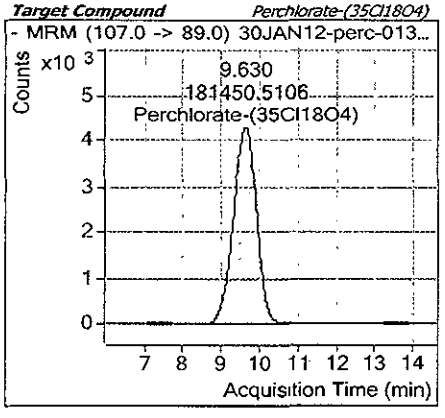
Compound Graphics

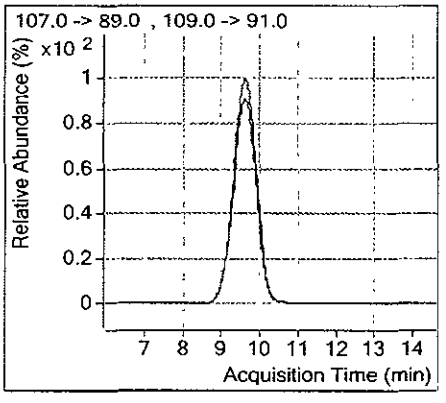
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:08
Analyst	lores
Data File	30JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5 00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.637	73655	99	83	4.96289	4.96289	1
Perchlorate-(35Cl18O4)	ISTD	9.625	176950	107	89			1
							-0.7 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24149	101	85	3 05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54819	109	91	3 23	2.30	3.80	In Control

Compound Graphics

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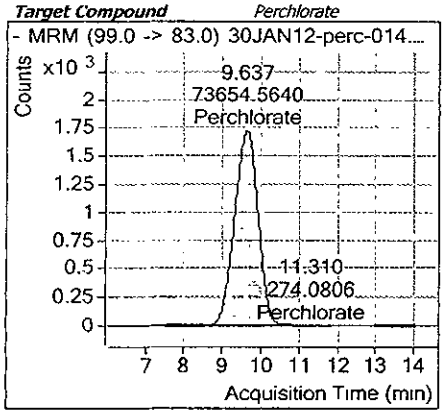
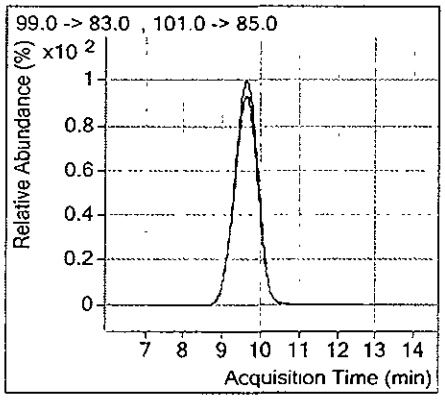
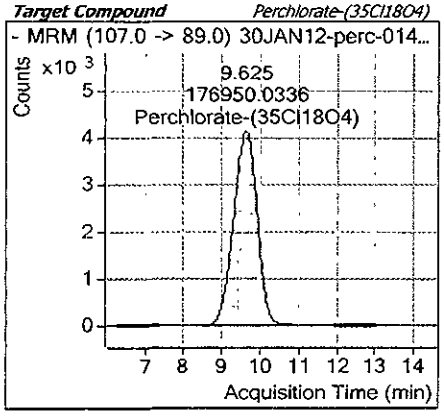
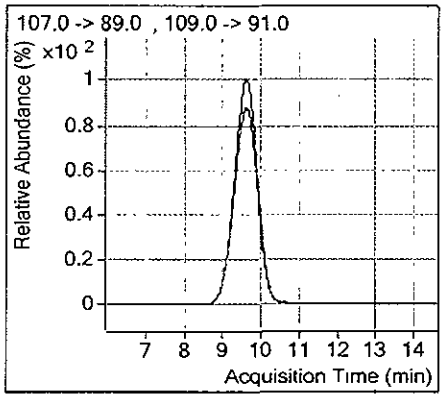
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





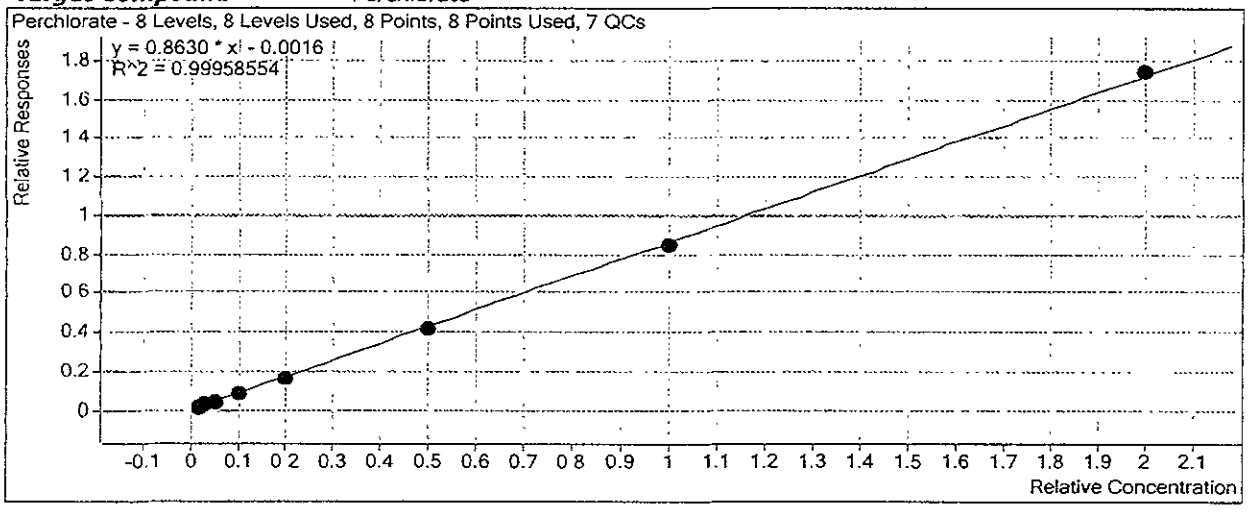
TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml		
Analysis Time	2/9/2012 8:16 PM	**Analyst Name**	lores
Report Time	2/9/2012 8:17 PM	**Reporter Name**	lores
Last Calib Update	2/9/2012 8:16 PM	**Batch State**	Processed

Calibration Info **Linear Fit, 1/x weighting, and origin ignored.**

Target Compound *Perchlorate*



DEG 2-9-2012

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
09FEB12-perc-005.d	1	☑	1994	0.7456	0.1500
09FEB12-perc-006.d	2	☑	4939	0.8985	0.3000
09FEB12-perc-007.d	3	☑	7366	0.8230	0.5000
09FEB12-perc-008.d	4	☑	14708	0.8274	1.0000
09FEB12-perc-009.d	5	☑	29275	0.8272	2.0000
09FEB12-perc-010.d	6	☑	72149	0.8377	5.0000
09FEB12-perc-011.d	7	☑	142220	0.8532	10.0000
09FEB12-perc-012.d	8	☑	267911	0.8747	20.0000
09FEB12-perc-021.d	CCV4	☑	13702	0.8044	1.0000
09FEB12-perc-024.d	CCV4	☑	14717	0.7969	1.0000
09FEB12-perc-015.d	CCV6	☑	70584	0.8294	5.0000
09FEB12-perc-014.d	ICV	☑	73040	0.8513	5.0000
09FEB12-perc-018.d	LCS_0.5	☑	6429	0.7730	0.5000
09FEB12-perc-016.d	LODV	☑	2314	0.8784	0.1500
09FEB12-perc-022.d	LODV	☑	2039	0.8047	0.1500

Target Compound *Perchlorate-(35Cl1804)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
09FEB12-perc-005.d	1	☑	178318	17831.7697	10.0000
09FEB12-perc-006.d	2	☑	183239	18323.8603	10.0000
09FEB12-perc-007.d	3	☑	179006	17900.5960	10.0000
09FEB12-perc-008.d	4	☑	177774	17777.3848	10.0000
09FEB12-perc-009.d	5	☑	176957	17695.6762	10.0000
09FEB12-perc-010.d	6	☑	172263	17226.2606	10.0000
09FEB12-perc-011.d	7	☑	166692	16669.1742	10.0000
09FEB12-perc-012.d	8	☑	153143	15314.3262	10.0000
09FEB12-perc-021.d	CCV4	☑	170354	17035.3578	10.0000
09FEB12-perc-024.d	CCV4	☑	184677	18467.6516	10.0000
09FEB12-perc-015.d	CCV6	☑	170202	17020.1990	10.0000
09FEB12-perc-014.d	ICV	☑	171605	17160.5247	10.0000
09FEB12-perc-018.d	LCS_0.5	☑	166351	16635.0784	10.0000
09FEB12-perc-016.d	LODV	☑	175607	17560.6666	10.0000
09FEB12-perc-022.d	LODV	☑	168912	16891.2233	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

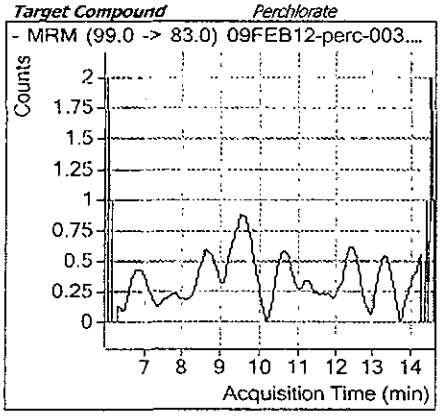
Acquisition Date - Time	2/9/2012 09:05
Analyst	lores
Data File	09FEB12-perc-003.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank No IS
Sample Identification	BLANK
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-A5
Exp. Concentration	
Injection Volume	50

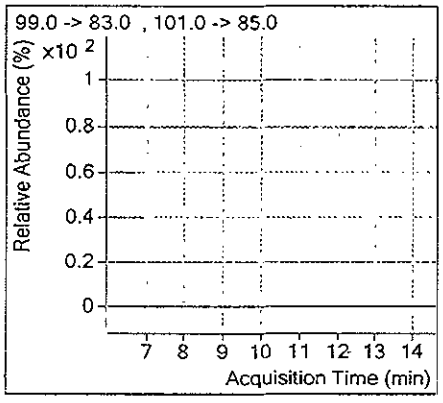
Perchlorate and IS are non-detect (ND).

DEG 2-9-12

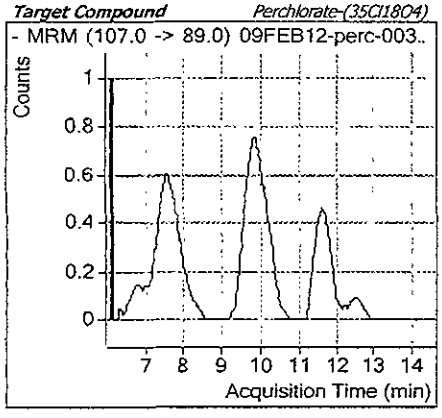
Compound Graphics

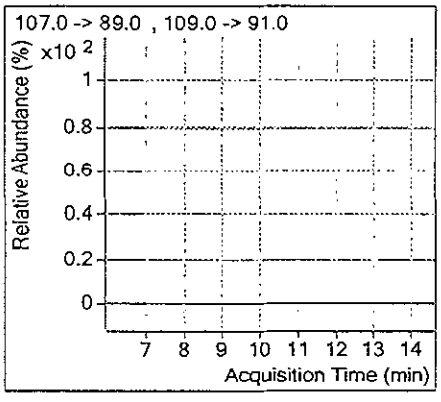
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:21
Analyst	lores
Data File	09FEB12-perc-004 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

Quantitation Results

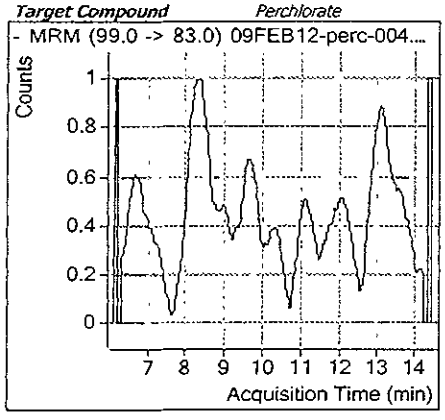
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 717	178134	107	89			1
						Perchlorate is ND		

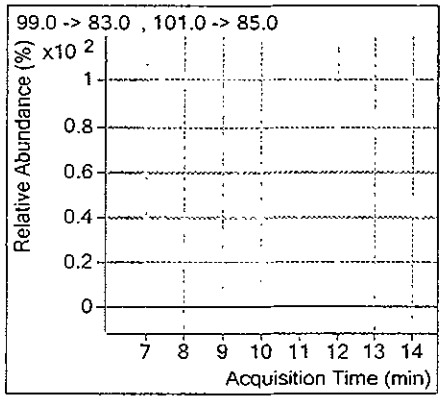
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56552	109	91	3.15	2.30	3.80	In Control

Compound Graphics

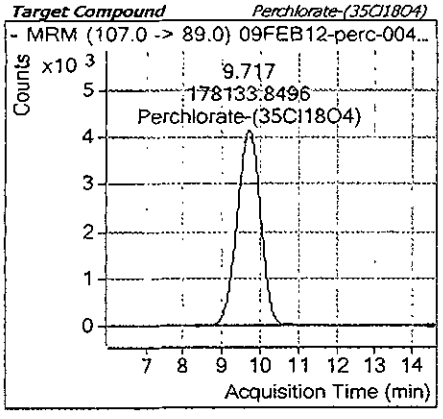
DEL 2-9-12

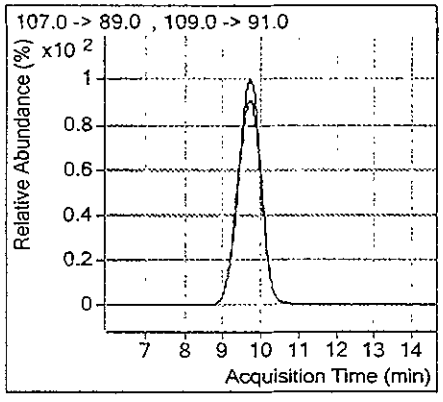
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:37
Analyst	lores
Data File	09FEB12-perc-005.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	ICAL-1
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

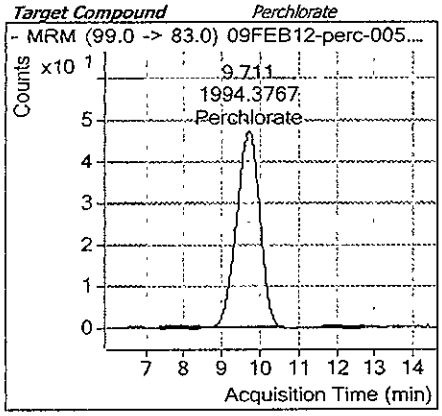
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.711	1994	99	83	0.14774	0.14774	1
Perchlorate-(35Cl18O4)	ISTD	9.705	178318	107	89			1

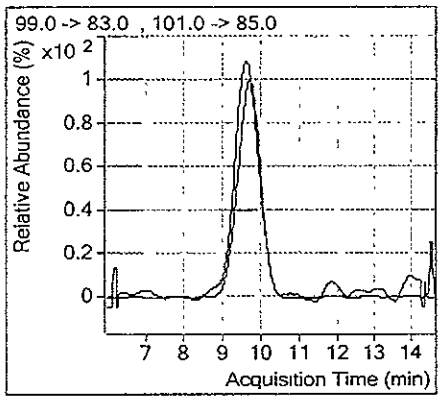
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	800	101	85	2.49	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56401	109	91	3.16	2.30	3.80	In Control

Compound Graphics

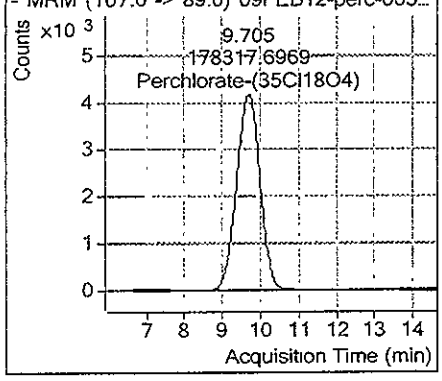
DEL 2-9-12

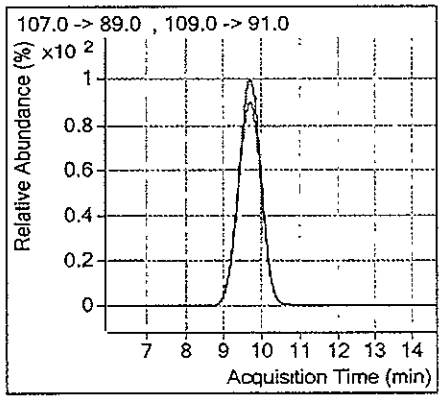
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:54
Analyst	lores
Data File	09FEB12-perc-006.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL
Sample Identification	ICAL-2
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B3
Exp. Concentration	0.30
Injection Volume	50

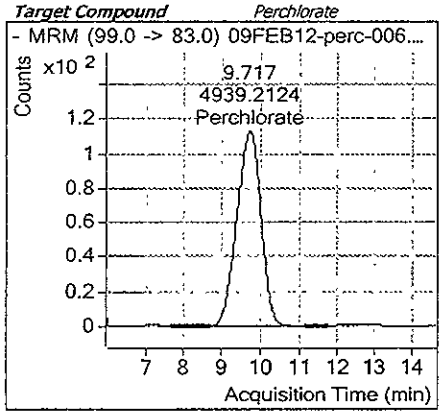
Quantitation Results

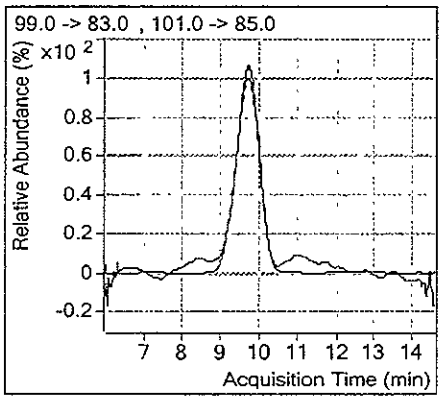
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.717	4939	99	83	0.33048	0.33048	1
Perchlorate-(35Cl18O4)	ISTD	9.700	183239	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	1922	101	85	2.57	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	58965	109	91	3 11	2.30	3.80	In Control

Compound Graphics

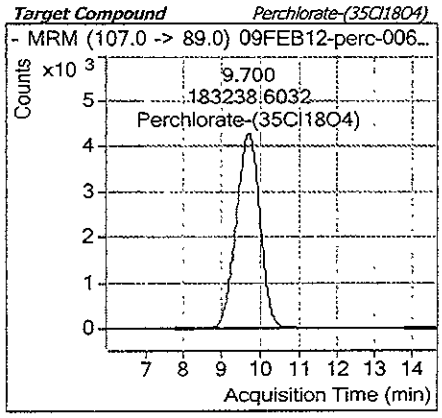
Target Compound *Perchlorate*

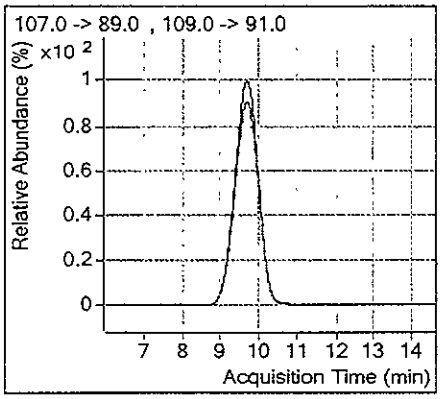




DCh 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:10
Analyst	lores
Data File	09FEB12-perc-007.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	ICAL-3
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B4
Exp. Concentration	0.50
Injection Volume	50

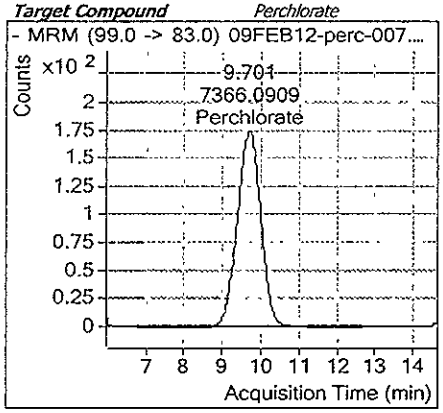
Quantitation Results

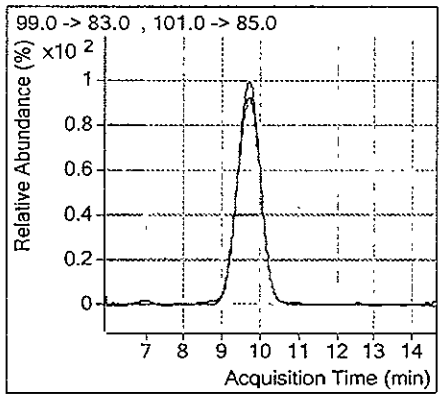
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 701	7366	99	83	0.49496	0.49496	1
Perchlorate-(35Cl18O4)	ISTD	9.699	179006	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2510	101	85	2.93	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	57218	109	91	3 13	2.30	3.80	In Control

Compound Graphics

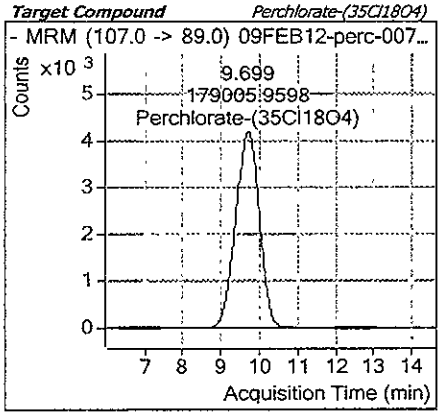
Target Compound *Perchlorate*

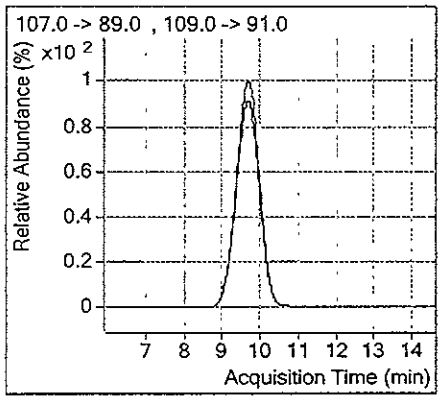




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:26
Analyst	lores
Data File	09FEB12-perc-008.d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	ICAL-4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B5
Exp. Concentration	1.00
Injection Volume	50

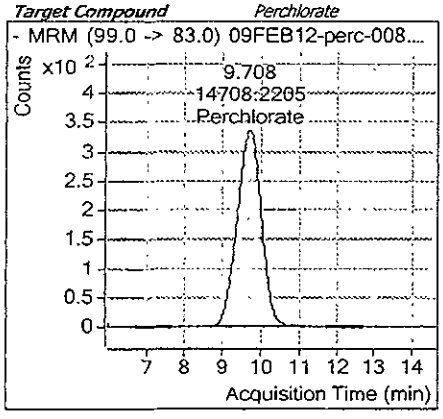
Quantitation Results

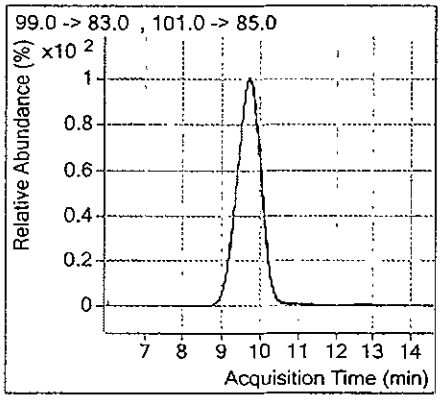
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.708	14708	99	83	0.97683	0.97683	1
Perchlorate-(35Cl18O4)	ISTD	9.696	177774	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5278	101	85	2.79	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55982	109	91	3.18	2.30	3.80	In Control

Compound Graphics

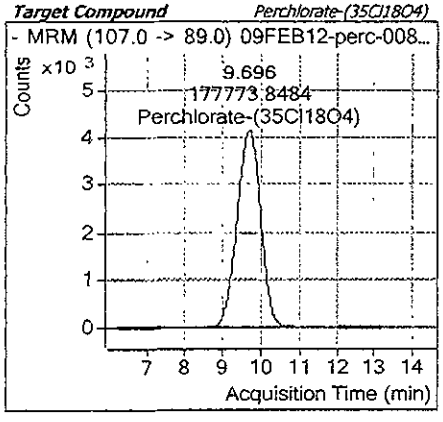
Target Compound *Perchlorate*

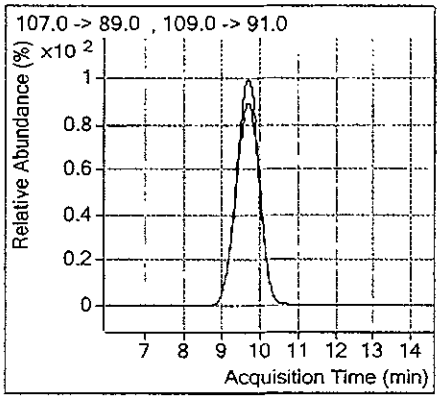




DCh 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:42
Analyst	lores
Data File	09FEB12-perc-009.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	ICAL-5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B6
Exp. Concentration	2.00
Injection Volume	50

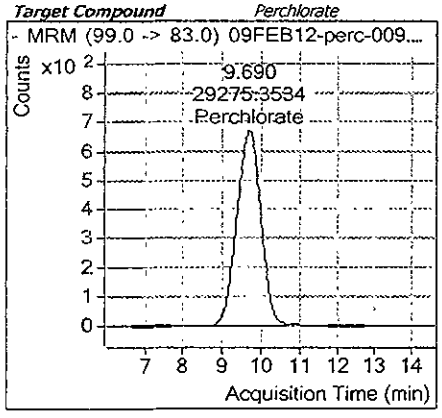
Quantitation Results

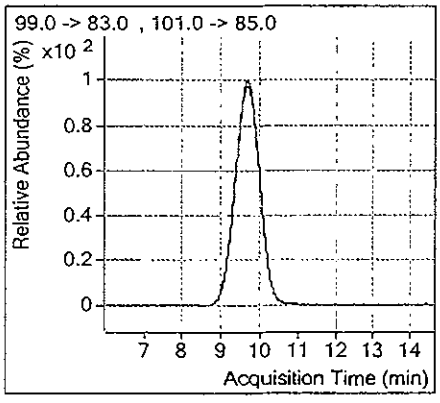
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.690	29275	99	83	1.93513	1.93513	1
Perchlorate-(35Cl18O4)	ISTD	9.695	176957	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	10005	101	85	2.93	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56466	109	91	3.13	2.30	3.80	In Control

Compound Graphics

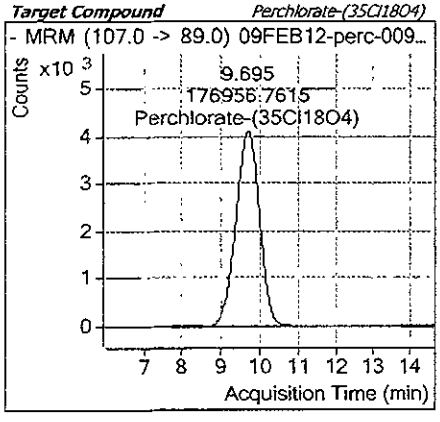
Target Compound *Perchlorate*

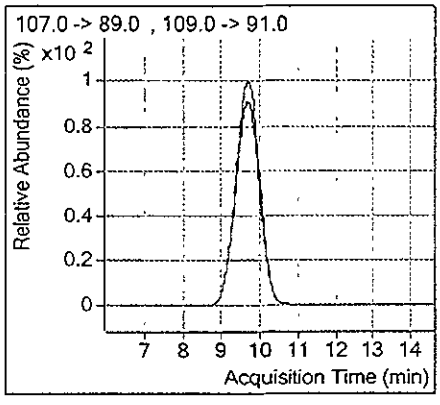




DCh 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:59
Analyst	lores
Data File	09FEB12-perc-010 d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	ICAL-6
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B7
Exp. Concentration	5.00
Injection Volume	50

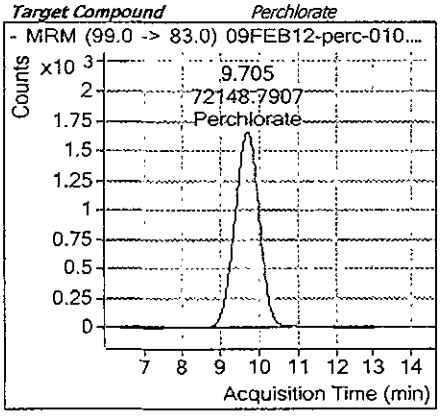
Quantitation Results

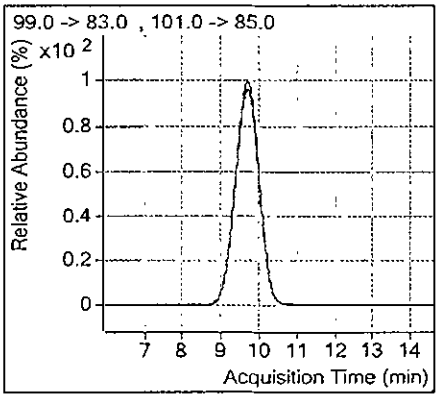
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.705	72149	99	83	4.87128	4.87128	1
Perchlorate-(35Cl18O4)	ISTD	9 700	172263	107	89			1

Qualifier Ion	*Area*	*Precursor*	*Product*	*Ratio*	*Min*	*Max*	
Perchlorate	24495	101	85	2.95	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	54170	109	91	3.18	2.30	3 80	In Control

Compound Graphics

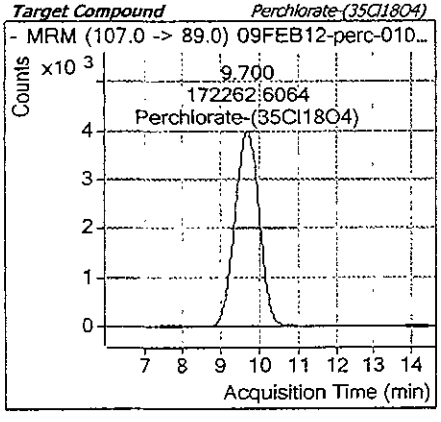
Target Compound *Perchlorate*

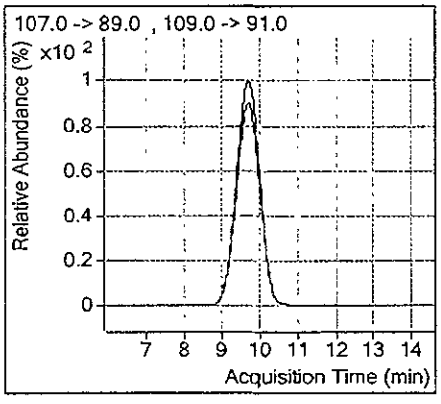




DCL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:15
Analyst	lores
Data File	09FEB12-perc-011.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL
Sample Identification	ICAL-7
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B8
Exp. Concentration	10.00
Injection Volume	50

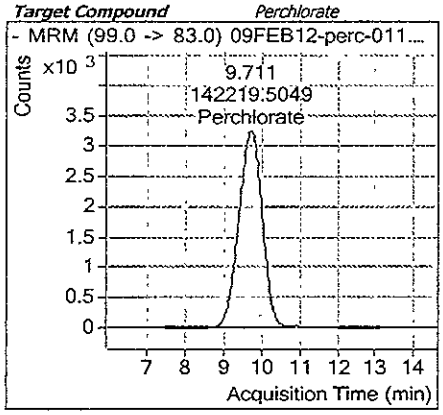
Quantitation Results

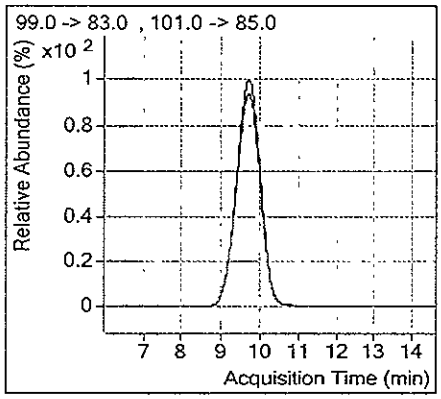
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.711	142220	99	83	9.90435	9.90435	1
Perchlorate-(35Cl18O4)	ISTD	9.701	166692	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	46644	101	85	3.05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53242	109	91	3.13	2.30	3.80	In Control

Compound Graphics

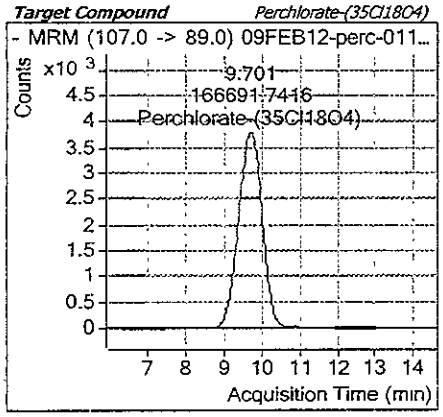
Target Compound *Perchlorate*

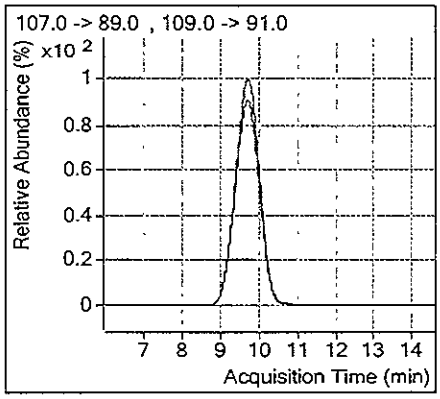




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:31
Analyst	lores
Data File	09FEB12-perc-012.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL
Sample Identification	ICAL-8
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B9
Exp. Concentration	20.00
Injection Volume	50

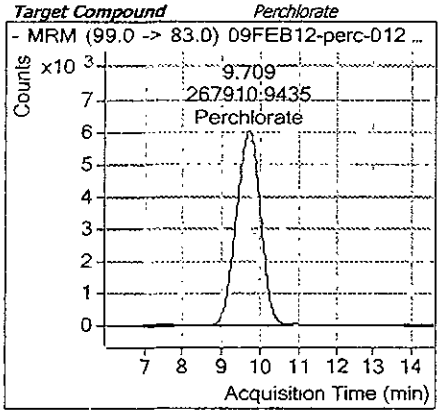
Quantitation Results

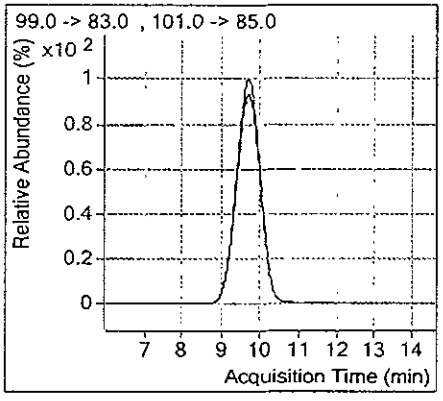
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.709	267911	99	83	20.28923	20.28923	1
Perchlorate-(35Cl18O4)	ISTD	9.698	153143	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	87645	101	85	3.06	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	49220	109	91	3.11	2.30	3.80	In Control

Compound Graphics

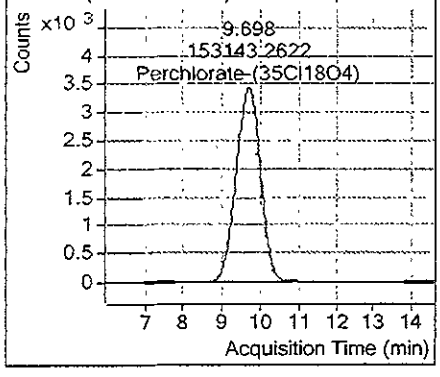
Target Compound *Perchlorate*

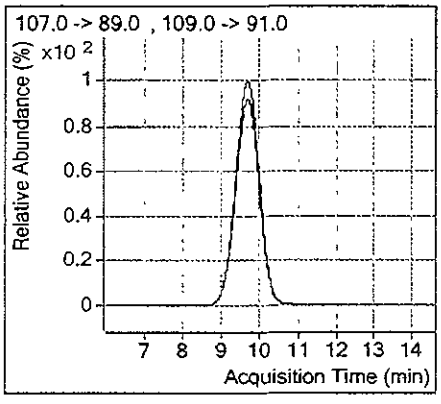




DCh 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:47
Analyst	lores
Data File	09FEB12-perc-013.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

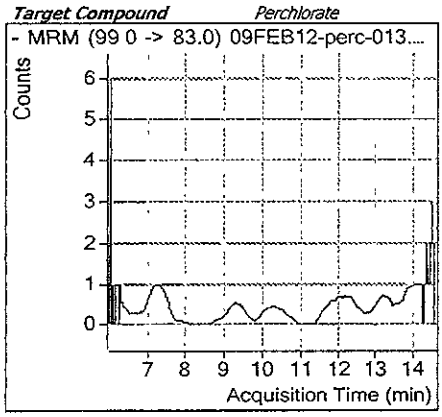
Quantitation Results

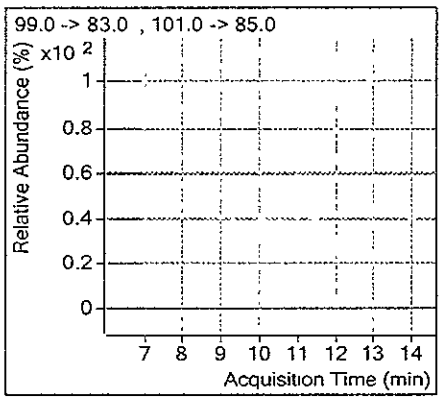
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 702	175351	107	89			1
						Perchlorate is ND		

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	57596	109	91	3.04	2 30	3 80	In Control

Compound Graphics

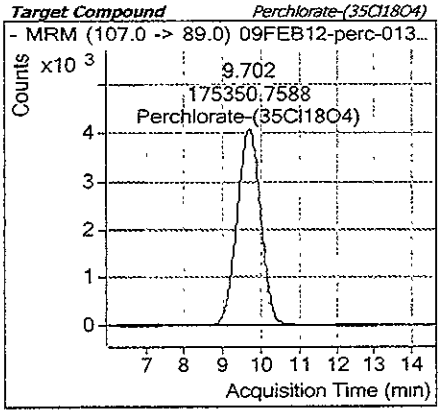
Target Compound *Perchlorate*

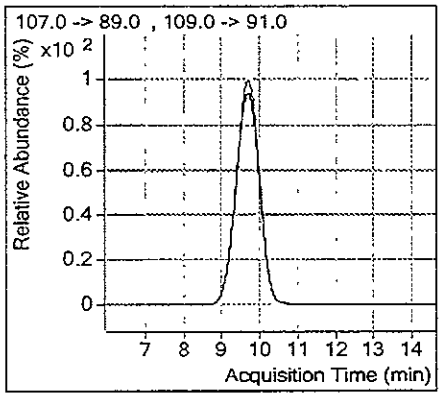




Dah 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:03
Analyst	lores
Data File	09FEB12-perc-014 d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5 00
Injection Volume	50

Quantitation Results

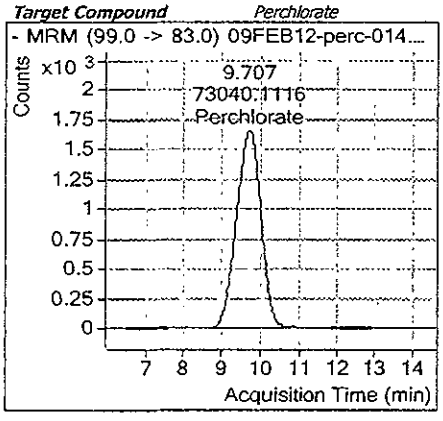
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.707	73040	99	83	4.95006	4.95006	1
Perchlorate-(35Cl18O4)	ISTD	9.705	171605	107	89			1
							-1.0 % Deviation	

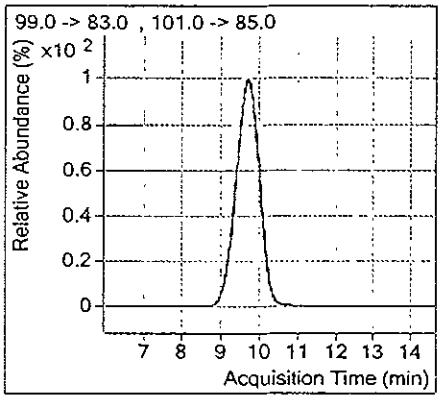
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24318	101	85	3 00	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	53400	109	91	3.21	2 30	3 80	In Control

Compound Graphics

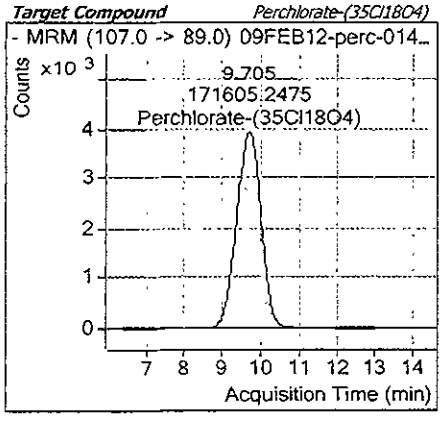
ICV in control
DA 2-9-12

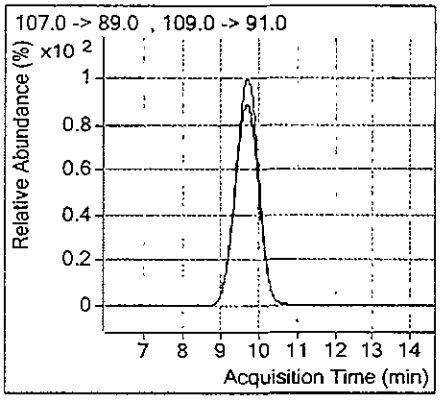
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





CCAL Data

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 02:44
Analyst	lores
Data File	27JAN12-perc-044 d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1 00
Injection Volume	50

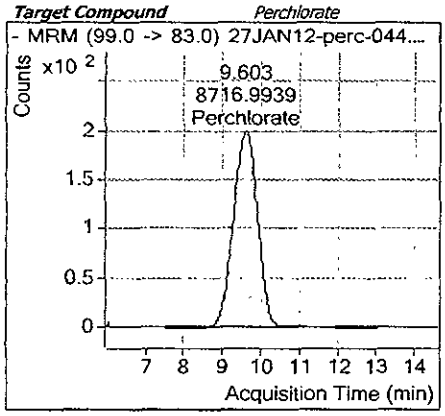
Quantitation Results

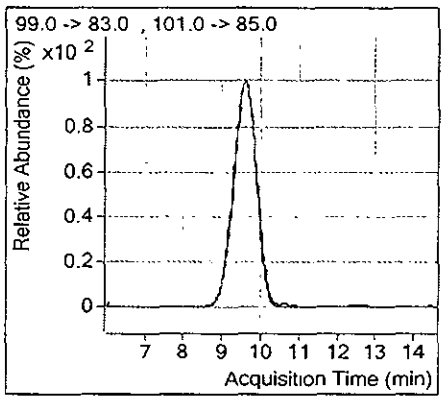
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.603	8717	99	83	**0.97742**	**0.97742**	1
Perchlorate-(35Cl18O4)	ISTD	9.608	107420	107	89			1
							-2.3 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2873	101	85	3 03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	33636	109	91	3.19	2 30	3.80	In Control

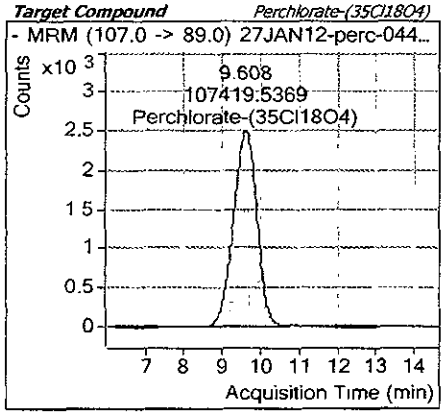
Compound Graphics

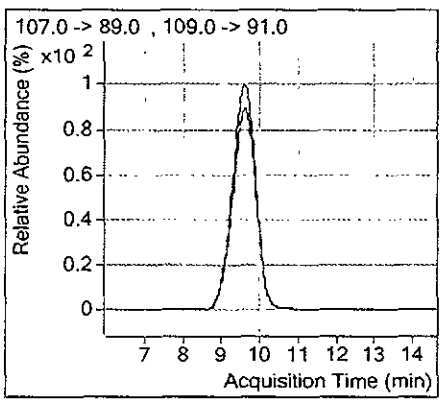
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:00
Analyst	lores
Data File	27JAN12-perc-045.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.620	1287	99	83	**0.16412**	**0.16412**	1
Perchlorate-(35Cl18O4)	ISTD	9 617	103051	107	89			1
							9.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	438	101	85	2 94	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	32905	109	91	3.13	2.30	3 80	In Control

Compound Graphics

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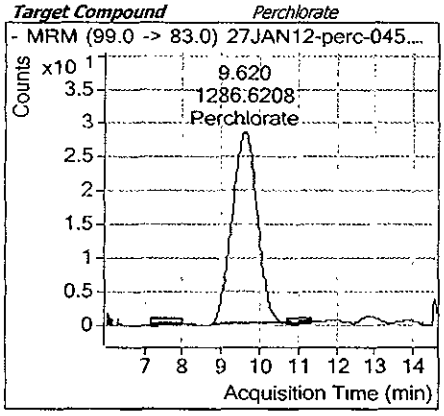
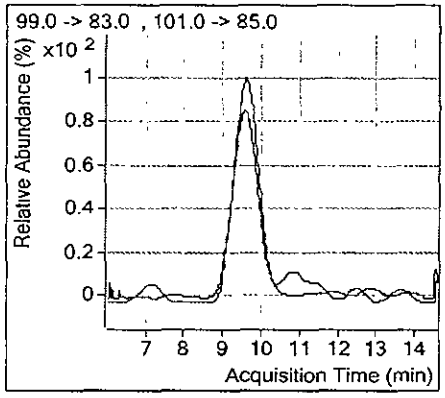
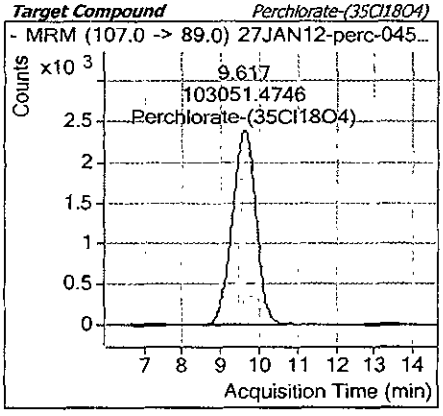
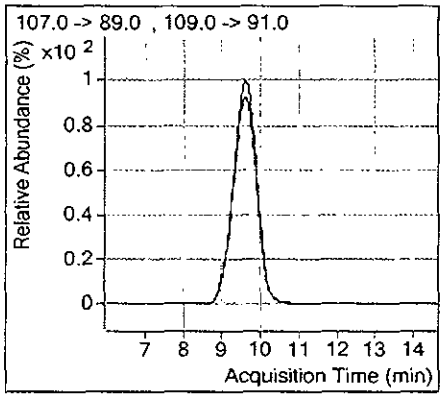
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:17
Analyst	lores
Data File	27JAN12-perc-046.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

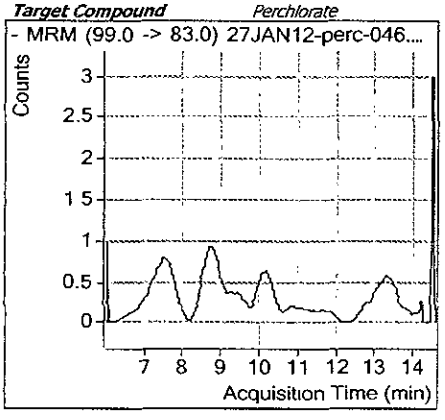
Quantitation Results

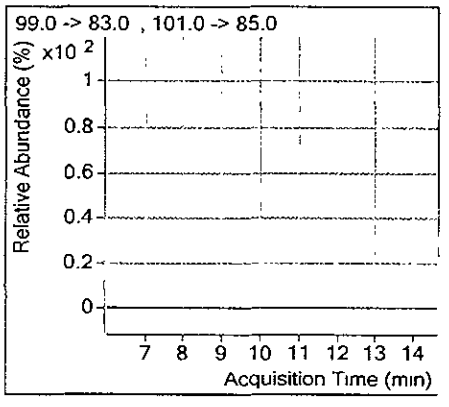
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.616	159119	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	50156	109	91	3 17	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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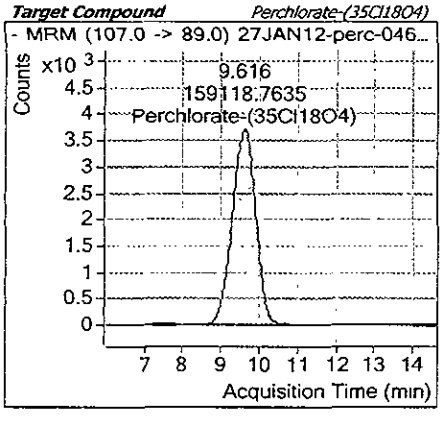
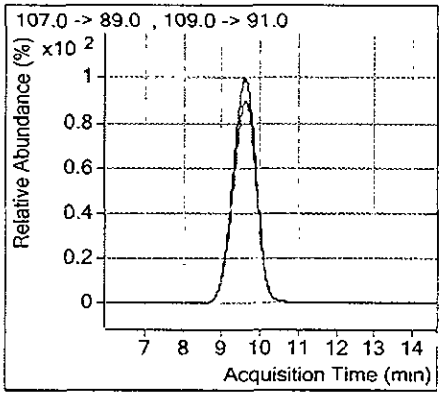
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:15
Analyst	lores
Data File	27JAN12-perc-057.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2 0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.615	27081	99	83	1.82370	1.82370	1
Perchlorate-(35Cl18O4)	ISTD	9.607	177470	107	89			1
							-8.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	9082	101	85	2.98	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55608	109	91	3.19	2.30	3.80	In Control

Compound Graphics

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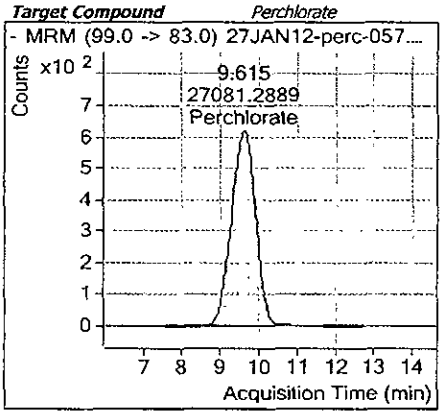
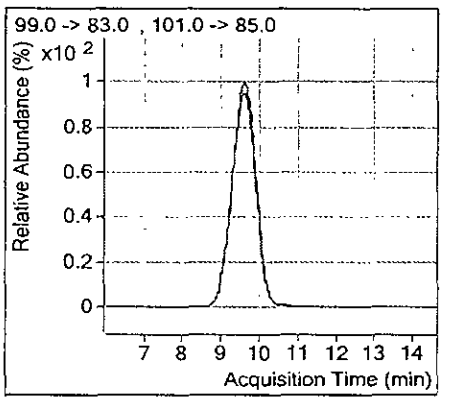
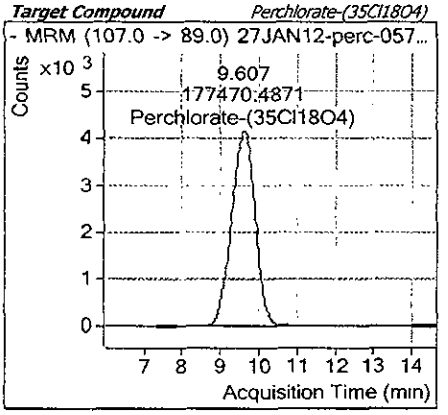
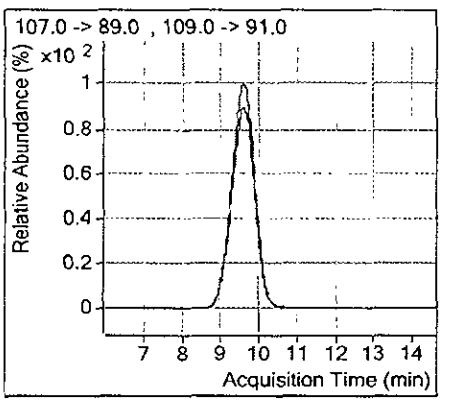
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:31
Analyst	lores
Data File	27JAN12-perc-058 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

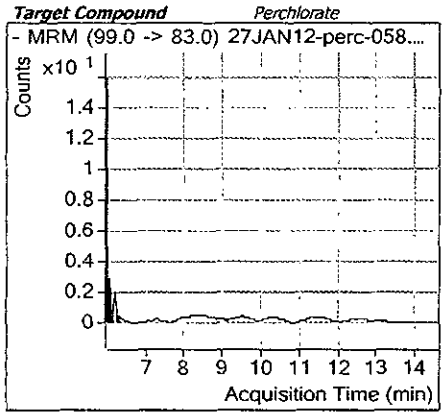
Quantitation Results

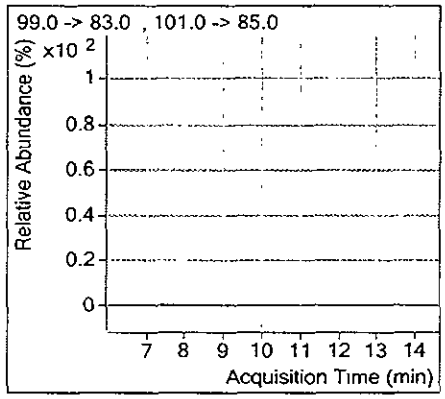
Name	Type	RT	Area	Precursor	Product		Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 608	172615	107	89				1
								Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53854	109	91	3.21	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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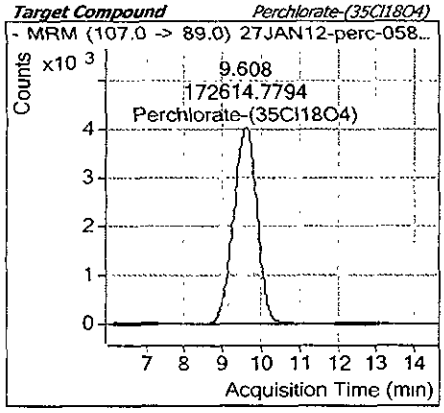
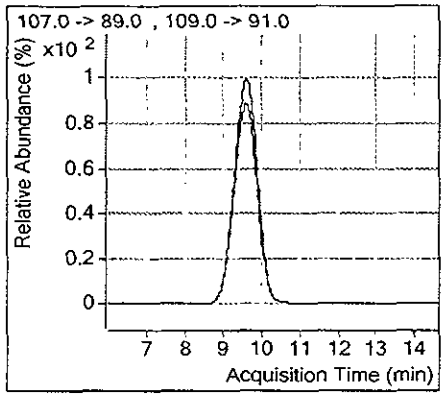
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:25
Analyst	lores
Data File	27JAN12-perc-065.d
Acquisition Method	PercMRM_2 m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1 00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.607	13752	99	83	**0.92952**	**0.92952**	1
Perchlorate-(35Cl18O4)	ISTD	9 602	178353	107	89			1
							-7.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4832	101	85	2.85	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	55704	109	91	3.20	2.30	3 80	In Control

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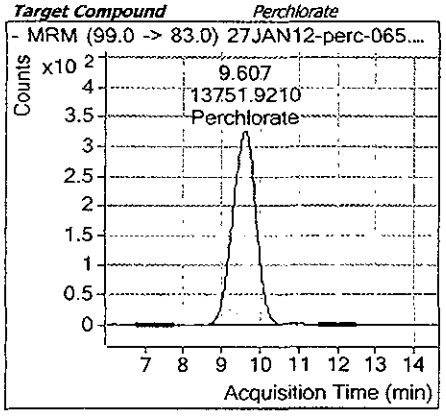
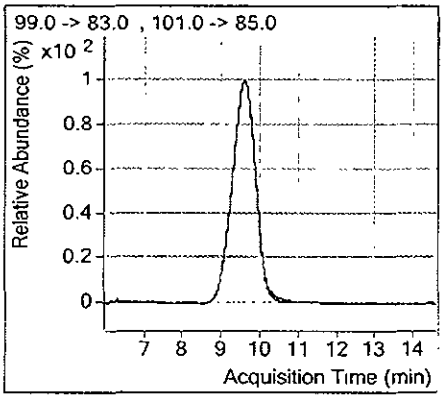
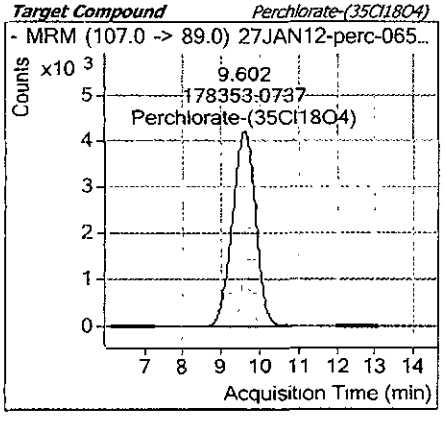
Compound Graphics

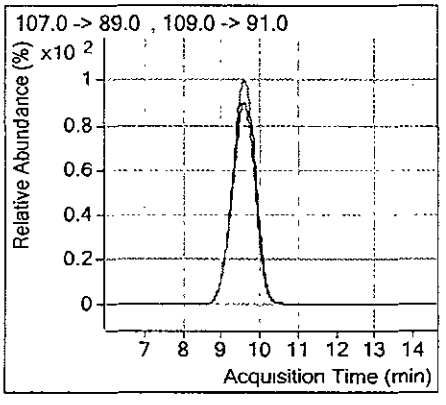
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:41
Analyst	lores
Data File	27JAN12-perc-066.d
Acquisition Method	PercMRM_2 m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.595	2043	99	83	0.15376	0.15376	1
Perchlorate-(35Cl18O4)	ISTD	9.603	175950	107	89			1
							2.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	786	101	85	2.60	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54998	109	91	3.20	2.30	3.80	In Control

Compound Graphics

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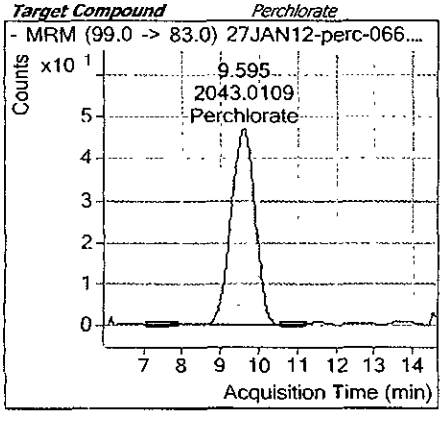
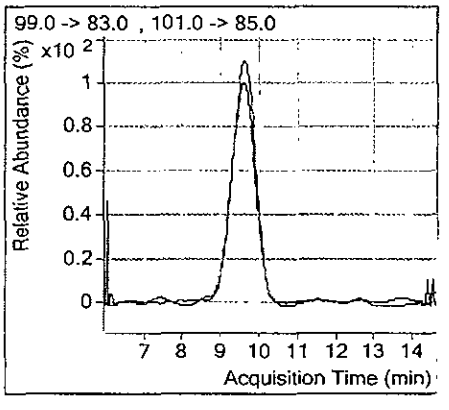
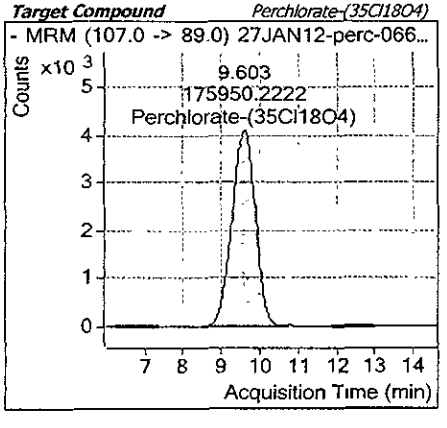
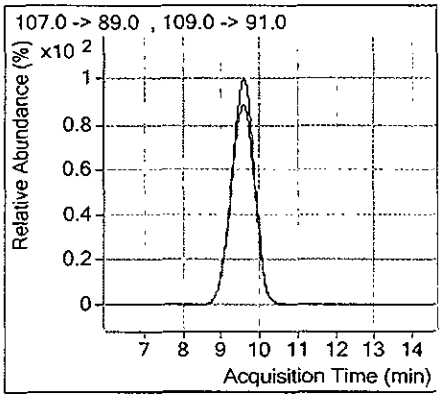
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:57
Analyst	lores
Data File	27JAN12-perc-067.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

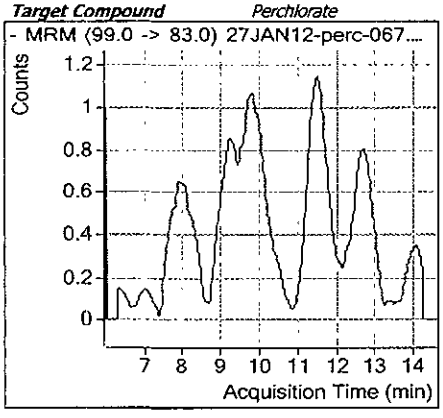
Quantitation Results

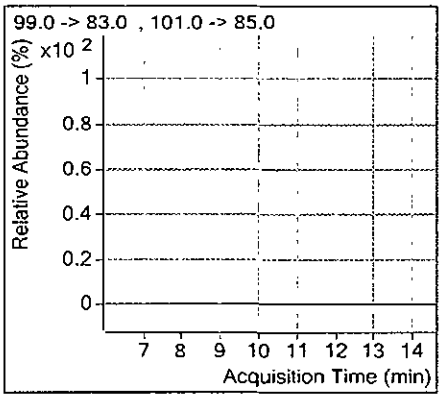
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.602	173900	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54242	109	91	3.21	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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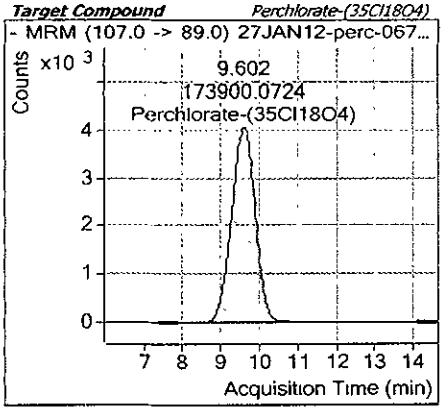
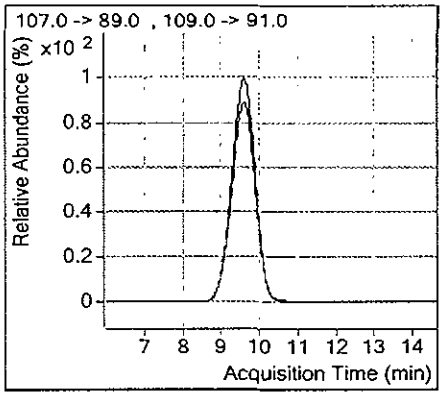
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:25
Analyst	lores
Data File	30JAN12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

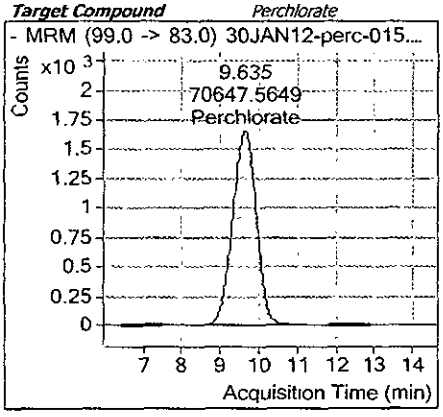
Quantitation Results

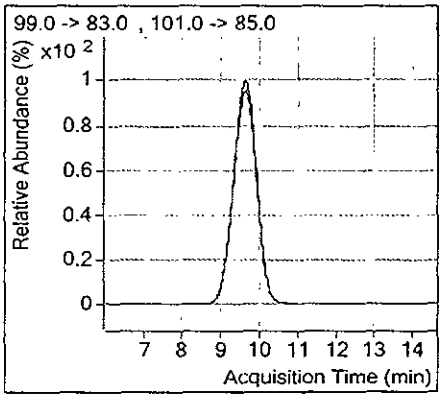
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 635	70648	99	83	**4.82526**	**4.82526**	1
Perchlorate-(35Cl18O4)	ISTD	9.633	174587	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23526	101	85	3.00	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	53891	109	91	3.24	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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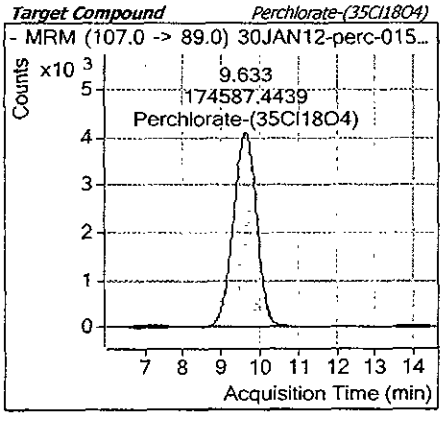
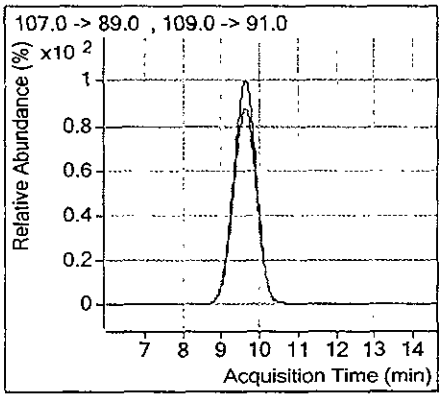
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 19:41
Analyst	lores
Data File	30JAN12-perc-016.d
Acquisition Method	PercMRM_2 m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

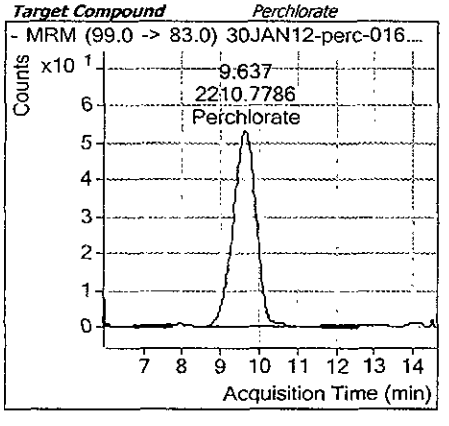
Quantitation Results

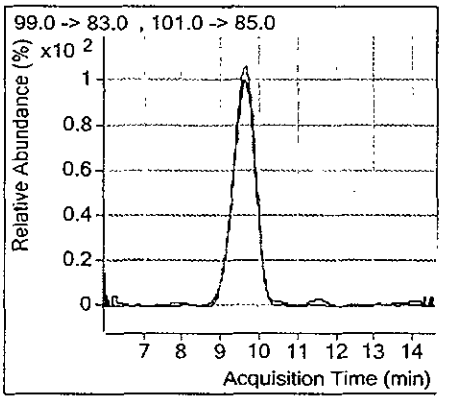
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 637	2211	99	83	0.16957	0.16957	1
Perchlorate-(35Cl18O4)	ISTD	9.626	176047	107	89			1
							13.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	816	101	85	2.71	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	56164	109	91	3 13	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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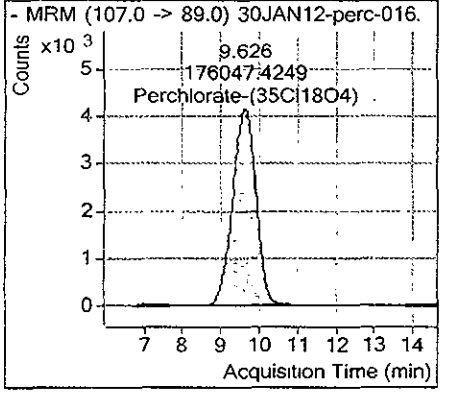
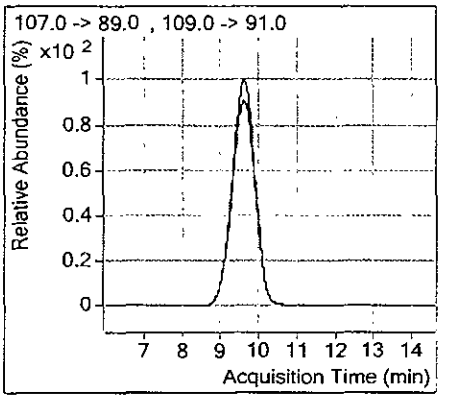
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 22:39
Analyst	lores
Data File	30JAN12-perc-027 d
Acquisition Method	PercMRM_2 m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.623	12992	99	83	0.99592	0.99592	1
Perchlorate-(35Cl18O4)	ISTD	9 621	158141	107	89			1
							-0.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4269	101	85	3.04	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	48975	109	91	3.23	2.30	3.80	In Control

Compound Graphics

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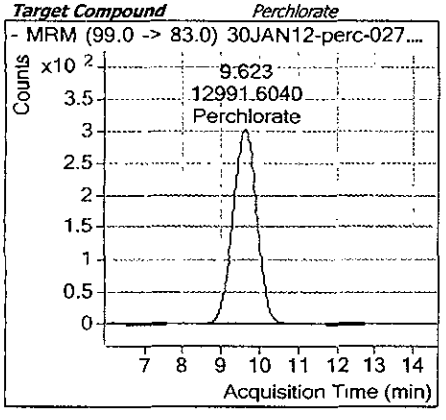
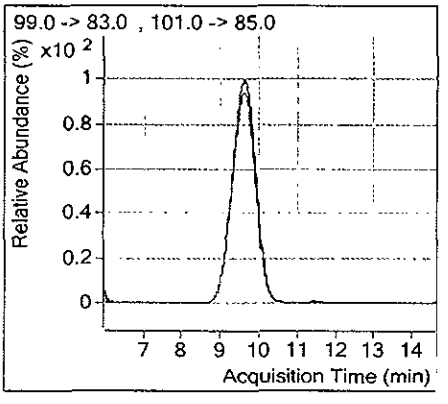
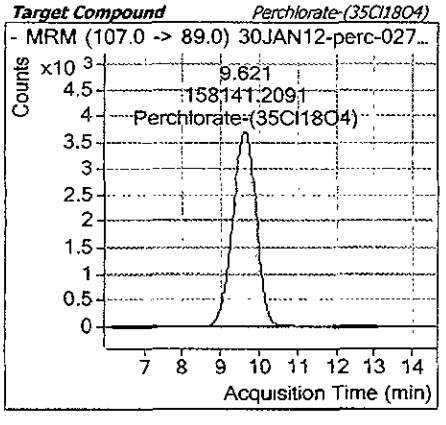
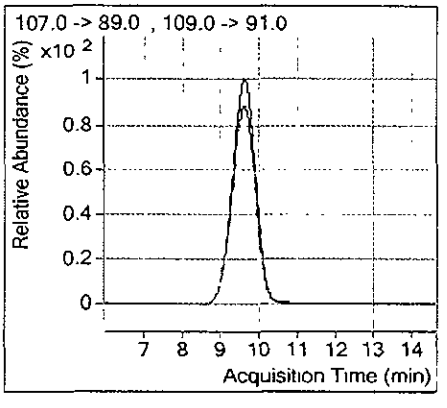
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/30/2012 22:56
Analyst	lores
Data File	30JAN12-perc-028.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

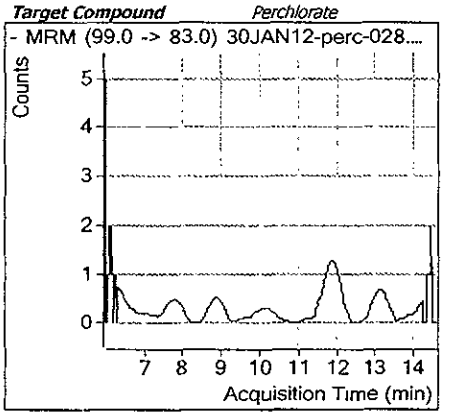
Quantitation Results

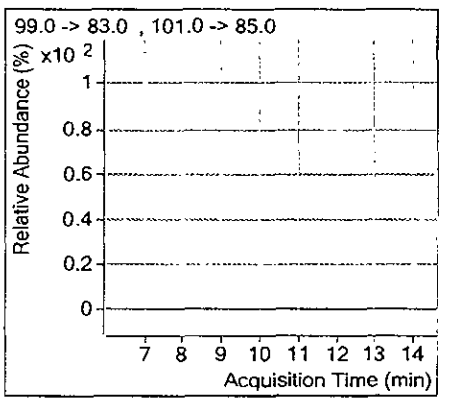
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 623	151830	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	48513	109	91	3 13	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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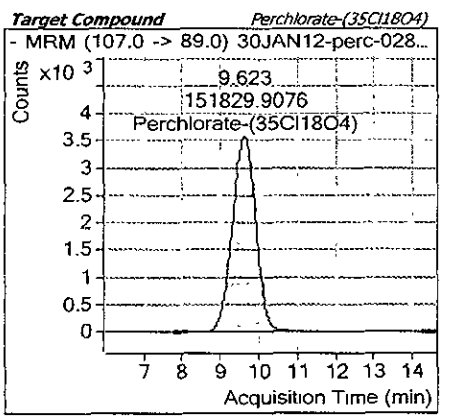
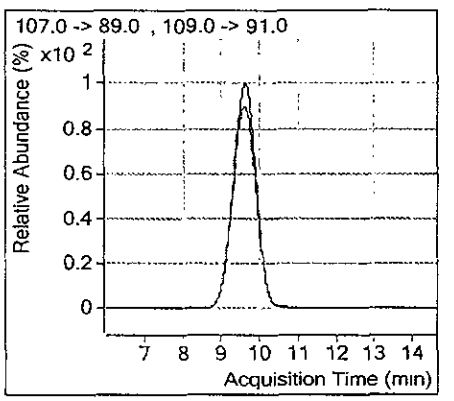
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D.\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:05
Analyst	lores
Data File	30JAN12-perc-036.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

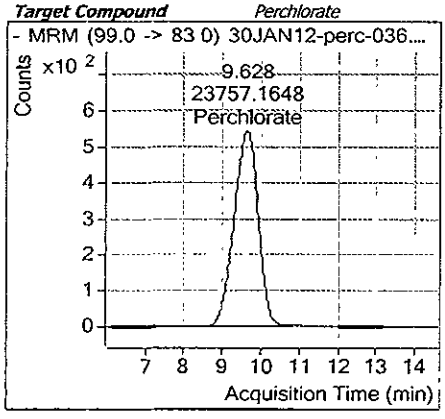
Quantitation Results

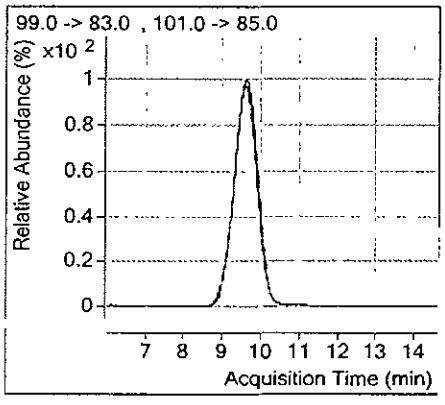
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.628	23757	99	83	1.93650	1.93650	1
Perchlorate-(35Cl18O4)	ISTD	9.619	147226	107	89			1
							-3.2 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	7810	101	85	3 04	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	46754	109	91	3 15	2.30	3.80	In Control

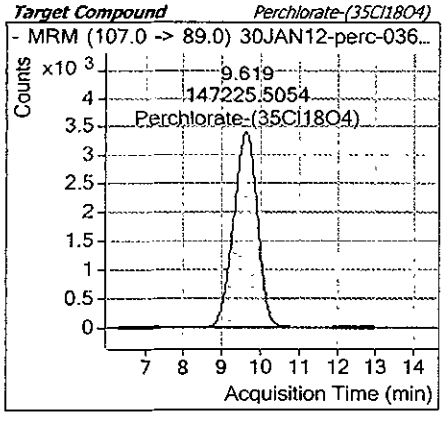
Compound Graphics

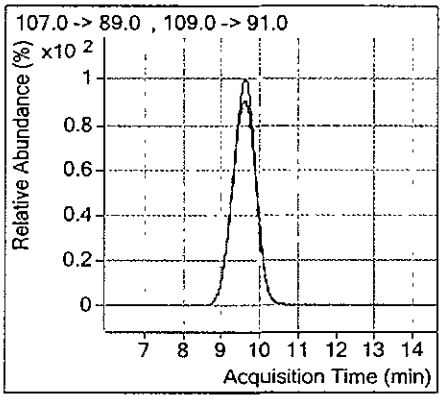
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:22
Analyst	lores
Data File	30JAN12-perc-037 d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	CCV3
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0.50
Injection Volume	50

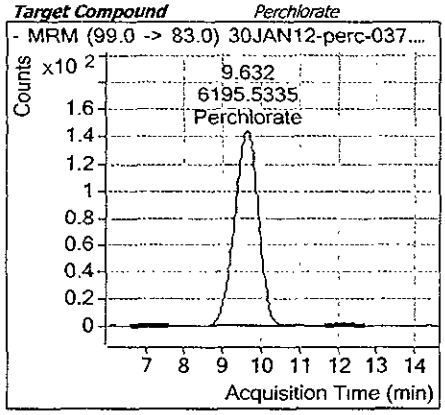
Quantitation Results

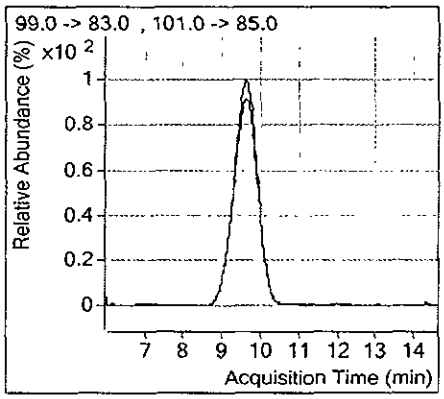
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.632	6196	99	83	0.51721	0.51721	1
Perchlorate-(35Cl18O4)	ISTD	9 622	148094	107	89			1
							3.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2035	101	85	3.04	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	47408	109	91	3.12	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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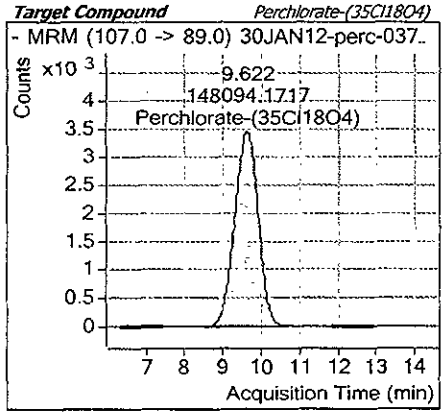
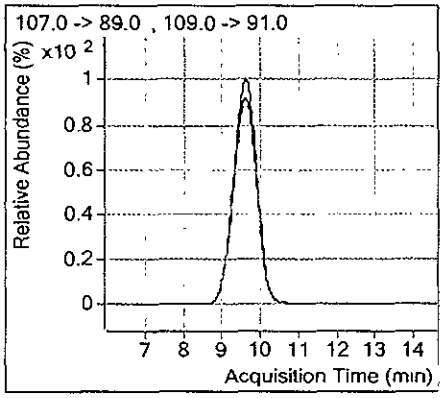
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:38
Analyst	lores
Data File	30JAN12-perc-038 d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0 15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

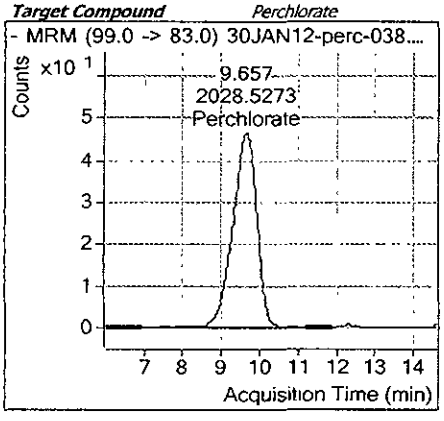
Quantitation Results

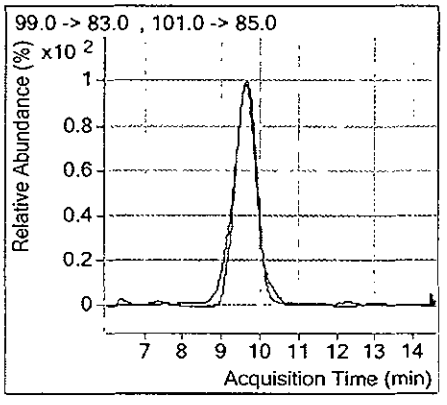
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.657	2029	99	83	**0.16384**	**0.16384**	1
Perchlorate-(35Cl18O4)	ISTD	9.633	167999	107	89			1
							9.2 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	640	101	85	3.17	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	53351	109	91	3.15	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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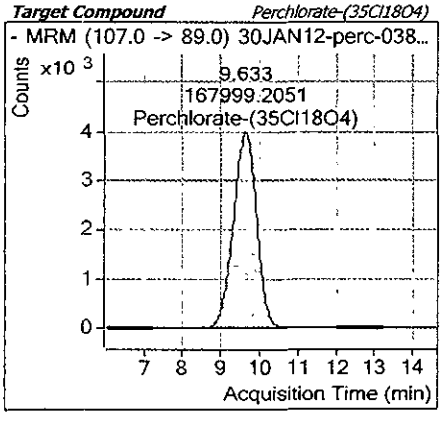
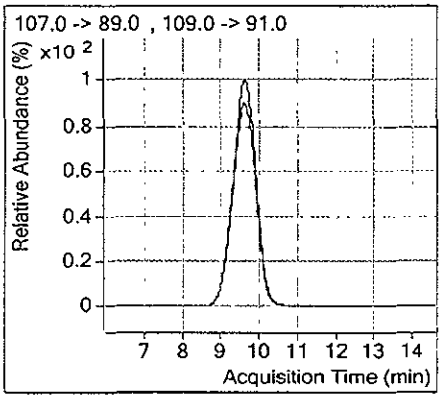
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/31/2012 01:54
Analyst	lores
Data File	30JAN12-perc-039.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

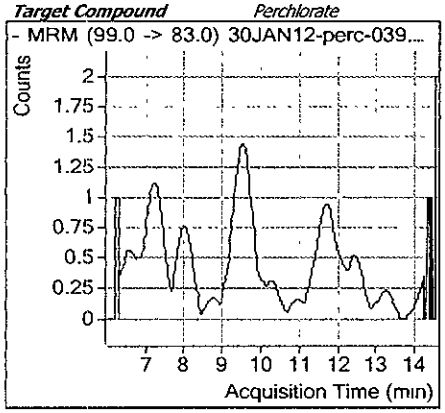
Quantitation Results

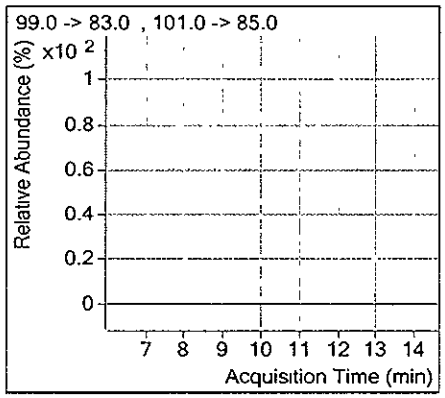
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 636	167895	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53123	109	91	3.16	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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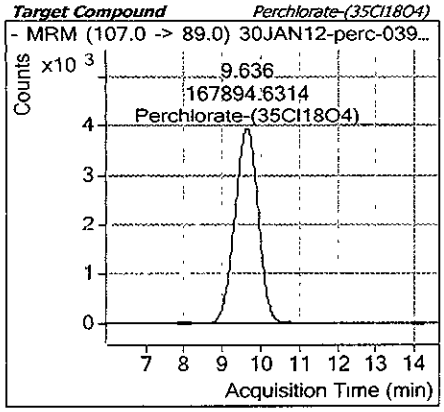
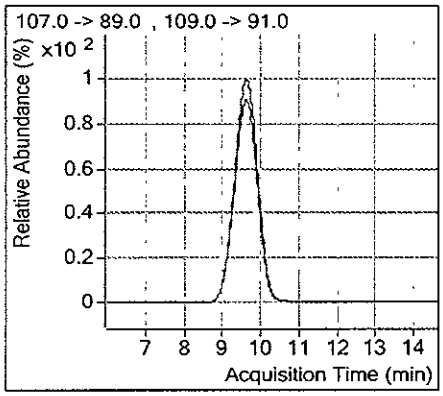
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12.20
Analyst	lores
Data File	09FEB12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

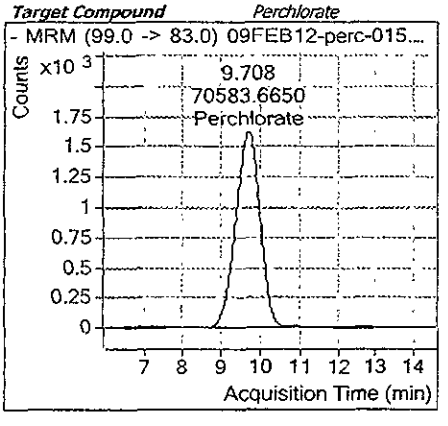
Quantitation Results

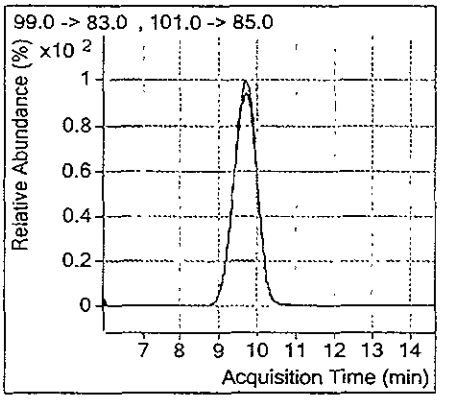
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.708	70584	99	83	4.82348	4.82348	1
Perchlorate-(35Cl18O4)	ISTD	9.698	170202	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23649	101	85	2.98	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55409	109	91	3.07	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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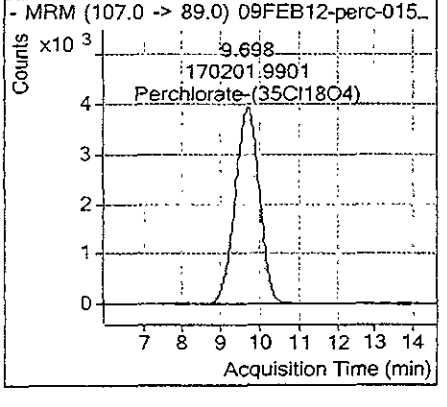
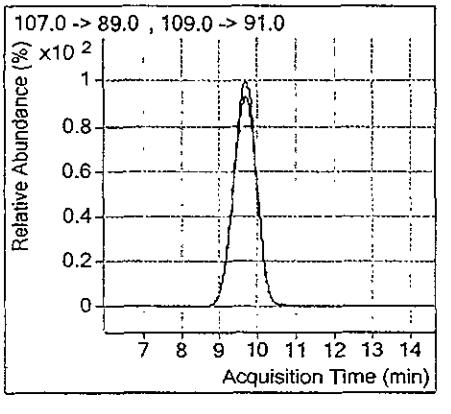
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:36
Analyst	lores
Data File	09FEB12-perc-016.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

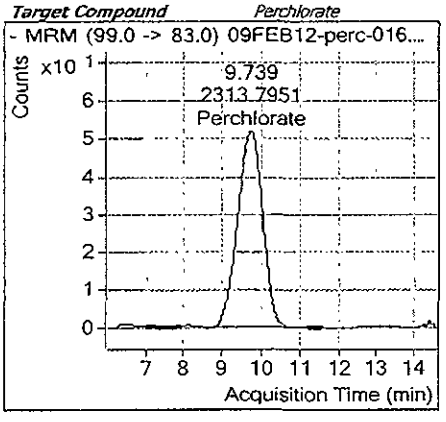
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.739	2314	99	83	0.17082	0.17082	1
Perchlorate-(35Cl18O4)	ISTD	9.704	175607	107	89			1
							13.9 % Deviation	

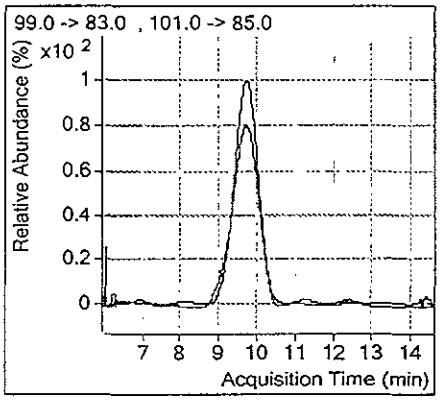
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	699	101	85	3.31	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56496	109	91	3.11	2.30	3.80	In Control

Compound Graphics

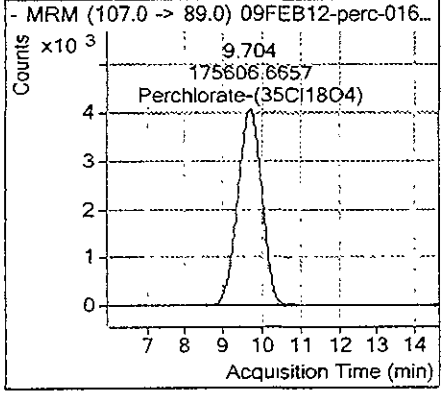
DGh 2-9-12

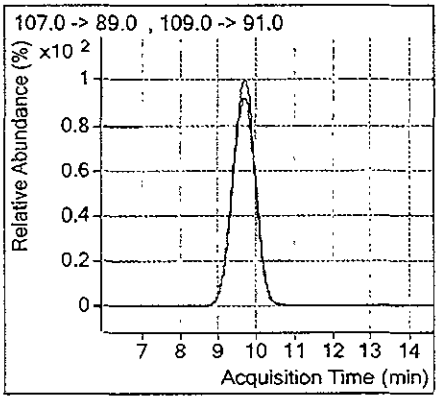
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D.\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:57
Analyst	lores
Data File	09FEB12-perc-021.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1 00
Injection Volume	50

Quantitation Results

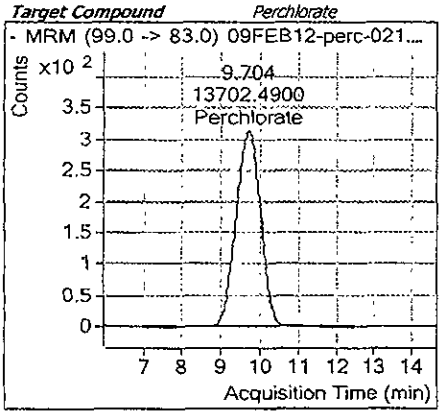
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 704	13702	99	83	0.95018	0.95018	1
Perchlorate-(35Cl18O4)	ISTD	9.708	170354	107	89			1
							-5.0 % Deviation	

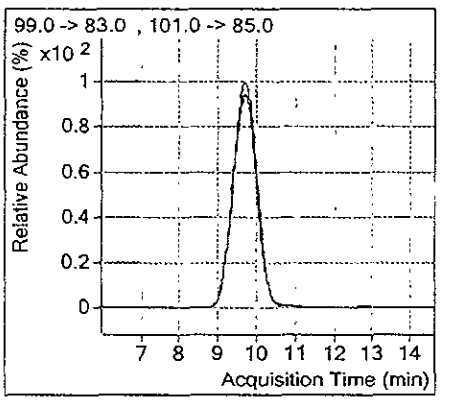
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4477	101	85	3 06	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53905	109	91	3 16	2.30	3.80	In Control

Compound Graphics

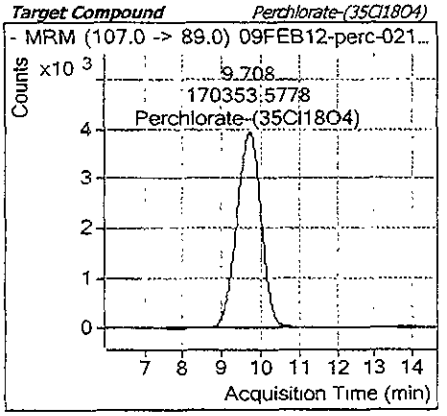
DEL 2-9-12

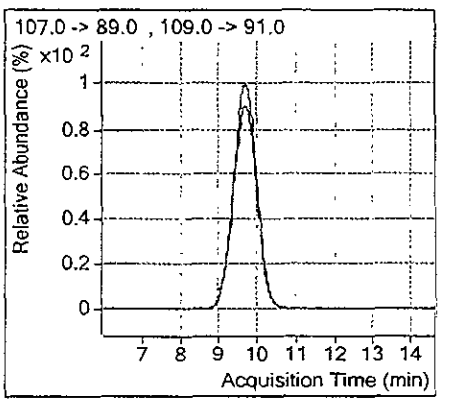
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 14:13
Analyst	lores
Data File	09FEB12-perc-022.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

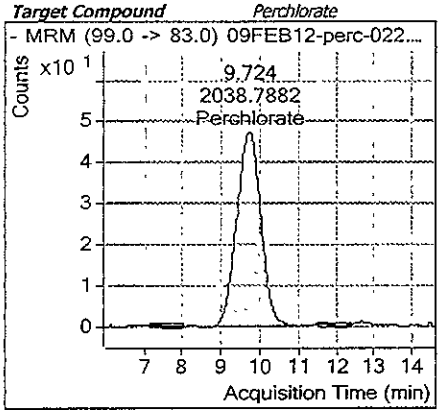
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 724	2039	99	83	0.15800	0.15800	1
Perchlorate-(35Cl18O4)	ISTD	9.713	168912	107	89			1
							5.3 % Deviation	

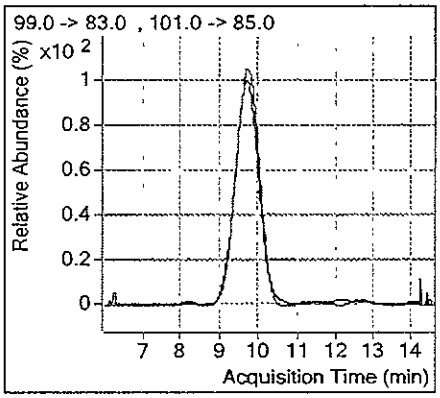
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	756	101	85	2.70	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53870	109	91	3.14	2.30	3 80	In Control

Compound Graphics

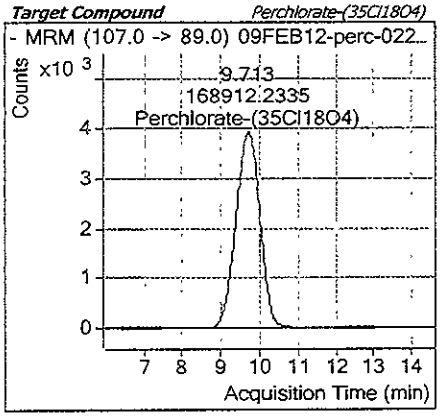
DEL 2-9-12

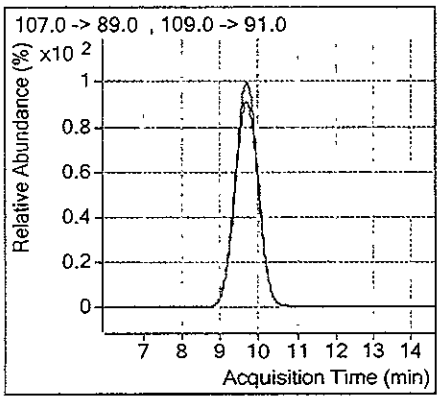
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

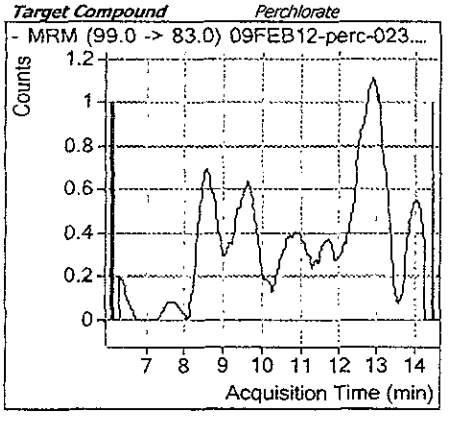
Analysis Information

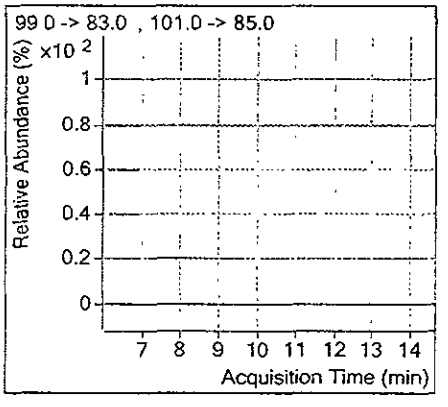
Acquisition Date - Time	2/9/2012 14:29
Analyst	lores
Data File	09FEB12-perc-023 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

No IS recovery - vial was emptied, see RI DEL 2-9-12

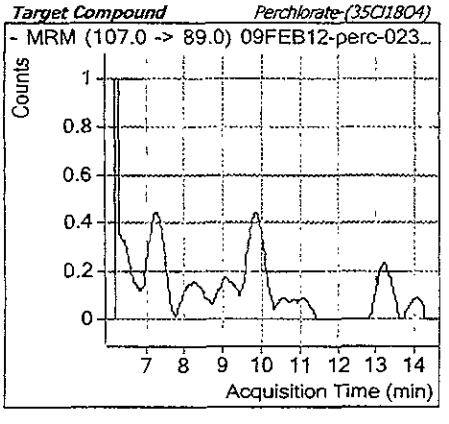
Compound Graphics

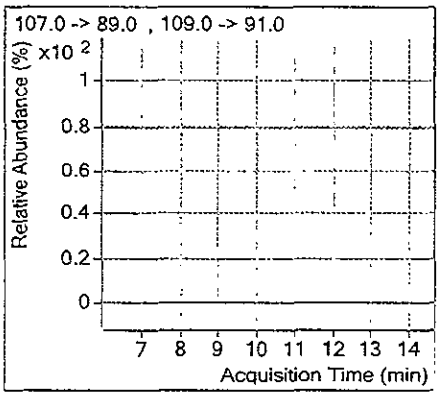
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl1804)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:15
Analyst	lores
Data File	09FEB12-perc-024.d
Acquisition Method	PercMRM_2 m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

System re-started on standard DEM 2-9-12

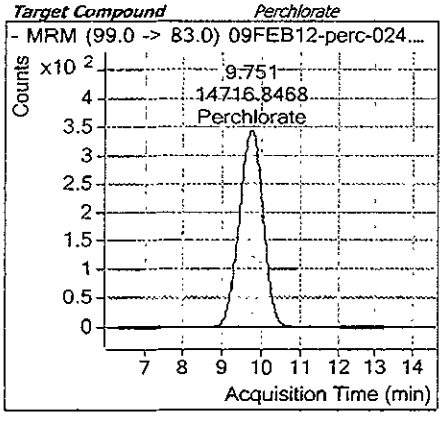
Quantitation Results

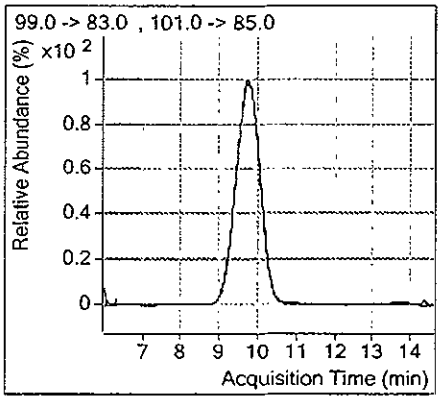
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.751	14717	99	83	0.94154	0.94154	1
Perchlorate-(35Cl18O4)	ISTD	9.754	184677	107	89			1
							-5.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5184	101	85	2.84	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	59614	109	91	3.10	2.30	3.80	In Control

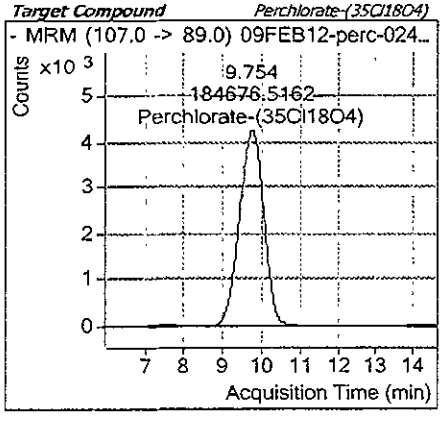
Compound Graphics

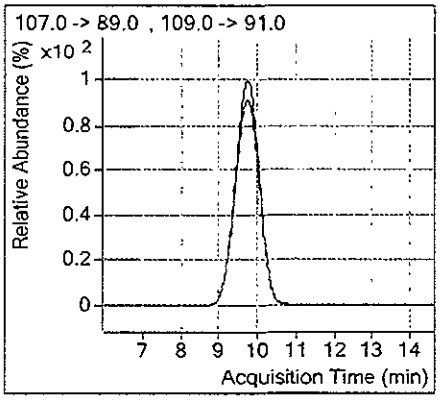
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:31
Analyst	lores
Data File	09FEB12-perc-025.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

Blank + IS in control. DEL 2-9-12

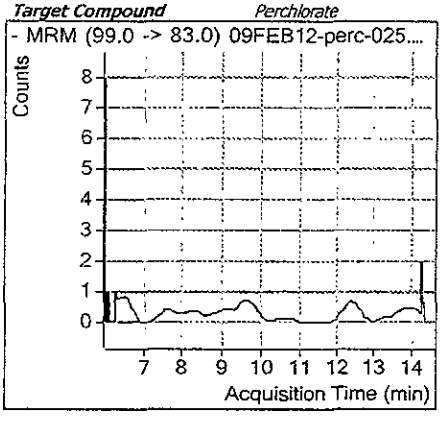
Quantitation Results

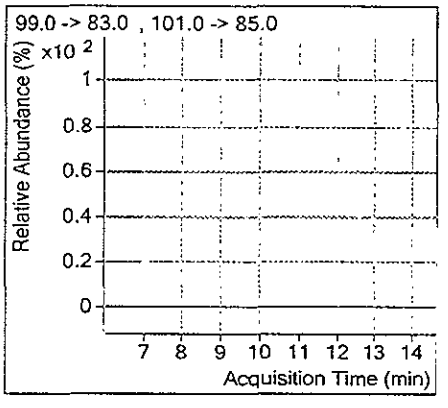
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.754	179947	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56904	109	91	3.16	2.30	3.80	In Control

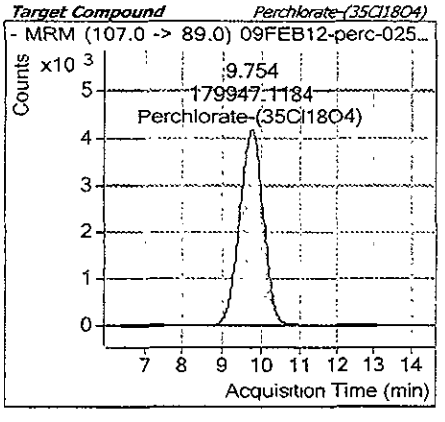
Compound Graphics

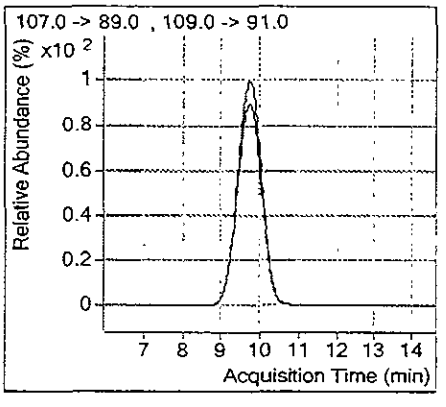
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Raw QC Data

Tune Data

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-01-27 15:00		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00		0.70	0.70	0.10	0.00		86113		
301.98	302.00	0.10	-0.02		0.71	0.70	0.10	0.01		121445		
601.98	601.98	0.10	0.00		0.70	0.70	0.10	0.00		601674		
1033.99	1033.99	0.10	0.00		0.70	0.70	0.10	0.00		503189		
1333.94	1333.97	0.10	-0.03		0.70	0.70	0.10	0.00		778406		
1633.89	1633.95	0.10	-0.06		0.71	0.70	0.10	0.01		530504		

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.10	0.06		0.67	0.70	0.10	-0.03		268924		
302.03	302.00	0.10	0.03		0.67	0.70	0.10	-0.03		127050		
602.04	601.98	0.10	0.06		0.67	0.70	0.10	-0.03		352493		
1034.04	1033.99	0.10	0.05		0.65	0.70	0.10	-0.05		272718		
1334.02	1333.97	0.10	0.05		0.65	0.70	0.10	-0.05		631495		
1634.01	1633.95	0.10	0.06		0.67	0.70	0.10	-0.03		446816		

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.30	-0.01		1.21	1.20	0.60	0.01		101764		
301.92	302.00	0.30	-0.08		1.30	1.20	0.60	0.10		171483		
601.92	601.98	0.30	-0.06		1.32	1.20	0.60	0.12		896539		
1033.87	1033.99	0.30	-0.12		1.37	1.20	0.60	0.17		918881		
1333.85	1333.97	0.30	-0.12		1.34	1.20	0.60	0.14		1681241		
1633.87	1633.95	0.30	-0.08		1.25	1.20	0.60	0.05		1466771		

QQQ Checktune Report

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.30	0.06		1.18	1.20	0.60	-0.02		360448	0	
302.03	302.00	0.30	0.03		1.23	1.20	0.60	0.03		185456	0	
601.99	601.98	0.30	0.01		1.19	1.20	0.60	-0.01		579567	0	
1033.99	1033.99	0.30	0.00		1.18	1.20	0.60	-0.02		529624	0	
1333.98	1333.97	0.30	0.01		1.20	1.20	0.60	0.00		1187491	0	
1633.98	1633.95	0.30	0.03		1.16	1.20	0.60	-0.04		854545	0	

Analyzer:* *MS1 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.90	112.99	0.50	-0.09		2.58	2.50	1.25	0.08		121944	0	
301.89	302.00	0.50	-0.11		2.66	2.50	1.25	0.16		231367	0	
601.89	601.98	0.50	-0.09		2.74	2.50	1.25	0.24		1078188	0	
1033.90	1033.99	0.50	-0.09		2.71	2.50	1.25	0.21		1342840	0	
1333.93	1333.97	0.50	-0.04		2.67	2.50	1.25	0.17		2459597	0	
1633.98	1633.95	0.50	0.03		2.51	2.50	1.25	0.01		2386958	0	

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.93	112.99	0.50	-0.06		2.43	2.50	1.25	-0.07		453616	0	
301.96	302.00	0.50	-0.04		2.41	2.50	1.25	-0.09		267389	0	
601.98	601.98	0.50	0.00		2.41	2.50	1.25	-0.09		903553	0	
1034.06	1033.99	0.50	0.07		2.28	2.50	1.25	-0.22		1084148	0	
1334.02	1333.97	0.50	0.05		2.33	2.50	1.25	-0.17		2454479	0	
1634.06	1633.95	0.50	0.11		2.25	2.50	1.25	-0.25		2048619	0	

[1] *NOTE:* *1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum ebundance, edit the values on the "Options" sheet.

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-01-30 14:38		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.00	112.99	0.10	0.01		0.70	0.70	0.10	0.00		47960	0	
301.99	302.00	0.10	-0.01		0.72	0.70	0.10	0.02		147291	0	
601.98	601.98	0.10	0.00		0.71	0.70	0.10	0.01		991805	0	
1034.01	1033.99	0.10	0.02		0.71	0.70	0.10	0.01		493100	0	
1333.99	1333.97	0.10	0.02		0.73	0.70	0.10	0.03		777405	0	
1633.90	1633.95	0.10	-0.05		0.73	0.70	0.10	0.03		569341	0	

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.02	112.99	0.10	0.03		0.70	0.70	0.10	0.00		180120	0	
302.00	302.00	0.10	0.00		0.70	0.70	0.10	0.00		145013	0	
602.01	601.98	0.10	0.03		0.69	0.70	0.10	-0.01		519075	0	
1034.00	1033.99	0.10	0.01		0.66	0.70	0.10	-0.04		247404	0	
1334.00	1333.97	0.10	0.03		0.66	0.70	0.10	-0.04		570946	0	
1634.00	1633.95	0.10	0.05		0.66	0.70	0.10	-0.04		404475	0	

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.30	0.00		1.21	1.20	0.60	0.01		53444	0	
301.92	302.00	0.30	-0.08		1.32	1.20	0.60	0.12		209743	0	
601.92	601.98	0.30	-0.06		1.36	1.20	0.60	0.16		1513510	0	
1033.88	1033.99	0.30	-0.11		1.38	1.20	0.60	0.18		908438	0	
1333.89	1333.97	0.30	-0.08		1.38	1.20	0.60	0.18		1676715	0	
1633.88	1633.95	0.30	-0.07		1.29	1.20	0.60	0.09		1502413	0	

QQQ Checktune Report

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.03	112.99	0.30	0.04		1.20	1.20	0.60	0.00		231178		
301.99	302.00	0.30	-0.01		1.24	1.20	0.60	0.04		215343		
601.96	601.98	0.30	-0.02		1.23	1.20	0.60	0.03		847199		
1033.97	1033.99	0.30	-0.02		1.20	1.20	0.60	0.00		477738		
1333.96	1333.97	0.30	-0.01		1.20	1.20	0.60	0.00		1053024		
1633.97	1633.95	0.30	0.02		1.18	1.20	0.60	-0.02		750044		

Analyzer:* *MS1 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.91	112.99	0.50	-0.08		2.61	2.50	1.25	0.11		58691		
301.86	302.00	0.50	-0.14		2.69	2.50	1.25	0.19		286802		
601.89	601.98	0.50	-0.09		2.78	2.50	1.25	0.28		1920003		
1033.91	1033.99	0.50	-0.08		2.76	2.50	1.25	0.26		1272506		
1333.95	1333.97	0.50	-0.02		2.72	2.50	1.25	0.22		2425493		
1634.00	1633.95	0.50	0.05		2.57	2.50	1.25	0.07		2370369		

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.90	112.99	0.50	-0.09		2.45	2.50	1.25	-0.05		278543	0	
301.92	302.00	0.50	-0.08		2.44	2.50	1.25	-0.06		314058	0	
601.94	601.98	0.50	-0.04		2.42	2.50	1.25	-0.08		1412364	0	
1034.03	1033.99	0.50	0.04		2.30	2.50	1.25	-0.20		966637	0	
1333.99	1333.97	0.50	0.02		2.33	2.50	1.25	-0.17		2221421	0	
1634.06	1633.95	0.50	0.11		2.25	2.50	1.25	-0.25		1860869	0	

[1] *NOTE:* *1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-02-09 08:24		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.10	-0.01		0.70	0.70	0.10	0.00		95029	0	
301.98	302.00	0.10	-0.02		0.69	0.70	0.10	-0.01		142512	0	
601.95	601.98	0.10	-0.03		0.68	0.70	0.10	-0.02		716830	0	
1033.98	1033.99	0.10	-0.01		0.71	0.70	0.10	0.01		569273	0	
1333.94	1333.97	0.10	-0.03		0.69	0.70	0.10	-0.01		847230	0	
1633.88	1633.95	0.10	-0.07		0.68	0.70	0.10	-0.02		581498	0	

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.10	0.06		0.67	0.70	0.10	-0.03		314948	0	
302.05	302.00	0.10	0.05		0.66	0.70	0.10	-0.04		143294	0	
602.06	601.98	0.10	0.08		0.64	0.70	0.10	-0.06		413785	0	
1034.06	1033.99	0.10	0.07		0.64	0.70	0.10	-0.06		293314	0	
1334.05	1333.97	0.10	0.08		0.65	0.70	0.10	-0.05		673202	0	
1634.04	1633.95	0.10	0.09		0.65	0.70	0.10	-0.05		498580	0	

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.96	112.99	0.30	-0.03		1.21	1.20	0.60	0.01		114855		
301.92	302.00	0.30	-0.08		1.29	1.20	0.60	0.09		199884		
601.91	601.98	0.30	-0.07		1.32	1.20	0.60	0.12		1048791		
1033.86	1033.99	0.30	-0.13		1.37	1.20	0.60	0.17		1041317		
1333.86	1333.97	0.30	-0.11		1.30	1.20	0.60	0.10		1876355		
1633.87	1633.95	0.30	-0.08		1.26	1.20	0.60	0.06		1600876		

QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.08	112.99	0.30	0.09	Pass	1.13	1.20	0.60	-0.07		414618	0	
302.05	302.00	0.30	0.05	Pass	1.20	1.20	0.60	0.00		211793	0	
602.01	601.98	0.30	0.03	Pass	1.19	1.20	0.60	-0.01		668030	0	
1034.03	1033.99	0.30	0.04	Pass	1.16	1.20	0.60	-0.04		588664	0	
1334.01	1333.97	0.30	0.04	Pass	1.16	1.20	0.60	-0.04		1260364	0	
1634.01	1633.95	0.30	0.06	Pass	1.14	1.20	0.60	-0.06		936254	0	

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.88	112.99	0.50	-0.11		2.62	2.50	1.25	0.12		138210	0	
301.88	302.00	0.50	-0.12		2.65	2.50	1.25	0.15		272537	0	
601.87	601.98	0.50	-0.11		2.74	2.50	1.25	0.24		1260782	0	
1033.88	1033.99	0.50	-0.11		2.71	2.50	1.25	0.21		1478273	0	
1333.93	1333.97	0.50	-0.04		2.65	2.50	1.25	0.15		2718572	0	
1633.98	1633.95	0.50	0.03		2.52	2.50	1.25	0.02		2605726	0	

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.50	-0.01		2.43	2.50	1.25	-0.07		521240	0	
302.02	302.00	0.50	0.02		2.43	2.50	1.25	-0.07		299258	0	
602.00	601.98	0.50	0.02		2.38	2.50	1.25	-0.12		1100304	0	
1034.11	1033.99	0.50	0.12		2.22	2.50	1.25	-0.28		1228682	0	
1334.05	1333.97	0.50	0.08		2.32	2.50	1.25	-0.18		2697575	0	
1634.10	1633.95	0.50	0.15		2.21	2.50	1.25	-0.29		2348577	0	

[1] *NOTE: 1) Actual abundences depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

Blank Data

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AA Matrix.....: WATER
MB Lot-Sample #: G2A260000-097
Prep Date.....: 01/26/12
Analysis Date..: 01/28/12 Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:33
Analyst	lores
Data File	27JAN12-perc-047.d
Acquisition Method	PercMRM_2 m
Sample Name	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L
Sample Identification	MQE631AAB
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-C6
Exp. Concentration	
Injection Volume	50

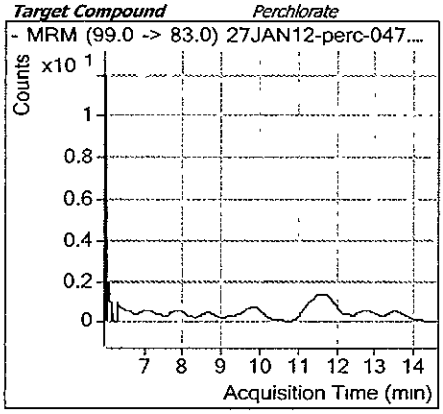
Quantitation Results

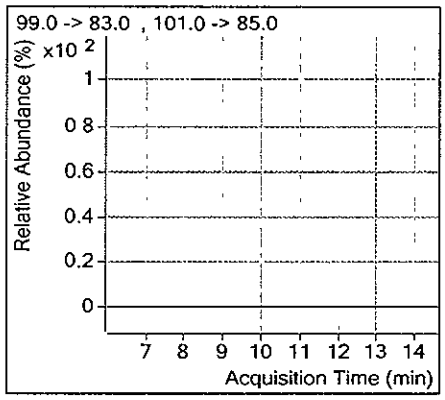
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 612	178313	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56215	109	91	3 17	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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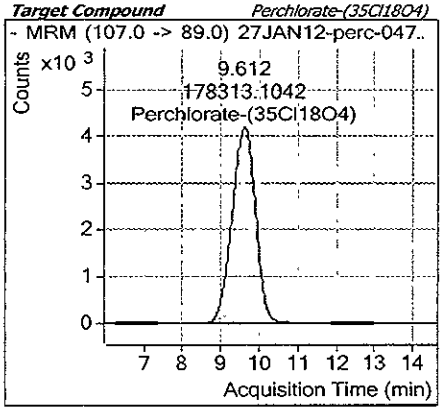
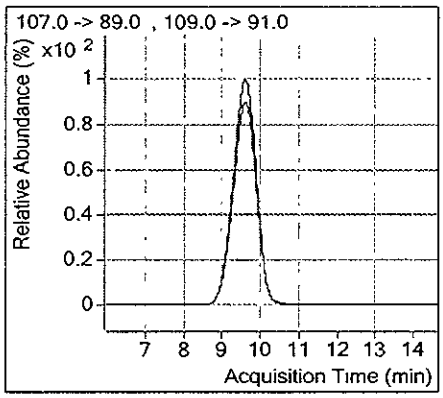
Target Compound *Perchlorate-(35Cl18O4)*





LCS/LCSD Data

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQE631AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.486**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:49
Analyst	lores
Data File	27JAN12-perc-048.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A260000-LCS, 2026097, 20mL/20mL
Sample Identification	MQE631ACC
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-C7
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.606	7006	99	83	**0.48560**	**0.48560**	1
Perchlorate-(35Cl18O4)	ISTD	9.613	176810	107	89			1

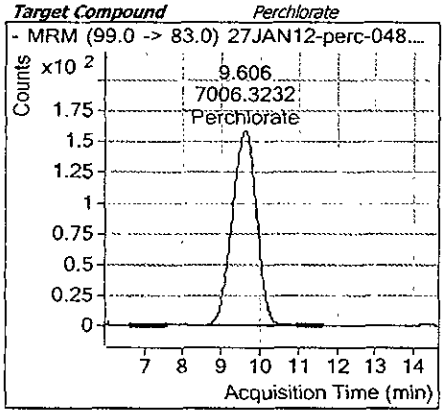
97.1 % Recovery

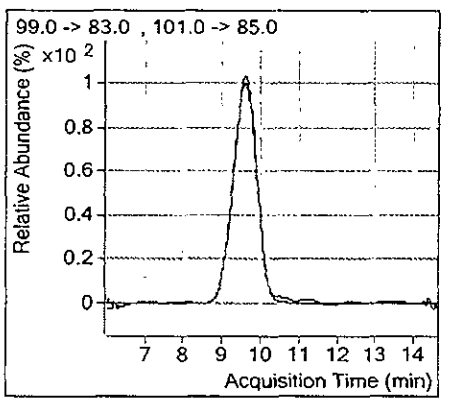
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2517	101	85	2.78	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56121	109	91	3.15	2.30	3.80	In Control

Compound Graphics

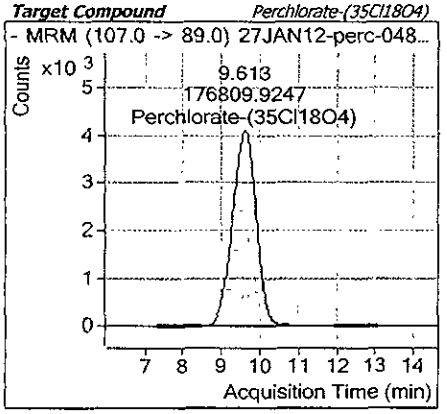
m 2/2/12

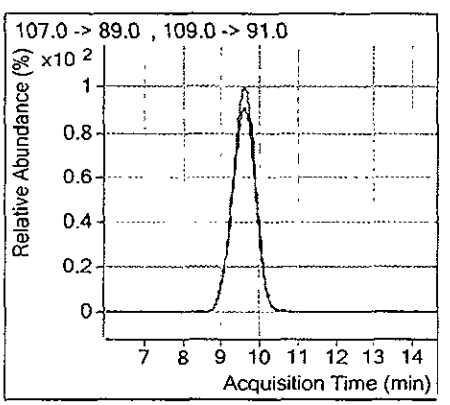
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQE631AD **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.483**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 04:05
Analyst	lores
Data File	27JAN12-perc-049 d
Acquisition Method	PercMRM_2.m
Sample Name	G2A260000-SMCS, 2026097, 20mL/20mL
Sample Identification	MQE631ADC
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-C8
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

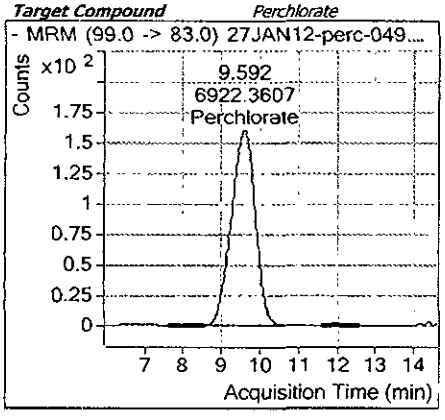
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 592	6922	99	83	**0.48255**	**0.48255**	1
Perchlorate-(35Cl18O4)	ISTD	9.587	175833	107	89			1
							96.5 % Recovery	

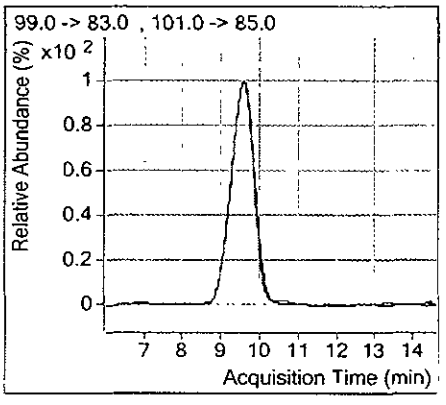
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2336	101	85	2.96	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	56341	109	91	3.12	2 30	3 80	In Control

Compound Graphics

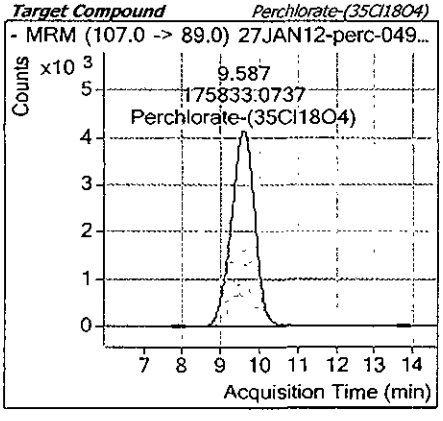
m 2/2/12

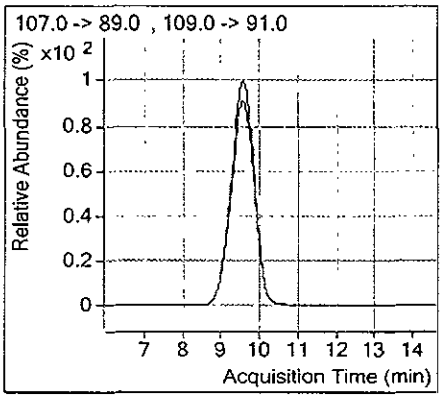
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





MS/MSD Data

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AU-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Boid print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:26
Analyst	lores
Data File	27JAN12-perc-054.d
Acquisition Method	PercMRM_2 m
Sample Name	G2A190474-4MS, 2026097, 20mL/20mL,
Sample Identification	MQAVV1AUS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-D4
Exp. Concentration	0 50
Injection Volume	50

Quantitation Results

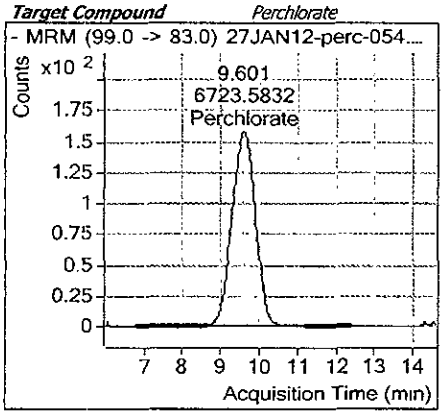
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.601	6724	99	83	0.46067	0.46067	1
Perchlorate-(35Cl18O4)	ISTD	9 606	179192	107	89			1
							92.1 % Recovery	

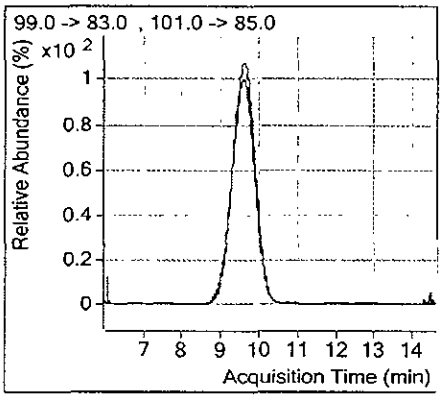
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2511	101	85	2.68	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55931	109	91	3.20	2.30	3.80	In Control

Compound Graphics

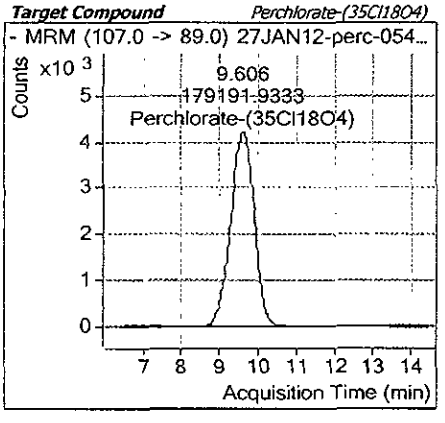
m 2/2/12

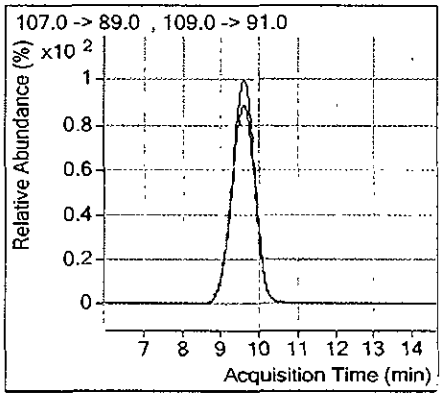
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:43
Analyst	lores
Data File	27JAN12-perc-055.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-4SD, 2026097, 20mL/20mL,
Sample Identification	MQAVV1AVD
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-D5
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

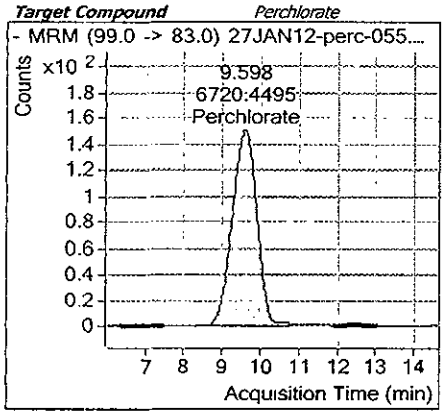
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.598	6720	99	83	0.47595	0.47595	1
Perchlorate-(35Cl18O4)	ISTD	9 602	173155	107	89			1
							95.2 % Recovery	

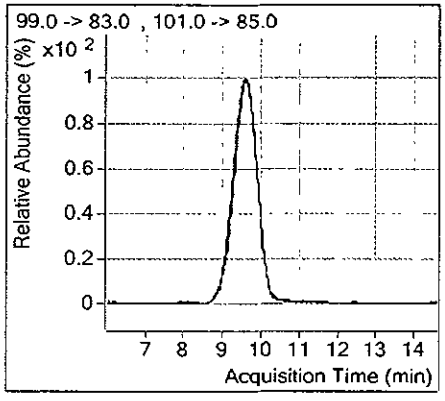
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2240	101	85	3.00	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	54871	109	91	3.16	2.30	3.80	In Control

Compound Graphics

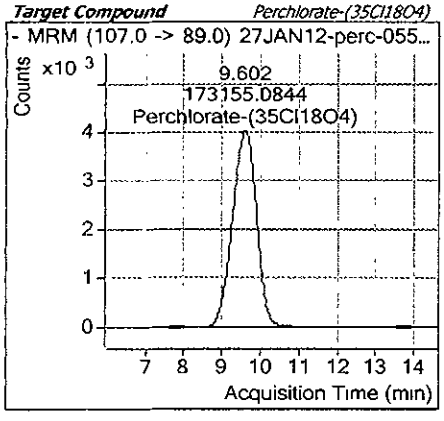
M 2/2/12

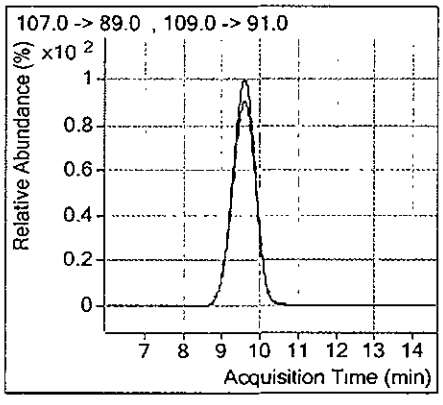
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Run Log

TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 2025195, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + IS	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	MS_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-CS	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate	Sample				
27JAN12-perc-004.d	Perchlorate	Sample				
27JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2801	109.9	
27JAN12-perc-006.d	Perchlorate	Calibration	0.3000	5404	102.3	
27JAN12-perc-007.d	Perchlorate	Calibration	0.5000	9177	99.0	
27JAN12-perc-008.d	Perchlorate	Calibration	1.0000	17438	96.2	
27JAN12-perc-009.d	Perchlorate	Calibration	2.0000	34849	95.2	
27JAN12-perc-010.d	Perchlorate	Calibration	5.0000	87739	96.3	
27JAN12-perc-011.d	Perchlorate	Calibration	10.0000	171805	99.3	
27JAN12-perc-012.d	Perchlorate	Calibration	20.0000	306806	101.9	
27JAN12-perc-013.d	Perchlorate	Sample				
27JAN12-perc-014.d	Perchlorate	QC	5.0000	83936	101.3	
27JAN12-perc-015.d	Perchlorate	QC	5.0000	80689	97.6	
27JAN12-perc-016.d	Perchlorate	QC	0.1500	2565	106.0	
27JAN12-perc-017.d	Perchlorate	Sample				
27JAN12-perc-018.d	Perchlorate	QC	5.0000	23240	29.5	
27JAN12-perc-019.d	Perchlorate	QC	5.0000	22371	30.5	
27JAN12-perc-020.d	Perchlorate	Sample		14534		
27JAN12-perc-021.d	Perchlorate	Sample		34033		
27JAN12-perc-022.d	Perchlorate	Sample		32681		
27JAN12-perc-023.d	Perchlorate	Sample		16035		
27JAN12-perc-024.d	Perchlorate	Sample		15853		
27JAN12-perc-025.d	Perchlorate	Sample		14618		
27JAN12-perc-026.d	Perchlorate	QC	1.0000	14647	96.0	
27JAN12-perc-027.d	Perchlorate	Sample				
27JAN12-perc-028.d	Perchlorate	Sample		3998		

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-029.d	Perchlorate	Sample		2751	
27JAN12-perc-030.d	Perchlorate	Sample		6938	
27JAN12-perc-031.d	Perchlorate	Sample		6710	
27JAN12-perc-032.d	Perchlorate	Sample		742	
27JAN12-perc-033.d	Perchlorate	Sample		563	
27JAN12-perc-034.d	Perchlorate	QC	2.0000	27816	94.6
27JAN12-perc-035.d	Perchlorate	QC	0.1500	1981	106.2
27JAN12-perc-036.d	Perchlorate	Sample			
27JAN12-perc-037.d	Perchlorate	Sample			
27JAN12-perc-038.d	Perchlorate	QC	0.5000	7080	100.6
27JAN12-perc-039.d	Perchlorate	QC	0.5000	7079	96.1
27JAN12-perc-040.d	Perchlorate	Sample		196240	
27JAN12-perc-041.d	Perchlorate	Sample		11609	
27JAN12-perc-042.d	Perchlorate	QC	0.5000	18064	250.4
27JAN12-perc-043.d	Perchlorate	QC	0.5000	17693	256.4
27JAN12-perc-044.d	Perchlorate	QC	1.0000	8717	97.7
27JAN12-perc-045.d	Perchlorate	QC	0.1500	1287	109.4
27JAN12-perc-046.d	Perchlorate	Sample			
27JAN12-perc-047.d	Perchlorate	Sample			
27JAN12-perc-048.d	Perchlorate	QC	0.5000	7006	97.1
27JAN12-perc-049.d	Perchlorate	QC	0.5000	6922	96.5
27JAN12-perc-050.d	Perchlorate	Sample		276	
27JAN12-perc-051.d	Perchlorate	Sample		1203	
27JAN12-perc-052.d	Perchlorate	Sample		1180	
27JAN12-perc-053.d	Perchlorate	Sample			
27JAN12-perc-054.d	Perchlorate	QC	0.5000	6724	92.1
27JAN12-perc-055.d	Perchlorate	QC	0.5000	6720	95.2
27JAN12-perc-056.d	Perchlorate	Sample		154	
27JAN12-perc-057.d	Perchlorate	QC	2.0000	27081	91.2

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Perchlorate	Sample			
27JAN12-perc-059.d	Perchlorate	Sample			
27JAN12-perc-060.d	Perchlorate	Sample			
27JAN12-perc-061.d	Perchlorate	Sample		2937	
27JAN12-perc-062.d	Perchlorate	Sample			
27JAN12-perc-063.d	Perchlorate	Sample			
27JAN12-perc-064.d	Perchlorate	Sample			
27JAN12-perc-065.d	Perchlorate	QC	1.0000	13752	93.0
27JAN12-perc-066.d	Perchlorate	QC	0.1500	2043	102.5
27JAN12-perc-067.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
27JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		211488		
27JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	223283		
27JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	220220		
27JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	227031		
27JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218398		
27JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218746		
27JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	216575		
27JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	205344		
27JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178484	213510.2	Averge ICAL IS area response
27JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		215378	0.9	% Dev from average
27JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	196970	-7.7	
27JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	196515	-8.0	
27JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	212887	-0.3	
27JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		195538	-8.4	
27JAN12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	188710	-11.6	
27JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	175846	-17.6	
27JAN12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		153808	-28.0	
27JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		143338	-32.9	
27JAN12-perc-022.d	Perchlorate-(35Cl18O4)	Sample		145700	-31.8	
27JAN12-perc-023.d	Perchlorate-(35Cl18O4)	Sample		149523	-30.0	
27JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		138647	-35.1	
27JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		139526	-34.7	
27JAN12-perc-026.d	Perchlorate-(35Cl18O4)	QC	10.0000	183855	-13.9	
27JAN12-perc-027.d	Perchlorate-(35Cl18O4)	Sample		176320	-17.4	
27JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		163374	-23.5	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		164633	-22.9	
27JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		145400	-31.9	
27JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		152782	-28.4	
27JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		124945	-41.5	
27JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		126496	-40.8	
27JAN12-perc-034.d	Perchlorate-(35Cl18O4)	QC	10.0000	175657	-17.7	
27JAN12-perc-035.d	Perchlorate-(35Cl18O4)	QC	10.0000	164057	-23.2	
27JAN12-perc-036.d	Perchlorate-(35Cl18O4)	Sample		182675	-14.4	
27JAN12-perc-037.d	Perchlorate-(35Cl18O4)	Sample		173391	-18.8	
27JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	172284	-19.3	
27JAN12-perc-039.d	Perchlorate-(35Cl18O4)	QC	10.0000	180536	-15.4	
27JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		156395	-26.8	
27JAN12-perc-041.d	Perchlorate-(35Cl18O4)	Sample		178444	-16.4	
27JAN12-perc-042.d	Perchlorate-(35Cl18O4)	QC	10.0000	173173	-18.9	
27JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	165599	-22.4	
27JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	107420	-49.7	
27JAN12-perc-045.d	Perchlorate-(35Cl18O4)	QC	10.0000	103051	-51.7	— Low
27JAN12-perc-046.d	Perchlorate-(35Cl18O4)	Sample		159119	-25.5	DJL 2-9-2012
27JAN12-perc-047.d	Perchlorate-(35Cl18O4)	Sample		178313	-16.5	
27JAN12-perc-048.d	Perchlorate-(35Cl18O4)	QC	10.0000	176810	-17.2	
27JAN12-perc-049.d	Perchlorate-(35Cl18O4)	QC	10.0000	175833	-17.6	
27JAN12-perc-050.d	Perchlorate-(35Cl18O4)	Sample		183614	-14.0	
27JAN12-perc-051.d	Perchlorate-(35Cl18O4)	Sample		174824	-18.1	
27JAN12-perc-052.d	Perchlorate-(35Cl18O4)	Sample		184680	-13.5	
27JAN12-perc-053.d	Perchlorate-(35Cl18O4)	Sample		178081	-16.6	
27JAN12-perc-054.d	Perchlorate-(35Cl18O4)	QC	10.0000	179192	-16.1	
27JAN12-perc-055.d	Perchlorate-(35Cl18O4)	QC	10.0000	173155	-18.9	
27JAN12-perc-056.d	Perchlorate-(35Cl18O4)	Sample		184409	-13.6	
27JAN12-perc-057.d	Perchlorate-(35Cl18O4)	QC	10.0000	177470	-16.9	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-058.d	Perchlorate-(35Cl18O4)	Sample		172615	-19.2
27JAN12-perc-059.d	Perchlorate-(35Cl18O4)	Sample		172828	-19.1
27JAN12-perc-060.d	Perchlorate-(35Cl18O4)	Sample		176299	-17.4
27JAN12-perc-061.d	Perchlorate-(35Cl18O4)	Sample		172234	-19.3
27JAN12-perc-062.d	Perchlorate-(35Cl18O4)	Sample		174129	-18.4
27JAN12-perc-063.d	Perchlorate-(35Cl18O4)	Sample		174800	-18.1
27JAN12-perc-064.d	Perchlorate-(35Cl18O4)	Sample		175962	-17.6
27JAN12-perc-065.d	Perchlorate-(35Cl18O4)	QC	10.0000	178353	-16.5
27JAN12-perc-066.d	Perchlorate-(35Cl18O4)	QC	10.0000	175950	-17.6
27JAN12-perc-067.d	Perchlorate-(35Cl18O4)	Sample		173900	-18.6

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

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Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\30JAN2012\QuantResults\30January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
30JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/30/2012 16:10
30JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/30/2012 16:26
30JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/30/2012 16:43
30JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/30/2012 16:59
30JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/30/2012 17:15
30JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/30/2012 17:31
30JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/30/2012 17:47
30JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/30/2012 18:04
30JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/30/2012 18:20
30JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/30/2012 18:36
30JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/30/2012 18:52
30JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/30/2012 19:08
30JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/30/2012 19:25
30JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/30/2012 19:41
30JAN12-perc-017.d ✓	G2A190474-2, 2026097, 20mL/20mL, RI	P1-A1		Sample	1/30/2012 19:57
30JAN12-perc-018.d	G2A300000-MB, 2030100, 20mL/20mL, 6850-L	P1-A2		Sample	1/30/2012 20:13
30JAN12-perc-019.d	G2A300000-LCS, 2030100, 20mL/20mL	P1-A3	LCS_5	QC	1/30/2012 20:30
30JAN12-perc-020.d	G2A300000-SMCS, 2030100, 20mL/20mL	P1-A4	LCS_5	QC	1/30/2012 20:46
30JAN12-perc-021.d	G2A300411-1, 2030100, 20mL/20mL, See 10X.	P1-A5		Sample	1/30/2012 21:02
30JAN12-perc-022.d	G2A300411-1MS, 2030100, 20mL/20mL, See 10X.	P1-A6	MS_5	QC	1/30/2012 21:18
30JAN12-perc-023.d	G2A300411-1SD, 2030100, 20mL/20mL, See 10X.	P1-A7	MS_5	QC	1/30/2012 21:34
30JAN12-perc-024.d	G2A300411-2, 2030100, 20mL/20mL, See 5X.	P1-A8		Sample	1/30/2012 21:51
30JAN12-perc-025.d	G2A300411-3, 2030100, 20mL/20mL,	P1-A9		Sample	1/30/2012 22:07
30JAN12-perc-026.d	G2A300411-4, 2030100, 20mL/20mL,	P1-B1		Sample	1/30/2012 22:23
30JAN12-perc-027.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/30/2012 22:39
30JAN12-perc-028.d	Blank + IS	P2-B1		Sample	1/30/2012 22:56

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

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30JAN12-perc-029.d	G2A300411-5, 2030100, 20mL/20mL,	P1-B2		Sample	1/30/2012 23:12
30JAN12-perc-030.d	G2A300411-6, 2030100, 20mL/20mL,	P1-B3		Sample	1/30/2012 23:28
30JAN12-perc-031.d	G2A300411-7, 2030100, 20mL/20mL, See 10X	P1-B4		Sample	1/30/2012 23:44
30JAN12-perc-032.d	G2A300411-8, 2030100, 20mL/20mL,	P1-B5		Sample	1/31/2012 00:00
30JAN12-perc-033.d	G2A300411-9, 2030100, 20mL/20mL,	P1-B6		Sample	1/31/2012 00:17
30JAN12-perc-034.d	G2A300411-10, 2030100, 20mL/20mL, See 20X.	P1-B7		Sample	1/31/2012 00:33
30JAN12-perc-035.d	G2A300411-11, 2030100, 20mL/20mL, See 5X.	P1-B8		Sample	1/31/2012 00:49
30JAN12-perc-036.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/31/2012 01:05
30JAN12-perc-037.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 01:22
30JAN12-perc-038.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/31/2012 01:38
30JAN12-perc-039.d	Blank + IS	P2-B1		Sample	1/31/2012 01:54
30JAN12-perc-040.d	G2A240000-MB, 2024070, 20mL/20mL, 8321-L	P1-B9		Sample	1/31/2012 02:10
30JAN12-perc-041.d	G2A240000-LCS, 2024070, 20mL/20mL	P1-C1	LCS_5	QC	1/31/2012 02:27
30JAN12-perc-042.d	G2A140424-2, 2024070, 20mL/20mL,	P1-C2		Sample	1/31/2012 02:43
30JAN12-perc-043.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/31/2012 02:59
30JAN12-perc-044.d	CCV-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-C4	CCV3	QC	1/31/2012 03:15
30JAN12-perc-045.d	Blank + IS	P2-B1		Sample	1/31/2012 03:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
30JAN12-perc-003.d	Perchlorate	Sample				
30JAN12-perc-004.d	Perchlorate	Sample				
30JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2026	104.9	
30JAN12-perc-006.d	Perchlorate	Calibration	0.3000	4944	108.9	
30JAN12-perc-007.d	Perchlorate	Calibration	0.5000	7259	95.8	
30JAN12-perc-008.d	Perchlorate	Calibration	1.0000	15254	100.5	
30JAN12-perc-009.d	Perchlorate	Calibration	2.0000	28929	93.3	
30JAN12-perc-010.d	Perchlorate	Calibration	5.0000	72105	95.4	
30JAN12-perc-011.d	Perchlorate	Calibration	10.0000	142254	99.0	
30JAN12-perc-012.d	Perchlorate	Calibration	20.0000	272408	102.2	
30JAN12-perc-013.d	Perchlorate	Sample				
30JAN12-perc-014.d	Perchlorate	QC	5.0000	73655	99.3	
30JAN12-perc-015.d	Perchlorate	QC	5.0000	70648	96.5	
30JAN12-perc-016.d	Perchlorate	QC	0.1500	2211	113.0	
30JAN12-perc-017.d	Perchlorate	Sample		1465		
30JAN12-perc-018.d	Perchlorate	Sample				
30JAN12-perc-019.d	Perchlorate	QC	5.0000	66709	97.5	
30JAN12-perc-020.d	Perchlorate	QC	5.0000	70205	97.4	
30JAN12-perc-021.d	Perchlorate	Sample		956389		
30JAN12-perc-022.d	Perchlorate	QC	5.0000	972901	2339.5	
30JAN12-perc-023.d	Perchlorate	QC	5.0000	868009	2313.7	
30JAN12-perc-024.d	Perchlorate	Sample		283786		
30JAN12-perc-025.d	Perchlorate	Sample		10275		
30JAN12-perc-026.d	Perchlorate	Sample		29669		
30JAN12-perc-027.d	Perchlorate	QC	1.0000	12992	99.6	
30JAN12-perc-028.d	Perchlorate	Sample				

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

30JAN12-perc-029.d	Perchlorate	Sample		3424	
30JAN12-perc-030.d	Perchlorate	Sample		19657	
30JAN12-perc-031.d	Perchlorate	Sample		579758	
30JAN12-perc-032.d	Perchlorate	Sample		30385	
30JAN12-perc-033.d	Perchlorate	Sample		32165	
30JAN12-perc-034.d	Perchlorate	Sample		1039235	
30JAN12-perc-035.d	Perchlorate	Sample		448862	
30JAN12-perc-036.d	Perchlorate	QC	2.0000	23757	96.8
30JAN12-perc-037.d	Perchlorate	QC	0.5000	6196	103.4
30JAN12-perc-038.d	Perchlorate	QC	0.1500	2029	109.2
30JAN12-perc-039.d	Perchlorate	Sample			
30JAN12-perc-040.d	Perchlorate	Sample			
30JAN12-perc-041.d	Perchlorate	QC	5.0000	63643	90.8
30JAN12-perc-042.d	Perchlorate	Sample		189330	
30JAN12-perc-043.d	Perchlorate	QC	1.0000	13861	98.4
30JAN12-perc-044.d	Perchlorate	QC	0.5000	7040	102.0
30JAN12-perc-045.d	Perchlorate	Sample			

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
30JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
30JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		186900		
30JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	175770		
30JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	191772		
30JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	187952		
30JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	184009		
30JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	186047		
30JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	180252		
30JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	170892		
30JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	158397	179386.6	Averge ICAL IS area response
30JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		181451	1.2	% Dev from average
30JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	176950	-1.4	
30JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	174587	-2.7	
30JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	176047	-1.9	
30JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		182656	1.8	
30JAN12-perc-018.d	Perchlorate-(35Cl18O4)	Sample		167687	-6.5	
30JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	163241	-9.0	
30JAN12-perc-020.d	Perchlorate-(35Cl18O4)	QC	10.0000	171871	-4.2	
30JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		104223	-41.9	
30JAN12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	98773	-44.9	
30JAN12-perc-023.d	Perchlorate-(35Cl18O4)	QC	10.0000	89109	-50.3	See 10X.
30JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		122508	-31.7	
30JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		149538	-16.6	
30JAN12-perc-026.d	Perchlorate-(35Cl18O4)	Sample		143226	-20.2	
30JAN12-perc-027.d	Perchlorate-(35Cl18O4)	QC	10.0000	158141	-11.8	
30JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		151830	-15.4	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

30JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		165587	-7.7	
30JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		163244	-9.0	
30JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		105044	-41.4	
30JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		147192	-17.9	
30JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		147371	-17.8	
30JAN12-perc-034.d	Perchlorate-(35Cl18O4)	Sample		82482	-54.0	See 20X.
30JAN12-perc-035.d	Perchlorate-(35Cl18O4)	Sample		107250	-40.2	
30JAN12-perc-036.d	Perchlorate-(35Cl18O4)	QC	10.0000	147226	-17.9	
30JAN12-perc-037.d	Perchlorate-(35Cl18O4)	QC	10.0000	148094	-17.4	
30JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	167999	-6.3	
30JAN12-perc-039.d	Perchlorate-(35Cl18O4)	Sample		167895	-6.4	
30JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		174636	-2.6	
30JAN12-perc-041.d	Perchlorate-(35Cl18O4)	QC	10.0000	167215	-6.8	
30JAN12-perc-042.d	Perchlorate-(35Cl18O4)	Sample		159377	-11.2	
30JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	170835	-4.8	
30JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	170789	-4.8	
30JAN12-perc-045.d	Perchlorate-(35Cl18O4)	Sample		165876	-7.5	

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-82	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy
09FEB12-perc-003.d	Perchlorate	Sample			
09FEB12-perc-004.d	Perchlorate	Sample			
09FEB12-perc-005.d	Perchlorate	Calibration	0.1500	1994	98.5
09FEB12-perc-006.d	Perchlorate	Calibration	0.3000	4939	110.2
09FEB12-perc-007.d	Perchlorate	Calibration	0.5000	7366	99.0
09FEB12-perc-008.d	Perchlorate	Calibration	1.0000	14708	97.7
09FEB12-perc-009.d	Perchlorate	Calibration	2.0000	29275	96.8
09FEB12-perc-010.d	Perchlorate	Calibration	5.0000	72149	97.4
09FEB12-perc-011.d	Perchlorate	Calibration	10.0000	142220	99.0
09FEB12-perc-012.d	Perchlorate	Calibration	20.0000	267911	101.4
09FEB12-perc-013.d	Perchlorate	Sample			
09FEB12-perc-014.d	Perchlorate	QC	5.0000	73040	99.0
09FEB12-perc-015.d	Perchlorate	QC	5.0000	70584	96.5
09FEB12-perc-016.d	Perchlorate	QC	0.1500	2314	113.9
09FEB12-perc-017.d	Perchlorate	Sample			
09FEB12-perc-018.d	Perchlorate	QC	0.5000	6429	93.2
09FEB12-perc-019.d	Perchlorate	Sample		1270	
09FEB12-perc-020.d	Perchlorate	Sample		2732	
09FEB12-perc-021.d	Perchlorate	QC	1.0000	13702	95.0
09FEB12-perc-022.d	Perchlorate	QC	0.1500	2039	105.3
09FEB12-perc-023.d	Perchlorate	Sample			
09FEB12-perc-024.d	Perchlorate	QC	1.0000	14717	94.2
09FEB12-perc-025.d	Perchlorate	Sample			

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response		
09FEB12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
09FEB12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		178134		
09FEB12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178318		
09FEB12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	183239		
09FEB12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	179006		
09FEB12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	177774		
09FEB12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	176957		
09FEB12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	172263		
09FEB12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	166692		
09FEB12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	153143	173423.8	Average ICAL IS area response
09FEB12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		175351	1.1	% Deviation from ICAL IS average
09FEB12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	171605	-1.0	
09FEB12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	170202	-1.9	
09FEB12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	175607	1.3	
09FEB12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		170093	-1.9	
09FEB12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	166351	-4.1	
09FEB12-perc-019.d	Perchlorate-(35Cl18O4)	Sample		179135	3.3	
09FEB12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		175345	1.1	
09FEB12-perc-021.d	Perchlorate-(35Cl18O4)	QC	10.0000	170354	-1.8	
09FEB12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	168912	-2.6	
09FEB12-perc-023.d	Perchlorate-(35Cl18O4)	Sample			-100.0	(vial was emptied)
09FEB12-perc-024.d	Perchlorate-(35Cl18O4)	QC	10.0000	184677	6.5	
09FEB12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		179947	3.8	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

Prep Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica West Sacramento

LCMS Data Review Checklist

Lot ID: G2A190474 **Test:** 6850-DOD-L **PM:** LCL

Prep Batch(es) 20260097 **Due:** 2/8/12

A. Calibration/Instrument Run QC	Analyst	Reviewer	N/A
1. ICAL or ICAL Summary and CCV included.	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• $RF_{average}$ criteria appropriate for the method (see footnote for criteria).			✓
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓	✓	
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).			✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓	✓	
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
4. Copy of logbook for ICAL included	✓	✓	
5. Tune check frequency & criteria met and copy included.	✓	✓	
6. Method Number is identified on data.	✓	✓	
B. QA/QC			
1. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
2. LCS/LCSD and MB data is included.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present in Clouseau.	✓	✓	
4. MS/MSD data complete.	✓	✓	
5. Holding Times were met. 2/14-15/12	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted.	✓	✓	
C. Sample Analysis			
1. Logbook copies for all injections made, including ICV standards and ICAL.	✓	✓	
2. Logbooks/prep sheets properly filled out.	✓	✓	
3. Manual Integrations reviewed and appropriate.			✓
4. All raw data for samples is included (applies to unused data as well)	✓	✓	
5. All analytes correctly reported.	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all non-conformances documented appropriately?	✓	✓	
2. Quantims entry correct, including dates and times.	✓	✓	
3. Appropriate footnotes used.	✓	✓	
4. Report sheets included and error-free.	✓	✓	

Analyst: [signature] Date: 2/8/12 2-9-12

2nd Level Reviewer: [signature] Date: 2-8-2012 / 2/10/12

Comments:

FAILING OPENING LODV - Sample 3 Reanalyzed, [illegible] 2-9-12

Criteria for $RF_{average}$

- PPCP – NS by Isotope Dilution ≤ 30%.
- PPCP – NS by Internal Standard ≤ 50%.
- PPCP – IS by Internal Standard ≤ 50%.
- All other LCMS methods ≤ 20%

Delivered To Instruments 1/26/12 j - Entered on 2/08/12 g
Received @ Instruments 1/26/12 ms - entered on 2/8/12 ms

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento
ESC-Extraction Master Sheet

Holding Time Due: 2/14/12 Project Due: 2/08/12
BATCH #: 2026097 Initiated By: [signature] Date: 1/26/12
Test: Perch. 685 Dod Hbk - L Extn Comp'd By: [signature] Date: 1/26/12

QC Code	Lot ID	Sample #	Sample Size / Initial Mass	Final Volume / Final Mass	Chlorine checked
B		-MB	20.00 mL	20.00 mL	NA
C		-LCS	20.00 mL	20.00 mL	
	62A190474	-1	20.00 mL	20.00 mL	
		-2	20.00 mL	20.00 mL	
		-3	20.00 mL	20.00 mL	
		-4	20.00 mL	20.00 mL	
S		-4MS	20.00 mL	20.00 mL	
D		-4SD	20.00 mL	20.00 mL	
		-5	20.00 mL	20.00 mL	
	62A200474	-1	20.00 mL	20.00 mL	
		-2	20.00 mL	20.00 mL	
		-3	20.00 mL	20.00 mL	
		-4	20.00 mL	20.00 mL	
		-5	20.00 mL	20.00 mL	
		-6	20.00 mL	20.00 mL	
C	Synth Matrix	-TMCS	20.00 mL	20.00 mL	

1/26/12

QC Codes: B = MB, C = LCS, L = LCSD, S = MS, D = SD, FB = Filter Blank

SOP No.: WS-LC-0012

EXTRACTION COMMENTS:

Multi-incremental Sampling/Date: NA

Dried/Date NA Ground//Date NA

Sonicated - Start: NA End: NA Date: NA

Cleanup by/Date _____ Dilution by/Date NA

Synthetic Matrix: 3844-089D

Final Vialling /Date 1/26/12

Filters: Millipore: 0.45: R1JA91854

Millipore Water Dispensed / Date 1/24/12

Filters: Millex: 0.2: R1EA59190

SPE Cartridge: Waters Lot # NA

Dionex Cartridges: 11/007-2.5-Ba/Ag/H

QCCodes

QCCodes	Standard Information				
	Volume	STD ID	Expire	STD Name	Std Conc.
All	200 µL	11LCMS0952-06	7/26/12	IS TD	1.0 µg/mL
C, S, D	100 µL	12LCMS0096	7/8/12	Perchlorate	0.1 µg/mL

Spiked By / Date: [signature] 1/26/12 Witnessed By / Date: NA 1-26-12

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/26/12
Time: 17:58:00

LEV 1	LEV 2		LEV 1	LEV 2	
Y	_	Blank	Y	_	Weights/Volumes
Y	_	Check	Y	_	Spike & Surrogate Worksheet
Y	_	MS/MSD	Y	_	Vial contains correct volume
			Y	_	Labels, greenbars, worksheets
					computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
Y Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: 002531 Jonathan Reed

Concentrationist: 002531 Jonathan Reed

Reviewer/Date: REEDJ / 1/26/12

****
* *
* QC BATCH: 2026097 *
* *
****

PREP DATE: 1/26/12 13:04
COMP DATE: 1/26/12 17:01

Perchlorate by LC/MS/MS
FILTRATION (DISS)

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJI	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	2/08/12	G2A190474-001 **MQAVQ-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-002 **MQAVR-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-003 **MQAVT-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 **MQAVV-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 **MQAVV-1-AUS**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 **MQAVV-1-AVD**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-005 **MQAVW-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/26/12
Time: 17:58:00

QC BATCH: 2026097

PREP DATE: 1/26/12 13:04
COMP DATE: 1/26/12 17:01

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJT	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	2/09/12	G2A200474-001 **MQCM3-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-002 **MQCM4-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-003 **MQCM5-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-004 **MQCM6-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-005 **MQCM7-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-006 **MQCM8-1-AJ**	2026051 D	87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 **MQE63-1-AAB**		87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 **MQE63-1-ACC**		87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 **MQE63-1-ADC**		87	71	WATER	**20.00mL** 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:	SYNTHETIC MATRIX														

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 2026097 **Test:** Perchlorate 6850 DoD Hbk - L

Prep Date: 1/26/12 **Holding Times:** 2/14/12 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)	✓	✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet		✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	✓
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: NA Date: 1-26-12

2nd Level Reviewer: [illegible] Date: 2/8/12

Comments:

WATER, 8330A, Explosives

ICV/CCV Summaries and Run Logs

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC11 ICAL ID: 013020120 Method: 8330 A/B

Analytes Included in curve (with dates): 8330 All, NG, PETN + Picric Acid (1/26/12)
MNX, TNX + DNX (1/30/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/1/12

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 4: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Level 5: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Level 6: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Level 7: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Level 8: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
2 TNX	+++++	+++++	53.70000	60.74000	61.33000	61.55500		
	57.56200	62.90600					59.63217	5.712
3 DNX	+++++	+++++	82.05000	92.56000	94.32000	94.87500		
	89.65200	97.07100					91.75467	5.845
4 HMX	99.00000	96.20000	95.90000	94.56000	96.75000	93.59000		
	87.43800	70.82000					91.78225	9.939
5 MNX	+++++	+++++	97.90000	108	112	112		
	107	113					108	5.152
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	102	95.30000	94.60000	93.90000	96.01000	91.97000		
	85.35600	68.88900					90.95313	10.987
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	120	115	117	128	127	121		
	112	102					118	7.195

RM 2/1/12

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
10 1,3,5-Trinitrobenzene	211	210	207	206	211	208		
	201	182					205	4.640
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	219	220	215	215	221	217		
	211	193					214	4.218
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	144	143	141	139	143	142		
	138	128					140	3.725
16 TETRYL	114	111	111	110	114	114		
	113	111					112	1.307
17 Nitrobenzene	100	93.50000	87.05000	93.60000	96.72000	95.08000		
	92.21600	84.77000					92.91700	5.415
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	120	121	119	118	121	122		
	120	117					120	1.309
20 4-AM-2,6-DNT	97.00000	97.40000	96.60000	95.46000	97.64000	97.75000		
	96.13600	92.28600					96 28400	1.863

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
21 2-AM-4,6-DNT	109	108	107	106	109	109		
	107	102					107	2.198
22 2,6-Dinitrotoluene	76.40000	76.20000	73.30000	73.16000	74.88000	74.72000		
	73.58800	71.51800					74.22075	2.221
23 2,4-Dinitrotoluene	124	123	122	120	124	123		
	122	118					122	1.601
24 2-Nitrotoluene	58.00000	53.90000	48.25000	52.36000	53.60000	53.46000		
	52.77200	51.06700					52.92612	5.204
25 4-Nitrotoluene	61.60000	66.20000	59.05000	62.88000	64.64000	64.59500		
	63.84600	62.14000					63.11888	3.512
26 3-Nitrotoluene	64.80000	64.80000	57.35000	62.22000	63.92000	63.79000		
	63.20600	61.77500					62.73262	3.879
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 1 3,4-Dinitrotoluene	69.80000	65.40000	63.95000	64.88000	67.78000	67.97500		
	68.71000	68.11200					67.07587	3.080

B

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Level 4: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Level 5: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Level 6: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Level 7: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Level 8: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	176	167	171	187	185	178			
	162	138					171	9.104	

TestAmerica West Sacramento

(B)

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
15 3,5-Dinitroaniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
16 TETRYL	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
18 Nitroglycerin	+++++	+++++	69.40000	79.80000	87.13000	88.24000			
	87.71000	85.97900					83.04317	8.861	
19 2,4,6-Trinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 4-AM-2,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(B)

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 2,6-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
23 2,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 2-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 4-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
26 3-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
27 PETN	+++++ / 49.40400	+++++ / 49.44000	43.45000	46.14000	49.53000	49.66000	47.93733	5.382
$ 1 3,4-Dinitrotoluene	130 / 131	124 / 130	120	124	130	131	127	3.347

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 47

Inst ID: LC11 Batch ID: 01262012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: R418/5
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/30/12

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 01:38 File ID: 01262012C.B/M-000014.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.492	0.000	19981	217.7	8.9					
2	RDX	200	23.726	0.000	19040	209.3	4.7					
3	1,3,5-Trinitrobenz	200	25.669	0.000	42142	206.0	3.0					
4	Picric ACID	500	25.949	0.000	59562	506.0	1.2	25.949	0.000	87153	510.8	2.2
5	1,3-Dinitrobenzene	200	28.409	0.000	42353	198.0	-1.0					
6	3,5-Dinitroaniline	200	29.542	0.000	29363	210.3	5.2					
7	Nitrobenzene	200	30.026	0.000	19145	206.0	3.0					
8	TETRYL	200	30.346	0.000	23886	213.0	6.5					
9	2,4,6-Trinitrotolu	200	31.592	0.000	24900	208.0	4.0					
10	4-AM-2,6-DNT	200	32.586	0.000	19050	197.8	-1.1					
11	3,4-Dinitrotoluene	200	not spiked									
12	2-AM-4,6-DNT	200	33.282	0.000	21564	201.2	0.60					
13	2,6-Dinitrotoluene	200	34.539	0.000	14974	201.7	0.85					
14	2,4-Dinitrotoluene	200	34.929	0.000	24852	203.6	1.8					
15	2-Nitrotoluene	200	37.872	0.000	10714	202.4	1.2					
16	4-Nitrotoluene	200	39.116	0.000	13065	207.0	3.5					
17	3-Nitrotoluene	200	40.642	0.000	12888	205.4	2.7					
18	EGDN	200										
19	Nitroglycerin	200						30.852	0.000	18822	226.6	13
20	PETN	200						41.352	0.000	10640	222.0	11

ICV passes ± 15%.
TCM 1/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:24

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 48

Inst ID: LC11 Batch ID: 01302012C Eluents: Water: M0102201 2
Test: SOP WS-LC-0009 ACN: K4 8 15
Method: Method 8330 50:50 H2O:MeOH+0.4% H3PO4 445 Z -2 S 4
ICAL Date: See Calibration Report MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: [illegible] 1/31/12

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : ICV E110811E METAB
Analyzed : 30-JAN-2012 23:28
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000011.d
Sublist: 2_CALMET

		Side A						Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.418	0.000	12346	207.0	3.5					
2	DNX	200	19.211	0.000	17488	190.6	-4.7					
3	MNX	200	21.968	0.000	20795	192.0	-4.0					

ICV passes ±15%
RB 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:27

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K 41815
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD 06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD 06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD 05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD 05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD 05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD 05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 50

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD_05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD_05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD_05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD_05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 E110811I METAB 200ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 11:25 File ID: 02012012.B/M-000003.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	200	15.436	0.000	12281	205.9	3.0					
2	DNX	200	19.219	0.000	18964	206.7	3.4					
3	MNX	200	21.962	0.000	22322	206.2	3.1					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 12:17

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 200ng/mL
Analyzed : 01-FEB-2012 12:22
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000004.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.547	0.000	18798	204.8	2.4					
2	RDX	200	23.730	0.000	18461	203.0	1.5					
3	1,3,5-Trinitrobenz	200	25.670	0.000	41451	202.6	1.3					
4	Picric ACID	500	25.913	0.000	61106	519.2	3.8	25.913	0.000	89203	522.8	4.6
5	1,3-Dinitrobenzene	200	28.393	0.000	43583	203.7	1.9					
6	3,5-Dinitroaniline	200	29.530	0.000	28348	203.0	1.5					
7	Nitrobenzene	200	30.000	0.000	19130	205.9	3.0					
8	TETRYL	200	30.353	0.000	22595	201.5	0.75					
9	2,4,6-Trinitrotolu	200	31.597	0.000	24203	202.2	1.1					
10	4-AM-2,6-DNT	200	32.577	0.000	19568	203.2	1.6					
11	3,4-Dinitrotoluene	200	32.940	0.000	13565	202.2	1.1	32.940	0.000	26067	204.5	2.3
12	2-AM-4,6-DNT	200	33.267	0.000	21818	203.6	1.8					
13	2,6-Dinitrotoluene	200	34.527	0.000	14946	201.4	0.70					
14	2,4-Dinitrotoluene	200	34.917	0.000	24667	202.1	1.1					
15	2-Nitrotoluene	200	37.847	0.000	10675	201.7	0.85					
16	4-Nitrotoluene	200	39.087	0.000	12936	204.9	2.5					
17	3-Nitrotoluene	200	40.607	0.000	12815	204.3	2.2					
18	EGDN	200										
19	Nitroglycerin	200						30.860	0.000	17573	211.6	5.8
20	PETN	200						41.363	0.000	9919	206.9	3.5

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 13:15

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 20:57 File ID: 02012012.B/M-000013.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.426	0.000	6127	102.7	2.7					
2	DNX	100	19.212	0.000	9445	102.9	2.9					
3	MNX	100	21.962	0.000	11125	102.7	2.7					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 21:49

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 01-FEB-2012 21:54
Operator : rm

Instrument: LC11
File ID: 02012012.B/M-000014.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.529	0.000	9695	105.6	5.6					
2	RDX	100	23.739	0.000	9598	105.5	5.5					
3	1,3,5-Trinitrobenz	100	25.676	0.000	21065	103.0	3.0					
4	Picric ACID	200	25.979	0.000	25483	216.5	8.3	25.979	0.000	37419	219.3	9.7
5	1,3-Dinitrobenzene	100	28.412	0.000	22007	102.9	2.9					
6	3,5-Dinitroaniline	100	29.556	0.000	14215	101.8	1.8					
7	Nitrobenzene	100	30.029	0.000	9613	103.4	3.4					
8	TETRYL	100	30.366	0.000	11223	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.612	0.000	12075	100.9	0.90					
10	4-AM-2,6-DNT	100	32.609	0.000	9713	100.9	0.90					
11	3,4-Dinitrotoluene	100	32.962	0.000	6762	100.8	0.80	32.959	0.000	12965	101.7	1.7
12	2-AM-4,6-DNT	100	33.306	0.000	10831	101.0	1.0					
13	2,6-Dinitrotoluene	100	34.562	0.000	7436	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.952	0.000	12260	100.5	0.50					
15	2-Nitrotoluene	100	37.892	0.000	5315	100.4	0.40					
16	4-Nitrotoluene	100	39.132	0.000	6406	101.5	1.5					
17	3-Nitrotoluene	100	40.656	0.000	6340	101.1	1.1					
18	EGDN	100										
19	Nitroglycerin	100						30.869	0.000	8669	104.4	4.4
20	PETN	100						41.376	0.000	4873	101.6	1.6

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 22:46

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 06:29 File ID: 02012012.B/M-000023.D
Operator : rm Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.421	0.000	6131	102.8	2.8					
2	DNX	100	19.214	0.000	9454	103.0	3.0					
3	MNX	100	21.964	0.000	11115	102.6	2.6					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 07:21

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 07:26
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000024.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9643	105.1	5.1					
2	RDX	100	23.740	0.000	9553	105.0	5.0					
3	1,3,5-Trinitrobenz	100	25.677	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.984	0.000	25461	216.3	8.2	25.987	0.000	37308	218.6	9.3
5	1,3-Dinitrobenzene	100	28.410	0.000	21931	102.5	2.5					
6	3,5-Dinitroaniline	100	29.550	0.000	14151	101.3	1.3					
7	Nitrobenzene	100	30.027	0.000	9406	101.2	1.2					
8	TETRYL	100	30.360	0.000	11195	99.83	-0.17					
9	2,4,6-Trinitrotolu	100	31.600	0.000	12053	100.7	0.70					
10	4-AM-2,6-DNT	100	32.590	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.947	0.000	6766	100.9	0.90	32.947	0.000	12938	101.5	1.5
12	2-AM-4,6-DNT	100	33.284	0.000	10855	101.3	1.3					
13	2,6-Dinitrotoluene	100	34.540	0.000	7450	100.4	0.40					
14	2,4-Dinitrotoluene	100	34.930	0.000	12312	100.9	0.90					
15	2-Nitrotoluene	100	37.867	0.000	5229	98.80	-1.2					
16	4-Nitrotoluene	100	39.107	0.000	6357	100.7	0.70					
17	3-Nitrotoluene	100	40.627	0.000	6267	99.90	-0.10					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8611	103.7	3.7
20	PETN	100						41.364	0.000	4907	102.4	2.4

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 08:18

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC12 ICAL ID: 02022012 Method: 8330 A/B

Analytes Included in curve (with dates): 8330, NG+PETN (1/26/12)
MNX, TNX+DNX (2/1/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/2/12.

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

A

INITIAL CALIBRATION DATA

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
2 TNX	+++++	+++++	52.90000	58.92000	60.55000	60.25000		
	57.23800	60.81300					58.44517	5.174
3 DNX	+++++	+++++	55.15000	60.76000	62.35000	62.35000		
	59.78400	63.11500					60.58483	4.832
4 HMX	62.00000	62.10000	61.35000	60.74000	62.33000	61.66500		
	60.03200	55.64500					60.73275	3.610
5 MNX	+++++	+++++	53.20000	57.96000	59.90000	59.69000		
	57.66200	60.08100					58.08217	4.484
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	64.60000	54.80000	51.75000	48.88000	48.64000	46.98500		
	44.60000	38.86800					49.89037	15.236
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
10 1,3,5-Trinitrobenzene	80.40000	80.50000	77.70000	77.18000	78.17000	76.84000		
	74.02600	65.39500					76.27638	6.366
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	108	106	103	103	105	102		
	95.56400	79.85200					100	9.103
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	93.60000	87.40000	85.20000	83.24000	84.29000	81.91000		
	77.31600	65.28900					82.28063	10.078
16 TETRYL	121	121	117	116	120	119		
	118	115					118	2.039
17 Nitrobenzene	52.80000	48.60000	44.50000	47.62000	49.01000	46.80000		
	43.06200	34.72200					45.88925	11.744
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	80.00000	83.00000	79.65000	79.16000	81.68000	81.20500		
	79.32400	73.81800					79.72962	3.425
20 4-AM-2,6-DNT	65.60000	64.10000	62.15000	61.96000	63.29000	62.27500		
	59.92200	52.89900					61.52450	6.279

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
21 2-AM-4,6-DNT	78.40000	75.50000	74.10000	72.50000	73.57000	72.34000			
	69.19600	60.42600					72.00400	7.466	
22 2,6-Dinitrotoluene	62.80000	56.50000	54.05000	53.62000	53.84000	52.70000			
	50.56600	44.27800					53.54425	9.735	
23 2,4-Dinitrotoluene	98.40000	92.70000	89.15000	88.58000	89.64000	87.80000			
	84.18400	73.56800					88.00275	8.120	
24 2-Nitrotoluene	33.10000	30.45000	27.77500	29.83000	30.51000	29.68500			
	28.13900	24.06300					29.19400	9.032	
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
26 3-Nitrotoluene	46.80000	40.20000	36.35000	38.26000	38.90000	37.78000			
	36.10200	32.30200					38.33675	10.849	
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
$ 1 3,4-Dinitrotoluene	48.00000	46.80000	45.45000	46.42000	49.00000	48.00500			
	46.26000	41.31400					46.40613	5.076	

TestAmerica West Sacramento

B

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
2 TNX	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	
3 DNX	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	
4 HMX	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	
5 MNX	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	
6 EGDN	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	<-
7 RDX	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	
8 4-Nitrophenol	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	<-
9 Picric ACID	++++++ / ++++++	++++++ / ++++++	++++++	++++++	++++++	++++++	++++++	++++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	++++	+++++	
11 Picramic Acid	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	++++	<-
12 2,4-Dinitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	++++	++++	
14 2-Nitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 3,5-Dinitroaniline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	++++	+++++	
16 TETRYL	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Nitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 Nitroglycerin	+++++ / 85.00600	+++++ / 81.58200	71.30000	78.16000	85.12000	86.04000	81.20133	6.981	
19 2,4,6-Trinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 4-AM-2,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 2,6-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
23 2,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 2-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 4-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
26 3-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
27 PETN	+++++ / 146	+-+++ / 147	138	141	146	147	144	2.624
$ 1 3,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 10

Inst ID: LC12 Batch ID: 01262012C Eluents: Water: 9457-23C
Test: SOP WS-LC-0009 ACN: K14815
Method: Method 8330 MeOH: K04E22
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_1CV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: 1/27/12

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 04:46 File ID: 01262012C.B/C-000012.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	21.924	0.000	9732	212.1	6.1					
2	1,3-Dinitrobenzene	200	24.898	0.000	20270	201.8	0.90					
3	1,3,5-Trinitrobenz	200	27.648	0.000	15645	205.1	2.6					
4	2-Nitrotoluene	400	28.998	0.000	12223	418.7	4.7					
5	3-Nitrotoluene	200	29.578	0.000	7855	204.9	2.5					
6	3,5-Dinitroaniline	200	30.961	0.000	17369	211.1	5.6					
7	RDX	200	31.534	0.000	9670	193.8	-3.1					
8	2,4-Dinitrotoluene	200	32.668	0.000	18048	205.1	2.6					
9	2,6-Dinitrotoluene	200	33 694	0.000	10822	202.1	1.1					
10	2-AM-4,6-DNT	200	35.748	0.000	14679	203.9	2.0					
11	4-AM-2,6-DNT	200	36.388	0.000	12366	201.0	0.50					
12	3,4-Dinitrotoluene	200	38.134	0.000	84	1.810	-99					
13	2,4,6-Trinitrotolu	200	40.251	0.000	16693	209.4	4.7					
14	HMX	200	41.981	0.000	12849	211.6	5.8					
15	TETRYL	200	46 254	0.000	25166	212.5	6.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.798	0.000	31225	216.8	8.4
19	Picric ACID	500										
20	Nitroglycerin	200						44.541	0.000	18382	226.4	13

NA not spiked on 1/26/12

ICV passes ±15%
1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:30

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K19815
MeOH: K04622

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	not needed
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	~~not needed~~ 2/8/12
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3	C-000024	986.89 mL	20 mL	1	
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: ECJ 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:48	RN	5	STD 05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 2/3/12

TestAmerica West Sacramento

Dual Column Continuing Calibration Report

Sample : STD_06 E110811D ICV 200ng/mL
Analyzed : 02-FEB-2012 02:26
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000012.d
Sublist: 2_CAIMET
SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	18.341	0.000	12148	207.8	3.9					
2	DNX	200	23.661	0.000	11544	190.5	-4.8					
3	MNX	200	28.061	0.000	11164	192.2	-3.9					

ICV passes ±15%.
RPM 2/2/12.

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:06

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 03:32 File ID: 02012012.B/C-000013.d
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	22.250	0.000	9444	205.8	2.9					
2	1,3-Dinitrobenzene	200	25.240	0.000	20499	204.0	2.0					
3	1,3,5-Trinitrobenz	200	27.990	0.000	15534	203.6	1.8					
4	2-Nitrotoluene	400	29.366	0.000	12034	412.2	3.1					
5	3-Nitrotoluene	200	29.940	0.000	7648	199.5	-0.25					
6	3,5-Dinitroaniline	200	31.326	0.000	16465	200.1	0.050					
7	RDX	200	31.903	0.000	9304	186.5	-6.8					
8	2,4-Dinitrotoluene	200	33.066	0.000	17650	200.6	0.30					
9	2,6-Dinitrotoluene	200	34.096	0.000	10551	197.0	-1.5					
10	2-AM-4,6-DNT	200	36.160	0.000	14493	201.3	0.65					
11	4-AM-2,6-DNT	200	36.790	0.000	12724	206.8	3.4					
12	3,4-Dinitrotoluene	200	38.473	0.000	9905	213.4	6.7					
13	2,4,6-Trinitrotolu	200	40.583	0.000	16675	209.1	4.6					
14	HMX	200	42.256	0.000	12429	204.6	2.3					
15	TETRYL	200	46.476	0.000	24454	206.5	3.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.930	0.000	29369	203.9	2.0
19	Picric ACID	500										
20	Nitroglycerin	200						44.783	0.000	17384	214.1	7.1

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 11:30

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H 100ng/mL
Analyzed : 02-FEB-2012 12:15
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000021.D
Sublist: 2_CALMET
SpikeList:

		Side A						Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	100	18.326	0.000	6012	102.9	2.9					
2	DNX	100	23.630	0.000	6215	102.6	2.6					
3	MNX	100	28.026	0.000	5981	103.0	3.0					

RM 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 13:20

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 13:21 File ID: 02012012.B/C-000022.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	Nitrobenzene	100	22.267	0.000	4888	106.5	6.5					
2	1,3-Dinitrobenzene	100	25.264	0.000	10515	104.7	4.7					
3	1,3,5-Trinitrobenz	100	28.007	0.000	7829	102.6	2.6					
4	2-Nitrotoluene	200	29.397	0.000	6087	208.5	4.3					
5	3-Nitrotoluene	100	29.984	0.000	3862	100.7	0.70					
6	3,5-Dinitroaniline	100	31.357	0.000	8360	101.6	1.6					
7	RDX	100	31.944	0.000	4704	94.29	-5.7					
8	2,4-Dinitrotoluene	100	33.114	0.000	8906	101.2	1.2					
9	2,6-Dinitrotoluene	100	34.140	0.000	5314	99.24	-0.76					
10	2-AM-4,6-DNT	100	36.210	0.000	7322	101.7	1.7					
11	4-AM-2,6-DNT	100	36.847	0.000	6433	104.6	4.6					
12	3,4-Dinitrotoluene	100	38.527	0.000	4981	107.3	7.3					
13	2,4,6-Trinitrotolu	100	40.617	0.000	8394	105.3	5.3					
14	HMX	100	42.274	0.000	6250	102.9	2.9					
15	TETRYL	100	46.470	0.000	12307	103.9	3.9					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.957	0.000	14321	99.44	-0.56
19	Picric ACID	200										
20	Nitroglycerin	100						44.790	0.000	8614	106.1	6.1

RM 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 14:26

QC Summary

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	1.00	1.02	ug/L	102	SW846 8330/83
4-Amino-2,6-dinitrotoluene	1.00	1.00	ug/L	100	SW846 8330/83
1,3-Dinitrobenzene	1.00	1.05	ug/L	105	SW846 8330/83
2,4-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/83
2,6-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/83
RDX	1.00	1.14	ug/L	114	SW846 8330/83
1,3,5-Trinitrobenzene	1.00	1.07	ug/L	107	SW846 8330/83
2,4,6-Trinitrotoluene	1.00	0.794	ug/L	79	SW846 8330/83
MNX	4.00	4.21	ug/L	105	SW846 8330/83
TNX	4.00	3.87	ug/L	97	SW846 8330/83

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	102	(50 - 155)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	100	(55 - 155)	SW846 8330/8330A
1,3-Dinitrobenzene	105	(45 - 160)	SW846 8330/8330A
2,4-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
2,6-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
RDX	114	(50 - 160)	SW846 8330/8330A
1,3,5-Trinitrobenzene	107	(65 - 140)	SW846 8330/8330A
2,4,6-Trinitrotoluene	79	(50 - 145)	SW846 8330/8330A
MNX	105	(70 - 130)	SW846 8330/8330A
TNX	97	(70 - 130)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	**0.10 U**	**1.01**	**1.00**	**ug/L**	**99**		**SW846 8330/8330A**
	0.10 U	**1.01**	**1.02**	**ug/L**	**100**	**1.8**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**0.051 U**	**1.01**	**0.982**	**ug/L**	**97**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.999**	**ug/L**	**99**	**1.8**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**0.051 U**	**1.01**	**1.05**	**ug/L**	**104**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.07**	**ug/L**	**105**	**1.7**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**0.051 U**	**1.01**	**0.996**	**ug/L**	**99**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.02**	**ug/L**	**100**	**1.9**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**0.051 U**	**1.01**	**0.986**	**ug/L**	**98**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.00**	**ug/L**	**99**	**1.6**	**SW846 8330/8330A**
RDX	**0.051 U**	**1.01**	**1.20**	**ug/L**	**118**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.23**	**ug/L**	**121**	**2.8**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**0.051 U**	**1.01**	**1.08**	**ug/L**	**106**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.10**	**ug/L**	**109**	**2.6**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**0.051 U**	**1.01**	**0.789**	**ug/L**	**78**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.802**	**ug/L**	**79**	**1.6**	**SW846 8330/8330A**
MNX	**1.0 U**	**4.04**	**4.28**	**ug/L**	**106**		**SW846 8330/8330A**
	1.0 U	**4.06**	**4.25**	**ug/L**	**105**	**0.68**	**SW846 8330/8330A**
TNX	**0.15 U**	**4.04**	**3.95**	**ug/L**	**98**		**SW846 8330/8330A**
	0.15 U	**4.06**	**3.83**	**ug/L**	**94**	**3.0**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	99	(50 - 155)			SW846 8330/8330A
	100	(50 - 155)	1.8	(0-30)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	97	(55 - 155)			SW846 8330/8330A
	99	(55 - 155)	1.8	(0-30)	SW846 8330/8330A
1,3-Dinitrobenzene	104	(45 - 160)			SW846 8330/8330A
	105	(45 - 160)	1.7	(0-30)	SW846 8330/8330A
2,4-Dinitrotoluene	99	(60 - 135)			SW846 8330/8330A
	100	(60 - 135)	1.9	(0-30)	SW846 8330/8330A
2,6-Dinitrotoluene	98	(60 - 135)			SW846 8330/8330A
	99	(60 - 135)	1.6	(0-30)	SW846 8330/8330A
RDX	118	(50 - 160)			SW846 8330/8330A
	121	(50 - 160)	2.8	(0-30)	SW846 8330/8330A
1,3,5-Trinitrobenzene	106	(65 - 140)			SW846 8330/8330A
	109	(65 - 140)	2.6	(0-30)	SW846 8330/8330A
2,4,6-Trinitrotoluene	78	(50 - 145)			SW846 8330/8330A
	79	(50 - 145)	1.6	(0-30)	SW846 8330/8330A
MNX	106	(70 - 130)			SW846 8330/8330A
	105	(70 - 130)	0.68	(0-30)	SW846 8330/8330A
TNX	98	(70 - 130)			SW846 8330/8330A
	94	(70 - 130)	3.0	(0-30)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 47

Inst ID: LC11 Batch ID: 01262012C Eluents: Water: M0102 2012
Test: SOP WS-LC-0009 ACN: R415/5
Method: Method 8330 50:50 H2O:MeOH+0.4% H3PO4 4457-25A
ICAL Date: See Calibration Report MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: 1/30/12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 48

Inst ID: LC11 Batch ID: 01302012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102201 2
ACN: 1241815
50:50 H2O:MeOH+0.4% H3PO4 4457-254
MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/31/12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K 41815
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD_06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD_06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD_05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD_05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD_05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD_05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 50

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD_05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD_05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD_05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD_05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 10

Inst ID: LC12 Batch ID: 01262012C Eluents: Water: #457-23C
Test: SOP WS-LC-0009 ACN: K148/5
Method: Method 8330 MeOH: K04E22
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_ICV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: [illegible] 1/27/12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K19815
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	not needed
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	~~not needed~~ NM 2/8/12
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3	C-000024	986.89 mL	20 mL	1	
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: ECJ 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:48	RN	5	STD_05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 2/3/12

Sample Data

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...:	G2A190474-001	Work Order #...:	MQAVQ1AK	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/01/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.01	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.22 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01C-20120117

HPLC

Lot-Sample #...:	G2A190474-001	Work Order #...:	MQAVQ2AK	Matrix.....:	WATER
Date Sampled...:	01/17/12	Date Received..:	01/19/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.01	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.093 J,PG	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	117 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVQ1AK 2024017 A190474-1
Analyzed : 01-FEB-2012 17:08
Operator : rn
Matrix : WATER
Sample Amt: 984.22 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000009.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX	15.334	-0.101	647	0.2205					
2	DNX									
3	HMX									
4	MNX	21.984	0.022	9231	1.732					
5	RDX	23.591	-0.139	14291	3.193					
6	1,3,5-Trinitrobenz	25.598	-0.072	8398	0.8341					
7	Picric ACID	25.958	0.045	11287	1.949					
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline	29.364	-0.166	2831	0.4120					
10	Nitrobenzene	30.044	0.045	4271	0.9340					
11	TETRYL									
12	2,4,6-Trinitrotolu	31.711	0.115	470	0.07978					
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.954	0.015	8608	2.608	32.954	0.015	17569	2.800	7.1
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene	34.698	0.171	242	0.06526					
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

conf PG.
NA
NA
not conf.
NA
ND
NA
not conf
not conf.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.540	2.608	102.7	2.800	110.2	(84-125)

TAM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 18:01

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000009.D
Lab Smp Id: MQAVQ1AK 2024017 A1
Inj Date : 01-FEB-2012 17:08
Operator : rn Inst ID: LC11.i
Smp Info : MQAVQ1AK 2024017 A190474-1;0;
Misc Info : ;;984.22;;20;1;WATERMET.sub;;0;;;;MQAVQ1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	984.220	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.334	22582	647	0.029	0.31	2 TNX
16.564	54253	1264	0.023	0.62	
17.821	272700	3927	0.014	1.93	
18.224	23064	2911	0.126	1.43	
18.574	97208	3680	0.038	1.81	
19.444	232293	4538	0.020	2.23	
20.861	799485	10818	0.014	5.33	
21.984	311703	9231	0.030	4.55	5 MNX
22.494	195975	8624	0.044	4.25	
22.781	168987	9371	0.055	4.62	
23.008	137402	9271	0.067	4.57	
23.591	422635	14291	0.034	7.23	7 RDX
24.164	268599	9094	0.034	4.48	
24.501	179183	9769	0.055	4.81	
24.904	244826	9409	0.038	4.63	
25.211	72768	8132	0.112	4.00	
25.324	64062	8118	0.127	4.00	
25.598	187294	8398	0.045	4.14	10 1,3,5-Trinitrobenze
25.958	161813	11287	0.070	5.56	9 Picric ACID
26.194	344393	12667	0.037	6.24	
27.051	111561	6265	0.056	3.08	
27.334	323067	11264	0.035	5.55	
28.191	110078	4668	0.042	2.30	
28.604	160368	4734	0.030	2.33	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
29.364	82033	2831	0.035	1.39	15 3,5-Dinitroaniline
30.044	107394	4271	0.040	2.10	17 Nitrobenzene
30.914	68821	2190	0.032	1.07	
31.711	7728	470	0.061	0.23	19 2,4,6-Trinitrotolue
32.954	132558	8608	0.065	4.24	$ 1 3,4-Dinitrotoluene
34.301	1322	81	0.061	0.03	
34.698	4377	242	0.055	0.11	22 2,6-Dinitrotoluene
36.954	250	35	0.140	0.01	
40.068	1678	88	0.052	0.04	
40.858	3749	169	0.045	0.08	
41.428	11122	525	0.047	0.25	
41.848	22404	758	0.034	0.37	
43.854	2514	89	0.035	0.04	
45.214	2373	98	0.041	0.04	
	5414622	202833		100.000	

Total unknown % height = 70.14

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000009.D

Date : 01-FEB-2012 17:08

Client ID:

Instrument: LC11.i

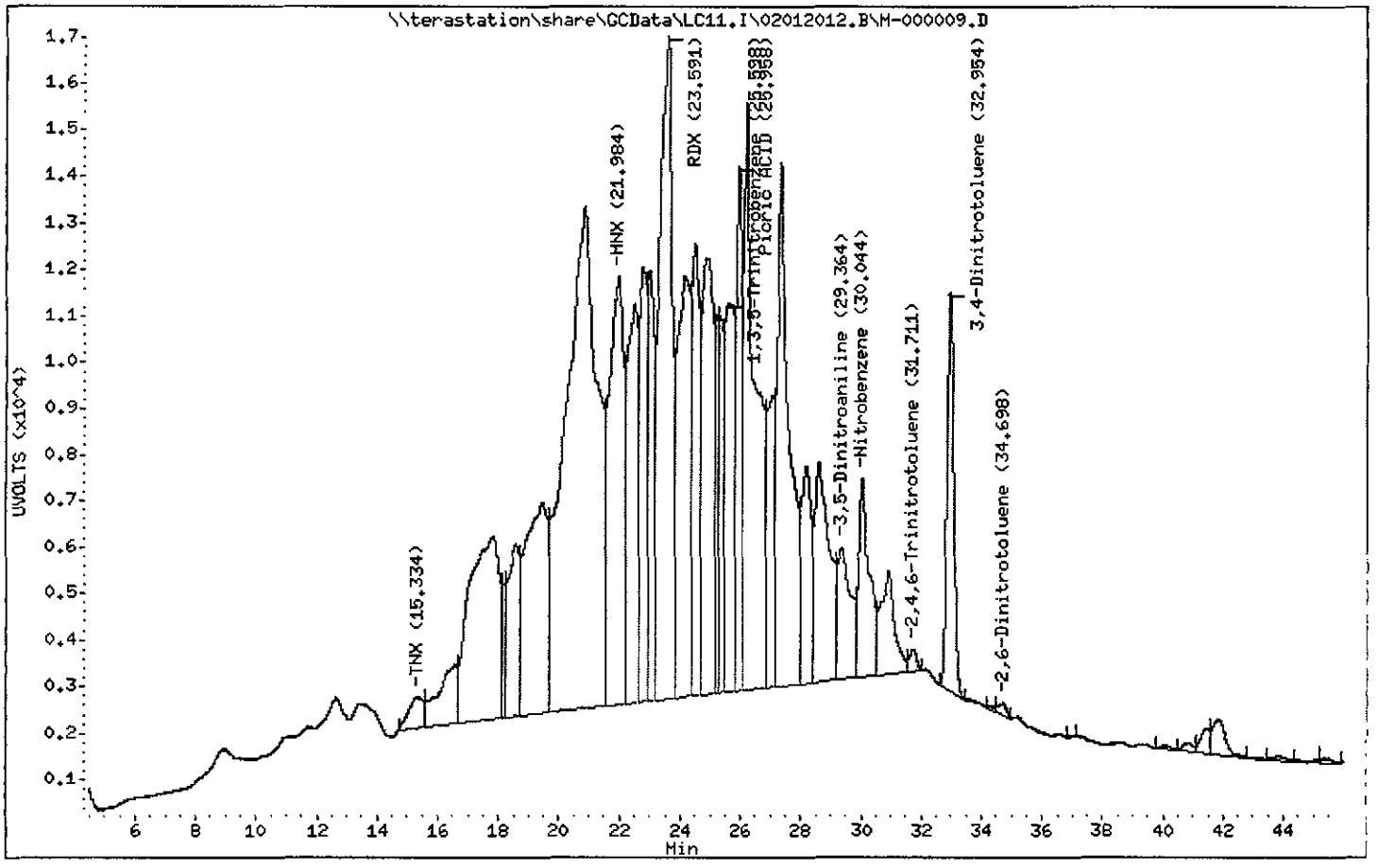
Sample Info: MQAVQ1AK 2024017 A190474-1:0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000009.D\M-000009
Lab Smp Id: MQAVQ1AK 2024017 A1
Inj Date : 01-FEB-2012 17:08
Operator : rn Inst ID: LC11.i
Smp Info : MQAVQ1AK 2024017 A190474-1;0;
Misc Info : ;;984.22;;20;1;WATERMET.sub;;0;;;;MQAVQ1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	984.220	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.284	18081	655	0.036	1.18	
23.048	328	56	0.171	0.10	
23.314	23188	2169	0.094	3.91	
23.621	24891	2353	0.095	4.24	
24.274	933	103	0.110	0.18	
24.434	1412	132	0.093	0.23	
25.481	398	79	0.199	0.14	
25.744	3647	346	0.095	0.62	
26.118	2338	172	0.074	0.31	
26.501	3436	350	0.102	0.63	
27.898	2030	186	0.092	0.33	
28.271	90808	6533	0.072	11.77	
28.764	137751	8226	0.060	14.83	
29.581	22806	1231	0.054	2.21	
30.324	24090	1993	0.083	3.59	
30.701	8577	664	0.077	1.19	
31.404	18766	1153	0.061	2.07	
32.211	7672	465	0.061	0.83	
32.954	277540	17569	0.063	31.81	$ 1 3,4-Dinitrotoluene
34.038	9750	734	0.075	1.32	
34.338	35296	1437	0.041	2.59	
34.898	46013	2181	0.047	3.93	
35.628	1267	109	0.086	0.19	
36.528	578	65	0.112	0.11	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
37.004	19436	933	0.048	1.68	
38.714	8962	344	0.038	0.62	
39.428	20536	957	0.047	1.72	
40.108	53003	2126	0.040	3.83	
41.548	6728	450	0.067	0.81	
41.928	37980	952	0.025	1.71	
43.731	18463	530	0.029	0.95	
45.281	5686	210	0.037	0.37	
	932391	55463		100.000	

Total unknown % height = 68.19

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000009.D\M-000009.D

Date : 01-FEB-2012 17:08

Client ID:

Instrument: LC11.i

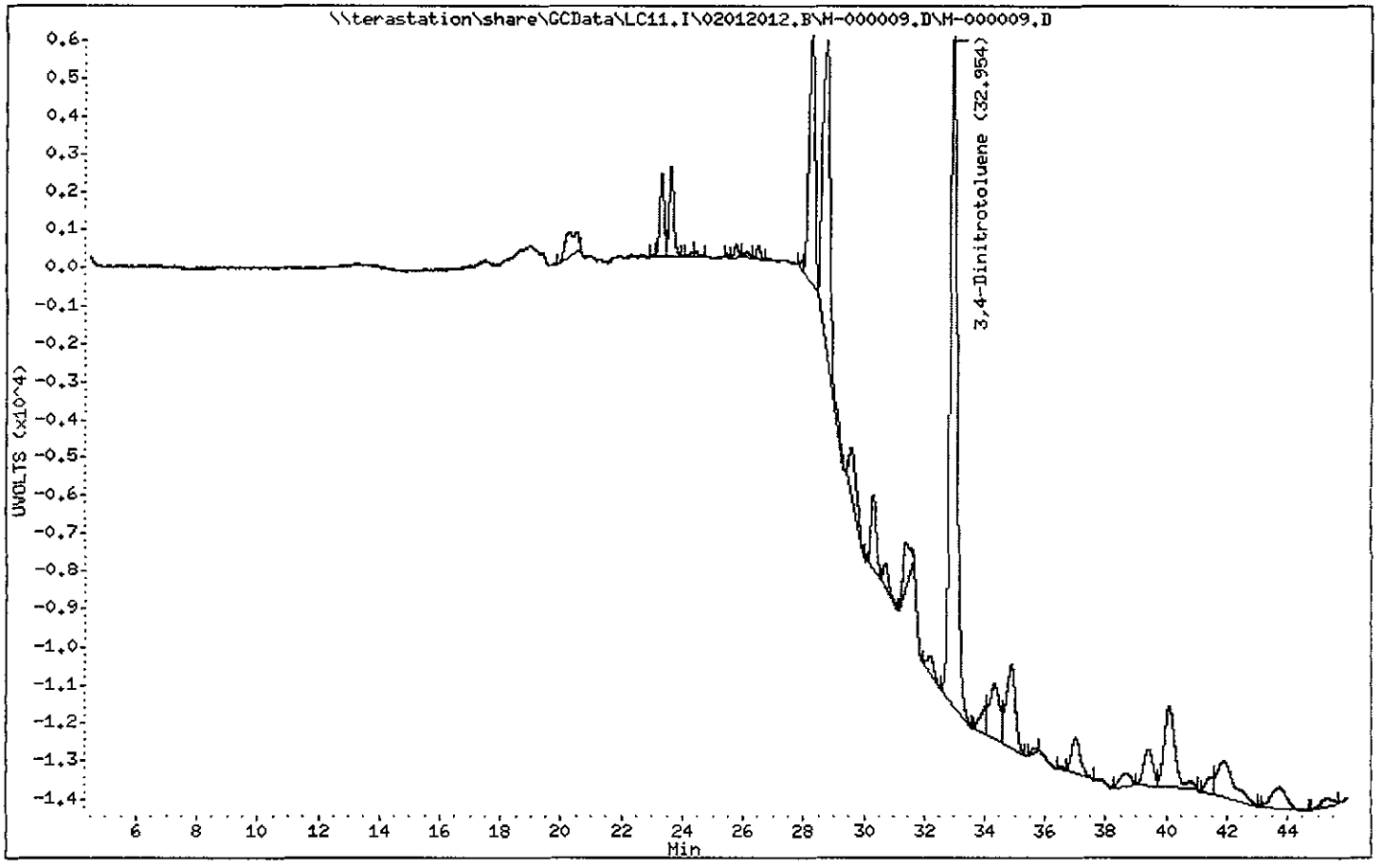
Sample Info: MQAVQ1AK 2024017 A190474-1;0;

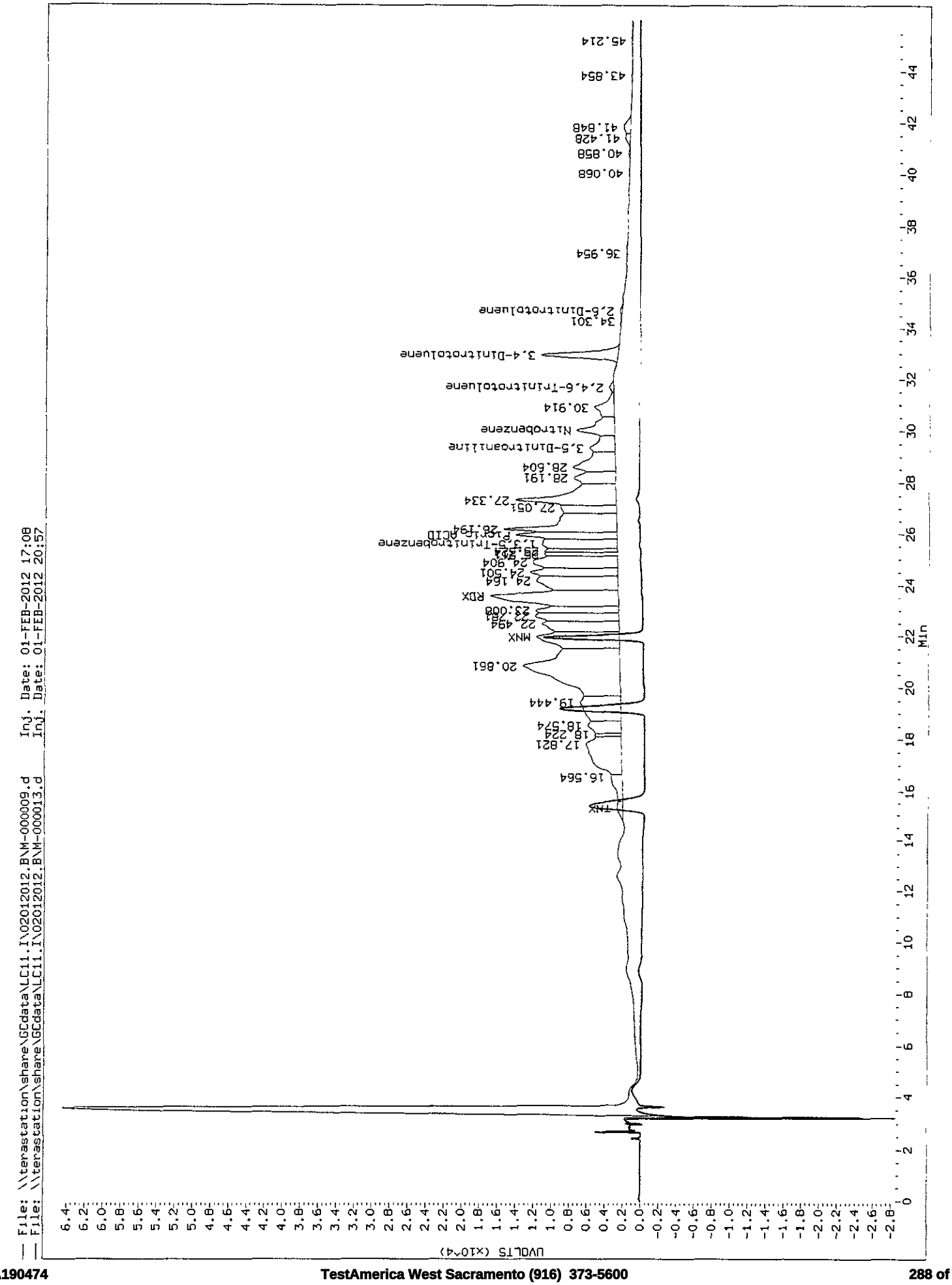
Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60




File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000009.d Inj. Date: 01-FEB-2012 17:08
File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000013.d Inj. Date: 01-FEB-2012 20:57
UVOLTS (x10^4)
Min
TNX
16.564
17.821
18.224
18.574
19.444
20.861
MNX
22.494
23.008
RDX
24.164
24.501
24.904
1,3,5-Trinitrobenzene
Picric Acid
26.194
27.051
27.334
28.191
28.604
3,5-Dinitroaniline
Nitrobenzene
30.914
2,4,6-Trinitrotoluene
3,4-Dinitrotoluene
34.301
2,6-Dinitrotoluene
36.954
40.068
40.858
41.428
41.848
43.854
45.214

TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : MQAVQ1AK 2024017 A190474-1
Analyzed : 02-FEB-2012 07:53
Operator : RN
Matrix : WATER
Sample Amt: 984.22 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000017.d
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A					Side B				
	Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1	TNX	18.225	-0.115	268	0.09318					
2	Nitrobenzene	22.175	-0.075	774	0.3427					
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz									
6	MNX									
7	2-Nitrotoluene									
8	3-Nitrotoluene	30.132	0.192	281	0.1489					
9	3,5-Dinitroaniline	31.162	-0.165	170	0.04198					
10	RDX									
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT									
15	3,4-Dinitrotoluene	38.518	0.045	6804	2.979					
16	2,4,6-Trinitrotolu	40.808	0.225	153	0.03900					
17	HMX									
18	TETRYL	46.462	-0.015	848	0.1455					
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

conf. PG.
NA
ND
ND
RRT
ND

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.540	2.979	117.3*			(79-111)

RM 2/ 2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:33

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000017.d
Lab Smp Id: MQAVQ1AK 2024017 A1
Inj Date : 02-FEB-2012 07:53
Operator : RN Inst ID: LC12.i
Smp Info : MQAVQ1AK 2024017 A190474-1;0;
Misc Info : ;;984.22;;20;1;WATERMETQSM.sub;;0;;;;MQAVQ1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	984.220	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.902	94145	2491	0.026	11.27	
16.332	7577	396	0.052	1.79	
16.812	77677	2421	0.031	10.96	
18.225	5148	268	0.052	1.21	2 TNX
19.172	44875	833	0.019	3.77	
20.029	38232	985	0.026	4.46	
21.649	2791	134	0.048	0.60	
22.175	35470	774	0.022	3.50	17 Nitrobenzene
26.549	2425	126	0.052	0.57	
27.235	15666	546	0.035	2.47	
27.679	16717	478	0.029	2.16	
29.022	20208	482	0.024	2.18	
30.132	8983	281	0.031	1.27	26 3-Nitrotoluene
30.425	6949	295	0.042	1.33	
31.032	1031	141	0.137	0.63	
31.162	2861	170	0.059	0.76	15 3,5-Dinitroaniline
31.575	1529	107	0.070	0.48	
31.942	488	87	0.178	0.39	
32.179	2621	123	0.047	0.55	
32.975	773	60	0.078	0.27	
33.455	441	69	0.157	0.31	
33.589	950	115	0.121	0.52	
34.342	114	27	0.236	0.12	
34.552	548	45	0.082	0.20	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
35.719	208	29	0.139	0.13	
36.785	215	21	0.098	0.09	
37.362	87	25	0.289	0.11	
38.519	158948	6804	0.043	30.98	$ 1 3,4-Dinitrotoluene
39.689	367	56	0.153	0.25	
40.265	12117	697	0.058	3.15	
40.809	3316	153	0.046	0.69	19 2,4,6-Trinitrotolue
41.635	80	19	0.237	0.08	
41.762	121	29	0.239	0.13	
42.059	66	23	0.348	0.10	
42.229	332	39	0.118	0.17	
42.572	1130	62	0.055	0.28	
43.015	916	62	0.068	0.28	
43.409	1434	103	0.072	0.46	
44.002	190	20	0.105	0.09	
44.322	819	51	0.062	0.23	
46.462	14723	848	0.058	3.83	16 TETRYL
47.449	6363	440	0.069	1.99	
48.289	4601	421	0.091	1.90	
48.465	4756	447	0.094	2.02	
48.865	3561	282	0.079	1.27	
	602567	22085		100.000	

Total unknown % height = 57.76

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000017.d

Date : 02-FEB-2012 07:53

Client ID:

Instrument: LC12.i

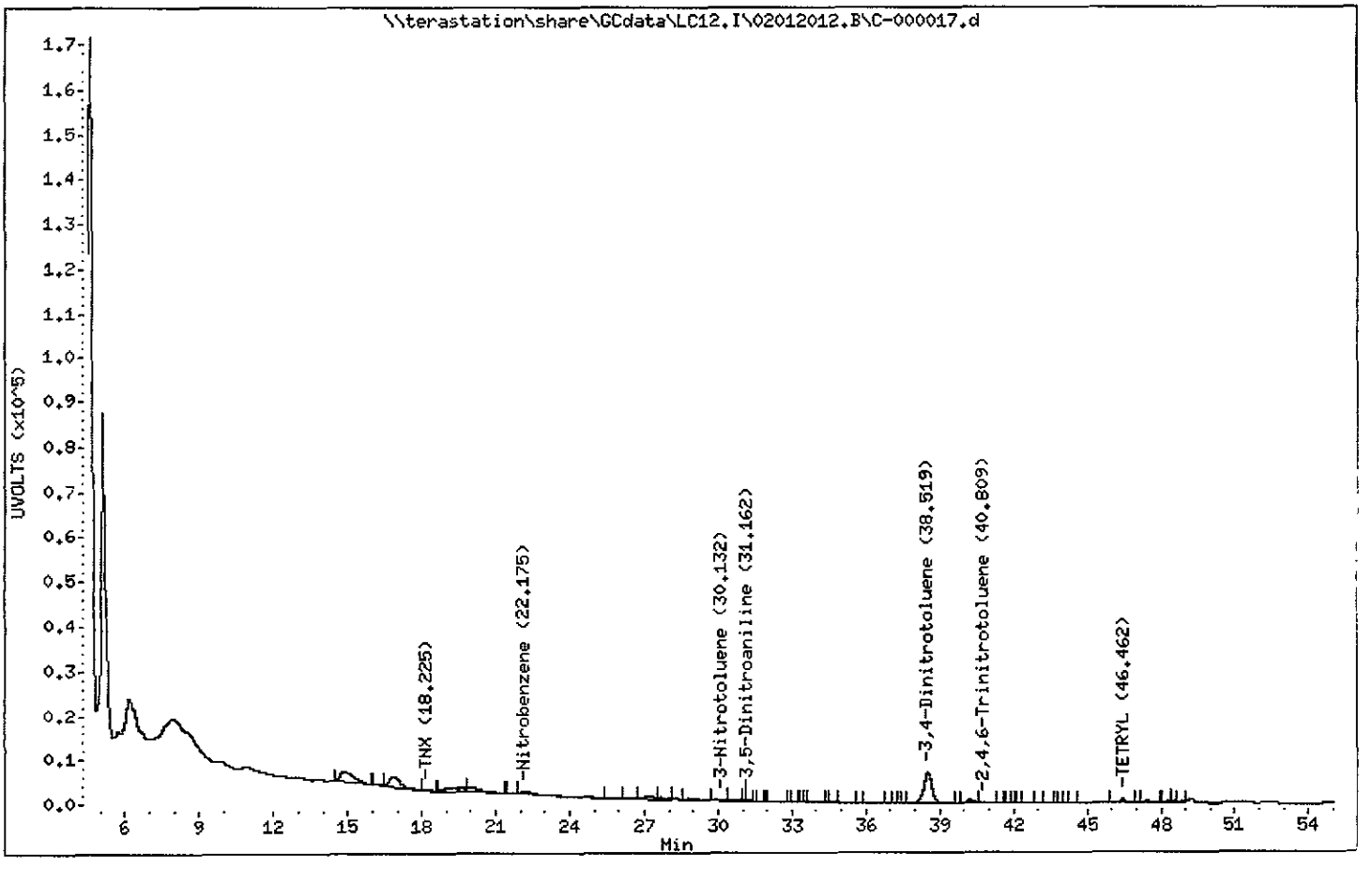
Sample Info: MQAVQ1AK 2024017 A190474-1;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000017.d\C-000017
Lab Smp Id: MQAVQ1AK 2024017 A1
Inj Date : 02-FEB-2012 07:53
Operator : RN Inst ID: LC12.i
Smp Info : MQAVQ1AK 2024017 A190474-1;0;
Misc Info : ;;984.22;;20;1;WATERMETQSM.sub;;0;;;;MQAVQ1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	984.220	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.142	6926	660	0.095	24.31	
52.482	10085	937	0.093	34.52	
53.475	24161	1117	0.046	41.17	
	41172	2714		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000017.d\C-000017.d

Date : 02-FEB-2012 07:53

Client ID:

Instrument: LC12.i

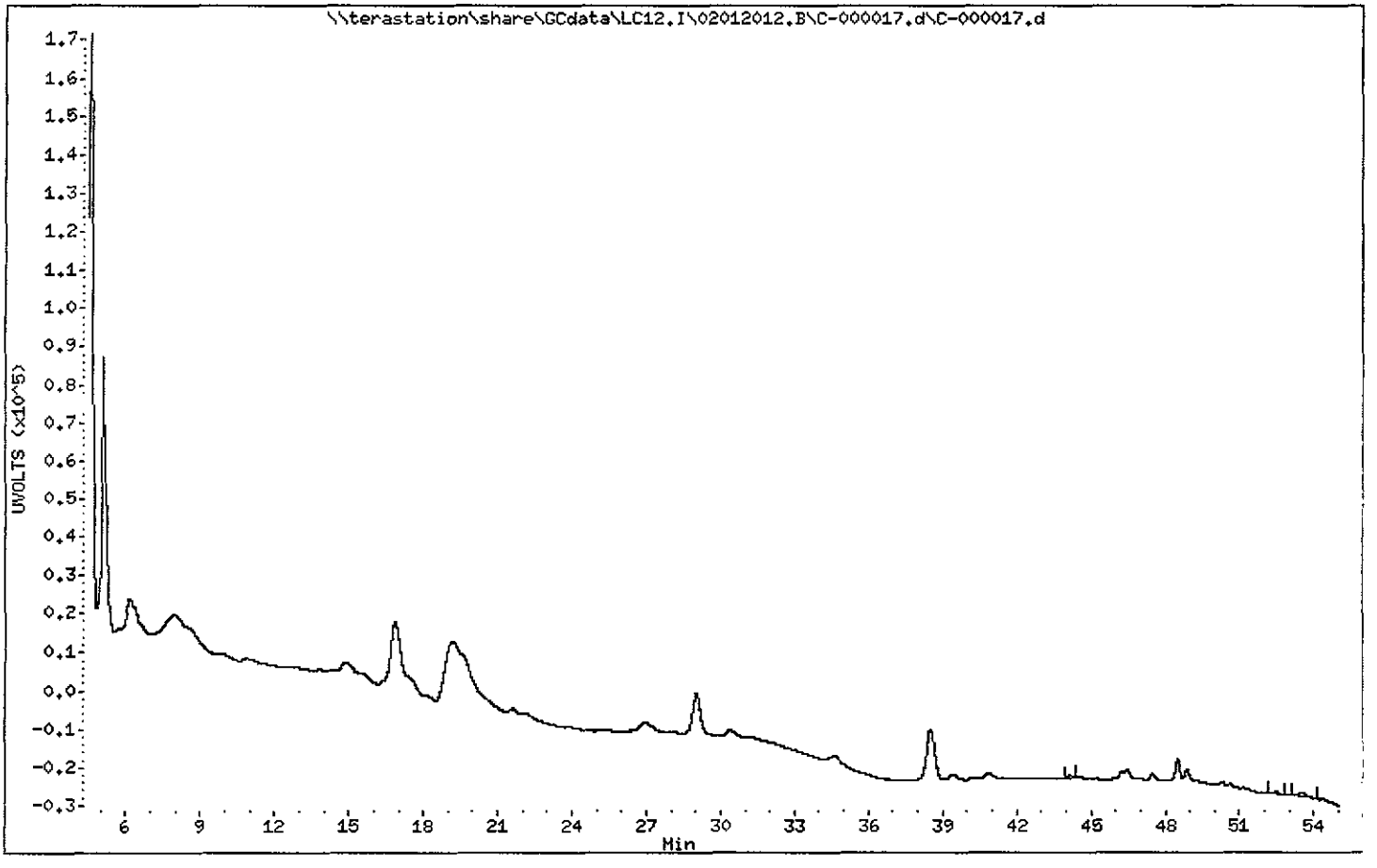
Sample Info: MQAVQ1AK 2024017 A190474-1;0;

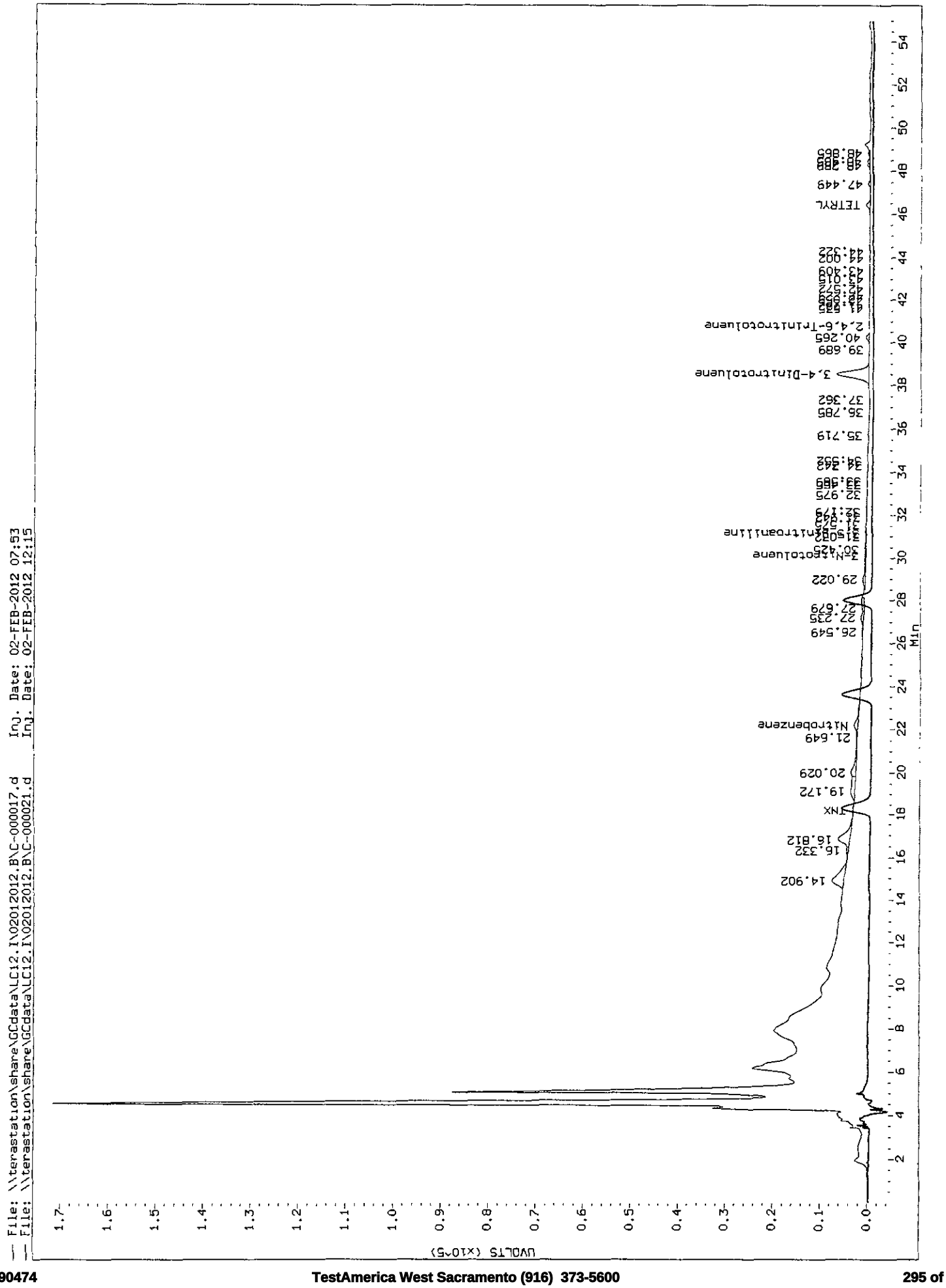
Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60




File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000017.d
File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000021.d
Inj. Date: 02-FEB-2012 07:53
Inj. Date: 02-FEB-2012 12:15
UVOLTS (x10^5)
Min
14.902
16.332
16.812
TNX
19.172
20.029
21.649
Nitrobenzene
26.549
27.235
27.679
29.022
3-Nitrotoluene
30.425
31.502
31.502
31.942
32.179
32.975
33.485
33.485
34.242
34.352
35.719
36.785
37.362
3,4-Dinitrotoluene
39.689
40.265
2,4,6-Trinitrotoluene
41.625
42.029
42.572
43.015
43.409
44.092
44.322
TETRYL
47.449
48.288
48.865

White Water Associates

Client Sample ID: 02MW01B-20120117

HPLC

Lot-Sample #...: G2A190474-002 Work Order #...: MQAVR1AK Matrix.....: WATER
Date Sampled...: 01/17/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVR1AK 2024017 A190474-2
Analyzed : 01-FEB-2012 18:05
Operator : rn
Matrix : WATER
Sample Amt: 985.64 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000010.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX									
6	1,3,5-Trinitrobenz									
7	Picric ACID									
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.955	0.015	8261	2.499	32.955	0.015	16040	2.553	2.1
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.536	2.499	98.53	2.553	100.6	(84-125)

rm 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 18:58

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000010.D
Lab Smp Id: MQAVR1AK 2024017 A1
Inj Date : 01-FEB-2012 18:05
Operator : rn Inst ID: LC11.i
Smp Info : MQAVR1AK 2024017 A190474-2;0;
Misc Info : ;;985.64;;20;1;WATERMET.sub;;0;;;;MQAVR1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.640	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.312	206	15	0.073	0.14	
16.985	963	46	0.048	0.45	
17.219	634	47	0.074	0.46	
20.312	61	15	0.244	0.14	
20.629	61	17	0.281	0.16	
20.858	114	27	0.238	0.26	
21.415	130	17	0.131	0.16	
21.969	52	12	0.229	0.11	
22.358	76	22	0.289	0.21	
22.769	111	17	0.154	0.16	
23.382	64	13	0.204	0.12	
24.232	192	20	0.104	0.19	
24.662	1669	147	0.088	1.44	
24.929	1857	153	0.082	1.49	
25.602	1902	138	0.073	1.35	
25.829	1877	186	0.099	1.82	
26.149	1121	82	0.073	0.80	
26.512	460	40	0.087	0.39	
27.005	694	74	0.107	0.72	
27.592	1534	148	0.096	1.45	
28.579	76	17	0.224	0.16	
30.275	3801	254	0.067	2.48	
31.025	2146	93	0.043	0.91	
32.955	124396	8261	0.066	81.08	$ 1 3,4-Dinitrotoluene

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
34.585	1310	82	0.063	0.80	
37.442	316	31	0.098	0.30	
40.148	58	18	0.313	0.17	
41.409	2000	89	0.044	0.87	
42.092	3496	124	0.035	1.21	
	151376	10205		100.000	

Total unknown % height = 18.92

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000010.D

Date : 01-FEB-2012 18:05

Client ID:

Instrument: LC11.i

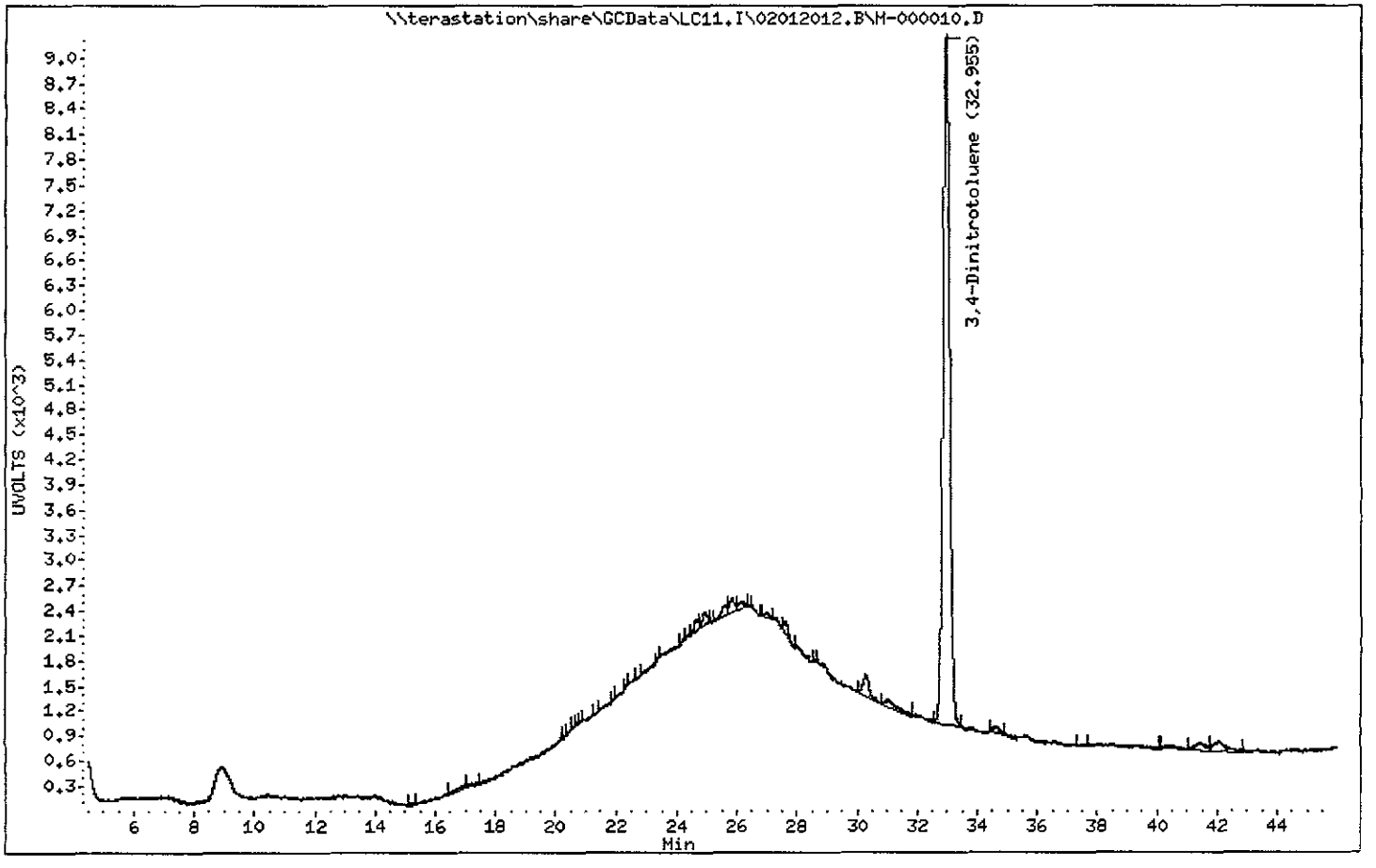
Sample Info: MQAVR1AK 2024017 A190474-2;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000010.D\M-000010
Lab Smp Id: MQAVR1AK 2024017 A1
Inj Date : 01-FEB-2012 18:05
Operator : rn Inst ID: LC11.i
Smp Info : MQAVR1AK 2024017 A190474-2;0;
Misc Info : ;;985.64;;20;1;WATERMET.sub;;0;;;;MQAVR1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.640	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.312	220	32	0.146	0.15	
24.092	419	44	0.105	0.20	
24.619	157	43	0.274	0.20	
26.612	208	33	0.159	0.15	
26.952	170	38	0.224	0.17	
28.792	3516	270	0.077	1.27	
29.325	30193	2357	0.078	11.09	
30.282	8083	626	0.077	2.94	
32.295	2423	130	0.054	0.61	
32.955	243337	16040	0.066	75.59	$ 1 3,4-Dinitrotoluene
34.569	941	70	0.074	0.32	
35.679	8671	452	0.052	2.12	
38.562	391	32	0.082	0.15	
39.389	10536	392	0.037	1.84	
40.148	3673	150	0.041	0.70	
41.412	1219	86	0.071	0.40	
42.055	12277	349	0.028	1.64	
43.242	186	24	0.129	0.11	
44.142	267	32	0.120	0.15	
45.195	588	44	0.075	0.20	
	327474	21244		100.000	

Total unknown % height = 24.41

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000010.D\M-000010.D

Date : 01-FEB-2012 18:05

Client ID:

Instrument: LC11.i

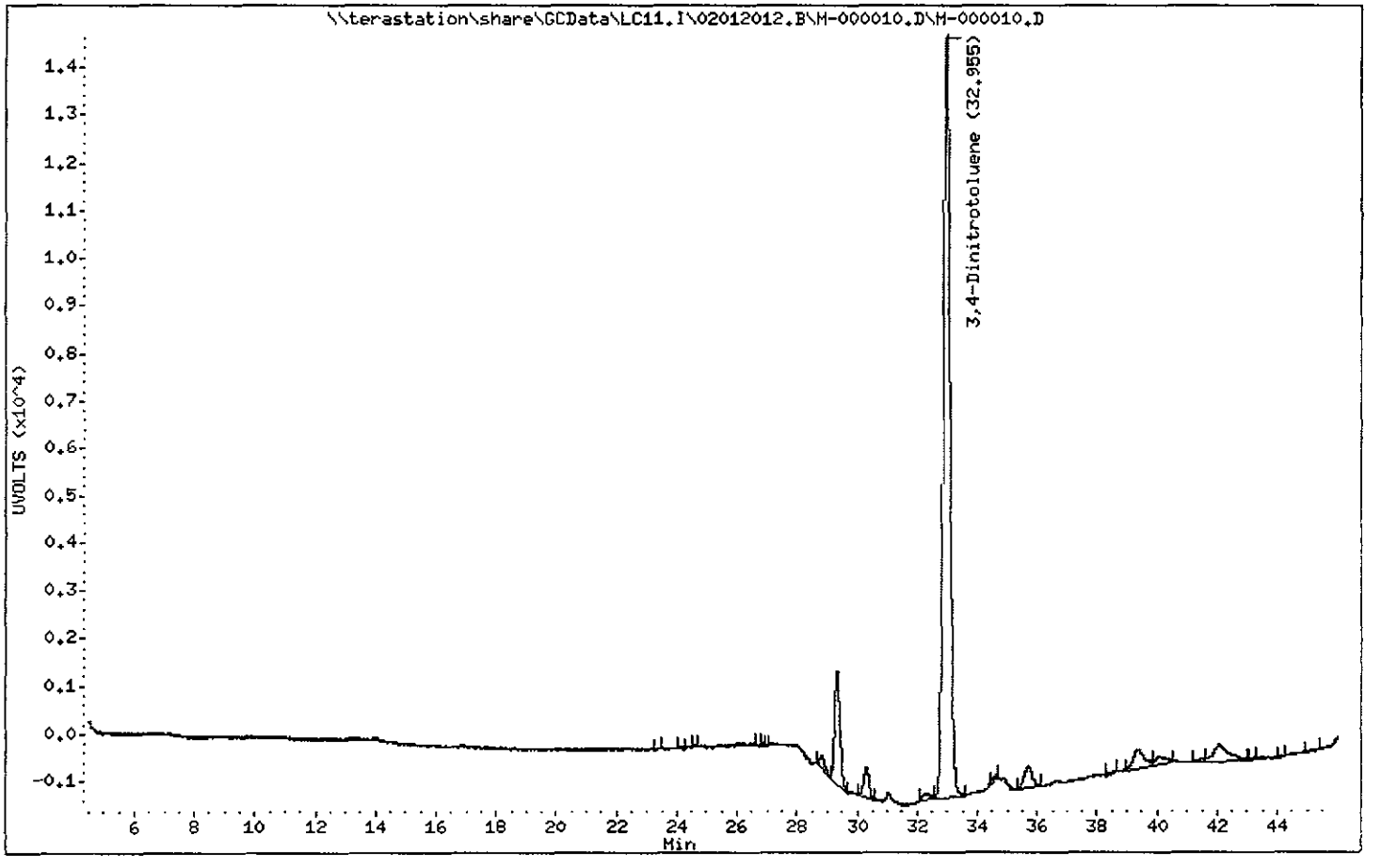
Sample Info: MQAVR1AK 2024017 A190474-2;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.03 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.034 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

White Water Associates

Client Sample ID: 02MW01A-20120118

HPLC

Lot-Sample #...: G2A190474-003 Work Order #...: MQAVT2AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.03 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.052 U CON	0.10	ug/L	0.052
2-Amino-4,6-dinitrotoluene	0.10 U	0.21	ug/L	0.10
1,3-Dinitrobenzene	0.052 U	0.10	ug/L	0.052
2,4-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
2,6-Dinitrotoluene	0.052 U	0.10	ug/L	0.052
RDX	0.052 U	0.10	ug/L	0.037
MNX	1.0 U	2.1	ug/L	0.56
TNX	0.15 U	2.1	ug/L	0.058
1,3,5-Trinitrobenzene	0.081 J,PG	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.052 U	0.10	ug/L	0.052

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

PG The percent difference between the original and confirmation analyses is greater than 40%.

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVT1AK 2024017 A190474-3
Analyzed : 01-FEB-2012 19:02
Operator : rn
Matrix : WATER
Sample Amt: 967.93 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000011.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX									
6	1,3,5-Trinitrobenz	25.563	-0.107	334	0.03373					
7	Picric ACID									
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.950	0.010	8529	2.627	32.950	0.010	16485	2.672	1.7
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

RDM 2/8/12
NA conf PG.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.583	2.627	101.7	2.672	103.4	(84-125)

RDM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 19:55

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000011.D
Lab Smp Id: MQAVT1AK 2024017 A1
Inj Date : 01-FEB-2012 19:02
Operator : rn Inst ID: LC11.i
Smp Info : MQAVT1AK 2024017 A190474-3;0;
Misc Info : ;;967.93;;20;1;WATERMET.sub;;0;;;;MQAVT1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	967.930	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.070	1412	138	0.098	1.29	
15.213	278	25	0.090	0.23	
17.013	1502	26	0.017	0.24	
18.090	475	33	0.069	0.30	
18.660	114	28	0.245	0.26	
18.850	124	14	0.113	0.13	
19.463	79	20	0.254	0.18	
19.900	110	16	0.146	0.15	
20.016	71	11	0.156	0.10	
20.553	73	13	0.179	0.12	
20.723	324	30	0.093	0.28	
21.520	141	17	0.121	0.15	
21.616	223	33	0.148	0.30	
21.953	117	27	0.231	0.25	
22.696	360	20	0.056	0.18	
23.080	210	19	0.090	0.17	
23.430	266	26	0.098	0.24	
24.063	166	22	0.132	0.20	
24.283	199	33	0.166	0.30	
24.630	1311	143	0.109	1.34	
24.906	420	77	0.184	0.72	
25.563	4526	334	0.074	3.13	10 1,3,5-Trinitrobenze
25.880	2613	195	0.075	1.83	
26.140	2809	150	0.053	1.40	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.590	4931	248	0.050	2.32	
30.270	1683	121	0.072	1.13	
32.950	128645	8529	0.066	80.23	$ 1 3,4-Dinitrotoluene
34.330	88	18	0.205	0.16	
38.440	202	22	0.109	0.20	
41.433	2910	117	0.040	1.09	
42.040	4265	148	0.035	1.38	
	160646	10653		100.000	

Total unknown % height = 16.64

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000011.D

Date : 01-FEB-2012 19:02

Client ID:

Instrument: LC11.i

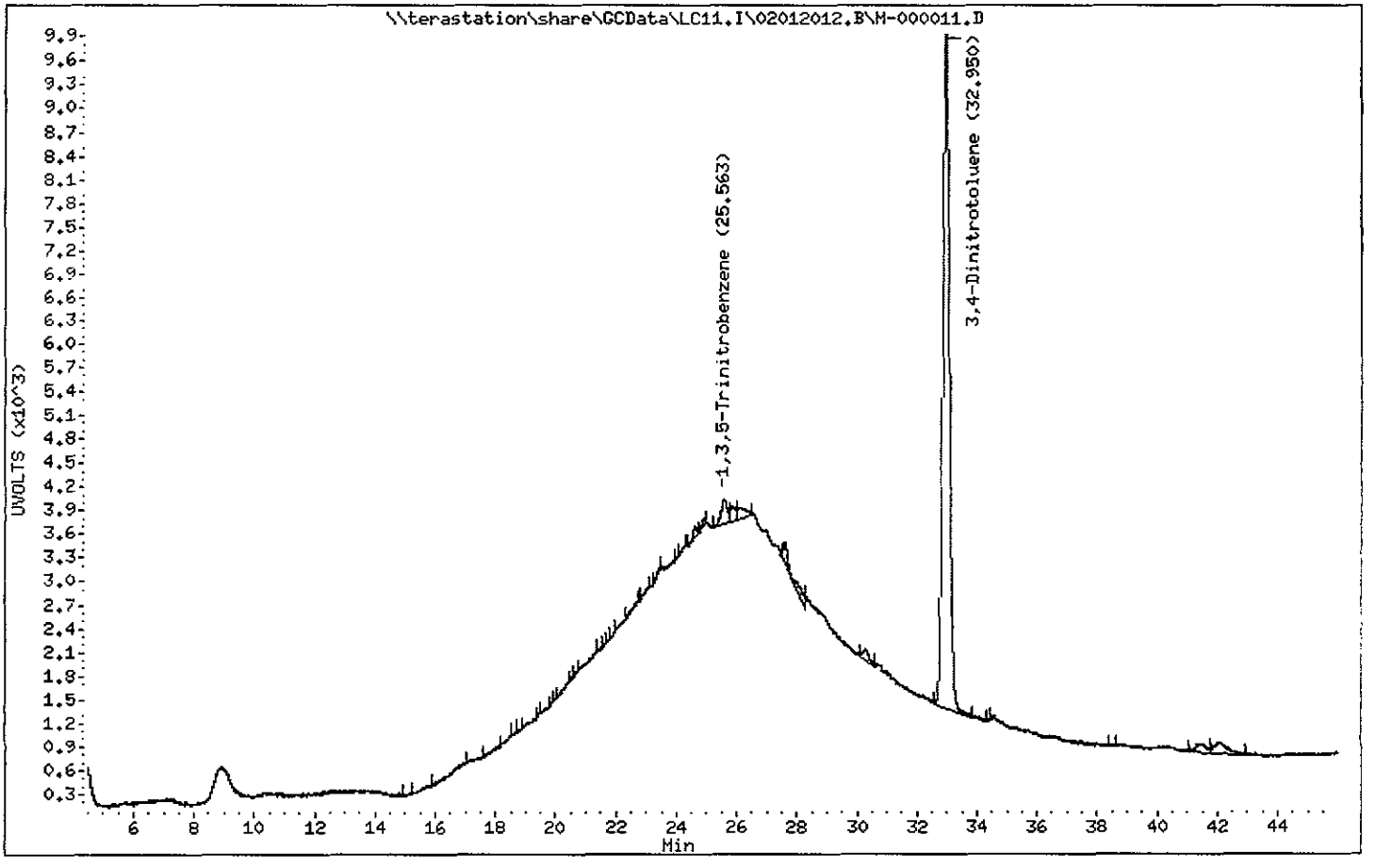
Sample Info: MQAVT1AK 2024017 A190474-3;0;

Volume Injected (uL): 500.0

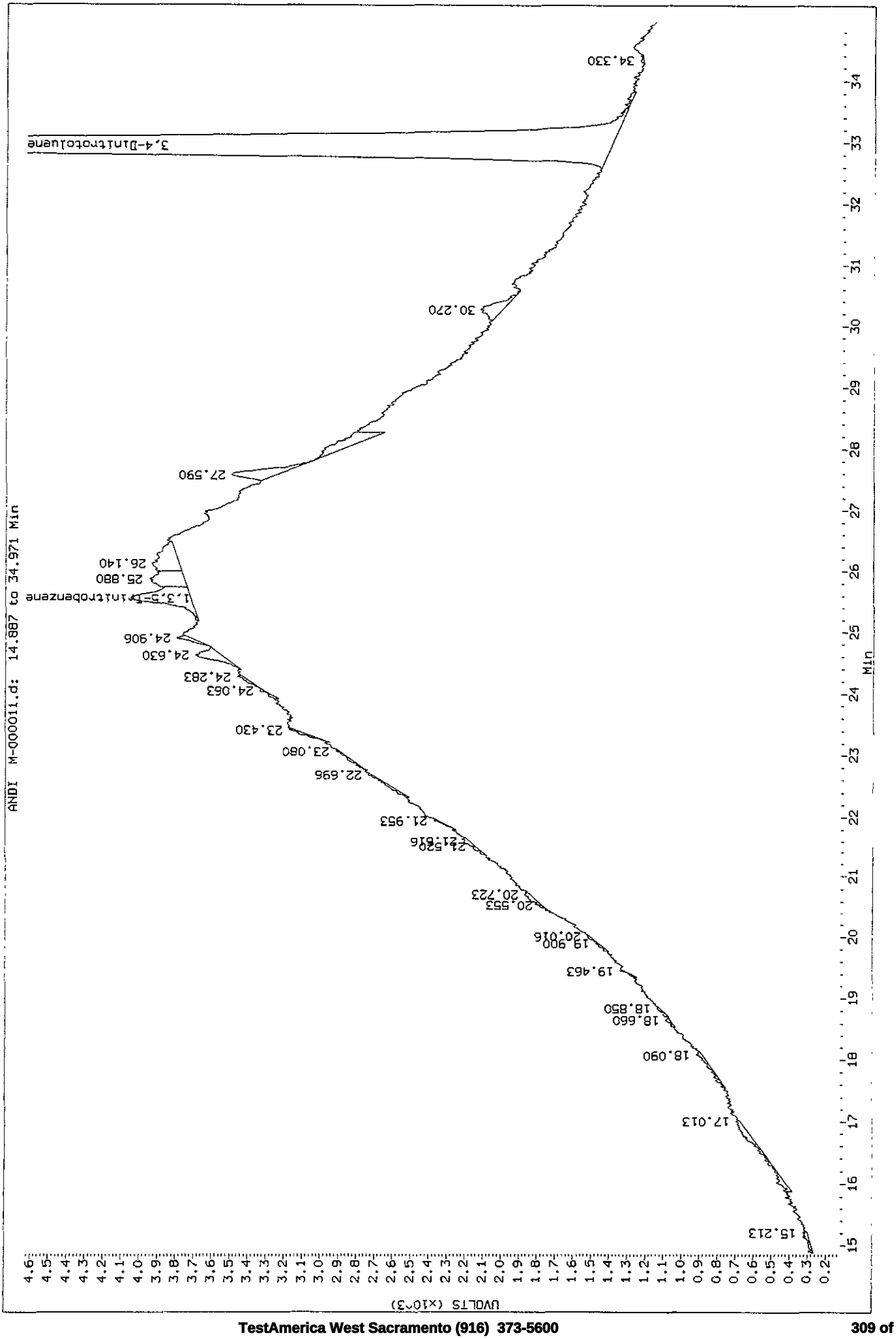
Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000011.d
Injection Date: 01-FEB-2012 19:02
Instrument: LC11.I
Client Sample ID:



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000011.D\M-000011
Lab Smp Id: MQAVT1AK 2024017 A1
Inj Date : 01-FEB-2012 19:02
Operator : rn Inst ID: LC11.i
Smp Info : MQAVT1AK 2024017 A190474-3;0;
Misc Info : ;;967.93;;20;1;WATERMET.sub;;0;;;;MQAVT1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	967.930	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.610	169	33	0.196	0.15	
24.576	292	42	0.144	0.19	
26.213	179	70	0.390	0.32	
27.103	377	45	0.119	0.20	
27.870	683	57	0.083	0.26	
28.806	4345	371	0.085	1.70	
30.270	2366	215	0.091	0.98	
30.733	2107	188	0.089	0.86	
32.250	3116	198	0.064	0.91	
32.950	247305	16485	0.067	75.98	$ 1 3,4-Dinitrotoluene
34.513	7709	406	0.053	1.86	
34.833	7421	399	0.054	1.83	
35.776	19601	887	0.045	4.08	
36.620	11190	494	0.044	2.27	
38.730	561	63	0.112	0.28	
39.360	16173	623	0.039	2.86	
40.070	16882	671	0.040	3.08	
41.453	1370	82	0.060	0.37	
42.036	11727	396	0.034	1.82	
	353573	21725		100.000	

Total unknown % height = 24.02

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000011.D\M-000011.D

Date : 01-FEB-2012 19:02

Client ID:

Instrument: LC11.i

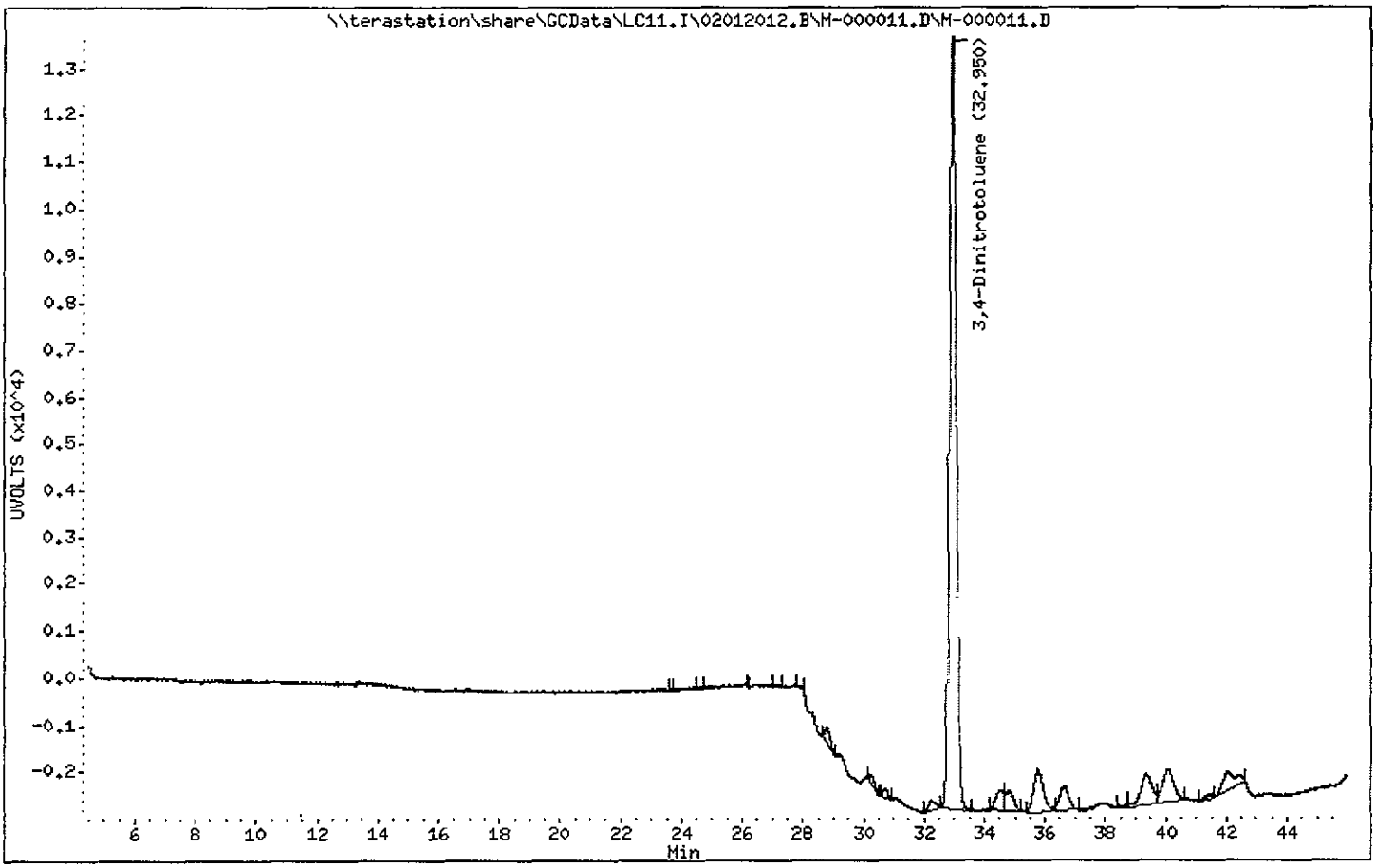
Sample Info: MQAVT1AK 2024017 A190474-3;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : MQAVT1AK 2024017 A190474-3
Analyzed : 02-FEB-2012 10:04
Operator : RN
Matrix : WATER
Sample Amt: 967.93 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000019.d
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	Nitrobenzene									
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz	28.018	0.029	299	0.08100					
6	MNX									
7	2-Nitrotoluene	29.288	-0.078	116	0.08210					
8	3-Nitrotoluene									
9	3,5-Dinitroaniline									
10	RDX									
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT									
15	3,4-Dinitrotoluene	38.505	0.032	6669	2.969					
16	2,4,6-Trinitrotolu									
17	HMX									
18	TETRYL									
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

cont. PQ.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.583	2.969	115.0*			(79-111)

~~not needed.~~ RM 2/8/12
RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:35

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000019.d
Lab Smp Id: MQAVT1AK 2024017 A1
Inj Date : 02-FEB-2012 10:04
Operator : RN Inst ID: LC12.i
Smp Info : MQAVT1AK 2024017 A190474-3;0;
Misc Info : ;;967.93;;20;1;WATERMETQSM.sub;;0;;;;MQAVT1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	967.930	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.445	3912	104	0.027	0.96	
15.852	3187	132	0.041	1.22	
18.249	2691	102	0.038	0.94	
22.069	888	47	0.053	0.43	
25.529	1084	48	0.044	0.44	
26.485	5170	202	0.039	1.87	
27.159	21228	467	0.022	4.33	
28.019	6656	299	0.045	2.77	10 1,3,5-Trinitrobenze
28.585	653	90	0.138	0.83	
28.742	750	93	0.124	0.86	
28.965	971	105	0.108	0.97	
29.189	1331	108	0.081	1.00	
29.289	1832	116	0.063	1.07	24 2-Nitrotoluene
29.662	2038	90	0.044	0.83	
30.185	435	67	0.154	0.62	
30.349	1292	74	0.057	0.68	
30.675	730	49	0.067	0.45	
31.029	831	48	0.058	0.44	
31.265	320	58	0.181	0.53	
31.495	505	63	0.125	0.58	
31.635	1185	64	0.054	0.59	
32.839	186	36	0.193	0.33	
32.945	990	61	0.062	0.56	
33.765	194	22	0.114	0.20	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
35.009	133	21	0.157	0.19	
35.982	263	22	0.084	0.20	
36.612	93	32	0.343	0.29	
36.832	222	25	0.113	0.23	
37.172	465	30	0.064	0.27	
38.505	151890	6669	0.044	62.17	$ 1 3,4-Dinitrotoluene
40.289	163	30	0.184	0.27	
40.845	2257	87	0.039	0.80	
42.282	254	28	0.110	0.25	
42.589	70	19	0.271	0.17	
43.032	676	55	0.081	0.51	
43.419	1906	116	0.061	1.07	
43.935	164	16	0.098	0.14	
44.792	84	21	0.251	0.19	
45.149	501	43	0.086	0.39	
45.955	264	34	0.129	0.31	
46.192	2620	114	0.044	1.05	
47.089	232	39	0.168	0.36	
48.249	5235	359	0.069	3.33	
48.835	6498	465	0.072	4.31	
	233049	10770		100.000	

Total unknown % height = 33.99

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000019.d

Date : 02-FEB-2012 10:04

Client ID:

Instrument: LC12.i

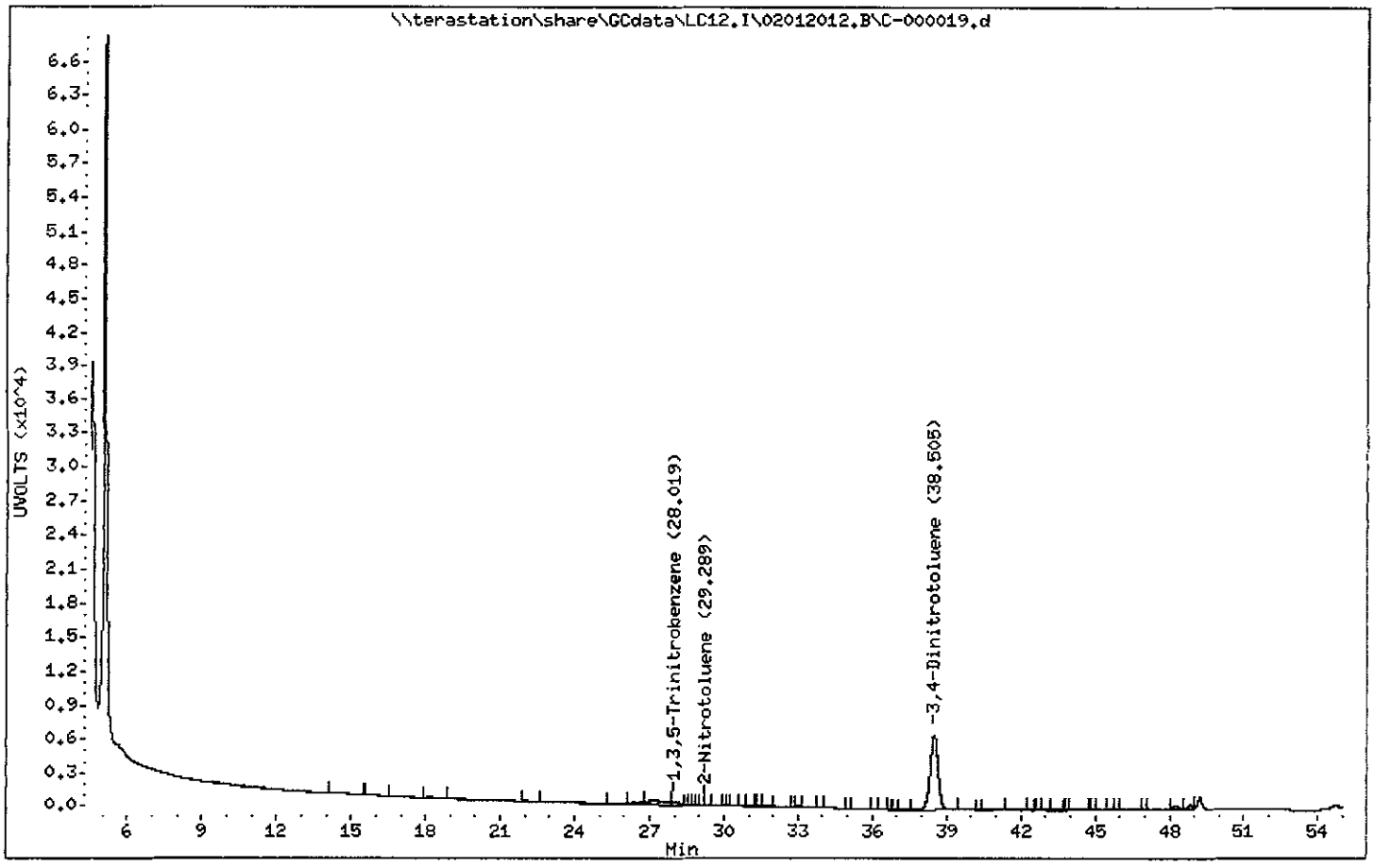
Sample Info: HQAVT1AK 2024017 A190474-3;0;

Volume Injected (uL): 500.0

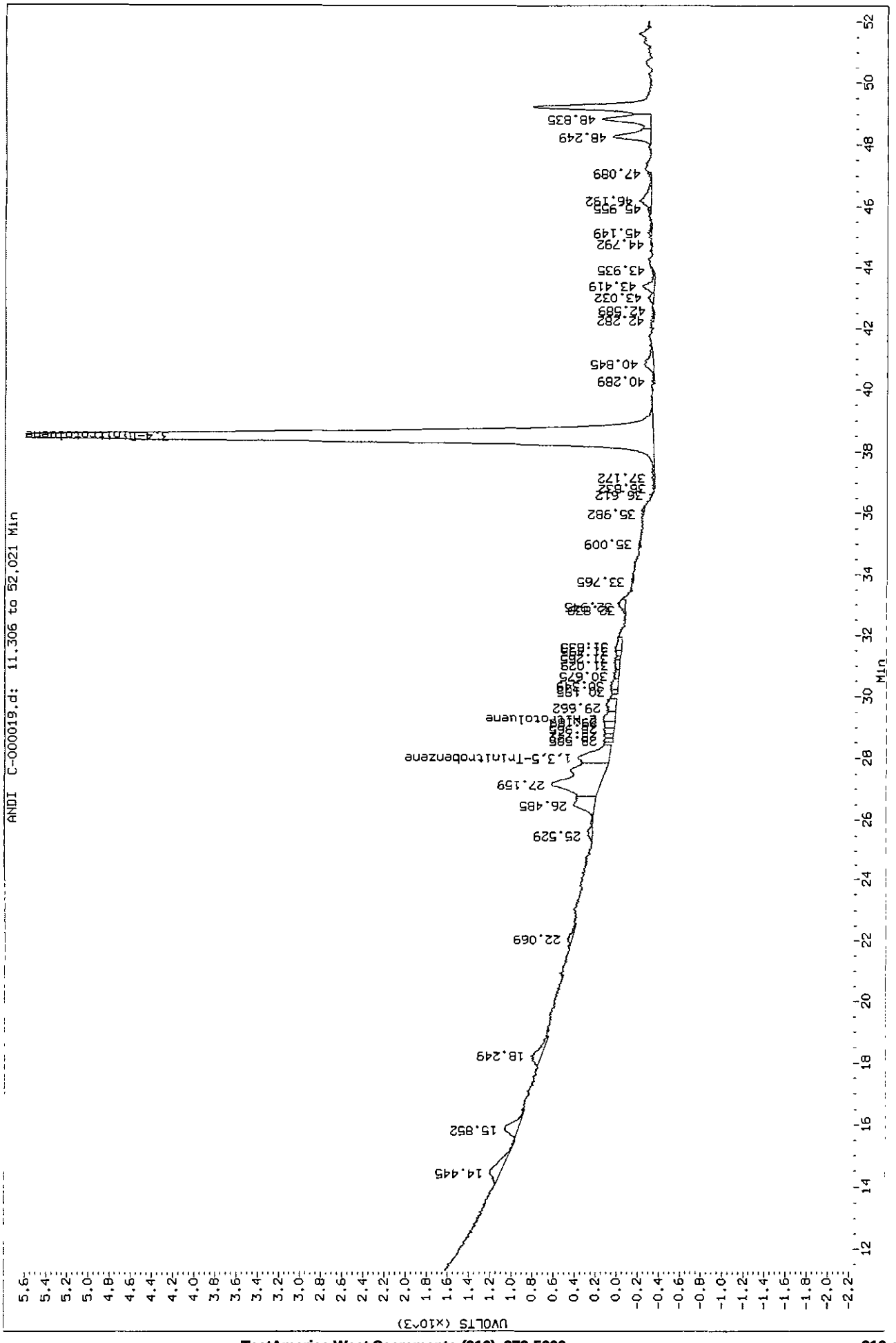
Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12,I\02012012.B\C-000019.d
Injection Date: 02-FEB-2012 10:04
Instrument: LC12.I
Client Sample ID:



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000019.d\C-000019
Lab Smp Id: MQAVT1AK 2024017 A1
Inj Date : 02-FEB-2012 10:04
Operator : RN Inst ID: LC12.i
Smp Info : MQAVT1AK 2024017 A190474-3;0;
Misc Info : ;;967.93;;20;1;WATERMETQSM.sub;;0;;;;MQAVT1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	967.930	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.109	4857	425	0.088	16.71	
52.475	11461	1142	0.100	44.92	
53.465	16952	976	0.058	38.37	
	33270	2543		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000019.d\C-000019.d

Date : 02-FEB-2012 10:04

Client ID:

Instrument: LC12.1

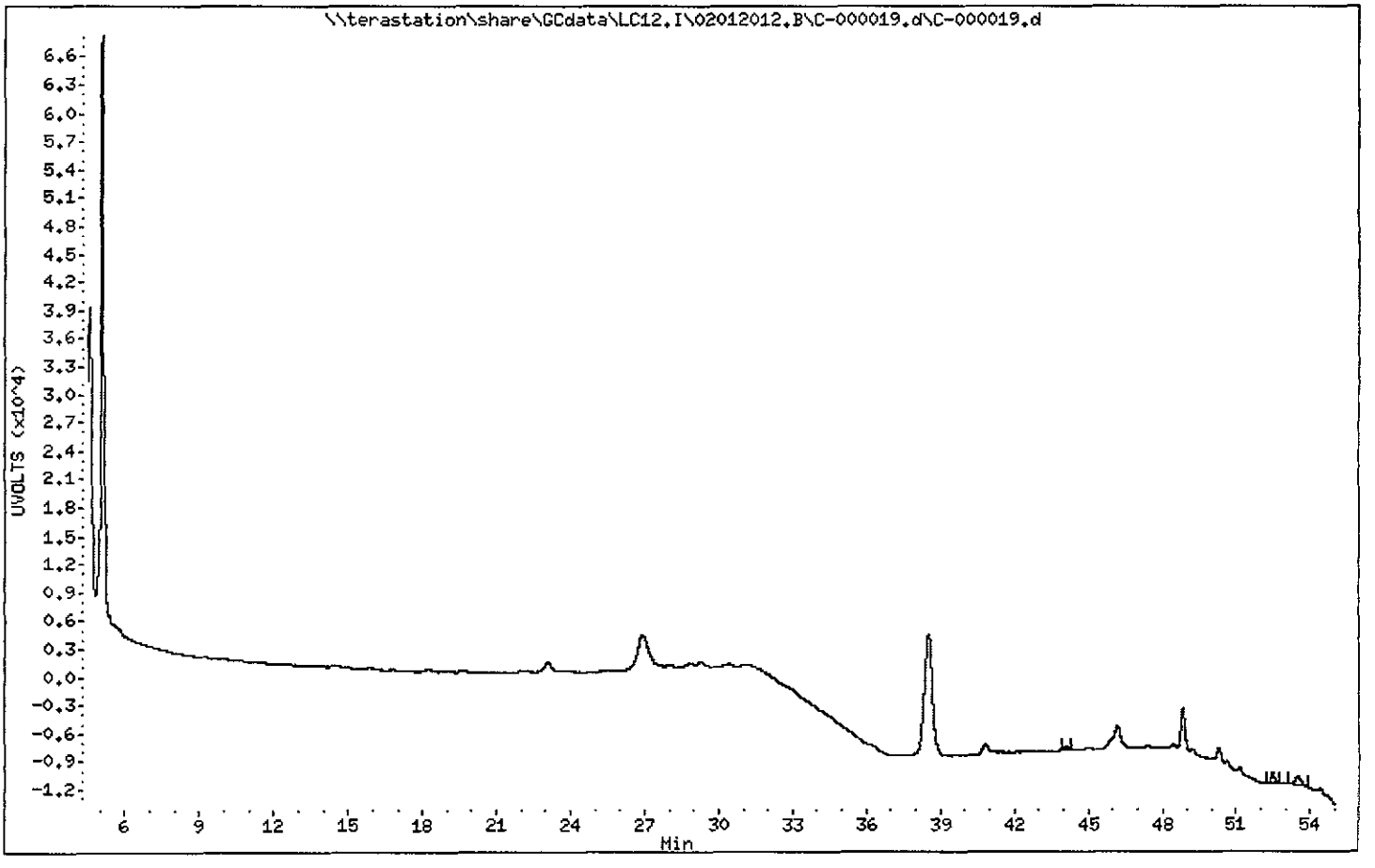
Sample Info: MQAVT1AK 2024017 A190474-3;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02MW13B-20120118

HPLC

Lot-Sample #...: G2A190474-004 Work Order #...: MQAVV1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVV1AK 2024017 A190474-4
Analyzed : 01-FEB-2012 19:59
Operator : rn
Matrix : WATER
Sample Amt: 980.52 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000012.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX	23.532	-0.198 RT	1051	0.2357 ND					
6	1,3,5-Trinitrobenz									
7	Picric ACID	25.828	-0.085	1799	0.3118 NA					
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.962	0.022	8619	2.621	32.962	0.022	16712	2.674	2.0
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.550	2.621	102.8	2.674	104.9	(84-125)

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 20:52

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D
Lab Smp Id: MQAVV1AK 2024017 A1
Inj Date : 01-FEB-2012 19:59
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AK 2024017 A190474-4;0;
Misc Info : ;;980.52;;20;1;WATERMET.sub;;0;;;;MQAVV1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	980.520	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.518	567	9	0.016	0.04	
15.968	410	28	0.068	0.14	
18.208	11099	21	0.002	0.10	
18.478	252	29	0.115	0.14	
19.058	86	17	0.198	0.08	
19.225	61	17	0.281	0.08	
19.712	237	29	0.123	0.14	
20.858	7933	222	0.028	1.13	
21.048	2427	235	0.097	1.20	
22.015	19647	492	0.025	2.51	
23.532	67339	1051	0.016	5.37	7 RDX
24.282	47143	1159	0.025	5.92	
24.665	30784	1322	0.043	6.75	
24.925	31400	1370	0.044	7.00	
25.315	14002	1202	0.086	6.14	
25.828	55437	1799	0.032	9.19	9 Picric ACID
26.155	44985	1166	0.026	5.95	
28.062	15030	182	0.012	0.92	
30.275	10076	175	0.017	0.89	
32.962	130535	8619	0.066	44.16	$ 1 3,4-Dinitrotoluene
34.488	739	61	0.082	0.31	
37.512	208	31	0.149	0.15	
41.471	2842	130	0.046	0.66	
42.068	4072	170	0.042	0.86	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
45.315	336	35	0.104	0.17	
	497647	19571		100.000	

Total unknown % height = 41.28

Data File: \\terastation\share\GCData\LC11.I\02012012.B\H-000012.D

Date : 01-FEB-2012 19:59

Client ID:

Instrument: LC11.i

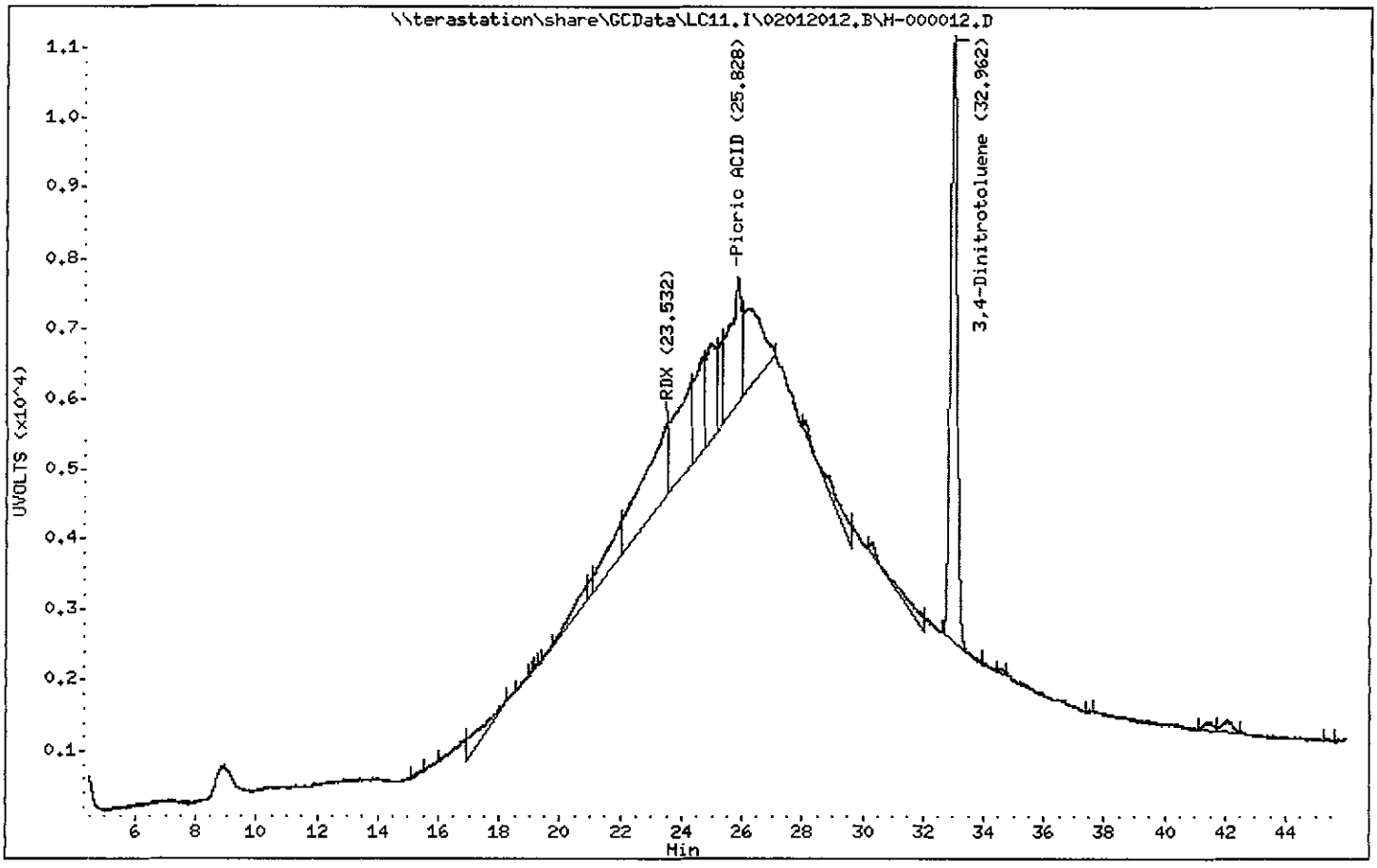
Sample Info: HQAVV1AK 2024017 A190474-4;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D\M-000012
Lab Smp Id: MQAVV1AK 2024017 A1
Inj Date : 01-FEB-2012 19:59
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AK 2024017 A190474-4;0;
Misc Info : ;;980.52;;20;1;WATERMET.sub;;0;;;;MQAVV1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	980.520	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.028	165	43	0.260	0.21	
23.785	160	34	0.213	0.17	
24.385	234	39	0.166	0.19	
24.565	237	37	0.156	0.18	
27.852	154	32	0.208	0.16	
28.788	10845	450	0.041	2.26	
30.295	5897	479	0.081	2.41	
32.202	1131	106	0.094	0.53	
32.962	251801	16712	0.066	84.32	$ 1 3,4-Dinitrotoluene
34.182	252	40	0.159	0.20	
34.778	744	50	0.067	0.25	
37.558	163	30	0.183	0.15	
38.808	2091	136	0.065	0.68	
39.382	9165	430	0.047	2.16	
40.068	12017	445	0.037	2.24	
41.515	2785	130	0.047	0.65	
42.048	26223	643	0.025	3.24	
	324063	19836		100.000	

Total unknown % height = 15.68

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D\M-000012.D

Date : 01-FEB-2012 19:59

Client ID:

Instrument: LC11.i

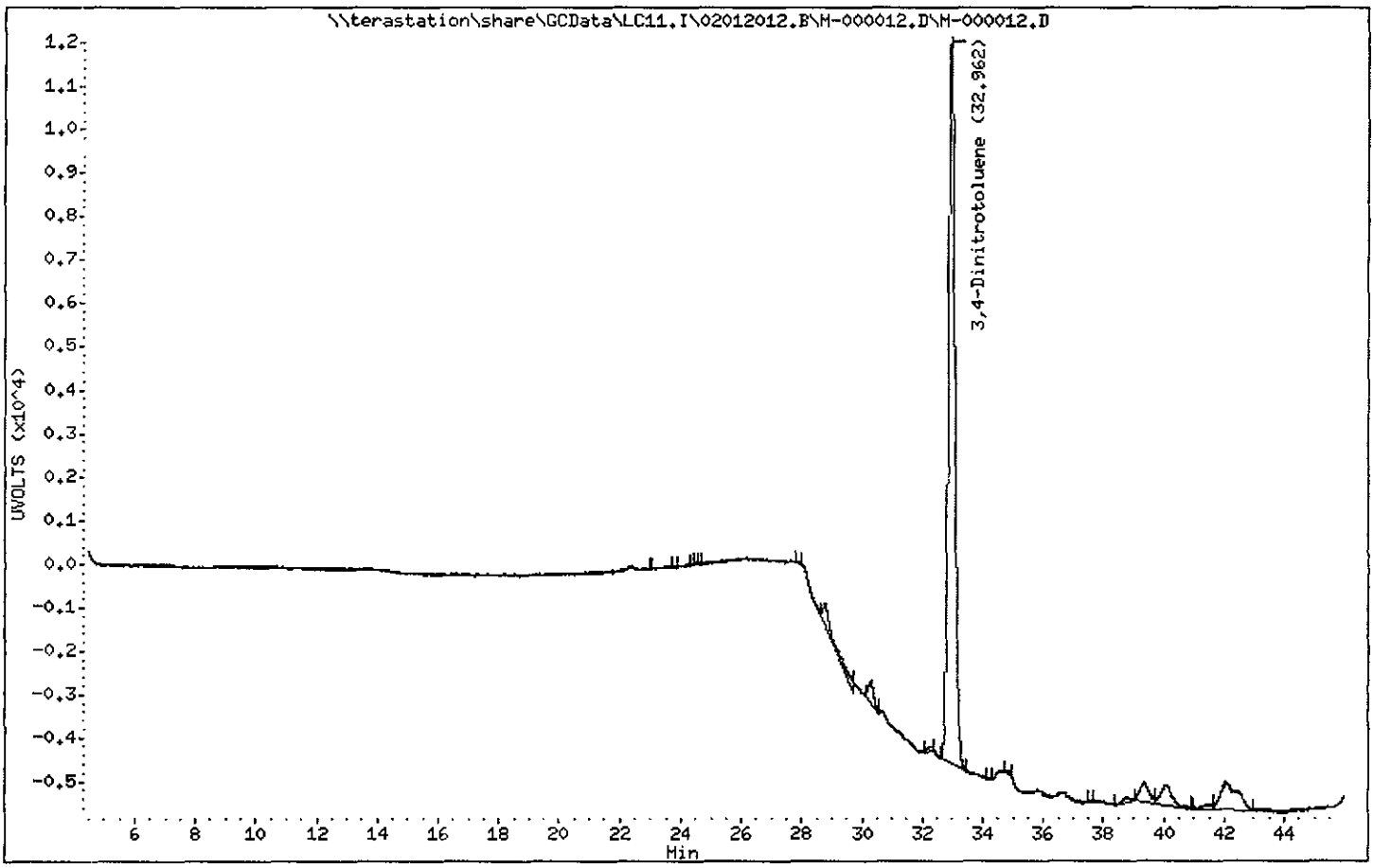
Sample Info: MQAVV1AK 2024017 A190474-4:0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02MW13C-20120118

HPLC

Lot-Sample #...: G2A190474-005 Work Order #...: MQAVW1AK Matrix.....: WATER
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVW1AK 2024017 A190474-5
Analyzed : 02-FEB-2012 00:46
Operator : rn
Matrix : WATER
Sample Amt: 982.01 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000017.D
Sublist: WATERMET

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 DNX									
3 HMX									
4 MNX									
5 RDX									
6 1,3,5-Trinitrobenz									
7 Picric ACID									
8 1,3-Dinitrobenzene									
9 3,5-Dinitroaniline									
10 Nitrobenzene									
11 TETRYL									
12 2,4,6-Trinitrotolu									
13 4-AM-2,6-DNT									
14 3,4-Dinitrotoluene	32.950	-0.012	8412	2.554	32.950	-0.008	16296	2.603	1.9
15 2-AM-4,6-DNT									
16 2,6-Dinitrotoluene									
17 2,4-Dinitrotoluene									
18 2-Nitrotoluene									
19 4-Nitrotoluene									
20 3-Nitrotoluene									
21 EGDN									
22 Nitroglycerin									
23 PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.546	2.554	100.3	2.603	102.3	(84-125)

rm 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 01:38

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000017.D
Lab Smp Id: MQAVW1AK 2024017 A1
Inj Date : 02-FEB-2012 00:46
Operator : rn Inst ID: LC11.i
Smp Info : MQAVW1AK 2024017 A190474-5;0;
Misc Info : ;;982.01;;20;1;WATERMET.sub;;0;;;;MQAVW1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	982.010	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.084	666	97	0.146	0.92	
15.384	217	27	0.124	0.25	
17.994	335	23	0.069	0.21	
18.337	86	29	0.337	0.27	
20.244	115	31	0.271	0.29	
20.407	88	20	0.226	0.19	
21.901	69	16	0.233	0.15	
22.271	70	20	0.284	0.19	
22.917	54	17	0.318	0.16	
23.211	51	25	0.490	0.23	
23.744	59	29	0.496	0.27	
24.061	708	63	0.089	0.59	
24.614	1548	147	0.095	1.39	
24.897	2201	166	0.075	1.58	
25.571	2158	149	0.069	1.41	
25.854	747	85	0.114	0.80	
26.161	1185	65	0.055	0.61	
26.954	787	68	0.086	0.64	
27.231	1465	83	0.057	0.79	
28.084	1552	139	0.090	1.32	
29.784	4088	252	0.062	2.39	
30.274	3599	194	0.054	1.84	
32.950	128213	8412	0.066	80.22	$ 1 3,4-Dinitrotoluene
34.557	1439	78	0.054	0.74	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
37.674	503	38	0.076	0.36	
38.071	121	31	0.257	0.29	
41.401	1985	93	0.047	0.88	
42.104	3833	108	0.028	1.02	
	157943	10505		100.000	

Total unknown % height = 19.78

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000017.D

Date : 02-FEB-2012 00:46

Client ID:

Instrument: LC11.i

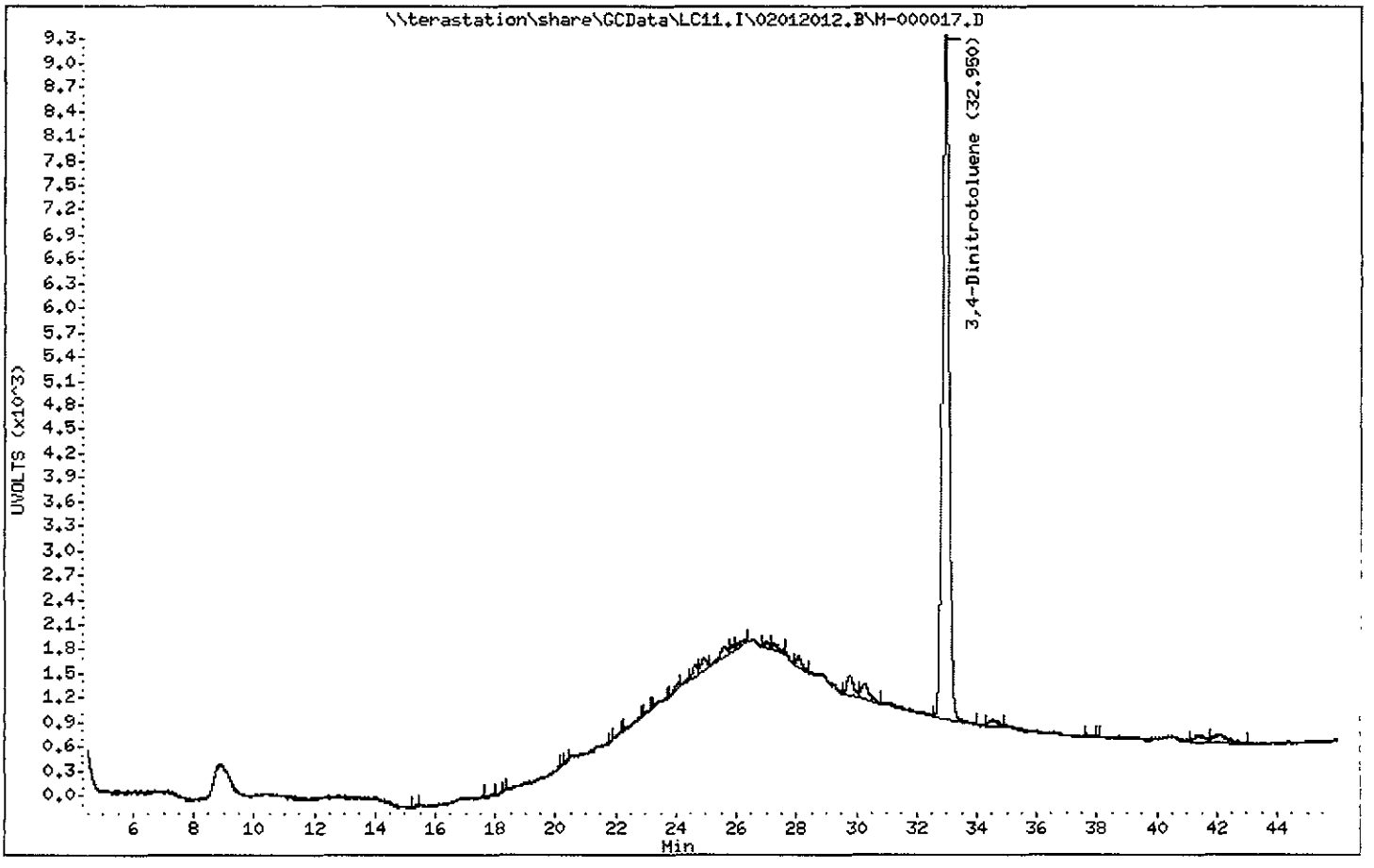
Sample Info: MQAVW1AK 2024017 A190474-5;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000017.D\M-000017
Lab Smp Id: MQAVW1AK 2024017 A1
Inj Date : 02-FEB-2012 00:46
Operator : rn Inst ID: LC11.i
Smp Info : MQAVW1AK 2024017 A190474-5;0;
Misc Info : ;;982.01;;20;1;WATERMET.sub;;0;;;;MQAVW1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	982.010	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.731	191	41	0.215	0.20	
25.481	270	46	0.170	0.23	
28.797	5249	390	0.074	1.98	
29.837	1854	148	0.080	0.75	
30.277	4504	368	0.082	1.86	
32.241	3554	181	0.051	0.91	
32.950	247481	16296	0.066	82.84	$ 1 3,4-Dinitrotoluene
34.590	3989	293	0.073	1.48	
34.874	8201	427	0.052	2.16	
36.634	9362	459	0.049	2.33	
38.871	2085	100	0.048	0.50	
39.344	7868	315	0.040	1.59	
40.081	6032	229	0.038	1.16	
41.527	908	49	0.054	0.24	
42.061	5556	239	0.043	1.21	
44.487	436	32	0.073	0.16	
45.051	618	29	0.047	0.14	
45.287	396	53	0.134	0.26	
	308552	19695		100.000	

Total unknown % height = 17.16

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000017.D\M-000017.D

Date : 02-FEB-2012 00:46

Client ID:

Instrument: LC11.i

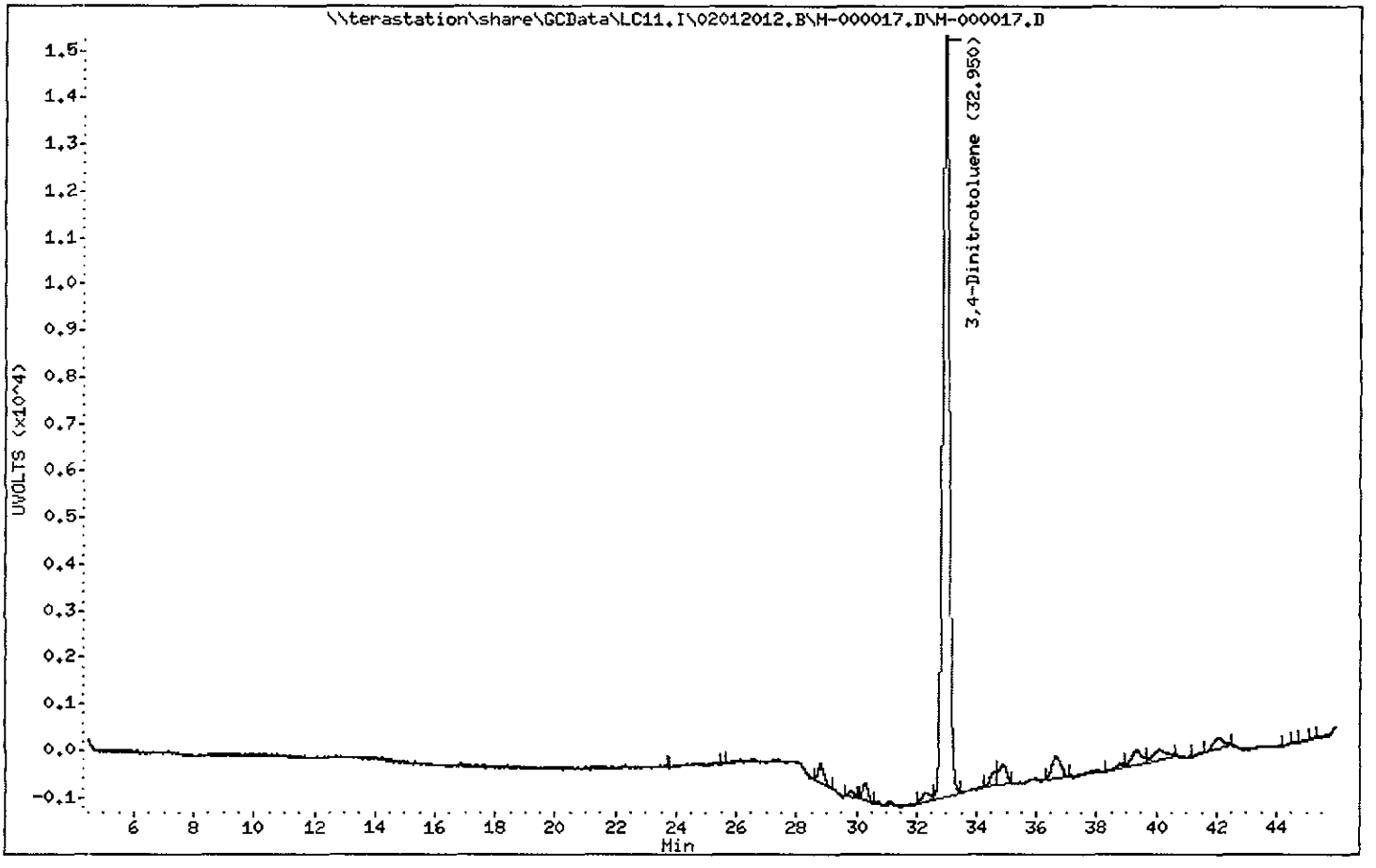
Sample Info: MQAVW1AK 2024017 A190474-5;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



Standards Data

ICAL Data

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC11 ICAL ID: 013020120 Method: 8330 A/B

Analytes included in curve (with dates): 8330 All, NG, PETN + Picric Acid (1/26/12)
MNX, TNX + DNX (1/30/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/1/12

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 4: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Level 5: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Level 6: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Level 7: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Level 8: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
2 TNX	+++++	+++++	53.70000	60.74000	61.33000	61.55500		
	57.56200	62.90600					59.63217	5.712
3 DNX	+++++	+++++	82.05000	92.56000	94.32000	94.87500		
	89.65200	97.07100					91.75467	5.845
4 HMX	99.00000	96.20000	95.90000	94.56000	96.75000	93.59000		
	87.43800	70.82000					91.78225	9.939
5 MNX	+++++	+++++	97.90000	108	112	112		
	107	113					108	5.152
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	102	95.30000	94.60000	93.90000	96.01000	91.97000		
	85.35600	68.88900					90.95313	10.987
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	120	115	117	128	127	121		
	112	102					118	7.195

2/1/12

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
10 1,3,5-Trinitrobenzene	211	210	207	206	211	208		
	201	182					205	4.640
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	219	220	215	215	221	217		
	211	193					214	4.218
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	144	143	141	139	143	142		
	138	128					140	3.725
16 TETRYL	114	111	111	110	114	114		
	113	111					112	1.307
17 Nitrobenzene	100	93.50000	87.05000	93.60000	96.72000	95.08000		
	92.21600	84.77000					92.91700	5.415
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	120	121	119	118	121	122		
	120	117					120	1.309
20 4-AM-2,6-DNT	97.00000	97.40000	96.60000	95.46000	97.64000	97.75000		
	96.13600	92.28600					96.28400	1.863

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	109	108	107	106	109	109		
	107	102					107	2.198
22 2,6-Dinitrotoluene	76.40000	76.20000	73.30000	73.16000	74.88000	74.72000		
	73.58800	71.51800					74.22075	2.221
23 2,4-Dinitrotoluene	124	123	122	120	124	123		
	122	118					122	1.601
24 2-Nitrotoluene	58.00000	53.90000	48.25000	52.36000	53.60000	53.46000		
	52.77200	51.06700					52.92612	5.204
25 4-Nitrotoluene	61.60000	66.20000	59.05000	62.88000	64.64000	64.59500		
	63.84600	62.14000					63.12888	3.512
26 3-Nitrotoluene	64.80000	64.80000	57.35000	62.22000	63.92000	63.79000		
	63.20600	61.77500					62.73262	3.879
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 1 3,4-Dinitrotoluene	69.80000	65.40000	63.95000	64.88000	67.78000	67.97500		
	68.71000	68.11200					67.07587	3.080

B

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Level 4: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Level 5: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Level 6: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Level 7: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Level 8: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	176	167	171	187	185	178			
	162	138					171	9.104	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
15 3,5-Dinitroaniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
16 TETRYL	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
18 Nitroglycerin	+++++	+++++	69.40000	79.80000	87.13000	88.24000			
	87.71000	85.97900					83.04317	8.861	
19 2,4,6-Trinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 4-AM-2,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 6	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 2,6-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
23 2,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 2-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 4-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
26 3-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
27 PETN	+++++ / 49.40400	+++++ / 49.44000	43.45000	46.14000	49.53000	49.66000	47.93733	5.382
$ 1 3,4-Dinitrotoluene	130 / 131	124 / 130	120	124	130	131	127	3.347

Report Date: 01-Feb-2012 09:45

A

Calibration History

Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Start Cal Date: 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
30-JAN-2012 16:49	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
26-JAN-2012 16:06	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 17:03	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Cal Level: 3 , Cal Amount: 20.00000		
30-JAN-2012 16:49	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
26-JAN-2012 18:00	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d
Cal Level: 4 , Cal Amount: 50.00000		
30-JAN-2012 17:46	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d
Cal Level: 5 , Cal Amount: 100.00000		
30-JAN-2012 18:43	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d
Cal Level: 6 , Cal Amount: 200.00000		
30-JAN-2012 19:40	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
26-JAN-2012 20:52	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d

A

Cal Level: 7 , Cal Amount: 500.00000		
30-JAN-2012 20:37	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
26-JAN-2012 21:49	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d

Cal Level: 8 , Cal Amount: 1000.00000		
30-JAN-2012 21:34	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d
26-JAN-2012 22:47	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

31-JAN-2012 00:25	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d
30-JAN-2012 23:28	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d
30-JAN-2012 18:43	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
27-JAN-2012 01:38	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d
27-JAN-2012 00:41	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d

Report Date: 01-Feb-2012 09:45

(B)

Calibration History

Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.M
Start Cal Date: 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 16:06	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 17:03	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Cal Level: 3 , Cal Amount: 20.00000		
26-JAN-2012 18:00	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Cal Level: 4 , Cal Amount: 50.00000		
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Cal Level: 5 , Cal Amount: 100.00000		
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Cal Level: 6 , Cal Amount: 200.00000		
26-JAN-2012 20:52	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Cal Level: 7 , Cal Amount: 500.00000		
26-JAN-2012 21:49	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Cal Level: 8 , Cal Amount: 1000.00000		

26-JAN-2012 22:47	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

B

Continuing Calibration
Ccal Level Mode: BY SAMPLE

27-JAN-2012 01:38	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d\M-000014.d
27-JAN-2012 00:41	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-000013.d
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d

TestAmerica West Sacramento

Calibration Standard Level Reference Sheet

8330, 8330A, 8330B

	Concentration (ppb)							
Analyte	Level 1	2	3	4	5	6	7	8
3,4-Dinitrotoluene (surr)		10	20	50	100	200	300	500
HMX	5	10	20	50	100	200	500	1000
MNX	5	10	20	50	100	200	500	1000
DNX	5	10	20	50	100	200	500	1000
TNX	5	10	20	50	100	200	500	1000
RDX	5	10	20	50	100	200	500	1000
1,3,5-Trinitrobenzene	5	10	20	50	100	200	500	1000
1,3-Dinitrotoluene	5	10	20	50	100	200	500	1000
3,5-Dinitroaniline	5	10	20	50	100	200	500	1000
TETRYL	5	10	20	50	100	200	500	1000
Nitrobenzene	5	10	20	50	100	200	500	1000
2,4,6-Trinitrotoluene	5	10	20	50	100	200	500	1000
4-Amino-2,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2-Amino-4,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2,6-Dinitrotoluene	5	10	20	50	100	200	500	1000
2,4-Dinitrotoluene	5	10	20	50	100	200	500	1000
2-Nitrotoluene	5	10	20	50	100	200	500	1000
4-Nitrotoluene	5	10	20	50	100	200	500	1000
3-Nitrotoluene	5	10	20	50	100	200	500	1000
Picric Acid	10	20	50	100	200	500	1000	2000
Nitroglycerin			20	50	100	200	500	1000
PETN			20	50	100	200	500	1000
EGDN			20	50	100	200	500	1000

Revision Date: 6/24/2010

TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 15:09
Operator : SV
Matrix : NONE

Instrument: LC11
File ID: 01262012C.B/M-000003.d
Sublist: 1_CAL
SpikeList:

	Side A				Side B				
	Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1	HMX									
2	RDX									
3	1,3,5-Trinitrobenz	25.719	0.050	26	0.1271					
4	Picric ACID	26.049	0.100	25	0.2124					
5	1,3-Dinitrobenzene									
6	3,5-Dinitroaniline									
7	Nitrobenzene									
8	TETRYL									
9	2,4,6-Trinitrotolu	31.712	0.120	32	0.2673					
10	4-AM-2,6-DNT	32.642	0.057	31	0.3220					
11	3,4-Dinitrotoluene									
12	2-AM-4,6-DNT									
13	2,6-Dinitrotoluene									
14	2,4-Dinitrotoluene									
15	2-Nitrotoluene									
16	4-Nitrotoluene									
17	3-Nitrotoluene									
18	EGDN									
19	Nitroglycerin									
20	PETN									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 15:09
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.432	77	22	0.287	4.15	
19.302	87	25	0.286	4.72	
20.282	172	29	0.169	5.48	
22.505	56	24	0.427	4.53	
23.192	106	25	0.236	4.72	
24.859	74	24	0.325	4.53	
25.719	349	26	0.075	4.91	10 1,3,5-Trinitrobenze
26.049	199	25	0.126	4.72	9 Picric ACID
27.252	782	48	0.061	9.17	
31.712	201	32	0.159	6.04	19 2,4,6-Trinitrotolue
31.982	315	30	0.095	5.67	
32.642	182	31	0.171	5.86	20 4-AM-2,6-DNT
35.145	211	32	0.151	6.04	
36.002	312	32	0.102	6.04	
36.679	304	38	0.125	7.18	
37.215	405	32	0.079	6.04	
39.802	333	25	0.075	4.72	
43.862	160	29	0.181	5.48	
	4325	529		100.000	

Total unknown % height = 78.47

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d

Date : 26-JAN-2012 15:09

Client ID:

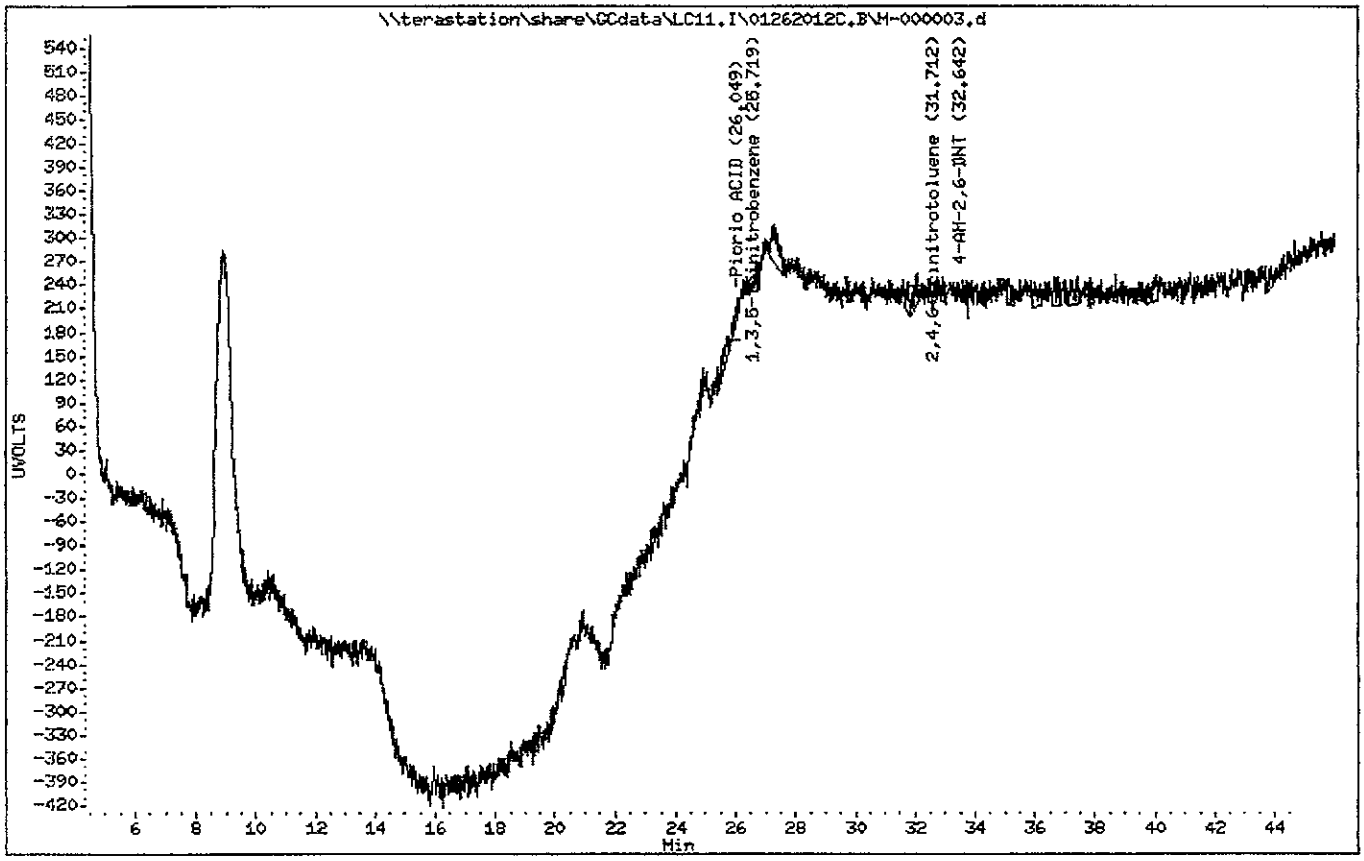
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d\M-00000
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 15:09
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.419	203	28	0.138	7.19	
24.992	244	37	0.152	9.51	
27.885	313	41	0.131	10.53	
38.662	278	10	0.036	2.57	
39.649	721	39	0.054	10.02	
40.229	1214	51	0.042	13.16	
40.529	436	28	0.064	7.19	
42.062	1809	47	0.026	12.08	
42.569	542	45	0.083	11.56	
43.292	527	33	0.063	8.48	
44.295	228	30	0.132	7.71	
45.932	1484	0	0.000	0.00	
	7999	389		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d\M-000003.d

Date : 26-JAN-2012 15:09

Client ID:

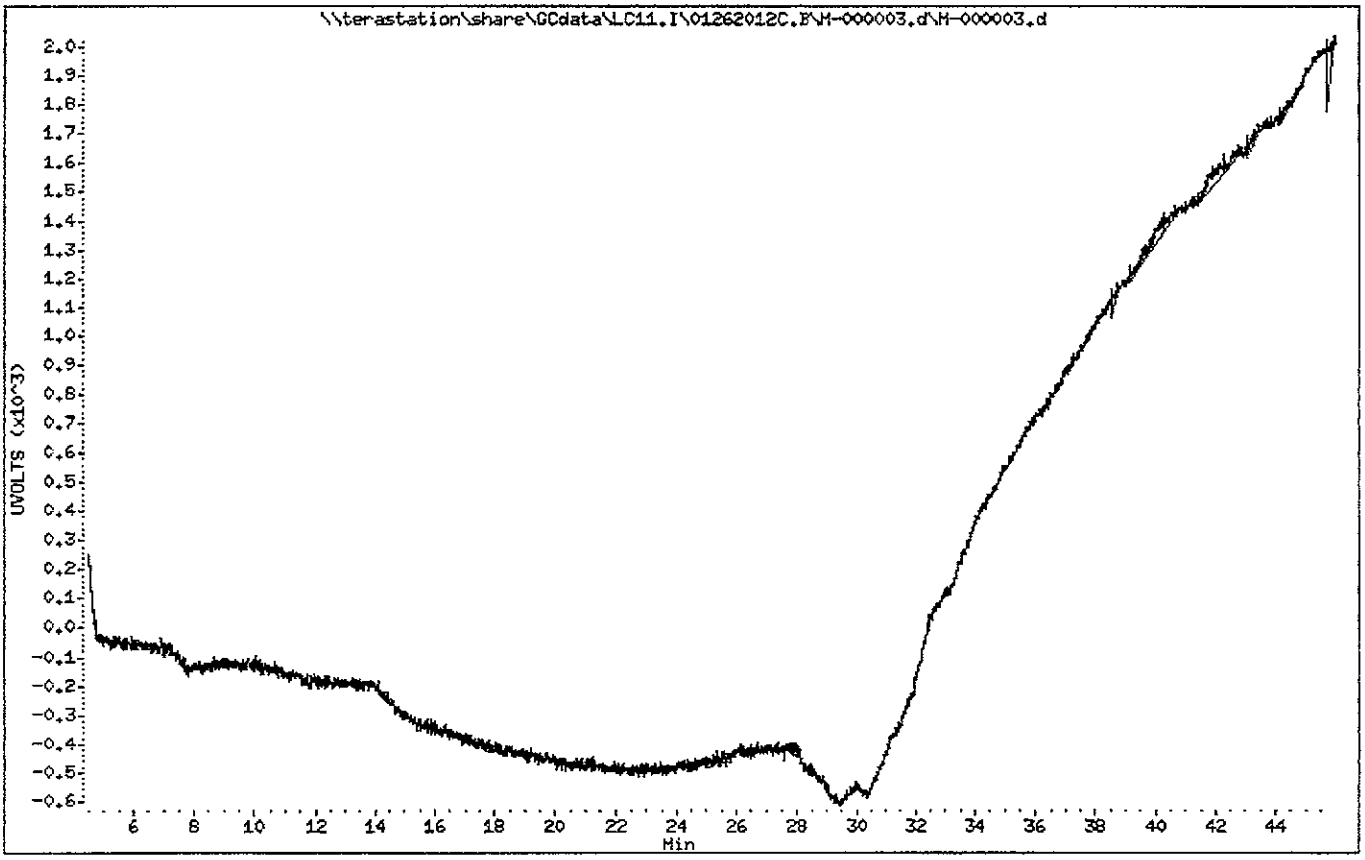
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_01 12GCSV0104 8330 5 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 16:06 File ID: 01262012C.B/M-000004.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	5.00	20.502	0.000	495	99.00000				
2	RDX	5.00	23.742	0.000	508	101.6000				
3	1,3,5-Trinitrobenz	5.00	25.675	0.000	1055	211.0000				
4	Picric ACID	10.0	26.032	0.000	1201	120.1000	26.028	0.000	1756	175.6000
5	1,3-Dinitrobenzene	5.00	28.422	0.000	1094	218.8000				
6	3,5-Dinitroaniline	5.00	29.552	0.000	719	143.8000				
7	Nitrobenzene	5.00	30.028	0.000	502	100.4000				
8	TETRYL	5.00	30.365	0.000	568	113.6000				
9	2,4,6-Trinitrotolu	5.00	31.612	0.000	598	119.6000				
10	4-AM-2,6-DNT	5.00	32.605	0.000	485	97.00000				
11	3,4-Dinitrotoluene	5.00	32.958	0.000	349	69.80000	32.962	0.000	650	130.0000
12	2-AM-4,6-DNT	5.00	33.308	0.000	547	109.4000				
13	2,6-Dinitrotoluene	5.00	34.568	0.000	382	76.40000				
14	2,4-Dinitrotoluene	5.00	34.962	0.000	620	124.0000				
15	2-Nitrotoluene	5.00	37.508	0.000	290	58.00000				
16	4-Nitrotoluene	5.00	39.168	0.000	308	61.60000				
17	3-Nitrotoluene	5.00	40.685	0.000	324	64.80000				
18	EGDN	5.00								
19	Nitroglycerin	5.00					30.865	0.000	379	75.80000
20	PETN	5.00					41.398	0.000	224	44.80000

NOT USED

RM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:07

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 16:06
Operator : SV Inst ID: LC11.i
Smp Info : STD_01 12GCSV0104 8330 5 ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:06 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 16:06 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.502	4345	495	0.114	4.79	4 HMX
21.618	77	28	0.364	0.27	
22.755	92	31	0.338	0.30	
23.742	4894	508	0.104	4.92	7 RDX
24.895	299	40	0.134	0.38	
25.675	10415	1055	0.101	10.22	10 1,3,5-Trinitrobenzene
26.032	12056	1201	0.100	11.74	9 Picric ACID
26.732	97	30	0.308	0.29	
27.155	1173	54	0.046	0.52	
28.422	12842	1094	0.085	10.59	13 1,3-Dinitrobenzene
29.552	9443	719	0.076	6.96	15 3,5-Dinitroaniline
30.028	6382	502	0.079	4.86	17 Nitrobenzene
30.365	7884	568	0.072	5.50	16 TETRYL
31.612	8715	598	0.069	5.79	19 2,4,6-Trinitrotoluene
32.605	7582	485	0.064	4.69	20 4-AM-2,6-DNT
32.958	4599	349	0.076	3.38	$ 1 3,4-Dinitrotoluene
33.308	9146	547	0.060	5.29	21 2-AM-4,6-DNT
34.568	6302	382	0.061	3.70	22 2,6-Dinitrotoluene
34.962	11041	620	0.056	6.00	23 2,4-Dinitrotoluene
36.652	169	37	0.218	0.35	
37.478	186	29	0.156	0.28	
37.908	6433	290	0.045	2.80	24 2-Nitrotoluene
39.168	6420	308	0.048	2.98	25 4-Nitrotoluene
40.685	8165	324	0.040	3.13	26 3-Nitrotoluene
45.455	205	28	0.137	0.27	
	138961	10322		100.000	

Total unknown % height = 2.660

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d

Page 2

Date : 26-JAN-2012 16:06

Client ID:

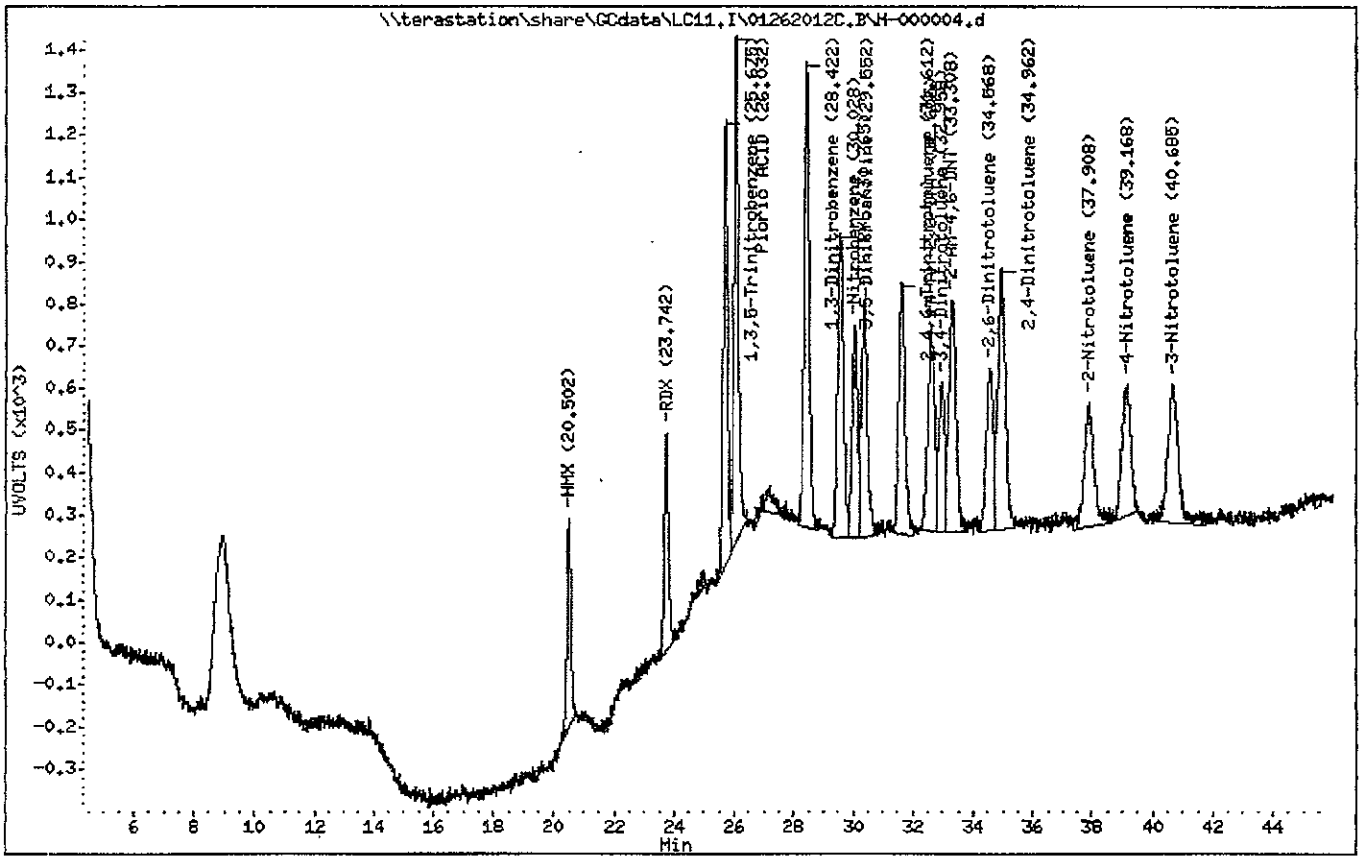
Instrument: LC11.i

Sample Info: STD_01 12GCSV0104 8330 5 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-00000
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 16:06
Operator : SV Inst ID: LC11.i
Smp Info : STD_01 12GCSV0104 8330 5 ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:06 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 16:06 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.028	17291	1756	0.102	16.43	9 Picric ACID
28.408	6539	554	0.085	5.15	
29.558	8045	681	0.085	6.33	
30.038	8698	729	0.084	6.77	
30.365	8161	668	0.082	6.21	
30.865	4498	379	0.084	3.52	18 Nitroglycerin
31.608	8519	613	0.072	5.69	
32.605	12046	740	0.061	6.87	
32.962	9970	650	0.065	6.04	$ 1 3,4-Dinitrotoluene
33.308	8416	540	0.064	5.02	
34.552	10785	669	0.062	6.21	
34.938	8682	493	0.057	4.58	
36.678	257	39	0.152	0.36	
37.908	12647	643	0.051	5.97	
39.168	10893	477	0.044	4.43	
40.085	1485	86	0.058	0.79	
40.645	15827	663	0.042	6.16	
41.398	5301	224	0.042	2.08	27 PETN
42.852	516	37	0.072	0.34	
43.065	155	37	0.239	0.34	
43.425	546	46	0.084	0.42	
45.102	2181	32	0.015	0.29	
	161458	10756		100.000	

Total unknown % height = 71.93

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d

Date : 26-JAN-2012 16:06

Client ID:

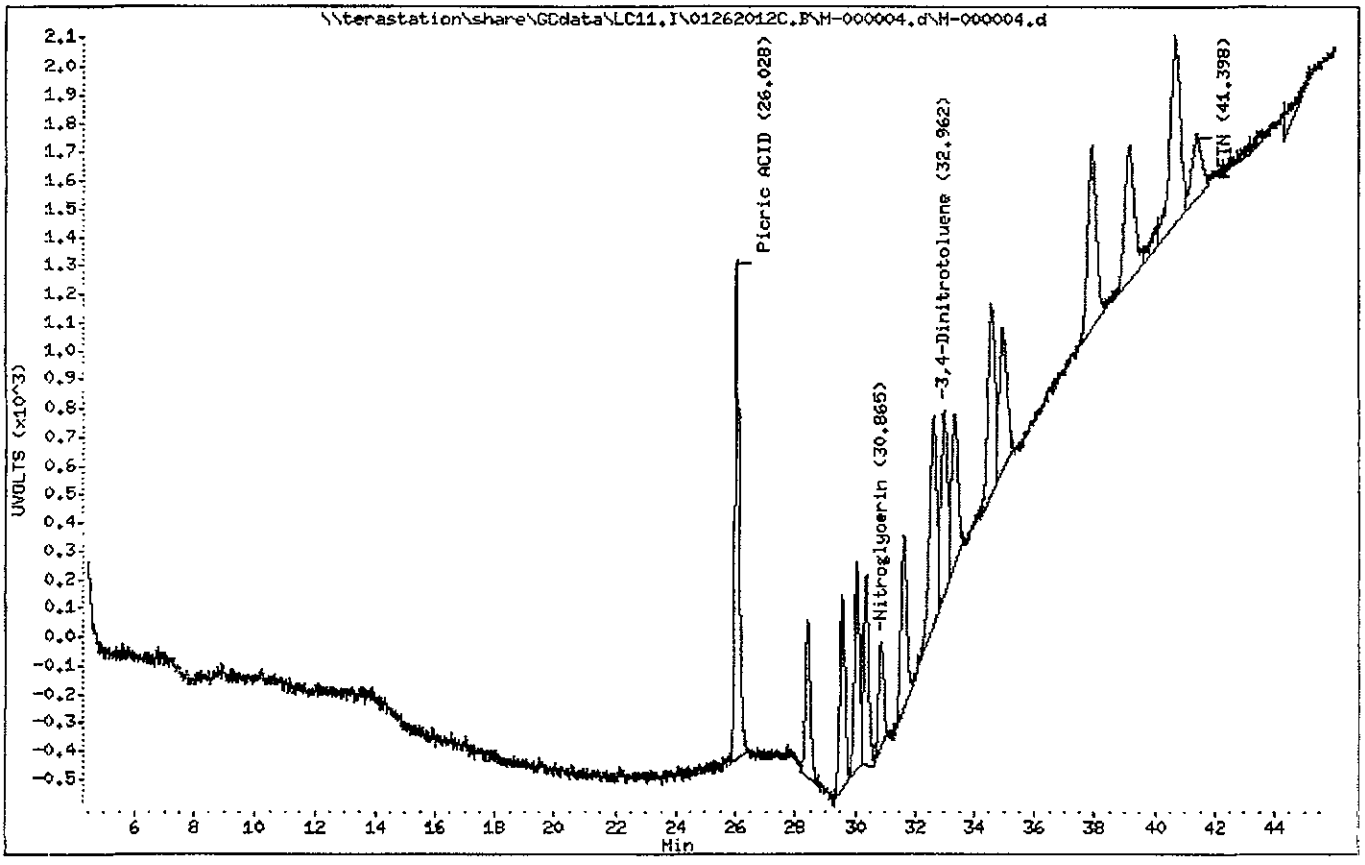
Instrument: LC11.i

Sample Info: STD_01 12GCSW0104 8330 5 ng/mL;1;

Operator: SW

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_02 12GCSV0095 8330 10 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 17:03 File ID: 01262012C.B/M-000005.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	10.0	20.490	0.000	962	96.20000				
2	RDX	10.0	23.730	0.000	953	95.30000				
3	1,3,5-Trinitrobenz	10.0	25.674	0.000	2103	210.3000				
4	Picric ACID	20.0	26.024	0.000	2293	114.6500	26.024	0.000	3349	167.4500
5	1,3-Dinitrobenzene	10.0	28.417	0.000	2202	220.2000				
6	3,5-Dinitroaniline	10.0	29.560	0.000	1434	143.4000				
7	Nitrobenzene	10.0	30.044	0 000	935	93.50000				
8	TETRYL	10.0	30.360	0.000	1111	111.1000				
9	2,4,6-Trinitrotolu	10.0	31.610	0.000	1208	120.8000				
10	4-AM-2,6-DNT	10.0	32.600	0.000	974	97.40000				
11	3,4-Dinitrotoluene	10.0	32.970	0.000	654	65.40000	32.957	0.000	1236	123.6000
12	2-AM-4,6-DNT	10.0	33.304	0.000	1079	107.9000				
13	2,6-Dinitrotoluene	10.0	34.564	0.000	762	76.20000				
14	2,4-Dinitrotoluene	10.0	34.957	0.000	1233	123.3000				
15	2-Nitrotoluene	10.0	37.897	0.000	539	53.90000				
16	4-Nitrotoluene	10.0	39.137	0.000	662	66.20000				
17	3-Nitrotoluene	10.0	40.677	0.000	648	64.80000				
18	EGDN	10.0								
19	Nitroglycerin	10.0					30.867	0.000	487	48.70000
20	PETN	10.0					41.400	0.000	516	51.60000

NOT USED

RM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:07

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 17:03
Operator : SV Inst ID: LC11.i
Smp Info : STD_02 12GCSV0095 8330 10 ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 17:03 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.094	1594	126	0.079	0.61		
18.057	102	22	0.216	0.10		
18.277	102	32	0.315	0.15		
20.017	101	28	0.278	0.13		
20.490	8395	962	0.115	4.70	4	HMX
21.727	120	31	0.258	0.15		
22.034	71	22	0.308	0.10		
23.730	9755	953	0.098	4.66	7	RDX
24.844	81	18	0.222	0.08		
25.674	20597	2103	0.102	10.29	10	1,3,5-Trinitrobenze
26.024	22638	2293	0.101	11.40	9	Picric ACID
26.640	94	24	0.254	0.11		
26.847	633	52	0.082	0.25		
27.110	1288	110	0.085	0.53		
27.420	416	61	0.147	0.29		
28.417	26098	2202	0.084	10.77	13	1,3-Dinitrobenzene
29.560	17981	1434	0.080	7.01	15	3,5-Dinitroaniline
30.044	12036	935	0.078	4.57	17	Nitrobenzene
30.360	14889	1111	0.075	5.43	16	TETRYL
31.107	134	30	0.224	0.14		
31.610	18004	1208	0.067	5.91	19	2,4,6-Trinitrotolue
32.600	15409	974	0.063	4.76	20	4-AM-2,6-DNT
32.970	9428	654	0.069	3.20	$ 1	3,4-Dinitrotoluene
33.304	17904	1079	0.060	5.28	21	2-AM-4,6-DNT
34.237	207	46	0.222	0.22		
34.564	12641	762	0.060	3.72	22	2,6-Dinitrotoluene
34.957	22092	1233	0.056	6.03	23	2,4-Dinitrotoluene
37.897	11479	539	0.047	2.63	24	2-Nitrotoluene
39.137	14684	662	0.045	3.23	25	4-Nitrotoluene
40.677	15726	648	0.041	3.17	26	3-Nitrotoluene
42.550	156	42	0.269	0.20		
45.620	209	37	0.177	0.18		
	275063	20433		100.000		

Total unknown % height = 3.240

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d

Date : 26-JAN-2012 17:03

Client ID:

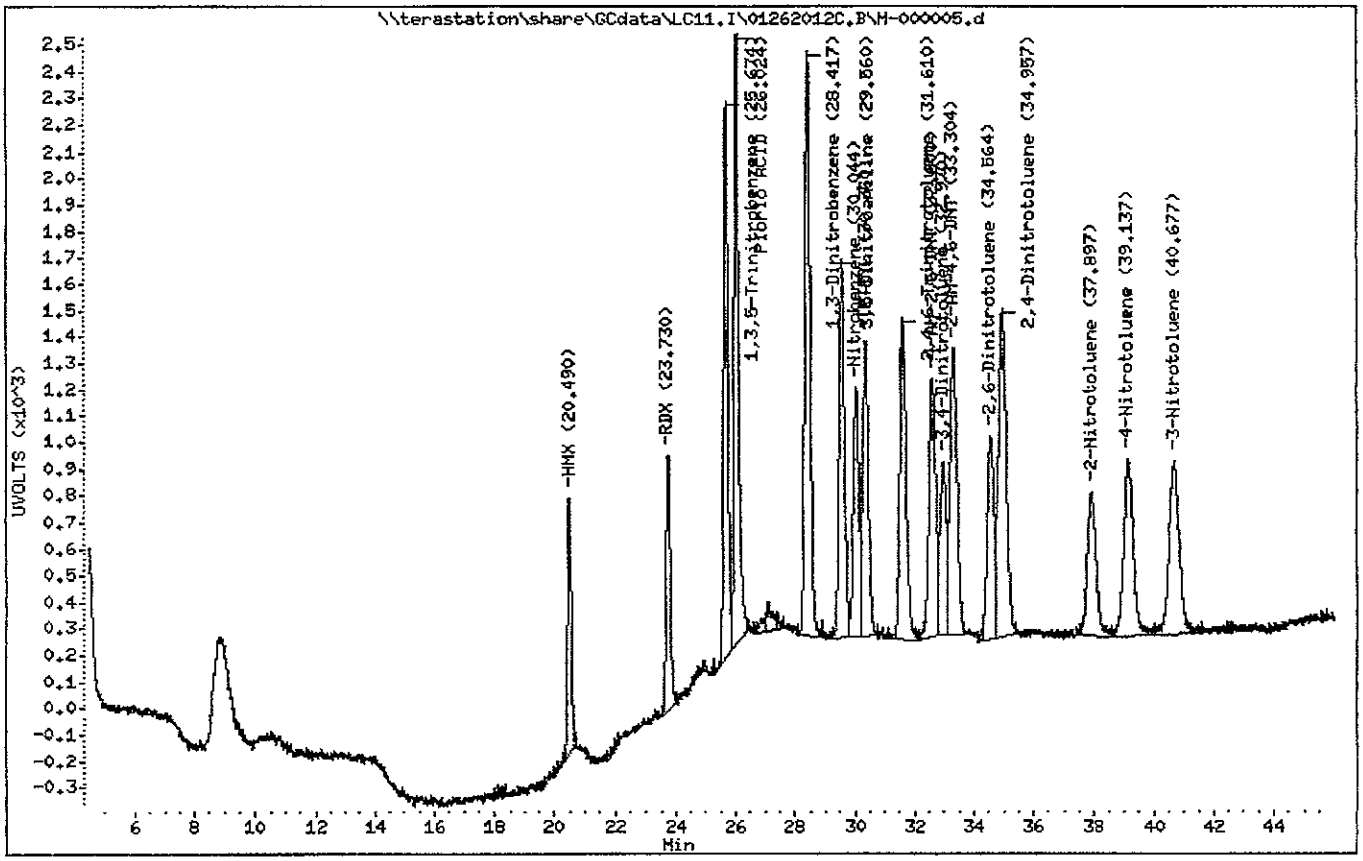
Instrument: LC11.i

Sample Info: STD_02 12GCSV0095 8330 10 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-00000
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 17:03
Operator : SV Inst ID: LC11.i
Smp Info : STD_02 12GCSV0095 8330 10 ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 17:03 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.084	197	44	0.224	0.20	
26.024	32154	3349	0.104	16.08	9 Picric ACID
28.004	427	53	0.124	0.25	
28.417	13298	1132	0.085	5.39	
29.554	16927	1393	0.082	6.63	
30.047	17287	1393	0.081	6.63	
30.360	17005	1400	0.082	6.66	
30.867	6193	487	0.079	2.31	18 Nitroglycerin
31.624	18072	1263	0.070	6.01	
32.134	175	26	0.149	0.12	
32.607	21976	1435	0.065	6.83	
32.957	18186	1236	0.068	5.88	$ 1 3,4-Dinitrotoluene
33.304	18163	1103	0.061	5.25	
33.900	226	22	0.097	0.10	
34.567	21761	1302	0.060	6.20	
34.957	17154	994	0.058	4.73	
37.420	154	37	0.240	0.17	
37.897	27554	1304	0.047	6.21	
39.144	25118	1008	0.040	4.80	
40.674	35589	1345	0.038	6.40	
41.400	14255	516	0.036	2.45	27 PETN
42.314	372	43	0.116	0.20	
43.450	584	25	0.043	0.11	
44.684	621	37	0.060	0.17	
45.407	1334	48	0.036	0.22	
	324781	20995		100.000	

Total unknown % height = 73.28

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d

Date : 26-JAN-2012 17:03

Client ID:

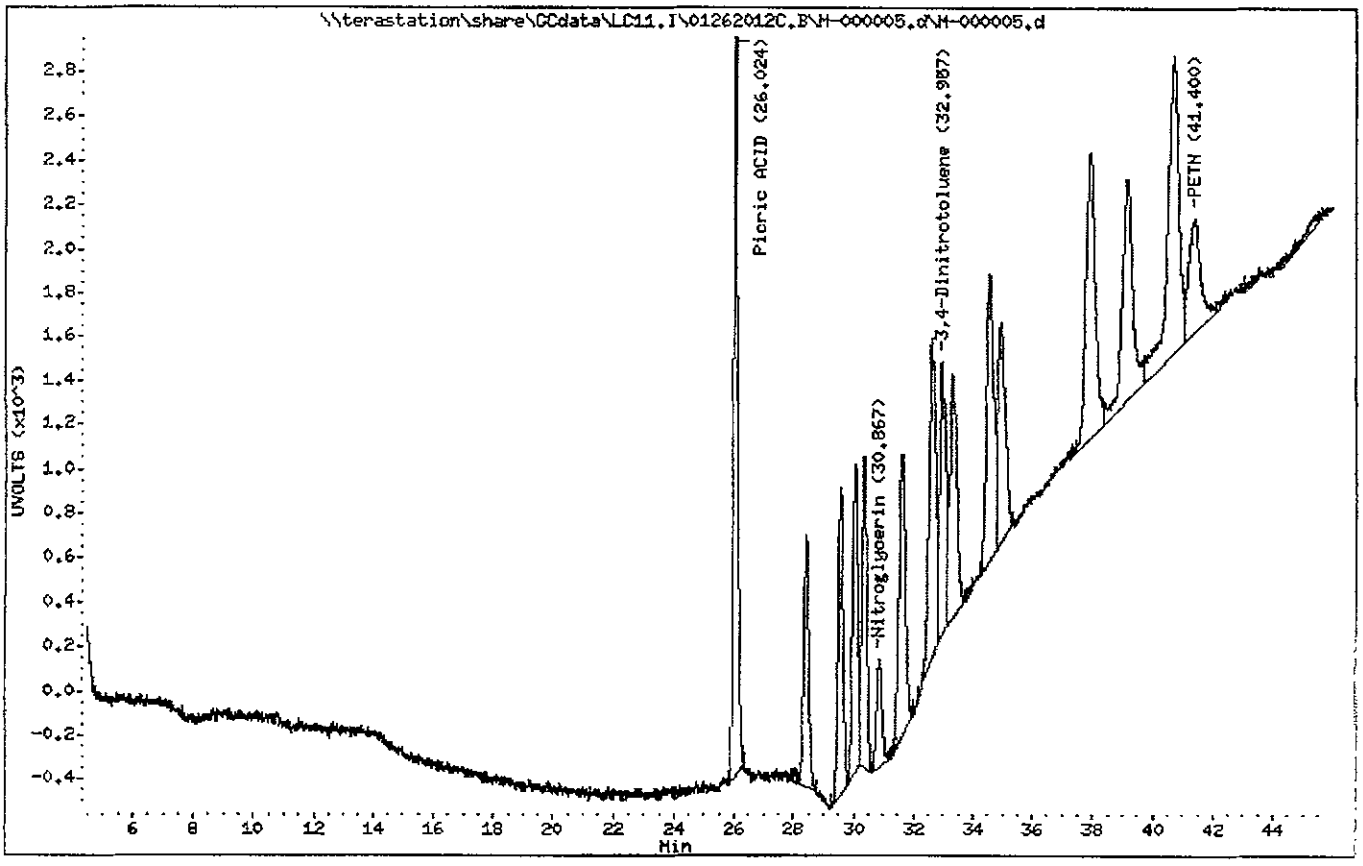
Instrument: LC11.i

Sample Info: STD_02 12GCSV0095 8330 10 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_03 12GCSV0096 8330 20 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 18:00 File ID: 01262012C.B/M-000006.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	20.0	20.487	0.000	1918	95.90000				
2	RDX	20.0	23.717	0.000	1892	94.60000				
3	1,3,5-Trinitrobenz	20.0	25.660	0.000	4141	207.0500				
4	Picric ACID	50.0	25.997	0.000	5846	116.9200	25.997	0.000	8569	171.3800
5	1,3-Dinitrobenzene	20.0	28.400	0.000	4294	214.7000				
6	3,5-Dinitroaniline	20.0	29.540	0.000	2811	140.5500				
7	Nitrobenzene	20.0	30.020	0.000	1741	87.05000				
8	TETRYL	20.0	30.343	0.000	2227	111.3500				
9	2,4,6-Trinitrotolu	20.0	31.587	0.000	2384	119.2000				
10	4-AM-2,6-DNT	20.0	32.580	0.000	1932	96.60000				
11	3,4-Dinitrotoluene	20.0	32.930	0.000	1279	63.95000	32.933	0.000	2403	120.1500
12	2-AM-4,6-DNT	20.0	33.283	0.000	2138	106.9000				
13	2,6-Dinitrotoluene	20.0	34.533	0.000	1466	73.30000				
14	2,4-Dinitrotoluene	20.0	34.923	0.000	2430	121.5000				
15	2-Nitrotoluene	20.0	37.857	0.000	965	48.25000				
16	4-Nitrotoluene	20.0	39.117	0.000	1181	59.05000				
17	3-Nitrotoluene	20.0	40.607	0.000	1147	57.35000				
18	EGDN	20.0								
19	Nitroglycerin	20.0					30.850	0.000	1388	69.40000
20	PETN	20.0					41.310	0.000	869	43.45000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:08

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 18:00
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 12GCSV0096 8330 20 ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:00 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.257	81	30	0.373	0.07		
20.487	17431	1918	0.110	4.78		4 HMX
23.717	18722	1892	0.101	4.71		7 RDX
24.627	148	31	0.210	0.07		
24.757	291	32	0.110	0.07		
24.967	273	47	0.172	0.11		
25.660	40142	4141	0.103	10.32		10 1,3,5-Trinitrobenze
25.997	56775	5846	0.103	14.71		9 Picric ACID
27.097	1427	120	0.084	0.29		
28.400	50910	4294	0.084	10.70		13 1,3-Dinitrobenzene
29.540	35514	2811	0.079	7.00		15 3,5-Dinitroaniline
30.020	22773	1741	0.076	4.34		17 Nitrobenzene
30.343	29405	2227	0.076	5.55		16 TETRYL
31.587	34175	2384	0.070	5.94		19 2,4,6-Trinitrotolue
32.580	30226	1932	0.064	4.81		20 4-AM-2,6-DNT
32.930	17779	1279	0.072	3.18	$	1 3,4-Dinitrotoluene
33.283	36197	2138	0.059	5.33		21 2-AM-4,6-DNT
34.533	23825	1466	0.062	3.65		22 2,6-Dinitrotoluene
34.923	43856	2430	0.055	6.05		23 2,4-Dinitrotoluene
36.013	394	39	0.099	0.09		
37.280	109	18	0.165	0.04		
37.857	20204	965	0.048	2.40		24 2-Nitrotoluene
39.117	25490	1181	0.046	2.94		25 4-Nitrotoluene
40.607	26743	1147	0.043	2.85		26 3-Nitrotoluene
	532890	40109		100.000		

Total unknown % height = 0.7400

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\H-000006.d

Page 2

Date : 26-JAN-2012 18:00

Client ID:

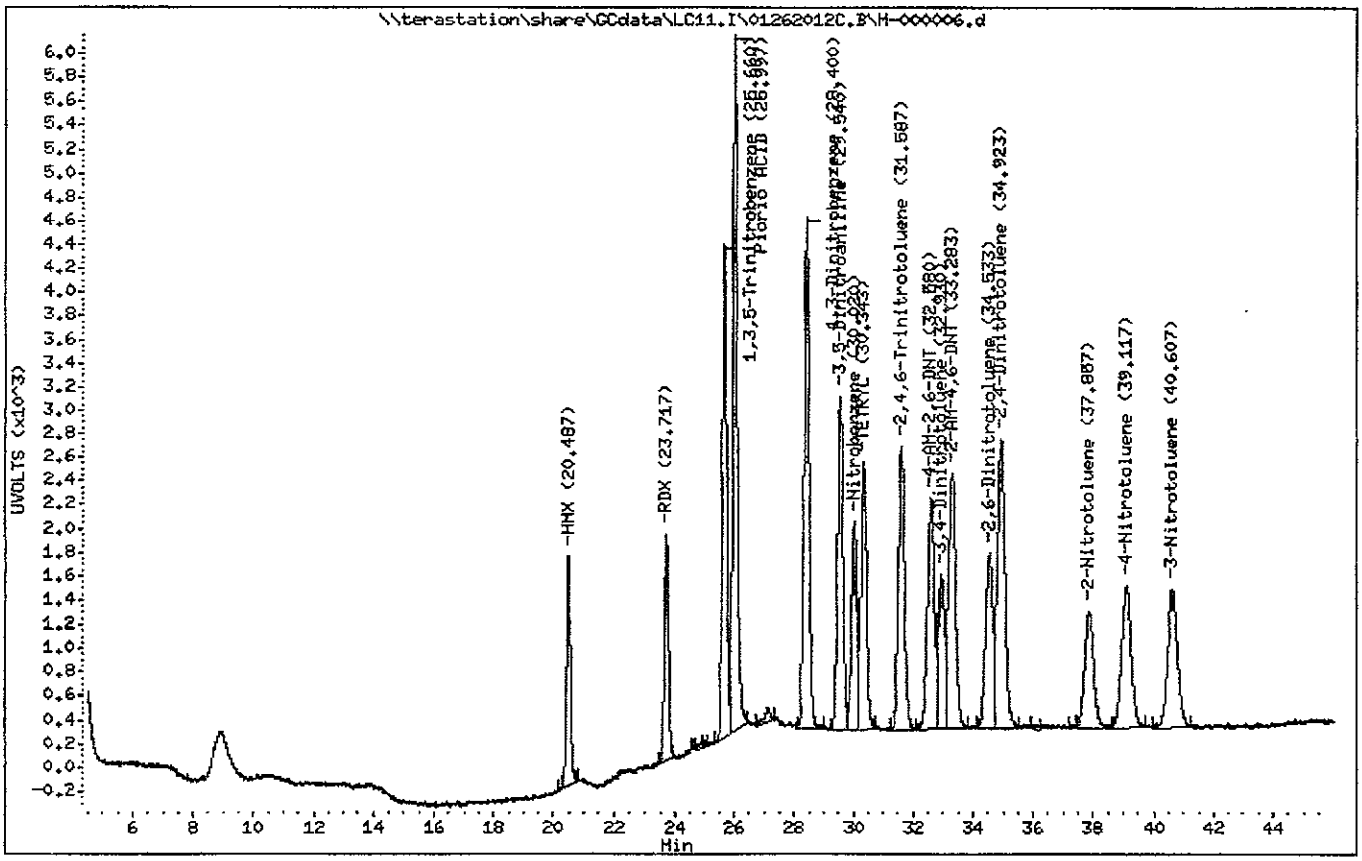
Instrument: LC11.i

Sample Info: STD_03 12GCSV0096 8330 20 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-00000
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 18:00
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 12GCSV0096 8330 20 ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:00 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.453	174	47	0.270	0.11	
23.603	341	52	0.153	0.12	
25.630	576	56	0.097	0.13	
25.997	82524	8569	0.104	20.23	9 Picric ACID
28.400	25356	2188	0.086	5.14	
29.537	34112	2799	0.082	6.57	
30.020	33111	2666	0.081	6.26	
30.343	35272	2817	0.080	6.62	
30.850	17855	1388	0.078	3.26	18 Nitroglycerin
31.590	36035	2534	0.070	5.95	
32.580	44050	2812	0.064	6.60	
32.933	35129	2403	0.068	5.64	$ 1 3,4-Dinitrotoluene
33.283	36426	2214	0.061	5.20	
34.537	41915	2523	0.060	5.92	
34.927	33762	1932	0.057	4.54	
37.863	49666	2382	0.048	5.59	
39.107	41448	1806	0.044	4.24	
40.003	2648	105	0.040	0.24	
40.633	55624	2358	0.042	5.54	
41.310	22322	869	0.039	2.04	27 PETN
44.093	389	27	0.069	0.06	
	628735	42547		100.000	

Total unknown % height = 68.83

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d

Date : 26-JAN-2012 18:00

Client ID:

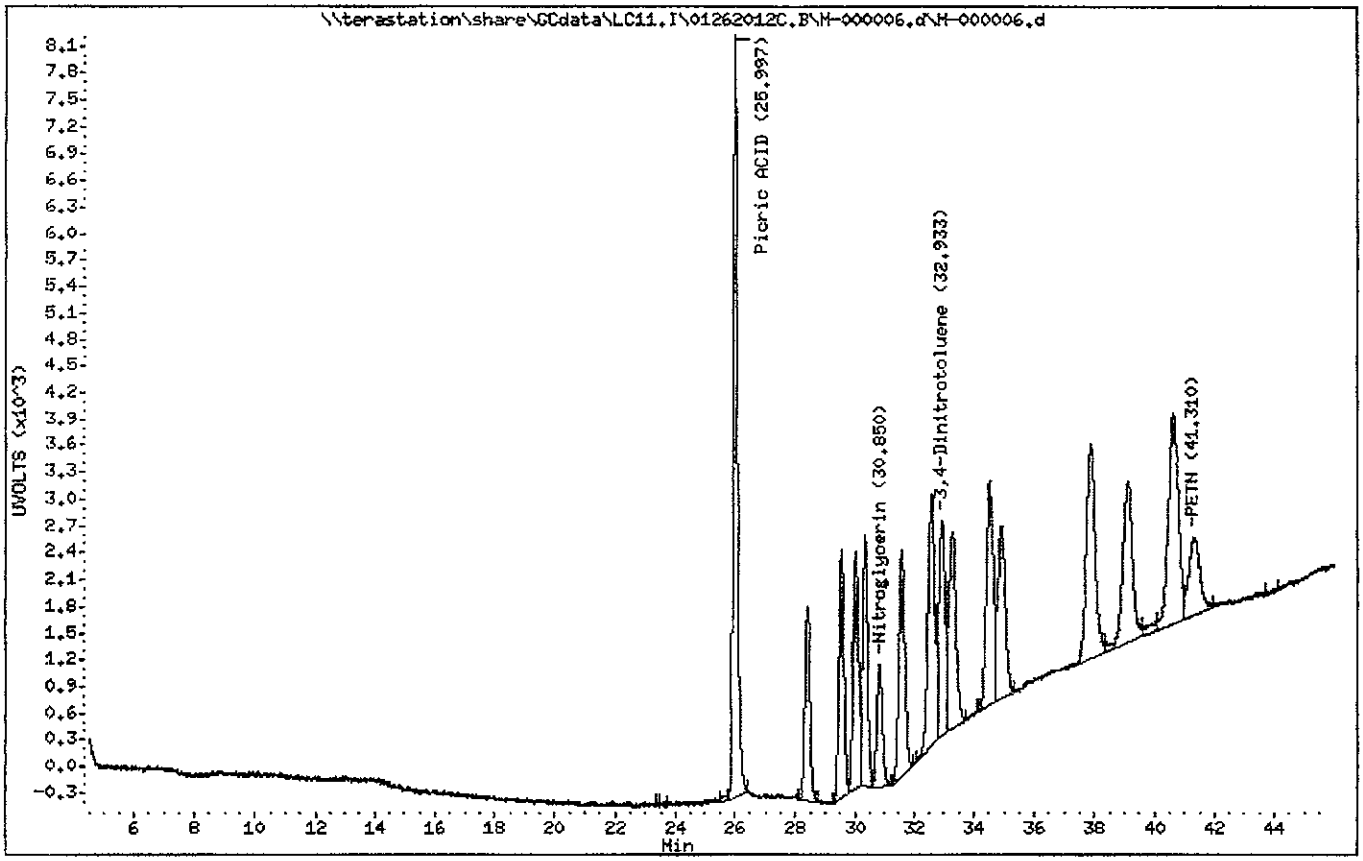
Instrument: LC11.i

Sample Info: STD_03 12GCSV0096 8330 20 ng/mL:1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 12GCSV0097 8330 50 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 18:58 File ID: 01262012C.B/M-000007.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	50.0	20.495	0.000	4728	94.56000				
2	RDX	50.0	23.728	0.000	4695	93.90000				
3	1,3,5-Trinitrobenz	50.0	25.672	0.000	10311	206.2200				
4	Picric ACID	100	26.002	0.000	12835	128.3500	26.002	0.000	18742	187.4200
5	1,3-Dinitrobenzene	50.0	28.415	0.000	10769	215.3800				
6	3,5-Dinitroaniline	50.0	29.555	0.000	6956	139.1200				
7	Nitrobenzene	50.0	30.038	0.000	4680	93.60000				
8	TETRYL	50.0	30.358	0.000	5517	110.3400				
9	2,4,6-Trinitrotolu	50.0	31.608	0.000	5900	118.0000				
10	4-AM-2,6-DNT	50.0	32.605	0.000	4773	95.46000				
11	3,4-Dinitrotoluene	50.0	32.962	0.000	3244	64.88000	32.958	0.000	6192	123.8400
12	2-AM-4,6-DNT	50.0	33.302	0.000	5309	106.1800				
13	2,6-Dinitrotoluene	50.0	34.562	0.000	3658	73.16000				
14	2,4-Dinitrotoluene	50.0	34.952	0.000	6024	120.4800				
15	2-Nitrotoluene	50.0	37.905	0.000	2618	52.36000				
16	4-Nitrotoluene	50.0	39.142	0.000	3144	62.88000				
17	3-Nitrotoluene	50.0	40.672	0.000	3111	62.22000				
18	EGDN	50.0								
19	Nitroglycerin	50.0					30.865	0.000	3990	79.80000
20	PETN	50.0					41.368	0.000	2307	46.14000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:08

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 18:58
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 12GCSV0097 8330 50 ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:58 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.085	1770	131	0.074	0.13		
20.495	41644	4728	0.114	4.78		4 HMX
22.868	64	12	0.188	0.01		
23.728	47456	4695	0.099	4.74		7 RDX
25.672	100540	10311	0.103	10.42		10 1,3,5-Trinitrobenzene
26.002	128544	12835	0.100	13.09		9 Picric ACID
27.122	7848	386	0.049	0.39		
28.415	127107	10769	0.085	10.89		13 1,3-Dinitrobenzene
29.555	87597	6956	0.079	7.03		15 3,5-Dinitroaniline
30.038	60312	4680	0.078	4.73		17 Nitrobenzene
30.358	73406	5517	0.075	5.58		16 TETRYL
31.608	84537	5900	0.070	5.96		19 2,4,6-Trinitrotoluene
32.605	73808	4773	0.065	4.82		20 4-AM-2,6-DNT
32.962	46637	3244	0.070	3.28	$	1 3,4-Dinitrotoluene
33.302	89417	5309	0.059	5.36		21 2-AM-4,6-DNT
34.562	58964	3658	0.062	3.69		22 2,6-Dinitrotoluene
34.952	108253	6024	0.056	6.09		23 2,4-Dinitrotoluene
37.328	208	30	0.144	0.03		
37.905	53792	2618	0.049	2.64		24 2-Nitrotoluene
39.142	68085	3144	0.046	3.17		25 4-Nitrotoluene
40.672	73039	3111	0.043	3.14		26 3-Nitrotoluene
41.875	69	25	0.364	0.02		
44.532	131	12	0.092	0.01		
	1333225	98868		100.000		

Total unknown % height = 0.5900

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000007.d

Date : 26-JAN-2012 18:58

Client ID:

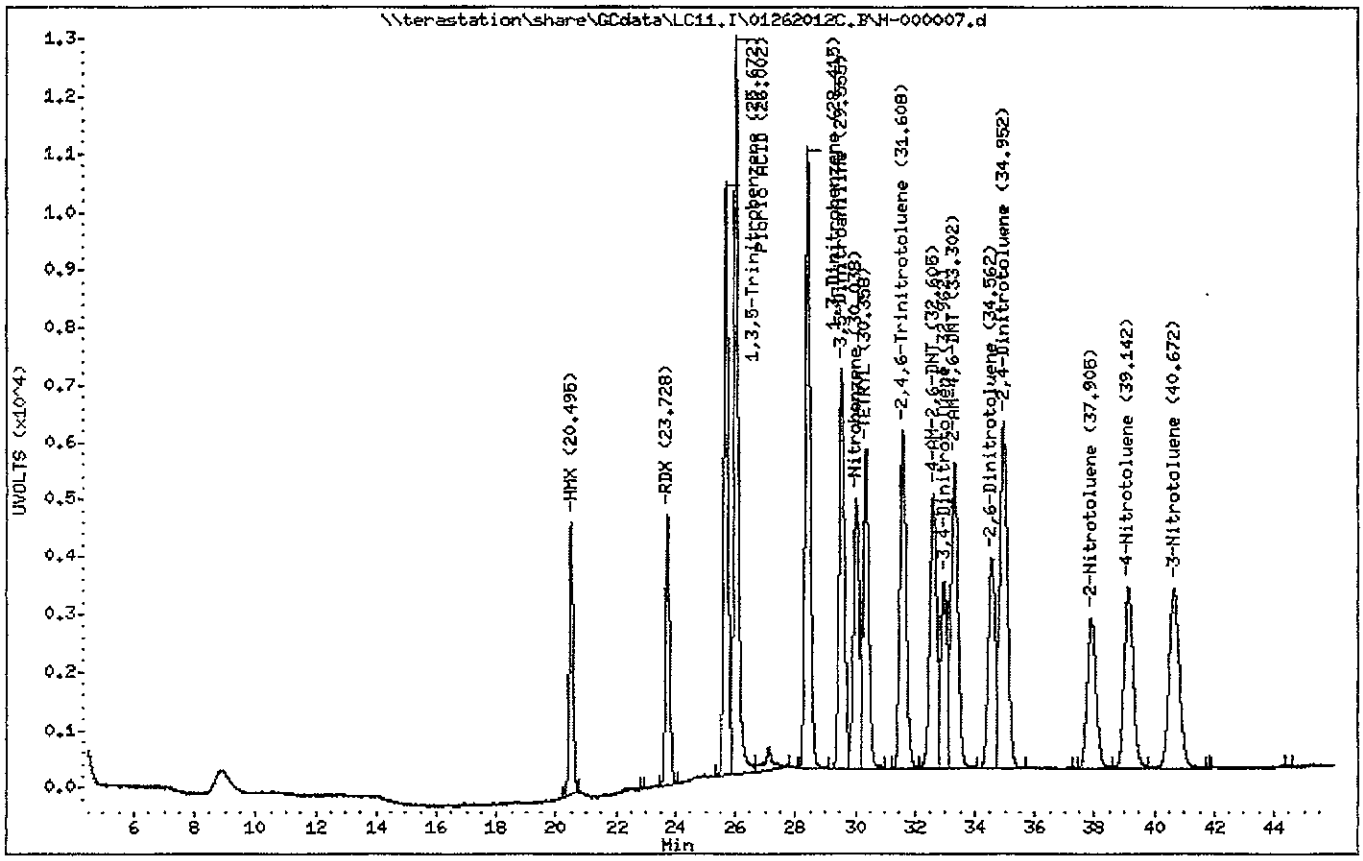
Instrument: LC11.i

Sample Info: STD_04 12GCSV0097 8330 50 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-00000
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 18:58
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 12GCSV0097 8330 50 ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:58 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.662	1303	144	0.111	0.13	
26.002	179122	18742	0.105	17.73	9 Picric ACID
28.418	65189	5571	0.085	5.24	
29.555	87581	7055	0.081	6.64	
30.038	95197	7409	0.078	6.97	
30.358	93853	7261	0.077	6.83	
30.865	51944	3990	0.077	3.75	18 Nitroglycerin
31.608	89040	6274	0.070	5.90	
32.605	108092	7049	0.065	6.63	
32.958	93053	6192	0.067	5.83	$ 1 3,4-Dinitrotoluene
33.302	89663	5496	0.061	5.17	
34.562	106475	6358	0.060	5.98	
34.952	85828	4875	0.057	4.59	
36.462	151	25	0.165	0.02	
37.905	128930	6330	0.049	5.96	
39.145	102326	4727	0.046	4.45	
40.668	146995	6298	0.043	5.93	
41.368	56918	2307	0.041	2.17	27 PETN
43.361	536	56	0.104	0.05	
43.945	565	37	0.066	0.03	
	1582761	106196		100.000	

Total unknown % height = 70.52

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d

Page 2

Date : 26-JAN-2012 18:58

Client ID:

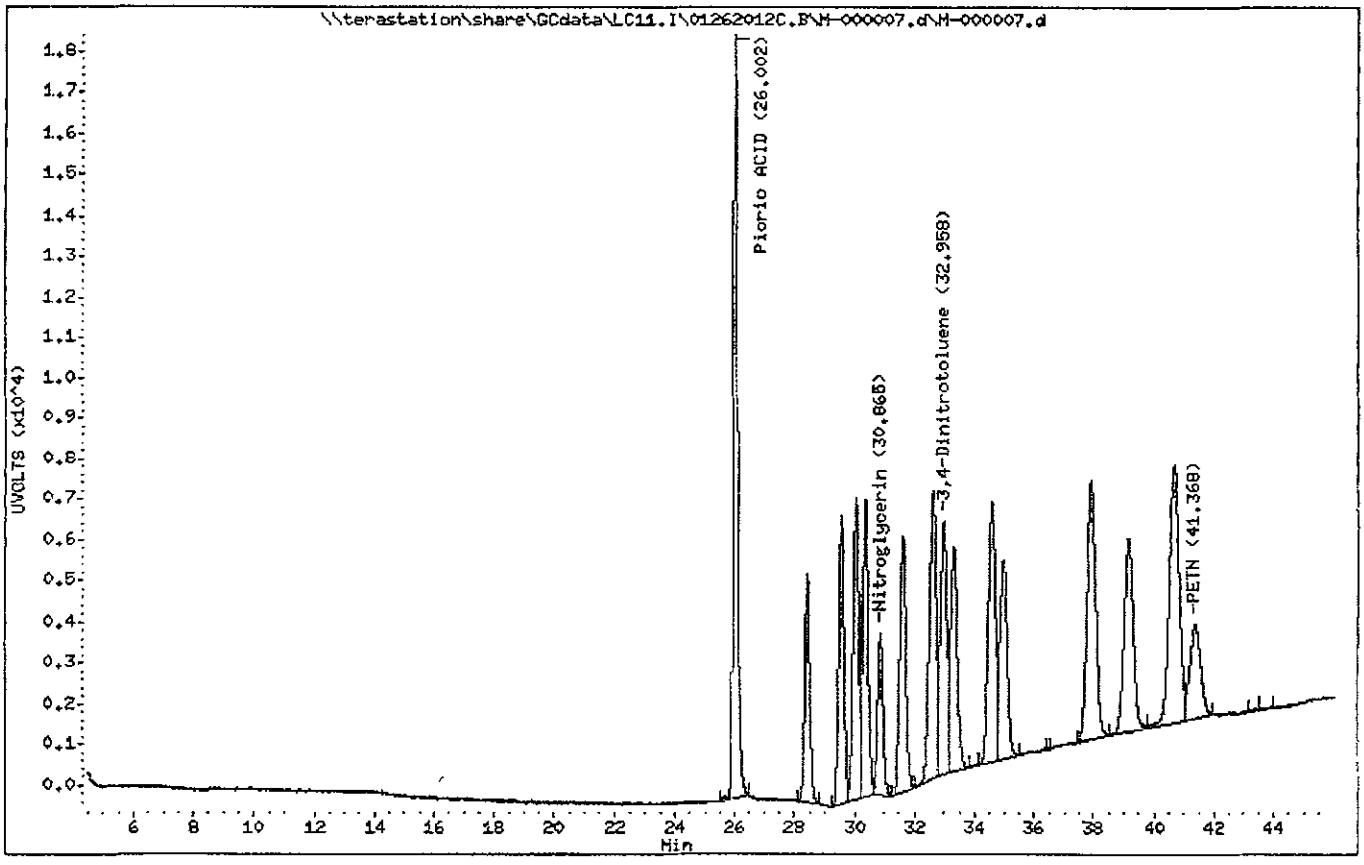
Instrument: LC11.i

Sample Info: STD_04 12GCSV0097 8330 50 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_05 12GCSV0099 8330 100 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 19:55 File ID: 01262012C.B/M-000008.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	100	20.483	0.000	9675	96.75000				
2	RDX	100	23.729	0.000	9601	96.01000				
3	1,3,5-Trinitrobenz	100	25.673	0.000	21082	210.8200				
4	Picric ACID	200	25.986	0.000	25300	126.5000	25.986	0.000	37044	185.2200
5	1,3-Dinitrobenzene	100	28.416	0.000	22095	220.9500				
6	3,5-Dinitroaniline	100	29.553	0.000	14301	143.0100				
7	Nitrobenzene	100	30.043	0.000	9672	96.72000				
8	TETRYL	100	30.356	0.000	11368	113.6800				
9	2,4,6-Trinitrotolu	100	31.606	0.000	12137	121.3700				
10	4-AM-2,6-DNT	100	32.596	0.000	9764	97.64000				
11	3,4-Dinitrotoluene	100	32.953	0.000	6778	67.78000	32.953	0.000	13038	130.3800
12	2-AM-4,6-DNT	100	33.293	0.000	10901	109.0100				
13	2,6-Dinitrotoluene	100	34.553	0.000	7488	74.88000				
14	2,4-Dinitrotoluene	100	34.943	0.000	12355	123.5500				
15	2-Nitrotoluene	100	37.889	0.000	5360	53.60000				
16	4-Nitrotoluene	100	39.133	0.000	6464	64.64000				
17	3-Nitrotoluene	100	40.653	0.000	6392	63.92000				
18	EGDN	100								
19	Nitroglycerin	100					30.863	0.000	8713	87.13000
20	PETN	100					41.359	0.000	4953	49.53000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:09

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 19:55
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 8330 100 ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 19:55 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.066	647	100	0.154	0.04		
19.326	82	23	0.280	0.01		
20.483	87309	9675	0.111	4.79	4	HMX
21.666	147	46	0.313	0.02		
22.486	756	81	0.107	0.04		
23.729	96944	9601	0.099	4.76	7	RDX
25.673	204668	21082	0.103	10.45	10	1,3,5-Trinitrobenze
25.986	251419	25300	0.101	12.66	9	Picric ACID
27.103	7870	593	0.075	0.29		
28.416	261350	22095	0.085	10.95	13	1,3-Dinitrobenzene
29.553	179829	14301	0.080	7.09	15	3,5-Dinitroaniline
30.043	124925	9672	0.077	4.79	17	Nitrobenzene
30.356	152493	11368	0.075	5.63	16	TETRYL
31.606	173648	12137	0.070	6.01	19	2,4,6-Trinitrotolue
32.596	150561	9764	0.065	4.84	20	4-AM-2,6-DNT
32.953	97351	6778	0.070	3.36	$ 1	3,4-Dinitrotoluene
33.293	180829	10901	0.060	5.40	21	2-AM-4,6-DNT
34.553	120319	7488	0.062	3.71	22	2,6-Dinitrotoluene
34.943	222005	12355	0.056	6.12	23	2,4-Dinitrotoluene
36.863	313	35	0.112	0.01		
37.889	108255	5360	0.050	2.65	24	2-Nitrotoluene
39.133	138413	6464	0.047	3.20	25	4-Nitrotoluene
40.653	145858	6392	0.044	3.17	26	3-Nitrotoluene
43.599	155	29	0.187	0.01		
	2706145	201640		100.000		

Total unknown % height = 0.4200

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d

Date : 26-JAN-2012 19:55

Client ID:

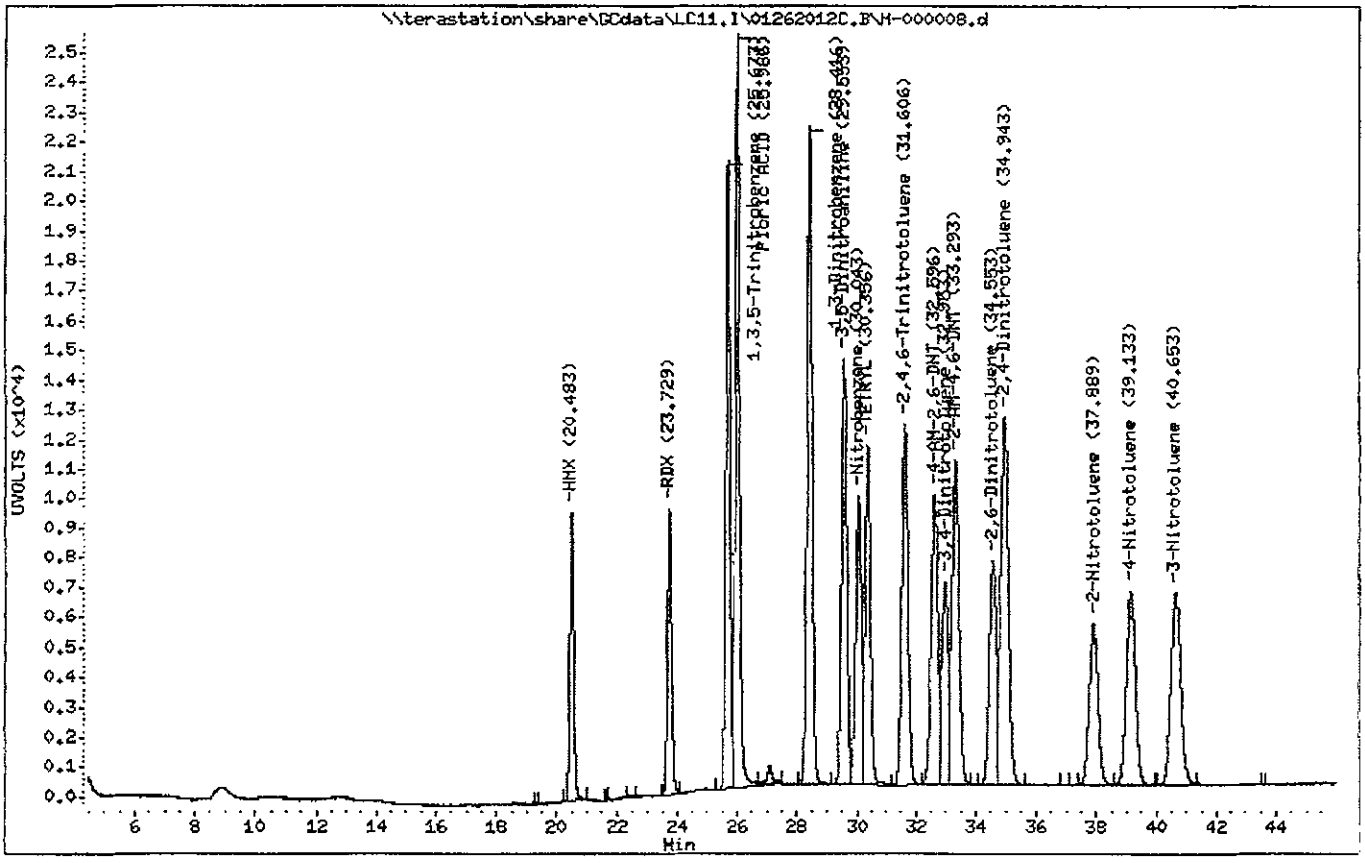
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 8330 100 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-00000
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 19:55
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 8330 100 ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 19:55 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.666	2566	278	0.108	0.12	
25.986	358413	37044	0.103	17.07	9 Picric ACID
28.416	134199	11412	0.085	5.22	
29.553	181076	14502	0.080	6.64	
30.039	200039	15451	0.077	7.07	
30.356	197772	15135	0.077	6.93	
30.863	115899	8713	0.075	3.99	18 Nitroglycerin
31.606	183199	12913	0.070	5.91	
32.599	220638	14436	0.065	6.61	
32.953	196247	13038	0.066	5.97	$ 1 3,4-Dinitrotoluene
33.293	185139	11329	0.061	5.18	
34.553	218996	13109	0.060	6.00	
34.943	176694	10006	0.057	4.58	
35.826	155	39	0.251	0.01	
37.889	265133	13097	0.049	5.99	
39.133	210920	9765	0.046	4.47	
40.656	300848	13011	0.043	5.95	
41.359	123557	4953	0.040	2.26	27 PETN
43.386	625	38	0.061	0.01	
44.366	257	25	0.097	0.01	
45.349	601	33	0.055	0.01	
	3272976	218327		100.000	

Total unknown % height = 70.71

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000008.d\H-000008.d Page 2

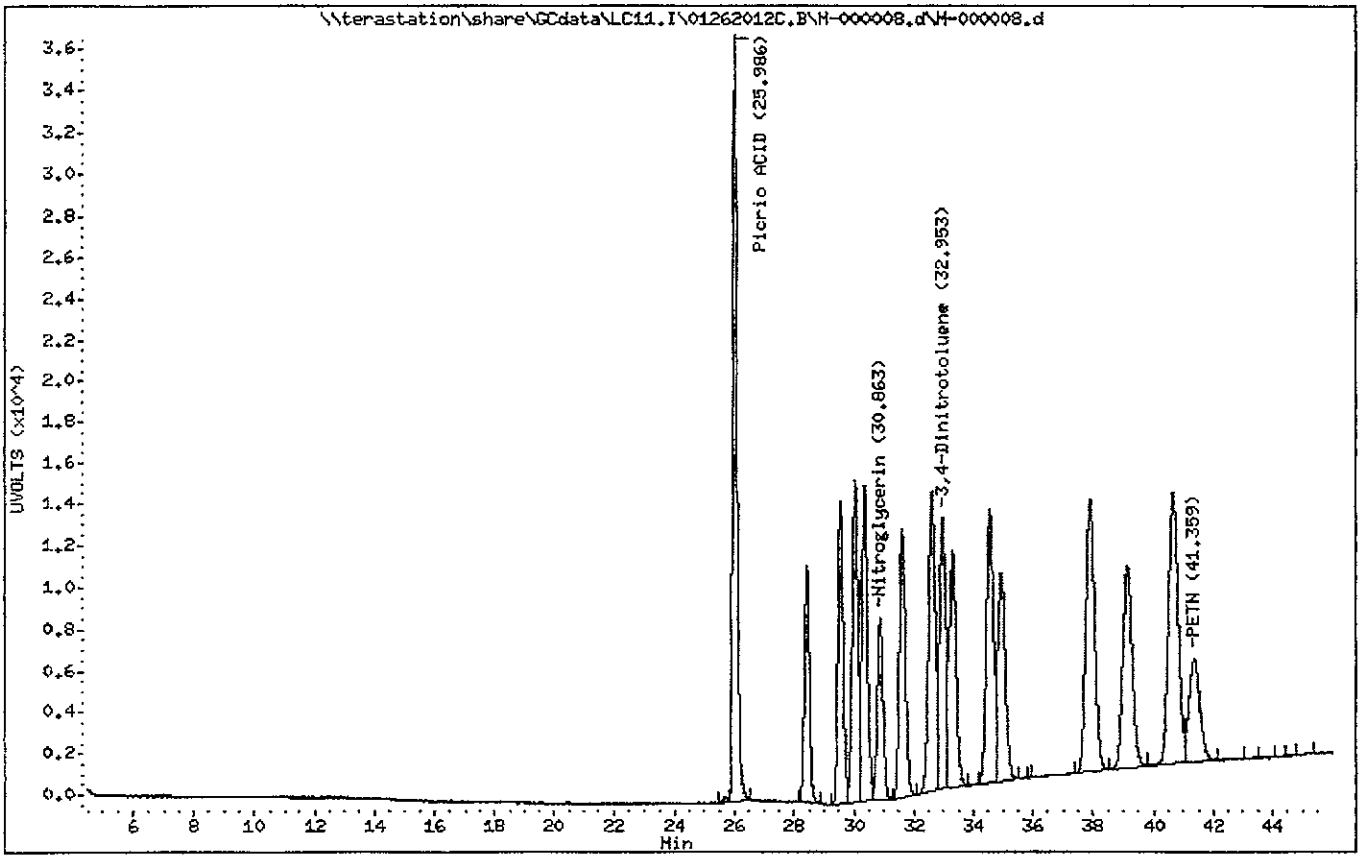
Date : 26-JAN-2012 19:55

Client ID: Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 8330 100 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_06 12GCSV0100 8330 200 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 20:52 File ID: 01262012C.B/M-000009.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	200	20.480	0.000	18718	93.59000				
2	RDX	200	23.723	0.000	18394	91.97000				
3	1,3,5-Trinitrobenz	200	25.670	0.000	41512	207.5600				
4	Picric ACID	500	25.950	0.000	60651	121.3020	25.950	0.000	88761	177.5220
5	1,3-Dinitrobenzene	200	28.413	0.000	43478	217.3900				
6	3,5-Dinitroaniline	200	29.546	0.000	28313	141.5650				
7	Nitrobenzene	200	30.033	0.000	19016	95.08000				
8	TETRYL	200	30.353	0.000	22776	113.8800				
9	2,4,6-Trinitrotolu	200	31.600	0.000	24302	121.5100				
10	4-AM-2,6-DNT	200	32.593	0.000	19550	97.75000				
11	3,4-Dinitrotoluene	200	32.950	0.000	13595	67.97500	32.950	0.000	26119	130.5950
12	2-AM-4,6-DNT	200	33.290	0.000	21825	109.1250				
13	2,6-Dinitrotoluene	200	34.553	0.000	14944	74.72000				
14	2,4-Dinitrotoluene	200	34.943	0.000	24676	123.3800				
15	2-Nitrotoluene	200	37.890	0.000	10692	53.46000				
16	4-Nitrotoluene	200	39.130	0.000	12919	64.59500				
17	3-Nitrotoluene	200	40.660	0.000	12758	63.79000				
18	EGDN	200								
19	Nitroglycerin	200					30.856	0.000	17648	88.24000
20	PETN	200					41.356	0.000	9932	49.66000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:10

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 20:52
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 8330 200 ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 20:52 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.113	1683	129	0.077	0.03		
20.480	173684	18718	0.108	4.56		4 HMX
21.703	786	88	0.112	0.02		
22.460	1633	141	0.086	0.03		
23.723	194999	18394	0.094	4.48		7 RDX
25.670	405383	41512	0.102	10.12		10 1,3,5-Trinitrobenzene
25.950	634149	60651	0.096	14.91		9 Picric ACID
27.106	16274	1301	0.080	0.31		
28.413	522912	43478	0.083	10.60		13 1,3-Dinitrobenzene
29.546	360590	28313	0.079	6.90		15 3,5-Dinitroaniline
30.033	249331	19016	0.076	4.64		17 Nitrobenzene
30.353	302809	22776	0.075	5.55		16 TETRYL
31.600	348067	24302	0.070	5.93		19 2,4,6-Trinitrotoluene
32.593	304004	19550	0.064	4.77		20 4-AM-2,6-DNT
32.950	194018	13595	0.070	3.31	$	1 3,4-Dinitrotoluene
33.290	366311	21825	0.060	5.32		21 2-AM-4,6-DNT
34.553	239141	14944	0.062	3.64		22 2,6-Dinitrotoluene
34.943	445518	24676	0.055	6.02		23 2,4-Dinitrotoluene
36.793	250	30	0.120	0.00		
37.890	215916	10692	0.050	2.60		24 2-Nitrotoluene
39.130	276067	12919	0.047	3.15		25 4-Nitrotoluene
40.660	295553	12758	0.043	3.11		26 3-Nitrotoluene
	5549078	409808		100.000		

Total unknown % height = 0.3900

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\H-000009.d

Date : 26-JAN-2012 20:52

Client ID:

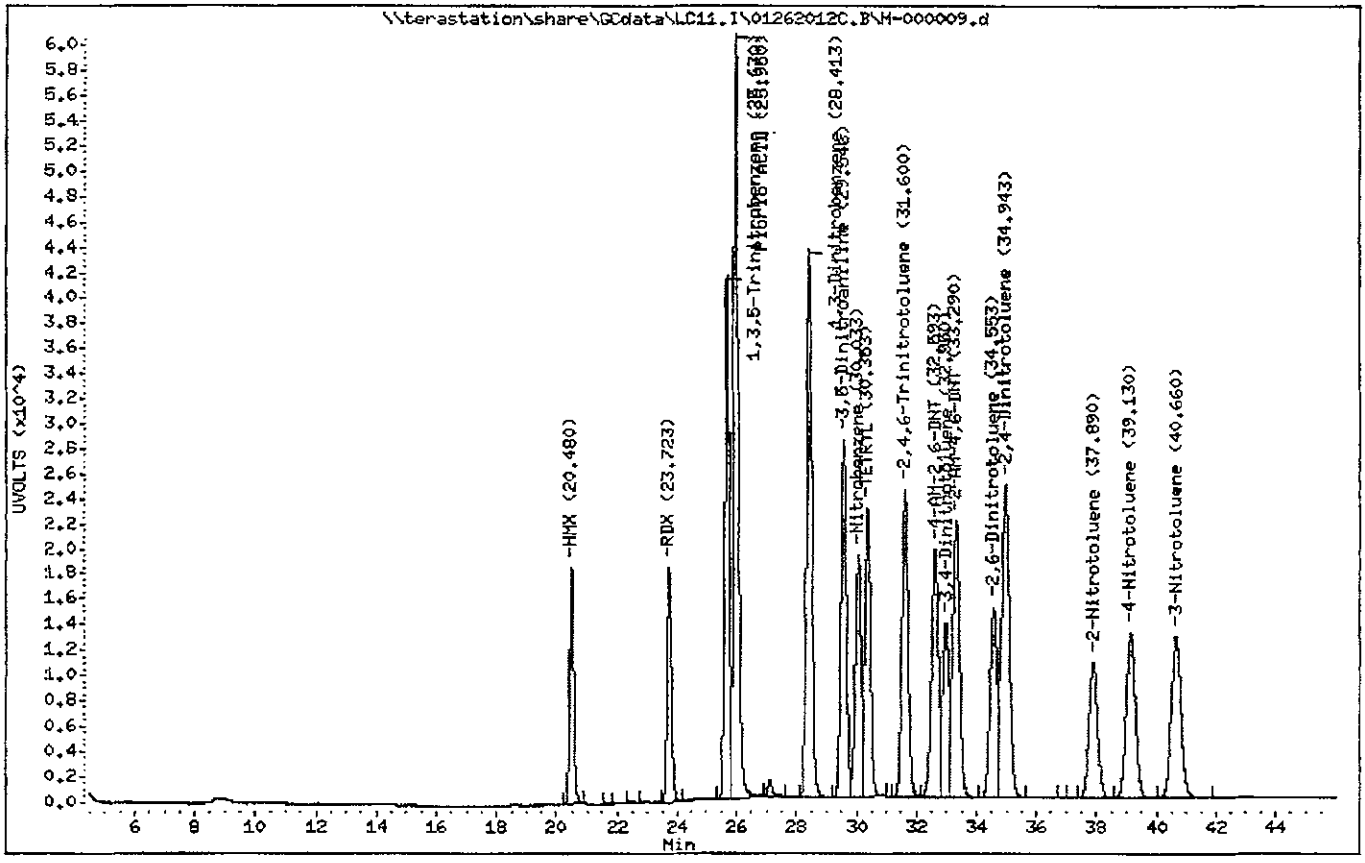
Instrument: LC11.i

Sample Info: STD_06 12GCSW0100 8330 200 ng/mL;1;

Operator: SW

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-00000
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 20:52
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 8330 200 ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 20:52 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.063	255	27	0.106	0.00	
25.676	5011	537	0.107	0.11	
25.950	904991	88761	0.098	19.80	9 Picric ACID
28.413	271075	22500	0.083	4.99	
29.546	366049	28815	0.079	6.39	
30.033	402763	30521	0.076	6.77	
30.350	403627	30605	0.076	6.78	
30.856	237174	17648	0.074	3.91	18 Nitroglycerin
31.600	368282	25892	0.070	5.74	
32.593	443489	28855	0.065	6.40	
32.950	393517	26119	0.066	5.79	$ 1 3,4-Dinitrotoluene
33.290	371976	22686	0.061	5.03	
34.553	438680	26145	0.060	5.79	
34.943	354360	20028	0.057	4.44	
35.673	183	30	0.164	0.00	
35.933	320	46	0.144	0.01	
37.050	230	37	0.161	0.00	
37.890	530215	26106	0.049	5.79	
39.133	418936	19481	0.047	4.32	
40.660	597770	25890	0.043	5.74	
41.356	247487	9932	0.040	2.20	27 PETN
43.220	256	42	0.164	0.00	
44.450	633	31	0.049	0.00	
44.986	459	41	0.089	0.00	
45.420	435	21	0.048	0.00	
	6758174	450796		100.000	

Total unknown % height = 68.30

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\M-000009.d\M-000009.d

Date : 26-JAN-2012 20:52

Client ID:

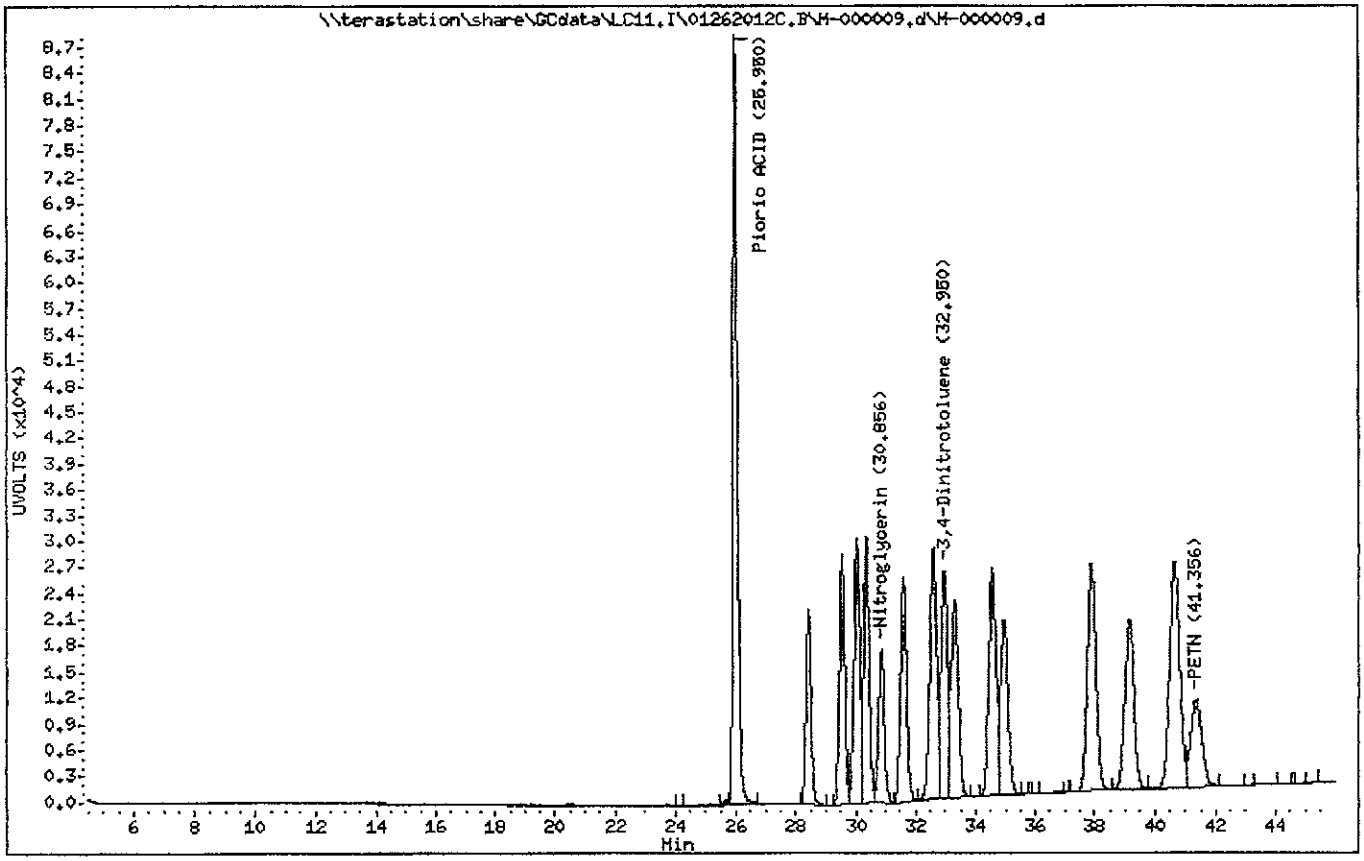
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 8330 200 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_07 12GCSV0101 8330 500 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 21:49 File ID: 01262012C.B/M-000010.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	500	20.470	0.000	43719	87.43800				
2	RDX	500	23.717	0.000	42678	85.35600				
3	1,3,5-Trinitrobenz	500	25.667	0.000	100632	201.2640				
4	Picric ACID	1000	25.907	0.000	111815	111.8150	25.910	0.000	162032	162.0320
5	1,3-Dinitrobenzene	500	28.414	0.000	105554	211.1080				
6	3,5-Dinitroaniline	500	29.554	0.000	68877	137.7540				
7	Nitrobenzene	500	30.037	0.000	46108	92.21600				
8	TETRYL	500	30.360	0.000	56290	112.5800				
9	2,4,6-Trinitrotolu	500	31.607	0.000	60022	120.0440				
10	4-AM-2,6-DNT	500	32 600	0.000	48068	96.13600				
11	3,4-Dinitrotoluene	300	32.954	0.000	20613	68.71000	32.954	0.000	39393	131.3100
12	2-AM-4,6-DNT	500	33.300	0.000	53372	106.7440				
13	2,6-Dinitrotoluene	500	34.560	0.000	36794	73.58800				
14	2,4-Dinitrotoluene	500	34.950	0.000	60910	121.8200				
15	2-Nitrotoluene	500	37.897	0.000	26386	52.77200				
16	4-Nitrotoluene	500	39.144	0.000	31923	63.84600				
17	3-Nitrotoluene	500	40.674	0.000	31603	63.20600				
18	EGDN	500								
19	Nitroglycerin	500					30.864	0.000	43855	87.71000
20	PETN	500					41.380	0.000	24702	49.40400

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:11

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 26-JAN-2012 21:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 12GCSV0101 8330 500 ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:10 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 21:49 Cal File: M-000010.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
17.760	135	29	0.215	0.00		
18.487	133	0	0.000	0.00		
19.514	214	36	0.169	0.00		
19.824	110	24	0.219	0.00		
20.470	432309	43719	0.101	4.60		4 HMX
21.684	1759	189	0.107	0.01		
22.440	4466	356	0.080	0.03		
22.944	2079	160	0.077	0.01		
23.717	486203	42678	0.088	4.49		7 RDX
24.314	99	32	0.323	0.00		
24.520	73	15	0.205	0.00		
24.670	163	32	0.196	0.00		
25.667	982853	100632	0.102	10.60		10 1,3,5-Trinitrobenze
25.907	1295947	111815	0.086	11.92		9 Picric ACID
27.110	29944	2950	0.099	0.31		
27.700	301	36	0.120	0.00		
28.050	142	28	0.198	0.00		
28.414	1303922	105554	0.081	11.11		13 1,3-Dinitrobenzene
29.554	900005	68877	0.077	7.25		15 3,5-Dinitroaniline
30.037	623864	46108	0.074	4.85		17 Nitrobenzene
30.360	752343	56290	0.075	5.92		16 TETRYL
31.607	868457	60022	0.069	6.32		19 2,4,6-Trinitrotolue
32.600	771595	48068	0.062	5.06		20 4-AM-2,6-DNT
32.954	270912	20613	0.076	2.17	$	1 3,4-Dinitrotoluene
33.300	918849	53372	0.058	5.62		21 2-AM-4,6-DNT
34.560	598640	36794	0.061	3.87		22 2,6-Dinitrotoluene
34.950	1116710	60910	0.055	6.41		23 2,4-Dinitrotoluene
36.750	145	27	0.187	0.00		
37.897	539085	26386	0.049	2.77		24 2-Nitrotoluene
39.144	689951	31923	0.046	3.36		25 4-Nitrotoluene
40.674	737206	31603	0.043	3.32		26 3-Nitrotoluene
	13328612	949278		100.000		

Total unknown % height = 0.3600

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d

Date : 26-JAN-2012 21:49

Client ID:

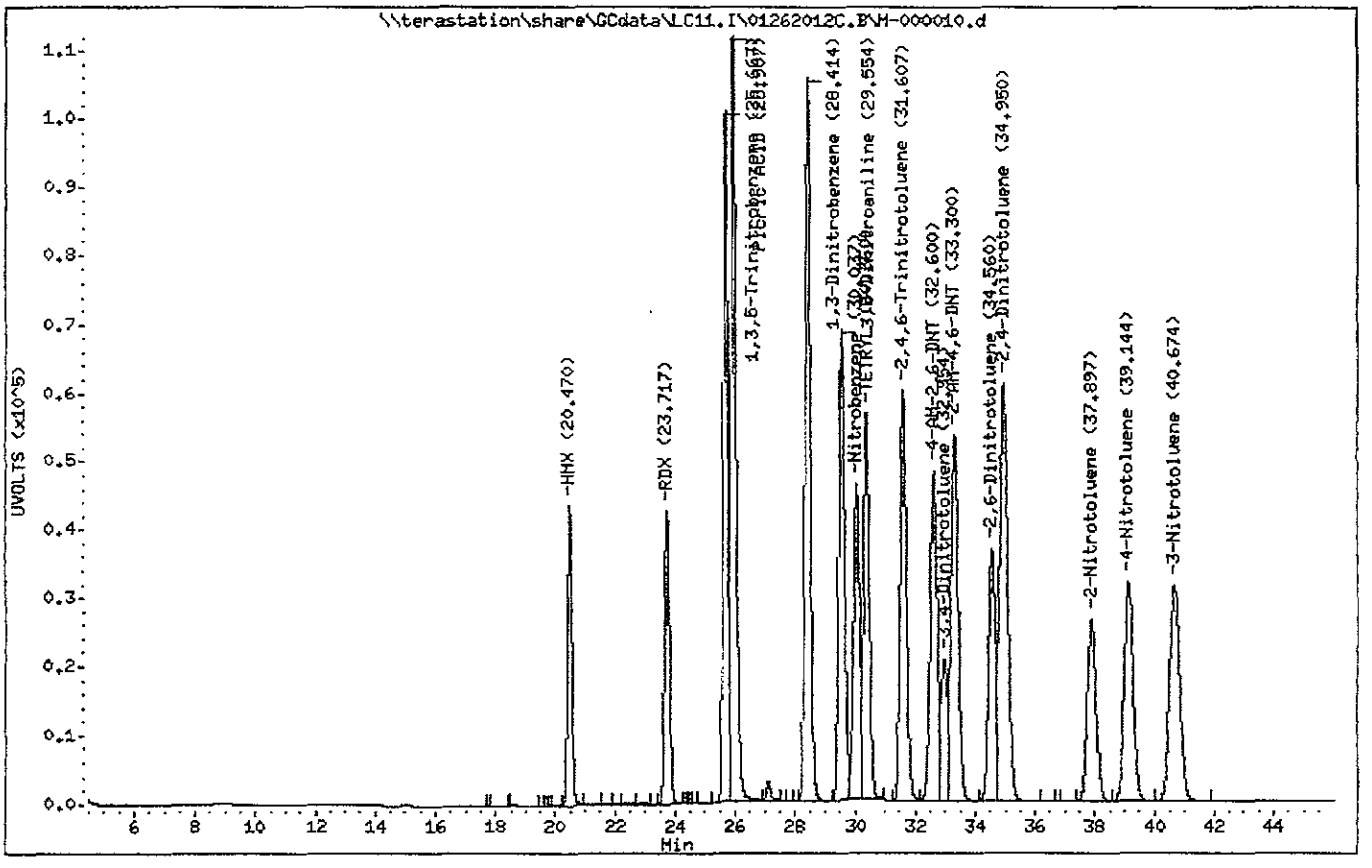
Instrument: LC11.i

Sample Info: STD_07 12GCSV0101 8330 500 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-00001
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 26-JAN-2012 21:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 12GCSV0101 8330 500 ng/mL;1;
Misc Info : ;7;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:10 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 21:49 Cal File: M-000010.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.680	630	62	0.098	0.00	
24.030	175	34	0.195	0.00	
24.310	206	28	0.136	0.00	
25.664	12326	1376	0.112	0.13	
25.910	1821895	162032	0.089	15.87	9 Picric ACID
27.067	974	85	0.087	0.00	
28.064	266	64	0.240	0.00	
28.414	677002	54678	0.081	5.32	
29.554	917466	70220	0.077	6.83	
30.037	1012697	74184	0.073	7.22	
30.360	1012793	76003	0.075	7.40	
30.864	599050	43855	0.073	4.27	18 Nitroglycerin
31.607	921003	63984	0.069	6.23	
32.600	1128761	70923	0.063	6.90	
32.954	565175	39393	0.070	3.83	$ 1 3,4-Dinitrotoluene
33.297	942366	55313	0.059	5.38	
34.560	1083595	64108	0.059	6.24	
34.947	884699	49302	0.056	4.80	
37.897	1318624	64368	0.049	6.26	
39.144	1043392	48126	0.046	4.68	
40.674	1486251	64108	0.043	6.24	
41.380	617777	24702	0.040	2.40	27 PETN
42.644	560	41	0.073	0.00	
44.554	774	21	0.027	0.00	
	16048458	1027010		100.000	

Total unknown % height = 73.63

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000010.d\H-000010.d

Date : 26-JAN-2012 21:49

Client ID:

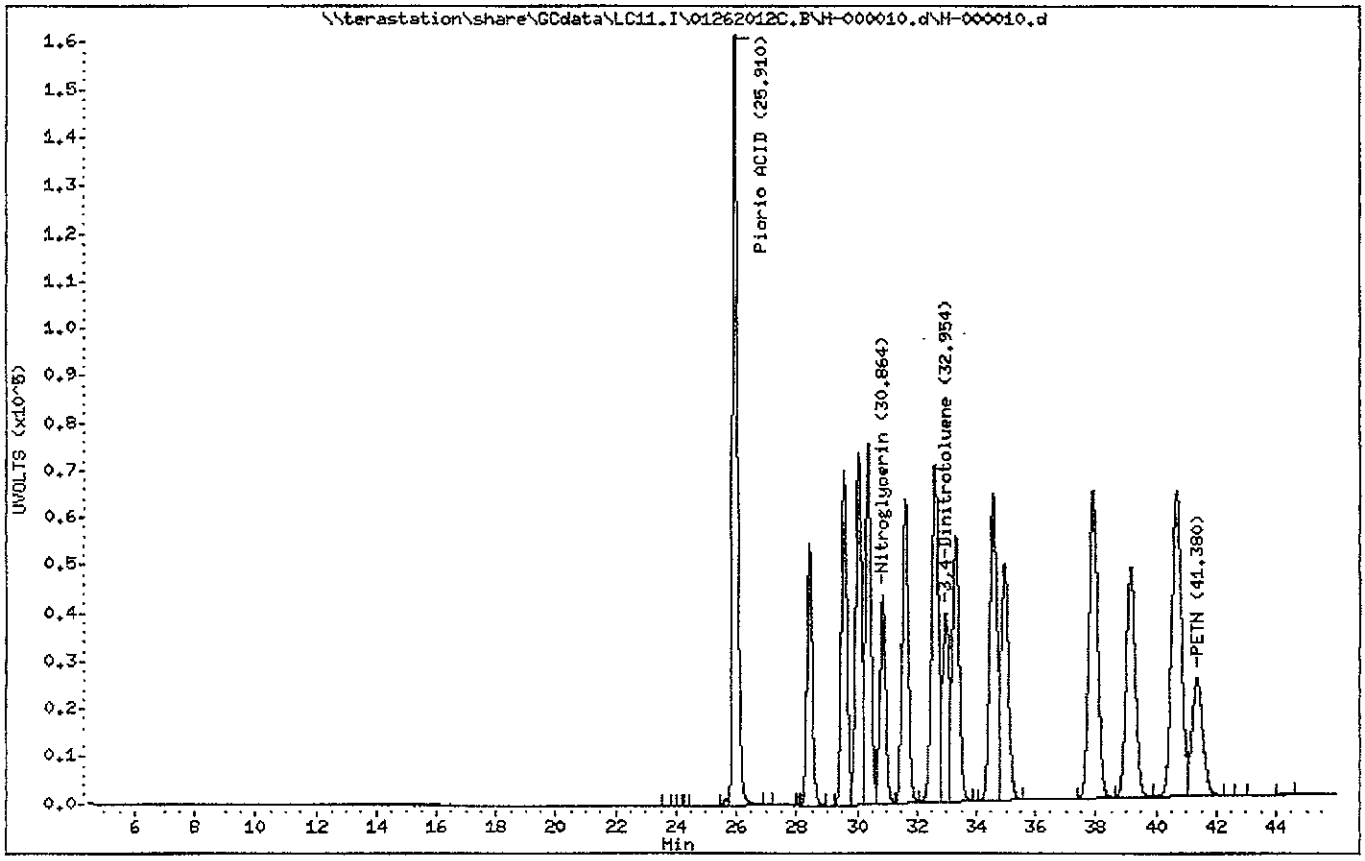
Instrument: LC11.i

Sample Info: STD_07 12GCSV0101 8330 500 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_08 12GCSV0102 8330 1000 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 22:47 File ID: 01262012C.B/M-000011.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	1000	20.454	0.000	70820	70.82000				
2	RDX	1000	23.698	0.000	68889	68.88900				
3	1,3,5-Trinitrobenz	1000	25.651	0.000	182459	182.4590				
4	Picric ACID	2000	25.824	0.000	203917	101.9585	25.834	0.000	276836	138.4180
5	1,3-Dinitrobenzene	1000	28.398	0.000	193073	193.0730				
6	3,5-Dinitroaniline	1000	29.538	0.000	127882	127.8820				
7	Nitrobenzene	1000	30.018	0.000	84770	84.77000				
8	TETRYL	1000	30.354	0.000	110599	110.5990				
9	2,4,6-Trinitrotolu	1000	31.601	0.000	117122	117.1220				
10	4-AM-2,6-DNT	1000	32.588	0.000	92286	92.28600				
11	3,4-Dinitrotoluene	500	32.944	0.000	34056	68.11200	32.944	0.000	64989	129.9780
12	2-AM-4,6-DNT	1000	33.284	0.000	102179	102.1790				
13	2,6-Dinitrotoluene	1000	34.548	0.000	71518	71.51800				
14	2,4-Dinitrotoluene	1000	34.934	0.000	118238	118.2380				
15	2-Nitrotoluene	1000	37.878	0.000	51067	51.06700				
16	4-Nitrotoluene	1000	39.121	0.000	62140	62.14000				
17	3-Nitrotoluene	1000	40.648	0.000	61775	61.77500				
18	EGDN	1000								
19	Nitroglycerin	1000					30.854	0.000	85979	85.97900
20	PETN	1000					41.364	0.000	49440	49.44000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:11

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 26-JAN-2012 22:47
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 12GCSV0102 8330 1000 ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:11 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.088	975	111	0.114	0.00		
18.328	191	30	0.157	0.00		
19.971	223	23	0.103	0.00		
20.454	865980	70820	0.082	4.02	4	HMX
21.671	3678	316	0.086	0.01		
22.414	9345	577	0.062	0.03		
22.884	3860	255	0.066	0.01		
23.698	969857	68889	0.071	3.91	7	RDX
24.701	1060	110	0.104	0.00		
25.651	1730259	182459	0.105	10.36	10	1,3,5-Trinitrobenzene
25.824	2824268	203917	0.072	11.70	9	Picric ACID
27.101	66501	6056	0.091	0.34		
27.724	1303	113	0.087	0.00		
28.398	2604054	193073	0.074	10.96	13	1,3-Dinitrobenzene
29.538	1795397	127882	0.071	7.26	15	3,5-Dinitroaniline
30.018	1251328	84770	0.068	4.81	17	Nitrobenzene
30.354	1506691	110599	0.073	6.28	16	TETRYL
31.601	1726788	117122	0.068	6.65	19	2,4,6-Trinitrotoluene
32.588	1539523	92286	0.060	5.24	20	4-AM-2,6-DNT
32.944	415736	34056	0.082	1.93	$ 1	3,4-Dinitrotoluene
33.284	1838923	102179	0.056	5.80	21	2-AM-4,6-DNT
34.548	1187964	71518	0.060	4.06	22	2,6-Dinitrotoluene
34.934	2233551	118238	0.053	6.71	23	2,4-Dinitrotoluene
37.878	1071324	51067	0.048	2.90	24	2-Nitrotoluene
39.121	1374752	62140	0.045	3.52	25	4-Nitrotoluene
40.648	1470743	61775	0.042	3.50	26	3-Nitrotoluene
43.964	170	24	0.141	0.00		
44.608	644	34	0.053	0.00		
	26495091	1760439		100.000		

Total unknown % height = 0.3900

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d

Page 2

Date : 26-JAN-2012 22:47

Client ID:

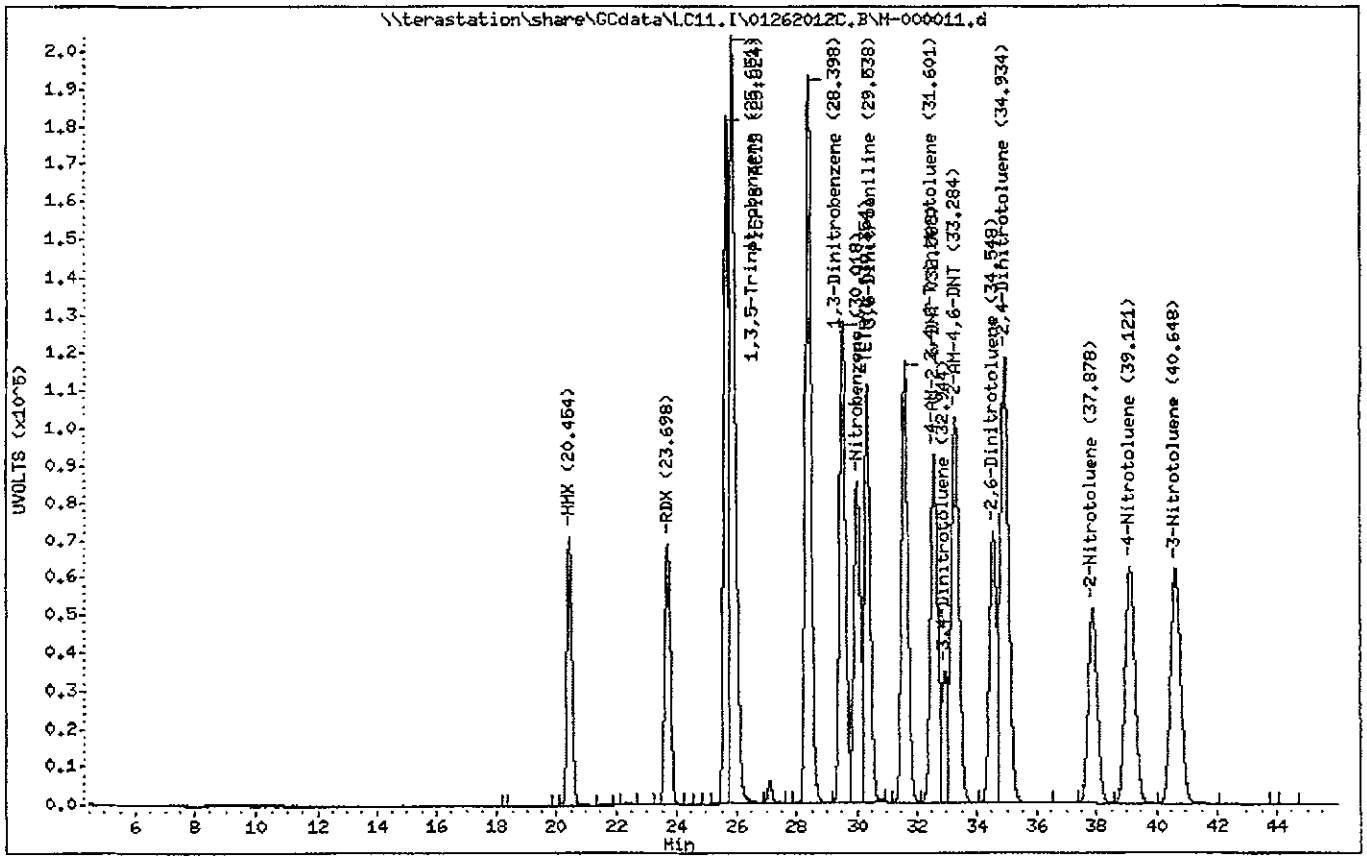
Instrument: LC11.i

Sample Info: STD_08 12GCSV0102 8330 1000 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-00001
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 26-JAN-2012 22:47
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 12GCSV0102 8330 1000 ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:11 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.638	771	68	0.088	0.00	
24.154	238	32	0.134	0.00	
25.661	17799	2459	0.138	0.12	
25.834	3654598	276836	0.076	14.48	9 Picric ACID
27.078	4708	353	0.075	0.01	
27.334	1550	161	0.104	0.00	
28.028	247	82	0.332	0.00	
28.398	1356044	100111	0.074	5.19	
29.538	1826623	130259	0.071	6.75	
30.018	2012758	136088	0.068	7.05	
30.354	2035578	149249	0.073	7.74	
30.854	1198074	85979	0.072	4.46	18 Nitroglycerin
31.601	1838179	124988	0.068	6.48	
32.588	2260387	136507	0.060	7.08	
32.944	920853	64989	0.071	3.37	$ 1 3,4-Dinitrotoluene
33.284	1887194	106085	0.056	5.50	
34.548	2179889	124476	0.057	6.45	
34.931	1756253	95954	0.055	4.97	
36.424	219	40	0.182	0.00	
36.618	2113	121	0.057	0.00	
37.878	2624218	124643	0.047	6.46	
39.121	2068255	93484	0.045	4.84	
40.648	2957036	125153	0.042	6.49	
41.364	1235991	49440	0.040	2.56	27 PETN
43.411	382	18	0.047	0.00	
44.168	429	24	0.056	0.00	
44.854	1401	55	0.039	0.00	
45.444	2261	71	0.031	0.00	
45.761	710	46	0.065	0.00	
	31844759	1927771		100.000	

Total unknown % height = 75.13

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\M-000011.d\M-000011.d

Date : 26-JAN-2012 22:47

Client ID:

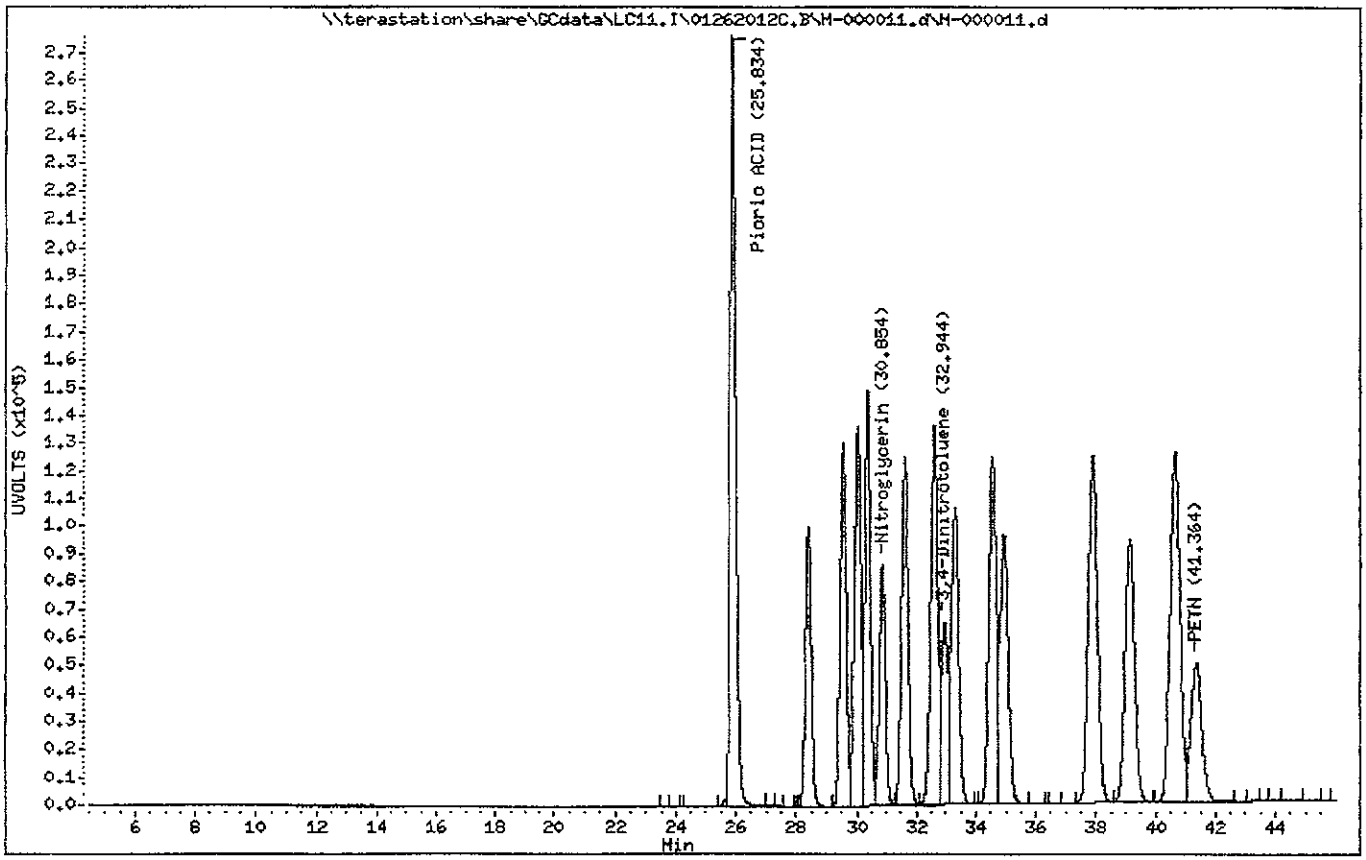
Instrument: LC11.i

Sample Info: STD_08 12GCSV0102 8330 1000 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 23:44
Operator : SV
Matrix : NONE

Instrument: LC11
File ID: 01262012C.B/M-000012.d
Sublist: 1_CAL
SpikeList:

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	HMX									
2	RDX									
3	1,3,5-Trinitrobenz	25.730	0.061	30	0.1466					
4	Picric ACID	26.083	0.134	20	0.1699					
5	1,3-Dinitrobenzene									
6	3,5-Dinitroaniline									
7	Nitrobenzene									
8	TETRYL	30.430	0.084	24	0.2140					
9	2,4,6-Trinitrotolu	31.510	-0.083	20	0.1671					
10	4-AM-2,6-DNT									
11	3,4-Dinitrotoluene					33.136	0.195	36	0.2824	
12	2-AM-4,6-DNT									
13	2,6-Dinitrotoluene									
14	2,4-Dinitrotoluene									
15	2-Nitrotoluene									
16	4-Nitrotoluene									
17	3-Nitrotoluene									
18	EGDN									
19	Nitroglycerin									
20	PETN									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 23:44
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.803	51	17	0.332	4.17	
21.933	56	14	0.250	3.43	
22.533	172	36	0.210	8.84	
24.620	87	17	0.195	4.17	
24.853	177	46	0.260	11.30	
24.970	504	53	0.105	13.09	
25.730	467	30	0.064	7.37	10 1,3,5-Trinitrobenze
26.083	350	20	0.057	4.91	9 Picric ACID
26.963	323	39	0.121	9.58	
27.730	176	29	0.164	7.12	
30.430	102	24	0.234	5.89	16 TETRYL
31.510	63	20	0.317	4.91	19 2,4,6-Trinitrotolue
39.463	255	33	0.129	8.10	
40.006	344	29	0.084	7.12	
	3128	407		100.000	

Total unknown % height = 76.92

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000012.d

Date : 26-JAN-2012 23:44

Client ID:

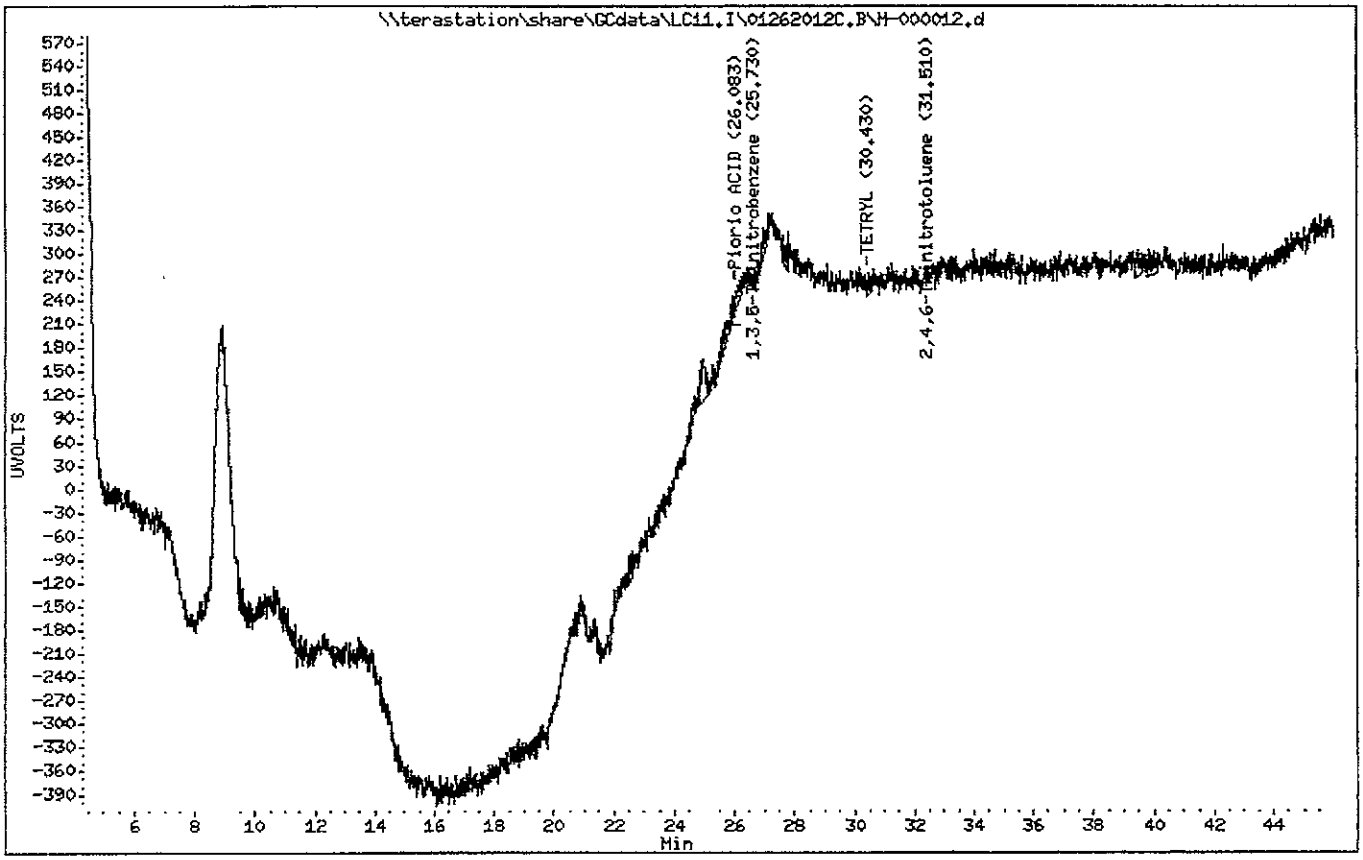
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d\M-00001
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 23:44
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.340	317	51	0.161	7.96	
23.613	229	32	0.140	5.00	
26.963	194	44	0.227	6.87	
27.510	165	28	0.170	4.37	
30.643	198	42	0.212	6.56	
33.136	165	36	0.218	5.62	$ 1 3,4-Dinitrotoluene
35.823	153	34	0.222	5.31	
35.950	270	46	0.170	7.18	
37.646	167	32	0.192	5.00	
38.573	852	62	0.073	9.75	
39.550	550	28	0.051	4.37	
40.013	479	34	0.071	5.31	
41.993	1472	44	0.030	6.87	
42.753	366	34	0.093	5.31	
44.410	454	39	0.086	6.09	
44.963	484	22	0.045	3.43	
45.506	902	32	0.035	5.00	
	7416	640		100.000	

Total unknown % height = 94.38

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d\M-000012.d

Date : 26-JAN-2012 23:44

Client ID:

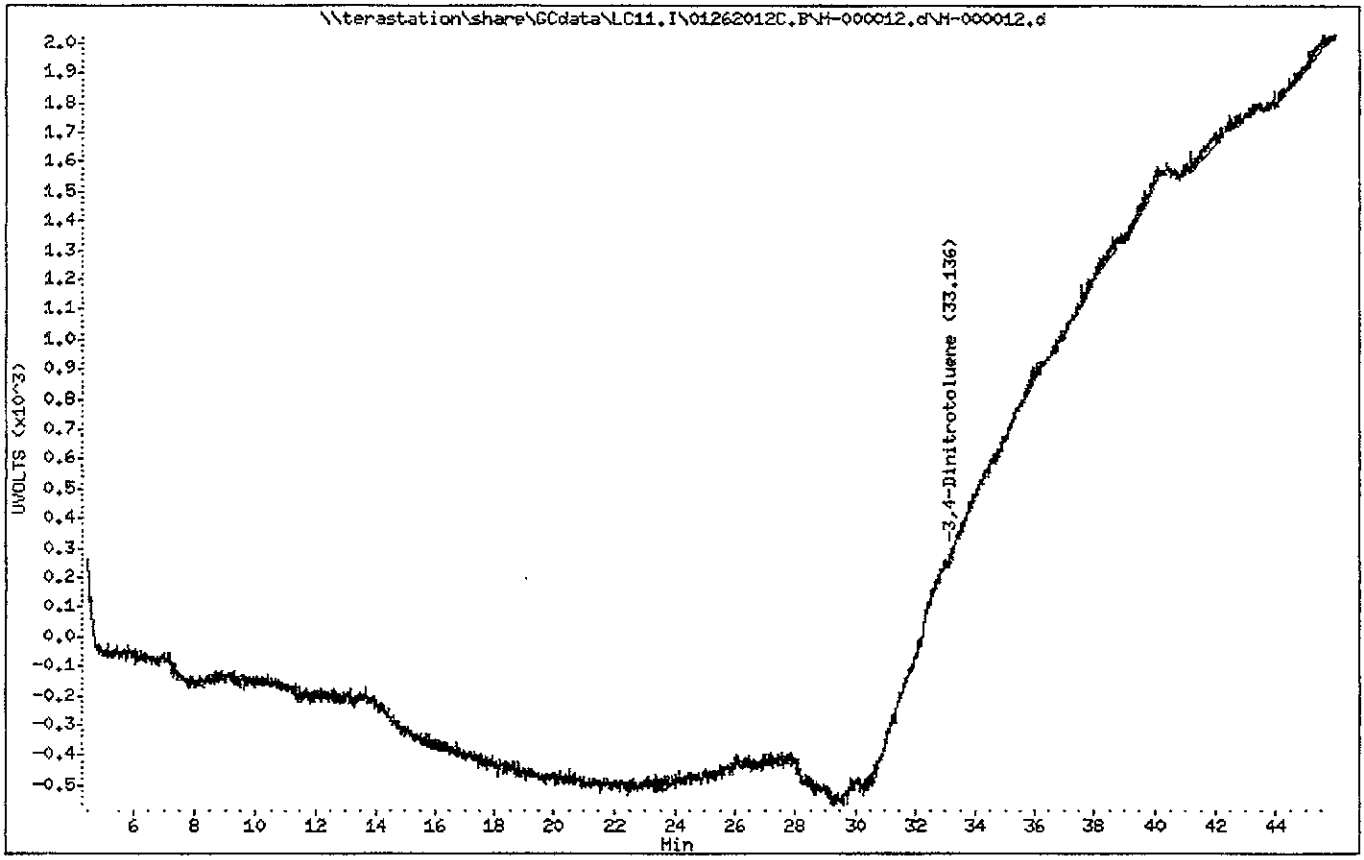
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_MRL 11GCSV0468 8330 5-50 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 00:41 File ID: 01262012C.B/M-000013.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	5.00	20.498	0.000	550	5.992	20					
2	RDX	5.00	23.732	0.000	556	6.113	22					
3	1,3,5-Trinitrobenz	5.00	25.675	0.000	1211	5.919	18					
4	Picric ACID	50.0	26.015	0.000	6086	51.71	3.4	26.015	0.000	8958	52.50	5.0
5	1,3-Dinitrobenzene	5.00	28.415	0.000	1214	5.674	13					
6	3,5-Dinitroaniline	5.00	29.545	0.000	801	5.736	15					
7	Nitrobenzene	5.00	30.048	0.000	521	5.607	12					
8	TETRYL	5.00	30.372	0.000	557	4.967	-0.66					
9	2,4,6-Trinitrotolu	5.00	31.588	0.000	603	5.037	0.74					
10	4-AM-2,6-DNT	5.00	32.585	0.000	552	5.733	15					
11	3,4-Dinitrotoluene	20.0	32.948	0.000	1302	19.41	-3.0	32.942	0.000	2544	19.96	-0.20
12	2-AM-4,6-DNT	5.00	33.285	0.000	649	6.055	21					
13	2,6-Dinitrotoluene	5.00	34.555	0.000	428	5.766	15					
14	2,4-Dinitrotoluene	5.00	34.938	0.000	696	5.703	14					
15	2-Nitrotoluene	5.00	37.872	0.000	301	5.687	14					
16	4-Nitrotoluene	5.00	39.115	0.000	371	5.878	18					
17	3-Nitrotoluene	5.00	40.632	0.000	366	5.834	17					
18	EGDN	5.00										
19	Nitroglycerin	20.0						30.852	0.000	1659	19.98	-0.10
20	PETN	20.0						41.352	0.000	1052	21.94	9.7

MRL passes S:N>5:1

TCM 1/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:23

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 00:41
Operator : SV Inst ID: LC11.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;
Misc Info : MRL;9;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:22 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.498	4705	550	0.117	3.23		4 HMX
22.902	129	26	0.201	0.15		
23.732	5437	556	0.102	3.27		7 RDX
24.018	61	26	0.428	0.15		
25.675	11871	1211	0.102	7.12		10 1,3,5-Trinitrobenze
26.015	59332	6086	0.103	35.92		9 Picric ACID
26.865	241	32	0.133	0.18		
28.415	13939	1214	0.087	7.14		13 1,3-Dinitrobenzene
29.545	10170	801	0.079	4.71		15 3,5-Dinitroaniline
30.048	6779	521	0.077	3.06		17 Nitrobenzene
30.372	7281	557	0.077	3.27		16 TETRYL
30.908	218	41	0.188	0.24		
31.588	8832	603	0.068	3.54		19 2,4,6-Trinitrotolue
32.585	8436	552	0.065	3.24		20 4-AM-2,6-DNT
32.948	20322	1302	0.064	7.66	$	1 3,4-Dinitrotoluene
33.285	10192	649	0.064	3.81		21 2-AM-4,6-DNT
34.555	7217	428	0.059	2.51		22 2,6-Dinitrotoluene
34.938	12242	696	0.057	4.09		23 2,4-Dinitrotoluene
36.348	373	42	0.113	0.24		
37.872	6284	301	0.048	1.77		24 2-Nitrotoluene
39.115	8064	371	0.046	2.18		25 4-Nitrotoluene
40.632	8727	366	0.042	2.15		26 3-Nitrotoluene
42.312	488	29	0.059	0.17		
42.595	539	34	0.063	0.20		
	211879	16994		100.000		

Total unknown % height = 1.330

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000013.d

Date : 27-JAN-2012 00:41

Client ID:

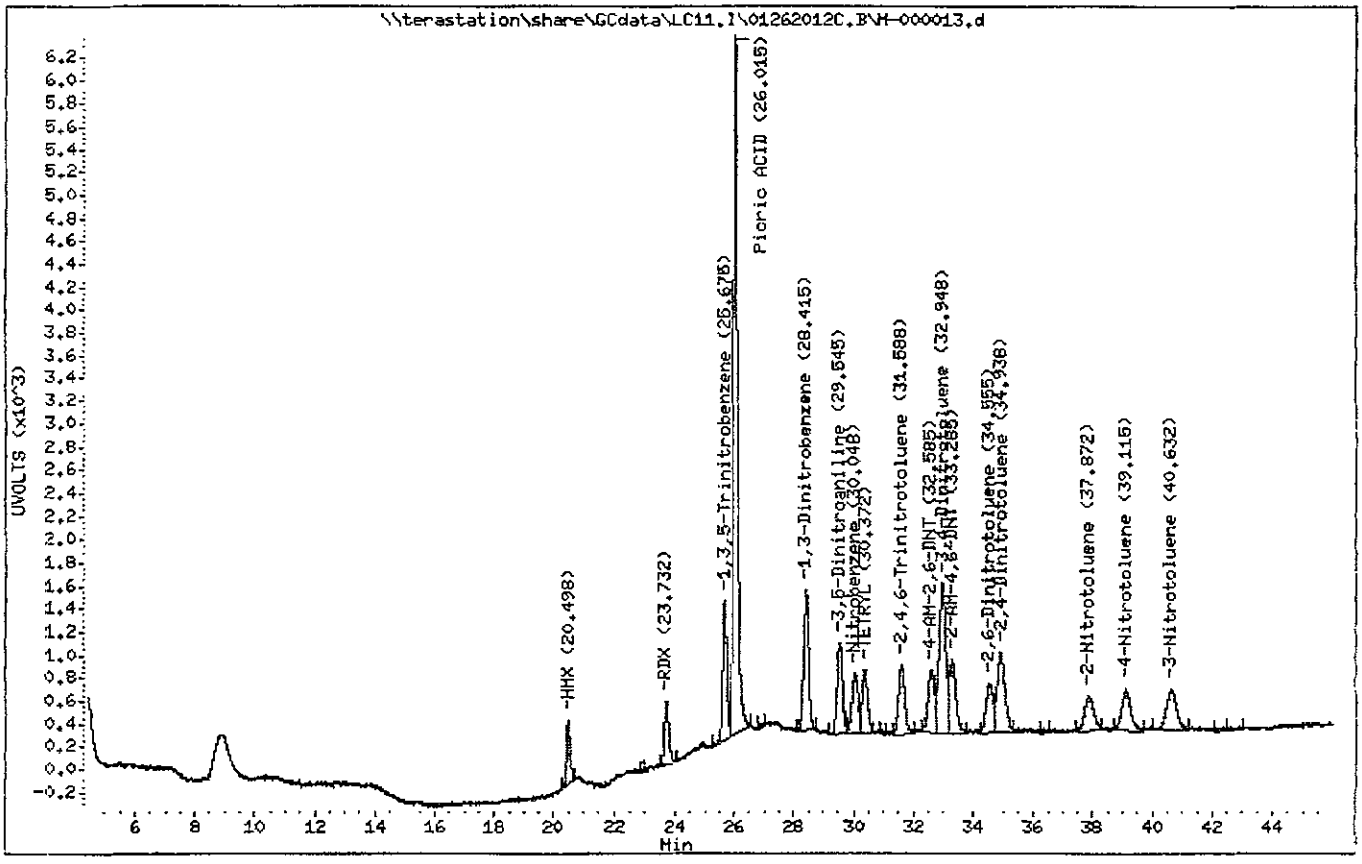
Instrument: LC11.i

Sample Info: STD_HRL 11GCSV0468 8330 5-50 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-00001
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 00:41
Operator : SV Inst ID: LC11.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;
Misc Info : MRL;9;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.355	208	36	0.173	0.15	
26.015	86518	8958	0.104	38.92	9 Picric ACID
27.968	496	54	0.109	0.23	
28.405	3306	655	0.198	2.83	
29.545	9314	780	0.084	3.37	
30.048	9932	804	0.081	3.48	
30.362	8326	655	0.079	2.83	
30.852	21671	1659	0.077	7.18	18 Nitroglycerin
31.612	8597	618	0.072	2.67	
32.245	186	27	0.145	0.11	
32.581	13695	880	0.064	3.81	
32.942	39703	2544	0.064	11.01	$ 1 3,4-Dinitrotoluene
33.285	10409	687	0.066	2.97	
33.721	284	44	0.155	0.19	
34.568	12319	750	0.061	3.24	
34.932	10323	575	0.056	2.49	
35.712	319	58	0.182	0.25	
36.361	224	41	0.183	0.17	
37.875	16522	741	0.045	3.20	
39.122	14754	566	0.038	2.45	
40.118	2663	105	0.039	0.45	
40.632	18287	757	0.041	3.27	
41.352	26893	1052	0.039	4.55	27 PETN
45.111	483	42	0.087	0.18	
	315432	23088		100.000	

Total unknown % height = 38.34

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-000013.d

Date : 27-JAN-2012 00:41

Client ID:

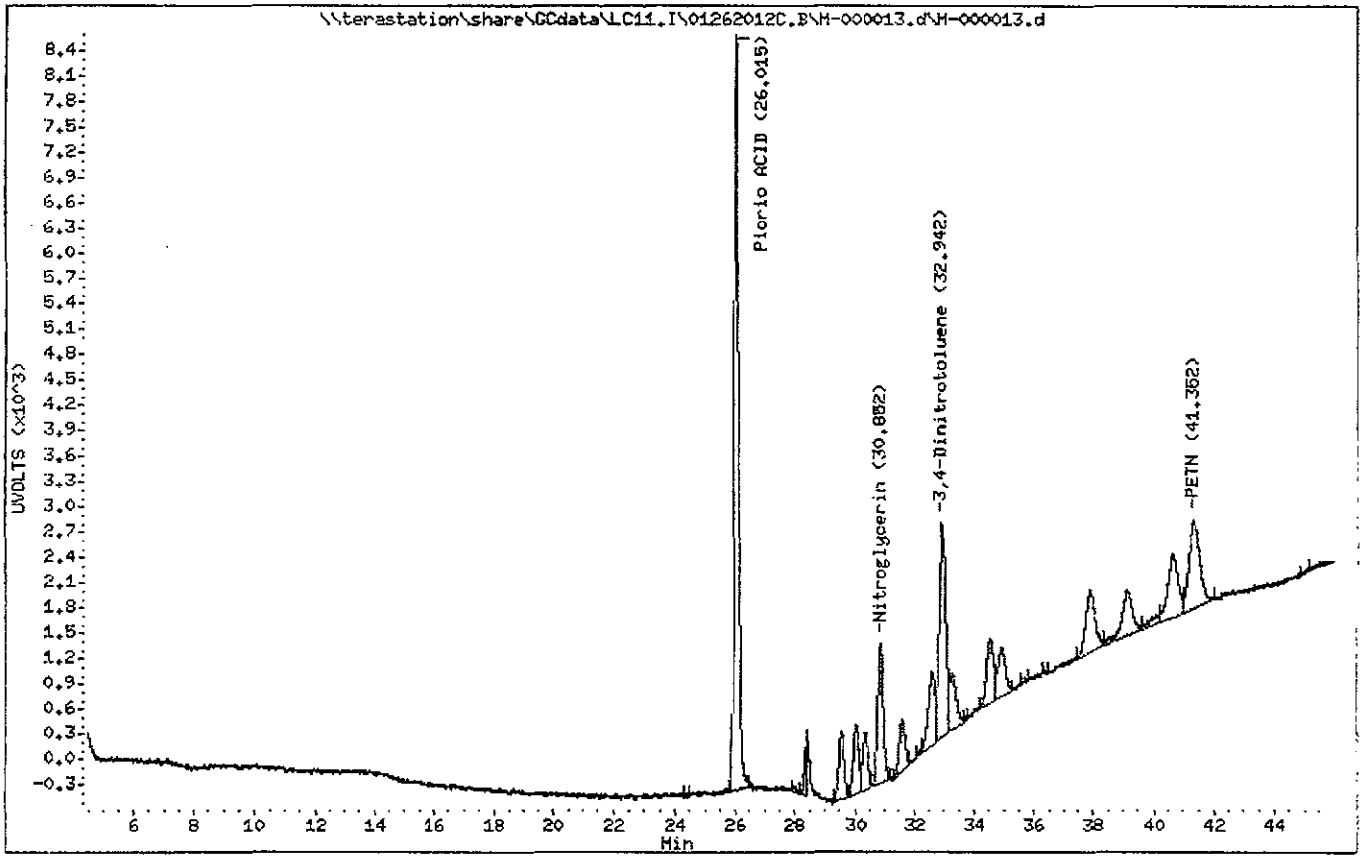
Instrument: LC11.i

Sample Info: STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 01:38 File ID: 01262012C.B/M-000014.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.492	0.000	19981	217.7	8.9					
2	RDX	200	23.726	0.000	19040	209.3	4.7					
3	1,3,5-Trinitrobenz	200	25.669	0.000	42142	206.0	3.0					
4	Picric ACID	500	25.949	0.000	59562	506.0	1.2	25.949	0.000	87153	510.8	2.2
5	1,3-Dinitrobenzene	200	28.409	0.000	42353	198.0	-1.0					
6	3,5-Dinitroaniline	200	29.542	0.000	29363	210.3	5.2					
7	Nitrobenzene	200	30.026	0.000	19145	206.0	3.0					
8	TETRYL	200	30.346	0.000	23886	213.0	6.5					
9	2,4,6-Trinitrotolu	200	31.592	0.000	24900	208.0	4.0					
10	4-AM-2,6-DNT	200	32.586	0.000	19050	197.8	-1.1					
11	3,4-Dinitrotoluene	200	not spiked									
12	2-AM-4,6-DNT	200	33.282	0.000	21564	201.2	0.60					
13	2,6-Dinitrotoluene	200	34.539	0.000	14974	201.7	0.85					
14	2,4-Dinitrotoluene	200	34.929	0.000	24852	203.6	1.8					
15	2-Nitrotoluene	200	37.872	0.000	10714	202.4	1.2					
16	4-Nitrotoluene	200	39.116	0.000	13065	207.0	3.5					
17	3-Nitrotoluene	200	40.642	0.000	12888	205.4	2.7					
18	EGDN	200										
19	Nitroglycerin	200						30.852	0.000	18822	226.6	13
20	PETN	200						41.352	0.000	10540	222.0	11

ICV passes ± 15%
TR 01/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:24

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 01:38
Operator : SV Inst ID: LC11.i
Smp Info : STD_ICV 11GCSV0515 8330 200 ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.969	1096	116	0.106	0.02	
20.492	179879	19981	0.111	5.01	4 HMX
21.939	144	32	0.223	0.00	
22.039	147	47	0.319	0.01	
22.649	103	25	0.243	0.00	
22.839	108	18	0.167	0.00	
23.726	193813	19040	0.098	4.78	7 RDX
24.482	86	25	0.290	0.00	
25.669	406315	42142	0.104	10.58	10 1,3,5-Trinitrobenze
25.949	623312	59562	0.096	15.07	9 Picric ACID
27.109	8930	360	0.040	0.09	
27.679	2663	155	0.058	0.03	
28.409	504323	42353	0.084	10.63	13 1,3-Dinitrobenzene
29.542	371162	29363	0.079	7.37	15 3,5-Dinitroaniline
30.026	248470	19145	0.077	4.80	17 Nitrobenzene
30.346	315575	23886	0.076	5.99	16 TETRYL
31.592	356419	24900	0.070	6.25	19 2,4,6-Trinitrotolue
32.586	295976	19050	0.064	4.78	20 4-AM-2,6-DNT
33.282	353142	21564	0.061	5.41	21 2-AM-4,6-DNT
34.539	242874	14974	0.062	3.75	22 2,6-Dinitrotoluene
34.929	448275	24852	0.055	6.23	23 2,4-Dinitrotoluene
36.962	124	29	0.234	0.00	
37.872	216021	10714	0.050	2.69	24 2-Nitrotoluene
39.116	278921	13065	0.047	3.28	25 4-Nitrotoluene
40.642	294046	12888	0.044	3.23	26 3-Nitrotoluene
	5341922	398286		100.000	

Total unknown % height = 0.1500

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d

Date : 27-JAN-2012 01:38

Client ID:

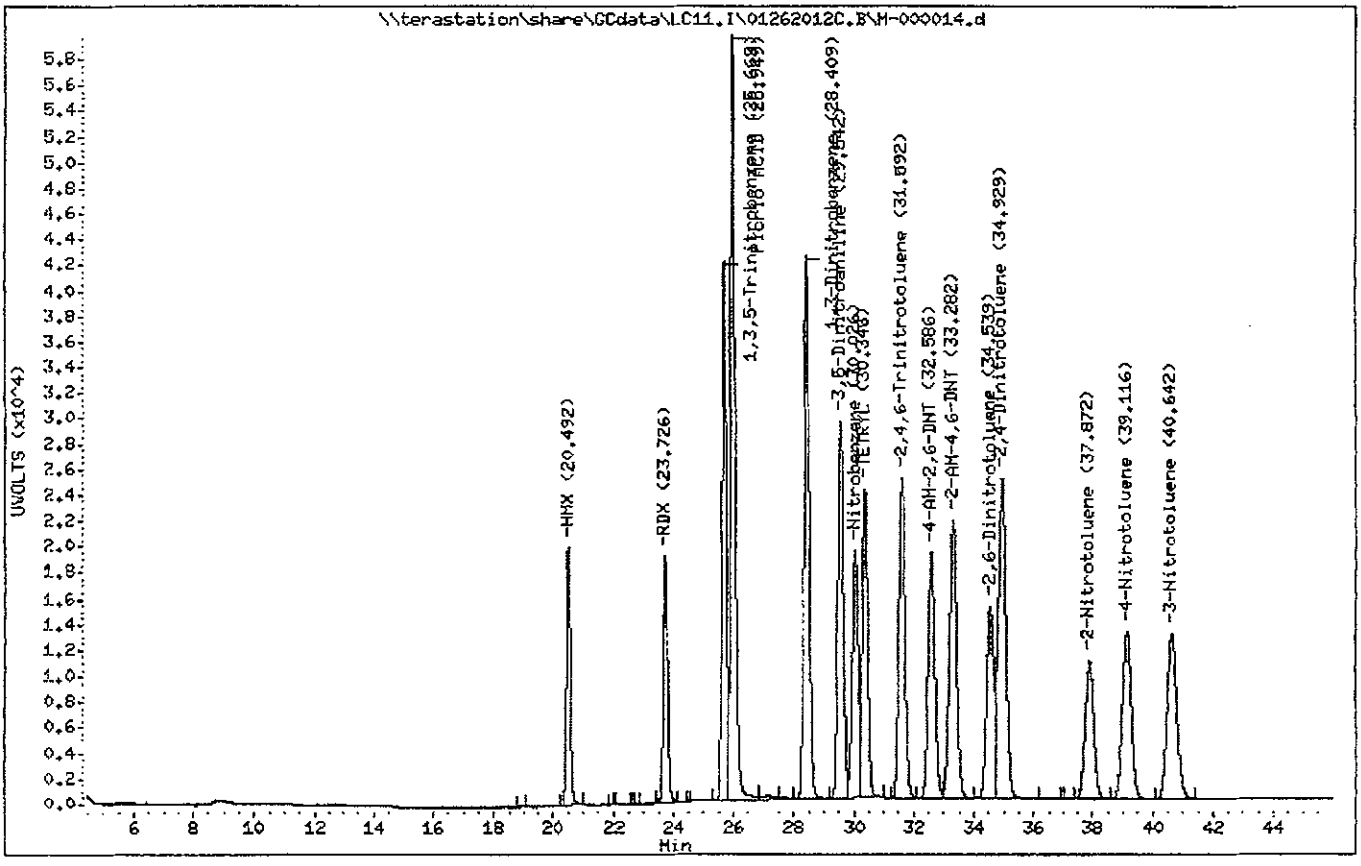
Instrument: LC11.i

Sample Info: STD_ICV 11GCSV0515 8330 200 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d\M-00001
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 01:38
Operator : SV Inst ID: LC11.i
Smp Info : STD_ICV 11GCSV0515 8330 200 ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.616	216	41	0.190	0.00	
23.716	280	50	0.179	0.01	
25.676	5286	593	0.112	0.13	
25.949	888625	87153	0.098	20.52	9 Picric ACID
26.839	454	77	0.170	0.01	
27.502	214	44	0.205	0.01	
28.409	260132	21892	0.084	5.12	
29.542	376766	29886	0.079	6.99	
30.026	401640	30773	0.077	7.19	
30.346	420503	32117	0.076	7.51	
30.852	252639	18822	0.075	4.40	18 Nitroglycerin
31.592	378104	26545	0.070	6.20	
32.586	436855	28082	0.064	6.56	
33.282	364397	22255	0.061	5.20	
34.102	848	104	0.123	0.02	
34.539	436839	26050	0.060	6.09	
34.929	358555	20171	0.056	4.71	
37.872	528095	26136	0.049	6.11	
39.116	424115	19726	0.047	4.61	
40.642	602944	26248	0.044	6.13	
41.352	266750	10640	0.040	2.48	27 PETN
43.399	450	28	0.062	0.00	
44.299	415	38	0.092	0.00	
45.396	1695	26	0.015	0.00	
	6406816	427497		100.000	

Total unknown % height = 72.60

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000014.d\H-000014.d

Date : 27-JAN-2012 01:38

Client ID:

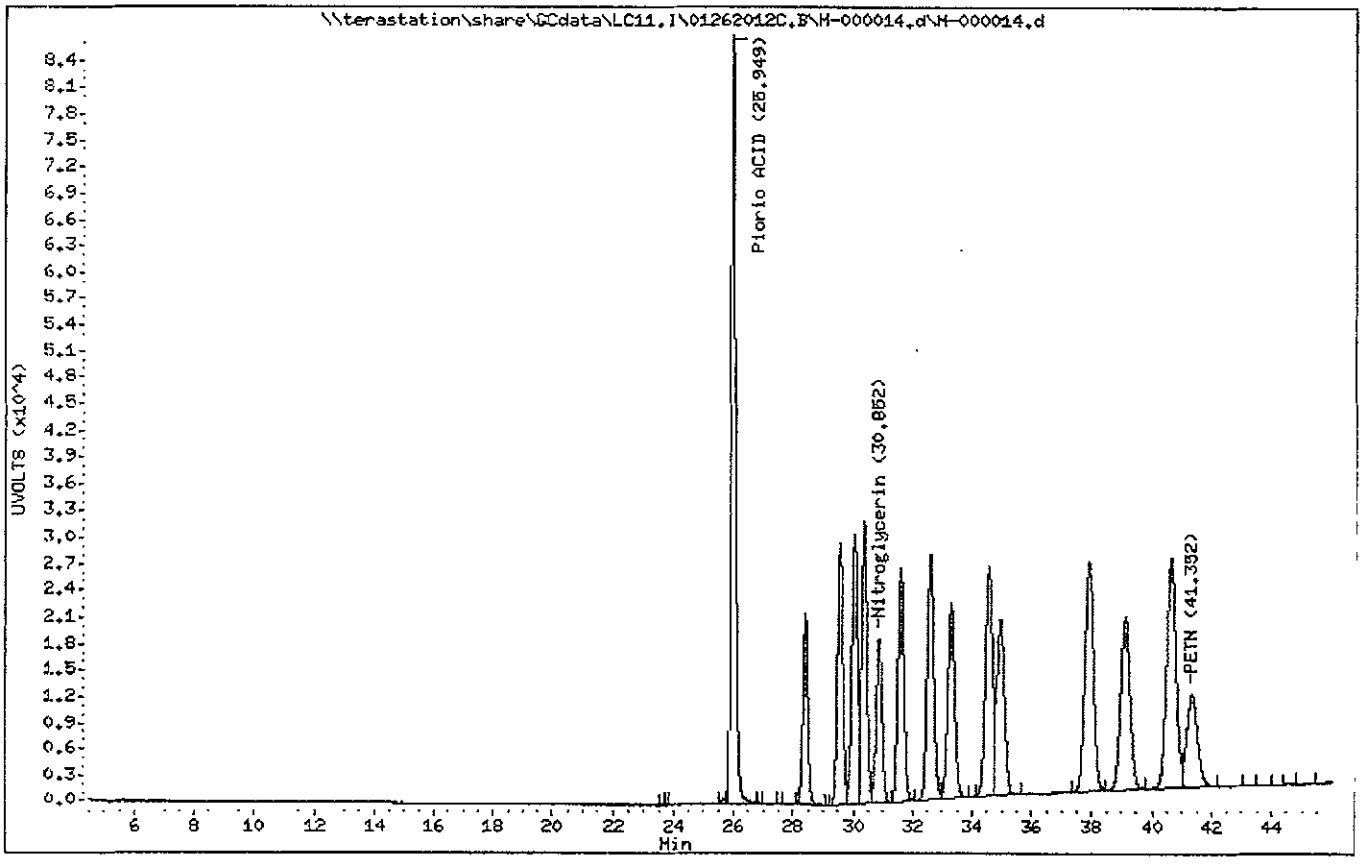
Instrument: LC11.i

Sample Info: STD_ICV 11GCSW0515 8330 200 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : Blank
Analyzed : 30-JAN-2012 15:52
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000003.d
Sublist: 2_CALMET

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX	21.902	-0.062	13	0.1201					

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:19

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 15:52
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.902	78	13	0.167	4.36	5 MNX
24.448	51	17	0.331	5.70	
25.888	487	28	0.058	9.39	
26.955	275	32	0.116	10.73	
27.648	115	32	0.279	10.73	
28.592	343	33	0.096	11.07	
31.285	195	39	0.200	13.13	
32.642	89	26	0.291	8.72	
33.468	270	27	0.100	9.06	
36.508	184	27	0.146	9.06	
45.265	109	24	0.220	8.05	
	2196	298		100.000	

Total unknown % height = 95.64

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000003.d

Date : 30-JAN-2012 15:52

Client ID:

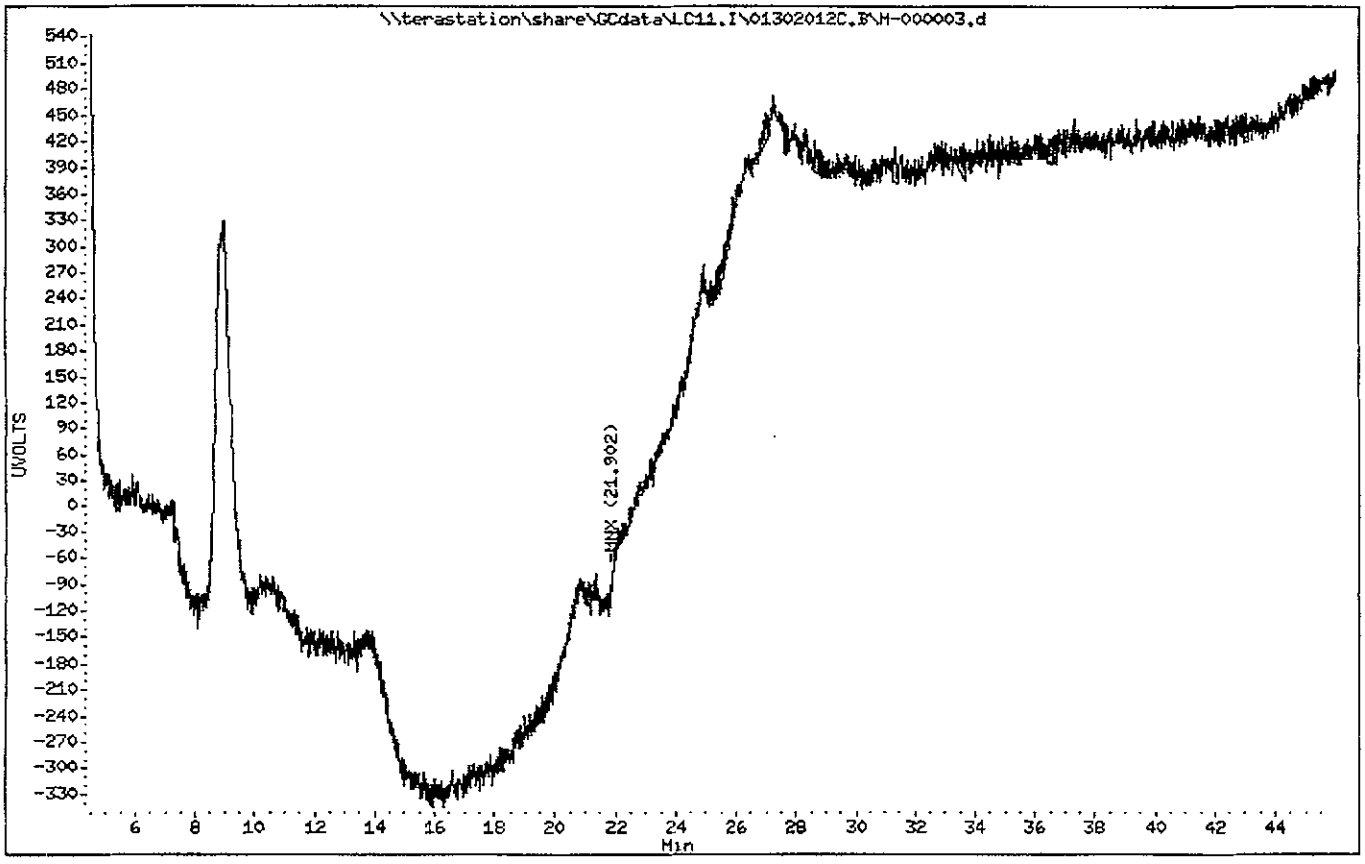
Instrument: LC11.i

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d\M-00000
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 15:52
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.648	161	50	0.310	5.91	
30.252	208	39	0.187	4.61	
31.482	215	53	0.247	6.27	
32.312	162	25	0.155	2.95	
32.655	163	29	0.178	3.43	
33.035	170	41	0.241	4.85	
34.042	167	26	0.156	3.07	
34.915	391	73	0.187	8.74	
35.025	247	52	0.211	6.15	
35.215	270	47	0.174	5.56	
35.672	340	50	0.147	5.91	
36.032	153	43	0.281	5.08	
38.012	200	46	0.230	5.44	
38.508	438	32	0.073	3.78	
39.485	307	36	0.117	4.26	
39.955	492	37	0.075	4.37	
41.788	666	33	0.050	3.90	
43.898	472	51	0.108	6.03	
44.185	317	31	0.098	3.66	
45.272	1445	51	0.035	6.03	
	6985	845		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d\M-000003.d

Date : 30-JAN-2012 15:52

Client ID:

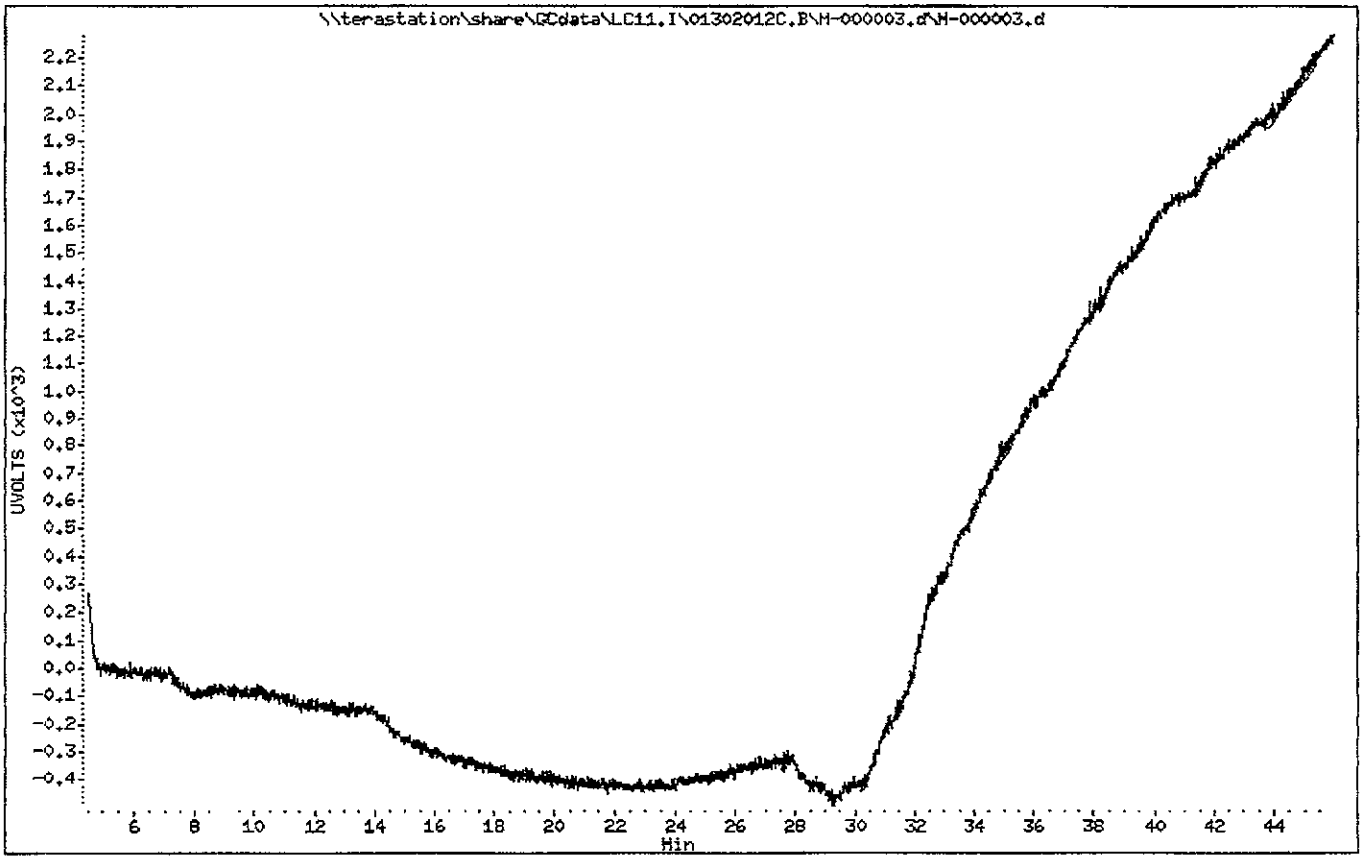
Instrument: LC11.i

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_03 E110811F METAB ICAL
Analyzed : 30-JAN-2012 16:49
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000004.d
Sublist: 2_CALMET

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	20.0	15.459	0.000	1074	53.70000				
2	DNX	20.0	19.209	0.000	1641	82.05000				
3	MNX	20.0	21.973	0.000	1958	97.90000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:10

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Lab Smp Id: STD_03 E110811F MET
Inj Date : 30-JAN-2012 16:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 E110811F METAB ICAL ;1
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:10 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 16:49 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.459	29123	1074	0.037	21.25	2 TNX
19.209	26383	1641	0.062	32.47	3 DNX
21.973	23590	1958	0.083	38.81	5 MNX
23.663	51	20	0.391	0.39	
25.643	776	52	0.067	1.02	
26.029	185	27	0.146	0.53	
26.189	75	27	0.358	0.53	
27.269	92	0	0.000	0.00	
31.003	77	34	0.443	0.67	
35.216	365	34	0.093	0.67	
35.536	267	28	0.105	0.55	
36.509	725	40	0.055	0.79	
37.349	285	36	0.126	0.71	
38.929	222	30	0.135	0.59	
39.329	415	29	0.070	0.57	
39.919	125	23	0.184	0.45	
	82756	5053		100.000	

Total unknown % height = 7.470

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000004.d

Date : 30-JAN-2012 16:49

Client ID:

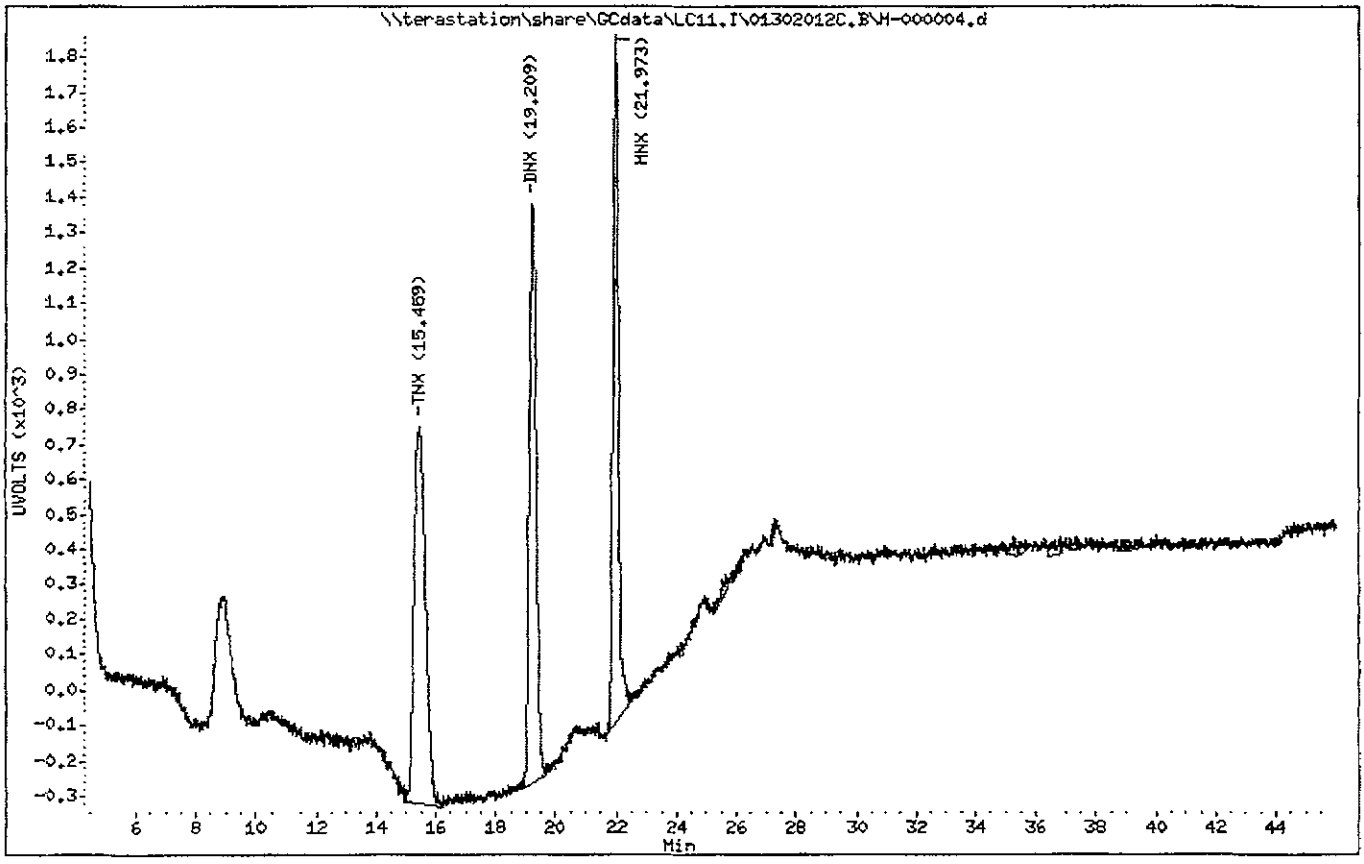
Instrument: LC11.i

Sample Info: STD_03 E110811F METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d\M-00000
Lab Smp Id: STD_03 E110811F MET
Inj Date : 30-JAN-2012 16:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 E110811F METAB ICAL ;1
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.059	161	32	0.199	3.61	
29.149	162	39	0.241	4.40	
30.056	244	48	0.197	5.42	
33.433	260	39	0.150	4.40	
34.339	160	49	0.306	5.53	
34.489	250	51	0.204	5.76	
34.883	265	57	0.215	6.44	
34.999	300	47	0.157	5.31	
35.546	151	37	0.244	4.18	
35.733	358	30	0.084	3.38	
38.213	603	40	0.066	4.51	
38.693	772	50	0.065	5.64	
39.493	326	37	0.113	4.18	
40.089	1075	58	0.054	6.65	
41.739	921	54	0.059	6.10	
42.709	331	43	0.130	4.85	
43.446	550	45	0.082	5.08	
44.773	322	28	0.087	3.16	
45.103	591	52	0.088	5.87	
45.409	670	49	0.073	5.53	
	8474	885		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d\M-000004.d

Date : 30-JAN-2012 16:49

Client ID:

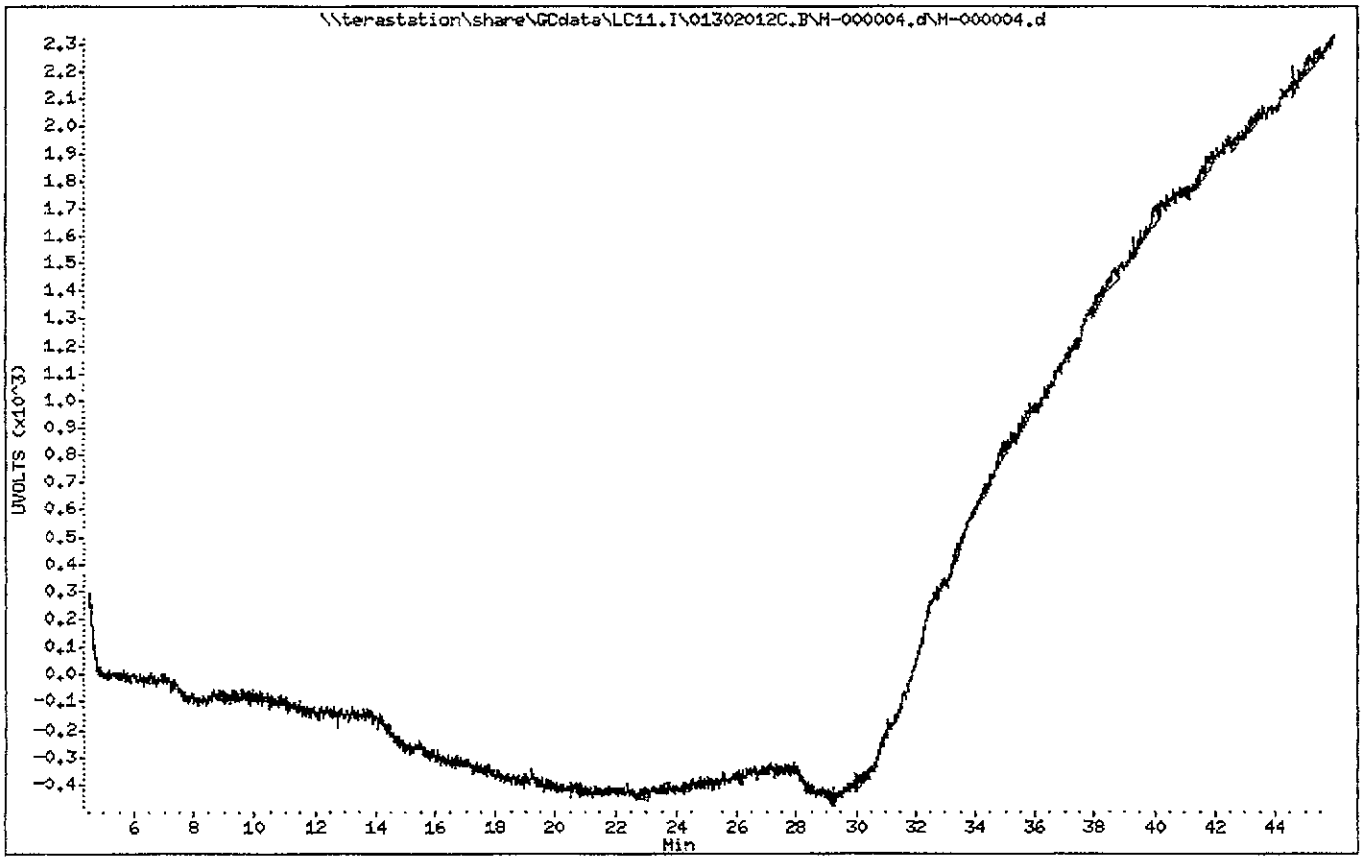
Instrument: LC11.i

Sample Info: STD_03 E110811F METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 E110811G METAB ICAL
Analyzed : 30-JAN-2012 17:46
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000005.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	50.0	15.427	0.000	3037	60.74000				
2	DNX	50.0	19.214	0.000	4628	92.56000				
3	MNX	50.0	21.957	0.000	5404	108.0800				

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Lab Smp Id: STD_04 E110811G MET
Inj Date : 30-JAN-2012 17:46
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 E110811G METAB ICAL ;1
Misc Info : ;4;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:10 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 17:46 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.427	76735	3037	0.040	22.18	2 TNX
19.214	70737	4628	0.065	33.80	3 DNX
21.957	60175	5404	0.090	39.54	5 MNX
23.477	136	27	0.198	0.19	
25.630	590	42	0.071	0.30	
26.084	163	35	0.214	0.25	
26.564	838	69	0.082	0.50	
26.930	409	51	0.125	0.37	
27.377	3189	181	0.057	1.32	
28.410	231	26	0.112	0.18	
29.270	132	26	0.197	0.18	
31.474	64	24	0.373	0.17	
32.190	152	22	0.145	0.16	
32.467	220	28	0.127	0.20	
37.764	306	30	0.098	0.21	
38.267	247	33	0.134	0.24	
44.564	441	29	0.066	0.21	
	214766	13692		100.000	

Total unknown % height = 4.480

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d

Date : 30-JAN-2012 17:46

Client ID:

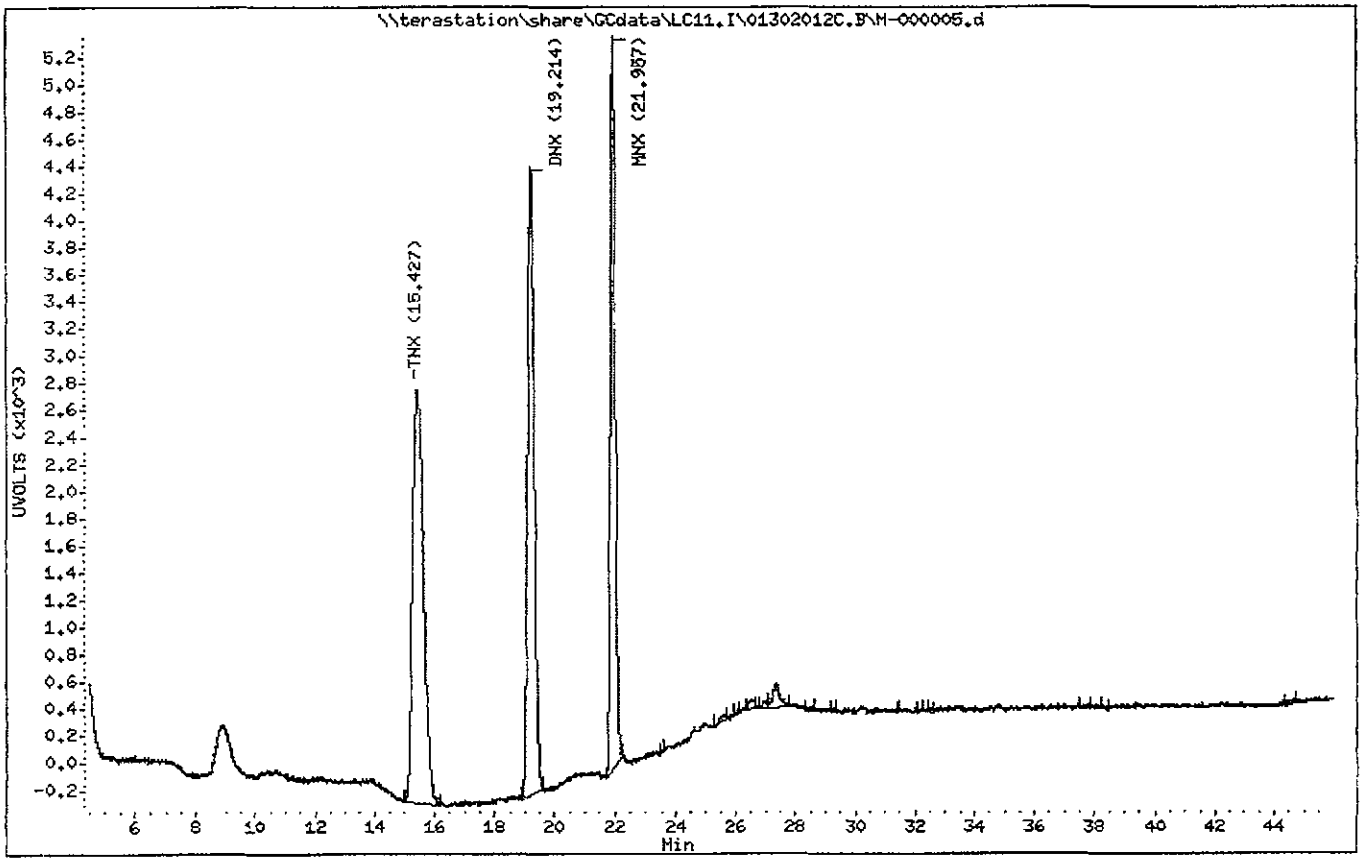
Instrument: LC11.i

Sample Info: STD_04 E110811G METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d\M-00000
Lab Smp Id: STD_04 E110811G MET
Inj Date : 30-JAN-2012 17:46
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 E110811G METAB ICAL ;1
Misc Info : ;4;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.290	160	31	0.193	5.55	
30.257	806	70	0.087	12.61	
31.194	156	24	0.154	4.30	
33.370	172	38	0.220	6.81	
34.074	263	57	0.216	10.21	
35.647	173	20	0.115	3.58	
36.587	230	38	0.165	6.81	
38.990	1271	32	0.025	5.73	
39.523	496	28	0.056	5.01	
40.034	451	35	0.078	6.27	
40.520	194	34	0.175	6.09	
41.100	219	23	0.105	4.12	
41.900	783	40	0.051	7.16	
42.347	221	15	0.068	2.68	
44.274	295	28	0.095	5.01	
45.147	584	45	0.077	8.06	
	6476	558		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d\M-000005.d

Date : 30-JAN-2012 17:46

Client ID:

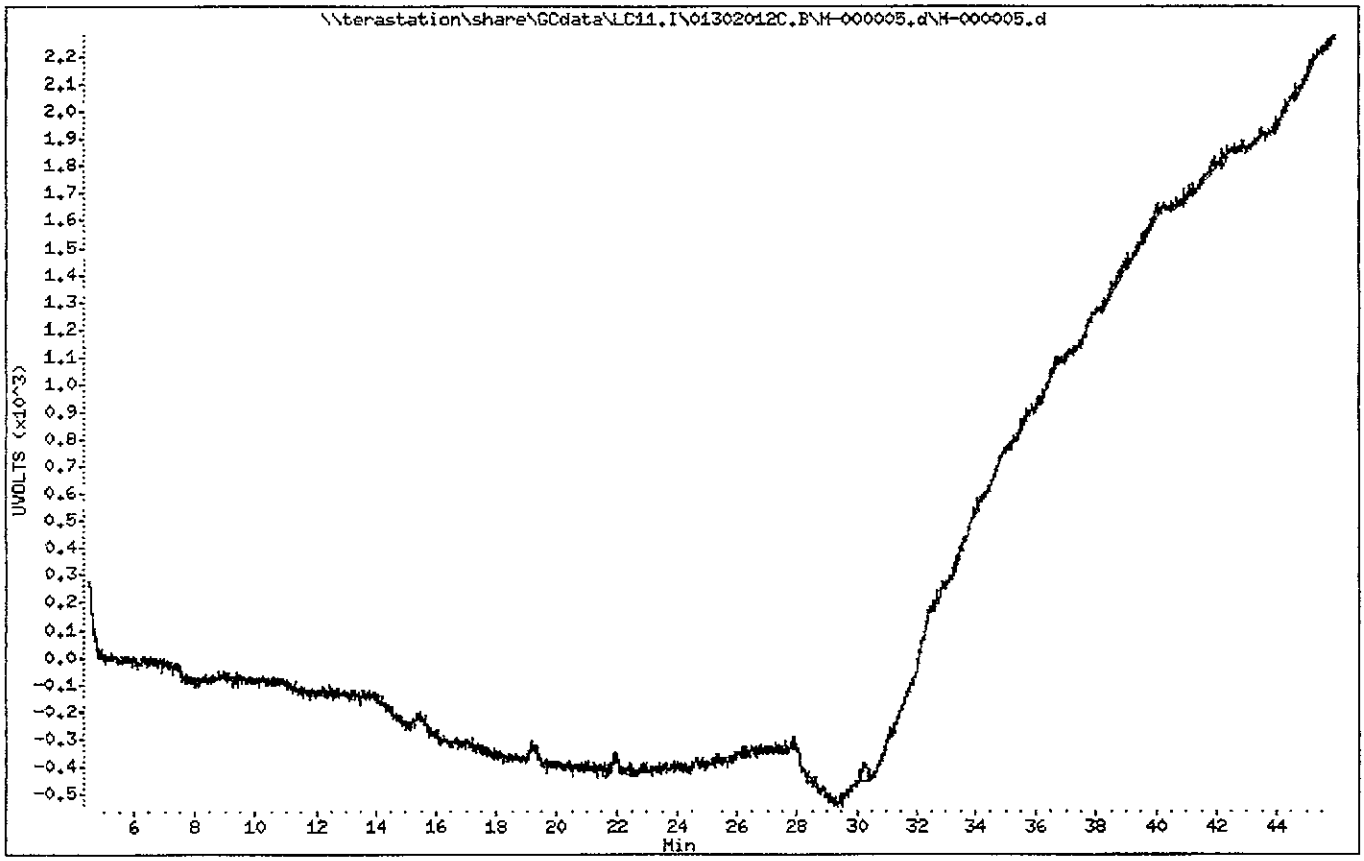
Instrument: LC11.I

Sample Info: STD_04 E110811G METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_05 E110811H METAB ICAL
Analyzed : 30-JAN-2012 18:43
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000006.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	100	15.423	0.000	6133	61.33000				
2	DNX	100	19.207	0.000	9432	94.32000				
3	MNX	100	21.957	0.000	11153	111.5300				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:11

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Lab Smp Id: STD_05 E110811H MET
Inj Date : 30-JAN-2012 18:43
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB ICAL ;1
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:11 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 18:43 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.063	940	126	0.134	0.44	
15.423	160079	6133	0.038	21.85	2 TNX
19.207	147973	9432	0.064	33.60	3 DNX
21.957	127496	11153	0.087	39.86	5 MNX
22.763	73	20	0.275	0.07	
23.693	341	44	0.129	0.15	
24.607	201	39	0.194	0.13	
24.913	76	15	0.197	0.05	
25.557	1677	134	0.080	0.47	
26.537	1947	169	0.087	0.60	
26.943	537	64	0.119	0.22	
27.367	6545	341	0.052	1.21	
27.987	347	39	0.112	0.13	
28.283	128	21	0.165	0.07	
30.063	106	36	0.339	0.12	
30.270	1183	82	0.069	0.29	
31.100	179	30	0.167	0.10	
31.480	156	35	0.224	0.12	
33.000	262	41	0.157	0.14	
33.950	77	22	0.286	0.07	
35.103	156	32	0.205	0.11	
37.203	164	31	0.189	0.11	
42.883	170	28	0.165	0.09	
	450812	28067		100.000	

Total unknown % height = 4.690

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d

Date : 30-JAN-2012 18:43

Client ID:

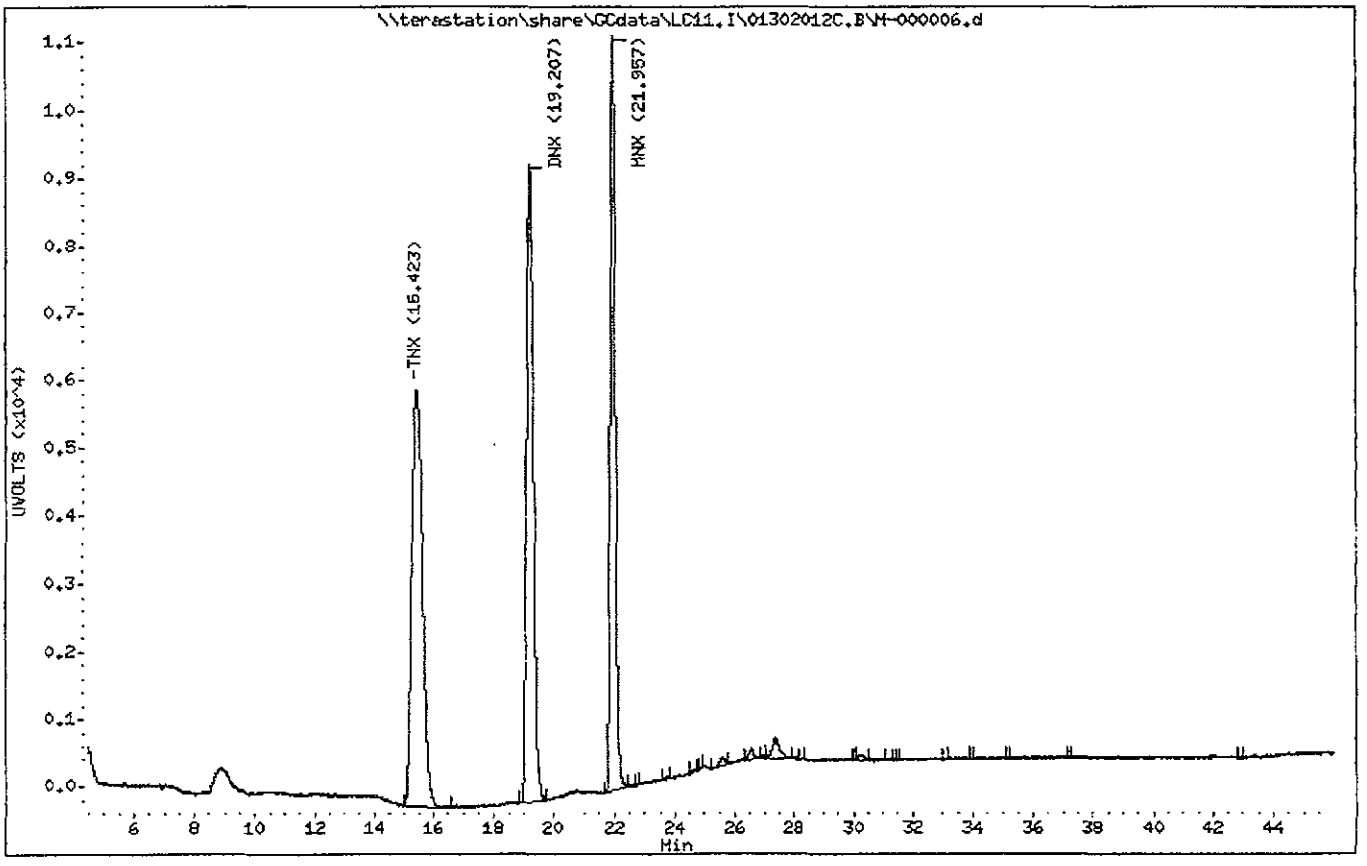
Instrument: LC11.I

Sample Info: STD_05 E110811H METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d\M-00000
Lab Smp Id: STD_05 E110811H MET
Inj Date : 30-JAN-2012 18:43
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB ICAL ;1
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.590	182	36	0.198	5.48	
27.840	178	43	0.242	6.55	
30.283	2077	188	0.090	28.72	
31.607	257	20	0.078	3.04	
31.737	214	38	0.178	5.79	
32.230	200	29	0.145	4.42	
38.763	717	26	0.036	3.96	
39.416	331	32	0.097	4.87	
39.963	636	50	0.079	7.62	
42.020	1562	53	0.034	8.07	
42.420	1763	79	0.045	12.04	
43.500	474	31	0.065	4.72	
45.490	934	31	0.033	4.72	
	9525	656		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d\M-000006.d

Date : 30-JAN-2012 18:43

Client ID:

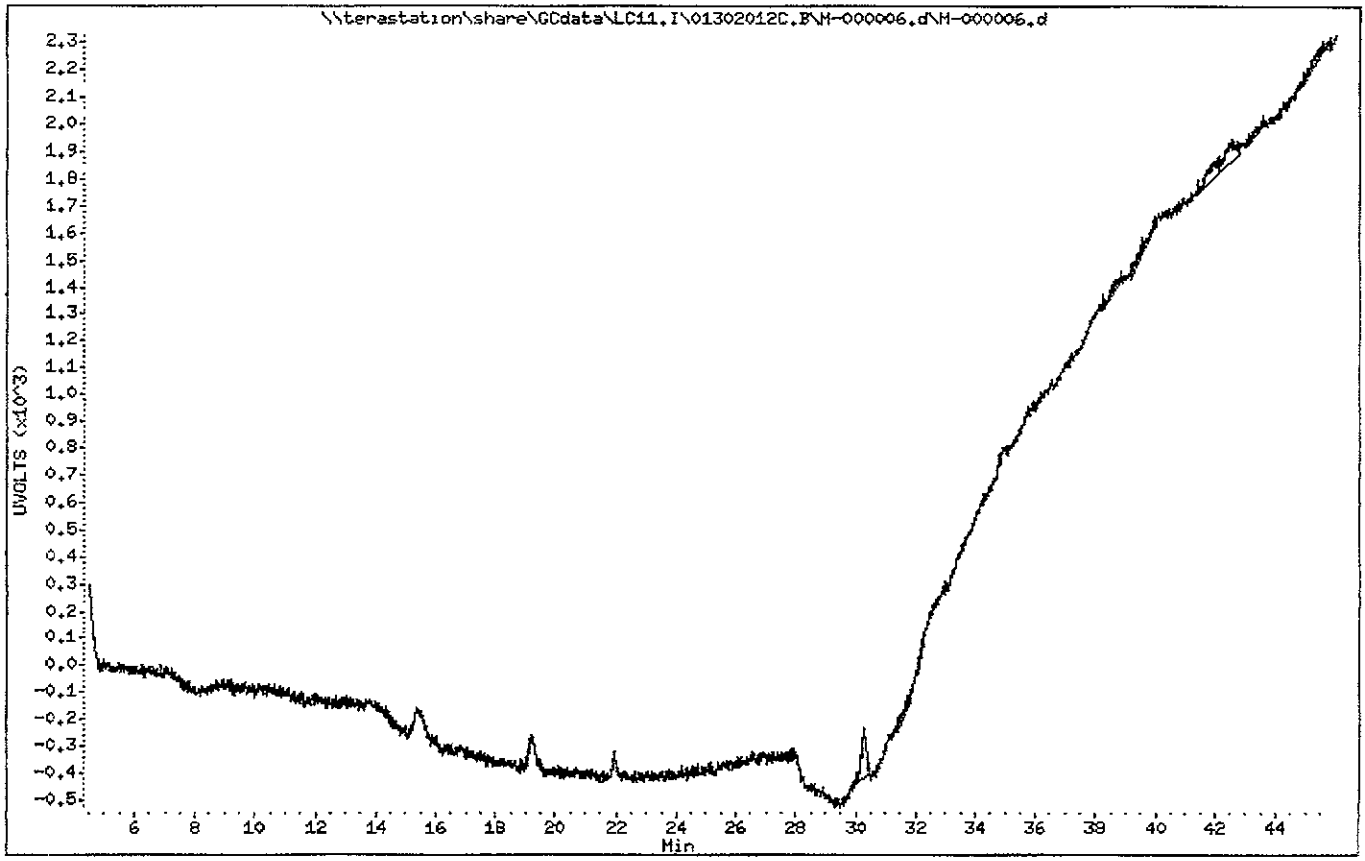
Instrument: LC11.I

Sample Info: STD_05 E110811H METAB ICAL :1

Operator: SW

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_06 E110811I METAB ICAL
Analyzed : 30-JAN-2012 19:40
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000007.d
Sublist: 2_CALMET

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	200	15.428	0.000	12311	61.55500				
2	DNX	200	19.211	0.000	18975	94.87500				
3	MNX	200	21.961	0.000	22367	111.8350				

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Lab Smp Id: STD_06 E110811I MET
Inj Date : 30-JAN-2012 19:40
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB ICAL;1
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:12 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 19:40 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.428	319246	12311	0.039	22.22	2 TNX
19.211	295993	18975	0.064	34.26	3 DNX
20.494	86	14	0.163	0.02	
21.961	254847	22367	0.088	40.46	5 MNX
23.708	522	61	0.117	0.11	
24.601	163	19	0.116	0.03	
24.984	162	19	0.117	0.03	
25.548	3272	248	0.076	0.44	
26.544	3979	318	0.080	0.57	
27.381	13225	637	0.048	1.15	
28.584	213	27	0.127	0.04	
29.828	500	44	0.088	0.07	
30.258	2912	173	0.059	0.31	
31.238	378	39	0.103	0.07	
35.748	65	30	0.465	0.05	
36.344	586	39	0.067	0.07	
40.088	428	29	0.068	0.05	
43.561	119	21	0.176	0.03	
44.411	176	12	0.068	0.02	
	896872	55383		100.000	

Total unknown % height = 3.060

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000007.d

Date : 30-JAN-2012 19:40

Client ID:

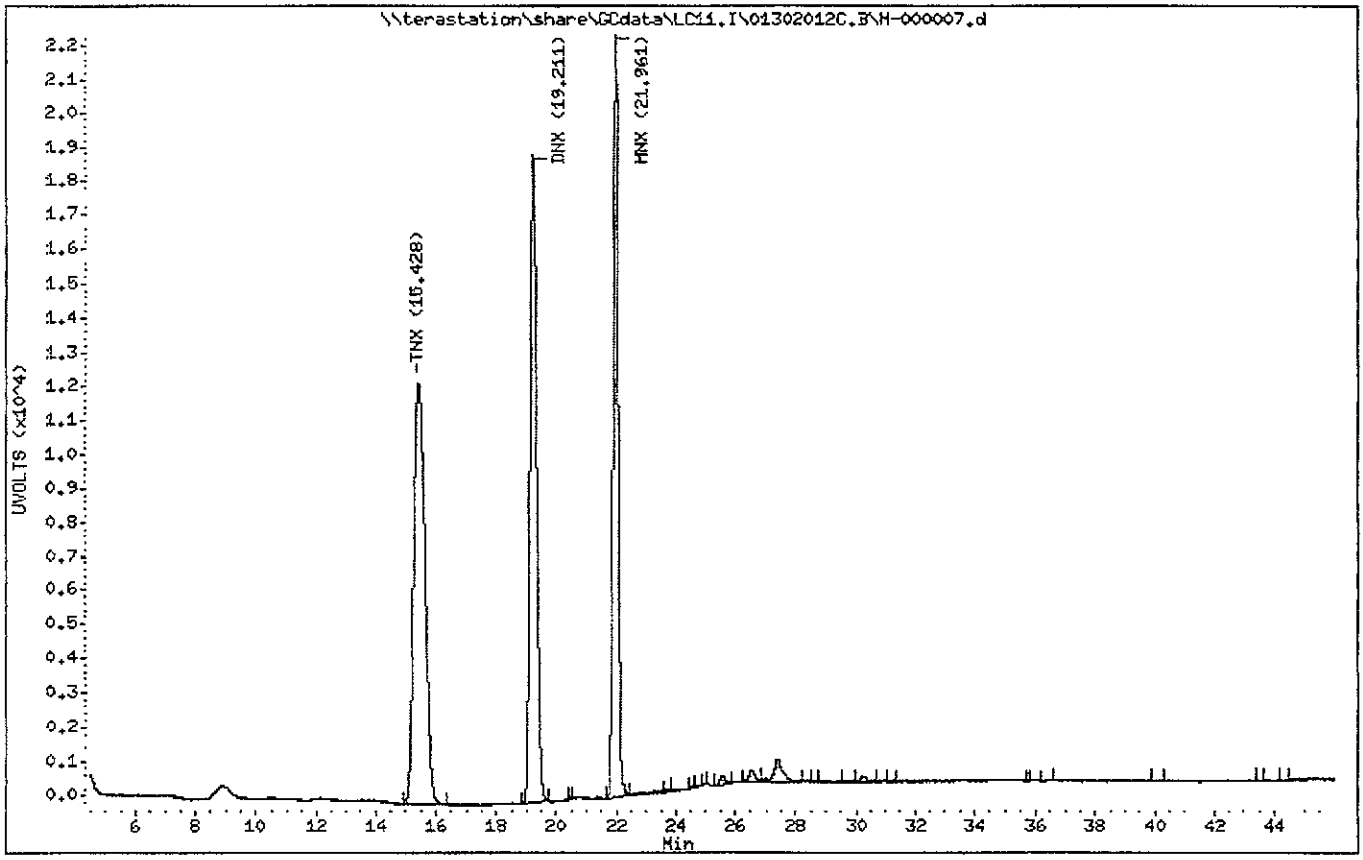
Instrument: LC11.I

Sample Info: STD_06 E110811I METAB ICAL:1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d\M-00000
Lab Smp Id: STD_06 E110811I MET
Inj Date : 30-JAN-2012 19:40
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB ICAL;1
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.834	160	30	0.188	3.12	
25.938	158	58	0.368	6.03	
30.284	6096	418	0.069	43.55	
31.958	150	20	0.133	2.08	
32.648	679	44	0.065	4.57	
34.911	150	31	0.206	3.22	
38.061	572	45	0.079	4.68	
38.761	1045	25	0.024	2.60	
39.578	302	33	0.109	3.43	
40.148	1437	62	0.043	6.45	
41.884	625	38	0.061	3.95	
42.474	1138	61	0.054	6.34	
44.511	993	28	0.028	2.91	
44.854	419	28	0.067	2.91	
45.534	1344	40	0.030	4.16	
	15269	961		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d\M-000007.d

Date : 30-JAN-2012 19:40

Client ID:

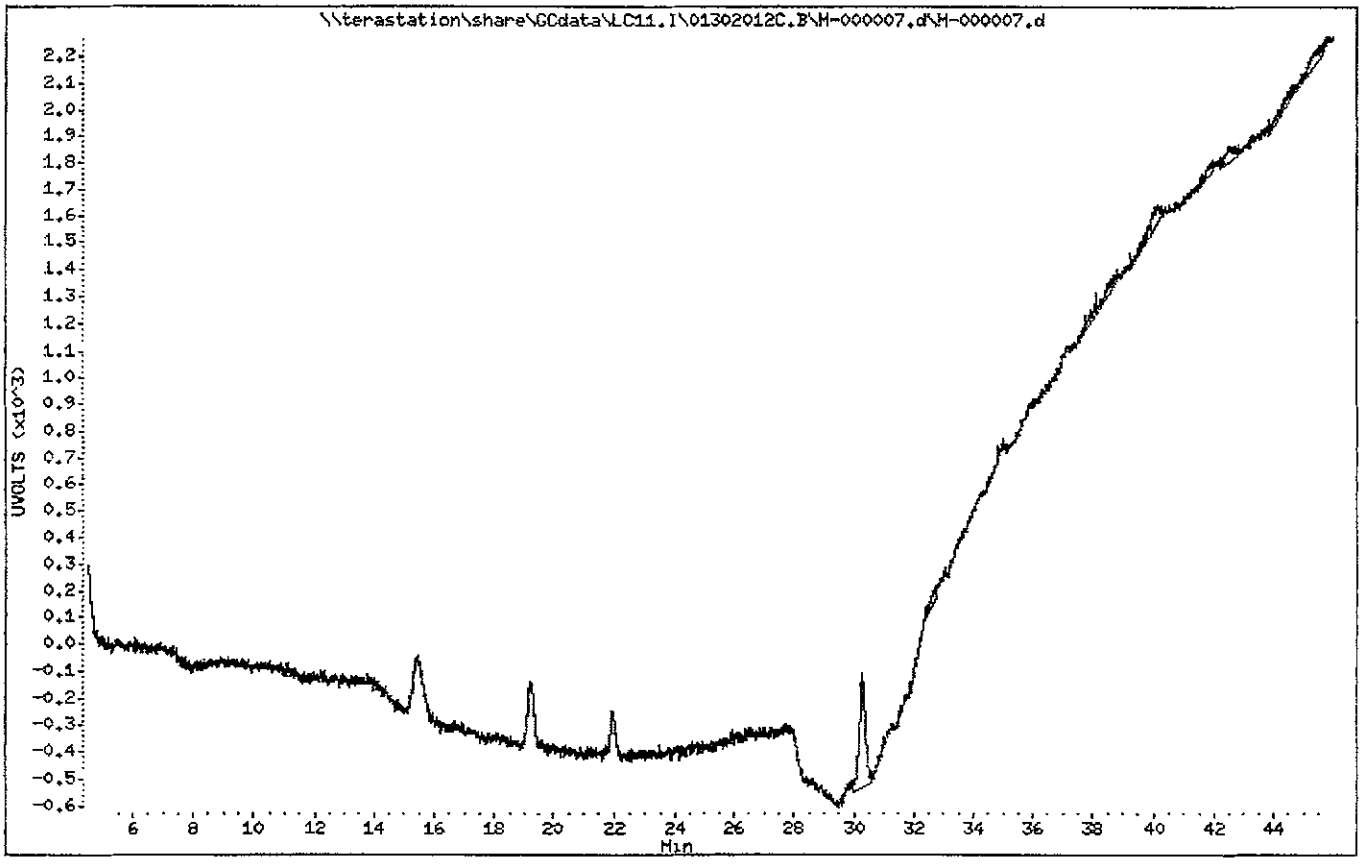
Instrument: LC11.I

Sample Info: STD_06 E110811I METAB ICAL;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary -- ICAL RFs

Sample : STD_07 E110811J METAB ICAL
Analyzed : 30-JAN-2012 20:37
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000008.d
Sublist: 2_CALMET

	Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	500	15.400	0.000	28781	57.56200				
2	DNX	500	19.193	0.000	44826	89.65200				
3	MNX	500	21.946	0.000	53602	107.2040				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:13

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Lab Smp Id: STD_07 E110811J MET
Inj Date : 30-JAN-2012 20:37
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 E110811J METAB ICAL ;1
Misc Info : ;7;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:12 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 20:37 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.103	2156	143	0.066	0.10	
15.400	801367	28781	0.036	21.89	2 TNX
19.193	741572	44826	0.060	34.09	3 DNX
20.500	111	14	0.126	0.01	
21.946	634539	53602	0.084	40.87	5 MNX
23.743	1751	176	0.101	0.13	
24.833	154	51	0.331	0.03	
25.046	2882	221	0.077	0.16	
25.553	8377	618	0.074	0.47	
26.330	172	31	0.180	0.02	
26.540	8873	757	0.085	0.57	
27.376	25786	1525	0.059	1.15	
29.206	142	30	0.212	0.02	
29.886	333	49	0.147	0.03	
30.263	5546	378	0.068	0.28	
31.570	372	40	0.107	0.03	
32.556	246	25	0.102	0.01	
33.766	148	25	0.169	0.01	
37.930	429	33	0.077	0.02	
38.533	293	28	0.095	0.02	
39.669	120	27	0.225	0.02	
40.496	538	30	0.056	0.02	
42.540	259	40	0.154	0.03	
44.686	231	30	0.130	0.02	
	2236400	131480		100.000	

Total unknown % height = 3.150

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000008.d

Date : 30-JAN-2012 20:37

Client ID:

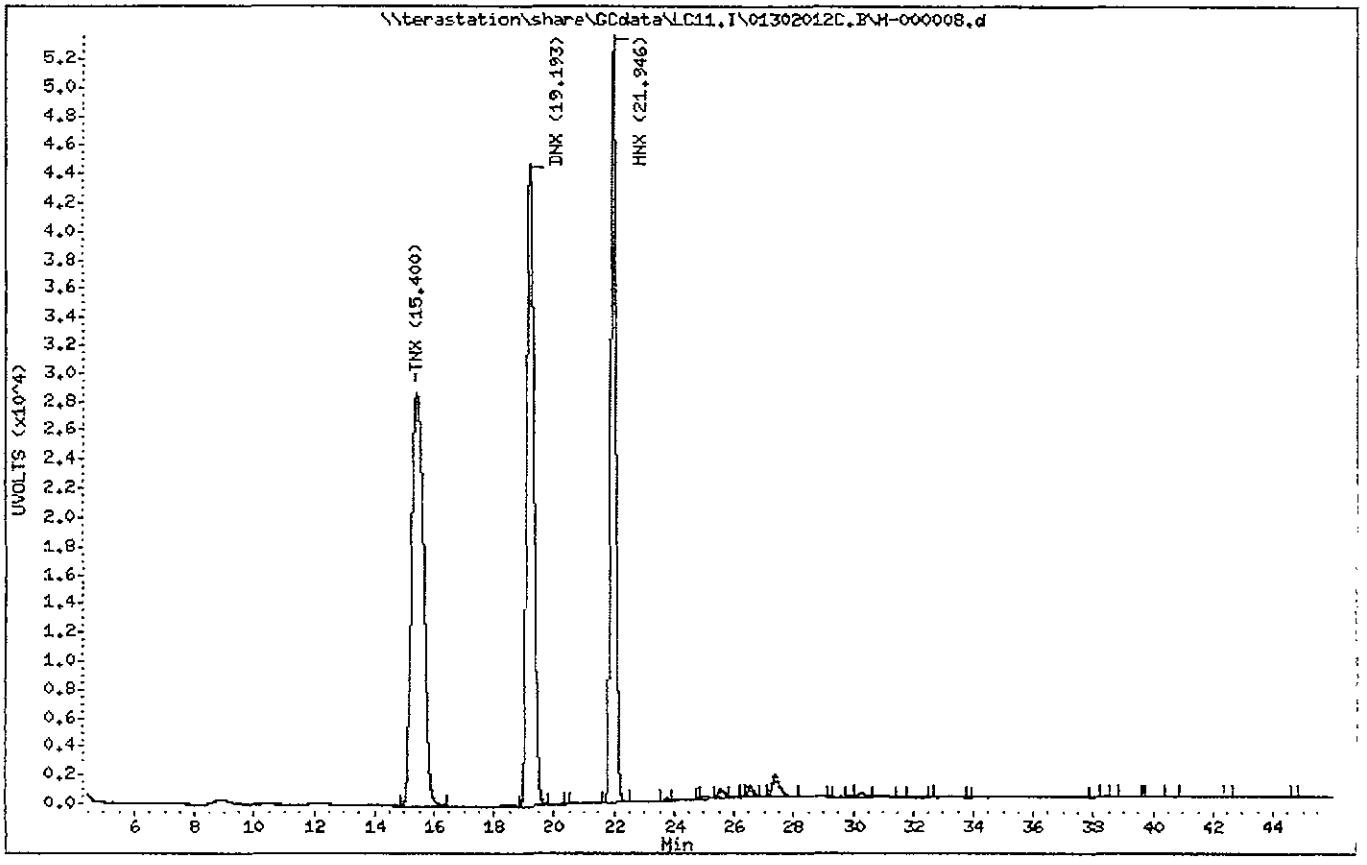
Instrument: LC11.i

Sample Info: STD_07 E110811J HETAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d\M-00000
Lab Smp Id: STD_07 E110811J MET
Inj Date : 30-JAN-2012 20:37
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 E110811J METAB ICAL ;1
Misc Info : ;7;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.956	4829	387	0.080	18.51	
23.483	249	34	0.136	1.62	
24.383	204	48	0.236	2.29	
24.900	175	35	0.200	1.67	
30.273	13750	981	0.071	47.03	
32.666	152	34	0.224	1.62	
35.266	215	33	0.153	1.57	
36.643	995	74	0.074	3.54	
38.553	349	47	0.135	2.24	
38.863	404	35	0.087	1.67	
39.446	338	25	0.074	1.19	
40.070	4068	149	0.037	7.12	
40.786	1351	49	0.036	2.34	
41.896	887	41	0.046	1.96	
43.360	663	42	0.063	2.00	
44.693	1279	41	0.032	1.96	
45.413	952	35	0.037	1.67	
	30861	2090		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d\M-000008.d

Date : 30-JAN-2012 20:37

Client ID:

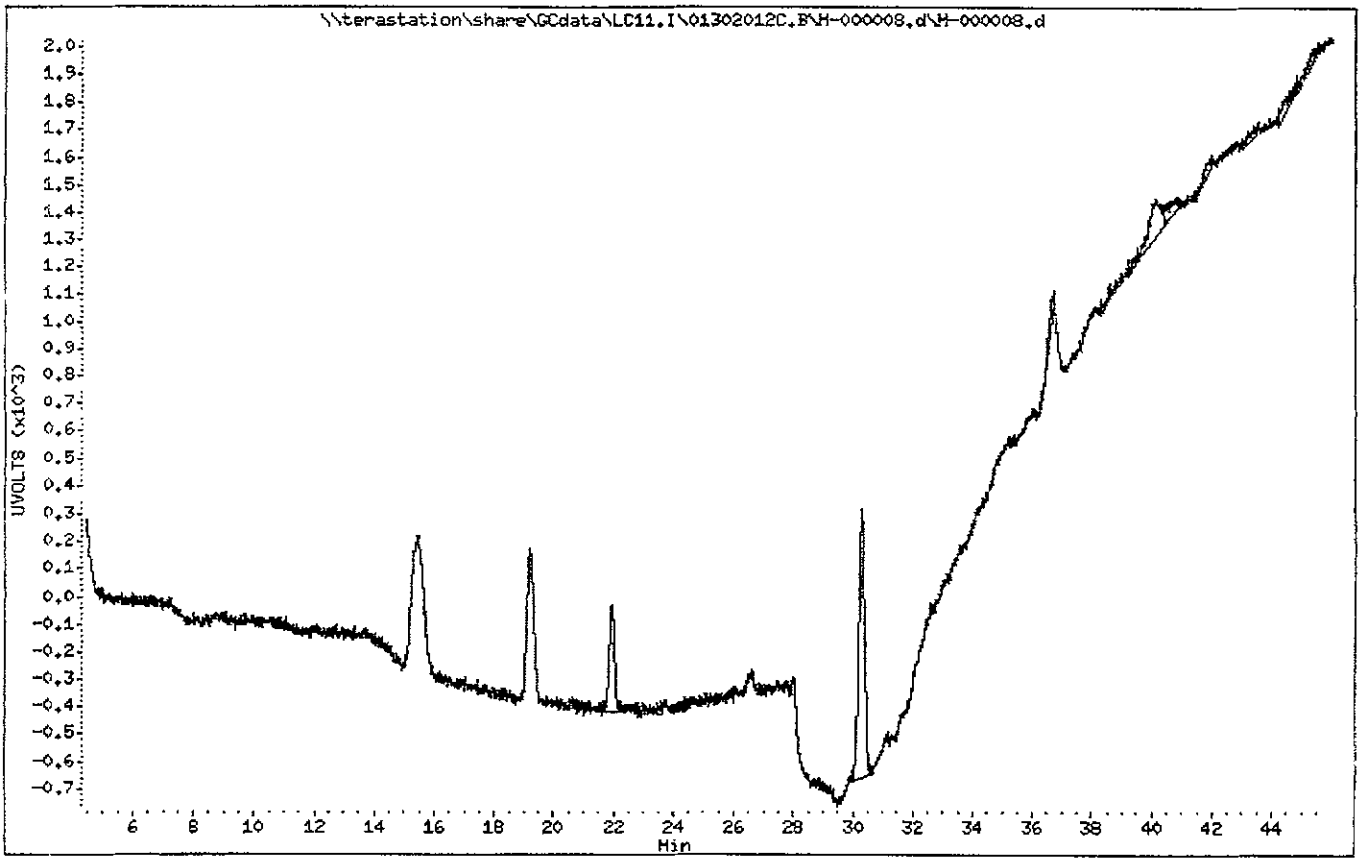
Instrument: LC11.I

Sample Info: STD_07 E110811J METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_08 E110811K METAB ICAL
Analyzed : 30-JAN-2012 21:34
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000009.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	1000	15.422	0.000	62906	62.90600				
2	DNX	1000	19.208	0.000	97071	97.07100				
3	MNX	1000	21.962	0.000	113126	113.1260				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:13

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d
Lab Smp Id: STD_08 E110811K MET
Inj Date : 30-JAN-2012 21:34
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 E110811K METAB ICAL ;1
Misc Info : ;8;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:13 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.422	1606269	62906	0.039	22.36	2 TNX
18.135	94	24	0.255	0.00	
19.208	1481175	97071	0.066	34.50	3 DNX
20.605	1492	115	0.077	0.04	
21.962	1265641	113126	0.089	40.35	5 MNX
23.742	3102	342	0.110	0.12	
24.108	92	24	0.261	0.00	
25.055	5138	446	0.087	0.15	
25.565	16612	1254	0.075	0.44	
26.268	127	21	0.165	0.00	
26.548	19397	1615	0.083	0.57	
27.398	52662	3229	0.061	1.14	
30.285	10849	760	0.070	0.27	
30.868	125	27	0.216	0.00	
31.632	699	55	0.079	0.01	
33.132	104	25	0.241	0.00	
33.462	599	38	0.063	0.01	
35.112	1292	75	0.058	0.02	
36.382	137	35	0.255	0.01	
36.785	203	22	0.108	0.00	
38.105	226	35	0.155	0.01	
38.935	134	19	0.142	0.00	
39.588	77	24	0.310	0.00	
40.965	265	25	0.094	0.00	
44.825	96	18	0.188	0.00	
	4466608	281331		100.000	

Total unknown % height = 2.790

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000009.d

Date : 30-JAN-2012 21:34

Client ID:

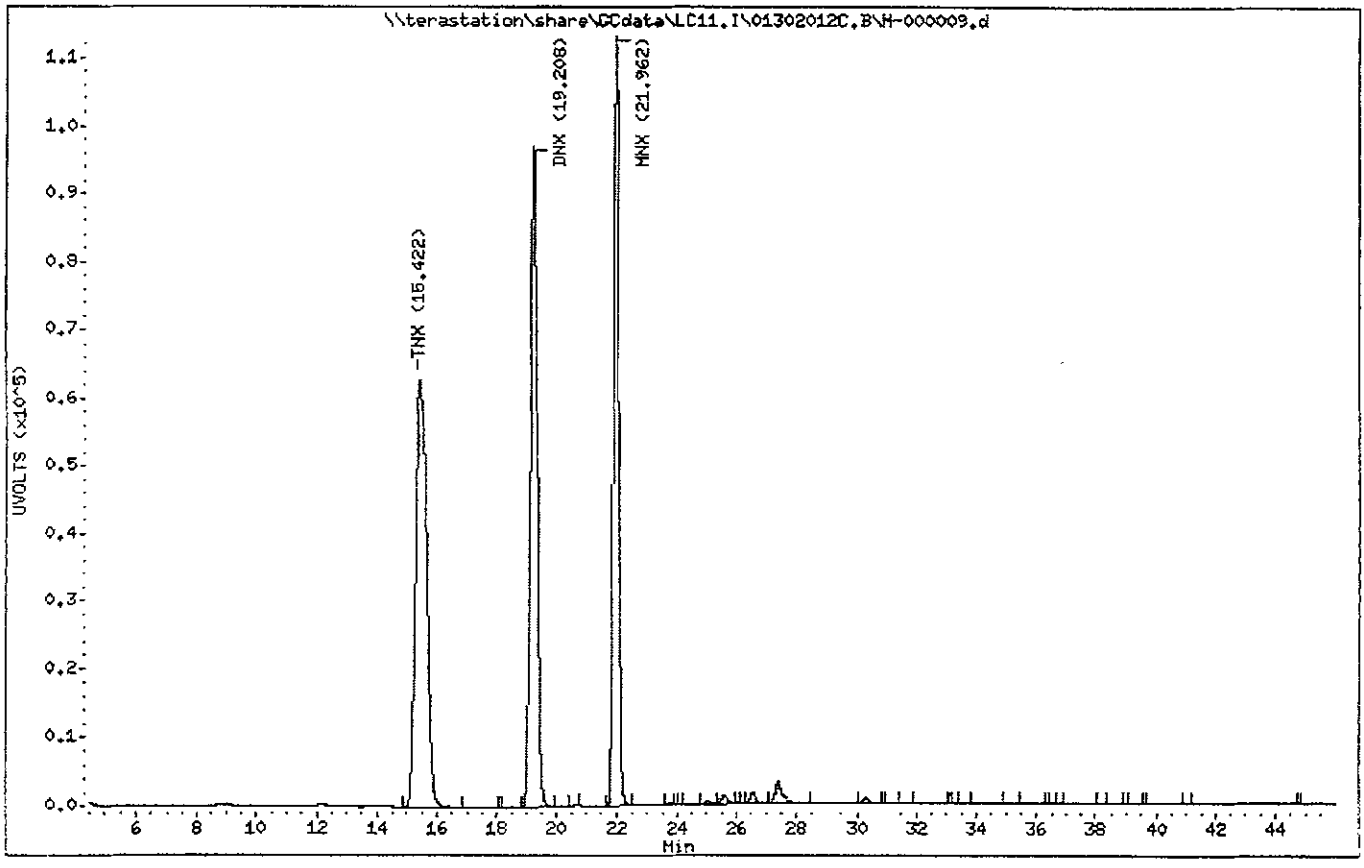
Instrument: LC11.I

Sample Info: STD_08 E110811K METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d\M-00000
Lab Smp Id: STD_08 E110811K MET
Inj Date : 30-JAN-2012 21:34
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 E110811K METAB ICAL ;1
Misc Info : ;8;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.965	9029	797	0.088	21.47	
26.548	1546	165	0.107	4.44	
30.288	28461	2044	0.072	55.15	
31.632	403	57	0.141	1.53	
32.058	165	22	0.133	0.59	
33.498	505	52	0.103	1.40	
35.108	343	35	0.102	0.94	
39.272	346	34	0.098	0.91	
40.075	6063	214	0.035	5.76	
40.642	571	54	0.095	1.45	
41.892	2071	99	0.048	2.66	
42.548	1065	56	0.053	1.50	
44.328	535	45	0.084	1.21	
45.605	1968	37	0.019	0.99	
	53068	3711		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d\M-000009.d

Date : 30-JAN-2012 21:34

Client ID:

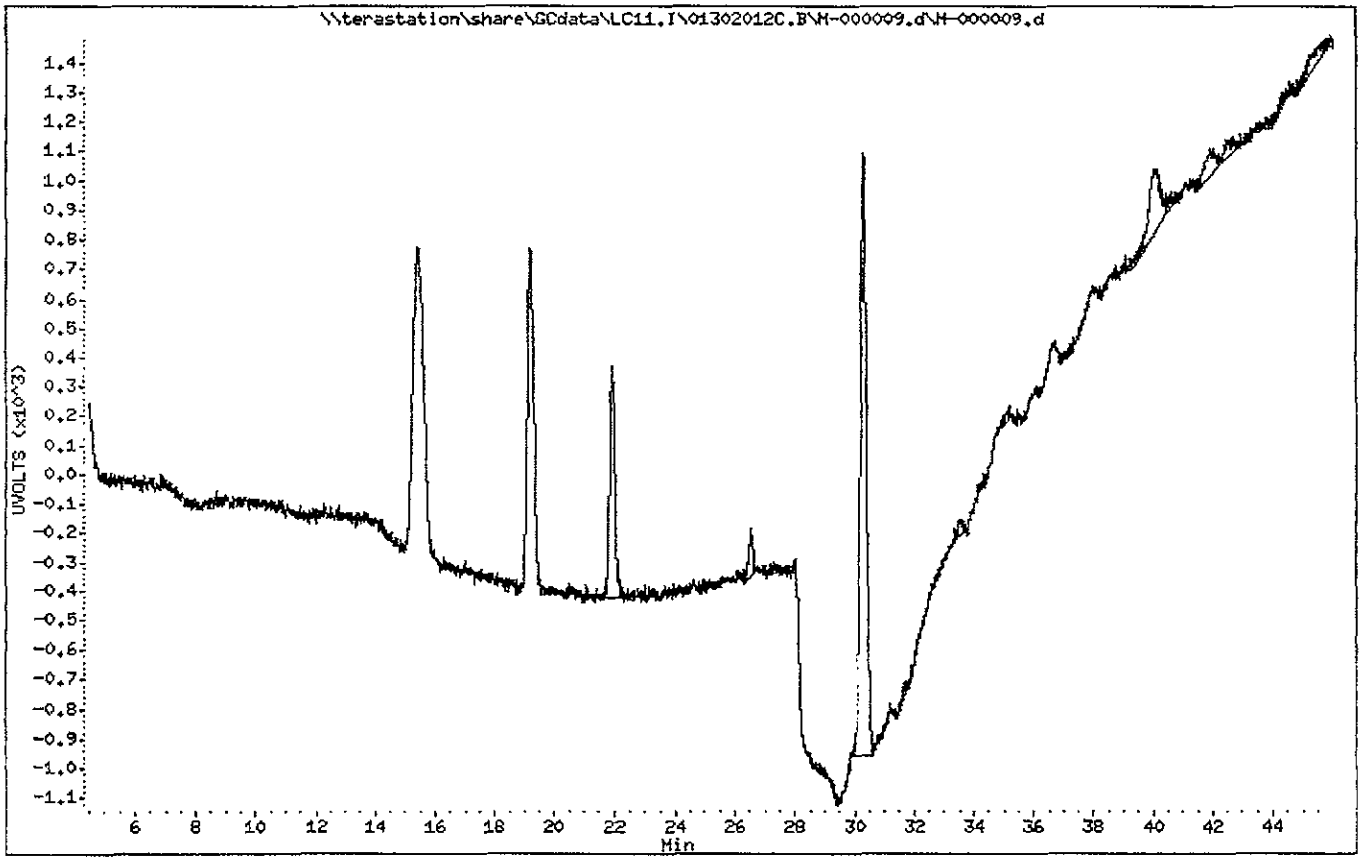
Instrument: LC11.I

Sample Info: STD_OB E110811K METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : Blank
Analyzed : 30-JAN-2012 22:31
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000010.d
Sublist: 2_CALMET

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1 TNX									
2 DNX									
3 MNX									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:26

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 22:31
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:24 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.227	91	24	0.264	4.19	
24.324	78	25	0.322	4.37	
25.997	273	30	0.110	5.24	
26.904	116	38	0.329	6.64	
28.024	484	33	0.068	5.76	
29.480	129	27	0.210	4.72	
29.620	88	18	0.206	3.14	
30.197	76	30	0.394	5.24	
30.600	600	32	0.053	5.59	
31.977	161	37	0.230	6.46	
32.354	217	27	0.124	4.72	
34.660	394	31	0.079	5.41	
35.600	129	27	0.209	4.72	
37.357	286	41	0.144	7.27	
37.670	354	28	0.079	4.89	
38.894	353	31	0.088	5.41	
39.287	300	29	0.097	5.06	
39.480	169	33	0.195	5.76	
40.367	293	31	0.106	5.41	
	4589	572		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000010.d

Date : 30-JAN-2012 22:31

Client ID:

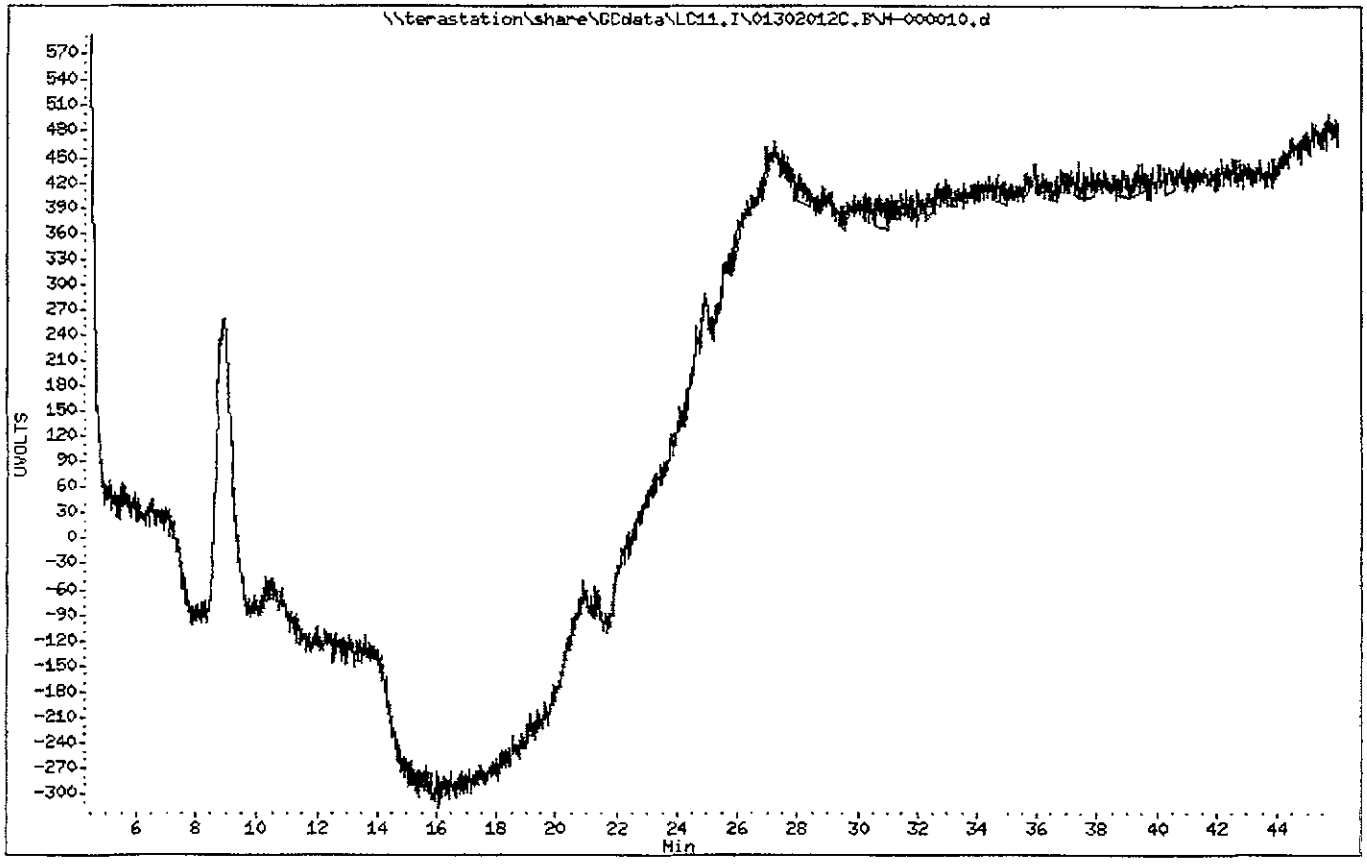
Instrument: LC11.i

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d\M-00001
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 22:31
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.640	197	37	0.188	10.00	
27.650	159	35	0.220	9.45	
30.170	217	32	0.147	8.64	
33.494	264	30	0.114	8.10	
35.907	159	36	0.226	9.72	
38.584	353	29	0.082	7.83	
39.450	743	11	0.015	2.97	
40.084	503	33	0.066	8.91	
41.624	271	37	0.137	10.00	
44.400	508	18	0.035	4.86	
44.944	304	31	0.102	8.37	
45.537	293	41	0.140	11.15	
	3971	370		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d\M-000010.d

Date : 30-JAN-2012 22:31

Client ID:

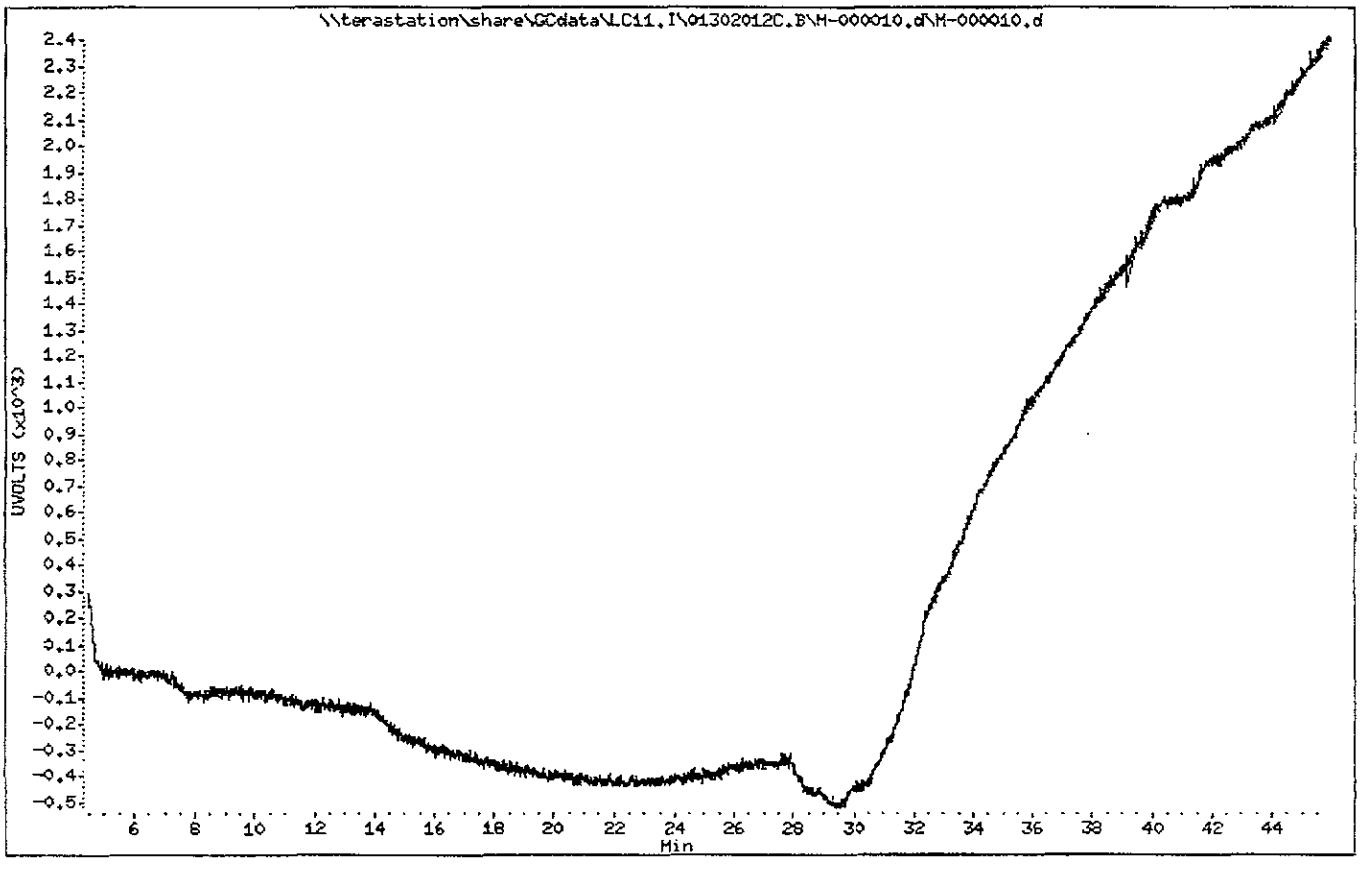
Instrument: LC11.I

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : ICV E110811E METAB
Analyzed : 30-JAN-2012 23:28
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000011.d
Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.418	0.000	12346	207.0	3.5					
2	DNX	200	19.211	0.000	17488	190.6	-4.7					
3	MNX	200	21.968	0.000	20795	192.0	-4.0					

ICV passes ±15%
RB 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:27

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d
Lab Smp Id: ICV E110811E METAB
Inj Date : 30-JAN-2012 23:28
Operator : SV Inst ID: LC11.i
Smp Info : ICV E110811E METAB ;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:27 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.088	2273	136	0.060	0.26	
15.418	328420	12346	0.038	24.12	2 TNX
18.494	117	24	0.205	0.04	
19.211	279178	17488	0.063	34.17	3 DNX
21.968	242531	20795	0.086	40.69	5 MNX
22.671	108	24	0.222	0.04	
23.741	467	63	0.135	0.12	
25.681	872	60	0.069	0.11	
26.308	325	31	0.095	0.06	
26.548	97	27	0.278	0.05	
31.198	168	23	0.137	0.04	
32.301	200	32	0.160	0.06	
36.594	171	22	0.129	0.04	
36.864	160	31	0.194	0.06	
37.148	137	26	0.190	0.05	
37.374	91	26	0.285	0.05	
44.311	223	24	0.108	0.04	
	855538	51178		100.000	

Total unknown % height = 1.020

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d

Date : 30-JAN-2012 23:28

Client ID:

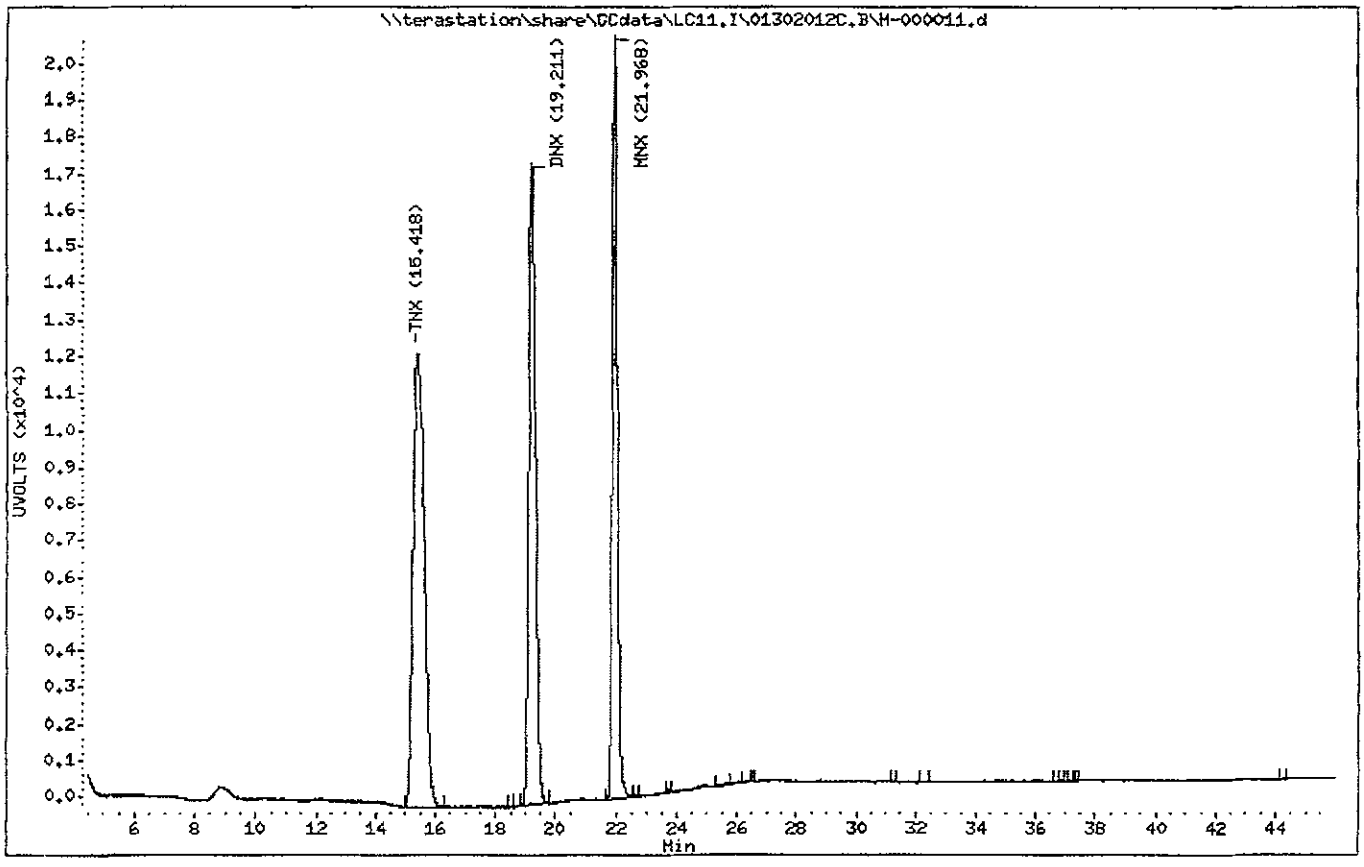
Instrument: LC11.i

Sample Info: ICV E110B11E METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d\M-00001
Lab Smp Id: ICV E110811E METAB
Inj Date : 30-JAN-2012 23:28
Operator : SV Inst ID: LC11.i
Smp Info : ICV E110811E METAB ;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.571	160	33	0.206	6.12	
34.788	168	31	0.184	5.75	
34.921	183	34	0.186	6.30	
36.524	179	24	0.134	4.45	
38.671	434	43	0.099	7.97	
40.091	521	39	0.075	7.23	
40.764	339	33	0.097	6.12	
42.008	1328	27	0.020	5.00	
42.368	168	37	0.221	6.86	
43.587	1059	44	0.042	8.16	
44.948	546	34	0.062	6.30	
45.818	580	160	0.276	29.74	
	5663	539		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d\M-000011.d Page 2

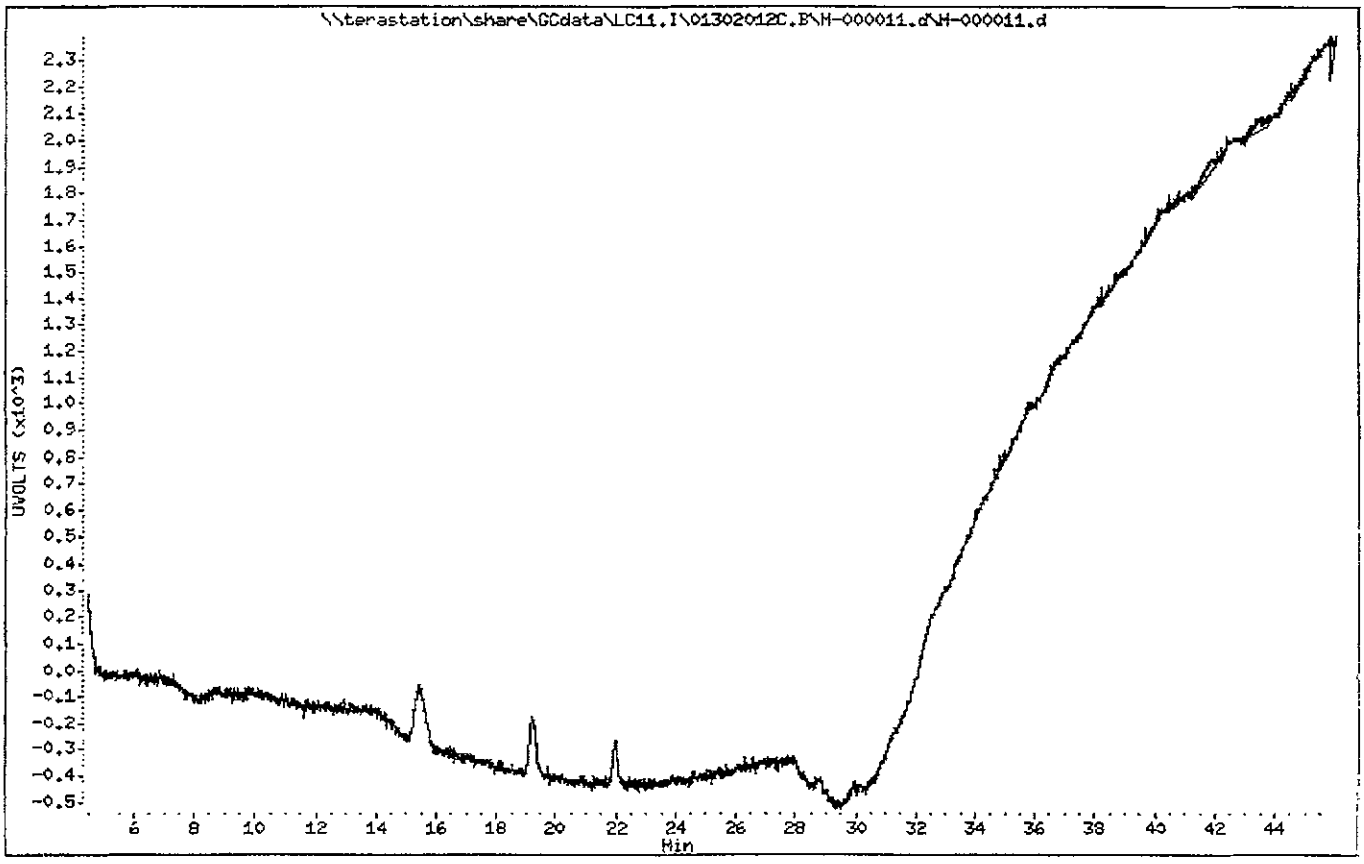
Date : 30-JAN-2012 23:28

Client ID: Instrument: LC11.i

Sample Info: ICV E110811E METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : MRL E110811F METAB
Analyzed : 31-JAN-2012 00:25
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000012.d
Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	20.0	15.403	0.000	1059	17.76	-11					
2	DNX	20.0	19.213	0.000	1629	17.75	-11					
3	MNX	20.0	21.963	0.000	1938	17.90	-11					

MRL passes S:N > 5:1

RM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:28

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d
Lab Smp Id: MRL E110811F METAB
Inj Date : 31-JAN-2012 00:25
Operator : SV Inst ID: LC11.i
Smp Info : MRL E110811F METAB ;2
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:27 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.403	28385	1059	0.037	20.78	2 TNX
19.213	26083	1629	0.062	31.97	3 DNX
21.707	58	21	0.362	0.41	
21.963	22564	1938	0.086	38.12	5 MNX
24.500	65	15	0.231	0.29	
24.830	60	25	0.419	0.49	
25.603	418	30	0.072	0.58	
26.057	174	17	0.097	0.33	
26.573	287	39	0.136	0.76	
27.217	179	42	0.235	0.82	
27.390	1150	71	0.062	1.39	
28.043	168	26	0.154	0.51	
29.583	63	20	0.319	0.39	
30.643	99	23	0.233	0.45	
31.910	90	32	0.356	0.62	
32.573	177	21	0.119	0.41	
39.537	430	27	0.063	0.52	
39.997	152	31	0.204	0.60	
44.663	580	29	0.050	0.56	
	81181	5095		100.000	

Total unknown % height = 9.130

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d

Date : 31-JAN-2012 00:25

Client ID:

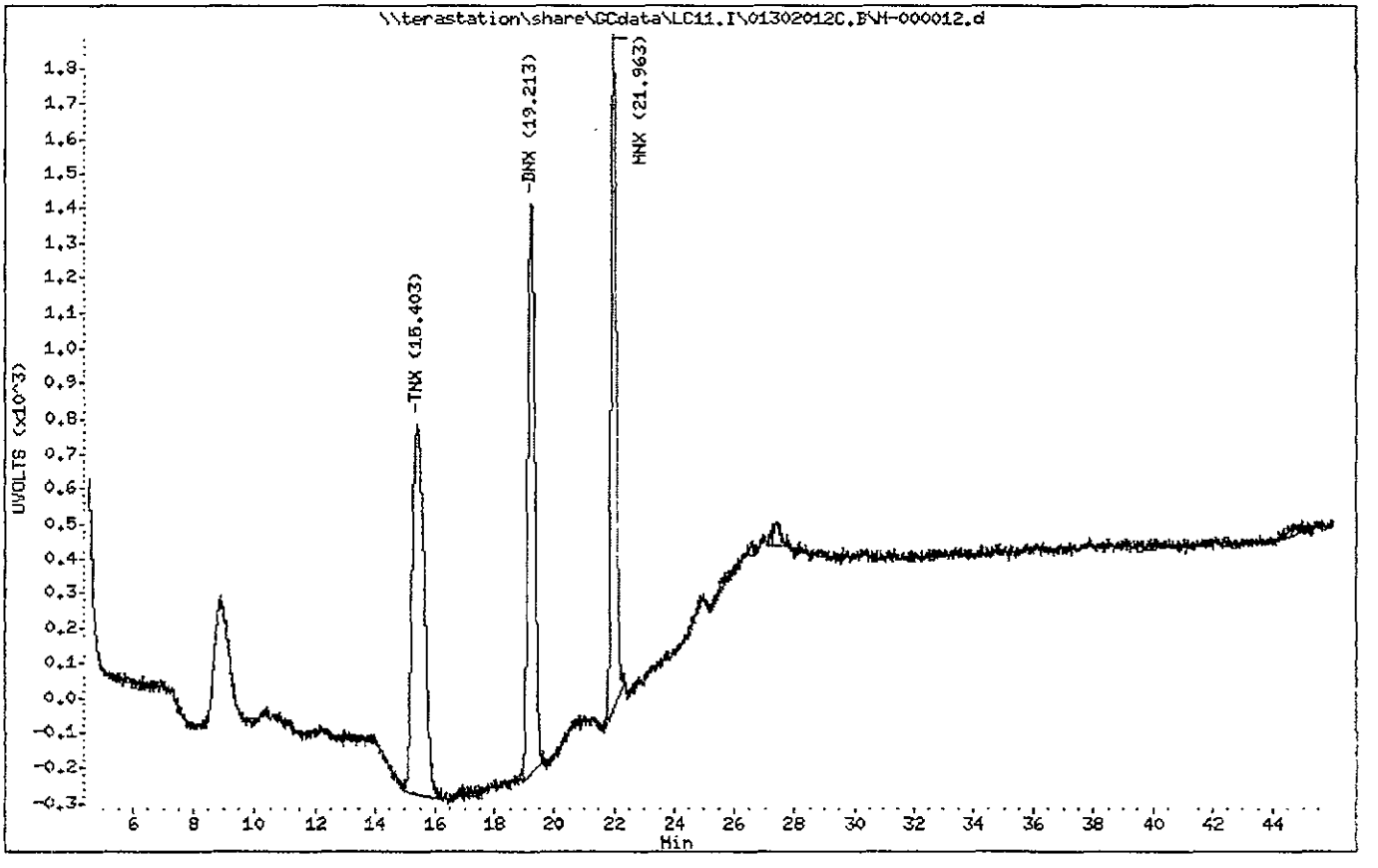
Instrument: LC11.i

Sample Info: MRL E110811F METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d\M-00001
Lab Smp Id: MRL E110811F METAB
Inj Date : 31-JAN-2012 00:25
Operator : SV Inst ID: LC11.i
Smp Info : MRL E110811F METAB ;2
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
30.860	208	37	0.178	8.56	
31.603	151	34	0.226	7.87	
32.103	163	28	0.172	6.48	
36.867	163	40	0.246	9.25	
38.617	725	45	0.062	10.41	
38.893	186	35	0.189	8.10	
39.507	658	29	0.044	6.71	
39.763	214	22	0.103	5.09	
40.110	611	39	0.064	9.02	
41.837	992	50	0.050	11.63	
42.367	185	40	0.216	9.25	
44.743	640	33	0.052	7.63	
	4893	432		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d\M-000012.d

Date : 31-JAN-2012 00:25

Client ID:

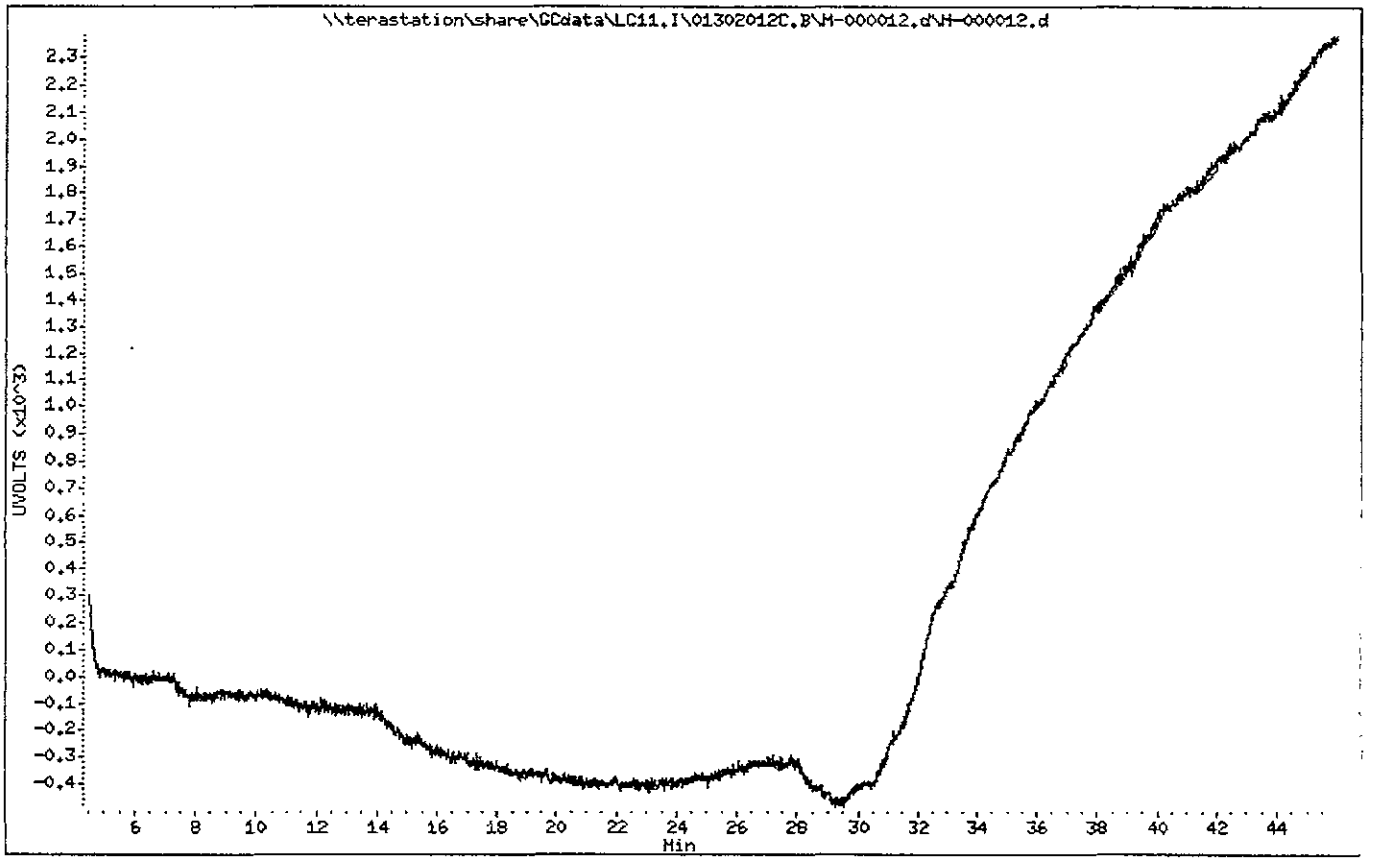
Instrument: LC11.i

Sample Info: MRL E110811F METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC12 ICAL ID: 02022012 Method: 8330 A/B

Analytes Included in curve (with dates): 8330, NG+PETN (1/26/12)
MNX, TNX + DNX (2/1/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/2/12

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

(A)

INITIAL CALIBRATION DATA

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
2 TNX	+++++	+++++	52.90000	58.92000	60.55000	60.25000		
	57.23800	60.81300					58.44517	5.174
3 DNX	+++++	+++++	55.15000	60.76000	62.35000	62.35000		
	59.78400	63.11500					60.58483	4.832
4 HMX	62.00000	62.10000	61.35000	60.74000	62.33000	61.66500		
	60.03200	55.64500					60.73275	3.610
5 MNX	+++++	+++++	53.20000	57.96000	59.90000	59.69000		
	57.66200	60.08100					58.08217	4.484
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	64.60000	54.80000	51.75000	48.88000	48.64000	46.98500		
	44.60000	38.86800					49.89037	15.236
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
10 1,3,5-Trinitrobenzene	80.40000	80.50000	77.70000	77.18000	78.17000	76.84000		
	74.02600	65.39500					76.27638	6.366
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	108	106	103	103	105	102		
	95.56400	79.85200					100	9.103
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	93.60000	87.40000	85.20000	83.24000	84.29000	81.91000		
	77.31600	65.28900					82.28063	10.078
16 TETRYL	121	121	117	116	120	119		
	118	115					118	2.039
17 Nitrobenzene	52.80000	48.60000	44.50000	47.62000	49.01000	46.80000		
	43.06200	34.72200					45.88925	11.744
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	80.00000	83.00000	79.65000	79.16000	81.68000	81.20500		
	79.32400	73.81800					79.72962	3.425
20 4-AM-2,6-DNT	65.60000	64.10000	62.15000	61.96000	63.29000	62.27500		
	59.92200	52.89900					61.52450	6.279

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
21 2-AM-4,6-DNT	78.40000	75.50000	74.10000	72.50000	73.57000	72.34000		
	69.19600	60.42600					72.00400	7.466
22 2,6-Dinitrotoluene	62.80000	56.50000	54.05000	53.62000	53.84000	52.70000		
	50.56600	44.27800					53.54425	9.735
23 2,4-Dinitrotoluene	98.40000	92.70000	89.15000	88.58000	89.64000	87.80000		
	84.18400	73.56800					88.00275	8.120
24 2-Nitrotoluene	33.10000	30.45000	27.77500	29.83000	30.51000	29.68500		
	28.13900	24.06300					29.19400	9.032
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++ <-
26 3-Nitrotoluene	46.80000	40.20000	36.35000	38.26000	38.90000	37.78000		
	36.10200	32.30200					38.33675	10.849
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 1 3,4-Dinitrotoluene	48.00000	46.80000	45.45000	46.42000	49.00000	48.00500		
	46.26000	41.31400					46.40613	5.076

TestAmerica West Sacramento

(B)

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
2 TNX	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 DNX	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 HMX	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 MNX	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 EGDN	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
7 RDX	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
8 4-Nitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
9 Picric ACID	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
15 3,5-Dinitroaniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
16 TETRYL	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
18 Nitroglycerin	+++++	+++++	71.30000	78.16000	85.12000	86.04000			
	85.00600	81.58200					81.20133	6.981	
19 2,4,6-Trinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 4-AM-2,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
24 2-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
26 3-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
27 PETN	+++++	+++++	138	141	146	147		
	146	147					144	2.624
$ 1 3,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Report Date: 02-Feb-2012 11:03

(A)

Calibration History

Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Start Cal Date: 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Last Cal Level: 3
Last Cal Type : Initial Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 17:51	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 18:56	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Cal Level: 3 , Cal Amount: 20.00000		
01-FEB-2012 17:43	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
26-JAN-2012 20:02	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d
Cal Level: 4 , Cal Amount: 50.00000		
01-FEB-2012 18:48	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d
Cal Level: 5 , Cal Amount: 100.00000		
01-FEB-2012 19:54	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
26-JAN-2012 22:13	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d
Cal Level: 6 , Cal Amount: 200.00000		
01-FEB-2012 20:59	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
26-JAN-2012 23:19	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d

Cal Level: 7 , Cal Amount: 500.00000		
01-FEB-2012 22:04	2_CALMET	
\\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d		
27-JAN-2012 00:24	1_CAL	
\\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d		

Cal Level: 8 , Cal Amount: 1000.00000		
01-FEB-2012 23:10	2_CALMET	
\\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d		
27-JAN-2012 01:30	1_CAL	
\\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d		

Continuing Calibration
Ccal Level Mode: BY SAMPLE

02-FEB-2012 02:26	2_CALMET	
\\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d		
01-FEB-2012 19:54	2_CALMET	
\\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d		
02-FEB-2012 03:32	1_CAL	
\\Terastation\Share\GCData\LC12.I\02012012.B\C-000013.D		
27-JAN-2012 04:46	1_CAL	
\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d		
27-JAN-2012 03:41	1_CAL	
\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d		
26-JAN-2012 22:13	1_CAL	
\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d		

Report Date: 02-Feb-2012 10:44

5

Calibration History

Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.M
Start Cal Date: 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 17:51	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 18:56	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Cal Level: 3 , Cal Amount: 20.00000		
26-JAN-2012 20:02	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Cal Level: 4 , Cal Amount: 50.00000		
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Cal Level: 5 , Cal Amount: 100.00000		
26-JAN-2012 22:13	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Cal Level: 6 , Cal Amount: 200.00000		
26-JAN-2012 23:19	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Cal Level: 7 , Cal Amount: 500.00000		
27-JAN-2012 00:24	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Cal Level: 8 , Cal Amount: 1000.00000		

B

27-JAN-2012 01:30	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

02-FEB-2012 03:32	1_CAL	\\Terastation\Share\GCData\LC12.I\02012012.B\C-000013.D\C-000013.D
01-FEB-2012 14:24	1_CAL	\\Terastation\Share\GCData\LC12.I\02012012.B\C-000001.D\C-000001.D
27-JAN-2012 04:46	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d
27-JAN-2012 03:41	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d
27-JAN-2012 04:46	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d
27-JAN-2012 03:41	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d

TestAmerica West Sacramento

Calibration Standard Level Reference Sheet

8330, 8330A, 8330B

	Concentration (ppb)							
Analyte	Level 1	2	3	4	5	6	7	8
3,4-Dinitrotoluene (surr)		10	20	50	100	200	300	500
HMX	5	10	20	50	100	200	500	1000
MNX	5	10	20	50	100	200	500	1000
DNX	5	10	20	50	100	200	500	1000
TNX	5	10	20	50	100	200	500	1000
RDX	5	10	20	50	100	200	500	1000
1,3,5-Trinitrobenzene	5	10	20	50	100	200	500	1000
1,3-Dinitrotoluene	5	10	20	50	100	200	500	1000
3.5-Dinitroaniline	5	10	20	50	100	200	500	1000
TETRYL	5	10	20	50	100	200	500	1000
Nitrobenzene	5	10	20	50	100	200	500	1000
2,4,6-Trinitrotoluene	5	10	20	50	100	200	500	1000
4-Amino-2,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2-Amino-4,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2,6-Dinitrotoluene	5	10	20	50	100	200	500	1000
2,4-Dinitrotoluene	5	10	20	50	100	200	500	1000
2-Nitrotoluene	5	10	20	50	100	200	500	1000
4-Nitrotoluene	5	10	20	50	100	200	500	1000
3-Nitrotoluene	5	10	20	50	100	200	500	1000
Picric Acid			50	100	200	500	1000	2000
Nitroglycerin			20	50	100	200	500	1000
PETN			20	50	100	200	500	1000
EGDN			20	50	100	200	500	1000

Revision Date: 6/24/2010

TestAmerica
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 16:43
Operator : SV

Instrument: LC12
File ID: 01262012C.B/C-000001.d
Sublist: CAL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	Nitrobenzene									
2	1,3-Dinitrobenzene									
3	1,3,5-Trinitrobenz	27.808	0.160	54	0.7080					
4	2-Nitrotoluene	29.028	0.030	38	1.302					
5	3-Nitrotoluene	29 584	0.007	52	1.356					
6	3,5-Dinitroaniline	30.951	-0.010	56	0.6806					
7	RDX	31.474	-0.060	75	1.503					
8	2,4-Dinitrotoluene									
9	2,6-Dinitrotoluene	33.801	0.107	42	0.7844					
10	2-AM-4,6-DNT	35.911	0.163	27	0.3750					
11	4-AM-2,6-DNT									
12	3,4-Dinitrotoluene									
13	2,4,6-Trinitrotolu	40.221	-0.030	32	0.4014					
14	HMX	41.944	-0.037	22	0.3622					
15	TETRYL	46.174	-0.080	67	0.5658					
16	4-Nitrotoluene									
17	EGDN									
18	PETN									
19	Picric ACID									
20	Nitroglycerin									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 01/27/2012 11:18

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 16:43
Operator : SV Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 10:36 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.941	784	35	0.045	1.37	
27.398	889	47	0.053	1.84	
27.808	531	54	0.102	2.12	10 1,3,5-Trinitrobenze
28.048	509	37	0.073	1.45	
28.294	774	48	0.062	1.88	
28.734	455	50	0.110	1.96	
28.861	433	51	0.118	2.00	
29.028	434	38	0.088	1.49	24 2-Nitrotoluene
29.248	232	46	0.198	1.80	
29.378	452	43	0.095	1.68	
29.584	506	52	0.103	2.04	26 3-Nitrotoluene
29.811	421	53	0.126	2.08	
29.954	663	54	0.081	2.12	
30.211	403	47	0.117	1.84	
30.438	594	42	0.071	1.64	
30.774	246	46	0.187	1.80	
30.951	278	56	0.202	2.19	15 3,5-Dinitroaniline
31.074	363	49	0.135	1.92	
31.241	538	56	0.104	2.19	
31.341	446	68	0.152	2.67	
31.474	741	75	0.101	2.94	7 RDX
31.634	1074	75	0.070	2.94	
31.914	448	69	0.154	2.71	
33.114	223	41	0.184	1.61	
33.508	503	41	0.081	1.61	
33.801	244	42	0.172	1.64	22 2,6-Dinitrotoluene
34.278	455	38	0.084	1.49	
35.248	215	28	0.130	1.09	
35.911	392	27	0.069	1.06	21 2-AM-4,6-DNT
36.941	223	14	0.063	0.54	
37.481	274	19	0.069	0.74	
37.808	125	22	0.176	0.86	
38.508	130	32	0.247	1.25	
38.974	230	25	0.109	0.98	
39.211	125	29	0.231	1.13	
39.528	203	21	0.103	0.82	

Data File: C-000001.d
Report Date: 27-Jan-2012 11:17

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.944	331	32	0.097	1.25	
40.221	355	32	0.090	1.25	19 2,4,6-Trinitrotolue
40.471	297	29	0.098	1.13	
40.921	119	20	0.169	0.78	
41.191	179	24	0.134	0.94	
41.944	95	22	0.233	0.86	4 HMX
42.214	524	34	0.065	1.33	
42.531	184	26	0.141	1.02	
43.051	271	31	0.114	1.21	
43.388	167	22	0.132	0.86	
43.751	124	32	0.257	1.25	
44.651	95	34	0.358	1.33	
45.231	602	52	0.086	2.04	
45.518	412	57	0.138	2.23	
46.174	689	67	0.097	2.63	16 TETRYL
47.758	1782	110	0.062	4.32	
48.011	1651	173	0.105	6.79	
48.544	1097	179	0.163	7.29	
	24530	2546		100.000	

Total unknown % height = 81.78

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d

Date : 26-JAN-2012 16:43

Client ID:

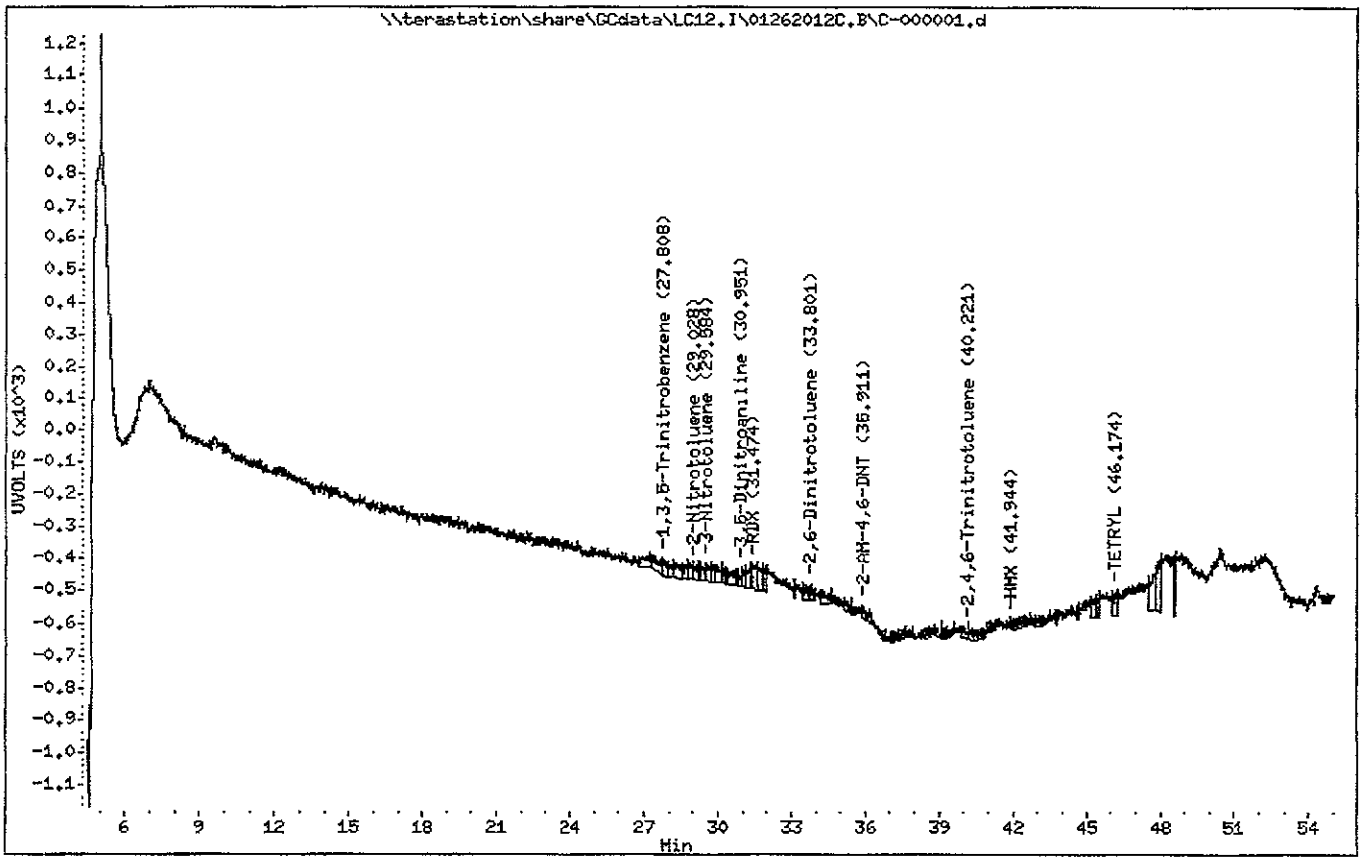
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d\C-000001.d

Page 1

Date : 26-JAN-2012 16:43

Client ID:

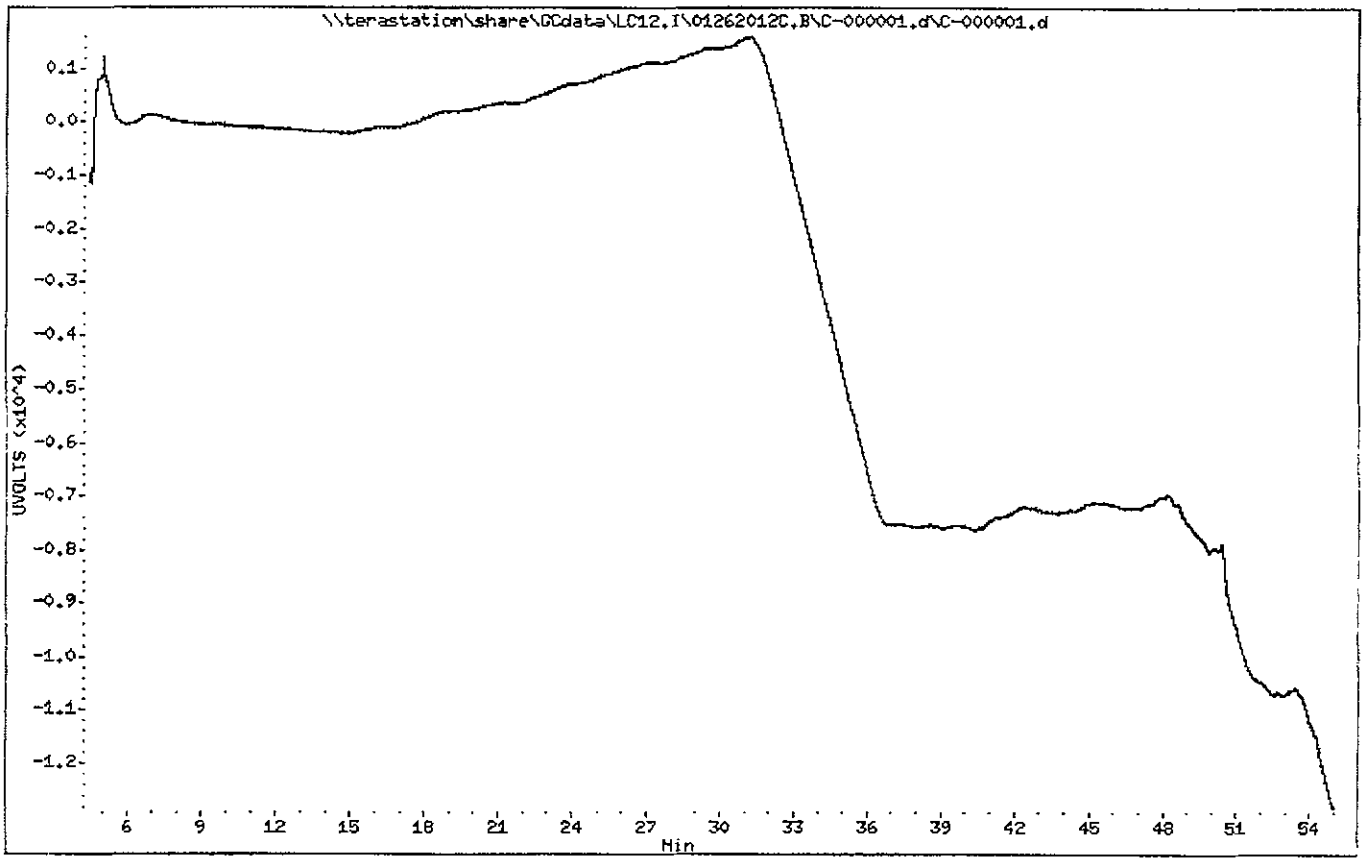
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_01 12GCSV0104 8330 5ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 17:51 File ID: 01262012C.B/C-000002.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	5.00	22.011	0.087	264	52.80000				
2	1,3-Dinitrobenzene	5.00	24.965	0.067	542	108.4000				
3	1,3,5-Trinitrobenz	5.00	27.751	0.104	402	80.40000				
4	2-Nitrotoluene	10.0	29.058	0.070	331	33.10000				
5	3-Nitrotoluene	5.00	29.601	0.024	234	46.80000				
6	3,5-Dinitroaniline	5.00	31.048	0.087	468	93.60000				
7	RDX	5.00	31.615	0.080	323	64.60000				
8	2,4-Dinitrotoluene	5.00	32.751	0.084	492	98.40000				
9	2,6-Dinitrotoluene	5.00	33.751	0.057	314	62.80000				
10	2-AM-4,6-DNT	5.00	35.788	0.040	392	78.40000				
11	4-AM-2,6-DNT	5.00	36.411	0.024	328	65.60000				
12	3,4-Dinitrotoluene	5.00	38.118	-0.016	240	48.00000				
13	2,4,6-Trinitrotolu	5.00	40.308	0.057	400	80.00000				
14	HMX	5.00	42.008	0.027	310	62.00000				
15	TETRYL	5.00	46.255	0.000	607	121.4000				
16	4-Nitrotoluene	5.00								
17	EGDN	5.00								
18	PETN	5.00					52.621	0.024	766	153.2000
19	Picric ACID	10.0								
20	Nitroglycerin	5.00								

Not used

PDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:19

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 17:51
Operator : SV Inst ID: LC12.i
Smp Info : STD_01 12GCSV0104 8330 5ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:18 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.011	7378	264	0.036	4.18	17 Nitrobenzene
24.965	15899	542	0.034	8.60	13 1,3-Dinitrobenzene
27.198	407	39	0.096	0.61	
27.751	12454	402	0.032	6.37	10 1,3,5-Trinitrobenze
29.068	9489	331	0.035	5.25	24 2-Nitrotoluene
29.601	6352	234	0.037	3.71	26 3-Nitrotoluene
31.048	12280	468	0.038	7.42	15 3,5-Dinitroaniline
31.615	9449	323	0.034	5.12	7 RDX
32.751	14568	492	0.034	7.80	23 2,4-Dinitrotoluene
33.751	9691	314	0.032	4.98	22 2,6-Dinitrotoluene
35.358	202	38	0.188	0.60	
35.788	9813	392	0.040	6.22	21 2-AM-4,6-DNT
36.411	8534	328	0.038	5.20	20 4-AM-2,6-DNT
37.701	81	37	0.459	0.58	
38.118	5204	240	0.046	3.80	$ 1 3,4-Dinitrotoluene
38.771	51	18	0.352	0.28	
39.868	204	29	0.142	0.46	
40.308	9386	400	0.043	6.34	19 2,4,6-Trinitrotolue
41.725	168	30	0.178	0.47	
42.008	4691	310	0.066	4.91	4 HMX
42.978	84	18	0.214	0.28	
43.295	269	26	0.097	0.41	
44.811	197	24	0.122	0.38	
45.151	892	43	0.048	0.68	
46.255	8742	607	0.069	9.77	16 TETRYL
47.068	447	50	0.112	0.79	
47.491	925	60	0.065	0.95	
48.785	1325	105	0.079	1.66	
48.951	1216	138	0.113	2.18	
	150401	6302		100.000	

Total unknown % height = 10.33

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d

Date : 26-JAN-2012 17:51

Client ID:

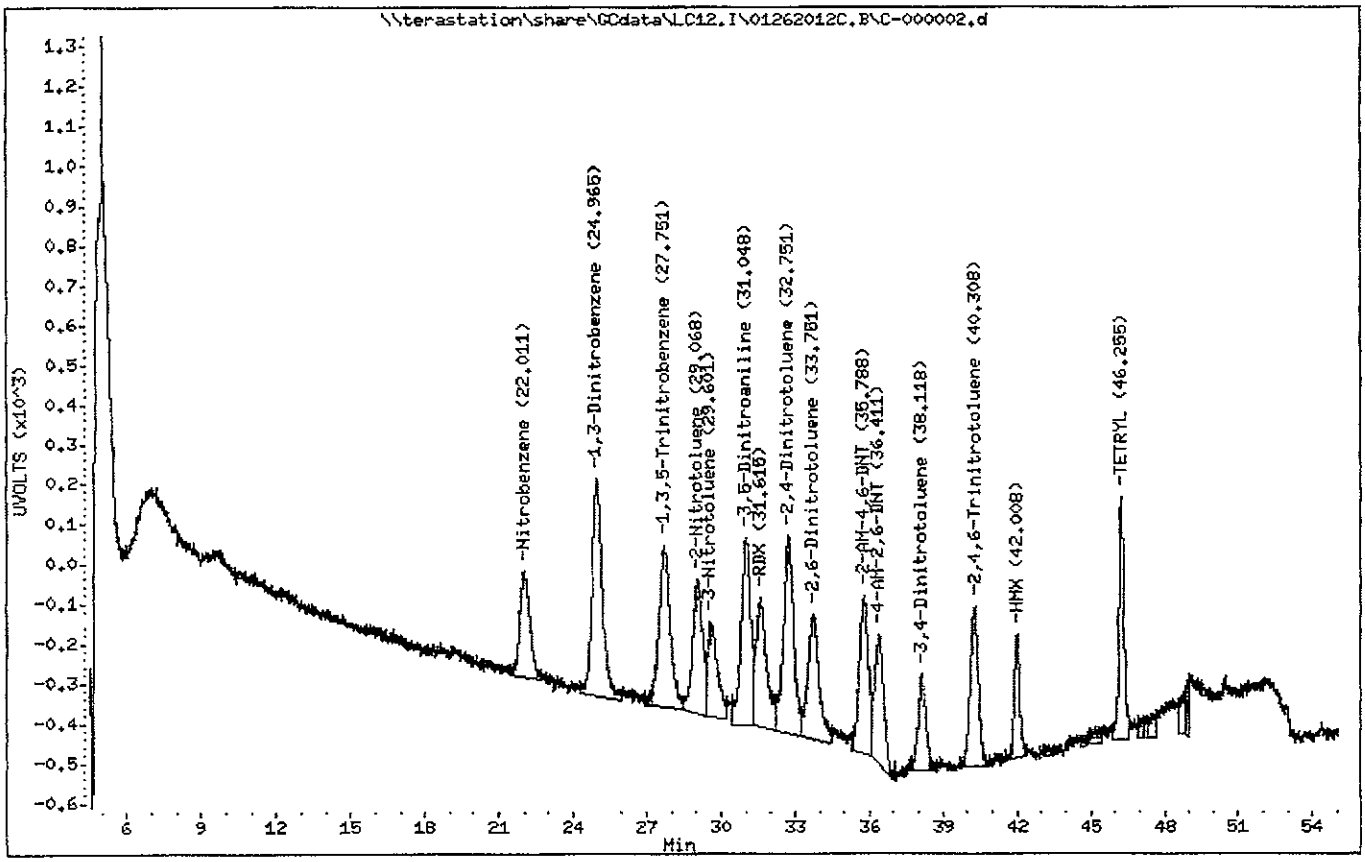
Instrument: LC12.i

Sample Info: STD_01 12CCSV0104 8330 5ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-00000
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 17:51
Operator : SV Inst ID: LC12.i
Smp Info : STD_01 12GCSV0104 8330 5ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:18 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.821	7354	766	0.104	100.00	27 PETN
	7354	766		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d

Date : 26-JAN-2012 17:51

Client ID:

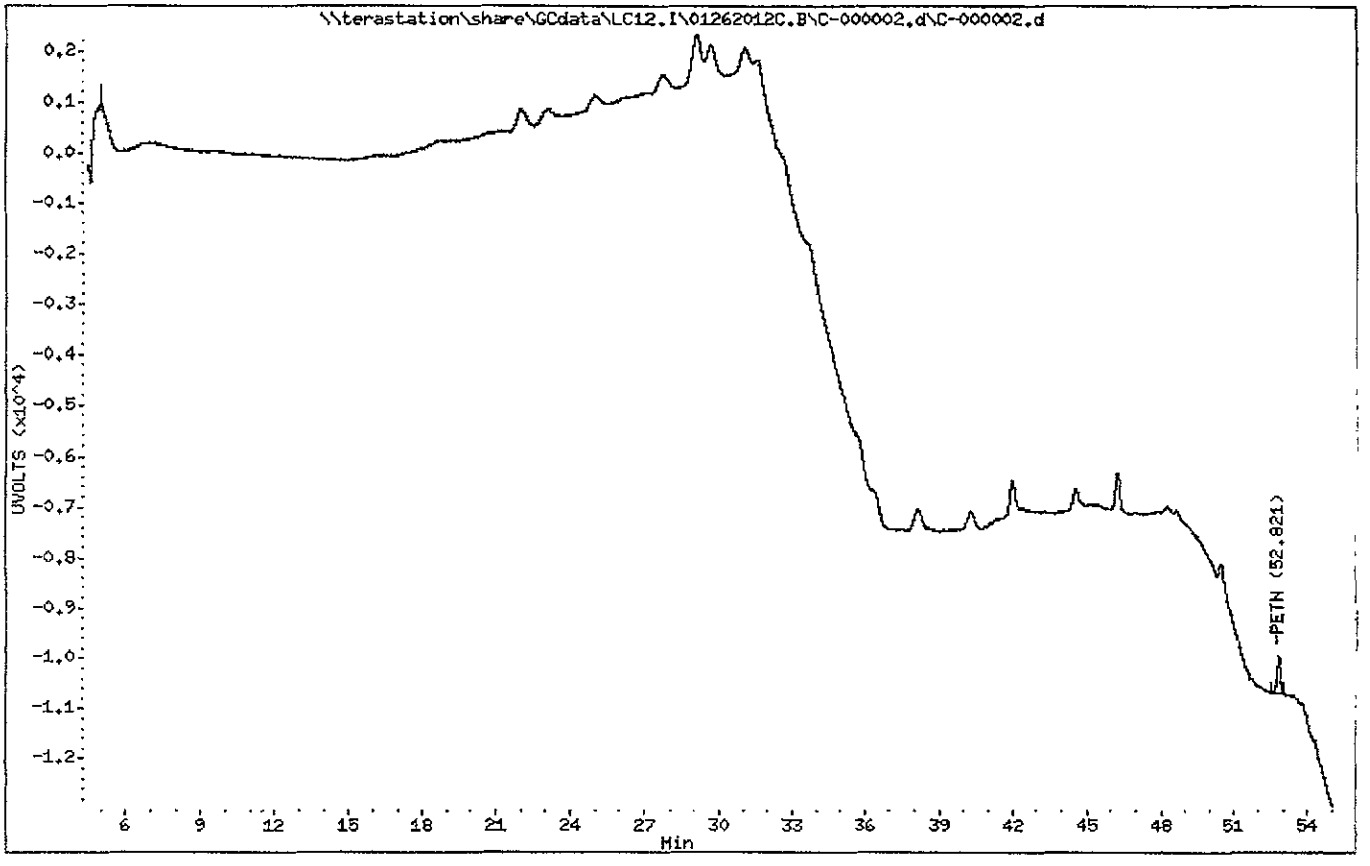
Instrument: LC12.i

Sample Info: STD_01 12GCSV0104 8330 5ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_02 12GCSV0095 8330 10ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 18:56 File ID: 01262012C.B/C-000003.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	10.0	22.023	0.099	486	48.60000				
2	1,3-Dinitrobenzene	10.0	24.989	0.092	1060	106.0000				
3	1,3,5-Trinitrobenz	10.0	27.736	0.088	805	80.50000				
4	2-Nitrotoluene	20.0	29.059	0.062	609	30.45000				
5	3-Nitrotoluene	10.0	29.643	0.065	402	40.20000				
6	3,5-Dinitroaniline	10.0	31.053	0.092	874	87.40000				
7	RDX	10.0	31.623	0.088	548	54.80000				
8	2,4-Dinitrotoluene	10.0	32.763	0.095	927	92.70000				
9	2,6-Dinitrotoluene	10.0	33.776	0.082	565	56.50000				
10	2-AM-4,6-DNT	10.0	35.826	0.078	755	75.50000				
11	4-AM-2,6-DNT	10.0	36.449	0.062	641	64.10000				
12	3,4-Dinitrotoluene	10.0	38.119	-0.015	468	46.80000				
13	2,4,6-Trinitrotolu	10.0	40.323	0.072	830	83.00000				
14	HMX	10.0	42.039	0.058	621	62.10000				
15	TETRYL	10.0	46.283	0.028	1212	121.2000				
16	4-Nitrotoluene	10.0								
17	EGDN	10.0								
18	PETN	10.0					52.816	0.018	1406	140.8000
19	Picric ACID	20.0								
20	Nitroglycerin	10.0					44.569	0.028	440	44.00000

not used RDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:20

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 18:56
Operator : SV Inst ID: LC12.i
Smp Info : STD_02 12GCSV0095 8330 10ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:19 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
22.023	14683	486	0.033	4.21		17 Nitrobenzene
24.989	30702	1060	0.035	9.20		13 1,3-Dinitrobenzene
26.996	166	20	0.120	0.17		
27.173	173	36	0.208	0.31		
27.736	24439	805	0.033	6.98		10 1,3,5-Trinitrobenze
29.059	16390	609	0.037	5.28		24 2-Nitrotoluene
29.643	10677	402	0.038	3.48		26 3-Nitrotoluene
31.053	21929	874	0.040	7.58		15 3,5-Dinitroaniline
31.623	14426	548	0.038	4.75		7 RDX
32.763	25932	927	0.036	8.04		23 2,4-Dinitrotoluene
33.776	16761	565	0.034	4.90		22 2,6-Dinitrotoluene
34.933	701	43	0.061	0.37		
35.826	20956	755	0.036	6.55		21 2-AM-4,6-DNT
36.449	16097	641	0.040	5.56		20 4-AM-2,6-DNT
37.383	141	25	0.178	0.21		
38.119	11211	468	0.042	4.06	$	1 3,4-Dinitrotoluene
38.839	114	40	0.350	0.34		
39.856	198	36	0.182	0.31		
40.323	19772	830	0.042	7.20		19 2,4,6-Trinitrotolue
40.996	104	25	0.241	0.21		
41.233	124	23	0.186	0.19		
41.629	59	15	0.255	0.13		
42.039	9888	621	0.063	5.39		4 HMX
42.746	291	30	0.103	0.26		
45.083	893	47	0.053	0.40		
45.619	551	44	0.080	0.38		
46.283	17650	1212	0.069	10.67		16 TETRYL
48.163	1388	86	0.062	0.74		
48.683	1305	105	0.080	0.91		
49.033	1746	141	0.081	1.22		
	279465	11519		100.000		

Total unknown % height = 6.150

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d

Date : 26-JAN-2012 18:56

Client ID:

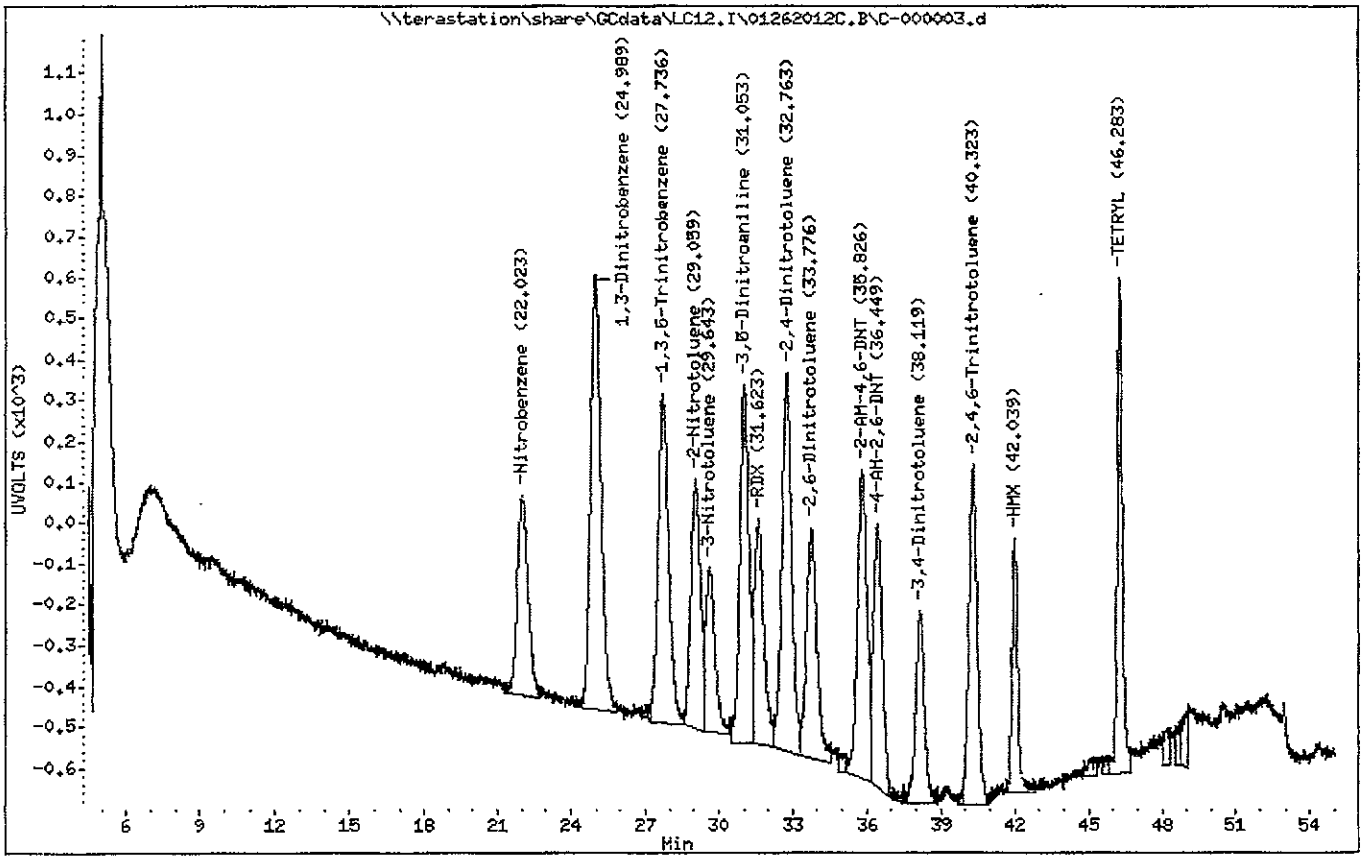
Instrument: LC12.i

Sample Info: STD_02 12GCSW0095 8330 10ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-00000
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 18:56
Operator : SV Inst ID: LC12.i
Smp Info : STD_02 12GCSV0095 8330 10ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:19 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.569	5733	440	0.077	23.80	18 Nitroglycerin
52.816	12858	1408	0.110	76.20	27 PETN
	18591	1848		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d

Date : 26-JAN-2012 18:56

Client ID:

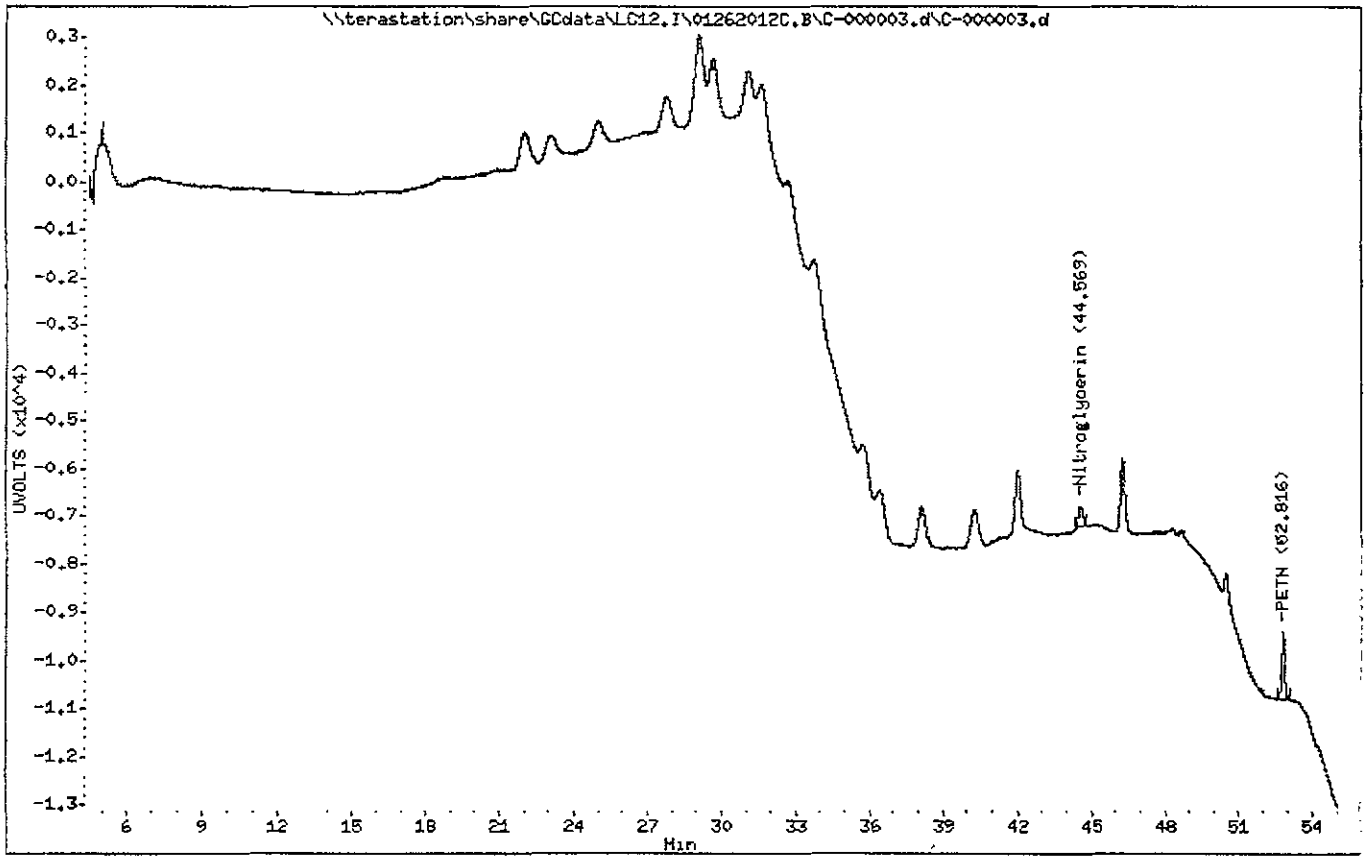
Instrument: LC12.i

Sample Info: STD_02 12GCSV0095 8330 10mg/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_03 12GCSV0096 8330 20ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 20:02 File ID: 01262012C.B/C-000004.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	20.0	21.986	0.062	890	44.50000				
2	1,3-Dinitrobenzene	20.0	24.963	0.065	2066	103.3000				
3	1,3,5-Trinitrobenz	20.0	27.709	0.062	1554	77.70000				
4	2-Nitrotoluene	40.0	29.036	0.038	1111	27.77500				
5	3-Nitrotoluene	20.0	29.639	0.062	727	36.35000				
6	3,5-Dinitroaniline	20.0	31.009	0.048	1704	85.20000				
7	RDX	20.0	31.589	0.055	1035	51.75000				
8	2,4-Dinitrotoluene	20.0	32.736	0.068	1783	89.15000				
9	2,6-Dinitrotoluene	20.0	33.739	0.045	1081	54.05000				
10	2-AM-4,6-DNT	20.0	35.786	0.038	1482	74.10000				
11	4-AM-2,6-DNT	20.0	36.429	0.042	1243	62.15000				
12	3,4-Dinitrotoluene	20.0	38.146	0.012	909	45.45000				
13	2,4,6-Trinitrotolu	20.0	40.303	0 052	1593	79.65000				
14	HMX	20.0	42.016	0.035	1227	61.35000				
15	TETRYL	20.0	46.273	0.018	2332	116.6000				
16	4-Nitrotoluene	20.0								
17	EGDN	20.0								
18	PETN	20.0					52.793	-0.005	2755	137.7500
19	Picric ACID	50.0								
20	Nitroglycerin	20.0					44.566	0.025	1426	71.30000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:21

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 20:02
Operator : SV Inst ID: LC12.i
Smp Info : STD_03 12GCSV0096 8330 20ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:20 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.786	236	30	0.127	0.13	
21.986	26042	890	0.034	4.13	17 Nitrobenzene
24.963	59739	2066	0.035	9.60	13 1,3-Dinitrobenzene
27.099	142	31	0.218	0.14	
27.709	46433	1554	0.033	7.22	10 1,3,5-Trinitrobenze
29.036	29586	1111	0.038	5.16	24 2-Nitrotoluene
29.639	19929	727	0.036	3.37	26 3-Nitrotoluene
31.009	42683	1704	0.040	7.92	15 3,5-Dinitroaniline
31.589	26618	1035	0.039	4.81	7 RDX
32.736	50410	1783	0.035	8.28	23 2,4-Dinitrotoluene
33.739	31679	1081	0.034	5.02	22 2,6-Dinitrotoluene
34.589	265	56	0.211	0.26	
35.079	415	51	0.123	0.23	
35.786	39408	1482	0.038	6.88	21 2-AM-4,6-DNT
36.429	33149	1243	0.037	5.77	20 4-AM-2,6-DNT
37.313	123	22	0.179	0.10	
37.623	76	29	0.381	0.13	
38.146	21188	909	0.043	4.22	$ 1 3,4-Dinitrotoluene
38.869	199	25	0.126	0.11	
39.196	1354	68	0.050	0.31	
40.303	38820	1593	0.041	7.40	19 2,4,6-Trinitrotolue
41.143	389	28	0.072	0.13	
42.016	19197	1227	0.064	5.70	4 HMX
42.786	115	21	0.182	0.09	
44.139	153	20	0.131	0.09	
45.273	105	29	0.276	0.13	
45.666	110	27	0.245	0.12	
46.273	32076	2332	0.073	10.99	16 TETRYL
48.083	535	64	0.120	0.29	
48.276	1219	71	0.058	0.33	
48.706	852	87	0.102	0.40	
49.063	2509	117	0.047	0.54	
	525754	21513		100.000	

Total unknown % height = 3.530

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d

Date : 26-JAN-2012 20:02

Client ID:

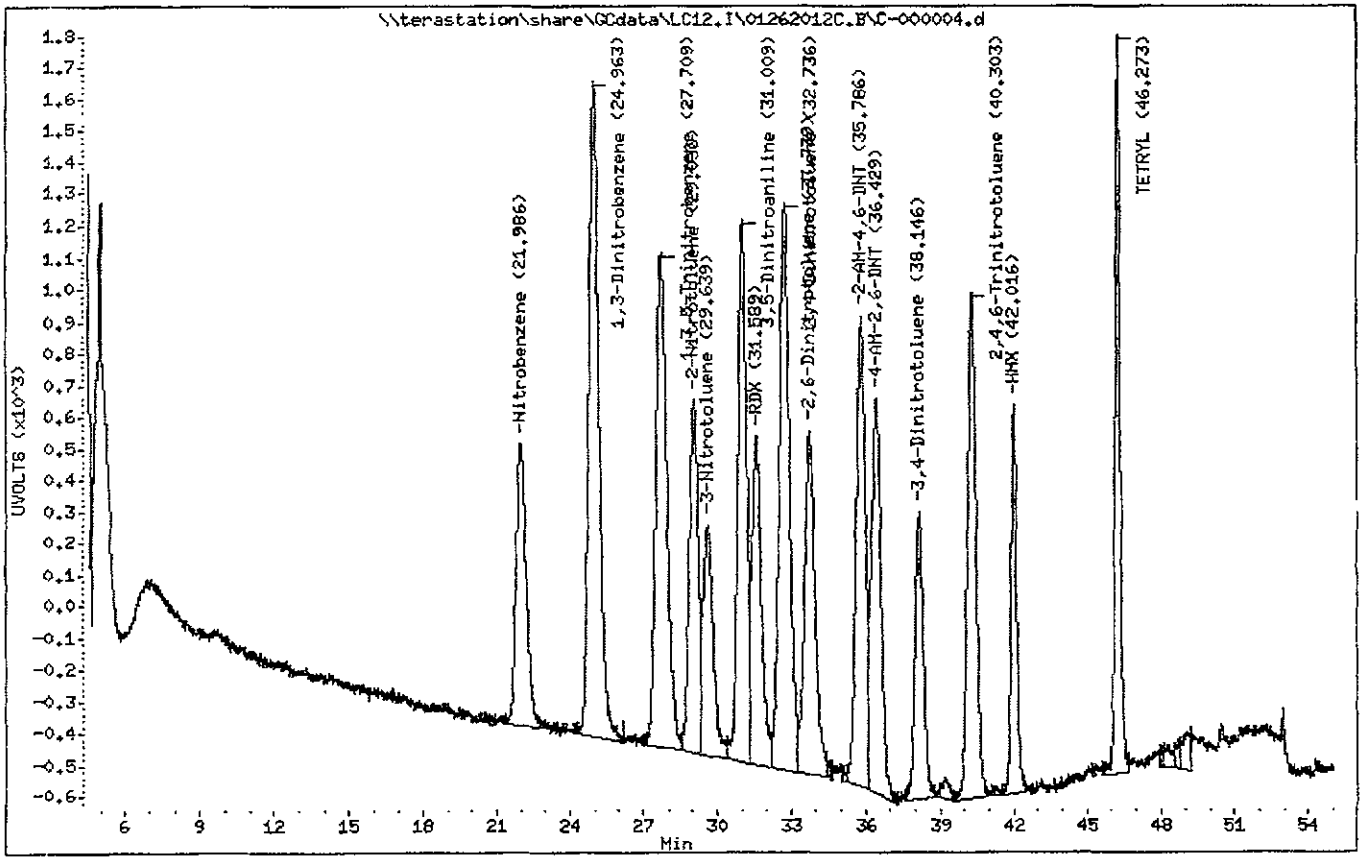
Instrument: LC12.i

Sample Info: STD_03 12GCSV0096 8330 20ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-00000
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 20:02
Operator : SV Inst ID: LC12.i
Smp Info : STD_03 12GCSV0096 8330 20ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:20 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.566	26136	1426	0.055	34.10	18 Nitroglycerin
52.793	27522	2755	0.100	65.90	27 PETN
	53658	4181		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d

Date : 26-JAN-2012 20:02

Client ID:

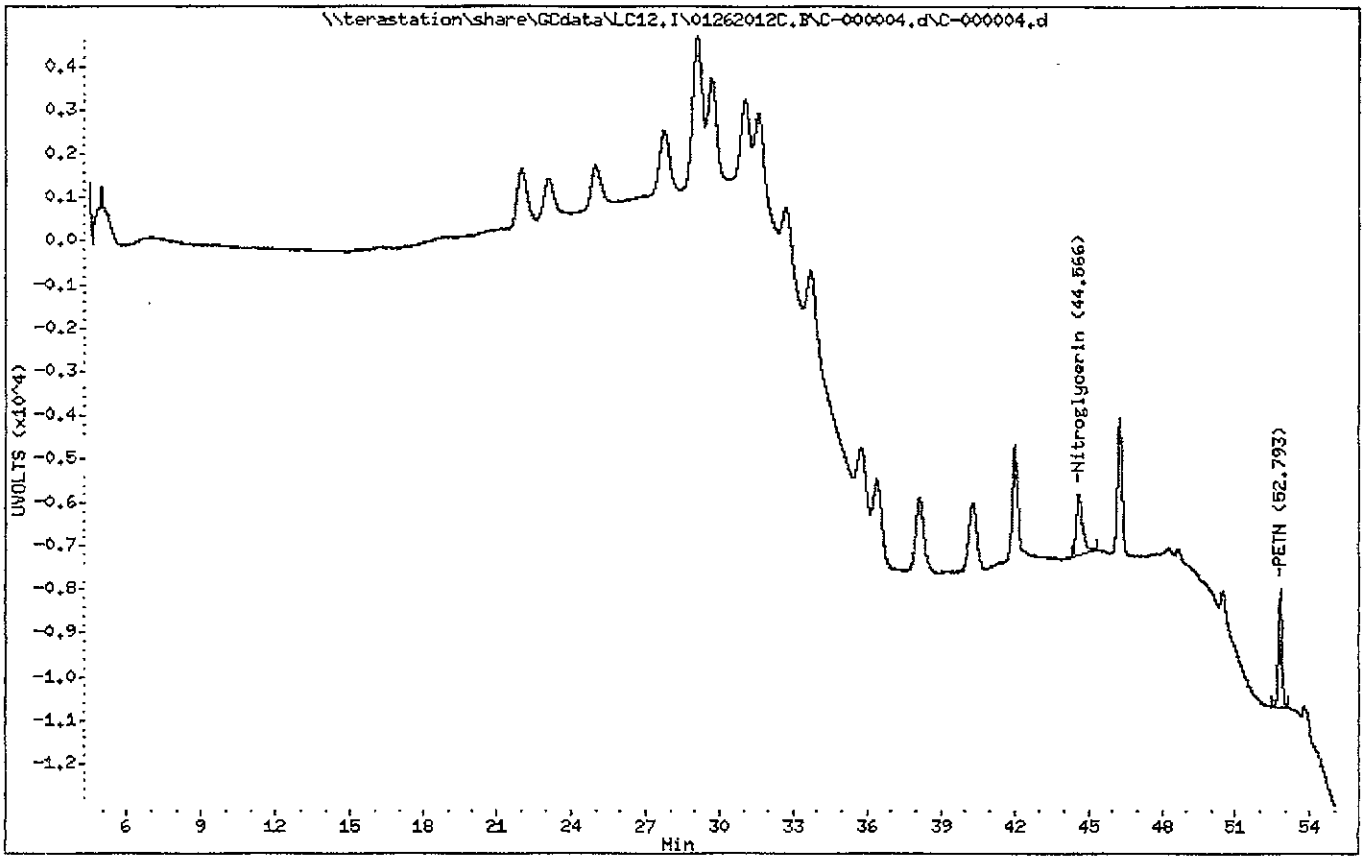
Instrument: LC12.i

Sample Info: STD_03 12CCSV0096 8330 20ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_04 12GCSV0097 8330 50ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 21:08 File ID: 01262012C.B/C-000005.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	50.0	22.014	0.090	2381	47.62000				
2	1,3-Dinitrobenzene	50.0	24.988	0.090	5162	103.2400				
3	1,3,5-Trinitrobenz	50.0	27.731	0.083	3859	77.18000				
4	2-Nitrotoluene	100	29.078	0.080	2983	29.83000				
5	3-Nitrotoluene	50.0	29.644	0.067	1913	38.26000				
6	3,5-Dinitroaniline	50.0	31.034	0.073	4162	83.24000				
7	RDX	50.0	31.611	0.077	2444	48.88000				
8	2,4-Dinitrotoluene	50.0	32.744	0.077	4429	88.58000				
9	2,6-Dinitrotoluene	50.0	33.754	0.060	2681	53.62000				
10	2-AM-4,6-DNT	50.0	35.804	0.057	3625	72.50000				
11	4-AM-2,6-DNT	50.0	36.451	0.063	3098	61.96000				
12	3,4-Dinitrotoluene	50.0	38.148	0.013	2321	46.42000				
13	2,4,6-Trinitrotolu	50.0	40.301	0.050	3958	79.16000				
14	HMX	50.0	42.004	0.023	3037	60.74000				
15	TETRYL	50.0	46.281	0.027	5822	116.4400				
16	4-Nitrotoluene	50.0								
17	EGDN	50.0								
18	PETN	50.0					52.798	0.000	7052	141.0400
19	Picric ACID	100								
20	Nitroglycerin	50.0					44.578	0.037	3908	78.16000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:22

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 21:08
Operator : SV Inst ID: LC12.i
Smp Info : STD_04 12GCSV0097 8330 50ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:21 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
14.738	493	34	0.069	0.06		
22.014	70651	2381	0.034	4.54		17 Nitrobenzene
24.988	151081	5162	0.034	9.84		13 1,3-Dinitrobenzene
27.731	117087	3859	0.033	7.35		10 1,3,5-Trinitrobenze
29.078	79798	2983	0.037	5.68		24 2-Nitrotoluene
29.644	51428	1913	0.037	3.64		26 3-Nitrotoluene
31.034	101120	4162	0.041	7.93		15 3,5-Dinitroaniline
31.611	61375	2444	0.040	4.66		7 RDX
32.744	123332	4429	0.036	8.44		23 2,4-Dinitrotoluene
33.754	77068	2681	0.035	5.11		22 2,6-Dinitrotoluene
35.091	275	36	0.131	0.06		
35.804	95455	3625	0.038	6.91		21 2-AM-4,6-DNT
36.451	83480	3098	0.037	5.90		20 4-AM-2,6-DNT
37.361	203	33	0.162	0.06		
38.148	54149	2321	0.043	4.42	$	1 3,4-Dinitrotoluene
39.201	2701	133	0.049	0.25		
39.771	76	25	0.331	0.04		
40.301	95235	3958	0.042	7.54		19 2,4,6-Trinitrotolue
41.354	293	19	0.065	0.03		
42.004	47996	3037	0.063	5.79		4 HMX
42.874	107	24	0.224	0.04		
44.494	611	30	0.049	0.05		
45.051	496	51	0.103	0.09		
45.728	577	60	0.104	0.11		
46.281	79663	5822	0.073	11.23		16 TETRYL
48.988	1470	123	0.084	0.23		
	1296219	52443		100.000		

Total unknown % height = 1.020

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d

Page 2

Date : 26-JAN-2012 21:08

Client ID:

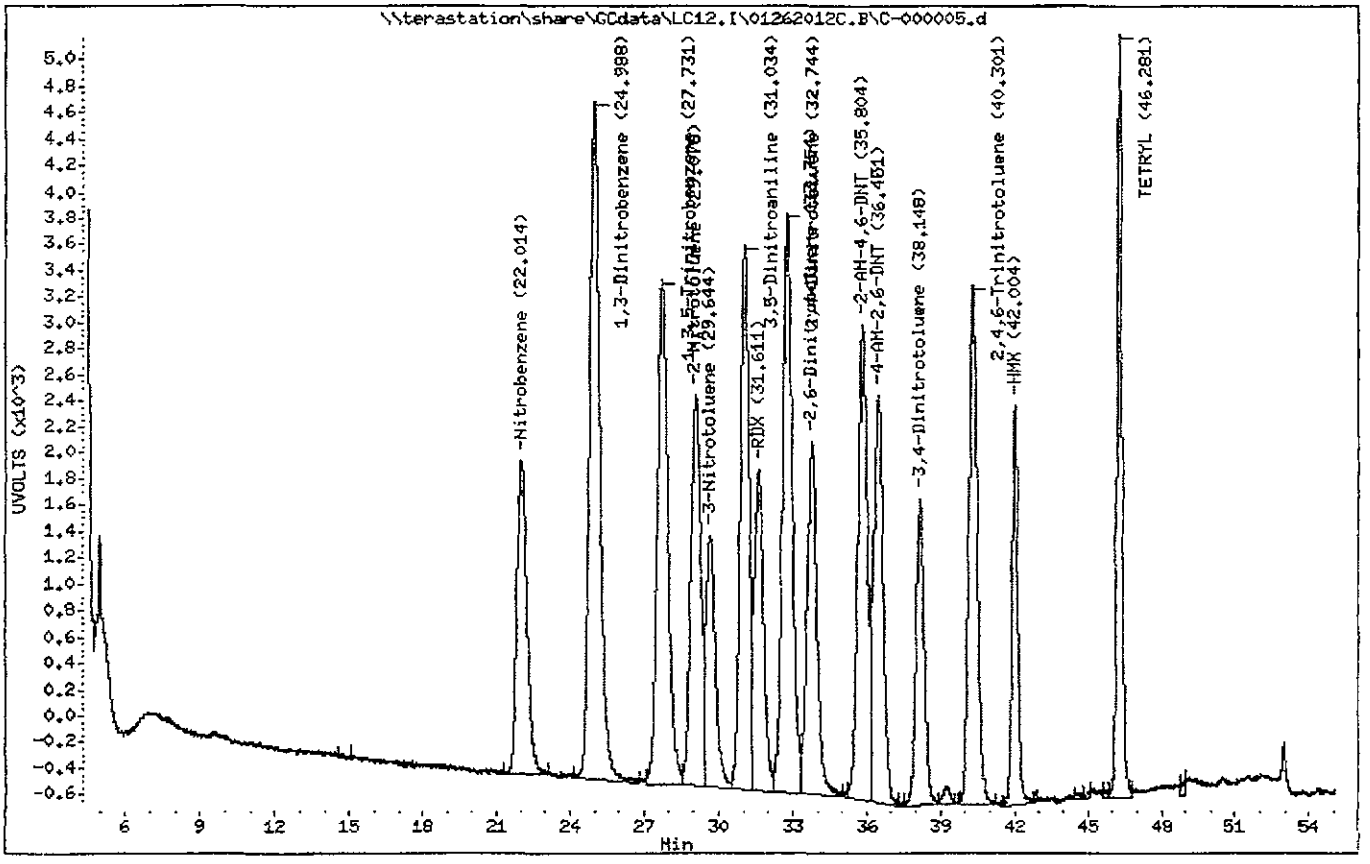
Instrument: LC12.i

Sample Info: STD_04 12GCSV0097 8330 50ng/mL:1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-00000
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 21:08
Operator : SV Inst ID: LC12.i
Smp Info : STD_04 12GCSV0097 8330 50ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:22 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.578	63715	3908	0.061	35.65	18 Nitroglycerin
52.798	64712	7052	0.109	64.35	27 PETN
	128427	10960		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d

Page 2

Date : 26-JAN-2012 21:08

Client ID:

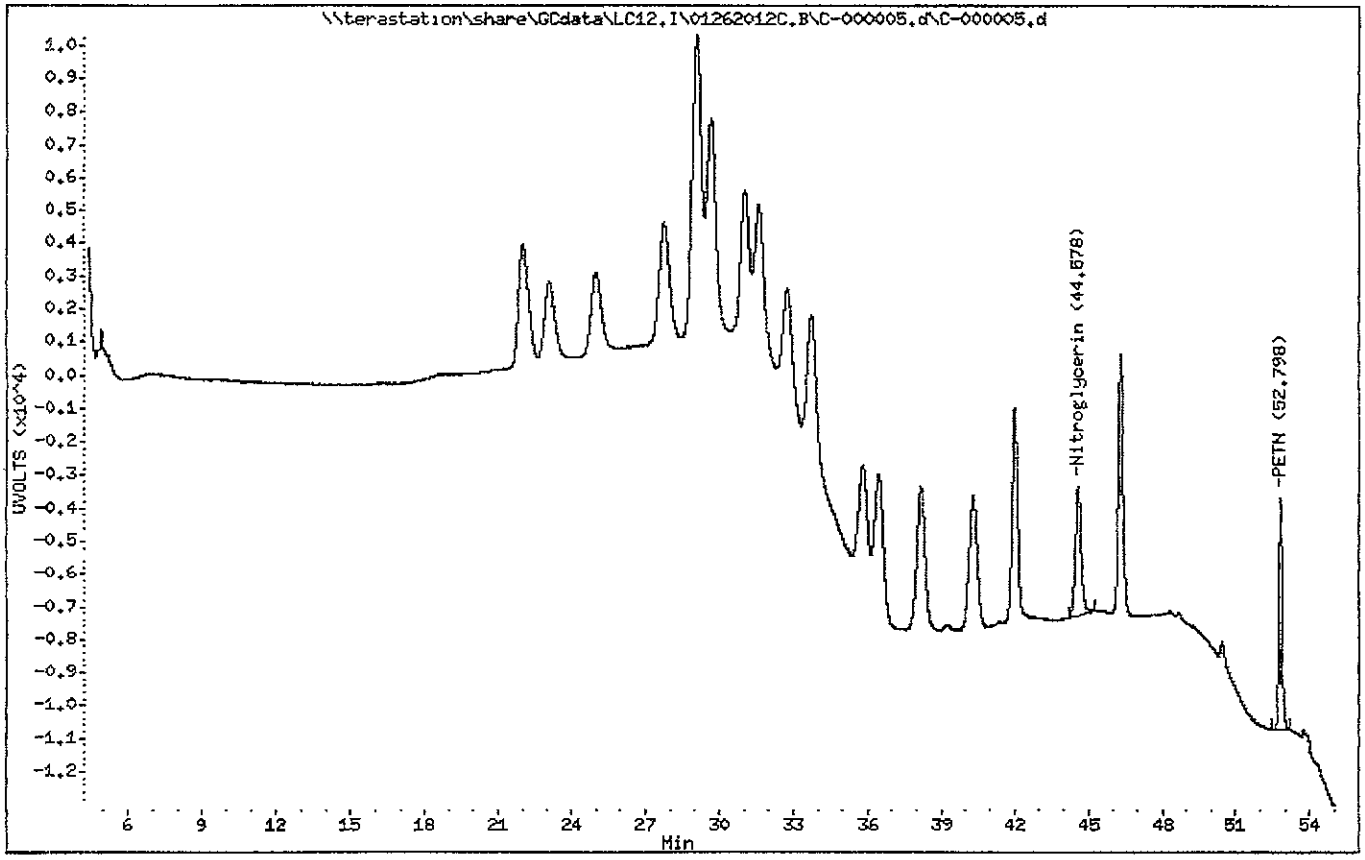
Instrument: LC12.i

Sample Info: STD_04 12GCSV0097 8330 50ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_05 12GCSV0099 8330 100ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 22:13 File ID: 01262012C.B/C-000006.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	100	22.001	0.076	4901	49.01000				
2	1,3-Dinitrobenzene	100	24.984	0.086	10548	105.4800				
3	1,3,5-Trinitrobenz	100	27.734	0.086	7817	78.17000				
4	2-Nitrotoluene	200	29.081	0.083	6102	30.51000				
5	3-Nitrotoluene	100	29.661	0.083	3890	38.90000				
6	3,5-Dinitroaniline	100	31.054	0.093	8429	84.29000				
7	RDX	100	31.631	0.096	4864	48.64000				
8	2,4-Dinitrotoluene	100	32.767	0.100	8964	89.64000				
9	2,6-Dinitrotoluene	100	33.794	0.100	5384	53.84000				
10	2-AM-4,6-DNT	100	35.851	0.103	7357	73.57000				
11	4-AM-2,6-DNT	100	36.494	0.106	6329	63.29000				
12	3,4-Dinitrotoluene	100	38.184	0.050	4900	49.00000				
13	2,4,6-Trinitrotolu	100	40.341	0.090	8168	81.68000				
14	HMX	100	42.041	0.060	6233	62.33000				
15	TETRYL	100	46.294	0.040	11965	119.6500				
16	4-Nitrotoluene	100								
17	EGDN	100								
18	PETN	100					52.814	0.016	14555	145.5500
19	Picric ACID	200								
20	Nitroglycerin	100					44.591	0.050	8512	85.12000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:24

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 22:13
Operator : SV Inst ID: LC12.i
Smp Info : STD_05 12GCSV0099 8330 100ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:23 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
22.001	147874	4901	0.033	4.59		17 Nitrobenzene
24.984	307226	10548	0.034	9.88		13 1,3-Dinitrobenzene
27.734	237221	7817	0.033	7.32		10 1,3,5-Trinitrobenze
29.081	163972	6102	0.037	5.71		24 2-Nitrotoluene
29.661	102784	3890	0.038	3.64		26 3-Nitrotoluene
31.054	204697	8429	0.041	7.89		15 3,5-Dinitroaniline
31.631	122035	4864	0.040	4.55		7 RDX
32.767	247812	8964	0.036	8.39		23 2,4-Dinitrotoluene
33.794	153274	5384	0.035	5.04		22 2,6-Dinitrotoluene
35.851	194532	7357	0.038	6.89		21 2-AM-4,6-DNT
36.494	170341	6329	0.037	5.93		20 4-AM-2,6-DNT
38.184	113101	4900	0.043	4.59	$	1 3,4-Dinitrotoluene
38.904	164	67	0.409	0.06		
39.227	5976	270	0.045	0.25		
40.341	196575	8168	0.042	7.65		19 2,4,6-Trinitrotolue
41.374	274	28	0.102	0.02		
42.041	95674	6233	0.065	5.84		4 HMX
42.901	100	17	0.169	0.01		
43.437	302	29	0.096	0.02		
44.421	91	31	0.341	0.02		
44.617	698	66	0.095	0.06		
45.161	1704	69	0.040	0.06		
46.294	160940	11965	0.074	11.33		16 TETRYL
47.877	373	46	0.123	0.04		
48.124	988	66	0.067	0.06		
48.347	1270	70	0.055	0.06		
48.991	2482	115	0.046	0.10		
	2632480	106725		100.000		

Total unknown % height = 0.7600

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d

Date : 26-JAN-2012 22:13

Client ID:

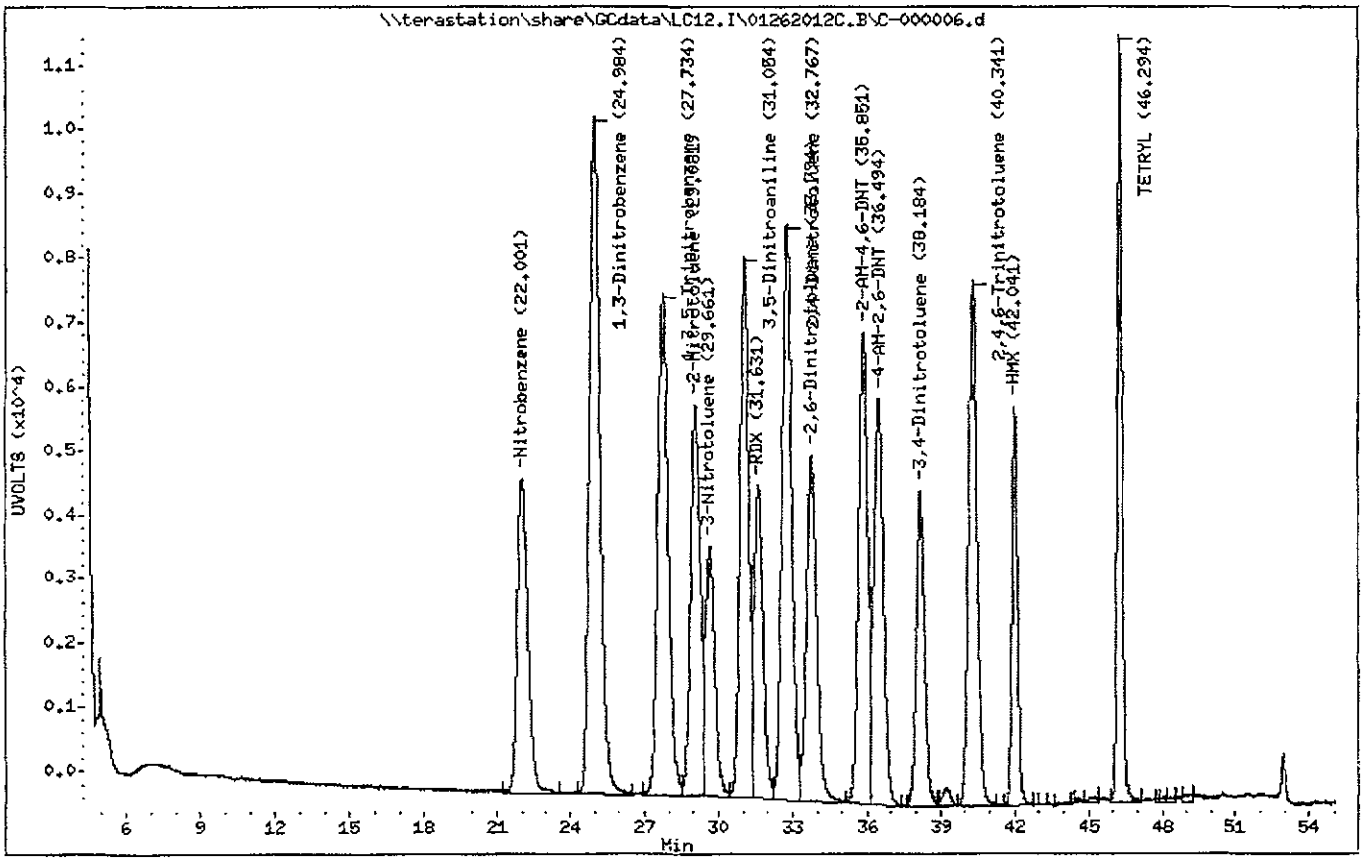
Instrument: LC12.i

Sample Info: STD_05 12GCSV0099 8330 100ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-00000
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 22:13
Operator : SV Inst ID: LC12.i
Smp Info : STD_05 12GCSV0099 8330 100ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:23 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.591	130939	8512	0.065	36.90	18 Nitroglycerin
52.814	128012	14555	0.114	63.10	27 PETN
	258951	23067		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d

Date : 26-JAN-2012 22:13

Client ID:

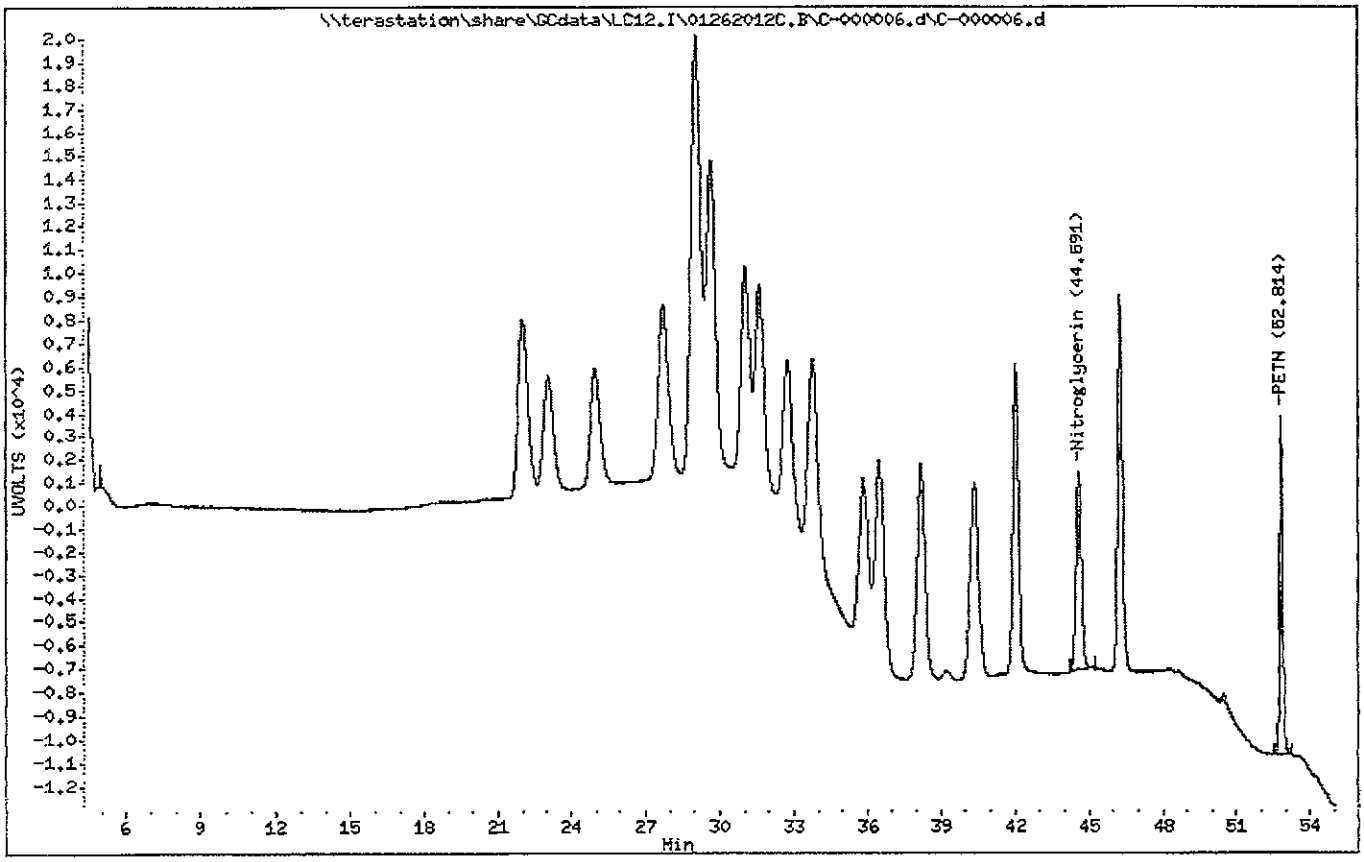
Instrument: LC12.i

Sample Info: STD_05 12GCSV0099 8330 100ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 23:19 File ID: 01262012C.B/C-000007.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	200	21.984	0.059	9360	46.80000				
2	1,3-Dinitrobenzene	200	24.960	0.063	20375	101.8750				
3	1,3,5-Trinitrobenz	200	27.724	0.076	15368	76.84000				
4	2-Nitrotoluene	400	29.060	0.063	11874	29.68500				
5	3-Nitrotoluene	200	29.634	0.056	7556	37.78000				
6	3,5-Dinitroaniline	200	31.034	0.073	16382	81.91000				
7	RDX	200	31.604	0.069	9357	46.98500				
8	2,4-Dinitrotoluene	200	32.744	0.076	17560	87.80000				
9	2,6-Dinitrotoluene	200	33.767	0.073	10540	52.70000				
10	2-AM-4,6-DNT	200	35.814	0.066	14468	72.34000				
11	4-AM-2,6-DNT	200	36.454	0.066	12455	62.27500				
12	3,4-Dinitrotoluene	200	38.157	0.023	9601	48.00500				
13	2,4,6-Trinitrotolu	200	40.314	0.063	16241	81.20500				
14	HMX	200	42.020	0.039	12333	61.66500				
15	TETRYL	200	46.277	0.023	23797	118.9850				
16	4-Nitrotoluene	200								
17	EGDN	200								
18	PETN	200					52.800	0.003	29476	147.3800
19	Picric ACID	500								
20	Nitroglycerin	200					44.577	0.036	17208	86.04000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:25

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 23:19
Operator : SV Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:24 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
21.984	294064	9360	0.032	4.48		17 Nitrobenzene
24.064	357	44	0.123	0.02		
24.960	614388	20375	0.033	9.77		13 1,3-Dinitrobenzene
27.724	472067	15368	0.033	7.37		10 1,3,5-Trinitrobenze
29.060	327273	11874	0.036	5.69		24 2-Nitrotoluene
29.634	203368	7556	0.037	3.62		26 3-Nitrotoluene
31.034	409069	16382	0.040	7.85		15 3,5-Dinitroaniline
31.604	237986	9397	0.039	4.50		7 RDX
32.744	494022	17560	0.036	8.42		23 2,4-Dinitrotoluene
33.767	302256	10540	0.035	5.05		22 2,6-Dinitrotoluene
35.814	390139	14468	0.037	6.93		21 2-AM-4,6-DNT
36.454	342281	12455	0.036	5.97		20 4-AM-2,6-DNT
38.157	226239	9601	0.042	4.60	$	1 3,4-Dinitrotoluene
39.224	12870	552	0.043	0.26		
40.314	395982	16241	0.041	7.79		19 2,4,6-Trinitrotolue
42.020	192448	12333	0.064	5.91		4 HMX
42.887	449	26	0.058	0.01		
43.964	93	34	0.366	0.01		
44.100	195	28	0.144	0.01		
44.594	2140	131	0.061	0.06		
45.034	772	101	0.131	0.04		
45.227	2022	131	0.065	0.06		
46.277	320449	23797	0.074	11.53		16 TETRYL
48.214	958	56	0.058	0.02		
48.674	1060	73	0.069	0.03		
	5242947	208483		100.000		

Total unknown % height = 0.5200

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d

Date : 26-JAN-2012 23:19

Client ID:

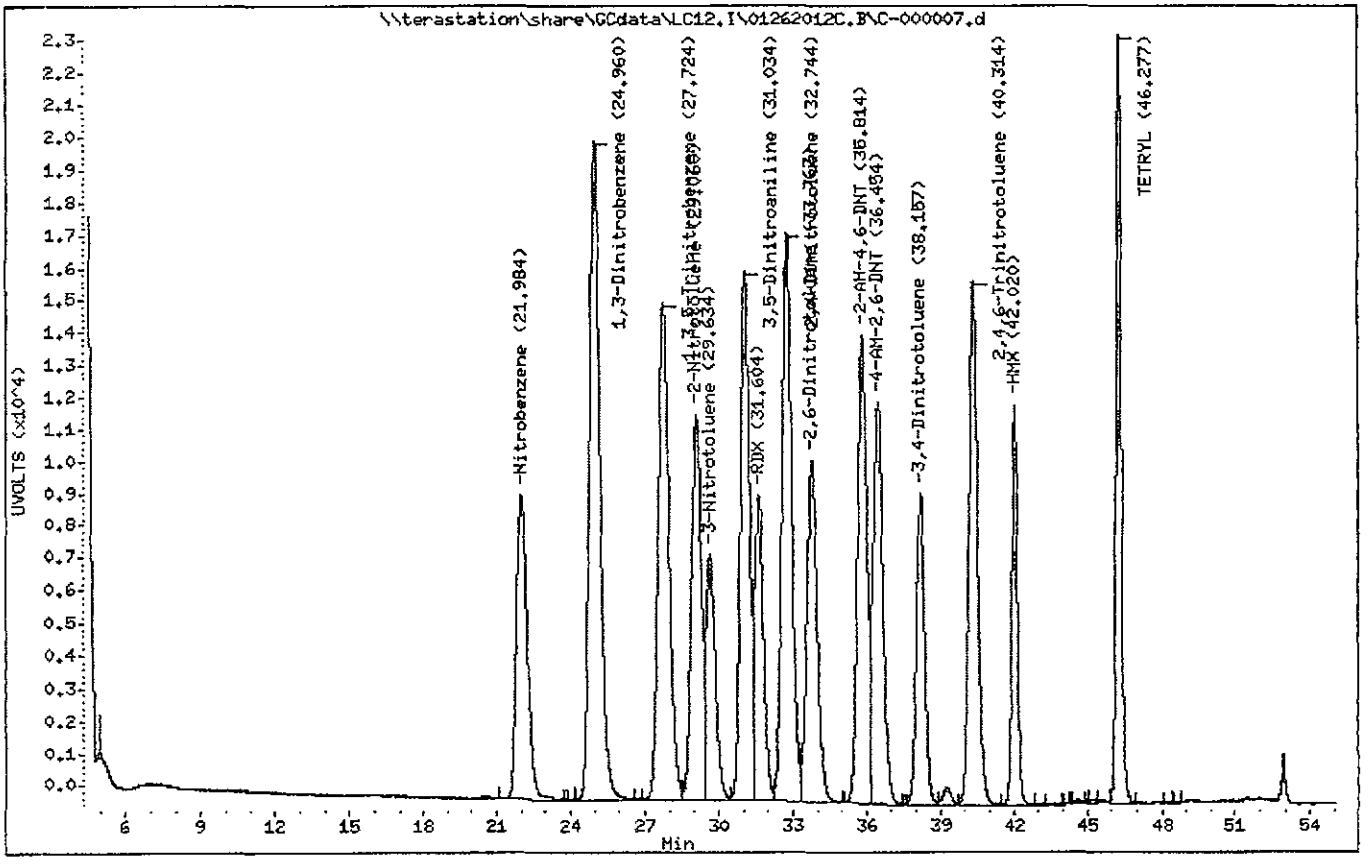
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-00000
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 23:19
Operator : SV Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:25 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.577	268248	17208	0.064	36.86	18 Nitroglycerin
52.800	262180	29476	0.112	63.14	27 PETN
	530428	46684		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d

Date : 26-JAN-2012 23:19

Client ID:

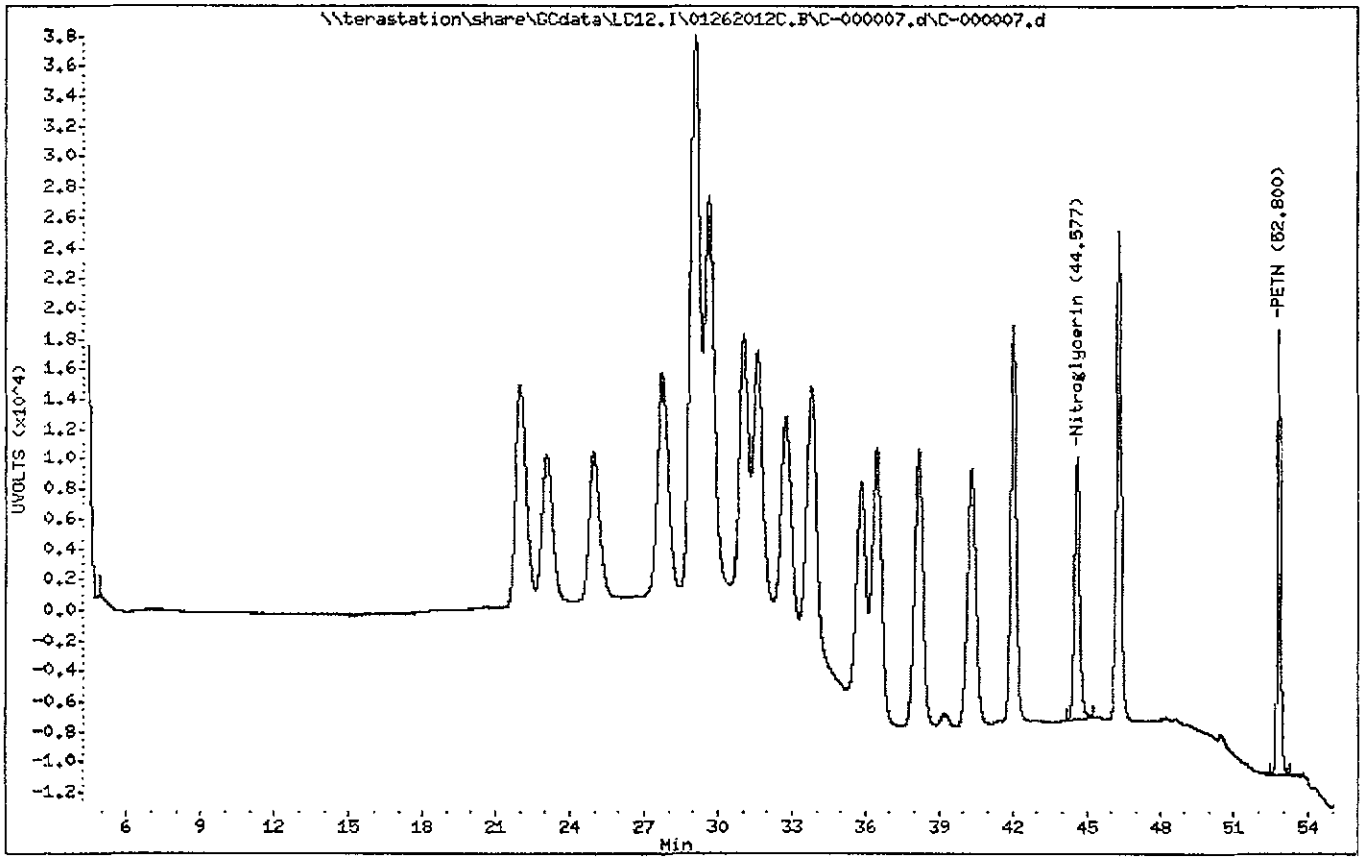
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_07 12GCSV0101 8330 500ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 00:24 File ID: 01262012C.B/C-000008.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	500	21.927	0.003	21531	43.06200				
2	1,3-Dinitrobenzene	500	24.907	0.009	47782	95.56400				
3	1,3,5-Trinitrobenz	500	27.670	0.023	37013	74.02600				
4	2-Nitrotoluene	1000	29.007	0.009	28139	28.13900				
5	3-Nitrotoluene	500	29.577	-0.001	18051	36.10200				
6	3,5-Dinitroaniline	500	30.987	0.026	38658	77.31600				
7	RDX	500	31.550	0.016	22300	44.60000				
8	2,4-Dinitrotoluene	500	32.694	0.026	42092	84.18400				
9	2,6-Dinitrotoluene	500	33.717	0.023	25283	50.56600				
10	2-AM-4,6-DNT	500	35.770	0.023	34598	69.19600				
11	4-AM-2,6-DNT	500	36.407	0.019	29961	59.92200				
12	3,4-Dinitrotoluene	300	38.124	-0.011	13878	46.26000				
13	2,4,6-Trinitrotolu	500	40.284	0.033	39662	79.32400				
14	HMX	500	41.994	0.013	30016	60.03200				
15	TETRYL	500	46.267	0.013	59227	118.4540				
16	4-Nitrotoluene	500								
17	EGDN	500								
18	PETN	500					52.794	-0.004	72909	145.8180
19	Picric ACID	1000								
20	Nitroglycerin	500					44.364	0.023	42503	85.00600

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:26

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 27-JAN-2012 00:24
Operator : SV Inst ID: LC12.i
Smp Info : STD_07 12GCSV0101 8330 500ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:25 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
14.137	177	31	0.175	0.00		
18.127	309	37	0.120	0.00		
20.554	2703	85	0.031	0.01		
21.927	733420	21531	0.029	4.38		17 Nitrobenzene
24.907	1531560	47782	0.031	9.74		13 1,3-Dinitrobenzene
27.670	1186263	37013	0.031	7.54		10 1,3,5-Trinitrobenze
29.007	825693	28139	0.034	5.73		24 2-Nitrotoluene
29.577	508837	18051	0.035	3.67		26 3-Nitrotoluene
30.987	1031799	38658	0.037	7.88		15 3,5-Dinitroaniline
31.550	587057	22300	0.038	4.54		7 RDX
32.694	1235159	42092	0.034	8.58		23 2,4-Dinitrotoluene
33.717	758533	25283	0.033	5.15		22 2,6-Dinitrotoluene
35.770	973633	34598	0.036	7.05		21 2-AM-4,6-DNT
36.407	857300	29961	0.035	6.10		20 4-AM-2,6-DNT
38.124	338092	13878	0.041	2.82	$	1 3,4-Dinitrotoluene
39.194	31667	1340	0.042	0.27		
40.284	986509	39662	0.040	8.08		19 2,4,6-Trinitrotolue
41.994	477093	30016	0.063	6.11		4 HMX
42.904	354	35	0.099	0.00		
43.354	892	41	0.046	0.00		
44.560	4819	325	0.067	0.06		
45.197	11888	299	0.025	0.06		
46.267	801185	59227	0.074	12.22		16 TETRYL
47.967	146	28	0.192	0.00		
48.694	630	40	0.064	0.00		
48.954	1543	71	0.046	0.01		
	12887262	490523		100.000		

Total unknown % height = 0.4100

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d

Page 2

Date : 27-JAN-2012 00:24

Client ID:

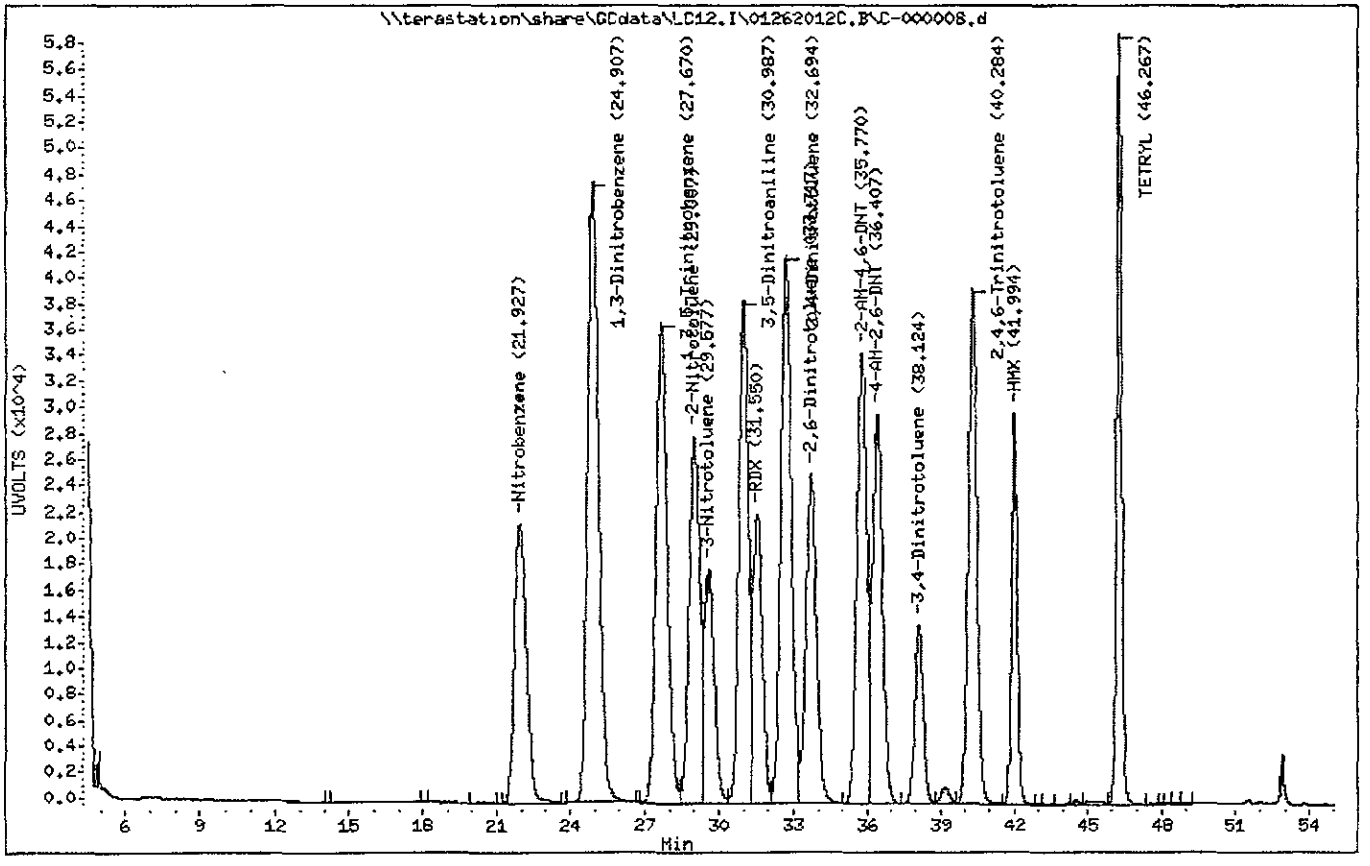
Instrument: LC12.i

Sample Info: STD_07 12GCSV0101 8330 500ng/mL:1:

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-00000
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 27-JAN-2012 00:24
Operator : SV Inst ID: LC12.i
Smp Info : STD_07 12GCSV0101 8330 500ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.564	684246	42503	0.062	36.82	18 Nitroglycerin
52.794	644063	72909	0.113	63.18	27 PETN
	1328309	115412		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d

Page 2

Date : 27-JAN-2012 00:24

Client ID:

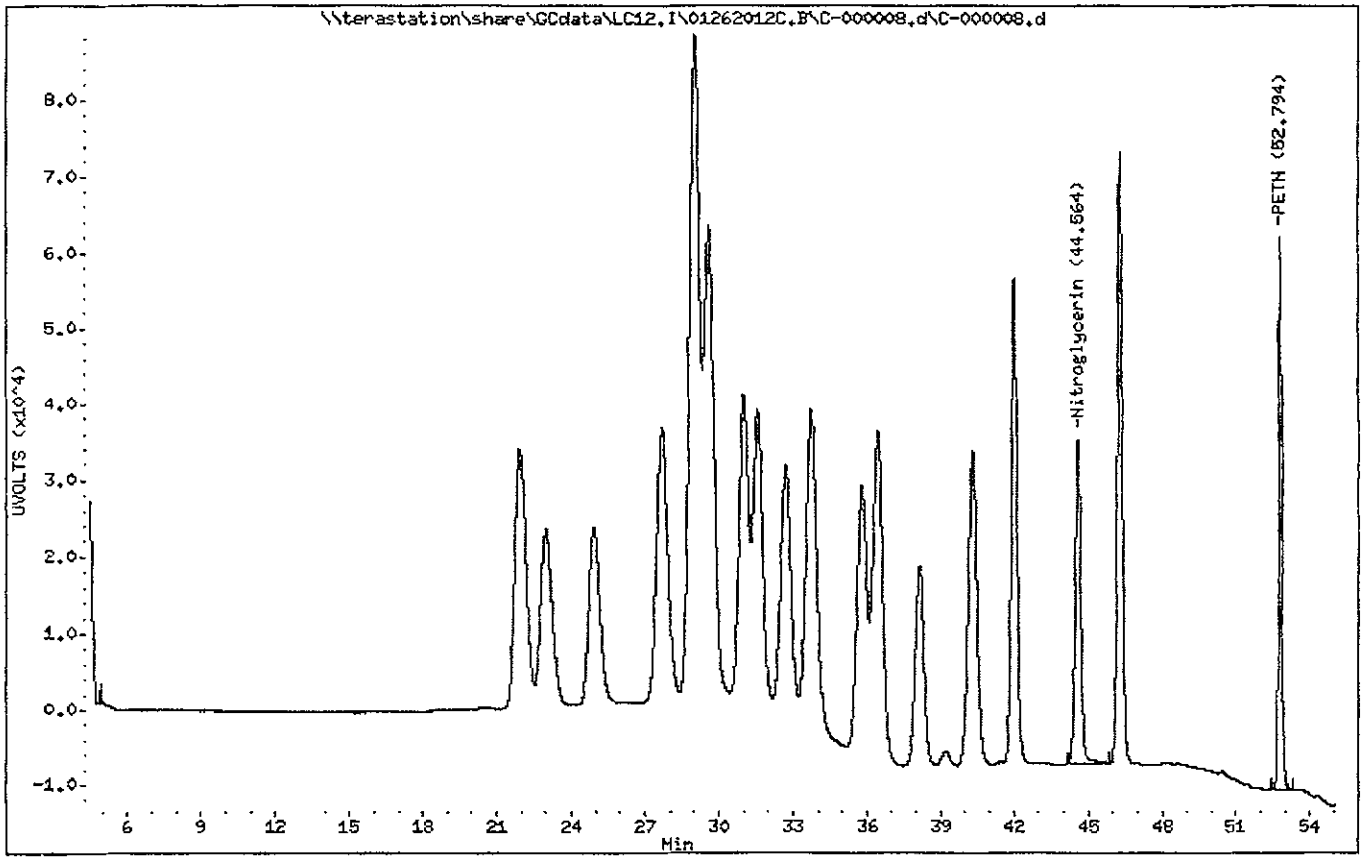
Instrument: LC12.i

Sample Info: STD_07 12GCSV0101 8330 500ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_08 12GCSV0102 8330 1000ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 01:30 File ID: 01262012C.B/C-000009.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	1000	21.846	-0.078	34722	34.72200				
2	1,3-Dinitrobenzene	1000	24.833	-0.065	79852	79.85200				
3	1,3,5-Trinitrobenz	1000	27.600	-0.048	65395	65.39500				
4	2-Nitrotoluene	2000	28.940	-0.058	48126	24.06300				
5	3-Nitrotoluene	1000	29.430	-0.148	32302	32.30200				
6	3,5-Dinitroaniline	1000	30.930	-0.031	65289	65.28900				
7	RDX	1000	31.433	-0.101	38868	38.86800				
8	2,4-Dinitrotoluene	1000	32.633	-0.035	73568	73.56800				
9	2,6-Dinitrotoluene	1000	33.653	-0.041	44278	44.27800				
10	2-AM-4,6-DNT	1000	35.720	-0.028	60426	60.42600				
11	4-AM-2,6-DNT	1000	36.346	-0.041	52899	52.89900				
12	3,4-Dinitrotoluene	500	38.073	-0.061	20657	41.31400				
13	2,4,6-Trinitrotolu	1000	40.236	-0.015	73818	73.81800				
14	HMX	1000	41.956	-0.025	55645	55.64500				
15	TETRYL	1000	46.236	-0.018	114530	114.5300				
16	4-Nitrotoluene	1000								
17	EGDN	1000								
18	PETN	1000					52.776	-0.021	146536	146.5360
19	Picric ACID	2000								
20	Nitroglycerin	1000					44.526	-0.015	81582	81.58200

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:27

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 27-JAN-2012 01:30
Operator : SV Inst ID: LC12.i
Smp Info : STD_08 12GCSV0102 8330 1000ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.266	685	40	0.058	0.00		
21.846	1463193	34722	0.024	4.01		17 Nitrobenzene
24.833	3060241	79852	0.026	9.24		13 1,3-Dinitrobenzene
27.600	2363752	65395	0.028	7.56		10 1,3,5-Trinitrobenze
28.940	1742180	48126	0.028	5.56		24 2-Nitrotoluene
29.430	926410	32302	0.035	3.73		26 3-Nitrotoluene
30.930	2169935	65289	0.030	7.55		15 3,5-Dinitroaniline
31.433	1054089	38868	0.037	4.49		7 RDX
32.633	2467371	73568	0.030	8.51		23 2,4-Dinitrotoluene
33.653	1513766	44278	0.029	5.12		22 2,6-Dinitrotoluene
35.720	1952844	60426	0.031	6.99		21 2-AM-4,6-DNT
36.346	1701187	52899	0.031	6.12		20 4-AM-2,6-DNT
38.073	562093	20657	0.037	2.39	$	1 3,4-Dinitrotoluene
39.146	63491	2447	0.039	0.28		
40.236	1971909	73818	0.037	8.54		19 2,4,6-Trinitrotolue
41.956	951690	55645	0.058	6.43		4 HMX
44.000	885	62	0.070	0.00		
44.536	9404	594	0.063	0.06		
45.160	21041	549	0.026	0.06		
46.236	1601906	114530	0.071	13.36		16 TETRYL
47.676	687	32	0.047	0.00		
48.600	116	12	0.104	0.00		
49.036	242	38	0.157	0.00		
	25599117	864149		100.000		

Total unknown % height = 0.4000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d

Date : 27-JAN-2012 01:30

Client ID:

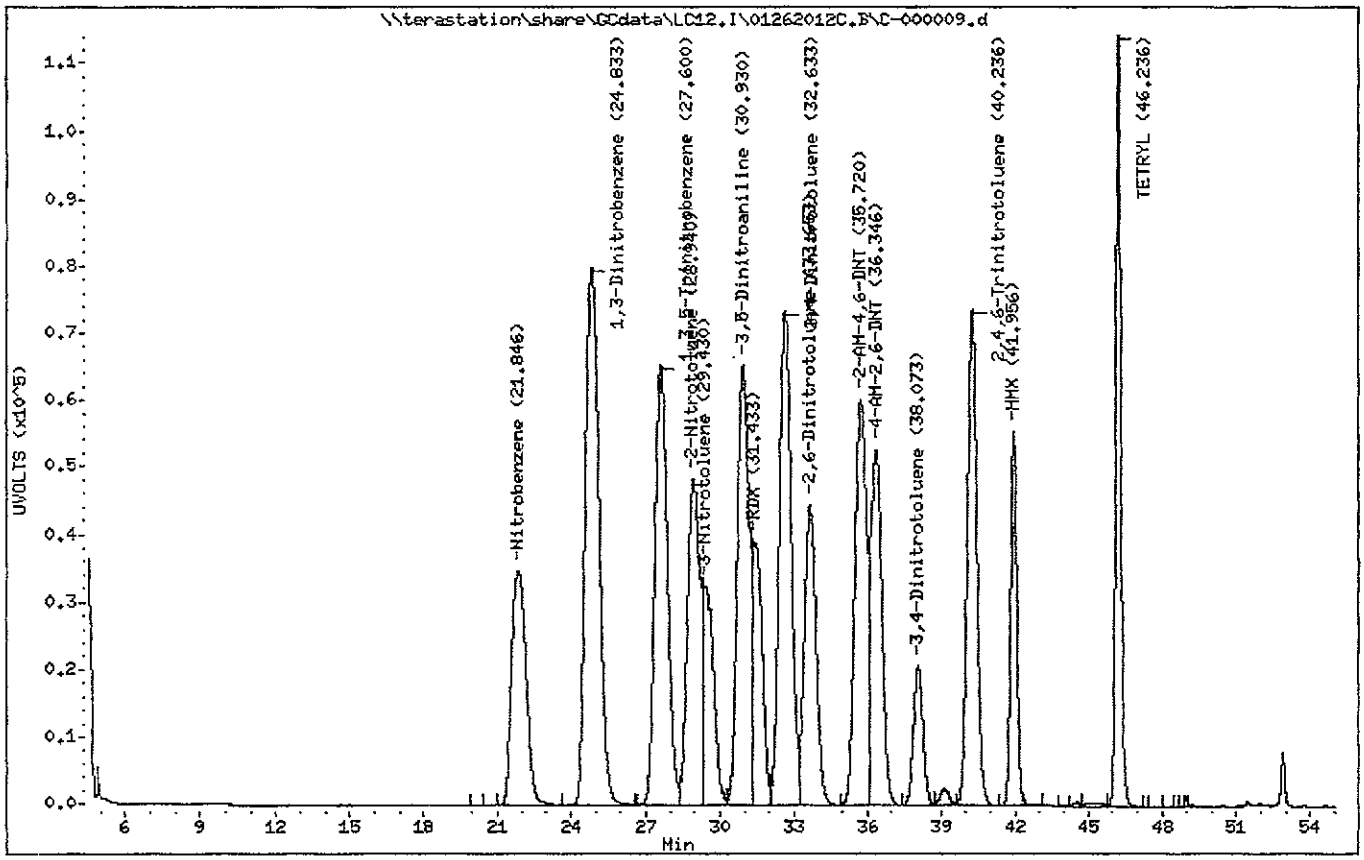
Instrument: LC12.i

Sample Info: STD_08 12GCSV0102 8330 1000ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-00000
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 27-JAN-2012 01:30
Operator : SV Inst ID: LC12.i
Smp Info : STD_08 12GCSV0102 8330 1000ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:27 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.526	1367473	81582	0.060	35.76	18 Nitroglycerin
52.776	1290535	146536	0.114	64.24	27 PETN
	2658008	228118		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Page 2

Date : 27-JAN-2012 01:30

Client ID:

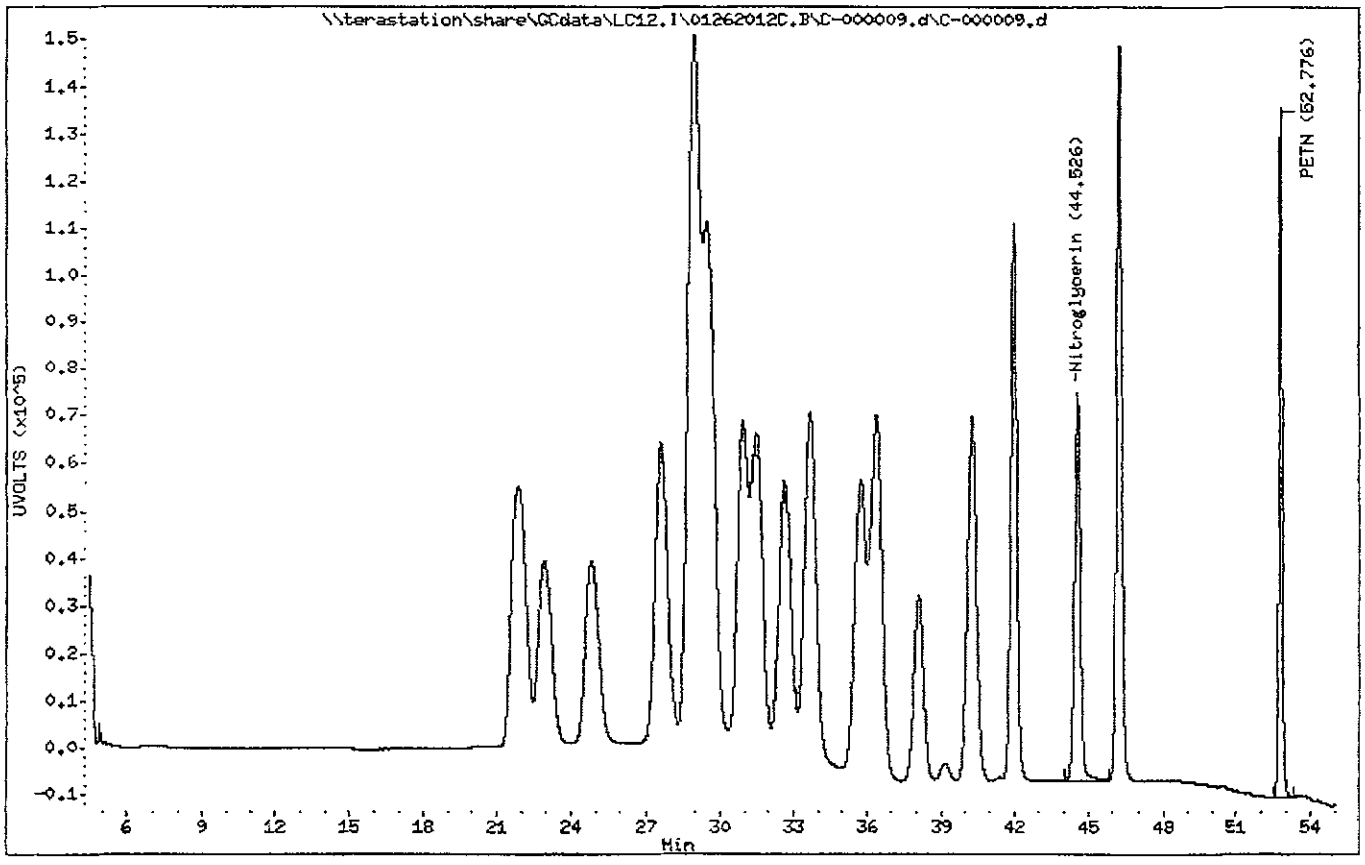
Instrument: LC12.i

Sample Info: STD_08 12GCSV0102 8330 1000ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 27-JAN-2012 02:35
Operator : SV

Instrument: LC12
File ID: 01262012C.B/C-000010.d
Sublist: CAL

	Side A				Side B				
	Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1	Nitrobenzene									
2	1,3-Dinitrobenzene									
3	1,3,5-Trinitrobenz	27.598	-0.050	34	0.4457					
4	2-Nitrotoluene	28.888	-0.110	38	1.302					
5	3-Nitrotoluene	29.644	0.067	34	0.8869					
6	3,5-Dinitroaniline	30.894	-0.067	34	0.4132					
7	RDX	31.448	-0.087	62	1.243					
8	2,4-Dinitrotoluene	32.764	0.097	46	0.5227					
9	2,6-Dinitrotoluene	33.524	-0.170	32	0.5976					
10	2-AM-4,6-DNT	35.561	-0.187	32	0.4444					
11	4-AM-2,6-DNT									
12	3,4-Dinitrotoluene									
13	2,4,6-Trinitrotolu	40.261	0.010	21	0.2634					
14	HMX	42.221	0.240	27	0.4446					
15	TETRYL									
16	4-Nitrotoluene									
17	EGDN									
18	PETN									
19	Picric ACID									
20	Nitroglycerin									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 01/27/2012 11:28

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d
Lab Smp Id: BLANK
Inj Date : 27-JAN-2012 02:35
Operator : SV Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.884	349	38	0.109	2.02	
26.981	447	29	0.065	1.54	
27.258	481	25	0.052	1.32	
27.598	256	34	0.133	1.80	10 1,3,5-Trinitrobenze
27.818	155	32	0.206	1.70	
28.014	477	40	0.084	2.12	
28.404	611	29	0.047	1.54	
28.731	133	27	0.202	1.43	
28.888	299	38	0.127	2.02	24 2-Nitrotoluene
29.144	570	33	0.058	1.75	
29.644	371	34	0.092	1.80	26 3-Nitrotoluene
29.858	307	47	0.153	2.49	
30.058	648	42	0.065	2.23	
30.504	332	26	0.078	1.38	
30.894	347	34	0.098	1.80	15 3,5-Dinitroaniline
31.071	130	41	0.314	2.17	
31.254	466	59	0.127	3.13	
31.344	399	68	0.171	3.61	
31.448	457	62	0.136	3.29	7 RDX
31.688	334	80	0.239	4.25	
31.944	709	75	0.106	3.98	
32.764	591	46	0.078	2.44	23 2,4-Dinitrotoluene
33.524	344	32	0.093	1.70	22 2,6-Dinitrotoluene
34.084	334	26	0.078	1.38	
34.648	162	34	0.210	1.80	
34.994	292	39	0.134	2.07	
35.561	230	32	0.139	1.70	21 2-AM-4,6-DNT
37.344	246	35	0.142	1.86	
37.784	215	26	0.121	1.38	
38.474	406	32	0.079	1.70	
39.191	150	23	0.153	1.22	
39.571	100	21	0.210	1.11	
39.998	113	28	0.247	1.48	
40.261	92	21	0.229	1.11	19 2,4,6-Trinitrotolue
40.791	121	27	0.223	1.43	
41.124	154	12	0.078	0.63	

Data File: C-000010.d
Report Date: 27-Jan-2012 11:28

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.508	171	22	0.129	1.16	
42.221	249	27	0.108	1.43	4 HMX
42.481	155	24	0.155	1.27	
43.138	233	23	0.099	1.22	
43.784	224	27	0.120	1.43	
45.901	639	61	0.096	3.24	
46.981	327	63	0.193	3.34	
47.318	812	70	0.086	3.72	
47.924	762	91	0.119	4.83	
49.008	4543	146	0.032	7.98	
	19945	1881		100.000	

Total unknown % height = 80.91

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d

Date : 27-JAN-2012 02:35

Client ID:

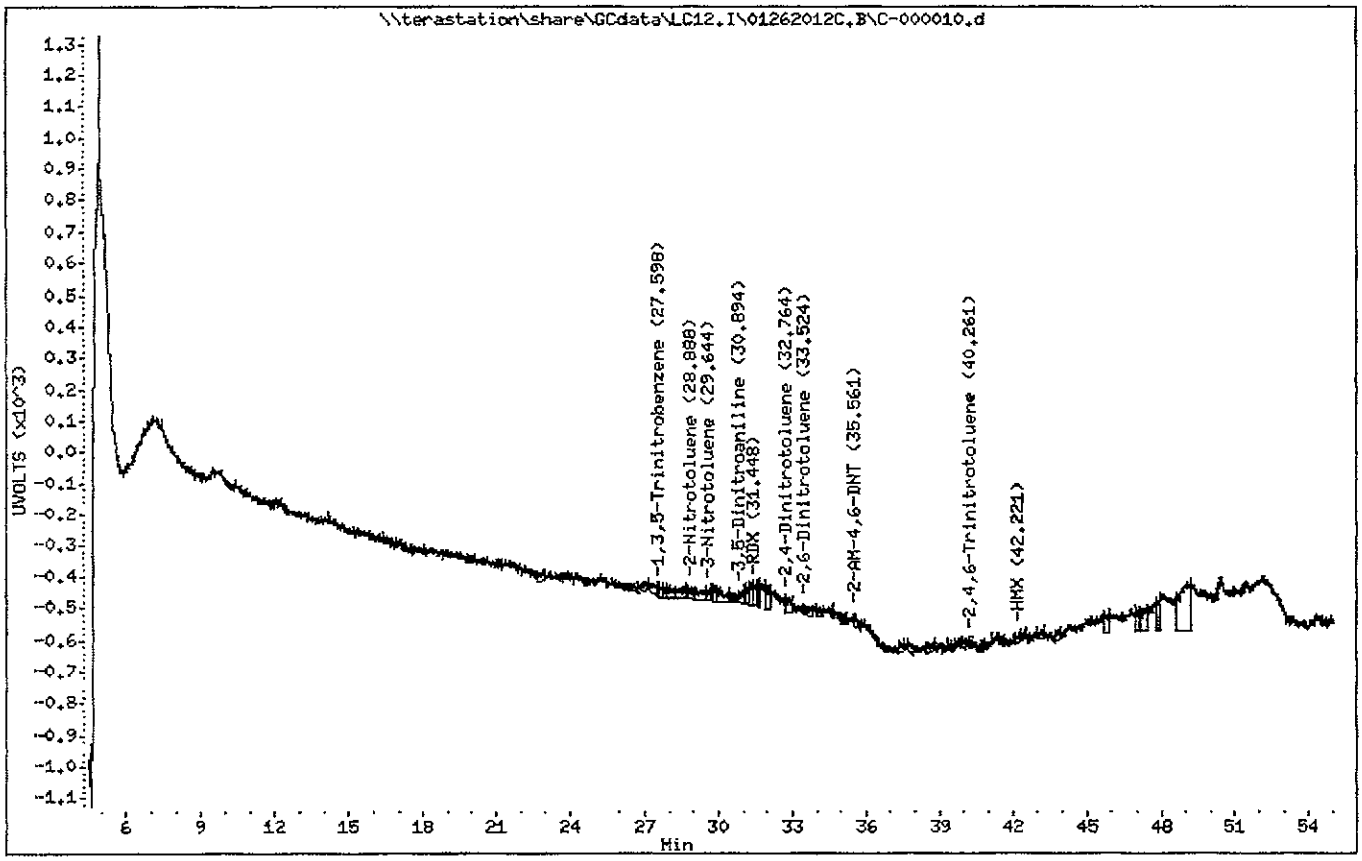
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d\C-000010.d

Page 1

Date : 27-JAN-2012 02:35

Client ID:

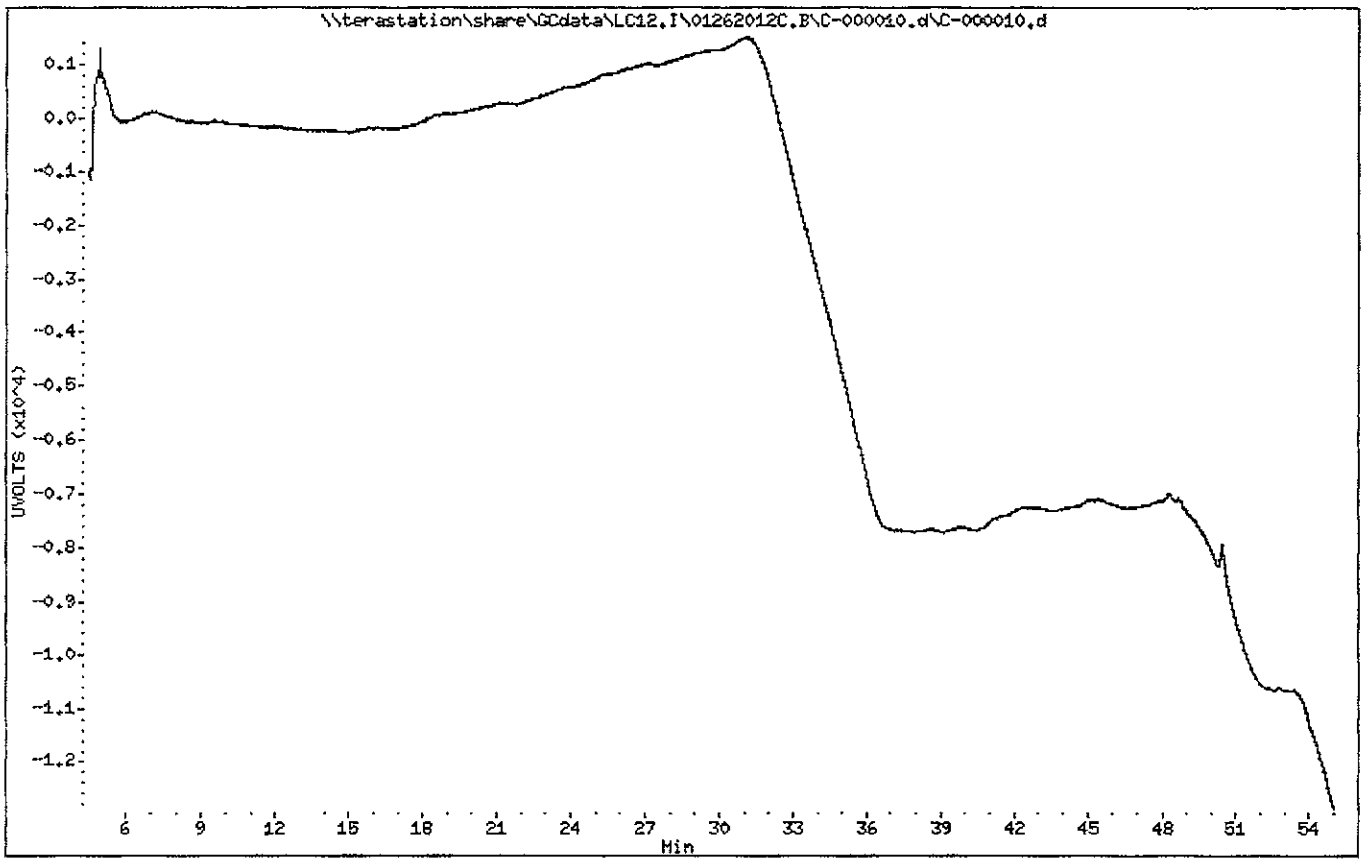
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_MRL 11GCSV0468 8330 5-50ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 03:41 File ID: 01262012C.B/C-000011.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	5.00	21.904	0.000	284	6.189	24					
2	1,3-Dinitrobenzene	5.00	24.904	0.000	611	6.082	22					
3	1,3,5-Trinitrobenz	5.00	27.624	0.000	446	5.847	17					
4	2-Nitrotoluene	10.0	28.977	0.000	346	11.85	19					
5	3-Nitrotoluene	5.00	29.597	0.000	225	5.869	17					
6	3,5-Dinitroaniline	5.00	30.967	0.000	501	6.089	22					
7	RDX	5.00	31.574	0.000	319	6.394	28					
8	2,4-Dinitrotoluene	5.00	32.677	0.000	537	6.102	22					
9	2,6-Dinitrotoluene	5.00	33.704	0.000	328	6.126	23					
10	2-AM-4,6-DNT	5.00	35.780	0.000	441	6.125	23					
11	4-AM-2,6-DNT	5.00	36.370	0.000	363	5.900	18					
12	3,4-Dinitrotoluene	20.0	38.114	0.000	942	20.30	1.5					
13	2,4,6-Trinitrotolu	5.00	40.280	0.000	422	5.293	5.9					
14	HMX	5.00	41.970	0.000	357	5.878	18					
15	TETRYL	5.00	46.254	0.000	636	5.371	7.4					
16	4-Nitrotoluene											
17	EGDN											
18	PETN	20.0						52.804	0.000	3039	21.10	5.5
19	Picric ACID	50.0										
20	Nitroglycerin	20.0						44.554	0.000	1618	19.92	-0.40

MRL passes S/N > 5:1
RDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:29

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 03:41
Operator : SV Inst ID: LC12.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50ng/mL;2;
Misc Info : MRL;10;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.577	340	24	0.071	0.31		
20.904	282	25	0.089	0.32		
21.277	314	36	0.115	0.47		
21.904	8589	284	0.033	3.73	17	Nitrobenzene
24.904	18622	611	0.033	8.03	13	1,3-Dinitrobenzene
27.000	241	33	0.137	0.43		
27.624	13648	446	0.033	5.86	10	1,3,5-Trinitrobenze
28.477	176	24	0.137	0.31		
28.977	8751	346	0.040	4.54	24	2-Nitrotoluene
29.597	6454	225	0.035	2.95	26	3-Nitrotoluene
30.967	12346	501	0.041	6.58	15	3,5-Dinitroaniline
31.574	6899	319	0.046	4.19	7	RDX
32.260	675	83	0.123	1.09		
32.677	15113	537	0.036	7.06	23	2,4-Dinitrotoluene
33.704	9025	328	0.036	4.31	22	2,6-Dinitrotoluene
34.284	149	51	0.341	0.67		
34.537	561	36	0.064	0.47		
35.780	11453	441	0.039	5.79	21	2-AM-4,6-DNT
36.370	9652	363	0.038	4.77	20	4-AM-2,6-DNT
37.170	249	34	0.137	0.44		
38.114	22113	942	0.043	12.54	$ 1	3,4-Dinitrotoluene
38.924	110	21	0.191	0.27		
39.620	110	25	0.227	0.32		
40.280	10858	422	0.039	5.54	19	2,4,6-Trinitrotolue
41.147	96	24	0.250	0.31		
41.317	84	21	0.250	0.27		
41.754	174	36	0.207	0.47		
41.970	5872	357	0.061	4.69	4	HMX
43.070	120	26	0.217	0.34		
44.980	632	51	0.081	0.67		
46.254	10009	636	0.064	8.36	16	TETRYL
47.507	603	67	0.111	0.88		
48.634	857	95	0.111	1.24		
49.030	2801	136	0.049	1.78		
	177980	7606		100.000		

Total unknown % height = 11.06

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d

Page 2

Date : 27-JAN-2012 03:41

Client ID:

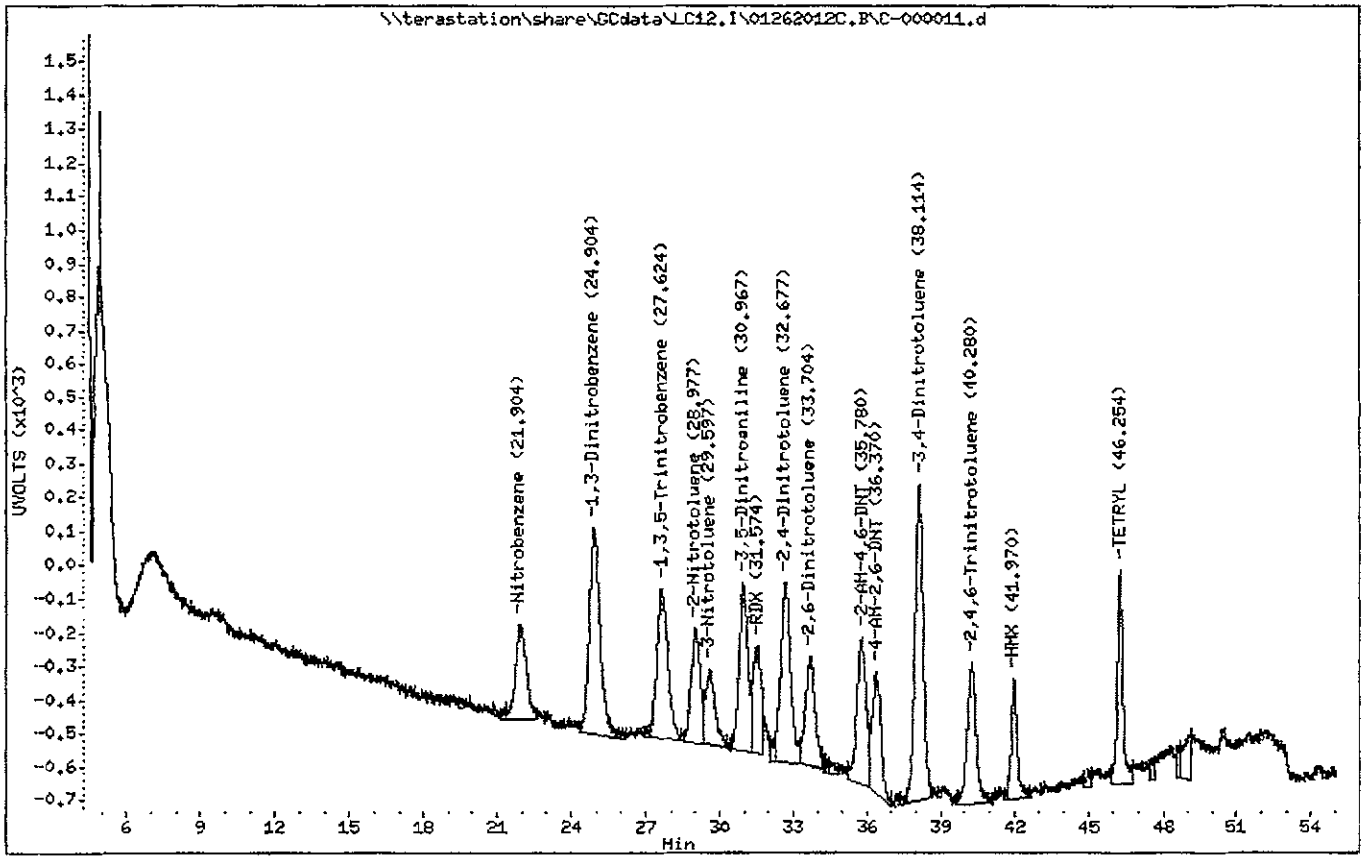
Instrument: LC12.i

Sample Info: STD_HRL 11GCSV0468 8330 5-50ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-00001
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 03:41
Operator : SV Inst ID: LC12.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50ng/mL;2;
Misc Info : MRL;10;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.554	23888	1618	0.068	34.74	18 Nitroglycerin
52.804	26263	3039	0.116	65.26	27 PETN
	50152	4657		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d

Date : 27-JAN-2012 03:41

Client ID:

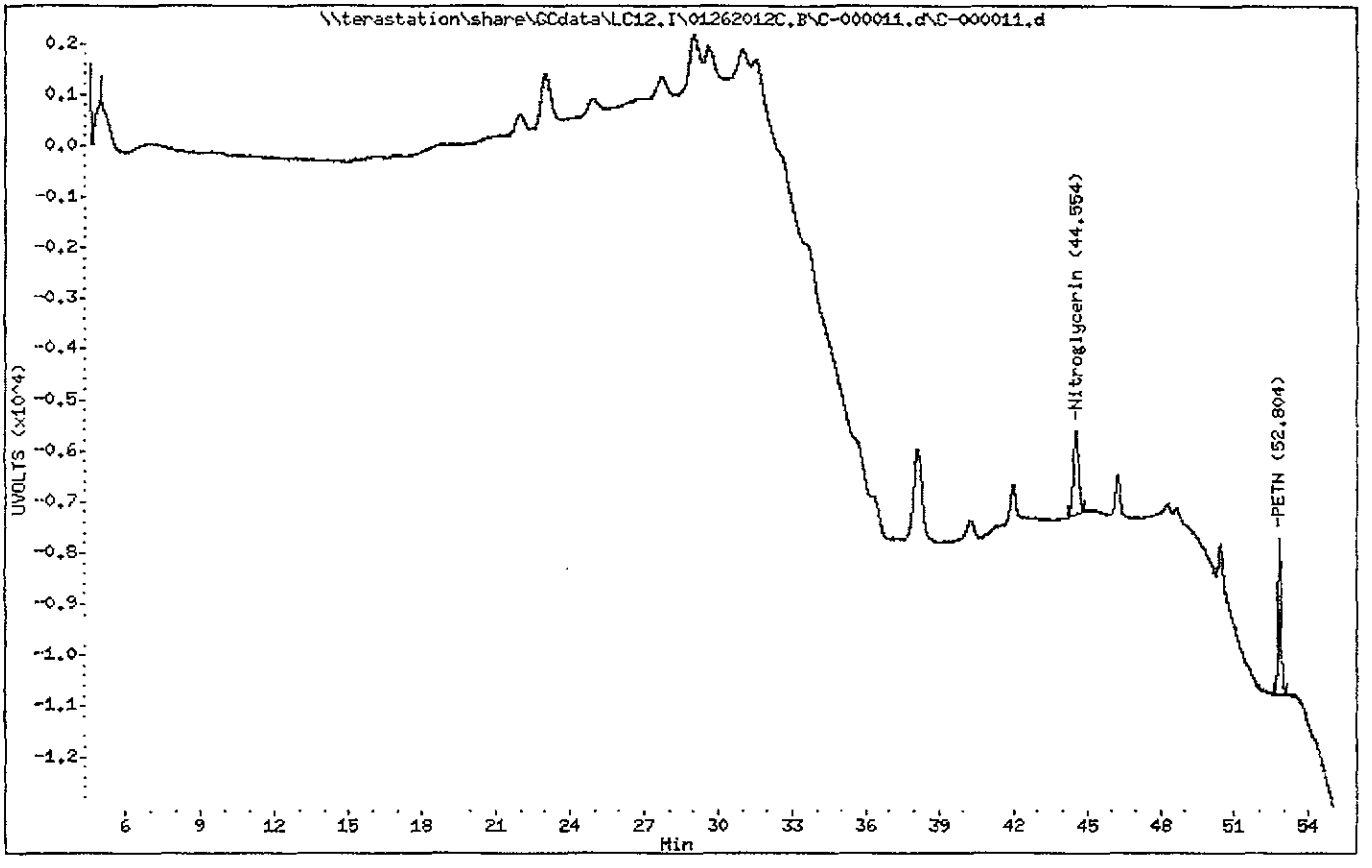
Instrument: LC12.i

Sample Info: STD_MRL 11GCSV0468 8330 5-50ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 04:46 File ID: 01262012C.B/C-000012.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	21.924	0.000	9732	212.1	6.1					
2	1,3-Dinitrobenzene	200	24.898	0.000	20270	201.8	0.90					
3	1,3,5-Trinitrobenz	200	27.648	0.000	15645	205.1	2.6					
4	2-Nitrotoluene	400	28.998	0.000	12223	418.7	4.7					
5	3-Nitrotoluene	200	29.578	0.000	7855	204.9	2.5					
6	3,5-Dinitroaniline	200	30.961	0.000	17369	211.1	5.5					
7	RDX	200	31.534	0.000	9670	193.8	-3.1					
8	2,4-Dinitrotoluene	200	32.668	0.000	18048	205.1	2.6					
9	2,6-Dinitrotoluene	200	33.694	0.000	10822	202.1	1.1					
10	2-AM-4,6-DNT	200	35.748	0.000	14679	203.9	2.0					
11	4-AM-2,6-DNT	200	36.388	0.000	12366	201.0	0.50					
12	3,4-Dinitrotoluene	200	38.134	0.000	84	1.810	-99					
13	2,4,6-Trinitrotolu	200	40.251	0.000	16693	209.4	4.7					
14	HMX	200	41.981	0.000	12849	211.6	5.8					
15	TETRYL	200	46.254	0.000	25166	212.5	6.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.798	0.000	31225	216.8	8.4
19	Picric ACID	500										
20	Nitroglycerin	200						44.541	0.000	18382	226.4	13

NA not spiked @ 1/26/12

ICV passes ±15%
1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:30

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 04:46
Operator : SV Inst ID: LC12.i
Smp Info : STD_ICV 11GCSV0515 8330 200ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
21.924	290579	9732	0.033	4.76		17 Nitrobenzene
24.898	589470	20270	0.034	9.92		13 1,3-Dinitrobenzene
27.648	474856	15645	0.033	7.65		10 1,3,5-Trinitrobenze
28.998	330541	12223	0.037	5.98		24 2-Nitrotoluene
29.578	206943	7855	0.038	3.84		26 3-Nitrotoluene
30.961	423943	17369	0.041	8.50		15 3,5-Dinitroaniline
31.534	239975	9670	0.040	4.73		7 RDX
32.668	498227	18048	0.036	8.83		23 2,4-Dinitrotoluene
33.694	306447	10822	0.035	5.29		22 2,6-Dinitrotoluene
35.748	388425	14679	0.038	7.18		21 2-AM-4,6-DNT
36.388	336419	12366	0.037	6.05		20 4-AM-2,6-DNT
37.814	123	25	0.203	0.01		
38.134	1514	84	0.055	0.04	$	1 3,4-Dinitrotoluene
38.751	83	20	0.240	0.00		
39.168	2870	131	0.046	0.06		
40.251	405775	16693	0.041	8.17		19 2,4,6-Trinitrotolue
41.981	198660	12849	0.065	6.28		4 HMX
42.931	1184	49	0.041	0.02		
43.311	275	36	0.131	0.01		
44.561	2055	141	0.069	0.06		
45.004	543	51	0.094	0.02		
45.404	794	90	0.113	0.04		
46.254	337501	25166	0.075	12.43		16 TETRYL
47.504	386	29	0.075	0.01		
47.838	500	48	0.096	0.02		
48.111	823	62	0.075	0.03		
48.564	2550	162	0.064	0.07		
	5041462	204315		100.000		

Total unknown % height = 0.3500

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d

Date : 27-JAN-2012 04:46

Client ID:

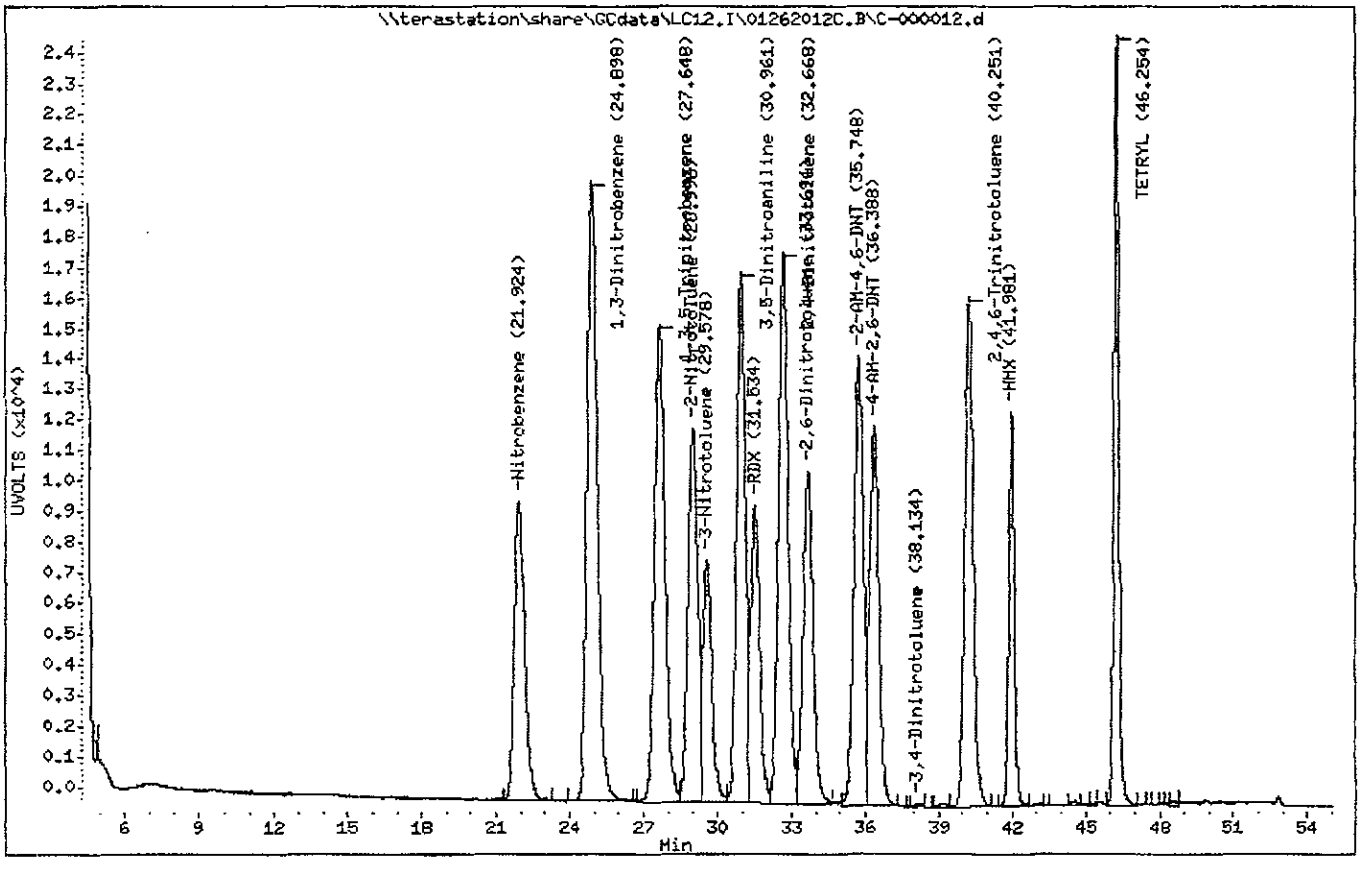
Instrument: LC12.i

Sample Info: STD_ICV 11GCSV0515 8330 200ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-00001
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 04:46
Operator : SV Inst ID: LC12.i
Smp Info : STD_ICV 11GCSV0515 8330 200ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:30 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.541	285162	18382	0.064	36.75	18 Nitroglycerin
52.381	3916	407	0.104	0.81	
52.798	269134	31225	0.116	62.44	27 PETN
	558211	50014		100.000	

Total unknown % height = 0.8100

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d

Date : 27-JAN-2012 04:46

Client ID:

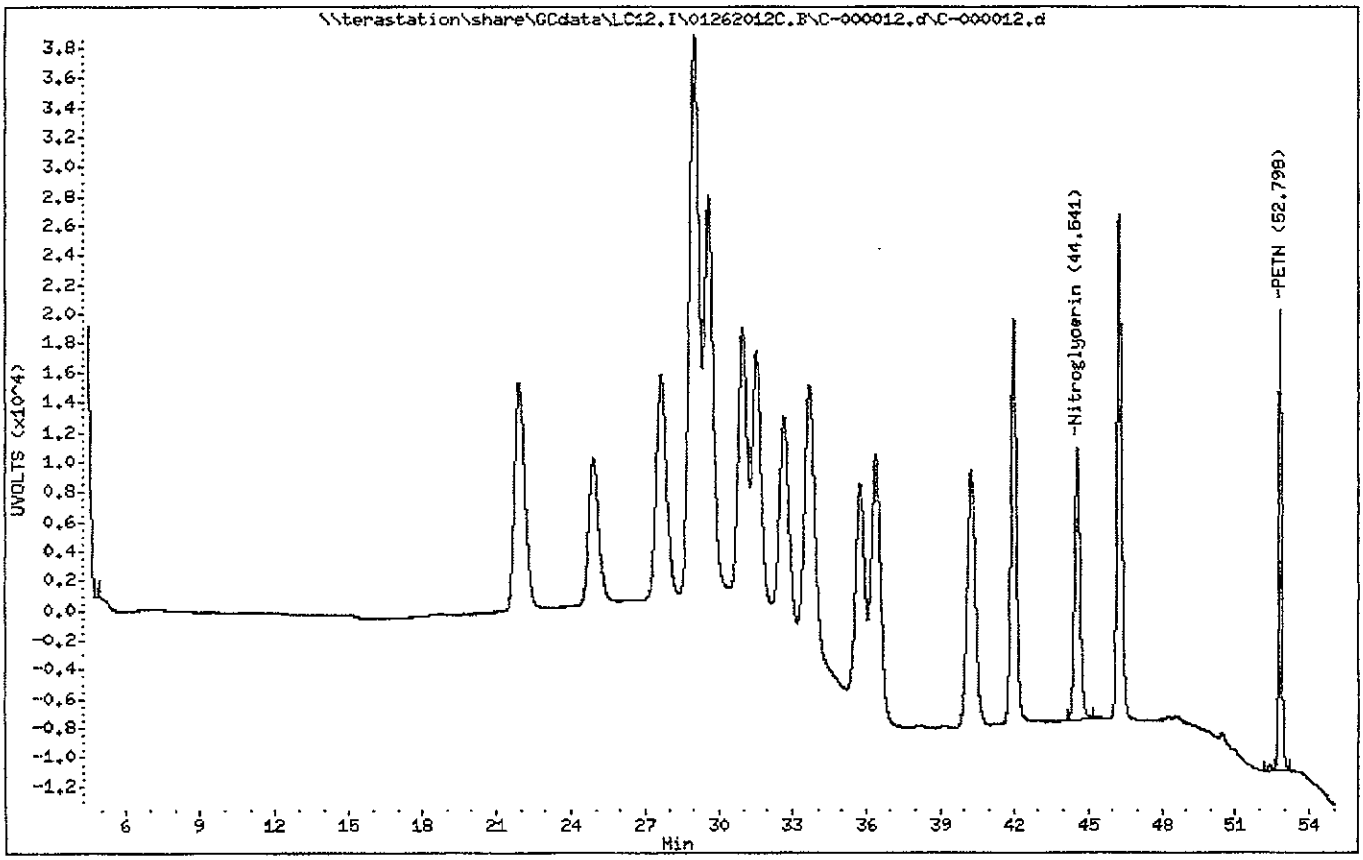
Instrument: LC12.i

Sample Info: STD_ICV 11GCSV0515 8330 200ng/mL:2:

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 01-FEB-2012 16:37
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000003.d
Sublist: 2_CALMET
SpikeList:

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1 TNX									
2 DNX									
3 MNX	28.083	0.022	49	0.8429					

not real peak

2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:47

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d
Lab Smp Id: BLANK
Inj Date : 01-FEB-2012 16:37
Operator : RN Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:44 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.766	556	36	0.065	1.42	
27.179	615	53	0.086	2.09	
27.513	801	61	0.076	2.40	
27.666	612	67	0.109	2.64	
27.886	667	52	0.078	2.05	
28.083	934	49	0.052	1.93	5 MNX
28.453	264	50	0.189	1.97	
28.603	311	49	0.158	1.93	
28.759	398	41	0.103	1.61	
28.959	530	45	0.085	1.77	
29.233	189	39	0.206	1.53	
29.396	525	54	0.103	2.13	
29.636	770	57	0.074	2.24	
29.869	759	50	0.066	1.97	
30.246	650	53	0.082	2.09	
30.399	376	60	0.160	2.36	
30.583	300	45	0.150	1.77	
30.779	557	47	0.084	1.85	
31.129	412	45	0.109	1.77	
31.193	305	51	0.167	2.01	
31.343	418	63	0.151	2.48	
31.529	1291	85	0.066	3.35	
31.843	674	92	0.136	3.63	
32.019	1739	83	0.048	3.27	
32.419	1284	72	0.056	2.84	
32.959	337	50	0.148	1.97	
33.849	389	47	0.121	1.85	
34.299	636	42	0.066	1.65	
34.686	684	38	0.056	1.49	
35.399	192	32	0.167	1.26	
35.739	205	24	0.117	0.94	
36.129	569	32	0.056	1.26	
37.126	141	23	0.163	0.90	
37.453	158	23	0.146	0.90	
37.969	218	24	0.110	0.94	
38.269	66	22	0.335	0.86	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d Page 2
Report Date: 02-Feb-2012 10:47

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
38.569	735	32	0.044	1.26	
39.049	232	32	0.138	1.26	
39.783	354	29	0.082	1.14	
40.123	162	21	0.129	0.82	
40.589	374	30	0.080	1.18	
40.983	358	36	0.101	1.42	
41.199	577	46	0.080	1.81	
41.529	667	43	0.064	1.69	
41.833	133	34	0.255	1.34	
42.056	203	27	0.133	1.06	
42.309	194	26	0.134	1.02	
42.873	80	30	0.375	1.18	
43.023	699	36	0.051	1.42	
44.396	888	46	0.052	1.81	
46.139	975	84	0.086	3.31	
46.743	428	91	0.213	3.59	
48.209	1076	135	0.126	5.57	
	27665	2534		100.000	

Total unknown % height = 98.07

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d

Date : 01-FEB-2012 16:37

Client ID:

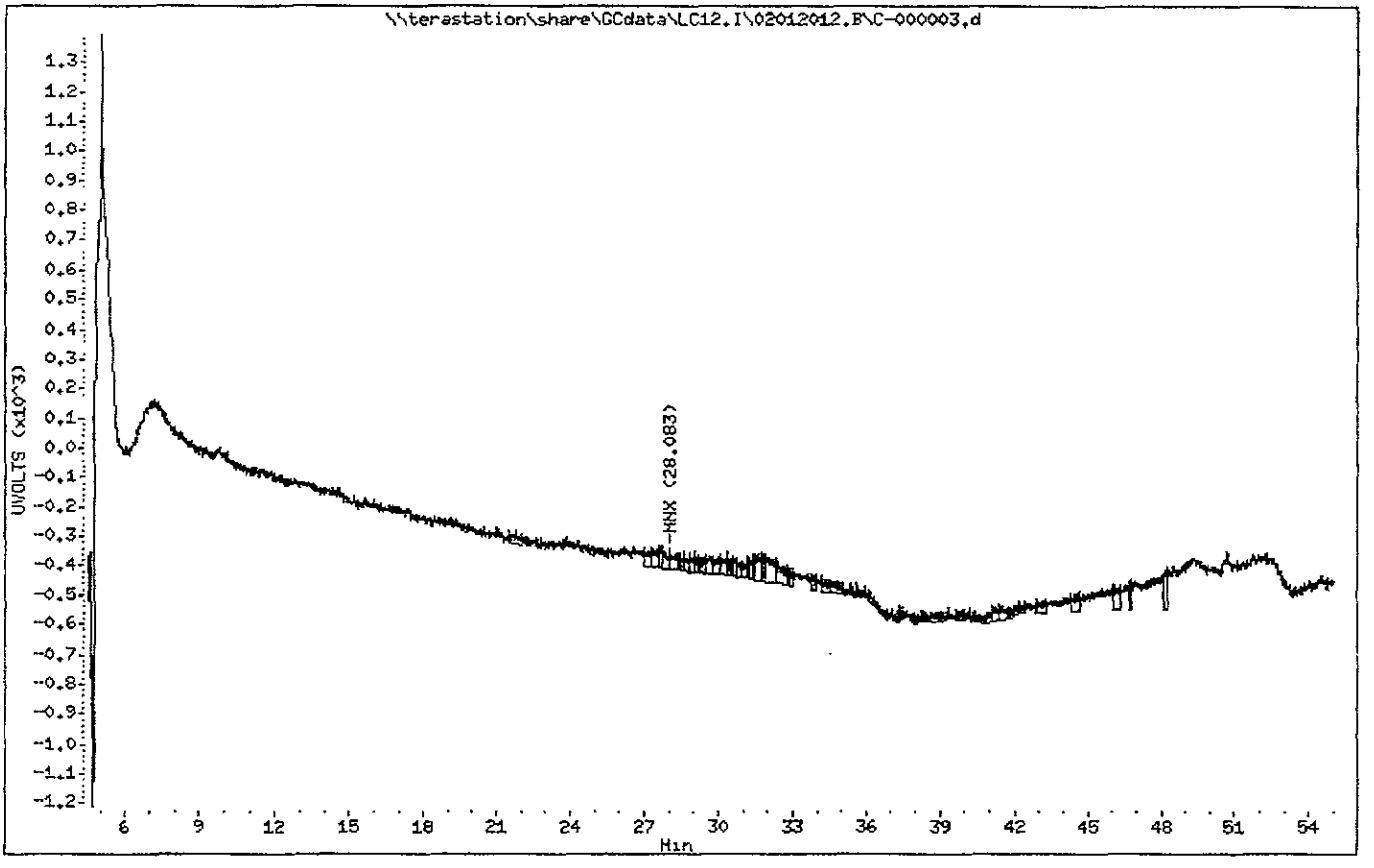
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



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Date : 01-FEB-2012 16:37

Client ID:

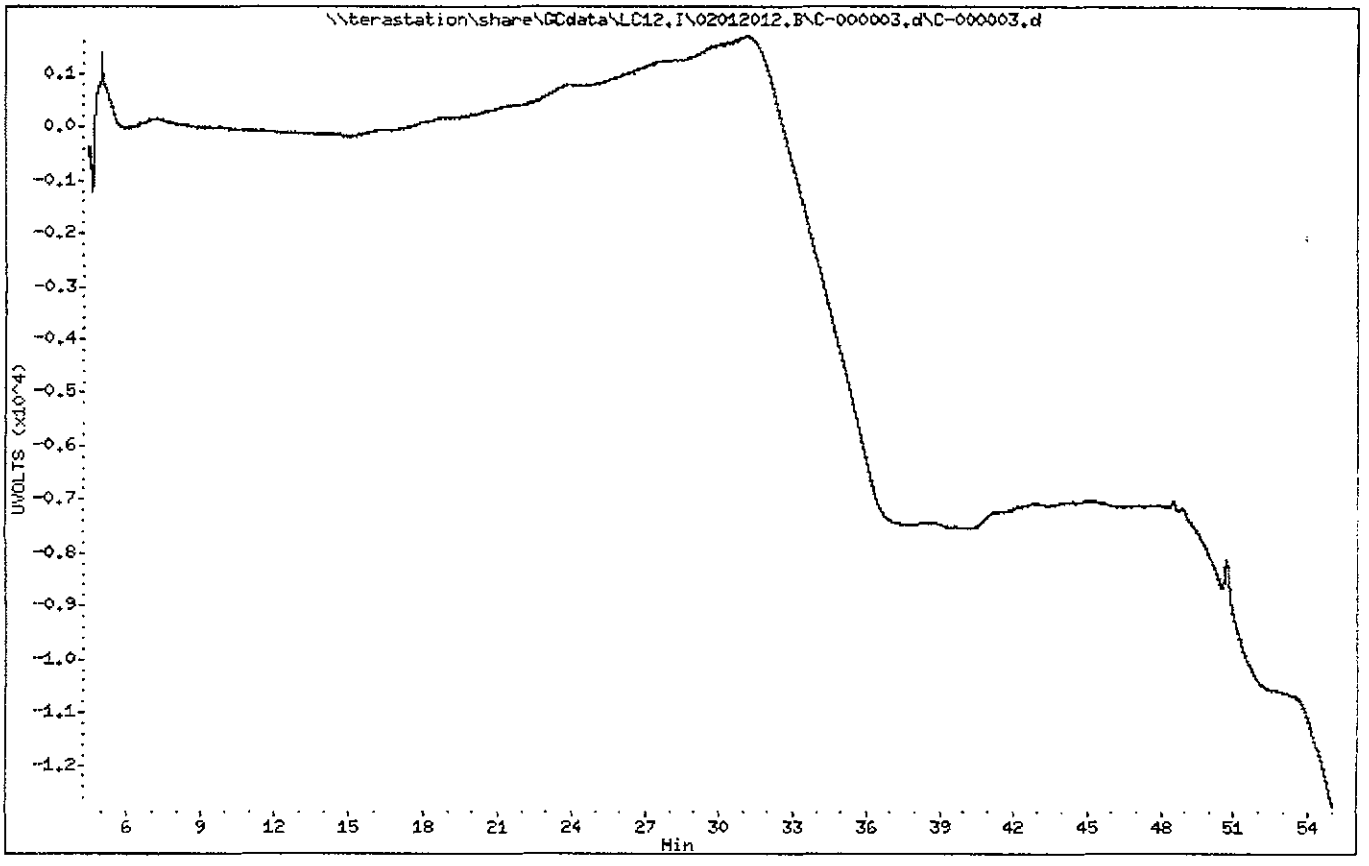
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_03 E110811F 20ng/mL
Analyzed : 01-FEB-2012 17:43
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012_B/C-000004.d
Sublist: 2_CALMET
SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	20.0	18.337	0.000	1058	52.90000				
2	DNX	20.0	23.647	0.000	1103	55.15000				
3	MNX	20.0	28.027	0.000	1064	53.20000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:48

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Lab Smp Id: STD_03 E110811F 20n
Inj Date : 01-FEB-2012 17:43
Operator : RN Inst ID: LC12.i
Smp Info : STD_03 E110811F 20ng/mL;1;
Misc Info : ;3;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:47 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.337	34270	1058	0.031	21.39	2 TNX
23.647	32316	1103	0.034	22.55	3 DNX
27.054	299	40	0.134	0.80	
27.247	681	54	0.079	1.09	
28.027	28980	1064	0.037	21.51	5 MNX
28.957	424	37	0.087	0.74	
29.251	315	27	0.086	0.54	
29.467	111	36	0.325	0.72	
29.594	198	38	0.192	0.76	
29.771	704	38	0.054	0.76	
30.107	210	38	0.181	0.76	
30.354	429	39	0.091	0.78	
30.451	179	47	0.263	0.95	
30.687	573	57	0.100	1.15	
30.837	308	46	0.149	0.93	
31.021	526	44	0.084	0.88	
31.244	323	45	0.139	0.91	
31.447	401	54	0.135	1.09	
31.631	621	69	0.111	1.39	
31.744	694	84	0.121	1.69	
31.927	771	80	0.104	1.61	
33.821	137	32	0.234	0.64	
33.957	207	20	0.097	0.40	
34.507	286	25	0.087	0.50	
35.634	165	21	0.127	0.42	
37.017	87	21	0.240	0.42	
37.697	118	24	0.204	0.48	
38.544	429	26	0.061	0.52	
38.934	308	34	0.110	0.68	
39.734	568	34	0.060	0.68	
40.121	185	27	0.146	0.54	
40.257	171	25	0.146	0.50	
40.731	192	33	0.172	0.66	
40.984	293	28	0.096	0.56	
41.611	130	23	0.177	0.46	
42.097	209	28	0.134	0.56	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d Page 2
Report Date: 02-Feb-2012 10:48

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.544	214	32	0.149	0.64	
42.707	212	29	0.137	0.58	
43.004	286	22	0.077	0.44	
44.777	417	40	0.096	0.80	
45.957	771	67	0.087	1.35	
47.717	1737	95	0.055	1.92	
48.457	4249	161	0.038	3.25	
	114701	4945		100.000	

Total unknown % height = 34.55

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d

Date : 01-FEB-2012 17:43

Client ID:

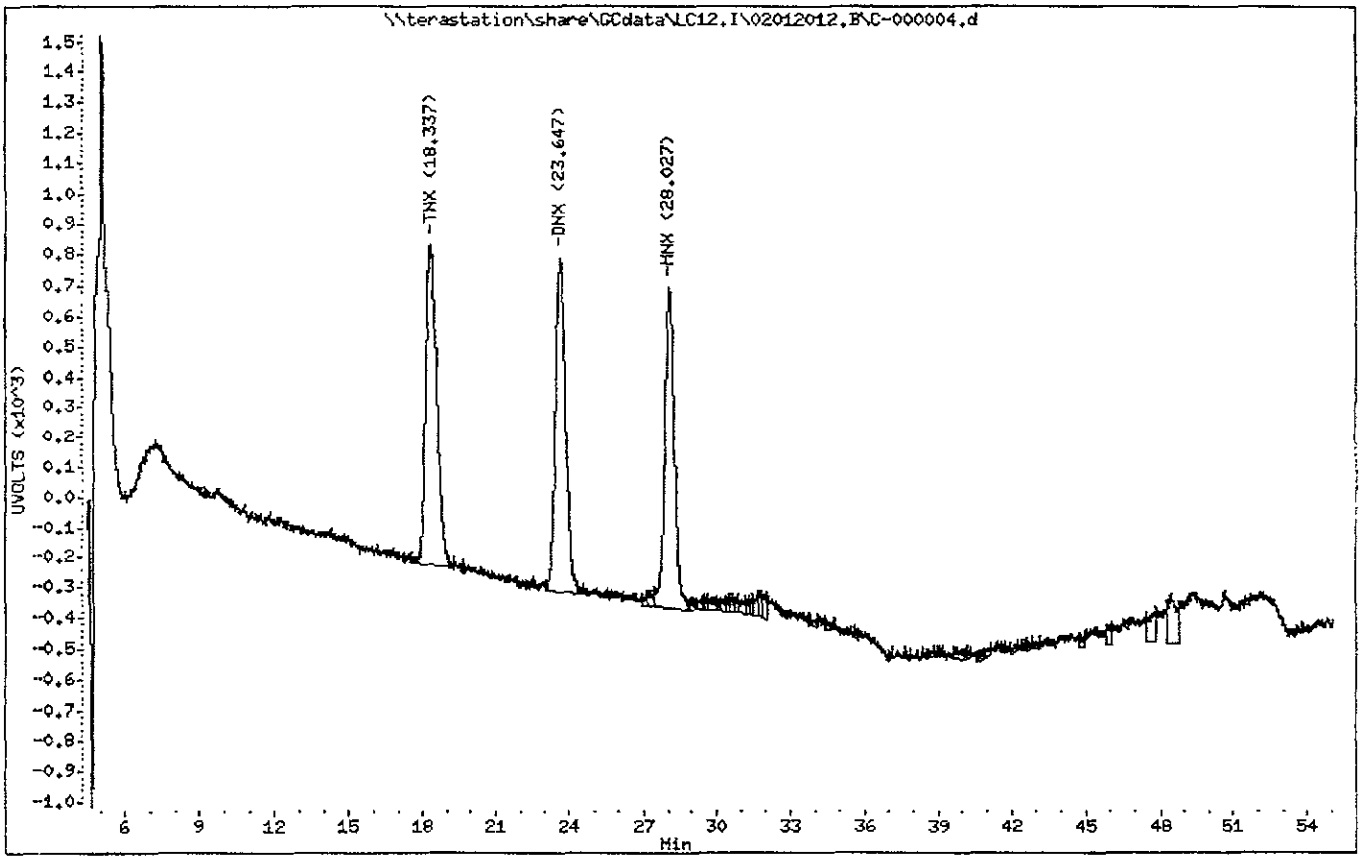
Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL:1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d\C-000004.d

Page 1

Date : 01-FEB-2012 17:43

Client ID:

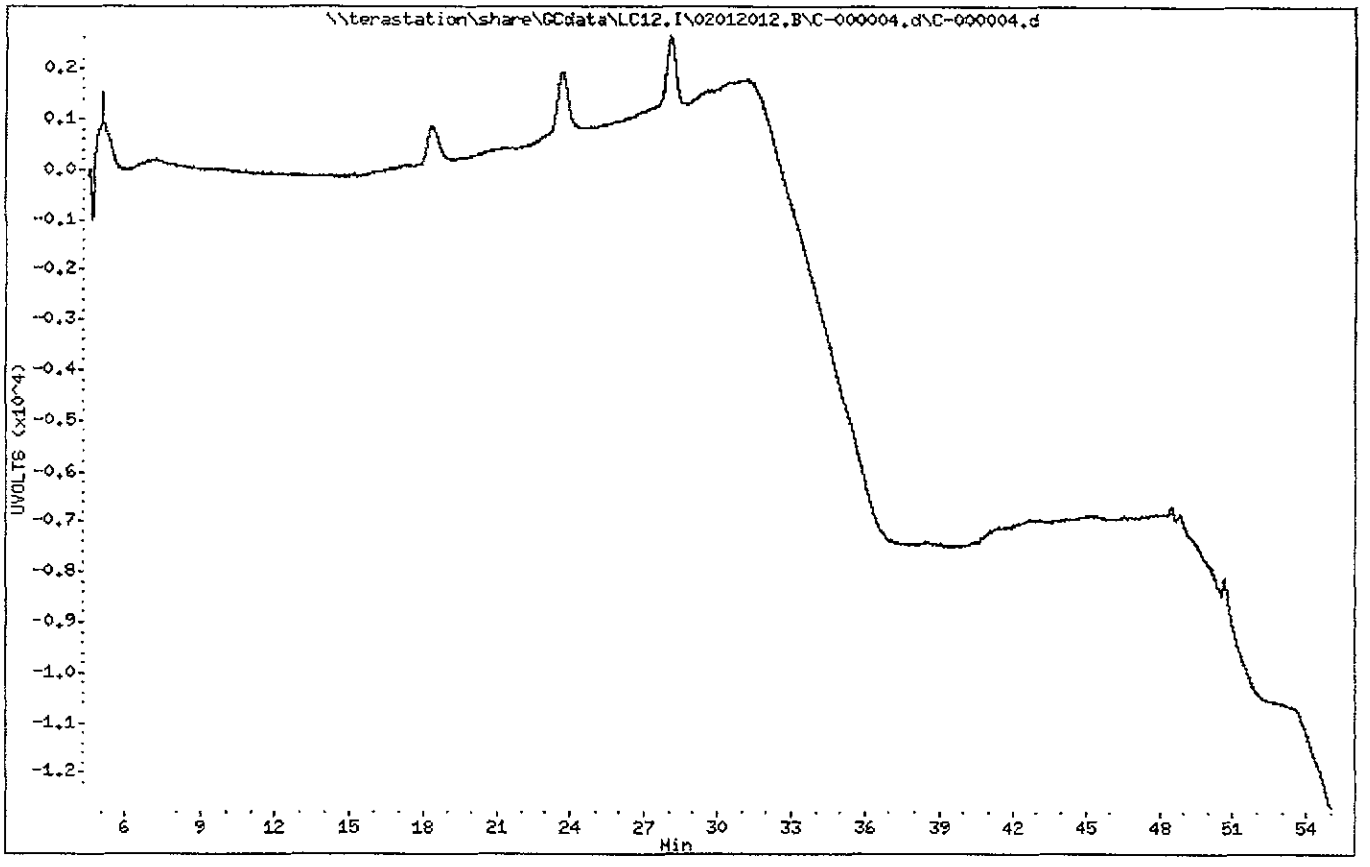
Instrument: LC12.i

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 E110811G 50ng/mL
Analyzed : 01-FEB-2012 18:48
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000005.d
Sublist: 2_CALMET
SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	50.0	18.350	0.000	2946	58.92000				
2	DNX	50.0	23.654	0.000	3038	60.76000				
3	MNX	50.0	28.060	0.000	2898	57.96000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:48

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Lab Smp Id: STD_04 E110811G 50n
Inj Date : 01-FEB-2012 18:48
Operator : RN Inst ID: LC12.i
Smp Info : STD_04 E110811G 50ng/mL;1;
Misc Info : ;4;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:48 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 18:48 Cal File: C-000005.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.980	1935	63	0.033	0.56	
16.664	648	36	0.056	0.32	
18.350	92282	2946	0.032	26.22	2 TNX
23.654	84352	3038	0.036	27.27	3 DNX
26.580	374	33	0.088	0.29	
27.074	460	44	0.096	0.39	
27.200	761	51	0.067	0.45	
27.474	259	63	0.244	0.56	
28.060	74424	2898	0.039	25.79	5 MNX
29.120	453	35	0.077	0.31	
29.380	147	37	0.252	0.32	
29.557	570	45	0.079	0.40	
29.840	825	55	0.067	0.48	
30.110	859	42	0.049	0.37	
30.504	297	58	0.195	0.51	
30.607	852	59	0.069	0.52	
30.927	453	52	0.115	0.46	
31.130	508	52	0.102	0.46	
31.257	256	62	0.242	0.55	
31.390	337	64	0.190	0.56	
31.584	883	82	0.093	0.72	
31.717	512	95	0.185	0.84	
31.960	3795	97	0.026	0.86	
32.824	524	59	0.113	0.52	
34.214	320	43	0.134	0.38	
34.317	516	54	0.105	0.48	
34.924	229	41	0.179	0.36	
35.587	133	31	0.233	0.27	
36.027	531	31	0.058	0.27	
37.277	371	26	0.070	0.23	
37.730	64	17	0.265	0.15	
37.940	172	30	0.175	0.26	
38.240	176	32	0.182	0.28	
38.767	277	18	0.065	0.16	
39.170	322	33	0.103	0.29	
39.400	167	15	0.090	0.13	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d Page 2
Report Date: 02-Feb-2012 10:48

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.924	191	21	0.110	0.18	
40.610	228	29	0.127	0.25	
40.954	202	21	0.104	0.18	
41.130	307	25	0.081	0.22	
41.387	129	33	0.256	0.29	
41.834	128	23	0.180	0.20	
42.524	252	17	0.067	0.15	
42.804	143	29	0.203	0.25	
43.980	154	26	0.169	0.23	
44.564	142	29	0.204	0.25	
45.230	163	37	0.227	0.32	
45.784	296	33	0.111	0.29	
46.500	240	58	0.242	0.51	
46.864	825	62	0.075	0.55	
47.790	1875	86	0.046	0.76	
48.457	3925	139	0.035	1.23	
48.930	1671	130	0.078	1.15	
	280913	11235		100.000	

Total unknown % height = 20.72

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d

Page 3

Date : 01-FEB-2012 18:48

Client ID:

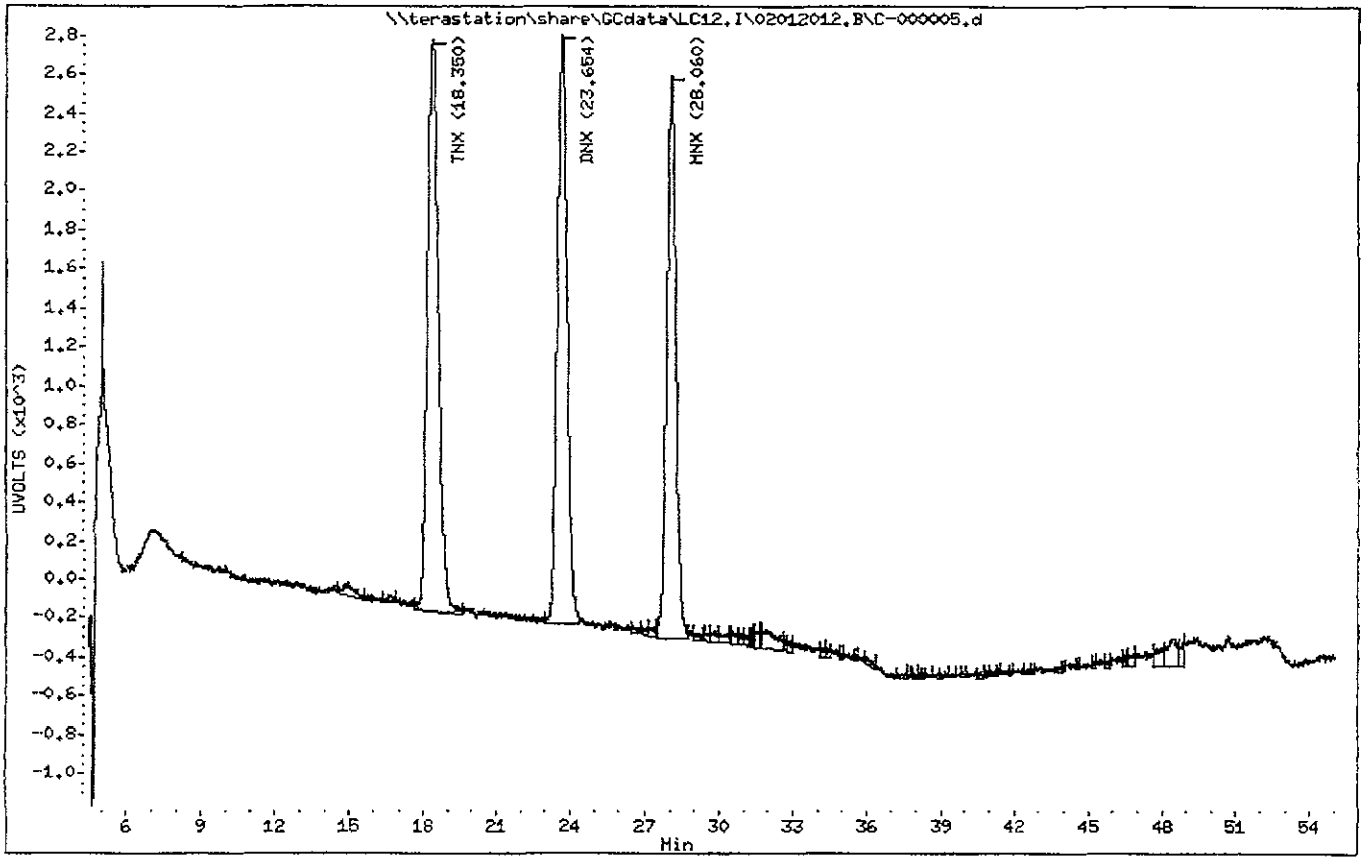
Instrument: LC12.i

Sample Info: STD_04 E110811G 50ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d\C-000005.d

Date : 01-FEB-2012 18:48

Client ID:

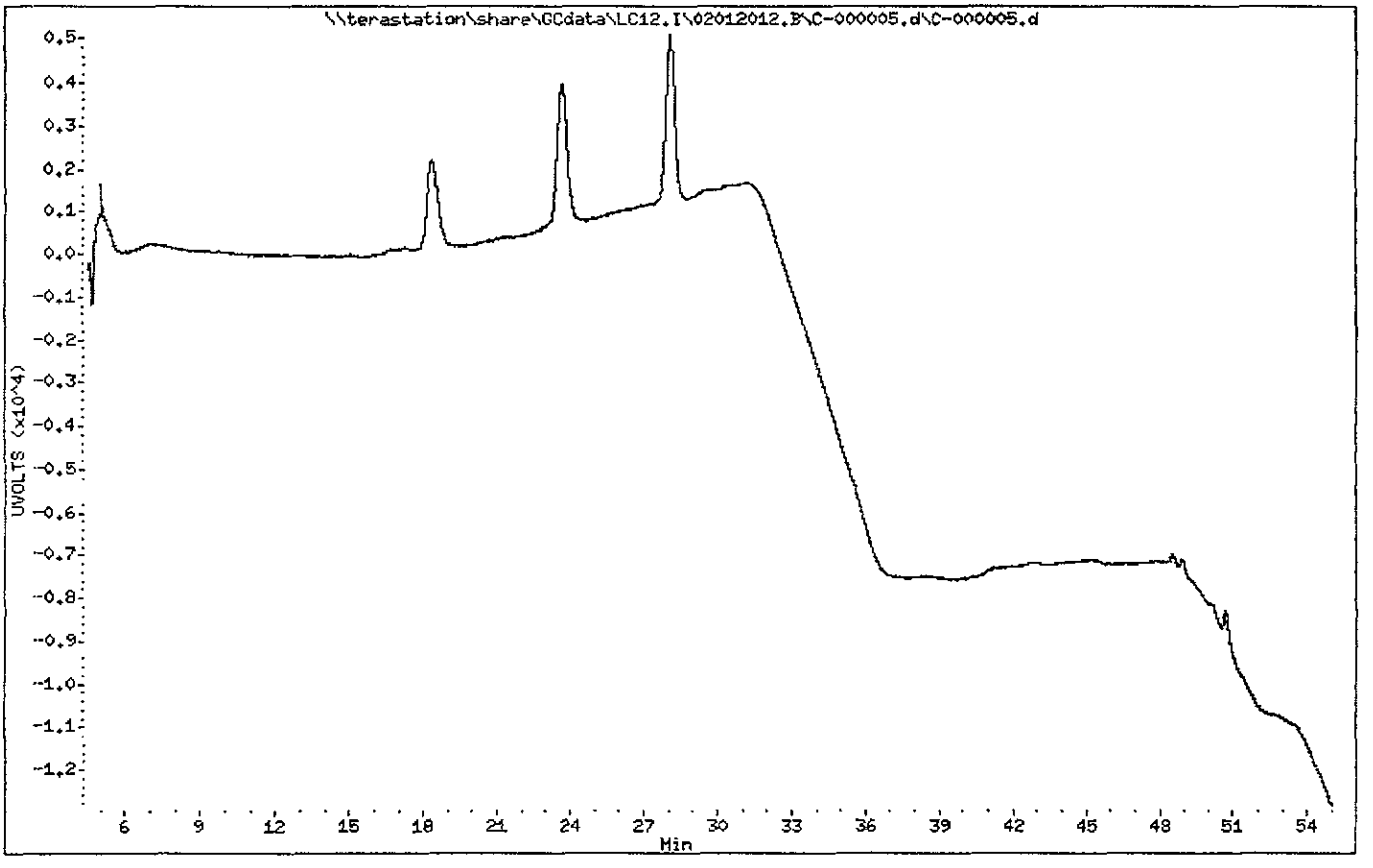
Instrument: LC12.i

Sample Info: STD_04 E110811G 50ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_05 E110811H 100ng/mL
Analyzed : 01-FEB-2012 19:54
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000006.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	100	18.329	0.000	6055	60.55000				
2	DNX	100	23.636	0.000	6235	62.35000				
3	MNX	100	28.032	0.000	5990	59.90000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:49

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Lab Smp Id: STD_05 E110811H 100
Inj Date : 01-FEB-2012 19:54
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 E110811H 100ng/mL;1;
Misc Info : ;5;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:49 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 19:54 Cal File: C-000006.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.979	2646	93	0.035	0.44	
16.539	886	36	0.041	0.17	
18.329	188669	6055	0.032	29.16	2 TNX
23.636	175095	6235	0.036	30.29	3 DNX
25.689	739	23	0.031	0.11	
27.172	396	34	0.086	0.16	
27.279	590	55	0.093	0.26	
28.032	152800	5990	0.039	28.84	5 MNX
29.046	599	35	0.058	0.16	
29.416	181	37	0.204	0.17	
29.596	473	42	0.089	0.20	
29.822	307	50	0.163	0.24	
30.069	542	53	0.098	0.25	
30.279	648	62	0.096	0.29	
30.489	167	63	0.377	0.30	
30.592	1044	60	0.057	0.28	
30.992	462	55	0.119	0.26	
31.256	605	52	0.086	0.25	
31.446	481	72	0.150	0.34	
31.569	815	79	0.097	0.38	
31.832	1161	100	0.086	0.48	
31.932	1865	107	0.057	0.51	
32.739	463	62	0.134	0.29	
32.969	1138	59	0.052	0.28	
33.892	569	51	0.090	0.24	
34.989	648	46	0.071	0.22	
35.229	481	47	0.098	0.22	
35.942	258	31	0.120	0.14	
37.109	200	22	0.110	0.10	
37.476	327	26	0.079	0.12	
37.909	84	25	0.298	0.12	
38.159	115	16	0.139	0.07	
38.569	84	24	0.286	0.11	
38.826	285	25	0.088	0.12	
39.376	179	32	0.178	0.15	
39.676	458	33	0.072	0.15	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d Page 2
Report Date: 02-Feb-2012 10:49

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
40.002	343	34	0.099	0.16	
40.286	194	31	0.160	0.14	
40.659	112	18	0.161	0.08	
40.999	53	19	0.358	0.09	
41.232	217	21	0.097	0.10	
41.606	341	30	0.088	0.14	
41.939	95	29	0.306	0.13	
42.226	461	22	0.048	0.10	
42.542	337	25	0.074	0.12	
42.879	203	29	0.143	0.13	
44.102	910	46	0.051	0.22	
44.729	954	56	0.059	0.26	
45.929	228	43	0.189	0.20	
46.259	615	80	0.130	0.38	
47.246	780	79	0.101	0.38	
48.359	3770	166	0.044	0.79	
48.816	1729	148	0.086	0.71	
	547802	20763		100.000	

Total unknown % height = 11.71

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d

Date : 01-FEB-2012 19:54

Client ID:

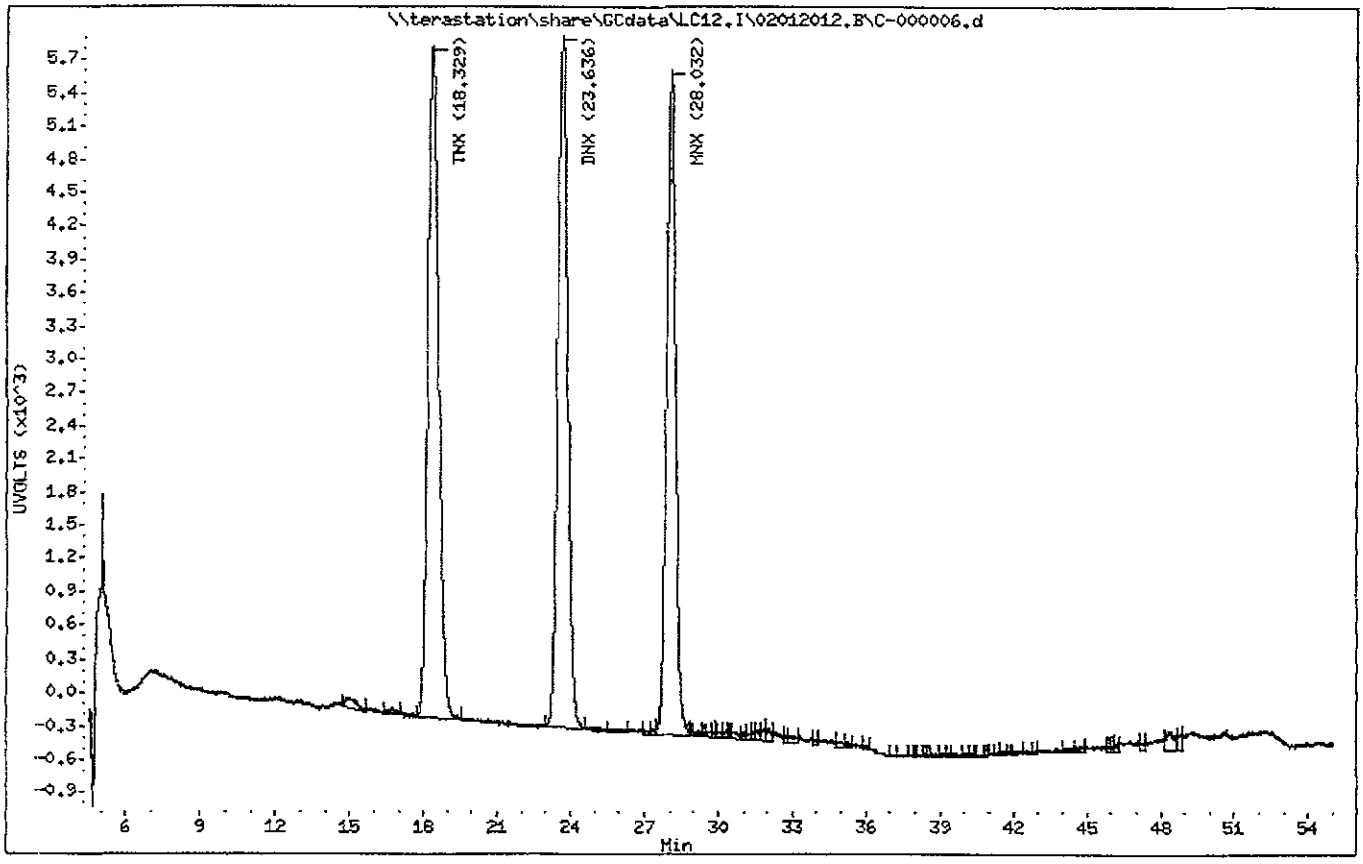
Instrument: LC12.I

Sample Info: STD_05 E110811H 100ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d\C-000006.d

Date : 01-FEB-2012 19:54

Client ID:

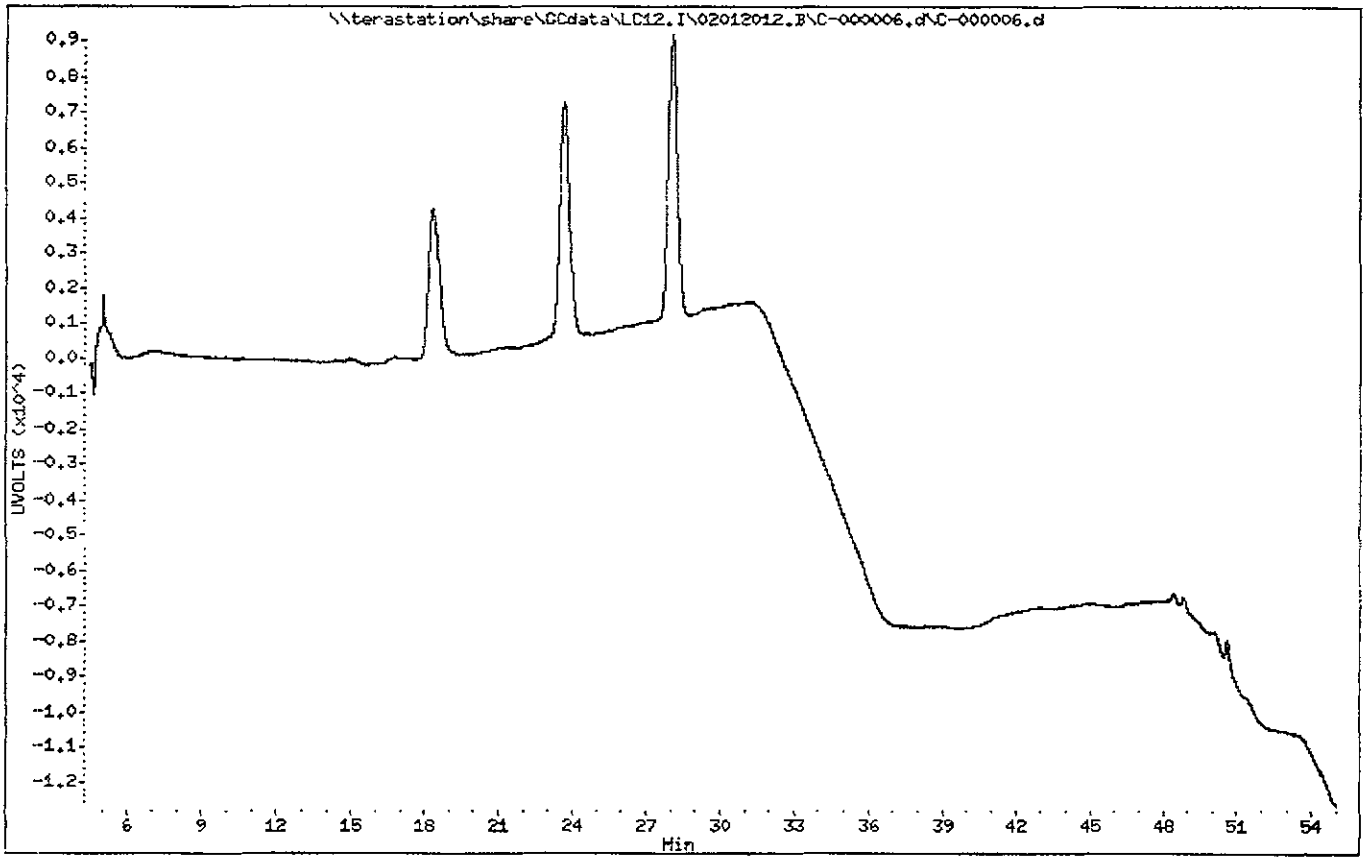
Instrument: LC12.I

Sample Info: STD_05 E110811H 100ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_06 E110811I 200ng/mL
Analyzed : 01-FEB-2012 20:59
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000007.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	200	18.326	0.000	12050	60.25000				
2	DNX	200	23.633	0.000	12470	62.35000				
3	MNX	200	28.033	0.000	11938	59.69000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:50

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Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Lab Smp Id: STD_06 E110811I 200
Inj Date : 01-FEB-2012 20:59
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 E110811I 200ng/mL;1;
Misc Info : ;6;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:49 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 20:59 Cal File: C-000007.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.936	10462	226	0.022	0.57	
15.793	1532	55	0.036	0.14	
16.683	889	45	0.051	0.11	
18.326	376142	12050	0.032	30.85	2 TNX
23.633	350438	12470	0.036	32.19	3 DNX
27.186	1072	57	0.053	0.14	
28.033	304197	11938	0.039	30.56	5 MNX
29.306	439	51	0.116	0.13	
29.626	553	54	0.098	0.13	
29.716	283	59	0.209	0.15	
29.859	1167	66	0.057	0.16	
30.433	1389	64	0.046	0.16	
30.703	481	69	0.143	0.17	
30.926	490	62	0.127	0.15	
31.179	570	66	0.116	0.16	
31.319	588	70	0.119	0.17	
31.576	869	94	0.108	0.24	
31.943	4045	129	0.032	0.33	
32.916	790	67	0.085	0.17	
33.219	1294	65	0.050	0.16	
34.109	628	57	0.091	0.14	
34.409	426	58	0.136	0.14	
35.153	218	45	0.206	0.11	
36.143	142	27	0.189	0.06	
36.483	90	23	0.254	0.05	
37.286	129	20	0.155	0.05	
37.499	295	23	0.078	0.05	
38.119	197	27	0.137	0.06	
38.363	283	30	0.106	0.07	
38.683	378	25	0.066	0.06	
38.936	280	37	0.132	0.09	
39.669	212	25	0.118	0.06	
40.103	101	21	0.207	0.05	
40.593	169	27	0.160	0.06	
40.929	107	24	0.224	0.06	
41.253	317	36	0.114	0.09	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d Page 2
Report Date: 02-Feb-2012 10:50

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.709	176	30	0.171	0.07	
42.063	114	19	0.166	0.04	
42.259	312	27	0.087	0.06	
42.606	79	19	0.242	0.04	
43.019	149	22	0.148	0.05	
45.503	828	51	0.062	0.13	
45.959	1741	70	0.040	0.17	
47.406	660	71	0.108	0.18	
47.786	1165	87	0.075	0.22	
48.166	951	97	0.102	0.24	
48.399	3084	164	0.053	0.41	
48.866	2615	138	0.053	0.35	
	1073540	39057		100.000	

Total unknown % height = 6.400

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d

Date : 01-FEB-2012 20:59

Client ID:

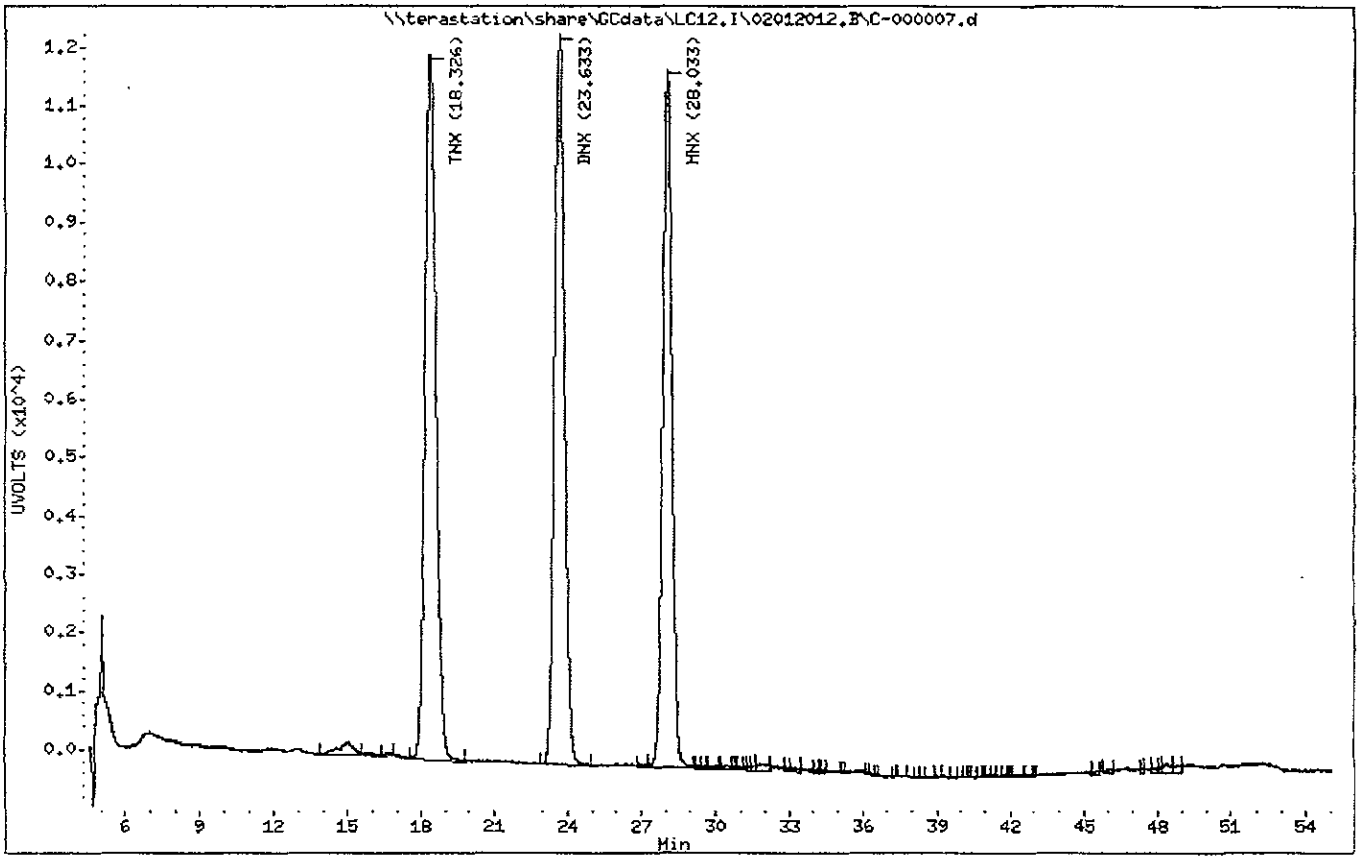
Instrument: LC12.i

Sample Info: STD_06 E110B11I 200mg/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d\C-000007.d

Page 1

Date : 01-FEB-2012 20:59

Client ID:

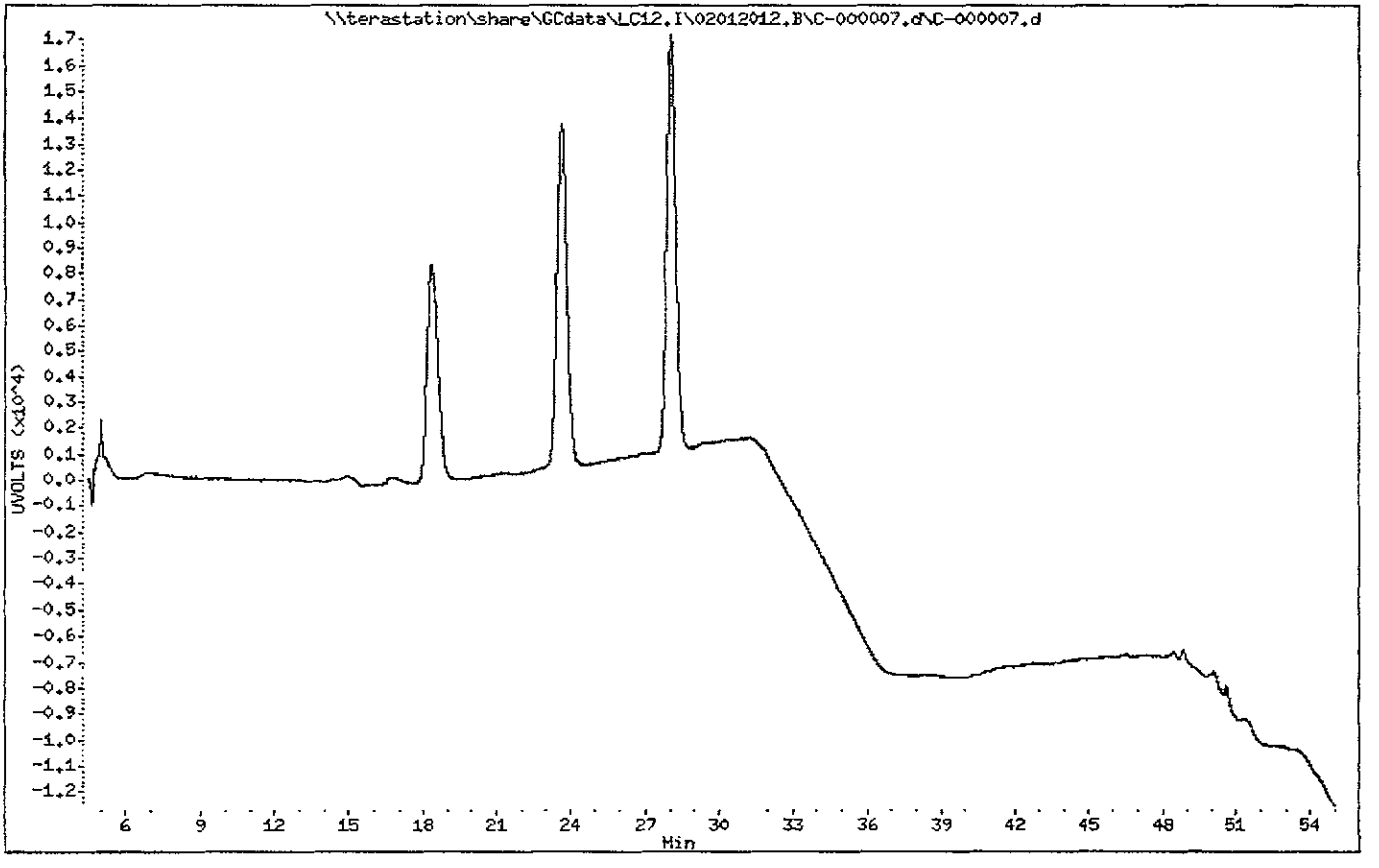
Instrument: LC12.i

Sample Info: STD_06 E110811I 200ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_07 E110811J 500ng/mL
Analyzed : 01-FEB-2012 22:04
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000008.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	500	18.297	0.000	28619	57.23800				
2	DNX	500	23.611	0.000	29892	59.78400				
3	MNX	500	28.011	0.000	28831	57.66200				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:50

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Lab Smp Id: STD_07 E110811J 500
Inj Date : 01-FEB-2012 22:04
Operator : RN Inst ID: LC12.i
Smp Info : STD_07 E110811J 500ng/mL;1;
Misc Info : ;7;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 22:04 Cal File: C-000008.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.447	5789	250	0.043	0.27	
14.901	26989	584	0.022	0.64	
16.711	7885	201	0.025	0.22	
18.297	941754	28619	0.030	31.40	2 TNX
23.611	872134	29892	0.034	33.02	3 DNX
27.004	493	53	0.107	0.05	
27.181	300	52	0.173	0.05	
28.011	754008	28831	0.038	31.63	5 MNX
29.401	469	50	0.107	0.05	
29.647	856	62	0.072	0.06	
29.921	902	66	0.073	0.07	
30.347	1835	73	0.040	0.08	
30.861	994	65	0.065	0.07	
31.224	231	61	0.264	0.06	
31.434	832	80	0.096	0.08	
31.601	933	98	0.105	0.10	
31.917	6273	178	0.028	0.19	
32.914	901	71	0.079	0.07	
33.647	1175	75	0.064	0.08	
34.094	397	62	0.156	0.06	
34.871	876	47	0.054	0.05	
36.741	216	21	0.097	0.02	
37.337	137	27	0.198	0.02	
37.517	116	28	0.241	0.03	
37.774	151	23	0.152	0.02	
38.117	239	20	0.084	0.02	
38.374	127	20	0.158	0.02	
38.731	114	20	0.176	0.02	
39.247	269	32	0.119	0.03	
39.801	92	30	0.325	0.03	
40.034	96	26	0.271	0.02	
40.234	92	26	0.283	0.02	
40.604	163	25	0.154	0.02	
41.094	142	21	0.148	0.02	
41.311	211	23	0.109	0.02	
41.861	163	21	0.129	0.02	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d Page 2
Report Date: 02-Feb-2012 10:50

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.341	344	35	0.102	0.03	
42.637	81	25	0.310	0.02	
43.364	208	25	0.120	0.02	
44.054	142	44	0.311	0.04	
44.677	649	47	0.072	0.05	
45.304	817	58	0.071	0.06	
46.047	2589	130	0.050	0.14	
46.324	2800	149	0.053	0.16	
46.577	3655	140	0.038	0.15	
47.121	2628	131	0.050	0.14	
48.087	1419	117	0.082	0.12	
48.401	4886	186	0.038	0.20	
48.824	3417	221	0.065	0.24	
	2651987	91141		100.000	

Total unknown % height = 3.950

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d

Date : 01-FEB-2012 22:04

Client ID:

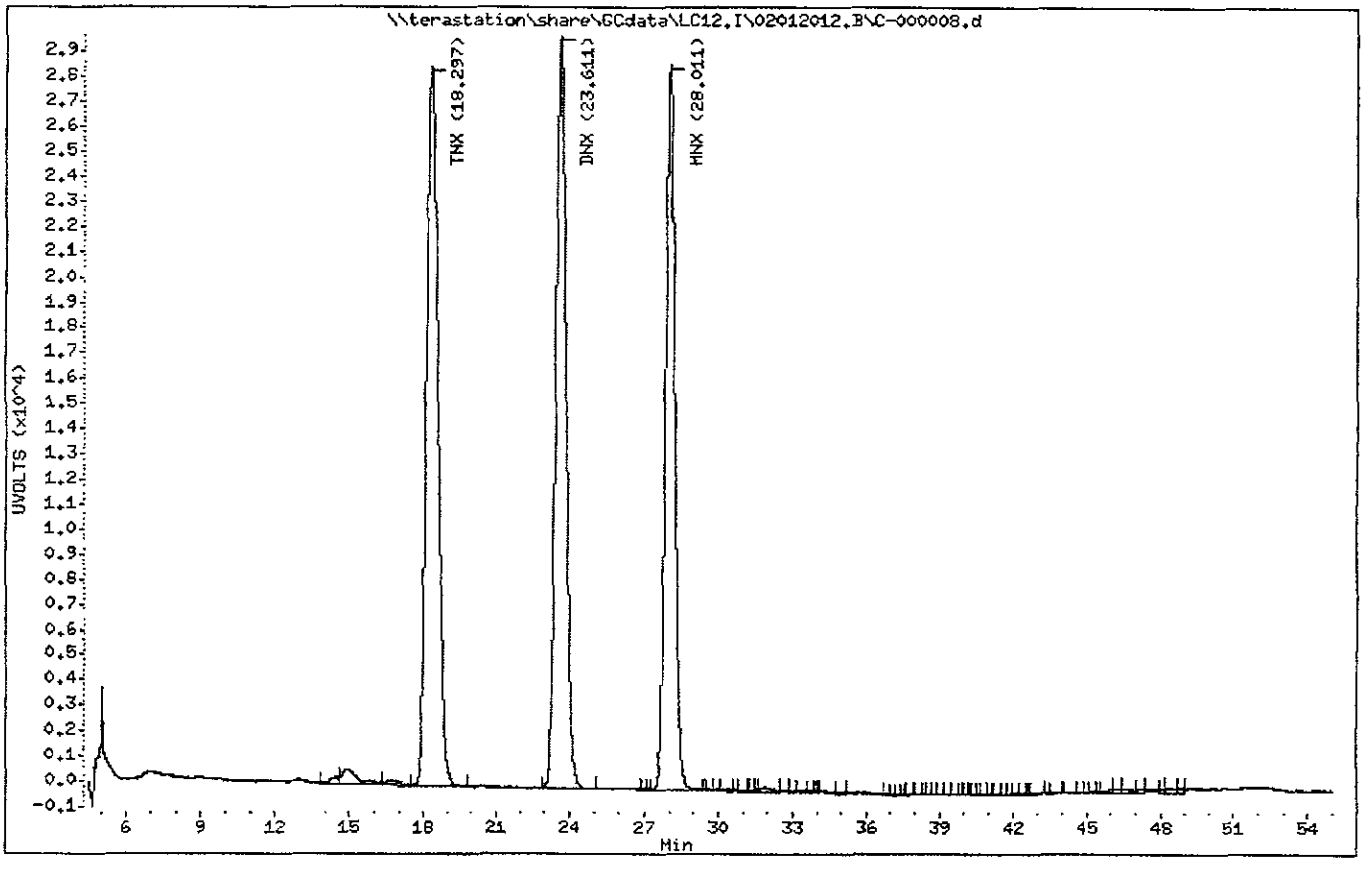
Instrument: LC12.I

Sample Info: STD_07 E110811J 500ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d\C-000008.d

Page 1

Date : 01-FEB-2012 22:04

Client ID:

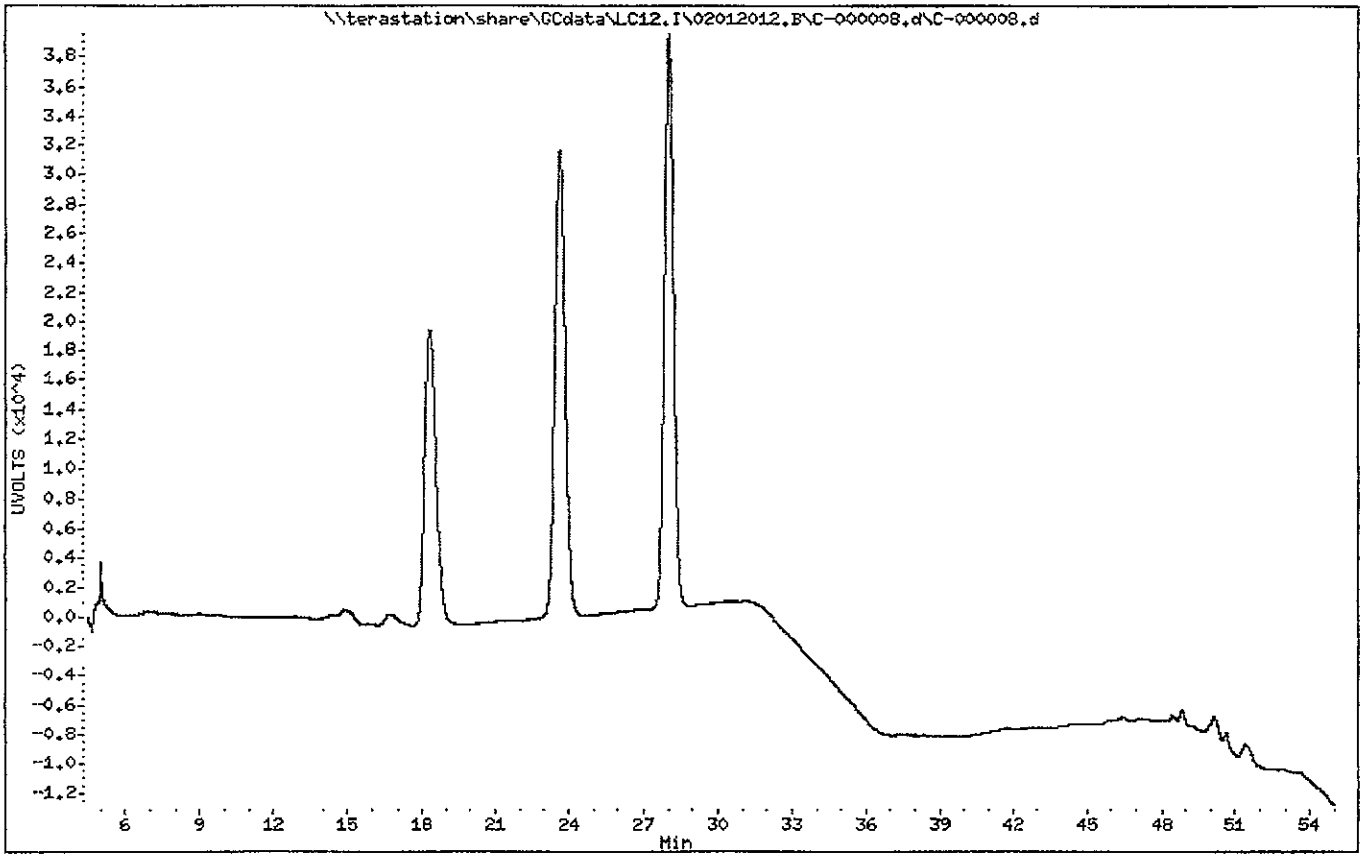
Instrument: LC12.i

Sample Info: STD_07 E110811J 500ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_08 E110811K 1000ng/mL
Analyzed : 01-FEB-2012 23:10
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000009.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	1000	18.326	0.000	60813	60.81300				
2	DNX	1000	23.639	0.000	63115	63.11500				
3	MNX	1000	28.039	0.000	60081	60.08100				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d
Lab Smp Id: STD_08 E110811K 100
Inj Date : 01-FEB-2012 23:10
Operator : RN Inst ID: LC12.i
Smp Info : STD_08 E110811K 1000ng/mL;1;
Misc Info : ;8;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 23:10 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.553	12051	518	0.043	0.27	
15.009	44319	1219	0.028	0.64	
15.859	10218	329	0.032	0.17	
16.726	13927	416	0.030	0.21	
18.326	1879733	60813	0.032	32.07	2 TNX
21.553	1352	46	0.034	0.02	
22.656	947	49	0.052	0.02	
23.639	1742952	63115	0.036	33.52	3 DNX
27.073	317	42	0.132	0.02	
28.039	1503748	60081	0.040	31.68	5 MNX
29.359	125	43	0.343	0.02	
29.513	1197	47	0.039	0.02	
30.089	308	50	0.162	0.02	
30.236	319	50	0.157	0.02	
30.426	612	74	0.121	0.03	
30.589	1033	78	0.075	0.04	
30.886	546	64	0.117	0.03	
31.169	384	47	0.122	0.02	
31.396	648	67	0.103	0.03	
31.573	538	93	0.173	0.04	
31.969	8369	238	0.028	0.12	
32.909	944	62	0.066	0.03	
33.189	1205	86	0.071	0.04	
33.706	1426	66	0.046	0.03	
34.169	452	69	0.153	0.03	
35.223	186	24	0.129	0.01	
37.063	160	30	0.188	0.01	
37.529	357	37	0.104	0.01	
37.869	561	41	0.073	0.02	
38.139	193	30	0.156	0.01	
38.376	296	41	0.139	0.02	
38.673	159	21	0.132	0.01	
39.353	247	29	0.117	0.01	
39.643	254	28	0.110	0.01	
40.163	156	32	0.205	0.01	
40.393	266	27	0.101	0.01	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d Page 2
Report Date: 02-Feb-2012 10:51

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
40.503	275	39	0.142	0.02	
41.056	98	19	0.194	0.01	
41.309	269	22	0.082	0.01	
41.526	320	32	0.100	0.01	
42.156	221	17	0.077	0.00	
42.543	151	17	0.113	0.00	
42.889	245	29	0.118	0.01	
44.726	620	37	0.060	0.01	
45.179	678	60	0.088	0.03	
45.456	1226	122	0.099	0.06	
45.643	1694	163	0.096	0.08	
47.116	3292	171	0.052	0.09	
47.716	2993	134	0.045	0.07	
48.116	1523	152	0.100	0.08	
48.396	4657	185	0.040	0.09	
48.853	5967	321	0.054	0.16	
	5254732	189622		100.000	

Total unknown % height = 2.730

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Date : 01-FEB-2012 23:10

Client ID:

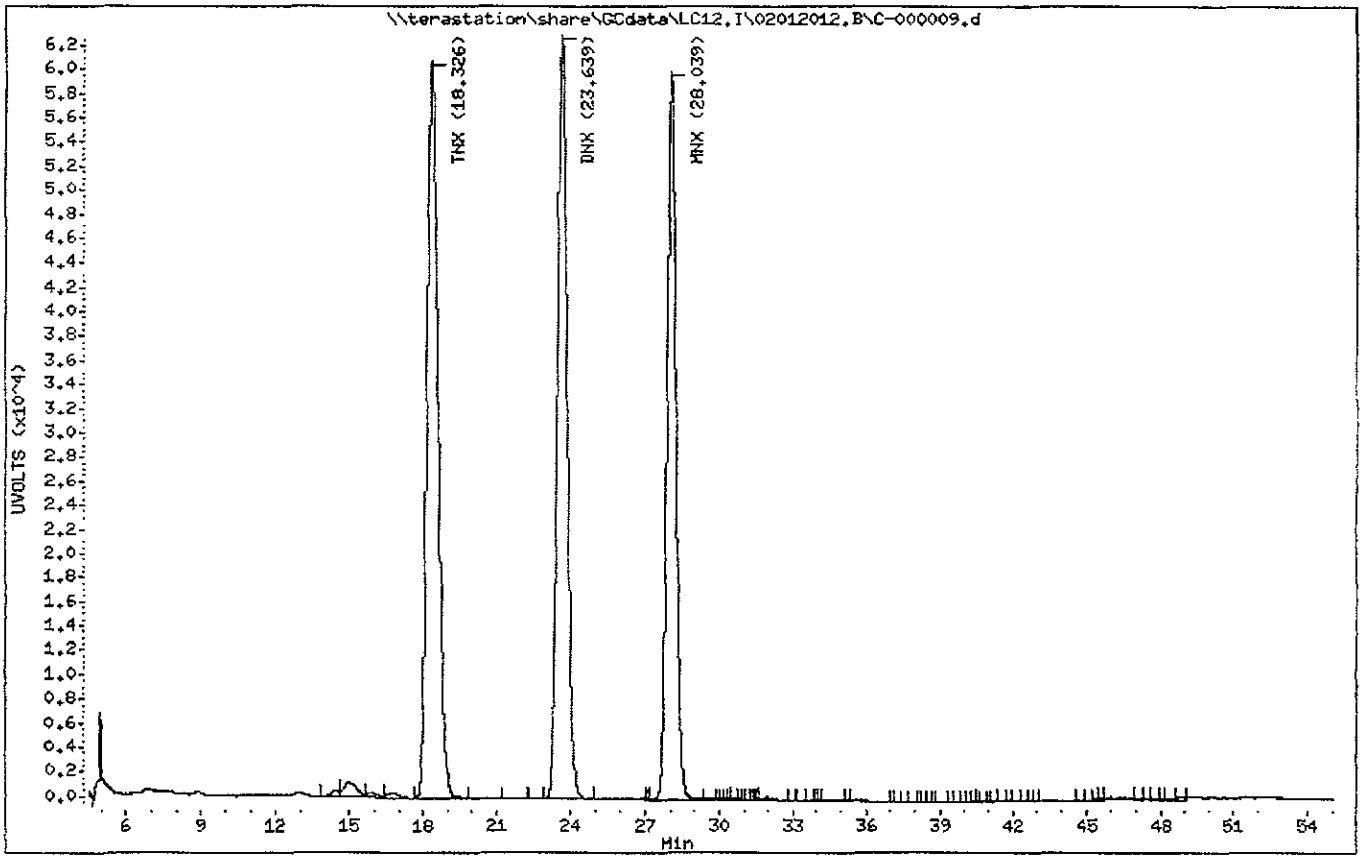
Instrument: LC12.1

Sample Info: STD_08 E110811K 1000ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d\C-000009
Lab Smp Id: STD_08 E110811K 100
Inj Date : 01-FEB-2012 23:10
Operator : RN Inst ID: LC12.i
Smp Info : STD_08 E110811K 1000ng/mL;1;
Misc Info : ;8;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 10:45 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.966	1918	177	0.092	100.00	
	1918	177		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d\C-000009.d Page 2

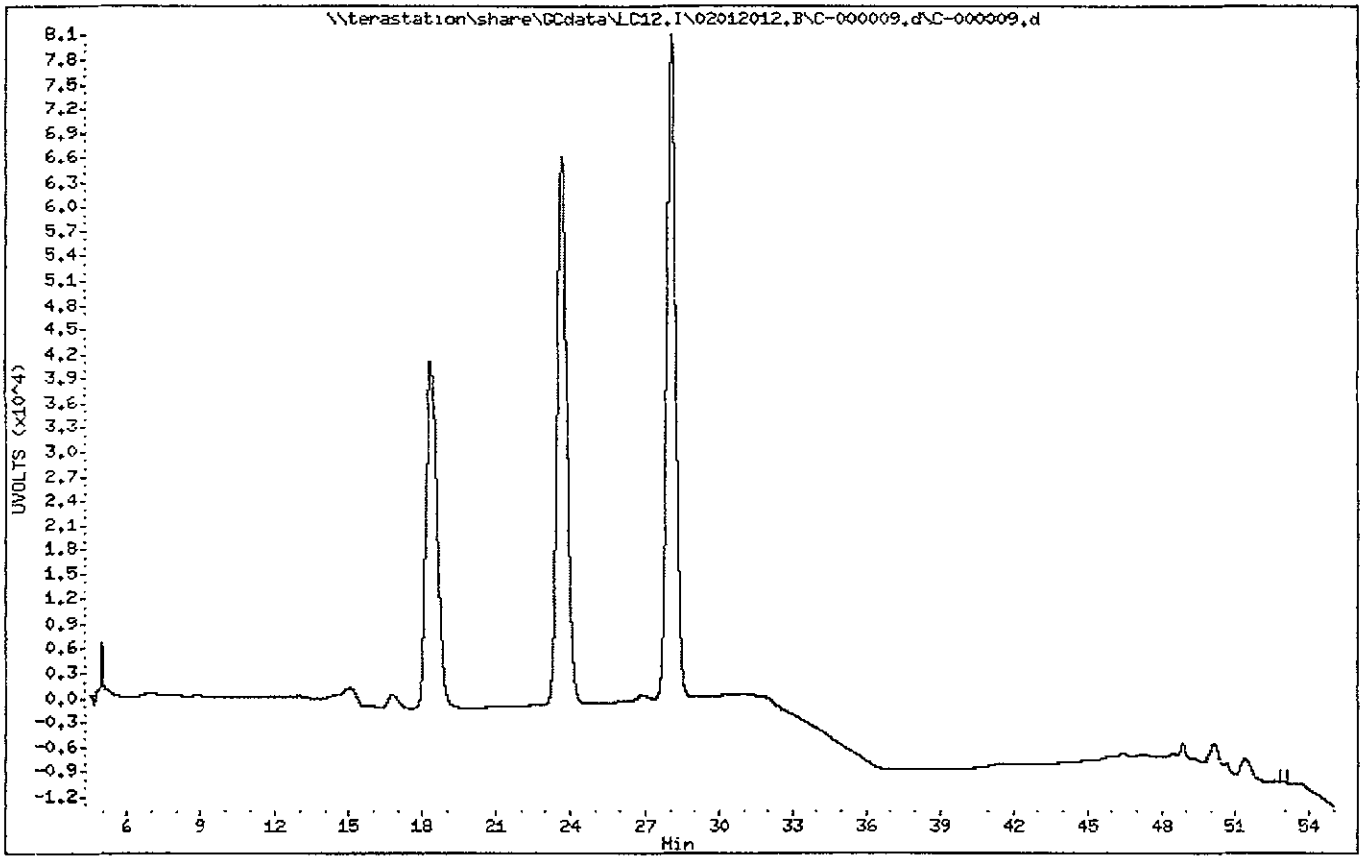
Date : 01-FEB-2012 23:10

Client ID: Instrument: LC12.I

Sample Info: STD_08 E110811K 1000ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 02-FEB-2012 00:15
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000010.d
Sublist: 2_CALMET
SpikeList:

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX	28.009	-0.030	42	0.7~~31~~					

not real peak.

RN 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d
Lab Smp Id: BLANK
Inj Date : 02-FEB-2012 00:15
Operator : RN Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 23:10 Cal File: C-000009.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.126	384	40	0.104	2.04	
27.432	307	50	0.163	2.56	
27.496	745	50	0.067	2.56	
27.936	303	45	0.148	2.30	
28.009	509	42	0.083	2.15	5 MNX
28.346	276	34	0.123	1.74	
28.486	160	46	0.287	2.35	
28.882	249	35	0.140	1.79	
29.059	247	36	0.146	1.84	
29.206	444	35	0.079	1.79	
29.419	178	36	0.203	1.84	
29.596	910	41	0.045	2.09	
30.169	624	45	0.072	2.30	
30.306	624	42	0.067	2.15	
30.642	189	43	0.227	2.20	
30.789	205	41	0.200	2.09	
30.989	331	38	0.115	1.94	
31.192	293	47	0.160	2.40	
31.546	956	62	0.065	3.17	
31.636	184	66	0.358	3.37	
31.802	1306	75	0.057	3.84	
32.202	790	64	0.081	3.27	
32.409	713	55	0.077	2.81	
32.772	534	51	0.095	2.61	
34.322	257	30	0.117	1.53	
34.526	290	33	0.114	1.68	
35.222	297	24	0.081	1.22	
35.842	281	22	0.078	1.12	
37.422	329	32	0.097	1.63	
38.242	133	24	0.180	1.22	
38.589	254	22	0.087	1.12	
39.372	74	20	0.272	1.02	
39.669	296	33	0.111	1.68	
39.982	312	34	0.109	1.74	
40.306	349	25	0.072	1.28	
40.752	331	29	0.088	1.48	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d Page 2
Report Date: 02-Feb-2012 10:51

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.226	132	22	0.167	1.12	
41.712	78	17	0.219	0.87	
42.416	204	28	0.137	1.43	
42.716	118	31	0.263	1.58	
45.986	457	42	0.092	2.15	
46.302	1084	55	0.051	2.81	
46.602	283	56	0.198	2.86	
46.746	697	68	0.098	3.48	
47.299	448	66	0.147	3.37	
48.309	2760	121	0.044	6.41	
	20924	1953		100.000	

Total unknown % height = 97.85

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d

Date : 02-FEB-2012 00:15

Client ID:

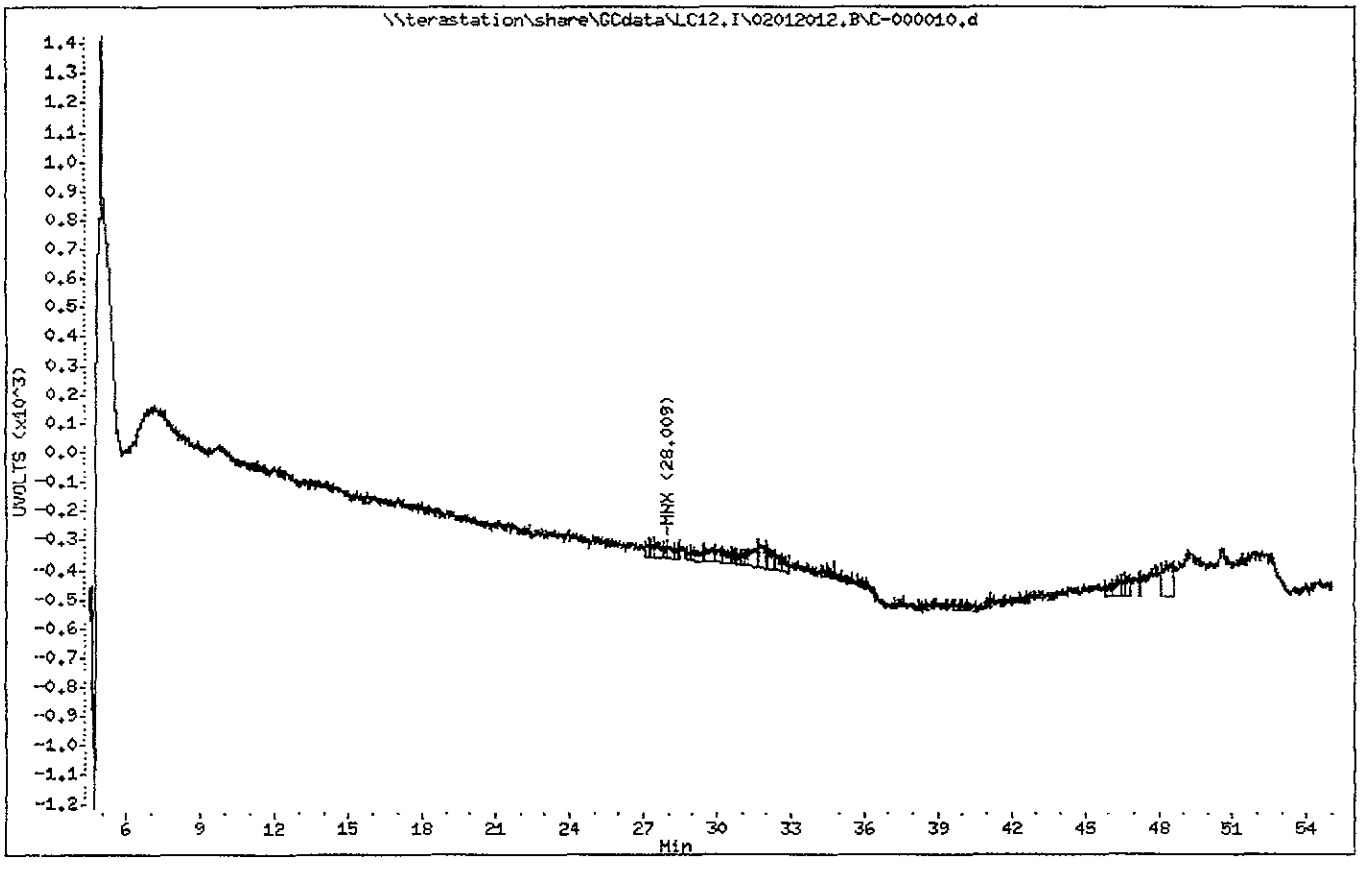
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d\C-000010.d

Page 1

Date : 02-FEB-2012 00:15

Client ID:

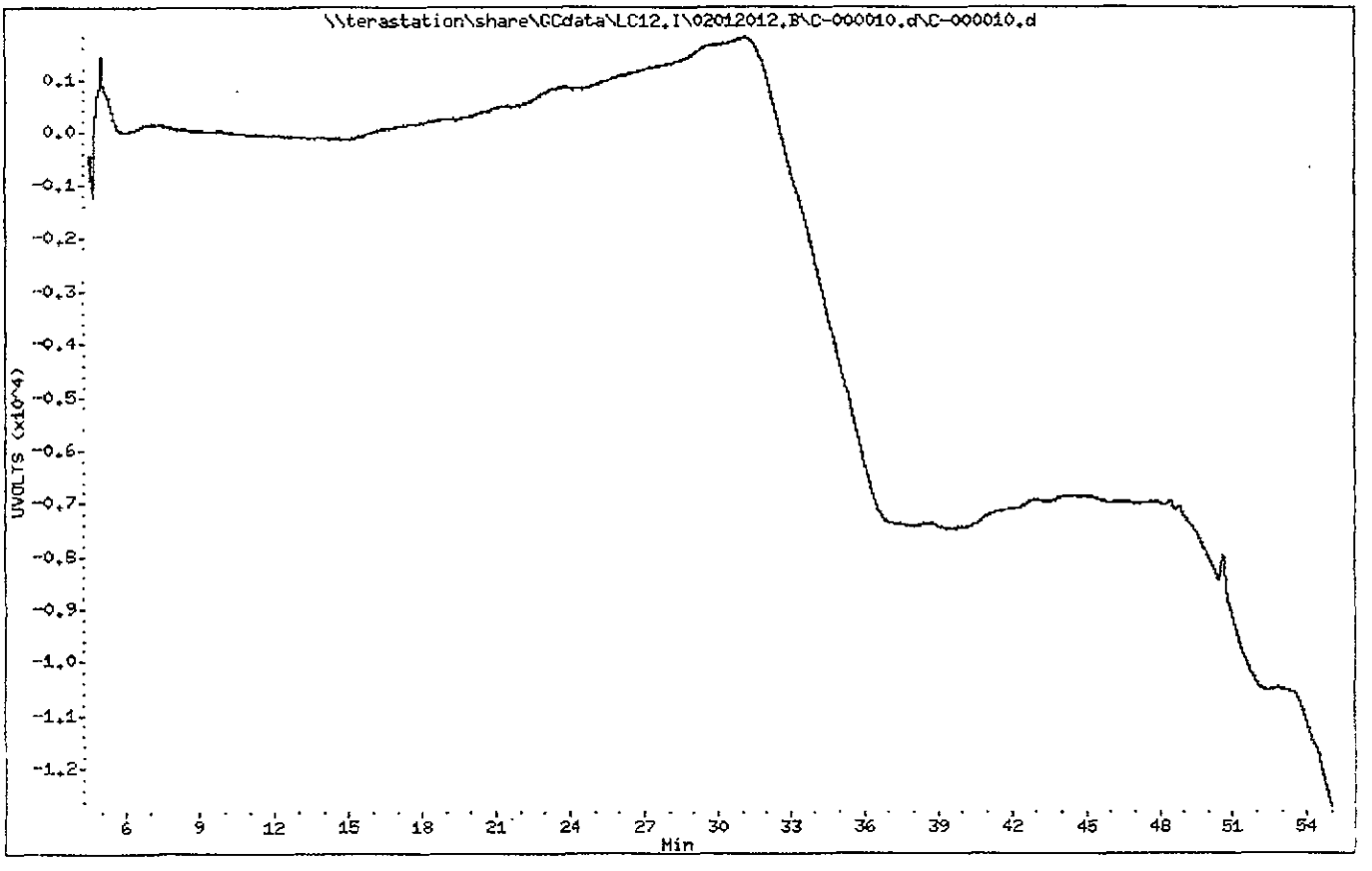
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Continuing Calibration Report

Sample : STD_03 E110811F 20ng/mL
Analyzed : 02-FEB-2012 01:21
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000011.d
Sublist: 2_CALMET
SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	20.0	18.370	0.000	1049	17.95	-10					
2	DNX	20.0	23.686	0.000	1093	18.04	-9.8					
3	MNX	20.0	28.106	0.000	1070	18.42	-7.9					

MRL passes S:N > 5:1

RDM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:05

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d
Lab Smp Id: STD_03 E110811F 20n
Inj Date : 02-FEB-2012 01:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_03 E110811F 20ng/mL;1;
Misc Info : ;3;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:51 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.950	677	38	0.056	0.69	
18.370	33499	1049	0.031	19.26	2 TNX
23.686	32315	1093	0.034	20.32	3 DNX
27.046	419	41	0.098	0.75	
27.233	441	46	0.104	0.84	
27.370	443	44	0.099	0.80	
28.106	28712	1070	0.037	19.64	5 MNX
29.056	188	34	0.181	0.62	
29.260	553	43	0.078	0.78	
29.503	278	51	0.183	0.93	
29.676	708	50	0.071	0.91	
29.980	507	54	0.106	0.99	
30.290	538	49	0.091	0.89	
30.560	1483	65	0.044	1.19	
31.116	283	53	0.187	0.97	
31.216	236	68	0.289	1.24	
31.323	387	70	0.181	1.28	
31.430	396	76	0.192	1.39	
31.630	949	87	0.092	1.59	
31.830	999	89	0.089	1.63	
31.910	1359	86	0.063	1.57	
32.560	571	71	0.124	1.30	
32.976	975	64	0.066	1.17	
34.173	1087	57	0.052	1.04	
34.520	875	47	0.054	0.86	
35.870	223	26	0.116	0.47	
36.220	237	28	0.118	0.51	
37.080	108	19	0.176	0.34	
37.446	142	15	0.106	0.27	
37.770	161	27	0.168	0.49	
37.986	261	27	0.104	0.49	
38.226	88	24	0.274	0.44	
38.370	82	22	0.269	0.40	
38.870	249	28	0.113	0.51	
39.663	210	25	0.119	0.45	
39.843	137	29	0.212	0.53	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d Page 2
Report Date: 02-Feb-2012 10:52

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.960	144	35	0.243	0.64	
40.330	102	24	0.235	0.44	
40.823	152	24	0.158	0.44	
41.216	202	25	0.124	0.45	
41.620	86	19	0.221	0.34	
41.856	157	27	0.172	0.49	
42.306	159	35	0.220	0.64	
42.426	435	27	0.062	0.49	
42.766	90	32	0.354	0.58	
42.953	422	35	0.083	0.64	
45.000	694	48	0.069	0.88	
47.973	1186	85	0.072	1.56	
48.426	3759	149	0.040	2.73	
48.936	2682	116	0.043	2.13	
	121043	5446		100.000	

Total unknown % height = 40.78

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d

Date : 02-FEB-2012 01:21

Client ID:

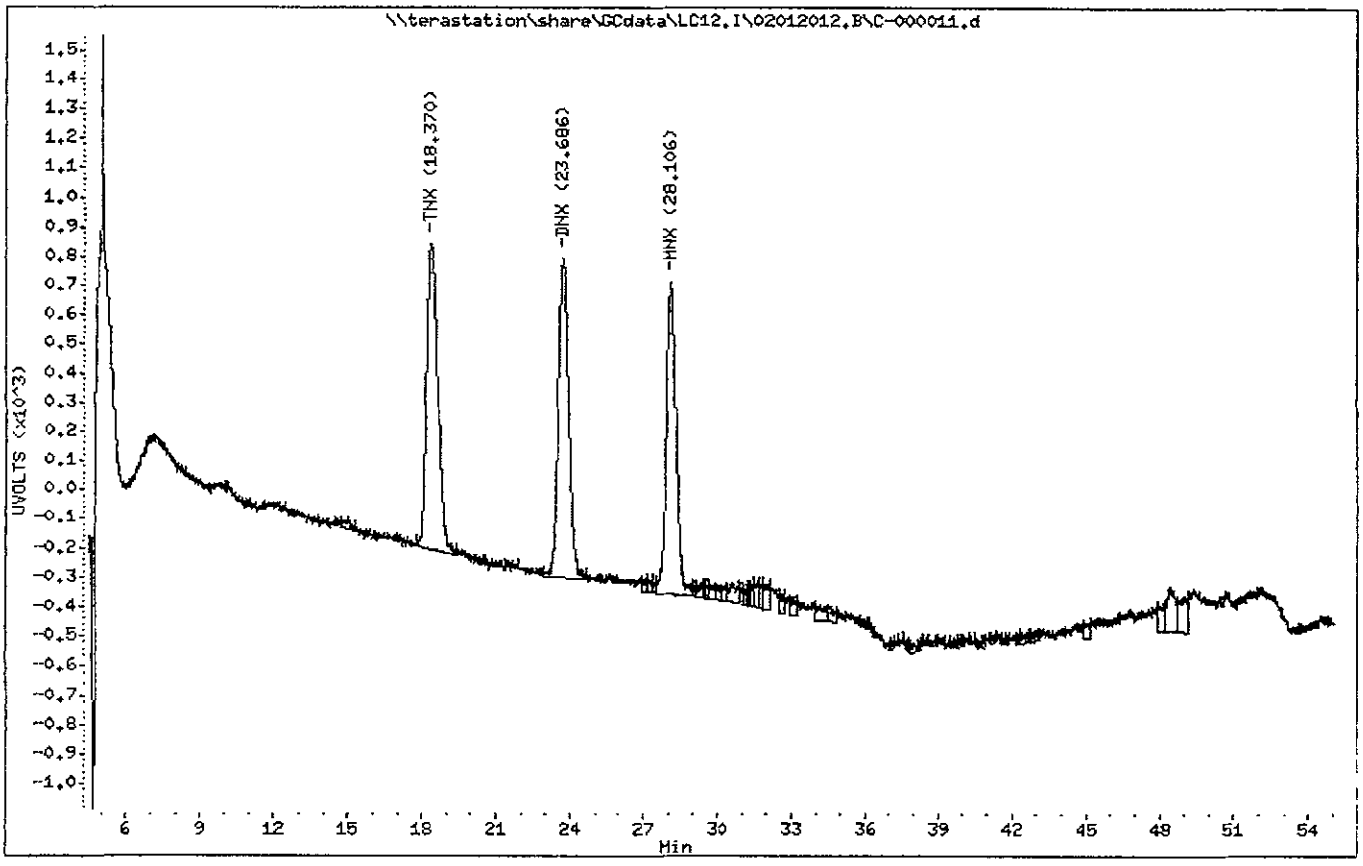
Instrument: LC12.i

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d\C-000011.d

Date : 02-FEB-2012 01:21

Client ID:

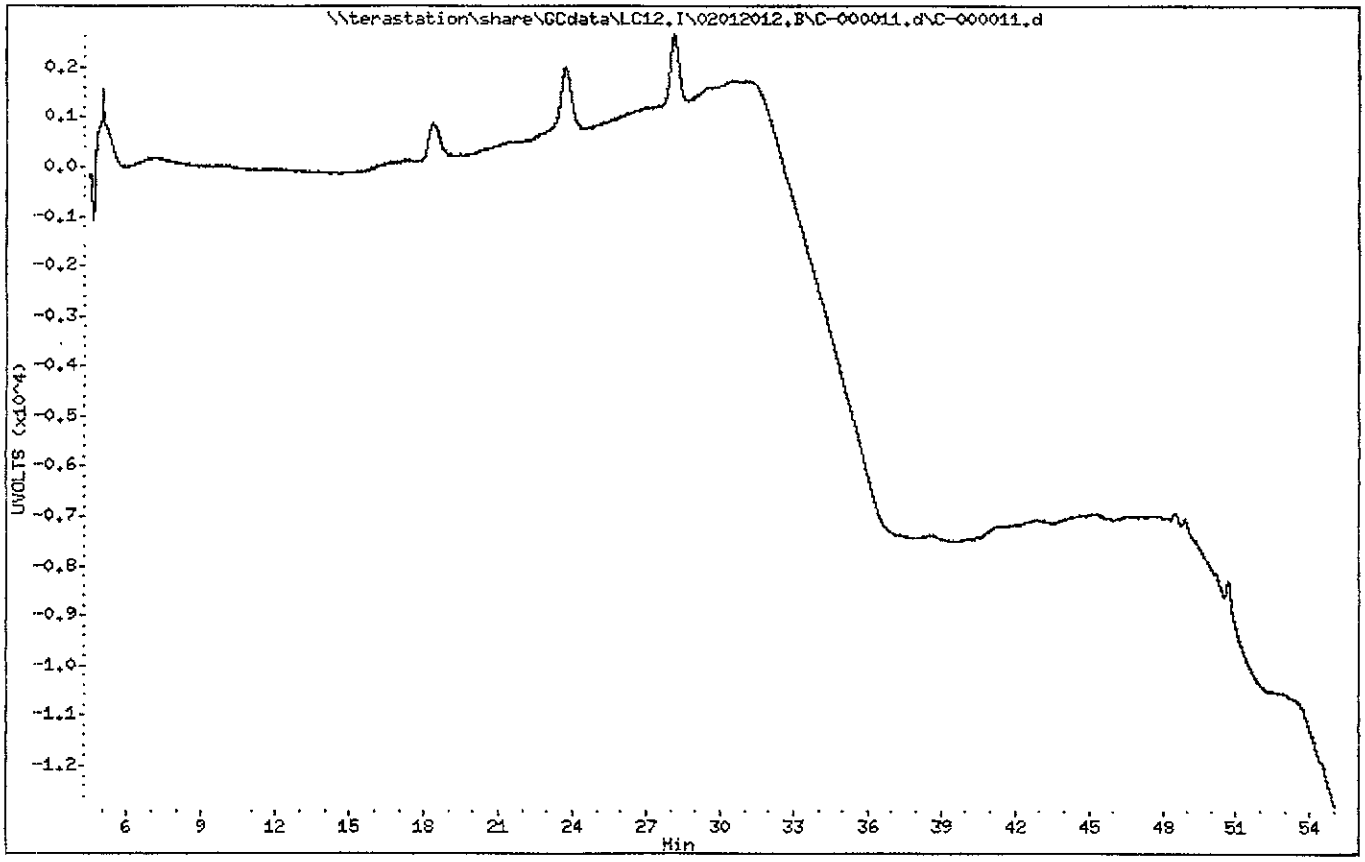
Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD 06 E110811D ICV 200ng/mL
Analyzed : 02-FEB-2012 02:26
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000012.d
Sublist: 2_CALMET
SpikeList:

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	200	18.341	0.000	12148	207.8	3.9					
2	DNX	200	23.661	0.000	11544	190.5	-4.8					
3	MNX	200	28.061	0.000	11164	192.2	-3.9					

ICV passes ±15%
RDM 2/2/12.

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:06

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d
Lab Smp Id: STD_06 E110811D ICV
Inj Date : 02-FEB-2012 02:26
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 E110811D ICV 200ng/mL;2;
Misc Info : ;6;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:52 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
16.621	781	49	0.063	0.13	
18.341	382410	12148	0.032	33.01	2 TNX
23.661	328209	11544	0.035	31.20	3 DNX
27.167	947	52	0.055	0.14	
28.061	286386	11164	0.039	30.17	5 MNX
29.241	270	38	0.141	0.10	
29.461	381	56	0.147	0.15	
29.627	321	52	0.162	0.14	
29.867	1090	58	0.053	0.15	
30.151	1174	56	0.048	0.15	
30.561	1123	64	0.057	0.17	
30.927	714	49	0.069	0.13	
31.287	517	60	0.116	0.16	
31.437	633	81	0.128	0.21	
31.574	910	80	0.088	0.21	
31.857	1294	124	0.096	0.33	
32.547	506	75	0.148	0.20	
32.691	387	76	0.196	0.20	
32.887	1315	70	0.053	0.18	
33.227	881	66	0.075	0.17	
33.621	649	57	0.088	0.15	
34.094	1277	46	0.036	0.12	
34.817	470	47	0.100	0.12	
35.141	321	36	0.112	0.09	
35.354	201	27	0.134	0.07	
35.857	285	27	0.095	0.07	
37.157	142	24	0.169	0.06	
37.351	124	20	0.161	0.05	
37.784	198	19	0.096	0.05	
38.074	301	20	0.066	0.05	
38.557	228	18	0.079	0.04	
39.111	246	27	0.110	0.07	
39.681	292	24	0.082	0.06	
40.031	85	27	0.318	0.07	
40.821	64	18	0.283	0.04	
41.084	517	37	0.072	0.10	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d Page 2
Report Date: 02-Feb-2012 10:52

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.077	114	27	0.237	0.07	
42.514	125	30	0.240	0.08	
42.747	93	17	0.182	0.04	
43.927	277	27	0.098	0.07	
45.111	121	25	0.207	0.06	
46.277	398	39	0.098	0.10	
47.744	792	67	0.085	0.18	
48.381	4566	215	0.047	0.58	
48.841	1202	117	0.097	0.31	
	1023339	37000		100.000	

Total unknown % height = 5.620

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d

Page 3

Date : 02-FEB-2012 02:26

Client ID:

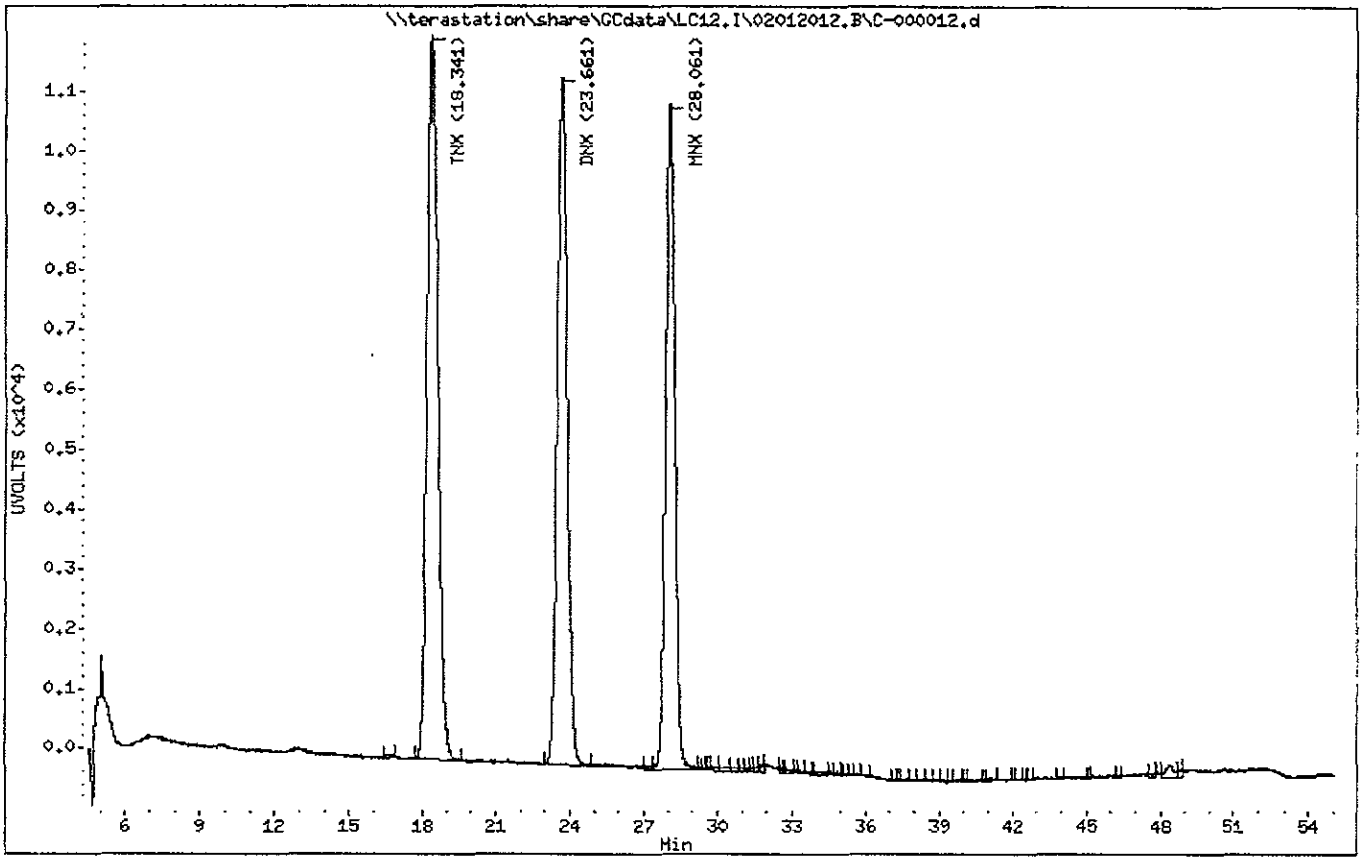
Instrument: LC12.I

Sample Info: STD_06 E110811D ICV 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d\C-000012.d Page 1

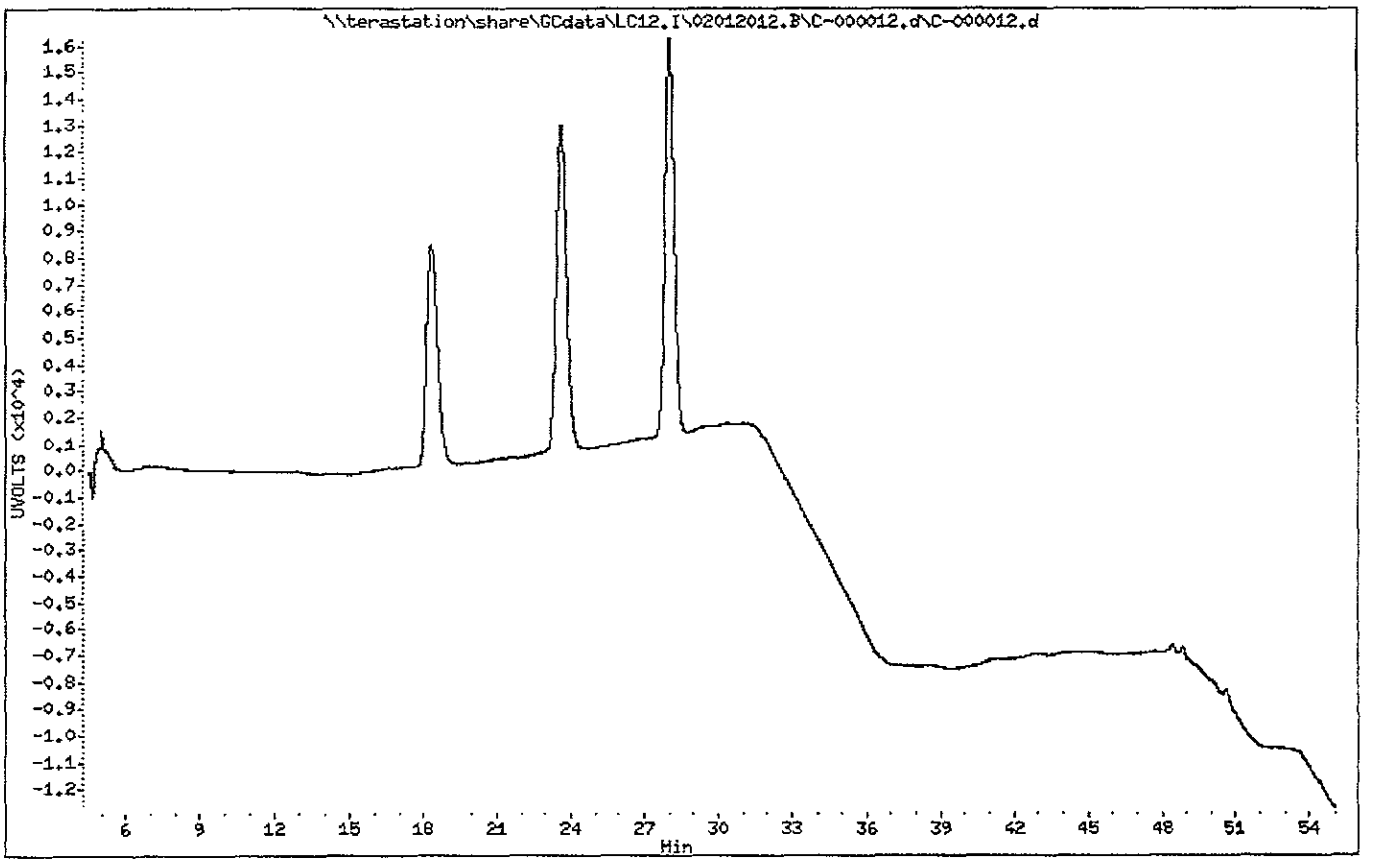
Date : 02-FEB-2012 02:26

Client ID: Instrument: LC12.i

Sample Info: STD_06 E110811D ICV 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano Column diameter: 4.60



CCAL Data

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 E110811I METAB 200ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 11:25 File ID: 02012012.B/M-000003.D
Operator : rn Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.436	0.000	12281	205.9	3.0					
2	DNX	200	19.219	0.000	18964	206.7	3.4					
3	MNX	200	21.962	0.000	22322	206.2	3.1					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 12:17

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D
Lab Smp Id: STD_06 E110811I MET
Inj Date : 01-FEB-2012 11:25
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB 200ng/mL;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 12:17 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.072	1699	124	0.073	0.22	
15.436	319764	12281	0.038	21.98	2 TNX
19.219	295832	18964	0.064	33.94	3 DNX
20.556	106	20	0.189	0.03	
21.962	254995	22322	0.088	40.06	5 MNX
23.746	283	36	0.127	0.06	
24.246	81	23	0.284	0.04	
24.986	1813	117	0.065	0.20	
25.552	4447	279	0.063	0.49	
26.042	1306	93	0.071	0.16	
26.276	919	101	0.110	0.18	
26.519	6165	401	0.065	0.71	
26.936	1686	124	0.074	0.22	
27.362	13200	677	0.051	1.21	
28.762	138	31	0.225	0.05	
30.262	1860	149	0.080	0.26	
31.306	57	21	0.370	0.03	
33.056	302	41	0.136	0.07	
40.059	212	26	0.123	0.04	
42.392	317	32	0.101	0.05	
	905182	55862		100.000	

Total unknown % height = 4.020

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D

Date : 01-FEB-2012 11:25

Client ID:

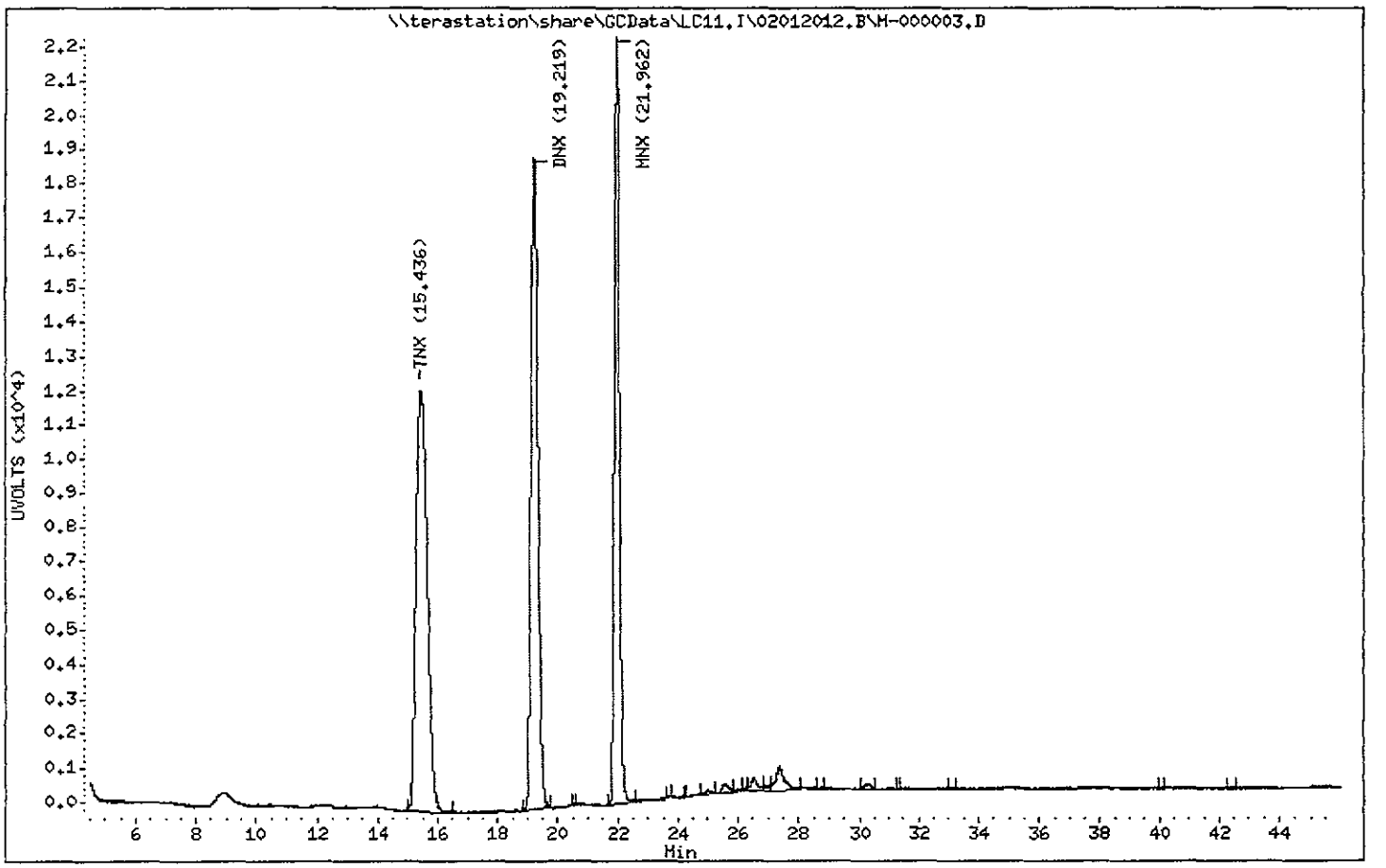
Instrument: LC11.i

Sample Info: STD_06 E110811I METAB 200ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D\M-000003
Lab Smp Id: STD_06 E110811I MET
Inj Date : 01-FEB-2012 11:25
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB 200ng/mL;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.219	180	53	0.294	4.20	
27.302	154	47	0.306	3.73	
27.766	171	29	0.169	2.30	
29.776	171	29	0.170	2.30	
29.882	172	38	0.221	3.01	
30.266	5485	397	0.072	31.57	
31.036	172	31	0.181	2.46	
31.619	560	37	0.066	2.93	
32.306	572	41	0.072	3.25	
32.466	290	41	0.141	3.25	
35.869	189	30	0.159	2.38	
38.769	2123	105	0.049	8.33	
39.492	209	42	0.201	3.33	
40.149	1742	78	0.045	6.19	
41.959	2061	68	0.033	5.39	
42.529	2173	77	0.035	6.11	
43.259	364	35	0.096	2.77	
43.632	451	44	0.097	3.49	
45.129	205	38	0.185	3.01	
	17444	1260		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D\M-000003.D

Date : 01-FEB-2012 11:25

Client ID:

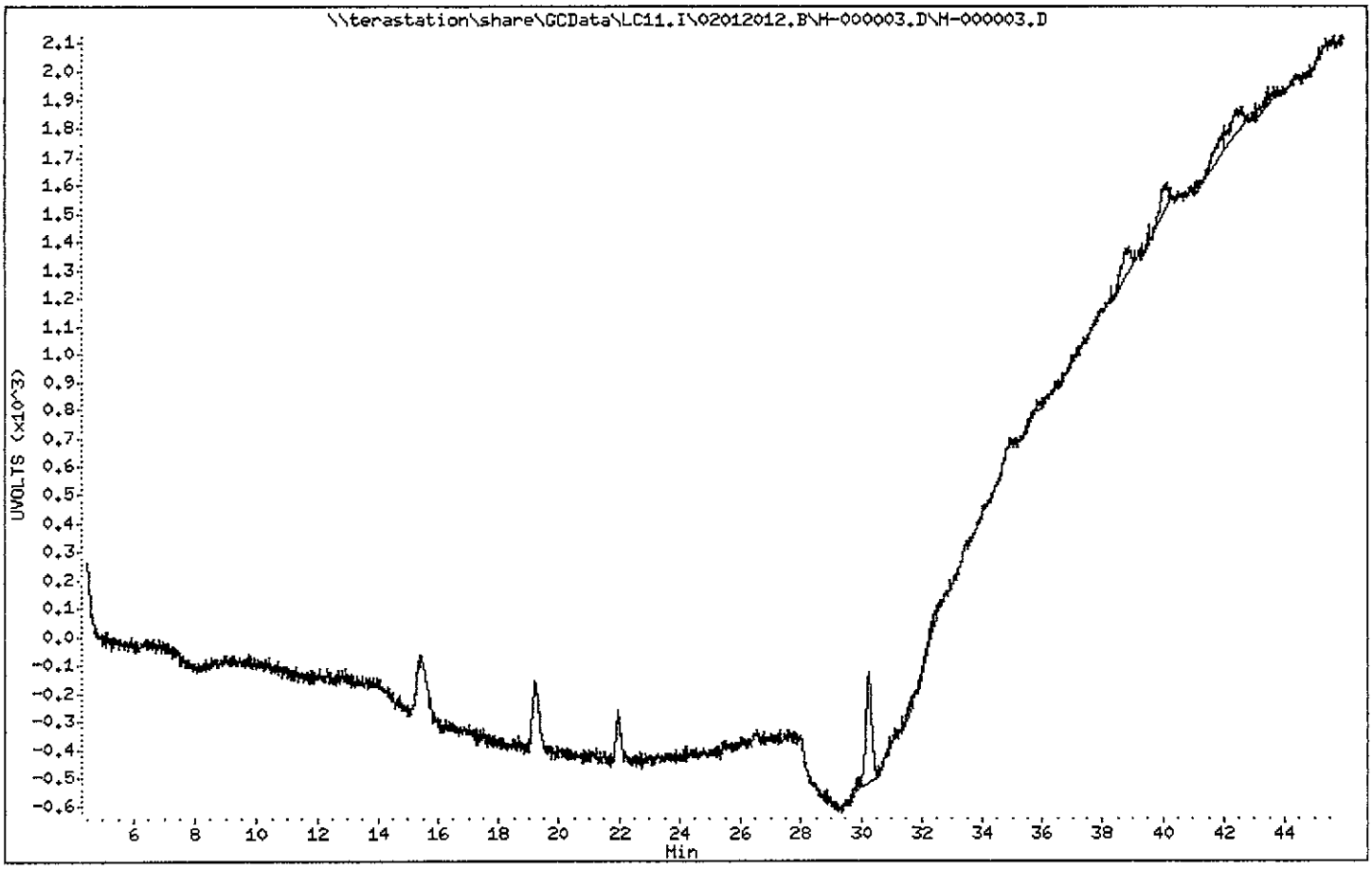
Instrument: LC11.i

Sample Info: STD_06 E110811I METAB 200ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 200ng/mL
Analyzed : 01-FEB-2012 12:22
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000004.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.547	0.000	18798	204.8	2.4					
2	RDX	200	23.730	0.000	18461	203.0	1.5					
3	1,3,5-Trinitrobenz	200	25.670	0.000	41451	202.6	1.3					
4	Picric ACID	500	25.913	0.000	61106	519.2	3.8	25.913	0.000	89203	522.8	4.6
5	1,3-Dinitrobenzene	200	28.393	0.000	43583	203.7	1.9					
6	3,5-Dinitroaniline	200	29.530	0.000	28348	203.0	1.5					
7	Nitrobenzene	200	30.000	0.000	19130	205.9	3.0					
8	TETRYL	200	30.353	0.000	22595	201.5	0.75					
9	2,4,6-Trinitrotolu	200	31.597	0.000	24203	202.2	1.1					
10	4-AM-2,6-DNT	200	32.577	0.000	19568	203.2	1.6					
11	3,4-Dinitrotoluene	200	32.940	0.000	13565	202.2	1.1	32.940	0.000	26067	204.5	2.3
12	2-AM-4,6-DNT	200	33.267	0.000	21818	203.6	1.8					
13	2,6-Dinitrotoluene	200	34.527	0.000	14946	201.4	0.70					
14	2,4-Dinitrotoluene	200	34.917	0.000	24667	202.1	1.1					
15	2-Nitrotoluene	200	37.847	0.000	10675	201.7	0.85					
16	4-Nitrotoluene	200	39.087	0.000	12936	204.9	2.5					
17	3-Nitrotoluene	200	40.607	0.000	12815	204.3	2.2					
18	EGDN	200										
19	Nitroglycerin	200						30.860	0.000	17573	211.6	5.8
20	PETN	200						41.363	0.000	9919	206.9	3.5

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 13:15

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D
Lab Smp Id: STD_06 12GCSV0100 2
Inj Date : 01-FEB-2012 12:22
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 200ng/mL;2
Misc Info : ;6;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.357	132	34	0.257	0.00		
20.547	173773	18798	0.108	4.58		4 HMX
22.217	107	38	0.355	0.00		
22.450	669	73	0.109	0.01		
22.870	75	21	0.279	0.00		
23.730	194658	18461	0.095	4.49		7 RDX
24.533	65	27	0.417	0.00		
24.633	62	24	0.385	0.00		
24.940	242	43	0.178	0.01		
25.670	394428	41451	0.105	10.10		10 1,3,5-Trinitrobenze
25.913	635793	61106	0.096	15.04		9 Picric ACID
27.113	9624	1121	0.116	0.27		
28.393	522374	43583	0.083	10.62		13 1,3-Dinitrobenzene
29.530	360915	28348	0.079	6.90		15 3,5-Dinitroaniline
30.000	255068	19130	0.075	4.66		17 Nitrobenzene
30.353	299569	22595	0.075	5.50		16 TETRYL
30.867	2056	180	0.088	0.04		
31.597	347349	24203	0.070	5.89		19 2,4,6-Trinitrotolue
32.577	303253	19568	0.065	4.76		20 4-AM-2,6-DNT
32.940	191824	13565	0.071	3.30	$	1 3,4-Dinitrotoluene
33.267	367435	21818	0.059	5.31		21 2-AM-4,6-DNT
34.526	239972	14946	0.062	3.64		22 2,6-Dinitrotoluene
34.916	444352	24667	0.056	6.01		23 2,4-Dinitrotoluene
37.170	215	24	0.112	0.00		
37.846	214764	10675	0.050	2.60		24 2-Nitrotoluene
39.087	275695	12936	0.047	3.15		25 4-Nitrotoluene
40.607	295885	12815	0.043	3.12		26 3-Nitrotoluene
	5530354	410250		100.000		

Total unknown % height = 0.3300

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D

Date : 01-FEB-2012 12:22

Client ID:

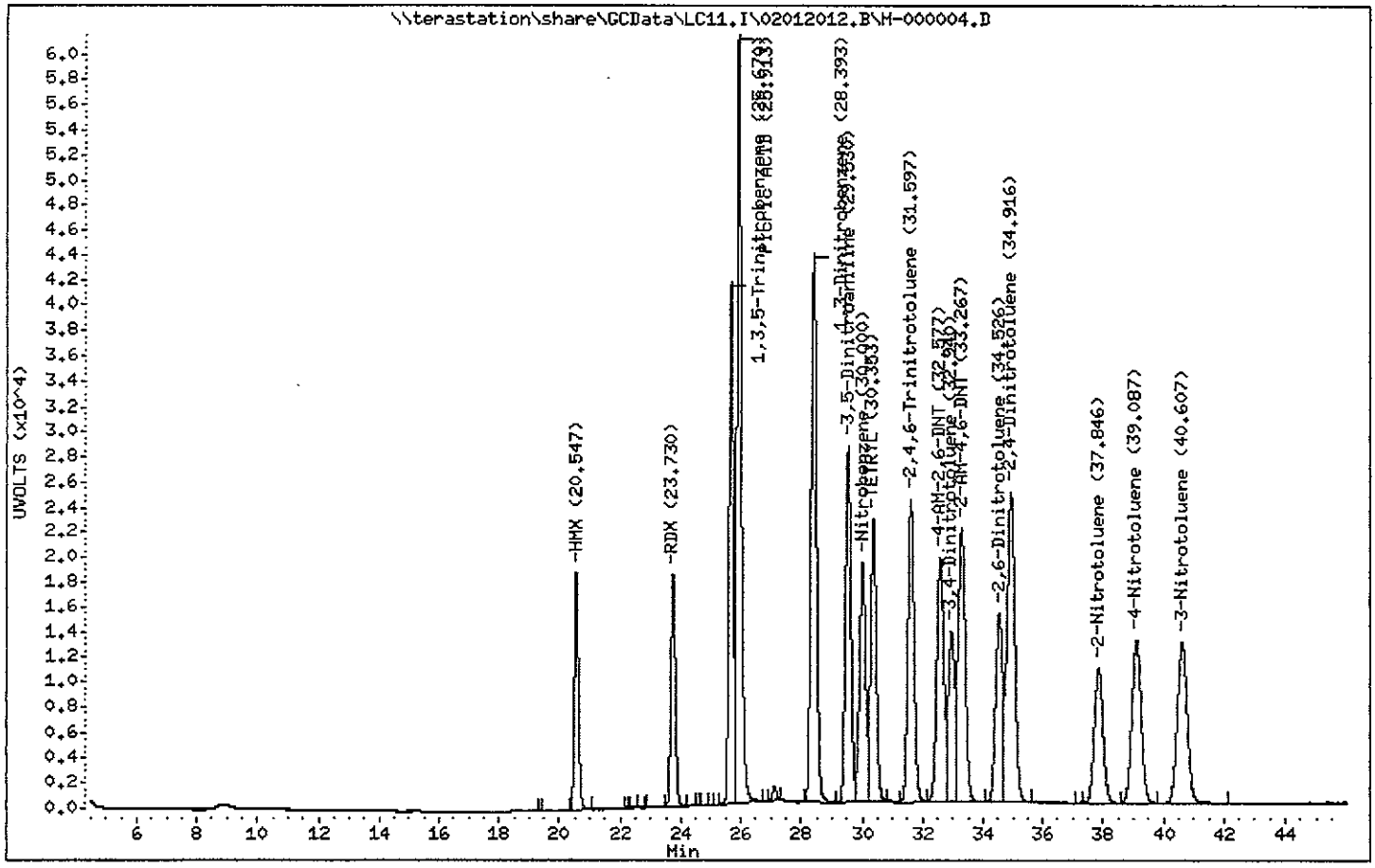
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 200ng/mL:2

Operator: rm

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D\M-000004
Lab Smp Id: STD_06 12GCSV0100 2
Inj Date : 01-FEB-2012 12:22
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 200ng/mL;2
Misc Info : ;6;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.263	293	50	0.171	0.01	
23.717	424	46	0.108	0.01	
24.153	308	37	0.120	0.00	
24.663	185	32	0.173	0.00	
25.673	5145	572	0.111	0.12	
25.913	906882	89203	0.098	19.91	9 Picric ACID
28.393	271637	22569	0.083	5.00	
29.530	365519	28832	0.079	6.39	
30.003	406175	30587	0.075	6.78	
30.353	397157	30199	0.076	6.69	
30.860	235540	17573	0.075	3.89	18 Nitroglycerin
31.600	368119	25800	0.070	5.71	
32.577	444960	28856	0.065	6.39	
32.940	391506	26067	0.067	5.77	$ 1 3,4-Dinitrotoluene
33.267	370574	22718	0.061	5.03	
34.526	436642	26138	0.060	5.79	
34.913	354058	19992	0.056	4.43	
37.077	418	35	0.084	0.00	
37.846	530956	26158	0.049	5.79	
39.087	422690	19560	0.046	4.33	
40.607	600966	26061	0.043	5.77	
41.363	248177	9919	0.040	2.19	27 PETN
43.507	1013	37	0.037	0.00	
44.763	365	40	0.110	0.00	
	6759710	451081		100.000	

Total unknown % height = 68.24

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D\M-000004.D

Date : 01-FEB-2012 12:22

Client ID:

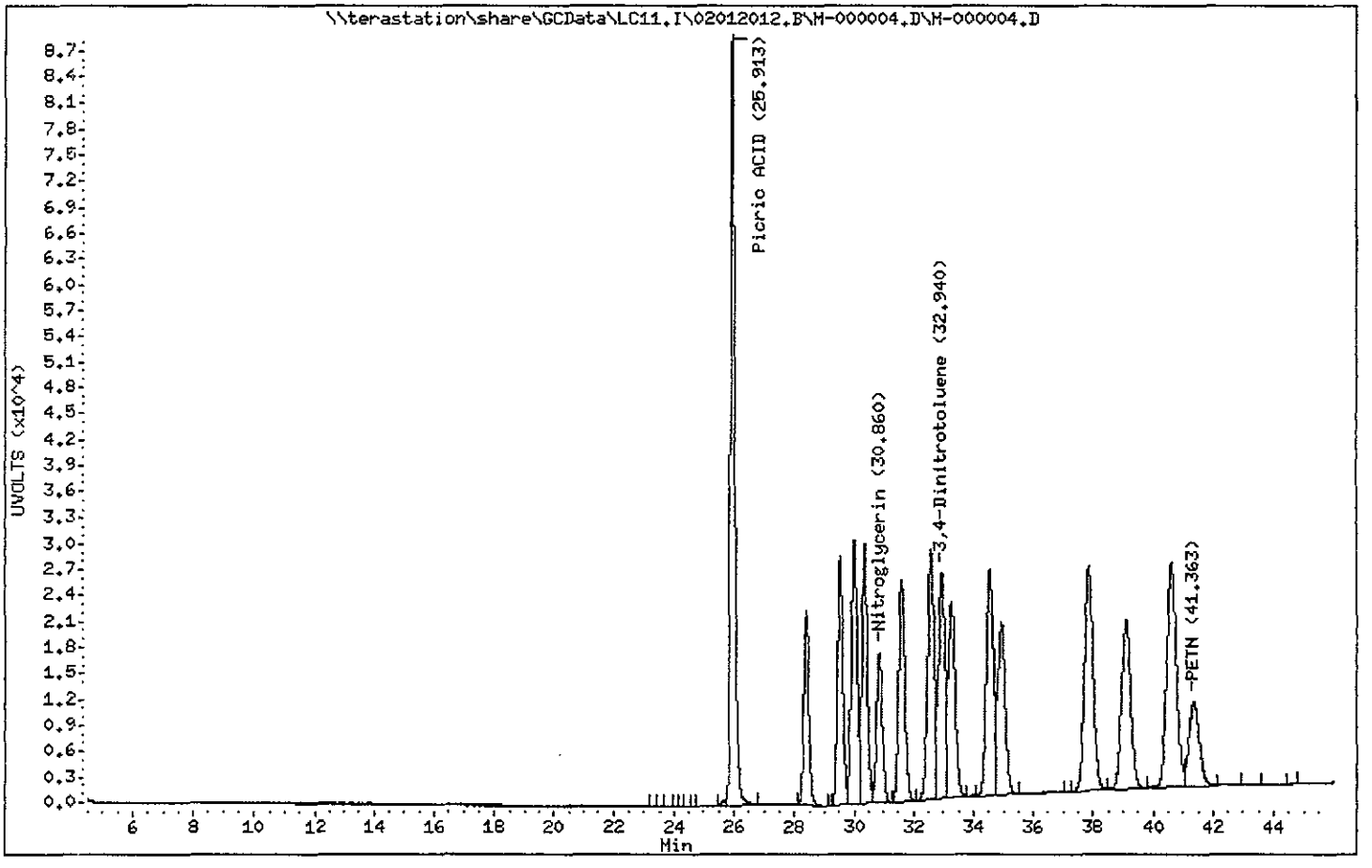
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 200ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 20:57 File ID: 02012012.B/M-000013.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.426	0.000	6127	102.7	2.7					
2	DNX	100	19.212	0.000	9445	102.9	2.9					
3	MNX	100	21.962	0.000	11125	102.7	2.7					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 21:49

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D
Lab Smp Id: STD_05 E110811H MET
Inj Date : 01-FEB-2012 20:57
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 21:49 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.426	159505	6127	0.038	22.07	2 TNX
19.212	147481	9445	0.064	34.02	3 DNX
21.962	126566	11125	0.088	40.13	5 MNX
23.959	51	23	0.455	0.08	
25.579	2249	143	0.064	0.51	
26.269	423	42	0.099	0.15	
26.519	2319	185	0.080	0.66	
26.976	1137	78	0.069	0.28	
27.369	5990	339	0.057	1.22	
29.832	266	33	0.124	0.11	
30.272	1461	89	0.061	0.32	
35.976	118	24	0.203	0.08	
36.509	123	22	0.178	0.07	
36.842	247	28	0.113	0.10	
41.449	649	26	0.040	0.09	
44.589	439	31	0.071	0.11	
	449024	27760		100.000	

Total unknown % height = 3.780

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D

Date : 01-FEB-2012 20:57

Client ID:

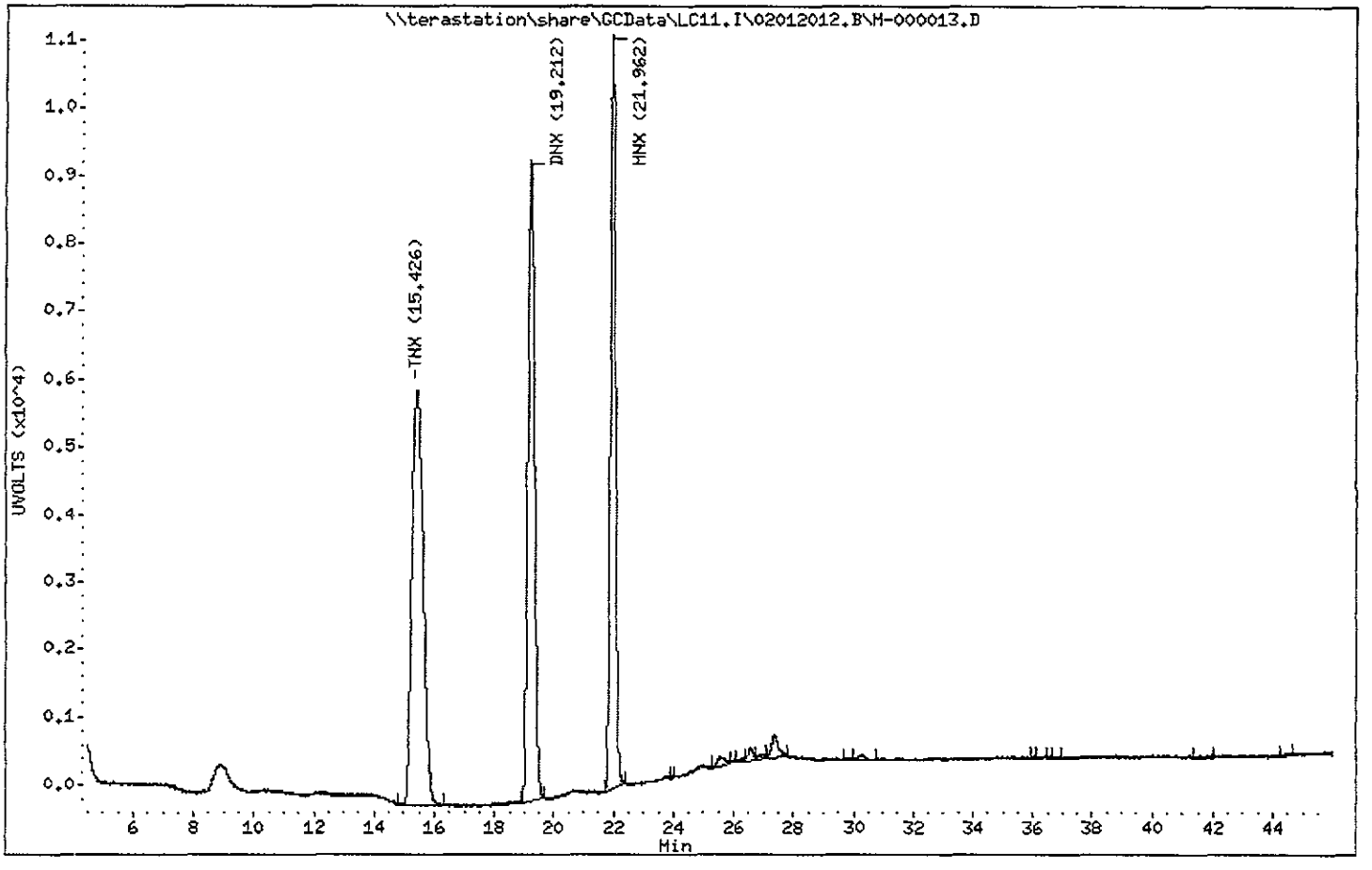
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D\M-000013
Lab Smp Id: STD_05 E110811H MET
Inj Date : 01-FEB-2012 20:57
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.249	281	39	0.139	5.50	
24.616	194	23	0.119	3.24	
29.859	170	15	0.088	2.11	
30.269	316	48	0.152	6.77	
31.619	357	34	0.095	4.80	
32.376	172	17	0.099	2.40	
33.416	160	31	0.194	4.37	
37.106	199	44	0.221	6.21	
37.672	159	21	0.132	2.96	
38.859	2653	98	0.037	13.93	
40.116	2161	87	0.040	12.28	
40.796	297	43	0.145	6.07	
41.842	2124	74	0.035	10.45	
42.419	759	51	0.067	7.20	
42.932	513	36	0.070	5.08	
45.386	2712	47	0.017	6.63	
	13225	708		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D\M-000013.D

Date : 01-FEB-2012 20:57

Client ID:

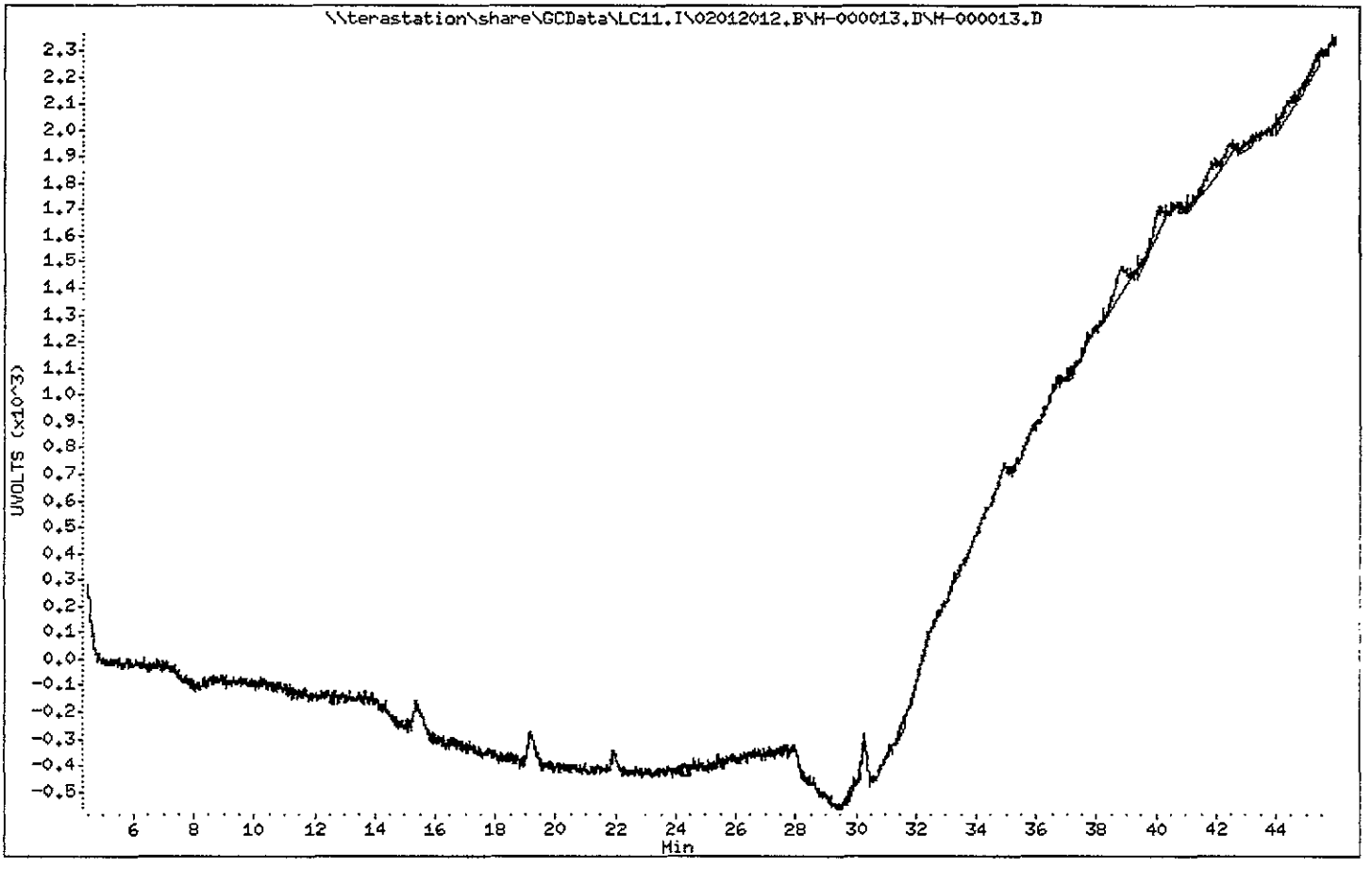
Instrument: LC11.i

Sample Info: STD_05 E110811M METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 01-FEB-2012 21:54
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000014.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.529	0.000	9695	105.6	5.6					
2	RDX	100	23.739	0.000	9598	105.5	5.5					
3	1,3,5-Trinitrobenz	100	25.676	0.000	21065	103.0	3.0					
4	Picric ACID	200	25.979	0.000	25483	216.5	8.3	25.979	0.000	37419	219.3	9.7
5	1,3-Dinitrobenzene	100	28.412	0.000	22007	102.9	2.9					
6	3,5-Dinitroaniline	100	29.556	0.000	14215	101.8	1.8					
7	Nitrobenzene	100	30.029	0.000	9613	103.4	3.4					
8	TETRYL	100	30.366	0.000	11223	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.612	0.000	12075	100.9	0.90					
10	4-AM-2,6-DNT	100	32.609	0.000	9713	100.9	0.90					
11	3,4-Dinitrotoluene	100	32.962	0.000	6762	100.8	0.80	32.959	0.000	12965	101.7	1.7
12	2-AM-4,6-DNT	100	33.306	0.000	10831	101.0	1.0					
13	2,6-Dinitrotoluene	100	34.562	0.000	7436	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.952	0.000	12260	100.5	0.50					
15	2-Nitrotoluene	100	37.892	0.000	5315	100.4	0.40					
16	4-Nitrotoluene	100	39.132	0.000	6406	101.5	1.5					
17	3-Nitrotoluene	100	40.656	0.000	6340	101.1	1.1					
18	EGDN	100										
19	Nitroglycerin	100						30.869	0.000	8669	104.4	4.4
20	PETN	100						41.376	0.000	4873	101.6	1.6

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 22:46

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 01-FEB-2012 21:54
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.289	62	27	0.433	0.01		
20.529	86814	9695	0.112	4.82	4	HMX
21.552	65	25	0.388	0.01		
22.469	718	71	0.099	0.03		
23.739	96894	9598	0.099	4.78	7	RDX
25.676	203605	21065	0.103	10.49	10	1,3,5-Trinitrobenze
25.979	248997	25483	0.102	12.79	9	Picric ACID
27.119	6220	566	0.091	0.28		
28.412	261091	22007	0.084	10.96	13	1,3-Dinitrobenzene
29.556	179792	14215	0.079	7.08	15	3,5-Dinitroaniline
30.029	125905	9613	0.076	4.78	17	Nitrobenzene
30.366	148694	11223	0.075	5.59	16	TETRYL
31.612	174651	12075	0.069	6.01	19	2,4,6-Trinitrotolue
32.609	151830	9713	0.064	4.83	20	4-AM-2,6-DNT
32.962	97686	6762	0.069	3.36	$ 1	3,4-Dinitrotoluene
33.306	183189	10831	0.059	5.39	21	2-AM-4,6-DNT
34.562	119790	7436	0.062	3.70	22	2,6-Dinitrotoluene
34.952	223662	12260	0.055	6.10	23	2,4-Dinitrotoluene
36.876	198	26	0.132	0.01		
37.892	107967	5315	0.049	2.64	24	2-Nitrotoluene
39.132	138085	6406	0.046	3.19	25	4-Nitrotoluene
40.656	145968	6340	0.043	3.15	26	3-Nitrotoluene
	2701883	200752		100.000		

Total unknown % height = 0.3400

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D

Date : 01-FEB-2012 21:54

Client ID:

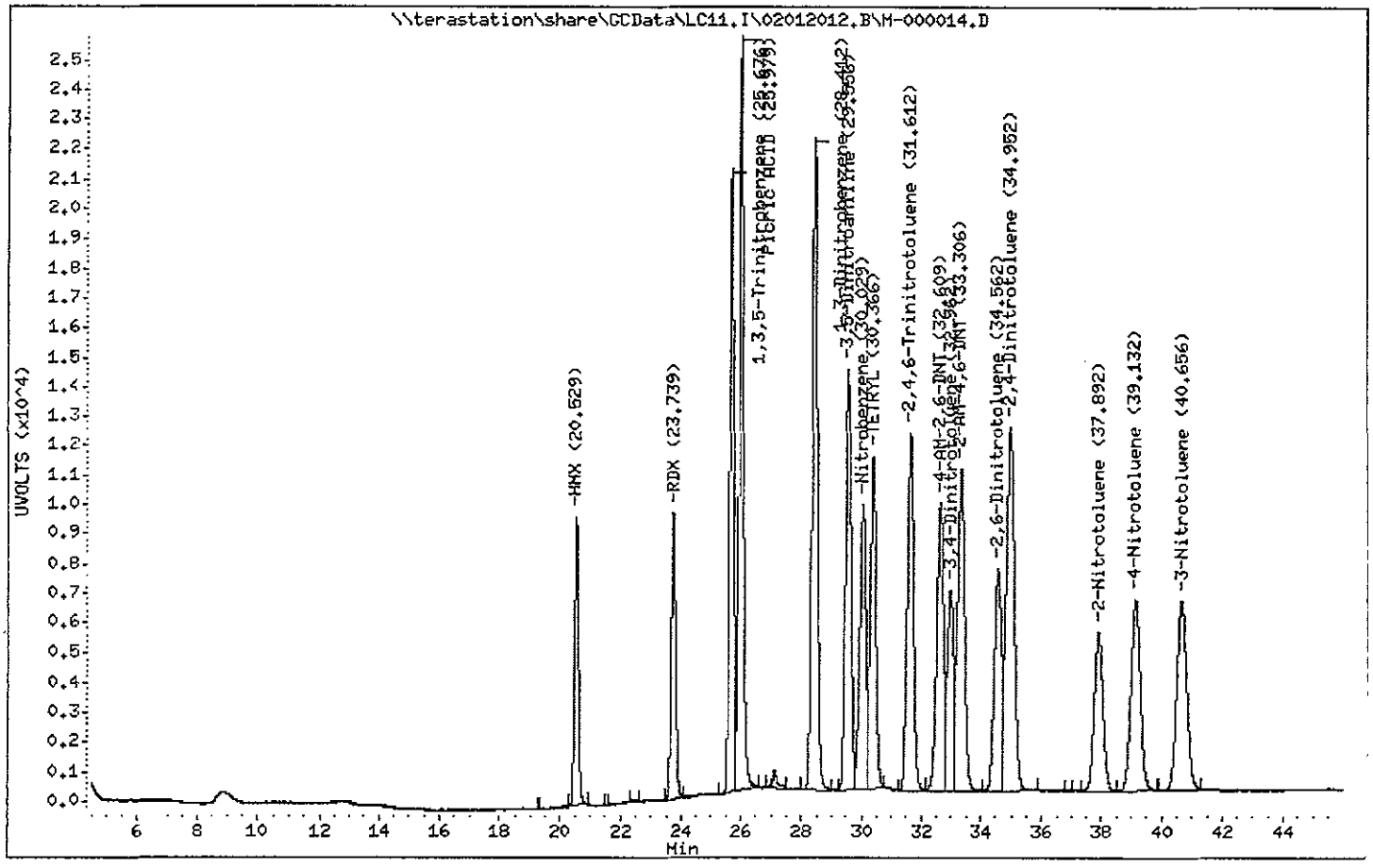
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D\M-000014
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 01-FEB-2012 21:54
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.506	222	43	0.194	0.01	
25.682	2580	287	0.111	0.13	
25.979	361080	37419	0.104	17.30	9 Picric ACID
27.662	168	35	0.209	0.01	
28.412	136494	11416	0.084	5.24	
29.556	182185	14446	0.079	6.63	
30.029	202008	15428	0.076	7.08	
30.366	197371	15018	0.076	6.89	
30.869	116585	8669	0.074	3.98	18 Nitroglycerin
31.612	183576	12860	0.070	5.90	
32.609	221838	14307	0.064	6.56	
32.959	196021	12965	0.066	5.95	$ 1 3,4-Dinitrotoluene
33.306	185296	11223	0.061	5.15	
33.916	153	37	0.242	0.01	
34.559	218531	12986	0.059	5.96	
34.952	175807	9910	0.056	4.55	
36.739	162	63	0.389	0.02	
37.892	264694	12968	0.049	5.95	
39.132	211877	9672	0.046	4.44	
40.659	301735	12909	0.043	5.92	
41.376	122769	4873	0.040	2.23	27 PETN
42.359	1370	70	0.051	0.03	
43.212	186	36	0.193	0.01	
44.046	216	41	0.190	0.01	
44.522	333	35	0.105	0.01	
45.332	1648	55	0.033	0.02	
45.916	249	27	0.108	0.01	
	3285154	217798		100.000	

Total unknown % height = 70.54

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D\M-000014.D

Date : 01-FEB-2012 21:54

Client ID:

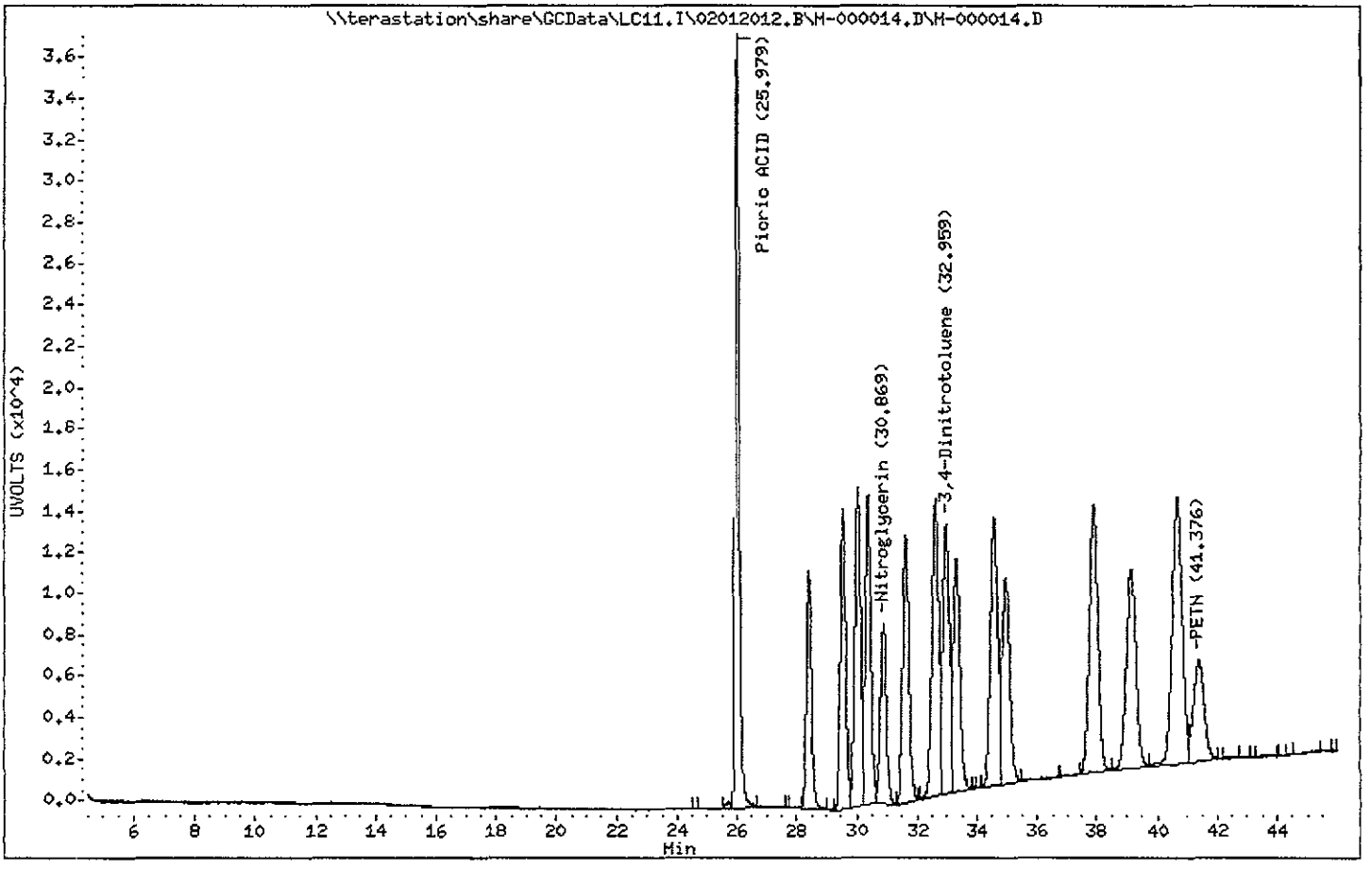
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 06:29 File ID: 02012012.B/M-000023.D
Operator : rm Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.421	0.000	6131	102.8	2.8					
2	DNX	100	19.214	0.000	9454	103.0	3.0					
3	MNX	100	21.964	0.000	11115	102.6	2.6					

RDM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 07:21

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 06:29
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 07:21 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.071	1847	150	0.081	0.53	
15.421	160132	6131	0.038	21.86	2 TNX
18.374	188	27	0.144	0.09	
19.214	148080	9454	0.064	33.71	3 DNX
20.364	50	16	0.319	0.05	
21.964	127101	11115	0.087	39.73	5 MNX
25.594	1999	143	0.072	0.50	
26.301	316	54	0.171	0.19	
26.544	2427	187	0.077	0.66	
26.974	1082	86	0.079	0.30	
27.401	6889	349	0.051	1.24	
30.151	282	63	0.223	0.22	
30.281	1385	99	0.072	0.35	
31.051	279	25	0.090	0.08	
31.451	270	26	0.096	0.09	
32.020	373	28	0.075	0.09	
34.984	126	25	0.199	0.08	
37.394	247	34	0.138	0.12	
44.654	251	33	0.132	0.11	
	453322	28045		100.000	

Total unknown % height = 4.700

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D

Date : 02-FEB-2012 06:29

Client ID:

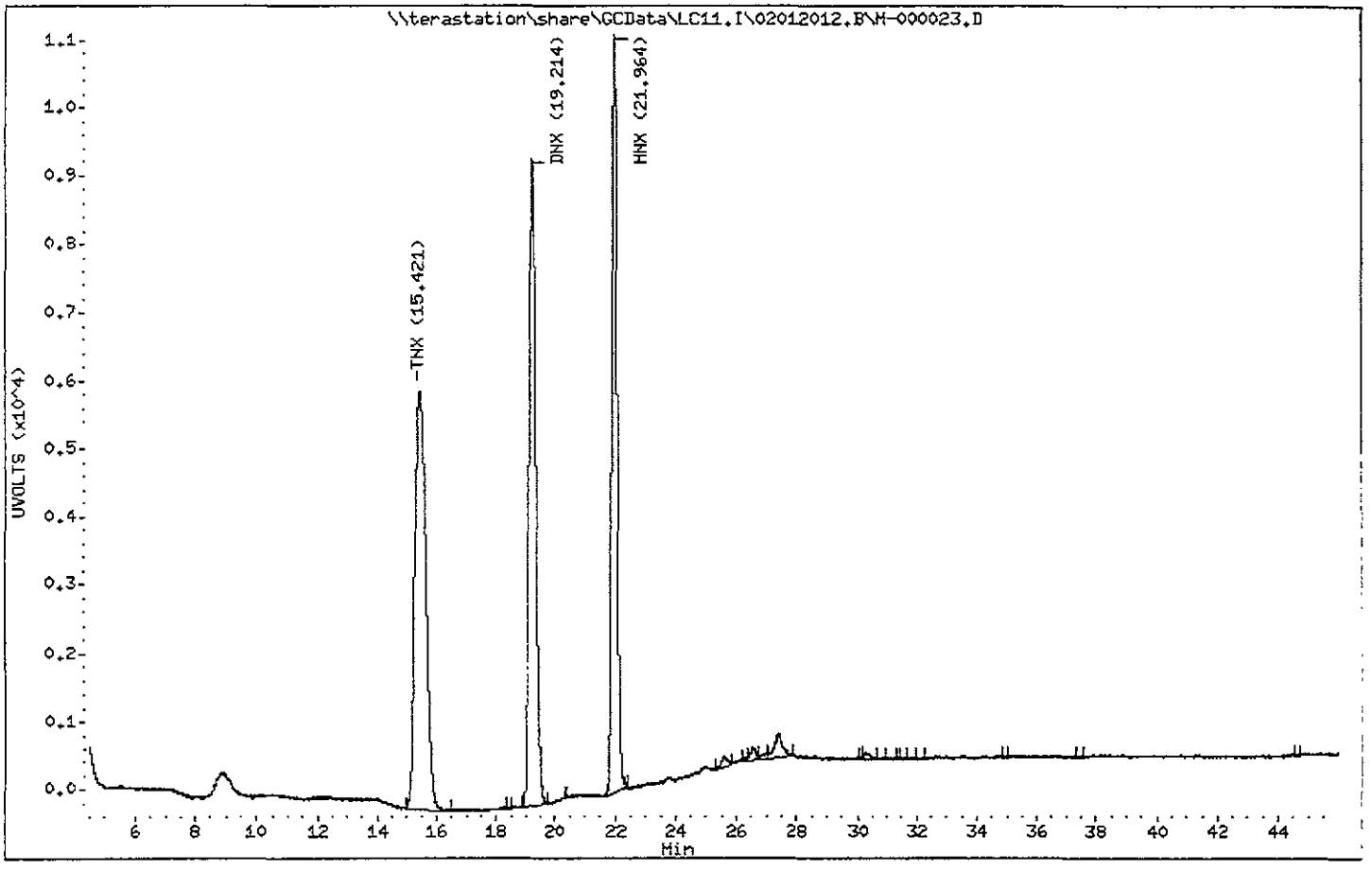
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D\M-000023
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 06:29
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.317	213	50	0.235	4.85	
26.184	167	39	0.234	3.78	
27.677	168	36	0.214	3.49	
27.937	409	53	0.130	5.14	
29.887	515	51	0.099	4.95	
30.284	2817	203	0.072	19.78	
31.247	293	29	0.099	2.81	
32.211	186	30	0.161	2.91	
32.461	356	39	0.110	3.78	
37.464	241	33	0.137	3.20	
38.081	387	41	0.106	3.98	
38.877	2336	101	0.043	9.80	
40.127	2351	88	0.037	8.54	
41.754	478	54	0.113	5.24	
42.037	670	60	0.090	5.82	
42.501	2721	90	0.033	8.73	
45.244	930	33	0.035	3.20	
	15239	1030		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D\M-000023.D

Date : 02-FEB-2012 06:29

Client ID:

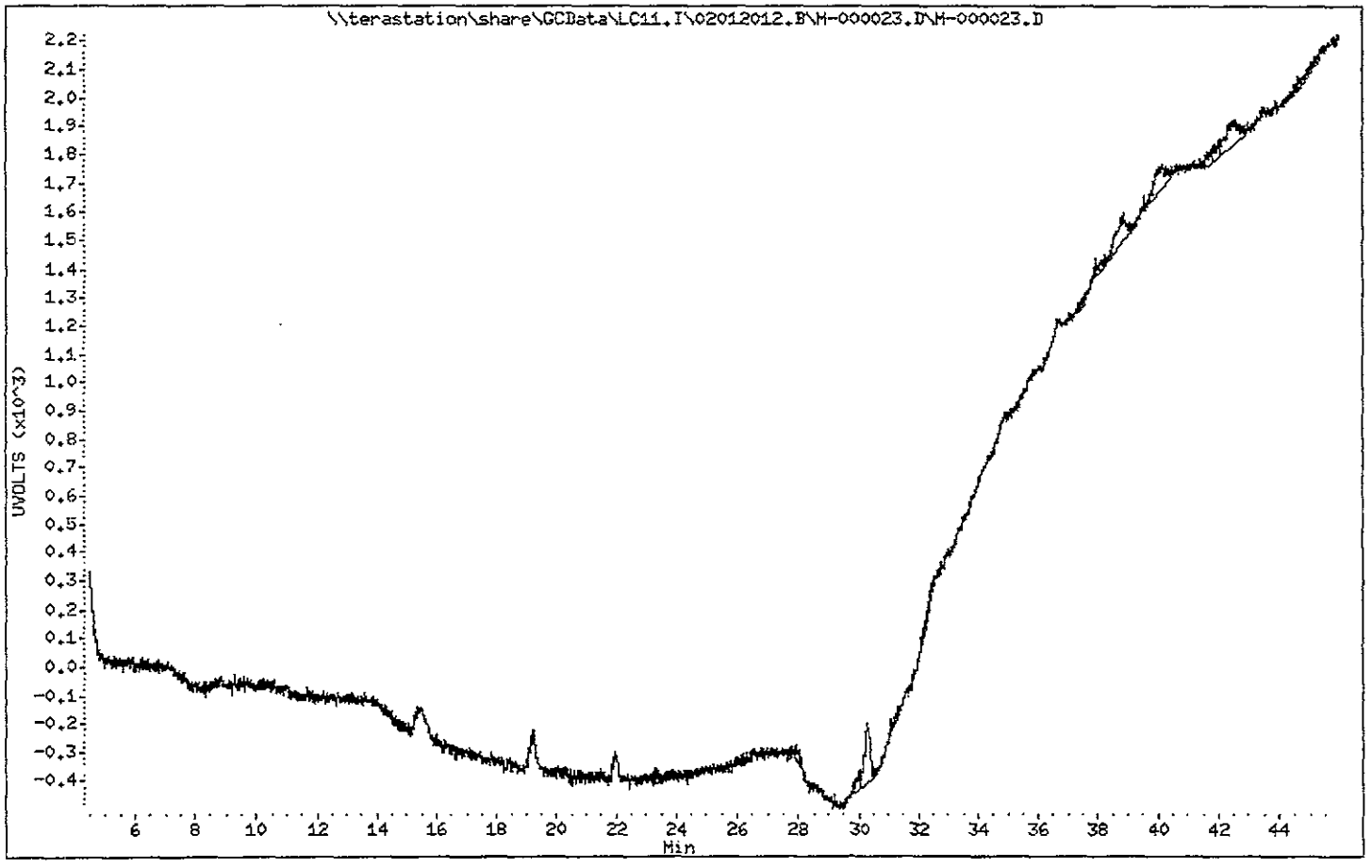
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 07:26
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000024.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9643	105.1	5.1					
2	RDX	100	23.740	0.000	9553	105.0	5.0					
3	1,3,5-Trinitrobenz	100	25.677	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.984	0.000	25461	216.3	8.2	25.987	0.000	37308	218.6	9.3
5	1,3-Dinitrobenzene	100	28.410	0.000	21931	102.5	2.5					
6	3,5-Dinitroaniline	100	29.550	0.000	14151	101.3	1.3					
7	Nitrobenzene	100	30.027	0.000	9406	101.2	1.2					
8	TETRYL	100	30.360	0.000	11195	99.83	-0.17					
9	2,4,6-Trinitrotolu	100	31.600	0.000	12053	100.7	0.70					
10	4-AM-2,6-DNT	100	32.590	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.947	0.000	6766	100.9	0.90	32.947	0.000	12938	101.5	1.5
12	2-AM-4,6-DNT	100	33.284	0.000	10855	101.3	1.3					
13	2,6-Dinitrotoluene	100	34.540	0.000	7450	100.4	0.40					
14	2,4-Dinitrotoluene	100	34.930	0.000	12312	100.9	0.90					
15	2-Nitrotoluene	100	37.867	0.000	5229	98.80	-1.2					
16	4-Nitrotoluene	100	39.107	0.000	6357	100.7	0.70					
17	3-Nitrotoluene	100	40.627	0.000	6267	99.90	-0.10					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8611	103.7	3.7
20	PETN	100						41.364	0.000	4907	102.4	2.4

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 08:18

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 07:26
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.060	1632	120	0.074	0.05		
20.287	52	27	0.520	0.01		
20.517	86673	9643	0.111	4.81		4 HMX
21.940	67	14	0.208	0.00		
22.434	340	45	0.132	0.02		
22.974	474	54	0.114	0.02		
23.740	97354	9553	0.098	4.76		7 RDX
24.664	77	24	0.310	0.01		
25.254	121	29	0.239	0.01		
25.677	204830	20963	0.102	10.46		10 1,3,5-Trinitrobenze
25.984	252460	25461	0.101	12.86		9 Picric ACID
26.964	885	75	0.085	0.03		
27.107	6732	595	0.088	0.29		
27.947	120	28	0.233	0.01		
28.410	260613	21931	0.084	10.94		13 1,3-Dinitrobenzene
29.550	179487	14151	0.079	7.06		15 3,5-Dinitroaniline
30.027	123391	9406	0.076	4.69		17 Nitrobenzene
30.360	148992	11195	0.075	5.58		16 TETRYL
31.600	174487	12053	0.069	6.01		19 2,4,6-Trinitrotolue
32.590	152306	9711	0.064	4.84		20 4-AM-2,6-DNT
32.947	96564	6766	0.070	3.37	$	1 3,4-Dinitrotoluene
33.284	184237	10855	0.059	5.41		21 2-AM-4,6-DNT
34.540	119530	7450	0.062	3.71		22 2,6-Dinitrotoluene
34.930	224696	12312	0.055	6.14		23 2,4-Dinitrotoluene
36.203	157	38	0.241	0.01		
37.867	105812	5229	0.049	2.60		24 2-Nitrotoluene
39.107	136644	6357	0.047	3.17		25 4-Nitrotoluene
40.627	145097	6267	0.043	3.12		26 3-Nitrotoluene
44.300	461	31	0.067	0.01		
	2704292	200383		100.000		

Total unknown % height = 0.4700

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D

Date : 02-FEB-2012 07:26

Client ID:

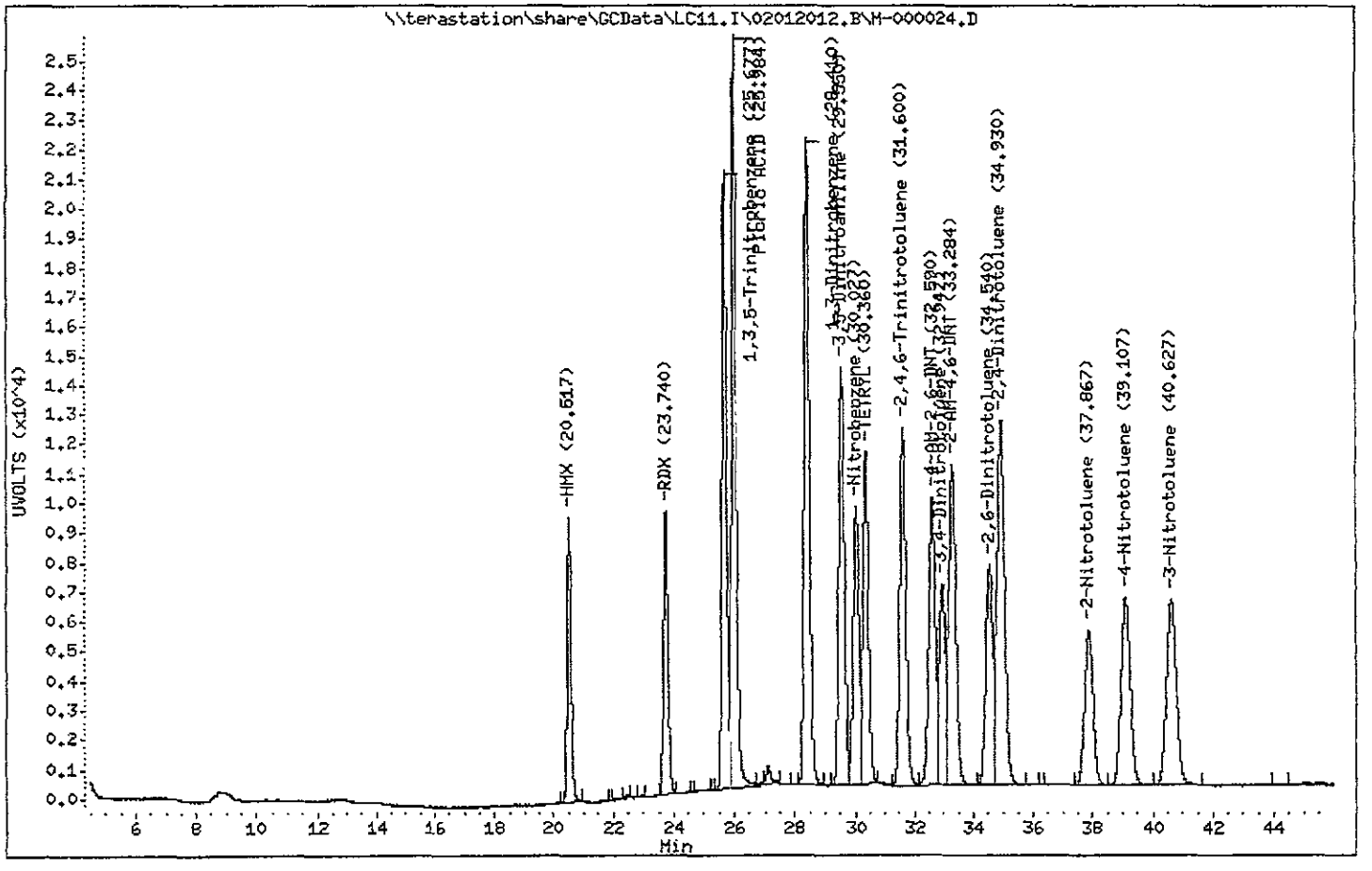
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D\M-000024
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 07:26
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.677	2685	294	0.110	0.13	
25.987	361998	37308	0.103	17.33	9 Picric ACID
27.370	373	45	0.121	0.02	
28.410	135447	11360	0.084	5.24	
29.550	181749	14394	0.079	6.64	
30.027	197957	15082	0.076	6.96	
30.357	197168	14946	0.076	6.90	
30.864	115619	8611	0.074	3.97	18 Nitroglycerin
31.604	183993	12826	0.070	5.92	
32.590	222139	14304	0.064	6.60	
32.947	195363	12938	0.066	5.97	$ 1 3,4-Dinitrotoluene
33.280	185590	11245	0.061	5.19	
34.540	219733	13006	0.059	6.00	
34.927	176496	9953	0.056	4.59	
37.864	260876	12797	0.049	5.91	
39.107	210969	9618	0.046	4.44	
40.630	298998	12778	0.043	5.90	
41.364	124072	4907	0.040	2.26	27 PETN
44.340	476	36	0.076	0.01	
44.910	780	31	0.040	0.01	
45.347	434	39	0.090	0.01	
	3272913	216518		100.000	

Total unknown % height = 70.47

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D\M-000024.D

Date : 02-FEB-2012 07:26

Client ID:

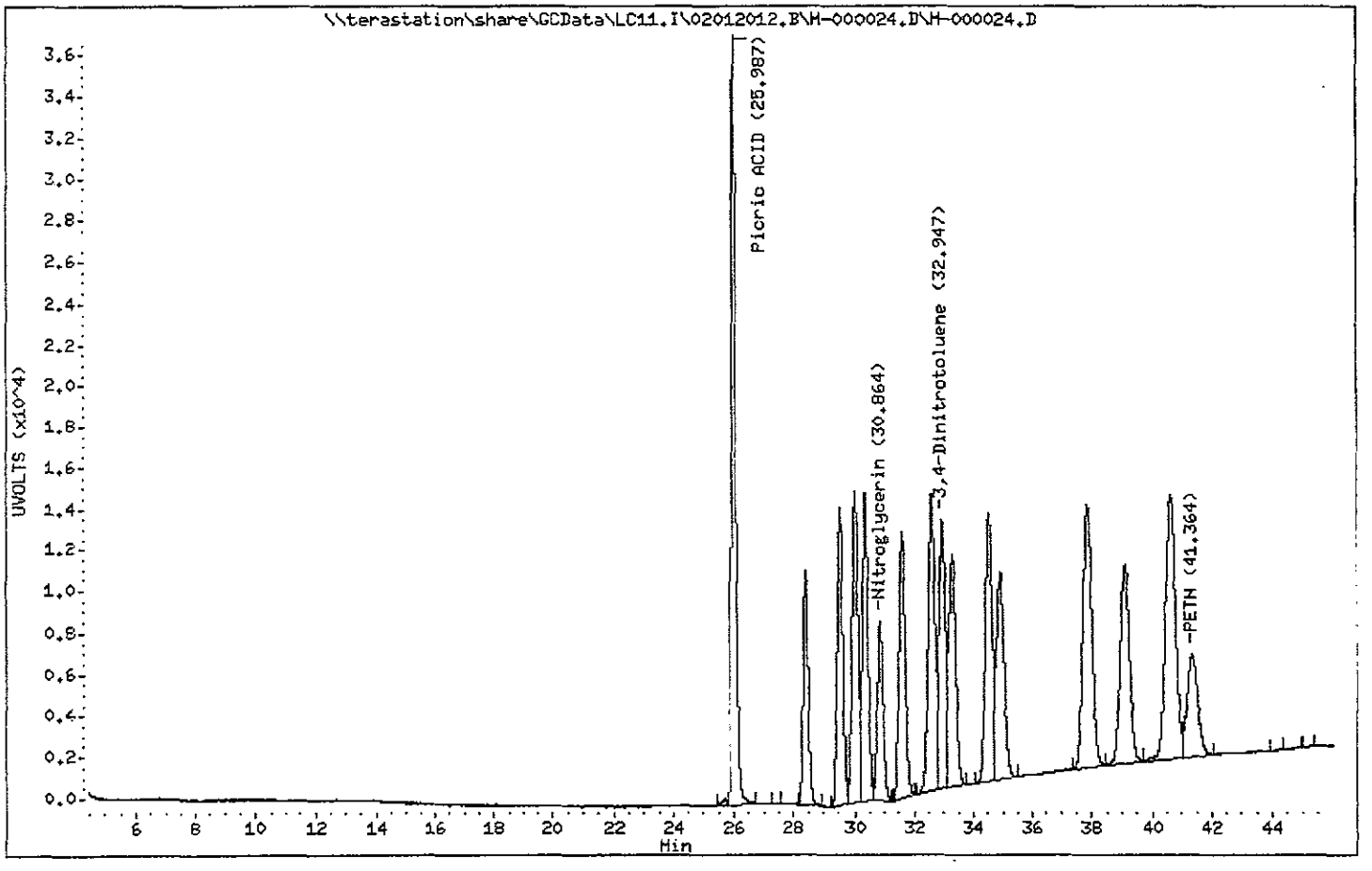
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 03:32 File ID: 02012012.B/C-000013.d
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	22.250	0.000	9444	205.8	2.9					
2	1,3-Dinitrobenzene	200	25.240	0.000	20499	204.0	2.0					
3	1,3,5-Trinitrobenz	200	27.990	0.000	15534	203.6	1.8					
4	2-Nitrotoluene	400	29.366	0.000	12034	412.2	3.1					
5	3-Nitrotoluene	200	29.940	0.000	7648	199.5	-0.25					
6	3,5-Dinitroaniline	200	31.326	0.000	16465	200.1	0.050					
7	RDX	200	31.903	0.000	9304	186.5	-6.8					
8	2,4-Dinitrotoluene	200	33.066	0.000	17650	200.6	0.30					
9	2,6-Dinitrotoluene	200	34.096	0.000	10551	197.0	-1.5					
10	2-AM-4,6-DNT	200	36.160	0.000	14493	201.3	0.65					
11	4-AM-2,6-DNT	200	36.790	0.000	12724	206.8	3.4					
12	3,4-Dinitrotoluene	200	38.473	0.000	9905	213.4	6.7					
13	2,4,6-Trinitrotolu	200	40.583	0.000	16675	209.1	4.6					
14	HMX	200	42.256	0.000	12429	204.6	2.3					
15	TETRYL	200	46.476	0.000	24454	206.5	3.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.930	0.000	29369	203.9	2.0
19	Picric ACID	500										
20	Nitroglycerin	200						44.783	0.000	17384	214.1	7.1

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 11:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 02-FEB-2012 03:32
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;2;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.656	2124	56	0.026	0.02	
22.250	296281	9444	0.032	4.47	17 Nitrobenzene
25.240	621676	20499	0.033	9.71	13 1,3-Dinitrobenzene
27.106	224	35	0.156	0.01	
27.990	485200	15534	0.032	7.36	10 1,3,5-Trinitrobenze
29.366	337515	12034	0.036	5.70	24 2-Nitrotoluene
29.940	206108	7648	0.037	3.62	26 3-Nitrotoluene
31.326	422769	16465	0.039	7.80	15 3,5-Dinitroaniline
31.903	240407	9304	0.039	4.40	7 RDX
33.066	503424	17650	0.035	8.36	23 2,4-Dinitrotoluene
34.096	307743	10551	0.034	4.99	22 2,6-Dinitrotoluene
36.160	398868	14493	0.036	6.86	21 2-AM-4,6-DNT
36.790	343203	12724	0.037	6.02	20 4-AM-2,6-DNT
38.473	229758	9905	0.043	4.69	$ 1 3,4-Dinitrotoluene
39.510	13442	577	0.043	0.27	
40.583	402574	16675	0.041	7.90	19 2,4,6-Trinitrotolue
42.256	194145	12429	0.064	5.88	4 HMX
42.970	250	30	0.120	0.01	
43.683	303	25	0.082	0.01	
44.353	642	43	0.067	0.02	
44.780	2531	149	0.059	0.07	
45.353	3314	123	0.037	0.05	
46.476	330745	24454	0.074	11.69	16 TETRYL
47.726	540	68	0.126	0.03	
48.913	2460	131	0.053	0.06	
	5346249	211046		100.000	

Total unknown % height = 0.5500

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d

Date : 02-FEB-2012 03:32

Client ID:

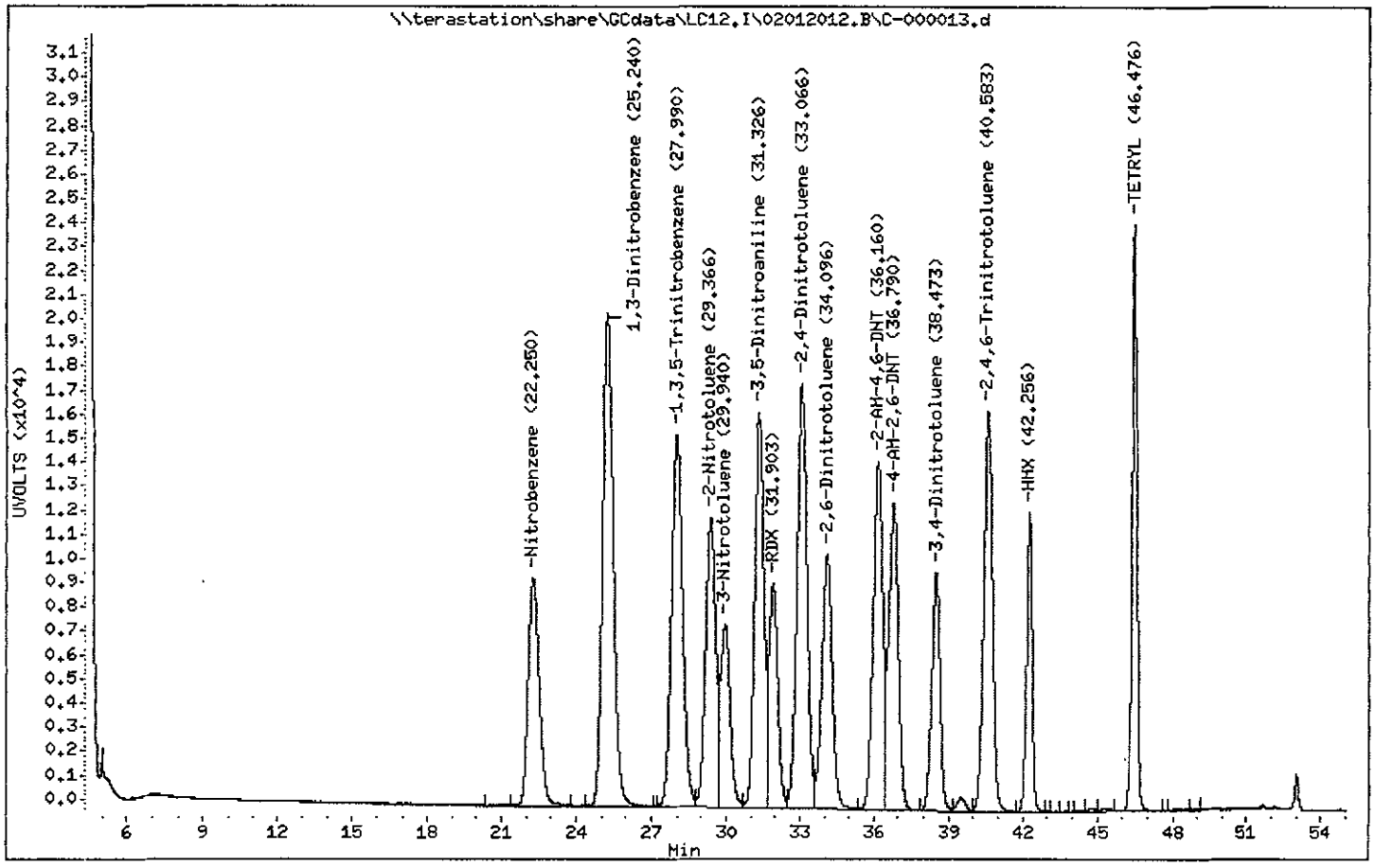
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d\C-000013
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 02-FEB-2012 03:32
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;2;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.783	279401	17384	0.062	37.18	18 Nitroglycerin
52.930	260132	29369	0.113	62.82	27 PETN
	539533	46753		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d\C-000013.d

Date : 02-FEB-2012 03:32

Client ID:

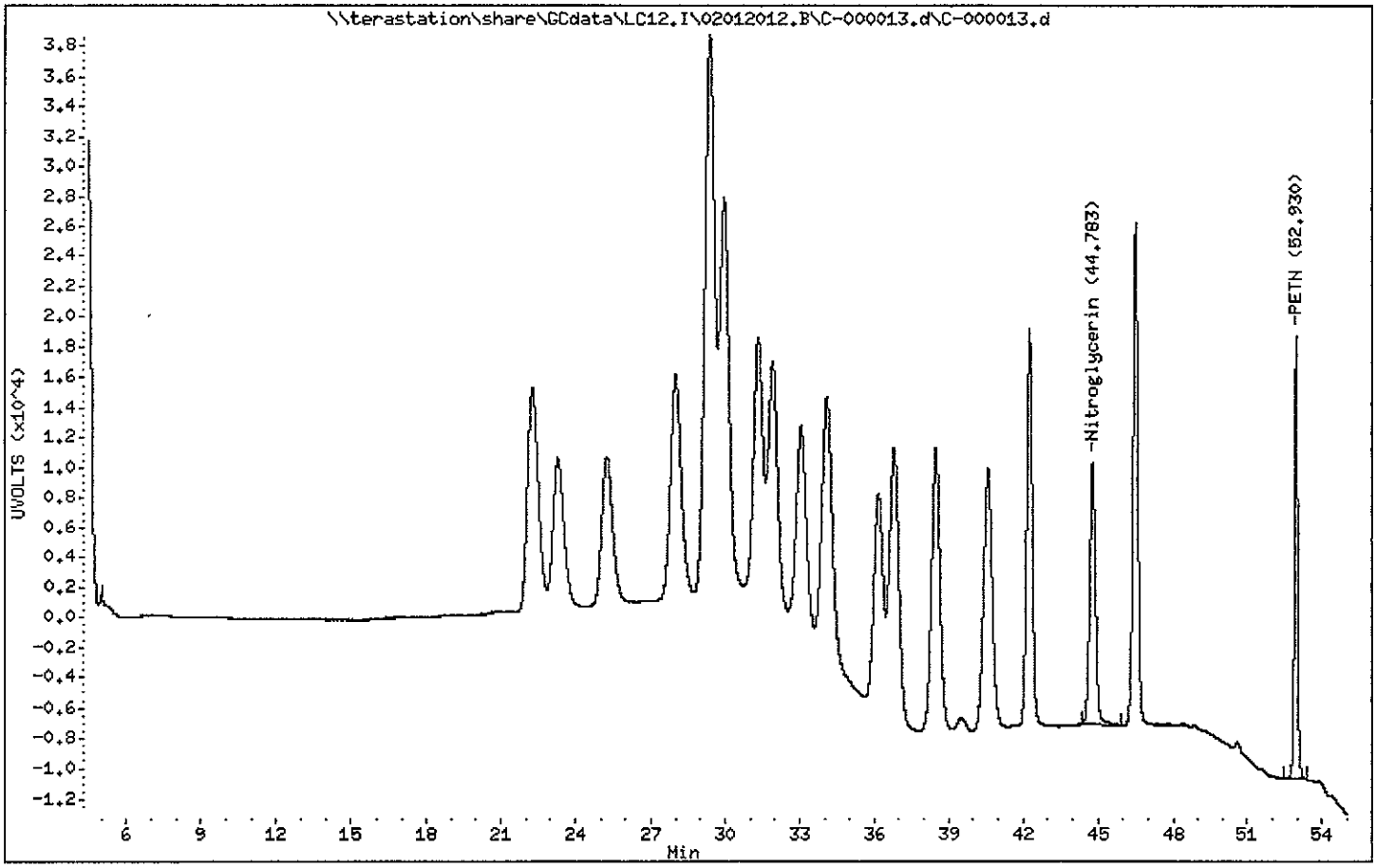
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL:2:

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H 100ng/mL
Analyzed : 02-FEB-2012 12:15
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000021.D
Sublist: 2_CALMET
SpikeList:

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	18.326	0.000	6012	102.9	2.9					
2	DNX	100	23.630	0.000	6215	102.6	2.6					
3	MNX	100	28.026	0.000	5981	103.0	3.0					

RAM 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 13:20

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000021.D
Lab Smp Id: STD_05 E110811H 100
Inj Date : 02-FEB-2012 12:15
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 E110811H 100ng/mL;2;
Misc Info : ;5;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 13:20 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.396	1378	63	0.046	0.30	
15.010	4888	125	0.026	0.61	
18.326	186973	6012	0.032	29.49	2 TNX
23.630	173975	6215	0.036	30.70	3 DNX
27.013	410	43	0.105	0.21	
27.190	610	46	0.075	0.22	
28.026	151965	5981	0.039	29.33	5 MNX
28.976	266	58	0.218	0.28	
29.270	602	48	0.080	0.23	
29.590	386	47	0.122	0.23	
29.730	475	54	0.114	0.26	
29.926	507	51	0.101	0.25	
30.073	265	55	0.207	0.26	
30.266	372	52	0.140	0.25	
30.423	754	56	0.074	0.27	
30.730	1052	58	0.055	0.28	
31.026	86	52	0.607	0.25	
31.286	535	64	0.120	0.31	
31.440	574	73	0.127	0.35	
31.653	991	94	0.095	0.46	
31.800	2000	97	0.049	0.47	
32.693	962	64	0.067	0.31	
33.770	641	58	0.091	0.28	
34.250	652	49	0.075	0.24	
34.796	184	36	0.196	0.17	
36.773	198	25	0.126	0.12	
37.383	220	32	0.145	0.15	
37.590	330	35	0.106	0.17	
37.893	158	22	0.140	0.10	
38.626	325	28	0.086	0.13	
38.866	161	25	0.155	0.12	
39.180	227	22	0.097	0.10	
39.536	122	29	0.238	0.14	
39.743	179	23	0.129	0.11	
40.000	472	31	0.066	0.15	
40.456	297	37	0.125	0.18	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.393	171	26	0.152	0.12	
42.056	94	18	0.192	0.08	
42.730	179	20	0.112	0.09	
43.320	476	40	0.084	0.19	
43.990	359	38	0.106	0.18	
46.073	580	66	0.114	0.32	
48.080	704	72	0.102	0.35	
48.400	2664	134	0.050	0.65	
48.913	2287	112	0.049	0.54	
	541704	20386		100.000	

Total unknown % height = 10.48

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000021.D

Date : 02-FEB-2012 12:15

Client ID:

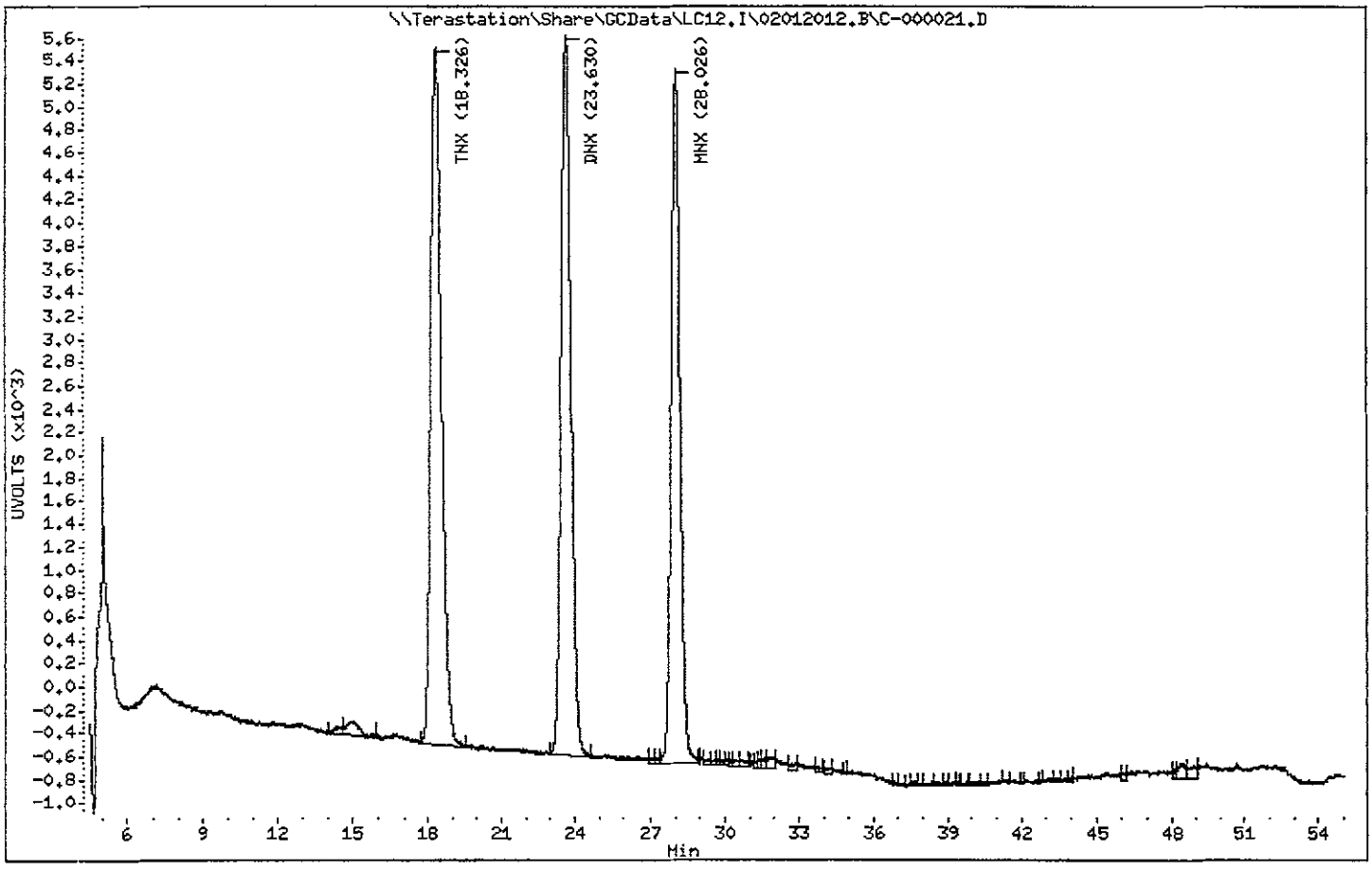
Instrument: LC12.i

Sample Info: STD_05 E110811H 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000021.D\C-000021.D

Date : 02-FEB-2012 12:15

Client ID:

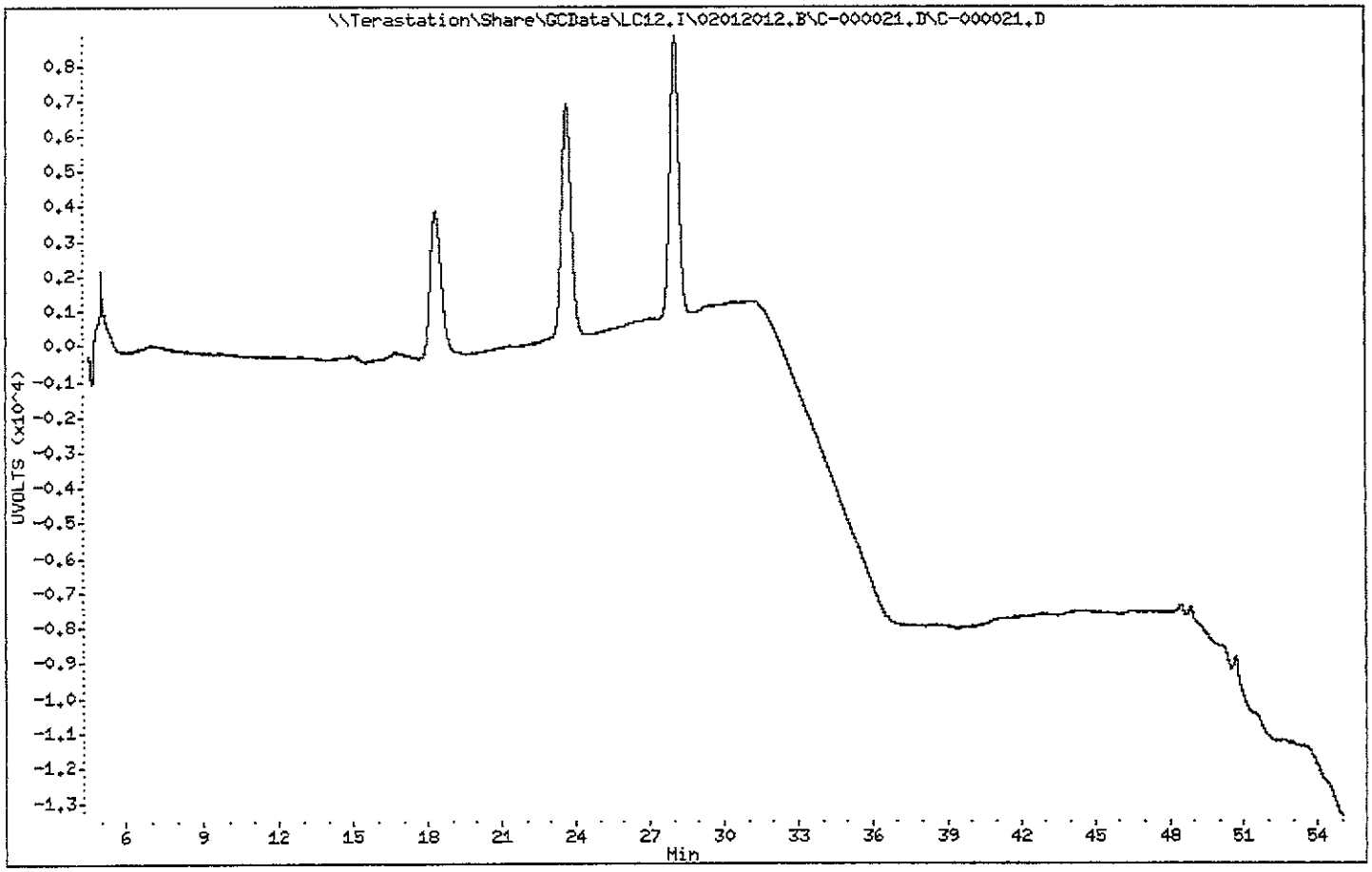
Instrument: LC12.i

Sample Info: STD_05 E110811H 100ng/mL:2:

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 13:21 File ID: 02012012.B/C-000022.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	100	22.267	0.000	4888	106.5	6.5					
2	1,3-Dinitrobenzene	100	25.264	0.000	10515	104.7	4.7					
3	1,3,5-Trinitrobenz	100	28.007	0.000	7829	102.6	2.6					
4	2-Nitrotoluene	200	29.397	0.000	6087	208.5	4.3					
5	3-Nitrotoluene	100	29.984	0.000	3862	100.7	0.70					
6	3,5-Dinitroaniline	100	31.357	0.000	8360	101.6	1.6					
7	RDX	100	31.944	0.000	4704	94.29	-5.7					
8	2,4-Dinitrotoluene	100	33.114	0.000	8906	101.2	1.2					
9	2,6-Dinitrotoluene	100	34.140	0.000	5314	99.24	-0.76					
10	2-AM-4,6-DNT	100	36.210	0.000	7322	101.7	1.7					
11	4-AM-2,6-DNT	100	36.847	0.000	6433	104.6	4.6					
12	3,4-Dinitrotoluene	100	38.527	0.000	4981	107.3	7.3					
13	2,4,6-Trinitrotolu	100	40.617	0.000	8394	105.3	5.3					
14	HMX	100	42.274	0.000	6250	102.9	2.9					
15	TETRYL	100	46.470	0.000	12307	103.9	3.9					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.957	0.000	14321	99.44	-0.56
19	Picric ACID	200										
20	Nitroglycerin	100						44.790	0.000	8614	106.1	6.1

RN 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 14:26

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 13:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.670	252	20	0.079	0.01	
22.267	145300	4888	0.034	4.57	17 Nitrobenzene
25.264	308476	10515	0.034	9.84	13 1,3-Dinitrobenzene
27.060	156	30	0.193	0.02	
28.007	238834	7829	0.033	7.32	10 1,3,5-Trinitrobenze
29.397	165823	6087	0.037	5.69	24 2-Nitrotoluene
29.984	100622	3862	0.038	3.61	26 3-Nitrotoluene
31.357	207144	8360	0.040	7.82	15 3,5-Dinitroaniline
31.944	118930	4704	0.040	4.40	7 RDX
33.114	248131	8906	0.036	8.33	23 2,4-Dinitrotoluene
34.140	151910	5314	0.035	4.97	22 2,6-Dinitrotoluene
35.347	78	20	0.257	0.01	
36.210	199481	7322	0.037	6.85	21 2-AM-4,6-DNT
36.847	168711	6433	0.038	6.02	20 4-AM-2,6-DNT
38.527	114220	4981	0.044	4.66	$ 1 3,4-Dinitrotoluene
39.587	5988	263	0.044	0.24	
40.617	200109	8394	0.042	7.85	19 2,4,6-Trinitrotolue
41.714	94	32	0.342	0.02	
42.274	96570	6250	0.065	5.85	4 HMX
44.314	209	21	0.101	0.01	
44.750	1098	69	0.063	0.06	
45.407	749	53	0.071	0.04	
45.987	217	29	0.134	0.02	
46.470	163103	12307	0.075	11.67	16 TETRYL
48.054	576	58	0.101	0.05	
48.847	833	79	0.095	0.07	
	2637611	106826		100.000	

Total unknown % height = 0.5500

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D

Date : 02-FEB-2012 13:21

Client ID:

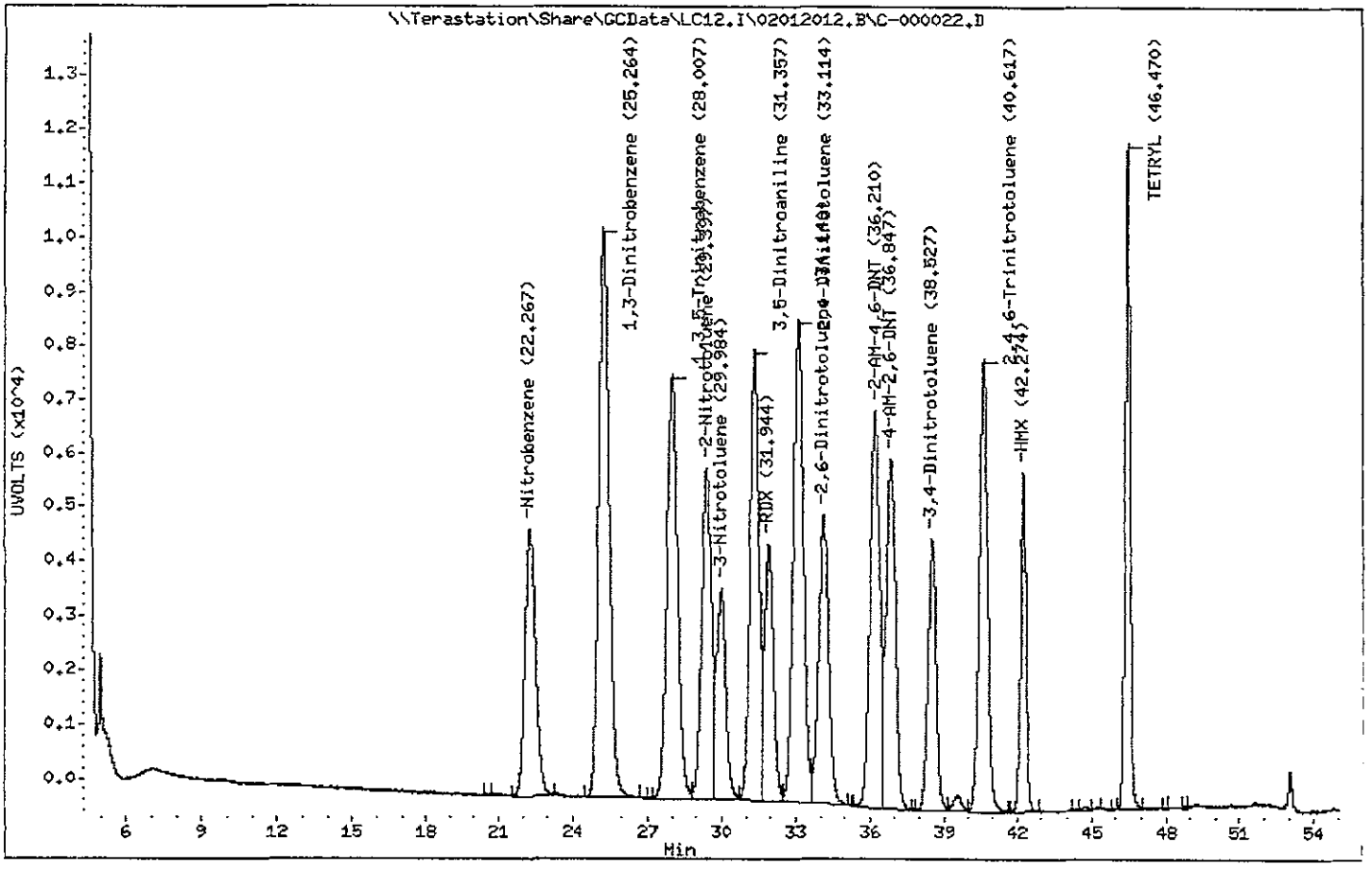
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D\C-000022
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 13:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.790	136482	8614	0.063	37.55	18 Nitroglycerin
52.957	125951	14321	0.114	62.45	27 PETN
	262433	22935		100.000	

Total unknown % height = 0.0000

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D\C-000022.D

Date : 02-FEB-2012 13:21

Client ID:

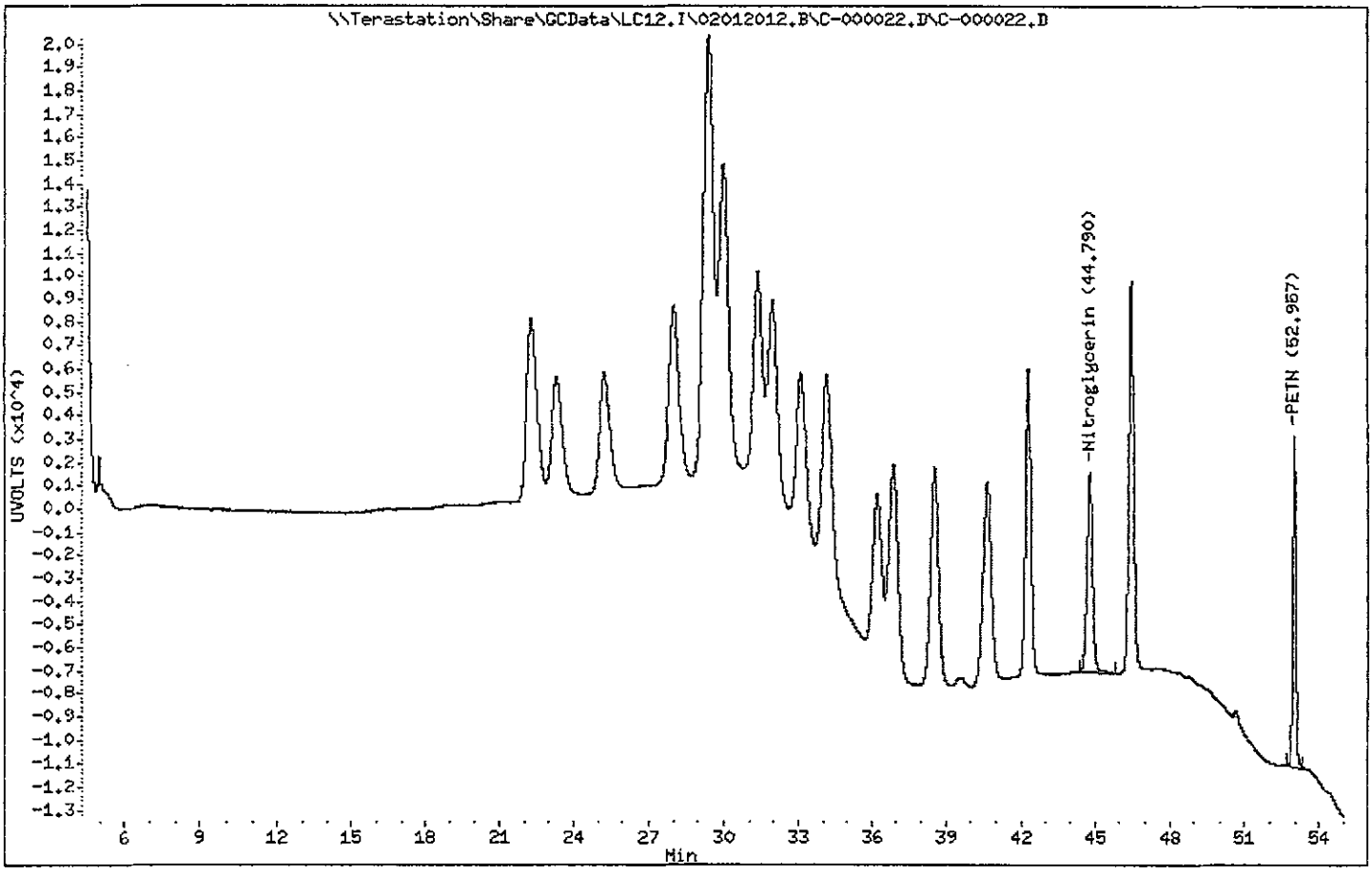
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Raw QC Data

Blank Data

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AA Matrix.....: WATER
MB Lot-Sample #: G2A240000-017

Prep Date.....: 01/24/12
Analysis Date..: 02/01/12 Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica
Dual Column Chromatography Summary

Sample : MQDFC1AA 2024017 MB
Analyzed : 01-FEB-2012 15:14
Operator : rn
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000007.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX									
6	1,3,5-Trinitrobenz									
7	Picric ACID									
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.928	-0.012	8619	2.570	32.931	-0.009	16735	2.625	2.1
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.500	2.570	102.8	2.625	105.0	(84-125)

2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 16:06

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 01-FEB-2012 15:14
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMET.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.108	987	110	0.111	1.04	
16.718	619	41	0.066	0.39	
18.648	126	24	0.191	0.22	
19.341	103	27	0.263	0.25	
20.138	51	24	0.472	0.22	
20.418	72	24	0.333	0.22	
22.744	100	28	0.281	0.26	
22.954	118	22	0.186	0.20	
23.378	71	32	0.452	0.30	
24.071	94	19	0.202	0.18	
24.604	1115	131	0.117	1.24	
24.881	220	31	0.141	0.29	
25.411	128	32	0.251	0.30	
25.574	1723	137	0.080	1.30	
26.101	574	73	0.127	0.69	
26.514	500	56	0.112	0.53	
26.944	582	54	0.093	0.51	
27.331	1705	113	0.066	1.07	
27.604	4108	320	0.078	3.04	
28.861	685	65	0.095	0.61	
29.681	51	31	0.609	0.29	
30.228	667	39	0.058	0.37	
30.758	97	31	0.321	0.29	
30.904	281	27	0.096	0.25	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
31.498	185	34	0.184	0.32	
32.928	130332	8619	0.066	82.23	$ 1 3,4-Dinitrotoluene
34.468	1359	74	0.054	0.70	
36.501	335	26	0.078	0.24	
37.371	225	28	0.124	0.26	
39.068	132	24	0.182	0.22	
41.428	1996	79	0.040	0.75	
42.064	1809	84	0.046	0.79	
45.188	925	30	0.032	0.28	
45.864	92	16	0.174	0.15	
	152165	10505		100.000	

Total unknown % height = 17.77

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D

Date : 01-FEB-2012 15:14

Client ID:

Instrument: LC11.i

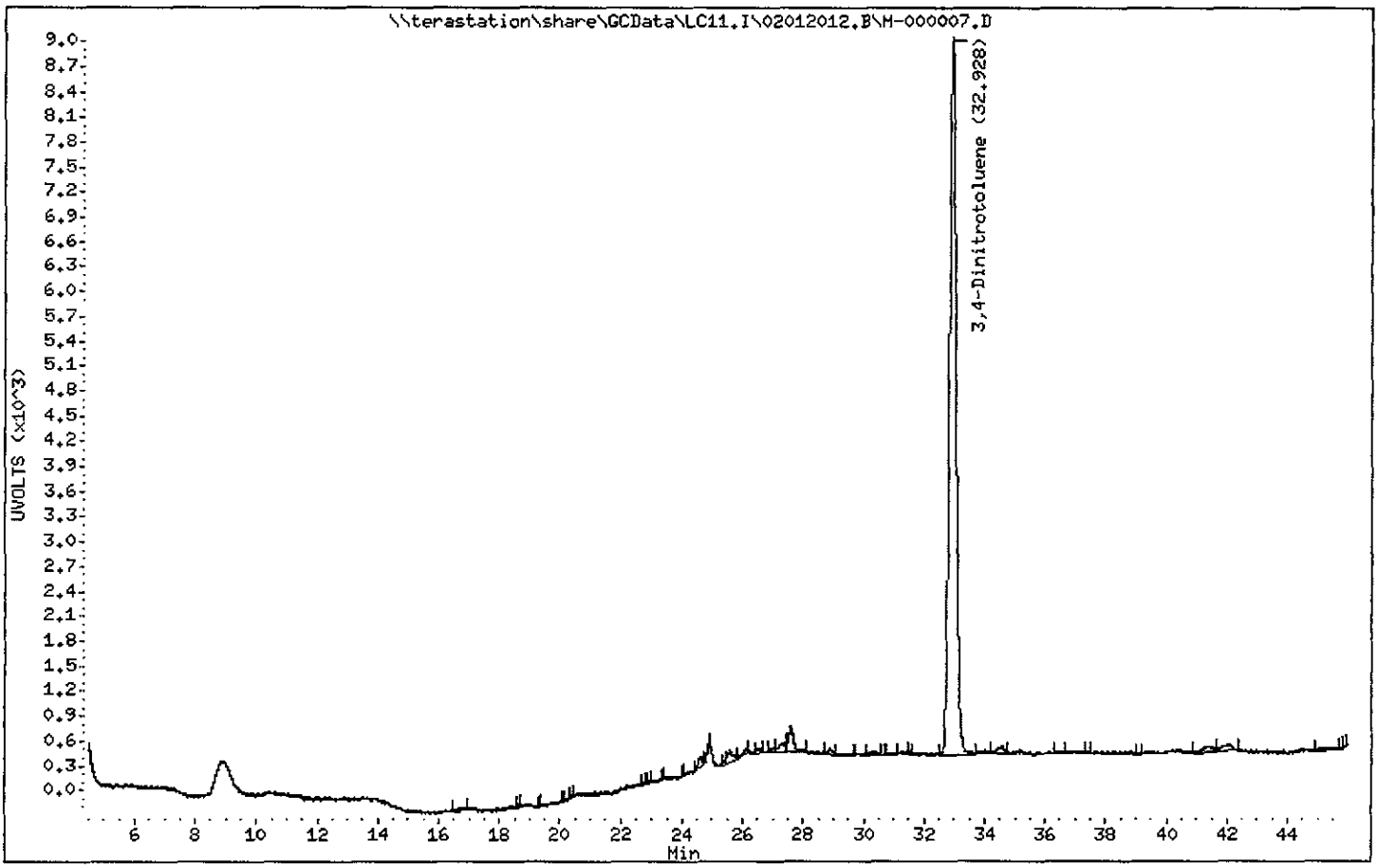
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D\M-000007
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 01-FEB-2012 15:14
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMET.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.768	251	47	0.187	0.25	
26.091	345	67	0.194	0.36	
28.791	612	60	0.098	0.32	
29.764	183	30	0.164	0.16	
30.234	300	50	0.167	0.27	
30.698	838	85	0.101	0.46	
32.198	1206	173	0.143	0.94	
32.284	2163	187	0.086	1.02	
32.931	254159	16735	0.066	91.85	$ 1 3,4-Dinitrotoluene
33.598	598	45	0.075	0.24	
34.121	162	29	0.179	0.15	
34.558	2438	168	0.069	0.92	
38.461	427	44	0.103	0.24	
39.344	3697	167	0.045	0.91	
40.171	857	43	0.050	0.23	
41.201	228	26	0.114	0.14	
42.024	6746	269	0.040	1.47	
45.611	3380	14	0.004	0.07	
	278589	18239		100.000	

Total unknown % height = 8.150

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D\M-000007.D

Date : 01-FEB-2012 15:14

Client ID:

Instrument: LC11.i

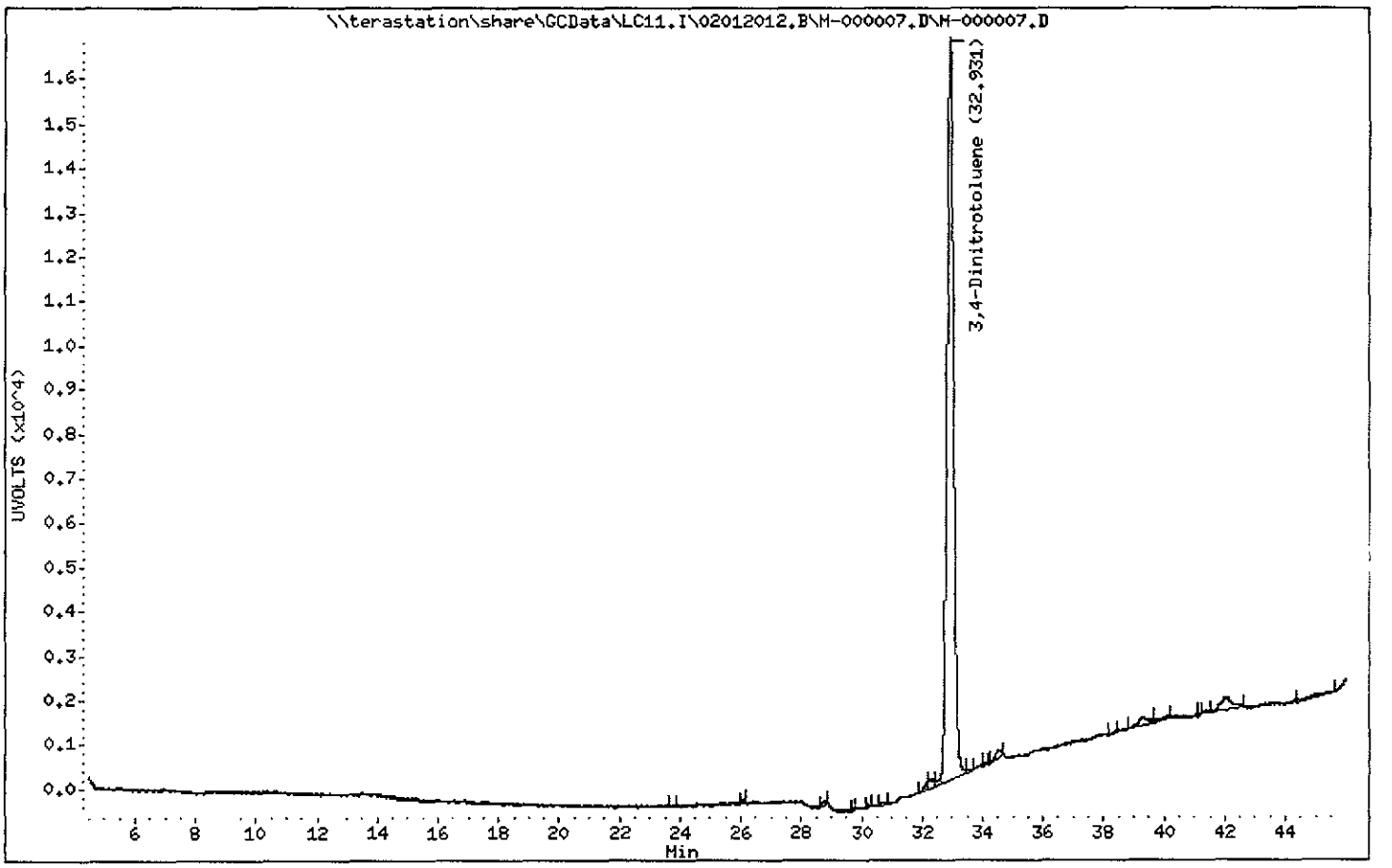
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : MQDFC1AA 2024017 MB
Analyzed : 02-FEB-2012 06:48
Operator : RN
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000016.d
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 Nitrobenzene									
3 DNX									
4 1,3-Dinitrobenzene									
5 1,3,5-Trinitrobenz	27.724	-0.265 RTdiff	289	0.07578 ND					
6 MNX									
7 2-Nitrotoluene									
8 3-Nitrotoluene									
9 3,5-Dinitroaniline									
10 RDX									
11 2,4-Dinitrotoluene									
12 2,6-Dinitrotoluene									
13 2-AM-4,6-DNT									
14 4-AM-2,6-DNT									
15 3,4-Dinitrotoluene	38.594	0.121	6730	2.900					
16 2,4,6-Trinitrotolu									
17 HMX									
18 TETRYL									
19 4-Nitrotoluene									
20 EGDN									
21 PETN									
22 Nitroglycerin									
23 Picric ACID									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.500	2.900	116.0*			(79-111)

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:32

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 02-FEB-2012 06:48
Operator : RN Inst ID: LC12.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMETQSM.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.548	1014	50	0.049	0.49	
15.898	4120	134	0.033	1.31	
19.428	192	29	0.151	0.28	
25.744	1281	55	0.043	0.54	
26.711	1698	91	0.054	0.89	
27.301	10534	326	0.031	3.20	
27.724	8805	289	0.033	2.84	10 1,3,5-Trinitrobenze
28.671	408	58	0.142	0.57	
28.944	400	54	0.135	0.53	
29.158	186	49	0.264	0.48	
29.344	564	48	0.085	0.47	
29.548	440	50	0.114	0.49	
29.804	734	60	0.082	0.59	
30.038	585	53	0.091	0.52	
30.318	470	41	0.087	0.40	
30.538	265	48	0.181	0.47	
30.714	611	44	0.072	0.43	
30.948	142	45	0.317	0.44	
31.111	340	46	0.135	0.45	
31.284	170	50	0.295	0.49	
31.394	311	61	0.196	0.59	
31.588	1166	81	0.069	0.79	
31.821	541	87	0.161	0.85	
31.964	1024	73	0.071	0.71	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
32.658	444	46	0.104	0.45	
32.918	951	42	0.044	0.41	
33.914	222	35	0.158	0.34	
34.278	353	29	0.082	0.28	
34.668	415	31	0.075	0.30	
35.258	239	26	0.109	0.25	
35.471	284	27	0.095	0.26	
35.768	573	33	0.058	0.32	
36.388	122	27	0.221	0.26	
37.194	182	20	0.110	0.19	
37.734	66	34	0.519	0.33	
37.994	54	21	0.390	0.20	
38.594	148476	6730	0.045	66.44	$ 1 3,4-Dinitrotoluene
39.884	109	24	0.221	0.23	
40.938	212	29	0.137	0.28	
41.138	632	44	0.070	0.43	
41.618	143	20	0.139	0.19	
41.744	142	28	0.197	0.27	
42.114	140	28	0.200	0.27	
42.248	307	31	0.101	0.30	
42.644	65	23	0.353	0.22	
42.861	96	25	0.261	0.24	
43.518	942	65	0.069	0.63	
43.998	109	28	0.257	0.27	
44.778	250	40	0.160	0.39	
46.198	2152	87	0.040	0.85	
46.611	572	64	0.112	0.62	
47.001	462	68	0.147	0.66	
47.274	1592	85	0.053	0.83	
47.758	632	78	0.123	0.76	
48.358	4495	210	0.047	2.06	
48.811	3904	168	0.043	1.65	
	205337	10168		100.000	

Total unknown % height = 30.72

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d

Date : 02-FEB-2012 06:48

Client ID:

Instrument: LC12.i

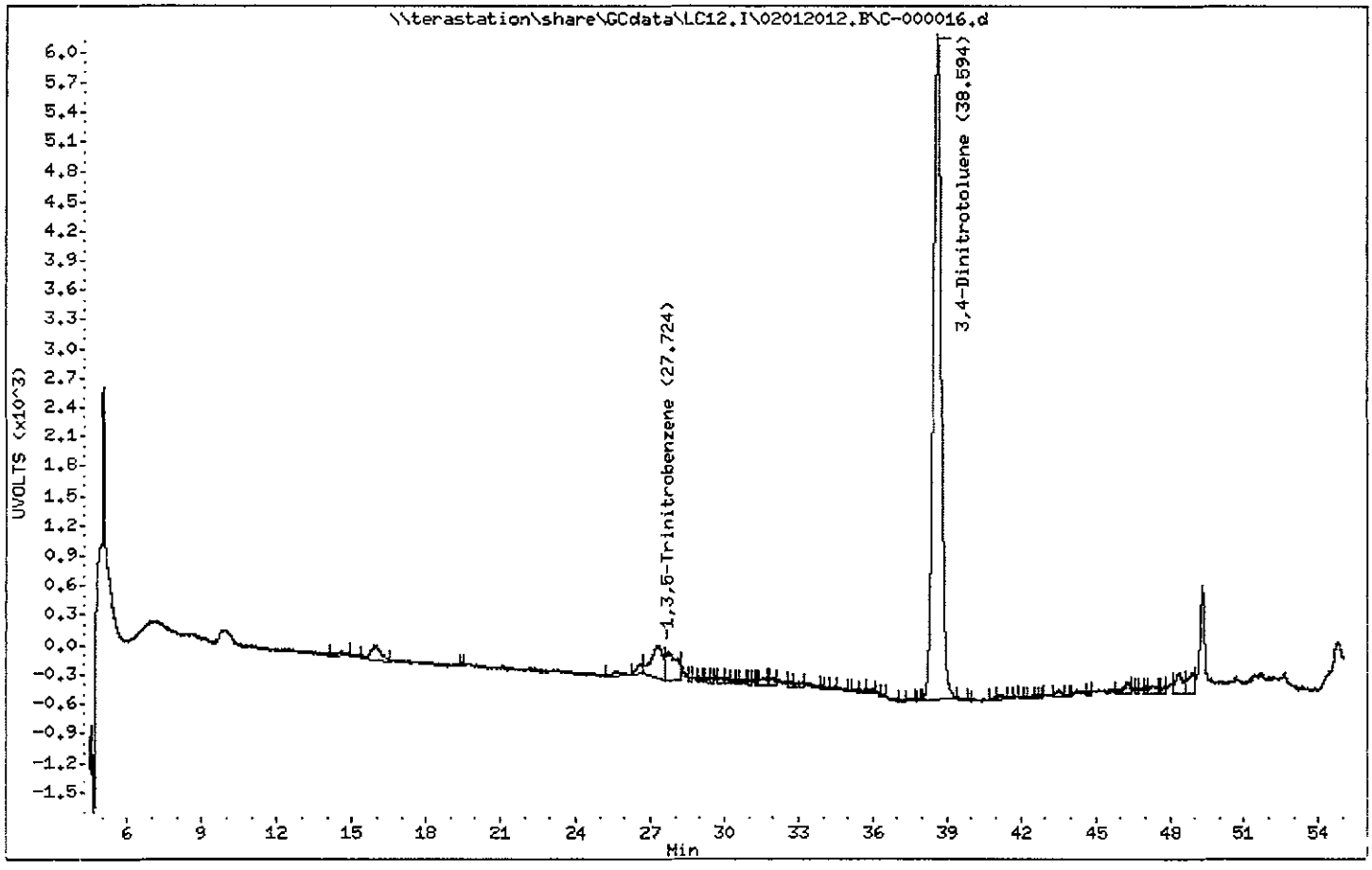
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d\C-000016
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 02-FEB-2012 06:48
Operator : RN Inst ID: LC12.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMETQSM.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.508	6437	647	0.101	40.01	
53.501	20225	970	0.048	59.99	
	26663	1617		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d\C-000016.d

Date : 02-FEB-2012 06:48

Client ID:

Instrument: LC12.i

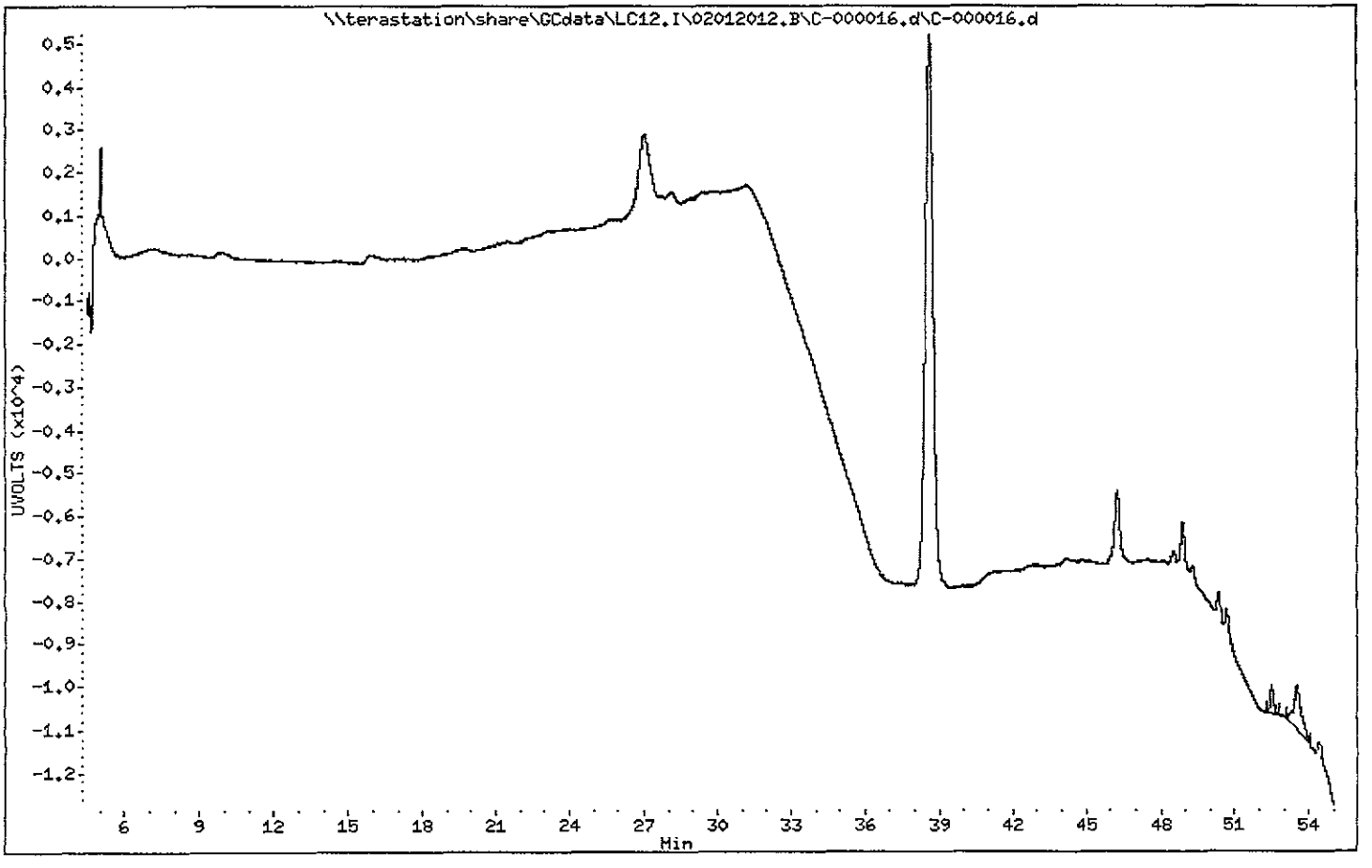
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



LCS/LCSD Data

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	**1.00**	**1.02**	**ug/L**	**102**	**SW846 8330/83**
4-Amino-2,6-dinitrotoluene	**1.00**	**1.00**	**ug/L**	**100**	**SW846 8330/83**
1,3-Dinitrobenzene	**1.00**	**1.05**	**ug/L**	**105**	**SW846 8330/83**
2,4-Dinitrotoluene	**1.00**	**1.01**	**ug/L**	**101**	**SW846 8330/83**
2,6-Dinitrotoluene	**1.00**	**1.01**	**ug/L**	**101**	**SW846 8330/83**
RDX	**1.00**	**1.14**	**ug/L**	**114**	**SW846 8330/83**
1,3,5-Trinitrobenzene	**1.00**	**1.07**	**ug/L**	**107**	**SW846 8330/83**
2,4,6-Trinitrotoluene	**1.00**	**0.794**	**ug/L**	**79**	**SW846 8330/83**
MNX	**4.00**	**4.21**	**ug/L**	**105**	**SW846 8330/83**
TNX	**4.00**	**3.87**	**ug/L**	**97**	**SW846 8330/83**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQDFC1AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 **Analysis Date..:** 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	**102**	**(50 - 155)**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**100**	**(55 - 155)**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**105**	**(45 - 160)**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**101**	**(60 - 135)**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**101**	**(60 - 135)**	**SW846 8330/8330A**
RDX	**114**	**(50 - 160)**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**107**	**(65 - 140)**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**79**	**(50 - 145)**	**SW846 8330/8330A**
MNX	**105**	**(70 - 130)**	**SW846 8330/8330A**
TNX	**97**	**(70 - 130)**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
Dual Column Spike Report

Sample : MQDFC1AC 2024017 LCS
Analyzed : 01-FEB-2012 16:11
Operator : rn
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000008.D
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

			Side A			Side B				
Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1 TNX	4.000	15.473	11533	3.868	96.70					(70-130)
2 DNX	4.000	19.236	19367	4.221	105.5					(70-130)
3 HMX	1.000	20.536	5124	1.116	111.6					(80-115)
4 MNX	4.000	21.976	22769	4.206	105.1					(70-130)
5 RDX	1.000	23.750	5188	1.141	114.1					(50-160)
6 1,3,5-Trinitrobenz	1.000	25.680	10971	1.072	107.2					(65-140)
7 Picric ACID	0.0000	NA								(0-0)
8 1,3-Dinitrobenzene	1.000	28.413	11239	1.051	105.1					(45-160)
9 3,5-Dinitroaniline	1.000	29.550	7075	1.013	101.3					(40-140)
10 Nitrobenzene	1.000	30.030	4832	1.040	104.0					(50-140)
11 TETRYL	1.000	30.350	4919	0.8773	87.73					(20-175)
12 2,4,6-Trinitrotolu	1.000	31.600	4750	0.7936	79.36					(50-145)
13 4-AM-2,6-DNT	1.000	32.586	4837	1.005	100.5					(55-155)
14 3,4-Dinitrotoluene	2.500	32.943	8551	2.550	102.0	32.943	16507	2.590	103.6	(84-125)
15 2-AM-4,6-DNT	1.000	33.283	5475	1.022	102.2					(50-155)
16 2,6-Dinitrotoluene	1.000	34.540	3752	1.011	101.1					(60-135)
17 2,4-Dinitrotoluene	1.000	34.930	6152	1.008	100.8					(60-135)
18 2-Nitrotoluene	1.000	37.870	2598	0.9817	98.17					(45-135)
19 4-Nitrotoluene	1.000	39.110	3153	0.9991	99.91					(50-130)
20 3-Nitrotoluene	1.000	40.626	3099	0.9880	98.80					(50-130)
21 EGDN	5.000	NA								(70-130)
22 Nitroglycerin	5.000					30.856	22437	5.404	108.1	(85-115)
23 PETN	5.000					41.340	12171	5.078	101.6	(84-117)

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 17:03

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D
Lab Smp Id: MQDFC1AC 2024017 LC
Inj Date : 01-FEB-2012 16:11
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AC 2024017 LCS;3;
Misc Info : LCS;;1000.00;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQDFC1A30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.106	2084	160	0.077	0.10	
15.473	257038	11533	0.045	7.76	2 TNX
19.236	264143	19367	0.073	13.04	3 DNX
20.536	44411	5124	0.115	3.45	4 HMX
21.976	235641	22769	0.097	15.51	5 MNX
22.983	205	42	0.204	0.02	
23.416	81	28	0.344	0.01	
23.750	47526	5188	0.109	3.49	7 RDX
24.650	574	58	0.101	0.03	
24.923	642	76	0.118	0.05	
25.680	109651	10971	0.100	7.39	10 1,3,5-Trinitrobenze
26.550	9065	871	0.096	0.58	
27.133	291	37	0.127	0.02	
27.406	16834	1177	0.070	0.79	
28.413	128928	11239	0.087	7.57	13 1,3-Dinitrobenzene
29.550	86845	7075	0.081	4.76	15 3,5-Dinitroaniline
30.030	61517	4832	0.079	3.25	17 Nitrobenzene
30.350	66105	4919	0.074	3.31	16 TETRYL
30.853	2705	200	0.074	0.13	
31.600	69682	4750	0.068	3.19	19 2,4,6-Trinitrotolue
32.586	75391	4837	0.064	3.25	20 4-AM-2,6-DNT
32.943	131050	8551	0.065	5.75	$ 1 3,4-Dinitrotoluene
33.283	87819	5475	0.062	3.68	21 2-AM-4,6-DNT
34.540	60354	3752	0.062	2.52	22 2,6-Dinitrotoluene

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
34.930	112195	6152	0.055	4.14	23 2,4-Dinitrotoluene
36.183	349	31	0.089	0.02	
36.443	762	37	0.049	0.02	
37.870	52933	2598	0.049	1.75	24 2-Nitrotoluene
39.110	68061	3153	0.046	2.12	25 4-Nitrotoluene
39.963	703	61	0.087	0.04	
40.626	72641	3099	0.043	2.08	26 3-Nitrotoluene
41.349	3724	176	0.047	0.11	
42.036	3488	118	0.034	0.07	
	2073438	148456		100.000	

Total unknown % height = 1.990

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D

Date : 01-FEB-2012 16:11

Client ID:

Instrument: LC11.i

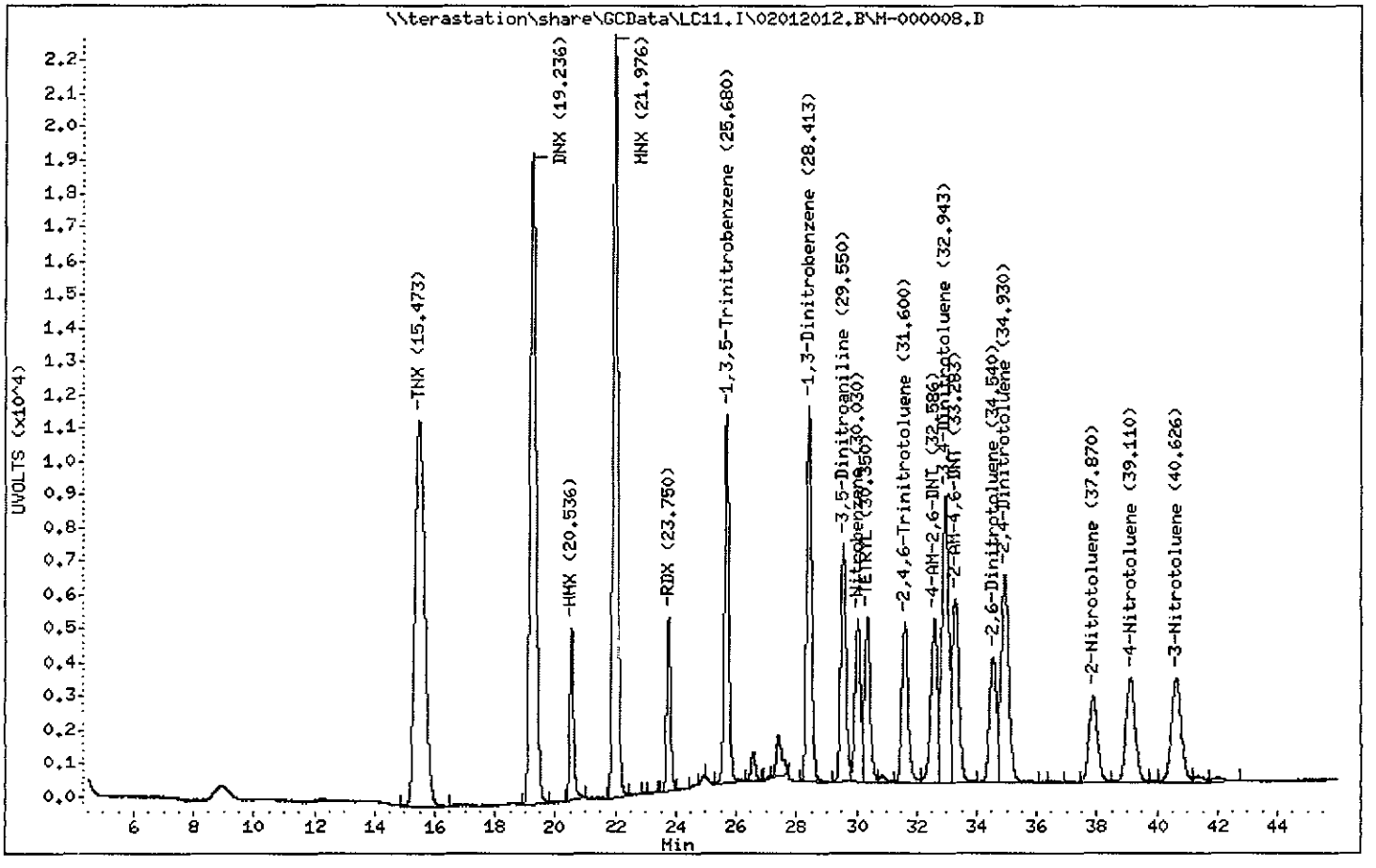
Sample Info: MQDFC1AC 2024017 LCS;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D\M-000008
Lab Smp Id: MQDFC1AC 2024017 LC
Inj Date : 01-FEB-2012 16:11
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AC 2024017 LCS;3;
Misc Info : LCS;;1000.00;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQDFC1A26-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.126	252	25	0.099	0.01	
24.333	224	46	0.206	0.03	
25.686	1287	159	0.124	0.12	
26.043	342	39	0.114	0.03	
26.526	1154	102	0.088	0.08	
28.413	64159	5743	0.090	4.55	
29.550	86325	7116	0.082	5.64	
30.030	96833	7668	0.079	6.08	
30.343	93366	6939	0.074	5.50	
30.856	299749	22437	0.075	17.92	18 Nitroglycerin
31.600	69388	4967	0.072	3.94	
32.590	111049	7138	0.064	5.66	
32.943	256027	16507	0.064	13.09	$ 1 3,4-Dinitrotoluene
33.279	87544	5760	0.066	4.57	
33.959	233	39	0.168	0.03	
34.540	111804	6682	0.060	5.30	
34.926	90285	5043	0.056	4.00	
35.653	219	33	0.151	0.02	
36.500	188	45	0.239	0.03	
37.130	303	47	0.155	0.03	
37.866	126043	6302	0.050	5.00	
39.113	104138	4764	0.046	3.78	
40.076	2083	154	0.074	0.12	
40.626	134170	6058	0.045	4.80	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.340	295751	12171	0.041	9.65	27 PETN
44.703	329	35	0.106	0.02	
	2033245	126019		100.000	

Total unknown % height = 59.34

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D\M-000008.D

Date : 01-FEB-2012 16:11

Client ID:

Instrument: LC11.i

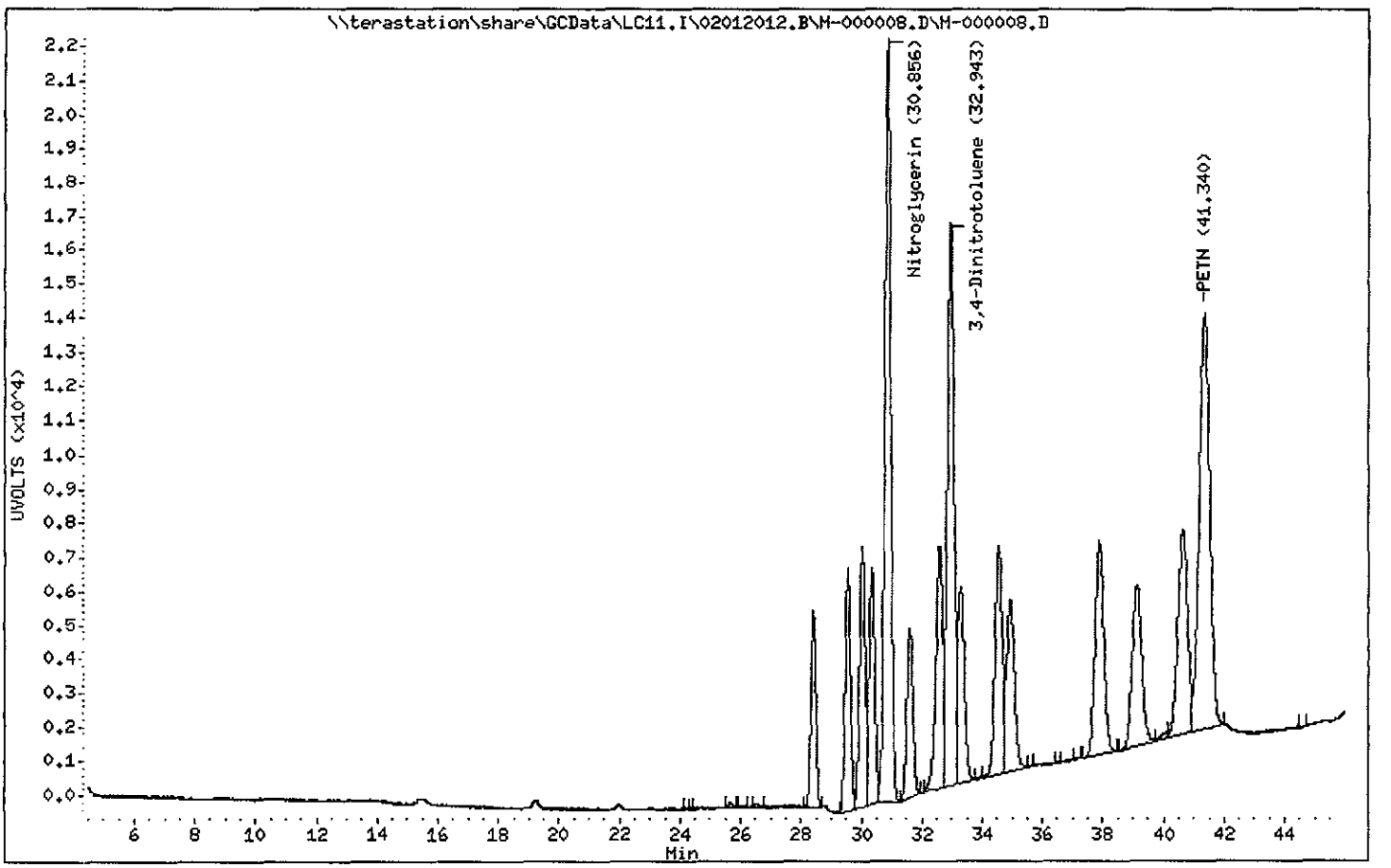
Sample Info: MQDFC1AC 2024017 LCS;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



MS/MSD Data

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQAVV1AW-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/24/12 **Analysis Date..:** 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	**0.10 U**	**1.01**	**1.00**	**ug/L**	**99**		**SW846 8330/8330A**
	0.10 U	**1.01**	**1.02**	**ug/L**	**100**	**1.8**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**0.051 U**	**1.01**	**0.982**	**ug/L**	**97**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.999**	**ug/L**	**99**	**1.8**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**0.051 U**	**1.01**	**1.05**	**ug/L**	**104**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.07**	**ug/L**	**105**	**1.7**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**0.051 U**	**1.01**	**0.996**	**ug/L**	**99**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.02**	**ug/L**	**100**	**1.9**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**0.051 U**	**1.01**	**0.986**	**ug/L**	**98**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.00**	**ug/L**	**99**	**1.6**	**SW846 8330/8330A**
RDX	**0.051 U**	**1.01**	**1.20**	**ug/L**	**118**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.23**	**ug/L**	**121**	**2.8**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**0.051 U**	**1.01**	**1.08**	**ug/L**	**106**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.10**	**ug/L**	**109**	**2.6**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**0.051 U**	**1.01**	**0.789**	**ug/L**	**78**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.802**	**ug/L**	**79**	**1.6**	**SW846 8330/8330A**
MNX	**1.0 U**	**4.04**	**4.28**	**ug/L**	**106**		**SW846 8330/8330A**
	1.0 U	**4.06**	**4.25**	**ug/L**	**105**	**0.68**	**SW846 8330/8330A**
TNX	**0.15 U**	**4.04**	**3.95**	**ug/L**	**98**		**SW846 8330/8330A**
	0.15 U	**4.06**	**3.83**	**ug/L**	**94**	**3.0**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A190474 **Work Order #...:** MQAVV1AW-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/24/12 **Analysis Date..:** 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	**99**	**(50 - 155)**			**SW846 8330/8330A**
	100	**(50 - 155)**	**1.8**	**(0-30)**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**97**	**(55 - 155)**			**SW846 8330/8330A**
	99	**(55 - 155)**	**1.8**	**(0-30)**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**104**	**(45 - 160)**			**SW846 8330/8330A**
	105	**(45 - 160)**	**1.7**	**(0-30)**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**99**	**(60 - 135)**			**SW846 8330/8330A**
	100	**(60 - 135)**	**1.9**	**(0-30)**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**98**	**(60 - 135)**			**SW846 8330/8330A**
	99	**(60 - 135)**	**1.6**	**(0-30)**	**SW846 8330/8330A**
RDX	**118**	**(50 - 160)**			**SW846 8330/8330A**
	121	**(50 - 160)**	**2.8**	**(0-30)**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**106**	**(65 - 140)**			**SW846 8330/8330A**
	109	**(65 - 140)**	**2.6**	**(0-30)**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**78**	**(50 - 145)**			**SW846 8330/8330A**
	79	**(50 - 145)**	**1.6**	**(0-30)**	**SW846 8330/8330A**
MNX	**106**	**(70 - 130)**			**SW846 8330/8330A**
	105	**(70 - 130)**	**0.68**	**(0-30)**	**SW846 8330/8330A**
TNX	**98**	**(70 - 130)**			**SW846 8330/8330A**
	94	**(70 - 130)**	**3.0**	**(0-30)**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
Dual Column Spike Report

Sample : MQAVV1AW 2024017 A190474-4S
Analyzed : 01-FEB-2012 22:51
Operator : rn
Matrix : WATER
Sample Amt: 989.06 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000015.D
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

			Side A				Side B				
	Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1	TNX	4.044	15.452	11650	3.950	97.68					(70-130)
2	DNX	4.044	19.225	19456	4.288	106.0					(70-130)
3	HMX	1.011	20.528	5101	1.124	111.2					(80-115)
4	MNX	4.044	21.968	22920	4.280	105.8					(70-130)
5	RDX	1.011	23.745	5380	1.196	118.3					(50-160)
6	1,3,5-Trinitrobenz	1.011	25.678	10891	1.076	106.5					(65-140)
7	Picric ACID	0.0000									(0-0)
8	1,3-Dinitrobenzene	1.011	28.412	11119	1.051	103.9					(45-160)
9	3,5-Dinitroaniline	1.011	29.555	6935	1.004	99.33					(40-140)
10	Nitrobenzene	1.011	30.032	4565	0.9935	98.26					(50-140)
11	TETRYL	1.011	30.355	4853	0.8751	86.55					(20-175)
12	2,4,6-Trinitrotolu	1.011	31.605	4669	0.7887	78.01					(50-145)
13	4-AM-2,6-DNT	1.011	32.598	4676	0.9820	97.13					(55-155)
14	3,4-Dinitrotoluene	2.528	32.952	8359	2.520	99.70	32.952	16425	2.605	103.1	(84-125)
15	2-AM-4,6-DNT	1.011	33.295	5301	1.000	98.92					(50-155)
16	2,6-Dinitrotoluene	1.011	34.555	3620	0.9862	97.55					(60-135)
17	2,4-Dinitrotoluene	1.011	34.942	6010	0.9959	98.50					(60-135)
18	2-Nitrotoluene	1.011	37.888	2627	1.004	99.27					(45-135)
19	4-Nitrotoluene	1.011	39.132	3169	1.015	100.4					(50-130)
20	3-Nitrotoluene	1.011	40.672	3102	0.9999	98.90					(50-130)
21	EGDN	5.055									(70-130)
22	Nitroglycerin	5.055					30.865	21799	5.308	105.0	(85-115)
23	PETN	5.055					41.382	12062	5.088	100.6	(84-117)

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 23:44

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D
Lab Smp Id: MQAVV1AW 2024017 A1
Inj Date : 01-FEB-2012 22:51
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AW 2024017 A190474-4S;3;
Misc Info : MS;;989.06;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AW
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	989.060	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.452	256477	11650	0.045	7.86	2 TNX
17.318	3870	15	0.004	0.01	
18.048	646	22	0.034	0.01	
18.152	62	0	0.000	0.00	
18.451	130	18	0.138	0.01	
18.722	185	15	0.081	0.01	
19.225	262985	19456	0.074	13.13	3 DNX
19.932	193	22	0.114	0.01	
20.528	43644	5101	0.117	3.44	4 HMX
21.115	135	15	0.111	0.01	
21.968	237692	22920	0.096	15.63	5 MNX
22.468	140	35	0.250	0.02	
22.652	138	24	0.174	0.01	
23.745	56382	5380	0.095	3.63	7 RDX
24.385	3735	179	0.048	0.12	
24.611	3445	297	0.086	0.20	
25.048	9349	325	0.035	0.21	
25.678	123335	10891	0.088	7.35	10 1,3,5-Trinitrobenze
26.538	10169	865	0.085	0.58	
27.388	20246	1360	0.067	0.91	
28.085	1247	176	0.141	0.11	
28.412	125862	11119	0.088	7.50	13 1,3-Dinitrobenzene
29.555	82387	6935	0.084	4.68	15 3,5-Dinitroaniline
30.032	55286	4565	0.083	3.08	17 Nitrobenzene

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
30.355	63941	4853	0.076	3.27	16 TETRYL
31.605	66711	4669	0.070	3.15	19 2,4,6-Trinitrotolue
32.598	71112	4676	0.066	3.15	20 4-AM-2,6-DNT
32.952	126455	8359	0.066	5.64	$ 1 3,4-Dinitrotoluene
33.295	84107	5301	0.063	3.57	21 2-AM-4,6-DNT
34.555	57491	3620	0.063	2.44	22 2,6-Dinitrotoluene
34.942	107600	6010	0.056	4.05	23 2,4-Dinitrotoluene
37.888	52958	2627	0.050	1.77	24 2-Nitrotoluene
39.132	67362	3169	0.047	2.13	25 4-Nitrotoluene
40.062	203	29	0.143	0.01	
40.672	70392	3102	0.044	2.09	26 3-Nitrotoluene
41.425	3568	163	0.046	0.11	
42.115	4008	154	0.038	0.10	
	2073648	148117		100.000	

Total unknown % height = 2.440

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D

Date : 01-FEB-2012 22:51

Client ID:

Instrument: LC11.i

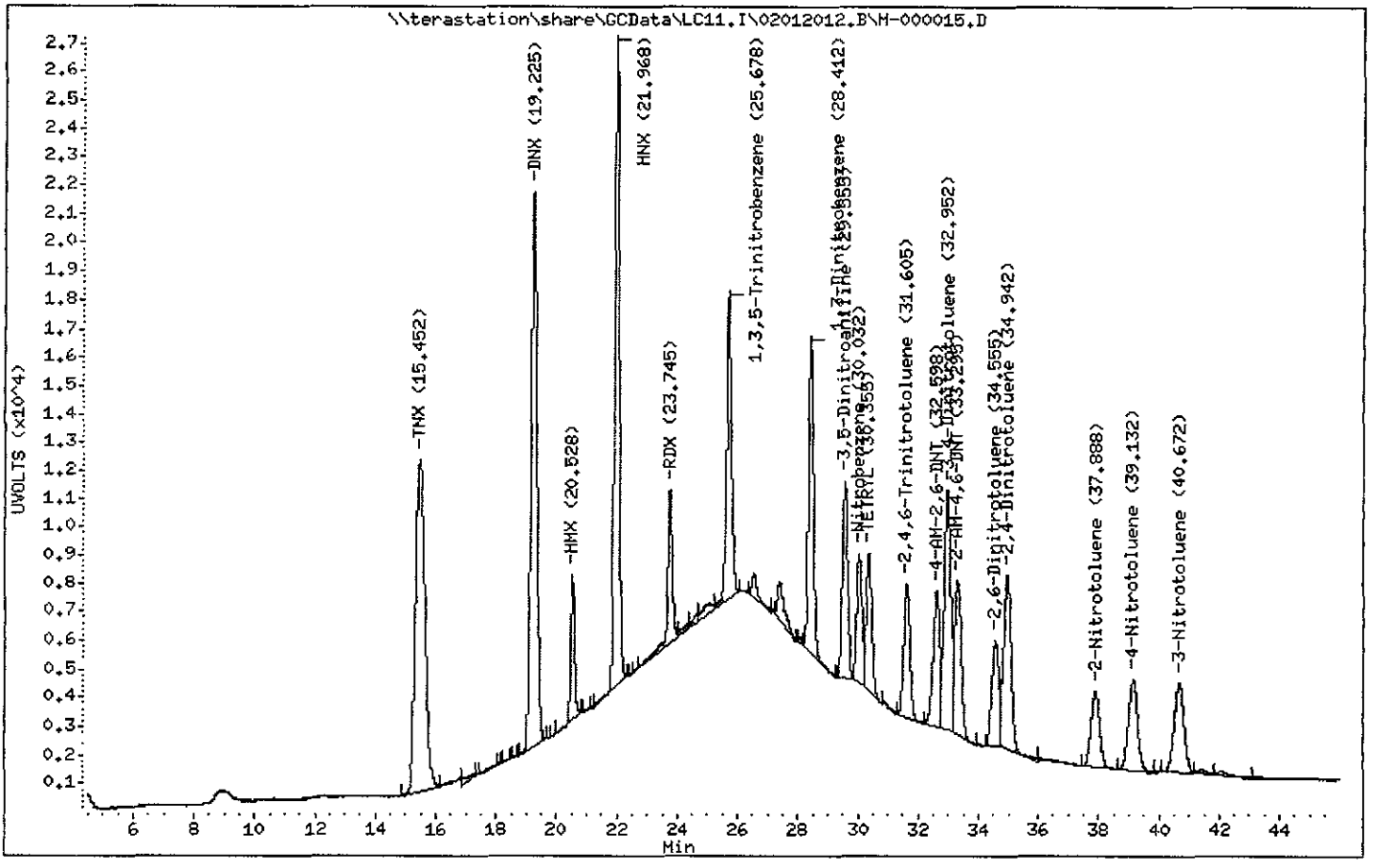
Sample Info: MQAVV1AW 2024017 A190474-4S;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D\M-000015
Lab Smp Id: MQAVV1AW 2024017 A1
Inj Date : 01-FEB-2012 22:51
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AW 2024017 A190474-4S;3;
Misc Info : MS;;989.06;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AW
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	989.060	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.968	1764	180	0.102	0.14	
24.205	155	42	0.272	0.03	
25.678	1000	125	0.125	0.09	
26.545	1230	114	0.093	0.09	
27.348	161	51	0.317	0.04	
28.412	61093	5639	0.092	4.46	
28.762	3230	173	0.054	0.13	
29.555	82548	7027	0.085	5.56	
30.035	90544	7402	0.082	5.86	
30.345	90211	6964	0.077	5.51	
30.865	286569	21799	0.076	17.38	18 Nitroglycerin
31.605	68838	4930	0.072	3.90	
32.595	112482	7093	0.063	5.61	
32.952	256154	16425	0.064	13.01	$ 1 3,4-Dinitrotoluene
33.288	85252	5697	0.067	4.51	
34.552	110912	6628	0.060	5.25	
34.932	91578	5179	0.057	4.10	
36.628	5866	266	0.045	0.21	
37.885	129186	6430	0.050	5.09	
39.138	105860	4785	0.045	3.79	
40.088	18280	985	0.054	0.78	
40.658	137683	6133	0.045	4.85	
41.382	297277	12062	0.041	9.55	27 PETN
45.221	1518	81	0.053	0.06	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
	2039391	126210		100.000	

Total unknown % height = 60.06

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D\M-000015.D

Date : 01-FEB-2012 22:51

Client ID:

Instrument: LC11.i

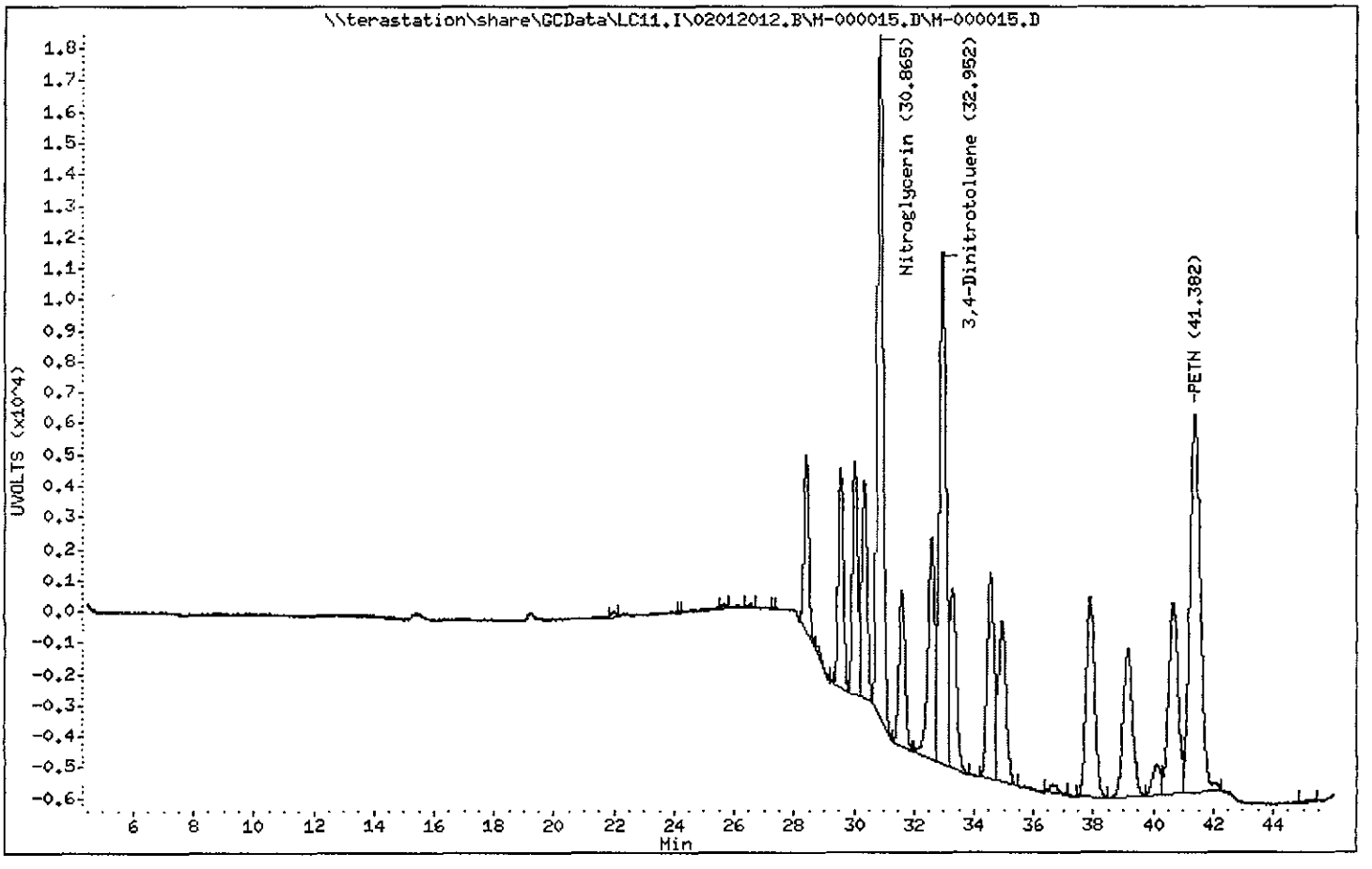
Sample Info: MQAVV1AW 2024017 A190474-4S;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Spike Report

Sample : MQAVV1AX 2024017 A190474-4D
Analyzed : 01-FEB-2012 23:48
Operator : rn
Matrix : WATER
Sample Amt: 985.59 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000016.d
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

			Side A				Side B				
	Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1	TNX	4.058	15.439	11267	3.834	94.47					(70-130)
2	DNX	4.058	19.223	19000	4.202	103.5					(70-130)
3	HMX	1.015	20.529	5207	1.151M	113.5					(80-115)
4	MNX	4.058	21.969	22683	4.251M	104.7					(70-130)
5	RDX	1.015	23.743	5512	1.230M	121.2					(50-160)
6	1,3,5-Trinitrobenz	1.015	25.676	11143	1.105M	108.9					(65-140)
7	Picric ACID	0.0000									(0-0)
8	1,3-Dinitrobenzene	1.015	28.413	11269	1.069M	105.3					(45-160)
9	3,5-Dinitroaniline	1.015	29.553	7161	1.041M	102.6					(40-140)
10	Nitrobenzene	1.015	30.029	5036	1.100M	108.4					(50-140)
11	TETRYL	1.015	30.349	5156	0.9330M	91.96					(20-175)
12	2,4,6-Trinitrotolu	1.015	31.599	4730	0.8018	79.03					(50-145)
13	4-AM-2,6-DNT	1.015	32.589	4742	0.9994	98.50					(55-155)
14	3,4-Dinitrotoluene	2.536	32.949	8437	2.552	100.6	32.949	16617	2.645	104.3	(84-125)
15	2-AM-4,6-DNT	1.015	33.286	5378	1.018	100.4					(50-155)
16	2,6-Dinitrotoluene	1.015	34.549	3665	1.002	98.76					(60-135)
17	2,4-Dinitrotoluene	1.015	34.939	6103	1.015	100.0					(60-135)
18	2-Nitrotoluene	1.015	37.883	2659	1.019	100.5					(45-135)
19	4-Nitrotoluene	1.015	39.133	3206	1.031	101.6					(50-130)
20	3-Nitrotoluene	1.015	40.663	3151	1.019	100.4					(50-130)
21	EGDN	5.073									(70-130)
22	Nitroglycerin	5.073					30.863	21886	5.348	105.4	(85-115)
23	PETN	5.073					41.383	12183	5.157	101.6	(84-117)

M = Compound was manually integrated.

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/07/2012 11:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000016.d
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M
Meth Date : 07-Feb-2012 11:47 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.439	255725	11267	0.044	7.49	2 TNX
18.089	5616	24	0.004	0.01	
18.306	181	28	0.154	0.01	
18.499	117	21	0.180	0.01	
18.703	240	24	0.100	0.01	
19.223	263479	19000	0.072	12.64	3 DNX
19.726	55	23	0.420	0.01	
19.909	245	62	0.253	0.04	
20.139	657	60	0.091	0.03	
20.529	45178	5207	0.115	3.46	4 HMX
20.959	442	37	0.084	0.02	
21.206	264	16	0.061	0.01	
21.463	551	25	0.045	0.01	
21.533	143	23	0.160	0.01	
21.969	238182	22683	0.095	15.28	5 MNX
22.696	2155	122	0.057	0.08	
23.019	2790	166	0.060	0.11	
23.499	7005	305	0.044	0.20	
23.743	56086	5512	0.098	3.66	7 RDX
24.629	7094	187	0.026	0.12	
25.009	5273	221	0.042	0.14	
25.676	122501	11143	0.091	7.41	10 1,3,5-Trinitrobenze
26.226	9337	454	0.049	0.30	
26.543	23072	1194	0.052	0.79	

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
27.393	23788	1423	0.060	0.94		
28.413	126806	11269	0.089	7.49		13 1,3-Dinitrobenzene
29.553	89033	7161	0.080	4.76		15 3,5-Dinitroaniline
30.029	66027	5036	0.076	3.35		17 Nitrobenzene
30.353	71722	5156	0.072	3.43		16 TETRYL
31.599	67475	4730	0.070	3.14		19 2,4,6-Trinitrotolue
32.589	72035	4742	0.066	3.15		20 4-AM-2,6-DNT
32.949	128120	8437	0.066	5.61	$	1 3,4-Dinitrotoluene
33.286	84229	5378	0.064	3.57		21 2-AM-4,6-DNT
34.549	57792	3665	0.063	2.43		22 2,6-Dinitrotoluene
34.939	108795	6103	0.056	4.06		23 2,4-Dinitrotoluene
37.883	53431	2659	0.050	1.76		24 2-Nitrotoluene
39.133	68407	3206	0.047	2.13		25 4-Nitrotoluene
40.663	72294	3151	0.044	2.09		26 3-Nitrotoluene
41.426	4255	197	0.046	0.13		
42.076	5095	180	0.035	0.11		
	2145691	150297		100.000		

Total unknown % height = 3.090

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000016.d

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

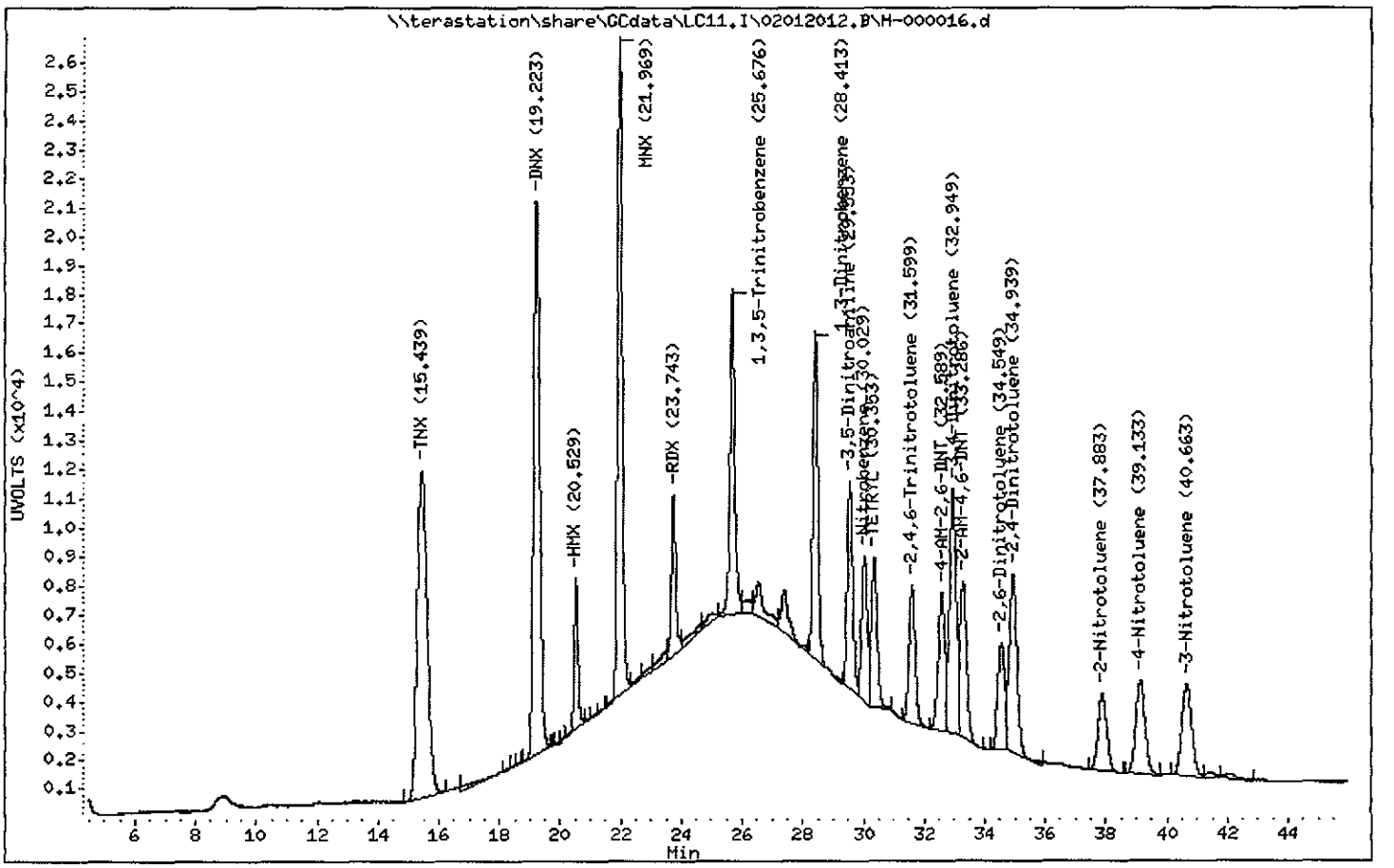
Sample Info: MQAVV1AX 2024017 A190474-4D;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/17/12

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D\M-000016
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX26-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.389	166	34	0.205	0.02	
25.679	1848	175	0.095	0.13	
26.199	184	41	0.223	0.03	
28.413	61795	5667	0.092	4.47	
28.776	3834	265	0.069	0.20	
29.553	83341	7058	0.085	5.57	
30.029	91657	7447	0.081	5.88	
30.346	87318	6808	0.078	5.38	
30.863	288024	21886	0.076	17.41	18 Nitroglycerin
31.603	69797	4999	0.072	3.95	
32.173	489	122	0.250	0.09	
32.589	112798	7212	0.064	5.70	
32.949	259224	16617	0.064	13.13	$ 1 3,4-Dinitrotoluene
33.279	86096	5786	0.067	4.57	
34.546	112246	6723	0.060	5.31	
34.936	93911	5321	0.057	4.20	
36.583	1575	134	0.085	0.10	
37.889	132422	6546	0.049	5.17	
39.133	111521	4924	0.044	3.89	
40.103	4890	321	0.066	0.25	
40.663	137586	6190	0.045	4.89	
41.383	301619	12183	0.040	9.63	27 PETN
45.326	629	49	0.078	0.03	
	2042969	126508		100.000	

Total unknown % height = 59.83

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D\M-000016.D

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

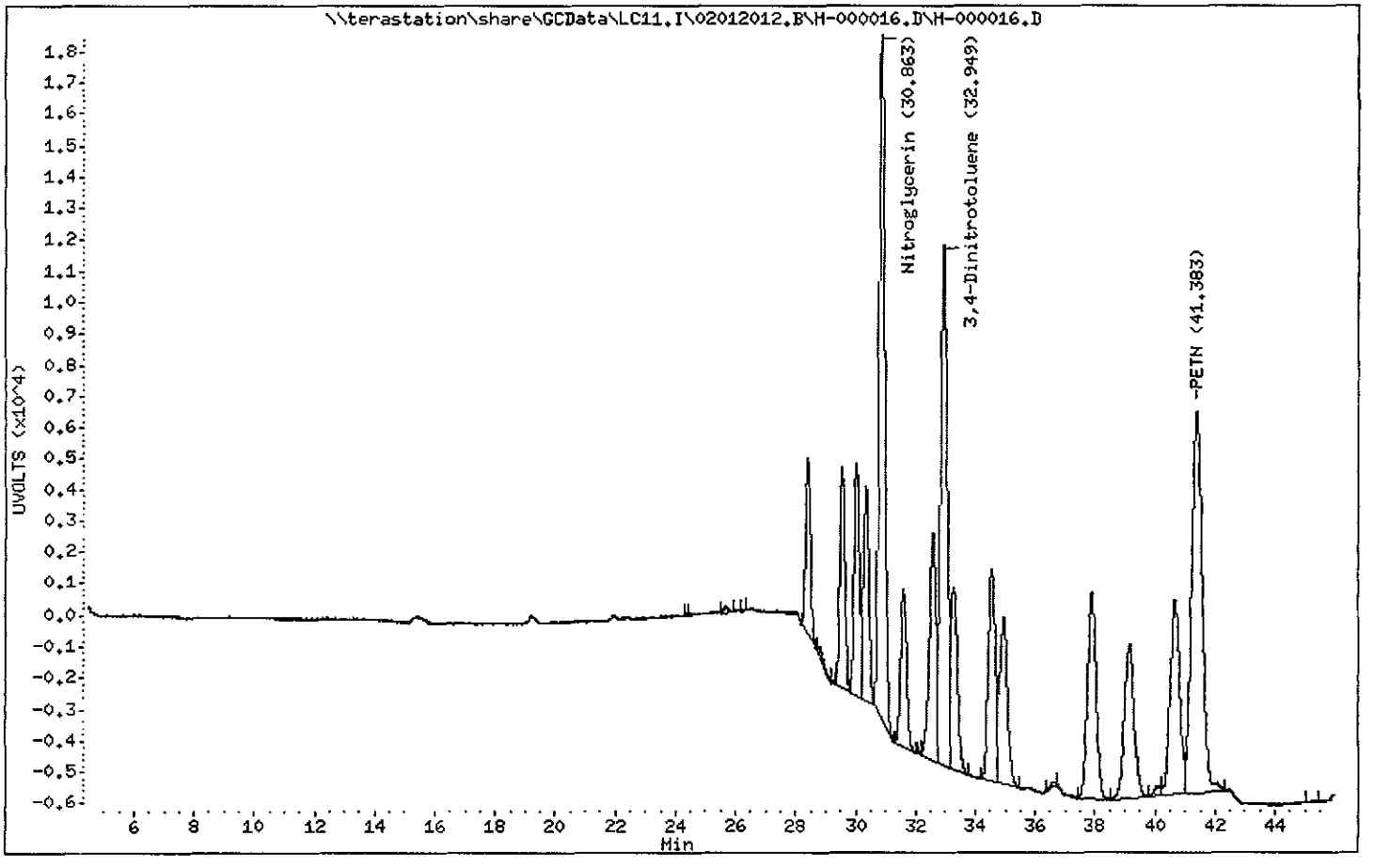
Sample Info: MQAVV1AX 2024017 A190474-4D;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.439	255725	11267	0.044	5.92	2 TNX
18.089	5616	24	0.004	0.01	
18.306	181	28	0.154	0.01	
18.499	117	21	0.180	0.01	
18.703	240	24	0.100	0.01	
19.223	263479	19000	0.072	9.98	3 DNX
19.726	55	23	0.420	0.01	
19.909	245	62	0.253	0.03	
20.139	1896	219	0.116	0.11	
20.529	61685	5643	0.091	2.96	4 HMX
20.959	8060	769	0.095	0.40	
21.206	10157	882	0.087	0.46	
21.463	15089	1055	0.070	0.55	
21.533	4553	1100	0.242	0.57	
21.969	304823	24115	0.079	12.86	5 MNX
22.696	42360	2057	0.049	1.08	
23.019	41274	2323	0.056	1.22	
23.499	76349	2792	0.037	1.46	
23.743	135658	8170	0.060	4.29	7 RDX
24.629	126123	3631	0.029	1.90	
25.009	124975	3938	0.032	2.07	
25.676	311411	14984	0.048	7.87	10 1,3,5-Trinitrobenze
26.226	91683	4267	0.047	2.24	
26.543	198077	4878	0.025	2.56	

See reintegration.

RDM 2/7/12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
27.393	187467	4489	0.024	2.36		
28.413	238183	13286	0.056	6.98		13 1,3-Dinitrobenzene
29.553	115868	8009	0.069	4.21		15 3,5-Dinitroaniline
30.029	74329	5395	0.073	2.83		17 Nitrobenzene
30.353	75737	5307	0.070	2.79		16 TETRYL
31.599	67475	4730	0.070	2.48		19 2,4,6-Trinitrotolue
32.589	72035	4742	0.066	2.49		20 4-AM-2,6-DNT
32.949	128120	8437	0.066	4.43	$	1 3,4-Dinitrotoluene
33.286	84229	5378	0.064	2.82		21 2-AM-4,6-DNT
34.549	57792	3665	0.063	1.92		22 2,6-Dinitrotoluene
34.939	108795	6103	0.056	3.20		23 2,4-Dinitrotoluene
37.883	53431	2659	0.050	1.39		24 2-Nitrotoluene
39.133	68407	3206	0.047	1.68		25 4-Nitrotoluene
40.663	72294	3151	0.044	1.65		26 3-Nitrotoluene
41.426	4255	197	0.046	0.10		
42.076	5095	180	0.035	0.09		
	3493343	190206		100.000		

Total unknown % height = 17.25

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

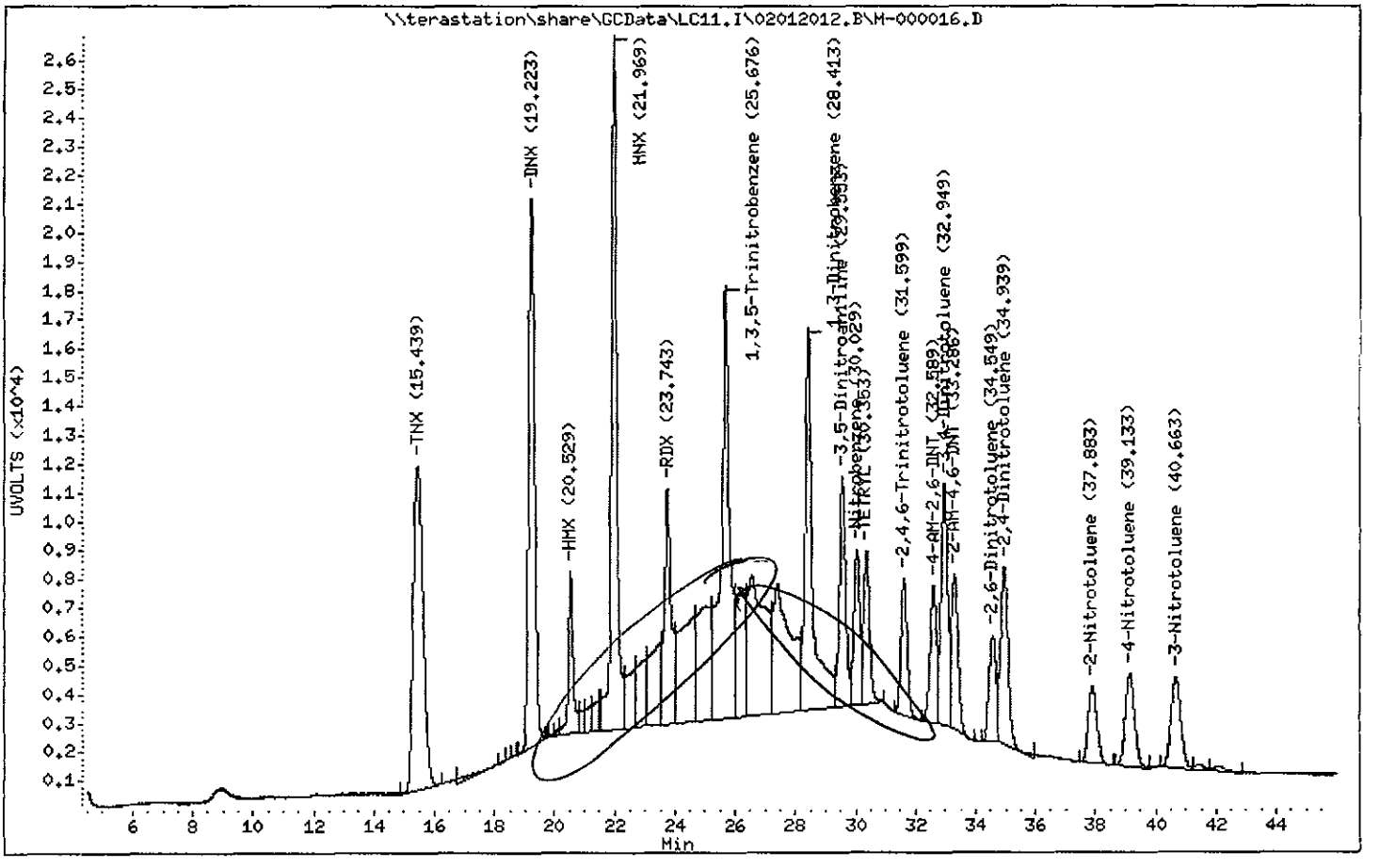
Sample Info: MQAVV1AX 2024017 A190474-4D:3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



See reintegration.

RDM 2/7/12

Run Log

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 47

Inst ID: LC11 Batch ID: 01262012C Eluents: Water: M0102 2012
Test: SOP WS-LC-0009 ACN: R4/5/3
Method: Method 8330 50:50 H2O:MeOH+0.4% H3PO4 4457-25A
ICAL Date: See Calibration Report MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: 1/30/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 48

Inst ID: LC11 Batch ID: 01302012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M01022012
ACN: K418/5
50:50 H2O:MeOH+0.4% H3PO4 4457-254
MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: TDP 1/31/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K 41815
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD_06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD_06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD_05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD_05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD_05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD_05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD_05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD_05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD_05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD_05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 10

Inst ID: LC12 Batch ID: 01262012C Eluents: Water: 1457-23C
Test: SOP WS-LC-0009 ACN: K14815
Method: Method 8330 MeOH: K04E22
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_ICV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: [illegible] 1/27/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K14815
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	not needed, pm 2/8/12
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	~~not needed~~
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3	C-000024	986.89 mL	20 mL	1	
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: ECJ 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:40	RN	5	STD_05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 2/3/12

Prep Data

2/8/12

LCL

TestAmerica West Sacramento

GC/HPLC Data Review Checklist

Batch: 2024017 **Method ID:** Nitroaromatics & Nitramines: Explosives (8330/A) Ag.

NCM: Y N G2A190474

A. Calibration/Instrument Run QC	Analyst	Reviewer	N/A
1. ICAL or ICAL Summary and CCV included.	✓	✓	
2. ICAL, CCV criteria met.	✓	✓	
3. Multiple-eluters (TPH-D, 8081A, 8082) ICAL/CCVs appropriate and within criteria		✓	✓
4. CCVs every 10 samples/12 hours, all samples bracketed front and back.	✓	✓	
5. PEM frequency and criteria met.			✓
6. Peaks correctly ID'd by data system.	✓	✓	
7. Method Number is identified on data.	✓	✓	
B. QA/QC			
1. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
2. LCS/LCSD and MB data is included.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present in Clouseau.	✓	✓	
4. MS/MSD data complete.	✓	✓	
5. Holding Times were met.	✓	✓	
C. Sample Analysis			
1. Logbook copies for all injections made, including ICV standards and ICAL.	✓	✓	
2. Logbooks/prep sheets properly filled out.	✓	✓	
3. Manual Integrations reviewed and appropriate.	✓	✓	
4. All raw data for samples is included (applies to unused data as well)	✓	✓	
5. All analytes correctly reported.	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all nonconformances documented appropriately?	✓	✓	
2. Quantims entry correct, including dates and times.	✓	✓	
3. Appropriate footnotes used.	✓	✓	
4. Report sheets included and error-free.	✓	✓	

Analyst: [signature] Date: 2/8/12

2nd Level Reviewer: [signature] Date: 2/8/12

Comments:

q:\forms\qa-507_gc_review.doc

QA-508 GC Review
3/4/02 ERS

TestAmerica West Sacramento
Energetic Prep Log
8330 Aqueous

Box # JM

Shared QC Batch: NA

Shares QC With Lots(s): NA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Internal COC:	
Delivered to Inst.:	TP 1/25/12
Inst Receipt:	SJ 1/25/12

Batch: 2024017

MS Run #: 2024007

Prep Date: 1/24/2012

Method: A0 8330/8330A

Matrix: I WATER

Prep Reagents		
Reagent	Supplier	Date/Lot #
0.1% HOAc/ACN	NA	3844-095A
Millipore Water Dispense Date		1/13/12
SPE Catridge:	Waters	003631222A
0.45 Filter	Millipore	RIJA91854

SAC: A0 - I - 20 - D4

WS-LC-0009

Extraction Table

Sample ID	Suff	Work Order	Extraction Hold Time Expires	Sample size 1000mL nom.	Final Volume 20mL	Final Volume Other	Analysis Hold Time Expires
G2A190474 - 1		MQAVQ1AK	1/24/2012	984.22	20mL		3/4/2012
G2A190474 - 2		MQAVR1AK	1/24/2012	985.64	20mL		3/4/2012
G2A190474 - 3		MQAVT1AK	1/25/2012	967.93	20mL		3/4/2012
G2A190474 - 4		MQAVV1AK	1/25/2012	980.52	20mL		3/4/2012
G2A190474 - 4	S	MQAVV1AW	1/25/2012	989.06	20mL		3/4/2012
G2A190474 - 4	D	MQAVV1AX	1/25/2012	985.59	20mL		3/4/2012
G2A190474 - 5		MQAVW1AK	1/25/2012	982.01	20mL		3/4/2012
G2A200474 - 1		MQCM31AK	1/26/2012	978.66	20mL		3/4/2012
G2A200474 - 2		MQCM41AK	1/26/2012	986.02	20mL	1/25/12	3/4/2012
G2A200474 - 3		MQCM51AK	1/26/2012	986.89	20mL		3/4/2012
G2A200474 - 4		MQCM61AK	1/26/2012	977.49	20mL		3/4/2012
G2A200474 - 5		MQCM71AK	1/26/2012	974.29	20mL		3/4/2012
G2A200474 - 6		MQCM81AK	1/26/2012	935.08	20mL		3/4/2012
G2A240000 - 17	B	MQDFC1AA	1/24/2012	1000.00	20mL		3/4/2012
G2A240000 - 17	C	MQDFC1AC	1/24/2012	1000.00	20mL		3/4/2012

Sample volumes recorded from balance are on

Comments/NCMs:

	ID	Spike Exp Date:	Spiked By:	Witnessed By:	Date:
Surrogate Spike (All Samples)	50uL 11GCSV0536	4/19/12	TP	GM	1/24/12
Spike Mix LCS/LCSD/MS/MSD	20uL 11GCSV0346	2/8/12	TP	GM	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0509	5/8/12	TP	GM	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0541	4/10/12	TP	GM	1/24/12
Spike Mix LCS/LCSD/MS/MSD	80uL E110802B	2/2/12	TP	GM	1/24/12

Extracted Analyst/Date	TP 1/24/12	Clean Up Analyst/Dat	TP 1/25/12	Dilution Analyst/Date	TP 1/25/12
Final Volume Analyst/Date	TP 1/25/12	Review Analyst/Date	1/25/12		

TestAmerica

West Sacramento

Weight Difference Worksheet

Batch Id: 120124T

Created Date: 1/24/12 6:30:56 AM

Test Date: 1/24/12

Group Comments:

ANALYST: TP

TEST: 8330

BALANCE ID: QA-036

QuantIMS Batch: 2024017

Sample ID:	Initial Weight (g)	Weight after rinse (g)	Weight Diff (g)	Comments:
G2A190474-1	1484.50	500.28	984.22	
G2A190474-2	1487.30	501.66	985.64	
G2A190474-3	1470.20	502.27	967.93	
G2A190474-4	1480.50	499.98	980.52	
G2A190474-4S	1488.40	499.34	989.06	
G2A190474-4D	1486.20	500.61	985.59	
G2A190474-5	1480.90	498.89	982.01	
G2A200474-1	1480.70	502.04	978.66	
G2A200474-2	1488.00	501.98	986.02	
G2A200474-3	1486.80	499.91	986.89	
G2A200474-4	1478.10	500.61	977.49	
G2A200474-5	1473.70	499.41	974.29	
G2A200474-6	1434.60	499.52	935.08	

Water Weight Different Worksheet, Revised 12/31/2008 ERS Printed Tuesday, January 24, 2012 11:52:58 AM

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/25/12
Time: 10:14:32

LEV 1	LEV 2		LEV 1	LEV 2	
_	_	Blank	_	_	Weights/Volumes
_	_	Check	_	_	Spike & Surrogate Worksheet
_	_	MS/MSD	_	_	Vial contains correct volume
			_	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

Reviewer/Date: PHANT / 1/24/12

Nitroaromatics & Nitramines: Explosives (8330/A)
EXTRACTION, SOLID PHASE

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/24/12	2/08/12	G2A190474-001 **MQAVQ-1-AK**	2024007 D	20	A0	WATER	**984.22mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	2/08/12	G2A190474-002 **MQAVR-1-AK**	2024007 D	20	A0	WATER	**985.64mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-003 **MQAVT-1-AK**	2024007 D	20	A0	WATER	**967.93mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AK**	2024007 D	20	A0	WATER	**980.52mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AWS**	2024007 D	20	A0	WATER	**989.06mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AXD**	2024007 D	20	A0	WATER	**985.59mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-005 **MQAVW-1-AK**	2024007 D	20	A0	WATER	**982.01mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/25/12
Time: 10:14:32

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJI	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/26/12	2/09/12	G2A200474-001 **MQCM3-1-AK**	2024007 D	20	A0	WATER	**978.66mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-002 **MQCM4-1-AK**	2024007 D	20	A0	WATER	**986.02mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-003 **MQCM5-1-AK**	2024007 D	20	A0	WATER	**986.89mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-004 **MQCM6-1-AK**	2024007 D	20	A0	WATER	**977.49mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-005 **MQCM7-1-AK**	2024007 D	20	A0	WATER	**974.29mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-006 **MQCM8-1-AK**	2024007 D	20	A0	WATER	**935.08mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 **MQDFC-1-AAB**		20	A0	WATER	**1000.00mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 **MQDFC-1-ACC**		20	A0	WATER	**1000.00mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															

LCS 20UL-11GCSV0346,100UL-11GCSV0509,100UL-11GCSV0541,80UL-E110802B

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD
‡

NUMBER OF WORK ORDERS IN BATCH: 15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 2024017 **Test:** 8330-L

Prep Date: 1/24/12 **Holding Times:** 1/24/12 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)	✓	✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet	✓	✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	✓
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: GB Date: 1-24-12

2nd Level Reviewer: [signature] Date: 1/25/12

Comments:

Shipping and Receiving Documents

G2A190474

62A190474

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2741 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
1126 03605	NWS Earle	Jennifer Lambert		Test America Linda Laver
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Donald Whalen	610 382 1536	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 5963 9562		West Sacramento, CA

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: — — HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: Explosives	Perchlorate	Total Metals					COMMENTS
1/17	1215	02MW01C-20120117				GW	G	4	X	X	X					
1/17	1505	02MW01B-20120117				GW	G	4	X	X	X					
1/18	0920	02MW01A-20120118				GW	G	4	X	X	X					
1/18	1420	02MW13B-20120118				GW	G	12	X	X	X					DO MS/MSD
1/18	1625	02MW13C-20120118				GW	G	4	X	X	X					

1 RELINQUISHED BY Donald Whalen	DATE 1/18/12	TIME 1830	1 RECEIVED BY [illegible]	DATE 1-19-12	TIME 1230
2. RELINQUISHED BY	DATE	TIME	2 RECEIVED BY	DATE	TIME
3 RELINQUISHED BY	DATE	TIME	3 RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO TINUS-001

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT WHITEWATER PM LL

LOT# (QUANTIMS ID) G2A190474 QUOTE# 90036 LOCATION W17D

Checked (✓)

DATE RECEIVED 1/19/12 TIME RECEIVED 920 ☑

DELIVERED BY ☑ FEDEX ☐ ON TRAC ☐ OTHER

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☐ TAL ☑ CLIENT ☐ N/A

MULIT-COOLER(S) (If checked see multi-cooler form) ☑

SINGLE COOLER INFORMATION N/A

CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☐ N/A ☑ ☐

CUSTODY SEAL #(S) _____

COC #(S) _____ ☑ ☐

TEMPERATURE BLANK Observed:_____ Corrected:_____

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed:_____ Average_____ Corrected Average_____

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☐ #5☐ ☐ OTHER_____ ☑ ☐

JS (Initials) 1/19/12 (Date)

==========

pH MEASURED ☑ YES ☐ ANOMALY ☐ N/A ☑

LABELED BY.....CH ☑

LOGGED IN BY.....JS ☑

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☑ N/A ☑

VOA-ENCORES ☑ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☑ N/A ☑

☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A ☑

☐ CLOUSEAU ☐ TEMPERATURE EXCEEDED (0 °C – 6 °C)*1 ☑ N/A

☑ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED

JS (Initials) 1/19/12 (Date)

Notes_____

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

QA-185 10/09 RKE, Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: WHITEWATER LOT# (QUANTIMS ID): G2A190474

Checked (✓)

COOLER ID **AIRBILL/TRACKING #** 795761278551 ☑

CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) NA ☑

COC #(S) 2741

SHIPPPING CONTAINER(S) ☐ TAL ☑ CLIENT ☐ N/A ☑

TEMPERATURE BLANK: OBSERVED: 0 CORRECTED 3 ☑

SAMPLE TEMPERATURE:

OBSERVED: 2,2,3 AVERAGE: 2 CORRECTED 2 ☑

SAMPLES / TESTS (IF NCM REQUIRED): ☑

LABORATORY THERMOMETER ID:

IR UNIT: #4☑ #5☐ ☐ OTHER

COOLER ID **AIRBILL/TRACKING #** 874456939573 ☑ Initials JS

CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) NA ☑

COC #(S) 2741

SHIPPPING CONTAINER(S) ☐ TAL ☑ CLIENT ☐ N/A ☑

TEMPERATURE BLANK: OBSERVED: -1 CORRECTED 2 ☑

SAMPLE TEMPERATURE:

OBSERVED: 1,2,3 AVERAGE: 2 CORRECTED 2 ☑

SAMPLES / TESTS (IF NCM REQUIRED): ☑

LABORATORY THERMOMETER ID:

IR UNIT: #4☑ #5☐ ☐ OTHER ☑

COOLER ID **AIRBILL/TRACKING #** ☐ Initials JS

CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☐ N/A ☐

CUSTODY SEAL #(S) ☐

COC #(S)

SHIPPPING CONTAINER(S) ☐ TAL ☐ CLIENT ☐ N/A ☐

TEMPERATURE BLANK: OBSERVED: CORRECTED ☐

SAMPLE TEMPERATURE:

OBSERVED: AVERAGE: CORRECTED ☐

SAMPLES / TESTS (IF NCM REQUIRED): ☐

LABORATORY THERMOMETER ID:

IR UNIT: #4☐ #5☐ ☐ OTHER ☐

JS 1/19/12

Initials **Date**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G2A190474

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
VOAmeoh																				
AGB	2	2	2	6	2															
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
125AGJmeoh																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn	1	1	1	3	1															
500PJna																				
500PJzn/na																				
250PJ	1	1	1	3	1															
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 10/09 RKE, Page 2

FedEx Express — *US Airbill*

FedEx Tracking Number 8744 5963 9573

RECIPIENT: PEEL HERE

fedex.com 1800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

FedEx Tracking Number 874459639573

Date

Sender's Name — Phone

Company

Address — Dept./Floor/Suite/Room

City — State — ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name — Phone

Company

Address

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for confirmation of your shipping and bill.

City — State — ZIP

HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8744 5963 9573

0235

4a Express Package Service — * To most locations. — *Packages up to 150 lbs.*

- FedEx Priority Overnight — Next business morning.* FedEx shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- FedEx First Overnight — Earliest next business morning delivery to select locations.*
- FedEx 2Day — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Express Saver — Third business day.** Saturday Delivery NOT available.

4b Express Freight Service — ** To most locations. — *Packages over 150 lbs.*

- FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight booking No
- FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging — * Declared value limit $500.

- FedEx Envelope*
- FedEx Pak* — includes FedEx Small Pak and FedEx Large Pak
- FedEx Box
- FedEx Tube
- Other

6 Special Handling and Delivery Signature Options

- SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx Express Saver or FedEx 3Day Freight
- No Signature Required — Package may be left without obtaining a signature for delivery.
- Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

- No
- Yes — Shipper's Declaration not required
- Yes — Shipper's Declaration attached
- Dry Ice — Dry Ice Weight ____ kg
- Cargo Aircraft Only

Dangerous goods such as certain chemicals, aerosols, and dry ice cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below — Obtain recip. Acct. No.

- Sender — Acct. No. in Section 1 will be billed
- Recipient
- Third Party
- Credit Card
- Cash/Check

Total Packages — Total Weight — Credit Card Auth.

605

fedex.com 1.800.GoFedEx 1.800.463.3339

America Labora
OMPLETE ANALYS

EXPIRE DUE
DATE DAT

5/03/05 0/0

ec Comments
ids

ed from PREP Da

11.12.16

ORIGIN ID: BLMA (610) 491-9688
TETRA TECH NUS INC GOVT

234 MALL BLVD STE 260

KING OF PRUSSIA, PA 194062954
UNITED STATES US

SHIP DATE: 18JAN12
ACTWGT: 46.0 LB MAN
CAD: /POS1242
DIMS: 25x13x14 IN

BILL SENDER

TO SAMPLE RECEIVING
TESTAMERICA LABORATORIES, INC.
880 RIVERSIDE PKWY

WEST SACRAMENTO CA 95605
(916) 374-4382

INV:
PO: REF:
DEPT:

FedEx Express

2 of 2

THU - 19 JAN A1
PRIORITY OVERNIGHT

MPS# 7957 6127 8551
0881
Mstr# 8744 5963 9573
0215

XH BLUA

95605
CA-US SMF

TestAmerica

West Sacramento
Sample Receiving Preservation Check

Lot ID: G2A190474

Instructions: Check or x the container type, then check or x the pH measurement if it meets. Write the actual pH if out.

Container					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
AGBs	AGBh	250AG Bs	500PJn	250PJn	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2
			X		X	X	X	X	X															
			X					X																
			X					X																
500PJna	500PJzn/na	250PJna	250PJzn/na		pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2

QA-611 Pres Check xls Sheet1

QA-611
Revised 3/24/2010 ERS

WATER, 6020,
Total Metals

Performed at TestAmerica Pittsburgh
Report# 180-7794-1

ANALYTICAL REPORT

Job Number: 180-7794-1

Job Description: WhiteWater Metals 6020 DOD

For:
TestAmerica Laboratories, Inc.
880 Riverside Parkway
West Sacramento, CA 95605

Attention: Linda Laver

Approved for release.
Alexandra Cox
Project Manager I
2/13/2012 9:49 AM

Alexandra Cox
Project Manager I
alexandra.cox@testamericainc.com
02/13/2012
Revision: 1

"I certify that this Sample Data Package is in compliance with the terms and conditions of the DOD QSM, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: WhiteWater Metals 6020 DOD

Report Number: 180-7794-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This report was revised to correct sample ID for sample number eight.

RECEIPT

The samples were received on 01/27/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

METALS (ICPMS)

Samples 02MW01C-20120117 (180-7794-7), 02MW01B-20120117 (180-7794-8), 02MW01A-20120118 (180-7794-9), 02MW13B-20120118 (180-7794-10) and 02MW13C-20120118 (180-7794-11) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/30/2012 and analyzed on 02/05/2012.

Iron was detected in method blank MB 180-27202/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-7794-7	02MW01C-20120117	Water	01/17/2012 1215	01/27/2012 0920
180-7794-8	02MW01B-20120117	Water	01/17/2012 1505	01/27/2012 0920
180-7794-9	02MW01A-20120118	Water	01/18/2012 0920	01/27/2012 0920
180-7794-10	02MW13B-20120118	Water	01/18/2012 1420	01/27/2012 0920
180-7794-10MS	02MW13B-20120118	Water	01/18/2012 1420	01/27/2012 0920
180-7794-10MSD	02MW13B-20120118	Water	01/18/2012 1420	01/27/2012 0920
180-7794-11	02MW13C-20120118	Water	01/18/2012 1625	01/27/2012 0920

EXECUTIVE SUMMARY - Detections

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-7794-7	**02MW01C-20120117**					
Chromium		11		2.0	ug/L	6020/DOD
Copper		12	Q	2.0	ug/L	6020/DOD
Iron		1300		50	ug/L	6020/DOD
Lead		2.0	Q	1.0	ug/L	6020/DOD
Zinc		48	Q	5.0	ug/L	6020/DOD
180-7794-8	**02MW01B-20120117**					
Chromium		26		2.0	ug/L	6020/DOD
Copper		3.7	Q	2.0	ug/L	6020/DOD
Iron		1400		50	ug/L	6020/DOD
Lead		0.59	J Q	1.0	ug/L	6020/DOD
Zinc		15	Q	5.0	ug/L	6020/DOD
180-7794-9	**02MW01A-20120118**					
Chromium		18		2.0	ug/L	6020/DOD
Copper		13	Q	2.0	ug/L	6020/DOD
Iron		870		50	ug/L	6020/DOD
Lead		1.3	Q	1.0	ug/L	6020/DOD
Zinc		37	Q	5.0	ug/L	6020/DOD
180-7794-10	**02MW13B-20120118**					
Chromium		5.3		2.0	ug/L	6020/DOD
Copper		0.60	J Q	2.0	ug/L	6020/DOD
Iron		590		50	ug/L	6020/DOD
Lead		0.38	J Q	1.0	ug/L	6020/DOD
Zinc		6.9	Q	5.0	ug/L	6020/DOD
180-7794-11	**02MW13C-20120118**					
Chromium		5.6		2.0	ug/L	6020/DOD
Copper		0.60	J Q	2.0	ug/L	6020/DOD
Iron		1000		50	ug/L	6020/DOD
Lead		0.41	J Q	1.0	ug/L	6020/DOD
Zinc		3.6	J Q	5.0	ug/L	6020/DOD

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP/MS)	TAL PIT	SW846 6020/DOD	
Preparation, Total Metals	TAL PIT		SW846 3010A

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Method	Analyst	Analyst ID
SW846 6020/DOD	Reinheimer, Bill	BR

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Client Sample ID: **02MW01C-20120117**

Lab Sample ID: 180-7794-7 Date Sampled: 01/17/2012 1215
Client Matrix: Water Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1828			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	11		0.54	2.0
Copper	12	Q	0.24	2.0
Iron	1300		11	50
Lead	2.0	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	48	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Client Sample ID: **02MW01B-20120117**

Lab Sample ID: 180-7794-8

Client Matrix: Water

Date Sampled: 01/17/2012 1505

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1832			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	26		0.54	2.0
Copper	3.7	Q	0.24	2.0
Iron	1400		11	50
Lead	0.59	J Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	15	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Client Sample ID: **02MW01A-20120118**

Lab Sample ID: 180-7794-9

Client Matrix: Water

Date Sampled: 01/18/2012 0920

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1837			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	18		0.54	2.0
Copper	13	Q	0.24	2.0
Iron	870		11	50
Lead	1.3	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	37	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Client Sample ID: **02MW13B-20120118**

Lab Sample ID: 180-7794-10

Client Matrix: Water

Date Sampled: 01/18/2012 1420

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1841			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	5.3		0.54	2.0
Copper	0.60	J Q	0.24	2.0
Iron	590		11	50
Lead	0.38	J Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	6.9	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Client Sample ID: **02MW13C-20120118**

Lab Sample ID: 180-7794-11

Client Matrix: Water

Date Sampled: 01/18/2012 1625

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1916			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	5.6		0.54	2.0
Copper	0.60	J Q	0.24	2.0
Iron	1000		11	50
Lead	0.41	J Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	3.6	J Q	0.96	5.0

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Method Blank - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	MB 180-27202/1-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1736	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.0	U	0.54	2.0
Copper	0.50	U Q	0.24	2.0
Iron	21.6	J	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Lab Control Sample - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	LCS 180-27202/2-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1740	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	40.0	37.7	94	80 - 120	
Chromium	200	202	101	80 - 120	
Copper	250	246	99	80 - 120	Q
Iron	1000	1110	111	80 - 120	
Lead	20.0	20.3	101	80 - 120	Q
Antimony	500	499	100	80 - 120	
Zinc	500	460	92	80 - 120	Q

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

MS Lab Sample ID:	180-7794-10	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1904			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

MSD Lab Sample ID:	180-7794-10	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1908			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	94	93	80 - 120	2	20		
Chromium	98	96	80 - 120	2	20		
Copper	98	95	80 - 120	3	20	Q	Q
Iron	81	86	80 - 120	4	20		
Lead	98	94	80 - 120	4	20	Q	Q
Antimony	100	98	80 - 120	2	20		
Zinc	91	89	80 - 120	2	20	Q	Q

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

MS Lab Sample ID:	180-7794-10	Units:	ug/L
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	02/05/2012 1904		
Prep Date:	01/30/2012 1419		
Leach Date:	N/A		

MSD Lab Sample ID:	180-7794-10
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	02/05/2012 1908
Prep Date:	01/30/2012 1419
Leach Date:	N/A

	Sample		MS Spike	MSD Spike	MS		MSD	
Analyte	Result/Qual		Amount	Amount	Result/Qual		Result/Qual	
Arsenic	0.50	U	40.0	40.0	37.7		37.1	
Chromium	5.3		200	200	201		197	
Copper	0.60	J	250	250	245	Q	238	Q
Iron	590		1000	1000	1390		1450	
Lead	0.38	J	20.0	20.0	19.9	Q	19.2	Q
Antimony	0.90	U	500	500	500		489	
Zinc	6.9		500	500	463	Q	453	Q

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Serial Dilution - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	180-7794-10	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1845	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Arsenic	0.50	U	2.5	NC	10	U
Chromium	5.3		5.52	NC	10	J D
Copper	0.60	J	2.5	NC	10	U Q
Iron	590		573	2.4	10	D
Lead	0.38	J	1.5	NC	10	U Q
Antimony	0.90	U	4.5	NC	10	U
Zinc	6.9		10	NC	10	U Q

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Lab Section	Qualifier	Description
Metals		
	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	Q	One or more quality control criteria failed.
	D	The reported value is from a dilution.
	U	Undetected at the Limit of Detection.

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-27202					
LCS 180-27202/2-A	Lab Control Sample	T	Water	3010A	
MB 180-27202/1-A	Method Blank	T	Water	3010A	
180-7794-7	02MW01C-20120117	T	Water	3010A	
180-7794-8	02MW01B-20120117	T	Water	3010A	
180-7794-9	02MW01A-20120118	T	Water	3010A	
180-7794-10	02MW13B-20120118	T	Water	3010A	
180-7794-10MS	Matrix Spike	T	Water	3010A	
180-7794-10MSD	Matrix Spike Duplicate	T	Water	3010A	
180-7794-11	02MW13C-20120118	T	Water	3010A	
Analysis Batch:180-27774					
LCS 180-27202/2-A	Lab Control Sample	T	Water	6020/DOD	180-27202
MB 180-27202/1-A	Method Blank	T	Water	6020/DOD	180-27202
180-7794-7	02MW01C-20120117	T	Water	6020/DOD	180-27202
180-7794-8	02MW01B-20120117	T	Water	6020/DOD	180-27202
180-7794-9	02MW01A-20120118	T	Water	6020/DOD	180-27202
180-7794-10	02MW13B-20120118	T	Water	6020/DOD	180-27202
180-7794-10MS	Matrix Spike	T	Water	6020/DOD	180-27202
180-7794-10MSD	Matrix Spike Duplicate	T	Water	6020/DOD	180-27202
180-7794-11	02MW13C-20120118	T	Water	6020/DOD	180-27202

Report Basis

T = Total

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Laboratory Chronicle

Lab ID: 180-7794-7 **Client ID:** 02MW01C-20120117

Sample Date/Time: 01/17/2012 12:15 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-7-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-7-A		180-27774	180-27202	02/05/2012 18:28	1	TAL PIT	BR

Lab ID: 180-7794-8 **Client ID:** 02MW01B-20120117

Sample Date/Time: 01/17/2012 15:05 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-8-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-8-A		180-27774	180-27202	02/05/2012 18:32	1	TAL PIT	BR

Lab ID: 180-7794-9 **Client ID:** 02MW01A-20120118

Sample Date/Time: 01/18/2012 09:20 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-9-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-9-A		180-27774	180-27202	02/05/2012 18:37	1	TAL PIT	BR

Lab ID: 180-7794-10 **Client ID:** 02MW13B-20120118

Sample Date/Time: 01/18/2012 14:20 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-10-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-10-A		180-27774	180-27202	02/05/2012 18:41	1	TAL PIT	BR

Lab ID: 180-7794-10 **Client ID:** 02MW13B-20120118

Sample Date/Time: 01/18/2012 14:20 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-10-B MS		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-10-B MS		180-27774	180-27202	02/05/2012 19:04	1	TAL PIT	BR

Lab ID: 180-7794-10 **Client ID:** 02MW13B-20120118

Sample Date/Time: 01/18/2012 14:20 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-10-C MSD		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-10-C MSD		180-27774	180-27202	02/05/2012 19:08	1	TAL PIT	BR

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-1

Laboratory Chronicle

Lab ID: **180-7794-10 SD** **Client ID:** **02MW13B-20120118**

Sample Date/Time: 01/18/2012 14:20 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-10-A SD ^5		180-27774	180-27202	01/30/2012 14:19	5	TAL PIT	CNS
A:6020/DOD	180-7794-A-10-A SD ^5		180-27774	180-27202	02/05/2012 18:45	5	TAL PIT	BR

Lab ID: **180-7794-11** **Client ID:** **02MW13C-20120118**

Sample Date/Time: 01/18/2012 16:25 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-11-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-11-A		180-27774	180-27202	02/05/2012 19:16	1	TAL PIT	BR

Lab ID: **MB** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	MB 180-27202/1-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	MB 180-27202/1-A		180-27774	180-27202	02/05/2012 17:36	1	TAL PIT	BR

Lab ID: **LCS** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	LCS 180-27202/2-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	LCS 180-27202/2-A		180-27774	180-27202	02/05/2012 17:40	1	TAL PIT	BR

Lab References:
TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MCCV1X_00015	03/01/12	01/19/12	DI Water, Lot K35N55	500 mL	MCALSPECAREV_00002	10 mL	Arsenic	0.1 ppm
							Chromium	0.1 ppm
							Copper	0.1 ppm
							Iron	25 ppm
							Lead	0.1 ppm
							Zinc	0.1 ppm
					MCALSPECB_00003	10 mL	Antimony	0.1 ppm
.MCALSPECAREV_00002	03/01/12	Inorganic Ventures, Lot D2-MEB317133			(Purchased Reagent)		Arsenic	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Zinc	5 ppm
.MCALSPECB_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317134			(Purchased Reagent)		Antimony	5 ppm
MCRIX_00010	03/19/12	12/19/11	HNO3, Lot J38N72	250 mL	MMSCRI-1B_00001	1 mL	Arsenic	0.001 ppm
							Chromium	0.002 ppm
							Copper	0.002 ppm
							Iron	0.05 ppm
							Lead	0.001 ppm
							Zinc	0.005 ppm
					MMSCRI-2_00003	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00001	11/01/12	Inorganic Ventures, Lot E2-MEB391155			(Purchased Reagent)		Arsenic	0.25 ppm
							Chromium	0.5 ppm
							Copper	0.5 ppm
							Iron	12.5 ppm
							Lead	0.25 ppm
							Zinc	1.25 ppm
.MMSCRI-2_00003	10/01/12	Inorganic Ventures, Lot D2-MEB350035			(Purchased Reagent)		Antimony	0.5 ppm
MICPMSICV_00006	04/01/12	01/01/12	2% Nitric Acid, Lot K09N65	250 mg/L	MICPMSICV_00005	10 mg/L	Antimony	0.08 mg/L
							Arsenic	0.08 mg/L
							Chromium	0.08 mg/L
							Copper	0.08 mg/L
							Iron	20 mg/L
							Lead	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00005	12/30/12	SPEX CertiPrep, Lot 26-209JB			(Purchased Reagent)		Antimony	2 ppm
							Arsenic	2 ppm
							Chromium	2 ppm
							Copper	2 ppm
							Iron	500 ppm
							Lead	2 ppm
							Zinc	2 ppm
MICSABX_00013	02/07/12	12/07/11	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00002	10 mL	Al	100 ppm
							Ca	100 ppm
							Iron	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Na	100 ppm
							Ti	2 ppm
					M6020ICS-0B_00003	1 mL	Ag	0.02 ppm
							Arsenic	0.02 ppm
							Cd	0.02 ppm
							Chromium	0.02 ppm
							Co	0.02 ppm
							Copper	0.02 ppm
							Mn	0.0225 ppm
							Ni	0.02 ppm
							Zinc	0.025 ppm
					MMSICSAB-1_00003	0.2 mL	Ba	0.02 ppm
							Be	0.02 ppm
							Lead	0.02 ppm
							Sr	0.02 ppm
							Tl	0.02 ppm
							V	0.02 ppm
					MMSICSAB-2_00003	0.2 mL	Antimony	0.02 ppm
							B	0.05 ppm
							Se	0.05 ppm
							Si	0.5 ppm
							Sn	0.1 ppm
.M6020ICS-0A_00002	11/01/12	Inorganic Ventures, Lot E2-MEB371022			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Iron	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
.M6020ICS-0B_00003	11/01/12	Inorganic Ventures, Lot E2-MEB369155			(Purchased Reagent)		Ag	2 ppm
							Arsenic	2 ppm
							Cd	2 ppm
							Chromium	2 ppm
							Co	2 ppm
							Copper	2 ppm
							Mn	2.25 ppm
							Ni	2 ppm
							Zinc	2.5 ppm
.MMSICSAB-1_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317136			(Purchased Reagent)		Ba	10 ppm
							Be	10 ppm
							Lead	10 ppm
							Sr	10 ppm
							Tl	10 ppm
							V	10 ppm
.MMSICSAB-2_00003	03/01/12	Inorganic Ventures, Lot E2-MEB361116			(Purchased Reagent)		Antimony	10 ppm
							B	25 ppm
							Se	25 ppm
							Si	250 ppm
							Sn	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MICSAX_00010	04/26/12	01/26/12	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00002	10 mL	Al	100 ppm
							Ca	100 ppm
							Iron	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00002	11/01/12	Inorganic Ventures, Lot E2-MEB371022			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Iron	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
MSTD2X_00008	03/01/12	01/19/12	DI Water, Lot K35N55	250 mL	MCALSPECAREV_00002	10 mL	Arsenic	0.2 ppm
							Chromium	0.2 ppm
							Copper	0.2 ppm
							Iron	50 ppm
							Lead	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00002	03/01/12	Inorganic Ventures, Lot D2-MEB317133			(Purchased Reagent)		Arsenic	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Zinc	5 ppm
MSTD3X_00009	03/01/12	01/19/12	DI Water, Lot K35N55	250 mL	MCALSPECB_00003	10 mL	Antimony	0.2 ppm
.MCALSPECB_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317134			(Purchased Reagent)		Antimony	5 ppm
MTAPITTICPMS_00005	10/01/12	INORGANIC VENTURES, Lot E2-MEB379097			(Purchased Reagent)		Ag	5 ug/mL
							Al	200 ug/mL
							Arsenic	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL
							Cd	5 ug/mL
							Chromium	20 ug/mL
							Co	50 ug/mL
							Copper	25 ug/mL
							Iron	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Ni	50 ug/mL
							Se	1 ug/mL
							Sr	100 ug/mL
							Tl	5 ug/mL
							V	50 ug/mL
							Zinc	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTAPITTMSA_00005	12/01/12	INORGANIC VENTURES, Lot E2-MEB373098			(Purchased Reagent)		Ca	5000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
MTAPITTMSC_00010	12/01/12	Inorganic Ventures, Lot E2-MEB398146			(Purchased Reagent)		Antimony	50 ug/mL
							Mo	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL

Certification Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: WhiteWater Metals 6020 DOD

TestAmerica Job ID: 180-7794-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	ACLASS	DoD ELAP		ADE-1422
TestAmerica Pittsburgh	Arkansas	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAC	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAC	4	E871008
TestAmerica Pittsburgh	Illinois	NELAC	5	002602
TestAmerica Pittsburgh	Kansas	NELAC	7	E-10350
TestAmerica Pittsburgh	Louisiana	NELAC	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAC	1	203011
TestAmerica Pittsburgh	New Jersey	NELAC	2	PA005
TestAmerica Pittsburgh	New York	NELAC	2	11182
TestAmerica Pittsburgh	North Carolina	North Carolina DENR	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAC	3	02-00416
TestAmerica Pittsburgh	Pennsylvania	State Program	3	02-416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014002
TestAmerica Pittsburgh	USDA	USDA		P330-10-00139
TestAmerica Pittsburgh	USDA	USDA		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAC	8	STLP
TestAmerica Pittsburgh	Virginia	NELAC	3	460189
TestAmerica Pittsburgh	West Virginia	West Virginia DEP	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-1

SDG No.:

Project: WhiteWater Metals 6020 DOD

Client Sample ID	Lab Sample ID
02MW01C-20120117	180-7794-7
02MW01B-20120117	180-7794-8
02MW01A-20120118	180-7794-9
02MW13B-20120118	180-7794-10
02MW13C-20120118	180-7794-11

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01C-20120117
Lab Sample ID: 180-7794-7
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/17/2012 12:15
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	11	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	12	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	1300	50	20	11	ug/L			1	6020/DOD
Lead	2.0	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	48	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01B-20120117
Lab Sample ID: 180-7794-8
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/17/2012 15:05
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	26	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	3.7	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	1400	50	20	11	ug/L			1	6020/DOD
Lead	0.59	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	15	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW01A-20120118
Lab Sample ID: 180-7794-9
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 09:20
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	18	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	13	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	870	50	20	11	ug/L			1	6020/DOD
Lead	1.3	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	37	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW13B-20120118
Lab Sample ID: 180-7794-10
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 14:20
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	5.3	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	0.60	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	590	50	20	11	ug/L			1	6020/DOD
Lead	0.38	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	6.9	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW13C-20120118
Lab Sample ID: 180-7794-11
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG ID.:
Matrix: Water
Date Sampled: 01/18/2012 16:25
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	5.6	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	0.60	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	1000	50	20	11	ug/L			1	6020/DOD
Lead	0.41	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	3.6	5.0	2.0	0.96	ug/L	J	Q	1	6020/DOD

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

ICV Source: MICPMSICV_00006 Concentration Units: ug/L

CCV Source: MCCV1X_00015

Analyte	ICV 180-27774/5 02/05/2012 13:57				CCV 180-27774/10 02/05/2012 14:24				CCV 180-27774/34 02/05/2012 16:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	83.7		80.0	105	96.1		100	96	93.6		100	94
Arsenic	82.6		80.0	103	101		100	101	100		100	100
Chromium	80.1		80.0	100	100		100	100	99.8		100	100
Copper	82.5		80.0	103	98.9		100	99	100		100	100
Iron	20000		20000	100	25200		25000	101	25900		25000	104
Lead	79.3		80.0	99	102		100	102	97.9		100	98
Zinc	83.3		80.0	104	102		100	102	100		100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

ICV Source: MICPMSICV_00006 Concentration Units: ug/L

CCV Source: MCCV1X_00015

Analyte	CCV 180-27774/46 02/05/2012 17:55				CCV 180-27774/58 02/05/2012 18:52				CCV 180-27774/70 02/05/2012 20:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	93.0		100	93	92.3		100	92	93.4		100	93
Arsenic	101		100	101	100		100	100	99.5		100	100
Chromium	98.8		100	99	97.4		100	97	98.1		100	98
Copper	99.8		100	100	98.8		100	99	96.9		100	97
Iron	25900		25000	104	25600		25000	102	25700		25000	103
Lead	96.5		100	97	96.2		100	96	96.0		100	96
Zinc	99.9		100	100	98.4		100	98	98.8		100	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Method: 6020/DOD Instrument ID: M

Lab Sample ID: CRI 180-27774/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00010

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.17		117	80-120
Chromium	2.00	1.94	J	97	80-120
Copper	2.00	1.84	J	92	80-120
Iron	50.0	55.2		110	80-120
Lead	1.00	1.09		109	80-120
Antimony	2.00	2.16		108	80-120
Zinc	5.00	4.45	J	89	80-120

Lab Sample ID: CRI 180-27774/128 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00010

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.06		106	80-120
Chromium	2.00	1.90	J	95	80-120
Copper	2.00	1.77	J	89	80-120
Iron	50.0	49.2	J	98	80-120
Lead	1.00	1.09		109	80-120
Antimony	2.00	1.82	J	91	80-120
Zinc	5.00	4.54	J	91	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-27774/6 02/05/2012 14:04		CCB 180-27774/11 02/05/2012 14:32		CCB3 180-27774/35 02/05/2012 16:55		CCB4 180-27774/47 02/05/2012 18:02	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.90	U	0.648	J	0.613	J	0.574	J
Arsenic	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Chromium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	0.50	U	0.50	U	0.50	U	0.50	U
Iron	50	20	U	20	U	20	U	20	U
Lead	1.0	0.30	U	0.30	U	0.255	J	0.190	J
Zinc	5.0	2.0	U	2.0	U	2.0	U	2.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB5 180-27774/59 02/05/2012 19:00		CCB6 180-27774/71 02/05/2012 20:10					
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.584	J	0.501	J				
Arsenic	1.0	0.50	U	0.50	U				
Chromium	2.0	1.0	U	1.0	U				
Copper	2.0	0.50	U	0.50	U				
Iron	50	20	U	20	U				
Lead	1.0	0.30	U	0.168	J				
Zinc	5.0	2.0	U	2.0	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-27202/1-A

Instrument Code: M Batch No.: 27774

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6020_DoD
7440-47-3	Chromium	1.0	U		6020_DoD
7440-50-8	Copper	0.50	U	Q	6020_DoD
7439-89-6	Iron	21.6	J		6020_DoD
7439-92-1	Lead	0.30	U	Q	6020_DoD
7440-36-0	Antimony	0.90	U		6020_DoD
7440-66-6	Zinc	2.0	U	Q	6020_DoD

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Lab Sample ID: ICSA 180-27774/8 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSAX_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.537**	
Arsenic		**0.442**	
Chromium		**0.350**	
Copper		**0.962**	
Iron	**100000**	**102000**	**102**
Lead		**0.672**	
Zinc		**8.14**	
Aluminum	*100000*	*100700*	*101*
Barium		*0.270*	
Beryllium		*0.0070*	
Boron		*2.21*	
Cadmium		*0.696*	
Calcium	*100000*	*101800*	*102*
Cobalt		*0.111*	
Magnesium	*100000*	*106400*	*106*
Manganese		*0.647*	
Molybdenum	*2000*	*2100*	*105*
Nickel		*-0.0110*	
Potassium	*100000*	*98030*	*98*
Selenium		*0.312*	
Silicon		*16.7*	
Silver		*0.149*	
Sodium	*100000*	*95920*	*96*
Strontium		*0.514*	
Thallium		*0.0360*	
Tin		*0.300*	
Titanium	*2000*	*2219*	*111*
Vanadium		*-0.218*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Lab Sample ID: ICSAB 180-27774/9 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSABX_00013

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**22.7**	**113**
Arsenic	**20.0**	**21.7**	**109**
Chromium	**20.0**	**21.4**	**107**
Copper	**20.0**	**21.1**	**106**
Iron	**100000**	**104733**	**105**
Lead	**20.0**	**22.1**	**110**
Zinc	**25.0**	**24.9**	**100**
Aluminum	*100000*	*104967*	*105*
Barium	*20.0*	*22.4*	*112*
Beryllium	*20.0*	*20.1*	*100*
Boron	*50.0*	*50.0*	*100*
Cadmium	*20.0*	*22.6*	*113*
Calcium	*100000*	*104000*	*104*
Cobalt	*20.0*	*20.2*	*101*
Magnesium	*100000*	*111600*	*112*
Manganese	*22.5*	*23.2*	*103*
Molybdenum	*2000*	*2229*	*111*
Nickel	*20.0*	*20.6*	*103*
Potassium	*100000*	*98827*	*99*
Selenium	*50.0*	*55.3*	*111*
Silicon	*500*	*593*	*119*
Silver	*20.0*	*22.2*	*111*
Sodium	*100000*	*96537*	*97*
Strontium	*20.0*	*21.4*	*107*
Thallium	*20.0*	*21.4*	*107*
Tin	*100*	*107*	*107*
Titanium	*2000*	*2131*	*107*
Vanadium	*20.0*	*20.9*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 02MW13B-20120118 MS
Lab ID: 180-7794-10 MS
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	37.7		0.50	U	40.0	94	80-120		6020/DOD
Chromium	201		5.3		200	98	80-120		6020/DOD
Copper	245		0.60	J	250	98	80-120	Q	6020/DOD
Iron	1390		590		1000	81	80-120		6020/DOD
Lead	19.9		0.38	J	20.0	98	80-120	Q	6020/DOD
Antimony	500		0.90	U	500	100	80-120		6020/DOD
Zinc	463		6.9		500	91	80-120	Q	6020/DOD

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: 02MW13B-20120118 MSD Lab ID: 180-7794-10 MSD

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	37.1		40.0	93	80-120	2	20		6020/DOD
Chromium	197		200	96	80-120	2	20		6020/DOD
Copper	238		250	95	80-120	3	20	Q	6020/DOD
Iron	1450		1000	86	80-120	4	20		6020/DOD
Lead	19.2		20.0	94	80-120	4	20	Q	6020/DOD
Antimony	489		500	98	80-120	2	20		6020/DOD
Zinc	453		500	89	80-120	2	20	Q	6020/DOD

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 180-27202/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

Sample Matrix: Water LCS Source: MTAPITTICPMS_00005

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	37.7		94	80	120		6020/DOD
Chromium	200	202		101	80	120		6020/DOD
Copper	250	246		99	80	120	Q	6020/DOD
Iron	1000	1110		111	80	120		6020/DOD
Lead	20.0	20.3		101	80	120	Q	6020/DOD
Antimony	500	499		100	80	120		6020/DOD
Zinc	500	460		92	80	120	Q	6020/DOD

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 180-7794-10

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 180-7794-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.50	U	2.5	U	NC		6020/DOD
Chromium	5.3		5.52	J	NC	D	6020/DOD
Copper	0.60	J	2.5	U	NC	Q	6020/DOD
Iron	590		573		2.4	D	6020/DOD
Lead	0.38	J	1.5	U	NC	Q	6020/DOD
Antimony	0.90	U	4.5	U	NC		6020/DOD
Zinc	6.9		10	U	NC	Q	6020/DOD

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-1

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020/DOD DL Date: 01/26/2010 16:35

Prep Method: 3010A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Antimony	121	2	0.459
Arsenic	75	1	0.2908
Chromium	52	2	0.5433
Copper	65	2	0.2443
Iron	56	50	10.77
Lead	208	1	0.154
Zinc	66	5	0.9609

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-1

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020/DOD XMDL Date: 01/26/2010 16:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.459
Arsenic	75	1	0.2908
Chromium	52	2	0.5433
Copper	65	2	0.2443
Iron	56	50	10.77
Lead	208	1	0.154
Zinc	66	5	0.9609

FORM IX - IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh Job No: 180-7794-1

SDG No.:

Instrument ID: M Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		4500	6020/DOD
Chromium		13500	6020/DOD
Copper		20000	6020/DOD
Iron		450000	6020/DOD
Lead		20000	6020/DOD
Antimony		13500	6020/DOD
Zinc		25000	6020/DOD

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-27202/1-A	01/30/2012 14:19	27202		50	50
LCS 180-27202/2-A	01/30/2012 14:19	27202		50	50
180-7794-7	01/30/2012 14:19	27202		50	50
180-7794-8	01/30/2012 14:19	27202		50	50
180-7794-9	01/30/2012 14:19	27202		50	50
180-7794-10	01/30/2012 14:19	27202		50	50
180-7794-10 MS	01/30/2012 14:19	27202		50	50
180-7794-10 MSD	01/30/2012 14:19	27202		50	50
180-7794-11	01/30/2012 14:19	27202		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ITUNE 180-27774/1			12:46																				
STD1 180-27774/2 IC	1		13:43	X	X	X	X	X	X	X													
STD2 180-27774/3 IC	1		13:49	X	X	X	X	X	X	X													
STD3 180-27774/4 IC	1		13:53	X	X	X	X	X	X	X													
ICV 180-27774/5	1		13:57	X	X	X	X	X	X	X													
ICB 180-27774/6	1		14:04	X	X	X	X	X	X	X													
CRI 180-27774/7	1		14:09	X	X	X	X	X	X	X													
ICSA 180-27774/8	1		14:13	X	X	X	X	X	X	X													
ICSAB 180-27774/9	1		14:17	X	X	X	X	X	X	X													
CCV 180-27774/10	1		14:24	X	X	X	X	X	X	X													
CCB 180-27774/11	1		14:32	X	X	X	X	X	X	X													
ZZZZZZ			14:39																				
ZZZZZZ			14:43																				
ZZZZZZ			14:47																				
ZZZZZZ			14:55																				
ZZZZZZ			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:18																				
ZZZZZZ			15:22																				
ZZZZZZ			15:30																				
ZZZZZZ			15:34																				
CCV 180-27774/22			15:41																				
CCB2 180-27774/23			15:48																				
ZZZZZZ			15:56																				
ZZZZZZ			16:00																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:21																				
ZZZZZZ			16:25																				
ZZZZZZ			16:32																				
ZZZZZZ			16:37																				
ZZZZZZ			16:41																				
CCV 180-27774/34	1		16:48	X	X	X	X	X	X	X													
CCB3 180-27774/35	1		16:55	X	X	X	X	X	X	X													
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:11																				
ZZZZZZ			17:15																				
ZZZZZZ			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
MB 180-27202/1-A	1	T	17:36	X	X	X	X	X	X	X													
LCS 180-27202/2-A	1	T	17:40	X	X	X	X	X	X	X													
ZZZZZZ			17:48																				
CCV 180-27774/46	1		17:55	X	X	X	X	X	X	X													
CCB4 180-27774/47	1		18:02	X	X	X	X	X	X	X													
ZZZZZZ			18:07																				
ZZZZZZ			18:11																				
ZZZZZZ			18:15																				
ZZZZZZ			18:20																				
ZZZZZZ			18:24																				
180-7794-7	1	T	18:28	X	X	X	X	X	X	X													
180-7794-8	1	T	18:32	X	X	X	X	X	X	X													
180-7794-9	1	T	18:37	X	X	X	X	X	X	X													
180-7794-10	1	T	18:41	X	X	X	X	X	X	X													
180-7794-10 SD	5	T	18:45	X	X	X	X	X	X	X													
CCV 180-27774/58	1		18:52	X	X	X	X	X	X	X													
CCB5 180-27774/59	1		19:00	X	X	X	X	X	X	X													
180-7794-10 MS	1	T	19:04	X	X	X	X	X	X	X													
180-7794-10 MSD	1	T	19:08	X	X	X	X	X	X	X													
180-7794-11	1	T	19:16	X	X	X	X	X	X	X													
ZZZZZZ			19:24																				
ZZZZZZ			19:28																				
ZZZZZZ			19:35																				
ZZZZZZ			19:40																				
ZZZZZZ			19:44																				
ZZZZZZ			19:48																				
ZZZZZZ			19:55																				
CCV 180-27774/70	1		20:03	X	X	X	X	X	X	X													
CCB6 180-27774/71	1		20:10	X	X	X	X	X	X	X													
ZZZZZZ			20:14																				
ZZZZZZ			20:18																				
ZZZZZZ			20:23																				
ZZZZZZ			20:27																				
ZZZZZZ			20:31																				
ZZZZZZ			20:38																				
ZZZZZZ			20:43																				
ZZZZZZ			20:50																				
ZZZZZZ			20:54																				
ZZZZZZ			20:58																				
CCV 180-27774/82			21:06																				
CCB7 180-27774/83			21:13																				
ZZZZZZ			21:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ZZZZZZ			21:24																				
ZZZZZZ			21:29																				
ZZZZZZ			21:33																				
ZZZZZZ			21:37																				
ZZZZZZ			21:41																				
ZZZZZZ			21:46																				
ZZZZZZ			21:50																				
ZZZZZZ			21:58																				
ZZZZZZ			22:02																				
CCV 180-27774/94			22:09																				
CCB8 180-27774/95			22:17																				
ZZZZZZ			22:21																				
ZZZZZZ			22:25																				
ZZZZZZ			22:30																				
ZZZZZZ			22:34																				
ZZZZZZ			22:38																				
ZZZZZZ			22:42																				
ZZZZZZ			22:47																				
ZZZZZZ			22:51																				
ZZZZZZ			22:55																				
ZZZZZZ			23:00																				
CCV 180-27774/106			23:07																				
CCB9 180-27774/107			23:15																				
ZZZZZZ			23:19																				
ZZZZZZ			23:23																				
ZZZZZZ			23:28																				
ZZZZZZ			23:32																				
ZZZZZZ			23:36																				
ZZZZZZ			23:41																				
ZZZZZZ			23:45																				
ZZZZZZ			23:49																				
ZZZZZZ			23:53																				
ZZZZZZ			23:58																				
CCV 180-27774/118			00:05																				
CCB10 180-27774/119			00:12																				
ZZZZZZ			00:16																				
ZZZZZZ			00:21																				
ZZZZZZ			00:25																				
ZZZZZZ			00:29																				
ZZZZZZ			00:37																				
ZZZZZZ			00:42																				
ZZZZZZ			00:46																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ZZZZZZ			00:50																				
CRI 180-27774/128	1		00:59	X	X	X	X	X	X	X													
CCV 180-27774/129			01:14																				
CCB11 180-27774/130			01:21																				

Prep Types
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 02/05/2012 End Date: 02/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Y-89	Q	Element Rh-103	Q	Element In	Q
STD1 180-27774/2 IC	13:43	100		100		100		100		100	
STD2 180-27774/3 IC	13:49	99		103		102		97		101	
STD3 180-27774/4 IC	13:53	103		104		104		104		104	
ICV 180-27774/5	13:57	103		107		106		104		105	
ICB 180-27774/6	14:04	101		103		103		104		103	
CRI 180-27774/7	14:09	96		106		107		100		110	
ICSA 180-27774/8	14:13	93		99		103		91		95	
ICSAB 180-27774/9	14:17	95		102		105		92		102	
CCV 180-27774/10	14:24	93		99		100		97		99	
CCB 180-27774/11	14:32	96		100		102		103		102	
CCV 180-27774/34	16:48	96		95		94		94		92	
CCB3 180-27774/35	16:55	99		97		96		100		96	
MB 180-27202/1-A	17:36	102		110		104		101		95	
LCS 180-27202/2-A	17:40	91		94		94		94		91	
CCV 180-27774/46	17:55	100		97		93		95		92	
CCB4 180-27774/47	18:02	100		112		107		94		106	
180-7794-7	18:28	29		93		93		94		90	
180-7794-8	18:32	92		92		92		95		90	
180-7794-9	18:37	90		92		93		95		91	
180-7794-10	18:41	91		91		92		93		89	
180-7794-10 SD	18:45	89		87		91		95		90	
CCV 180-27774/58	18:52	95		94		91		93		90	
CCB5 180-27774/59	19:00	98		106		104		109		106	
180-7794-10 MS	19:04	89		92		91		90		88	
180-7794-10 MSD	19:08	89		92		92		91		88	
180-7794-11	19:16	90		91		91		93		89	
CCV 180-27774/70	20:03	86		88		86		87		86	
CCB6 180-27774/71	20:10	97		104		99		105		102	
CRI 180-27774/128	00:59	85		86		82		84		98	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

ICP-MS Instrument ID: M Start Date: 02/05/2012 End Date: 02/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Bi	Q	Element	Q	Element	Q	Element	Q
STD1 180-27774/2 IC	13:43	100		100							
STD2 180-27774/3 IC	13:49	102		98							
STD3 180-27774/4 IC	13:53	102		102							
ICV 180-27774/5	13:57	102		101							
ICB 180-27774/6	14:04	103		102							
CRI 180-27774/7	14:09	102		105							
ICSA 180-27774/8	14:13	101		100							
ICSAB 180-27774/9	14:17	104		105							
CCV 180-27774/10	14:24	103		99							
CCB 180-27774/11	14:32	105		104							
CCV 180-27774/34	16:48	95		93							
CCB3 180-27774/35	16:55	96		99							
MB 180-27202/1-A	17:36	95		97							
LCS 180-27202/2-A	17:40	96		93							
CCV 180-27774/46	17:55	92		91							
CCB4 180-27774/47	18:02	105		108							
180-7794-7	18:28	94		96							
180-7794-8	18:32	93		97							
180-7794-9	18:37	95		98							
180-7794-10	18:41	93		97							
180-7794-10 SD	18:45	92		97							
CCV 180-27774/58	18:52	91		90							
CCB5 180-27774/59	19:00	103		107							
180-7794-10 MS	19:04	93		92							
180-7794-10 MSD	19:08	93		94							
180-7794-11	19:16	92		98							
CCV 180-27774/70	20:03	87		89							
CCB6 180-27774/71	20:10	100		105							
CRI 180-27774/128	00:59	85		93							

FORM XV - IN

Dilution Corrected Concentrations

STD1 317572 INT STD 2/5/2012 1:43:29 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	100.579%	-0.005	0.230	0.094	0.000	0.061	-0.246	-0.065
2	13:44:54	99.838%	0.010	-0.117	-0.021	0.000	-0.084	0.059	0.010
3	13:45:37	99.583%	-0.005	-0.113	-0.073	0.000	0.023	0.188	0.056
x		100.000%	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.000
σ		0.518%	0.008	0.199	0.086	0.000	0.076	0.223	0.061
%RSD		0.518	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.014	-0.432	0.000	-0.345	-4.349	-0.025	100.048%	0.044
2	13:44:54	-0.006	0.123	0.000	0.200	-4.386	-1.419	100.573%	-0.023
3	13:45:37	-0.008	0.309	0.000	0.145	8.734	1.444	99.379%	-0.021
x		0.000	0.000	0.000	-0.000	0.000	0.000	100.000%	0.000
σ		0.012	0.386	0.000	0.300	7.564	1.431	0.598%	0.038
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.598	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	-0.008	-0.022	0.000	0.621	-0.526	-0.001	-0.016	-0.022
2	13:44:54	-0.007	0.015	0.006	-0.882	0.314	0.000	-0.030	0.019
3	13:45:37	0.015	0.007	-0.006	0.262	0.212	0.001	0.046	0.003
x		0.000	0.000	-0.000	0.000	0.000	0.000	0.000	-0.000
σ		0.013	0.019	0.006	0.785	0.458	0.001	0.040	0.021
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.059	-0.044	-0.173	0.054	0.071	0.373	0.000	-0.001
2	13:44:54	0.004	-0.023	0.252	-0.106	-0.196	-0.534	0.000	-0.001
3	13:45:37	-0.063	0.067	-0.079	0.052	0.125	0.161	0.000	0.002
x		0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.061	0.059	0.223	0.092	0.172	0.475	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	99.660%	-0.005	0.006	99.985%	-0.005	0.000	0.040	0.030
2	13:44:54	99.985%	0.004	0.004	99.779%	0.004	0.001	-0.053	-0.042
3	13:45:37	100.356%	0.001	-0.009	100.236%	0.001	-0.002	0.012	0.012
x		100.000%	0.000	0.000	100.000%	-0.000	-0.000	-0.000	-0.000
σ		0.348%	0.005	0.008	0.229%	0.004	0.002	0.048	0.037
%RSD		0.348	0.000	0.000	0.229	0.000	0.000	0.000	0.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	98.845%	0.020	0.001	-0.014	-0.001	-0.017	99.294%	99.310%
2	13:44:54	100.453%	0.002	-0.002	-0.007	0.020	0.008	100.461%	100.710%
3	13:45:37	100.702%	-0.022	0.001	0.021	-0.019	0.008	100.245%	99.979%
x		100.000%	0.000	-0.000	-0.000	0.000	-0.000	100.000%	100.000%
σ		1.008%	0.021	0.002	0.019	0.020	0.015	0.621%	0.700%
%RSD		1.008	0.000	0.000	0.000	0.000	0.000	0.621	0.700

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.005	0.002	0.006	-0.004	-0.001	99.254%
2	13:44:54	-0.002	-0.003	-0.005	-0.010	-0.003	100.027%
3	13:45:37	-0.003	0.001	-0.001	0.014	0.004	100.719%
x		0.000	0.000	0.000	0.000	0.000	100.000%
σ		0.004	0.003	0.005	0.012	0.004	0.733%
%RSD		0.000	0.000	0.000	0.000	0.000	0.733

STD2 309489 2/5/2012 1:49:04 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	98.176%	199.600	0.871	0.486	0.000	99510.000	99160.000	99220.000
2	13:50:30	99.845%	197.400	0.791	0.525	0.000	100100.000	99640.000	99460.000
3	13:51:13	99.068%	203.000	0.488	0.709	0.000	100400.000	101200.000	101300.000
x		99.030%	200.000	0.717	0.573	0.000	100000.000	100000.000	100000.000
σ		0.835%	2.809	0.202	0.119	0.000	452.200	1064.000	1149.000
%RSD		0.843	1.404	28.170	20.790	0.000	0.452	1.064	1.149

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	997.700	7.731	0.000	100300.000	100000.000	98750.000	102.142%	0.102
2	13:50:30	992.000	7.526	0.000	99180.000	99330.000	99840.000	103.500%	0.098
3	13:51:13	1010.000	8.297	0.000	100500.000	100700.000	101400.000	103.468%	0.098
x		1000.000	7.851	0.000	100000.000	100000.000	100000.000	103.037%	0.100
σ		9.341	0.399	0.000	718.600	661.200	1333.000	0.775%	0.002
%RSD		0.934	5.082	0.000	0.719	0.661	1.333	0.752	2.491

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	198.800	198.500	990.700	49650.000	49800.000	199.400	199.800	199.900
2	13:50:30	201.400	201.100	1000.000	50030.000	50120.000	201.000	199.700	197.800
3	13:51:13	199.800	200.400	1009.000	50320.000	50080.000	199.600	200.500	202.300
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		1.353	1.361	9.193	335.900	176.200	0.852	0.446	2.248
%RSD		0.677	0.680	0.919	0.672	0.352	0.426	0.223	1.124

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	199.200	198.700	198.800	199.500	197.400	198.800	0.000	199.400
2	13:50:30	200.100	201.900	202.900	200.000	199.800	199.200	0.000	199.300
3	13:51:13	200.700	199.300	198.300	200.500	202.800	202.100	0.000	201.300
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		0.777	1.702	2.534	0.531	2.683	1.803	0.000	1.133
%RSD		0.388	0.851	1.267	0.265	1.341	0.901	0.000	0.566

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	100.739%	0.070	0.065	96.276%	197.900	199.200	198.800	199.700
2	13:50:30	102.845%	0.065	0.058	97.283%	200.400	200.700	200.100	200.000
3	13:51:13	103.227%	0.073	0.101	97.882%	201.800	200.100	201.100	200.300
x		102.270%	0.069	0.074	97.147%	200.000	200.000	200.000	200.000
σ		1.340%	0.004	0.023	0.812%	1.978	0.759	1.152	0.302
%RSD		1.310	6.198	31.280	0.836	0.989	0.379	0.576	0.151

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	99.176%	0.026	0.038	0.018	198.900	198.900	100.763%	101.450%
2	13:50:30	101.166%	0.029	0.038	0.025	200.800	199.700	102.473%	103.004%
3	13:51:13	101.510%	0.027	0.058	0.043	200.300	201.400	102.854%	103.303%
x		100.617%	0.027	0.045	0.029	200.000	200.000	102.030%	102.586%
σ		1.260%	0.002	0.011	0.013	1.017	1.293	1.114%	0.995%
%RSD		1.252	6.050	25.590	45.550	0.508	0.647	1.092	0.970

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	196.400	196.900	196.300	196.500	196.600	98.059%
2	13:50:30	201.100	201.100	201.500	201.700	201.300	97.921%
3	13:51:13	202.500	202.000	202.200	201.800	202.100	97.581%
x		200.000	200.000	200.000	200.000	200.000	97.854%
σ		3.214	2.705	3.264	3.010	2.960	0.246%
%RSD		1.607	1.352	1.632	1.505	1.480	0.252

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	105.209%	0.083	195.300	197.700	0.000	58.090	50.120	50.870
2	13:54:45	103.261%	0.120	195.600	196.800	0.000	54.290	49.970	48.780
3	13:55:28	99.828%	0.153	209.100	205.600	0.000	54.600	48.950	49.330
x		102.766%	0.119	200.000	200.000	0.000	55.660	49.680	49.660
σ		2.724%	0.035	7.878	4.854	0.000	2.109	0.635	1.082
%RSD		2.651	29.620	3.939	2.427	0.000	3.789	1.279	2.180

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	6.308	9878.000	0.000	46.340	53.670	109.100	105.291%	197.400
2	13:54:45	4.631	9952.000	0.000	42.010	60.380	100.500	104.536%	202.100
3	13:55:28	4.143	10170.000	0.000	41.000	31.510	99.710	103.305%	200.600
x		5.027	10000.000	0.000	43.120	48.520	103.100	104.377%	200.000
σ		1.135	151.900	0.000	2.839	15.110	5.204	1.003%	2.406
%RSD		22.580	1.519	0.000	6.585	31.140	5.048	0.961	1.203

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.209	0.086	0.704	148.100	144.100	0.116	0.135	0.158
2	13:54:45	0.179	0.114	0.638	69.400	64.550	0.090	0.122	0.044
3	13:55:28	0.167	0.090	0.616	49.320	46.270	0.091	0.104	0.091
x		0.185	0.097	0.653	88.940	84.990	0.099	0.121	0.098
σ		0.022	0.015	0.046	52.200	52.030	0.015	0.015	0.057
%RSD		11.810	15.360	7.070	58.700	61.230	14.630	12.710	58.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.221	0.127	0.130	0.664	2.517	2.398	0.000	0.368
2	13:54:45	0.089	0.094	0.117	0.613	1.654	1.689	0.000	0.347
3	13:55:28	0.115	0.169	-0.137	0.367	0.966	1.077	0.000	0.315
x		0.141	0.130	0.037	0.548	1.712	1.721	0.000	0.344
σ		0.070	0.038	0.150	0.159	0.777	0.661	0.000	0.027
%RSD		49.400	28.950	408.200	29.030	45.380	38.400	0.000	7.827

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	103.198%	196.700	196.800	104.493%	0.211	0.179	0.116	-0.276
2	13:54:45	104.211%	200.500	200.700	104.066%	0.153	0.178	0.143	-0.301
3	13:55:28	104.086%	202.800	202.500	103.570%	0.189	0.152	0.030	-0.392
x		103.832%	200.000	200.000	104.043%	0.184	0.170	0.096	-0.323
σ		0.552%	3.072	2.900	0.461%	0.029	0.015	0.059	0.061
%RSD		0.532	1.536	1.450	0.444	15.980	8.884	61.400	18.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	103.848%	198.400	194.700	194.700	0.178	0.356	102.008%	101.868%
2	13:54:45	104.335%	199.600	200.300	200.700	0.172	0.333	101.971%	102.678%
3	13:55:28	103.102%	201.900	205.000	204.600	0.211	0.281	103.058%	103.597%
x		103.762%	200.000	200.000	200.000	0.187	0.323	102.346%	102.715%
σ		0.621%	1.797	5.141	4.957	0.021	0.039	0.617%	0.865%
%RSD		0.598	0.899	2.571	2.478	11.180	11.930	0.603	0.842

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.117	0.130	0.372	0.380	0.396	101.307%
2	13:54:45	0.113	0.106	0.230	0.254	0.237	101.933%
3	13:55:28	0.113	0.102	0.192	0.222	0.192	102.253%
x		0.114	0.113	0.265	0.285	0.275	101.831%
σ		0.002	0.015	0.095	0.084	0.107	0.481%
%RSD		2.094	13.240	35.800	29.300	38.830	0.473

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.407%	81.030	77.350	76.320	0.000	39590.000	39110.000	38870.000
2	13:59:01	104.178%	80.020	77.280	75.020	0.000	38800.000	39220.000	39170.000
3	13:59:44	101.706%	80.740	74.340	77.230	0.000	39060.000	39910.000	39950.000
x		103.430%	100.745%	95.406%	95.238%	0.000	97.872%	98.532%	98.331%
σ		1.498%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.448	0.643	2.249	1.459	0.000	1.031	1.091	1.416

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	392.900	3902.000	0.000	40110.000	38820.000	37510.000	106.807%	79.470
2	13:59:01	396.600	3903.000	0.000	39560.000	38780.000	37380.000	108.251%	78.980
3	13:59:44	403.000	3971.000	0.000	40020.000	39490.000	39270.000	106.571%	78.340
x		99.370%	98.129%	0.000	99.736%	97.579%	95.138%	107.209%	98.665%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.910%	n/a
%RSD		1.283	1.002	0.000	0.745	1.025	2.764	0.849	0.716

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	79.230	80.290	416.100	20160.000	20820.000	81.300	81.280	83.600
2	13:59:01	77.750	79.010	411.700	19920.000	20530.000	79.560	80.900	82.180
3	13:59:44	79.030	80.950	415.300	19950.000	20820.000	80.520	81.290	82.260
x		98.337%	100.103%	103.595%	100.047%	103.613%	100.573%	101.443%	103.354%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.018	1.232	0.565	0.634	0.802	1.080	0.275	0.964

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	83.750	84.330	85.170	83.050	82.960	84.050	0.000	78.280
2	13:59:01	81.960	82.840	83.240	82.960	82.210	81.940	0.000	78.600
3	13:59:44	81.710	82.620	85.020	81.910	81.850	80.450	0.000	78.430
x		103.092%	104.078%	105.596%	103.301%	102.924%	102.686%	0.000	98.044%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.350	1.115	1.275	0.763	0.689	2.203	0.000	0.204

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.796%	80.620	81.670	104.078%	77.960	78.150	78.290	80.030
2	13:59:01	107.098%	81.480	81.220	104.539%	79.810	79.450	79.600	80.470
3	13:59:44	106.719%	81.770	82.030	104.303%	79.270	78.580	80.080	80.920
x		106.204%	101.612%	102.053%	104.306%	98.769%	98.408%	99.155%	100.592%
σ		1.234%	n/a	n/a	0.231%	n/a	n/a	n/a	n/a
%RSD		1.162	0.735	0.500	0.221	1.208	0.839	1.164	0.555

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.700%	77.450	84.880	84.830	82.110	81.480	100.211%	100.755%
2	13:59:01	105.714%	78.860	83.450	82.880	80.710	81.720	102.772%	102.420%
3	13:59:44	105.809%	78.540	82.910	81.850	81.080	81.330	102.649%	102.141%
x		105.408%	97.857%	104.680%	103.984%	101.626%	101.890%	101.877%	101.772%
σ		0.615%	n/a	n/a	n/a	n/a	n/a	1.444%	0.892%
%RSD		0.583	0.946	1.219	1.815	0.889	0.245	1.418	0.876

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	82.040	81.650	78.790	77.400	78.200	99.897%
2	13:59:01	83.240	82.630	80.430	77.740	79.450	100.792%
3	13:59:44	82.900	83.440	81.990	79.490	80.370	100.954%
x		103.411%	103.214%	100.503%	97.759%	99.177%	100.548%
σ		n/a	n/a	n/a	n/a	n/a	0.569%
%RSD		0.749	1.087	1.989	1.436	1.376	0.566

ICB 2/5/2012 2:04:46 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	102.573%	0.016	0.853	0.465	0.000	-0.216	0.668	0.165
2	14:06:12	101.496%	0.002	0.838	0.272	0.000	-0.206	0.096	0.327
3	14:06:55	99.279%	0.010	0.486	0.295	0.000	-0.833	0.007	-0.050
x		101.116%	0.009	0.725	0.344	0.000	-0.418	0.257	0.147
σ		1.679%	0.007	0.207	0.105	0.000	0.359	0.359	0.189
%RSD		1.661	75.470	28.600	30.640	0.000	85.750	139.600	128.500

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-1.472	1.192	0.000	-1.981	22.120	11.580	103.074%	-0.171
2	14:06:12	-1.629	1.084	0.000	-4.698	17.560	12.000	102.566%	-0.043
3	14:06:55	-1.533	0.732	0.000	-5.040	9.695	14.870	102.565%	-0.154
x		-1.545	1.003	0.000	-3.906	16.460	12.820	102.735%	-0.123
σ		0.080	0.240	0.000	1.676	6.285	1.790	0.294%	0.070
%RSD		5.148	23.960	0.000	42.910	38.190	13.960	0.286	56.780

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	0.023	-0.017	-0.014	2.247	5.782	0.006	-0.014	-0.126
2	14:06:12	-0.009	-0.015	-0.039	-1.730	1.812	0.007	-0.095	-0.125
3	14:06:55	-0.017	-0.026	-0.039	-5.125	-0.904	0.013	-0.069	-0.146
x		-0.001	-0.019	-0.031	-1.536	2.230	0.009	-0.059	-0.132
σ		0.021	0.006	0.014	3.690	3.363	0.004	0.041	0.012
%RSD		1926.000	30.950	47.070	240.200	150.800	45.730	70.070	8.912

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-0.115	-0.731	-0.736	0.098	-0.526	0.252	0.000	-0.009
2	14:06:12	-0.170	-0.889	-0.819	-0.012	-0.110	-0.120	0.000	-0.015
3	14:06:55	-0.192	-0.883	-0.878	0.222	0.429	0.488	0.000	-0.016
x		-0.159	-0.834	-0.811	0.102	-0.069	0.206	0.000	-0.013
σ		0.040	0.090	0.072	0.117	0.479	0.307	0.000	0.004
%RSD		24.910	10.770	8.822	114.600	693.600	148.600	0.000	30.420

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	103.023%	0.641	0.607	103.198%	0.003	0.007	0.038	0.033
2	14:06:12	103.354%	0.470	0.520	103.562%	0.001	0.006	0.013	0.018
3	14:06:55	102.923%	0.403	0.476	103.760%	0.002	-0.002	-0.071	-0.044
x		103.100%	0.504	0.534	103.506%	0.002	0.004	-0.007	0.002
σ		0.225%	0.123	0.067	0.285%	0.001	0.005	0.057	0.041
%RSD		0.219	24.360	12.500	0.275	41.510	136.400	869.500	1805.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	102.718%	-0.103	0.173	0.112	-0.008	-0.014	100.776%	101.389%
2	14:06:12	103.132%	-0.113	0.147	0.179	-0.036	0.023	102.727%	103.050%
3	14:06:55	103.830%	-0.163	0.141	0.116	-0.031	0.001	104.096%	103.521%
x		103.227%	-0.126	0.154	0.136	-0.025	0.003	102.533%	102.654%
σ		0.562%	0.032	0.017	0.038	0.015	0.019	1.669%	1.120%
%RSD		0.544	25.490	11.140	27.840	58.680	591.400	1.628	1.091

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-0.001	0.004	0.148	0.141	0.140	100.188%
2	14:06:12	-0.005	0.001	0.043	0.014	0.033	102.295%
3	14:06:55	-0.006	-0.003	0.031	0.006	0.016	102.255%
x		-0.004	0.001	0.074	0.053	0.063	101.579%
σ		0.002	0.003	0.064	0.076	0.067	1.205%
%RSD		60.800	617.800	86.900	141.800	107.000	1.186

CRI 289521 2/5/2012 2:09:04 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	98.840%	1.039	6.004	5.445	0.000	112.400	113.600	114.400
2	14:10:30	95.526%	1.193	5.212	5.364	0.000	110.100	119.600	118.800
3	14:11:13	94.402%	0.957	4.744	5.230	0.000	111.000	116.600	121.300
x		96.256%	106.307%	106.400%	106.922%	0.000	111.172%	116.603%	118.138%
σ		2.307%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.397	11.270	11.970	2.033	0.000	1.054	2.599	2.954

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	33.210	520.900	0.000	105.200	107.000	109.400	106.070%	4.686
2	14:10:30	34.200	526.600	0.000	105.400	81.480	104.100	105.697%	4.687
3	14:11:13	34.110	530.500	0.000	102.000	129.600	105.000	105.501%	4.493
x		112.804%	105.202%	0.000	104.203%	106.021%	106.155%	105.756%	92.438%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.289%	n/a
%RSD		1.610	0.915	0.000	1.832	22.690	2.678	0.274	2.420

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	0.997	1.954	5.489	56.840	60.000	0.516	0.989	1.997
2	14:10:30	0.970	1.941	5.300	55.160	58.190	0.533	0.966	1.920
3	14:11:13	0.858	1.921	5.305	53.500	53.730	0.496	1.019	1.896
x		94.143%	96.919%	1072.915%	110.340%	114.613%	103.033%	99.158%	96.887%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.844	0.859	2.009	3.027	5.630	3.616	2.656	2.726

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	1.961	4.462	3.914	1.231	4.385	5.135	0.000	4.812
2	14:10:30	1.776	4.568	3.925	1.188	4.238	5.089	0.000	4.868
3	14:11:13	1.769	4.311	4.355	1.102	4.051	4.899	0.000	4.863
x		91.769%	88.941%	81.296%	117.401%	84.495%	100.822%	0.000	96.953%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		5.929	2.912	6.185	5.606	3.963	2.482	0.000	0.644

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	106.848%	5.046	5.211	99.857%	1.031	1.088	0.970	0.974
2	14:10:30	107.142%	5.073	5.193	99.922%	0.998	0.964	1.008	0.955
3	14:11:13	107.756%	4.961	5.284	99.062%	1.121	1.057	1.036	0.938
x		107.248%	100.535%	104.587%	99.614%	104.993%	103.621%	100.460%	95.567%
σ		0.464%	n/a	n/a	0.479%	n/a	n/a	n/a	n/a
%RSD		0.432	1.159	0.928	0.481	6.106	6.211	3.323	1.919

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	109.013%	6.091	2.164	2.108	9.426	9.696	101.383%	98.614%
2	14:10:30	109.980%	6.723	2.093	2.026	9.378	9.550	101.719%	99.891%
3	14:11:13	110.601%	6.353	2.211	2.102	9.555	9.604	103.924%	99.834%
x		109.864%	127.782%	107.781%	103.924%	94.529%	96.170%	102.342%	99.446%
σ		0.801%	n/a	n/a	n/a	n/a	n/a	1.381%	0.722%
%RSD		0.729	4.967	2.757	2.202	0.971	0.767	1.349	0.726

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	1.021	0.947	1.145	1.095	1.135	105.477%
2	14:10:30	0.958	0.956	1.085	1.043	1.059	105.809%
3	14:11:13	0.989	0.994	1.030	1.104	1.085	105.155%
x		98.910%	96.568%	108.651%	108.051%	109.303%	105.481%
σ		n/a	n/a	n/a	n/a	n/a	0.327%
%RSD		3.171	2.602	5.294	3.070	3.538	0.310

ICSA 315568 2/5/2012 2:13:23 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	94.633%	-0.004	1.045	2.307	0.000	97710.000	104100.000	104400.000
2	14:14:49	92.269%	0.005	1.747	2.272	0.000	95800.000	106400.000	106800.000
3	14:15:32	91.662%	0.020	2.322	2.035	0.000	94240.000	107100.000	107900.000
x		92.855%	0.007	1.705	2.205	0.000	95920.000	105900.000	106400.000
σ		1.570%	0.012	0.639	0.148	0.000	1737.000	1571.000	1774.000
%RSD		1.690	171.200	37.520	6.720	0.000	1.811	1.484	1.668

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	99040.000	16.740	0.000	98880.000	99130.000	101600.000	98.592%	2206.000
2	14:14:49	101400.000	16.340	0.000	98610.000	100500.000	102500.000	98.658%	2230.000
3	14:15:32	101700.000	17.060	0.000	96600.000	97870.000	101400.000	100.058%	2221.000
x		100700.000	16.710	0.000	98030.000	99190.000	101800.000	99.103%	2219.000
σ		1441.000	0.361	0.000	1249.000	1337.000	589.000	0.828%	12.400
%RSD		1.431	2.160	0.000	1.274	1.348	0.579	0.836	0.559

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	-0.196	0.353	0.631	102400.000	101900.000	0.111	-0.144	0.680
2	14:14:49	-0.262	0.371	0.648	102300.000	101600.000	0.115	0.069	0.660
3	14:15:32	-0.197	0.325	0.662	101300.000	99670.000	0.106	0.042	0.755
x		-0.218	0.350	0.647	102000.000	101000.000	0.111	-0.011	0.698
σ		0.038	0.023	0.015	636.000	1198.000	0.005	0.116	0.050
%RSD		17.200	6.595	2.368	0.624	1.186	4.088	1080.000	7.194

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	1.074	8.338	7.188	0.197	-0.357	0.200	0.000	0.524
2	14:14:49	0.949	8.168	7.055	0.507	-0.551	0.251	0.000	0.502
3	14:15:32	0.864	7.924	7.548	0.623	-0.843	0.486	0.000	0.516
x		0.962	8.143	7.264	0.442	-0.584	0.312	0.000	0.514
σ		0.106	0.208	0.255	0.220	0.245	0.153	0.000	0.011
%RSD		10.980	2.552	3.513	49.800	41.950	48.950	0.000	2.220

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	101.079%	2074.000	2098.000	89.549%	0.169	0.164	0.582	0.543
2	14:14:49	103.935%	2098.000	2085.000	91.110%	0.149	0.170	0.919	0.616
3	14:15:32	104.511%	2135.000	2115.000	91.820%	0.130	0.146	0.586	0.619
x		103.175%	2102.000	2100.000	90.826%	0.149	0.160	0.696	0.593
σ		1.838%	30.900	15.160	1.162%	0.019	0.012	0.194	0.043
%RSD		1.781	1.470	0.722	1.279	13.070	7.779	27.820	7.246

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	93.242%	0.381	0.539	0.570	0.226	0.245	98.077%	98.957%
2	14:14:49	94.826%	0.285	0.570	0.522	0.255	0.236	100.892%	101.792%
3	14:15:32	95.912%	0.233	0.501	0.447	0.232	0.327	103.525%	103.535%
x		94.660%	0.300	0.537	0.513	0.238	0.270	100.831%	101.428%
σ		1.343%	0.075	0.034	0.062	0.015	0.050	2.725%	2.311%
%RSD		1.419	25.020	6.369	12.080	6.350	18.690	2.702	2.278

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	0.022	0.039	0.836	0.754	0.802	100.809%
2	14:14:49	0.038	0.029	0.684	0.679	0.654	99.561%
3	14:15:32	0.027	0.042	0.560	0.569	0.560	99.553%
x		0.029	0.036	0.693	0.668	0.672	99.975%
σ		0.008	0.007	0.138	0.093	0.122	0.723%
%RSD		26.960	18.500	19.890	13.900	18.180	0.723

ICSAB 291571 2/5/2012 2:17:41 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	97.649%	20.150	48.280	51.370	0.000	96970.000	108200.000	109200.000
2	14:19:08	94.599%	19.800	47.530	49.440	0.000	96200.000	110200.000	112000.000
3	14:19:51	91.836%	20.280	46.810	49.060	0.000	96440.000	112500.000	113600.000
x		94.695%	100.390%	95.077%	99.912%	0.000	96.538%	110.305%	111.619%
σ		2.908%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.071	1.233	1.543	2.482	0.000	0.409	1.964	2.026

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	103100.000	585.700	0.000	99730.000	100700.000	104800.000	102.601%	2148.000
2	14:19:08	105800.000	598.500	0.000	99940.000	99820.000	103800.000	102.410%	2133.000
3	14:19:51	106000.000	595.300	0.000	96810.000	99030.000	103400.000	102.187%	2112.000
x		104.947%	118.633%	0.000	98.825%	99.847%	104.010%	102.399%	106.544%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.207%	n/a
%RSD		1.540	1.129	0.000	1.771	0.827	0.726	0.203	0.848

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	21.150	21.600	23.150	105300.000	104200.000	20.480	21.490	21.260
2	14:19:08	21.320	21.700	23.390	104800.000	103800.000	20.340	19.910	20.520
3	14:19:51	20.310	20.920	22.980	104100.000	102400.000	19.670	20.260	20.480
x		104.639%	107.036%	100.756%	104.739%	103.473%	100.810%	102.773%	103.752%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.580	1.963	0.892	0.582	0.932	2.139	4.043	2.111

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	21.590	24.950	23.680	22.000	54.840	54.210	0.000	21.340
2	14:19:08	21.020	24.710	24.140	21.360	55.120	55.400	0.000	21.630
3	14:19:51	20.770	25.020	23.440	21.830	55.180	56.180	0.000	21.260
x		105.628%	99.563%	95.015%	108.656%	110.088%	110.528%	0.000	107.046%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.999	0.656	1.512	1.513	0.331	1.798	0.000	0.897

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	104.697%	2212.000	2203.000	91.718%	22.120	21.930	22.810	22.680
2	14:19:08	105.200%	2236.000	2230.000	92.754%	22.070	21.690	22.810	21.280
3	14:19:51	104.749%	2266.000	2255.000	91.954%	22.490	22.120	22.260	21.800
x		104.882%	111.901%	111.457%	92.142%	111.134%	109.550%	113.130%	109.590%
σ		0.276%	n/a	n/a	0.543%	n/a	n/a	n/a	n/a
%RSD		0.264	1.209	1.167	0.589	1.020	0.978	1.411	3.226

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	100.966%	106.000	22.350	22.530	22.120	22.340	102.387%	103.025%
2	14:19:08	101.949%	107.400	22.960	22.590	21.800	22.460	104.380%	105.134%
3	14:19:51	101.671%	108.500	22.720	22.630	22.400	22.390	105.138%	105.224%
x		101.529%	107.315%	113.378%	112.897%	110.527%	111.982%	103.968%	104.461%
σ		0.506%	n/a	n/a	n/a	n/a	n/a	1.421%	1.244%
%RSD		0.499	1.159	1.371	0.229	1.355	0.277	1.367	1.191

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	20.960	20.990	21.920	21.880	21.920	104.410%
2	14:19:08	21.420	21.470	22.030	22.100	22.090	105.159%
3	14:19:51	21.300	21.690	22.260	21.950	22.190	105.504%
x		106.136%	106.924%	110.368%	109.867%	110.329%	105.024%
σ		n/a	n/a	n/a	n/a	n/a	0.559%
%RSD		1.110	1.682	0.782	0.512	0.621	0.533

CCV 309497 2/5/2012 2:24:51 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	94.630%	100.400	92.990	95.670	0.000	49150.000	51460.000	52020.000
2	14:26:17	92.454%	100.200	94.190	95.580	0.000	48190.000	51840.000	52590.000
3	14:27:00	92.175%	96.600	89.170	95.820	0.000	48970.000	52260.000	52410.000
x		93.086%	99.061%	92.116%	95.691%	0.000	97.537%	103.713%	104.680%
σ		1.344%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.444	2.155	2.842	0.123	0.000	1.049	0.768	0.552

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	539.900	5152.000	0.000	49710.000	49240.000	48300.000	98.770%	100.100
2	14:26:17	535.800	5133.000	0.000	48760.000	48470.000	46430.000	98.711%	98.930
3	14:27:00	528.900	5101.000	0.000	49250.000	49660.000	50490.000	98.240%	98.350
x		106.978%	102.577%	0.000	98.478%	98.252%	96.814%	98.574%	99.126%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.290%	n/a
%RSD		1.040	0.499	0.000	0.965	1.229	4.190	0.295	0.896

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	98.160	99.990	520.300	25460.000	26270.000	99.450	100.400	99.060
2	14:26:17	98.820	99.780	519.800	25140.000	25740.000	97.740	96.810	98.570
3	14:27:00	98.070	100.600	518.400	24950.000	25840.000	98.510	96.620	97.870
x		98.352%	100.119%	103.895%	100.718%	103.792%	98.569%	97.957%	98.501%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.416	0.418	0.188	1.022	1.084	0.866	2.191	0.606

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	100.600	102.900	101.700	100.800	102.200	102.600	0.000	99.630
2	14:26:17	98.430	101.100	100.400	101.600	102.000	105.100	0.000	99.370
3	14:27:00	97.780	101.200	100.900	100.000	101.300	103.300	0.000	99.920
x		98.931%	101.756%	100.983%	100.807%	101.835%	103.668%	0.000	99.642%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.491	0.984	0.666	0.772	0.505	1.266	0.000	0.276

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	100.027%	107.000	107.700	97.349%	98.980	100.000	100.900	101.400
2	14:26:17	100.791%	108.300	109.500	96.532%	99.220	99.660	101.500	102.000
3	14:27:00	100.278%	106.600	108.300	96.070%	99.190	99.260	100.900	101.100
x		100.365%	107.325%	108.513%	96.650%	99.131%	99.645%	101.108%	101.492%
σ		0.389%	n/a	n/a	0.648%	n/a	n/a	n/a	n/a
%RSD		0.388	0.835	0.855	0.670	0.132	0.377	0.303	0.434

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	98.851%	96.290	93.820	93.680	98.560	98.890	101.701%	102.407%
2	14:26:17	99.267%	97.260	96.990	96.690	100.300	99.900	103.237%	103.873%
3	14:27:00	99.128%	97.510	97.400	97.670	99.100	99.540	103.110%	103.563%
x		99.082%	97.023%	96.069%	96.013%	99.322%	99.446%	102.683%	103.281%
σ		0.212%	n/a	n/a	n/a	n/a	n/a	0.853%	0.772%
%RSD		0.214	0.664	2.039	2.166	0.901	0.514	0.831	0.748

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	101.000	101.000	102.800	101.200	101.800	97.616%
2	14:26:17	101.200	101.100	101.900	101.500	102.100	98.717%
3	14:27:00	100.800	101.100	102.400	101.700	102.200	99.442%
x		100.980%	101.076%	102.354%	101.478%	102.032%	98.592%
σ		n/a	n/a	n/a	n/a	n/a	0.920%
%RSD		0.199	0.071	0.433	0.232	0.184	0.933

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	97.874%	-0.012	0.151	0.350	0.000	1.939	0.993	0.824
2	14:33:26	96.389%	0.003	0.627	0.267	0.000	1.301	1.021	0.837
3	14:34:10	93.583%	0.020	0.351	-0.158	0.000	6.184	7.380	6.029
x		95.949%	0.004	0.376	0.153	0.000	3.141	3.131	2.563
σ		2.179%	0.016	0.239	0.272	0.000	2.654	3.680	3.002
%RSD		2.271	418.800	63.530	177.700	0.000	84.480	117.500	117.100

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.404	0.183	0.000	-2.632	18.110	4.413	100.815%	-0.040
2	14:33:26	-0.639	-0.025	0.000	-3.337	21.440	7.315	100.549%	-0.088
3	14:34:10	0.849	0.868	0.000	0.928	13.730	13.070	99.293%	-0.087
x		-0.065	0.342	0.000	-1.680	17.760	8.265	100.219%	-0.071
σ		0.800	0.467	0.000	2.286	3.870	4.404	0.813%	0.027
%RSD		1236.000	136.600	0.000	136.100	21.790	53.290	0.811	38.460

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.030	-0.017	-0.099	6.159	10.200	-0.004	-0.097	-0.160
2	14:33:26	0.017	-0.009	-0.106	1.322	4.223	-0.002	-0.036	-0.196
3	14:34:10	-0.002	-0.003	-0.053	2.120	3.059	-0.008	-0.048	-0.185
x		-0.005	-0.009	-0.086	3.200	5.828	-0.005	-0.060	-0.180
σ		0.024	0.007	0.029	2.593	3.833	0.003	0.032	0.018
%RSD		482.200	74.540	33.610	81.030	65.760	67.520	53.470	10.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.193	-0.873	-0.992	0.001	0.100	0.310	0.000	-0.008
2	14:33:26	-0.234	-0.848	-0.775	-0.062	0.136	0.252	0.000	-0.011
3	14:34:10	-0.309	-0.803	-0.763	0.029	-0.334	-0.060	0.000	0.005
x		-0.245	-0.841	-0.844	-0.011	-0.033	0.167	0.000	-0.005
σ		0.059	0.035	0.129	0.046	0.262	0.199	0.000	0.009
%RSD		23.910	4.208	15.280	427.600	799.400	118.900	0.000	189.300

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	102.062%	2.725	2.595	102.714%	0.002	0.002	0.045	0.029
2	14:33:26	102.777%	2.574	2.408	102.486%	-0.002	0.003	-0.081	-0.052
3	14:34:10	102.424%	2.212	2.247	102.766%	0.002	0.005	-0.022	-0.003
x		102.421%	2.504	2.417	102.655%	0.001	0.003	-0.019	-0.008
σ		0.358%	0.264	0.174	0.149%	0.002	0.002	0.063	0.041
%RSD		0.349	10.540	7.212	0.145	424.000	45.590	328.000	483.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	102.928%	-0.076	0.706	0.772	-0.004	0.001	104.718%	104.139%
2	14:33:26	102.203%	-0.099	0.684	0.554	-0.004	-0.011	104.622%	104.047%
3	14:34:10	102.159%	-0.073	0.552	0.525	-0.026	0.026	104.634%	104.671%
x		102.430%	-0.083	0.647	0.617	-0.011	0.005	104.658%	104.286%
σ		0.431%	0.014	0.083	0.135	0.013	0.019	0.052%	0.337%
%RSD		0.421	17.320	12.840	21.890	113.700	376.400	0.050	0.323

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.001	0.007	0.189	0.209	0.200	103.474%
2	14:33:26	0.001	-0.001	0.068	0.085	0.078	104.356%
3	14:34:10	0.008	0.009	0.117	0.091	0.089	105.064%
x		0.003	0.005	0.125	0.129	0.122	104.298%
σ		0.004	0.005	0.061	0.070	0.067	0.796%
%RSD		154.300	108.200	48.810	54.400	55.200	0.764

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	92.077%	0.005	0.212	-0.020	0.000	7.642	1.037	1.395
2	14:40:36	90.154%	-0.018	0.072	-0.263	0.000	7.859	1.903	2.067
3	14:41:19	88.510%	0.022	-0.391	-0.285	0.000	9.346	3.389	2.333
x		90.247%	0.003	-0.035	-0.189	0.000	8.282	2.110	1.932
σ		1.785%	0.020	0.316	0.147	0.000	0.928	1.190	0.483
%RSD		1.978	723.400	892.700	77.630	0.000	11.200	56.390	25.030

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	1.361	1.956	0.000	0.286	-0.656	2.057	96.419%	-0.032
2	14:40:36	1.338	1.872	0.000	-2.153	4.570	-0.875	95.466%	-0.098
3	14:41:19	1.310	1.687	0.000	-2.080	-3.913	4.428	95.337%	0.022
x		1.336	1.838	0.000	-1.316	-0.000	1.870	95.741%	-0.036
σ		0.026	0.138	0.000	1.387	4.279	2.656	0.591%	0.060
%RSD		1.939	7.480	0.000	105.500	8678000.000	142.100	0.617	166.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	0.017	0.257	-0.066	4.679	2.609	-0.008	-0.069	-0.041
2	14:40:36	0.030	0.240	-0.093	1.915	-0.404	-0.003	-0.082	-0.022
3	14:41:19	0.102	0.224	-0.056	0.291	-1.327	-0.014	-0.091	-0.067
x		0.050	0.240	-0.072	2.295	0.292	-0.008	-0.081	-0.043
σ		0.046	0.017	0.019	2.219	2.058	0.005	0.011	0.023
%RSD		92.370	7.001	26.790	96.680	703.600	65.180	13.540	52.170

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	-0.073	-0.915	-1.005	-0.145	0.065	0.087	0.000	0.015
2	14:40:36	-0.074	-0.962	-1.066	0.005	-0.457	-0.024	0.000	0.007
3	14:41:19	-0.086	-0.962	-0.791	-0.229	0.353	0.018	0.000	0.011
x		-0.078	-0.947	-0.954	-0.123	-0.013	0.027	0.000	0.011
σ		0.007	0.027	0.145	0.119	0.411	0.056	0.000	0.004
%RSD		9.492	2.854	15.160	96.580	3184.000	207.100	0.000	38.870

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	98.175%	1.754	1.878	99.045%	0.000	0.017	0.032	0.050
2	14:40:36	97.956%	1.569	1.838	99.118%	0.016	0.015	-0.012	-0.001
3	14:41:19	98.139%	1.705	1.703	98.198%	0.017	0.013	-0.062	-0.046
x		98.090%	1.676	1.806	98.787%	0.011	0.015	-0.014	0.001
σ		0.117%	0.096	0.092	0.511%	0.009	0.002	0.047	0.048
%RSD		0.120	5.713	5.090	0.518	85.290	13.260	331.300	4325.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	98.175%	0.164	0.418	0.476	-0.001	-0.001	99.955%	100.446%
2	14:40:36	98.327%	0.135	0.445	0.402	-0.007	0.018	101.489%	102.893%
3	14:41:19	97.733%	0.065	0.345	0.355	0.021	0.028	102.120%	101.909%
x		98.078%	0.122	0.403	0.411	0.004	0.015	101.188%	101.749%
σ		0.309%	0.051	0.051	0.061	0.015	0.015	1.113%	1.231%
%RSD		0.315	42.080	12.750	14.790	364.700	95.730	1.100	1.210

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	0.024	0.034	0.368	0.327	0.319	107.083%
2	14:40:36	0.015	0.022	0.212	0.168	0.194	104.864%
3	14:41:19	0.012	0.010	0.179	0.161	0.163	102.981%
x		0.017	0.022	0.253	0.219	0.225	104.976%
σ		0.006	0.012	0.101	0.094	0.083	2.053%
%RSD		37.660	53.030	39.920	42.950	36.830	1.956

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	97.060%	49.470	933.100	939.200	0.000	46450.000	51770.000	52480.000
2	14:44:50	95.005%	48.520	933.200	976.800	0.000	46020.000	52520.000	53000.000
3	14:45:32	92.364%	46.930	951.400	987.200	0.000	46330.000	53810.000	54490.000
x		94.809%	48.300	939.200	967.700	0.000	46270.000	52700.000	53330.000
σ		2.354%	1.285	10.510	25.210	0.000	219.300	1033.000	1042.000
%RSD		2.483	2.659	1.119	2.605	0.000	0.474	1.961	1.954

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	1985.000	9345.000	0.000	48950.000	49690.000	49410.000	96.537%	969.400
2	14:44:50	2004.000	9477.000	0.000	48720.000	48910.000	49250.000	95.429%	986.600
3	14:45:32	2053.000	9611.000	0.000	48670.000	49440.000	50280.000	94.934%	981.100
x		2014.000	9478.000	0.000	48780.000	49350.000	49650.000	95.633%	979.000
σ		35.210	132.600	0.000	145.700	395.500	552.600	0.821%	8.776
%RSD		1.748	1.399	0.000	0.299	0.801	1.113	0.858	0.896

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	506.600	202.400	524.000	1050.000	1267.000	489.300	497.700	252.000
2	14:44:50	514.900	205.000	527.800	1047.000	1253.000	488.600	487.900	247.600
3	14:45:32	511.200	201.800	526.800	1039.000	1256.000	484.300	487.600	243.400
x		510.900	203.100	526.200	1045.000	1258.000	487.400	491.100	247.600
σ		4.131	1.707	1.985	5.577	7.317	2.655	5.735	4.297
%RSD		0.809	0.840	0.377	0.533	0.582	0.545	1.168	1.735

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	252.600	477.800	478.800	37.740	9.760	10.710	0.000	967.300
2	14:44:50	251.000	476.800	477.000	38.150	9.296	10.590	0.000	968.000
3	14:45:32	248.400	468.400	471.000	37.620	10.260	10.350	0.000	969.400
x		250.700	474.300	475.600	37.840	9.771	10.550	0.000	968.200
σ		2.113	5.177	4.068	0.279	0.480	0.183	0.000	1.096
%RSD		0.843	1.091	0.855	0.738	4.913	1.735	0.000	0.113

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	96.165%	1034.000	1036.000	91.564%	50.920	51.170	51.320	48.490
2	14:44:50	96.104%	1038.000	1045.000	91.560%	50.870	51.220	52.400	47.420
3	14:45:32	96.624%	1035.000	1038.000	91.901%	50.590	51.210	52.000	49.650
x		96.298%	1036.000	1040.000	91.675%	50.790	51.200	51.900	48.520
σ		0.284%	2.123	4.399	0.196%	0.177	0.023	0.546	1.112
%RSD		0.295	0.205	0.423	0.214	0.349	0.044	1.052	2.293

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	92.765%	1883.000	504.200	501.500	2001.000	1988.000	98.160%	98.800%
2	14:44:50	93.773%	1877.000	503.900	504.200	1998.000	1992.000	99.508%	100.006%
3	14:45:32	93.496%	1820.000	505.200	506.500	2008.000	1991.000	100.260%	100.767%
x		93.344%	1860.000	504.400	504.100	2002.000	1990.000	99.309%	99.858%
σ		0.521%	35.030	0.687	2.494	4.838	1.874	1.064%	0.992%
%RSD		0.558	1.883	0.136	0.495	0.242	0.094	1.071	0.994

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	48.620	48.870	20.440	21.600	21.090	96.439%
2	14:44:50	49.300	49.800	20.750	21.970	21.420	98.306%
3	14:45:32	49.460	49.870	20.870	22.150	21.500	99.589%
x		49.120	49.510	20.690	21.900	21.340	98.111%
σ		0.448	0.559	0.219	0.281	0.221	1.584%
%RSD		0.911	1.128	1.059	1.285	1.034	1.615

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	96.886%	49.020	916.800	962.600	0.000	46880.000	53780.000	54250.000
2	14:49:04	94.616%	46.430	908.000	948.000	0.000	46220.000	54570.000	55280.000
3	14:49:47	92.773%	47.840	940.300	973.700	0.000	46420.000	55110.000	55650.000
x		94.758%	47.770	921.700	961.400	0.000	46510.000	54490.000	55060.000
σ		2.060%	1.298	16.710	12.890	0.000	337.000	665.400	724.800
%RSD		2.174	2.717	1.813	1.341	0.000	0.725	1.221	1.316

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	2040.000	9683.000	0.000	48980.000	50100.000	50720.000	97.193%	995.300
2	14:49:04	2052.000	9615.000	0.000	47860.000	49540.000	48800.000	96.566%	996.100
3	14:49:47	2084.000	9799.000	0.000	47760.000	49570.000	51460.000	96.331%	1004.000
x		2059.000	9699.000	0.000	48200.000	49730.000	50330.000	96.697%	998.600
σ		23.170	93.170	0.000	678.200	318.800	1370.000	0.445%	5.072
%RSD		1.126	0.961	0.000	1.407	0.641	2.723	0.460	0.508

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	515.100	205.300	533.100	1056.000	1259.000	497.100	499.400	252.600
2	14:49:04	507.200	203.800	528.600	1045.000	1251.000	485.400	489.700	246.700
3	14:49:47	511.500	203.700	533.600	1043.000	1233.000	485.900	489.200	245.700
x		511.200	204.300	531.800	1048.000	1248.000	489.400	492.800	248.300
σ		3.959	0.928	2.769	7.199	13.100	6.631	5.763	3.709
%RSD		0.774	0.454	0.521	0.687	1.050	1.355	1.169	1.493

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	252.400	482.100	481.200	38.860	10.390	11.360	0.000	995.600
2	14:49:04	247.900	475.400	476.500	38.950	9.940	10.870	0.000	983.800
3	14:49:47	249.000	474.100	477.300	38.000	9.903	10.700	0.000	999.700
x		249.700	477.200	478.300	38.600	10.080	10.980	0.000	993.100
σ		2.375	4.274	2.535	0.527	0.271	0.343	0.000	8.255
%RSD		0.951	0.895	0.530	1.364	2.691	3.120	0.000	0.831

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	96.259%	1072.000	1074.000	91.563%	52.360	52.720	53.090	50.580
2	14:49:04	96.987%	1080.000	1080.000	91.135%	52.530	51.740	52.350	50.870
3	14:49:47	96.996%	1081.000	1083.000	91.185%	51.820	53.250	52.250	50.330
x		96.748%	1078.000	1079.000	91.295%	52.240	52.570	52.560	50.590
σ		0.423%	4.752	4.682	0.234%	0.367	0.768	0.460	0.267
%RSD		0.437	0.441	0.434	0.256	0.703	1.462	0.875	0.527

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	93.234%	1923.000	522.500	522.300	2059.000	2054.000	98.145%	99.124%
2	14:49:04	94.091%	1925.000	524.800	522.800	2066.000	2060.000	99.709%	101.594%
3	14:49:47	93.887%	1946.000	522.100	522.500	2041.000	2044.000	101.198%	100.934%
x		93.737%	1931.000	523.100	522.600	2055.000	2053.000	99.684%	100.551%
σ		0.448%	13.060	1.429	0.244	12.720	8.209	1.527%	1.279%
%RSD		0.478	0.676	0.273	0.047	0.619	0.400	1.531	1.272

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	50.520	50.780	21.350	22.580	22.010	98.334%
2	14:49:04	50.800	50.970	21.930	22.870	22.480	100.202%
3	14:49:47	50.940	50.990	21.540	23.150	22.280	102.051%
x		50.750	50.910	21.610	22.870	22.260	100.196%
σ		0.213	0.119	0.291	0.285	0.236	1.859%
%RSD		0.419	0.234	1.349	1.247	1.061	1.855

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	0.000	0.073	2883.000	2960.000	0.000	839900.000	26770.000	26690.000
2	14:56:53	0.000	0.028	2822.000	2911.000	0.000	820400.000	26850.000	26990.000
3	14:57:36	0.000	0.067	2767.000	2847.000	0.000	807700.000	26950.000	27160.000
x		0.000	0.056	2824.000	2906.000	0.000	822700.000	26860.000	26950.000
σ		0.000	0.025	58.250	56.640	0.000	16220.000	85.410	237.900
%RSD		0.000	44.120	2.063	1.949	0.000	1.972	0.318	0.883

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	2.110	375.900	0.000	2339.000	302900.000	302200.000	93.875%	27.840
2	14:56:53	2.003	369.300	0.000	2313.000	303000.000	303600.000	93.210%	27.650
3	14:57:36	1.955	358.300	0.000	2245.000	294100.000	300000.000	92.873%	24.840
x		2.023	367.800	0.000	2299.000	300000.000	301900.000	93.319%	26.770
σ		0.079	8.892	0.000	48.540	5104.000	1799.000	0.510%	1.681
%RSD		3.918	2.417	0.000	2.111	1.701	0.596	0.546	6.278

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	-8.458	-20.970	175.000	5144.000	6263.000	0.354	-0.675	6.352
2	14:56:53	-7.789	-20.190	174.800	5087.000	6206.000	0.324	-0.526	6.279
3	14:57:36	-7.912	-19.460	173.900	5033.000	5975.000	0.324	-0.879	6.348
x		-8.053	-20.210	174.600	5088.000	6148.000	0.334	-0.693	6.326
σ		0.356	0.753	0.537	55.620	152.600	0.017	0.177	0.041
%RSD		4.422	3.729	0.308	1.093	2.482	5.127	25.600	0.642

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	32.960	66.840	-1667.000	2.028	0.567	11.270	0.000	81280.000
2	14:56:53	32.100	65.890	-1532.000	0.815	0.339	11.310	0.000	81200.000
3	14:57:36	31.120	63.800	-1508.000	1.187	0.913	10.980	0.000	81060.000
x		32.060	65.510	-1569.000	1.344	0.607	11.180	0.000	81180.000
σ		0.922	1.554	85.510	0.622	0.289	0.176	0.000	107.600
%RSD		2.876	2.372	5.450	46.250	47.690	1.571	0.000	0.133

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	92.384%	8.367	8.156	84.555%	0.069	0.035	0.257	0.164
2	14:56:53	94.074%	6.480	6.626	85.394%	0.076	0.033	0.069	0.044
3	14:57:36	94.543%	5.594	5.377	84.631%	0.063	0.020	0.139	0.097
x		93.667%	6.814	6.720	84.860%	0.069	0.029	0.155	0.102
σ		1.135%	1.416	1.392	0.464%	0.006	0.008	0.095	0.060
%RSD		1.212	20.780	20.710	0.547	8.725	28.910	61.470	59.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	86.961%	6.457	1.024	4.218	200400.000	198100.000	92.365%	92.683%
2	14:56:53	86.946%	4.623	1.007	4.293	200500.000	199100.000	94.979%	95.363%
3	14:57:36	87.645%	3.550	0.980	4.507	198800.000	197900.000	95.183%	95.486%
x		87.184%	4.877	1.004	4.339	199900.000	198400.000	94.176%	94.511%
σ		0.399%	1.470	0.022	0.150	917.800	666.800	1.571%	1.584%
%RSD		0.458	30.150	2.220	3.457	0.459	0.336	1.669	1.676

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	0.148	0.173	2.377	2.117	2.259	83.953%
2	14:56:53	0.130	0.115	2.236	2.130	2.176	86.051%
3	14:57:36	0.113	0.110	2.211	2.092	2.158	87.381%
x		0.130	0.133	2.274	2.113	2.198	85.795%
σ		0.017	0.035	0.089	0.020	0.054	1.728%
%RSD		13.290	26.540	3.928	0.927	2.449	2.015

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	79.091%	0.001	634.900	665.300	0.000	181300.000	5793.000	5812.000
2	15:01:09	78.904%	0.019	636.200	658.500	0.000	181400.000	5854.000	5875.000
3	15:01:52	79.262%	0.019	624.900	650.800	0.000	182400.000	5868.000	5854.000
x		79.086%	0.013	632.000	658.200	0.000	181700.000	5838.000	5847.000
σ		0.179%	0.010	6.190	7.271	0.000	620.300	40.010	31.840
%RSD		0.227	82.570	0.979	1.105	0.000	0.341	0.685	0.544

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	0.582	81.120	0.000	488.400	59800.000	60190.000	93.114%	3.926
2	15:01:09	3.156	83.840	0.000	496.700	59390.000	59380.000	91.127%	3.528
3	15:01:52	3.465	81.460	0.000	483.600	59310.000	59200.000	92.032%	3.848
x		2.401	82.140	0.000	489.600	59500.000	59590.000	92.091%	3.768
σ		1.583	1.481	0.000	6.616	264.400	525.800	0.995%	0.211
%RSD		65.920	1.803	0.000	1.351	0.444	0.882	1.081	5.606

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	-1.386	-3.783	33.990	1030.000	1243.000	0.109	-0.113	1.572
2	15:01:09	-1.390	-3.791	35.070	1033.000	1261.000	0.141	-0.061	1.650
3	15:01:52	-1.624	-3.762	34.480	1018.000	1232.000	0.149	-0.057	1.581
x		-1.467	-3.778	34.520	1027.000	1245.000	0.133	-0.077	1.601
σ		0.136	0.015	0.541	7.604	14.290	0.021	0.031	0.043
%RSD		9.299	0.394	1.568	0.740	1.147	16.060	40.410	2.670

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	6.346	12.300	2.595	0.645	0.249	2.582	0.000	16270.000
2	15:01:09	6.495	12.120	0.122	0.219	-0.158	1.867	0.000	16250.000
3	15:01:52	5.938	12.620	2.202	0.646	-0.202	3.022	0.000	16270.000
x		6.260	12.350	1.639	0.503	-0.037	2.491	0.000	16270.000
σ		0.288	0.252	1.329	0.246	0.249	0.583	0.000	11.270
%RSD		4.605	2.041	81.060	48.940	676.500	23.410	0.000	0.069

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	94.644%	1.534	1.494	91.900%	0.020	0.006	0.019	-0.003
2	15:01:09	95.116%	1.598	1.611	91.573%	0.018	0.012	0.027	0.017
3	15:01:52	94.707%	1.624	1.572	90.914%	0.021	0.007	0.057	0.034
x		94.822%	1.585	1.559	91.463%	0.020	0.008	0.034	0.016
σ		0.256%	0.046	0.060	0.503%	0.002	0.004	0.020	0.019
%RSD		0.270	2.895	3.828	0.550	8.402	42.580	59.230	117.600

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	92.075%	0.636	0.194	0.469	39430.000	39160.000	97.040%	98.205%
2	15:01:09	92.132%	0.729	0.248	0.541	39660.000	39270.000	97.853%	98.981%
3	15:01:52	92.199%	0.770	0.288	0.507	39140.000	38990.000	98.806%	98.923%
x		92.135%	0.712	0.243	0.505	39410.000	39140.000	97.900%	98.703%
σ		0.062%	0.068	0.047	0.036	260.900	138.500	0.884%	0.432%
%RSD		0.068	9.616	19.450	7.131	0.662	0.354	0.903	0.438

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	0.046	0.049	0.250	0.286	0.277	94.806%
2	15:01:09	0.065	0.046	0.354	0.344	0.362	95.064%
3	15:01:52	0.047	0.061	0.358	0.294	0.325	95.176%
x		0.053	0.052	0.321	0.308	0.321	95.015%
σ		0.011	0.008	0.061	0.031	0.043	0.190%
%RSD		20.110	15.680	19.040	10.150	13.250	0.199

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	87.549%	0.006	302.700	303.200	0.000	87850.000	2720.000	2718.000
2	15:05:24	84.034%	-0.001	307.000	311.400	0.000	87100.000	2726.000	2807.000
3	15:06:07	83.888%	0.008	300.300	306.100	0.000	86720.000	2767.000	2809.000
x		85.157%	0.004	303.300	306.900	0.000	87220.000	2737.000	2778.000
σ		2.073%	0.005	3.420	4.183	0.000	574.500	25.370	51.660
%RSD		2.434	104.800	1.127	1.363	0.000	0.659	0.927	1.860

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	-0.637	39.020	0.000	232.900	29660.000	28400.000	93.198%	1.327
2	15:05:24	0.298	39.940	0.000	238.200	29070.000	28040.000	91.661%	1.226
3	15:06:07	1.848	38.590	0.000	236.300	28740.000	28160.000	91.507%	1.586
x		0.503	39.180	0.000	235.800	29160.000	28200.000	92.122%	1.380
σ		1.255	0.692	0.000	2.698	467.900	183.400	0.935%	0.185
%RSD		249.600	1.765	0.000	1.144	1.605	0.650	1.015	13.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	-0.916	-1.947	17.160	522.300	603.600	0.042	-0.074	0.697
2	15:05:24	-0.492	-1.826	17.670	526.400	620.500	0.027	-0.070	0.843
3	15:06:07	-0.768	-1.977	17.250	520.500	607.800	0.042	0.006	0.752
x		-0.725	-1.917	17.360	523.100	610.600	0.037	-0.046	0.764
σ		0.215	0.079	0.274	3.002	8.774	0.009	0.045	0.074
%RSD		29.640	4.145	1.575	0.574	1.437	24.020	97.730	9.632

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	2.979	5.631	3.426	0.104	-0.165	1.004	0.000	8109.000
2	15:05:24	3.316	5.755	-1.592	0.376	0.084	1.498	0.000	8083.000
3	15:06:07	2.824	5.688	-2.599	0.407	-0.281	1.461	0.000	8120.000
x		3.040	5.691	-0.255	0.296	-0.121	1.321	0.000	8104.000
σ		0.252	0.062	3.227	0.167	0.187	0.275	0.000	18.690
%RSD		8.287	1.096	1266.000	56.310	154.600	20.810	0.000	0.231

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	93.494%	0.852	0.848	92.065%	-0.001	-0.005	-0.037	-0.026
2	15:05:24	93.926%	0.742	0.775	91.903%	-0.005	-0.010	0.016	0.010
3	15:06:07	94.313%	0.749	0.757	92.000%	0.003	0.006	-0.032	-0.034
x		93.911%	0.781	0.793	91.989%	-0.001	-0.003	-0.018	-0.017
σ		0.410%	0.062	0.048	0.082%	0.004	0.008	0.029	0.023
%RSD		0.437	7.882	6.091	0.089	479.000	251.900	164.700	139.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	92.700%	0.083	0.051	0.148	19530.000	19330.000	96.655%	96.663%
2	15:05:24	92.898%	0.080	0.070	0.168	19440.000	19440.000	97.364%	99.009%
3	15:06:07	92.899%	0.131	0.080	0.164	19520.000	19440.000	98.105%	98.511%
x		92.832%	0.098	0.067	0.160	19500.000	19400.000	97.375%	98.061%
σ		0.114%	0.029	0.015	0.010	50.430	64.830	0.725%	1.236%
%RSD		0.123	29.370	22.410	6.492	0.259	0.334	0.745	1.261

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	0.015	0.020	0.146	0.108	0.121	95.475%
2	15:05:24	0.024	0.014	0.134	0.113	0.134	96.394%
3	15:06:07	0.008	0.018	0.187	0.181	0.182	96.734%
x		0.015	0.017	0.156	0.134	0.145	96.201%
σ		0.008	0.003	0.028	0.041	0.033	0.651%
%RSD		50.750	15.670	17.920	30.610	22.420	0.677

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	95.733%	-0.019	4.742	3.791	0.000	6.223	-0.136	-0.485
2	15:19:32	94.591%	-0.004	3.427	3.476	0.000	9.622	0.213	-0.117
3	15:20:15	92.414%	-0.019	3.620	3.404	0.000	10.230	0.038	-0.025
x		94.246%	-0.014	3.930	3.557	0.000	8.691	0.038	-0.209
σ		1.686%	0.009	0.710	0.206	0.000	2.159	0.174	0.243
%RSD		1.789	64.310	18.070	5.791	0.000	24.840	454.300	116.400

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	-0.486	0.107	0.000	-3.010	20.540	0.598	93.132%	-0.095
2	15:19:32	-0.400	0.107	0.000	-3.785	22.740	2.834	91.898%	-0.147
3	15:20:15	-0.503	0.389	0.000	-3.675	26.430	3.201	91.567%	-0.129
x		-0.463	0.201	0.000	-3.490	23.240	2.211	92.199%	-0.124
σ		0.055	0.163	0.000	0.419	2.979	1.409	0.825%	0.026
%RSD		11.990	81.090	0.000	12.010	12.820	63.720	0.895	21.290

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	0.082	0.007	-0.054	-10.310	-8.361	0.003	-0.077	-0.149
2	15:19:32	0.030	-0.019	-0.037	-10.650	-6.492	-0.005	-0.072	-0.109
3	15:20:15	0.034	-0.001	-0.043	-10.860	-6.423	-0.007	-0.072	-0.153
x		0.049	-0.004	-0.045	-10.610	-7.092	-0.003	-0.074	-0.137
σ		0.029	0.013	0.009	0.279	1.099	0.005	0.003	0.024
%RSD		59.510	297.700	19.910	2.626	15.500	187.300	4.352	17.730

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	-0.138	0.757	0.544	0.028	-0.436	-0.029	0.000	0.253
2	15:19:32	-0.215	0.947	0.782	0.123	-0.702	0.446	0.000	0.479
3	15:20:15	-0.227	0.464	0.673	0.144	-0.375	0.634	0.000	0.452
x		-0.193	0.723	0.666	0.098	-0.504	0.350	0.000	0.395
σ		0.049	0.243	0.119	0.062	0.174	0.342	0.000	0.124
%RSD		25.180	33.700	17.890	63.190	34.450	97.460	0.000	31.360

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	92.295%	0.290	0.221	94.956%	0.003	-0.003	0.004	-0.011
2	15:19:32	93.548%	0.196	0.243	95.184%	-0.004	-0.005	0.014	0.008
3	15:20:15	93.185%	0.194	0.285	94.594%	-0.004	-0.003	-0.004	0.006
x		93.009%	0.226	0.250	94.911%	-0.002	-0.004	0.004	0.001
σ		0.645%	0.055	0.033	0.298%	0.004	0.001	0.009	0.010
%RSD		0.693	24.230	13.010	0.314	222.600	31.480	201.400	880.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	92.958%	-0.142	-0.021	-0.024	1.973	1.784	95.050%	95.143%
2	15:19:32	94.084%	-0.083	-0.003	-0.010	2.361	2.323	96.082%	95.154%
3	15:20:15	94.002%	-0.148	-0.013	-0.021	2.183	2.192	96.099%	95.828%
x		93.681%	-0.124	-0.013	-0.018	2.172	2.100	95.744%	95.375%
σ		0.628%	0.036	0.009	0.007	0.194	0.281	0.601%	0.392%
%RSD		0.670	28.890	74.820	38.640	8.941	13.380	0.628	0.411

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	0.004	-0.001	0.194	0.185	0.177	97.830%
2	15:19:32	-0.003	0.003	0.119	0.112	0.111	98.331%
3	15:20:15	0.003	0.001	0.058	0.061	0.060	98.040%
x		0.001	0.001	0.123	0.119	0.116	98.067%
σ		0.004	0.002	0.068	0.062	0.058	0.252%
%RSD		287.600	283.700	55.390	52.220	50.480	0.257

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	94.780%	48.150	895.700	926.000	0.000	46810.000	51450.000	52690.000
2	15:23:47	94.077%	45.660	874.000	919.500	0.000	46380.000	52950.000	53200.000
3	15:24:30	89.400%	47.440	909.400	954.500	0.000	46550.000	54390.000	55060.000
x		92.752%	47.080	893.000	933.300	0.000	46580.000	52930.000	53650.000
σ		2.924%	1.280	17.890	18.610	0.000	214.800	1467.000	1249.000
%RSD		3.153	2.719	2.004	1.993	0.000	0.461	2.771	2.328

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	2004.000	4197.000	0.000	48440.000	49010.000	47810.000	94.112%	960.800
2	15:23:47	2002.000	4137.000	0.000	47770.000	48650.000	48510.000	92.849%	960.200
3	15:24:30	2068.000	4256.000	0.000	47650.000	48550.000	48540.000	92.166%	965.000
x		2025.000	4196.000	0.000	47950.000	48740.000	48280.000	93.042%	962.000
σ		37.740	59.660	0.000	426.100	244.800	414.300	0.987%	2.611
%RSD		1.864	1.422	0.000	0.889	0.502	0.858	1.061	0.271

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	493.800	205.600	512.400	1098.000	1285.000	480.900	483.700	244.000
2	15:23:47	501.000	209.900	517.500	1088.000	1285.000	482.700	482.400	241.300
3	15:24:30	491.000	205.100	518.000	1085.000	1242.000	471.700	475.000	239.500
x		495.300	206.900	516.000	1090.000	1271.000	478.400	480.400	241.600
σ		5.182	2.652	3.133	7.137	24.470	5.918	4.682	2.310
%RSD		1.046	1.282	0.607	0.655	1.925	1.237	0.975	0.956

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	246.400	463.000	464.200	36.150	9.067	9.562	0.000	965.300
2	15:23:47	244.000	462.500	464.500	35.190	8.515	9.550	0.000	961.700
3	15:24:30	238.500	459.000	456.800	36.210	8.835	9.226	0.000	954.400
x		243.000	461.500	461.900	35.850	8.806	9.446	0.000	960.500
σ		4.077	2.179	4.379	0.571	0.277	0.190	0.000	5.515
%RSD		1.678	0.472	0.948	1.592	3.144	2.016	0.000	0.574

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	93.772%	998.000	998.100	90.977%	49.000	49.460	50.130	47.970
2	15:23:47	94.490%	1009.000	1006.000	90.403%	49.410	49.660	49.340	48.110
3	15:24:30	94.168%	1015.000	1017.000	89.440%	49.730	49.120	50.380	45.630
x		94.143%	1007.000	1007.000	90.273%	49.380	49.410	49.950	47.240
σ		0.359%	8.431	9.775	0.776%	0.367	0.274	0.545	1.392
%RSD		0.382	0.837	0.971	0.860	0.744	0.554	1.091	2.946

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	91.085%	1805.000	488.500	488.000	1945.000	1948.000	96.777%	96.711%
2	15:23:47	91.837%	1838.000	487.600	489.200	1957.000	1954.000	97.924%	98.514%
3	15:24:30	91.607%	1851.000	488.700	490.800	1943.000	1943.000	98.272%	98.812%
x		91.510%	1831.000	488.300	489.400	1948.000	1948.000	97.658%	98.013%
σ		0.385%	23.710	0.574	1.413	7.675	5.444	0.782%	1.137%
%RSD		0.421	1.294	0.117	0.289	0.394	0.279	0.801	1.160

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	49.600	49.910	20.970	21.890	21.520	90.824%
2	15:23:47	50.350	50.650	20.840	22.150	21.540	93.340%
3	15:24:30	49.960	50.610	21.230	22.360	21.850	93.744%
x		49.970	50.390	21.010	22.130	21.640	92.636%
σ		0.377	0.417	0.202	0.236	0.183	1.582%
%RSD		0.755	0.827	0.959	1.065	0.845	1.708

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	87.826%	1.331	48.710	48.330	0.000	1774.000	747000.000	748500.000
2	15:31:39	84.815%	1.520	49.480	49.240	0.000	1756.000	763600.000	771400.000
3	15:32:22	85.374%	1.259	46.670	48.620	0.000	1737.000	757300.000	766400.000
x		86.005%	1.370	48.290	48.730	0.000	1756.000	756000.000	762100.000
σ		1.602%	0.135	1.452	0.466	0.000	18.390	8385.000	12050.000
%RSD		1.863	9.817	3.008	0.955	0.000	1.048	1.109	1.582

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	12160.000	2143.000	0.000	1811.000	1354000.000	1387000.000	90.662%	631.500
2	15:31:39	12450.000	2151.000	0.000	1783.000	1345000.000	1374000.000	90.625%	631.000
3	15:32:22	12390.000	2183.000	0.000	1796.000	1346000.000	1374000.000	89.867%	631.900
x		12330.000	2159.000	0.000	1797.000	1348000.000	1378000.000	90.384%	631.500
σ		152.200	21.000	0.000	14.300	4791.000	7860.000	0.449%	0.441
%RSD		1.234	0.973	0.000	0.796	0.355	0.570	0.497	0.070

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	102.600	58.430	3487.000	72450.000	77520.000	21.920	31.810	72.340
2	15:31:39	103.300	57.900	3501.000	72470.000	76880.000	21.430	31.410	73.580
3	15:32:22	102.400	58.860	3495.000	72410.000	77030.000	21.450	30.340	72.310
x		102.800	58.400	3494.000	72450.000	77140.000	21.600	31.190	72.740
σ		0.516	0.483	7.184	31.510	331.100	0.282	0.758	0.727
%RSD		0.502	0.828	0.206	0.043	0.429	1.304	2.430	0.999

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	75.250	521.900	524.200	21.790	1.470	2.839	0.000	472.200
2	15:31:39	76.620	525.500	529.300	22.800	1.920	2.297	0.000	481.200
3	15:32:22	75.020	520.700	524.800	23.470	1.487	2.808	0.000	473.700
x		75.630	522.700	526.100	22.690	1.626	2.648	0.000	475.700
σ		0.867	2.473	2.815	0.845	0.255	0.304	0.000	4.812
%RSD		1.146	0.473	0.535	3.723	15.680	11.480	0.000	1.012

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	0.000	12.240	12.290	81.348%	0.134	0.142	2.473	2.379
2	15:31:39	0.000	11.610	11.620	80.834%	0.163	0.139	2.464	2.240
3	15:32:22	0.000	10.900	10.740	82.530%	0.141	0.139	2.359	2.133
x		0.000	11.580	11.550	81.571%	0.146	0.140	2.432	2.251
σ		0.000	0.672	0.779	0.870%	0.015	0.002	0.063	0.123
%RSD		0.000	5.803	6.744	1.066	10.510	1.363	2.601	5.483

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	82.164%	38.190	1.272	1.560	196.300	194.200	92.192%	92.666%
2	15:31:39	83.549%	37.030	1.092	1.590	195.900	194.300	93.712%	94.614%
3	15:32:22	83.360%	35.640	1.192	1.508	194.900	192.200	94.113%	94.833%
x		83.024%	36.950	1.185	1.553	195.700	193.600	93.339%	94.038%
σ		0.751%	1.276	0.090	0.041	0.734	1.223	1.014%	1.193%
%RSD		0.905	3.453	7.621	2.654	0.375	0.632	1.086	1.268

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	0.426	0.419	178.800	169.700	173.300	79.954%
2	15:31:39	0.433	0.415	178.300	169.500	173.600	81.678%
3	15:32:22	0.409	0.402	178.300	169.900	173.600	81.908%
x		0.423	0.412	178.500	169.700	173.500	81.180%
σ		0.012	0.009	0.309	0.182	0.174	1.068%
%RSD		2.895	2.081	0.173	0.107	0.100	1.315

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	88.058%	1.187	42.280	43.480	0.000	2170.000	610300.000	615000.000
2	15:35:56	85.800%	1.126	41.840	43.550	0.000	2149.000	614700.000	622000.000
3	15:36:39	84.870%	1.349	40.960	42.730	0.000	2151.000	622800.000	622500.000
x		86.243%	1.221	41.700	43.250	0.000	2157.000	615900.000	619800.000
σ		1.639%	0.115	0.674	0.455	0.000	11.480	6314.000	4222.000
%RSD		1.901	9.455	1.617	1.053	0.000	0.532	1.025	0.681

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	23480.000	2610.000	0.000	2873.000	1047000.000	1068000.000	92.555%	1278.000
2	15:35:56	23790.000	2658.000	0.000	2841.000	1041000.000	1060000.000	91.688%	1303.000
3	15:36:39	23780.000	2610.000	0.000	2840.000	1050000.000	1068000.000	90.893%	1285.000
x		23680.000	2626.000	0.000	2851.000	1046000.000	1065000.000	91.712%	1289.000
σ		174.300	27.930	0.000	18.530	4409.000	4372.000	0.831%	12.870
%RSD		0.736	1.064	0.000	0.650	0.421	0.410	0.907	0.999

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	137.900	109.500	3338.000	93800.000	96230.000	28.720	66.080	126.700
2	15:35:56	138.000	109.300	3327.000	93440.000	96290.000	28.350	65.150	125.000
3	15:36:39	137.800	110.200	3345.000	92530.000	96180.000	28.510	64.420	124.700
x		137.900	109.700	3336.000	93260.000	96230.000	28.530	65.220	125.500
σ		0.117	0.445	9.149	651.300	55.180	0.185	0.830	1.075
%RSD		0.085	0.406	0.274	0.698	0.057	0.649	1.273	0.857

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	128.700	673.800	680.700	22.030	1.775	2.600	0.000	394.900
2	15:35:56	129.500	670.300	667.800	21.580	1.493	2.593	0.000	399.100
3	15:36:39	126.700	669.400	675.100	22.160	1.681	1.928	0.000	400.000
x		128.300	671.200	674.500	21.920	1.649	2.374	0.000	398.000
σ		1.474	2.325	6.477	0.302	0.143	0.386	0.000	2.709
%RSD		1.149	0.346	0.960	1.379	8.694	16.280	0.000	0.681

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.000	14.060	13.870	83.521%	0.221	0.182	2.036	2.081
2	15:35:56	0.000	13.190	13.620	84.055%	0.222	0.183	1.952	1.955
3	15:36:39	0.000	13.630	13.560	83.398%	0.186	0.179	2.163	1.951
x		0.000	13.630	13.690	83.658%	0.210	0.181	2.050	1.996
σ		0.000	0.434	0.166	0.349%	0.021	0.002	0.107	0.074
%RSD		0.000	3.185	1.211	0.417	9.874	0.928	5.195	3.696

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	84.979%	33.670	3.645	3.921	200.000	202.700	94.489%	95.245%
2	15:35:56	85.792%	32.770	3.707	4.151	201.700	200.900	96.616%	97.184%
3	15:36:39	85.132%	31.660	3.750	3.857	201.300	201.000	96.603%	96.103%
x		85.301%	32.700	3.701	3.976	201.000	201.500	95.903%	96.177%
σ		0.432%	1.007	0.053	0.155	0.894	1.019	1.224%	0.972%
%RSD		0.506	3.078	1.422	3.887	0.445	0.506	1.276	1.010

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.595	0.577	357.800	347.400	353.100	83.106%
2	15:35:56	0.570	0.564	359.900	351.000	353.900	84.923%
3	15:36:39	0.545	0.591	358.000	348.300	351.800	85.487%
x		0.570	0.577	358.600	348.900	353.000	84.506%
σ		0.025	0.014	1.169	1.875	1.057	1.244%
%RSD		4.351	2.379	0.326	0.537	0.299	1.473

CCV 309497 2/5/2012 3:41:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	96.542%	101.800	95.610	94.990	0.000	50790.000	50780.000	50970.000
2	15:43:04	94.509%	99.410	93.760	95.850	0.000	50700.000	51230.000	51960.000
3	15:43:47	94.453%	96.420	90.090	93.820	0.000	49610.000	51530.000	52090.000
x		95.168%	99.216%	93.156%	94.885%	0.000	100.735%	102.358%	103.347%
σ		1.190%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.251	2.720	3.016	1.071	0.000	1.301	0.736	1.188

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	519.100	5181.000	0.000	51480.000	50820.000	49150.000	94.067%	100.800
2	15:43:04	526.400	5248.000	0.000	51080.000	50040.000	49060.000	94.174%	99.200
3	15:43:47	519.800	5126.000	0.000	50040.000	49420.000	48980.000	94.738%	99.290
x		104.360%	103.697%	0.000	101.734%	100.180%	98.120%	94.326%	99.757%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.360%	n/a
%RSD		0.772	1.180	0.000	1.464	1.398	0.174	0.382	0.894

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	100.400	101.700	521.700	26220.000	26610.000	102.300	101.600	103.000
2	15:43:04	102.600	102.200	522.200	26250.000	26500.000	101.400	101.800	102.100
3	15:43:47	99.380	100.800	524.700	25980.000	26040.000	100.700	100.100	102.200
x		100.793%	101.538%	104.573%	104.594%	105.539%	101.478%	101.158%	102.432%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.631	0.685	0.312	0.573	1.162	0.783	0.943	0.469

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	104.100	104.300	103.100	105.200	105.200	104.200	0.000	101.200
2	15:43:04	101.600	102.500	102.000	102.200	103.800	104.000	0.000	101.500
3	15:43:47	102.000	103.500	102.200	103.400	102.400	104.100	0.000	101.000
x		102.552%	103.452%	102.451%	103.584%	103.792%	104.115%	0.000	101.232%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.296	0.883	0.535	1.464	1.339	0.110	0.000	0.229

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	91.958%	97.470	96.870	91.348%	100.100	100.200	100.900	102.200
2	15:43:04	93.666%	98.860	99.690	93.011%	98.980	100.000	102.200	102.100
3	15:43:47	93.762%	101.300	101.000	92.897%	99.390	100.300	102.100	103.300
x		93.129%	99.227%	99.184%	92.419%	99.483%	100.159%	101.748%	102.540%
σ		1.015%	n/a	n/a	0.929%	n/a	n/a	n/a	n/a
%RSD		1.090	1.978	2.125	1.005	0.561	0.106	0.705	0.649

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	91.553%	97.770	93.260	93.260	99.810	101.100	93.129%	92.536%
2	15:43:04	92.645%	98.710	96.600	96.880	100.400	99.510	94.751%	95.006%
3	15:43:47	92.505%	97.870	97.840	98.530	101.200	101.200	95.077%	95.713%
x		92.235%	98.119%	95.902%	96.225%	100.451%	100.599%	94.319%	94.419%
σ		0.594%	n/a	n/a	n/a	n/a	n/a	1.043%	1.668%
%RSD		0.645	0.526	2.470	2.802	0.683	0.936	1.106	1.767

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	98.480	98.540	100.900	100.100	100.600	91.084%
2	15:43:04	99.810	99.980	101.600	100.900	101.800	91.982%
3	15:43:47	99.740	99.950	102.600	102.000	102.000	92.822%
x		99.342%	99.493%	101.668%	101.019%	101.473%	91.962%
σ		n/a	n/a	n/a	n/a	n/a	0.869%
%RSD		0.752	0.827	0.848	0.971	0.738	0.945

CCB2 2/5/2012 3:48:48 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	101.631%	-0.005	2.694	2.091	0.000	0.921	2.345	1.930
2	15:50:14	99.058%	-0.005	1.905	1.894	0.000	2.009	3.573	3.592
3	15:50:56	99.438%	-0.019	2.221	1.697	0.000	3.829	10.340	10.870
x		100.042%	-0.010	2.273	1.894	0.000	2.253	5.419	5.464
σ		1.389%	0.008	0.397	0.197	0.000	1.469	4.305	4.755
%RSD		1.388	85.990	17.470	10.410	0.000	65.200	79.440	87.020

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	-1.097	0.338	0.000	-2.055	2.421	4.681	97.862%	0.050
2	15:50:14	-1.036	-0.190	0.000	-3.869	17.090	4.954	98.642%	-0.135
3	15:50:56	-0.947	0.278	0.000	-2.125	57.810	15.050	96.624%	-0.083
x		-1.027	0.142	0.000	-2.683	25.780	8.227	97.709%	-0.056
σ		0.076	0.289	0.000	1.028	28.700	5.907	1.017%	0.095
%RSD		7.372	203.800	0.000	38.300	111.300	71.800	1.041	169.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	0.074	0.006	0.029	5.440	8.884	-0.021	-0.115	-0.187
2	15:50:14	-0.003	-0.026	0.055	0.404	1.938	-0.010	-0.112	-0.237
3	15:50:56	0.011	-0.004	0.067	-0.526	2.772	-0.006	-0.083	-0.236
x		0.027	-0.008	0.050	1.773	4.531	-0.012	-0.103	-0.220
σ		0.041	0.017	0.019	3.210	3.793	0.007	0.018	0.029
%RSD		151.400	203.700	38.780	181.100	83.700	61.200	17.040	12.980

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	-0.273	-0.961	-0.899	-0.114	0.193	0.108	0.000	0.002
2	15:50:14	-0.197	-0.934	-1.027	-0.056	-0.399	0.035	0.000	0.005
3	15:50:56	-0.225	-0.809	-0.909	0.159	-0.355	0.226	0.000	0.047
x		-0.231	-0.901	-0.945	-0.004	-0.187	0.123	0.000	0.018
σ		0.039	0.081	0.071	0.144	0.330	0.096	0.000	0.025
%RSD		16.640	8.963	7.505	4109.000	176.500	78.340	0.000	138.200

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	96.662%	0.745	0.720	100.919%	0.001	0.003	-0.086	-0.064
2	15:50:14	97.845%	0.628	0.633	100.903%	-0.002	-0.002	0.005	0.008
3	15:50:56	96.754%	0.483	0.532	100.990%	0.004	0.009	-0.086	-0.056
x		97.087%	0.619	0.628	100.937%	0.001	0.003	-0.056	-0.037
σ		0.658%	0.131	0.094	0.046%	0.003	0.005	0.052	0.040
%RSD		0.678	21.180	15.000	0.046	283.400	146.300	94.150	106.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	97.377%	-0.040	0.626	0.663	0.111	0.119	96.667%	96.778%
2	15:50:14	97.583%	-0.036	0.569	0.582	0.109	0.150	98.653%	97.820%
3	15:50:56	96.145%	-0.093	0.509	0.544	0.181	0.284	98.061%	98.396%
x		97.035%	-0.056	0.568	0.596	0.133	0.184	97.793%	97.665%
σ		0.778%	0.032	0.059	0.061	0.041	0.088	1.020%	0.820%
%RSD		0.801	56.660	10.310	10.180	30.720	47.570	1.043	0.840

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	0.021	0.009	0.270	0.263	0.262	98.703%
2	15:50:14	0.012	0.010	0.213	0.174	0.185	100.141%
3	15:50:56	0.014	0.021	0.199	0.178	0.196	100.874%
x		0.016	0.013	0.227	0.205	0.214	99.906%
σ		0.005	0.006	0.037	0.050	0.042	1.104%
%RSD		30.760	48.600	16.470	24.430	19.530	1.105

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	90.381%	1.134	40.270	43.200	0.000	2084.000	299400.000	303600.000
2	15:58:07	90.040%	1.290	43.910	45.310	0.000	2050.000	304300.000	308600.000
3	15:58:49	90.191%	1.557	44.310	43.700	0.000	2045.000	307100.000	309900.000
x		90.204%	1.327	42.830	44.070	0.000	2060.000	303600.000	307400.000
σ		0.171%	0.214	2.224	1.106	0.000	20.930	3887.000	3307.000
%RSD		0.189	16.130	5.193	2.510	0.000	1.016	1.280	1.076

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	21310.000	2849.000	0.000	2675.000	568900.000	596300.000	93.227%	1001.000
2	15:58:07	21570.000	2844.000	0.000	2696.000	574200.000	603700.000	92.942%	1017.000
3	15:58:49	21410.000	2812.000	0.000	2608.000	561900.000	597400.000	94.119%	1001.000
x		21430.000	2835.000	0.000	2660.000	568300.000	599100.000	93.430%	1006.000
σ		128.900	19.940	0.000	45.910	6193.000	4014.000	0.614%	9.340
%RSD		0.602	0.703	0.000	1.726	1.090	0.670	0.657	0.928

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	106.500	103.500	2802.000	102600.000	104200.000	31.050	68.280	177.700
2	15:58:07	108.700	104.700	2844.000	104100.000	105100.000	31.120	68.670	178.500
3	15:58:49	105.200	103.000	2847.000	102900.000	102900.000	31.070	69.510	178.300
x		106.800	103.700	2831.000	103200.000	104000.000	31.080	68.820	178.200
σ		1.770	0.875	25.060	805.400	1084.000	0.038	0.628	0.392
%RSD		1.658	0.843	0.885	0.780	1.042	0.124	0.912	0.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	181.100	973.900	984.200	17.880	1.903	3.407	0.000	428.700
2	15:58:07	180.700	968.700	983.900	16.500	2.176	3.202	0.000	432.900
3	15:58:49	177.900	966.700	983.400	18.140	1.979	3.181	0.000	434.300
x		179.900	969.800	983.800	17.510	2.019	3.264	0.000	431.900
σ		1.725	3.687	0.400	0.878	0.141	0.125	0.000	2.913
%RSD		0.959	0.380	0.041	5.018	6.998	3.829	0.000	0.674

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	0.000	18.100	18.090	86.059%	0.230	0.219	3.009	2.833
2	15:58:07	0.000	18.120	18.290	86.962%	0.234	0.220	2.910	2.604
3	15:58:49	0.000	18.300	18.340	86.449%	0.227	0.208	2.946	2.704
x		0.000	18.170	18.240	86.490%	0.230	0.216	2.955	2.714
σ		0.000	0.113	0.133	0.453%	0.003	0.007	0.050	0.115
%RSD		0.000	0.623	0.731	0.524	1.465	3.147	1.703	4.227

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	86.723%	53.720	2.910	3.008	416.600	417.600	95.517%	94.929%
2	15:58:07	86.759%	55.260	2.617	2.721	423.800	419.400	96.641%	96.958%
3	15:58:49	87.849%	54.760	2.548	2.535	424.900	418.500	97.711%	97.675%
x		87.110%	54.580	2.692	2.755	421.700	418.500	96.623%	96.521%
σ		0.640%	0.787	0.192	0.238	4.493	0.907	1.097%	1.424%
%RSD		0.734	1.442	7.145	8.650	1.065	0.217	1.135	1.476

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	0.471	0.483	683.400	667.400	673.000	86.140%
2	15:58:07	0.435	0.475	680.800	664.200	670.000	88.023%
3	15:58:49	0.446	0.484	688.100	670.000	676.500	87.741%
x		0.451	0.481	684.100	667.200	673.200	87.302%
σ		0.019	0.005	3.714	2.896	3.211	1.016%
%RSD		4.181	1.064	0.543	0.434	0.477	1.164

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	98.776%	0.244	10.230	9.308	0.000	415.200	57120.000	58180.000
2	16:02:23	95.872%	0.161	10.520	9.683	0.000	420.400	58400.000	59150.000
3	16:03:06	94.604%	0.277	9.732	9.636	0.000	412.700	58540.000	59620.000
x		96.417%	0.228	10.160	9.542	0.000	416.100	58020.000	58980.000
σ		2.139%	0.060	0.398	0.204	0.000	3.939	781.500	736.700
%RSD		2.218	26.270	3.921	2.141	0.000	0.947	1.347	1.249

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	4070.000	546.400	0.000	529.600	111700.000	116700.000	97.229%	196.300
2	16:02:23	4123.000	554.700	0.000	528.100	112500.000	117200.000	96.338%	192.400
3	16:03:06	4120.000	546.900	0.000	513.700	110700.000	116300.000	97.126%	196.800
x		4104.000	549.300	0.000	523.800	111600.000	116800.000	96.898%	195.200
σ		29.890	4.650	0.000	8.766	937.100	467.400	0.487%	2.416
%RSD		0.728	0.846	0.000	1.673	0.840	0.400	0.503	1.238

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	20.250	19.690	549.600	20430.000	20570.000	5.915	13.420	36.440
2	16:02:23	20.790	20.280	546.800	20190.000	20560.000	5.908	13.210	35.370
3	16:03:06	19.970	19.960	542.000	19910.000	20350.000	5.911	13.270	34.640
x		20.340	19.980	546.100	20180.000	20500.000	5.911	13.300	35.480
σ		0.419	0.296	3.870	261.000	122.100	0.004	0.108	0.907
%RSD		2.062	1.483	0.709	1.294	0.596	0.059	0.810	2.557

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	36.240	198.600	197.400	3.417	-0.680	0.415	0.000	75.420
2	16:02:23	34.960	198.800	197.800	2.765	-0.099	-0.351	0.000	76.030
3	16:03:06	34.980	193.400	195.000	3.156	0.268	-0.132	0.000	75.900
x		35.390	196.900	196.700	3.113	-0.170	-0.023	0.000	75.780
σ		0.735	3.081	1.485	0.328	0.478	0.395	0.000	0.323
%RSD		2.075	1.565	0.755	10.540	280.500	1737.000	0.000	0.426

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	101.760%	3.423	3.326	96.631%	0.043	0.026	0.575	0.561
2	16:02:23	102.202%	3.051	3.353	96.537%	0.034	0.051	0.674	0.555
3	16:03:06	102.744%	3.085	3.129	96.713%	0.044	0.036	0.448	0.390
x		102.235%	3.186	3.269	96.627%	0.040	0.038	0.566	0.502
σ		0.493%	0.206	0.122	0.088%	0.006	0.013	0.113	0.097
%RSD		0.482	6.459	3.729	0.091	13.700	33.860	20.010	19.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	93.791%	8.295	0.430	0.489	80.100	81.060	99.041%	98.382%
2	16:02:23	93.888%	8.258	0.461	0.434	80.290	80.740	99.315%	99.544%
3	16:03:06	93.993%	8.267	0.420	0.432	81.240	80.780	100.253%	100.266%
x		93.891%	8.273	0.437	0.452	80.540	80.860	99.536%	99.397%
σ		0.101%	0.019	0.022	0.033	0.609	0.174	0.635%	0.950%
%RSD		0.108	0.233	4.931	7.197	0.756	0.215	0.638	0.956

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	0.063	0.094	136.500	133.700	134.900	88.369%
2	16:02:23	0.096	0.093	137.400	133.500	135.500	89.956%
3	16:03:06	0.088	0.082	137.100	132.900	135.000	90.621%
x		0.083	0.090	137.000	133.400	135.200	89.648%
σ		0.017	0.007	0.427	0.404	0.335	1.157%
%RSD		20.500	7.392	0.312	0.303	0.248	1.291

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	90.593%	51.230	963.700	1001.000	0.000	50030.000	307300.000	311700.000
2	16:06:37	87.676%	50.410	975.500	1010.000	0.000	49200.000	312900.000	318600.000
3	16:07:20	86.687%	48.820	967.200	1022.000	0.000	49690.000	318200.000	320300.000
x		88.319%	50.150	968.800	1011.000	0.000	49640.000	312800.000	316900.000
σ		2.031%	1.226	6.042	10.470	0.000	417.600	5481.000	4565.000
%RSD		2.299	2.444	0.624	1.035	0.000	0.841	1.752	1.441

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	40200.000	10090.000	0.000	55550.000	529500.000	556000.000	97.212%	2291.000
2	16:06:37	41140.000	10170.000	0.000	54920.000	521500.000	555600.000	96.470%	2301.000
3	16:07:20	41130.000	10220.000	0.000	55690.000	528300.000	560400.000	95.682%	2299.000
x		40820.000	10160.000	0.000	55390.000	526500.000	557300.000	96.455%	2297.000
σ		538.500	65.560	0.000	411.400	4299.000	2683.000	0.766%	5.681
%RSD		1.319	0.645	0.000	0.743	0.817	0.481	0.794	0.247

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	635.200	360.700	3468.000	119900.000	120500.000	504.800	550.300	391.200
2	16:06:37	636.900	363.700	3506.000	120700.000	121100.000	503.900	548.000	396.300
3	16:07:20	636.600	364.200	3496.000	120100.000	120700.000	501.700	544.200	391.000
x		636.200	362.900	3490.000	120300.000	120800.000	503.500	547.500	392.900
σ		0.904	1.887	20.140	441.800	259.000	1.627	3.123	2.987
%RSD		0.142	0.520	0.577	0.367	0.215	0.323	0.570	0.760

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	395.400	1666.000	1691.000	62.640	10.700	12.720	0.000	1490.000
2	16:06:37	394.300	1671.000	1685.000	62.340	11.180	12.930	0.000	1500.000
3	16:07:20	396.500	1670.000	1694.000	62.140	11.930	12.980	0.000	1502.000
x		395.400	1669.000	1690.000	62.370	11.270	12.880	0.000	1497.000
σ		1.103	2.353	4.456	0.256	0.617	0.138	0.000	6.565
%RSD		0.279	0.141	0.264	0.410	5.476	1.070	0.000	0.439

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	0.000	1048.000	1049.000	88.808%	48.070	48.830	51.710	47.830
2	16:06:37	0.000	1075.000	1073.000	88.717%	48.040	48.780	53.310	50.040
3	16:07:20	0.000	1077.000	1074.000	88.349%	48.600	48.890	51.830	49.100
x		0.000	1067.000	1065.000	88.625%	48.240	48.840	52.280	48.990
σ		0.000	16.620	14.150	0.243%	0.316	0.055	0.894	1.109
%RSD		0.000	1.558	1.328	0.274	0.654	0.113	1.710	2.264

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	88.682%	1881.000	455.100	454.900	2409.000	2389.000	97.926%	98.609%
2	16:06:37	88.302%	1910.000	462.100	459.200	2403.000	2391.000	100.421%	99.946%
3	16:07:20	87.711%	1916.000	464.900	463.100	2420.000	2401.000	100.122%	99.356%
x		88.232%	1902.000	460.700	459.100	2411.000	2394.000	99.490%	99.304%
σ		0.489%	18.380	5.038	4.094	8.585	6.396	1.362%	0.670%
%RSD		0.554	0.966	1.093	0.892	0.356	0.267	1.369	0.675

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	49.780	50.150	283.100	277.600	279.500	88.998%
2	16:06:37	50.720	50.650	283.700	279.800	281.100	90.428%
3	16:07:20	50.290	50.240	283.100	276.800	280.400	90.752%
x		50.270	50.350	283.300	278.100	280.300	90.059%
σ		0.470	0.269	0.362	1.531	0.850	0.933%
%RSD		0.935	0.534	0.128	0.551	0.303	1.036

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	95.663%	49.810	940.200	961.300	0.000	49200.000	330300.000	333300.000
2	16:10:51	91.300%	51.230	977.300	1005.000	0.000	49220.000	341000.000	345000.000
3	16:11:34	88.090%	48.030	966.600	1013.000	0.000	49280.000	346100.000	349100.000
x		91.684%	49.690	961.400	992.900	0.000	49230.000	339100.000	342500.000
σ		3.801%	1.602	19.110	27.670	0.000	43.830	8073.000	8192.000
%RSD		4.146	3.224	1.988	2.786	0.000	0.089	2.380	2.392

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	39640.000	9482.000	0.000	54750.000	598000.000	637800.000	98.557%	2720.000
2	16:10:51	40810.000	9698.000	0.000	53600.000	595100.000	635500.000	97.277%	2743.000
3	16:11:34	41090.000	9707.000	0.000	54270.000	600400.000	637500.000	96.342%	2739.000
x		40510.000	9629.000	0.000	54200.000	597900.000	636900.000	97.392%	2734.000
σ		771.700	127.100	0.000	576.600	2667.000	1254.000	1.112%	12.270
%RSD		1.905	1.320	0.000	1.064	0.446	0.197	1.142	0.449

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	649.600	303.200	3955.000	122700.000	123400.000	503.700	550.500	398.900
2	16:10:51	650.100	301.400	4004.000	123500.000	123500.000	500.300	544.800	397.600
3	16:11:34	648.100	301.200	3991.000	122200.000	122600.000	495.400	536.800	391.100
x		649.300	302.000	3983.000	122800.000	123100.000	499.800	544.000	395.900
σ		1.018	1.101	25.600	630.600	508.100	4.195	6.866	4.172
%RSD		0.157	0.365	0.643	0.513	0.413	0.839	1.262	1.054

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	401.000	1327.000	1345.000	62.020	11.820	14.050	0.000	1506.000
2	16:10:51	398.000	1325.000	1337.000	62.270	12.200	12.720	0.000	1532.000
3	16:11:34	394.800	1322.000	1339.000	63.320	11.190	13.030	0.000	1535.000
x		397.900	1325.000	1340.000	62.540	11.730	13.270	0.000	1525.000
σ		3.055	2.643	4.304	0.691	0.509	0.696	0.000	15.890
%RSD		0.768	0.200	0.321	1.105	4.340	5.250	0.000	1.042

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	0.000	1050.000	1051.000	89.038%	48.190	47.950	52.200	49.830
2	16:10:51	0.000	1080.000	1077.000	88.164%	48.560	48.690	52.260	48.900
3	16:11:34	0.000	1077.000	1072.000	88.072%	48.070	48.400	51.230	48.580
x		0.000	1069.000	1067.000	88.424%	48.270	48.350	51.900	49.100
σ		0.000	16.590	13.700	0.533%	0.257	0.372	0.575	0.650
%RSD		0.000	1.552	1.285	0.603	0.532	0.768	1.109	1.324

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	88.250%	1885.000	446.600	445.900	2558.000	2514.000	97.565%	97.470%
2	16:10:51	88.384%	1904.000	449.200	447.200	2547.000	2530.000	99.777%	100.037%
3	16:11:34	88.094%	1903.000	447.600	446.100	2534.000	2528.000	99.682%	99.594%
x		88.243%	1897.000	447.800	446.400	2546.000	2524.000	99.008%	99.034%
σ		0.145%	10.400	1.310	0.713	12.360	8.676	1.251%	1.372%
%RSD		0.164	0.548	0.293	0.160	0.485	0.344	1.263	1.386

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	50.780	50.840	236.900	229.500	232.700	86.437%
2	16:10:51	51.140	50.810	236.400	230.700	233.200	88.623%
3	16:11:34	50.600	51.230	236.300	230.700	233.300	88.792%
x		50.840	50.960	236.500	230.300	233.100	87.951%
σ		0.272	0.234	0.302	0.672	0.314	1.314%
%RSD		0.534	0.460	0.128	0.292	0.135	1.494

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	90.910%	54.800	1012.000	1039.000	0.000	53990.000	356300.000	359500.000
2	16:15:07	86.081%	53.160	1028.000	1077.000	0.000	54260.000	364600.000	368100.000
3	16:15:50	83.547%	52.540	1044.000	1083.000	0.000	53190.000	367900.000	373400.000
x		86.846%	53.500	1028.000	1067.000	0.000	53810.000	362900.000	367000.000
σ		3.741%	1.167	15.750	23.710	0.000	555.900	5940.000	7018.000
%RSD		4.307	2.182	1.532	2.223	0.000	1.033	1.637	1.912

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	23130.000	13510.000	0.000	55230.000	605600.000	642700.000	94.071%	2034.000
2	16:15:07	23690.000	13820.000	0.000	55340.000	595600.000	639400.000	93.177%	2041.000
3	16:15:50	23990.000	13940.000	0.000	55150.000	597900.000	643100.000	91.902%	2045.000
x		23600.000	13760.000	0.000	55240.000	599700.000	641700.000	93.050%	2040.000
σ		435.300	220.100	0.000	96.660	5237.000	2029.000	1.090%	5.285
%RSD		1.844	1.600	0.000	0.175	0.873	0.316	1.172	0.259

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	654.600	317.400	3317.000	101800.000	103500.000	552.700	586.900	433.600
2	16:15:07	660.800	316.800	3291.000	101400.000	103200.000	547.800	577.700	428.000
3	16:15:50	654.600	315.400	3332.000	101500.000	102500.000	539.200	575.300	429.000
x		656.600	316.500	3313.000	101600.000	103000.000	546.600	580.000	430.200
σ		3.596	1.064	20.610	228.400	525.900	6.858	6.138	2.998
%RSD		0.548	0.336	0.622	0.225	0.510	1.255	1.058	0.697

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	431.600	1421.000	1436.000	59.420	13.210	13.320	0.000	1532.000
2	16:15:07	429.500	1410.000	1415.000	58.500	12.180	13.150	0.000	1544.000
3	16:15:50	427.300	1416.000	1428.000	58.750	12.910	13.420	0.000	1556.000
x		429.500	1416.000	1427.000	58.890	12.770	13.300	0.000	1544.000
σ		2.129	5.759	10.360	0.477	0.527	0.136	0.000	11.630
%RSD		0.496	0.407	0.726	0.811	4.132	1.026	0.000	0.753

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	0.000	1189.000	1180.000	86.743%	53.530	53.780	57.280	53.050
2	16:15:07	0.000	1200.000	1196.000	86.508%	53.210	53.520	57.050	54.260
3	16:15:50	0.000	1200.000	1201.000	85.687%	53.460	53.700	57.270	53.340
x		0.000	1196.000	1192.000	86.313%	53.400	53.670	57.200	53.550
σ		0.000	6.414	10.980	0.554%	0.171	0.131	0.130	0.631
%RSD		0.000	0.536	0.921	0.642	0.320	0.245	0.227	1.178

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	87.388%	2138.000	540.200	539.500	2561.000	2544.000	97.785%	97.196%
2	16:15:07	87.564%	2132.000	541.500	543.000	2569.000	2550.000	98.266%	97.899%
3	16:15:50	86.538%	2147.000	545.400	543.300	2566.000	2556.000	98.122%	97.852%
x		87.163%	2139.000	542.400	541.900	2565.000	2550.000	98.058%	97.649%
σ		0.549%	7.526	2.691	2.119	4.056	6.264	0.247%	0.393%
%RSD		0.630	0.352	0.496	0.391	0.158	0.246	0.252	0.403

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	56.000	55.920	682.900	666.900	671.100	87.004%
2	16:15:07	55.690	55.910	678.200	663.200	668.300	89.633%
3	16:15:50	55.460	55.630	675.100	663.700	666.000	89.963%
x		55.710	55.820	678.800	664.600	668.500	88.867%
σ		0.270	0.164	3.926	2.025	2.571	1.622%
%RSD		0.484	0.294	0.578	0.305	0.385	1.825

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	97.724%	-0.012	8.911	8.197	0.000	25.740	28.630	27.550
2	16:22:59	93.251%	-0.011	8.136	7.755	0.000	25.720	28.020	29.750
3	16:23:41	90.269%	-0.018	7.236	7.138	0.000	26.750	42.520	46.910
x		93.748%	-0.014	8.094	7.697	0.000	26.070	33.060	34.740
σ		3.752%	0.004	0.838	0.532	0.000	0.586	8.201	10.600
%RSD		4.003	30.290	10.360	6.911	0.000	2.249	24.810	30.520

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	1.692	8.935	0.000	6.604	83.560	58.660	94.241%	0.511
2	16:22:59	1.409	8.183	0.000	5.251	64.090	57.320	93.052%	0.538
3	16:23:41	2.887	8.159	0.000	7.600	88.490	86.010	93.165%	0.238
x		1.996	8.426	0.000	6.485	78.710	67.330	93.486%	0.429
σ		0.784	0.441	0.000	1.179	12.900	16.190	0.656%	0.166
%RSD		39.300	5.238	0.000	18.180	16.390	24.050	0.702	38.640

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	-0.060	0.433	0.322	33.690	31.050	0.036	-0.015	0.315
2	16:22:59	0.082	0.391	0.368	22.900	23.240	0.051	-0.045	0.321
3	16:23:41	-0.036	0.384	0.478	20.850	22.100	0.077	0.048	0.318
x		-0.005	0.403	0.390	25.810	25.460	0.055	-0.004	0.318
σ		0.076	0.026	0.080	6.901	4.871	0.020	0.048	0.003
%RSD		1676.000	6.566	20.570	26.730	19.130	37.430	1171.000	0.883

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	0.384	-0.230	-0.480	-0.170	-1.052	1.085	0.000	0.205
2	16:22:59	0.347	-0.358	-0.552	-0.293	0.183	0.647	0.000	0.228
3	16:23:41	0.246	-0.357	-0.429	-0.039	-0.530	0.662	0.000	0.309
x		0.326	-0.315	-0.487	-0.168	-0.466	0.798	0.000	0.247
σ		0.071	0.073	0.062	0.127	0.620	0.248	0.000	0.055
%RSD		21.860	23.270	12.750	75.870	133.000	31.110	0.000	22.210

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	94.303%	3.425	3.492	96.898%	-0.009	-0.006	-0.087	-0.089
2	16:22:59	93.653%	2.724	2.673	97.885%	-0.010	0.002	-0.041	-0.053
3	16:23:41	94.351%	2.511	2.273	96.422%	-0.001	-0.000	-0.075	-0.046
x		94.102%	2.887	2.813	97.069%	-0.006	-0.001	-0.067	-0.063
σ		0.390%	0.478	0.622	0.746%	0.005	0.004	0.024	0.023
%RSD		0.414	16.550	22.100	0.769	78.730	344.500	34.990	37.140

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	99.471%	5.449	0.136	0.123	0.651	0.679	94.977%	94.686%
2	16:22:59	99.837%	4.840	0.103	0.113	0.793	0.577	96.659%	96.545%
3	16:23:41	99.431%	4.299	0.107	0.119	0.823	0.701	96.954%	96.744%
x		99.580%	4.862	0.115	0.118	0.755	0.652	96.197%	95.992%
σ		0.224%	0.575	0.018	0.005	0.092	0.066	1.066%	1.135%
%RSD		0.225	11.830	15.430	4.233	12.170	10.160	1.109	1.182

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	0.136	0.129	0.212	0.161	0.189	98.256%
2	16:22:59	0.105	0.122	0.123	0.152	0.149	98.076%
3	16:23:41	0.090	0.074	0.187	0.182	0.184	97.956%
x		0.110	0.108	0.174	0.165	0.174	98.096%
σ		0.024	0.030	0.046	0.016	0.022	0.151%
%RSD		21.300	27.530	26.260	9.390	12.450	0.154

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	97.263%	46.920	929.600	942.200	0.000	45500.000	52370.000	53350.000
2	16:27:15	94.775%	45.830	938.900	964.400	0.000	45080.000	53190.000	54060.000
3	16:27:58	93.615%	45.700	919.000	967.300	0.000	45190.000	53730.000	53920.000
x		95.218%	46.150	929.200	958.000	0.000	45260.000	53100.000	53770.000
σ		1.864%	0.670	9.944	13.720	0.000	215.400	681.500	377.400
%RSD		1.958	1.453	1.070	1.432	0.000	0.476	1.283	0.702

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	2046.000	5958.000	0.000	47720.000	47350.000	45770.000	97.679%	954.600
2	16:27:15	2065.000	5979.000	0.000	47280.000	47320.000	45290.000	96.459%	956.100
3	16:27:58	2044.000	5965.000	0.000	48170.000	47720.000	47810.000	94.859%	964.300
x		2052.000	5967.000	0.000	47720.000	47460.000	46290.000	96.332%	958.300
σ		12.040	10.690	0.000	447.000	223.700	1338.000	1.414%	5.186
%RSD		0.587	0.179	0.000	0.937	0.471	2.890	1.468	0.541

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	485.100	194.000	504.800	1089.000	1231.000	462.900	468.900	240.100
2	16:27:15	485.900	192.400	502.200	1071.000	1215.000	461.200	463.000	239.100
3	16:27:58	497.400	197.600	503.600	1063.000	1219.000	462.700	466.800	233.300
x		489.500	194.700	503.500	1074.000	1222.000	462.300	466.200	237.500
σ		6.898	2.638	1.291	13.250	8.520	0.919	2.977	3.637
%RSD		1.409	1.355	0.256	1.234	0.697	0.199	0.638	1.531

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	241.600	434.900	432.100	34.480	8.538	9.770	0.000	943.600
2	16:27:15	240.300	432.800	430.900	35.340	8.918	10.180	0.000	952.500
3	16:27:58	237.700	433.800	433.400	33.280	9.108	9.518	0.000	952.900
x		239.900	433.800	432.100	34.370	8.855	9.823	0.000	949.700
σ		2.019	1.016	1.239	1.034	0.290	0.336	0.000	5.265
%RSD		0.842	0.234	0.287	3.010	3.275	3.415	0.000	0.554

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	96.724%	992.500	984.000	93.679%	48.640	49.050	47.920	45.360
2	16:27:15	95.888%	994.200	994.500	93.656%	47.580	48.300	48.460	45.210
3	16:27:58	96.307%	993.000	985.900	93.434%	47.530	48.490	47.160	46.140
x		96.306%	993.200	988.200	93.590%	47.920	48.610	47.850	45.570
σ		0.418%	0.866	5.617	0.135%	0.625	0.391	0.654	0.500
%RSD		0.434	0.087	0.569	0.145	1.305	0.805	1.366	1.096

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	92.326%	1868.000	472.300	473.300	1912.000	1905.000	97.695%	98.371%
2	16:27:15	92.632%	1861.000	470.600	472.400	1920.000	1903.000	98.352%	98.622%
3	16:27:58	93.007%	1810.000	469.200	472.600	1901.000	1903.000	98.276%	99.177%
x		92.655%	1846.000	470.700	472.800	1911.000	1904.000	98.108%	98.723%
σ		0.342%	31.910	1.564	0.459	9.527	1.121	0.360%	0.412%
%RSD		0.369	1.728	0.332	0.097	0.499	0.059	0.367	0.418

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	43.910	43.530	20.020	21.280	20.600	103.852%
2	16:27:15	43.910	43.800	19.680	21.050	20.210	106.080%
3	16:27:58	44.360	44.450	19.880	20.640	20.170	105.891%
x		44.060	43.920	19.860	20.990	20.320	105.274%
σ		0.262	0.475	0.170	0.327	0.236	1.235%
%RSD		0.595	1.081	0.857	1.557	1.162	1.173

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	91.327%	1.285	61.740	63.200	0.000	2131.000	533400.000	541300.000
2	16:34:23	87.727%	1.058	57.510	63.170	0.000	2093.000	545100.000	550400.000
3	16:35:05	85.495%	1.195	58.800	62.980	0.000	2119.000	551700.000	557800.000
x		88.183%	1.179	59.350	63.120	0.000	2114.000	543400.000	549800.000
σ		2.943%	0.114	2.170	0.119	0.000	19.630	9304.000	8295.000
%RSD		3.337	9.659	3.657	0.189	0.000	0.928	1.712	1.509

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	25900.000	10370.000	0.000	5123.000	1172000.000	1191000.000	96.666%	1320.000
2	16:34:23	26530.000	10460.000	0.000	5028.000	1149000.000	1173000.000	95.469%	1319.000
3	16:35:05	26650.000	10510.000	0.000	5060.000	1155000.000	1183000.000	94.025%	1313.000
x		26360.000	10450.000	0.000	5070.000	1159000.000	1182000.000	95.387%	1317.000
σ		405.000	72.240	0.000	48.510	11650.000	9099.000	1.323%	3.805
%RSD		1.536	0.691	0.000	0.957	1.005	0.769	1.387	0.289

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	113.300	65.660	4624.000	95290.000	99180.000	34.640	83.100	136.300
2	16:34:23	114.700	64.620	4601.000	94850.000	97580.000	34.030	82.870	133.800
3	16:35:05	114.900	65.310	4598.000	94560.000	97280.000	34.710	82.690	133.300
x		114.300	65.200	4608.000	94900.000	98010.000	34.460	82.880	134.500
σ		0.853	0.529	14.320	365.100	1025.000	0.374	0.205	1.645
%RSD		0.747	0.812	0.311	0.385	1.046	1.085	0.247	1.223

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	139.000	992.200	1001.000	30.290	1.266	2.573	0.000	418.600
2	16:34:23	138.000	980.800	991.400	30.860	1.807	2.877	0.000	419.000
3	16:35:05	137.100	989.600	998.600	29.330	1.924	2.749	0.000	422.100
x		138.000	987.500	996.800	30.160	1.666	2.733	0.000	419.900
σ		0.928	5.968	4.809	0.772	0.351	0.153	0.000	1.923
%RSD		0.672	0.604	0.482	2.561	21.080	5.590	0.000	0.458

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	0.000	28.810	28.660	85.190%	1.012	0.884	5.675	5.591
2	16:34:23	0.000	27.660	27.050	85.326%	0.973	0.955	5.852	5.739
3	16:35:05	0.000	26.100	26.180	84.879%	1.005	0.926	6.119	5.747
x		0.000	27.520	27.300	85.132%	0.997	0.921	5.882	5.692
σ		0.000	1.358	1.257	0.229%	0.021	0.036	0.224	0.088
%RSD		0.000	4.935	4.606	0.269	2.057	3.861	3.802	1.543

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	85.885%	54.980	1.291	1.588	76.490	75.810	95.499%	95.731%
2	16:34:23	86.495%	45.970	1.129	1.480	74.560	75.780	97.336%	97.398%
3	16:35:05	86.259%	38.680	1.069	1.409	75.770	75.330	96.939%	97.166%
x		86.213%	46.540	1.163	1.493	75.600	75.640	96.591%	96.765%
σ		0.308%	8.169	0.115	0.090	0.975	0.267	0.967%	0.903%
%RSD		0.357	17.550	9.889	6.053	1.290	0.352	1.001	0.933

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	1.350	1.373	57.160	54.280	55.340	94.948%
2	16:34:23	1.311	1.310	57.540	54.550	55.800	95.838%
3	16:35:05	1.354	1.342	57.870	54.780	55.860	95.735%
x		1.338	1.341	57.520	54.540	55.670	95.507%
σ		0.023	0.031	0.357	0.253	0.282	0.487%
%RSD		1.751	2.322	0.621	0.463	0.506	0.510

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	92.821%	0.307	15.340	14.400	0.000	425.000	105000.000	106900.000
2	16:38:39	92.176%	0.255	14.240	14.750	0.000	425.200	106500.000	107900.000
3	16:39:22	90.260%	0.308	13.030	14.370	0.000	421.900	106700.000	108400.000
x		91.752%	0.290	14.200	14.510	0.000	424.000	106100.000	107700.000
σ		1.332%	0.030	1.154	0.213	0.000	1.843	943.200	776.900
%RSD		1.452	10.520	8.124	1.466	0.000	0.435	0.889	0.721

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	5123.000	2127.000	0.000	1045.000	224800.000	237700.000	92.707%	256.100
2	16:38:39	5147.000	2108.000	0.000	1029.000	225000.000	238800.000	92.827%	260.900
3	16:39:22	5148.000	2123.000	0.000	1017.000	221900.000	236700.000	93.421%	266.300
x		5139.000	2119.000	0.000	1031.000	223900.000	237700.000	92.985%	261.100
σ		14.080	9.715	0.000	14.070	1732.000	1022.000	0.383%	5.129
%RSD		0.274	0.458	0.000	1.365	0.774	0.430	0.411	1.964

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	23.190	13.040	919.600	19300.000	19840.000	7.084	17.220	27.960
2	16:38:39	22.370	12.940	918.200	19010.000	19540.000	6.959	17.320	27.500
3	16:39:22	22.670	12.760	905.800	18950.000	19330.000	6.844	16.420	27.210
x		22.740	12.910	914.500	19090.000	19570.000	6.962	16.980	27.560
σ		0.413	0.143	7.615	185.200	253.800	0.120	0.494	0.377
%RSD		1.817	1.109	0.833	0.970	1.297	1.726	2.909	1.366

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	27.990	208.800	213.100	6.842	-0.504	0.401	0.000	74.160
2	16:38:39	27.580	208.900	212.200	6.805	-0.898	0.145	0.000	73.310
3	16:39:22	27.140	209.000	208.900	6.805	-0.884	0.618	0.000	73.240
x		27.570	208.900	211.400	6.817	-0.762	0.388	0.000	73.570
σ		0.427	0.096	2.170	0.021	0.224	0.237	0.000	0.513
%RSD		1.548	0.046	1.027	0.314	29.380	60.980	0.000	0.698

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	99.049%	4.559	4.887	90.721%	0.209	0.195	1.114	1.060
2	16:38:39	100.196%	4.696	4.841	91.150%	0.226	0.216	1.157	1.162
3	16:39:22	100.415%	4.766	5.000	91.280%	0.173	0.197	1.030	1.100
x		99.887%	4.674	4.909	91.050%	0.203	0.202	1.100	1.107
σ		0.734%	0.105	0.082	0.293%	0.027	0.012	0.065	0.051
%RSD		0.735	2.254	1.662	0.321	13.270	5.685	5.869	4.606

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	88.395%	5.160	0.257	0.237	14.820	14.640	94.445%	94.700%
2	16:38:39	89.368%	5.382	0.256	0.251	15.390	14.940	96.282%	96.080%
3	16:39:22	89.537%	5.271	0.269	0.287	15.430	14.750	96.060%	97.235%
x		89.100%	5.271	0.261	0.258	15.210	14.780	95.596%	96.005%
σ		0.616%	0.111	0.007	0.026	0.339	0.154	1.003%	1.269%
%RSD		0.692	2.108	2.808	10.060	2.231	1.043	1.049	1.322

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	0.281	0.323	11.550	11.000	11.170	94.307%
2	16:38:39	0.270	0.280	11.820	11.050	11.330	95.779%
3	16:39:22	0.294	0.290	11.310	10.870	11.050	96.634%
x		0.282	0.298	11.560	10.970	11.190	95.574%
σ		0.012	0.022	0.255	0.097	0.138	1.177%
%RSD		4.206	7.464	2.209	0.882	1.238	1.232

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	90.001%	42.970	848.400	883.100	0.000	41660.000	568100.000	578200.000
2	16:42:56	88.171%	41.430	837.800	869.100	0.000	41820.000	584500.000	587100.000
3	16:43:39	83.520%	42.280	879.500	915.500	0.000	42110.000	590800.000	597200.000
x		87.230%	42.230	855.300	889.200	0.000	41860.000	581100.000	587500.000
σ		3.341%	0.772	21.690	23.790	0.000	229.800	11720.000	9501.000
%RSD		3.831	1.829	2.536	2.675	0.000	0.549	2.016	1.617

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	38380.000	17900.000	0.000	49350.000	1210000.000	1244000.000	96.647%	2194.000
2	16:42:56	38650.000	17850.000	0.000	49490.000	1226000.000	1248000.000	94.800%	2207.000
3	16:43:39	39410.000	18150.000	0.000	49010.000	1213000.000	1239000.000	93.124%	2202.000
x		38810.000	17970.000	0.000	49280.000	1216000.000	1244000.000	94.857%	2201.000
σ		535.000	158.400	0.000	249.300	8652.000	4739.000	1.762%	6.617
%RSD		1.378	0.882	0.000	0.506	0.711	0.381	1.857	0.301

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	552.400	234.700	6637.000	97040.000	100500.000	427.700	465.700	282.500
2	16:42:56	555.700	237.200	6627.000	96370.000	99930.000	430.300	463.800	281.200
3	16:43:39	556.300	234.900	6598.000	96200.000	99550.000	422.200	454.500	280.500
x		554.800	235.600	6621.000	96540.000	99990.000	426.700	461.300	281.400
σ		2.134	1.426	20.110	446.500	462.700	4.134	5.966	1.037
%RSD		0.385	0.605	0.304	0.463	0.463	0.969	1.293	0.368

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	287.600	627.300	630.300	62.910	8.761	11.670	0.000	1295.000
2	16:42:56	282.600	625.000	637.200	61.220	9.119	10.810	0.000	1326.000
3	16:43:39	284.000	626.900	630.100	62.080	9.446	11.130	0.000	1331.000
x		284.700	626.400	632.500	62.070	9.108	11.200	0.000	1318.000
σ		2.584	1.222	4.029	0.845	0.343	0.436	0.000	19.430
%RSD		0.908	0.195	0.637	1.361	3.763	3.894	0.000	1.475

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	0.000	909.300	912.800	84.895%	43.470	43.210	43.080	39.500
2	16:42:56	0.000	933.900	929.100	83.143%	44.730	43.980	41.870	40.710
3	16:43:39	0.000	931.700	931.600	82.652%	43.800	44.350	42.590	39.100
x		0.000	925.000	924.500	83.563%	44.000	43.850	42.520	39.770
σ		0.000	13.590	10.240	1.179%	0.651	0.583	0.607	0.839
%RSD		0.000	1.469	1.107	1.411	1.481	1.330	1.427	2.110

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	85.418%	1598.000	376.500	377.000	1744.000	1732.000	95.513%	95.142%
2	16:42:56	85.636%	1600.000	378.800	378.300	1754.000	1741.000	95.916%	96.039%
3	16:43:39	84.052%	1619.000	382.200	382.100	1751.000	1740.000	96.971%	96.693%
x		85.035%	1606.000	379.100	379.100	1750.000	1738.000	96.134%	95.958%
σ		0.859%	11.500	2.862	2.637	5.035	4.616	0.753%	0.778%
%RSD		1.010	0.717	0.755	0.696	0.288	0.266	0.783	0.811

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	39.950	39.990	67.640	65.960	66.290	91.979%
2	16:42:56	39.970	40.000	66.640	65.270	65.790	94.701%
3	16:43:39	40.140	40.270	67.240	65.540	65.950	94.966%
x		40.020	40.090	67.170	65.590	66.010	93.882%
σ		0.102	0.159	0.503	0.346	0.256	1.654%
%RSD		0.254	0.397	0.750	0.527	0.388	1.761

CCV 309497 2/5/2012 4:48:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	97.272%	95.880	94.020	97.300	0.000	49110.000	50040.000	50450.000
2	16:50:04	95.855%	95.260	96.520	97.220	0.000	48950.000	50770.000	51790.000
3	16:50:47	95.401%	95.770	94.690	97.250	0.000	49080.000	51220.000	51490.000
x		96.176%	95.636%	95.075%	97.255%	0.000	98.094%	101.348%	102.489%
σ		0.976%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.015	0.347	1.363	0.045	0.000	0.172	1.180	1.375

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	506.000	5205.000	0.000	50930.000	48340.000	47560.000	95.223%	95.960
2	16:50:04	516.500	5223.000	0.000	50160.000	48520.000	48200.000	94.512%	99.670
3	16:50:47	511.300	5251.000	0.000	51000.000	48960.000	48280.000	94.049%	98.740
x		102.255%	104.523%	0.000	101.403%	97.218%	96.028%	94.595%	98.123%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.591%	n/a
%RSD		1.024	0.439	0.000	0.919	0.653	0.818	0.625	1.971

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	98.520	99.450	509.700	25880.000	25650.000	98.290	99.740	99.510
2	16:50:04	99.290	99.440	514.000	25960.000	25780.000	99.130	98.350	99.980
3	16:50:47	99.810	100.500	515.100	25870.000	26040.000	99.120	97.760	98.210
x		99.207%	99.806%	102.585%	103.625%	103.290%	98.848%	98.619%	99.236%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.655	0.629	0.562	0.194	0.779	0.489	1.030	0.923

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	101.300	101.200	101.400	100.700	99.110	100.700	0.000	98.080
2	16:50:04	100.500	99.770	99.720	99.380	102.100	99.770	0.000	97.670
3	16:50:47	99.220	100.400	100.800	100.700	100.600	102.800	0.000	99.080
x		100.338%	100.463%	100.638%	100.237%	100.622%	101.103%	0.000	98.279%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.055	0.705	0.829	0.745	1.509	1.534	0.000	0.738

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	92.491%	95.050	95.710	92.826%	97.020	96.560	99.990	99.690
2	16:50:04	94.033%	98.080	98.510	93.773%	95.670	97.620	97.570	99.720
3	16:50:47	93.927%	99.430	99.330	94.480%	96.450	97.140	97.900	99.090
x		93.483%	97.520%	97.850%	93.693%	96.380%	97.108%	98.487%	99.497%
σ		0.861%	n/a	n/a	0.830%	n/a	n/a	n/a	n/a
%RSD		0.921	2.300	1.942	0.885	0.699	0.544	1.334	0.354

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	91.414%	96.020	90.620	90.270	97.480	98.400	92.896%	93.315%
2	16:50:04	92.546%	96.960	93.930	93.740	97.830	97.740	95.436%	94.973%
3	16:50:47	92.113%	96.670	96.220	95.820	97.770	97.900	95.574%	95.746%
x		92.024%	96.547%	93.589%	93.278%	97.691%	98.013%	94.635%	94.678%
σ		0.571%	n/a	n/a	n/a	n/a	n/a	1.508%	1.242%
%RSD		0.621	0.499	3.008	3.010	0.192	0.347	1.593	1.312

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	96.340	95.960	97.560	96.880	97.120	91.965%
2	16:50:04	97.530	96.980	98.910	97.530	98.180	93.110%
3	16:50:47	97.090	97.270	98.640	97.380	98.380	93.514%
x		96.985%	96.737%	98.369%	97.264%	97.895%	92.863%
σ		n/a	n/a	n/a	n/a	n/a	0.803%
%RSD		0.619	0.710	0.726	0.348	0.689	0.865

CCB3 2/5/2012 4:55:49 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	100.713%	-0.012	3.406	3.097	0.000	1.887	5.830	6.186
2	16:57:14	98.763%	0.017	3.498	2.742	0.000	3.122	9.437	9.080
3	16:57:57	96.592%	0.011	2.363	2.542	0.000	6.499	14.500	16.900
x		98.689%	0.005	3.089	2.794	0.000	3.836	9.921	10.720
σ		2.062%	0.015	0.631	0.281	0.000	2.388	4.354	5.543
%RSD		2.089	286.300	20.420	10.070	0.000	62.250	43.880	51.700

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.916	1.206	0.000	-0.256	42.500	4.342	97.041%	-0.016
2	16:57:14	-0.648	1.054	0.000	-0.186	21.160	11.790	96.215%	0.088
3	16:57:57	-0.062	2.303	0.000	1.744	37.900	27.130	96.453%	-0.015
x		-0.542	1.521	0.000	0.434	33.850	14.420	96.570%	0.019
σ		0.437	0.682	0.000	1.135	11.230	11.620	0.425%	0.060
%RSD		80.600	44.810	0.000	261.500	33.170	80.580	0.440	308.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.043	0.005	0.210	7.632	10.430	-0.006	-0.092	-0.203
2	16:57:14	0.017	0.040	0.265	4.238	4.021	0.004	-0.087	-0.178
3	16:57:57	0.012	-0.009	0.298	3.949	3.578	0.012	-0.128	-0.167
x		-0.005	0.012	0.258	5.273	6.009	0.003	-0.102	-0.183
σ		0.033	0.025	0.045	2.048	3.833	0.009	0.023	0.018
%RSD		686.100	208.500	17.350	38.850	63.790	275.700	22.160	10.010

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.283	-0.805	-0.898	0.065	-0.364	0.671	0.000	0.030
2	16:57:14	-0.196	-0.770	-0.907	0.143	-0.026	0.765	0.000	0.031
3	16:57:57	-0.184	-0.839	-0.818	0.258	-0.264	0.705	0.000	0.070
x		-0.221	-0.805	-0.874	0.155	-0.218	0.713	0.000	0.044
σ		0.054	0.034	0.049	0.097	0.174	0.048	0.000	0.023
%RSD		24.530	4.283	5.635	62.560	79.690	6.713	0.000	52.590

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	95.143%	1.173	1.043	99.716%	0.000	0.009	0.010	0.007
2	16:57:14	96.031%	1.029	1.025	100.334%	0.005	0.014	-0.010	-0.014
3	16:57:57	95.896%	0.893	0.925	100.086%	0.008	0.015	0.032	0.051
x		95.690%	1.031	0.998	100.045%	0.004	0.013	0.010	0.014
σ		0.479%	0.140	0.063	0.311%	0.004	0.003	0.021	0.033
%RSD		0.500	13.590	6.338	0.311	88.410	26.110	203.600	232.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	95.496%	0.197	0.635	0.674	0.067	0.028	94.543%	94.146%
2	16:57:14	96.224%	0.188	0.622	0.581	0.048	0.104	95.481%	95.746%
3	16:57:57	95.030%	0.117	0.582	0.516	0.136	0.150	97.786%	96.961%
x		95.583%	0.167	0.613	0.591	0.083	0.094	95.937%	95.618%
σ		0.602%	0.044	0.028	0.079	0.046	0.062	1.669%	1.412%
%RSD		0.630	26.310	4.531	13.420	55.490	65.630	1.740	1.477

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	0.032	0.039	0.337	0.284	0.309	97.929%
2	16:57:14	0.039	0.042	0.250	0.217	0.232	98.935%
3	16:57:57	0.057	0.043	0.237	0.216	0.224	99.079%
x		0.042	0.041	0.275	0.239	0.255	98.648%
σ		0.013	0.002	0.055	0.039	0.047	0.626%
%RSD		30.470	4.513	19.920	16.300	18.320	0.635

180-7454-B-1-F MSD 2/5/2012 5:00:07 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	91.535%	48.290	990.900	1020.000	0.000	48400.000	620600.000	628000.000
2	17:01:33	90.437%	47.250	957.600	995.100	0.000	47200.000	627200.000	628300.000
3	17:02:16	86.768%	46.850	958.200	1009.000	0.000	47420.000	638200.000	641500.000
x		89.580%	47.460	968.900	1008.000	0.000	47670.000	628700.000	632600.000
σ		2.496%	0.746	19.070	12.220	0.000	641.300	8882.000	7738.000
%RSD		2.787	1.572	1.968	1.212	0.000	1.345	1.413	1.223

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	43100.000	22230.000	0.000	57630.000	1259000.000	1273000.000	98.378%	2407.000
2	17:01:33	43040.000	22000.000	0.000	56490.000	1253000.000	1279000.000	97.121%	2407.000
3	17:02:16	44060.000	22240.000	0.000	57060.000	1257000.000	1280000.000	95.669%	2397.000
x		43400.000	22150.000	0.000	57060.000	1256000.000	1277000.000	97.056%	2404.000
σ		571.400	134.100	0.000	568.100	2690.000	3495.000	1.356%	5.392
%RSD		1.317	0.606	0.000	0.996	0.214	0.274	1.397	0.224

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	616.300	264.100	7335.000	114400.000	118500.000	482.200	524.600	330.400
2	17:01:33	614.700	267.600	7322.000	112500.000	115900.000	473.700	513.000	321.400
3	17:02:16	616.500	267.200	7381.000	113100.000	116200.000	475.500	515.900	324.000
x		615.800	266.300	7346.000	113400.000	116800.000	477.100	517.800	325.300
σ		0.990	1.947	31.110	979.800	1413.000	4.480	6.025	4.671
%RSD		0.161	0.731	0.423	0.864	1.210	0.939	1.163	1.436

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	334.300	2009.000	2040.000	66.950	11.180	12.680	0.000	1454.000
2	17:01:33	323.400	1990.000	2012.000	68.140	10.900	12.420	0.000	1471.000
3	17:02:16	326.100	1987.000	2025.000	68.940	10.380	12.980	0.000	1482.000
x		327.900	1995.000	2026.000	68.010	10.820	12.700	0.000	1469.000
σ		5.636	11.970	14.040	1.004	0.406	0.281	0.000	14.060
%RSD		1.719	0.600	0.693	1.476	3.751	2.214	0.000	0.957

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	0.000	1050.000	1050.000	84.015%	47.290	46.840	49.550	46.940
2	17:01:33	0.000	1060.000	1058.000	83.702%	46.900	46.200	49.630	47.890
3	17:02:16	0.000	1067.000	1060.000	82.989%	46.520	46.690	49.530	45.960
x		0.000	1059.000	1056.000	83.569%	46.900	46.580	49.570	46.930
σ		0.000	8.342	5.309	0.526%	0.382	0.335	0.055	0.969
%RSD		0.000	0.788	0.503	0.629	0.814	0.720	0.111	2.065

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	85.026%	1825.000	420.900	422.400	1971.000	1949.000	96.723%	95.462%
2	17:01:33	86.431%	1777.000	417.300	416.400	1966.000	1953.000	97.278%	97.132%
3	17:02:16	85.302%	1841.000	422.400	423.400	1979.000	1971.000	97.253%	97.096%
x		85.586%	1814.000	420.200	420.800	1972.000	1958.000	97.085%	96.563%
σ		0.744%	33.140	2.620	3.779	6.411	11.350	0.314%	0.954%
%RSD		0.870	1.827	0.623	0.898	0.325	0.580	0.323	0.988

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	43.680	44.120	69.470	67.000	68.010	94.380%
2	17:01:33	43.360	43.580	68.390	66.160	67.030	98.126%
3	17:02:16	43.620	43.670	69.070	66.710	67.560	98.220%
x		43.550	43.790	68.980	66.620	67.530	96.909%
σ		0.169	0.292	0.546	0.429	0.487	2.190%
%RSD		0.389	0.667	0.792	0.643	0.722	2.260

180-7454-B-1-D PDS 2/5/2012 5:04:25 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	88.064%	53.160	1044.000	1068.000	0.000	52230.000	575900.000	587900.000
2	17:05:51	85.146%	53.190	1057.000	1077.000	0.000	51620.000	582900.000	593100.000
3	17:06:33	85.217%	51.710	1025.000	1084.000	0.000	52600.000	587500.000	589000.000
x		86.142%	52.680	1042.000	1076.000	0.000	52150.000	582100.000	590000.000
σ		1.665%	0.847	16.120	7.935	0.000	496.900	5838.000	2773.000
%RSD		1.933	1.607	1.547	0.737	0.000	0.953	1.003	0.470

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	27670.000	20730.000	0.000	56550.000	1181000.000	1198000.000	93.517%	2325.000
2	17:05:51	27910.000	20680.000	0.000	55180.000	1165000.000	1194000.000	92.726%	2321.000
3	17:06:33	27500.000	20580.000	0.000	55980.000	1186000.000	1206000.000	90.765%	2307.000
x		27690.000	20660.000	0.000	55900.000	1177000.000	1200000.000	92.336%	2317.000
σ		207.800	79.810	0.000	689.900	10660.000	5975.000	1.417%	9.464
%RSD		0.750	0.386	0.000	1.234	0.905	0.498	1.535	0.408

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	648.400	271.100	5014.000	93350.000	97370.000	529.000	571.800	374.100
2	17:05:51	640.000	267.400	5014.000	92360.000	95500.000	522.200	563.400	372.700
3	17:06:33	641.500	272.300	5030.000	92830.000	96520.000	531.200	575.500	371.800
x		643.300	270.200	5019.000	92850.000	96460.000	527.400	570.200	372.900
σ		4.495	2.554	9.077	493.200	938.900	4.702	6.213	1.167
%RSD		0.699	0.945	0.181	0.531	0.973	0.891	1.090	0.313

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	378.900	1392.000	1402.000	71.580	11.640	12.990	0.000	1514.000
2	17:05:51	372.800	1391.000	1418.000	73.550	11.920	13.010	0.000	1522.000
3	17:06:33	380.200	1412.000	1427.000	71.790	12.120	13.290	0.000	1531.000
x		377.300	1398.000	1416.000	72.310	11.890	13.100	0.000	1522.000
σ		3.947	12.190	12.900	1.085	0.241	0.166	0.000	8.950
%RSD		1.046	0.872	0.911	1.501	2.029	1.270	0.000	0.588

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	0.000	1201.000	1195.000	83.302%	51.580	52.110	57.030	53.480
2	17:05:51	0.000	1219.000	1213.000	81.308%	52.420	52.690	58.190	53.320
3	17:06:33	0.000	1213.000	1205.000	81.204%	52.180	52.310	56.090	53.690
x		0.000	1211.000	1204.000	81.938%	52.060	52.370	57.110	53.490
σ		0.000	9.564	9.072	1.182%	0.434	0.294	1.052	0.186
%RSD		0.000	0.790	0.753	1.443	0.833	0.562	1.842	0.348

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	83.990%	2092.000	527.300	526.600	2172.000	2165.000	93.046%	93.681%
2	17:05:51	83.542%	2107.000	529.100	530.500	2175.000	2161.000	94.324%	94.476%
3	17:06:33	83.506%	2094.000	526.400	524.900	2163.000	2158.000	94.091%	93.447%
x		83.679%	2098.000	527.600	527.300	2170.000	2161.000	93.820%	93.868%
σ		0.269%	7.769	1.397	2.903	6.206	3.943	0.681%	0.539%
%RSD		0.322	0.370	0.265	0.550	0.286	0.183	0.725	0.575

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	51.960	52.030	76.700	74.830	75.390	88.798%
2	17:05:51	51.100	51.110	74.630	72.440	73.230	92.246%
3	17:06:33	51.070	50.720	73.260	72.260	72.450	92.856%
x		51.380	51.290	74.870	73.180	73.690	91.300%
σ		0.502	0.673	1.734	1.434	1.525	2.188%
%RSD		0.978	1.313	2.316	1.960	2.069	2.397

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	91.142%	1.179	65.040	66.490	0.000	2207.000	512900.000	518400.000
2	17:13:01	88.173%	1.202	62.730	68.730	0.000	2182.000	524400.000	529300.000
3	17:13:44	85.275%	1.141	64.570	65.990	0.000	2205.000	535300.000	536100.000
x		88.197%	1.174	64.110	67.070	0.000	2198.000	524200.000	527900.000
σ		2.933%	0.031	1.223	1.460	0.000	14.130	11210.000	8914.000
%RSD		3.326	2.607	1.907	2.177	0.000	0.643	2.140	1.689

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	25300.000	12960.000	0.000	5792.000	1136000.000	1150000.000	94.549%	1240.000
2	17:13:01	25500.000	13070.000	0.000	5747.000	1135000.000	1151000.000	92.973%	1259.000
3	17:13:44	25550.000	13000.000	0.000	5672.000	1120000.000	1157000.000	91.437%	1251.000
x		25450.000	13010.000	0.000	5737.000	1130000.000	1153000.000	92.986%	1250.000
σ		133.700	54.790	0.000	60.570	8935.000	3367.000	1.556%	9.225
%RSD		0.525	0.421	0.000	1.056	0.790	0.292	1.674	0.738

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	118.000	75.150	5145.000	89580.000	93510.000	27.870	68.580	138.700
2	17:13:01	118.400	75.990	5134.000	89280.000	93170.000	27.930	68.250	136.500
3	17:13:44	117.900	76.270	5187.000	88990.000	92000.000	27.900	68.810	137.100
x		118.100	75.800	5156.000	89290.000	92890.000	27.900	68.550	137.400
σ		0.293	0.586	27.950	296.500	792.400	0.029	0.283	1.126
%RSD		0.248	0.773	0.542	0.332	0.853	0.103	0.413	0.820

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	140.700	352.400	356.800	23.610	2.387	4.097	0.000	411.000
2	17:13:01	139.700	353.700	357.600	22.430	2.713	3.392	0.000	416.300
3	17:13:44	139.800	352.200	356.600	23.860	3.012	3.852	0.000	422.600
x		140.000	352.800	357.000	23.300	2.704	3.780	0.000	416.600
σ		0.560	0.820	0.526	0.765	0.313	0.358	0.000	5.786
%RSD		0.400	0.233	0.147	3.285	11.550	9.468	0.000	1.389

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	0.000	22.130	22.610	84.128%	0.730	0.728	2.795	2.789
2	17:13:01	0.000	19.480	19.690	83.627%	0.784	0.758	3.206	2.855
3	17:13:44	0.000	18.680	18.790	82.080%	0.734	0.744	2.969	2.556
x		0.000	20.100	20.370	83.279%	0.749	0.744	2.990	2.734
σ		0.000	1.805	1.998	1.068%	0.030	0.015	0.207	0.157
%RSD		0.000	8.981	9.812	1.282	4.036	2.043	6.910	5.736

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	84.253%	53.530	2.512	2.801	100.100	99.470	92.984%	93.285%
2	17:13:01	84.098%	46.040	2.611	2.635	100.300	100.500	94.363%	94.994%
3	17:13:44	84.368%	41.780	2.533	2.615	100.300	100.100	94.573%	94.355%
x		84.240%	47.120	2.552	2.684	100.200	100.000	93.973%	94.211%
σ		0.136%	5.950	0.052	0.102	0.125	0.527	0.863%	0.864%
%RSD		0.161	12.630	2.044	3.810	0.125	0.527	0.918	0.917

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	1.687	1.715	174.100	168.500	170.700	87.987%
2	17:13:01	1.677	1.693	174.600	169.700	172.100	89.343%
3	17:13:44	1.716	1.721	178.600	171.300	174.400	88.369%
x		1.693	1.710	175.800	169.800	172.400	88.566%
σ		0.020	0.015	2.453	1.406	1.884	0.699%
%RSD		1.194	0.873	1.396	0.828	1.092	0.790

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	90.433%	4.984	169.900	173.200	0.000	3657.000	450300.000	457700.000
2	17:17:17	88.282%	4.943	169.100	175.300	0.000	3714.000	469200.000	473100.000
3	17:18:00	86.722%	4.883	177.700	177.000	0.000	3718.000	470700.000	476100.000
x		88.479%	4.936	172.300	175.200	0.000	3696.000	463400.000	469000.000
σ		1.863%	0.051	4.764	1.905	0.000	33.970	11340.000	9902.000
%RSD		2.106	1.027	2.766	1.087	0.000	0.919	2.446	2.111

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	100600.000	17360.000	0.000	25310.000	926600.000	947500.000	98.104%	3150.000
2	17:17:17	102700.000	17620.000	0.000	25270.000	924300.000	953500.000	98.274%	3147.000
3	17:18:00	103300.000	17450.000	0.000	24920.000	917900.000	944100.000	99.169%	3135.000
x		102200.000	17480.000	0.000	25170.000	923000.000	948400.000	98.516%	3144.000
σ		1414.000	131.900	0.000	217.200	4544.000	4725.000	0.572%	7.790
%RSD		1.384	0.755	0.000	0.863	0.492	0.498	0.581	0.248

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	237.600	168.500	3933.000	146900.000	148800.000	67.250	165.800	159.400
2	17:17:17	237.700	170.400	3951.000	145800.000	147700.000	67.200	164.200	158.900
3	17:18:00	235.500	169.300	3951.000	146400.000	146900.000	66.590	162.700	158.000
x		236.900	169.400	3945.000	146400.000	147800.000	67.010	164.200	158.700
σ		1.227	0.947	10.190	574.900	911.500	0.370	1.561	0.707
%RSD		0.518	0.559	0.258	0.393	0.617	0.551	0.951	0.445

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	162.600	315.100	313.200	20.880	1.337	3.235	0.000	841.200
2	17:17:17	160.700	316.100	319.800	23.300	1.881	3.960	0.000	848.100
3	17:18:00	160.600	312.200	313.400	21.030	2.225	4.045	0.000	846.500
x		161.300	314.500	315.500	21.740	1.814	3.747	0.000	845.300
σ		1.122	2.038	3.790	1.358	0.448	0.445	0.000	3.582
%RSD		0.696	0.648	1.202	6.249	24.670	11.890	0.000	0.424

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	0.000	18.390	18.370	83.813%	0.398	0.312	1.695	1.443
2	17:17:17	0.000	18.910	18.200	84.463%	0.386	0.267	1.684	1.410
3	17:18:00	0.000	18.090	18.240	85.368%	0.428	0.287	1.756	1.390
x		0.000	18.460	18.270	84.548%	0.404	0.289	1.712	1.414
σ		0.000	0.414	0.091	0.781%	0.021	0.023	0.039	0.027
%RSD		0.000	2.240	0.500	0.924	5.287	7.847	2.271	1.889

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	84.236%	27.030	1.074	1.307	525.200	520.700	94.946%	94.999%
2	17:17:17	86.432%	26.160	1.087	1.117	523.100	523.100	97.994%	97.951%
3	17:18:00	86.317%	25.570	1.070	1.140	523.700	523.100	98.102%	97.964%
x		85.662%	26.250	1.077	1.188	524.000	522.300	97.014%	96.971%
σ		1.236%	0.732	0.009	0.104	1.082	1.417	1.792%	1.708%
%RSD		1.443	2.790	0.812	8.741	0.207	0.271	1.847	1.761

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	1.973	1.997	70.130	64.010	67.020	85.169%
2	17:17:17	1.890	2.002	71.500	64.590	67.950	86.706%
3	17:18:00	1.996	1.995	71.560	64.680	67.940	87.258%
x		1.953	1.998	71.060	64.420	67.640	86.378%
σ		0.056	0.003	0.809	0.364	0.532	1.082%
%RSD		2.861	0.174	1.138	0.565	0.786	1.253

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	89.006%	5.291	187.500	191.800	0.000	3482.000	471200.000	477300.000
2	17:21:32	84.959%	5.768	183.500	193.700	0.000	3500.000	488100.000	492300.000
3	17:22:15	85.160%	5.311	185.100	191.900	0.000	3441.000	485600.000	489600.000
x		86.375%	5.457	185.400	192.500	0.000	3474.000	481700.000	486400.000
σ		2.281%	0.270	2.002	1.051	0.000	30.180	9121.000	8013.000
%RSD		2.641	4.948	1.080	0.546	0.000	0.869	1.894	1.648

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	109500.000	15820.000	0.000	27210.000	937600.000	950900.000	100.318%	3385.000
2	17:21:32	112200.000	16030.000	0.000	27220.000	936200.000	957000.000	98.516%	3413.000
3	17:22:15	110500.000	15690.000	0.000	26540.000	932600.000	950900.000	98.799%	3381.000
x		110800.000	15840.000	0.000	26990.000	935400.000	952900.000	99.211%	3393.000
σ		1372.000	171.000	0.000	390.700	2584.000	3527.000	0.969%	17.230
%RSD		1.239	1.079	0.000	1.448	0.276	0.370	0.977	0.508

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	253.300	174.600	3826.000	151200.000	152700.000	68.780	168.600	168.700
2	17:21:32	253.000	176.500	3829.000	149600.000	151500.000	68.470	167.400	166.800
3	17:22:15	252.600	175.200	3816.000	149200.000	150500.000	67.880	166.000	165.800
x		253.000	175.400	3824.000	150000.000	151600.000	68.380	167.300	167.100
σ		0.355	0.941	6.917	1084.000	1055.000	0.454	1.272	1.485
%RSD		0.140	0.536	0.181	0.723	0.696	0.665	0.760	0.888

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	173.200	311.300	311.000	21.430	1.908	4.676	0.000	925.200
2	17:21:32	171.500	313.900	314.000	21.670	2.027	4.747	0.000	936.100
3	17:22:15	167.000	309.400	309.400	22.620	3.115	4.165	0.000	936.400
x		170.600	311.500	311.500	21.910	2.350	4.529	0.000	932.500
σ		3.195	2.230	2.294	0.630	0.665	0.318	0.000	6.360
%RSD		1.873	0.716	0.737	2.874	28.310	7.015	0.000	0.682

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	0.000	15.720	15.580	86.430%	0.431	0.329	2.090	1.740
2	17:21:32	0.000	15.490	15.350	86.482%	0.443	0.320	2.010	1.601
3	17:22:15	0.000	15.360	15.200	86.299%	0.413	0.331	1.896	1.583
x		0.000	15.520	15.380	86.404%	0.429	0.327	1.999	1.641
σ		0.000	0.181	0.193	0.094%	0.015	0.006	0.097	0.086
%RSD		0.000	1.168	1.253	0.109	3.553	1.800	4.873	5.219

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	86.262%	23.310	0.976	1.047	581.200	581.300	97.857%	97.756%
2	17:21:32	86.736%	23.210	0.998	1.118	583.200	580.900	99.144%	99.342%
3	17:22:15	87.215%	22.240	0.982	1.105	588.000	579.700	100.655%	99.973%
x		86.737%	22.920	0.985	1.090	584.100	580.600	99.219%	99.024%
σ		0.477%	0.588	0.012	0.038	3.517	0.843	1.401%	1.142%
%RSD		0.549	2.567	1.180	3.459	0.602	0.145	1.412	1.153

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	1.994	2.009	73.940	68.610	71.160	84.007%
2	17:21:32	2.023	2.014	74.750	68.060	71.480	85.538%
3	17:22:15	1.993	1.965	75.140	68.500	71.790	86.249%
x		2.003	1.996	74.610	68.390	71.480	85.265%
σ		0.017	0.027	0.611	0.294	0.313	1.146%
%RSD		0.839	1.347	0.818	0.430	0.438	1.344

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	87.841%	4.551	171.800	173.500	0.000	2656.000	474000.000	478300.000
2	17:25:47	84.227%	4.440	170.500	177.400	0.000	2653.000	481800.000	487000.000
3	17:26:30	84.929%	4.585	164.400	173.600	0.000	2624.000	482500.000	482700.000
x		85.666%	4.525	168.900	174.900	0.000	2644.000	479400.000	482600.000
σ		1.916%	0.076	3.986	2.239	0.000	17.560	4745.000	4332.000
%RSD		2.237	1.676	2.360	1.280	0.000	0.664	0.990	0.898

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	90090.000	14660.000	0.000	23820.000	890800.000	917600.000	100.816%	2655.000
2	17:25:47	91430.000	15010.000	0.000	23840.000	884900.000	918700.000	100.456%	2645.000
3	17:26:30	90130.000	14590.000	0.000	23570.000	894700.000	925100.000	99.292%	2626.000
x		90550.000	14750.000	0.000	23740.000	890200.000	920500.000	100.188%	2642.000
σ		759.500	228.100	0.000	150.100	4942.000	4040.000	0.797%	14.890
%RSD		0.839	1.546	0.000	0.632	0.555	0.439	0.795	0.564

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	209.800	148.800	3517.000	136200.000	137000.000	58.670	147.400	138.100
2	17:25:47	211.100	147.500	3493.000	134700.000	134800.000	57.790	144.600	136.100
3	17:26:30	209.100	147.400	3457.000	132700.000	134800.000	58.600	144.800	136.000
x		210.000	147.900	3489.000	134500.000	135500.000	58.350	145.600	136.700
σ		1.000	0.765	30.450	1741.000	1258.000	0.485	1.523	1.202
%RSD		0.476	0.518	0.873	1.294	0.928	0.831	1.046	0.879

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	140.400	308.200	309.100	30.400	2.018	3.432	0.000	900.100
2	17:25:47	137.700	302.100	302.500	30.230	2.482	4.494	0.000	909.900
3	17:26:30	136.900	304.800	306.900	30.300	2.772	3.419	0.000	915.300
x		138.300	305.100	306.100	30.310	2.424	3.781	0.000	908.400
σ		1.839	3.083	3.357	0.087	0.380	0.617	0.000	7.718
%RSD		1.330	1.011	1.096	0.288	15.690	16.320	0.000	0.850

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	0.000	20.130	19.980	88.262%	0.407	0.264	1.514	1.234
2	17:25:47	0.000	19.480	19.890	87.476%	0.333	0.249	1.587	1.237
3	17:26:30	0.000	19.800	19.710	87.508%	0.363	0.276	1.984	1.570
x		0.000	19.810	19.860	87.749%	0.368	0.263	1.695	1.347
σ		0.000	0.327	0.138	0.444%	0.037	0.014	0.253	0.193
%RSD		0.000	1.652	0.693	0.506	10.170	5.288	14.930	14.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	86.840%	20.520	1.009	1.159	353.500	352.700	98.624%	97.818%
2	17:25:47	87.978%	20.690	0.960	1.122	351.400	350.100	99.661%	99.015%
3	17:26:30	87.036%	20.510	1.005	1.157	355.900	354.900	98.447%	98.367%
x		87.285%	20.570	0.991	1.146	353.600	352.600	98.910%	98.400%
σ		0.608%	0.099	0.027	0.020	2.256	2.431	0.656%	0.599%
%RSD		0.697	0.480	2.774	1.775	0.638	0.690	0.663	0.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	2.065	2.072	71.380	67.240	69.210	83.637%
2	17:25:47	2.091	2.156	72.170	66.630	69.330	85.041%
3	17:26:30	2.009	2.140	72.520	67.050	69.450	85.001%
x		2.055	2.123	72.020	66.980	69.330	84.560%
σ		0.042	0.045	0.583	0.314	0.117	0.799%
%RSD		2.026	2.099	0.809	0.468	0.169	0.945

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	90.982%	4.912	162.700	168.600	0.000	2494.000	448900.000	454000.000
2	17:30:03	88.048%	4.369	157.700	163.500	0.000	2474.000	461300.000	463100.000
3	17:30:46	84.067%	4.456	163.400	170.000	0.000	2490.000	465600.000	469100.000
x		87.699%	4.579	161.300	167.300	0.000	2486.000	458600.000	462100.000
σ		3.471%	0.292	3.100	3.430	0.000	10.270	8678.000	7598.000
%RSD		3.958	6.377	1.922	2.050	0.000	0.413	1.892	1.644

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	92180.000	17330.000	0.000	23480.000	907300.000	921100.000	101.492%	2780.000
2	17:30:03	93210.000	17280.000	0.000	23040.000	894300.000	920200.000	101.681%	2773.000
3	17:30:46	94520.000	17470.000	0.000	22930.000	890300.000	918600.000	100.688%	2808.000
x		93300.000	17360.000	0.000	23150.000	897300.000	920000.000	101.287%	2787.000
σ		1171.000	100.000	0.000	291.900	8868.000	1248.000	0.528%	18.630
%RSD		1.255	0.576	0.000	1.261	0.988	0.136	0.521	0.669

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	210.500	162.200	3428.000	137400.000	139300.000	64.360	159.600	142.900
2	17:30:03	210.500	162.100	3469.000	137000.000	137100.000	63.170	158.300	140.800
3	17:30:46	209.200	161.400	3431.000	135800.000	137600.000	62.470	155.500	139.300
x		210.000	161.900	3443.000	136700.000	138000.000	63.330	157.800	141.000
σ		0.746	0.448	22.720	798.300	1147.000	0.955	2.115	1.853
%RSD		0.355	0.277	0.660	0.584	0.831	1.507	1.340	1.314

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	144.000	327.700	330.800	26.090	2.077	3.107	0.000	1008.000
2	17:30:03	142.900	322.300	324.900	24.340	2.363	3.463	0.000	1025.000
3	17:30:46	140.600	322.500	326.200	25.990	2.573	3.592	0.000	1027.000
x		142.500	324.200	327.300	25.470	2.337	3.387	0.000	1020.000
σ		1.764	3.093	3.064	0.986	0.249	0.251	0.000	10.480
%RSD		1.238	0.954	0.936	3.869	10.650	7.407	0.000	1.028

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	0.000	18.280	18.490	89.435%	0.350	0.283	1.721	1.564
2	17:30:03	0.000	18.900	19.250	88.465%	0.368	0.263	1.826	1.413
3	17:30:46	0.000	18.990	18.600	88.450%	0.349	0.260	1.585	1.321
x		0.000	18.730	18.780	88.783%	0.355	0.269	1.711	1.433
σ		0.000	0.387	0.411	0.564%	0.011	0.013	0.121	0.123
%RSD		0.000	2.067	2.189	0.635	2.965	4.701	7.056	8.549

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	87.896%	17.830	0.948	1.069	425.700	420.500	98.631%	97.730%
2	17:30:03	88.657%	17.980	0.894	1.112	426.600	424.600	99.579%	99.914%
3	17:30:46	87.868%	17.720	0.927	1.039	427.700	427.200	99.524%	99.737%
x		88.141%	17.850	0.923	1.073	426.700	424.100	99.245%	99.127%
σ		0.448%	0.131	0.027	0.037	1.014	3.384	0.532%	1.213%
%RSD		0.508	0.731	2.919	3.435	0.238	0.798	0.536	1.223

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	1.815	1.931	73.850	67.440	70.620	83.055%
2	17:30:03	1.938	1.911	74.310	68.340	71.050	85.040%
3	17:30:46	1.842	1.909	73.680	67.630	70.750	86.201%
x		1.865	1.917	73.950	67.800	70.810	84.765%
σ		0.065	0.013	0.327	0.474	0.222	1.591%
%RSD		3.464	0.657	0.442	0.699	0.314	1.877

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	103.699%	-0.020	2.909	2.592	0.000	3.535	26.460	27.590
2	17:37:54	102.623%	-0.012	2.910	2.062	0.000	3.174	37.390	40.550
3	17:38:37	100.453%	-0.026	2.614	2.269	0.000	4.171	53.000	56.550
x		102.258%	-0.019	2.811	2.308	0.000	3.627	38.950	41.560
σ		1.654%	0.007	0.171	0.267	0.000	0.505	13.340	14.510
%RSD		1.617	35.850	6.082	11.580	0.000	13.920	34.250	34.900

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	8.551	4.530	0.000	-12.060	46.340	43.080	110.526%	0.524
2	17:37:54	9.868	4.505	0.000	-13.260	70.820	60.680	111.289%	0.682
3	17:38:37	11.350	5.451	0.000	-11.280	121.800	96.830	108.944%	0.595
x		9.924	4.828	0.000	-12.200	79.670	66.860	110.253%	0.600
σ		1.402	0.539	0.000	0.996	38.530	27.400	1.196%	0.079
%RSD		14.120	11.170	0.000	8.162	48.360	40.980	1.085	13.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	0.077	0.245	0.172	25.490	20.590	-0.015	-0.113	-0.165
2	17:37:54	-0.011	0.249	0.330	20.100	14.560	-0.008	-0.122	-0.161
3	17:38:37	0.129	0.225	0.413	19.140	15.410	-0.009	-0.080	-0.159
x		0.065	0.240	0.305	21.580	16.850	-0.011	-0.105	-0.161
σ		0.071	0.013	0.123	3.422	3.268	0.004	0.022	0.003
%RSD		109.000	5.239	40.210	15.860	19.390	33.160	20.810	1.947

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	-0.185	-1.092	-1.076	0.163	-0.827	-0.142	0.000	0.054
2	17:37:54	-0.175	-0.971	-1.005	0.127	-0.604	0.163	0.000	0.069
3	17:38:37	-0.163	-1.023	-0.982	-0.140	-0.269	0.055	0.000	0.136
x		-0.174	-1.029	-1.021	0.050	-0.567	0.025	0.000	0.086
σ		0.011	0.060	0.049	0.165	0.281	0.155	0.000	0.044
%RSD		6.416	5.874	4.810	333.400	49.600	616.200	0.000	50.620

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	103.690%	0.188	0.175	100.877%	-0.005	-0.004	-0.074	-0.038
2	17:37:54	103.741%	0.129	0.136	100.487%	-0.008	-0.003	-0.067	-0.035
3	17:38:37	104.619%	0.122	0.112	100.837%	-0.009	-0.009	-0.123	-0.087
x		104.017%	0.146	0.141	100.734%	-0.007	-0.005	-0.088	-0.053
σ		0.522%	0.037	0.032	0.214%	0.002	0.003	0.030	0.029
%RSD		0.502	25.030	22.680	0.213	29.180	67.190	34.370	54.720

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	94.948%	-0.022	-0.011	-0.021	0.007	0.038	93.840%	93.552%
2	17:37:54	95.746%	-0.061	-0.009	-0.015	0.031	0.018	94.401%	95.142%
3	17:38:37	95.609%	-0.080	-0.015	-0.009	0.077	0.091	96.042%	95.312%
x		95.435%	-0.054	-0.012	-0.015	0.039	0.049	94.761%	94.669%
σ		0.427%	0.030	0.003	0.006	0.036	0.038	1.144%	0.971%
%RSD		0.447	54.390	25.320	38.340	92.440	76.940	1.208	1.026

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	0.007	0.003	0.079	0.064	0.065	97.196%
2	17:37:54	0.001	0.003	0.020	0.027	0.026	97.176%
3	17:38:37	0.002	0.004	0.013	0.000	0.003	97.096%
x		0.003	0.003	0.037	0.030	0.032	97.156%
σ		0.003	0.001	0.037	0.032	0.031	0.053%
%RSD		95.230	19.500	97.870	104.300	98.480	0.054

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	95.289%	48.070	939.000	966.000	0.000	47690.000	54310.000	55430.000
2	17:42:10	90.943%	48.680	940.700	968.800	0.000	47170.000	55550.000	56850.000
3	17:42:53	88.105%	48.060	939.300	989.500	0.000	48120.000	57300.000	57590.000
x		91.446%	48.270	939.700	974.800	0.000	47660.000	55720.000	56620.000
σ		3.618%	0.357	0.918	12.810	0.000	473.200	1503.000	1098.000
%RSD		3.957	0.739	0.098	1.314	0.000	0.993	2.697	1.939

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	2128.000	10280.000	0.000	51080.000	49730.000	52410.000	95.472%	984.100
2	17:42:10	2158.000	10280.000	0.000	49710.000	48930.000	51990.000	95.204%	979.600
3	17:42:53	2194.000	10430.000	0.000	50790.000	49490.000	50560.000	92.336%	997.200
x		2160.000	10330.000	0.000	50520.000	49380.000	51650.000	94.337%	987.000
σ		33.220	87.400	0.000	723.200	412.500	969.500	1.738%	9.138
%RSD		1.538	0.846	0.000	1.431	0.835	1.877	1.843	0.926

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	513.400	203.000	520.900	1125.000	1278.000	491.900	500.700	253.000
2	17:42:10	506.500	198.400	519.500	1098.000	1228.000	479.100	483.200	245.700
3	17:42:53	511.800	204.500	522.900	1096.000	1212.000	482.500	487.300	242.900
x		510.600	202.000	521.100	1106.000	1239.000	484.500	490.400	247.200
σ		3.599	3.195	1.702	16.120	34.260	6.628	9.138	5.212
%RSD		0.705	1.582	0.327	1.457	2.765	1.368	1.863	2.108

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	251.200	466.800	468.400	37.860	9.804	10.970	0.000	1005.000
2	17:42:10	245.500	454.200	453.100	37.710	9.745	10.450	0.000	995.000
3	17:42:53	242.300	458.700	461.800	37.480	9.719	10.420	0.000	1005.000
x		246.300	459.900	461.100	37.690	9.756	10.610	0.000	1002.000
σ		4.477	6.351	7.673	0.190	0.043	0.308	0.000	5.803
%RSD		1.817	1.381	1.664	0.503	0.446	2.905	0.000	0.579

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	94.260%	998.000	998.500	94.724%	49.530	50.160	50.730	48.010
2	17:42:10	95.113%	1016.000	1008.000	93.562%	50.580	49.830	50.210	47.700
3	17:42:53	93.759%	1014.000	1008.000	92.308%	49.850	49.850	50.450	47.460
x		94.378%	1009.000	1005.000	93.531%	49.980	49.950	50.460	47.730
σ		0.685%	9.980	5.439	1.209%	0.537	0.184	0.257	0.274
%RSD		0.726	0.989	0.541	1.292	1.073	0.367	0.509	0.575

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	90.598%	1884.000	498.100	498.900	2017.000	2002.000	94.450%	95.019%
2	17:42:10	91.251%	1880.000	497.400	497.000	1999.000	1985.000	96.909%	96.783%
3	17:42:53	90.615%	1897.000	500.100	498.400	2009.000	2008.000	95.776%	95.966%
x		90.822%	1887.000	498.500	498.100	2009.000	1998.000	95.712%	95.923%
σ		0.372%	9.238	1.391	0.988	9.052	11.740	1.230%	0.883%
%RSD		0.410	0.489	0.279	0.198	0.451	0.588	1.285	0.920

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	49.620	49.510	19.560	21.000	20.310	90.979%
2	17:42:10	49.510	50.270	19.620	21.000	20.300	93.074%
3	17:42:53	49.890	50.010	19.540	20.940	20.180	94.402%
x		49.670	49.930	19.570	20.980	20.260	92.818%
σ		0.197	0.386	0.041	0.034	0.068	1.726%
%RSD		0.397	0.774	0.207	0.162	0.338	1.860

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	99.342%	0.090	26.400	29.430	0.000	2540.000	455.100	461.800
2	17:50:01	94.743%	0.019	26.350	28.820	0.000	2517.000	461.700	472.900
3	17:50:44	92.901%	0.005	26.340	27.240	0.000	2509.000	470.400	477.200
x		95.662%	0.038	26.360	28.500	0.000	2522.000	462.400	470.600
σ		3.317%	0.046	0.034	1.132	0.000	16.090	7.628	7.931
%RSD		3.468	120.500	0.130	3.972	0.000	0.638	1.650	1.685

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	2701.000	5012.000	0.000	645.900	515.800	518.700	96.682%	6.336
2	17:50:01	2769.000	5119.000	0.000	637.100	502.700	519.600	95.563%	6.340
3	17:50:44	2791.000	5055.000	0.000	618.300	490.200	505.300	95.449%	5.851
x		2754.000	5062.000	0.000	633.800	502.900	514.500	95.898%	6.176
σ		46.510	54.040	0.000	14.100	12.830	8.032	0.681%	0.281
%RSD		1.689	1.068	0.000	2.225	2.551	1.561	0.710	4.555

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	5.218	7.759	8.456	2474.000	2402.000	0.495	2.355	1.314
2	17:50:01	5.433	7.862	8.522	2440.000	2366.000	0.466	2.127	1.447
3	17:50:44	5.083	7.641	8.398	2451.000	2330.000	0.446	2.247	1.288
x		5.245	7.754	8.459	2455.000	2366.000	0.469	2.243	1.349
σ		0.177	0.111	0.062	17.750	35.860	0.025	0.114	0.085
%RSD		3.371	1.428	0.734	0.723	1.516	5.310	5.093	6.328

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	1.473	30.280	31.730	0.819	-0.507	0.796	0.000	5.432
2	17:50:01	1.177	30.690	30.580	0.832	-0.432	1.043	0.000	5.324
3	17:50:44	1.321	30.780	31.220	-0.044	-0.039	0.766	0.000	5.375
x		1.324	30.590	31.180	0.535	-0.326	0.868	0.000	5.377
σ		0.148	0.265	0.574	0.502	0.252	0.152	0.000	0.054
%RSD		11.160	0.866	1.842	93.740	77.120	17.530	0.000	1.007

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	95.320%	3.679	3.533	98.956%	-0.001	-0.003	0.140	0.089
2	17:50:01	95.802%	2.492	2.525	98.708%	-0.002	-0.003	0.077	0.063
3	17:50:44	95.498%	1.841	1.903	97.678%	-0.000	-0.000	0.088	-0.005
x		95.540%	2.671	2.654	98.447%	-0.001	-0.002	0.102	0.049
σ		0.243%	0.932	0.822	0.678%	0.001	0.002	0.034	0.049
%RSD		0.255	34.890	30.980	0.688	70.430	77.560	33.340	98.410

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	92.972%	16.370	0.386	0.439	13.790	13.410	94.270%	93.744%
2	17:50:01	93.197%	13.520	0.395	0.471	13.310	12.740	95.075%	95.433%
3	17:50:44	94.198%	11.130	0.451	0.390	12.950	12.980	97.210%	96.283%
x		93.455%	13.680	0.410	0.434	13.350	13.050	95.518%	95.153%
σ		0.652%	2.625	0.035	0.041	0.421	0.339	1.519%	1.292%
%RSD		0.698	19.190	8.543	9.476	3.155	2.598	1.590	1.358

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	0.123	0.118	1.035	0.999	1.024	97.624%
2	17:50:01	0.087	0.103	1.071	0.948	0.978	99.745%
3	17:50:44	0.084	0.083	0.976	0.984	1.000	100.053%
x		0.098	0.101	1.027	0.977	1.001	99.141%
σ		0.022	0.018	0.048	0.026	0.023	1.322%
%RSD		22.270	17.730	4.666	2.696	2.311	1.334

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	100.469%	96.990	91.840	90.000	0.000	48910.000	49280.000	50120.000
2	17:57:10	99.053%	97.510	90.550	91.950	0.000	49710.000	50200.000	50650.000
3	17:57:53	98.887%	95.230	90.540	90.970	0.000	49420.000	50540.000	51030.000
x		99.470%	96.575%	90.977%	90.975%	0.000	98.692%	100.013%	101.207%
σ		0.870%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.874	1.233	0.824	1.076	0.000	0.817	1.300	0.901

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	498.900	5221.000	0.000	51720.000	48660.000	51760.000	96.820%	95.190
2	17:57:10	502.000	5203.000	0.000	52400.000	49060.000	51220.000	96.334%	100.100
3	17:57:53	506.900	5258.000	0.000	51970.000	49100.000	51450.000	96.586%	97.940
x		100.524%	104.545%	0.000	104.053%	97.878%	102.956%	96.580%	97.750%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.243%	n/a
%RSD		0.803	0.532	0.000	0.662	0.499	0.521	0.252	2.528

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	97.620	97.770	501.600	25950.000	25450.000	98.980	99.290	100.700
2	17:57:10	99.760	99.550	505.100	25890.000	25640.000	99.820	100.000	99.440
3	17:57:53	98.900	99.200	506.800	25880.000	25760.000	99.830	99.430	100.300
x		98.763%	98.842%	100.896%	103.636%	102.471%	99.543%	99.579%	100.133%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.089	0.955	0.522	0.144	0.607	0.487	0.389	0.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	99.390	99.220	98.160	102.100	101.500	102.800	0.000	98.810
2	17:57:10	98.990	99.890	98.520	101.300	101.100	100.100	0.000	98.710
3	17:57:53	101.000	100.700	102.200	101.000	100.700	103.200	0.000	99.220
x		99.793%	99.940%	99.625%	101.474%	101.100%	102.015%	0.000	98.912%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.065	0.746	2.245	0.584	0.424	1.630	0.000	0.278

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	91.843%	93.890	92.020	94.041%	95.340	96.770	97.310	98.530
2	17:57:10	93.655%	95.740	95.910	95.346%	95.760	95.890	96.880	99.520
3	17:57:53	94.194%	98.760	96.840	96.222%	96.030	95.770	98.770	100.000
x		93.230%	96.133%	94.924%	95.203%	95.713%	96.142%	97.656%	99.354%
σ		1.232%	n/a	n/a	1.097%	n/a	n/a	n/a	n/a
%RSD		1.321	2.557	2.694	1.153	0.363	0.566	1.016	0.758

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	90.738%	94.810	90.160	90.410	99.260	97.820	91.030%	91.019%
2	17:57:10	92.037%	96.100	93.860	95.110	98.510	99.820	92.246%	92.790%
3	17:57:53	93.042%	95.350	94.880	96.150	101.900	99.020	93.010%	93.201%
x		91.939%	95.419%	92.967%	93.887%	99.896%	98.887%	92.095%	92.337%
σ		1.155%	n/a	n/a	n/a	n/a	n/a	0.999%	1.159%
%RSD		1.256	0.675	2.673	3.257	1.794	1.021	1.085	1.255

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	95.270	95.050	96.260	95.500	95.750	90.449%
2	17:57:10	96.250	95.880	97.000	95.900	96.720	91.290%
3	17:57:53	96.570	95.990	97.570	96.640	97.130	91.929%
x		96.032%	95.641%	96.944%	96.011%	96.534%	91.223%
σ		n/a	n/a	n/a	n/a	n/a	0.742%
%RSD		0.704	0.539	0.673	0.601	0.736	0.814

CCB4 2/5/2012 6:02:54 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	100.815%	-0.012	2.123	1.679	0.000	1.557	9.027	8.580
2	18:04:20	100.339%	0.002	1.783	1.533	0.000	4.174	10.440	11.020
3	18:05:03	98.408%	-0.012	2.004	1.391	0.000	8.030	14.350	14.980
x		99.854%	-0.007	1.970	1.534	0.000	4.587	11.270	11.530
σ		1.275%	0.008	0.173	0.144	0.000	3.256	2.757	3.228
%RSD		1.276	110.900	8.772	9.394	0.000	70.980	24.460	28.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.744	0.938	0.000	-6.664	30.030	3.142	111.114%	-0.026
2	18:04:20	-0.642	0.404	0.000	-6.417	36.910	9.240	112.199%	0.089
3	18:05:03	-0.379	0.986	0.000	-2.244	24.130	20.320	111.400%	-0.056
x		-0.589	0.776	0.000	-5.108	30.360	10.900	111.571%	0.002
σ		0.188	0.323	0.000	2.484	6.394	8.708	0.562%	0.077
%RSD		31.980	41.610	0.000	48.620	21.060	79.890	0.504	3711.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.074	0.066	0.082	1.758	3.609	-0.001	-0.114	-0.208
2	18:04:20	0.051	0.047	0.106	-0.102	0.991	0.004	-0.131	-0.237
3	18:05:03	-0.103	0.060	0.144	-0.762	-1.030	0.009	-0.094	-0.236
x		-0.042	0.058	0.111	0.298	1.190	0.004	-0.113	-0.227
σ		0.082	0.010	0.031	1.307	2.326	0.005	0.018	0.017
%RSD		194.700	16.690	28.430	439.000	195.400	130.100	16.290	7.408

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.251	-0.817	-0.977	-0.102	-1.014	0.196	0.000	0.028
2	18:04:20	-0.204	-0.898	-1.003	-0.078	-0.734	-0.428	0.000	0.036
3	18:05:03	-0.255	-0.889	-0.825	-0.049	-1.146	0.063	0.000	0.058
x		-0.237	-0.868	-0.935	-0.076	-0.965	-0.056	0.000	0.041
σ		0.029	0.045	0.096	0.026	0.210	0.329	0.000	0.016
%RSD		12.050	5.140	10.280	34.570	21.800	584.000	0.000	38.110

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	106.239%	0.760	0.826	93.439%	-0.001	0.004	0.003	0.009
2	18:04:20	106.815%	0.668	0.702	93.943%	0.007	0.014	-0.081	-0.045
3	18:05:03	106.615%	0.669	0.584	93.005%	0.016	0.012	-0.022	-0.007
x		106.556%	0.699	0.704	93.462%	0.008	0.010	-0.034	-0.014
σ		0.292%	0.053	0.121	0.469%	0.009	0.005	0.043	0.028
%RSD		0.274	7.584	17.220	0.502	110.700	50.480	128.800	193.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	105.868%	-0.021	0.627	0.583	0.039	0.059	103.544%	103.161%
2	18:04:20	106.783%	-0.077	0.577	0.560	0.049	0.043	104.592%	104.305%
3	18:05:03	105.331%	-0.044	0.519	0.465	0.049	0.079	105.830%	104.756%
x		105.994%	-0.047	0.574	0.536	0.045	0.060	104.656%	104.074%
σ		0.734%	0.028	0.054	0.062	0.006	0.018	1.144%	0.822%
%RSD		0.693	59.070	9.457	11.650	12.630	30.430	1.093	0.790

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	0.008	0.019	0.226	0.218	0.215	107.244%
2	18:04:20	0.017	0.034	0.182	0.145	0.169	108.350%
3	18:05:03	0.025	0.029	0.178	0.175	0.185	108.077%
x		0.017	0.027	0.196	0.179	0.190	107.890%
σ		0.009	0.008	0.027	0.036	0.023	0.576%
%RSD		51.480	28.320	13.690	20.310	12.340	0.534

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	99.359%	0.010	22.120	22.900	0.000	2522.000	434.800	456.200
2	18:08:38	94.558%	0.042	21.780	22.660	0.000	2504.000	457.900	466.500
3	18:09:22	92.204%	0.013	22.310	22.870	0.000	2498.000	468.900	471.200
x		95.374%	0.022	22.070	22.810	0.000	2508.000	453.900	464.600
σ		3.647%	0.018	0.265	0.130	0.000	12.750	17.430	7.653
%RSD		3.824	82.910	1.202	0.569	0.000	0.508	3.840	1.647

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	2667.000	4960.000	0.000	638.500	517.500	528.400	96.036%	5.820
2	18:08:38	2725.000	4988.000	0.000	628.000	472.100	507.300	95.236%	5.900
3	18:09:22	2737.000	5032.000	0.000	625.600	459.900	516.100	93.980%	6.638
x		2709.000	4993.000	0.000	630.700	483.200	517.300	95.084%	6.119
σ		37.380	36.200	0.000	6.880	30.370	10.580	1.036%	0.451
%RSD		1.380	0.725	0.000	1.091	6.285	2.046	1.090	7.367

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	5.272	7.695	8.631	2459.000	2347.000	0.450	2.385	1.442
2	18:08:38	5.277	7.548	8.522	2422.000	2326.000	0.450	2.107	1.201
3	18:09:22	4.999	7.575	8.357	2381.000	2315.000	0.478	2.106	1.216
x		5.183	7.606	8.503	2421.000	2329.000	0.460	2.199	1.286
σ		0.159	0.078	0.138	38.680	15.910	0.016	0.161	0.135
%RSD		3.064	1.031	1.622	1.598	0.683	3.444	7.304	10.490

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	1.304	30.870	31.800	0.122	0.832	0.460	0.000	5.456
2	18:08:38	1.175	31.020	30.240	0.842	0.048	0.943	0.000	5.399
3	18:09:22	1.324	30.910	30.410	1.388	-0.149	1.031	0.000	5.320
x		1.268	30.930	30.820	0.784	0.244	0.811	0.000	5.392
σ		0.081	0.078	0.859	0.635	0.519	0.308	0.000	0.068
%RSD		6.397	0.252	2.786	80.970	213.100	37.920	0.000	1.270

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	93.890%	1.415	1.421	98.529%	-0.000	-0.002	0.110	0.139
2	18:08:38	94.943%	1.107	1.146	97.277%	0.007	0.003	0.061	0.086
3	18:09:22	95.386%	0.959	0.933	97.090%	0.009	-0.003	0.000	0.027
x		94.739%	1.160	1.167	97.632%	0.005	-0.001	0.057	0.084
σ		0.768%	0.233	0.245	0.783%	0.005	0.003	0.055	0.056
%RSD		0.811	20.070	20.960	0.802	96.590	401.000	96.210	66.620

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	92.309%	6.969	1.985	1.798	13.170	13.260	93.804%	93.808%
2	18:08:38	92.740%	6.910	1.188	1.183	13.500	13.340	94.683%	95.181%
3	18:09:22	92.370%	6.159	0.893	0.897	13.080	13.280	96.130%	94.954%
x		92.473%	6.679	1.355	1.293	13.250	13.290	94.873%	94.648%
σ		0.233%	0.452	0.565	0.460	0.222	0.039	1.174%	0.736%
%RSD		0.252	6.765	41.690	35.600	1.675	0.293	1.238	0.777

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	0.067	0.062	0.985	1.004	0.990	95.784%
2	18:08:38	0.047	0.053	1.039	0.950	0.986	97.665%
3	18:09:22	0.042	0.044	1.027	0.983	0.983	98.163%
x		0.052	0.053	1.017	0.979	0.986	97.204%
σ		0.014	0.009	0.029	0.027	0.004	1.255%
%RSD		26.150	16.410	2.809	2.781	0.357	1.291

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	95.004%	0.042	35.830	37.480	0.000	3891.000	723.900	758.200
2	18:12:56	92.632%	0.020	36.550	38.250	0.000	3848.000	756.200	776.900
3	18:13:39	90.589%	0.029	36.830	40.060	0.000	3872.000	756.700	775.800
x		92.742%	0.030	36.410	38.600	0.000	3870.000	745.600	770.300
σ		2.210%	0.011	0.515	1.324	0.000	21.620	18.800	10.510
%RSD		2.383	35.720	1.416	3.431	0.000	0.559	2.521	1.365

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	158.900	3979.000	0.000	904.800	5570.000	5509.000	95.379%	1.637
2	18:12:56	157.600	4031.000	0.000	900.500	5247.000	5561.000	93.600%	2.038
3	18:13:39	162.100	4059.000	0.000	916.000	5365.000	5549.000	92.729%	1.811
x		159.500	4023.000	0.000	907.100	5394.000	5540.000	93.903%	1.829
σ		2.285	40.400	0.000	7.974	163.500	26.930	1.351%	0.201
%RSD		1.432	1.004	0.000	0.879	3.031	0.486	1.439	11.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	1.530	4.433	5.127	466.700	468.600	0.266	0.781	1.192
2	18:12:56	1.552	4.396	5.196	471.100	475.900	0.272	0.770	1.278
3	18:13:39	1.875	4.167	5.293	465.600	473.500	0.265	0.620	1.064
x		1.652	4.332	5.205	467.800	472.700	0.268	0.724	1.178
σ		0.193	0.144	0.084	2.925	3.718	0.004	0.090	0.108
%RSD		11.690	3.317	1.607	0.625	0.786	1.377	12.420	9.145

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	1.148	8.854	8.631	-0.020	0.504	0.638	0.000	12.160
2	18:12:56	1.218	8.906	8.811	-0.254	0.131	0.813	0.000	12.150
3	18:13:39	0.975	9.393	8.776	-0.201	0.053	0.217	0.000	12.030
x		1.114	9.051	8.739	-0.158	0.230	0.556	0.000	12.110
σ		0.125	0.297	0.095	0.123	0.241	0.306	0.000	0.074
%RSD		11.260	3.287	1.089	77.470	104.900	55.030	0.000	0.612

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	93.066%	0.669	0.705	96.235%	0.008	0.000	-0.037	-0.022
2	18:12:56	92.919%	0.686	0.617	96.195%	-0.001	-0.010	-0.008	0.027
3	18:13:39	92.527%	0.578	0.599	95.657%	-0.000	-0.001	-0.020	0.010
x		92.837%	0.644	0.641	96.029%	0.002	-0.004	-0.022	0.005
σ		0.279%	0.058	0.057	0.323%	0.005	0.005	0.014	0.025
%RSD		0.300	8.958	8.844	0.336	225.600	149.000	65.910	515.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	91.117%	5.176	0.446	0.555	8.121	8.972	93.665%	92.439%
2	18:12:56	91.429%	4.936	0.443	0.482	8.283	8.120	94.270%	94.581%
3	18:13:39	91.223%	4.958	0.435	0.378	8.440	8.167	94.132%	94.190%
x		91.256%	5.023	0.441	0.472	8.281	8.420	94.022%	93.737%
σ		0.158%	0.133	0.005	0.089	0.160	0.479	0.317%	1.141%
%RSD		0.173	2.639	1.236	18.940	1.928	5.689	0.338	1.217

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	0.035	0.034	1.036	1.035	1.014	96.277%
2	18:12:56	0.025	0.027	1.064	0.974	1.010	98.161%
3	18:13:39	0.030	0.027	1.025	0.978	0.986	98.302%
x		0.030	0.029	1.042	0.996	1.003	97.580%
σ		0.005	0.004	0.020	0.034	0.015	1.131%
%RSD		17.390	13.260	1.964	3.435	1.484	1.159

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	98.419%	0.069	9.615	11.090	0.000	2756.000	384.400	398.100
2	18:17:14	95.853%	0.041	9.868	10.330	0.000	2725.000	396.400	404.500
3	18:17:57	91.940%	0.075	9.475	10.300	0.000	2741.000	400.900	403.100
x		95.404%	0.062	9.653	10.570	0.000	2741.000	393.900	401.900
σ		3.263%	0.018	0.199	0.448	0.000	15.680	8.520	3.388
%RSD		3.420	29.340	2.063	4.238	0.000	0.572	2.163	0.843

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	774.100	3690.000	0.000	554.500	1534.000	1569.000	94.394%	4.516
2	18:17:14	777.500	3638.000	0.000	536.600	1537.000	1584.000	95.490%	4.667
3	18:17:57	799.300	3735.000	0.000	541.800	1575.000	1587.000	92.644%	5.413
x		783.600	3688.000	0.000	544.300	1549.000	1580.000	94.176%	4.865
σ		13.680	48.760	0.000	9.194	22.590	9.591	1.435%	0.480
%RSD		1.746	1.322	0.000	1.689	1.459	0.607	1.524	9.873

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	2.855	5.834	15.270	2665.000	2610.000	0.327	1.623	3.597
2	18:17:14	3.167	5.498	15.260	2574.000	2490.000	0.308	1.407	3.513
3	18:17:57	3.625	5.827	15.210	2609.000	2539.000	0.313	1.272	3.145
x		3.216	5.720	15.250	2616.000	2546.000	0.316	1.434	3.418
σ		0.387	0.192	0.034	45.740	60.360	0.010	0.177	0.240
%RSD		12.050	3.354	0.225	1.748	2.371	3.130	12.350	7.024

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	3.317	24.950	24.200	0.978	0.035	0.521	0.000	6.150
2	18:17:14	3.324	23.250	24.020	1.056	0.112	0.947	0.000	6.231
3	18:17:57	3.268	23.160	23.810	1.722	0.131	1.049	0.000	6.377
x		3.303	23.790	24.010	1.252	0.093	0.839	0.000	6.253
σ		0.030	1.010	0.191	0.409	0.050	0.280	0.000	0.115
%RSD		0.918	4.244	0.797	32.650	54.480	33.400	0.000	1.837

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	93.951%	0.455	0.483	96.570%	0.005	0.002	0.121	0.091
2	18:17:14	95.141%	0.470	0.444	96.495%	0.001	0.002	0.021	0.046
3	18:17:57	94.015%	0.412	0.399	96.979%	0.003	0.006	0.092	0.082
x		94.369%	0.445	0.442	96.681%	0.003	0.003	0.078	0.073
σ		0.669%	0.030	0.042	0.261%	0.002	0.002	0.052	0.024
%RSD		0.709	6.809	9.468	0.270	74.140	70.900	66.280	33.170

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	91.437%	4.481	1.254	1.331	10.810	9.870	93.551%	93.890%
2	18:17:14	92.902%	4.427	1.312	1.281	10.720	10.680	94.991%	94.779%
3	18:17:57	91.433%	4.295	1.300	1.330	9.870	10.350	95.079%	95.702%
x		91.924%	4.401	1.289	1.314	10.470	10.300	94.540%	94.791%
σ		0.847%	0.096	0.031	0.028	0.518	0.405	0.858%	0.906%
%RSD		0.921	2.182	2.368	2.166	4.953	3.934	0.908	0.956

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	0.014	0.018	12.140	11.610	11.780	97.100%
2	18:17:14	0.007	0.012	12.040	11.640	11.830	98.414%
3	18:17:57	0.014	0.011	12.030	11.780	11.880	99.072%
x		0.011	0.014	12.070	11.670	11.830	98.195%
σ		0.004	0.004	0.063	0.095	0.050	1.004%
%RSD		33.810	26.480	0.523	0.817	0.421	1.023

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	93.828%	-0.026	1.672	1.962	0.000	5.015	0.363	0.073
2	18:21:32	89.842%	-0.002	1.450	1.440	0.000	5.380	-0.568	-0.394
3	18:22:15	89.990%	-0.018	1.054	1.359	0.000	5.599	0.114	-0.119
x		91.220%	-0.016	1.392	1.587	0.000	5.331	-0.031	-0.146
σ		2.260%	0.012	0.313	0.327	0.000	0.295	0.482	0.235
%RSD		2.477	77.550	22.480	20.610	0.000	5.533	1579.000	160.200

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	2.583	18.050	0.000	-6.561	-2.069	-10.670	93.676%	0.568
2	18:21:32	1.745	16.920	0.000	-7.898	-3.702	-10.460	92.826%	0.434
3	18:22:15	0.949	18.120	0.000	-7.795	0.015	-13.380	91.058%	0.393
x		1.759	17.690	0.000	-7.418	-1.919	-11.510	92.520%	0.465
σ		0.817	0.675	0.000	0.744	1.863	1.631	1.336%	0.092
%RSD		46.450	3.817	0.000	10.030	97.080	14.170	1.444	19.740

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	-0.124	1.376	0.047	9.038	2.433	-0.007	0.021	0.391
2	18:21:32	-0.483	1.203	0.016	6.756	3.659	0.003	0.036	0.434
3	18:22:15	-0.402	1.250	0.037	6.814	5.385	0.003	0.026	0.368
x		-0.337	1.276	0.033	7.536	3.826	-0.000	0.028	0.398
σ		0.188	0.089	0.016	1.301	1.483	0.006	0.008	0.034
%RSD		55.960	6.984	46.830	17.260	38.760	1328.000	28.470	8.452

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	0.370	0.409	0.465	-0.859	0.119	0.444	0.000	0.034
2	18:21:32	0.341	0.530	0.423	-0.551	-0.176	0.534	0.000	0.025
3	18:22:15	0.451	0.759	0.622	-0.413	0.498	0.754	0.000	0.030
x		0.388	0.566	0.503	-0.608	0.147	0.577	0.000	0.030
σ		0.057	0.178	0.105	0.228	0.338	0.159	0.000	0.005
%RSD		14.640	31.400	20.760	37.540	230.100	27.610	0.000	15.230

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	93.249%	0.385	0.273	96.810%	-0.004	-0.002	-0.086	-0.044
2	18:21:32	93.282%	0.371	0.281	95.493%	-0.002	0.001	-0.026	0.007
3	18:22:15	91.902%	0.263	0.285	95.507%	-0.001	-0.001	-0.097	-0.054
x		92.811%	0.340	0.280	95.937%	-0.002	-0.001	-0.070	-0.030
σ		0.788%	0.067	0.006	0.756%	0.002	0.002	0.038	0.033
%RSD		0.849	19.600	2.262	0.788	65.910	260.200	54.790	107.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	91.253%	3.018	0.125	0.127	0.021	0.040	92.920%	92.983%
2	18:21:32	90.338%	3.103	0.122	0.136	0.009	0.051	93.848%	93.760%
3	18:22:15	90.234%	3.196	0.129	0.124	0.040	0.051	93.385%	93.766%
x		90.608%	3.105	0.125	0.129	0.024	0.047	93.384%	93.503%
σ		0.561%	0.089	0.003	0.006	0.016	0.006	0.464%	0.451%
%RSD		0.619	2.862	2.604	4.981	66.060	12.910	0.497	0.482

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	-0.005	-0.006	0.114	0.104	0.106	95.589%
2	18:21:32	0.003	0.003	0.136	0.076	0.103	96.945%
3	18:22:15	-0.007	0.002	0.109	0.111	0.104	97.475%
x		-0.003	-0.000	0.120	0.097	0.105	96.669%
σ		0.005	0.005	0.014	0.019	0.002	0.973%
%RSD		200.800	1866.000	11.610	19.330	1.506	1.006

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	99.003%	-0.005	0.670	1.277	0.000	16.670	7.534	7.271
2	18:25:51	94.504%	-0.019	1.228	1.020	0.000	15.140	7.484	8.296
3	18:26:33	91.934%	-0.003	0.307	1.382	0.000	16.230	8.151	7.636
x		95.147%	-0.009	0.735	1.226	0.000	16.010	7.723	7.734
σ		3.578%	0.009	0.464	0.186	0.000	0.784	0.371	0.519
%RSD		3.761	99.850	63.150	15.180	0.000	4.896	4.809	6.717

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	4.934	23.910	0.000	-2.895	26.900	15.120	94.415%	0.267
2	18:25:51	5.429	23.880	0.000	-5.482	15.010	14.650	94.348%	0.650
3	18:26:33	5.622	22.660	0.000	-5.849	23.930	14.850	93.536%	0.412
x		5.328	23.490	0.000	-4.742	21.950	14.870	94.099%	0.443
σ		0.355	0.715	0.000	1.610	6.188	0.233	0.489%	0.193
%RSD		6.663	3.043	0.000	33.960	28.200	1.568	0.520	43.570

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	-0.234	1.548	0.128	14.830	14.290	0.010	0.127	0.361
2	18:25:51	-0.109	1.470	0.137	13.700	8.287	0.012	0.174	0.301
3	18:26:33	0.326	1.292	0.133	11.950	7.759	0.002	0.110	0.434
x		-0.006	1.437	0.132	13.500	10.110	0.008	0.137	0.365
σ		0.294	0.131	0.005	1.452	3.631	0.005	0.033	0.066
%RSD		5271.000	9.133	3.412	10.760	35.900	66.590	24.210	18.170

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	0.270	0.392	0.329	-0.313	0.091	0.516	0.000	0.144
2	18:25:51	0.335	0.298	0.283	0.097	0.011	0.945	0.000	0.139
3	18:26:33	0.211	0.380	0.633	-0.671	-0.085	0.757	0.000	0.150
x		0.272	0.357	0.415	-0.296	0.006	0.740	0.000	0.144
σ		0.062	0.051	0.190	0.384	0.088	0.215	0.000	0.006
%RSD		22.740	14.420	45.800	129.900	1594.000	29.060	0.000	3.964

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	93.004%	0.340	0.319	96.914%	-0.002	0.007	0.004	0.029
2	18:25:51	93.140%	0.310	0.300	97.308%	-0.001	-0.000	-0.050	-0.051
3	18:26:33	93.364%	0.240	0.315	96.494%	0.003	0.008	-0.117	-0.085
x		93.169%	0.297	0.312	96.905%	-0.000	0.005	-0.054	-0.036
σ		0.182%	0.052	0.010	0.407%	0.003	0.005	0.061	0.059
%RSD		0.195	17.370	3.137	0.420	1095.000	88.100	112.200	164.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	90.893%	2.826	0.108	0.136	0.146	0.121	92.327%	92.706%
2	18:25:51	91.390%	2.817	0.123	0.141	0.125	0.078	93.910%	93.774%
3	18:26:33	91.934%	2.960	0.140	0.107	0.027	0.105	94.829%	94.420%
x		91.406%	2.868	0.124	0.128	0.099	0.101	93.689%	93.633%
σ		0.521%	0.080	0.016	0.018	0.064	0.022	1.265%	0.866%
%RSD		0.570	2.795	12.890	14.480	64.260	21.560	1.350	0.925

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	-0.007	-0.001	0.128	0.127	0.105	94.418%
2	18:25:51	0.004	-0.001	0.100	0.087	0.091	96.752%
3	18:26:33	0.002	0.007	0.079	0.065	0.072	97.551%
x		-0.001	0.001	0.102	0.093	0.089	96.240%
σ		0.006	0.005	0.025	0.031	0.016	1.628%
%RSD		963.400	307.800	24.210	33.510	18.090	1.692

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	28.993%	0.514	193.500	185.200	0.000	18320.000	6688.000	6608.000
2	18:30:07	28.238%	0.528	183.000	189.700	0.000	17870.000	6754.000	6735.000
3	18:30:50	28.253%	0.480	188.100	186.700	0.000	17660.000	6789.000	6735.000
x		28.495%	0.508	188.200	187.200	0.000	17950.000	6744.000	6693.000
σ		0.432%	0.025	5.240	2.272	0.000	341.200	51.140	73.640
%RSD		1.516	4.888	2.784	1.213	0.000	1.901	0.758	1.100

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	1460.000	12350.000	0.000	4282.000	5781.000	5545.000	94.385%	5.874
2	18:30:07	1477.000	12510.000	0.000	4252.000	5531.000	5491.000	93.687%	5.758
3	18:30:50	1471.000	12440.000	0.000	4206.000	5559.000	5492.000	92.056%	6.482
x		1469.000	12430.000	0.000	4247.000	5624.000	5509.000	93.376%	6.038
σ		8.186	78.960	0.000	38.210	136.800	30.870	1.195%	0.389
%RSD		0.557	0.635	0.000	0.900	2.432	0.560	1.280	6.442

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	6.079	11.470	36.360	1302.000	1261.000	2.291	5.521	11.920
2	18:30:07	5.834	11.380	35.950	1294.000	1240.000	2.157	5.502	11.730
3	18:30:50	6.286	11.280	36.380	1298.000	1260.000	2.206	5.184	11.870
x		6.066	11.380	36.230	1298.000	1254.000	2.218	5.402	11.840
σ		0.226	0.097	0.243	3.904	11.760	0.068	0.189	0.100
%RSD		3.727	0.856	0.670	0.301	0.938	3.048	3.497	0.841

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	11.930	47.510	47.270	-0.118	-0.012	1.871	0.000	39.150
2	18:30:07	12.180	47.410	47.340	0.271	0.743	1.257	0.000	39.000
3	18:30:50	12.330	47.740	48.750	0.008	0.208	1.157	0.000	39.070
x		12.150	47.550	47.780	0.054	0.313	1.428	0.000	39.070
σ		0.202	0.169	0.839	0.198	0.389	0.386	0.000	0.078
%RSD		1.661	0.355	1.755	367.900	124.200	27.050	0.000	0.201

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	92.197%	0.340	0.322	94.455%	0.000	-0.003	0.106	0.124
2	18:30:07	92.748%	0.286	0.281	94.190%	-0.002	0.001	0.169	0.150
3	18:30:50	92.418%	0.342	0.326	92.990%	0.004	-0.003	0.123	0.163
x		92.454%	0.323	0.310	93.878%	0.001	-0.002	0.133	0.146
σ		0.277%	0.031	0.025	0.781%	0.003	0.003	0.032	0.020
%RSD		0.300	9.729	8.017	0.832	381.900	157.700	24.430	13.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	89.811%	2.589	0.128	0.181	49.500	49.900	92.898%	92.628%
2	18:30:07	89.726%	2.635	0.127	0.126	49.890	48.740	94.052%	94.577%
3	18:30:50	89.245%	2.701	0.135	0.162	48.960	50.170	94.408%	94.296%
x		89.594%	2.642	0.130	0.156	49.450	49.600	93.786%	93.833%
σ		0.305%	0.056	0.004	0.028	0.464	0.759	0.789%	1.053%
%RSD		0.341	2.128	3.373	17.780	0.938	1.531	0.841	1.123

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	0.079	0.072	2.165	2.023	2.064	94.331%
2	18:30:07	0.067	0.075	2.068	1.928	1.992	96.839%
3	18:30:50	0.057	0.081	2.026	1.990	1.999	97.903%
x		0.068	0.076	2.086	1.980	2.018	96.357%
σ		0.011	0.005	0.071	0.048	0.040	1.834%
%RSD		16.240	5.986	3.418	2.442	1.974	1.903

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	92.617%	0.067	21.490	22.980	0.000	3702.000	1359.000	1387.000
2	18:34:23	93.734%	0.066	20.360	20.950	0.000	3610.000	1384.000	1381.000
3	18:35:06	89.502%	0.094	18.330	21.300	0.000	3628.000	1399.000	1407.000
x		91.951%	0.076	20.060	21.740	0.000	3647.000	1380.000	1392.000
σ		2.193%	0.016	1.598	1.086	0.000	48.770	20.180	13.950
%RSD		2.385	21.140	7.966	4.995	0.000	1.337	1.462	1.002

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	360.000	6454.000	0.000	1787.000	5436.000	5620.000	92.211%	6.740
2	18:34:23	351.100	6343.000	0.000	1746.000	5389.000	5656.000	91.547%	8.073
3	18:35:06	351.300	6342.000	0.000	1734.000	5656.000	5633.000	90.911%	9.335
x		354.100	6380.000	0.000	1756.000	5494.000	5636.000	91.556%	8.049
σ		5.107	64.570	0.000	27.830	142.100	18.000	0.650%	1.298
%RSD		1.442	1.012	0.000	1.585	2.586	0.319	0.710	16.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	5.445	25.850	13.950	1450.000	1403.000	0.334	2.055	3.793
2	18:34:23	5.108	25.420	14.020	1425.000	1398.000	0.329	2.123	3.708
3	18:35:06	5.136	25.570	13.770	1418.000	1378.000	0.326	1.909	3.579
x		5.230	25.610	13.920	1431.000	1393.000	0.330	2.029	3.693
σ		0.187	0.221	0.131	16.320	13.350	0.004	0.110	0.108
%RSD		3.581	0.864	0.940	1.140	0.958	1.224	5.394	2.918

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	3.680	15.180	14.530	-0.788	-0.243	0.582	0.000	32.360
2	18:34:23	3.895	14.420	14.680	-0.584	0.352	1.011	0.000	32.460
3	18:35:06	3.495	14.820	14.820	-0.001	-0.422	1.247	0.000	32.320
x		3.690	14.810	14.680	-0.458	-0.104	0.947	0.000	32.380
σ		0.200	0.380	0.147	0.408	0.406	0.337	0.000	0.072
%RSD		5.417	2.563	0.998	89.180	388.900	35.620	0.000	0.222

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	91.726%	0.455	0.438	95.144%	-0.006	-0.003	-0.011	0.018
2	18:34:23	92.399%	0.435	0.494	94.388%	-0.001	0.002	0.024	0.034
3	18:35:06	91.935%	0.354	0.377	94.513%	0.000	-0.001	-0.011	0.006
x		92.020%	0.414	0.436	94.682%	-0.002	-0.001	0.001	0.019
σ		0.345%	0.054	0.058	0.406%	0.003	0.003	0.020	0.014
%RSD		0.375	12.940	13.390	0.428	141.100	490.300	3618.000	73.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	89.841%	2.520	0.101	0.133	19.700	19.450	92.775%	92.574%
2	18:34:23	90.023%	2.738	0.096	0.142	20.300	20.530	93.442%	93.950%
3	18:35:06	90.479%	2.685	0.139	0.157	19.200	19.960	93.979%	93.594%
x		90.114%	2.648	0.112	0.144	19.730	19.980	93.399%	93.373%
σ		0.329%	0.114	0.024	0.012	0.550	0.545	0.603%	0.714%
%RSD		0.365	4.288	21.230	8.388	2.789	2.728	0.646	0.765

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	0.052	0.034	0.667	0.558	0.606	95.685%
2	18:34:23	0.023	0.033	0.589	0.584	0.594	97.582%
3	18:35:06	0.051	0.035	0.555	0.564	0.573	97.821%
x		0.042	0.034	0.604	0.569	0.591	97.030%
σ		0.017	0.001	0.057	0.014	0.016	1.170%
%RSD		39.820	3.231	9.495	2.407	2.762	1.206

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	92.905%	0.105	15.150	16.410	0.000	2535.000	1807.000	1842.000
2	18:38:39	87.251%	0.048	17.830	15.910	0.000	2542.000	1868.000	1935.000
3	18:39:22	89.277%	0.102	14.470	15.180	0.000	2520.000	1863.000	1884.000
x		89.811%	0.085	15.820	15.830	0.000	2533.000	1846.000	1887.000
σ		2.865%	0.033	1.777	0.622	0.000	11.110	34.080	46.310
%RSD		3.190	38.220	11.230	3.926	0.000	0.439	1.846	2.454

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	400.300	3179.000	0.000	1778.000	1540.000	1586.000	92.708%	5.379
2	18:38:39	414.700	3127.000	0.000	1782.000	1498.000	1646.000	91.300%	5.121
3	18:39:22	403.700	3180.000	0.000	1754.000	1552.000	1616.000	90.598%	4.491
x		406.200	3162.000	0.000	1771.000	1530.000	1616.000	91.535%	4.997
σ		7.479	30.070	0.000	15.250	28.240	29.860	1.075%	0.457
%RSD		1.841	0.951	0.000	0.861	1.846	1.848	1.174	9.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	5.017	17.830	7.210	872.200	859.300	0.566	6.979	13.490
2	18:38:39	4.820	17.660	7.332	864.100	878.900	0.536	6.980	13.490
3	18:39:22	5.121	17.640	7.111	879.200	865.600	0.514	6.971	13.410
x		4.986	17.710	7.218	871.900	867.900	0.538	6.977	13.460
σ		0.153	0.102	0.110	7.566	10.000	0.026	0.005	0.047
%RSD		3.067	0.576	1.528	0.868	1.152	4.858	0.073	0.346

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	13.690	37.120	36.990	-0.108	0.026	1.009	0.000	15.550
2	18:38:39	13.470	37.160	37.050	-0.460	-0.021	0.801	0.000	15.840
3	18:39:22	13.280	36.140	36.380	-1.094	0.065	0.843	0.000	15.820
x		13.480	36.810	36.810	-0.554	0.023	0.884	0.000	15.730
σ		0.203	0.577	0.370	0.499	0.043	0.110	0.000	0.159
%RSD		1.502	1.566	1.006	90.180	186.800	12.430	0.000	1.012

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	92.229%	1.336	1.271	94.929%	-0.002	-0.005	-0.038	0.004
2	18:38:39	92.266%	1.155	1.122	95.050%	-0.002	0.001	-0.001	0.010
3	18:39:22	92.900%	1.287	1.173	93.937%	-0.005	-0.004	0.064	0.060
x		92.465%	1.259	1.189	94.638%	-0.003	-0.003	0.008	0.025
σ		0.377%	0.094	0.076	0.611%	0.002	0.003	0.052	0.030
%RSD		0.408	7.450	6.377	0.645	56.410	123.800	635.100	123.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	90.327%	2.327	0.113	0.137	18.330	18.430	93.114%	93.107%
2	18:38:39	91.316%	2.335	0.105	0.172	17.810	17.810	95.104%	94.955%
3	18:39:22	90.869%	2.361	0.102	0.084	18.620	18.470	95.157%	94.767%
x		90.838%	2.341	0.106	0.131	18.250	18.240	94.458%	94.276%
σ		0.495%	0.018	0.006	0.044	0.409	0.370	1.165%	1.017%
%RSD		0.545	0.749	5.387	33.640	2.238	2.028	1.233	1.079

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	0.001	0.003	1.299	1.194	1.252	96.241%
2	18:38:39	0.001	0.002	1.309	1.270	1.265	99.009%
3	18:39:22	-0.001	0.001	1.302	1.218	1.287	98.990%
x		0.001	0.002	1.303	1.228	1.268	98.080%
σ		0.001	0.001	0.005	0.039	0.017	1.593%
%RSD		214.100	45.950	0.368	3.169	1.363	1.624

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	93.528%	0.128	15.590	17.670	0.000	3926.000	1881.000	1915.000
2	18:42:55	90.226%	0.189	15.020	17.930	0.000	3922.000	1910.000	1922.000
3	18:43:38	88.176%	0.153	15.920	16.880	0.000	3910.000	1921.000	1981.000
x		90.644%	0.157	15.510	17.490	0.000	3919.000	1904.000	1939.000
σ		2.701%	0.031	0.452	0.548	0.000	8.412	20.680	35.990
%RSD		2.979	19.630	2.916	3.131	0.000	0.215	1.086	1.856

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	273.700	5288.000	0.000	1868.000	5040.000	5274.000	91.340%	4.403
2	18:42:55	274.900	5332.000	0.000	1872.000	5101.000	5302.000	90.530%	4.080
3	18:43:38	281.300	5370.000	0.000	1820.000	5086.000	5230.000	90.128%	4.208
x		276.600	5330.000	0.000	1853.000	5076.000	5269.000	90.666%	4.230
σ		4.080	40.940	0.000	28.860	31.810	36.500	0.617%	0.163
%RSD		1.475	0.768	0.000	1.557	0.627	0.693	0.681	3.856

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	2.284	5.377	80.830	591.100	583.200	3.598	3.062	0.619
2	18:42:55	3.117	5.409	80.930	584.300	578.800	3.583	3.064	0.778
3	18:43:38	1.712	5.162	81.060	586.200	582.100	3.633	2.752	0.568
x		2.371	5.316	80.940	587.200	581.300	3.605	2.959	0.655
σ		0.707	0.135	0.113	3.520	2.306	0.026	0.179	0.110
%RSD		29.810	2.532	0.139	0.599	0.397	0.709	6.061	16.760

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	0.555	7.044	7.605	-0.464	-0.119	0.766	0.000	24.470
2	18:42:55	0.634	6.674	7.113	-0.498	-0.201	0.909	0.000	24.290
3	18:43:38	0.598	6.963	6.724	-0.238	0.278	0.181	0.000	24.300
x		0.596	6.893	7.147	-0.400	-0.014	0.619	0.000	24.360
σ		0.040	0.194	0.441	0.141	0.257	0.386	0.000	0.102
%RSD		6.658	2.819	6.175	35.290	1841.000	62.320	0.000	0.417

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	91.613%	0.330	0.448	93.360%	-0.006	0.004	0.191	0.229
2	18:42:55	92.617%	0.403	0.379	93.350%	-0.004	0.000	0.206	0.203
3	18:43:38	91.963%	0.499	0.380	92.896%	-0.007	0.001	0.026	0.161
x		92.065%	0.411	0.402	93.202%	-0.006	0.002	0.141	0.198
σ		0.510%	0.085	0.040	0.265%	0.002	0.002	0.100	0.034
%RSD		0.554	20.630	9.830	0.284	28.340	92.630	70.890	17.360

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	88.760%	1.901	0.100	0.133	16.310	15.470	92.094%	92.256%
2	18:42:55	88.221%	2.194	0.093	0.103	16.440	15.990	93.166%	94.038%
3	18:43:38	89.187%	2.146	0.105	0.140	16.010	15.970	94.467%	93.991%
x		88.722%	2.080	0.100	0.125	16.250	15.810	93.242%	93.428%
σ		0.484%	0.157	0.006	0.020	0.223	0.296	1.188%	1.015%
%RSD		0.546	7.556	6.118	15.640	1.371	1.872	1.274	1.087

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	0.023	0.032	0.433	0.356	0.402	96.172%
2	18:42:55	0.023	0.044	0.407	0.323	0.371	97.807%
3	18:43:38	0.029	0.037	0.357	0.385	0.364	97.962%
x		0.025	0.037	0.399	0.354	0.379	97.313%
σ		0.003	0.006	0.038	0.031	0.020	0.992%
%RSD		13.340	15.970	9.634	8.774	5.302	1.019

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	91.826%	-0.003	2.628	3.286	0.000	787.000	364.900	378.700
2	18:47:11	87.710%	0.072	3.852	3.517	0.000	785.000	368.100	387.300
3	18:47:54	86.798%	0.015	3.771	3.495	0.000	782.600	381.500	385.400
x		88.778%	0.028	3.417	3.433	0.000	784.900	371.500	383.800
σ		2.678%	0.039	0.685	0.128	0.000	2.212	8.836	4.537
%RSD		3.017	139.100	20.040	3.720	0.000	0.282	2.378	1.182

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	54.390	1068.000	0.000	373.800	1105.000	1060.000	87.897%	0.823
2	18:47:11	54.700	1092.000	0.000	379.300	964.400	1069.000	86.952%	0.552
3	18:47:54	54.210	1084.000	0.000	372.300	1095.000	1079.000	86.017%	0.768
x		54.430	1081.000	0.000	375.100	1055.000	1069.000	86.955%	0.714
σ		0.246	11.870	0.000	3.699	78.460	9.558	0.940%	0.143
%RSD		0.451	1.098	0.000	0.986	7.438	0.894	1.081	20.060

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	0.364	1.147	16.210	116.000	109.100	0.710	0.710	0.048
2	18:47:11	0.636	1.066	16.260	115.200	110.500	0.737	0.643	0.083
3	18:47:54	0.492	1.097	16.110	112.700	106.800	0.688	0.530	0.007
x		0.498	1.103	16.190	114.600	108.800	0.712	0.628	0.046
σ		0.136	0.041	0.076	1.699	1.855	0.024	0.091	0.038
%RSD		27.320	3.730	0.469	1.482	1.705	3.394	14.480	83.490

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	0.076	0.759	1.034	-0.341	0.113	0.629	0.000	4.735
2	18:47:11	0.014	0.757	0.648	0.483	0.093	0.679	0.000	4.803
3	18:47:54	-0.011	0.818	0.519	-0.401	0.152	0.687	0.000	4.853
x		0.026	0.778	0.734	-0.087	0.119	0.665	0.000	4.797
σ		0.045	0.035	0.268	0.494	0.030	0.032	0.000	0.059
%RSD		170.000	4.449	36.570	570.600	25.520	4.765	0.000	1.234

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	90.586%	0.091	0.076	95.343%	-0.007	-0.003	-0.003	0.038
2	18:47:11	90.805%	0.084	0.101	95.174%	-0.005	-0.003	-0.110	-0.030
3	18:47:54	91.535%	0.094	0.072	94.783%	-0.008	-0.001	-0.066	-0.019
x		90.975%	0.090	0.083	95.100%	-0.007	-0.002	-0.060	-0.004
σ		0.497%	0.005	0.016	0.287%	0.002	0.001	0.054	0.036
%RSD		0.546	5.446	19.180	0.302	22.880	53.220	89.780	980.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	90.366%	0.062	-0.002	-0.026	3.057	3.059	91.412%	91.333%
2	18:47:11	89.822%	0.164	0.012	-0.008	3.153	3.264	93.163%	92.723%
3	18:47:54	89.916%	0.077	-0.003	-0.031	3.406	3.160	91.958%	92.767%
x		90.035%	0.101	0.002	-0.022	3.205	3.161	92.178%	92.274%
σ		0.291%	0.055	0.008	0.012	0.180	0.102	0.896%	0.816%
%RSD		0.323	54.450	393.100	54.780	5.630	3.239	0.972	0.884

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	-0.008	-0.002	0.097	0.079	0.087	95.954%
2	18:47:11	-0.007	-0.007	0.067	0.099	0.081	96.929%
3	18:47:54	-0.001	-0.008	0.056	0.079	0.074	97.957%
x		-0.005	-0.006	0.073	0.085	0.081	96.947%
σ		0.003	0.003	0.021	0.011	0.007	1.001%
%RSD		65.550	55.720	28.670	13.450	8.088	1.033

CCV 309497 2/5/2012 6:52:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	96.028%	97.590	86.710	89.360	0.000	48840.000	49150.000	49710.000
2	18:54:19	95.075%	97.180	89.950	92.130	0.000	48650.000	49600.000	50470.000
3	18:55:02	94.818%	94.220	89.990	92.760	0.000	49100.000	50390.000	50910.000
x		95.307%	96.332%	88.884%	91.418%	0.000	97.723%	99.429%	100.727%
σ		0.638%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.669	1.909	2.114	1.979	0.000	0.463	1.259	1.203

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	497.900	5189.000	0.000	51480.000	48590.000	45420.000	93.826%	98.390
2	18:54:19	502.500	5217.000	0.000	51070.000	48600.000	48670.000	94.562%	95.320
3	18:55:02	509.400	5262.000	0.000	51690.000	48830.000	45370.000	94.273%	94.990
x		100.646%	104.451%	0.000	102.830%	97.349%	92.975%	94.220%	96.237%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.371%	n/a
%RSD		1.150	0.709	0.000	0.610	0.279	4.069	0.394	1.948

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	97.090	96.610	499.700	25560.000	25350.000	97.660	97.900	98.050
2	18:54:19	96.440	97.260	503.000	25570.000	25300.000	97.260	96.040	97.820
3	18:55:02	99.030	98.190	500.200	25660.000	25500.000	97.230	97.520	98.530
x		97.521%	97.354%	100.195%	102.399%	101.539%	97.384%	97.154%	98.131%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.384	0.816	0.351	0.219	0.398	0.242	1.011	0.368

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	97.960	98.390	98.160	99.290	99.750	100.100	0.000	97.030
2	18:54:19	98.940	98.070	98.930	100.300	100.300	101.800	0.000	97.670
3	18:55:02	99.530	98.780	99.960	100.500	99.050	100.200	0.000	98.110
x		98.811%	98.413%	99.017%	100.030%	99.694%	100.709%	0.000	97.603%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.802	0.362	0.915	0.650	0.620	0.905	0.000	0.554

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	89.946%	91.380	89.880	91.788%	95.580	95.830	96.400	98.560
2	18:54:19	90.889%	94.920	95.900	92.738%	94.290	96.870	95.400	99.020
3	18:55:02	91.940%	96.840	96.790	93.641%	94.350	96.970	97.930	99.510
x		90.925%	94.379%	94.189%	92.722%	94.741%	96.556%	96.578%	99.031%
σ		0.997%	n/a	n/a	0.927%	n/a	n/a	n/a	n/a
%RSD		1.097	2.936	3.990	0.999	0.771	0.653	1.320	0.481

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	88.927%	94.460	89.180	89.620	98.710	97.690	90.083%	89.511%
2	18:54:19	90.544%	95.490	92.180	93.290	98.330	97.260	91.125%	91.246%
3	18:55:02	90.245%	95.690	95.500	95.460	98.080	97.830	92.452%	92.029%
x		89.906%	95.214%	92.285%	92.790%	98.372%	97.594%	91.220%	90.929%
σ		0.860%	n/a	n/a	n/a	n/a	n/a	1.187%	1.288%
%RSD		0.957	0.695	3.428	3.182	0.322	0.309	1.302	1.417

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	94.070	94.010	95.440	94.740	94.910	89.688%
2	18:54:19	95.490	95.100	96.100	96.250	96.270	90.289%
3	18:55:02	96.050	96.120	97.000	96.450	97.350	90.719%
x		95.205%	95.079%	96.182%	95.816%	96.176%	90.232%
σ		n/a	n/a	n/a	n/a	n/a	0.518%
%RSD		1.071	1.111	0.809	0.976	1.269	0.574

CCB5 2/5/2012 7:00:04 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	99.552%	-0.026	0.749	0.086	0.000	1.591	9.526	8.682
2	19:01:30	96.439%	0.003	-0.365	0.074	0.000	2.816	10.390	8.894
3	19:02:13	96.599%	0.025	0.326	0.199	0.000	10.470	15.720	19.080
x		97.530%	0.001	0.237	0.119	0.000	4.960	11.880	12.220
σ		1.753%	0.026	0.563	0.069	0.000	4.813	3.354	5.941
%RSD		1.797	3441.000	237.700	57.770	0.000	97.040	28.230	48.620

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.770	0.669	0.000	-5.949	20.800	9.770	107.588%	-0.096
2	19:01:30	-0.847	0.918	0.000	-4.199	21.470	10.490	105.528%	-0.094
3	19:02:13	-0.002	1.369	0.000	2.244	36.660	19.440	106.021%	-0.033
x		-0.540	0.986	0.000	-2.635	26.310	13.230	106.379%	-0.074
σ		0.468	0.355	0.000	4.315	8.970	5.390	1.075%	0.036
%RSD		86.650	35.980	0.000	163.800	34.100	40.730	1.011	48.490

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.029	0.033	0.039	1.488	2.582	0.000	-0.123	-0.185
2	19:01:30	-0.136	0.052	0.015	-2.083	-1.386	-0.008	-0.102	-0.238
3	19:02:13	0.052	0.068	0.139	0.622	0.280	0.001	-0.089	-0.188
x		-0.038	0.051	0.064	0.009	0.492	-0.002	-0.105	-0.204
σ		0.094	0.017	0.066	1.863	1.992	0.005	0.017	0.030
%RSD		249.900	33.780	102.100	21330.000	404.800	219.200	16.570	14.850

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.239	-0.882	-0.898	-0.047	-0.649	-0.185	0.000	0.035
2	19:01:30	-0.246	-0.855	-0.972	-0.250	-0.759	0.138	0.000	0.021
3	19:02:13	-0.241	-0.797	-0.809	-0.114	-0.449	0.034	0.000	0.083
x		-0.242	-0.845	-0.893	-0.137	-0.619	-0.004	0.000	0.046
σ		0.003	0.043	0.081	0.103	0.157	0.165	0.000	0.033
%RSD		1.412	5.146	9.119	75.250	25.390	3761.000	0.000	70.790

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	103.746%	0.516	0.508	108.835%	0.007	-0.000	-0.093	-0.047
2	19:01:30	105.384%	0.428	0.462	108.807%	0.003	0.010	-0.056	-0.034
3	19:02:13	103.389%	0.402	0.457	108.431%	0.026	0.017	-0.089	-0.044
x		104.173%	0.449	0.476	108.691%	0.012	0.009	-0.079	-0.042
σ		1.064%	0.060	0.028	0.225%	0.012	0.009	0.021	0.007
%RSD		1.021	13.330	5.905	0.207	99.880	100.200	25.920	16.600

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	106.061%	-0.082	0.611	0.609	0.056	0.071	102.214%	102.538%
2	19:01:30	106.689%	-0.094	0.567	0.548	0.065	0.071	103.378%	103.453%
3	19:02:13	106.249%	-0.131	0.575	0.549	0.115	0.111	102.923%	103.520%
x		106.333%	-0.103	0.584	0.569	0.078	0.084	102.838%	103.170%
σ		0.323%	0.025	0.023	0.035	0.032	0.023	0.587%	0.549%
%RSD		0.304	24.800	3.957	6.089	40.300	27.280	0.571	0.532

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	0.011	0.014	0.169	0.150	0.166	106.943%
2	19:01:30	0.004	0.011	0.125	0.138	0.126	107.037%
3	19:02:13	0.017	0.020	0.163	0.136	0.146	108.065%
x		0.011	0.015	0.153	0.141	0.146	107.348%
σ		0.007	0.005	0.024	0.008	0.020	0.623%
%RSD		61.940	32.240	15.680	5.396	13.600	0.580

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	93.902%	48.930	931.400	959.100	0.000	51640.000	54730.000	55910.000
2	19:05:49	88.913%	48.530	955.600	981.800	0.000	50430.000	56170.000	57550.000
3	19:06:32	85.467%	49.510	976.600	1006.000	0.000	50970.000	57400.000	58580.000
x		89.427%	48.990	954.600	982.400	0.000	51010.000	56100.000	57340.000
σ		4.241%	0.494	22.630	23.600	0.000	603.500	1339.000	1347.000
%RSD		4.742	1.009	2.371	2.402	0.000	1.183	2.386	2.348

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	2288.000	15060.000	0.000	52950.000	53800.000	57850.000	92.811%	986.500
2	19:05:49	2324.000	15170.000	0.000	51700.000	53590.000	57360.000	91.831%	985.600
3	19:06:32	2376.000	15310.000	0.000	51610.000	52740.000	56750.000	91.574%	980.900
x		2329.000	15180.000	0.000	52090.000	53380.000	57320.000	92.072%	984.300
σ		44.540	127.000	0.000	749.200	556.900	552.300	0.653%	3.030
%RSD		1.912	0.837	0.000	1.438	1.043	0.964	0.709	0.308

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	504.800	201.800	592.700	1412.000	1556.000	487.000	495.600	247.400
2	19:05:49	507.700	201.100	597.200	1400.000	1535.000	482.200	486.300	248.100
3	19:06:32	500.200	198.700	589.300	1370.000	1499.000	475.000	477.900	243.500
x		504.200	200.500	593.100	1394.000	1530.000	481.400	486.600	246.300
σ		3.778	1.588	3.952	21.730	28.730	6.024	8.868	2.501
%RSD		0.749	0.792	0.666	1.559	1.878	1.251	1.822	1.015

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	246.500	465.900	464.900	37.650	9.629	9.791	0.000	1024.000
2	19:05:49	247.600	463.100	461.500	37.590	9.871	11.110	0.000	1019.000
3	19:06:32	240.800	459.400	455.100	37.800	10.570	10.800	0.000	1016.000
x		245.000	462.800	460.500	37.680	10.020	10.570	0.000	1020.000
σ		3.671	3.269	4.932	0.108	0.488	0.692	0.000	4.130
%RSD		1.499	0.706	1.071	0.286	4.872	6.543	0.000	0.405

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	91.128%	997.700	991.600	91.116%	49.270	49.550	49.470	48.010
2	19:05:49	91.014%	1010.000	1007.000	89.825%	49.340	49.950	50.160	46.600
3	19:06:32	91.112%	1009.000	1010.000	89.888%	48.740	49.320	48.970	48.330
x		91.085%	1006.000	1003.000	90.276%	49.120	49.610	49.530	47.650
σ		0.062%	6.953	10.090	0.728%	0.330	0.323	0.596	0.921
%RSD		0.068	0.691	1.006	0.806	0.672	0.652	1.202	1.932

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	88.091%	1891.000	498.200	497.400	2006.000	1987.000	92.105%	91.273%
2	19:05:49	87.861%	1904.000	502.300	502.900	2009.000	2009.000	92.638%	93.181%
3	19:06:32	87.899%	1887.000	499.500	501.000	2009.000	1988.000	93.462%	94.047%
x		87.950%	1894.000	500.000	500.400	2008.000	1995.000	92.735%	92.834%
σ		0.123%	8.793	2.102	2.782	1.778	12.240	0.683%	1.419%
%RSD		0.140	0.464	0.420	0.556	0.089	0.613	0.737	1.529

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	48.390	48.390	19.430	20.760	20.100	89.844%
2	19:05:49	48.300	48.760	19.230	20.730	19.930	92.856%
3	19:06:32	48.580	48.610	18.960	20.610	19.760	94.342%
x		48.420	48.590	19.210	20.700	19.930	92.347%
σ		0.144	0.186	0.238	0.080	0.167	2.291%
%RSD		0.297	0.382	1.237	0.385	0.838	2.481

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	91.364%	47.990	929.000	969.300	0.000	50070.000	54190.000	55660.000
2	19:10:06	88.579%	46.860	936.100	982.600	0.000	49380.000	54730.000	56340.000
3	19:10:49	88.013%	45.760	935.200	958.100	0.000	49390.000	55550.000	56800.000
x		89.319%	46.870	933.500	970.000	0.000	49610.000	54820.000	56270.000
σ		1.794%	1.115	3.846	12.260	0.000	396.500	683.700	576.000
%RSD		2.008	2.378	0.412	1.264	0.000	0.799	1.247	1.024

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	2327.000	15010.000	0.000	51380.000	53020.000	53410.000	92.022%	972.300
2	19:10:06	2341.000	15110.000	0.000	51070.000	52310.000	56070.000	91.828%	958.900
3	19:10:49	2348.000	14980.000	0.000	50030.000	52370.000	56260.000	91.170%	957.400
x		2339.000	15030.000	0.000	50830.000	52570.000	55250.000	91.673%	962.900
σ		10.530	71.900	0.000	706.900	394.700	1596.000	0.447%	8.197
%RSD		0.450	0.478	0.000	1.391	0.751	2.888	0.487	0.851

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	495.800	197.900	583.200	1468.000	1617.000	475.500	478.600	240.000
2	19:10:06	494.200	197.700	574.800	1444.000	1597.000	468.300	462.400	234.300
3	19:10:49	488.300	196.000	578.800	1438.000	1555.000	465.800	468.000	237.600
x		492.800	197.200	579.000	1450.000	1590.000	469.900	469.700	237.300
σ		3.954	1.060	4.221	15.870	31.370	5.017	8.188	2.832
%RSD		0.802	0.537	0.729	1.095	1.974	1.068	1.743	1.193

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	240.700	458.600	455.700	36.910	9.248	11.160	0.000	994.500
2	19:10:06	237.000	453.600	444.700	37.360	9.636	11.710	0.000	985.400
3	19:10:49	236.100	448.100	445.700	36.890	9.448	10.100	0.000	993.100
x		237.900	453.400	448.700	37.050	9.444	10.990	0.000	991.000
σ		2.420	5.278	6.088	0.266	0.194	0.816	0.000	4.860
%RSD		1.017	1.164	1.357	0.718	2.058	7.423	0.000	0.490

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	91.455%	994.800	982.200	90.642%	48.400	48.470	48.830	46.470
2	19:10:06	92.298%	989.900	987.600	91.208%	47.700	48.360	49.400	46.100
3	19:10:49	91.901%	990.500	989.400	90.377%	47.940	48.310	48.220	46.910
x		91.885%	991.700	986.400	90.742%	48.010	48.380	48.820	46.500
σ		0.422%	2.638	3.737	0.424%	0.357	0.082	0.589	0.409
%RSD		0.459	0.266	0.379	0.468	0.744	0.169	1.206	0.879

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	88.115%	1866.000	488.100	490.800	1967.000	1940.000	92.936%	92.412%
2	19:10:06	88.166%	1874.000	492.500	491.800	1972.000	1954.000	93.215%	93.618%
3	19:10:49	88.087%	1868.000	487.400	486.900	1944.000	1946.000	94.072%	93.684%
x		88.123%	1869.000	489.300	489.800	1961.000	1946.000	93.408%	93.238%
σ		0.040%	4.104	2.738	2.618	14.910	6.797	0.592%	0.716%
%RSD		0.046	0.220	0.560	0.534	0.760	0.349	0.634	0.768

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	47.100	47.150	18.680	20.280	19.370	92.807%
2	19:10:06	46.920	47.340	18.570	19.780	19.150	94.861%
3	19:10:49	47.220	47.460	18.450	19.580	19.090	94.876%
x		47.080	47.320	18.570	19.880	19.200	94.182%
σ		0.151	0.157	0.114	0.359	0.146	1.190%
%RSD		0.321	0.333	0.611	1.809	0.760	1.264

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	93.403%	0.035	21.140	20.700	0.000	3397.000	782.300	782.100
2	19:17:58	90.289%	0.029	19.100	20.460	0.000	3385.000	794.300	804.600
3	19:18:41	86.587%	-0.010	19.770	19.680	0.000	3388.000	812.700	828.300
x		90.093%	0.018	20.000	20.280	0.000	3390.000	796.400	805.000
σ		3.412%	0.025	1.040	0.536	0.000	6.417	15.300	23.080
%RSD		3.788	134.100	5.202	2.642	0.000	0.189	1.921	2.867

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	299.700	8040.000	0.000	1530.000	21920.000	22480.000	92.302%	6.044
2	19:17:58	303.500	8166.000	0.000	1460.000	22270.000	22500.000	91.091%	6.826
3	19:18:41	307.100	8219.000	0.000	1502.000	22020.000	22830.000	90.494%	6.055
x		303.400	8141.000	0.000	1497.000	22070.000	22610.000	91.296%	6.308
σ		3.702	92.170	0.000	35.190	178.400	198.400	0.921%	0.448
%RSD		1.220	1.132	0.000	2.350	0.808	0.878	1.009	7.108

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	2.476	5.655	71.290	1049.000	1092.000	1.128	1.978	0.597
2	19:17:58	2.634	5.539	71.750	1051.000	1101.000	1.035	1.852	0.456
3	19:18:41	2.480	5.643	71.410	1035.000	1066.000	1.077	1.949	0.507
x		2.530	5.612	71.480	1045.000	1087.000	1.080	1.927	0.520
σ		0.090	0.064	0.239	8.520	18.520	0.046	0.066	0.071
%RSD		3.563	1.136	0.334	0.815	1.704	4.294	3.429	13.670

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	0.718	3.561	3.916	0.323	-0.154	0.950	0.000	40.150
2	19:17:58	0.570	3.723	3.427	-0.549	-0.459	0.255	0.000	40.840
3	19:18:41	0.525	3.370	2.878	-0.765	-0.019	0.512	0.000	40.660
x		0.604	3.551	3.407	-0.330	-0.211	0.572	0.000	40.550
σ		0.101	0.176	0.519	0.576	0.225	0.351	0.000	0.362
%RSD		16.680	4.965	15.230	174.500	106.900	61.370	0.000	0.892

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	91.181%	4.788	4.692	93.080%	-0.002	-0.001	0.102	0.051
2	19:17:58	90.548%	3.702	3.467	92.859%	-0.008	-0.004	0.021	0.082
3	19:18:41	91.047%	2.843	2.733	92.149%	-0.001	-0.002	-0.053	-0.038
x		90.925%	3.778	3.631	92.696%	-0.004	-0.002	0.024	0.032
σ		0.333%	0.975	0.990	0.486%	0.004	0.002	0.078	0.063
%RSD		0.367	25.810	27.270	0.525	112.000	74.290	327.300	198.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	89.462%	17.970	0.281	0.303	11.350	10.930	91.316%	90.920%
2	19:17:58	89.033%	15.460	0.233	0.267	11.460	11.260	92.106%	93.158%
3	19:18:41	89.408%	13.610	0.220	0.274	11.380	11.300	92.509%	92.777%
x		89.301%	15.680	0.244	0.281	11.400	11.160	91.977%	92.285%
σ		0.234%	2.189	0.032	0.019	0.055	0.204	0.607%	1.197%
%RSD		0.262	13.960	13.020	6.867	0.483	1.829	0.660	1.297

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	0.134	0.154	0.409	0.452	0.431	95.896%
2	19:17:58	0.116	0.101	0.451	0.380	0.408	98.721%
3	19:18:41	0.119	0.106	0.404	0.372	0.403	98.463%
x		0.123	0.120	0.421	0.402	0.414	97.693%
σ		0.010	0.030	0.026	0.044	0.015	1.562%
%RSD		7.871	24.540	6.112	10.930	3.615	1.598

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	93.937%	0.004	2.485	2.087	0.000	3.623	2.110	1.226
2	19:25:51	91.972%	-0.019	1.956	1.867	0.000	5.019	2.612	2.063
3	19:26:34	90.431%	0.013	1.842	2.461	0.000	4.603	1.187	1.744
x		92.113%	-0.000	2.094	2.138	0.000	4.415	1.970	1.677
σ		1.757%	0.017	0.343	0.301	0.000	0.716	0.723	0.423
%RSD		1.907	6217.000	16.370	14.060	0.000	16.230	36.710	25.200

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-1.375	6.053	0.000	-2.412	8.817	-10.250	91.255%	-0.003
2	19:25:51	-1.398	5.603	0.000	-2.090	15.970	-7.585	91.113%	-0.003
3	19:26:34	-1.327	5.175	0.000	-2.688	14.820	-7.149	89.016%	0.021
x		-1.367	5.611	0.000	-2.397	13.200	-8.329	90.461%	0.005
σ		0.036	0.439	0.000	0.299	3.841	1.680	1.254%	0.014
%RSD		2.636	7.825	0.000	12.470	29.100	20.180	1.386	261.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-0.064	0.188	-0.007	-3.473	-0.446	0.023	-0.059	-0.150
2	19:25:51	-0.133	0.200	0.015	-7.062	-6.659	0.003	-0.123	-0.162
3	19:26:34	-0.023	0.174	0.045	-7.638	-7.001	0.014	-0.121	-0.150
x		-0.073	0.187	0.018	-6.058	-4.702	0.013	-0.101	-0.154
σ		0.055	0.013	0.026	2.256	3.690	0.010	0.036	0.007
%RSD		75.600	7.100	147.500	37.250	78.470	74.510	35.800	4.596

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-0.218	-1.117	-1.050	0.009	-0.020	0.233	0.000	0.021
2	19:25:51	-0.160	-1.100	-1.086	-0.302	-0.130	0.418	0.000	0.022
3	19:26:34	-0.267	-1.074	-1.184	0.125	0.062	1.177	0.000	0.028
x		-0.215	-1.097	-1.107	-0.056	-0.029	0.609	0.000	0.024
σ		0.054	0.022	0.069	0.221	0.096	0.500	0.000	0.003
%RSD		24.990	1.977	6.266	393.500	330.900	82.120	0.000	14.590

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	89.158%	0.906	0.963	94.795%	-0.006	-0.005	0.024	0.026
2	19:25:51	89.679%	0.734	0.733	94.467%	-0.004	-0.008	-0.083	-0.051
3	19:26:34	89.219%	0.673	0.644	94.323%	-0.006	-0.001	0.009	0.006
x		89.352%	0.771	0.780	94.528%	-0.005	-0.005	-0.017	-0.006
σ		0.285%	0.121	0.165	0.242%	0.001	0.004	0.058	0.040
%RSD		0.319	15.680	21.160	0.256	22.360	79.070	344.400	628.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	88.852%	0.143	0.015	0.017	0.018	0.022	88.003%	87.773%
2	19:25:51	88.621%	0.161	0.025	0.014	0.094	0.064	89.546%	89.983%
3	19:26:34	89.004%	0.111	0.025	-0.003	0.062	0.057	90.236%	89.840%
x		88.825%	0.139	0.022	0.010	0.058	0.048	89.262%	89.199%
σ		0.193%	0.025	0.006	0.011	0.038	0.023	1.143%	1.237%
%RSD		0.217	18.210	26.290	112.200	65.570	47.780	1.281	1.386

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	0.014	0.027	0.084	0.080	0.076	95.033%
2	19:25:51	0.029	0.028	0.051	0.027	0.045	93.968%
3	19:26:34	0.023	0.018	0.035	0.026	0.031	93.726%
x		0.022	0.024	0.057	0.044	0.051	94.242%
σ		0.008	0.006	0.025	0.031	0.023	0.695%
%RSD		35.380	23.080	44.180	69.130	45.880	0.738

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	88.160%	48.700	883.500	922.900	0.000	47010.000	53260.000	54480.000
2	19:30:09	85.726%	46.910	906.200	950.200	0.000	47440.000	54660.000	55250.000
3	19:30:52	84.480%	46.860	922.400	958.900	0.000	47240.000	55170.000	55790.000
x		86.122%	47.490	904.000	944.000	0.000	47230.000	54360.000	55170.000
σ		1.872%	1.048	19.560	18.770	0.000	215.600	988.500	660.700
%RSD		2.173	2.207	2.164	1.989	0.000	0.457	1.818	1.198

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	2061.000	10010.000	0.000	50450.000	49030.000	49230.000	88.437%	959.400
2	19:30:09	2079.000	10130.000	0.000	50360.000	48720.000	49360.000	86.793%	978.500
3	19:30:52	2081.000	10190.000	0.000	50480.000	48890.000	49800.000	85.842%	978.700
x		2074.000	10110.000	0.000	50430.000	48880.000	49460.000	87.024%	972.200
σ		10.970	93.080	0.000	57.980	151.300	296.000	1.313%	11.070
%RSD		0.529	0.921	0.000	0.115	0.310	0.598	1.508	1.138

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	496.000	196.100	513.500	1049.000	1196.000	478.400	482.400	245.700
2	19:30:09	499.600	197.600	513.300	1005.000	1176.000	472.100	473.700	242.300
3	19:30:52	505.100	200.400	514.900	1051.000	1193.000	477.600	475.700	240.000
x		500.200	198.100	513.900	1035.000	1188.000	476.000	477.300	242.600
σ		4.557	2.185	0.853	25.910	10.770	3.406	4.520	2.882
%RSD		0.911	1.103	0.166	2.503	0.907	0.716	0.947	1.188

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	243.500	481.100	479.200	38.900	10.540	10.550	0.000	993.000
2	19:30:09	240.700	479.200	477.000	38.510	10.710	10.590	0.000	992.900
3	19:30:52	241.700	476.900	480.800	38.970	10.750	10.400	0.000	995.500
x		242.000	479.100	479.000	38.790	10.670	10.510	0.000	993.800
σ		1.448	2.127	1.862	0.252	0.111	0.103	0.000	1.472
%RSD		0.598	0.444	0.389	0.648	1.042	0.982	0.000	0.148

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	86.803%	980.100	972.300	86.613%	49.190	49.570	51.500	47.990
2	19:30:09	87.447%	995.100	987.500	86.593%	48.790	49.540	51.050	48.060
3	19:30:52	87.010%	1009.000	1009.000	86.044%	48.690	48.990	50.130	48.260
x		87.087%	994.600	989.700	86.417%	48.890	49.370	50.890	48.100
σ		0.329%	14.200	18.600	0.323%	0.260	0.325	0.697	0.137
%RSD		0.378	1.427	1.880	0.374	0.533	0.659	1.369	0.285

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	84.828%	1885.000	506.500	507.900	1971.000	1956.000	89.270%	88.262%
2	19:30:09	84.768%	1896.000	509.600	512.700	1984.000	1973.000	89.324%	89.908%
3	19:30:52	84.792%	1901.000	509.100	509.800	1984.000	1969.000	90.028%	90.611%
x		84.796%	1894.000	508.400	510.100	1980.000	1966.000	89.540%	89.594%
σ		0.030%	8.325	1.657	2.410	7.280	9.062	0.423%	1.206%
%RSD		0.036	0.440	0.326	0.472	0.368	0.461	0.472	1.346

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	47.270	47.480	18.580	19.860	19.230	90.079%
2	19:30:09	47.950	48.030	18.670	20.120	19.380	91.670%
3	19:30:52	47.710	48.160	18.450	20.190	19.360	92.498%
x		47.650	47.890	18.570	20.060	19.320	91.415%
σ		0.345	0.361	0.115	0.173	0.084	1.229%
%RSD		0.724	0.754	0.618	0.862	0.432	1.345

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	86.892%	0.007	49.720	51.270	0.000	20420.000	7451.000	7613.000
2	19:37:19	83.801%	-0.018	51.030	51.250	0.000	20120.000	7664.000	7777.000
3	19:38:02	81.362%	0.000	47.960	50.400	0.000	19950.000	7752.000	7908.000
x		84.018%	-0.004	49.570	50.970	0.000	20160.000	7622.000	7766.000
σ		2.771%	0.013	1.540	0.497	0.000	237.200	154.400	147.700
%RSD		3.299	342.400	3.106	0.976	0.000	1.177	2.026	1.902

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	2.801	4370.000	0.000	3459.000	109500.000	119000.000	87.980%	1.066
2	19:37:19	2.888	4388.000	0.000	3465.000	110700.000	118800.000	87.339%	1.430
3	19:38:02	2.504	4426.000	0.000	3359.000	108100.000	120400.000	86.839%	0.931
x		2.731	4395.000	0.000	3428.000	109400.000	119400.000	87.386%	1.142
σ		0.201	28.920	0.000	59.330	1288.000	850.300	0.572%	0.258
%RSD		7.366	0.658	0.000	1.731	1.177	0.712	0.655	22.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.255	1.683	3.448	144.500	544.300	0.321	-0.586	0.472
2	19:37:19	0.033	1.541	3.511	141.200	517.500	0.303	-0.493	0.612
3	19:38:02	-0.138	1.573	3.438	143.200	514.900	0.308	-0.560	0.457
x		0.050	1.599	3.466	142.900	525.600	0.311	-0.547	0.514
σ		0.197	0.074	0.040	1.673	16.280	0.010	0.048	0.086
%RSD		395.300	4.650	1.151	1.170	3.098	3.084	8.751	16.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.569	1.054	0.984	-0.558	3.194	4.754	0.000	217.600
2	19:37:19	0.564	1.032	1.151	-0.634	3.162	3.754	0.000	217.500
3	19:38:02	0.623	0.988	0.809	-0.128	3.858	3.934	0.000	219.000
x		0.585	1.024	0.982	-0.440	3.405	4.147	0.000	218.000
σ		0.033	0.034	0.171	0.273	0.393	0.533	0.000	0.829
%RSD		5.656	3.293	17.460	61.980	11.540	12.850	0.000	0.380

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	87.001%	5.145	4.762	88.045%	-0.011	-0.003	-0.075	-0.050
2	19:37:19	87.951%	3.924	3.663	88.697%	-0.005	-0.006	-0.108	-0.098
3	19:38:02	87.173%	3.205	2.914	87.136%	-0.002	-0.001	-0.049	-0.033
x		87.375%	4.091	3.780	87.959%	-0.006	-0.003	-0.077	-0.060
σ		0.507%	0.981	0.930	0.784%	0.005	0.002	0.030	0.034
%RSD		0.580	23.970	24.600	0.891	77.740	73.050	38.660	56.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	85.837%	12.260	0.088	0.108	42.760	42.360	89.194%	89.251%
2	19:37:19	86.552%	10.780	0.094	0.126	43.170	42.020	90.607%	90.040%
3	19:38:02	84.843%	10.110	0.104	0.131	43.740	42.810	90.579%	90.714%
x		85.744%	11.050	0.095	0.122	43.220	42.400	90.127%	90.002%
σ		0.858%	1.101	0.008	0.012	0.492	0.399	0.808%	0.732%
%RSD		1.001	9.968	8.284	10.010	1.138	0.941	0.896	0.814

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.133	0.136	0.140	0.095	0.108	91.618%
2	19:37:19	0.108	0.107	0.066	0.068	0.075	93.098%
3	19:38:02	0.109	0.097	0.052	0.056	0.067	94.041%
x		0.117	0.113	0.086	0.073	0.083	92.919%
σ		0.014	0.020	0.047	0.020	0.021	1.221%
%RSD		11.920	17.690	55.290	27.360	25.610	1.314

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	90.001%	-0.018	12.800	12.210	0.000	4017.000	1427.000	1464.000
2	19:41:38	89.641%	-0.010	11.970	11.700	0.000	3978.000	1426.000	1457.000
3	19:42:21	88.346%	0.006	10.760	11.410	0.000	4021.000	1470.000	1494.000
x		89.329%	-0.007	11.840	11.770	0.000	4005.000	1441.000	1472.000
σ		0.870%	0.013	1.023	0.405	0.000	23.470	24.930	19.720
%RSD		0.974	167.500	8.640	3.439	0.000	0.586	1.730	1.340

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.579	845.500	0.000	683.400	21870.000	22160.000	88.538%	0.207
2	19:41:38	0.646	854.300	0.000	684.200	22290.000	22100.000	88.042%	0.135
3	19:42:21	0.352	857.300	0.000	689.100	22110.000	22090.000	87.099%	0.326
x		0.526	852.400	0.000	685.600	22090.000	22120.000	87.893%	0.223
σ		0.154	6.111	0.000	3.055	206.300	39.910	0.731%	0.097
%RSD		29.270	0.717	0.000	0.446	0.934	0.180	0.832	43.380

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	-0.047	0.396	0.660	22.170	101.500	0.070	-0.155	-0.051
2	19:41:38	-0.094	0.334	0.687	22.250	99.830	0.093	-0.243	-0.052
3	19:42:21	0.071	0.403	0.683	20.180	100.700	0.077	-0.203	-0.040
x		-0.023	0.378	0.677	21.530	100.700	0.080	-0.200	-0.048
σ		0.085	0.038	0.015	1.175	0.818	0.012	0.044	0.007
%RSD		368.700	10.140	2.196	5.459	0.812	14.660	22.020	14.320

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.007	0.074	-0.150	0.190	0.245	1.694	0.000	42.210
2	19:41:38	0.035	0.044	-0.003	0.055	0.274	1.469	0.000	42.900
3	19:42:21	-0.041	-0.075	-0.100	-0.002	0.852	1.262	0.000	42.130
x		0.000	0.014	-0.084	0.081	0.457	1.475	0.000	42.410
σ		0.039	0.079	0.075	0.098	0.342	0.216	0.000	0.425
%RSD		15280.000	553.700	88.410	121.300	74.870	14.660	0.000	1.002

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	88.010%	1.656	1.524	91.545%	-0.007	-0.004	-0.085	-0.044
2	19:41:38	87.714%	1.239	1.329	91.797%	-0.009	-0.004	-0.039	0.003
3	19:42:21	88.105%	1.035	1.203	92.338%	-0.009	-0.007	0.034	0.032
x		87.943%	1.310	1.352	91.893%	-0.008	-0.005	-0.030	-0.003
σ		0.204%	0.316	0.162	0.405%	0.001	0.002	0.060	0.038
%RSD		0.231	24.130	11.990	0.441	14.790	37.910	201.300	1412.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	87.749%	1.012	0.011	0.008	8.341	8.143	89.098%	88.973%
2	19:41:38	87.957%	0.888	0.009	-0.012	8.510	8.043	90.558%	90.540%
3	19:42:21	87.457%	0.816	0.009	0.005	8.696	8.353	90.414%	90.542%
x		87.721%	0.905	0.010	0.000	8.516	8.180	90.023%	90.018%
σ		0.251%	0.099	0.001	0.011	0.178	0.159	0.805%	0.905%
%RSD		0.286	10.920	8.236	4536.000	2.089	1.940	0.894	1.006

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.074	0.067	0.071	0.086	0.070	91.115%
2	19:41:38	0.041	0.059	0.004	0.024	0.011	92.608%
3	19:42:21	0.057	0.042	0.010	0.001	0.000	93.763%
x		0.057	0.056	0.028	0.037	0.027	92.495%
σ		0.016	0.013	0.037	0.044	0.038	1.327%
%RSD		28.380	22.370	130.900	119.200	138.100	1.435

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	84.574%	48.930	955.200	983.300	0.000	66550.000	60730.000	62180.000
2	19:45:55	83.258%	46.550	936.600	999.100	0.000	66970.000	61990.000	62850.000
3	19:46:38	78.395%	49.600	997.200	1019.000	0.000	67460.000	63870.000	65360.000
x		82.076%	48.360	963.000	1000.000	0.000	66990.000	62200.000	63460.000
σ		3.255%	1.607	31.030	17.680	0.000	454.500	1582.000	1676.000
%RSD		3.966	3.323	3.222	1.767	0.000	0.678	2.543	2.642

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	2066.000	14250.000	0.000	53100.000	159100.000	170700.000	87.871%	956.900
2	19:45:55	2084.000	14240.000	0.000	53140.000	160400.000	171500.000	85.659%	962.100
3	19:46:38	2163.000	14750.000	0.000	52830.000	158900.000	171300.000	84.729%	973.100
x		2104.000	14410.000	0.000	53020.000	159500.000	171200.000	86.086%	964.000
σ		51.360	289.600	0.000	173.000	800.600	427.500	1.614%	8.259
%RSD		2.441	2.010	0.000	0.326	0.502	0.250	1.875	0.857

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	491.000	193.600	503.400	1172.000	1722.000	465.500	467.900	236.100
2	19:45:55	497.400	198.800	509.900	1169.000	1681.000	465.700	466.400	231.800
3	19:46:38	496.200	194.100	511.700	1185.000	1670.000	462.600	456.900	233.300
x		494.900	195.500	508.300	1175.000	1691.000	464.600	463.700	233.700
σ		3.375	2.862	4.366	8.532	27.670	1.739	5.958	2.178
%RSD		0.682	1.464	0.859	0.726	1.636	0.374	1.285	0.932

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	236.400	461.500	463.200	38.170	13.490	14.260	0.000	1219.000
2	19:45:55	236.500	461.500	461.600	38.110	13.470	14.470	0.000	1205.000
3	19:46:38	234.700	459.700	455.600	38.950	13.930	14.130	0.000	1211.000
x		235.800	460.900	460.100	38.410	13.630	14.290	0.000	1212.000
σ		1.023	1.024	4.003	0.470	0.260	0.175	0.000	7.341
%RSD		0.434	0.222	0.870	1.223	1.906	1.225	0.000	0.606

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	86.027%	987.400	986.200	85.104%	48.220	48.610	49.610	49.550
2	19:45:55	86.861%	994.400	995.900	84.758%	48.020	48.720	50.250	47.710
3	19:46:38	85.988%	1007.000	1005.000	84.392%	48.130	48.810	50.610	47.890
x		86.292%	996.400	995.800	84.751%	48.120	48.710	50.160	48.380
σ		0.493%	10.140	9.520	0.356%	0.099	0.100	0.507	1.014
%RSD		0.571	1.018	0.956	0.420	0.205	0.205	1.011	2.097

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	83.652%	1844.000	501.800	502.300	1990.000	1985.000	89.168%	89.637%
2	19:45:55	84.251%	1881.000	502.100	501.200	1993.000	1985.000	90.370%	90.075%
3	19:46:38	83.538%	1891.000	507.400	505.600	2001.000	1993.000	90.266%	90.886%
x		83.814%	1872.000	503.800	503.000	1995.000	1987.000	89.935%	90.199%
σ		0.383%	24.700	3.160	2.277	5.883	4.644	0.666%	0.634%
%RSD		0.457	1.319	0.627	0.453	0.295	0.234	0.741	0.703

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	46.550	46.640	18.450	19.890	19.100	89.973%
2	19:45:55	47.420	47.140	18.520	19.390	19.060	92.199%
3	19:46:38	47.280	47.190	18.270	19.820	18.980	92.995%
x		47.080	46.990	18.410	19.700	19.050	91.723%
σ		0.464	0.306	0.127	0.267	0.063	1.566%
%RSD		0.986	0.651	0.688	1.357	0.331	1.708

180-7740-C-1-D MSD 2/5/2012 7:48:45 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	86.238%	46.240	949.400	977.200	0.000	66370.000	60690.000	61630.000
2	19:50:11	84.479%	47.560	953.200	978.700	0.000	65750.000	60580.000	61930.000
3	19:50:54	84.298%	45.900	918.300	951.600	0.000	64840.000	60580.000	61840.000
x		85.005%	46.570	940.300	969.200	0.000	65660.000	60620.000	61800.000
σ		1.072%	0.879	19.110	15.200	0.000	768.300	66.900	153.800
%RSD		1.261	1.888	2.032	1.568	0.000	1.170	0.110	0.249

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	2046.000	14170.000	0.000	52440.000	157500.000	169200.000	86.261%	957.500
2	19:50:11	2046.000	14030.000	0.000	51810.000	156400.000	169000.000	87.232%	951.100
3	19:50:54	2029.000	13920.000	0.000	51310.000	157500.000	169100.000	86.511%	941.300
x		2040.000	14040.000	0.000	51850.000	157100.000	169100.000	86.668%	950.000
σ		10.020	127.500	0.000	567.500	640.300	78.740	0.504%	8.146
%RSD		0.491	0.909	0.000	1.094	0.408	0.047	0.582	0.858

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	492.500	194.200	503.100	1161.000	1672.000	462.700	471.100	236.600
2	19:50:11	485.500	191.300	502.300	1145.000	1639.000	455.600	458.100	229.800
3	19:50:54	484.300	192.500	504.400	1142.000	1605.000	453.200	454.000	228.800
x		487.500	192.600	503.200	1149.000	1639.000	457.200	461.100	231.700
σ		4.409	1.464	1.050	10.100	33.120	4.939	8.924	4.248
%RSD		0.904	0.760	0.209	0.879	2.021	1.080	1.936	1.833

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	238.600	458.900	456.500	38.010	13.500	14.850	0.000	1196.000
2	19:50:11	232.600	447.500	445.100	36.960	12.800	14.130	0.000	1186.000
3	19:50:54	229.500	449.000	451.900	38.120	12.660	13.620	0.000	1194.000
x		233.500	451.800	451.200	37.700	12.990	14.200	0.000	1192.000
σ		4.648	6.170	5.786	0.640	0.451	0.621	0.000	5.394
%RSD		1.990	1.366	1.282	1.697	3.470	4.372	0.000	0.453

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	85.528%	980.400	980.000	84.845%	47.950	48.290	49.780	47.510
2	19:50:11	86.887%	990.600	987.200	85.139%	47.830	47.920	48.810	45.160
3	19:50:54	86.568%	994.800	990.300	84.634%	47.890	47.660	49.670	46.110
x		86.328%	988.600	985.800	84.872%	47.890	47.960	49.420	46.260
σ		0.711%	7.375	5.311	0.253%	0.057	0.313	0.534	1.186
%RSD		0.824	0.746	0.539	0.299	0.118	0.652	1.081	2.563

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	82.465%	1886.000	497.100	499.600	1992.000	1980.000	88.478%	88.406%
2	19:50:11	84.315%	1865.000	495.600	495.000	1979.000	1974.000	90.125%	90.356%
3	19:50:54	85.056%	1861.000	489.200	489.200	1963.000	1949.000	91.222%	90.928%
x		83.945%	1870.000	493.900	494.600	1978.000	1968.000	89.942%	89.897%
σ		1.335%	13.220	4.179	5.247	14.510	16.570	1.381%	1.323%
%RSD		1.590	0.707	0.846	1.061	0.734	0.842	1.536	1.471

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	46.920	46.690	18.330	19.520	18.940	88.916%
2	19:50:11	46.730	46.980	18.070	19.790	19.000	91.180%
3	19:50:54	46.980	46.860	17.990	19.770	18.800	92.267%
x		46.880	46.840	18.130	19.690	18.920	90.788%
σ		0.129	0.141	0.178	0.154	0.102	1.709%
%RSD		0.276	0.302	0.981	0.780	0.541	1.883

180-7775-C-1-A 2/5/2012 7:55:54 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	86.615%	-0.001	229.900	244.200	0.000	20350.000	891.400	901.000
2	19:57:20	81.281%	0.035	233.900	248.500	0.000	20380.000	922.300	938.400
3	19:58:03	83.131%	0.043	225.700	239.200	0.000	20130.000	919.900	923.600
x		83.676%	0.026	229.800	244.000	0.000	20290.000	911.200	921.000
σ		2.709%	0.024	4.132	4.639	0.000	138.600	17.180	18.860
%RSD		3.237	92.780	1.798	1.901	0.000	0.683	1.886	2.048

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	343.800	2536.000	0.000	37150.000	120300.000	130800.000	87.429%	3.769
2	19:57:20	351.400	2589.000	0.000	37090.000	121600.000	130500.000	86.104%	4.283
3	19:58:03	346.300	2490.000	0.000	36180.000	120800.000	131000.000	85.397%	3.362
x		347.100	2539.000	0.000	36800.000	120900.000	130800.000	86.310%	3.805
σ		3.871	49.620	0.000	540.400	677.800	284.800	1.032%	0.461
%RSD		1.115	1.954	0.000	1.468	0.561	0.218	1.195	12.130

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	1.478	1.277	63.060	843.900	1258.000	0.784	3.724	1.540
2	19:57:20	1.757	1.354	63.760	843.100	1249.000	0.841	3.598	1.558
3	19:58:03	2.003	1.241	63.860	827.300	1201.000	0.834	3.592	1.633
x		1.746	1.291	63.560	838.100	1236.000	0.820	3.638	1.577
σ		0.263	0.058	0.436	9.361	30.840	0.031	0.074	0.049
%RSD		15.040	4.487	0.686	1.117	2.495	3.772	2.037	3.132

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	1.997	3.011	2.626	3.358	0.328	1.802	0.000	206.800
2	19:57:20	1.894	2.974	2.449	2.589	0.431	1.131	0.000	205.700
3	19:58:03	1.764	3.210	2.904	2.967	1.097	1.814	0.000	205.900
x		1.885	3.065	2.660	2.971	0.619	1.582	0.000	206.100
σ		0.117	0.127	0.230	0.385	0.417	0.391	0.000	0.588
%RSD		6.205	4.135	8.629	12.950	67.440	24.690	0.000	0.285

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	87.068%	34.850	34.120	88.356%	-0.010	-0.000	-0.024	-0.092
2	19:57:20	87.465%	34.350	33.910	86.855%	0.001	0.003	0.082	0.003
3	19:58:03	86.996%	34.040	33.460	85.628%	-0.002	0.001	-0.004	-0.029
x		87.176%	34.410	33.830	86.946%	-0.004	0.001	0.018	-0.039
σ		0.252%	0.405	0.339	1.366%	0.006	0.002	0.056	0.048
%RSD		0.289	1.176	1.003	1.571	159.600	133.400	309.400	123.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	85.085%	18.030	0.683	0.726	18.030	18.560	88.633%	89.119%
2	19:57:20	85.003%	16.220	0.695	0.732	18.310	18.760	89.651%	90.586%
3	19:58:03	84.864%	14.440	0.634	0.655	18.170	18.380	89.278%	89.277%
x		84.984%	16.230	0.671	0.704	18.170	18.570	89.187%	89.661%
σ		0.112%	1.792	0.032	0.042	0.138	0.192	0.515%	0.805%
%RSD		0.131	11.040	4.842	6.016	0.760	1.036	0.577	0.898

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	0.171	0.179	0.585	0.461	0.541	93.918%
2	19:57:20	0.151	0.171	0.544	0.520	0.518	94.972%
3	19:58:03	0.153	0.153	0.471	0.548	0.499	94.912%
x		0.158	0.168	0.534	0.510	0.519	94.601%
σ		0.011	0.013	0.058	0.044	0.021	0.592%
%RSD		7.184	7.963	10.820	8.679	4.106	0.626

CCV 309497 2/5/2012 8:03:03 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	88.055%	96.160	92.180	92.740	0.000	49180.000	50120.000	51070.000
2	20:04:28	86.671%	94.880	99.570	97.320	0.000	49170.000	50960.000	51950.000
3	20:05:11	83.771%	99.550	100.200	98.330	0.000	49450.000	51960.000	53310.000
x		86.166%	96.864%	97.318%	96.131%	0.000	98.536%	102.028%	104.217%
σ		2.187%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.538	2.490	4.583	3.096	0.000	0.321	1.807	2.167

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	504.800	5251.000	0.000	50960.000	48990.000	46750.000	87.151%	97.210
2	20:04:28	518.500	5294.000	0.000	52030.000	49250.000	48950.000	87.262%	95.110
3	20:05:11	530.900	5414.000	0.000	51440.000	48410.000	49120.000	88.473%	96.010
x		103.608%	106.397%	0.000	102.950%	97.759%	96.547%	87.629%	96.110%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.733%	n/a
%RSD		2.519	1.587	0.000	1.035	0.879	2.745	0.837	1.095

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	98.110	98.240	503.400	25800.000	25420.000	95.570	96.870	96.970
2	20:04:28	98.330	98.770	505.500	25630.000	25370.000	96.920	95.250	96.020
3	20:05:11	98.070	97.390	509.000	25800.000	25460.000	95.830	96.010	97.630
x		98.169%	98.134%	101.191%	102.980%	101.669%	96.108%	96.045%	96.873%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.141	0.706	0.562	0.376	0.191	0.747	0.844	0.838

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	96.550	98.290	99.810	98.440	100.500	100.600	0.000	97.440
2	20:04:28	96.530	99.760	99.880	100.800	101.600	101.700	0.000	98.650
3	20:05:11	97.700	98.460	96.910	99.300	102.300	103.300	0.000	97.940
x		96.929%	98.839%	98.867%	99.529%	101.471%	101.845%	0.000	98.010%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.692	0.813	1.714	1.227	0.869	1.310	0.000	0.619

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	84.553%	92.490	92.460	86.062%	95.270	96.120	97.910	99.950
2	20:04:28	85.772%	96.910	96.730	86.814%	94.430	96.360	97.980	99.370
3	20:05:11	86.732%	99.220	98.790	87.839%	95.710	96.950	96.660	98.750
x		85.686%	96.204%	95.993%	86.905%	95.137%	96.479%	97.516%	99.355%
σ		1.092%	n/a	n/a	0.892%	n/a	n/a	n/a	n/a
%RSD		1.274	3.552	3.360	1.026	0.681	0.445	0.764	0.607

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	84.067%	96.520	90.320	90.790	97.640	98.010	85.827%	86.781%
2	20:04:28	85.945%	95.470	93.540	93.770	96.990	97.640	87.506%	87.905%
3	20:05:11	86.667%	96.660	96.290	95.940	98.450	97.260	88.787%	88.845%
x		85.560%	96.217%	93.381%	93.499%	97.690%	97.638%	87.373%	87.844%
σ		1.342%	n/a	n/a	n/a	n/a	n/a	1.484%	1.033%
%RSD		1.569	0.676	3.198	2.762	0.750	0.381	1.699	1.176

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	94.400	93.210	94.500	93.890	94.060	88.457%
2	20:04:28	95.980	95.710	97.490	95.740	96.570	88.841%
3	20:05:11	95.510	95.810	98.290	96.370	97.290	89.420%
x		95.298%	94.911%	96.760%	95.336%	95.974%	88.906%
σ		n/a	n/a	n/a	n/a	n/a	0.485%
%RSD		0.849	1.550	2.066	1.351	1.767	0.545

CCB6 2/5/2012 8:10:14 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	99.376%	-0.019	2.275	3.195	0.000	3.004	9.283	9.476
2	20:11:40	96.555%	-0.004	2.907	2.545	0.000	7.626	12.240	13.830
3	20:12:23	96.142%	-0.004	2.149	2.232	0.000	10.330	16.680	15.980
x		97.358%	-0.009	2.444	2.657	0.000	6.987	12.740	13.100
σ		1.760%	0.009	0.406	0.491	0.000	3.705	3.725	3.315
%RSD		1.807	95.350	16.610	18.500	0.000	53.020	29.250	25.310

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	-0.805	1.095	0.000	-3.672	28.170	5.785	103.868%	-0.076
2	20:11:40	-0.398	1.002	0.000	-0.259	31.250	16.030	104.145%	-0.108
3	20:12:23	-0.201	1.063	0.000	2.374	41.360	16.400	102.652%	0.005
x		-0.468	1.054	0.000	-0.519	33.590	12.740	103.555%	-0.060
σ		0.308	0.047	0.000	3.031	6.897	6.022	0.794%	0.058
%RSD		65.860	4.505	0.000	584.200	20.530	47.290	0.767	98.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	0.032	0.030	0.065	-1.564	2.727	0.017	-0.090	-0.271
2	20:11:40	0.005	0.063	0.112	-3.800	-1.633	0.024	-0.107	-0.217
3	20:12:23	-0.088	0.041	0.120	-3.971	-1.967	0.037	-0.111	-0.230
x		-0.017	0.045	0.099	-3.112	-0.291	0.026	-0.102	-0.239
σ		0.063	0.017	0.030	1.343	2.619	0.010	0.011	0.029
%RSD		366.900	38.470	29.870	43.170	899.900	37.740	11.040	11.950

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	-0.313	-0.912	-0.797	-0.181	-1.447	-0.222	0.000	0.051
2	20:11:40	-0.283	-0.939	-0.919	-0.065	-0.656	-0.110	0.000	0.064
3	20:12:23	-0.215	-0.829	-0.796	0.285	-1.222	0.580	0.000	0.094
x		-0.271	-0.893	-0.838	0.013	-1.108	0.083	0.000	0.070
σ		0.050	0.057	0.071	0.243	0.407	0.434	0.000	0.022
%RSD		18.590	6.423	8.438	1875.000	36.780	525.600	0.000	31.690

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	98.971%	1.011	0.952	105.802%	0.007	0.003	-0.112	-0.062
2	20:11:40	98.882%	0.847	0.805	105.384%	0.011	0.014	0.013	0.020
3	20:12:23	99.796%	0.774	0.677	105.221%	0.015	0.018	-0.071	-0.042
x		99.216%	0.877	0.811	105.469%	0.011	0.012	-0.057	-0.028
σ		0.504%	0.121	0.137	0.300%	0.004	0.008	0.064	0.042
%RSD		0.508	13.810	16.920	0.284	38.780	67.920	112.600	150.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	101.814%	0.004	0.562	0.509	0.060	0.104	99.121%	98.341%
2	20:11:40	102.166%	-0.014	0.502	0.502	0.065	0.059	100.091%	100.247%
3	20:12:23	102.294%	-0.029	0.438	0.465	0.121	0.126	99.634%	100.013%
x		102.091%	-0.013	0.501	0.492	0.082	0.096	99.615%	99.534%
σ		0.249%	0.016	0.062	0.024	0.034	0.034	0.485%	1.040%
%RSD		0.244	123.700	12.370	4.800	41.540	35.450	0.487	1.045

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	0.038	0.041	0.199	0.199	0.187	103.664%
2	20:11:40	0.045	0.051	0.163	0.142	0.153	104.807%
3	20:12:23	0.055	0.054	0.158	0.165	0.164	105.103%
x		0.046	0.049	0.174	0.169	0.168	104.524%
σ		0.009	0.006	0.022	0.029	0.018	0.760%
%RSD		18.550	13.140	12.850	17.020	10.430	0.727

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	86.731%	0.139	70.900	70.510	0.000	16900.000	2315.000	2349.000
2	20:15:58	82.941%	0.025	69.100	75.130	0.000	16970.000	2379.000	2426.000
3	20:16:41	80.286%	0.072	73.160	74.040	0.000	16940.000	2408.000	2467.000
x		83.320%	0.079	71.060	73.230	0.000	16940.000	2367.000	2414.000
σ		3.239%	0.057	2.034	2.418	0.000	38.520	47.530	60.060
%RSD		3.888	72.670	2.863	3.302	0.000	0.227	2.008	2.488

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1302.000	6217.000	0.000	13740.000	36160.000	36620.000	88.754%	13.820
2	20:15:58	1332.000	6400.000	0.000	13750.000	35820.000	36900.000	87.675%	14.520
3	20:16:41	1363.000	6417.000	0.000	13420.000	35310.000	35960.000	87.247%	15.500
x		1333.000	6345.000	0.000	13640.000	35760.000	36490.000	87.892%	14.610
σ		30.300	111.100	0.000	186.900	428.600	481.800	0.777%	0.840
%RSD		2.273	1.752	0.000	1.371	1.199	1.320	0.884	5.748

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1.605	3.101	679.500	2775.000	2816.000	2.279	4.145	1.804
2	20:15:58	1.985	3.064	679.700	2757.000	2824.000	2.261	4.301	1.844
3	20:16:41	2.223	3.142	684.200	2761.000	2753.000	2.259	4.043	1.736
x		1.938	3.102	681.100	2764.000	2798.000	2.266	4.163	1.795
σ		0.312	0.039	2.670	9.626	38.880	0.011	0.130	0.055
%RSD		16.100	1.249	0.392	0.348	1.390	0.484	3.111	3.050

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1.764	9.051	9.348	0.917	0.267	0.444	0.000	102.800
2	20:15:58	1.888	9.261	8.500	0.055	-0.026	0.698	0.000	102.900
3	20:16:41	1.963	9.041	8.664	0.730	0.198	0.775	0.000	102.500
x		1.872	9.118	8.838	0.567	0.146	0.639	0.000	102.700
σ		0.100	0.124	0.450	0.454	0.153	0.173	0.000	0.225
%RSD		5.363	1.360	5.090	79.980	104.900	27.140	0.000	0.219

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	87.479%	1.585	1.567	89.013%	-0.001	-0.000	0.108	0.115
2	20:15:58	88.585%	1.430	1.282	89.183%	-0.001	0.001	0.080	0.037
3	20:16:41	87.894%	1.331	1.238	88.484%	-0.006	-0.005	0.115	0.172
x		87.986%	1.449	1.362	88.894%	-0.003	-0.002	0.101	0.108
σ		0.559%	0.128	0.178	0.364%	0.003	0.003	0.019	0.068
%RSD		0.635	8.829	13.090	0.410	91.140	198.100	18.480	62.510

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	85.160%	11.760	1.530	1.571	38.980	39.870	89.103%	88.649%
2	20:15:58	86.555%	11.050	1.041	1.147	40.210	40.390	90.186%	90.873%
3	20:16:41	86.027%	10.870	0.868	0.897	41.060	40.540	89.741%	90.812%
x		85.914%	11.230	1.146	1.205	40.080	40.270	89.677%	90.111%
σ		0.705%	0.467	0.344	0.341	1.043	0.352	0.544%	1.267%
%RSD		0.820	4.158	29.980	28.250	2.602	0.875	0.607	1.406

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	0.097	0.087	1.379	1.398	1.380	93.720%
2	20:15:58	0.054	0.055	1.425	1.334	1.371	95.411%
3	20:16:41	0.045	0.060	1.445	1.402	1.381	96.100%
x		0.065	0.067	1.416	1.378	1.377	95.077%
σ		0.028	0.017	0.034	0.038	0.005	1.225%
%RSD		43.030	25.780	2.416	2.756	0.374	1.288

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	83.287%	0.008	30.460	32.820	0.000	206900.000	11570.000	11780.000
2	20:20:15	81.546%	0.009	32.090	33.710	0.000	204300.000	11830.000	11720.000
3	20:20:58	79.811%	0.054	31.790	33.450	0.000	207500.000	11960.000	12170.000
x		81.548%	0.024	31.450	33.330	0.000	206300.000	11780.000	11890.000
σ		1.738%	0.027	0.866	0.459	0.000	1674.000	198.400	244.100
%RSD		2.131	111.800	2.754	1.377	0.000	0.812	1.684	2.053

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	147.200	12830.000	0.000	1603.000	50850.000	51670.000	86.916%	2.664
2	20:20:15	149.200	12950.000	0.000	1598.000	50440.000	49810.000	85.864%	2.526
3	20:20:58	149.300	12780.000	0.000	1570.000	50730.000	46300.000	84.933%	2.439
x		148.600	12850.000	0.000	1590.000	50670.000	49260.000	85.904%	2.543
σ		1.168	88.110	0.000	17.910	210.000	2730.000	0.992%	0.113
%RSD		0.786	0.686	0.000	1.126	0.414	5.542	1.155	4.454

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	-0.157	1.345	9493.000	2759.000	2879.000	34.970	60.250	1.201
2	20:20:15	0.150	1.252	9451.000	2752.000	2852.000	34.100	61.310	1.178
3	20:20:58	0.010	1.231	9510.000	2730.000	2810.000	34.600	62.100	1.232
x		0.001	1.276	9485.000	2747.000	2847.000	34.550	61.220	1.204
σ		0.154	0.061	29.990	15.080	34.420	0.438	0.927	0.027
%RSD		12340.000	4.758	0.316	0.549	1.209	1.268	1.514	2.271

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	0.585	34.140	35.650	1.592	-0.043	1.386	0.000	197.800
2	20:20:15	0.770	35.480	35.350	0.863	-0.066	1.038	0.000	198.500
3	20:20:58	0.826	33.060	34.760	0.892	0.406	0.410	0.000	199.200
x		0.727	34.230	35.250	1.116	0.099	0.945	0.000	198.500
σ		0.126	1.216	0.453	0.413	0.266	0.495	0.000	0.693
%RSD		17.330	3.553	1.284	36.980	269.000	52.380	0.000	0.349

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	86.032%	0.995	1.013	84.678%	-0.008	-0.002	1.943	2.115
2	20:20:15	85.993%	0.954	0.908	84.919%	-0.001	0.008	1.797	1.875
3	20:20:58	86.028%	0.826	0.787	84.028%	-0.004	-0.008	1.953	2.012
x		86.018%	0.925	0.902	84.541%	-0.004	-0.001	1.898	2.001
σ		0.022%	0.088	0.113	0.461%	0.003	0.008	0.087	0.120
%RSD		0.025	9.545	12.520	0.545	82.650	1136.000	4.594	6.012

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	82.901%	9.631	0.379	0.418	44.430	43.830	87.656%	87.695%
2	20:20:15	83.181%	9.764	0.364	0.406	44.410	44.990	89.508%	90.204%
3	20:20:58	83.403%	9.528	0.327	0.316	43.770	43.940	89.438%	89.249%
x		83.162%	9.641	0.357	0.380	44.210	44.250	88.867%	89.049%
σ		0.252%	0.118	0.026	0.056	0.374	0.642	1.050%	1.266%
%RSD		0.303	1.228	7.410	14.660	0.847	1.450	1.181	1.422

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	0.096	0.108	0.363	0.333	0.346	91.094%
2	20:20:15	0.115	0.105	0.343	0.321	0.325	92.712%
3	20:20:58	0.133	0.095	0.277	0.322	0.308	93.835%
x		0.115	0.103	0.327	0.325	0.326	92.547%
σ		0.018	0.007	0.045	0.007	0.019	1.378%
%RSD		16.100	6.657	13.730	2.076	5.906	1.489

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	85.244%	-0.018	1.939	2.466	0.000	46.610	2.753	2.583
2	20:24:32	83.315%	-0.009	2.352	2.492	0.000	44.910	2.722	2.204
3	20:25:15	80.397%	-0.018	1.937	2.470	0.000	53.580	2.621	2.908
x		82.985%	-0.015	2.076	2.476	0.000	48.370	2.699	2.565
σ		2.440%	0.005	0.239	0.014	0.000	4.596	0.069	0.352
%RSD		2.940	33.300	11.500	0.564	0.000	9.503	2.543	13.740

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.778	14.950	0.000	0.673	28.170	3.399	87.826%	0.211
2	20:24:32	0.966	13.310	0.000	-1.701	15.810	6.753	86.106%	0.276
3	20:25:15	0.875	13.810	0.000	-3.255	42.090	8.832	86.408%	0.179
x		0.873	14.030	0.000	-1.428	28.690	6.328	86.780%	0.222
σ		0.094	0.841	0.000	1.979	13.150	2.741	0.918%	0.049
%RSD		10.740	5.997	0.000	138.600	45.830	43.310	1.058	22.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	-0.427	0.923	3.731	8.104	8.273	0.015	0.036	0.209
2	20:24:32	-0.101	0.898	3.576	3.280	5.157	0.010	0.019	0.161
3	20:25:15	-0.303	0.924	3.680	2.376	4.628	0.026	0.110	0.135
x		-0.277	0.915	3.662	4.587	6.020	0.017	0.055	0.168
σ		0.165	0.015	0.079	3.080	1.970	0.008	0.048	0.038
%RSD		59.490	1.599	2.152	67.140	32.720	48.430	87.500	22.460

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.121	0.884	0.698	-0.448	0.114	0.400	0.000	0.113
2	20:24:32	0.209	0.979	0.677	-0.209	0.686	1.251	0.000	0.113
3	20:25:15	0.072	0.717	0.756	0.295	-0.178	1.325	0.000	0.105
x		0.134	0.860	0.711	-0.121	0.207	0.992	0.000	0.110
σ		0.070	0.133	0.041	0.379	0.439	0.514	0.000	0.005
%RSD		51.800	15.450	5.753	314.300	212.200	51.850	0.000	4.186

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	86.751%	0.474	0.542	91.042%	-0.003	-0.003	-0.010	-0.041
2	20:24:32	87.259%	0.435	0.442	90.711%	-0.003	-0.006	-0.136	-0.093
3	20:25:15	87.147%	0.405	0.416	90.663%	-0.005	-0.000	-0.031	-0.019
x		87.052%	0.438	0.467	90.805%	-0.003	-0.003	-0.059	-0.051
σ		0.267%	0.035	0.067	0.207%	0.001	0.003	0.067	0.038
%RSD		0.307	7.960	14.290	0.228	37.240	91.060	114.300	74.090

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	86.358%	5.827	0.153	0.180	0.083	0.062	89.707%	88.809%
2	20:24:32	86.663%	6.041	0.138	0.172	0.057	0.105	90.562%	90.497%
3	20:25:15	86.098%	5.879	0.129	0.164	0.096	0.106	89.746%	90.203%
x		86.373%	5.915	0.140	0.172	0.079	0.091	90.005%	89.836%
σ		0.283%	0.112	0.012	0.008	0.020	0.025	0.482%	0.902%
%RSD		0.328	1.885	8.662	4.678	25.600	27.510	0.536	1.004

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.008	0.018	0.085	0.088	0.078	95.273%
2	20:24:32	0.005	0.010	0.061	0.056	0.060	97.276%
3	20:25:15	0.001	0.005	0.050	0.027	0.054	97.184%
x		0.005	0.011	0.065	0.057	0.064	96.578%
σ		0.003	0.006	0.018	0.030	0.012	1.131%
%RSD		71.780	58.180	27.320	52.840	19.590	1.171

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	85.346%	-0.001	301.100	313.000	0.000	21690.000	22500.000	22900.000
2	20:28:49	81.406%	0.009	302.000	317.600	0.000	21850.000	23230.000	23660.000
3	20:29:32	81.766%	0.026	294.900	310.200	0.000	21620.000	23170.000	23490.000
x		82.839%	0.011	299.300	313.600	0.000	21720.000	22970.000	23350.000
σ		2.178%	0.014	3.830	3.703	0.000	119.800	408.300	395.500
%RSD		2.629	122.500	1.279	1.181	0.000	0.552	1.778	1.694

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	2.593	6112.000	0.000	5407.000	155600.000	168700.000	87.072%	0.515
2	20:28:49	3.448	6163.000	0.000	5358.000	154700.000	167900.000	85.717%	0.584
3	20:29:32	2.391	6099.000	0.000	5294.000	154700.000	169300.000	85.197%	0.607
x		2.811	6124.000	0.000	5353.000	155000.000	168600.000	85.995%	0.569
σ		0.561	33.760	0.000	56.640	498.900	698.600	0.968%	0.048
%RSD		19.950	0.551	0.000	1.058	0.322	0.414	1.126	8.404

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.015	1.173	3286.000	2511.000	2984.000	2.009	1.130	0.492
2	20:28:49	-0.042	1.155	3306.000	2511.000	2960.000	1.950	0.965	0.370
3	20:29:32	-0.284	1.090	3282.000	2467.000	2911.000	1.979	0.954	0.458
x		-0.103	1.139	3292.000	2497.000	2952.000	1.979	1.016	0.440
σ		0.159	0.044	12.590	25.350	37.410	0.029	0.098	0.063
%RSD		153.500	3.849	0.383	1.015	1.268	1.486	9.675	14.260

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.762	1.628	1.329	1.545	-0.026	0.625	0.000	244.400
2	20:28:49	0.820	1.489	1.299	2.306	-0.349	1.130	0.000	246.000
3	20:29:32	0.566	1.494	1.524	1.584	-0.019	0.304	0.000	243.900
x		0.716	1.537	1.384	1.812	-0.131	0.686	0.000	244.800
σ		0.133	0.079	0.122	0.428	0.188	0.417	0.000	1.079
%RSD		18.620	5.136	8.836	23.640	143.300	60.700	0.000	0.441

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	85.673%	1.081	1.077	86.396%	-0.010	-0.001	-0.050	-0.032
2	20:28:49	85.991%	1.015	1.033	86.374%	-0.007	-0.001	-0.031	-0.047
3	20:29:32	85.921%	0.942	1.067	85.372%	-0.004	0.002	-0.067	-0.077
x		85.861%	1.012	1.059	86.047%	-0.007	-0.000	-0.049	-0.052
σ		0.167%	0.070	0.023	0.585%	0.003	0.002	0.018	0.023
%RSD		0.195	6.869	2.171	0.680	41.340	2259.000	36.390	44.230

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	83.509%	6.572	0.282	0.370	60.350	61.690	88.193%	88.543%
2	20:28:49	85.092%	6.706	0.270	0.365	60.410	59.640	90.014%	89.314%
3	20:29:32	84.112%	6.660	0.246	0.327	61.190	60.620	89.870%	89.686%
x		84.238%	6.646	0.266	0.354	60.650	60.650	89.359%	89.181%
σ		0.799%	0.068	0.018	0.024	0.471	1.024	1.012%	0.583%
%RSD		0.948	1.030	6.832	6.674	0.776	1.689	1.133	0.654

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.010	0.026	0.142	0.120	0.141	91.691%
2	20:28:49	0.009	0.024	0.121	0.178	0.150	93.584%
3	20:29:32	0.012	0.012	0.150	0.098	0.125	93.685%
x		0.010	0.020	0.138	0.132	0.139	92.987%
σ		0.001	0.008	0.015	0.042	0.013	1.123%
%RSD		11.800	37.910	11.030	31.520	9.068	1.208

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	86.409%	-0.010	18.670	19.450	0.000	350.700	7.812	7.396
2	20:33:06	82.377%	-0.018	18.500	19.510	0.000	353.600	10.010	9.186
3	20:33:50	81.390%	-0.018	17.580	19.030	0.000	350.800	8.880	9.451
x		83.392%	-0.015	18.250	19.330	0.000	351.700	8.900	8.678
σ		2.659%	0.005	0.587	0.261	0.000	1.655	1.098	1.118
%RSD		3.189	30.410	3.216	1.351	0.000	0.470	12.340	12.880

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	0.142	33.160	0.000	40.610	64.590	45.350	86.134%	0.143
2	20:33:06	0.758	33.940	0.000	39.580	83.850	56.790	85.913%	0.372
3	20:33:50	0.418	33.370	0.000	37.010	85.080	54.590	84.831%	0.302
x		0.440	33.490	0.000	39.070	77.840	52.240	85.626%	0.272
σ		0.309	0.402	0.000	1.852	11.490	6.071	0.697%	0.118
%RSD		70.230	1.201	0.000	4.740	14.760	11.620	0.815	43.170

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	-0.093	1.279	1.974	12.050	14.780	0.015	0.040	0.056
2	20:33:06	0.161	1.166	2.189	7.691	9.024	-0.006	-0.027	0.059
3	20:33:50	0.343	1.090	2.070	5.534	9.837	0.002	-0.041	0.109
x		0.137	1.178	2.078	8.425	11.210	0.003	-0.009	0.075
σ		0.219	0.095	0.108	3.319	3.115	0.010	0.043	0.030
%RSD		160.200	8.075	5.187	39.400	27.780	301.200	463.700	39.560

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	0.107	0.529	1.035	-0.574	-0.730	0.643	0.000	0.148
2	20:33:06	0.112	0.807	0.550	-0.456	-0.464	0.650	0.000	0.195
3	20:33:50	0.024	0.701	0.860	-0.316	-0.358	0.463	0.000	0.177
x		0.081	0.679	0.815	-0.449	-0.517	0.585	0.000	0.173
σ		0.049	0.140	0.246	0.129	0.192	0.106	0.000	0.024
%RSD		60.970	20.660	30.140	28.810	37.020	18.070	0.000	13.820

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	86.195%	0.410	0.335	89.451%	-0.011	-0.002	-0.059	-0.049
2	20:33:06	86.116%	0.347	0.295	89.591%	0.004	-0.000	-0.030	-0.028
3	20:33:50	87.134%	0.393	0.352	87.944%	-0.005	-0.000	-0.020	-0.022
x		86.482%	0.383	0.327	88.995%	-0.004	-0.001	-0.036	-0.033
σ		0.566%	0.033	0.029	0.913%	0.008	0.001	0.020	0.014
%RSD		0.655	8.496	8.919	1.026	199.100	90.590	55.610	43.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	85.304%	4.207	0.051	0.089	0.066	0.134	87.508%	88.214%
2	20:33:06	85.601%	4.387	0.085	0.100	0.091	0.077	89.460%	89.781%
3	20:33:50	85.917%	4.312	0.069	0.101	0.129	0.099	89.555%	89.131%
x		85.607%	4.302	0.068	0.097	0.095	0.103	88.841%	89.042%
σ		0.306%	0.090	0.017	0.007	0.032	0.029	1.155%	0.788%
%RSD		0.358	2.094	24.340	6.796	33.280	27.830	1.300	0.885

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	-0.001	0.013	0.082	0.075	0.078	93.836%
2	20:33:06	0.007	-0.001	0.072	0.074	0.054	95.567%
3	20:33:50	0.004	0.010	0.054	0.020	0.037	96.130%
x		0.003	0.007	0.069	0.057	0.056	95.178%
σ		0.004	0.007	0.014	0.031	0.021	1.196%
%RSD		126.700	95.090	20.810	55.740	36.670	1.256

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	89.659%	-0.010	2.586	1.225	0.000	2.119	0.373	0.227
2	20:40:17	85.305%	-0.010	1.988	1.656	0.000	3.881	1.283	1.678
3	20:41:00	85.921%	-0.018	1.271	1.292	0.000	4.324	2.891	1.610
x		86.962%	-0.013	1.948	1.391	0.000	3.441	1.516	1.171
σ		2.356%	0.005	0.659	0.232	0.000	1.166	1.275	0.819
%RSD		2.710	37.160	33.810	16.640	0.000	33.890	84.130	69.910

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-1.323	3.210	0.000	-2.600	4.184	-10.190	87.544%	-0.050
2	20:40:17	-1.309	3.370	0.000	-4.444	17.460	-11.290	86.701%	-0.067
3	20:41:00	-1.229	2.903	0.000	-4.122	24.860	-3.171	86.829%	-0.105
x		-1.287	3.161	0.000	-3.722	15.500	-8.217	87.025%	-0.074
σ		0.051	0.237	0.000	0.985	10.480	4.404	0.455%	0.028
%RSD		3.969	7.513	0.000	26.460	67.590	53.600	0.522	38.210

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-0.080	0.281	0.309	-6.760	-3.424	-0.005	-0.149	-0.226
2	20:40:17	-0.125	0.247	0.321	-8.118	-7.853	0.004	-0.068	-0.228
3	20:41:00	-0.204	0.202	0.402	-8.707	-9.269	-0.002	-0.149	-0.183
x		-0.136	0.243	0.344	-7.862	-6.849	-0.001	-0.122	-0.212
σ		0.063	0.040	0.050	0.998	3.049	0.004	0.047	0.026
%RSD		46.120	16.240	14.660	12.700	44.520	367.000	38.630	12.070

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-0.231	-1.192	-1.126	-0.105	-0.247	0.864	0.000	0.005
2	20:40:17	-0.191	-1.102	-1.121	-0.129	-0.508	0.134	0.000	0.008
3	20:41:00	-0.227	-0.997	-1.217	-0.163	0.151	0.168	0.000	0.010
x		-0.217	-1.097	-1.155	-0.132	-0.201	0.389	0.000	0.007
σ		0.022	0.098	0.054	0.029	0.332	0.412	0.000	0.002
%RSD		10.290	8.900	4.693	22.080	165.000	106.000	0.000	32.120

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	85.870%	0.182	0.179	90.672%	-0.007	-0.007	-0.040	-0.014
2	20:40:17	86.134%	0.147	0.149	90.143%	-0.004	0.001	-0.054	-0.036
3	20:41:00	86.902%	0.185	0.174	89.683%	-0.009	-0.005	-0.014	0.002
x		86.302%	0.171	0.168	90.166%	-0.007	-0.004	-0.036	-0.016
σ		0.536%	0.021	0.016	0.495%	0.003	0.004	0.021	0.019
%RSD		0.621	12.220	9.643	0.549	42.110	106.100	57.490	119.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	86.183%	0.322	-0.012	-0.026	0.007	-0.006	86.149%	86.474%
2	20:40:17	86.058%	0.280	-0.003	0.017	-0.007	0.037	88.523%	87.609%
3	20:41:00	86.896%	0.208	-0.003	-0.010	0.013	0.022	88.394%	89.014%
x		86.379%	0.270	-0.006	-0.006	0.004	0.018	87.689%	87.699%
σ		0.452%	0.058	0.005	0.022	0.010	0.022	1.335%	1.272%
%RSD		0.523	21.300	89.200	363.900	222.900	125.700	1.522	1.451

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	0.000	-0.001	0.037	0.048	0.034	91.838%
2	20:40:17	0.001	-0.002	0.009	0.018	0.002	92.056%
3	20:41:00	-0.002	-0.001	-0.000	0.011	0.014	92.057%
x		-0.000	-0.001	0.015	0.026	0.017	91.984%
σ		0.002	0.000	0.019	0.020	0.016	0.126%
%RSD		398.500	38.030	126.600	75.250	97.770	0.137

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	82.467%	48.120	907.700	945.100	0.000	46810.000	54260.000	55060.000
2	20:44:35	81.123%	47.020	886.100	946.600	0.000	46350.000	54760.000	55680.000
3	20:45:18	81.398%	45.580	884.600	923.000	0.000	46030.000	55070.000	55790.000
x		81.663%	46.910	892.800	938.200	0.000	46400.000	54690.000	55510.000
σ		0.710%	1.277	12.950	13.210	0.000	391.500	404.700	391.800
%RSD		0.869	2.723	1.451	1.408	0.000	0.844	0.740	0.706

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	2078.000	10140.000	0.000	49340.000	47750.000	47890.000	85.990%	961.100
2	20:44:35	2068.000	9916.000	0.000	48820.000	47670.000	48460.000	85.102%	949.800
3	20:45:18	2062.000	9976.000	0.000	49160.000	47770.000	49260.000	84.056%	962.200
x		2070.000	10010.000	0.000	49110.000	47730.000	48540.000	85.049%	957.700
σ		8.175	117.900	0.000	265.700	55.670	686.700	0.968%	6.848
%RSD		0.395	1.177	0.000	0.541	0.117	1.415	1.139	0.715

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	489.200	193.900	500.600	991.900	1191.000	460.100	466.200	232.500
2	20:44:35	488.000	193.100	502.400	989.100	1158.000	455.200	457.700	229.500
3	20:45:18	482.100	193.300	503.400	1011.000	1164.000	457.500	462.300	231.100
x		486.400	193.400	502.100	997.300	1171.000	457.600	462.100	231.100
σ		3.790	0.402	1.432	11.940	17.180	2.427	4.255	1.513
%RSD		0.779	0.208	0.285	1.197	1.467	0.530	0.921	0.655

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	234.900	455.300	453.100	36.260	9.550	10.760	0.000	974.300
2	20:44:35	231.500	451.200	452.500	36.330	9.550	10.610	0.000	975.200
3	20:45:18	229.000	452.200	448.600	36.660	9.139	10.980	0.000	968.800
x		231.800	452.900	451.400	36.420	9.413	10.780	0.000	972.800
σ		2.970	2.129	2.432	0.216	0.237	0.188	0.000	3.442
%RSD		1.281	0.470	0.539	0.593	2.522	1.738	0.000	0.354

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	85.659%	980.500	973.200	84.669%	48.330	49.120	50.900	48.660
2	20:44:35	85.239%	996.400	990.300	83.797%	48.160	48.080	49.220	47.650
3	20:45:18	85.874%	992.700	985.200	84.137%	48.270	48.620	49.260	46.600
x		85.591%	989.900	982.900	84.201%	48.260	48.610	49.790	47.640
σ		0.323%	8.306	8.807	0.440%	0.085	0.517	0.958	1.029
%RSD		0.377	0.839	0.896	0.522	0.176	1.065	1.923	2.160

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	82.390%	1836.000	498.800	499.600	1942.000	1932.000	87.201%	88.123%
2	20:44:35	83.844%	1861.000	494.300	497.200	1929.000	1934.000	88.725%	88.783%
3	20:45:18	82.969%	1883.000	500.800	500.600	1947.000	1936.000	88.764%	89.531%
x		83.067%	1860.000	498.000	499.100	1939.000	1934.000	88.230%	88.812%
σ		0.732%	23.820	3.303	1.697	9.007	2.064	0.891%	0.704%
%RSD		0.881	1.281	0.663	0.340	0.464	0.107	1.010	0.793

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	44.490	44.590	17.870	19.080	18.260	92.530%
2	20:44:35	45.300	45.650	17.570	19.010	18.270	94.625%
3	20:45:18	45.240	45.560	17.790	19.050	18.450	95.308%
x		45.010	45.270	17.740	19.050	18.330	94.155%
σ		0.456	0.592	0.154	0.034	0.107	1.448%
%RSD		1.012	1.308	0.870	0.178	0.583	1.538

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	89.498%	-0.010	9.592	8.099	0.000	51.640	4.406	3.875
2	20:51:46	86.797%	0.007	7.669	8.333	0.000	51.960	4.854	4.718
3	20:52:29	84.395%	-0.018	6.318	7.044	0.000	51.930	4.606	5.149
x		86.897%	-0.007	7.860	7.825	0.000	51.850	4.622	4.581
σ		2.553%	0.013	1.645	0.687	0.000	0.176	0.224	0.648
%RSD		2.938	177.400	20.930	8.775	0.000	0.339	4.853	14.150

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	1.147	17.810	0.000	7.484	17.200	3.098	87.260%	0.776
2	20:51:46	1.163	17.350	0.000	6.504	26.990	3.062	86.176%	0.636
3	20:52:29	1.123	16.400	0.000	6.752	10.480	1.548	84.789%	0.611
x		1.144	17.190	0.000	6.914	18.220	2.569	86.075%	0.675
σ		0.020	0.720	0.000	0.510	8.304	0.885	1.239%	0.089
%RSD		1.746	4.188	0.000	7.374	45.570	34.430	1.439	13.180

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	-0.338	1.908	0.944	7.903	12.650	0.043	0.145	0.186
2	20:51:46	-0.383	1.837	0.932	5.549	6.074	0.058	0.117	0.137
3	20:52:29	-0.058	1.712	0.955	5.628	7.699	0.049	0.059	0.174
x		-0.260	1.819	0.944	6.360	8.808	0.050	0.107	0.166
σ		0.176	0.099	0.011	1.337	3.426	0.007	0.044	0.026
%RSD		67.750	5.457	1.189	21.020	38.900	14.840	40.900	15.680

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	0.160	1.066	1.251	-0.728	-0.153	0.508	0.000	0.630
2	20:51:46	0.116	1.085	1.119	-0.467	0.553	0.636	0.000	0.676
3	20:52:29	0.202	0.971	1.219	-0.729	0.048	0.774	0.000	0.647
x		0.159	1.041	1.197	-0.641	0.149	0.640	0.000	0.651
σ		0.043	0.061	0.069	0.151	0.363	0.133	0.000	0.023
%RSD		27.080	5.875	5.747	23.540	243.200	20.800	0.000	3.546

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	86.137%	4.468	4.176	89.788%	-0.005	0.004	-0.048	-0.085
2	20:51:46	85.983%	2.987	2.825	89.026%	-0.000	-0.006	-0.045	-0.011
3	20:52:29	85.701%	2.170	2.276	88.664%	-0.000	0.002	-0.005	0.020
x		85.940%	3.208	3.093	89.159%	-0.002	0.000	-0.033	-0.025
σ		0.221%	1.165	0.977	0.574%	0.003	0.005	0.024	0.054
%RSD		0.257	36.300	31.610	0.643	159.500	9233.000	73.180	215.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	85.068%	13.190	0.129	0.173	0.304	0.352	86.685%	86.454%
2	20:51:46	85.356%	11.400	0.126	0.229	0.190	0.322	88.054%	88.365%
3	20:52:29	84.451%	10.310	0.104	0.163	0.204	0.205	88.185%	88.453%
x		84.959%	11.630	0.120	0.188	0.233	0.293	87.641%	87.757%
σ		0.462%	1.453	0.014	0.035	0.062	0.078	0.831%	1.129%
%RSD		0.544	12.490	11.640	18.820	26.740	26.470	0.948	1.287

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	0.115	0.113	0.128	0.118	0.109	94.595%
2	20:51:46	0.085	0.095	0.096	0.068	0.080	95.643%
3	20:52:29	0.082	0.067	0.077	0.071	0.072	96.274%
x		0.094	0.092	0.100	0.086	0.087	95.504%
σ		0.018	0.023	0.026	0.028	0.019	0.848%
%RSD		19.590	25.480	25.620	32.980	22.360	0.888

180-7740-C-5-A SD@5 2/5/2012 8:54:39 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	86.355%	-0.018	2.968	2.762	0.000	14.030	2.117	2.085
2	20:56:05	83.038%	-0.018	2.795	2.890	0.000	15.360	1.844	2.796
3	20:56:48	82.485%	-0.026	3.065	2.748	0.000	14.110	2.456	2.618
x		83.960%	-0.021	2.943	2.800	0.000	14.500	2.139	2.500
σ		2.093%	0.005	0.136	0.078	0.000	0.745	0.307	0.370
%RSD		2.493	23.660	4.634	2.783	0.000	5.135	14.350	14.790

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	13.520	5.858	0.000	-1.287	19.650	-4.518	85.715%	-0.027
2	20:56:05	14.020	6.501	0.000	-1.782	10.280	-1.187	85.641%	0.107
3	20:56:48	14.350	6.057	0.000	-2.188	16.130	-6.874	85.126%	-0.007
x		13.970	6.139	0.000	-1.752	15.350	-4.193	85.494%	0.024
σ		0.417	0.329	0.000	0.451	4.734	2.858	0.321%	0.072
%RSD		2.983	5.360	0.000	25.760	30.830	68.150	0.375	297.500

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	-0.131	0.362	0.259	-7.136	-6.133	0.018	0.187	-0.017
2	20:56:05	0.150	0.392	0.258	-7.922	-9.506	0.016	0.243	-0.037
3	20:56:48	-0.140	0.382	0.241	-9.403	-6.977	0.015	0.156	-0.081
x		-0.040	0.379	0.253	-8.154	-7.539	0.016	0.195	-0.045
σ		0.165	0.015	0.010	1.151	1.755	0.002	0.044	0.033
%RSD		408.300	3.993	4.047	14.120	23.280	10.080	22.520	71.990

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	-0.116	-0.696	-0.684	0.110	0.413	0.174	0.000	0.136
2	20:56:05	-0.027	-0.756	-0.604	-0.054	-0.432	0.770	0.000	0.128
3	20:56:48	-0.108	-0.614	-0.870	-0.096	0.179	0.789	0.000	0.116
x		-0.084	-0.689	-0.720	-0.013	0.053	0.578	0.000	0.127
σ		0.049	0.071	0.137	0.109	0.436	0.350	0.000	0.010
%RSD		58.380	10.340	18.960	812.800	820.100	60.570	0.000	7.616

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	84.757%	0.790	0.831	89.209%	-0.012	0.004	-0.022	-0.007
2	20:56:05	85.279%	0.767	0.789	88.846%	0.002	-0.006	-0.060	-0.055
3	20:56:48	85.704%	0.665	0.682	88.281%	-0.007	-0.001	-0.028	-0.009
x		85.247%	0.741	0.767	88.778%	-0.006	-0.001	-0.037	-0.024
σ		0.474%	0.067	0.077	0.468%	0.007	0.005	0.021	0.027
%RSD		0.556	9.007	9.989	0.527	127.600	481.700	56.350	114.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	84.854%	1.396	0.011	0.007	0.047	0.057	87.278%	86.722%
2	20:56:05	85.600%	1.366	0.012	-0.001	0.059	0.060	87.570%	87.778%
3	20:56:48	84.874%	1.536	0.002	-0.002	0.040	0.105	87.881%	87.835%
x		85.109%	1.433	0.008	0.001	0.049	0.074	87.576%	87.445%
σ		0.425%	0.091	0.006	0.005	0.010	0.027	0.301%	0.627%
%RSD		0.499	6.351	66.880	326.700	20.100	36.280	0.344	0.717

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	0.030	0.033	0.039	0.042	0.040	91.585%
2	20:56:05	0.018	0.026	0.003	0.003	0.005	92.390%
3	20:56:48	0.036	0.034	0.012	-0.012	-0.002	92.114%
x		0.028	0.031	0.018	0.011	0.014	92.030%
σ		0.009	0.004	0.019	0.028	0.023	0.409%
%RSD		32.900	13.680	106.400	256.300	157.500	0.444

180-7740-C-5-B MS 2/5/2012 8:58:56 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	84.860%	48.390	914.500	948.700	0.000	46130.000	53190.000	54520.000
2	21:00:22	80.576%	47.690	942.600	973.900	0.000	46300.000	55040.000	56140.000
3	21:01:05	81.872%	46.700	878.100	941.400	0.000	45740.000	55010.000	55520.000
x		82.436%	47.590	911.700	954.700	0.000	46060.000	54410.000	55390.000
σ		2.197%	0.849	32.380	17.090	0.000	288.000	1060.000	814.600
%RSD		2.665	1.784	3.551	1.790	0.000	0.625	1.947	1.471

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	2068.000	10060.000	0.000	49750.000	48040.000	47800.000	85.923%	961.500
2	21:00:22	2124.000	10270.000	0.000	49140.000	48030.000	45320.000	83.548%	972.100
3	21:01:05	2074.000	9936.000	0.000	48520.000	46940.000	48170.000	83.998%	948.000
x		2089.000	10090.000	0.000	49140.000	47670.000	47100.000	84.490%	960.500
σ		30.890	166.500	0.000	619.500	632.300	1553.000	1.261%	12.110
%RSD		1.479	1.650	0.000	1.261	1.326	3.298	1.493	1.260

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	490.400	193.000	503.000	1029.000	1170.000	463.900	467.500	235.400
2	21:00:22	495.600	193.300	509.900	1032.000	1173.000	459.800	464.800	236.600
3	21:01:05	483.600	192.900	505.500	964.000	1150.000	455.700	458.400	231.100
x		489.900	193.100	506.100	1008.000	1164.000	459.800	463.600	234.400
σ		6.020	0.176	3.490	38.380	12.350	4.061	4.713	2.861
%RSD		1.229	0.091	0.690	3.806	1.061	0.883	1.017	1.221

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	238.100	461.900	458.400	37.220	9.217	10.980	0.000	978.700
2	21:00:22	237.400	457.700	453.200	36.620	9.080	9.774	0.000	977.400
3	21:01:05	230.200	450.400	457.500	36.870	9.372	11.460	0.000	978.200
x		235.200	456.600	456.400	36.900	9.223	10.740	0.000	978.100
σ		4.378	5.809	2.757	0.297	0.146	0.870	0.000	0.662
%RSD		1.861	1.272	0.604	0.806	1.588	8.100	0.000	0.068

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	84.136%	982.700	984.900	83.912%	49.010	49.280	49.670	47.610
2	21:00:22	84.605%	993.000	991.600	83.613%	48.320	49.390	51.230	46.790
3	21:01:05	84.929%	999.700	992.900	82.776%	48.720	48.500	48.730	47.110
x		84.557%	991.800	989.800	83.434%	48.680	49.050	49.880	47.170
σ		0.399%	8.572	4.316	0.589%	0.348	0.486	1.262	0.414
%RSD		0.471	0.864	0.436	0.705	0.715	0.991	2.530	0.878

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	81.406%	1882.000	497.900	499.600	1955.000	1941.000	86.040%	86.670%
2	21:00:22	81.408%	1892.000	501.200	500.100	1941.000	1944.000	88.023%	88.495%
3	21:01:05	82.953%	1878.000	493.400	494.100	1923.000	1918.000	88.768%	88.902%
x		81.922%	1884.000	497.500	497.900	1940.000	1934.000	87.610%	88.022%
σ		0.892%	7.419	3.902	3.329	16.180	14.210	1.410%	1.189%
%RSD		1.089	0.394	0.784	0.669	0.834	0.735	1.610	1.350

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	45.090	45.010	17.960	19.210	18.530	91.043%
2	21:00:22	45.600	45.420	17.920	18.820	18.370	93.009%
3	21:01:05	45.580	45.630	18.080	19.230	18.480	94.238%
x		45.420	45.350	17.990	19.090	18.460	92.763%
σ		0.286	0.314	0.085	0.230	0.082	1.611%
%RSD		0.630	0.691	0.470	1.206	0.447	1.737

CCV 309497 2/5/2012 9:06:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	88.895%	97.330	95.500	95.990	0.000	49580.000	50340.000	51010.000
2	21:07:32	87.537%	96.660	94.900	96.930	0.000	49290.000	51300.000	52240.000
3	21:08:15	88.664%	99.370	92.940	94.370	0.000	48840.000	51050.000	51800.000
x		88.365%	97.783%	94.449%	95.763%	0.000	98.477%	101.796%	103.365%
σ		0.727%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.822	1.443	1.417	1.353	0.000	0.754	0.975	1.205

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	504.900	5218.000	0.000	51600.000	48750.000	47690.000	87.636%	98.330
2	21:07:32	520.400	5321.000	0.000	51330.000	48510.000	47630.000	87.995%	100.500
3	21:08:15	510.200	5213.000	0.000	51260.000	49060.000	48350.000	89.273%	98.390
x		102.364%	105.018%	0.000	102.797%	97.545%	95.781%	88.301%	99.067%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.860%	n/a
%RSD		1.538	1.163	0.000	0.353	0.568	0.831	0.974	1.230

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	95.690	97.860	501.800	25760.000	25170.000	96.480	96.610	97.680
2	21:07:32	98.250	97.970	508.000	25820.000	25320.000	95.510	97.510	97.520
3	21:08:15	97.640	96.960	507.700	25580.000	25110.000	96.210	96.130	96.770
x		97.194%	97.595%	101.170%	102.877%	100.805%	96.069%	96.747%	97.321%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.378	0.568	0.686	0.484	0.416	0.518	0.722	0.501

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	96.740	99.350	97.960	99.490	98.490	102.000	0.000	97.660
2	21:07:32	95.540	97.630	96.380	98.370	101.100	99.380	0.000	98.480
3	21:08:15	95.650	96.330	99.430	98.700	98.780	98.570	0.000	98.470
x		95.977%	97.767%	97.923%	98.857%	99.447%	99.989%	0.000	98.204%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.691	1.548	1.558	0.583	1.422	1.795	0.000	0.478

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	85.074%	95.090	94.890	85.973%	95.400	95.940	97.660	99.970
2	21:07:32	86.329%	98.380	97.900	86.790%	95.650	97.040	98.080	100.400
3	21:08:15	86.810%	100.100	99.450	87.620%	95.210	96.620	96.290	99.050
x		86.071%	97.870%	97.412%	86.794%	95.421%	96.534%	97.346%	99.806%
σ		0.897%	n/a	n/a	0.823%	n/a	n/a	n/a	n/a
%RSD		1.042	2.620	2.382	0.949	0.230	0.576	0.962	0.686

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	84.226%	96.500	90.500	90.030	98.840	97.360	86.100%	86.483%
2	21:07:32	84.636%	97.500	94.380	94.750	97.460	97.560	87.756%	87.142%
3	21:08:15	86.571%	97.140	95.910	95.160	96.490	97.380	88.236%	87.858%
x		85.144%	97.048%	93.595%	93.311%	97.599%	97.432%	87.364%	87.161%
σ		1.252%	n/a	n/a	n/a	n/a	n/a	1.121%	0.687%
%RSD		1.471	0.524	2.980	3.055	1.210	0.114	1.283	0.789

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	94.270	93.860	96.080	94.830	95.290	87.688%
2	21:07:32	95.970	95.630	97.740	96.700	96.840	87.796%
3	21:08:15	95.100	95.740	97.780	97.340	97.490	88.328%
x		95.113%	95.075%	97.202%	96.291%	96.537%	87.937%
σ		n/a	n/a	n/a	n/a	n/a	0.343%
%RSD		0.894	1.107	1.000	1.359	1.173	0.390

CCB7 2/5/2012 9:13:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	90.404%	-0.010	3.027	3.031	0.000	5.841	12.530	12.060
2	21:14:43	89.643%	0.014	2.440	2.195	0.000	6.204	11.560	11.810
3	21:15:26	88.247%	0.014	2.186	1.913	0.000	10.710	15.670	16.560
x		89.431%	0.006	2.551	2.380	0.000	7.584	13.250	13.480
σ		1.094%	0.014	0.431	0.581	0.000	2.711	2.148	2.673
%RSD		1.223	241.300	16.910	24.420	0.000	35.740	16.210	19.830

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.509	1.880	0.000	5.375	41.360	13.730	90.256%	0.036
2	21:14:43	-0.480	1.889	0.000	4.519	14.410	12.030	90.474%	-0.182
3	21:15:26	-0.262	2.028	0.000	8.694	43.690	21.940	89.464%	-0.108
x		-0.417	1.932	0.000	6.196	33.150	15.900	90.064%	-0.085
σ		0.135	0.083	0.000	2.205	16.270	5.301	0.532%	0.111
%RSD		32.320	4.300	0.000	35.590	49.080	33.340	0.590	130.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.035	0.029	0.130	5.954	9.277	0.005	-0.097	-0.215
2	21:14:43	0.099	0.050	0.121	2.387	6.453	0.016	-0.083	-0.214
3	21:15:26	0.180	0.037	0.183	2.561	4.370	0.016	-0.008	-0.229
x		0.081	0.039	0.144	3.634	6.700	0.012	-0.063	-0.220
σ		0.109	0.011	0.033	2.011	2.463	0.006	0.048	0.008
%RSD		134.100	27.290	23.080	55.340	36.760	48.450	76.500	3.736

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.211	-0.810	-0.846	0.209	0.542	0.577	0.000	0.054
2	21:14:43	-0.251	-0.808	-0.696	0.082	0.394	0.362	0.000	0.065
3	21:15:26	-0.301	-0.852	-0.748	0.101	-0.175	0.665	0.000	0.087
x		-0.254	-0.823	-0.764	0.131	0.254	0.535	0.000	0.069
σ		0.045	0.025	0.076	0.069	0.378	0.156	0.000	0.017
%RSD		17.630	2.990	9.992	52.540	149.200	29.100	0.000	24.970

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	88.060%	1.079	1.070	93.859%	0.009	0.011	0.005	0.046
2	21:14:43	88.795%	0.936	0.970	93.728%	0.009	0.013	-0.029	-0.005
3	21:15:26	88.554%	0.917	0.940	93.006%	0.020	0.025	-0.099	-0.065
x		88.470%	0.978	0.994	93.531%	0.013	0.016	-0.041	-0.008
σ		0.374%	0.089	0.068	0.460%	0.007	0.007	0.053	0.055
%RSD		0.423	9.058	6.853	0.491	54.170	43.450	129.100	702.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	88.890%	0.183	0.615	0.561	0.044	0.105	88.524%	88.002%
2	21:14:43	88.984%	0.095	0.597	0.566	0.094	0.054	88.745%	88.979%
3	21:15:26	88.949%	0.117	0.577	0.525	0.074	0.103	89.917%	89.301%
x		88.941%	0.132	0.596	0.551	0.071	0.087	89.062%	88.761%
σ		0.048%	0.046	0.019	0.022	0.026	0.029	0.749%	0.676%
%RSD		0.054	34.970	3.208	4.025	36.130	33.160	0.841	0.762

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	0.049	0.053	0.194	0.236	0.221	93.027%
2	21:14:43	0.047	0.041	0.150	0.108	0.128	94.204%
3	21:15:26	0.052	0.053	0.190	0.165	0.176	93.857%
x		0.049	0.049	0.178	0.169	0.175	93.696%
σ		0.003	0.007	0.024	0.064	0.046	0.605%
%RSD		5.192	15.050	13.630	37.870	26.540	0.646

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	87.794%	48.360	917.700	937.700	0.000	46950.000	51970.000	53150.000
2	21:19:02	86.300%	46.540	880.500	912.700	0.000	45570.000	52900.000	53730.000
3	21:19:45	83.856%	46.800	890.800	938.000	0.000	45920.000	53940.000	54650.000
x		85.984%	47.230	896.300	929.500	0.000	46140.000	52930.000	53840.000
σ		1.988%	0.984	19.190	14.540	0.000	715.500	985.800	757.600
%RSD		2.312	2.082	2.141	1.565	0.000	1.551	1.862	1.407

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	2030.000	9811.000	0.000	50180.000	48040.000	47440.000	87.147%	956.300
2	21:19:02	2026.000	9774.000	0.000	48330.000	47190.000	47810.000	87.301%	936.500
3	21:19:45	2047.000	9869.000	0.000	47930.000	47210.000	46970.000	86.573%	946.700
x		2034.000	9818.000	0.000	48810.000	47480.000	47410.000	87.007%	946.500
σ		11.170	47.980	0.000	1199.000	486.700	418.000	0.383%	9.907
%RSD		0.549	0.489	0.000	2.457	1.025	0.882	0.441	1.047

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	487.200	194.300	502.200	1038.000	1186.000	467.100	470.700	240.200
2	21:19:02	476.600	190.500	497.200	998.700	1148.000	456.800	462.700	235.400
3	21:19:45	482.000	188.800	500.800	1008.000	1131.000	455.900	463.400	232.900
x		481.900	191.200	500.100	1015.000	1155.000	459.900	465.600	236.200
σ		5.296	2.864	2.567	20.610	28.410	6.230	4.394	3.721
%RSD		1.099	1.498	0.513	2.031	2.460	1.354	0.944	1.576

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	238.100	464.200	461.200	36.860	9.538	10.870	0.000	968.000
2	21:19:02	233.700	453.700	448.800	35.880	9.241	10.590	0.000	967.000
3	21:19:45	231.900	448.700	449.300	36.480	9.637	10.550	0.000	961.800
x		234.600	455.500	453.100	36.400	9.472	10.670	0.000	965.600
σ		3.213	7.922	7.026	0.494	0.206	0.176	0.000	3.361
%RSD		1.370	1.739	1.551	1.357	2.179	1.653	0.000	0.348

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	86.010%	972.100	966.100	85.877%	48.050	47.790	49.140	48.480
2	21:19:02	86.756%	987.500	978.000	85.497%	48.280	48.470	49.430	46.860
3	21:19:45	86.962%	988.600	985.700	84.619%	48.180	48.240	49.010	46.100
x		86.576%	982.700	976.600	85.331%	48.170	48.160	49.190	47.150
σ		0.501%	9.225	9.888	0.645%	0.118	0.347	0.212	1.214
%RSD		0.579	0.939	1.012	0.756	0.245	0.721	0.430	2.574

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	83.479%	1819.000	495.700	493.700	1933.000	1925.000	87.260%	87.642%
2	21:19:02	84.568%	1852.000	490.300	488.700	1921.000	1917.000	88.608%	88.871%
3	21:19:45	84.294%	1871.000	492.900	495.200	1931.000	1925.000	89.195%	89.718%
x		84.114%	1847.000	493.000	492.600	1928.000	1922.000	88.354%	88.744%
σ		0.566%	26.060	2.690	3.389	6.100	4.318	0.992%	1.044%
%RSD		0.673	1.411	0.546	0.688	0.316	0.225	1.123	1.176

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	45.070	45.390	18.000	19.560	18.670	89.786%
2	21:19:02	45.740	45.870	18.050	19.500	18.560	92.311%
3	21:19:45	46.260	45.880	18.080	19.130	18.620	92.821%
x		45.690	45.710	18.040	19.390	18.620	91.640%
σ		0.601	0.280	0.042	0.234	0.056	1.625%
%RSD		1.316	0.613	0.235	1.208	0.300	1.773

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	87.283%	-0.010	7.882	8.716	0.000	19.170	3.136	2.250
2	21:26:12	83.777%	-0.009	8.869	8.142	0.000	19.760	3.513	1.901
3	21:26:55	85.537%	0.007	6.485	6.731	0.000	18.800	1.719	2.268
x		85.532%	-0.004	7.745	7.863	0.000	19.240	2.789	2.140
σ		1.753%	0.010	1.198	1.021	0.000	0.482	0.946	0.207
%RSD		2.049	244.200	15.460	12.990	0.000	2.507	33.900	9.680

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.091	18.040	0.000	5.307	19.000	6.462	87.532%	0.736
2	21:26:12	-0.029	16.320	0.000	4.299	15.820	9.443	86.029%	0.809
3	21:26:55	-0.324	15.480	0.000	0.484	17.470	10.700	86.646%	0.462
x		-0.088	16.610	0.000	3.363	17.430	8.868	86.736%	0.669
σ		0.214	1.304	0.000	2.544	1.590	2.177	0.756%	0.183
%RSD		243.900	7.852	0.000	75.630	9.120	24.540	0.871	27.350

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.076	1.579	0.635	12.560	13.120	0.044	0.068	0.388
2	21:26:12	-0.377	1.467	0.639	11.220	10.150	0.056	0.020	0.249
3	21:26:55	-0.844	1.281	0.565	8.523	8.955	0.045	0.059	0.178
x		-0.382	1.442	0.613	10.770	10.740	0.048	0.049	0.272
σ		0.460	0.150	0.042	2.054	2.144	0.007	0.026	0.107
%RSD		120.600	10.430	6.812	19.080	19.960	13.650	52.500	39.350

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.376	0.585	0.688	-0.490	-0.097	0.286	0.000	0.151
2	21:26:12	0.296	0.979	0.723	-0.079	0.373	0.975	0.000	0.170
3	21:26:55	0.254	0.483	0.390	-0.525	-0.051	1.083	0.000	0.143
x		0.309	0.683	0.601	-0.364	0.075	0.781	0.000	0.155
σ		0.061	0.262	0.183	0.248	0.259	0.432	0.000	0.014
%RSD		19.910	38.410	30.470	68.100	344.900	55.330	0.000	8.820

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	85.835%	4.989	5.124	89.910%	-0.004	-0.005	0.033	0.021
2	21:26:12	86.423%	3.944	3.791	88.614%	-0.001	-0.001	-0.054	-0.028
3	21:26:55	86.317%	3.288	3.039	88.586%	0.004	-0.001	-0.101	-0.093
x		86.192%	4.074	3.985	89.037%	-0.000	-0.003	-0.040	-0.033
σ		0.314%	0.858	1.056	0.756%	0.004	0.002	0.068	0.057
%RSD		0.364	21.050	26.490	0.849	2753.000	76.880	167.200	172.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	84.589%	16.230	0.409	0.447	0.306	0.267	86.578%	86.933%
2	21:26:12	84.544%	14.440	0.332	0.355	0.205	0.354	87.775%	88.431%
3	21:26:55	85.623%	13.120	0.254	0.354	0.208	0.188	88.509%	88.699%
x		84.919%	14.600	0.332	0.385	0.240	0.270	87.620%	88.021%
σ		0.610%	1.562	0.077	0.053	0.057	0.083	0.975%	0.952%
%RSD		0.718	10.700	23.310	13.770	23.860	30.780	1.112	1.081

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.136	0.163	0.115	0.106	0.108	93.533%
2	21:26:12	0.132	0.141	0.082	0.086	0.073	95.636%
3	21:26:55	0.143	0.129	0.039	0.037	0.035	95.001%
x		0.137	0.144	0.078	0.076	0.072	94.723%
σ		0.006	0.017	0.038	0.036	0.036	1.079%
%RSD		4.130	12.080	48.200	46.610	50.260	1.139

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	82.248%	-0.000	81.240	86.650	0.000	582300.000	1227.000	1236.000
2	21:30:28	79.067%	-0.008	77.120	85.790	0.000	575000.000	1269.000	1271.000
3	21:31:11	73.715%	0.012	84.010	88.770	0.000	582800.000	1287.000	1312.000
x		78.343%	0.001	80.790	87.070	0.000	580000.000	1261.000	1273.000
σ		4.312%	0.010	3.466	1.533	0.000	4333.000	30.870	37.910
%RSD		5.505	780.200	4.290	1.760	0.000	0.747	2.447	2.978

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	30.950	4414.000	0.000	761.700	4748.000	4886.000	83.567%	2.152
2	21:30:28	30.640	4419.000	0.000	752.600	4746.000	4876.000	81.434%	2.312
3	21:31:11	32.820	4548.000	0.000	739.600	4866.000	4851.000	80.528%	1.771
x		31.470	4460.000	0.000	751.300	4787.000	4871.000	81.843%	2.078
σ		1.177	75.870	0.000	11.110	68.580	18.090	1.560%	0.278
%RSD		3.741	1.701	0.000	1.478	1.433	0.371	1.906	13.370

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	1.472	1.395	814.800	185.300	197.400	0.613	3.403	2.601
2	21:30:28	2.202	1.361	832.000	183.100	202.500	0.631	3.127	2.594
3	21:31:11	1.859	1.167	817.700	182.200	191.700	0.579	3.030	2.289
x		1.844	1.308	821.500	183.600	197.200	0.607	3.187	2.495
σ		0.365	0.123	9.184	1.598	5.428	0.026	0.194	0.178
%RSD		19.810	9.397	1.118	0.870	2.753	4.318	6.071	7.148

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	0.469	1.328	1.418	7.493	0.061	1.224	0.000	28.380
2	21:30:28	0.476	1.273	1.079	7.156	0.653	1.036	0.000	28.230
3	21:31:11	0.516	1.106	0.897	7.635	-0.138	1.403	0.000	27.940
x		0.487	1.235	1.131	7.428	0.192	1.221	0.000	28.180
σ		0.025	0.116	0.264	0.246	0.412	0.183	0.000	0.226
%RSD		5.217	9.361	23.380	3.313	214.200	15.000	0.000	0.801

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	82.957%	42.120	41.950	79.065%	-0.004	0.001	-0.006	0.009
2	21:30:28	83.050%	40.860	42.120	79.250%	0.004	-0.003	0.001	-0.025
3	21:31:11	82.799%	44.140	45.940	69.824%	-0.001	0.000	0.064	0.056
x		82.935%	42.370	43.340	76.046%	-0.000	-0.001	0.020	0.013
σ		0.127%	1.658	2.255	5.389%	0.004	0.002	0.039	0.041
%RSD		0.153	3.913	5.203	7.087	1154.000	262.500	193.200	306.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	79.863%	16.100	0.523	0.479	27.620	28.020	84.283%	84.792%
2	21:30:28	80.116%	15.580	0.507	0.506	26.740	27.900	85.876%	85.675%
3	21:31:11	78.841%	15.130	0.480	0.500	27.910	28.130	85.464%	85.646%
x		79.607%	15.610	0.504	0.495	27.420	28.020	85.208%	85.371%
σ		0.675%	0.484	0.021	0.014	0.607	0.112	0.827%	0.502%
%RSD		0.848	3.099	4.261	2.872	2.212	0.401	0.970	0.588

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	0.069	0.087	0.279	0.327	0.292	88.510%
2	21:30:28	0.079	0.073	0.281	0.297	0.274	90.271%
3	21:31:11	0.078	0.060	0.256	0.263	0.255	90.523%
x		0.076	0.073	0.272	0.295	0.274	89.768%
σ		0.006	0.014	0.014	0.032	0.019	1.097%
%RSD		7.272	18.670	5.285	10.710	6.771	1.222

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	74.675%	-0.007	71.420	80.600	0.000	610600.000	1296.000	1319.000
2	21:34:45	71.816%	0.003	76.120	80.400	0.000	605900.000	1323.000	1359.000
3	21:35:28	69.927%	0.014	75.850	83.040	0.000	608800.000	1342.000	1356.000
x		72.139%	0.004	74.460	81.350	0.000	608400.000	1320.000	1345.000
σ		2.390%	0.011	2.641	1.468	0.000	2383.000	23.460	22.670
%RSD		3.314	304.100	3.546	1.805	0.000	0.392	1.777	1.686

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	34.290	4164.000	0.000	723.000	4639.000	4783.000	79.484%	1.778
2	21:34:45	34.970	4148.000	0.000	722.300	4732.000	4856.000	79.501%	1.735
3	21:35:28	34.960	4209.000	0.000	722.500	4721.000	4836.000	78.111%	1.560
x		34.740	4174.000	0.000	722.600	4697.000	4825.000	79.032%	1.691
σ		0.387	31.150	0.000	0.345	50.850	37.650	0.798%	0.115
%RSD		1.115	0.746	0.000	0.048	1.083	0.780	1.009	6.820

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	1.539	1.307	791.100	161.000	170.400	0.515	3.093	2.464
2	21:34:45	1.380	1.250	787.400	160.100	168.600	0.535	3.154	2.670
3	21:35:28	1.736	1.297	793.100	162.100	168.200	0.553	2.786	2.465
x		1.552	1.285	790.500	161.000	169.100	0.534	3.011	2.533
σ		0.178	0.030	2.893	0.987	1.171	0.019	0.197	0.119
%RSD		11.480	2.370	0.366	0.613	0.693	3.504	6.539	4.682

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	0.492	0.537	0.545	7.132	0.696	1.608	0.000	28.340
2	21:34:45	0.593	0.555	0.581	7.476	0.126	2.042	0.000	28.430
3	21:35:28	0.453	0.544	0.416	6.615	0.484	0.985	0.000	28.640
x		0.513	0.546	0.514	7.074	0.435	1.545	0.000	28.470
σ		0.072	0.009	0.087	0.433	0.288	0.531	0.000	0.155
%RSD		14.060	1.675	16.930	6.122	66.100	34.400	0.000	0.543

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	80.429%	45.970	46.020	76.527%	-0.004	0.002	-0.010	-0.001
2	21:34:45	81.155%	46.880	47.890	75.830%	0.002	-0.005	0.016	-0.076
3	21:35:28	80.397%	46.970	46.630	74.169%	-0.005	0.003	0.042	0.049
x		80.660%	46.600	46.850	75.509%	-0.003	-0.000	0.016	-0.009
σ		0.428%	0.553	0.954	1.211%	0.004	0.005	0.026	0.063
%RSD		0.531	1.186	2.036	1.604	149.800	2251.000	160.400	687.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	77.724%	10.480	0.335	0.404	29.490	29.110	82.797%	83.779%
2	21:34:45	78.254%	11.080	0.403	0.404	30.160	28.460	84.407%	85.069%
3	21:35:28	76.932%	10.740	0.378	0.420	28.330	29.550	84.648%	85.090%
x		77.637%	10.770	0.372	0.409	29.320	29.040	83.951%	84.646%
σ		0.665%	0.301	0.034	0.009	0.924	0.550	1.006%	0.751%
%RSD		0.857	2.799	9.205	2.170	3.151	1.895	1.198	0.887

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	0.042	0.039	0.285	0.275	0.282	87.432%
2	21:34:45	0.040	0.036	0.298	0.245	0.282	88.674%
3	21:35:28	0.028	0.033	0.256	0.267	0.271	88.568%
x		0.037	0.036	0.280	0.262	0.278	88.225%
σ		0.007	0.003	0.022	0.016	0.006	0.689%
%RSD		20.170	8.518	7.747	5.950	2.291	0.781

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	78.997%	-0.008	152.900	155.500	0.000	208200.000	15310.000	15820.000
2	21:39:02	76.703%	-0.008	150.300	154.000	0.000	207000.000	15550.000	15990.000
3	21:39:45	75.024%	0.002	137.600	152.200	0.000	206000.000	15740.000	16110.000
x		76.908%	-0.005	146.900	153.900	0.000	207000.000	15540.000	15970.000
σ		1.995%	0.006	8.176	1.671	0.000	1067.000	215.200	143.400
%RSD		2.593	128.600	5.564	1.086	0.000	0.515	1.385	0.898

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	2.591	8442.000	0.000	3636.000	57720.000	62820.000	81.370%	1.230
2	21:39:02	2.330	8457.000	0.000	3661.000	57820.000	62850.000	81.169%	1.313
3	21:39:45	2.565	8377.000	0.000	3566.000	57220.000	62600.000	81.370%	1.330
x		2.495	8425.000	0.000	3621.000	57590.000	62760.000	81.303%	1.291
σ		0.143	42.980	0.000	49.170	322.800	134.800	0.116%	0.054
%RSD		5.747	0.510	0.000	1.358	0.561	0.215	0.143	4.153

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	-0.580	1.073	8526.000	14560.000	14280.000	0.553	0.309	0.987
2	21:39:02	0.023	1.003	8468.000	14380.000	14180.000	0.597	0.309	0.915
3	21:39:45	-0.480	0.943	8450.000	14120.000	13890.000	0.584	0.434	0.850
x		-0.346	1.006	8481.000	14350.000	14110.000	0.578	0.351	0.917
σ		0.324	0.065	39.810	224.200	201.500	0.022	0.072	0.068
%RSD		93.600	6.485	0.469	1.562	1.427	3.861	20.520	7.421

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	0.208	2.286	2.036	14.430	0.339	1.350	0.000	271.400
2	21:39:02	0.168	1.800	2.113	13.700	0.477	0.949	0.000	271.400
3	21:39:45	0.113	2.094	2.147	14.940	0.721	1.320	0.000	273.400
x		0.163	2.060	2.098	14.360	0.513	1.206	0.000	272.100
σ		0.048	0.245	0.057	0.623	0.193	0.224	0.000	1.189
%RSD		29.330	11.890	2.713	4.342	37.710	18.520	0.000	0.437

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	81.660%	3.028	3.013	79.068%	-0.002	-0.006	0.018	0.032
2	21:39:02	82.660%	2.980	2.790	79.567%	-0.007	-0.001	-0.024	-0.040
3	21:39:45	82.127%	3.005	2.594	80.321%	-0.010	0.001	-0.072	-0.086
x		82.149%	3.004	2.799	79.652%	-0.006	-0.002	-0.026	-0.031
σ		0.500%	0.024	0.210	0.631%	0.004	0.003	0.045	0.059
%RSD		0.609	0.803	7.494	0.792	59.240	173.000	174.100	189.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	78.852%	8.230	0.284	0.341	66.870	65.770	84.530%	85.246%
2	21:39:02	79.435%	8.549	0.252	0.329	66.770	66.120	85.305%	86.110%
3	21:39:45	80.209%	8.595	0.218	0.340	67.120	66.450	86.088%	86.208%
x		79.499%	8.458	0.251	0.337	66.920	66.110	85.308%	85.855%
σ		0.681%	0.199	0.033	0.007	0.184	0.339	0.779%	0.529%
%RSD		0.856	2.352	13.240	1.951	0.276	0.513	0.913	0.617

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	0.033	0.036	0.102	0.106	0.085	86.697%
2	21:39:02	0.027	0.024	0.078	0.079	0.078	88.414%
3	21:39:45	0.021	0.023	0.059	0.037	0.047	88.572%
x		0.027	0.028	0.080	0.074	0.070	87.894%
σ		0.006	0.007	0.021	0.035	0.020	1.040%
%RSD		21.100	25.160	26.770	47.020	29.210	1.183

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	81.460%	0.009	173.300	177.400	0.000	47120.000	24060.000	24440.000
2	21:43:20	77.598%	-0.017	179.000	186.700	0.000	48190.000	24700.000	25100.000
3	21:44:03	76.864%	0.002	170.500	181.400	0.000	46910.000	24720.000	25080.000
x		78.641%	-0.002	174.300	181.900	0.000	47410.000	24490.000	24870.000
σ		2.469%	0.013	4.292	4.656	0.000	688.800	373.800	372.000
%RSD		3.139	590.300	2.463	2.560	0.000	1.453	1.526	1.496

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	2.806	8810.000	0.000	5359.000	87030.000	96530.000	84.691%	1.039
2	21:43:20	2.960	9009.000	0.000	5396.000	88830.000	96590.000	83.575%	0.976
3	21:44:03	2.911	8926.000	0.000	5268.000	87190.000	97620.000	83.954%	1.224
x		2.892	8915.000	0.000	5341.000	87680.000	96910.000	84.073%	1.079
σ		0.079	100.200	0.000	65.930	997.100	613.300	0.568%	0.129
%RSD		2.724	1.124	0.000	1.234	1.137	0.633	0.675	11.950

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.627	0.834	17920.000	30310.000	29690.000	4.433	0.936	0.457
2	21:43:20	-0.275	0.741	17950.000	30610.000	29920.000	4.262	0.916	0.430
3	21:44:03	0.042	0.841	17810.000	30350.000	29650.000	4.290	0.826	0.397
x		0.132	0.805	17900.000	30420.000	29750.000	4.328	0.893	0.428
σ		0.457	0.056	71.900	163.400	146.600	0.092	0.058	0.030
%RSD		347.600	6.902	0.402	0.537	0.493	2.117	6.522	7.017

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.383	3.220	3.039	11.980	-0.183	1.674	0.000	379.900
2	21:43:20	0.426	3.165	3.417	11.780	0.745	1.058	0.000	382.400
3	21:44:03	0.238	2.882	2.903	11.580	0.998	1.342	0.000	379.200
x		0.349	3.089	3.119	11.780	0.520	1.358	0.000	380.500
σ		0.099	0.181	0.266	0.202	0.622	0.309	0.000	1.682
%RSD		28.340	5.865	8.541	1.718	119.600	22.720	0.000	0.442

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	83.332%	4.161	3.926	84.617%	-0.009	-0.007	0.036	0.011
2	21:43:20	84.175%	4.257	4.069	84.729%	-0.009	-0.003	-0.001	-0.029
3	21:44:03	84.320%	4.435	4.138	84.227%	0.001	-0.003	-0.071	-0.033
x		83.942%	4.284	4.044	84.524%	-0.006	-0.005	-0.012	-0.017
σ		0.534%	0.139	0.108	0.264%	0.005	0.002	0.055	0.024
%RSD		0.636	3.246	2.674	0.312	94.820	44.430	456.200	144.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	81.759%	5.777	0.217	0.240	74.760	73.500	86.008%	86.653%
2	21:43:20	82.018%	5.913	0.208	0.230	75.590	75.350	86.964%	87.528%
3	21:44:03	82.445%	5.854	0.219	0.262	74.660	74.900	87.499%	87.931%
x		82.074%	5.848	0.215	0.244	75.000	74.580	86.823%	87.370%
σ		0.346%	0.068	0.006	0.016	0.507	0.964	0.755%	0.653%
%RSD		0.422	1.165	2.714	6.580	0.676	1.292	0.870	0.748

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.023	0.015	0.105	0.108	0.108	88.600%
2	21:43:20	0.018	0.016	0.100	0.093	0.099	90.173%
3	21:44:03	0.008	0.013	0.079	0.057	0.080	91.089%
x		0.016	0.015	0.094	0.086	0.096	89.954%
σ		0.008	0.002	0.014	0.026	0.014	1.259%
%RSD		47.870	11.090	14.500	30.500	14.870	1.400

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	84.757%	0.016	4.121	6.195	0.000	75.160	6.409	6.879
2	21:47:38	82.813%	-0.026	5.113	4.495	0.000	64.170	3.909	3.341
3	21:48:21	80.956%	-0.009	4.083	4.073	0.000	61.320	3.373	3.549
x		82.842%	-0.006	4.439	4.921	0.000	66.880	4.564	4.590
σ		1.901%	0.021	0.584	1.123	0.000	7.308	1.621	1.985
%RSD		2.294	335.700	13.150	22.830	0.000	10.930	35.510	43.250

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	1.873	22.900	0.000	8.936	45.950	18.760	85.992%	0.201
2	21:47:38	1.965	21.020	0.000	7.710	22.050	9.030	84.572%	0.497
3	21:48:21	1.569	20.590	0.000	7.107	6.987	3.463	83.463%	0.291
x		1.802	21.500	0.000	7.918	25.000	10.420	84.676%	0.330
σ		0.207	1.225	0.000	0.932	19.650	7.745	1.268%	0.152
%RSD		11.480	5.696	0.000	11.770	78.610	74.330	1.498	46.110

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.142	1.220	5.585	30.130	27.580	0.001	-0.020	0.302
2	21:47:38	-0.582	1.064	3.664	13.740	9.706	0.004	-0.018	0.274
3	21:48:21	-0.296	1.068	3.110	8.290	8.714	0.006	-0.010	0.274
x		-0.245	1.117	4.120	17.390	15.330	0.004	-0.016	0.283
σ		0.364	0.089	1.299	11.370	10.620	0.003	0.005	0.016
%RSD		148.500	7.950	31.530	65.390	69.260	75.210	32.430	5.655

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.248	3.963	4.076	-0.275	0.052	0.549	0.000	0.191
2	21:47:38	0.154	4.068	4.285	-0.673	-0.405	0.990	0.000	0.168
3	21:48:21	0.212	3.912	4.411	-0.272	-0.034	0.969	0.000	0.129
x		0.205	3.981	4.257	-0.407	-0.129	0.836	0.000	0.163
σ		0.047	0.080	0.169	0.231	0.243	0.249	0.000	0.031
%RSD		23.020	1.999	3.973	56.660	188.400	29.720	0.000	19.190

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	85.246%	0.603	0.557	89.472%	-0.009	-0.005	0.049	0.028
2	21:47:38	85.490%	0.586	0.626	88.777%	-0.006	-0.001	-0.065	-0.003
3	21:48:21	84.448%	0.485	0.515	88.409%	-0.006	-0.005	0.037	0.020
x		85.061%	0.558	0.566	88.886%	-0.007	-0.004	0.007	0.015
σ		0.545%	0.064	0.056	0.539%	0.002	0.002	0.062	0.016
%RSD		0.640	11.400	9.897	0.607	29.010	54.260	875.800	106.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	84.518%	4.577	0.045	0.057	0.094	0.076	86.160%	87.007%
2	21:47:38	83.819%	4.701	0.056	0.083	0.047	0.072	88.025%	88.356%
3	21:48:21	84.092%	4.705	0.062	0.115	0.034	0.053	88.016%	88.461%
x		84.143%	4.661	0.054	0.085	0.058	0.067	87.400%	87.941%
σ		0.352%	0.073	0.009	0.029	0.032	0.012	1.074%	0.811%
%RSD		0.418	1.569	16.270	34.410	54.270	18.360	1.229	0.922

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.024	0.012	0.060	0.035	0.047	93.311%
2	21:47:38	0.020	0.015	0.005	0.012	0.010	94.683%
3	21:48:21	0.011	0.019	0.022	0.020	0.020	94.753%
x		0.019	0.015	0.029	0.022	0.025	94.249%
σ		0.007	0.003	0.028	0.012	0.019	0.813%
%RSD		35.020	21.190	95.880	52.590	75.310	0.862

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	81.144%	0.044	59.470	62.870	0.000	11120.000	11590.000	11650.000
2	21:51:57	78.193%	0.001	61.670	63.660	0.000	11170.000	11860.000	11980.000
3	21:52:40	77.753%	-0.008	54.250	62.850	0.000	10930.000	11770.000	11720.000
x		79.030%	0.013	58.460	63.130	0.000	11080.000	11740.000	11780.000
σ		1.844%	0.028	3.812	0.463	0.000	126.200	138.400	171.400
%RSD		2.333	223.800	6.521	0.733	0.000	1.139	1.179	1.455

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	1.016	5779.000	0.000	2338.000	50800.000	50460.000	84.087%	0.657
2	21:51:57	1.284	5791.000	0.000	2341.000	50340.000	50340.000	83.131%	0.844
3	21:52:40	1.294	5701.000	0.000	2307.000	50370.000	51750.000	82.606%	0.732
x		1.198	5757.000	0.000	2329.000	50500.000	50850.000	83.274%	0.744
σ		0.158	48.650	0.000	18.640	257.100	778.000	0.751%	0.094
%RSD		13.160	0.845	0.000	0.800	0.509	1.530	0.902	12.620

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	-0.042	1.328	2615.000	7513.000	7460.000	2.653	0.823	0.606
2	21:51:57	-0.032	1.165	2597.000	7447.000	7442.000	2.755	0.774	0.598
3	21:52:40	-0.258	1.180	2596.000	7340.000	7311.000	2.653	0.744	0.651
x		-0.111	1.224	2603.000	7433.000	7405.000	2.687	0.780	0.618
σ		0.128	0.090	10.890	86.930	81.390	0.059	0.040	0.029
%RSD		115.600	7.345	0.418	1.170	1.099	2.198	5.087	4.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	0.753	0.974	1.383	2.983	0.160	1.072	0.000	209.200
2	21:51:57	0.569	0.957	1.112	2.118	0.123	0.453	0.000	211.600
3	21:52:40	0.526	1.503	0.816	2.981	0.234	0.546	0.000	209.900
x		0.616	1.144	1.104	2.694	0.172	0.690	0.000	210.200
σ		0.120	0.310	0.284	0.499	0.056	0.334	0.000	1.203
%RSD		19.550	27.110	25.710	18.520	32.770	48.330	0.000	0.572

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	84.475%	3.748	3.837	85.955%	-0.007	-0.008	-0.092	-0.062
2	21:51:57	84.476%	3.686	4.133	85.590%	-0.009	-0.001	-0.010	-0.036
3	21:52:40	84.564%	3.988	4.038	85.144%	-0.009	-0.005	-0.099	-0.108
x		84.505%	3.807	4.003	85.563%	-0.008	-0.005	-0.067	-0.068
σ		0.051%	0.160	0.151	0.406%	0.001	0.004	0.049	0.036
%RSD		0.060	4.193	3.779	0.475	16.250	75.320	73.610	53.290

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	82.616%	3.861	0.201	0.294	143.300	142.400	87.418%	87.029%
2	21:51:57	83.002%	4.241	0.248	0.306	143.100	142.900	88.845%	88.614%
3	21:52:40	82.525%	4.247	0.233	0.230	145.100	145.100	88.175%	88.229%
x		82.714%	4.116	0.227	0.277	143.800	143.500	88.146%	87.958%
σ		0.253%	0.221	0.024	0.041	1.088	1.443	0.714%	0.827%
%RSD		0.306	5.372	10.510	14.770	0.756	1.006	0.810	0.940

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	0.005	0.003	0.060	0.051	0.044	90.768%
2	21:51:57	-0.005	0.006	0.035	0.038	0.041	93.323%
3	21:52:40	-0.004	0.009	0.047	0.018	0.031	93.376%
x		-0.001	0.006	0.047	0.036	0.039	92.489%
σ		0.006	0.003	0.012	0.017	0.007	1.491%
%RSD		441.200	48.280	25.620	46.790	18.340	1.612

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	87.196%	0.007	1.190	1.401	0.000	7.102	0.338	0.229
2	21:59:51	85.239%	0.007	1.858	1.126	0.000	8.885	1.052	0.880
3	22:00:35	83.102%	-0.009	1.267	1.078	0.000	9.421	1.268	1.158
x		85.179%	0.002	1.438	1.201	0.000	8.470	0.886	0.756
σ		2.048%	0.009	0.366	0.174	0.000	1.214	0.487	0.477
%RSD		2.404	566.400	25.420	14.490	0.000	14.340	54.970	63.050

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	1.422	1.979	0.000	-2.820	2.570	-8.904	86.243%	-0.085
2	21:59:51	1.338	2.193	0.000	-4.222	2.824	-10.000	84.834%	-0.122
3	22:00:35	1.649	1.768	0.000	-4.496	4.699	-6.022	85.122%	-0.103
x		1.470	1.980	0.000	-3.846	3.364	-8.309	85.400%	-0.103
σ		0.161	0.212	0.000	0.899	1.163	2.055	0.744%	0.018
%RSD		10.940	10.730	0.000	23.380	34.560	24.730	0.872	17.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	0.028	0.092	0.820	-5.418	-4.019	-0.013	-0.102	-0.259
2	21:59:51	0.089	0.045	0.896	-8.659	-6.654	-0.012	-0.096	-0.241
3	22:00:35	-0.064	0.067	0.923	-8.870	-9.144	-0.011	-0.132	-0.260
x		0.018	0.068	0.879	-7.649	-6.606	-0.012	-0.110	-0.253
σ		0.077	0.024	0.054	1.935	2.563	0.001	0.020	0.011
%RSD		435.500	34.720	6.109	25.300	38.800	9.560	17.800	4.277

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	-0.299	-1.165	-1.208	0.197	-0.065	0.642	0.000	-0.009
2	21:59:51	-0.344	-1.241	-1.178	-0.060	0.153	0.957	0.000	-0.001
3	22:00:35	-0.280	-1.202	-1.184	0.157	0.128	1.247	0.000	-0.001
x		-0.308	-1.202	-1.190	0.098	0.072	0.949	0.000	-0.004
σ		0.032	0.038	0.016	0.138	0.119	0.302	0.000	0.005
%RSD		10.520	3.139	1.313	140.900	166.500	31.890	0.000	120.800

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	83.823%	0.134	0.144	89.029%	-0.008	-0.003	-0.019	-0.002
2	21:59:51	84.401%	0.147	0.135	89.198%	-0.008	-0.006	-0.018	-0.001
3	22:00:35	84.136%	0.176	0.100	89.300%	-0.009	-0.000	0.013	0.032
x		84.120%	0.152	0.127	89.176%	-0.008	-0.003	-0.008	0.009
σ		0.289%	0.021	0.024	0.137%	0.001	0.003	0.018	0.019
%RSD		0.344	14.100	18.640	0.154	7.816	97.740	229.800	206.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	83.940%	-0.103	-0.011	-0.029	-0.025	0.021	84.992%	85.011%
2	21:59:51	84.544%	-0.205	-0.018	-0.034	0.008	0.005	85.577%	85.789%
3	22:00:35	84.275%	-0.210	-0.029	-0.042	-0.032	-0.006	86.066%	86.836%
x		84.253%	-0.173	-0.019	-0.035	-0.016	0.007	85.545%	85.878%
σ		0.303%	0.060	0.009	0.007	0.021	0.013	0.538%	0.916%
%RSD		0.359	34.760	49.270	19.980	131.500	204.500	0.629	1.066

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	-0.001	-0.004	0.068	0.056	0.064	89.882%
2	21:59:51	-0.012	0.001	0.022	0.009	0.021	90.338%
3	22:00:35	-0.003	-0.006	0.004	0.000	0.002	91.086%
x		-0.005	-0.003	0.031	0.022	0.029	90.435%
σ		0.006	0.004	0.033	0.030	0.032	0.608%
%RSD		110.500	111.800	106.200	138.900	111.100	0.672

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	77.298%	49.450	864.300	898.200	0.000	46580.000	50870.000	51750.000
2	22:04:10	74.861%	47.870	895.400	907.300	0.000	46060.000	52290.000	53010.000
3	22:04:53	73.508%	49.080	899.400	926.500	0.000	46090.000	52470.000	53490.000
x		75.222%	48.800	886.400	910.700	0.000	46240.000	51880.000	52750.000
σ		1.921%	0.829	19.220	14.450	0.000	292.000	874.400	899.900
%RSD		2.554	1.698	2.168	1.587	0.000	0.631	1.686	1.706

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	1988.000	9679.000	0.000	48590.000	45870.000	46090.000	85.187%	889.200
2	22:04:10	2018.000	9822.000	0.000	48400.000	46460.000	46010.000	84.720%	893.500
3	22:04:53	2030.000	9904.000	0.000	47620.000	45240.000	45990.000	83.842%	901.500
x		2012.000	9802.000	0.000	48200.000	45860.000	46030.000	84.583%	894.700
σ		22.020	114.100	0.000	513.000	609.500	54.010	0.683%	6.294
%RSD		1.094	1.164	0.000	1.064	1.329	0.117	0.808	0.704

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	463.900	181.400	477.900	915.400	1107.000	445.000	452.900	227.200
2	22:04:10	458.500	180.700	480.500	957.000	1093.000	439.800	445.000	225.300
3	22:04:53	468.100	181.500	477.900	937.100	1077.000	435.700	446.200	225.300
x		463.500	181.200	478.800	936.500	1092.000	440.100	448.000	225.900
σ		4.805	0.441	1.505	20.830	15.110	4.633	4.254	1.094
%RSD		1.037	0.243	0.314	2.224	1.384	1.053	0.950	0.484

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	226.200	455.000	454.300	36.960	9.461	9.857	0.000	922.900
2	22:04:10	224.000	451.500	453.900	36.830	9.438	11.300	0.000	916.200
3	22:04:53	227.500	452.600	453.200	36.300	10.480	10.160	0.000	901.100
x		225.900	453.000	453.800	36.690	9.794	10.440	0.000	913.400
σ		1.765	1.787	0.548	0.349	0.597	0.764	0.000	11.160
%RSD		0.781	0.394	0.121	0.951	6.092	7.316	0.000	1.222

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	84.231%	871.200	863.700	84.617%	45.590	45.830	46.830	43.820
2	22:04:10	84.287%	905.500	898.900	84.392%	45.120	45.630	46.980	43.680
3	22:04:53	83.832%	924.300	919.700	84.256%	45.520	46.650	48.460	45.200
x		84.117%	900.300	894.100	84.422%	45.410	46.040	47.420	44.240
σ		0.248%	26.950	28.340	0.182%	0.253	0.543	0.903	0.837
%RSD		0.295	2.993	3.170	0.216	0.558	1.179	1.904	1.892

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	83.383%	1770.000	468.500	468.200	1837.000	1823.000	86.098%	87.234%
2	22:04:10	83.165%	1790.000	471.100	469.700	1844.000	1839.000	87.142%	87.375%
3	22:04:53	81.852%	1819.000	477.400	479.400	1837.000	1839.000	87.156%	87.664%
x		82.800%	1793.000	472.300	472.400	1839.000	1834.000	86.799%	87.424%
σ		0.828%	24.600	4.606	6.104	3.978	9.337	0.606%	0.219%
%RSD		1.000	1.372	0.975	1.292	0.216	0.509	0.699	0.251

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	43.540	44.030	17.120	18.140	17.730	89.129%
2	22:04:10	45.070	45.760	17.680	18.850	18.240	88.259%
3	22:04:53	45.410	45.760	17.590	19.010	18.270	88.194%
x		44.670	45.180	17.470	18.670	18.080	88.528%
σ		0.994	0.997	0.299	0.463	0.304	0.522%
%RSD		2.226	2.206	1.711	2.479	1.683	0.590

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	86.385%	94.750	94.980	93.040	0.000	49540.000	50720.000	51100.000
2	22:11:21	83.315%	96.660	91.910	96.740	0.000	49910.000	52240.000	52580.000
3	22:12:04	83.949%	98.990	94.040	95.210	0.000	48770.000	51450.000	52380.000
x		84.549%	96.803%	93.643%	95.000%	0.000	98.817%	102.943%	104.036%
σ		1.621%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.917	2.194	1.685	1.957	0.000	1.171	1.484	1.538

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	501.400	5248.000	0.000	52240.000	48490.000	46150.000	85.689%	95.140
2	22:11:21	519.800	5352.000	0.000	52200.000	48980.000	48150.000	85.526%	97.510
3	22:12:04	521.600	5292.000	0.000	50930.000	47850.000	48560.000	87.439%	98.650
x		102.851%	105.947%	0.000	103.578%	96.882%	95.242%	86.218%	97.099%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.061%	n/a
%RSD		2.171	0.983	0.000	1.443	1.162	2.712	1.230	1.847

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	97.470	97.560	502.200	25840.000	25180.000	96.370	97.170	96.670
2	22:11:21	96.330	98.620	504.500	25750.000	25250.000	95.820	96.990	96.130
3	22:12:04	95.760	96.700	502.200	25490.000	24920.000	94.860	95.840	96.000
x		96.519%	97.626%	100.592%	102.769%	100.465%	95.681%	96.670%	96.267%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.899	0.985	0.260	0.716	0.699	0.801	0.745	0.367

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	96.780	99.170	96.920	99.570	99.840	101.600	0.000	98.190
2	22:11:21	96.640	98.270	98.670	97.540	100.800	101.000	0.000	98.330
3	22:12:04	95.070	97.230	97.800	98.840	99.500	98.150	0.000	97.840
x		96.164%	98.224%	97.799%	98.647%	100.039%	100.244%	0.000	98.117%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.988	0.991	0.892	1.043	0.659	1.840	0.000	0.255

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	83.262%	96.640	96.500	84.519%	94.030	95.010	97.180	98.070
2	22:11:21	84.351%	100.700	98.210	85.300%	95.020	95.870	98.430	99.470
3	22:12:04	85.241%	101.000	100.300	85.744%	94.660	95.940	96.590	97.970
x		84.285%	99.441%	98.322%	85.188%	94.571%	95.605%	97.400%	98.502%
σ		0.991%	n/a	n/a	0.620%	n/a	n/a	n/a	n/a
%RSD		1.176	2.441	1.914	0.728	0.526	0.544	0.967	0.855

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	83.037%	97.450	90.730	91.190	96.500	97.340	85.145%	84.639%
2	22:11:21	83.450%	97.510	94.580	95.320	97.670	98.230	86.214%	86.672%
3	22:12:04	85.157%	97.320	95.300	96.100	97.620	97.130	86.880%	87.506%
x		83.882%	97.428%	93.537%	94.203%	97.262%	97.563%	86.080%	86.273%
σ		1.124%	n/a	n/a	n/a	n/a	n/a	0.875%	1.475%
%RSD		1.340	0.104	2.625	2.804	0.678	0.600	1.016	1.709

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	92.780	92.640	93.770	93.310	93.700	87.313%
2	22:11:21	94.030	94.310	95.210	95.450	95.250	88.042%
3	22:12:04	94.490	93.550	96.040	95.500	95.520	88.651%
x		93.769%	93.498%	95.008%	94.751%	94.824%	88.002%
σ		n/a	n/a	n/a	n/a	n/a	0.670%
%RSD		0.944	0.895	1.208	1.318	1.039	0.761

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	89.441%	0.014	1.880	2.274	0.000	9.408	13.780	13.420
2	22:18:32	88.886%	-0.010	1.675	2.323	0.000	14.870	17.410	17.930
3	22:19:15	87.299%	-0.002	2.552	2.231	0.000	19.160	22.750	22.500
x		88.542%	0.001	2.036	2.276	0.000	14.480	17.980	17.950
σ		1.112%	0.012	0.459	0.046	0.000	4.888	4.515	4.536
%RSD		1.256	1788.000	22.550	2.024	0.000	33.760	25.110	25.270

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	-0.418	1.932	0.000	8.047	18.840	17.520	87.907%	-0.088
2	22:18:32	-0.462	2.963	0.000	12.950	37.140	23.320	88.103%	-0.051
3	22:19:15	0.031	3.085	0.000	15.130	71.310	31.470	86.952%	0.045
x		-0.283	2.660	0.000	12.040	42.430	24.100	87.654%	-0.031
σ		0.273	0.634	0.000	3.626	26.630	7.007	0.616%	0.069
%RSD		96.400	23.820	0.000	30.110	62.770	29.070	0.703	221.500

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	0.135	0.032	0.377	6.714	7.617	0.027	-0.078	-0.205
2	22:18:32	0.090	0.031	0.462	4.875	4.490	0.052	-0.084	-0.150
3	22:19:15	-0.016	0.008	0.462	4.284	4.831	0.042	-0.038	-0.224
x		0.070	0.024	0.434	5.291	5.646	0.041	-0.067	-0.193
σ		0.077	0.014	0.049	1.267	1.716	0.013	0.025	0.038
%RSD		110.900	58.500	11.340	23.950	30.380	31.520	37.900	19.710

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	-0.174	-0.622	-0.761	0.273	0.141	0.535	0.000	0.085
2	22:18:32	-0.267	-0.633	-0.761	-0.100	0.232	0.781	0.000	0.096
3	22:19:15	-0.235	-0.804	-0.906	0.091	0.109	0.544	0.000	0.142
x		-0.225	-0.686	-0.809	0.088	0.161	0.620	0.000	0.108
σ		0.047	0.102	0.084	0.187	0.064	0.139	0.000	0.030
%RSD		21.050	14.870	10.330	212.500	39.640	22.440	0.000	28.290

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	85.165%	1.259	1.267	92.204%	0.023	0.002	-0.032	-0.000
2	22:18:32	85.966%	1.110	1.064	91.687%	0.013	0.025	-0.006	0.024
3	22:19:15	85.856%	1.157	1.089	90.221%	0.018	0.027	-0.012	0.018
x		85.662%	1.175	1.140	91.371%	0.018	0.018	-0.017	0.014
σ		0.434%	0.077	0.110	1.029%	0.005	0.014	0.013	0.013
%RSD		0.507	6.516	9.686	1.126	26.010	78.860	78.980	91.660

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	87.000%	0.349	0.593	0.584	0.112	0.127	85.834%	85.625%
2	22:18:32	86.386%	0.391	0.616	0.553	0.163	0.181	87.305%	87.510%
3	22:19:15	86.590%	0.320	0.525	0.446	0.234	0.180	87.871%	87.020%
x		86.658%	0.353	0.578	0.527	0.170	0.163	87.003%	86.718%
σ		0.313%	0.036	0.047	0.073	0.061	0.031	1.051%	0.978%
%RSD		0.361	10.160	8.181	13.770	36.120	19.160	1.208	1.128

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	0.030	0.030	0.227	0.238	0.234	90.909%
2	22:18:32	0.039	0.041	0.179	0.205	0.185	92.466%
3	22:19:15	0.036	0.043	0.212	0.192	0.200	92.793%
x		0.035	0.038	0.206	0.211	0.207	92.056%
σ		0.004	0.007	0.025	0.024	0.025	1.007%
%RSD		12.690	17.590	12.000	11.200	12.180	1.094

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	86.052%	0.007	9.163	9.799	0.000	2668.000	3357.000	3418.000
2	22:22:52	84.351%	0.025	8.897	9.182	0.000	2678.000	3429.000	3483.000
3	22:23:35	82.602%	0.017	9.101	9.371	0.000	2652.000	3450.000	3513.000
x		84.335%	0.016	9.054	9.451	0.000	2666.000	3412.000	3471.000
σ		1.725%	0.009	0.139	0.316	0.000	13.150	49.030	48.670
%RSD		2.045	54.520	1.539	3.343	0.000	0.493	1.437	1.402

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	579.000	3682.000	0.000	1221.000	11430.000	11700.000	87.009%	6.595
2	22:22:52	586.400	3699.000	0.000	1199.000	11580.000	11800.000	86.220%	5.151
3	22:23:35	594.300	3751.000	0.000	1203.000	11540.000	11680.000	85.799%	5.904
x		586.500	3710.000	0.000	1208.000	11520.000	11730.000	86.343%	5.883
σ		7.646	35.940	0.000	11.690	76.380	63.490	0.614%	0.722
%RSD		1.304	0.969	0.000	0.968	0.663	0.541	0.711	12.270

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	0.756	0.755	130.600	1214.000	1210.000	0.558	1.454	3.859
2	22:22:52	0.878	0.752	131.000	1199.000	1196.000	0.532	1.243	3.778
3	22:23:35	0.637	0.691	132.800	1225.000	1220.000	0.563	1.326	3.850
x		0.757	0.733	131.500	1213.000	1209.000	0.551	1.341	3.829
σ		0.120	0.036	1.144	13.050	12.080	0.017	0.106	0.044
%RSD		15.890	4.946	0.870	1.076	0.999	3.094	7.927	1.160

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	3.590	14.240	14.180	1.046	-0.113	0.020	0.000	27.340
2	22:22:52	3.616	14.080	15.240	1.128	-0.002	1.005	0.000	27.740
3	22:23:35	3.759	14.000	14.000	0.791	0.328	0.438	0.000	27.820
x		3.655	14.110	14.480	0.988	0.071	0.488	0.000	27.630
σ		0.091	0.123	0.672	0.176	0.229	0.495	0.000	0.255
%RSD		2.485	0.873	4.641	17.820	322.200	101.400	0.000	0.923

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	85.811%	1.143	1.145	89.707%	0.015	0.015	0.039	0.021
2	22:22:52	86.814%	1.082	0.981	89.140%	0.005	0.005	0.020	0.031
3	22:23:35	86.022%	1.111	1.043	89.362%	0.001	0.016	0.005	0.025
x		86.216%	1.112	1.056	89.403%	0.007	0.012	0.022	0.026
σ		0.528%	0.030	0.083	0.286%	0.007	0.006	0.017	0.005
%RSD		0.613	2.727	7.838	0.320	103.000	47.420	78.930	19.510

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	85.348%	0.973	0.648	0.589	86.290	84.570	87.122%	86.552%
2	22:22:52	85.535%	0.810	0.504	0.645	84.730	84.340	87.557%	87.766%
3	22:23:35	86.171%	0.775	0.503	0.486	83.370	83.360	88.221%	88.236%
x		85.685%	0.852	0.552	0.573	84.800	84.090	87.633%	87.518%
σ		0.432%	0.106	0.084	0.081	1.459	0.639	0.553%	0.869%
%RSD		0.504	12.380	15.150	14.080	1.721	0.760	0.631	0.993

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	0.026	0.033	1.157	1.071	1.091	97.250%
2	22:22:52	0.024	0.025	1.174	1.094	1.121	95.859%
3	22:23:35	0.030	0.025	1.156	1.084	1.113	95.119%
x		0.027	0.028	1.162	1.083	1.109	96.076%
σ		0.003	0.004	0.010	0.011	0.016	1.082%
%RSD		11.020	15.900	0.877	1.058	1.404	1.126

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	85.388%	-0.001	85.210	83.710	0.000	15130.000	23970.000	24020.000
2	22:27:10	81.392%	0.000	87.790	87.950	0.000	15140.000	24350.000	24800.000
3	22:27:53	83.257%	0.008	79.910	82.300	0.000	14740.000	24300.000	24650.000
x		83.345%	0.002	84.300	84.650	0.000	15010.000	24210.000	24490.000
σ		2.000%	0.005	4.016	2.942	0.000	226.700	209.500	413.700
%RSD		2.399	212.100	4.764	3.475	0.000	1.511	0.866	1.689

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	4.367	6597.000	0.000	3197.000	36810.000	37270.000	84.563%	0.363
2	22:27:10	5.213	6728.000	0.000	3170.000	37030.000	37010.000	84.324%	0.325
3	22:27:53	4.894	6579.000	0.000	3117.000	36400.000	37170.000	84.445%	0.324
x		4.824	6635.000	0.000	3161.000	36750.000	37150.000	84.444%	0.337
σ		0.427	81.480	0.000	40.600	320.400	129.600	0.120%	0.022
%RSD		8.859	1.228	0.000	1.284	0.872	0.349	0.142	6.525

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	0.080	0.349	3.169	11.180	149.800	0.051	3.803	3.052
2	22:27:10	0.004	0.375	3.169	3.377	130.900	0.035	3.484	2.943
3	22:27:53	-0.223	0.316	3.085	0.264	121.000	0.035	3.293	3.081
x		-0.046	0.347	3.141	4.940	133.900	0.041	3.527	3.025
σ		0.158	0.030	0.048	5.623	14.600	0.009	0.258	0.073
%RSD		341.200	8.523	1.544	113.800	10.900	22.550	7.308	2.408

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	3.193	3.907	4.035	0.874	-0.024	0.461	0.000	739.700
2	22:27:10	3.134	3.382	3.544	0.603	-0.286	0.664	0.000	726.300
3	22:27:53	3.047	3.542	3.461	0.705	-0.438	0.531	0.000	711.600
x		3.124	3.611	3.680	0.727	-0.249	0.552	0.000	725.900
σ		0.074	0.269	0.310	0.137	0.209	0.103	0.000	14.040
%RSD		2.354	7.454	8.435	18.810	83.940	18.680	0.000	1.934

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	82.990%	1.707	1.659	86.419%	-0.007	-0.005	-0.094	-0.054
2	22:27:10	84.443%	1.532	1.496	86.886%	-0.008	-0.001	0.009	0.025
3	22:27:53	84.839%	1.451	1.480	86.148%	0.004	-0.002	-0.098	-0.069
x		84.091%	1.563	1.545	86.484%	-0.004	-0.003	-0.061	-0.033
σ		0.973%	0.131	0.099	0.373%	0.006	0.002	0.061	0.050
%RSD		1.158	8.390	6.417	0.432	175.300	62.430	99.400	154.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	82.865%	0.860	0.316	0.323	133.200	130.900	85.467%	84.930%
2	22:27:10	83.751%	0.760	0.264	0.317	132.600	133.700	86.434%	86.975%
3	22:27:53	84.050%	0.775	0.254	0.252	131.100	131.200	87.475%	87.439%
x		83.555%	0.798	0.278	0.297	132.300	131.900	86.458%	86.448%
σ		0.616%	0.054	0.033	0.039	1.066	1.533	1.004%	1.335%
%RSD		0.737	6.714	11.870	13.260	0.806	1.162	1.162	1.544

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	0.014	0.014	2.315	2.225	2.319	90.682%
2	22:27:10	0.017	0.011	2.355	2.317	2.330	90.697%
3	22:27:53	0.019	0.005	2.316	2.404	2.343	90.588%
x		0.017	0.010	2.328	2.315	2.331	90.656%
σ		0.002	0.004	0.023	0.090	0.012	0.059%
%RSD		14.930	43.580	0.969	3.880	0.499	0.065

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	82.541%	-0.000	131.900	137.800	0.000	39240.000	10640.000	10630.000
2	22:31:26	78.943%	-0.017	138.200	142.900	0.000	39190.000	10860.000	11010.000
3	22:32:09	79.185%	-0.017	128.200	138.300	0.000	38700.000	10920.000	11040.000
x		80.223%	-0.012	132.800	139.700	0.000	39040.000	10800.000	10900.000
σ		2.011%	0.010	5.056	2.821	0.000	298.800	145.500	227.900
%RSD		2.507	84.280	3.808	2.020	0.000	0.765	1.346	2.092

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	6.084	5034.000	0.000	2167.000	25380.000	25470.000	85.775%	0.336
2	22:31:26	7.646	5142.000	0.000	2193.000	25530.000	25650.000	83.905%	0.523
3	22:32:09	7.125	5068.000	0.000	2142.000	25960.000	25850.000	83.074%	0.373
x		6.952	5081.000	0.000	2167.000	25620.000	25660.000	84.252%	0.410
σ		0.795	55.100	0.000	25.500	299.500	188.500	1.383%	0.099
%RSD		11.440	1.084	0.000	1.177	1.169	0.735	1.642	24.210

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	0.012	0.292	2.202	77.560	164.800	0.036	-0.012	2.236
2	22:31:26	-0.039	0.204	2.238	77.530	164.400	0.026	0.001	2.193
3	22:32:09	-0.005	0.205	2.104	75.450	156.700	0.013	0.021	2.213
x		-0.011	0.234	2.181	76.850	162.000	0.025	0.004	2.214
σ		0.026	0.050	0.069	1.209	4.555	0.012	0.017	0.021
%RSD		238.200	21.560	3.177	1.574	2.812	46.640	476.100	0.967

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	2.023	1.723	1.641	0.191	0.189	0.269	0.000	349.300
2	22:31:26	2.134	1.899	2.441	0.269	0.155	0.974	0.000	351.000
3	22:32:09	2.134	1.759	1.555	0.342	0.630	0.347	0.000	349.700
x		2.097	1.794	1.879	0.267	0.325	0.530	0.000	350.000
σ		0.064	0.093	0.489	0.075	0.265	0.387	0.000	0.890
%RSD		3.069	5.189	26.000	28.100	81.650	72.960	0.000	0.254

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	84.322%	1.219	1.135	86.563%	-0.008	-0.004	0.001	0.032
2	22:31:26	83.635%	1.114	1.198	87.120%	-0.007	-0.001	-0.068	-0.044
3	22:32:09	84.024%	1.214	1.125	85.511%	-0.003	0.001	-0.139	-0.099
x		83.994%	1.183	1.153	86.398%	-0.006	-0.001	-0.069	-0.037
σ		0.345%	0.059	0.040	0.817%	0.002	0.002	0.070	0.066
%RSD		0.410	5.019	3.437	0.946	41.320	186.400	101.600	176.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	84.340%	0.434	0.135	0.144	140.600	140.500	86.899%	86.599%
2	22:31:26	84.148%	0.462	0.122	0.123	143.800	141.000	87.539%	88.236%
3	22:32:09	84.022%	0.415	0.149	0.140	142.900	142.500	87.848%	87.967%
x		84.170%	0.437	0.135	0.136	142.400	141.300	87.429%	87.601%
σ		0.160%	0.024	0.014	0.011	1.654	1.017	0.484%	0.878%
%RSD		0.190	5.411	10.350	8.076	1.161	0.720	0.554	1.002

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	0.002	0.006	0.310	0.291	0.286	92.159%
2	22:31:26	-0.002	0.007	0.256	0.258	0.260	92.851%
3	22:32:09	-0.002	0.001	0.210	0.212	0.232	92.778%
x		-0.001	0.004	0.259	0.254	0.259	92.596%
σ		0.002	0.003	0.050	0.040	0.027	0.380%
%RSD		353.300	72.570	19.340	15.680	10.330	0.410

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	87.159%	0.172	77.250	80.910	0.000	154.500	128.700	128.100
2	22:35:43	86.301%	0.215	77.850	82.140	0.000	152.800	127.700	127.700
3	22:36:26	85.817%	0.125	83.460	82.950	0.000	155.000	126.200	129.600
x		86.426%	0.171	79.520	82.000	0.000	154.100	127.500	128.500
σ		0.680%	0.045	3.428	1.030	0.000	1.123	1.277	1.024
%RSD		0.786	26.580	4.311	1.256	0.000	0.729	1.001	0.797

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	586.100	1049.000	0.000	133.900	86.520	86.040	86.661%	14.200
2	22:35:43	586.100	1058.000	0.000	128.200	68.850	87.240	87.683%	14.990
3	22:36:26	594.800	1070.000	0.000	129.700	132.500	79.920	86.026%	15.860
x		589.000	1059.000	0.000	130.600	95.940	84.400	86.790%	15.020
σ		5.007	10.490	0.000	2.976	32.830	3.925	0.836%	0.832
%RSD		0.850	0.990	0.000	2.278	34.220	4.650	0.963	5.540

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	1.358	5.149	39.110	673.400	653.900	0.267	3.766	0.357
2	22:35:43	1.417	5.076	38.870	677.800	664.800	0.236	3.623	0.418
3	22:36:26	1.528	5.246	39.130	681.900	677.800	0.218	3.505	0.418
x		1.434	5.157	39.030	677.700	665.500	0.240	3.631	0.397
σ		0.086	0.085	0.145	4.274	11.970	0.024	0.131	0.035
%RSD		6.018	1.653	0.371	0.631	1.799	10.170	3.601	8.858

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	0.364	2.400	2.750	0.038	-0.046	0.098	0.000	0.503
2	22:35:43	0.341	2.417	2.810	-0.080	0.035	0.393	0.000	0.530
3	22:36:26	0.297	2.591	2.455	0.115	-0.158	0.605	0.000	0.498
x		0.334	2.470	2.672	0.024	-0.056	0.365	0.000	0.510
σ		0.034	0.106	0.190	0.098	0.097	0.255	0.000	0.017
%RSD		10.260	4.290	7.125	405.000	171.900	69.670	0.000	3.356

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	85.383%	0.749	0.720	90.767%	-0.001	-0.003	-0.011	0.007
2	22:35:43	85.488%	0.717	0.863	90.831%	-0.005	-0.002	-0.005	-0.012
3	22:36:26	85.230%	0.662	0.692	89.875%	0.001	-0.005	-0.037	-0.017
x		85.367%	0.709	0.758	90.491%	-0.002	-0.003	-0.018	-0.008
σ		0.130%	0.044	0.092	0.534%	0.003	0.002	0.017	0.013
%RSD		0.152	6.220	12.120	0.591	152.100	54.900	96.140	167.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	85.871%	-0.072	0.092	0.070	17.090	17.090	86.256%	86.178%
2	22:35:43	86.378%	-0.026	0.072	0.076	17.650	17.130	87.755%	87.761%
3	22:36:26	86.565%	-0.040	0.055	0.077	16.910	17.180	87.284%	87.526%
x		86.271%	-0.046	0.073	0.074	17.220	17.140	87.099%	87.155%
σ		0.359%	0.024	0.018	0.004	0.390	0.046	0.766%	0.854%
%RSD		0.416	51.700	24.690	5.111	2.265	0.271	0.880	0.980

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	0.004	0.011	0.426	0.388	0.402	91.204%
2	22:35:43	0.001	0.004	0.338	0.368	0.347	92.407%
3	22:36:26	0.001	0.006	0.348	0.334	0.341	91.209%
x		0.002	0.007	0.371	0.363	0.364	91.607%
σ		0.002	0.004	0.048	0.027	0.034	0.693%
%RSD		83.590	54.750	12.960	7.537	9.240	0.757

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	86.850%	0.015	321.000	317.000	0.000	942.800	54.400	53.640
2	22:40:01	84.748%	0.008	328.900	314.400	0.000	917.000	53.870	55.880
3	22:40:44	82.288%	0.026	331.500	326.300	0.000	935.400	55.120	55.860
x		84.629%	0.016	327.100	319.200	0.000	931.700	54.470	55.130
σ		2.283%	0.009	5.498	6.250	0.000	13.290	0.630	1.286
%RSD		2.698	57.220	1.681	1.958	0.000	1.426	1.156	2.333

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	51.630	265.600	0.000	92.140	163.500	140.000	86.462%	2.738
2	22:40:01	52.690	264.500	0.000	88.970	137.700	149.700	86.343%	2.665
3	22:40:44	51.710	270.600	0.000	86.560	171.500	143.500	85.536%	2.653
x		52.010	266.900	0.000	89.220	157.500	144.400	86.114%	2.685
σ		0.587	3.215	0.000	2.803	17.670	4.934	0.503%	0.046
%RSD		1.128	1.205	0.000	3.141	11.220	3.417	0.585	1.717

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	0.141	0.294	2.770	81.100	84.720	0.013	0.076	-0.204
2	22:40:01	0.144	0.315	2.695	75.610	74.760	0.028	0.076	-0.178
3	22:40:44	0.161	0.342	2.693	73.420	71.920	0.023	0.083	-0.202
x		0.148	0.317	2.720	76.710	77.130	0.021	0.078	-0.195
σ		0.011	0.024	0.044	3.955	6.720	0.008	0.004	0.015
%RSD		7.303	7.554	1.603	5.157	8.712	36.680	5.011	7.544

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	-0.246	-0.550	-0.364	0.233	-0.120	0.821	0.000	0.718
2	22:40:01	-0.149	-0.650	-0.494	0.071	0.211	0.595	0.000	0.741
3	22:40:44	-0.232	-0.547	-0.511	0.213	0.024	1.338	0.000	0.735
x		-0.209	-0.582	-0.456	0.172	0.039	0.918	0.000	0.731
σ		0.053	0.059	0.081	0.088	0.166	0.381	0.000	0.012
%RSD		25.150	10.070	17.720	51.150	429.800	41.480	0.000	1.631

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	84.225%	0.285	0.277	89.603%	-0.009	-0.005	-0.021	-0.007
2	22:40:01	85.005%	0.276	0.330	89.434%	-0.005	-0.005	-0.048	-0.030
3	22:40:44	84.684%	0.256	0.292	89.125%	-0.005	0.001	-0.003	-0.003
x		84.638%	0.273	0.300	89.387%	-0.006	-0.003	-0.024	-0.013
σ		0.392%	0.015	0.028	0.243%	0.003	0.003	0.022	0.014
%RSD		0.463	5.390	9.193	0.271	41.990	110.600	91.620	107.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	85.821%	-0.084	0.046	0.045	5.739	5.712	85.630%	86.151%
2	22:40:01	86.127%	-0.127	0.022	0.001	5.557	5.770	86.721%	86.610%
3	22:40:44	84.758%	-0.134	0.028	0.063	5.463	5.796	88.264%	87.203%
x		85.569%	-0.115	0.032	0.036	5.586	5.759	86.872%	86.654%
σ		0.718%	0.027	0.012	0.032	0.140	0.043	1.323%	0.527%
%RSD		0.840	23.560	38.530	87.750	2.505	0.743	1.523	0.608

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	-0.004	-0.005	0.162	0.173	0.162	92.167%
2	22:40:01	-0.006	-0.007	0.110	0.096	0.087	92.779%
3	22:40:44	-0.007	-0.006	0.054	0.055	0.055	93.300%
x		-0.006	-0.006	0.109	0.108	0.101	92.749%
σ		0.002	0.001	0.054	0.060	0.055	0.567%
%RSD		30.470	24.270	49.500	55.580	54.200	0.612

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	88.104%	0.489	2022.000	1995.000	0.000	2590.000	302.000	300.600
2	22:44:18	87.403%	0.525	2016.000	1991.000	0.000	2532.000	304.400	307.700
3	22:45:01	87.194%	0.518	1959.000	2013.000	0.000	2587.000	300.900	302.200
x		87.567%	0.511	1999.000	2000.000	0.000	2569.000	302.400	303.500
σ		0.477%	0.019	34.420	11.800	0.000	32.500	1.779	3.714
%RSD		0.545	3.799	1.722	0.590	0.000	1.265	0.588	1.224

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	3935.000	1353.000	0.000	1091.000	1061.000	1069.000	87.889%	9.723
2	22:44:18	3967.000	1354.000	0.000	1117.000	1100.000	1064.000	88.563%	10.030
3	22:45:01	3943.000	1357.000	0.000	1124.000	1133.000	1054.000	87.762%	9.269
x		3948.000	1355.000	0.000	1111.000	1098.000	1062.000	88.071%	9.675
σ		16.760	1.854	0.000	17.180	36.110	7.641	0.430%	0.384
%RSD		0.424	0.137	0.000	1.547	3.288	0.719	0.489	3.969

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	0.114	1.949	977.200	360.800	348.800	1.191	4.987	4.516
2	22:44:18	0.094	2.063	969.900	360.200	355.800	1.136	4.951	4.710
3	22:45:01	-0.014	2.031	974.100	356.500	348.200	1.208	4.924	4.381
x		0.064	2.014	973.700	359.200	350.900	1.178	4.954	4.536
σ		0.069	0.059	3.653	2.288	4.235	0.037	0.032	0.166
%RSD		107.200	2.923	0.375	0.637	1.207	3.177	0.638	3.652

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	4.496	20.560	19.820	0.066	-0.240	0.184	0.000	4.271
2	22:44:18	4.381	20.190	19.480	0.077	-0.234	0.355	0.000	4.256
3	22:45:01	4.394	20.250	20.770	0.237	-0.003	0.493	0.000	4.352
x		4.424	20.340	20.020	0.127	-0.159	0.344	0.000	4.293
σ		0.063	0.198	0.668	0.096	0.135	0.155	0.000	0.052
%RSD		1.420	0.974	3.335	75.370	85.130	44.990	0.000	1.202

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	91.975%	0.402	0.494	90.339%	0.002	-0.000	0.035	0.093
2	22:44:18	93.283%	0.517	0.440	90.704%	0.008	0.012	-0.026	0.029
3	22:45:01	92.680%	0.439	0.495	90.855%	-0.003	0.004	0.114	0.122
x		92.646%	0.452	0.476	90.633%	0.002	0.005	0.041	0.081
σ		0.655%	0.059	0.031	0.265%	0.005	0.006	0.070	0.047
%RSD		0.707	13.010	6.583	0.293	221.200	122.200	172.600	58.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	86.195%	-0.122	0.021	0.006	83.700	83.690	87.691%	86.854%
2	22:44:18	87.234%	-0.053	0.035	0.007	83.750	83.860	88.719%	88.520%
3	22:45:01	87.266%	-0.121	0.039	0.017	85.620	84.630	89.165%	89.036%
x		86.898%	-0.099	0.032	0.010	84.360	84.060	88.525%	88.137%
σ		0.609%	0.039	0.010	0.006	1.093	0.505	0.756%	1.141%
%RSD		0.701	39.730	30.540	61.540	1.296	0.601	0.853	1.294

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	-0.005	-0.004	0.770	0.742	0.765	92.995%
2	22:44:18	-0.006	-0.005	0.787	0.754	0.778	93.552%
3	22:45:01	-0.006	-0.001	0.756	0.729	0.742	93.377%
x		-0.006	-0.003	0.771	0.742	0.761	93.308%
σ		0.001	0.002	0.015	0.013	0.018	0.285%
%RSD		9.809	55.210	1.990	1.720	2.407	0.305

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	87.724%	0.015	390.000	377.000	0.000	1028.000	60.670	59.640
2	22:48:36	84.492%	0.016	383.600	374.300	0.000	976.800	59.440	60.170
3	22:49:19	82.956%	0.043	388.900	381.500	0.000	1004.000	56.830	60.470
x		85.058%	0.025	387.500	377.600	0.000	1003.000	58.980	60.090
σ		2.434%	0.016	3.402	3.634	0.000	25.390	1.957	0.420
%RSD		2.862	64.590	0.878	0.962	0.000	2.532	3.318	0.699

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	86.040	300.700	0.000	106.900	179.300	159.300	86.008%	2.944
2	22:48:36	86.380	301.200	0.000	105.000	206.700	153.200	85.761%	3.545
3	22:49:19	86.310	302.100	0.000	104.200	206.600	160.000	85.081%	2.958
x		86.240	301.300	0.000	105.400	197.500	157.500	85.617%	3.149
σ		0.183	0.720	0.000	1.357	15.770	3.731	0.480%	0.343
%RSD		0.212	0.239	0.000	1.288	7.985	2.368	0.561	10.890

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	0.143	0.275	9.671	86.660	83.580	0.028	0.098	-0.133
2	22:48:36	0.257	0.409	9.518	83.690	84.460	0.024	0.109	-0.122
3	22:49:19	0.190	0.286	9.318	80.590	79.630	0.048	0.152	-0.159
x		0.197	0.323	9.502	83.640	82.560	0.033	0.120	-0.138
σ		0.057	0.074	0.177	3.034	2.574	0.013	0.029	0.019
%RSD		29.050	22.960	1.866	3.628	3.118	39.160	23.850	13.820

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	-0.240	-0.253	-0.304	-0.027	-0.344	0.432	0.000	0.806
2	22:48:36	-0.096	-0.426	-0.395	0.118	0.191	0.818	0.000	0.816
3	22:49:19	-0.163	-0.363	-0.524	-0.033	-0.091	0.844	0.000	0.819
x		-0.167	-0.347	-0.408	0.019	-0.082	0.698	0.000	0.814
σ		0.072	0.088	0.111	0.085	0.268	0.231	0.000	0.007
%RSD		43.330	25.290	27.160	444.800	328.300	33.110	0.000	0.855

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	83.637%	0.277	0.208	88.845%	-0.001	-0.003	-0.063	-0.039
2	22:48:36	83.742%	0.241	0.240	88.690%	-0.008	0.002	-0.022	-0.018
3	22:49:19	83.732%	0.202	0.224	88.182%	-0.004	-0.001	-0.069	-0.040
x		83.704%	0.240	0.224	88.572%	-0.004	-0.001	-0.052	-0.032
σ		0.058%	0.037	0.016	0.347%	0.003	0.002	0.026	0.013
%RSD		0.069	15.480	7.095	0.392	74.570	363.900	49.770	39.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	83.322%	-0.142	0.007	0.012	6.377	6.752	84.429%	84.417%
2	22:48:36	85.052%	-0.185	0.014	0.010	6.511	7.076	85.424%	85.567%
3	22:49:19	84.738%	-0.174	0.013	0.012	6.619	6.471	85.930%	86.776%
x		84.371%	-0.167	0.011	0.011	6.503	6.766	85.261%	85.586%
σ		0.922%	0.022	0.004	0.001	0.121	0.303	0.763%	1.180%
%RSD		1.092	13.140	32.830	8.400	1.865	4.472	0.895	1.379

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	-0.008	-0.009	0.197	0.177	0.177	90.634%
2	22:48:36	0.000	-0.005	0.117	0.104	0.097	91.893%
3	22:49:19	-0.007	-0.005	0.098	0.080	0.098	92.273%
x		-0.005	-0.006	0.137	0.120	0.124	91.600%
σ		0.004	0.003	0.052	0.050	0.046	0.858%
%RSD		90.460	41.790	38.270	41.840	37.340	0.936

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	85.731%	-0.010	16.660	15.070	0.000	9.473	2.147	1.979
2	22:52:54	84.027%	-0.009	11.750	12.270	0.000	9.868	1.443	1.866
3	22:53:37	83.516%	0.008	12.410	12.070	0.000	9.282	1.152	1.163
x		84.425%	-0.004	13.600	13.140	0.000	9.541	1.580	1.670
σ		1.160%	0.010	2.663	1.677	0.000	0.299	0.511	0.442
%RSD		1.374	281.000	19.580	12.760	0.000	3.130	32.360	26.480

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	2.637	4.617	0.000	1.940	12.280	-4.328	85.109%	-0.045
2	22:52:54	2.885	4.082	0.000	1.372	20.180	-3.968	84.390%	-0.102
3	22:53:37	2.261	4.825	0.000	0.830	12.730	-6.950	83.609%	-0.101
x		2.595	4.508	0.000	1.381	15.060	-5.082	84.369%	-0.082
σ		0.314	0.383	0.000	0.555	4.435	1.628	0.750%	0.033
%RSD		12.110	8.496	0.000	40.200	29.440	32.030	0.889	39.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	0.058	0.053	0.462	-4.014	2.144	0.002	-0.085	-0.070
2	22:52:54	-0.022	0.015	0.485	-5.970	-0.918	-0.013	-0.095	-0.079
3	22:53:37	-0.072	0.041	0.457	-5.781	-2.937	-0.002	-0.094	-0.082
x		-0.012	0.036	0.468	-5.255	-0.571	-0.004	-0.091	-0.077
σ		0.065	0.019	0.015	1.079	2.558	0.008	0.006	0.006
%RSD		548.100	53.170	3.226	20.530	448.400	188.300	6.099	8.225

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	-0.143	-0.362	-0.397	-0.097	0.287	0.771	0.000	0.006
2	22:52:54	-0.119	-0.351	-0.394	0.304	0.197	1.426	0.000	0.008
3	22:53:37	-0.186	-0.465	-0.402	0.288	-0.366	1.053	0.000	0.014
x		-0.149	-0.393	-0.398	0.165	0.039	1.083	0.000	0.009
σ		0.034	0.062	0.004	0.227	0.354	0.329	0.000	0.004
%RSD		22.810	15.910	0.996	137.200	898.200	30.330	0.000	47.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	82.719%	0.196	0.188	88.791%	-0.004	-0.007	-0.021	-0.003
2	22:52:54	82.884%	0.207	0.195	88.189%	-0.004	-0.004	-0.020	-0.010
3	22:53:37	82.986%	0.164	0.232	88.692%	-0.007	-0.006	0.010	0.004
x		82.863%	0.189	0.205	88.557%	-0.005	-0.006	-0.010	-0.003
σ		0.135%	0.023	0.024	0.323%	0.001	0.002	0.018	0.007
%RSD		0.163	12.040	11.580	0.365	24.730	31.550	173.800	223.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	83.714%	-0.138	0.001	-0.016	0.090	0.151	83.986%	83.926%
2	22:52:54	83.999%	-0.132	-0.005	-0.005	0.069	0.119	85.294%	84.517%
3	22:53:37	83.895%	-0.178	0.021	-0.023	0.123	0.123	85.110%	85.295%
x		83.869%	-0.150	0.006	-0.015	0.094	0.131	84.796%	84.579%
σ		0.144%	0.025	0.014	0.010	0.027	0.017	0.708%	0.686%
%RSD		0.172	16.750	240.000	64.530	28.920	13.310	0.835	0.811

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	-0.006	-0.010	0.111	0.107	0.109	92.142%
2	22:52:54	-0.010	-0.010	0.078	0.063	0.089	91.972%
3	22:53:37	-0.012	-0.003	0.073	0.079	0.064	91.919%
x		-0.009	-0.008	0.087	0.083	0.087	92.011%
σ		0.003	0.004	0.021	0.022	0.022	0.116%
%RSD		36.560	49.620	23.720	26.890	25.580	0.127

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	90.487%	-0.010	7.198	7.516	0.000	4.030	0.036	0.151
2	22:57:12	86.969%	-0.010	8.214	6.628	0.000	5.063	0.663	0.129
3	22:57:55	85.598%	-0.026	6.863	6.554	0.000	4.942	1.167	0.092
x		87.685%	-0.016	7.425	6.899	0.000	4.678	0.622	0.124
σ		2.522%	0.009	0.704	0.535	0.000	0.565	0.567	0.030
%RSD		2.876	60.460	9.474	7.756	0.000	12.070	91.110	23.970

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-1.163	0.526	0.000	-0.125	2.532	-10.140	86.302%	-0.218
2	22:57:12	-0.899	0.599	0.000	-1.455	4.644	-7.783	85.201%	-0.103
3	22:57:55	-1.302	0.682	0.000	-3.190	15.960	-11.130	85.485%	-0.199
x		-1.121	0.603	0.000	-1.590	7.713	-9.687	85.663%	-0.173
σ		0.205	0.078	0.000	1.537	7.222	1.722	0.572%	0.062
%RSD		18.260	12.940	0.000	96.700	93.640	17.780	0.668	35.660

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	0.044	-0.003	0.098	-8.735	-6.017	0.005	-0.112	-0.244
2	22:57:12	0.058	-0.021	0.127	-10.120	-8.694	-0.010	-0.090	-0.273
3	22:57:55	0.056	-0.043	0.126	-10.950	-7.310	-0.003	-0.127	-0.262
x		0.052	-0.022	0.117	-9.937	-7.340	-0.003	-0.110	-0.260
σ		0.008	0.020	0.017	1.121	1.339	0.008	0.018	0.015
%RSD		14.530	90.210	14.130	11.280	18.240	274.300	16.850	5.592

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-0.272	0.638	0.314	0.045	0.077	0.291	0.000	-0.016
2	22:57:12	-0.298	0.583	0.519	0.083	0.248	0.567	0.000	-0.002
3	22:57:55	-0.307	0.571	0.496	0.040	0.304	0.709	0.000	-0.008
x		-0.292	0.597	0.443	0.056	0.210	0.522	0.000	-0.008
σ		0.018	0.036	0.113	0.024	0.118	0.212	0.000	0.007
%RSD		6.251	5.996	25.400	42.520	56.490	40.610	0.000	84.310

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	83.422%	0.202	0.168	88.943%	-0.000	-0.004	-0.070	-0.035
2	22:57:12	83.338%	0.166	0.153	89.479%	-0.009	-0.007	-0.037	-0.010
3	22:57:55	83.427%	0.167	0.170	88.806%	-0.007	-0.007	-0.012	-0.001
x		83.396%	0.178	0.164	89.076%	-0.005	-0.006	-0.040	-0.015
σ		0.050%	0.021	0.010	0.356%	0.005	0.002	0.029	0.018
%RSD		0.060	11.620	5.898	0.399	86.740	32.760	73.820	118.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	85.024%	-0.211	-0.002	0.002	-0.032	0.021	83.714%	83.545%
2	22:57:12	83.573%	-0.190	0.000	-0.003	-0.012	0.005	85.788%	85.136%
3	22:57:55	85.013%	-0.185	-0.003	-0.005	-0.025	0.031	85.454%	85.510%
x		84.537%	-0.195	-0.002	-0.002	-0.023	0.019	84.985%	84.730%
σ		0.834%	0.014	0.002	0.004	0.010	0.013	1.113%	1.044%
%RSD		0.987	7.087	100.200	184.500	44.770	68.210	1.310	1.232

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-0.007	-0.009	0.095	0.099	0.105	91.696%
2	22:57:12	-0.006	-0.006	0.069	0.055	0.060	92.038%
3	22:57:55	-0.009	-0.010	0.040	0.018	0.031	91.682%
x		-0.007	-0.008	0.068	0.057	0.065	91.805%
σ		0.002	0.002	0.028	0.041	0.038	0.202%
%RSD		22.700	23.140	40.740	71.050	57.710	0.219

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	86.388%	0.582	1019.000	1017.000	0.000	2470.000	198.800	196.400
2	23:01:31	85.353%	0.741	1015.000	1052.000	0.000	2440.000	198.300	199.800
3	23:02:14	86.552%	0.798	981.600	1012.000	0.000	2398.000	194.500	196.300
x		86.097%	0.707	1005.000	1027.000	0.000	2436.000	197.200	197.500
σ		0.650%	0.112	20.470	22.070	0.000	35.880	2.365	1.989
%RSD		0.755	15.830	2.037	2.148	0.000	1.473	1.199	1.007

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	2209.000	1846.000	0.000	386.700	393.500	299.200	86.958%	14.030
2	23:01:31	2234.000	1878.000	0.000	380.400	301.700	311.200	86.091%	15.190
3	23:02:14	2192.000	1845.000	0.000	375.700	326.400	297.900	85.950%	14.710
x		2212.000	1856.000	0.000	380.900	340.500	302.800	86.333%	14.640
σ		21.050	18.690	0.000	5.537	47.490	7.372	0.546%	0.582
%RSD		0.952	1.007	0.000	1.454	13.950	2.435	0.633	3.973

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	0.777	1.127	215.000	899.900	878.900	0.183	1.635	19.100
2	23:01:31	0.860	1.017	215.500	905.900	892.200	0.148	1.663	19.300
3	23:02:14	0.849	1.086	215.800	901.300	890.000	0.177	1.638	19.050
x		0.829	1.077	215.400	902.400	887.100	0.169	1.645	19.150
σ		0.045	0.056	0.433	3.160	7.106	0.019	0.015	0.133
%RSD		5.446	5.184	0.201	0.350	0.801	11.010	0.940	0.693

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	18.900	14.860	15.170	0.080	-0.021	0.500	0.000	1.723
2	23:01:31	19.140	15.750	14.780	0.127	-0.052	0.826	0.000	1.674
3	23:02:14	19.350	14.890	14.640	0.087	0.353	0.297	0.000	1.727
x		19.130	15.170	14.860	0.098	0.093	0.541	0.000	1.708
σ		0.224	0.503	0.271	0.025	0.225	0.267	0.000	0.030
%RSD		1.171	3.320	1.822	25.950	241.100	49.340	0.000	1.738

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	86.711%	0.266	0.286	89.494%	-0.005	-0.002	0.045	0.117
2	23:01:31	87.494%	0.277	0.350	89.860%	-0.006	-0.006	0.028	0.048
3	23:02:14	87.735%	0.263	0.272	89.530%	-0.009	-0.002	-0.012	0.039
x		87.313%	0.269	0.303	89.628%	-0.006	-0.003	0.020	0.068
σ		0.535%	0.007	0.041	0.202%	0.002	0.003	0.030	0.042
%RSD		0.613	2.771	13.690	0.226	35.350	86.070	144.100	62.450

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	85.423%	-0.074	0.023	0.001	8.265	8.658	86.468%	86.689%
2	23:01:31	86.453%	-0.019	0.022	0.011	8.852	9.128	87.329%	87.824%
3	23:02:14	86.472%	-0.029	0.005	0.012	8.453	8.526	87.628%	87.735%
x		86.116%	-0.041	0.017	0.008	8.523	8.771	87.142%	87.416%
σ		0.601%	0.029	0.010	0.006	0.299	0.316	0.602%	0.631%
%RSD		0.697	71.730	60.250	72.790	3.514	3.607	0.691	0.722

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	-0.015	-0.012	1.327	1.129	1.206	93.943%
2	23:01:31	-0.006	-0.005	1.241	1.165	1.216	94.295%
3	23:02:14	-0.008	-0.005	1.261	1.208	1.237	94.182%
x		-0.010	-0.007	1.276	1.167	1.220	94.140%
σ		0.005	0.004	0.045	0.040	0.016	0.180%
%RSD		46.510	54.090	3.515	3.408	1.326	0.191

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	86.545%	98.190	98.330	99.910	0.000	50630.000	49940.000	50400.000
2	23:08:41	83.398%	101.600	104.900	100.600	0.000	50650.000	50910.000	51240.000
3	23:09:24	81.964%	99.570	103.600	102.000	0.000	50030.000	51320.000	52290.000
x		83.969%	99.789%	102.277%	100.849%	0.000	100.876%	101.442%	102.626%
σ		2.343%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.791	1.726	3.405	1.060	0.000	0.701	1.399	1.847

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	499.900	5215.000	0.000	52930.000	50080.000	48550.000	85.282%	99.320
2	23:08:41	513.000	5290.000	0.000	52770.000	49650.000	48320.000	85.225%	95.960
3	23:09:24	518.200	5309.000	0.000	51680.000	48840.000	48790.000	85.405%	99.300
x		102.072%	105.422%	0.000	104.921%	99.044%	97.105%	85.304%	98.194%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.092%	n/a
%RSD		1.843	0.942	0.000	1.299	1.272	0.490	0.108	1.968

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	95.670	97.050	503.300	25860.000	25320.000	96.590	98.130	99.870
2	23:08:41	97.350	97.550	504.800	25920.000	25540.000	97.910	95.820	97.100
3	23:09:24	97.880	96.930	506.300	25910.000	25290.000	96.560	94.320	98.240
x		96.967%	97.177%	100.955%	103.592%	101.536%	97.019%	96.090%	98.402%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.191	0.335	0.300	0.111	0.522	0.793	1.996	1.411

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	99.400	100.200	102.200	101.200	102.400	100.800	0.000	99.240
2	23:08:41	98.290	102.200	100.100	101.200	102.300	105.400	0.000	100.100
3	23:09:24	97.110	100.200	100.500	100.000	100.500	100.800	0.000	99.050
x		98.269%	100.859%	100.925%	100.798%	101.738%	102.332%	0.000	99.469%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.166	1.138	1.118	0.682	1.054	2.595	0.000	0.566

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	81.103%	93.300	92.170	83.270%	95.660	97.510	99.360	100.700
2	23:08:41	82.107%	97.890	97.060	83.734%	96.030	97.810	97.720	100.900
3	23:09:24	83.260%	99.570	97.270	84.456%	95.780	96.700	99.050	99.720
x		82.157%	96.920%	95.501%	83.820%	95.827%	97.336%	98.710%	100.443%
σ		1.080%	n/a	n/a	0.598%	n/a	n/a	n/a	n/a
%RSD		1.314	3.349	3.027	0.713	0.198	0.589	0.878	0.626

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	81.103%	97.070	92.120	92.160	97.990	99.810	83.922%	83.189%
2	23:08:41	82.380%	96.810	95.630	96.360	99.690	97.420	85.417%	85.089%
3	23:09:24	82.971%	98.220	98.470	97.730	98.710	99.250	85.920%	85.785%
x		82.151%	97.369%	95.404%	95.416%	98.797%	98.826%	85.086%	84.688%
σ		0.955%	n/a	n/a	n/a	n/a	n/a	1.039%	1.344%
%RSD		1.162	0.768	3.335	3.042	0.866	1.267	1.221	1.587

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	91.990	91.420	92.560	92.640	92.260	87.740%
2	23:08:41	92.610	93.440	94.790	93.600	94.030	88.557%
3	23:09:24	94.300	93.360	95.300	94.890	95.150	88.660%
x		92.968%	92.742%	94.217%	93.709%	93.817%	88.319%
σ		n/a	n/a	n/a	n/a	n/a	0.504%
%RSD		1.288	1.231	1.546	1.204	1.552	0.571

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	96.920%	-0.019	3.779	3.341	0.000	10.020	16.120	15.820
2	23:16:36	95.404%	0.004	4.070	3.780	0.000	20.570	24.810	25.140
3	23:17:19	94.466%	0.019	4.625	3.855	0.000	25.440	30.000	29.790
x		95.597%	0.001	4.158	3.659	0.000	18.680	23.640	23.580
σ		1.238%	0.019	0.430	0.278	0.000	7.884	7.011	7.114
%RSD		1.295	1440.000	10.340	7.586	0.000	42.210	29.660	30.160

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	-0.341	-0.279	0.000	4.718	30.490	15.460	98.089%	-0.135
2	23:16:36	0.159	0.971	0.000	12.980	24.340	19.370	96.892%	-0.032
3	23:17:19	0.556	1.015	0.000	17.470	32.780	29.350	96.766%	0.036
x		0.125	0.569	0.000	11.720	29.210	21.390	97.249%	-0.043
σ		0.450	0.735	0.000	6.470	4.364	7.159	0.730%	0.086
%RSD		360.600	129.200	0.000	55.180	14.940	33.460	0.751	197.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	0.056	-0.034	0.179	-0.791	5.551	0.018	-0.109	-0.201
2	23:16:36	-0.007	0.013	0.306	0.732	3.483	0.042	-0.085	-0.255
3	23:17:19	0.042	0.003	0.378	1.934	5.217	0.043	-0.015	-0.222
x		0.031	-0.006	0.288	0.625	4.750	0.034	-0.070	-0.226
σ		0.033	0.024	0.101	1.366	1.110	0.014	0.049	0.027
%RSD		107.700	393.100	34.980	218.600	23.370	42.210	69.620	11.970

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	-0.261	-0.813	-0.954	0.128	-0.996	0.459	0.000	0.086
2	23:16:36	-0.284	-0.603	-0.602	0.036	-0.889	0.308	0.000	0.128
3	23:17:19	-0.268	-0.788	-0.762	0.257	-0.883	0.570	0.000	0.134
x		-0.271	-0.735	-0.773	0.141	-0.923	0.445	0.000	0.116
σ		0.012	0.114	0.176	0.111	0.063	0.132	0.000	0.026
%RSD		4.364	15.570	22.790	78.930	6.878	29.530	0.000	22.560

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	91.821%	0.472	0.480	97.618%	0.016	0.008	-0.057	-0.024
2	23:16:36	91.657%	0.378	0.428	97.760%	0.035	0.030	-0.032	-0.006
3	23:17:19	91.501%	0.448	0.390	97.047%	0.055	0.035	-0.094	-0.032
x		91.660%	0.433	0.433	97.475%	0.035	0.025	-0.061	-0.021
σ		0.160%	0.049	0.045	0.377%	0.020	0.014	0.031	0.014
%RSD		0.175	11.300	10.420	0.387	55.990	57.920	50.720	65.380

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	92.175%	-0.076	0.502	0.475	0.030	0.086	85.952%	85.716%
2	23:16:36	92.077%	-0.094	0.468	0.453	0.124	0.149	87.413%	87.631%
3	23:17:19	92.256%	-0.070	0.374	0.497	0.180	0.167	87.611%	87.691%
x		92.169%	-0.080	0.448	0.475	0.112	0.134	86.992%	87.013%
σ		0.090%	0.012	0.066	0.022	0.076	0.042	0.906%	1.123%
%RSD		0.097	15.610	14.790	4.561	67.910	31.650	1.042	1.291

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	0.014	0.015	0.165	0.147	0.157	92.013%
2	23:16:36	0.033	0.035	0.165	0.178	0.174	93.086%
3	23:17:19	0.048	0.039	0.180	0.195	0.197	93.157%
x		0.032	0.029	0.170	0.173	0.175	92.752%
σ		0.017	0.013	0.009	0.025	0.020	0.641%
%RSD		53.110	42.770	5.157	14.190	11.430	0.691

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	77.423%	37.940	54110.000	53530.000	0.000	118500.000	9769.000	9924.000
2	23:20:56	73.852%	39.000	54420.000	54460.000	0.000	117500.000	10030.000	10220.000
3	23:21:39	70.759%	39.040	55460.000	55460.000	0.000	117700.000	10260.000	10450.000
x		74.011%	38.660	54660.000	54490.000	0.000	117900.000	10020.000	10200.000
σ		3.335%	0.621	707.600	964.000	0.000	510.000	244.100	263.600
%RSD		4.506	1.606	1.294	1.769	0.000	0.433	2.437	2.585

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	109200.000	90370.000	0.000	18250.000	14520.000	14850.000	85.029%	721.200
2	23:20:56	113300.000	92520.000	0.000	18250.000	14490.000	15040.000	83.716%	728.800
3	23:21:39	115500.000	94620.000	0.000	18240.000	14530.000	14880.000	82.915%	734.500
x		112700.000	92500.000	0.000	18250.000	14510.000	14920.000	83.887%	728.200
σ		3188.000	2122.000	0.000	4.650	21.030	104.500	1.067%	6.696
%RSD		2.830	2.294	0.000	0.025	0.145	0.700	1.272	0.919

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	34.200	47.510	9065.000	37590.000	35850.000	6.768	68.940	678.600
2	23:20:56	34.640	47.400	9173.000	37580.000	35700.000	6.651	68.600	681.000
3	23:21:39	34.450	47.690	9153.000	37620.000	34360.000	6.699	68.300	678.200
x		34.430	47.530	9130.000	37590.000	35300.000	6.706	68.610	679.300
σ		0.221	0.147	57.240	20.930	820.700	0.059	0.319	1.529
%RSD		0.642	0.309	0.627	0.056	2.325	0.874	0.465	0.225

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	657.000	538.400	527.300	0.724	-3.011	0.299	0.000	38.200
2	23:20:56	663.200	541.000	528.800	0.712	-2.860	-0.189	0.000	38.190
3	23:21:39	660.800	544.100	529.300	0.257	-3.158	-0.607	0.000	38.570
x		660.300	541.200	528.400	0.565	-3.010	-0.166	0.000	38.320
σ		3.110	2.877	1.042	0.266	0.149	0.454	0.000	0.219
%RSD		0.471	0.532	0.197	47.180	4.958	274.000	0.000	0.571

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	190.166%	6.337	7.698	80.419%	0.176	0.157	3.533	3.236
2	23:20:56	193.639%	6.536	7.711	81.159%	0.174	0.158	3.263	3.176
3	23:21:39	191.773%	6.844	7.782	80.060%	0.162	0.178	3.202	3.175
x		191.859%	6.572	7.730	80.546%	0.171	0.164	3.332	3.196
σ		1.738%	0.255	0.046	0.561%	0.007	0.012	0.176	0.035
%RSD		0.906	3.886	0.590	0.696	4.367	7.581	5.278	1.082

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	80.121%	7.229	1.542	1.511	426.800	420.400	97.934%	95.228%
2	23:20:56	80.834%	7.187	1.518	1.441	427.200	422.000	99.676%	97.197%
3	23:21:39	79.787%	7.335	1.384	1.347	427.100	423.300	99.926%	97.559%
x		80.247%	7.250	1.481	1.433	427.000	421.900	99.179%	96.661%
σ		0.535%	0.077	0.085	0.082	0.186	1.461	1.085%	1.254%
%RSD		0.666	1.058	5.733	5.727	0.044	0.346	1.094	1.298

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	0.206	0.209	56.560	54.750	55.960	93.198%
2	23:20:56	0.216	0.212	59.070	58.120	58.900	91.117%
3	23:21:39	0.213	0.219	60.450	58.930	60.040	89.935%
x		0.211	0.214	58.700	57.270	58.300	91.417%
σ		0.005	0.005	1.975	2.219	2.104	1.652%
%RSD		2.329	2.387	3.365	3.874	3.609	1.807

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	76.913%	35.910	60000.000	59700.000	0.000	125800.000	4463.000	4529.000
2	23:25:16	75.897%	34.630	57360.000	58070.000	0.000	125000.000	4473.000	4561.000
3	23:25:59	73.647%	35.020	58990.000	59200.000	0.000	125200.000	4576.000	4659.000
x		75.486%	35.190	58780.000	58990.000	0.000	125400.000	4504.000	4583.000
σ		1.671%	0.655	1332.000	831.300	0.000	435.000	62.620	67.640
%RSD		2.214	1.862	2.266	1.409	0.000	0.347	1.390	1.476

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	51890.000	28860.000	0.000	14160.000	15170.000	15080.000	83.462%	3.128
2	23:25:16	51750.000	28830.000	0.000	13800.000	14980.000	15010.000	82.829%	2.294
3	23:25:59	52950.000	29340.000	0.000	13900.000	15040.000	15050.000	80.949%	1.993
x		52200.000	29010.000	0.000	13960.000	15060.000	15050.000	82.413%	2.472
σ		652.400	288.600	0.000	184.300	98.620	35.560	1.307%	0.588
%RSD		1.250	0.995	0.000	1.321	0.655	0.236	1.586	23.780

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	0.011	1.920	8189.000	116.200	157.200	2.374	45.340	24.370
2	23:25:16	-0.034	1.811	8106.000	64.880	100.600	2.451	43.990	23.770
3	23:25:59	-0.011	1.836	8273.000	49.000	88.550	2.518	45.650	23.640
x		-0.012	1.856	8189.000	76.700	115.500	2.448	44.990	23.920
σ		0.022	0.057	83.880	35.130	36.670	0.072	0.884	0.387
%RSD		191.200	3.083	1.024	45.800	31.760	2.929	1.965	1.618

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	23.320	273.700	271.700	0.111	-1.580	0.495	0.000	49.030
2	23:25:16	22.840	272.300	271.700	-0.440	-1.784	-0.051	0.000	49.070
3	23:25:59	22.980	275.700	275.600	-0.446	-1.602	0.100	0.000	49.490
x		23.050	273.900	273.000	-0.258	-1.656	0.181	0.000	49.200
σ		0.247	1.674	2.261	0.320	0.112	0.282	0.000	0.259
%RSD		1.073	0.611	0.828	123.700	6.749	155.400	0.000	0.526

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	119.127%	0.492	0.585	83.818%	-0.001	-0.003	2.734	2.646
2	23:25:16	120.292%	0.406	0.396	82.577%	0.003	0.011	2.812	2.737
3	23:25:59	118.923%	0.341	0.328	82.655%	-0.000	0.004	3.041	2.819
x		119.448%	0.413	0.436	83.016%	0.001	0.004	2.862	2.734
σ		0.739%	0.076	0.134	0.695%	0.002	0.007	0.160	0.087
%RSD		0.618	18.430	30.610	0.837	291.000	187.900	5.586	3.174

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	82.133%	0.593	0.326	0.276	157.600	155.000	88.367%	89.496%
2	23:25:16	81.830%	0.698	0.280	0.284	155.500	154.200	90.825%	91.431%
3	23:25:59	81.877%	0.665	0.233	0.204	156.400	156.300	90.753%	91.908%
x		81.947%	0.652	0.280	0.255	156.500	155.200	89.982%	90.945%
σ		0.163%	0.054	0.047	0.044	1.015	1.029	1.399%	1.277%
%RSD		0.199	8.274	16.700	17.260	0.648	0.663	1.555	1.404

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	0.082	0.062	1.578	1.470	1.559	88.840%
2	23:25:16	0.065	0.074	1.548	1.518	1.517	89.903%
3	23:25:59	0.063	0.069	1.617	1.408	1.517	89.970%
x		0.070	0.068	1.581	1.465	1.531	89.571%
σ		0.010	0.006	0.035	0.055	0.024	0.634%
%RSD		14.710	9.026	2.191	3.768	1.560	0.708

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	79.028%	8.652	4533.000	4579.000	0.000	6921.000	6378.000	6505.000
2	23:29:36	76.356%	8.923	4513.000	4592.000	0.000	6865.000	6495.000	6692.000
3	23:30:19	76.112%	8.690	4261.000	4535.000	0.000	6906.000	6499.000	6652.000
x		77.165%	8.755	4436.000	4568.000	0.000	6897.000	6457.000	6616.000
σ		1.618%	0.147	151.700	29.800	0.000	28.640	69.010	98.400
%RSD		2.097	1.677	3.419	0.652	0.000	0.415	1.069	1.487

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	30970.000	52610.000	0.000	6523.000	4061.000	4334.000	85.536%	739.000
2	23:29:36	31750.000	53350.000	0.000	6446.000	4360.000	4296.000	84.467%	742.300
3	23:30:19	31430.000	53190.000	0.000	6458.000	4079.000	4343.000	84.022%	734.000
x		31380.000	53050.000	0.000	6476.000	4166.000	4325.000	84.675%	738.400
σ		393.900	390.900	0.000	41.200	168.000	25.110	0.778%	4.175
%RSD		1.255	0.737	0.000	0.636	4.031	0.581	0.919	0.566

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	62.670	241.800	1871.000	32130.000	30820.000	10.860	167.300	27.040
2	23:29:36	63.200	243.000	1890.000	32440.000	30990.000	10.910	167.700	27.020
3	23:30:19	63.230	242.400	1874.000	32080.000	31170.000	10.960	166.400	26.460
x		63.030	242.400	1878.000	32220.000	30990.000	10.910	167.200	26.840
σ		0.314	0.584	10.270	195.800	176.000	0.052	0.681	0.329
%RSD		0.499	0.241	0.547	0.608	0.568	0.475	0.407	1.226

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	26.840	167.400	166.700	0.555	-1.396	0.337	0.000	16.250
2	23:29:36	26.890	166.900	165.700	0.600	-1.470	0.438	0.000	16.540
3	23:30:19	27.140	167.200	165.400	0.598	-1.415	-0.081	0.000	16.290
x		26.960	167.200	165.900	0.585	-1.427	0.231	0.000	16.360
σ		0.159	0.220	0.688	0.025	0.038	0.275	0.000	0.154
%RSD		0.588	0.132	0.414	4.315	2.692	118.800	0.000	0.942

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	103.064%	15.950	16.120	86.145%	0.031	0.043	0.381	0.406
2	23:29:36	103.577%	15.940	16.680	86.154%	0.033	0.064	0.381	0.402
3	23:30:19	103.787%	16.460	16.690	86.520%	0.046	0.036	0.361	0.404
x		103.476%	16.120	16.490	86.273%	0.037	0.048	0.375	0.404
σ		0.372%	0.298	0.325	0.214%	0.009	0.015	0.012	0.002
%RSD		0.359	1.848	1.968	0.248	23.290	30.300	3.137	0.540

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	84.387%	1.057	0.355	0.368	845.500	845.800	90.019%	90.142%
2	23:29:36	84.850%	1.046	0.333	0.323	847.700	843.700	91.387%	91.612%
3	23:30:19	83.904%	1.154	0.310	0.368	860.200	849.700	91.851%	91.375%
x		84.380%	1.086	0.332	0.353	851.100	846.400	91.086%	91.043%
σ		0.473%	0.059	0.023	0.026	7.906	3.015	0.952%	0.789%
%RSD		0.561	5.450	6.802	7.426	0.929	0.356	1.045	0.867

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	0.381	0.401	15.880	15.360	15.510	95.535%
2	23:29:36	0.422	0.426	15.910	15.290	15.700	95.106%
3	23:30:19	0.387	0.414	16.080	15.380	15.840	95.600%
x		0.397	0.414	15.960	15.340	15.680	95.414%
σ		0.022	0.012	0.107	0.048	0.168	0.269%
%RSD		5.590	3.008	0.672	0.315	1.074	0.282

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	80.246%	1.965	17710.000	17630.000	0.000	48640.000	2904.000	2940.000
2	23:33:56	79.167%	1.631	17800.000	17720.000	0.000	48720.000	2918.000	2997.000
3	23:34:39	79.463%	1.868	17820.000	18030.000	0.000	47890.000	2940.000	2991.000
x		79.625%	1.821	17780.000	17790.000	0.000	48420.000	2921.000	2976.000
σ		0.557%	0.172	56.800	209.100	0.000	460.700	18.080	31.480
%RSD		0.700	9.423	0.320	1.175	0.000	0.952	0.619	1.058

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	2903.000	14190.000	0.000	4799.000	7961.000	7922.000	85.782%	156.000
2	23:33:56	2928.000	14300.000	0.000	4837.000	7950.000	8099.000	83.658%	159.600
3	23:34:39	2942.000	14320.000	0.000	4826.000	8176.000	7995.000	84.160%	161.100
x		2925.000	14270.000	0.000	4821.000	8029.000	8005.000	84.533%	158.900
σ		19.720	72.120	0.000	19.260	127.400	88.980	1.110%	2.581
%RSD		0.674	0.505	0.000	0.400	1.587	1.112	1.313	1.624

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	10.270	18.430	134.800	4429.000	4222.000	1.470	10.270	2.821
2	23:33:56	10.580	18.320	137.000	4358.000	4229.000	1.465	9.898	2.989
3	23:34:39	10.890	18.400	136.100	4323.000	4199.000	1.517	9.774	2.904
x		10.580	18.380	136.000	4370.000	4217.000	1.484	9.980	2.905
σ		0.312	0.060	1.104	54.190	15.600	0.029	0.256	0.084
%RSD		2.945	0.328	0.812	1.240	0.370	1.931	2.566	2.888

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	2.921	34.620	35.160	0.307	2.390	2.246	0.000	37.030
2	23:33:56	3.037	35.950	35.800	0.352	1.685	3.045	0.000	36.380
3	23:34:39	2.831	35.540	35.330	0.026	1.764	2.864	0.000	36.980
x		2.930	35.370	35.430	0.228	1.946	2.718	0.000	36.800
σ		0.103	0.681	0.331	0.177	0.387	0.419	0.000	0.360
%RSD		3.515	1.927	0.933	77.410	19.870	15.410	0.000	0.979

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	88.239%	2.305	2.162	87.293%	0.023	0.048	0.013	0.046
2	23:33:56	88.922%	2.097	2.071	87.571%	0.047	0.041	0.128	0.129
3	23:34:39	88.872%	1.955	1.873	88.045%	0.049	0.064	0.112	0.116
x		88.677%	2.119	2.036	87.636%	0.039	0.051	0.084	0.097
σ		0.381%	0.176	0.148	0.380%	0.015	0.012	0.062	0.045
%RSD		0.429	8.312	7.260	0.434	37.210	23.190	73.960	46.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	83.888%	0.304	0.219	0.181	306.500	303.600	88.447%	88.816%
2	23:33:56	84.503%	0.313	0.194	0.156	303.900	301.800	89.905%	89.698%
3	23:34:39	84.748%	0.328	0.165	0.196	302.400	302.300	89.592%	89.484%
x		84.380%	0.315	0.192	0.178	304.300	302.600	89.315%	89.333%
σ		0.443%	0.012	0.027	0.020	2.074	0.905	0.768%	0.460%
%RSD		0.526	3.921	14.040	11.470	0.682	0.299	0.860	0.515

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	0.036	0.049	2.235	2.258	2.193	94.670%
2	23:33:56	0.060	0.044	2.275	2.298	2.274	94.309%
3	23:34:39	0.035	0.043	2.249	2.037	2.167	94.764%
x		0.043	0.046	2.253	2.197	2.211	94.581%
σ		0.014	0.003	0.020	0.140	0.056	0.240%
%RSD		32.220	6.542	0.899	6.389	2.514	0.254

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	78.430%	1.107	19350.000	19810.000	0.000	51580.000	2185.000	2246.000
2	23:38:14	74.955%	1.301	20010.000	20250.000	0.000	51780.000	2251.000	2294.000
3	23:38:58	75.873%	1.097	19110.000	19430.000	0.000	50760.000	2229.000	2266.000
x		76.419%	1.168	19490.000	19830.000	0.000	51370.000	2222.000	2268.000
σ		1.801%	0.115	465.600	413.300	0.000	539.200	33.730	24.110
%RSD		2.357	9.827	2.389	2.084	0.000	1.050	1.518	1.063

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	21.320	9710.000	0.000	3948.000	9095.000	9007.000	82.903%	1.143
2	23:38:14	20.020	9876.000	0.000	3906.000	9058.000	8946.000	81.259%	0.928
3	23:38:58	15.770	9646.000	0.000	3913.000	8861.000	9106.000	81.265%	0.868
x		19.040	9744.000	0.000	3922.000	9005.000	9020.000	81.809%	0.980
σ		2.907	119.000	0.000	22.450	125.700	80.960	0.947%	0.145
%RSD		15.270	1.222	0.000	0.572	1.396	0.898	1.158	14.770

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	0.137	2.923	8.350	39.110	70.490	0.042	2.100	1.058
2	23:38:14	0.438	2.979	8.545	23.950	44.490	0.043	2.061	1.026
3	23:38:58	0.178	3.126	8.205	15.890	41.020	0.047	1.943	1.094
x		0.251	3.009	8.367	26.320	52.000	0.044	2.035	1.059
σ		0.163	0.105	0.171	11.790	16.110	0.002	0.082	0.034
%RSD		64.930	3.487	2.038	44.800	30.970	5.304	4.009	3.178

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	0.818	18.110	18.030	0.311	1.315	3.563	0.000	42.160
2	23:38:14	0.903	18.110	17.930	0.214	1.800	2.370	0.000	42.430
3	23:38:58	0.906	18.610	18.530	-0.336	1.948	2.380	0.000	43.020
x		0.875	18.280	18.160	0.063	1.688	2.771	0.000	42.540
σ		0.050	0.292	0.323	0.349	0.331	0.686	0.000	0.439
%RSD		5.733	1.598	1.775	554.200	19.610	24.760	0.000	1.032

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	83.636%	0.512	0.552	86.243%	-0.002	-0.000	0.097	0.109
2	23:38:14	83.401%	0.753	0.526	85.990%	-0.005	-0.001	0.015	0.108
3	23:38:58	83.529%	0.573	0.597	85.459%	-0.004	-0.000	0.011	0.045
x		83.522%	0.613	0.558	85.898%	-0.004	-0.000	0.041	0.087
σ		0.118%	0.125	0.036	0.400%	0.002	0.001	0.048	0.037
%RSD		0.141	20.440	6.437	0.466	44.360	156.900	116.800	42.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	83.061%	0.203	0.109	0.113	298.600	296.400	87.237%	87.334%
2	23:38:14	82.981%	0.252	0.126	0.149	300.700	300.100	88.879%	89.053%
3	23:38:58	83.982%	0.341	0.086	0.098	302.400	299.000	88.198%	87.661%
x		83.341%	0.265	0.107	0.120	300.500	298.500	88.105%	88.016%
σ		0.556%	0.070	0.020	0.026	1.914	1.918	0.825%	0.913%
%RSD		0.668	26.280	18.810	21.940	0.637	0.643	0.936	1.037

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	-0.000	0.006	0.079	0.110	0.102	93.905%
2	23:38:14	0.000	0.002	0.075	0.082	0.089	94.795%
3	23:38:58	-0.006	-0.004	0.064	0.058	0.054	95.540%
x		-0.002	0.001	0.073	0.083	0.082	94.747%
σ		0.004	0.005	0.008	0.026	0.024	0.819%
%RSD		170.000	375.200	10.620	30.920	30.030	0.864

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	80.809%	0.178	3983.000	3997.000	0.000	10180.000	424.400	436.100
2	23:42:31	77.659%	0.223	4108.000	4069.000	0.000	10090.000	436.300	443.200
3	23:43:14	78.075%	0.194	3962.000	3952.000	0.000	10190.000	443.900	446.900
x		78.848%	0.198	4018.000	4006.000	0.000	10160.000	434.900	442.100
σ		1.712%	0.023	78.760	59.220	0.000	54.760	9.863	5.515
%RSD		2.171	11.410	1.960	1.478	0.000	0.539	2.268	1.247

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	6.195	1898.000	0.000	762.000	2006.000	1784.000	84.546%	0.130
2	23:42:31	7.423	1938.000	0.000	749.200	1969.000	1785.000	84.097%	0.093
3	23:43:14	6.672	1898.000	0.000	756.400	1705.000	1806.000	82.896%	0.018
x		6.763	1911.000	0.000	755.900	1894.000	1791.000	83.846%	0.081
σ		0.619	23.350	0.000	6.377	164.000	12.230	0.853%	0.057
%RSD		9.154	1.221	0.000	0.844	8.661	0.683	1.018	70.590

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	-0.098	0.741	2.023	2.722	6.413	0.009	0.341	0.261
2	23:42:31	0.120	0.721	2.110	1.708	8.394	-0.003	0.328	0.267
3	23:43:14	0.143	0.733	2.016	-0.546	3.633	-0.003	0.505	0.285
x		0.055	0.732	2.050	1.295	6.147	0.001	0.392	0.271
σ		0.133	0.010	0.053	1.673	2.391	0.007	0.099	0.013
%RSD		242.700	1.405	2.575	129.200	38.900	778.400	25.200	4.816

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	0.230	3.487	3.223	-0.271	0.532	0.961	0.000	8.212
2	23:42:31	0.227	3.343	3.547	0.002	0.781	0.960	0.000	8.312
3	23:43:14	0.237	3.650	3.493	0.090	0.496	0.790	0.000	8.455
x		0.232	3.493	3.421	-0.060	0.603	0.904	0.000	8.326
σ		0.005	0.154	0.174	0.188	0.156	0.098	0.000	0.122
%RSD		2.198	4.401	5.085	313.700	25.790	10.890	0.000	1.467

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	84.391%	0.265	0.271	88.566%	-0.006	-0.006	-0.023	0.026
2	23:42:31	84.486%	0.327	0.262	87.562%	-0.009	-0.005	-0.021	-0.013
3	23:43:14	84.454%	0.355	0.283	87.721%	-0.003	-0.001	-0.030	-0.030
x		84.444%	0.316	0.272	87.950%	-0.006	-0.004	-0.025	-0.006
σ		0.048%	0.046	0.010	0.540%	0.003	0.002	0.005	0.028
%RSD		0.057	14.630	3.852	0.614	46.890	58.750	19.410	487.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	85.006%	-0.222	0.046	0.020	59.430	58.340	87.833%	87.870%
2	23:42:31	85.634%	-0.163	0.056	0.016	58.800	59.330	89.200%	89.103%
3	23:43:14	85.052%	-0.224	0.069	0.030	58.750	59.210	88.671%	88.945%
x		85.231%	-0.203	0.057	0.022	58.990	58.960	88.568%	88.639%
σ		0.350%	0.035	0.011	0.007	0.375	0.538	0.689%	0.671%
%RSD		0.410	17.250	19.430	32.730	0.636	0.912	0.778	0.757

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	-0.012	-0.007	0.136	0.119	0.129	94.313%
2	23:42:31	-0.011	-0.009	0.120	0.113	0.123	94.651%
3	23:43:14	-0.011	-0.006	0.088	0.096	0.089	94.711%
x		-0.011	-0.007	0.114	0.109	0.114	94.559%
σ		0.001	0.002	0.024	0.012	0.021	0.215%
%RSD		7.743	22.730	21.210	11.040	18.670	0.227

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	76.139%	49.290	20520.000	20100.000	0.000	98180.000	54530.000	55290.000
2	23:46:48	74.826%	48.170	20070.000	20210.000	0.000	96460.000	55020.000	55930.000
3	23:47:31	72.909%	47.990	20360.000	20530.000	0.000	97540.000	55640.000	56550.000
x		74.625%	48.480	20320.000	20280.000	0.000	97390.000	55060.000	55930.000
σ		1.624%	0.704	226.300	222.800	0.000	867.200	556.500	633.800
%RSD		2.176	1.453	1.114	1.099	0.000	0.890	1.011	1.133

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	2032.000	19440.000	0.000	53120.000	55820.000	55070.000	81.475%	926.800
2	23:46:48	2035.000	19470.000	0.000	53250.000	56410.000	57120.000	79.250%	937.300
3	23:47:31	2060.000	19640.000	0.000	53000.000	56080.000	56550.000	79.204%	924.500
x		2042.000	19520.000	0.000	53120.000	56110.000	56250.000	79.977%	929.500
σ		15.200	109.800	0.000	124.500	295.300	1055.000	1.298%	6.839
%RSD		0.744	0.563	0.000	0.234	0.526	1.876	1.623	0.736

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	473.400	187.900	497.100	986.900	1174.000	451.400	453.900	231.200
2	23:46:48	480.100	191.000	500.600	1019.000	1198.000	452.900	455.800	228.100
3	23:47:31	477.300	191.000	500.800	1002.000	1194.000	447.400	450.600	227.300
x		476.900	190.000	499.500	1003.000	1189.000	450.600	453.500	228.900
σ		3.413	1.803	2.053	16.130	12.890	2.875	2.634	2.103
%RSD		0.716	0.949	0.411	1.609	1.085	0.638	0.581	0.919

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	230.800	476.700	477.700	37.180	10.980	12.990	0.000	999.700
2	23:46:48	232.500	479.500	482.700	37.730	11.940	12.880	0.000	1002.000
3	23:47:31	229.300	474.900	476.600	37.810	12.020	12.640	0.000	1005.000
x		230.900	477.000	479.000	37.570	11.650	12.840	0.000	1002.000
σ		1.619	2.331	3.231	0.341	0.579	0.182	0.000	2.603
%RSD		0.701	0.489	0.674	0.908	4.969	1.417	0.000	0.260

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	81.642%	919.000	912.300	80.910%	47.250	46.750	48.100	45.930
2	23:46:48	82.065%	947.300	944.500	80.955%	46.820	47.300	49.520	46.900
3	23:47:31	81.402%	957.500	960.500	79.789%	47.210	47.810	50.030	46.820
x		81.703%	941.300	939.100	80.551%	47.090	47.290	49.220	46.550
σ		0.336%	19.910	24.550	0.661%	0.235	0.531	0.996	0.539
%RSD		0.411	2.116	2.614	0.820	0.500	1.123	2.023	1.158

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	80.323%	1865.000	490.200	489.700	2187.000	2181.000	85.857%	86.322%
2	23:46:48	79.824%	1879.000	496.900	496.600	2213.000	2213.000	86.263%	87.236%
3	23:47:31	79.921%	1873.000	495.400	493.900	2209.000	2197.000	87.123%	87.816%
x		80.023%	1872.000	494.100	493.400	2203.000	2197.000	86.414%	87.124%
σ		0.264%	7.187	3.534	3.495	13.780	15.930	0.646%	0.753%
%RSD		0.330	0.384	0.715	0.708	0.625	0.725	0.748	0.865

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	43.980	43.330	17.590	18.960	18.190	90.120%
2	23:46:48	45.140	45.210	17.790	19.180	18.470	89.750%
3	23:47:31	46.050	45.910	17.860	19.260	18.540	89.397%
x		45.060	44.820	17.750	19.130	18.400	89.756%
σ		1.038	1.333	0.139	0.155	0.185	0.361%
%RSD		2.302	2.973	0.785	0.809	1.008	0.403

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	74.914%	48.920	20640.000	20500.000	0.000	97960.000	54540.000	55500.000
2	23:51:06	70.776%	49.190	21310.000	21210.000	0.000	98090.000	56010.000	57180.000
3	23:51:49	72.401%	47.310	20380.000	20870.000	0.000	97120.000	56160.000	56760.000
x		72.697%	48.470	20780.000	20860.000	0.000	97720.000	55570.000	56480.000
σ		2.085%	1.017	482.000	357.300	0.000	523.800	894.500	875.100
%RSD		2.868	2.098	2.320	1.713	0.000	0.536	1.610	1.549

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	2021.000	19550.000	0.000	52890.000	56420.000	53790.000	80.225%	919.000
2	23:51:06	2089.000	20000.000	0.000	52220.000	54790.000	55650.000	80.197%	935.300
3	23:51:49	2036.000	19910.000	0.000	53000.000	55680.000	56480.000	78.336%	943.700
x		2049.000	19820.000	0.000	52700.000	55630.000	55310.000	79.586%	932.700
σ		35.880	240.200	0.000	421.900	816.400	1377.000	1.083%	12.570
%RSD		1.752	1.212	0.000	0.800	1.468	2.490	1.360	1.347

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	480.400	190.200	498.700	1011.000	1194.000	448.000	448.300	227.600
2	23:51:06	475.100	188.100	499.000	1015.000	1179.000	437.900	445.100	227.400
3	23:51:49	484.200	191.800	500.500	1006.000	1198.000	450.100	450.300	227.000
x		479.900	190.000	499.400	1011.000	1190.000	445.300	447.900	227.400
σ		4.567	1.865	0.993	4.558	9.900	6.485	2.610	0.298
%RSD		0.952	0.982	0.199	0.451	0.832	1.456	0.583	0.131

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	230.700	475.000	476.700	37.840	11.340	12.750	0.000	1003.000
2	23:51:06	228.600	469.700	467.300	37.060	10.880	12.270	0.000	997.900
3	23:51:49	230.100	477.600	478.000	37.570	11.840	12.330	0.000	1005.000
x		229.800	474.100	474.000	37.490	11.350	12.450	0.000	1002.000
σ		1.089	4.039	5.814	0.395	0.485	0.261	0.000	3.686
%RSD		0.474	0.852	1.227	1.055	4.271	2.095	0.000	0.368

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	80.894%	935.800	934.900	80.441%	47.020	46.910	48.770	46.240
2	23:51:06	81.623%	954.400	954.400	80.074%	46.830	46.980	48.520	46.030
3	23:51:49	81.147%	961.700	960.000	80.474%	46.110	47.020	49.030	47.750
x		81.221%	950.700	949.800	80.330%	46.650	46.970	48.770	46.670
σ		0.370%	13.380	13.190	0.222%	0.476	0.057	0.258	0.937
%RSD		0.456	1.407	1.388	0.276	1.020	0.120	0.530	2.007

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	79.909%	1881.000	492.200	492.400	2193.000	2191.000	86.077%	87.010%
2	23:51:06	80.380%	1879.000	492.500	491.300	2182.000	2178.000	87.617%	87.807%
3	23:51:49	79.564%	1873.000	495.300	499.600	2212.000	2207.000	87.121%	87.538%
x		79.951%	1878.000	493.300	494.400	2196.000	2192.000	86.938%	87.452%
σ		0.410%	4.558	1.739	4.482	14.770	14.720	0.786%	0.406%
%RSD		0.513	0.243	0.353	0.907	0.673	0.672	0.904	0.464

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	45.750	45.200	17.880	19.280	18.510	88.933%
2	23:51:06	46.280	46.370	17.850	19.260	18.660	89.092%
3	23:51:49	46.230	46.430	17.960	19.270	18.600	89.502%
x		46.090	46.000	17.890	19.270	18.590	89.176%
σ		0.291	0.694	0.055	0.009	0.074	0.293%
%RSD		0.632	1.509	0.308	0.046	0.400	0.329

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	73.700%	29.990	108800.000	109100.000	0.000	129900.000	15660.000	16080.000
2	23:55:24	72.021%	28.810	109000.000	109000.000	0.000	128400.000	15630.000	16370.000
3	23:56:07	70.182%	30.630	109900.000	110300.000	0.000	127900.000	15840.000	16570.000
x		71.968%	29.810	109200.000	109500.000	0.000	128700.000	15710.000	16340.000
σ		1.760%	0.923	582.600	687.200	0.000	1071.000	109.000	246.600
%RSD		2.445	3.095	0.533	0.628	0.000	0.832	0.694	1.509

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	207300.000	69530.000	0.000	55480.000	52650.000	49240.000	82.167%	501.600
2	23:55:24	209000.000	69240.000	0.000	54260.000	51880.000	48800.000	82.394%	497.400
3	23:56:07	211200.000	70330.000	0.000	54260.000	50820.000	50680.000	82.442%	493.100
x		209200.000	69700.000	0.000	54670.000	51790.000	49570.000	82.334%	497.400
σ		1945.000	566.300	0.000	704.900	917.400	986.000	0.147%	4.248
%RSD		0.930	0.813	0.000	1.289	1.772	1.989	0.178	0.854

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	8.613	89.200	39590.000	14630.000	14110.000	43.210	177.600	150.100
2	23:55:24	8.372	87.730	39760.000	14580.000	14070.000	42.440	174.300	146.500
3	23:56:07	9.491	87.350	39370.000	14570.000	13910.000	41.940	172.800	147.700
x		8.825	88.090	39570.000	14590.000	14030.000	42.530	174.900	148.100
σ		0.589	0.978	193.200	32.370	107.000	0.637	2.445	1.826
%RSD		6.670	1.110	0.488	0.222	0.763	1.498	1.398	1.233

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	143.200	633.900	604.700	2.585	-3.203	0.921	0.000	52.560
2	23:55:24	141.300	625.400	591.700	2.803	-3.565	0.574	0.000	51.160
3	23:56:07	141.200	627.500	595.000	2.511	-3.415	0.442	0.000	51.170
x		141.900	628.900	597.100	2.633	-3.394	0.646	0.000	51.630
σ		1.095	4.415	6.780	0.152	0.182	0.247	0.000	0.806
%RSD		0.771	0.702	1.136	5.769	5.366	38.320	0.000	1.560

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	389.939%	16.780	22.120	75.297%	0.617	0.581	7.422	7.115
2	23:55:24	404.398%	13.680	17.970	77.220%	0.553	0.576	7.426	6.845
3	23:56:07	401.532%	11.370	15.500	78.689%	0.576	0.533	7.222	6.761
x		398.623%	13.940	18.530	77.069%	0.582	0.563	7.357	6.907
σ		7.656%	2.713	3.344	1.701%	0.032	0.026	0.117	0.185
%RSD		1.921	19.460	18.050	2.207	5.575	4.671	1.586	2.683

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	79.263%	11.260	0.358	0.442	3619.000	3532.000	128.567%	119.466%
2	23:55:24	80.370%	7.408	0.306	0.322	3576.000	3475.000	131.187%	121.440%
3	23:56:07	79.811%	5.343	0.252	0.222	3626.000	3526.000	131.117%	122.665%
x		79.815%	8.004	0.305	0.329	3607.000	3511.000	130.290%	121.190%
σ		0.553%	3.004	0.053	0.110	27.360	31.490	1.493%	1.614%
%RSD		0.693	37.530	17.280	33.490	0.758	0.897	1.146	1.332

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	0.395	0.450	34.300	33.270	34.720	87.925%
2	23:55:24	0.315	0.305	35.000	34.190	35.470	87.435%
3	23:56:07	0.251	0.245	35.390	34.790	35.830	87.532%
x		0.320	0.333	34.890	34.080	35.340	87.631%
σ		0.072	0.105	0.550	0.766	0.563	0.259%
%RSD		22.490	31.560	1.577	2.248	1.592	0.296

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	80.857%	1.704	18440.000	18580.000	0.000	49840.000	2878.000	2929.000
2	23:59:42	77.629%	1.760	18670.000	18580.000	0.000	49480.000	2938.000	2995.000
3	00:00:25	76.083%	2.164	18980.000	18930.000	0.000	49270.000	2970.000	3042.000
x		78.190%	1.876	18700.000	18700.000	0.000	49530.000	2929.000	2989.000
σ		2.436%	0.251	274.300	204.400	0.000	284.900	46.580	56.500
%RSD		3.115	13.380	1.467	1.093	0.000	0.575	1.590	1.890

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	3098.000	14590.000	0.000	4898.000	8115.000	8042.000	84.937%	152.600
2	23:59:42	3071.000	14530.000	0.000	4761.000	7859.000	7973.000	85.571%	153.900
3	00:00:25	3103.000	14900.000	0.000	4850.000	8146.000	8051.000	83.437%	156.300
x		3091.000	14670.000	0.000	4836.000	8040.000	8022.000	84.648%	154.300
σ		17.220	200.300	0.000	69.100	157.400	42.350	1.096%	1.887
%RSD		0.557	1.365	0.000	1.429	1.958	0.528	1.295	1.223

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	10.430	16.980	150.900	4319.000	4213.000	1.470	9.362	3.313
2	23:59:42	10.140	16.820	139.100	4218.000	4053.000	1.459	9.355	3.134
3	00:00:25	10.660	16.690	136.900	4279.000	4135.000	1.489	9.418	3.068
x		10.410	16.830	142.300	4272.000	4134.000	1.473	9.379	3.172
σ		0.261	0.145	7.492	50.930	80.250	0.015	0.034	0.127
%RSD		2.512	0.860	5.265	1.192	1.941	1.036	0.364	3.997

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	3.174	34.680	35.920	0.453	1.846	2.724	0.000	37.340
2	23:59:42	3.096	34.380	34.030	0.202	2.120	3.285	0.000	37.170
3	00:00:25	2.933	34.330	34.860	0.607	2.190	3.731	0.000	37.250
x		3.067	34.460	34.940	0.421	2.052	3.247	0.000	37.250
σ		0.123	0.189	0.951	0.204	0.182	0.505	0.000	0.084
%RSD		4.020	0.549	2.721	48.570	8.878	15.550	0.000	0.224

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	88.684%	5.543	5.245	88.131%	0.039	0.083	0.065	0.085
2	23:59:42	89.320%	4.634	4.596	87.975%	0.043	0.038	0.034	0.047
3	00:00:25	88.803%	4.256	4.260	87.754%	0.029	0.047	0.096	0.115
x		88.936%	4.811	4.700	87.954%	0.037	0.056	0.065	0.082
σ		0.338%	0.661	0.501	0.189%	0.007	0.024	0.031	0.034
%RSD		0.380	13.750	10.650	0.215	19.820	42.750	48.100	41.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	85.293%	2.398	0.234	0.203	304.500	303.400	89.710%	89.368%
2	23:59:42	86.135%	2.123	0.168	0.154	299.500	300.100	90.956%	91.076%
3	00:00:25	85.736%	1.667	0.163	0.106	303.300	300.300	90.929%	91.452%
x		85.722%	2.063	0.188	0.154	302.400	301.200	90.532%	90.632%
σ		0.421%	0.369	0.040	0.048	2.625	1.843	0.711%	1.111%
%RSD		0.491	17.890	20.980	31.460	0.868	0.612	0.786	1.226

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	0.117	0.129	2.236	2.041	2.159	94.956%
2	23:59:42	0.102	0.106	2.209	2.017	2.070	95.461%
3	00:00:25	0.102	0.096	2.115	2.001	2.015	96.448%
x		0.107	0.110	2.187	2.020	2.082	95.622%
σ		0.009	0.017	0.063	0.020	0.072	0.759%
%RSD		8.347	15.120	2.891	0.977	3.483	0.794

CCV 309497 2/6/2012 12:05:26 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	80.232%	99.300	457.700	466.200	0.000	50640.000	52090.000	52840.000
2	00:06:52	77.581%	99.590	459.900	459.500	0.000	50070.000	53120.000	53760.000
3	00:07:35	77.212%	97.910	439.500	444.000	0.000	49160.000	52750.000	53650.000
x		78.342%	98.934%	452.345%	456.559%	0.000	99.912%	105.305%	106.833%
σ		1.648%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.103	0.909	2.478	2.503	0.000	1.494	0.990	0.937

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	532.100	5454.000	0.000	52060.000	48760.000	48630.000	83.548%	98.580
2	00:06:52	536.300	5442.000	0.000	51540.000	49090.000	47640.000	83.277%	96.130
3	00:07:35	530.700	5430.000	0.000	51440.000	48990.000	47960.000	82.709%	96.530
x		106.607%	108.836%	0.000	103.358%	97.886%	96.149%	83.178%	97.082%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.428%	n/a
%RSD		0.550	0.219	0.000	0.642	0.345	1.054	0.515	1.352

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	96.070	96.500	504.800	25870.000	25280.000	96.080	96.080	96.540
2	00:06:52	96.580	96.620	504.400	25480.000	24980.000	95.050	93.610	95.880
3	00:07:35	97.710	96.690	506.200	25670.000	25230.000	94.140	93.550	94.770
x		96.786%	96.601%	101.028%	102.698%	100.654%	95.091%	94.416%	95.730%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.867	0.101	0.193	0.759	0.638	1.021	1.530	0.937

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	97.540	96.660	100.400	98.660	99.080	101.200	0.000	98.690
2	00:06:52	94.220	97.690	100.500	99.510	98.890	99.950	0.000	97.520
3	00:07:35	95.490	96.760	96.880	98.440	99.110	100.300	0.000	98.150
x		95.752%	97.035%	99.256%	98.867%	99.029%	100.481%	0.000	98.121%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.753	0.585	2.075	0.569	0.120	0.649	0.000	0.599

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	82.230%	93.300	93.450	83.887%	94.660	96.150	98.590	99.250
2	00:06:52	82.572%	96.550	96.880	83.451%	96.190	96.200	98.650	97.990
3	00:07:35	82.468%	98.590	97.680	84.001%	95.080	96.180	98.100	100.900
x		82.423%	96.149%	96.005%	83.780%	95.312%	96.177%	98.447%	99.388%
σ		0.175%	n/a	n/a	0.290%	n/a	n/a	n/a	n/a
%RSD		0.213	2.778	2.339	0.346	0.827	0.023	0.309	1.482

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	82.215%	96.520	92.120	91.350	97.950	97.190	86.162%	85.982%
2	00:06:52	82.441%	96.640	94.370	95.260	97.190	97.970	86.970%	86.760%
3	00:07:35	81.410%	98.360	97.580	97.760	98.080	99.000	86.523%	86.856%
x		82.022%	97.174%	94.687%	94.792%	97.741%	98.055%	86.551%	86.533%
σ		0.541%	n/a	n/a	n/a	n/a	n/a	0.404%	0.479%
%RSD		0.660	1.062	2.901	3.412	0.496	0.924	0.467	0.554

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	92.470	93.290	94.660	93.670	93.880	89.196%
2	00:06:52	93.980	93.400	95.580	94.520	95.000	89.259%
3	00:07:35	94.810	94.580	95.760	95.150	95.550	89.079%
x		93.751%	93.755%	95.333%	94.451%	94.809%	89.178%
σ		n/a	n/a	n/a	n/a	n/a	0.092%
%RSD		1.264	0.765	0.616	0.786	0.898	0.103

CCB10 2/6/2012 12:12:38 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	96.101%	-0.019	175.300	178.200	0.000	11.230	15.170	15.190
2	00:14:04	92.447%	0.005	184.000	178.800	0.000	20.110	20.660	21.050
3	00:14:47	92.007%	0.020	178.900	181.400	0.000	31.990	28.600	30.120
x		93.518%	0.002	179.400	179.500	0.000	21.110	21.480	22.120
σ		2.248%	0.020	4.383	1.672	0.000	10.410	6.750	7.525
%RSD		2.403	976.000	2.443	0.931	0.000	49.320	31.430	34.020

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.572	0.765	0.000	3.972	178.100	48.500	97.792%	-0.067
2	00:14:04	2.158	2.242	0.000	8.578	139.600	55.640	98.250%	-0.068
3	00:14:47	3.753	4.192	0.000	19.540	178.600	59.430	95.931%	-0.013
x		2.161	2.400	0.000	10.700	165.400	54.520	97.324%	-0.050
σ		1.590	1.719	0.000	7.996	22.370	5.552	1.228%	0.031
%RSD		73.590	71.650	0.000	74.760	13.520	10.180	1.262	63.270

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.099	0.015	0.700	0.791	3.617	0.019	-0.089	-0.217
2	00:14:04	0.003	0.016	1.054	0.689	4.090	0.050	-0.048	-0.221
3	00:14:47	0.097	0.042	1.671	2.699	6.033	0.046	-0.110	-0.192
x		0.066	0.025	1.142	1.393	4.580	0.038	-0.083	-0.210
σ		0.055	0.015	0.492	1.132	1.280	0.017	0.032	0.016
%RSD		83.330	62.020	43.070	81.290	27.950	43.800	38.410	7.535

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	-0.200	-0.852	-0.935	-0.096	-0.956	0.053	0.000	0.063
2	00:14:04	-0.260	-0.768	-0.879	0.095	-0.984	0.274	0.000	0.102
3	00:14:47	-0.206	-0.717	-0.846	0.096	-0.713	0.423	0.000	0.153
x		-0.222	-0.779	-0.887	0.032	-0.884	0.250	0.000	0.106
σ		0.033	0.068	0.045	0.110	0.149	0.186	0.000	0.045
%RSD		14.850	8.751	5.112	349.600	16.860	74.410	0.000	42.320

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	94.915%	1.035	0.993	101.182%	0.018	0.016	-0.033	0.000
2	00:14:04	94.667%	0.803	0.946	100.522%	0.024	0.029	0.013	0.002
3	00:14:47	94.682%	0.776	0.805	101.033%	0.043	0.049	0.020	0.044
x		94.755%	0.872	0.915	100.913%	0.028	0.031	0.000	0.015
σ		0.139%	0.142	0.097	0.346%	0.013	0.017	0.029	0.025
%RSD		0.147	16.330	10.650	0.343	46.030	53.740	8260.000	160.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	95.660%	0.181	0.558	0.623	0.118	0.197	96.850%	96.795%
2	00:14:04	96.763%	0.185	0.482	0.533	0.232	0.174	98.393%	98.189%
3	00:14:47	96.477%	0.148	0.480	0.478	0.268	0.277	98.030%	98.053%
x		96.300%	0.172	0.507	0.544	0.206	0.216	97.758%	97.679%
σ		0.572%	0.020	0.044	0.073	0.078	0.054	0.807%	0.769%
%RSD		0.594	11.860	8.695	13.470	37.960	25.020	0.825	0.787

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.029	0.029	0.202	0.171	0.180	103.922%
2	00:14:04	0.044	0.039	0.172	0.142	0.156	104.411%
3	00:14:47	0.069	0.058	0.179	0.157	0.170	105.106%
x		0.047	0.042	0.184	0.157	0.168	104.480%
σ		0.020	0.015	0.016	0.015	0.012	0.595%
%RSD		43.410	35.820	8.468	9.365	7.317	0.569

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	78.891%	1.185	18220.000	18080.000	0.000	51000.000	1894.000	1941.000
2	00:18:23	76.103%	1.283	17950.000	18180.000	0.000	50800.000	1965.000	1992.000
3	00:19:06	73.110%	1.166	18500.000	18460.000	0.000	50290.000	1967.000	2032.000
x		76.035%	1.211	18220.000	18240.000	0.000	50700.000	1942.000	1988.000
σ		2.891%	0.063	272.100	197.100	0.000	365.900	41.330	45.920
%RSD		3.802	5.211	1.493	1.081	0.000	0.722	2.128	2.310

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	3.143	9620.000	0.000	3746.000	7933.000	8061.000	81.381%	0.646
2	00:18:23	2.898	9838.000	0.000	3736.000	8067.000	8059.000	80.436%	0.371
3	00:19:06	2.552	9880.000	0.000	3642.000	7584.000	7958.000	81.378%	0.405
x		2.864	9779.000	0.000	3708.000	7862.000	8026.000	81.065%	0.474
σ		0.297	139.700	0.000	57.680	249.400	59.150	0.545%	0.150
%RSD		10.370	1.429	0.000	1.556	3.172	0.737	0.672	31.640

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	0.237	3.620	8.142	30.680	53.800	0.055	2.844	1.656
2	00:18:23	0.325	3.571	7.966	25.080	45.050	0.059	2.777	1.642
3	00:19:06	0.178	3.355	7.839	22.250	46.290	0.070	2.962	1.570
x		0.247	3.515	7.982	26.010	48.380	0.061	2.861	1.623
σ		0.074	0.141	0.152	4.286	4.737	0.008	0.094	0.046
%RSD		30.000	4.012	1.905	16.480	9.791	12.620	3.277	2.860

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	1.506	20.310	19.990	-0.044	2.835	3.256	0.000	37.720
2	00:18:23	1.407	20.520	20.710	0.110	2.819	3.833	0.000	37.860
3	00:19:06	1.380	20.150	20.190	0.218	2.771	3.371	0.000	37.910
x		1.431	20.330	20.300	0.095	2.808	3.487	0.000	37.830
σ		0.066	0.187	0.375	0.132	0.033	0.305	0.000	0.099
%RSD		4.634	0.918	1.847	138.900	1.176	8.756	0.000	0.262

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	81.956%	1.401	1.450	84.557%	0.002	-0.005	0.044	0.076
2	00:18:23	82.730%	1.436	1.385	84.702%	0.000	-0.001	0.042	0.106
3	00:19:06	81.944%	1.372	1.265	84.024%	0.004	0.007	0.031	0.059
x		82.210%	1.403	1.367	84.427%	0.002	0.001	0.039	0.080
σ		0.450%	0.032	0.094	0.357%	0.002	0.006	0.007	0.024
%RSD		0.548	2.297	6.864	0.423	86.780	1150.000	18.680	29.380

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	81.650%	1.057	0.629	0.627	265.500	263.800	84.995%	85.564%
2	00:18:23	82.301%	0.951	0.546	0.579	264.800	263.900	87.795%	87.022%
3	00:19:06	82.510%	0.825	0.407	0.433	263.900	263.400	87.628%	88.382%
x		82.154%	0.944	0.527	0.546	264.700	263.700	86.806%	86.989%
σ		0.448%	0.117	0.112	0.101	0.769	0.247	1.571%	1.409%
%RSD		0.546	12.340	21.230	18.430	0.290	0.094	1.809	1.620

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	0.032	0.031	0.143	0.138	0.144	97.111%
2	00:18:23	0.019	0.027	0.085	0.072	0.077	95.609%
3	00:19:06	0.018	0.022	0.045	0.054	0.050	95.483%
x		0.023	0.026	0.091	0.088	0.090	96.068%
σ		0.008	0.005	0.049	0.044	0.048	0.906%
%RSD		34.690	17.570	54.160	50.250	53.310	0.943

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	81.049%	0.222	3763.000	3746.000	0.000	10180.000	375.300	379.500
2	00:22:42	80.047%	0.198	3758.000	3752.000	0.000	10060.000	387.300	388.300
3	00:23:25	79.771%	0.271	3818.000	3738.000	0.000	9892.000	391.300	388.500
x		80.289%	0.230	3780.000	3745.000	0.000	10050.000	384.600	385.500
σ		0.672%	0.037	33.240	7.142	0.000	145.300	8.318	5.153
%RSD		0.837	16.080	0.879	0.191	0.000	1.447	2.163	1.337

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	-0.148	1900.000	0.000	731.500	1672.000	1593.000	83.667%	0.075
2	00:22:42	0.155	1937.000	0.000	722.300	1683.000	1611.000	82.835%	0.157
3	00:23:25	-0.471	1927.000	0.000	712.000	1656.000	1607.000	83.350%	0.116
x		-0.155	1921.000	0.000	721.900	1670.000	1604.000	83.284%	0.116
σ		0.313	18.870	0.000	9.738	13.630	9.395	0.420%	0.041
%RSD		202.100	0.982	0.000	1.349	0.816	0.586	0.504	35.300

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	-0.109	0.652	2.176	-1.642	1.731	0.007	0.350	0.189
2	00:22:42	-0.079	0.712	2.169	-2.932	2.518	0.012	0.428	0.190
3	00:23:25	-0.015	0.739	2.199	-3.718	5.154	0.009	0.567	0.125
x		-0.068	0.701	2.181	-2.764	3.134	0.009	0.449	0.168
σ		0.048	0.044	0.016	1.048	1.793	0.002	0.110	0.037
%RSD		70.730	6.309	0.718	37.930	57.200	25.470	24.530	22.270

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	0.209	3.158	3.552	0.020	0.557	0.648	0.000	7.482
2	00:22:42	0.120	3.280	2.857	0.113	0.387	1.381	0.000	7.365
3	00:23:25	0.077	3.234	2.875	0.008	-0.045	1.050	0.000	7.370
x		0.135	3.224	3.095	0.047	0.300	1.027	0.000	7.406
σ		0.067	0.062	0.396	0.057	0.310	0.367	0.000	0.066
%RSD		49.510	1.920	12.800	121.100	103.500	35.760	0.000	0.896

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	83.847%	0.735	0.749	88.019%	-0.004	-0.000	-0.023	0.013
2	00:22:42	83.892%	0.765	0.723	87.736%	-0.007	0.002	-0.073	-0.044
3	00:23:25	84.029%	0.749	0.661	86.903%	-0.011	-0.006	0.052	0.041
x		83.923%	0.750	0.711	87.553%	-0.007	-0.001	-0.015	0.003
σ		0.095%	0.015	0.045	0.580%	0.003	0.004	0.063	0.043
%RSD		0.113	1.965	6.352	0.663	45.510	295.600	427.400	1361.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	84.499%	0.178	0.206	0.229	52.480	52.400	86.913%	86.342%
2	00:22:42	85.532%	0.144	0.199	0.173	52.080	52.170	88.260%	88.548%
3	00:23:25	84.403%	0.098	0.201	0.177	52.370	52.050	88.765%	88.941%
x		84.811%	0.140	0.202	0.193	52.310	52.210	87.979%	87.943%
σ		0.626%	0.040	0.004	0.031	0.205	0.178	0.957%	1.401%
%RSD		0.738	28.690	1.769	16.150	0.393	0.341	1.088	1.593

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	0.004	0.010	0.117	0.108	0.105	93.303%
2	00:22:42	0.011	0.020	0.064	0.048	0.059	93.424%
3	00:23:25	0.004	0.002	0.018	0.025	0.015	94.284%
x		0.006	0.011	0.066	0.060	0.060	93.670%
σ		0.004	0.009	0.050	0.043	0.045	0.535%
%RSD		62.140	86.210	74.560	71.380	74.780	0.571

180-7631-A-10-B MS 2/6/2012 12:25:35 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	77.899%	46.180	18470.000	18450.000	0.000	95970.000	52540.000	53780.000
2	00:27:01	74.416%	47.240	19070.000	18880.000	0.000	95120.000	54200.000	55000.000
3	00:27:44	74.612%	46.870	18480.000	18600.000	0.000	95080.000	54270.000	54960.000
x		75.642%	46.760	18680.000	18640.000	0.000	95390.000	53670.000	54580.000
σ		1.957%	0.536	343.600	215.600	0.000	501.000	979.600	695.000
%RSD		2.587	1.147	1.840	1.156	0.000	0.525	1.825	1.273

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	1987.000	19130.000	0.000	52900.000	55010.000	54960.000	81.848%	915.300
2	00:27:01	2023.000	19370.000	0.000	52140.000	54310.000	52230.000	80.789%	922.000
3	00:27:44	2010.000	19390.000	0.000	52690.000	55410.000	55140.000	79.753%	926.200
x		2007.000	19300.000	0.000	52580.000	54910.000	54110.000	80.796%	921.200
σ		18.110	141.500	0.000	388.300	556.700	1630.000	1.048%	5.487
%RSD		0.902	0.734	0.000	0.739	1.014	3.013	1.297	0.596

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	467.300	186.400	493.300	1004.000	1184.000	450.600	451.700	228.000
2	00:27:01	469.000	186.900	493.500	1017.000	1181.000	444.400	451.600	227.800
3	00:27:44	474.600	188.400	493.000	1013.000	1175.000	448.800	450.400	225.600
x		470.300	187.200	493.300	1011.000	1180.000	447.900	451.200	227.100
σ		3.855	1.049	0.267	6.980	4.623	3.225	0.751	1.347
%RSD		0.820	0.560	0.054	0.690	0.392	0.720	0.167	0.593

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	230.600	472.800	470.600	37.490	12.500	11.710	0.000	987.600
2	00:27:01	226.600	469.600	470.700	37.870	12.550	13.530	0.000	988.500
3	00:27:44	228.200	474.400	473.000	36.890	11.750	12.210	0.000	995.600
x		228.500	472.300	471.400	37.410	12.270	12.480	0.000	990.600
σ		2.035	2.412	1.330	0.496	0.448	0.940	0.000	4.392
%RSD		0.891	0.511	0.282	1.325	3.655	7.529	0.000	0.443

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	81.597%	915.400	909.100	81.272%	45.650	46.540	48.240	46.850
2	00:27:01	81.879%	940.200	933.500	81.700%	45.910	46.890	48.920	45.540
3	00:27:44	81.529%	939.600	937.300	82.087%	45.730	46.580	48.350	44.660
x		81.668%	931.700	926.600	81.686%	45.760	46.670	48.510	45.680
σ		0.186%	14.140	15.290	0.407%	0.130	0.195	0.362	1.101
%RSD		0.227	1.518	1.650	0.499	0.283	0.418	0.747	2.411

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	80.603%	1841.000	482.100	485.700	2132.000	2126.000	85.345%	85.662%
2	00:27:01	80.402%	1854.000	488.200	487.400	2137.000	2128.000	87.320%	87.278%
3	00:27:44	80.876%	1845.000	486.300	488.300	2161.000	2136.000	86.791%	87.522%
x		80.627%	1847.000	485.500	487.100	2143.000	2130.000	86.486%	86.821%
σ		0.238%	6.971	3.104	1.320	15.600	5.075	1.022%	1.011%
%RSD		0.295	0.378	0.639	0.271	0.728	0.238	1.182	1.164

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	41.990	42.260	17.220	18.680	17.760	90.321%
2	00:27:01	43.720	43.930	17.660	19.230	18.470	89.396%
3	00:27:44	43.940	44.220	17.510	18.760	18.180	90.119%
x		43.220	43.470	17.460	18.890	18.140	89.945%
σ		1.071	1.060	0.219	0.297	0.358	0.487%
%RSD		2.477	2.438	1.253	1.572	1.972	0.541

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	75.178%	48.710	19490.000	19240.000	0.000	98590.000	54860.000	55870.000
2	00:31:20	74.156%	47.760	19180.000	19100.000	0.000	98690.000	55640.000	56030.000
3	00:32:04	72.045%	49.260	20140.000	19710.000	0.000	97780.000	55960.000	57400.000
x		73.793%	48.570	19600.000	19350.000	0.000	98350.000	55490.000	56430.000
σ		1.598%	0.759	491.400	319.800	0.000	497.200	564.500	839.800
%RSD		2.165	1.563	2.507	1.653	0.000	0.505	1.017	1.488

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	2071.000	20000.000	0.000	53410.000	54770.000	52640.000	80.999%	927.100
2	00:31:20	2043.000	19850.000	0.000	53290.000	55590.000	56160.000	79.508%	939.600
3	00:32:04	2090.000	20220.000	0.000	52880.000	54760.000	54820.000	79.684%	948.600
x		2068.000	20020.000	0.000	53190.000	55040.000	54540.000	80.064%	938.400
σ		23.540	187.400	0.000	276.100	477.700	1781.000	0.815%	10.790
%RSD		1.139	0.936	0.000	0.519	0.868	3.265	1.018	1.150

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	474.900	188.700	497.700	984.900	1183.000	453.500	455.500	232.100
2	00:31:20	479.800	192.400	503.200	1018.000	1169.000	452.000	458.300	230.300
3	00:32:04	478.900	190.700	502.200	1030.000	1191.000	448.600	457.500	233.200
x		477.900	190.600	501.000	1011.000	1181.000	451.400	457.100	231.900
σ		2.599	1.867	2.925	23.490	10.890	2.496	1.446	1.432
%RSD		0.544	0.979	0.584	2.323	0.922	0.553	0.316	0.618

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	232.500	477.100	482.400	37.630	12.080	13.240	0.000	998.500
2	00:31:20	229.500	480.700	481.800	37.990	12.820	14.720	0.000	1005.000
3	00:32:04	234.500	480.600	485.500	38.010	12.280	12.660	0.000	1005.000
x		232.200	479.500	483.300	37.880	12.390	13.540	0.000	1003.000
σ		2.549	1.998	2.008	0.215	0.380	1.063	0.000	3.664
%RSD		1.098	0.417	0.416	0.566	3.066	7.845	0.000	0.365

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	81.298%	940.100	938.000	80.426%	46.970	47.690	50.400	46.810
2	00:31:20	81.009%	963.400	962.500	80.303%	46.620	47.270	48.950	46.540
3	00:32:04	81.153%	967.000	970.500	80.850%	46.860	47.100	49.080	46.880
x		81.153%	956.900	957.000	80.526%	46.810	47.360	49.480	46.740
σ		0.145%	14.580	16.950	0.287%	0.178	0.302	0.801	0.178
%RSD		0.178	1.524	1.771	0.356	0.380	0.638	1.619	0.381

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	79.382%	1890.000	495.400	494.300	2197.000	2177.000	85.400%	85.839%
2	00:31:20	80.325%	1882.000	496.800	497.900	2192.000	2172.000	86.852%	86.765%
3	00:32:04	80.109%	1891.000	494.400	494.200	2178.000	2167.000	87.747%	87.456%
x		79.939%	1888.000	495.600	495.500	2189.000	2172.000	86.666%	86.687%
σ		0.494%	4.725	1.213	2.079	9.493	4.873	1.184%	0.811%
%RSD		0.618	0.250	0.245	0.420	0.434	0.224	1.367	0.936

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	43.560	43.670	17.550	19.030	18.220	89.985%
2	00:31:20	44.660	45.260	17.920	19.580	18.650	88.927%
3	00:32:04	45.420	45.210	18.130	19.480	18.840	89.062%
x		44.550	44.720	17.870	19.360	18.570	89.325%
σ		0.939	0.904	0.294	0.292	0.320	0.576%
%RSD		2.108	2.022	1.644	1.509	1.722	0.645

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	77.689%	0.011	238.500	238.700	0.000	135.700	38.680	39.140
2	00:39:16	75.740%	0.059	221.700	230.100	0.000	138.800	38.620	42.680
3	00:39:59	74.571%	0.079	216.600	219.200	0.000	140.600	44.440	43.200
x		76.000%	0.050	225.600	229.300	0.000	138.400	40.580	41.670
σ		1.575%	0.035	11.450	9.770	0.000	2.491	3.348	2.213
%RSD		2.072	71.220	5.078	4.261	0.000	1.801	8.250	5.311

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	106.700	164.800	0.000	106.200	142.100	64.750	80.837%	3.689
2	00:39:16	107.600	166.400	0.000	102.900	170.300	69.400	79.932%	3.279
3	00:39:59	106.300	168.300	0.000	104.100	140.600	54.650	79.607%	3.888
x		106.900	166.500	0.000	104.400	151.000	62.930	80.125%	3.619
σ		0.699	1.778	0.000	1.690	16.760	7.538	0.637%	0.310
%RSD		0.654	1.068	0.000	1.619	11.100	11.980	0.795	8.576

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	0.410	1.342	10.060	169.400	162.400	0.110	0.676	1.758
2	00:39:16	0.173	1.279	10.050	164.400	156.000	0.146	0.865	1.889
3	00:39:59	0.249	1.275	9.861	162.600	163.800	0.136	0.648	1.731
x		0.277	1.298	9.992	165.400	160.700	0.131	0.730	1.792
σ		0.121	0.037	0.114	3.559	4.183	0.019	0.118	0.085
%RSD		43.750	2.876	1.135	2.151	2.602	14.430	16.160	4.723

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	1.826	6.562	6.268	0.017	-0.205	0.883	0.000	0.382
2	00:39:16	1.655	6.783	6.176	-0.132	-0.450	0.080	0.000	0.427
3	00:39:59	1.766	6.459	6.717	-0.521	-0.464	0.476	0.000	0.429
x		1.749	6.601	6.387	-0.212	-0.373	0.479	0.000	0.413
σ		0.087	0.165	0.289	0.278	0.146	0.402	0.000	0.027
%RSD		4.962	2.506	4.528	131.300	39.060	83.750	0.000	6.454

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	80.920%	4.389	4.295	86.164%	0.005	0.004	-0.026	-0.003
2	00:39:16	81.723%	3.699	3.729	85.629%	0.004	0.006	-0.043	-0.009
3	00:39:59	81.906%	3.400	3.318	85.011%	0.003	0.009	-0.026	-0.022
x		81.516%	3.829	3.780	85.601%	0.004	0.006	-0.032	-0.011
σ		0.524%	0.507	0.491	0.577%	0.001	0.002	0.010	0.010
%RSD		0.643	13.250	12.980	0.675	27.190	41.000	31.450	85.260

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	82.406%	3.359	0.152	0.160	3.478	3.423	85.676%	85.495%
2	00:39:16	82.288%	2.790	0.174	0.176	3.348	3.807	86.367%	86.603%
3	00:39:59	81.764%	2.317	0.196	0.188	3.520	3.355	85.750%	86.063%
x		82.153%	2.822	0.174	0.175	3.449	3.528	85.931%	86.054%
σ		0.342%	0.522	0.022	0.014	0.090	0.244	0.379%	0.554%
%RSD		0.416	18.500	12.520	7.953	2.606	6.913	0.441	0.644

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	0.104	0.109	0.628	0.640	0.626	95.212%
2	00:39:16	0.097	0.086	0.682	0.614	0.642	94.285%
3	00:39:59	0.083	0.070	0.672	0.567	0.611	94.320%
x		0.095	0.088	0.661	0.607	0.626	94.606%
σ		0.011	0.020	0.029	0.037	0.015	0.525%
%RSD		11.310	22.540	4.313	6.037	2.465	0.555

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	81.670%	0.027	164.100	167.200	0.000	6.963	2.581	2.831
2	00:43:36	78.405%	-0.017	173.000	170.200	0.000	12.170	5.443	5.456
3	00:44:20	76.767%	0.002	157.400	171.100	0.000	8.552	3.299	4.206
x		78.947%	0.004	164.800	169.500	0.000	9.230	3.774	4.164
σ		2.496%	0.022	7.842	2.058	0.000	2.671	1.489	1.313
%RSD		3.162	603.500	4.757	1.214	0.000	28.940	39.460	31.530

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	0.672	17.510	0.000	3.200	115.000	18.560	81.292%	0.204
2	00:43:36	0.792	18.500	0.000	4.348	105.600	12.480	81.022%	0.206
3	00:44:20	0.668	18.490	0.000	3.264	125.400	16.430	80.004%	-0.055
x		0.711	18.170	0.000	3.604	115.300	15.820	80.773%	0.118
σ		0.070	0.568	0.000	0.645	9.906	3.086	0.679%	0.150
%RSD		9.920	3.126	0.000	17.910	8.589	19.510	0.840	126.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	-0.057	0.352	0.602	17.360	20.820	0.033	-0.109	-0.072
2	00:43:36	-0.005	0.287	0.588	15.270	15.360	0.049	-0.081	-0.072
3	00:44:20	-0.191	0.282	0.602	15.380	13.860	0.048	-0.096	-0.050
x		-0.084	0.307	0.597	16.000	16.680	0.044	-0.095	-0.065
σ		0.096	0.039	0.008	1.179	3.661	0.009	0.014	0.013
%RSD		113.700	12.690	1.315	7.365	21.950	20.560	14.370	19.440

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	-0.073	0.280	0.359	-0.142	-0.622	1.038	0.000	0.091
2	00:43:36	-0.054	0.289	-0.092	-0.127	-0.193	0.900	0.000	0.122
3	00:44:20	-0.036	0.247	0.244	-0.242	-0.132	0.158	0.000	0.097
x		-0.054	0.272	0.171	-0.170	-0.316	0.698	0.000	0.103
σ		0.019	0.022	0.234	0.063	0.267	0.473	0.000	0.016
%RSD		34.210	8.155	137.400	36.750	84.660	67.780	0.000	15.720

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	81.781%	2.463	2.338	85.926%	-0.004	0.000	0.046	0.047
2	00:43:36	81.904%	2.064	1.960	86.482%	0.004	0.002	0.023	0.010
3	00:44:20	81.311%	1.857	1.676	85.936%	-0.003	0.001	-0.068	-0.052
x		81.665%	2.128	1.992	86.115%	-0.001	0.001	0.000	0.002
σ		0.313%	0.308	0.332	0.318%	0.004	0.001	0.060	0.050
%RSD		0.383	14.480	16.680	0.369	344.800	98.030	23840.000	3172.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	82.639%	1.850	0.080	0.057	0.211	0.273	85.527%	85.006%
2	00:43:36	83.116%	1.721	0.086	0.084	0.343	0.365	86.383%	86.358%
3	00:44:20	82.740%	1.400	0.056	0.088	0.369	0.262	87.194%	87.700%
x		82.832%	1.657	0.074	0.076	0.308	0.300	86.368%	86.355%
σ		0.251%	0.232	0.016	0.017	0.085	0.057	0.833%	1.347%
%RSD		0.303	13.990	21.940	21.940	27.490	18.860	0.965	1.560

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	0.061	0.071	0.066	0.065	0.063	93.342%
2	00:43:36	0.050	0.057	0.039	0.046	0.051	93.578%
3	00:44:20	0.049	0.055	0.036	0.017	0.024	94.221%
x		0.053	0.061	0.047	0.043	0.046	93.713%
σ		0.007	0.009	0.016	0.024	0.020	0.455%
%RSD		12.680	14.060	34.460	56.970	43.100	0.486

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	81.578%	0.159	139.000	141.800	0.000	24.880	1550.000	1558.000
2	00:47:55	79.245%	0.109	142.000	145.100	0.000	27.130	1568.000	1608.000
3	00:48:38	77.445%	0.196	137.400	144.700	0.000	27.190	1627.000	1622.000
x		79.423%	0.155	139.400	143.900	0.000	26.400	1582.000	1596.000
σ		2.072%	0.043	2.330	1.781	0.000	1.319	40.740	33.750
%RSD		2.609	28.020	1.671	1.238	0.000	4.997	2.576	2.115

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	385.100	47.020	0.000	71.790	4009.000	3836.000	83.930%	13.380
2	00:47:55	393.600	48.080	0.000	70.360	3879.000	3803.000	82.980%	14.150
3	00:48:38	392.900	48.440	0.000	69.790	3849.000	3846.000	82.003%	14.510
x		390.500	47.840	0.000	70.650	3912.000	3829.000	82.971%	14.010
σ		4.691	0.735	0.000	1.030	85.290	22.560	0.964%	0.582
%RSD		1.201	1.536	0.000	1.458	2.180	0.589	1.162	4.152

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	1.078	0.565	15.820	962.200	1017.000	1.028	1.506	2.167
2	00:47:55	1.466	0.640	16.100	1031.000	1034.000	0.950	1.612	2.248
3	00:48:38	1.489	0.601	16.010	1017.000	1042.000	0.995	1.570	2.059
x		1.344	0.602	15.980	1003.000	1031.000	0.991	1.563	2.158
σ		0.231	0.038	0.143	36.140	12.610	0.039	0.053	0.095
%RSD		17.160	6.258	0.892	3.603	1.224	3.951	3.412	4.393

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	2.159	5197.000	5293.000	1.340	0.222	1.113	0.000	7.062
2	00:47:55	2.332	5226.000	5297.000	1.093	0.050	0.904	0.000	6.993
3	00:48:38	2.168	5250.000	5314.000	1.334	0.066	1.054	0.000	6.950
x		2.219	5224.000	5301.000	1.256	0.113	1.024	0.000	7.002
σ		0.097	26.170	11.300	0.141	0.095	0.108	0.000	0.057
%RSD		4.382	0.501	0.213	11.210	84.360	10.530	0.000	0.813

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	83.493%	1.393	1.347	87.040%	-0.008	0.005	5.770	5.804
2	00:47:55	84.063%	1.228	1.390	86.705%	0.007	0.014	5.368	5.594
3	00:48:38	83.916%	1.114	1.216	87.318%	0.013	0.020	5.781	5.724
x		83.824%	1.245	1.317	87.021%	0.004	0.013	5.640	5.707
σ		0.296%	0.140	0.090	0.307%	0.011	0.008	0.235	0.106
%RSD		0.353	11.260	6.861	0.353	258.400	59.790	4.170	1.859

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	84.099%	0.711	0.158	0.146	5.163	5.274	87.066%	85.921%
2	00:47:55	83.983%	0.664	0.160	0.156	5.088	5.394	87.053%	87.491%
3	00:48:38	85.094%	0.541	0.175	0.132	5.509	5.119	87.608%	87.983%
x		84.392%	0.639	0.164	0.145	5.253	5.262	87.242%	87.132%
σ		0.611%	0.087	0.009	0.012	0.225	0.138	0.317%	1.077%
%RSD		0.724	13.700	5.685	8.517	4.273	2.627	0.363	1.236

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	0.062	0.046	123.800	114.100	117.800	92.605%
2	00:47:55	0.042	0.049	124.300	114.800	118.700	93.568%
3	00:48:38	0.034	0.042	125.000	115.300	119.100	93.983%
x		0.046	0.046	124.300	114.700	118.500	93.385%
σ		0.015	0.004	0.608	0.591	0.691	0.707%
%RSD		32.280	7.705	0.489	0.515	0.583	0.757

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	81.989%	0.175	124.300	119.400	0.000	26.920	823.000	823.100
2	00:52:12	83.446%	0.206	119.100	118.300	0.000	27.050	803.800	816.300
3	00:52:55	81.011%	0.133	121.000	123.000	0.000	27.120	802.500	838.800
x		82.148%	0.172	121.500	120.200	0.000	27.030	809.700	826.000
σ		1.225%	0.037	2.664	2.473	0.000	0.101	11.480	11.530
%RSD		1.492	21.380	2.193	2.056	0.000	0.373	1.418	1.396

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	652.100	60.870	0.000	86.130	8642.000	8890.000	83.944%	13.250
2	00:52:12	641.700	58.700	0.000	82.640	9028.000	8788.000	84.964%	12.060
3	00:52:55	661.500	60.130	0.000	83.590	8789.000	8751.000	83.786%	12.480
x		651.800	59.900	0.000	84.120	8820.000	8810.000	84.231%	12.600
σ		9.887	1.102	0.000	1.806	194.900	71.770	0.639%	0.606
%RSD		1.517	1.840	0.000	2.147	2.210	0.815	0.759	4.813

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	1.449	0.858	17.800	1846.000	1796.000	0.729	1.326	3.807
2	00:52:12	1.304	0.788	17.880	1815.000	1789.000	0.642	1.168	3.750
3	00:52:55	1.338	0.853	18.130	1857.000	1793.000	0.671	1.317	3.692
x		1.364	0.833	17.940	1839.000	1793.000	0.681	1.270	3.750
σ		0.076	0.039	0.171	21.460	3.552	0.044	0.088	0.057
%RSD		5.559	4.652	0.952	1.167	0.198	6.473	6.959	1.526

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	3.686	2936.000	2968.000	1.487	-0.396	0.652	0.000	18.600
2	00:52:12	3.935	2914.000	2945.000	1.710	-0.332	0.589	0.000	18.760
3	00:52:55	3.451	2948.000	2953.000	1.579	0.066	1.141	0.000	18.830
x		3.691	2933.000	2955.000	1.592	-0.221	0.794	0.000	18.730
σ		0.242	17.260	11.400	0.112	0.250	0.302	0.000	0.121
%RSD		6.565	0.589	0.386	7.045	113.400	38.090	0.000	0.647

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	84.065%	1.096	1.086	87.841%	0.052	0.045	5.158	5.410
2	00:52:12	84.016%	1.027	1.143	88.136%	0.059	0.061	5.344	5.488
3	00:52:55	83.984%	1.067	0.973	87.999%	0.041	0.053	5.295	5.201
x		84.022%	1.063	1.067	87.992%	0.051	0.053	5.266	5.366
σ		0.041%	0.035	0.086	0.148%	0.009	0.008	0.096	0.149
%RSD		0.049	3.262	8.108	0.168	17.550	15.020	1.824	2.769

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	84.718%	0.612	0.141	0.162	6.821	6.849	86.261%	85.848%
2	00:52:12	85.192%	0.666	0.174	0.127	6.737	7.266	86.920%	87.098%
3	00:52:55	84.731%	0.684	0.132	0.149	6.810	6.920	88.063%	88.458%
x		84.880%	0.654	0.149	0.146	6.789	7.012	87.081%	87.135%
σ		0.270%	0.038	0.022	0.018	0.046	0.223	0.912%	1.305%
%RSD		0.319	5.768	14.710	12.200	0.672	3.179	1.047	1.498

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	0.019	0.036	604.700	555.700	568.000	93.551%
2	00:52:12	0.032	0.048	617.100	564.100	580.400	93.887%
3	00:52:55	0.032	0.049	614.900	568.300	582.200	94.171%
x		0.027	0.045	612.200	562.700	576.900	93.870%
σ		0.008	0.007	6.617	6.406	7.737	0.310%
%RSD		28.170	15.850	1.081	1.138	1.341	0.331

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	86.258%	0.833	97.220	93.100	0.000	103.200	113.400	113.800
2	01:00:49	83.384%	0.904	96.750	96.890	0.000	101.900	110.700	117.500
3	01:01:32	84.251%	0.869	91.650	93.340	0.000	102.100	113.100	115.200
x		84.631%	86.891%	1904.125%	1888.864%	0.000	102.410%	112.425%	115.484%
σ		1.474%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.742	4.090	3.247	2.249	0.000	0.720	1.298	1.590

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	32.320	514.900	0.000	105.300	236.100	117.600	86.625%	4.632
2	01:00:49	32.760	518.400	0.000	102.100	170.800	120.400	85.806%	4.980
3	01:01:32	33.150	508.100	0.000	101.500	214.900	117.100	86.245%	4.461
x		109.142%	102.763%	0.000	102.977%	207.275%	118.384%	86.226%	93.820%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.410%	n/a
%RSD		1.263	1.028	0.000	1.939	16.080	1.520	0.475	5.644

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	0.846	1.889	5.813	50.670	50.580	0.479	0.748	1.781
2	01:00:49	0.855	1.852	5.785	49.170	50.750	0.490	0.987	1.661
3	01:01:32	0.943	1.969	5.742	47.870	44.580	0.482	1.014	1.737
x		88.130%	95.168%	1156.004%	98.471%	97.281%	96.712%	91.626%	86.314%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		6.108	3.124	0.617	2.845	7.225	1.166	15.940	3.513

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	1.906	4.456	4.427	1.007	4.519	5.036	0.000	5.117
2	01:00:49	1.578	4.651	4.204	1.293	5.206	5.040	0.000	5.192
3	01:01:32	1.835	4.518	4.627	0.874	5.183	5.223	0.000	5.137
x		88.652%	90.825%	88.385%	105.799%	99.387%	101.993%	0.000	102.972%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		9.745	2.195	4.787	20.270	7.846	2.097	0.000	0.752

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	81.321%	5.219	4.996	83.961%	0.874	0.897	0.720	0.816
2	01:00:49	81.973%	5.249	5.318	83.581%	0.945	0.916	0.963	0.886
3	01:01:32	81.955%	5.363	5.429	83.504%	1.016	0.924	0.760	0.867
x		81.750%	105.541%	104.954%	83.682%	94.490%	91.238%	81.417%	85.640%
σ		0.372%	n/a	n/a	0.245%	n/a	n/a	n/a	n/a
%RSD		0.455	1.441	4.290	0.292	7.501	1.507	16.030	4.267

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	97.832%	6.894	1.787	1.663	8.730	9.047	84.706%	84.820%
2	01:00:49	97.467%	6.145	1.821	1.722	9.191	8.961	84.881%	85.415%
3	01:01:32	97.957%	5.844	1.863	1.825	9.121	9.324	85.175%	85.130%
x		97.752%	125.886%	91.180%	86.821%	90.140%	91.108%	84.921%	85.122%
σ		0.255%	n/a	n/a	n/a	n/a	n/a	0.237%	0.297%
%RSD		0.261	8.593	2.082	4.714	2.752	2.084	0.279	0.349

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	0.946	0.941	1.151	1.157	1.123	93.271%
2	01:00:49	0.903	0.914	1.106	1.000	1.070	93.645%
3	01:01:32	0.938	0.963	1.076	1.082	1.085	93.331%
x		92.877%	93.944%	111.069%	107.948%	109.257%	93.415%
σ		n/a	n/a	n/a	n/a	n/a	0.201%
%RSD		2.473	2.604	3.384	7.322	2.475	0.215

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	81.707%	97.760	156.500	160.100	0.000	49840.000	50210.000	50560.000
2	01:15:55	79.358%	97.460	169.500	166.800	0.000	49510.000	51660.000	52440.000
3	01:16:38	79.874%	96.090	161.600	158.200	0.000	49070.000	51840.000	52640.000
x		80.313%	97.101%	162.531%	161.662%	0.000	98.952%	102.467%	103.763%
σ		1.234%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.537	0.918	4.026	2.795	0.000	0.782	1.742	2.210

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	505.300	5222.000	0.000	51480.000	48230.000	47640.000	82.647%	97.650
2	01:15:55	523.300	5327.000	0.000	51960.000	48470.000	49040.000	81.717%	98.750
3	01:16:38	516.900	5271.000	0.000	51570.000	49090.000	49190.000	82.115%	95.930
x		103.031%	105.466%	0.000	103.340%	97.191%	97.244%	82.159%	97.444%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.466%	n/a
%RSD		1.774	0.990	0.000	0.497	0.911	1.764	0.568	1.459

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	96.380	96.140	498.300	25530.000	24880.000	95.550	95.900	96.950
2	01:15:55	96.540	97.180	507.000	25700.000	25170.000	95.090	94.460	95.230
3	01:16:38	94.740	97.050	503.800	25460.000	24870.000	94.440	95.220	95.050
x		95.888%	96.790%	100.609%	102.259%	99.895%	95.028%	95.194%	95.744%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.038	0.585	0.875	0.475	0.679	0.587	0.755	1.097

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	97.460	98.720	100.700	98.530	97.910	97.740	0.000	98.480
2	01:15:55	95.560	96.940	97.130	98.890	98.740	101.100	0.000	98.290
3	01:16:38	93.200	96.700	94.610	98.410	100.300	100.200	0.000	98.110
x		95.406%	97.453%	97.489%	98.610%	98.981%	99.659%	0.000	98.294%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.235	1.132	3.149	0.255	1.226	1.734	0.000	0.190

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	79.670%	92.780	92.610	81.467%	95.570	95.910	97.620	99.720
2	01:15:55	80.728%	97.770	96.850	82.203%	95.280	95.990	98.390	99.230
3	01:16:38	81.639%	97.670	97.510	81.975%	95.290	95.670	97.160	99.390
x		80.679%	96.073%	95.659%	81.881%	95.380%	95.855%	97.723%	99.447%
σ		0.986%	n/a	n/a	0.377%	n/a	n/a	n/a	n/a
%RSD		1.222	2.971	2.781	0.460	0.175	0.169	0.633	0.248

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	79.788%	95.820	92.410	92.680	97.590	95.920	83.333%	83.144%
2	01:15:55	80.259%	97.610	95.290	96.300	99.380	99.320	84.516%	85.416%
3	01:16:38	81.731%	96.990	97.160	96.750	98.570	97.500	84.849%	85.716%
x		80.593%	96.806%	94.951%	95.247%	98.514%	97.580%	84.232%	84.759%
σ		1.013%	n/a	n/a	n/a	n/a	n/a	0.797%	1.406%
%RSD		1.257	0.939	2.517	2.344	0.912	1.743	0.946	1.659

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	90.730	90.930	92.320	91.600	91.870	88.173%
2	01:15:55	92.890	92.180	93.930	93.070	93.510	88.766%
3	01:16:38	92.780	93.420	94.960	94.320	94.380	88.612%
x		92.134%	92.180%	93.734%	92.999%	93.251%	88.517%
σ		n/a	n/a	n/a	n/a	n/a	0.308%
%RSD		1.318	1.351	1.422	1.462	1.367	0.348

CCB11 2/6/2012 1:21:41 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	85.632%	0.049	53.260	54.970	0.000	19.710	22.570	22.420
2	01:23:07	84.700%	0.042	56.730	55.920	0.000	26.720	29.410	28.750
3	01:23:50	81.880%	-0.000	58.930	57.510	0.000	29.980	30.820	33.210
x		84.071%	0.030	56.310	56.130	0.000	25.470	27.600	28.130
σ		1.954%	0.027	2.860	1.284	0.000	5.250	4.413	5.420
%RSD		2.324	87.790	5.080	2.287	0.000	20.610	15.990	19.270

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.444	2.870	0.000	17.590	125.100	40.210	85.931%	-0.142
2	01:23:07	0.532	2.798	0.000	25.500	130.500	49.870	84.935%	-0.006
3	01:23:50	0.825	3.946	0.000	28.040	113.800	50.230	84.760%	-0.006
x		0.601	3.205	0.000	23.710	123.100	46.770	85.209%	-0.051
σ		0.200	0.643	0.000	5.449	8.511	5.681	0.632%	0.078
%RSD		33.220	20.060	0.000	22.980	6.912	12.150	0.742	152.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.035	0.013	0.461	10.470	14.060	0.042	-0.093	-0.221
2	01:23:07	0.084	0.064	0.585	10.040	12.760	0.073	-0.040	-0.216
3	01:23:50	0.107	0.034	0.579	9.224	9.641	0.069	-0.008	-0.174
x		0.075	0.037	0.542	9.911	12.150	0.062	-0.047	-0.204
σ		0.037	0.026	0.070	0.634	2.270	0.017	0.043	0.025
%RSD		48.840	69.140	12.840	6.398	18.680	27.520	90.610	12.510

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	-0.196	-0.670	-0.812	0.197	0.378	0.800	0.000	0.122
2	01:23:07	-0.195	-0.686	-0.736	0.112	0.043	0.452	0.000	0.107
3	01:23:50	-0.262	-0.695	-0.701	0.154	0.413	0.703	0.000	0.136
x		-0.218	-0.684	-0.750	0.154	0.278	0.652	0.000	0.122
σ		0.038	0.013	0.057	0.043	0.204	0.179	0.000	0.015
%RSD		17.560	1.893	7.552	27.580	73.520	27.520	0.000	11.980

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	84.361%	0.738	0.723	90.539%	0.033	0.036	-0.018	0.006
2	01:23:07	84.846%	0.662	0.704	90.222%	0.037	0.036	0.095	0.065
3	01:23:50	84.328%	0.581	0.588	90.031%	0.048	0.064	0.059	0.074
x		84.512%	0.660	0.671	90.264%	0.039	0.045	0.045	0.048
σ		0.290%	0.078	0.073	0.256%	0.007	0.016	0.058	0.037
%RSD		0.344	11.890	10.850	0.284	18.990	36.150	126.600	75.970

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	85.512%	0.085	0.671	0.680	0.086	0.198	86.705%	86.327%
2	01:23:07	86.352%	0.047	0.609	0.587	0.176	0.140	87.926%	87.636%
3	01:23:50	86.237%	-0.023	0.556	0.626	0.156	0.188	87.935%	88.338%
x		86.034%	0.036	0.612	0.631	0.139	0.175	87.522%	87.434%
σ		0.455%	0.055	0.058	0.047	0.047	0.031	0.707%	1.021%
%RSD		0.529	151.100	9.434	7.393	33.730	17.640	0.808	1.167

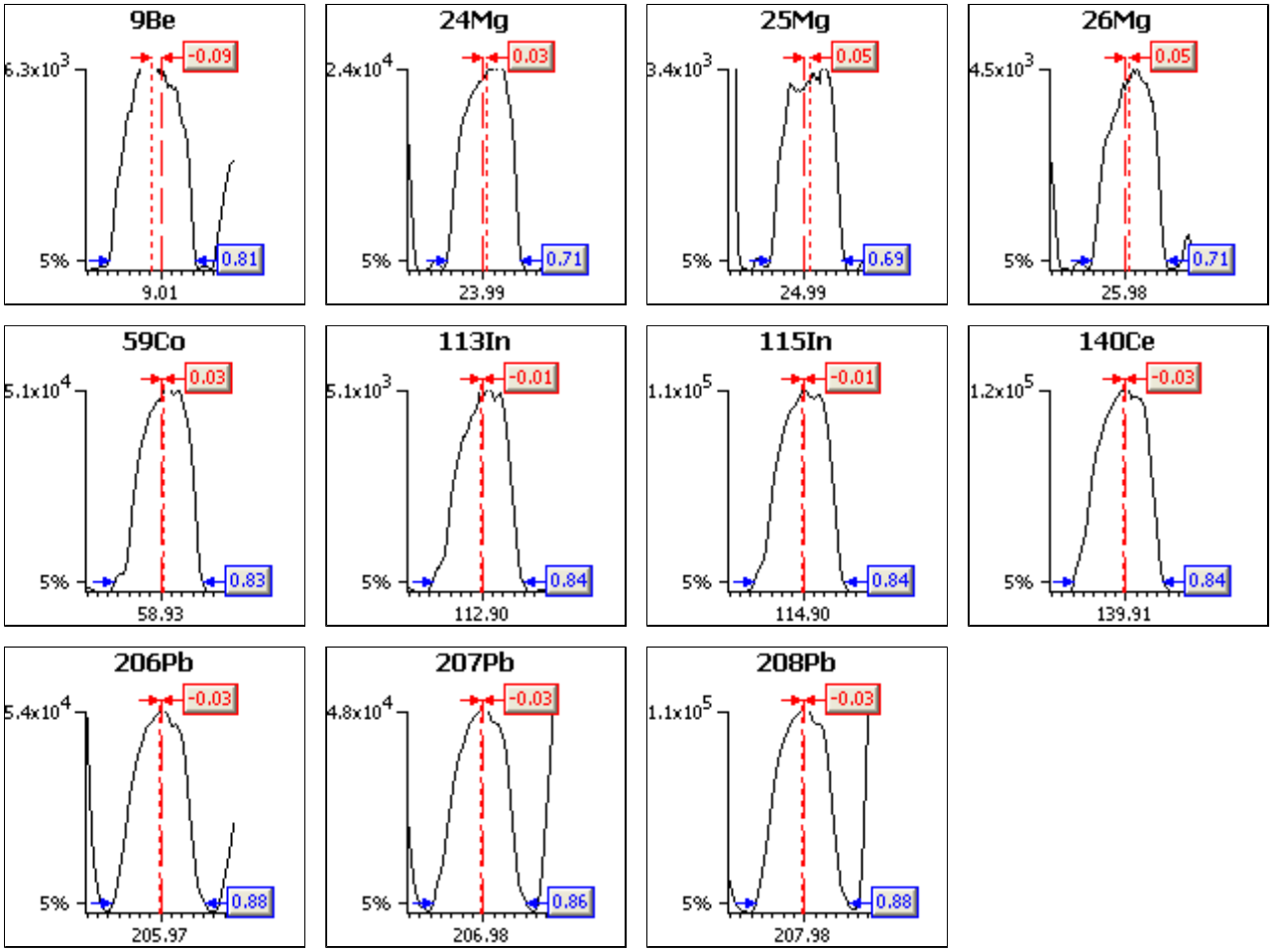
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.033	0.030	0.215	0.219	0.214	93.089%
2	01:23:07	0.043	0.039	0.171	0.221	0.188	94.056%
3	01:23:50	0.044	0.047	0.157	0.130	0.167	95.470%
x		0.040	0.039	0.181	0.190	0.190	94.205%
σ		0.006	0.009	0.031	0.052	0.023	1.197%
%RSD		15.950	22.770	16.910	27.280	12.380	1.271

Performance Report

Sample details
Sample name : ITUNE
Acquired at : 2/5/2012 12:46:57 PM
Report name : EPA ILMO5.2/6020A 2.1 [8/5/2011 12:59:56 PM]

Mass Calibration verification

Acquisition parameters
Sweeps : 25
Dwell : 2.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.81	-0.09
24Mg	0.90	0.45	0.10	0.71	0.03
25Mg	0.90	0.45	0.10	0.69	0.05
26Mg	0.90	0.45	0.10	0.71	0.05
59Co	0.90	0.45	0.10	0.83	0.03
113In	0.90	0.45	0.10	0.84	-0.01
115In	0.90	0.45	0.10	0.84	-0.01
140Ce	0.90	0.45	0.10	0.84	-0.03
206Pb	0.90	0.45	0.10	0.88	-0.03
207Pb	0.90	0.45	0.10	0.86	-0.03
208Pb	0.90	0.45	0.10	0.88	-0.03

Sample details
Sample name : ITUNE
Acquired at : 2/5/2012 12:46:57 PM
Report name : EPA ILMO5.2/6020A 2.1 [8/5/2011 12:59:56 PM]

Tune conditions

Major	
Extraction	-125
Lens 1	2.9
Focus	20.8
D1	-34.5
Pole Bias	-1.0
Hexapole Bias	-4.0
Nebuliser	0.77
Sampling Depth	130

Minor	
Lens 2	-22.7
Lens 3	-181.2
Forward power	1404
Horizontal	66
Vertical	596
D2	-141
DA	-58.0
Cool	13.0
Auxiliary	0.70

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
He/H2	0.00
He/NH3	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>10000	-
1	12:47:44 PM	0	6097	23509	3114	4017	148192	50033	2
2	12:49:09 PM	0	6074	22689	3118	3840	129586	49554	0
3	12:50:35 PM	0	5986	22239	3036	3724	124278	48739	0
4	12:52:00 PM	0	6096	22830	3102	3846	123492	48359	1
5	12:53:25 PM	0	6036	23190	3134	3975	123498	48832	1
x		0	6058	22891	3101	3880	129809	49104	1
σ		0.08	47.21	484.70	37.92	117.27	10586.72	675.87	0.89
%RSD		81.441	0.779	2.117	1.223	3.022	8.156	1.376	95.831

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	12:47:44 PM	17	0	4899	112872	809	124829	1062	48801
2	12:49:09 PM	8	0	4897	112000	721	124988	1070	48420
3	12:50:35 PM	9	0	4787	111172	671	124810	1028	47758
4	12:52:00 PM	12	0	4881	110635	755	122816	1039	47514
5	12:53:25 PM	13	0	4611	109731	769	122671	1032	46697
x		12	0	4815	111282	745	124023	1047	47838
σ		3.62	0.10	122.86	1212.60	51.82	1170.91	18.65	818.37
%RSD		30.744	94.786	2.551	1.090	6.956	0.944	1.782	1.711

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	12:47:44 PM	44832	107003	0
2	12:49:09 PM	44535	105489	0
3	12:50:35 PM	44498	104881	0
4	12:52:00 PM	43849	103477	0
5	12:53:25 PM	43023	102431	0
x		44147	104656	0
σ		723.84	1774.42	0.07
%RSD		1.640	1.695	100.000

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	12:47:44 PM	0
2	12:49:09 PM	0

3	12:50:35 PM	0
4	12:52:00 PM	0
5	12:53:25 PM	0
x		0.0084
σ		0.00
%RSD		1.4631

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-1

SDG No.:

Batch Number: 27202 Batch Start Date: 01/30/12 13:00 Batch Analyst: Shook, Caitlin N

Batch Method: 3010A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00005	MTAPITTMSA 00005	MTAPITTMSC 00010	
MB 180-27202/1		3010A, 6020/DOD		50 mL	50 mL				
LCS 180-27202/2		3010A, 6020/DOD		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-7794-A-7	02MW01C-20120117	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-8	02MW01B-20120117	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-9	02MW01A-20120118	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-10	02MW13B-20120118	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-10 MS	02MW13B-20120118	3010A, 6020/DOD	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-7794-A-10 MSD	02MW13B-20120118	3010A, 6020/DOD	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-7794-A-11	02MW13C-20120118	3010A, 6020/DOD	T	50 mL	50 mL				

Batch Notes	
Batch Comment	METALS A7
First End time	17:00
Lot # of hydrochloric acid	5mL 299966
Lot # of Nitric Acid	3mL 307501
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	96 Degrees C
Pipette ID	03F95602
Person who witnessed spiking	CS
First Start time	13:00
ID number of the thermometer	IP02 (0.0)
Digestion Tube/Cup Lot #	1107181
Uncorrected Temperature	96 Degrees C
Vendor of Reagent used	Mallinckrodt

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Pittsburgh
301 Alpha Drive

Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

180-7294

.4 #3

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Linda C. Laver		Date: 01/25/12	
TestAmerica West Sacramento	linda.laver@testamericainc.com		Carrier: FedEx	Page 1 of 1 COCs
880 Riverside Parkway	Analysis Turnaround Time			
West Sacramento, CA 95605				
Direct Line: 916-374-4362	TAT if different from Below 02/09/12			
	☐			Sample Specific Notes: Please refer to SOW sent to Alex Cox
		2 weeks		
Project Name: G2A190474	☐	1 week		
Site: White Water, NWS Earle, CTO WE72	☐	2 days		
P O # G2A190474	☐	1 day		

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	6020: Sb, As, Cr, Cu, Fe, Pb, Zn	
02MW01C-20120117	1/17/2012	1215	500ml	GW	1		X	G2A190474-01
02MW01B-20120117	1/17/2012	1505	500ml	GW	1		X	G2A190474-02
02MW01A-20120118	1/18/2012	0920	500ml	GW	1		X	G2A190474-03
02MW13B-20120118	1/18/2012	1420	500ml	GW	3		X	G2A190474-04
02MW13C-20120118	1/18/2012	1625	500ml	GW	1		X	G2A190474-05
			LCL 01/26/12					

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Please see workshare!!! QSM 4.2, Level IV, CLP type forms

Use sample G2A190474-04 for MS.
- LCL 01/26/12

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Linda C Laver	TAL West Sac	01/26/12 11:00	[illegible]	TAPITT	1/27/12 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

G2A190474

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 2741 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
1126 03605	NWS Earle	Jennifer Lambert		Test America Linda Laver
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Donald Whalen	610 382 1536	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 5963 9562		West Sacramento, CA

STANDARD TAT ☐
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: / / HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: Explosives	Perchlorate	Total Metals					COMMENTS
1/17	1215	02MW01C-20120117				GW	G	4	X	X	X					
1/17	1505	02MW01B-20120117				GW	G	4	X	X	X					
1/18	0920	02MW01A-20120118				GW	G	4	X	X	X					
1/18	1420	02MW03B-20120118				GW	G	12	X	X	X					DoMS/MSD
1/18	1625	02MW13C-20120118				GW	G	4	X	X	X					

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Donald Whalen	1/18/12	1830	1. RECEIVED BY [signature]	1-19-12	1230
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS 2.2°C

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO TtNUS-001

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
02MW13A-20120119	180-7794-A-1	Plastic 500ml - with Nitric Acid	2		
02DUP01-20120119	180-7794-A-2	Plastic 500ml - with Nitric Acid	2		
02SW101-20120119	180-7794-A-3	Plastic 500ml - with Nitric Acid	2		
02SW102-20120119	180-7794-A-4	Plastic 500ml - with Nitric Acid	2		
02FB01-20120119	180-7794-A-5	Plastic 500ml - with Nitric Acid	2		
02RB01-20120119	180-7794-A-6	Plastic 500ml - with Nitric Acid	2		
02MW01C-20120117	180-7794-A-7	Plastic 500ml - with Nitric Acid	2		
02MW01F-20120117	180-7794-A-8	Plastic 500ml - with Nitric Acid	2		
02MW01A-20120118	180-7794-A-9	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10 MS	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10 MSD	Plastic 500ml - with Nitric Acid	2		
02MW13C-20120118	180-7794-A-11	Plastic 500ml - with Nitric Acid	2		

ORIGIN ID: BLUA (916) 373-5600
SHIPPING
TESTAMERICA
880 RIVERSIDE PKWY

WEST SACRAMENTO, CA 95605
UNITED STATES US

SHIP DATE: 26JAN12
ACTWGT: 43.1 LB
CAD: 852262/CAFE2509

BILL RECIPIENT

TO SAMPLE RECEIVING
TAL PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
DEPT: SUB WORK

REF: SEND OUTS

FedEx Express

FRI - 27 JAN A2
PRIORITY OVERNIGHT

TRK# 0201 4895 5399 8636

XH AGCA

15238
PA-US PIT

Login Sample Receipt Checklist

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-1

Login Number: 7794

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

March 5, 2012

TestAmerica Project Number: G2A200474
Contract: N62472-08-D-1001, CTO WE72

Tobrena Skeen
Tetra Tech NUS Inc
Foster Plaza 7, 661 Anderson Drive
Pittsburgh, PA 15220-2745

Dear Ms. Skeen,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on January 20, 2012. These samples are associated with the NWS Earle project.

The TestAmerica Project Number has been revised on this page. This page should replace the original one issued on February 20, 2012.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4362.

Sincerely,

Linda C. Laver
Project Manager

880 Riverside Parkway West Sacramento, CA 95605 **tel** 916.373.5600 **fax** 916.372.1059 **www.testamericainc.com**

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Report# 180-7794-2

Case Narrative

TestAmerica West Sacramento Project Number G2A200474

General Comments

Contract Task Order – N62472-08-D-1001, CTO WE72
Site Name – NWS Earle
Tetra Tech Project Manager – Jennifer Lambert

Manual integrations are performed only when necessary and in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: S-Q-004, including Addendum 1. Detailed information can be found in the Manual Integration Addendum section of this report.

“U” definition: Analyte was not detected and is reported as less than the LOD.

The containers for the metals were forwarded to TestAmerica Pittsburgh for analysis. Please see Report # 180-7794-2 for analytical results and any anomalies that might pertain to the data.

WATER, 6850_DOD Handbook, Perchlorate
Samples: 1, 2, 3, 4, 5, 6
Per method guidelines, a laboratory control sample (LCS) and a synthetic matrix check sample (SMCS) have been analyzed with this analytical batch. Each set of data is reported as an LCS with the following work order numbers assigned:

LCS: MQE631AC
SMCS: MQE631AD

The internal standard (IS) for the beginning level of detection verification (LODV) analyzed on January 28, 2012 is 48%, which is below the 50% acceptance limit. The native compound in the LODV is within acceptance limits. Also, the opening continuing calibration verification (CCV) is within acceptance limits for both the internal standard and native recoveries. Thus, corrective action was to re-analyze sample 3 as it has a concentration that is between the LOQ and the DL.

Sample: 3
The ending blank for the re-analysis of this sample did not have a recovery for the IS. The vial was discovered to be empty. The instrument was re-started on a standard and closed with another ending blank. This closing standard and blank are within acceptance limits and the data is reported.

Case Narrative

TestAmerica West Sacramento Project Number G2A200474

WATER, 8330A, Explosives
Sample: 1, 2, 3, 4, 5, 6
Manual integrations were performed and detailed information can be found in the Manual Integration Addendum section of this report.

CONFIRMATION COLUMN ONLY:
The surrogate recoveries for 3,4-Dinitrotoluene are above the acceptance limits. The recoveries are within limits in the primary column analyses which is the data used for quality control purposes. Additional action is not required.

There are no other anomalies associated with this project.

TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
A2LA (DoD-ELAP)	2928-01	New Mexico	NA
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania*	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas*	T104704399-08-TX
Connecticut	PH-0691	UCMR	CA00044
Florida*	E87570	US Fish & Wildlife	LE148388-0
Georgia	960	USDA Foreign Plant	37-82605
Guam	10-009r	USDA Foreign Soil	P330-09-00055
Hawaii	NA	Utah*	QUAN1
Illinois*	002701	Virginia	178
Kansas*	E-10375	Washington	C581
Louisiana*	01944	West Virginia	9930C, 334
Michigan	9947	Wisconsin	998204680
Nevada	CA44	Wyoming	8TMS-Q
New Jersey*	CA005		

*NELAP accredited. A more detailed parameter list is available upon request. *Updated 5/25/2011*

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Manual Integration Addendum

Manual Integration Record - Method 8330

Instrument : LC11 Lot #: G2A200474

Compound Name	Analysis date:									Analysis date:					Analysis date: 2/1/2012								
	ICAL									CCAL - Prep QC					Samples								
	1	2	3	4	5	6	7	8	ICV	CCV	MB	LCS	LCSD	CCV	MSD	4							
1,3,5-Trinitrobenzene															x								
1,3-Dinitrobenzene															x								
HMX															x								
MNX															x								
Nitrobenzene															x								
RDX															x	x							
Tetryl															x								
2,4,6-Trinitrotoluene																							
2,4-Dinitrotoluene																							
2,6-Dinitrotoluene																							
2-AM-4, 6-DNT																							
2-Nitrotoluene																							
3,5-Dinitroaniline																							
3-Nitrotoluene																							
4-AM-2, 6-DNT																							
4-Nitrotoluene																							
DNX																							
EGDN																							
Nitroglycerin																							
Nitroguanidine																							
PETN																							
Picric Acid																							
TNX																							
3,4-Dinitrotoluene																x							

Sample Summary

TestAmerica West Sacramento Project Number G2A200474

WO#	Sample #	Client Sample ID	Sampling Date	Received Date
MQCM3	1	02MW13A-20120119	1/19/2012 09:25 AM	1/20/2012 09:00 AM
MQCM4	2	02DUP01-20120119	1/19/2012 10:15 AM	1/20/2012 09:00 AM
MQCM5	3	02SW101-20120119	1/19/2012 10:30 AM	1/20/2012 09:00 AM
MQCM6	4	02SW102-20120119	1/19/2012 11:10 AM	1/20/2012 09:00 AM
MQCM7	5	02FB01-20120119	1/19/2012 12:30 PM	1/20/2012 09:00 AM
MQCM8	6	02RB01-20120119	1/19/2012 12:45 PM	1/20/2012 09:00 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

EXECUTIVE SUMMARY - Detection Highlights

G2A200474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02MW13A-20120119 01/19/12 09:25 001				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U Qualifiers: CON	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
02DUP01-20120119 01/19/12 10:15 002				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U Qualifiers: CON	0.10	ug/L	SW846 8330/8330A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

G2A200474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02DUP01-20120119 01/19/12 10:15 002				
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
02SW101-20120119 01/19/12 10:30 003				
Perchlorate	0.20 J	0.50	ug/L	SW846 6850_DOD Ha
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.27	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
	Qualifiers: CON			
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.27	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

G2A200474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02SW102-20120119 01/19/12 11:10 004				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
	Qualifiers: CON			
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
02FB01-20120119 01/19/12 12:30 005				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 J	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
	Qualifiers: CON			

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

G2A200474

PARAMETER	RESULT	LOQ	UNITS	ANALYTICAL METHOD
02FB01-20120119 01/19/12 12:30 005				
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
RDX	0.051 U	0.10	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.054 J	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	SW846 8330/8330A
02RB01-20120119 01/19/12 12:45 006				
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.11 U	0.21	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
RDX	0.053 U	0.11	ug/L	SW846 8330/8330A
MNX	1.1 U	2.1	ug/L	SW846 8330/8330A
TNX	0.16 U	2.1	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.11 U	0.21	ug/L	SW846 8330/8330A
	Qualifiers: CON			
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A
RDX	0.053 U	0.11	ug/L	SW846 8330/8330A
MNX	1.1 U	2.1	ug/L	SW846 8330/8330A
TNX	0.16 U	2.1	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	SW846 8330/8330A

ANALYTICAL METHODS SUMMARY

G2A200474

PARAMETER	ANALYTICAL METHOD
DOD Perchlorate Handbook (6850)	SW846 6850_DOD Handbook
Nitroaromatics and Nitramines by HPLC	SW846 8330/8330A

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

G2A200474

ANALYTICAL METHOD	ANALYST	ANALYST ID
SW846 6850_DOD Handbook	Dennis Gall	033077
SW846 6850_DOD Handbook	Nathan Shafer	000181
SW846 8330/8330A	Robyn Noonan	003024

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

White Water Associates

Client Sample ID: 02MW13A-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-001	Work Order #...:	MQCM31AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02DUP01-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM41AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02SW101-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM51AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 02/09/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.20 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02SW102-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-004	Work Order #...:	MQCM61AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02FB01-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-005	Work Order #...:	MQCM71AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02RB01-20120119

Dissolved HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM81AJ Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1 Method.....: SW846 6850_DOD Ha

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM31AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM32AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	116 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM41AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM42AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	113 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM51AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...:	G2A200474-003	Work Order #...:	MQCM52AK	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.01	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	114 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis

White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...: G2A200474-004 Work Order #...: MQCM61AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...: G2A200474-004 Work Order #...: MQCM62AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	118 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits

CON Confirmation analysis

White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...: G2A200474-005 Work Order #...: MQCM71AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result Result is less than RL.

White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...: G2A200474-005 Work Order #...: MQCM72AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.054 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM81AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	0.11 U	0.21	ug/L	0.11
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM82AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
2-Amino-4,6-dinitrotoluene	0.11 U CON	0.21	ug/L	0.11
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

QC DATA ASSOCIATION SUMMARY

G2A200474

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051
002	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051
003	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051
004	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051
005	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051
006	WG	SW846 8330/8330A		2024017	2024007
	WG	SW846 6850_DOD Ha		2026097	2026051

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AA Matrix.....: WATER
MB Lot-Sample #: G2A260000-097
Prep Date.....: 01/26/12
Analysis Date..: 01/28/12 Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	0.500	0.486	ug/L	97	SW846 6850_DOD H

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	0.500	0.483	ug/L	97	SW846 6850_DOD H

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AU-MS · Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AU-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AA Matrix.....: WATER
MB Lot-Sample #: G2A240000-017

Prep Date.....: 01/24/12
Analysis Date..: 02/01/12 Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	102	(50 - 155)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	100	(55 - 155)	SW846 8330/8330A
1,3-Dinitrobenzene	105	(45 - 160)	SW846 8330/8330A
2,4-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
2,6-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
RDX	114	(50 - 160)	SW846 8330/8330A
1,3,5-Trinitrobenzene	107	(65 - 140)	SW846 8330/8330A
2,4,6-Trinitrotoluene	79	(50 - 145)	SW846 8330/8330A
MNX	105	(70 - 130)	SW846 8330/8330A
TNX	97	(70 - 130)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	1.00	1.02	ug/L	102	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	1.00	1.00	ug/L	100	SW846 8330/8330A
1,3-Dinitrobenzene	1.00	1.05	ug/L	105	SW846 8330/8330A
2,4-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/8330A
2,6-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/8330A
RDX	1.00	1.14	ug/L	114	SW846 8330/8330A
1,3,5-Trinitrobenzene	1.00	1.07	ug/L	107	SW846 8330/8330A
2,4,6-Trinitrotoluene	1.00	0.794	ug/L	79	SW846 8330/8330A
MNX	4.00	4.21	ug/L	105	SW846 8330/8330A
TNX	4.00	3.87	ug/L	97	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	99	(50 - 155)			SW846 8330/8330A
	100	(50 - 155)	1.8	(0-30)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	97	(55 - 155)			SW846 8330/8330A
	99	(55 - 155)	1.8	(0-30)	SW846 8330/8330A
1,3-Dinitrobenzene	104	(45 - 160)			SW846 8330/8330A
	105	(45 - 160)	1.7	(0-30)	SW846 8330/8330A
2,4-Dinitrotoluene	99	(60 - 135)			SW846 8330/8330A
	100	(60 - 135)	1.9	(0-30)	SW846 8330/8330A
2,6-Dinitrotoluene	98	(60 - 135)			SW846 8330/8330A
	99	(60 - 135)	1.6	(0-30)	SW846 8330/8330A
RDX	118	(50 - 160)			SW846 8330/8330A
	121	(50 - 160)	2.8	(0-30)	SW846 8330/8330A
1,3,5-Trinitrobenzene	106	(65 - 140)			SW846 8330/8330A
	109	(65 - 140)	2.6	(0-30)	SW846 8330/8330A
2,4,6-Trinitrotoluene	78	(50 - 145)			SW846 8330/8330A
	79	(50 - 145)	1.6	(0-30)	SW846 8330/8330A
MNX	106	(70 - 130)			SW846 8330/8330A
	105	(70 - 130)	0.68	(0-30)	SW846 8330/8330A
TNX	98	(70 - 130)			SW846 8330/8330A
	94	(70 - 130)	3.0	(0-30)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	0.10 U	1.01	1.00	ug/L	99		SW846 8330/8330A
	0.10 U	1.01	1.02	ug/L	100	1.8	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U	1.01	0.982	ug/L	97		SW846 8330/8330A
	0.051 U	1.01	0.999	ug/L	99	1.8	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	1.01	1.05	ug/L	104		SW846 8330/8330A
	0.051 U	1.01	1.07	ug/L	105	1.7	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	1.01	0.996	ug/L	99		SW846 8330/8330A
	0.051 U	1.01	1.02	ug/L	100	1.9	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	1.01	0.986	ug/L	98		SW846 8330/8330A
	0.051 U	1.01	1.00	ug/L	99	1.6	SW846 8330/8330A
RDX	0.051 U	1.01	1.20	ug/L	118		SW846 8330/8330A
	0.051 U	1.01	1.23	ug/L	121	2.8	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	1.01	1.08	ug/L	106		SW846 8330/8330A
	0.051 U	1.01	1.10	ug/L	109	2.6	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	1.01	0.789	ug/L	78		SW846 8330/8330A
	0.051 U	1.01	0.802	ug/L	79	1.6	SW846 8330/8330A
MNX	1.0 U	4.04	4.28	ug/L	106		SW846 8330/8330A
	1.0 U	4.06	4.25	ug/L	105	0.68	SW846 8330/8330A
TNX	0.15 U	4.04	3.95	ug/L	98		SW846 8330/8330A
	0.15 U	4.06	3.83	ug/L	94	3.0	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Raw Data Package

WATER, 6850_DOD Handbook, Perchlorate

ICV/CCV Summaries and Run Logs

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

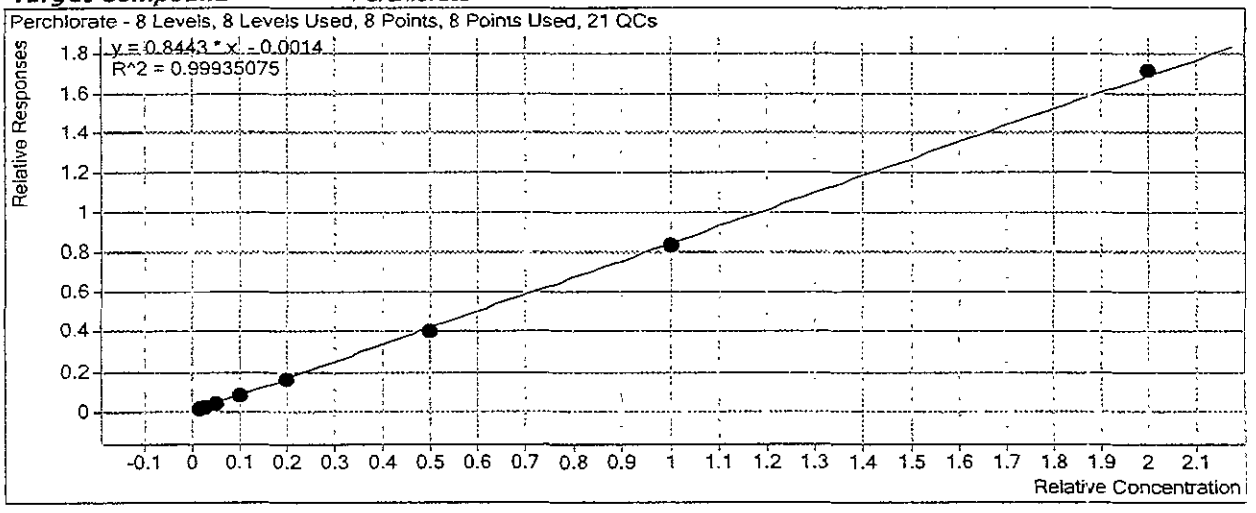
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml		
Analysis Time	1/30/2012 8:39 AM	**Analyst Name**	lores
Report Time	1/30/2012 11:50 AM	**Reporter Name**	lores
Last Calib Update	1/30/2012 8:39 AM	**Batch State**	ResultsDirty

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

mr 2/2/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:38
Analyst	lores
Data File	27JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45'55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

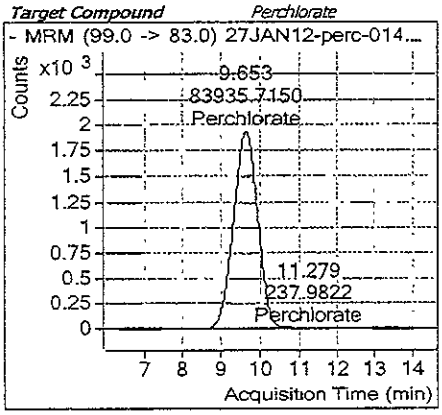
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.653	83936	99	83	5.06371	5.06371	1
Perchlorate-(35Cl18O4)	ISTD	9.639	196970	107	89			1
							1.3 % Deviation	

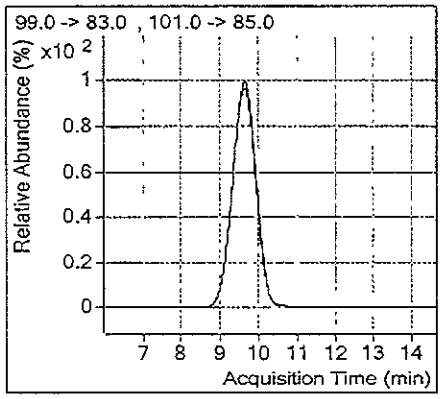
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	27996	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	63293	109	91	3.11	2.30	3.80	In Control

Compound Graphics

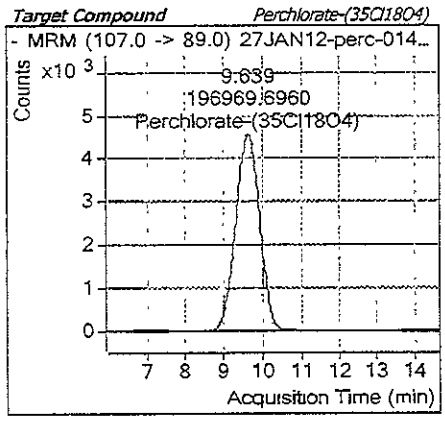
mr 2/2/12

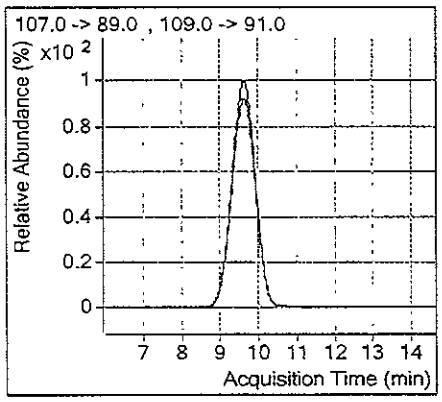
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 02:44
Analyst	lores
Data File	27JAN12-perc-044.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

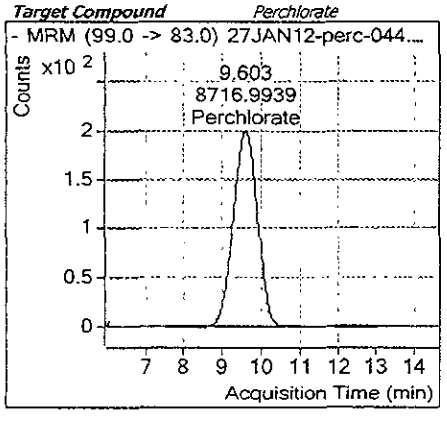
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.603	8717	99	83	0.97742	0.97742	1
Perchlorate-(35Cl18O4)	ISTD	9 608	107420	107	89			1
							-2.3 % Deviation	

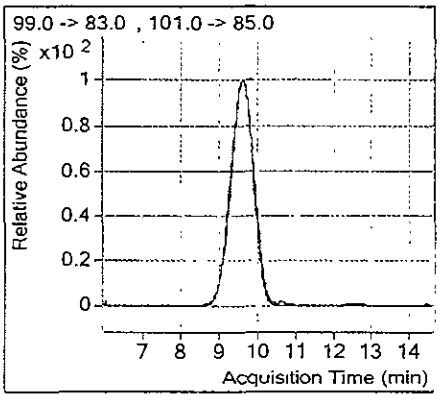
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2873	101	85	3.03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	33636	109	91	3.19	2.30	3.80	In Control

Compound Graphics

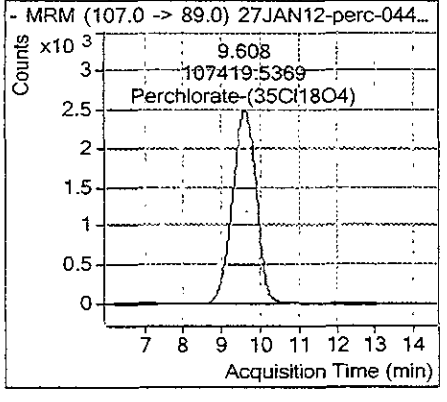
M 2/2/12

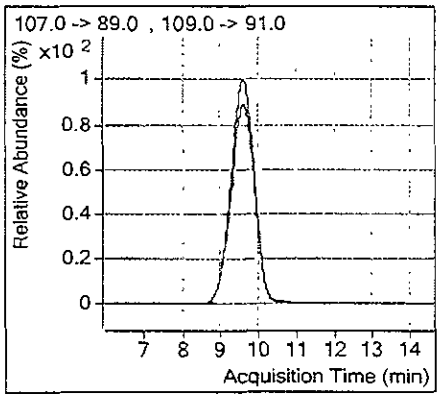
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:00
Analyst	lores
Data File	27JAN12-perc-045.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

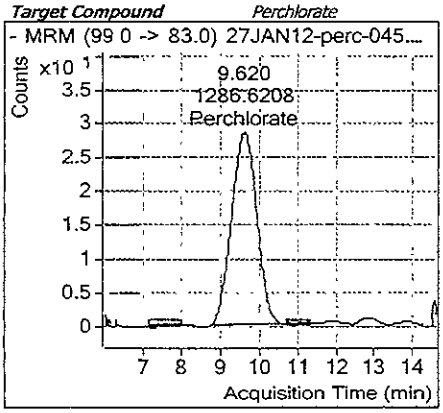
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.620	1287	99	83	0.16412	0.16412	1
Perchlorate-(35Cl18O4)	ISTD	9.617	103051	107	89			1
							9.4 % Deviation	

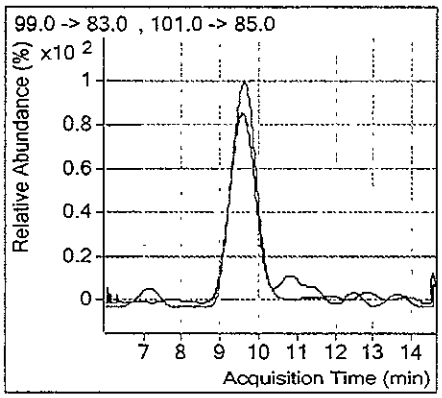
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	438	101	85	2.94	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	32905	109	91	3.13	2.30	3.80	In Control

Compound Graphics

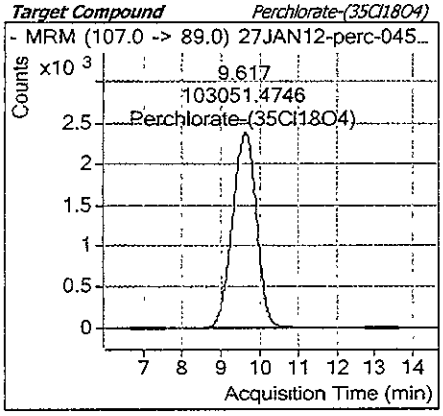
m 2/2/12

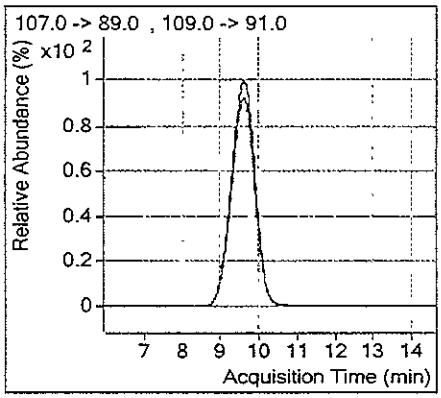
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:17
Analyst	lores
Data File	27JAN12-perc-046.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

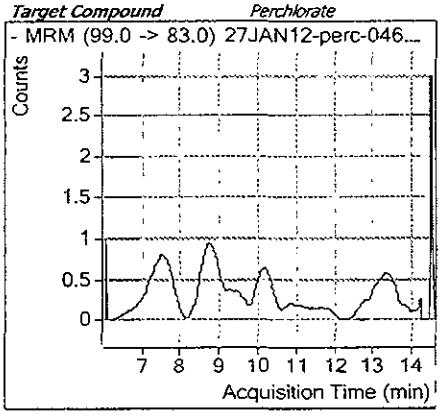
Quantitation Results

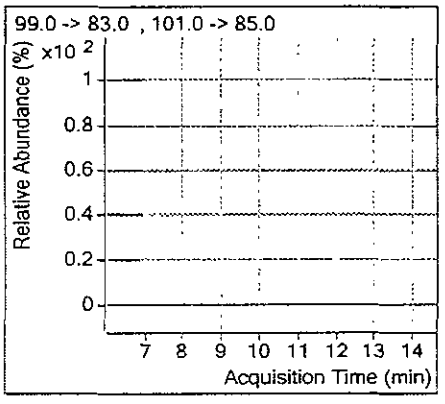
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.616	159119	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	50156	109	91	3.17	2.30	3.80	In Control

Compound Graphics

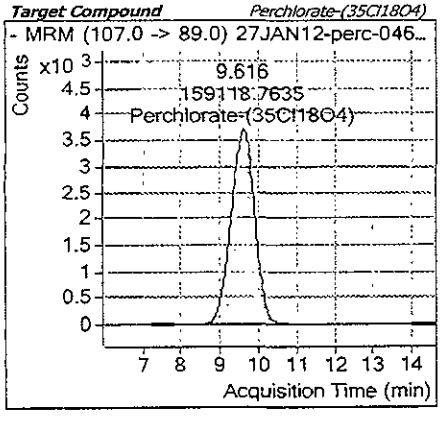
Target Compound *Perchlorate*

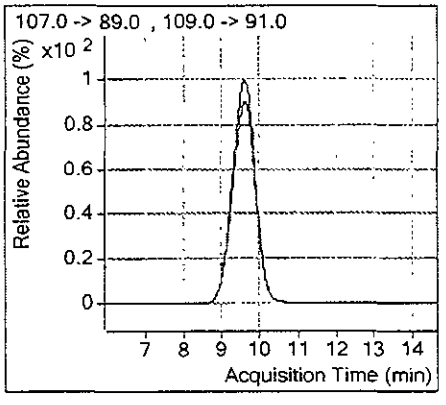




m 2/2/12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:15
Analyst	lores
Data File	27JAN12-perc-057.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 615	27081	99	83	1.82370	1.82370	1
Perchlorate-(35Cl18O4)	ISTD	9 607	177470	107	89			1
							-8.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	9082	101	85	2.98	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	55608	109	91	3.19	2.30	3.80	In Control

Compound Graphics

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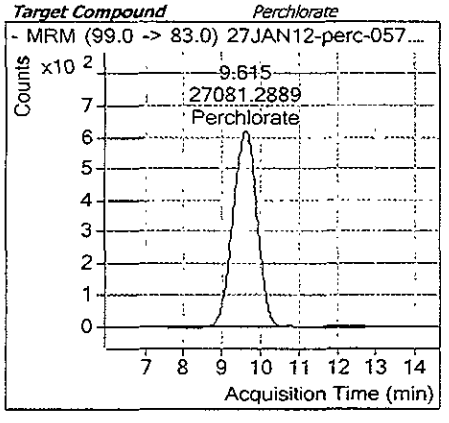
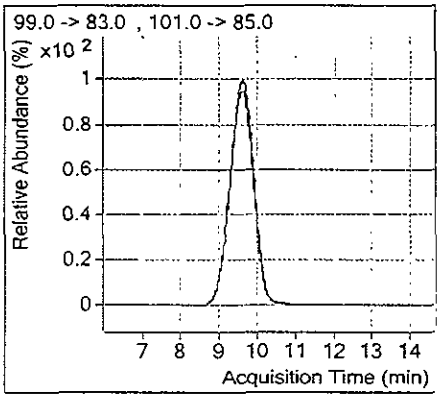
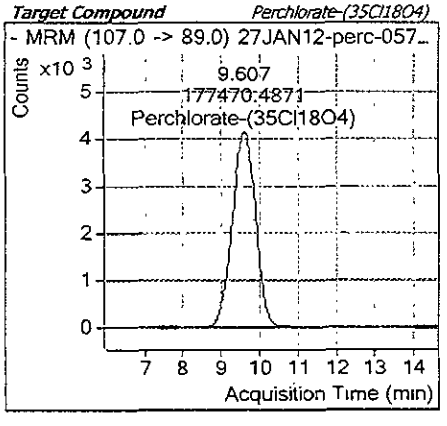
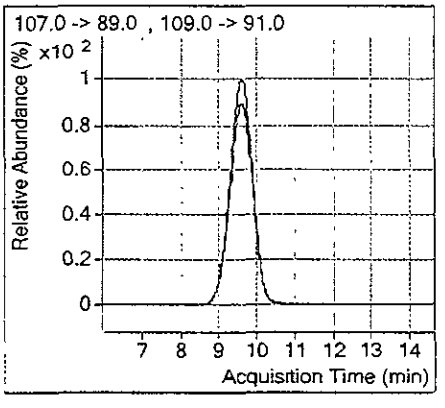
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:31
Analyst	lores
Data File	27JAN12-perc-058.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45'55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

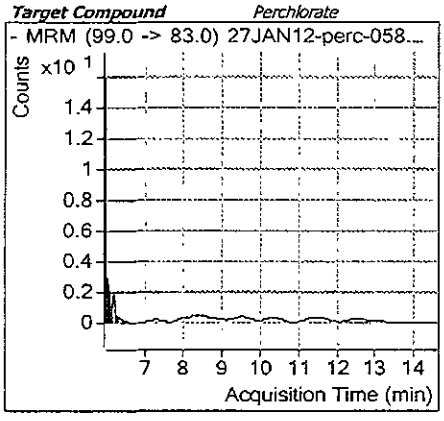
Quantitation Results

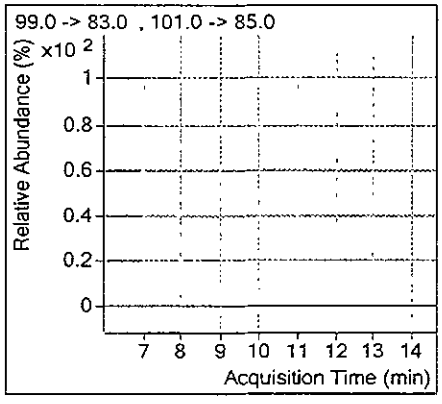
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 608	172615	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53854	109	91	3.21	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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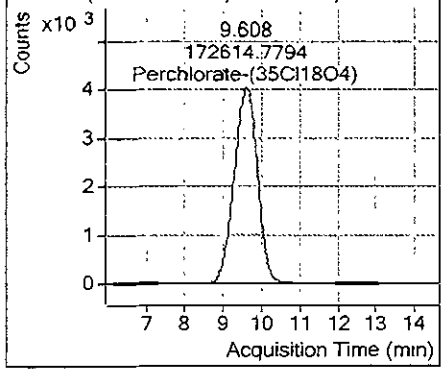
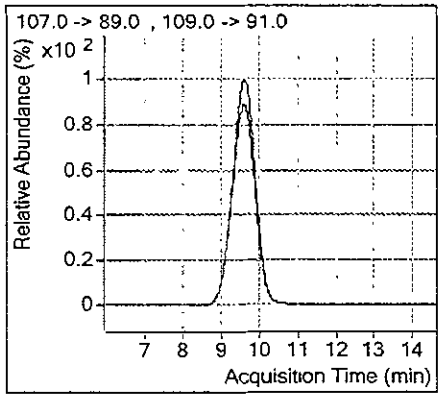
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D.\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:25
Analyst	lores
Data File	27JAN12-perc-065 d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 607	13752	99	83	0.92952	0.92952	1
Perchlorate-(35Cl18O4)	ISTD	9.602	178353	107	89			1
							-7.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4832	101	85	2.85	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55704	109	91	3 20	2.30	3.80	In Control

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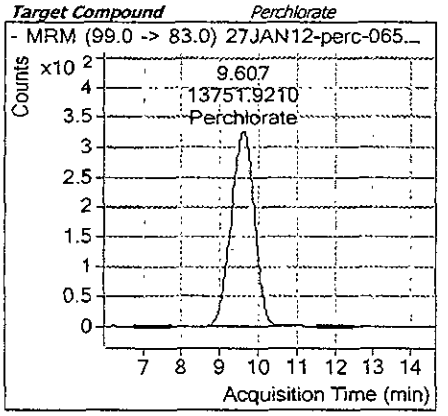
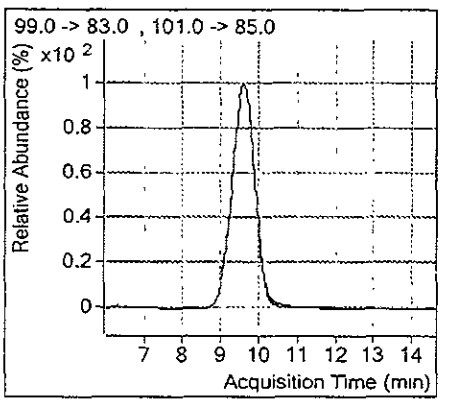
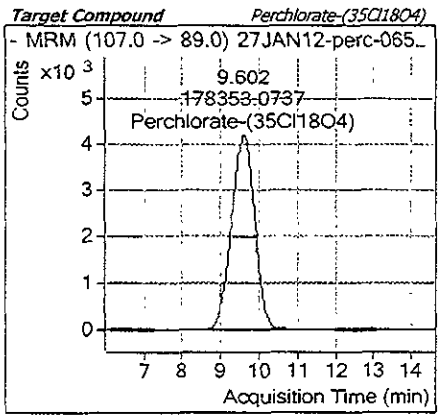
Compound Graphics

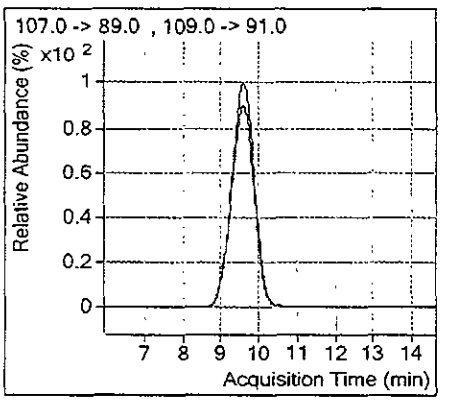
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:41
Analyst	lores
Data File	27JAN12-perc-066 d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 595	2043	99	83	0.15376	0.15376	1
Perchlorate-(35Cl18O4)	ISTD	9.603	175950	107	89			1
							2.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	786	101	85	2.60	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	54998	109	91	3.20	2.30	3 80	In Control

Compound Graphics

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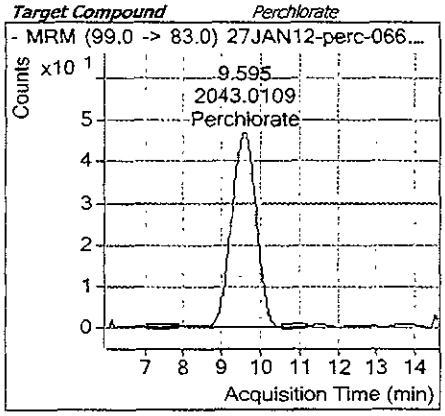
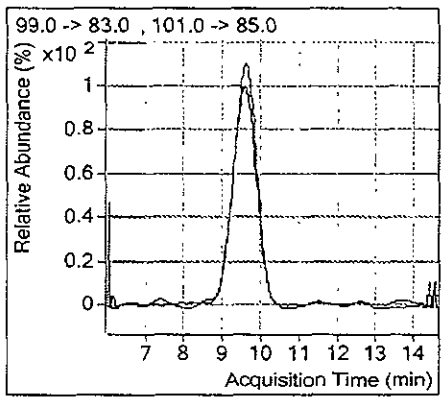
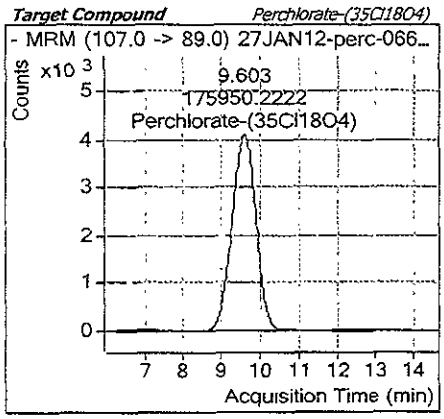
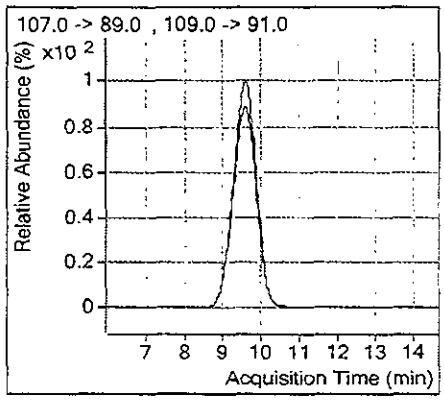
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:57
Analyst	lores
Data File	27JAN12-perc-067.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

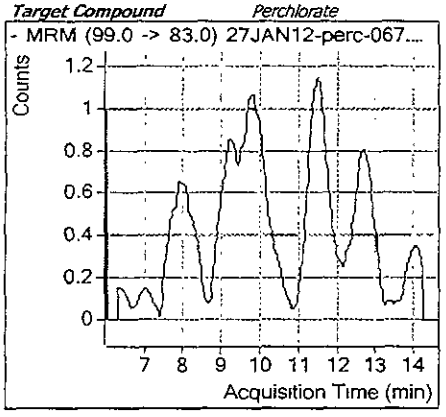
Quantitation Results

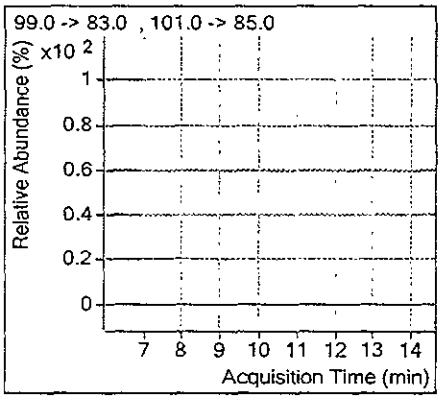
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.602	173900	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54242	109	91	3.21	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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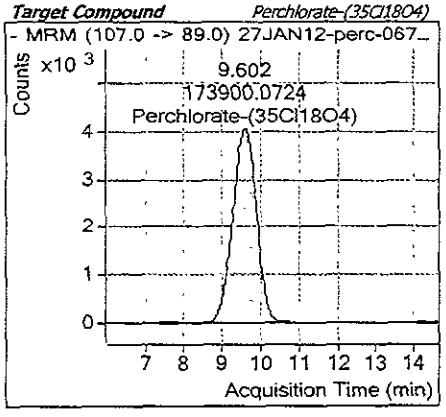
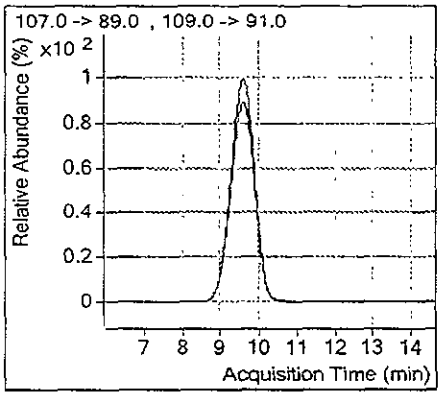
Target Compound *Perchlorate-(35Cl18O4)*





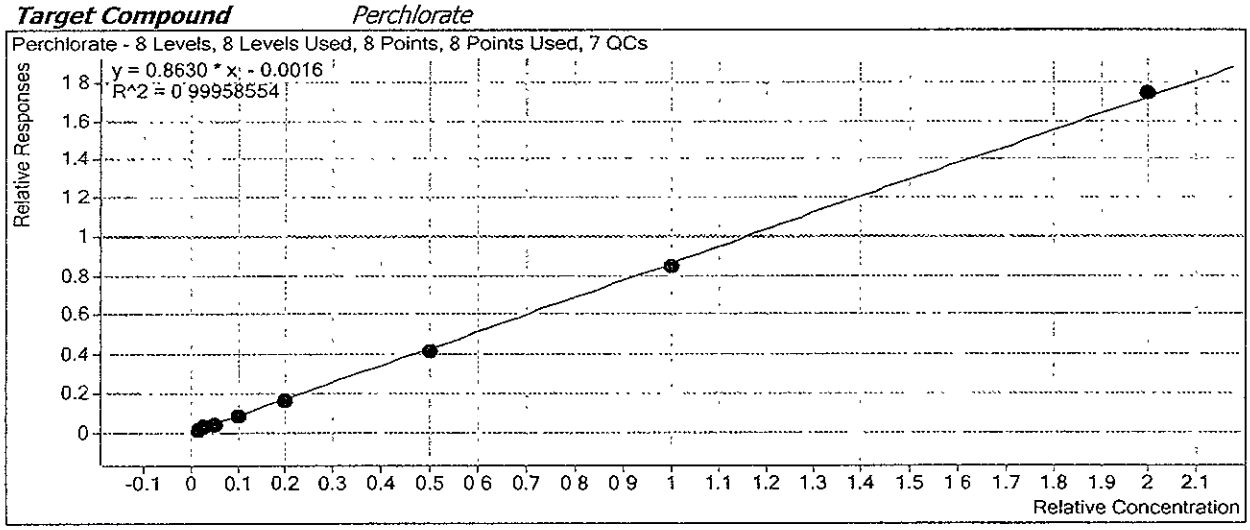
TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml		
Analysis Time	2/9/2012 8:16 PM	**Analyst Name**	lores
Report Time	2/9/2012 8:17 PM	**Reporter Name**	lores
Last Calib Update	2/9/2012 8:16 PM	**Batch State**	Processed

Calibration Info **Linear Fit, 1/x weighting, and origin ignored.**

Target Compound *Perchlorate*



DEG 2-9-2012

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:03
Analyst	lores
Data File	09FEB12-perc-014 d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

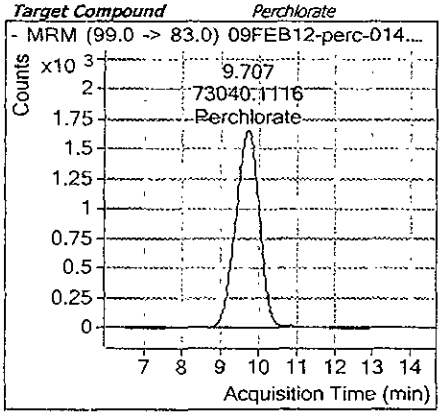
Quantitation Results

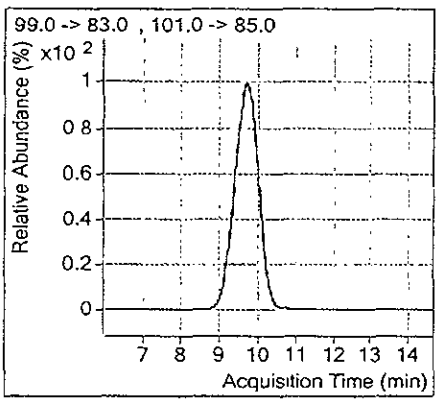
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.707	73040	99	83	4.95006	4.95006	1
Perchlorate-(35Cl18O4)	ISTD	9.705	171605	107	89			1
							-1.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24318	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53400	109	91	3.21	2.30	3.80	In Control

Compound Graphics

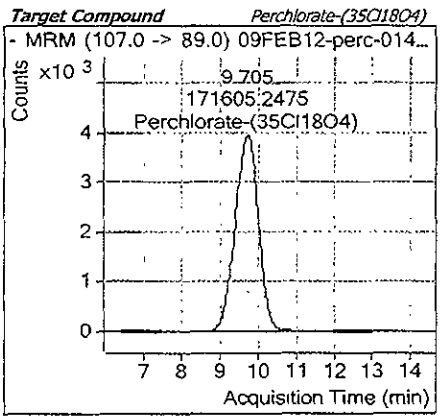
Target Compound *Perchlorate*

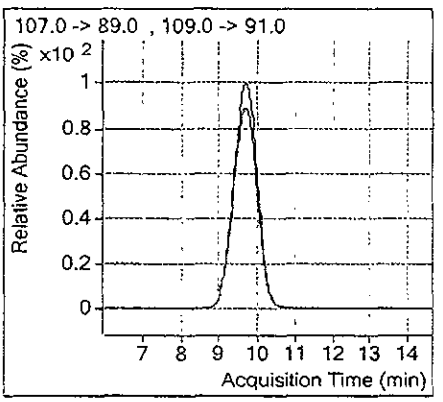




ICV in control
DR 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:20
Analyst	lores
Data File	09FEB12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

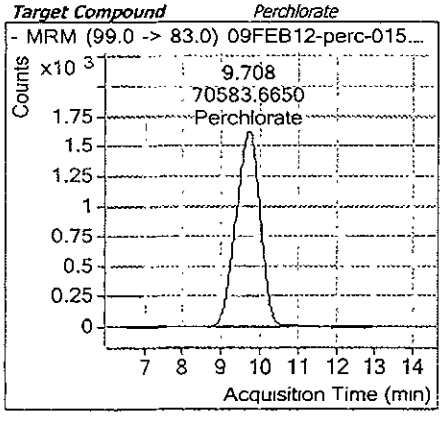
Quantitation Results

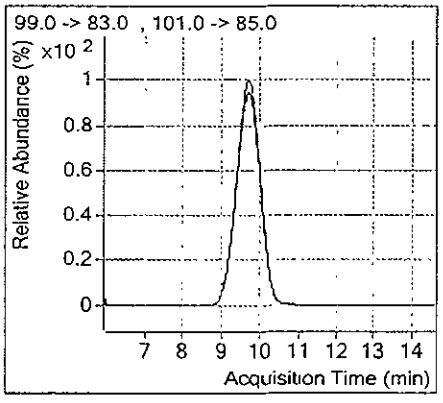
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.708	70584	99	83	4.82348	4.82348	1
Perchlorate-(35Cl18O4)	ISTD	9.698	170202	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23649	101	85	2.98	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55409	109	91	3.07	2.30	3.80	In Control

Compound Graphics

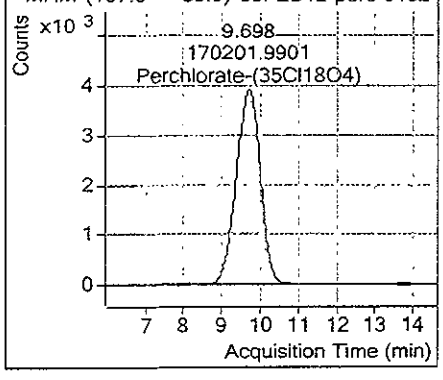
Target Compound *Perchlorate*

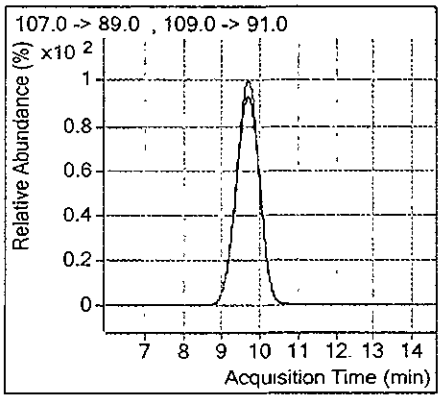




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:36
Analyst	lores
Data File	09FEB12-perc-016.d
Acquisition Method	PercMRM_2 m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

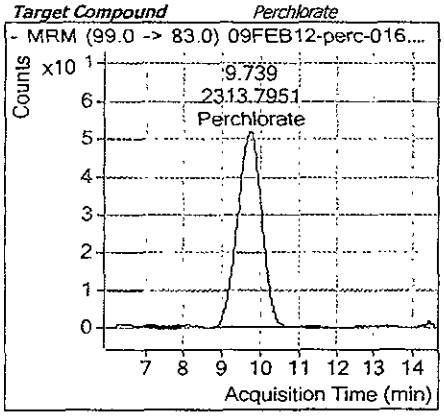
Quantitation Results

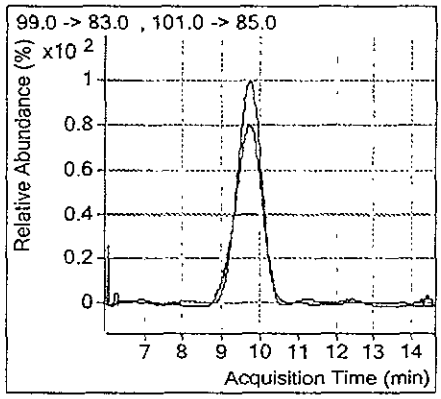
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 739	2314	99	83	0.17082	0.17082	1
Perchlorate-(35Cl18O4)	ISTD	9.704	175607	107	89			1
							13.9 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	699	101	85	3.31	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56496	109	91	3.11	2 30	3.80	In Control

Compound Graphics

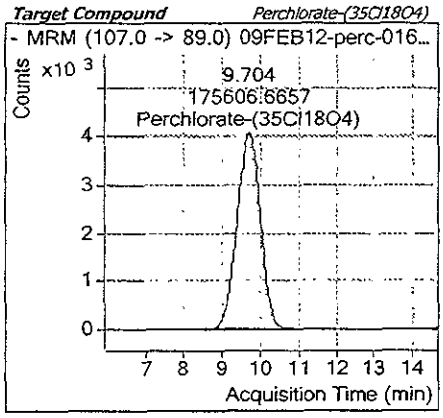
Target Compound *Perchlorate*

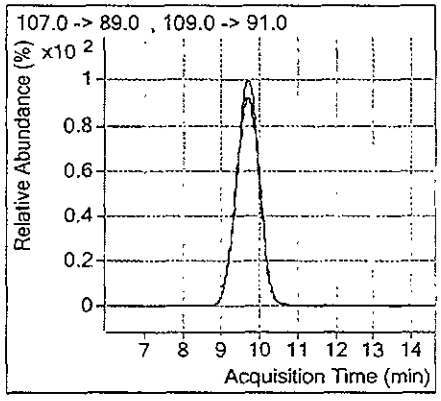




DEH 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:57
Analyst	lores
Data File	09FEB12-perc-021 d
Acquisition Method	PercMRM_2 m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

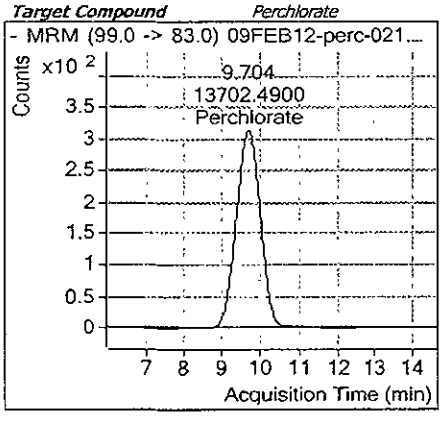
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.704	13702	99	83	0.95018	0.95018	1
Perchlorate-(35Cl18O4)	ISTD	9.708	170354	107	89			1
							-5.0 % Deviation	

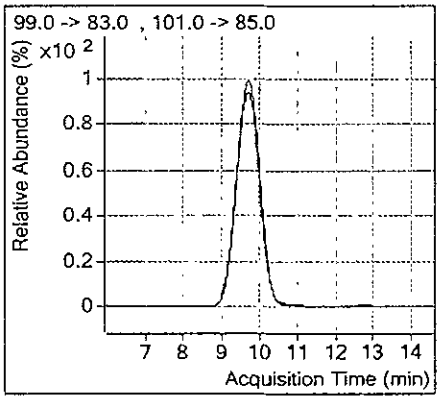
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4477	101	85	3.06	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	53905	109	91	3.16	2.30	3.80	In Control

Compound Graphics

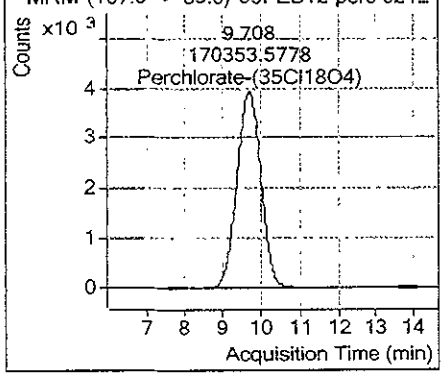
DEL 2-9-12

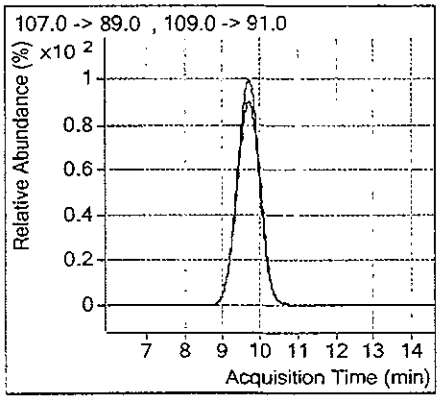
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 14:13
Analyst	lores
Data File	09FEB12-perc-022.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

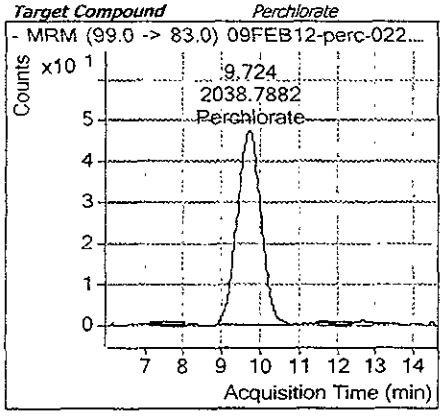
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.724	2039	99	83	0.15800	0.15800	1
Perchlorate-(35Cl18O4)	ISTD	9 713	168912	107	89			1
							5.3 % Deviation	

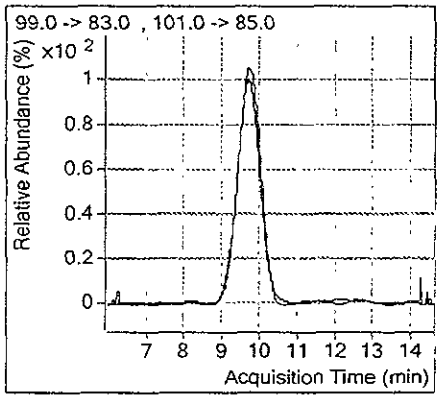
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	756	101	85	2 70	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53870	109	91	3.14	2.30	3.80	In Control

Compound Graphics

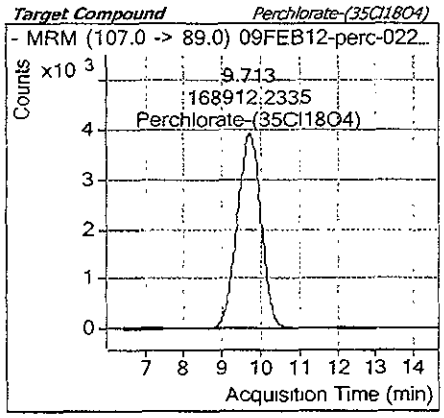
DEL 2-9-12

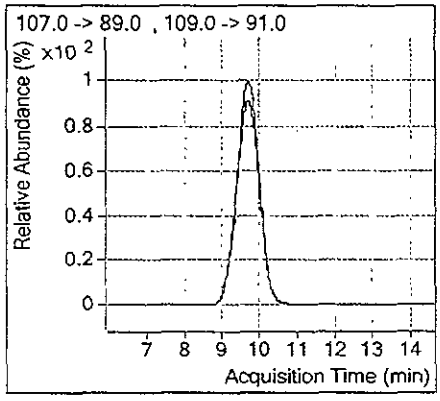
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

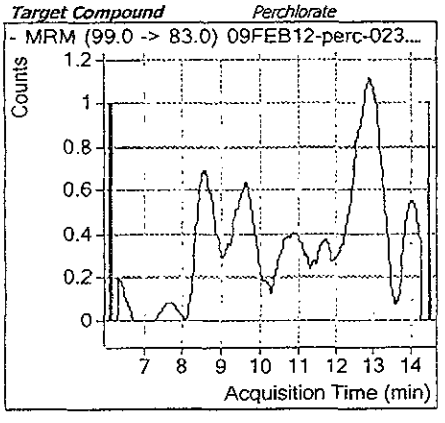
Analysis Information

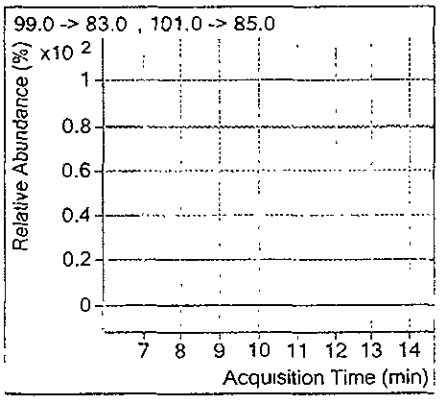
Acquisition Date - Time	2/9/2012 14:29
Analyst	lores
Data File	09FEB12-perc-023.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

No IS recovery - vial was emptied, see RI VGL 2-9-12

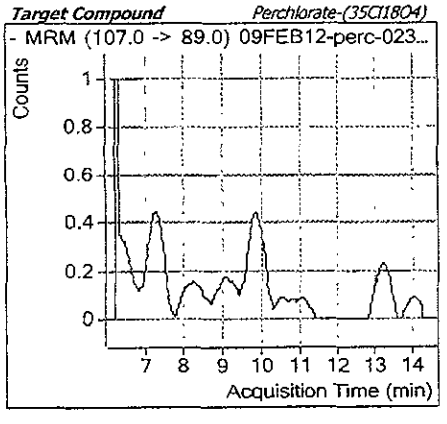
Compound Graphics

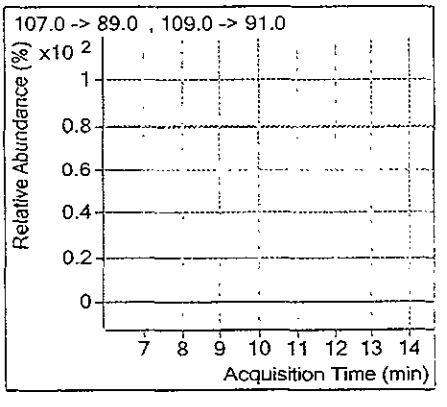
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:15
Analyst	lores
Data File	09FEB12-perc-024.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1 00
Injection Volume	50

System re-started on standard DSH 2-9-12

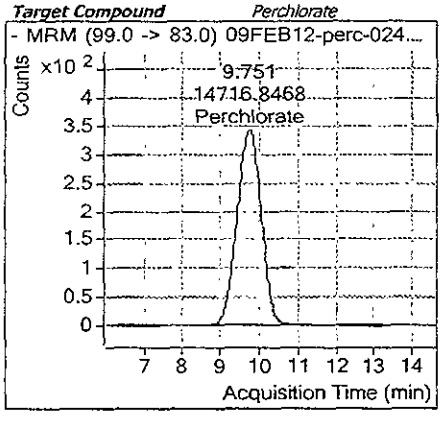
Quantitation Results

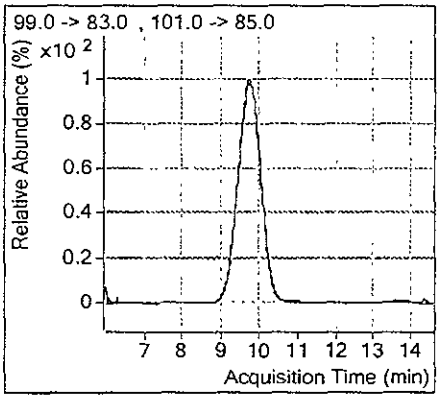
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.751	14717	99	83	0.94154	0.94154	1
Perchlorate-(35Cl18O4)	ISTD	9.754	184677	107	89			1
							-5.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5184	101	85	2 84	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	59614	109	91	3 10	2.30	3.80	In Control

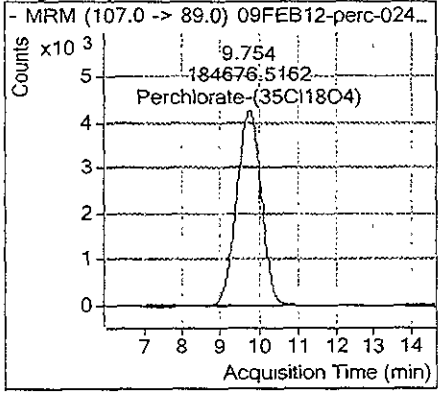
Compound Graphics

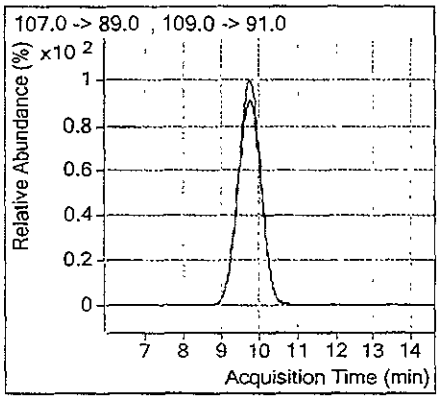
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:31
Analyst	lores
Data File	09FEB12-perc-025.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

Blank + IS in control. Dd 2-9-12

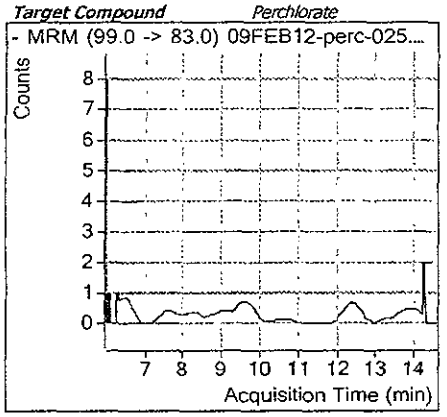
Quantitation Results

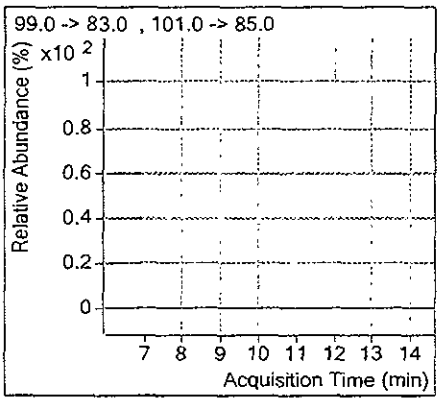
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.754	179947	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56904	109	91	3.16	2.30	3.80	In Control

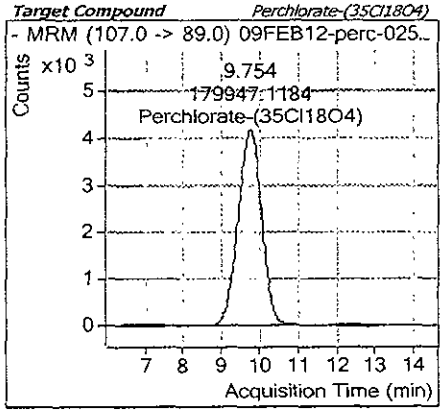
Compound Graphics

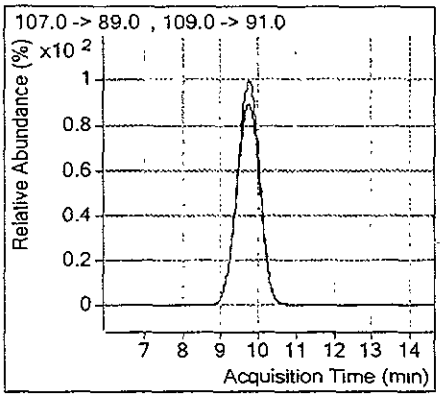
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 2025195, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + IS	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	MS_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate	Sample				
27JAN12-perc-004.d	Perchlorate	Sample				
27JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2801	109.9	
27JAN12-perc-006.d	Perchlorate	Calibration	0.3000	5404	102.3	
27JAN12-perc-007.d	Perchlorate	Calibration	0.5000	9177	99.0	
27JAN12-perc-008.d	Perchlorate	Calibration	1.0000	17438	96.2	
27JAN12-perc-009.d	Perchlorate	Calibration	2.0000	34849	95.2	
27JAN12-perc-010.d	Perchlorate	Calibration	5.0000	87739	96.3	
27JAN12-perc-011.d	Perchlorate	Calibration	10.0000	171805	99.3	
27JAN12-perc-012.d	Perchlorate	Calibration	20.0000	306806	101.9	
27JAN12-perc-013.d	Perchlorate	Sample				
27JAN12-perc-014.d	Perchlorate	QC	5.0000	83936	101.3	
27JAN12-perc-015.d	Perchlorate	QC	5.0000	80689	97.6	
27JAN12-perc-016.d	Perchlorate	QC	0.1500	2565	106.0	
27JAN12-perc-017.d	Perchlorate	Sample				
27JAN12-perc-018.d	Perchlorate	QC	5.0000	23240	29.5	
27JAN12-perc-019.d	Perchlorate	QC	5.0000	22371	30.5	
27JAN12-perc-020.d	Perchlorate	Sample		14534		
27JAN12-perc-021.d	Perchlorate	Sample		34033		
27JAN12-perc-022.d	Perchlorate	Sample		32681		
27JAN12-perc-023.d	Perchlorate	Sample		16035		
27JAN12-perc-024.d	Perchlorate	Sample		15853		
27JAN12-perc-025.d	Perchlorate	Sample		14618		
27JAN12-perc-026.d	Perchlorate	QC	1.0000	14647	96.0	
27JAN12-perc-027.d	Perchlorate	Sample				
27JAN12-perc-028.d	Perchlorate	Sample		3998		

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	Perchlorate	Sample		2751	
27JAN12-perc-030.d	Perchlorate	Sample		6938	
27JAN12-perc-031.d	Perchlorate	Sample		6710	
27JAN12-perc-032.d	Perchlorate	Sample		742	
27JAN12-perc-033.d	Perchlorate	Sample		563	
27JAN12-perc-034.d	Perchlorate	QC	2.0000	27816	94.6
27JAN12-perc-035.d	Perchlorate	QC	0.1500	1981	106.2
27JAN12-perc-036.d	Perchlorate	Sample			
27JAN12-perc-037.d	Perchlorate	Sample			
27JAN12-perc-038.d	Perchlorate	QC	0.5000	7080	100.6
27JAN12-perc-039.d	Perchlorate	QC	0.5000	7079	96.1
27JAN12-perc-040.d	Perchlorate	Sample		196240	
27JAN12-perc-041.d	Perchlorate	Sample		11609	
27JAN12-perc-042.d	Perchlorate	QC	0.5000	18064	250.4
27JAN12-perc-043.d	Perchlorate	QC	0.5000	17693	256.4
27JAN12-perc-044.d	Perchlorate	QC	1.0000	8717	97.7
27JAN12-perc-045.d	Perchlorate	QC	0.1500	1287	109.4
27JAN12-perc-046.d	Perchlorate	Sample			
27JAN12-perc-047.d	Perchlorate	Sample			
27JAN12-perc-048.d	Perchlorate	QC	0.5000	7006	97.1
27JAN12-perc-049.d	Perchlorate	QC	0.5000	6922	96.5
27JAN12-perc-050.d	Perchlorate	Sample		276	
27JAN12-perc-051.d	Perchlorate	Sample		1203	
27JAN12-perc-052.d	Perchlorate	Sample		1180	
27JAN12-perc-053.d	Perchlorate	Sample			
27JAN12-perc-054.d	Perchlorate	QC	0.5000	6724	92.1
27JAN12-perc-055.d	Perchlorate	QC	0.5000	6720	95.2
27JAN12-perc-056.d	Perchlorate	Sample		154	
27JAN12-perc-057.d	Perchlorate	QC	2.0000	27081	91.2

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Perchlorate	Sample			
27JAN12-perc-059.d	Perchlorate	Sample			
27JAN12-perc-060.d	Perchlorate	Sample			
27JAN12-perc-061.d	Perchlorate	Sample		2937	
27JAN12-perc-062.d	Perchlorate	Sample			
27JAN12-perc-063.d	Perchlorate	Sample			
27JAN12-perc-064.d	Perchlorate	Sample			
27JAN12-perc-065.d	Perchlorate	QC	1.0000	13752	93.0
27JAN12-perc-066.d	Perchlorate	QC	0.1500	2043	102.5
27JAN12-perc-067.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
27JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		211488		
27JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	223283		
27JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	220220		
27JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	227031		
27JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218398		
27JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218746		
27JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	216575		
27JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	205344		
27JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178484	213510.2	Averge ICAL IS area response
27JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		215378	0.9	% Dev from average
27JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	196970	-7.7	
27JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	196515	-8.0	
27JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	212887	-0.3	
27JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		195538	-8.4	
27JAN12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	188710	-11.6	
27JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	175846	-17.6	
27JAN12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		153808	-28.0	
27JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		143338	-32.9	
27JAN12-perc-022.d	Perchlorate-(35Cl18O4)	Sample		145700	-31.8	
27JAN12-perc-023.d	Perchlorate-(35Cl18O4)	Sample		149523	-30.0	
27JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		138647	-35.1	
27JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		139526	-34.7	
27JAN12-perc-026.d	Perchlorate-(35Cl18O4)	QC	10.0000	183855	-13.9	
27JAN12-perc-027.d	Perchlorate-(35Cl18O4)	Sample		176320	-17.4	
27JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		163374	-23.5	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		164633	-22.9
27JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		145400	-31.9
27JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		152782	-28.4
27JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		124945	-41.5
27JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		126496	-40.8
27JAN12-perc-034.d	Perchlorate-(35Cl18O4)	QC	10.0000	175657	-17.7
27JAN12-perc-035.d	Perchlorate-(35Cl18O4)	QC	10.0000	164057	-23.2
27JAN12-perc-036.d	Perchlorate-(35Cl18O4)	Sample		182675	-14.4
27JAN12-perc-037.d	Perchlorate-(35Cl18O4)	Sample		173391	-18.8
27JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	172284	-19.3
27JAN12-perc-039.d	Perchlorate-(35Cl18O4)	QC	10.0000	180536	-15.4
27JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		156395	-26.8
27JAN12-perc-041.d	Perchlorate-(35Cl18O4)	Sample		178444	-16.4
27JAN12-perc-042.d	Perchlorate-(35Cl18O4)	QC	10.0000	173173	-18.9
27JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	165599	-22.4
27JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	107420	-49.7
27JAN12-perc-045.d	Perchlorate-(35Cl18O4)	QC	10.0000	103051	-51.7
27JAN12-perc-046.d	Perchlorate-(35Cl18O4)	Sample		159119	-25.5
27JAN12-perc-047.d	Perchlorate-(35Cl18O4)	Sample		178313	-16.5
27JAN12-perc-048.d	Perchlorate-(35Cl18O4)	QC	10.0000	176810	-17.2
27JAN12-perc-049.d	Perchlorate-(35Cl18O4)	QC	10.0000	175833	-17.6
27JAN12-perc-050.d	Perchlorate-(35Cl18O4)	Sample		183614	-14.0
27JAN12-perc-051.d	Perchlorate-(35Cl18O4)	Sample		174824	-18.1
27JAN12-perc-052.d	Perchlorate-(35Cl18O4)	Sample		184680	-13.5
27JAN12-perc-053.d	Perchlorate-(35Cl18O4)	Sample		178081	-16.6
27JAN12-perc-054.d	Perchlorate-(35Cl18O4)	QC	10.0000	179192	-16.1
27JAN12-perc-055.d	Perchlorate-(35Cl18O4)	QC	10.0000	173155	-18.9
27JAN12-perc-056.d	Perchlorate-(35Cl18O4)	Sample		184409	-13.6
27JAN12-perc-057.d	Perchlorate-(35Cl18O4)	QC	10.0000	177470	-16.9

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Perchlorate-(35Cl18O4)	Sample		172615	-19.2
27JAN12-perc-059.d	Perchlorate-(35Cl18O4)	Sample		172828	-19.1
27JAN12-perc-060.d	Perchlorate-(35Cl18O4)	Sample		176299	-17.4
27JAN12-perc-061.d	Perchlorate-(35Cl18O4)	Sample		172234	-19.3
27JAN12-perc-062.d	Perchlorate-(35Cl18O4)	Sample		174129	-18.4
27JAN12-perc-063.d	Perchlorate-(35Cl18O4)	Sample		174800	-18.1
27JAN12-perc-064.d	Perchlorate-(35Cl18O4)	Sample		175962	-17.6
27JAN12-perc-065.d	Perchlorate-(35Cl18O4)	QC	10.0000	178353	-16.5
27JAN12-perc-066.d	Perchlorate-(35Cl18O4)	QC	10.0000	175950	-17.6
27JAN12-perc-067.d	Perchlorate-(35Cl18O4)	Sample		173900	-18.6

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy
09FEB12-perc-003.d	Perchlorate	Sample			
09FEB12-perc-004.d	Perchlorate	Sample			
09FEB12-perc-005.d	Perchlorate	Calibration	0.1500	1994	98.5
09FEB12-perc-006.d	Perchlorate	Calibration	0.3000	4939	110.2
09FEB12-perc-007.d	Perchlorate	Calibration	0.5000	7366	99.0
09FEB12-perc-008.d	Perchlorate	Calibration	1.0000	14708	97.7
09FEB12-perc-009.d	Perchlorate	Calibration	2.0000	29275	96.8
09FEB12-perc-010.d	Perchlorate	Calibration	5.0000	72149	97.4
09FEB12-perc-011.d	Perchlorate	Calibration	10.0000	142220	99.0
09FEB12-perc-012.d	Perchlorate	Calibration	20.0000	267911	101.4
09FEB12-perc-013.d	Perchlorate	Sample			
09FEB12-perc-014.d	Perchlorate	QC	5.0000	73040	99.0
09FEB12-perc-015.d	Perchlorate	QC	5.0000	70584	96.5
09FEB12-perc-016.d	Perchlorate	QC	0.1500	2314	113.9
09FEB12-perc-017.d	Perchlorate	Sample			
09FEB12-perc-018.d	Perchlorate	QC	0.5000	6429	93.2
09FEB12-perc-019.d	Perchlorate	Sample		1270	
09FEB12-perc-020.d	Perchlorate	Sample		2732	
09FEB12-perc-021.d	Perchlorate	QC	1.0000	13702	95.0
09FEB12-perc-022.d	Perchlorate	QC	0.1500	2039	105.3
09FEB12-perc-023.d	Perchlorate	Sample			
09FEB12-perc-024.d	Perchlorate	QC	1.0000	14717	94.2
09FEB12-perc-025.d	Perchlorate	Sample			

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response		
09FEB12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
09FEB12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		178134		
09FEB12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178318		
09FEB12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	183239		
09FEB12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	179006		
09FEB12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	177774		
09FEB12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	176957		
09FEB12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	172263		
09FEB12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	166692		
09FEB12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	153143	173423.8	Average ICAL IS area response
09FEB12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		175351	1.1	% Deviation from ICAL IS average
09FEB12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	171605	-1.0	
09FEB12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	170202	-1.9	
09FEB12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	175607	1.3	
09FEB12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		170093	-1.9	
09FEB12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	166351	-4.1	
09FEB12-perc-019.d	Perchlorate-(35Cl18O4)	Sample		179135	3.3	
09FEB12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		175345	1.1	
09FEB12-perc-021.d	Perchlorate-(35Cl18O4)	QC	10.0000	170354	-1.8	
09FEB12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	168912	-2.6	
09FEB12-perc-023.d	Perchlorate-(35Cl18O4)	Sample			-100.0	(vial was emptied)
09FEB12-perc-024.d	Perchlorate-(35Cl18O4)	QC	10.0000	184677	6.5	
09FEB12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		179947	3.8	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

QC Summary

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	0.500	0.486	ug/L	97	SW846 6850_DO

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AC Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AD **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.483**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AD **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**97**	**(80 - 120)**	**SW846 6850_DOD Handb**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 2025195, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + IS	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	MS_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Sample Data

White Water Associates

Client Sample ID: 02MW13A-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-001	Work Order #...:	MQCM31AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:47
Analyst	lores
Data File	27JAN12-perc-059 d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-1, 2026097, 20mL/20mL,
Sample Identification	MQCM31AJ
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D7
Exp. Concentration	
Injection Volume	50

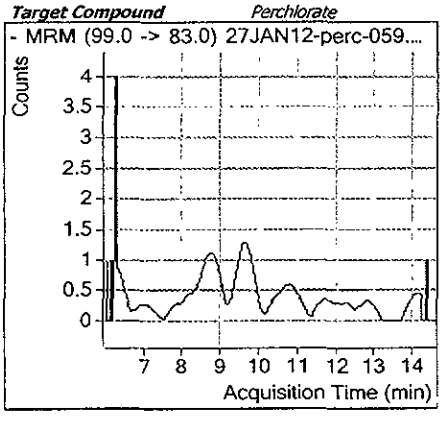
Quantitation Results

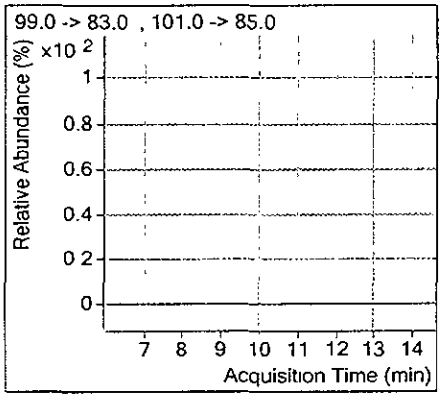
Name	Type	RT	Area	Precursor	Product		Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 601	172828	107	89				1
								Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53780	109	91	3.21	2.30	3.80	*In Control*

Compound Graphics

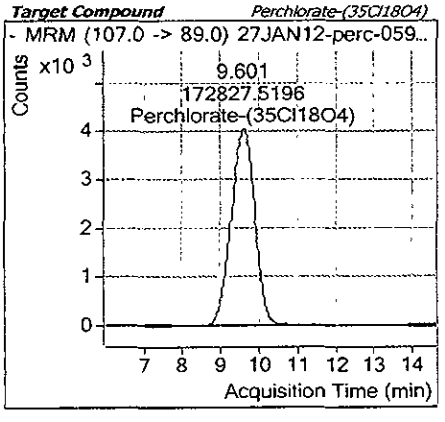
Target Compound *Perchlorate*

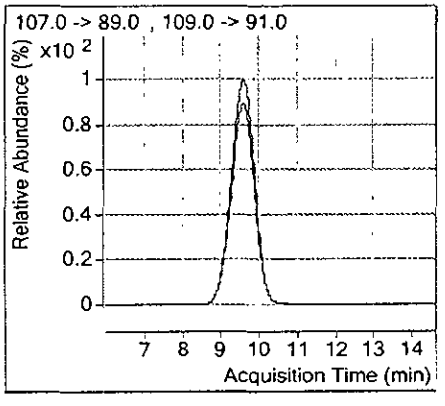




MR 2/8/12

Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02DUP01-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-002	Work Order #...:	MQCM41AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 07:04
Analyst	lores
Data File	27JAN12-perc-060 d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-2, 2026097, 20mL/20mL,
Sample Identification	MQCM41AJ
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D8
Exp. Concentration	
Injection Volume	50

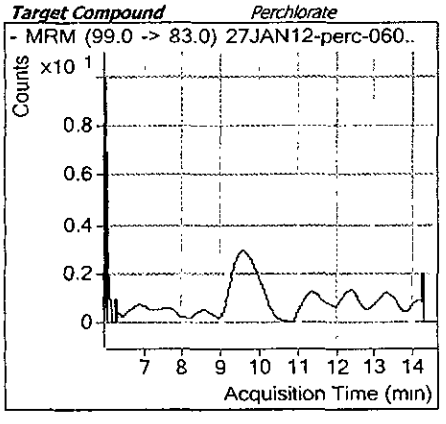
Quantitation Results

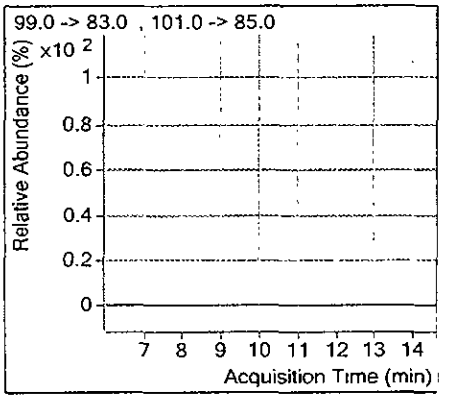
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.599	176299	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	55816	109	91	3.16	2 30	3.80	In Control

Compound Graphics

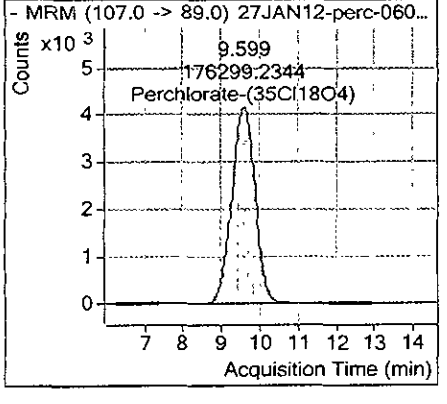
Target Compound *Perchlorate*

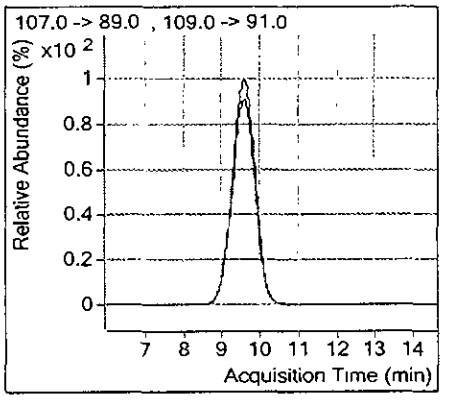




mr 2/8/12

Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02SW101-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-003	Work Order #...:	MQCM51AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	02/09/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.20 J	0.50	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:41
Analyst	lores
Data File	09FEB12-perc-020 d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-3, 2026097, 20mL/20mL, RI
Sample Identification	MQCM51AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-D9
Exp. Concentration	
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 706	2732	99	83	0.19866	0.19866	1
Perchlorate-(35Cl18O4)	ISTD	9 705	175345	107	89			1

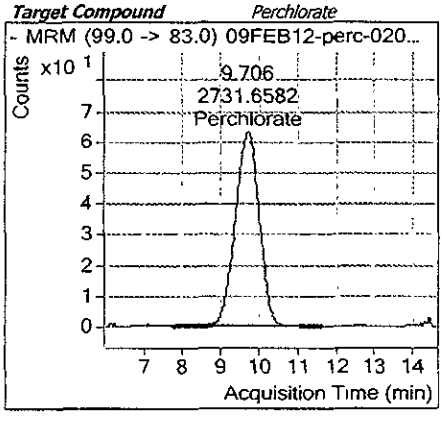
Result is J-Flag ✓

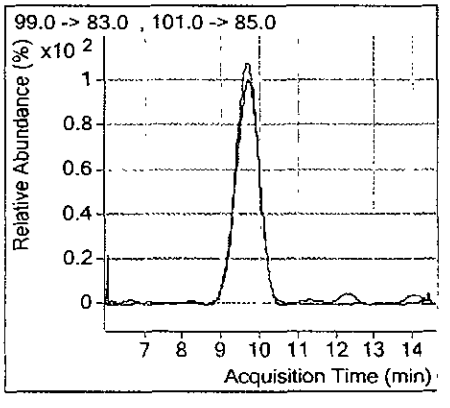
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	1013	101	85	2 70	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	55347	109	91	3.17	2.30	3 80	In Control

Compound Graphics

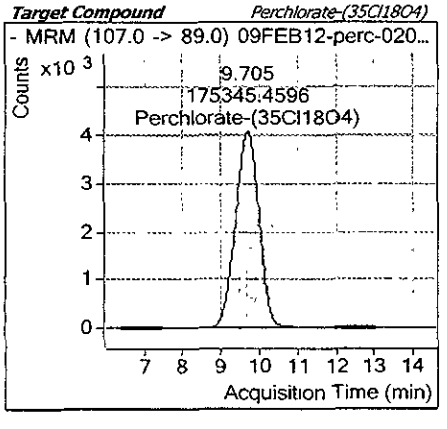
DEL 2-9-2012

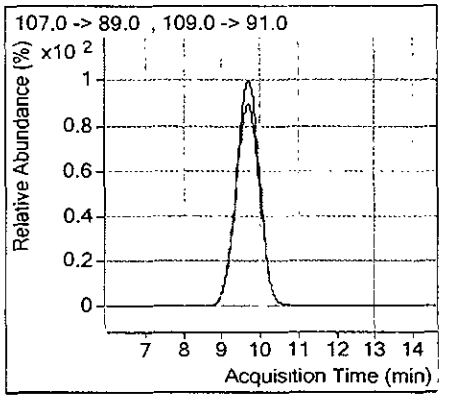
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02SW102-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-004	Work Order #...:	MQCM61AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 07:36
Analyst	lores
Data File	27JAN12-perc-062.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-4, 2026097, 20mL/20mL,
Sample Identification	MQCM61AJ
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-E1
Exp. Concentration	
Injection Volume	50

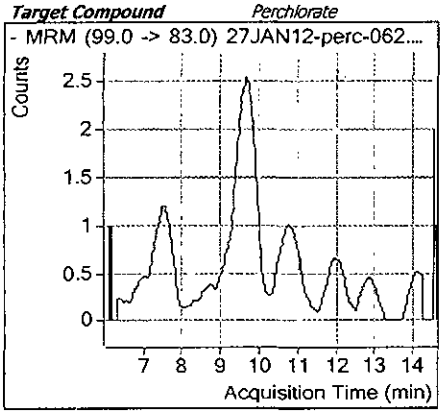
Quantitation Results

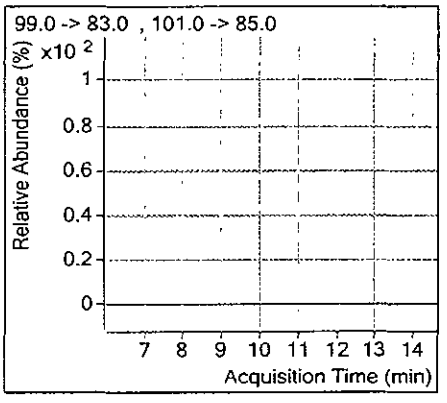
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.599	174129	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53304	109	91	3.27	2.30	3 80	In Control

Compound Graphics

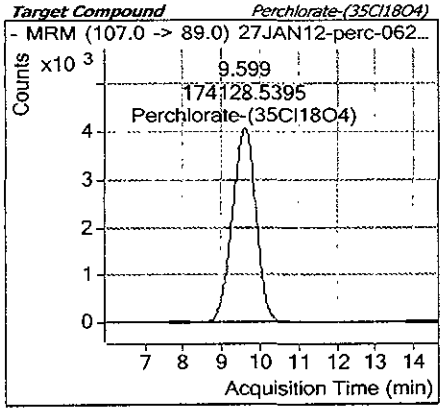
Target Compound *Perchlorate*

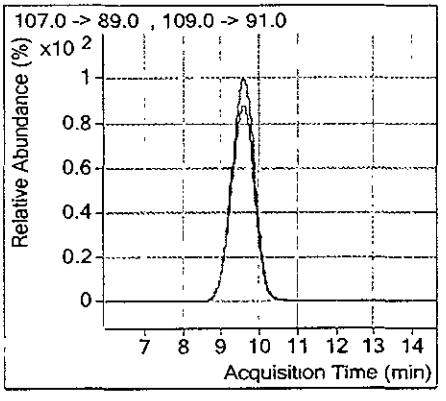




MR 2/8/12

Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02FB01-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-005	Work Order #...:	MQCM71AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 07:52
Analyst	lores
Data File	27JAN12-perc-063.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-5, 2026097, 20mL/20mL,
Sample Identification	MQCM71AJ
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-E2
Exp. Concentration	
Injection Volume	50

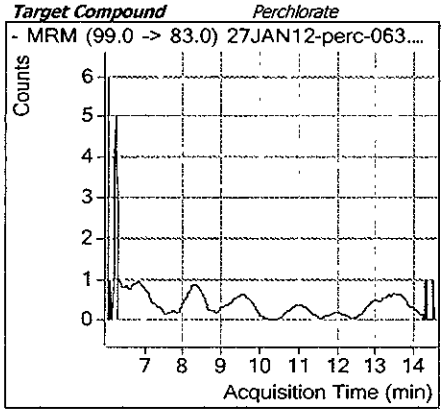
Quantitation Results

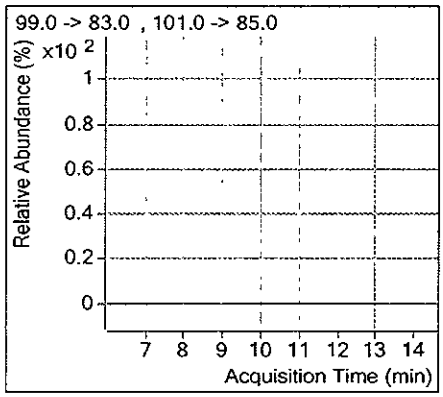
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.605	174800	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53713	109	91	3.25	2.30	3.80	In Control

Compound Graphics

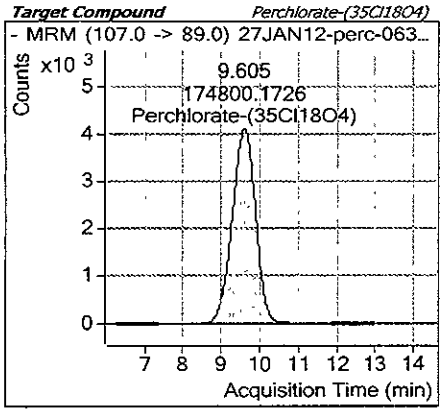
Target Compound *Perchlorate*

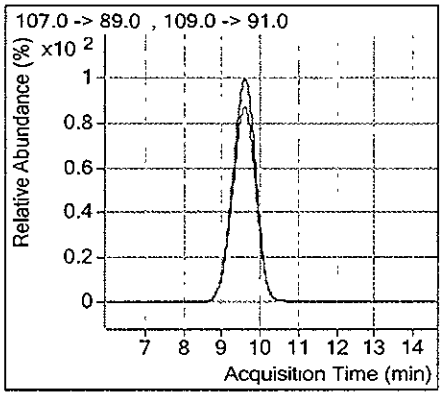




mr 2/8/12

Target Compound *Perchlorate-(35Cl18O4)*





White Water Associates

Client Sample ID: 02RB01-20120119

Dissolved HPLC

Lot-Sample #...:	G2A200474-006	Work Order #...:	MQCM81AJ	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/26/12	Analysis Date..:	01/28/12		
Prep Batch #...:	2026097				
Dilution Factor:	1	Method.....:	SW846 6850_DOD Ha		

PARAMETER	RESULT	LOQ	UNITS	DL
Perchlorate	0.25 U	0.50	ug/L	0.082

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:08
Analyst	lores
Data File	27JAN12-perc-064.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A200474-6, 2026097, 20mL/20mL,
Sample Identification	MQCM81AJ
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-E3
Exp. Concentration	
Injection Volume	50

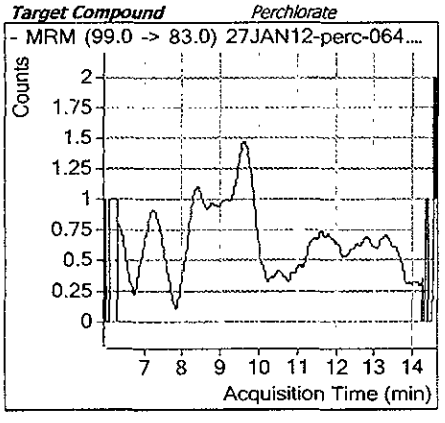
Quantitation Results

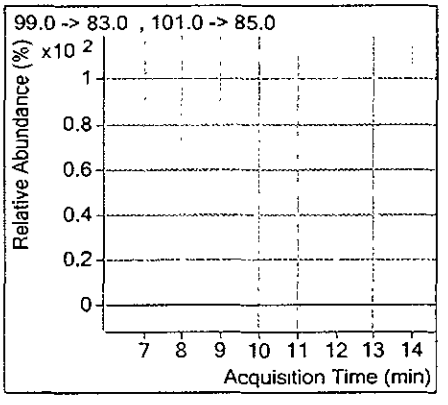
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.598	175962	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54970	109	91	3.20	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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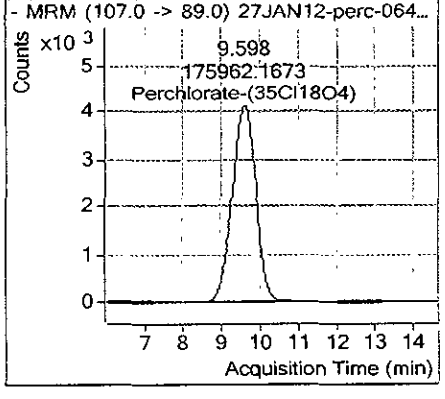
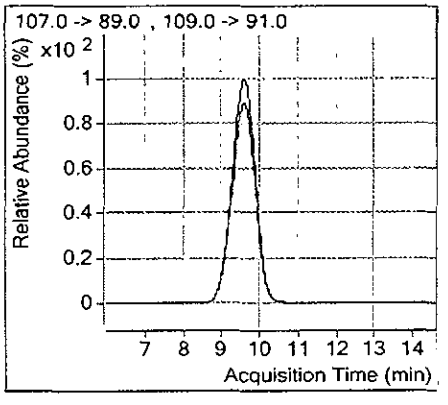
Target Compound *Perchlorate-(35Cl18O4)*





Standards Data

ICAL Data

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml		
Analysis Time	1/30/2012 8:39 AM	**Analyst Name**	lores
Report Time	1/30/2012 11:50 AM	**Reporter Name**	lores
Last Calib Update	1/30/2012 8:39 AM	**Batch State**	ResultsDirty

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

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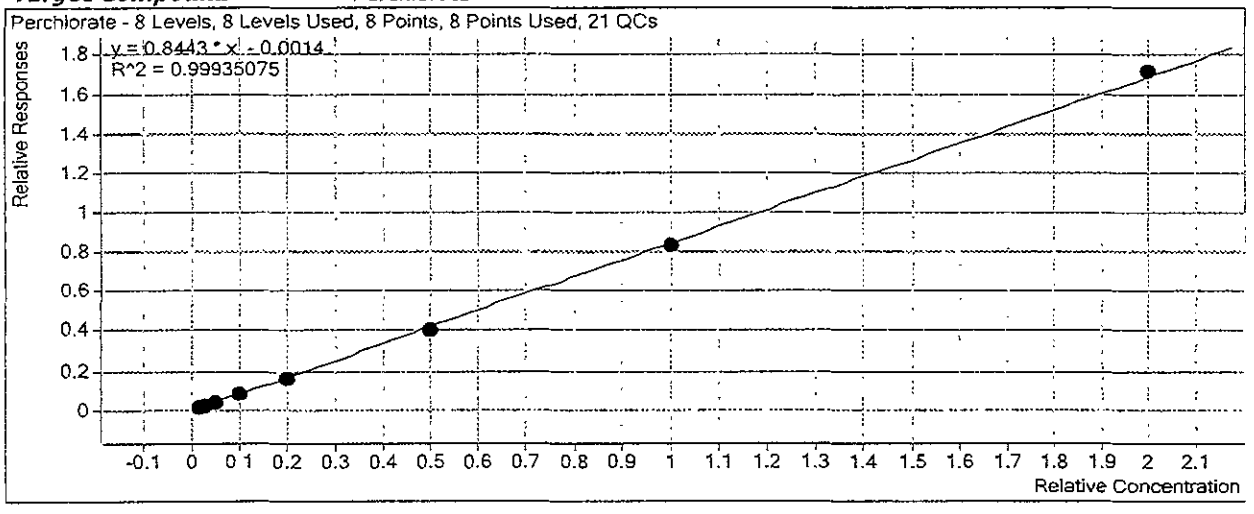
Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
27JAN12-perc-005.d	1	☑	2801	0.8364	0.1500
27JAN12-perc-006.d	2	☑	5404	0.8180	0.3000
27JAN12-perc-007.d	3	☑	9177	0.8084	0.5000
27JAN12-perc-008.d	4	☑	17438	0.7985	1.0000
27JAN12-perc-009.d	5	☑	34849	0.7966	2.0000
27JAN12-perc-010.d	6	☑	87739	0.8102	5.0000
27JAN12-perc-011.d	7	☑	171805	0.8367	10.0000
27JAN12-perc-012.d	8	☑	306806	0.8595	20.0000
27JAN12-perc-026.d	CCV4	☑	14647	0.7967	1.0000
27JAN12-perc-044.d	CCV4	☑	8717	0.8115	1.0000
27JAN12-perc-065.d	CCV4	☑	13752	0.7711	1.0000
27JAN12-perc-034.d	CCV5	☑	27816	0.7918	2.0000
27JAN12-perc-057.d	CCV5	☑	27081	0.7630	2.0000
27JAN12-perc-015.d	CCV6	☑	80689	0.8212	5.0000
27JAN12-perc-014.d	ICV	☑	83936	0.8523	5.0000
27JAN12-perc-038.d	LCS_0.5	☑	7080	0.8219	0.5000
27JAN12-perc-039.d	LCS_0.5	☑	7079	0.7842	0.5000
27JAN12-perc-048.d	LCS_0.5	☑	7006	0.7925	0.5000
27JAN12-perc-049.d	LCS_0.5	☑	6922	0.7874	0.5000
27JAN12-perc-018.d	LCS_5	☑	23240	0.2463	5.0000
27JAN12-perc-016.d	LODV	☑	2565	0.8032	0.1500
27JAN12-perc-035.d	LODV	☑	1981	0.8050	0.1500
27JAN12-perc-045.d	LODV	☑	1287	0.8323	0.1500
27JAN12-perc-066.d	LODV	☑	2043	0.7741	0.1500
27JAN12-perc-042.d	MS_0.5	☑	18064	2.0862	0.5000
27JAN12-perc-043.d	MS_0.5	☑	17693	2.1369	0.5000
27JAN12-perc-054.d	MS_0.5	☑	6724	0.7504	0.5000
27JAN12-perc-055.d	MS_0.5	☑	6720	0.7762	0.5000
27JAN12-perc-019.d	SMCS_5	☑	22371	0.2544	5.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate-(35Cl1804)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
27JAN12-perc-005.d	1	☑	223283	22328.3439	10.0000
27JAN12-perc-006.d	2	☑	220220	22021.9775	10.0000
27JAN12-perc-007.d	3	☑	227031	22703.0640	10.0000
27JAN12-perc-008.d	4	☑	218398	21839.7995	10.0000
27JAN12-perc-009.d	5	☑	218746	21874.5646	10.0000
27JAN12-perc-010.d	6	☑	216575	21657.5147	10.0000
27JAN12-perc-011.d	7	☑	205344	20534.4160	10.0000
27JAN12-perc-012.d	8	☑	178484	17848.4489	10.0000
27JAN12-perc-026.d	CCV4	☑	183855	18385.5154	10.0000
27JAN12-perc-044.d	CCV4	☑	107420	10741.9537	10.0000
27JAN12-perc-065.d	CCV4	☑	178353	17835.3074	10.0000
27JAN12-perc-034.d	CCV5	☑	175657	17565.7066	10.0000
27JAN12-perc-057.d	CCV5	☑	177470	17747.0487	10.0000
27JAN12-perc-015.d	CCV6	☑	196515	19651.4754	10.0000
27JAN12-perc-014.d	ICV	☑	196970	19696.9696	10.0000
27JAN12-perc-038.d	LCS_0.5	☑	172284	17228.3545	10.0000
27JAN12-perc-039.d	LCS_0.5	☑	180536	18053.6126	10.0000
27JAN12-perc-048.d	LCS_0.5	☑	176810	17680.9925	10.0000
27JAN12-perc-049.d	LCS_0.5	☑	175833	17583.3074	10.0000
27JAN12-perc-018.d	LCS_5	☑	188710	18870.9781	10.0000
27JAN12-perc-016.d	LODV	☑	212887	21288.7084	10.0000
27JAN12-perc-035.d	LODV	☑	164057	16405.7304	10.0000
27JAN12-perc-045.d	LODV	☑	103051	10305.1475	10.0000
27JAN12-perc-066.d	LODV	☑	175950	17595.0222	10.0000
27JAN12-perc-042.d	MS_0.5	☑	173173	17317.3067	10.0000
27JAN12-perc-043.d	MS_0.5	☑	165599	16559.8879	10.0000
27JAN12-perc-054.d	MS_0.5	☑	179192	17919.1933	10.0000
27JAN12-perc-055.d	MS_0.5	☑	173155	17315.5084	10.0000
27JAN12-perc-019.d	SMCS_5	☑	175846	17584.6275	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

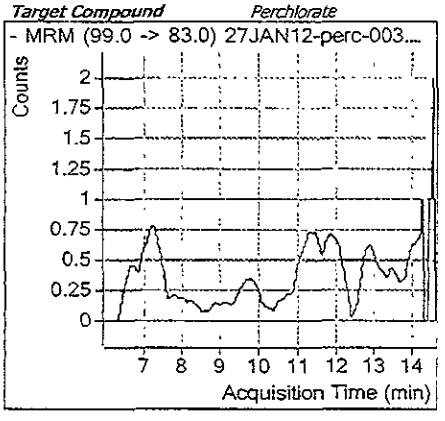
Acquisition Date - Time	1/27/2012 15:39
Analyst	lores
Data File	27JAN12-perc-003.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank No IS
Sample Identification	BLANK
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-A5
Exp. Concentration	
Injection Volume	50

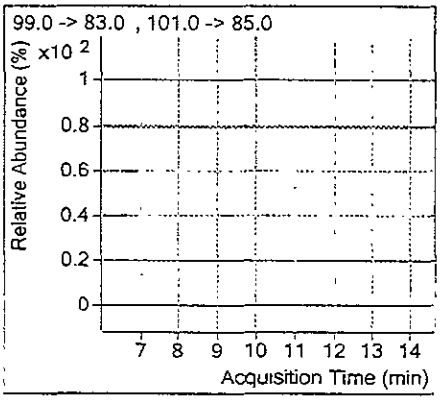
Perchlorate = ND

mr 2/2/12

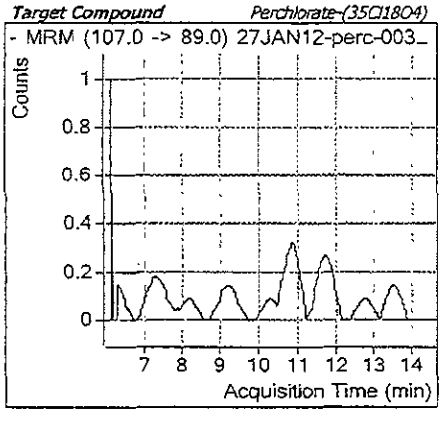
Compound Graphics

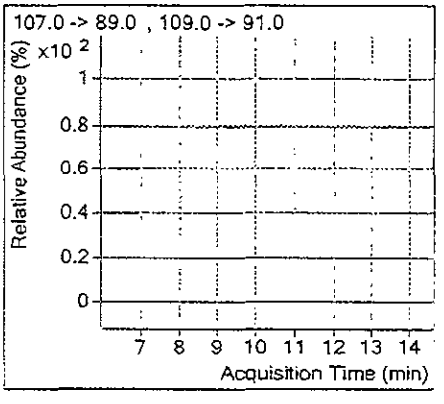
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl1804)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 15:55
Analyst	lores
Data File	27JAN12-perc-004.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

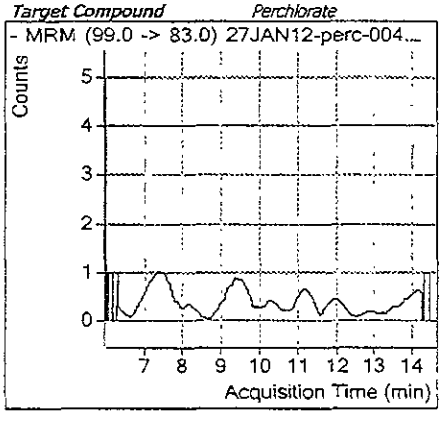
Quantitation Results

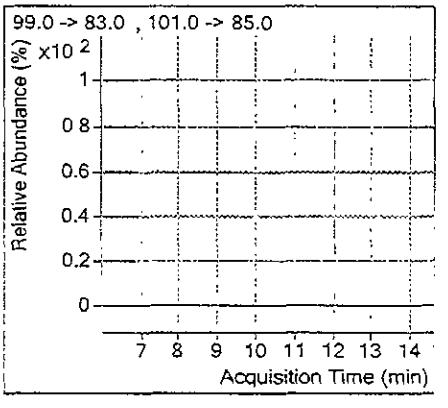
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.740	211488	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	67082	109	91	3 15	2.30	3 80	In Control

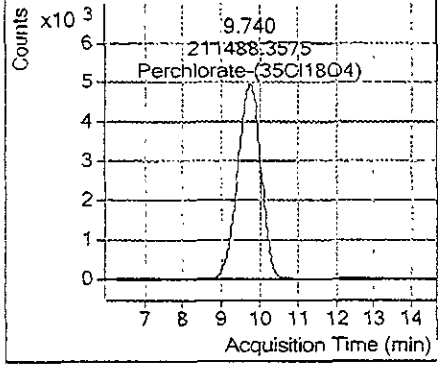
Compound Graphics

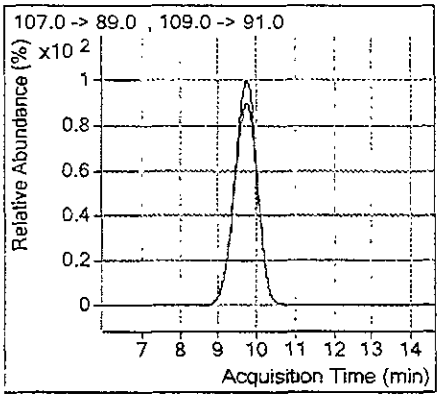
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:12
Analyst	lores
Data File	27JAN12-perc-005.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	ICAL-1
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.728	2801	99	83	0.16484	0.16484	1
Perchlorate-(35Cl18O4)	ISTD	9.716	223283	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	895	101	85	3.13	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	71658	109	91	3.12	2.30	3.80	In Control

Compound Graphics

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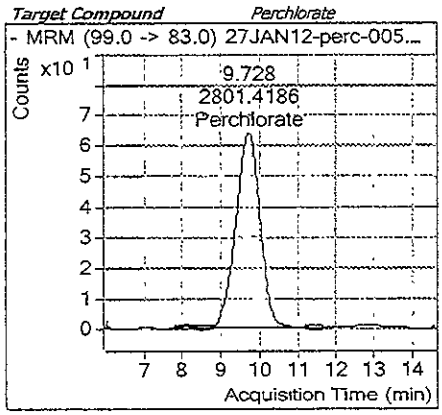
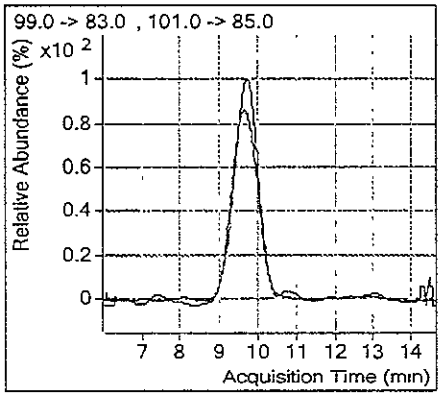
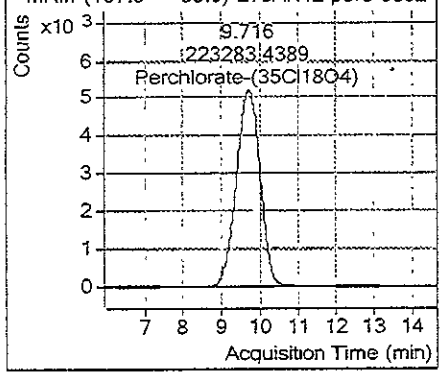
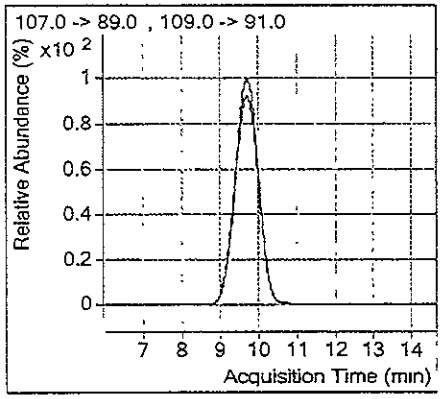
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:28
Analyst	lores
Data File	27JAN12-perc-006.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-2 12LCMS0065 Perchlorate Std 0 30ng/mL
Sample Identification	ICAL-2
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B3
Exp. Concentration	0.30
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.714	5404	99	83	0.30689	0.30689	1
Perchlorate-(35Cl18O4)	ISTD	9.707	220220	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2038	101	85	2.65	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	68780	109	91	3.20	2.30	3.80	In Control

Compound Graphics

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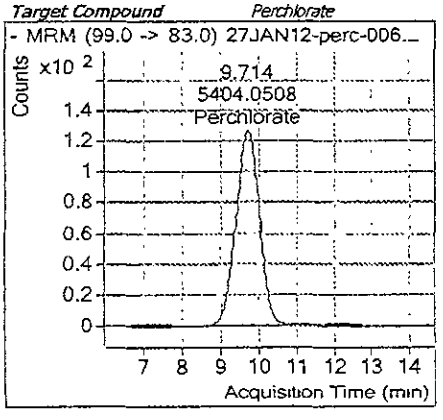
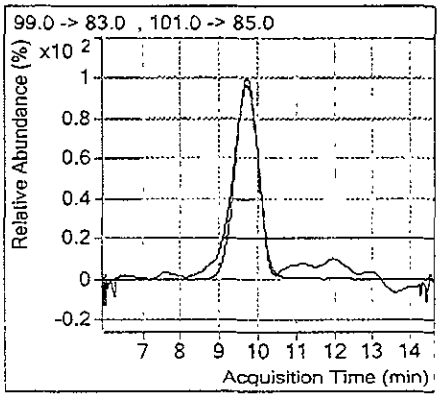
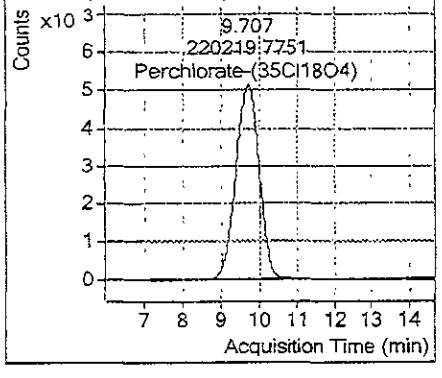
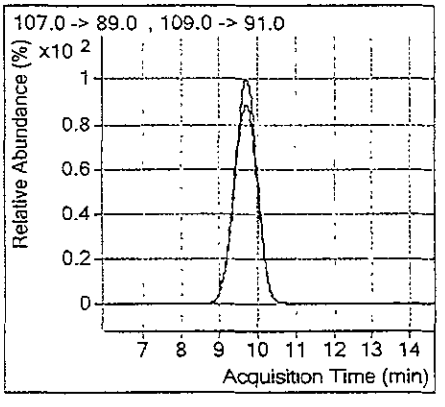
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 16:44
Analyst	lores
Data File	27JAN12-perc-007.d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL
Sample Identification	ICAL-3
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B4
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.704	9177	99	83	0.49501	0.49501	1
Perchlorate-(35Cl18O4)	ISTD	9.693	227031	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2908	101	85	3.16	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	73266	109	91	3.10	2.30	3.80	In Control

Compound Graphics

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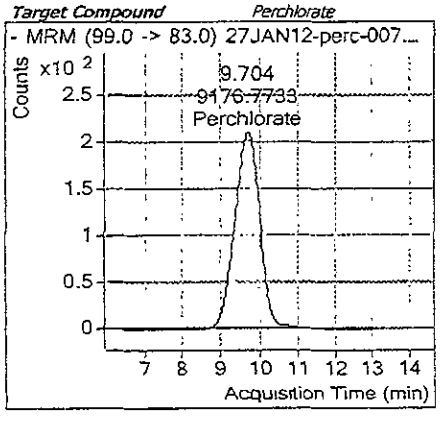
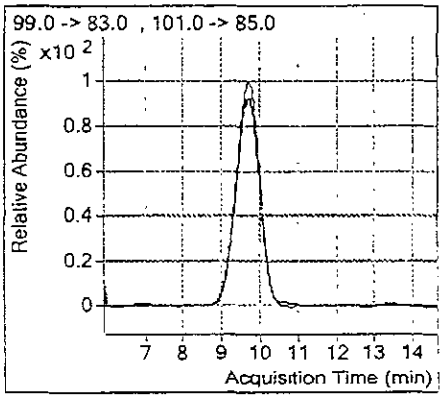
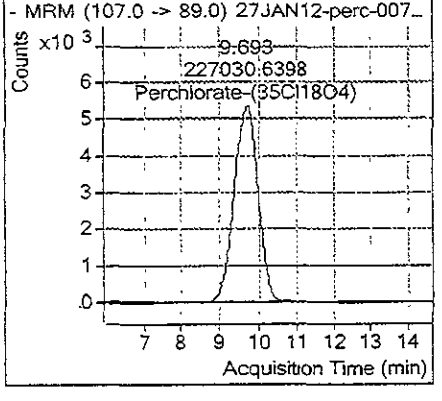
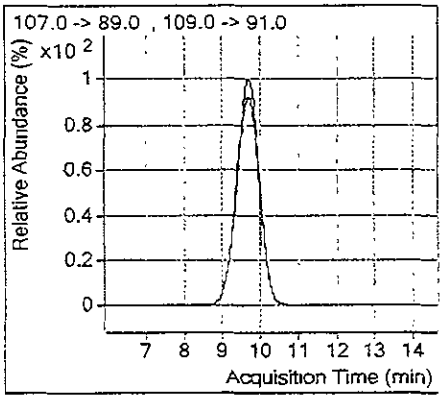
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:00
Analyst	lores
Data File	27JAN12-perc-008.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	ICAL-4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.690	17438	99	83	0.96199	0.96199	1
Perchlorate-(35Cl18O4)	ISTD	9.683	218398	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	6124	101	85	2.85	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	68833	109	91	3.17	2.30	3.80	In Control

Compound Graphics

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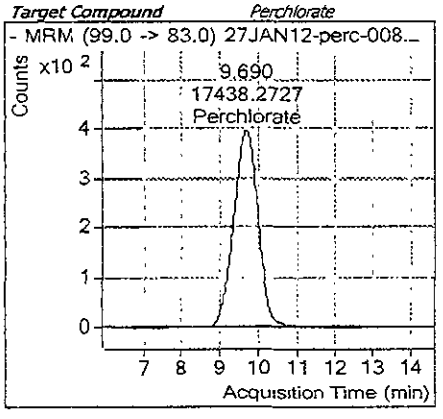
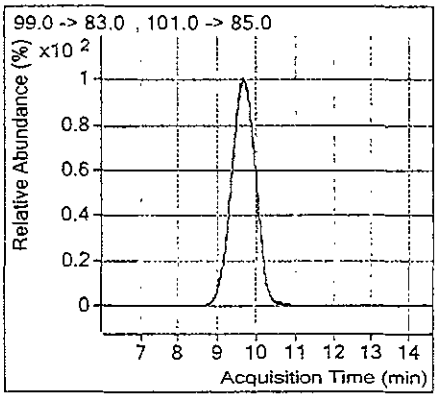
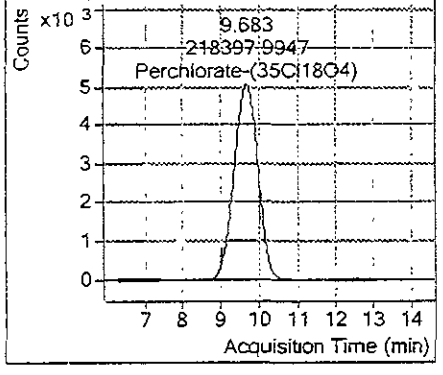
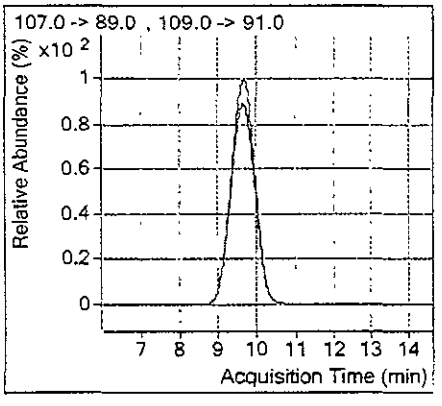
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:16
Analyst	lores
Data File	27JAN12-perc-009 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-5 12LCMS0068 Perchlorate Std 2 0ng/mL
Sample Identification	ICAL-5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B6
Exp. Concentration	2.00
Injection Volume	50

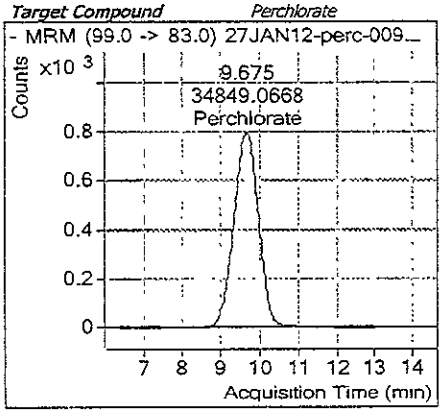
Quantitation Results

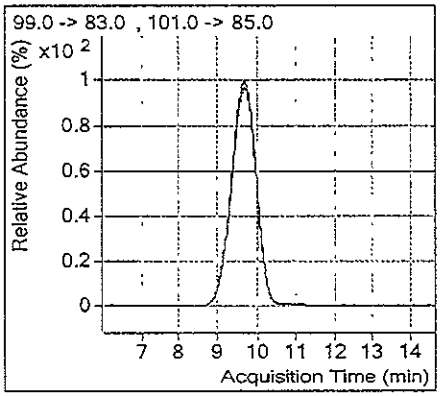
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.675	34849	99	83	1.90326	1.90326	1
Perchlorate-(35Cl18O4)	ISTD	9 669	218746	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	11720	101	85	2.97	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	69251	109	91	3.16	2 30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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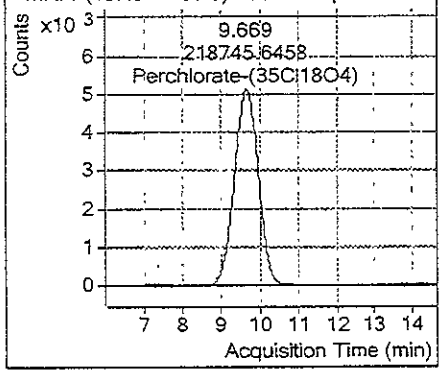
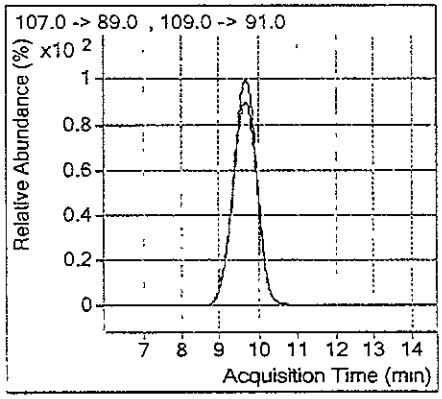
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17.33
Analyst	lores
Data File	27JAN12-perc-010.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	ICAL-6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B7
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.678	87739	99	83	4.81479	4.81479	1
Perchlorate-(35Cl18O4)	ISTD	9.665	216575	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	28925	101	85	3 03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	69295	109	91	3 13	2.30	3.80	In Control

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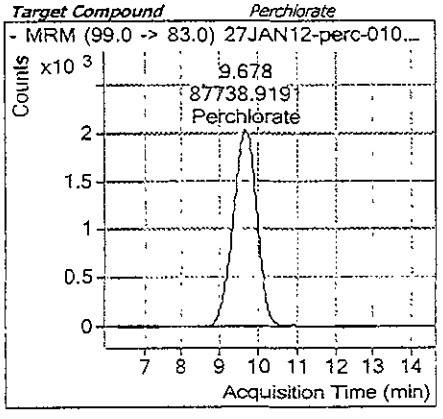
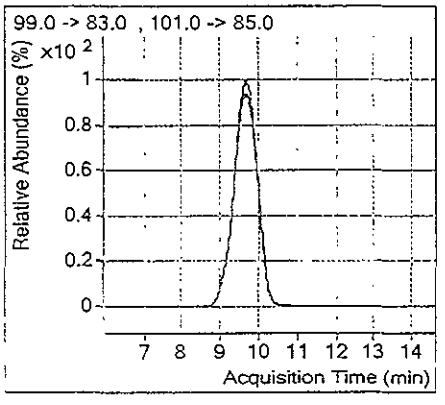
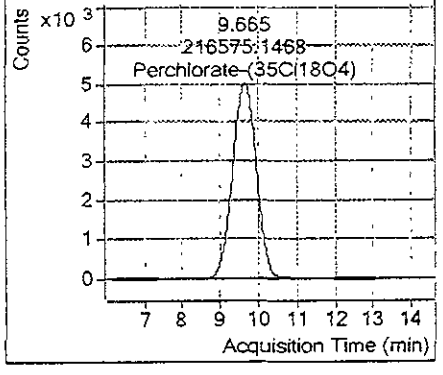
Compound Graphics

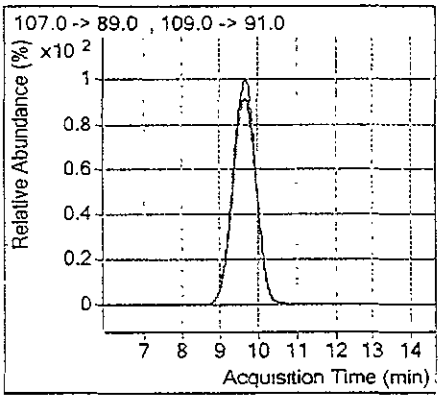
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 17:49
Analyst	lores
Data File	27JAN12-perc-011.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL
Sample Identification	ICAL-7
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B8
Exp. Concentration	10.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.661	171805	99	83	9.92640	9.92640	1
Perchlorate-(35Cl18O4)	ISTD	9.659	205344	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	55756	101	85	3.08	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	65469	109	91	3.14	2.30	3.80	In Control

Compound Graphics

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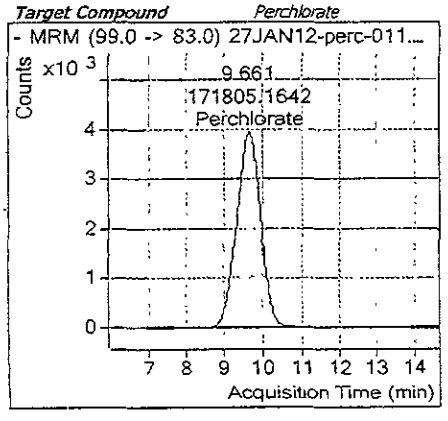
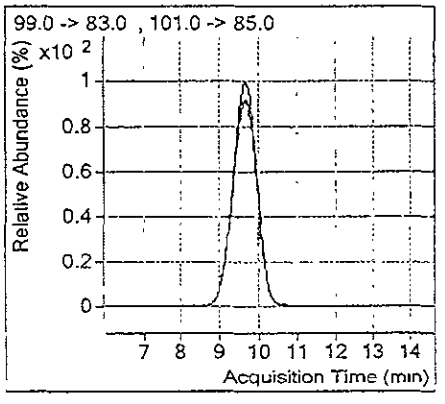
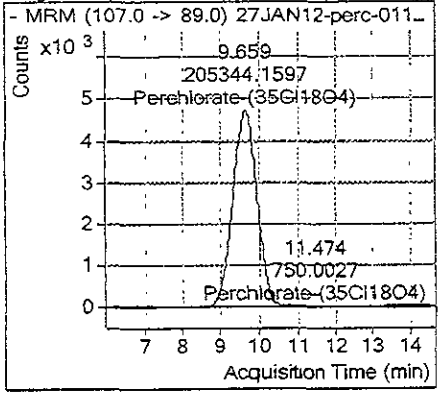
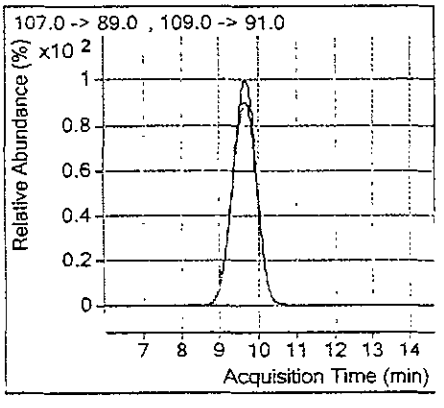
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:05
Analyst	lores
Data File	27JAN12-perc-012 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL
Sample Identification	ICAL-8
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B9
Exp. Concentration	20.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.660	306806	99	83	20.37682	20.37682	1
Perchlorate-(35Cl18O4)	ISTD	9.652	178484	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	97588	101	85	3.14	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56760	109	91	3.14	2.30	3.80	In Control

Compound Graphics

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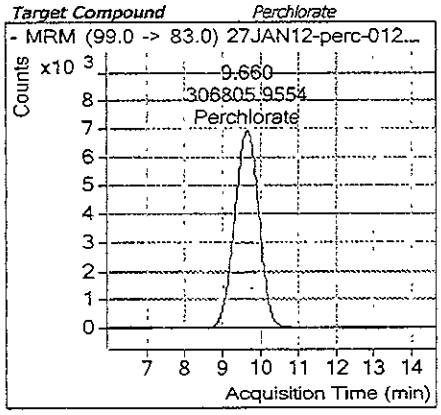
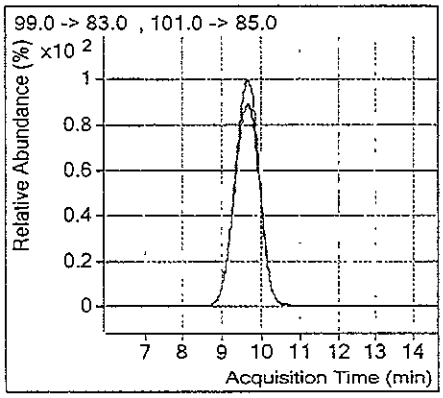
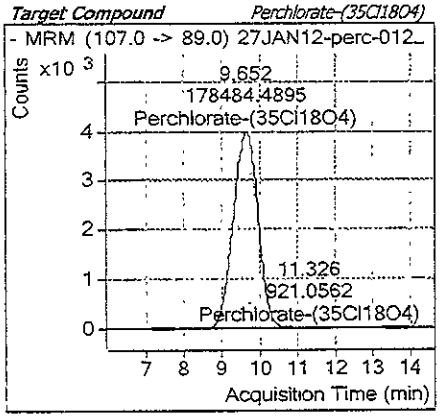
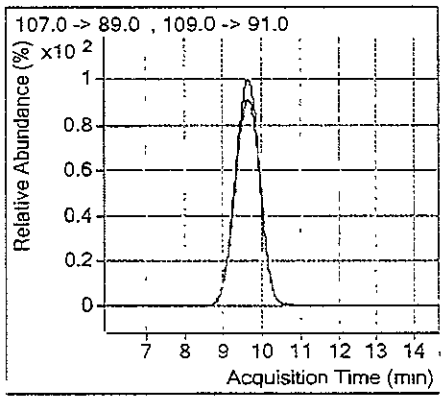
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:21
Analyst	lores
Data File	27JAN12-perc-013.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

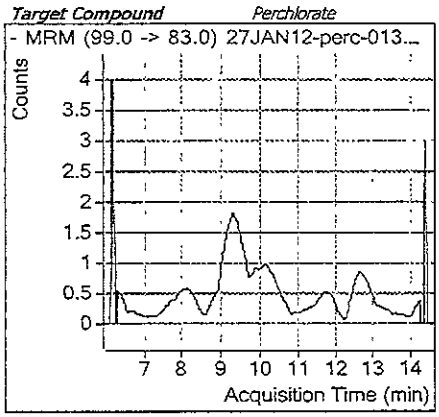
Quantitation Results

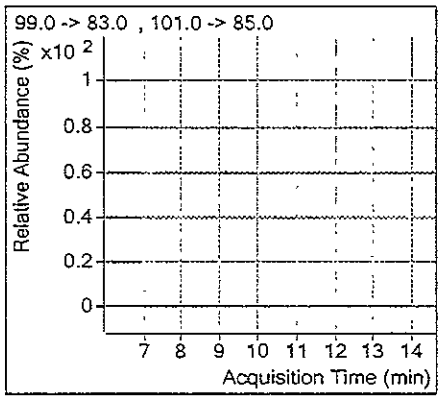
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.652	215378	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	67751	109	91	3.18	2.30	3.80	In Control

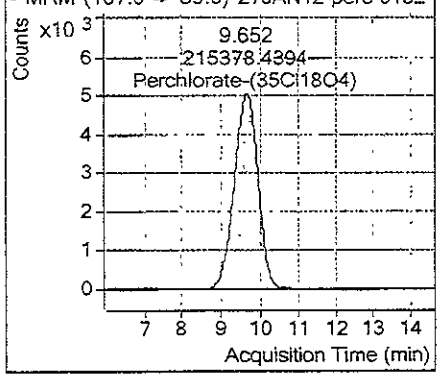
Compound Graphics

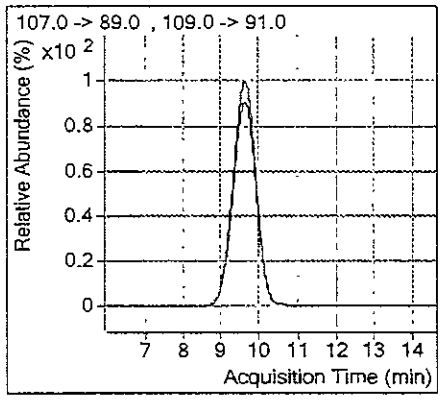
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D.\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/27/2012 18:38
Analyst	lores
Data File	27JAN12-perc-014.d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.653	83936	99	83	5.06371	5.06371	1
Perchlorate-(35Cl18O4)	ISTD	9.639	196970	107	89			1
							1.3 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	27996	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	63293	109	91	3.11	2.30	3.80	In Control

Compound Graphics

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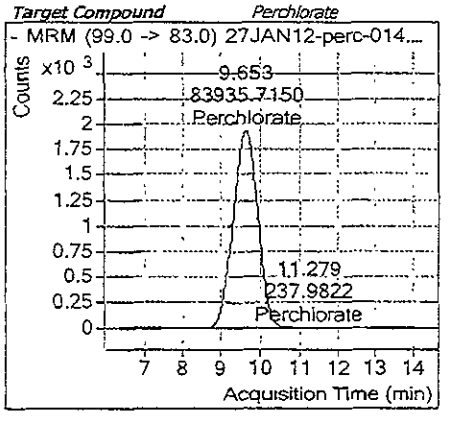
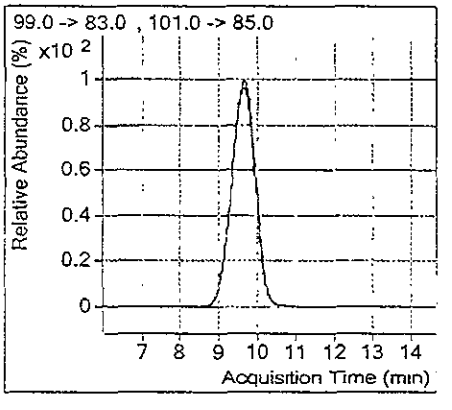
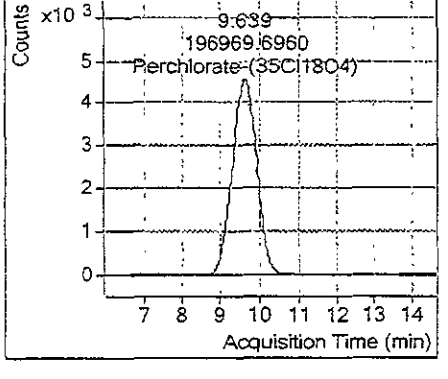
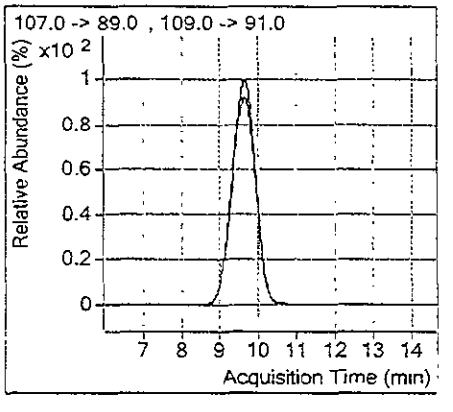
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





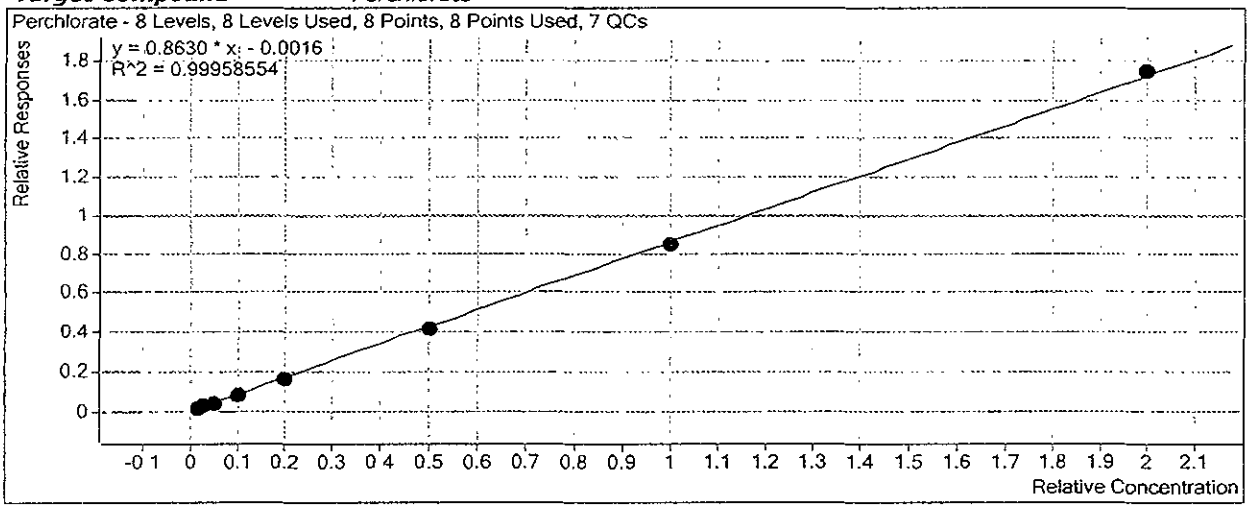
TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml		
Analysis Time	2/9/2012 8:16 PM	**Analyst Name**	lores
Report Time	2/9/2012 8:17 PM	**Reporter Name**	lores
Last Calib Update	2/9/2012 8:16 PM	**Batch State**	Processed

Calibration Info **Linear Fit, 1/x weighting, and origin ignored.**

Target Compound *Perchlorate*



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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
09FEB12-perc-005.d	1	☑	1994	0.7456	0.1500
09FEB12-perc-006.d	2	☑	4939	0.8985	0.3000
09FEB12-perc-007.d	3	☑	7366	0.8230	0.5000
09FEB12-perc-008.d	4	☑	14708	0.8274	1.0000
09FEB12-perc-009.d	5	☑	29275	0.8272	2.0000
09FEB12-perc-010.d	6	☑	72149	0.8377	5.0000
09FEB12-perc-011.d	7	☑	142220	0.8532	10.0000
09FEB12-perc-012.d	8	☑	267911	0.8747	20.0000
09FEB12-perc-021.d	CCV4	☑	13702	0.8044	1.0000
09FEB12-perc-024.d	CCV4	☑	14717	0.7969	1.0000
09FEB12-perc-015.d	CCV6	☑	70584	0.8294	5.0000
09FEB12-perc-014.d	ICV	☑	73040	0.8513	5.0000
09FEB12-perc-018.d	LCS_0.5	☑	6429	0.7730	0.5000
09FEB12-perc-016.d	LODV	☑	2314	0.8784	0.1500
09FEB12-perc-022.d	LODV	☑	2039	0.8047	0.1500

Target Compound *Perchlorate-(35Cl18O4)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
09FEB12-perc-005.d	1	☑	178318	17831.7697	10.0000
09FEB12-perc-006.d	2	☑	183239	18323.8603	10.0000
09FEB12-perc-007.d	3	☑	179006	17900.5960	10.0000
09FEB12-perc-008.d	4	☑	177774	17777.3848	10.0000
09FEB12-perc-009.d	5	☑	176957	17695.6762	10.0000
09FEB12-perc-010.d	6	☑	172263	17226.2606	10.0000
09FEB12-perc-011.d	7	☑	166692	16669.1742	10.0000
09FEB12-perc-012.d	8	☑	153143	15314.3262	10.0000
09FEB12-perc-021.d	CCV4	☑	170354	17035.3578	10.0000
09FEB12-perc-024.d	CCV4	☑	184677	18467.6516	10.0000
09FEB12-perc-015.d	CCV6	☑	170202	17020.1990	10.0000
09FEB12-perc-014.d	ICV	☑	171605	17160.5247	10.0000
09FEB12-perc-018.d	LCS_0.5	☑	166351	16635.0784	10.0000
09FEB12-perc-016.d	LODV	☑	175607	17560.6666	10.0000
09FEB12-perc-022.d	LODV	☑	168912	16891.2233	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:05
Analyst	lores
Data File	09FEB12-perc-003 d
Acquisition Method	PercMRM_2.m
Sample Name	Blank No IS
Sample Identification	BLANK
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-A5
Exp. Concentration	
Injection Volume	50

Perchlorate and IS are non-detect (ND).

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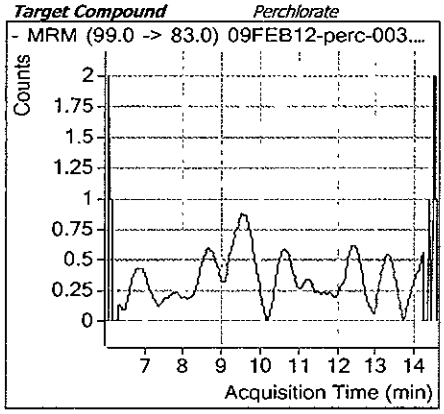
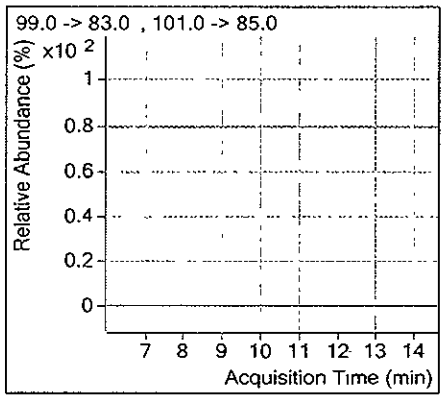
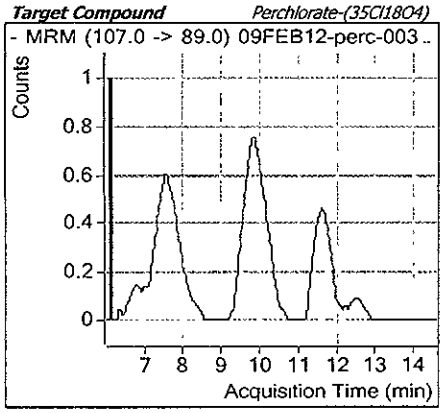
Compound Graphics

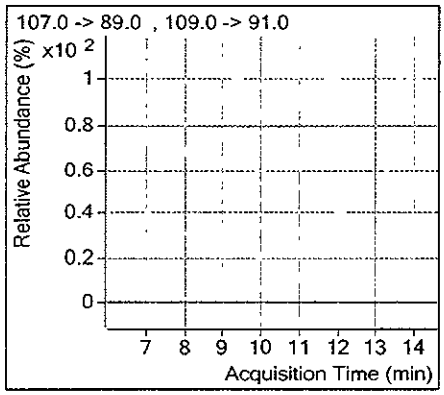
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:21
Analyst	lores
Data File	09FEB12-perc-004.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

Quantitation Results

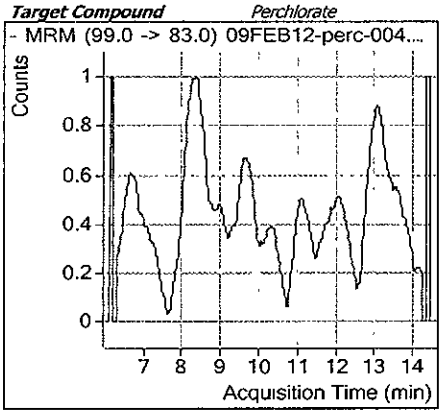
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.717	178134	107	89			1
						Perchlorate is ND		

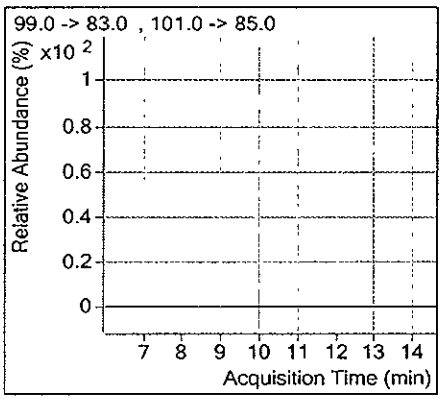
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56552	109	91	3 15	2 30	3.80	In Control

Compound Graphics

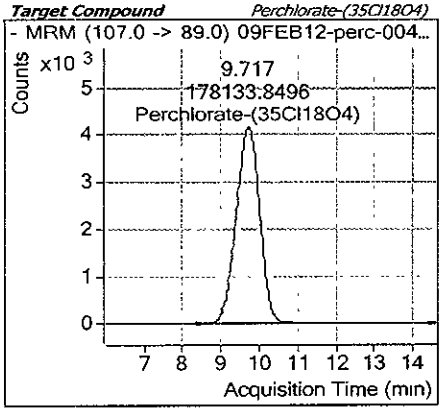
DEL 2-9-12

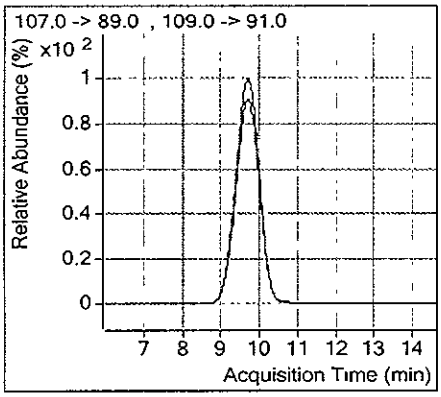
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:37
Analyst	lores
Data File	09FEB12-perc-005.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-1 12LCMS0064 Perchlorate Std 0 15ng/mL
Sample Identification	ICAL-1
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

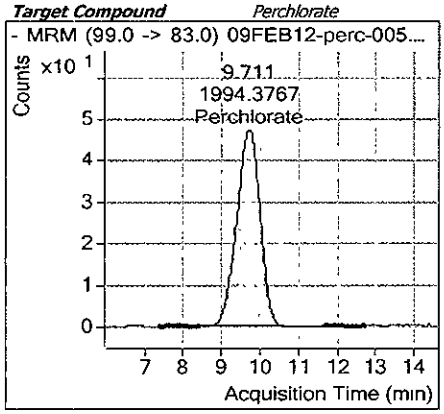
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 711	1994	99	83	0.14774	0.14774	1
Perchlorate-(35Cl18O4)	ISTD	9.705	178318	107	89			1

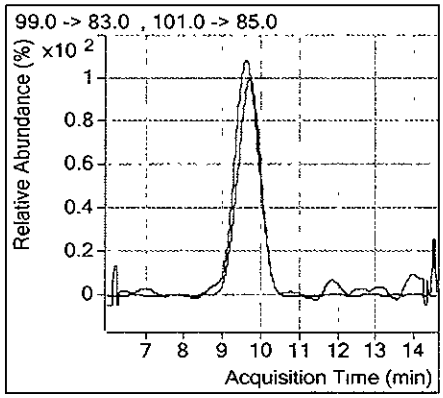
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	800	101	85	2.49	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56401	109	91	3.16	2.30	3.80	In Control

Compound Graphics

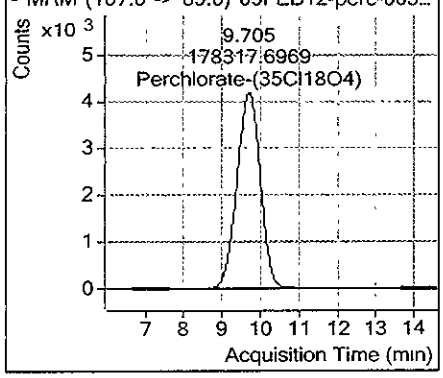
DEL 2-9-12

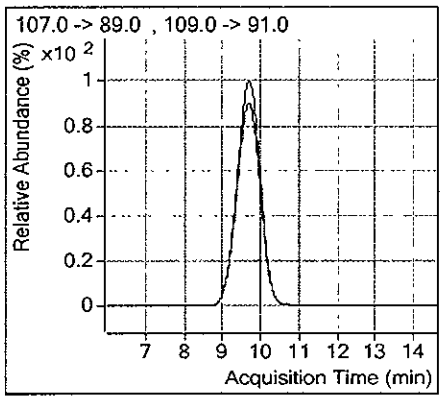
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 09:54
Analyst	lores
Data File	09FEB12-perc-006.d
Acquisition Method	PercMRM_2 m
Sample Name	ICAL-2 12LCMS0065 Perchlorate Std 0 30ng/mL
Sample Identification	ICAL-2
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B3
Exp. Concentration	0 30
Injection Volume	50

Quantitation Results

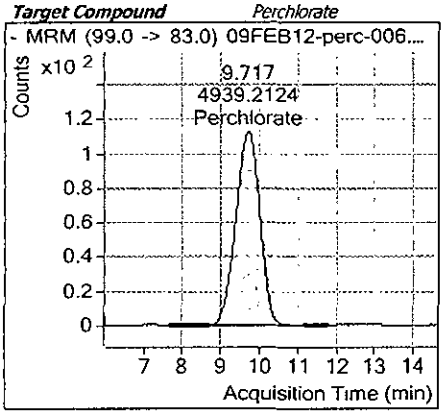
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.717	4939	99	83	0.33048	0.33048	1
Perchlorate-(35Cl18O4)	ISTD	9.700	183239	107	89			1

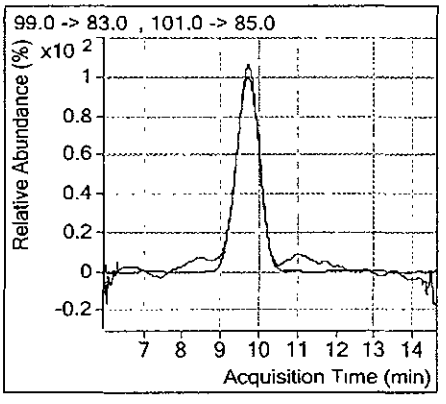
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	1922	101	85	2 57	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	58965	109	91	3 11	2.30	3 80	In Control

Compound Graphics

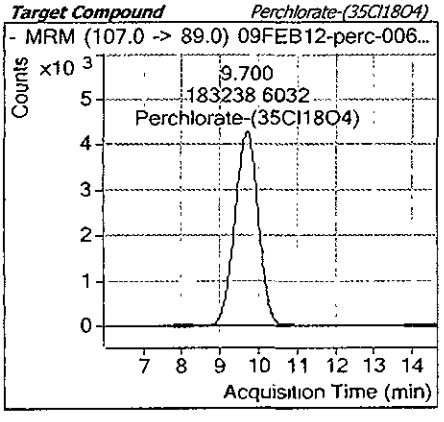
DCh 2-9-12

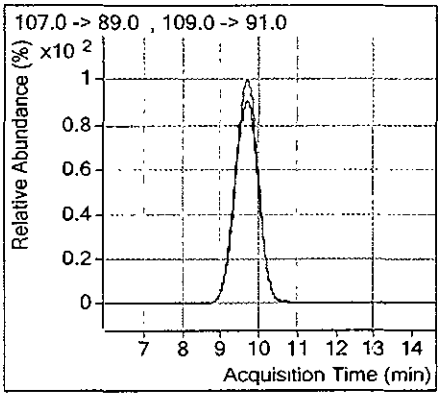
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:10
Analyst	lores
Data File	09FEB12-perc-007.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-3 12LCMS0066 Perchlorate Std 0 50ng/mL
Sample Identification	ICAL-3
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B4
Exp. Concentration	0.50
Injection Volume	50

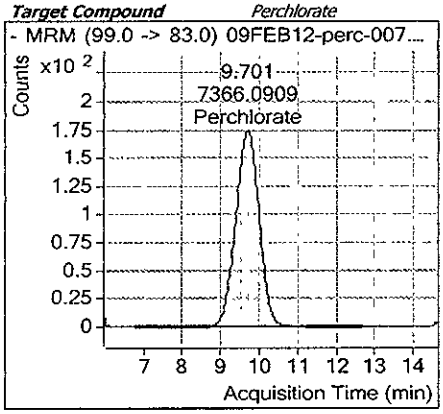
Quantitation Results

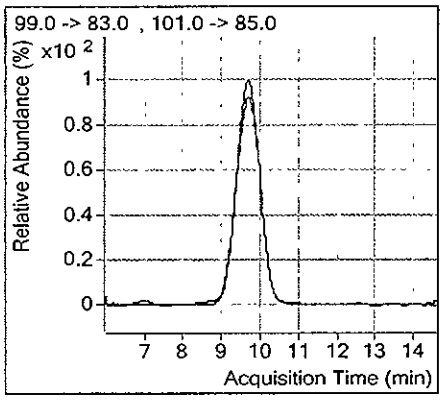
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 701	7366	99	83	**0.49496**	**0.49496**	1
Perchlorate-(35Cl18O4)	ISTD	9.699	179006	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2510	101	85	2.93	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	57218	109	91	3.13	2.30	3 80	In Control

Compound Graphics

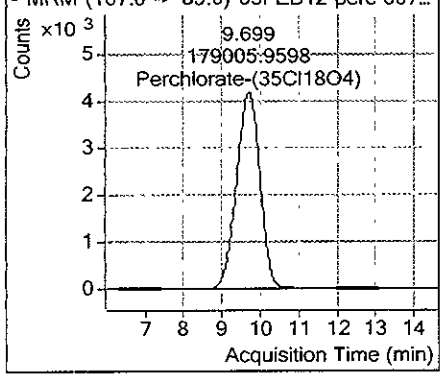
Target Compound *Perchlorate*

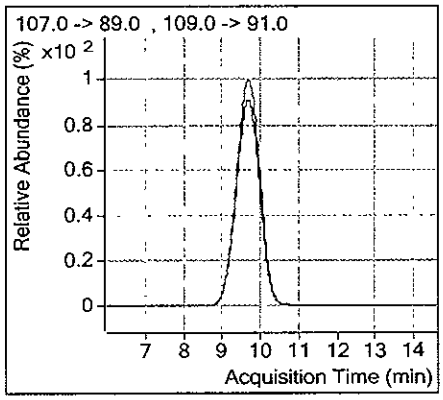




DA 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:26
Analyst	lores
Data File	09FEB12-perc-008.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	ICAL-4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B5
Exp. Concentration	1.00
Injection Volume	50

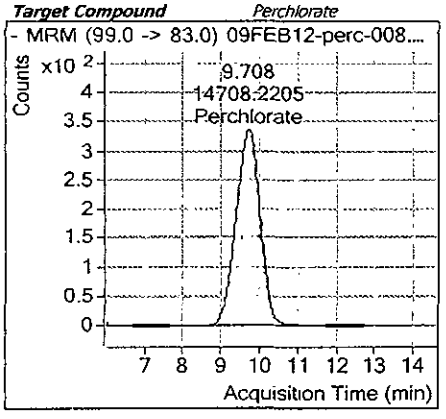
Quantitation Results

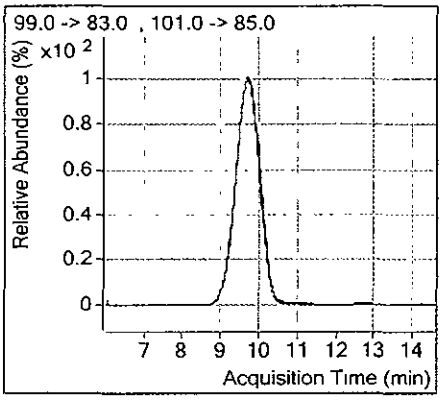
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 708	14708	99	83	0.97683	0.97683	1
Perchlorate-(35Cl18O4)	ISTD	9 696	177774	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5278	101	85	2 79	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	55982	109	91	3 18	2.30	3.80	In Control

Compound Graphics

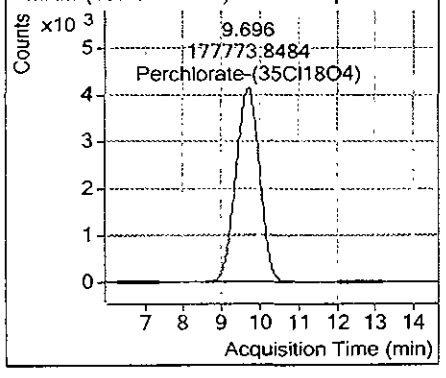
Target Compound *Perchlorate*

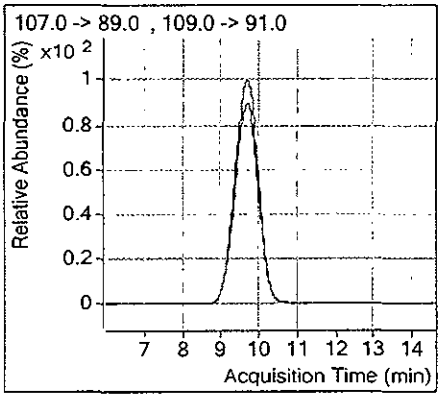




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10 42
Analyst	lores
Data File	09FEB12-perc-009.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL
Sample Identification	ICAL-5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B6
Exp. Concentration	2.00
Injection Volume	50

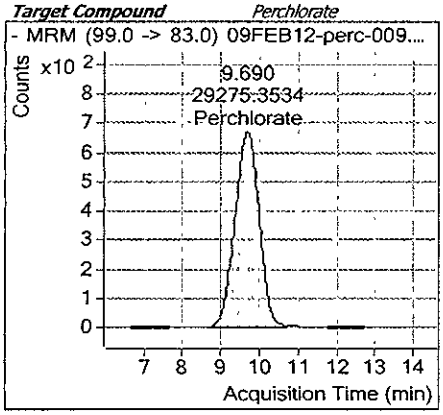
Quantitation Results

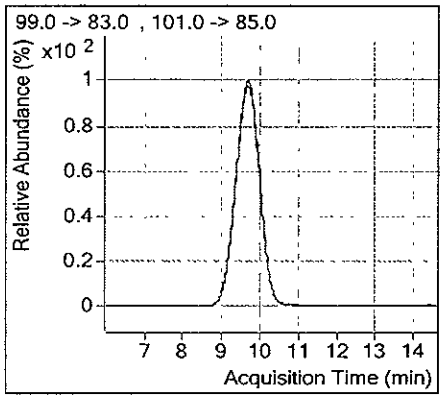
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.690	29275	99	83	1.93513	1.93513	1
Perchlorate-(35Cl18O4)	ISTD	9.695	176957	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	10006	101	85	2 93	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	56466	109	91	3.13	2 30	3 80	In Control

Compound Graphics

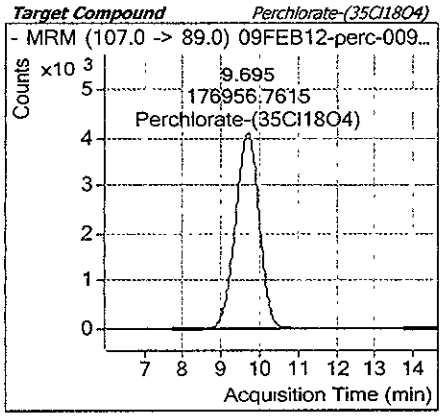
Target Compound *Perchlorate*

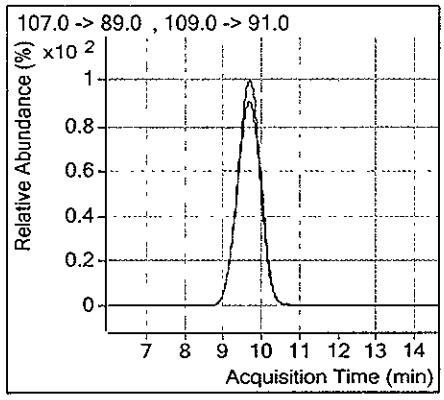




DCh 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 10:59
Analyst	lores
Data File	09FEB12-perc-010 d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	ICAL-6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B7
Exp. Concentration	5 00
Injection Volume	50

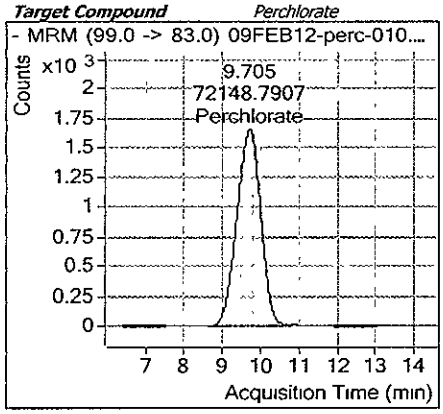
Quantitation Results

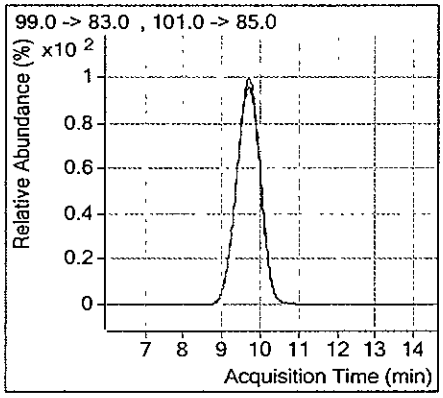
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.705	72149	99	83	4.87128	4.87128	1
Perchlorate-(35Cl18O4)	ISTD	9.700	172263	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24495	101	85	2 95	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54170	109	91	3 18	2 30	3.80	In Control

Compound Graphics

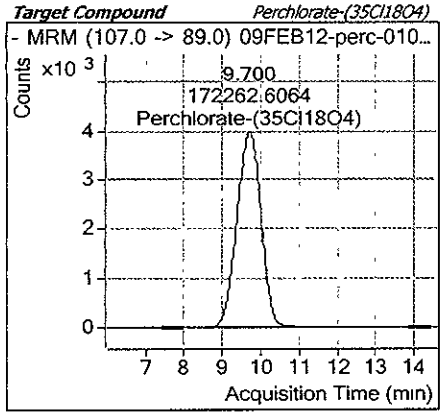
Target Compound *Perchlorate*

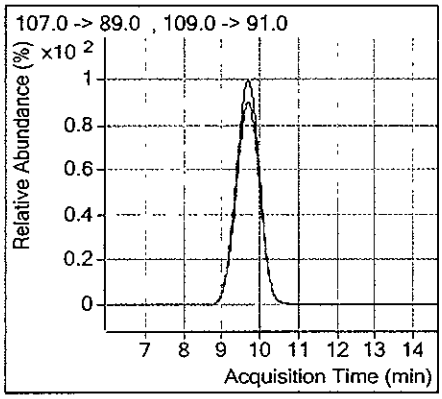




Vch 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:15
Analyst	lores
Data File	09FEB12-perc-011.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL
Sample Identification	ICAL-7
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B8
Exp. Concentration	10 00
Injection Volume	50

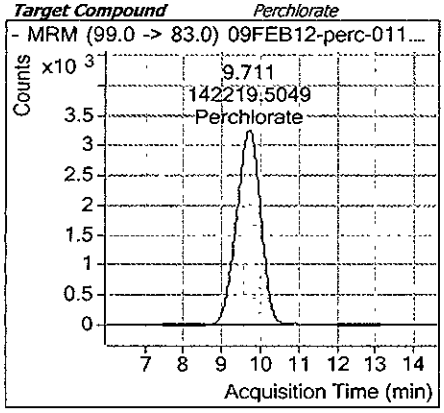
Quantitation Results

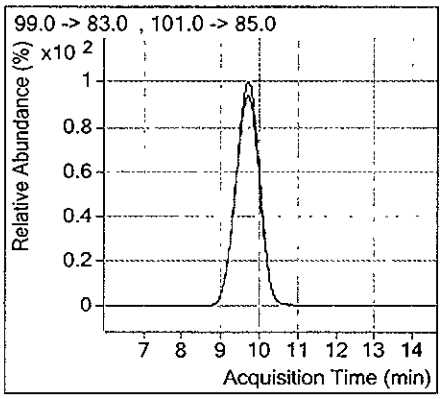
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.711	142220	99	83	9.90435	9.90435	1
Perchlorate-(35Cl18O4)	ISTD	9.701	166692	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	46644	101	85	3 05	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	53242	109	91	3.13	2.30	3 80	In Control

Compound Graphics

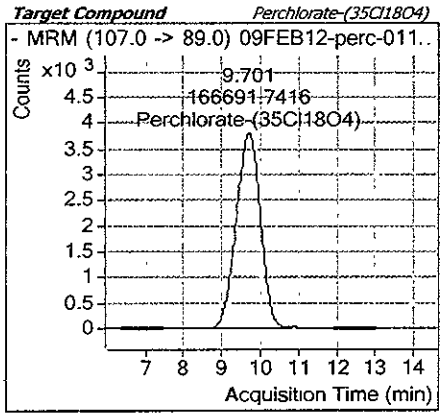
Target Compound *Perchlorate*

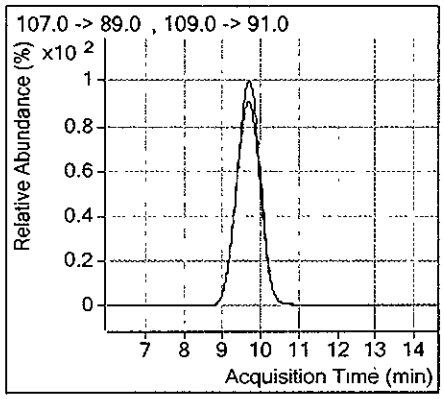




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:31
Analyst	lores
Data File	09FEB12-perc-012.d
Acquisition Method	PercMRM_2.m
Sample Name	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL
Sample Identification	ICAL-8
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Calibration
Sample Position	P2-B9
Exp. Concentration	20.00
Injection Volume	50

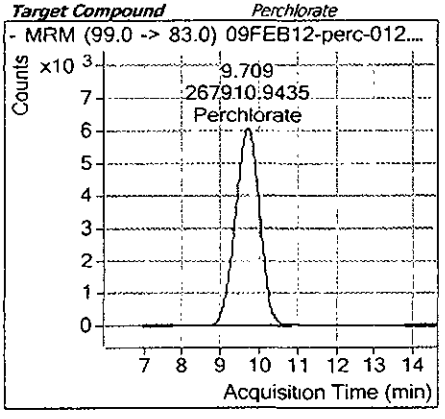
Quantitation Results

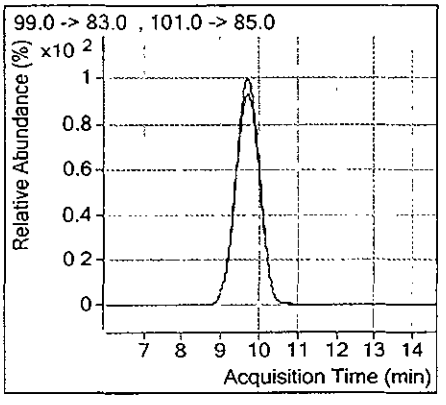
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.709	267911	99	83	20.28923	20.28923	1
Perchlorate-(35Cl18O4)	ISTD	9.698	153143	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	87645	101	85	3.06	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	49220	109	91	3.11	2.30	3.80	In Control

Compound Graphics

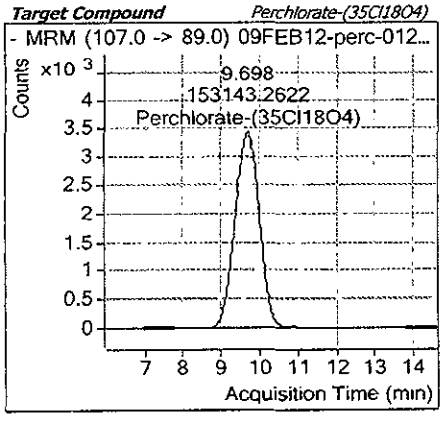
Target Compound *Perchlorate*

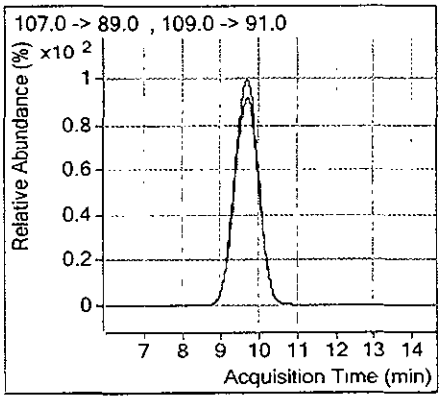




DEH 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 11:47
Analyst	lores
Data File	09FEB12-perc-013.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

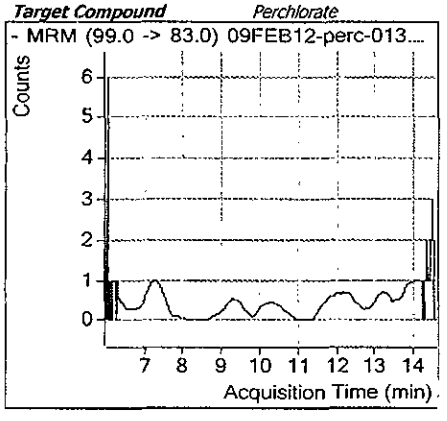
Quantitation Results

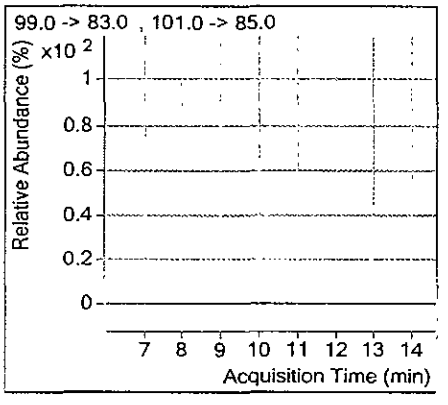
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.702	175351	107	89			1
						Perchlorate is ND		

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	57596	109	91	3.04	2.30	3.80	In Control

Compound Graphics

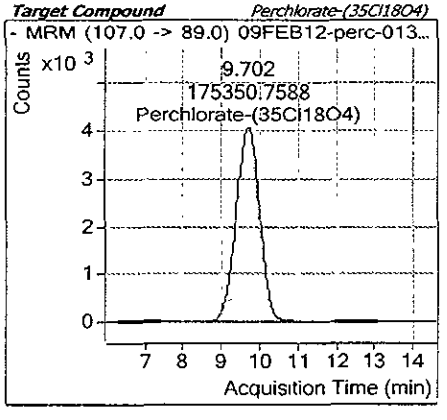
Target Compound *Perchlorate*

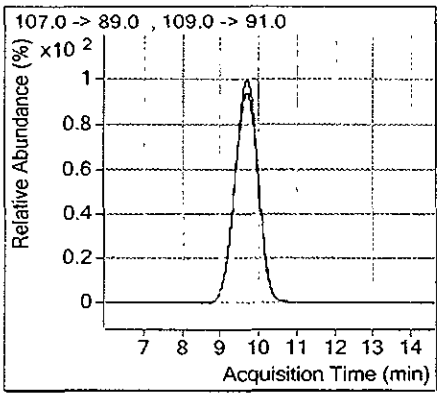




Dah 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:03
Analyst	lores
Data File	09FEB12-perc-014 d
Acquisition Method	PercMRM_2.m
Sample Name	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

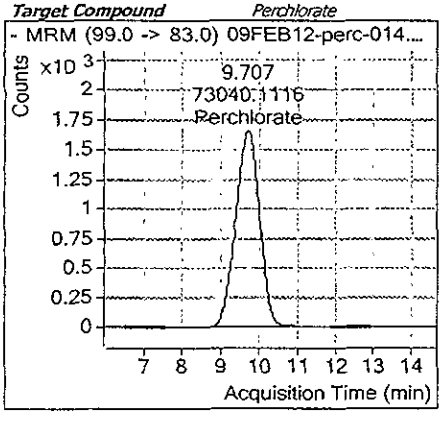
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.707	73040	99	83	4.95006	4.95006	1
Perchlorate-(35Cl18O4)	ISTD	9.705	171605	107	89			1
							-1.0 % Deviation	

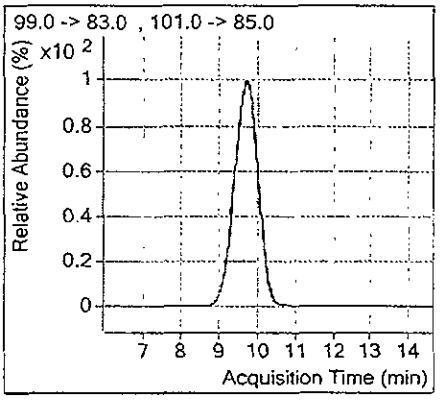
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24318	101	85	3.00	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53400	109	91	3.21	2.30	3.80	In Control

Compound Graphics

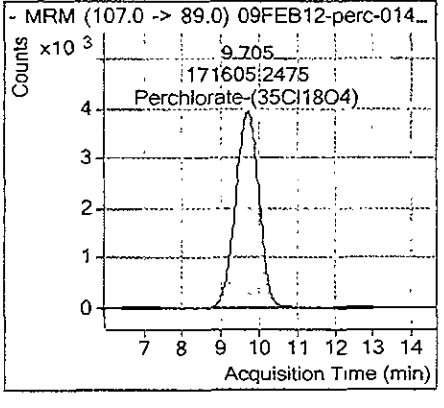
ICV in control
DA 2-9-12

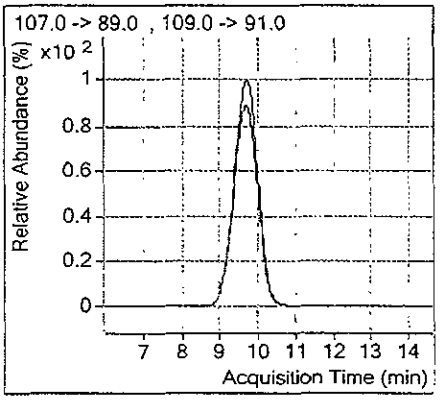
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





CCAL Data

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch xml

Analysis Information

Acquisition Date - Time	1/28/2012 02:44
Analyst	lores
Data File	27JAN12-perc-044.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

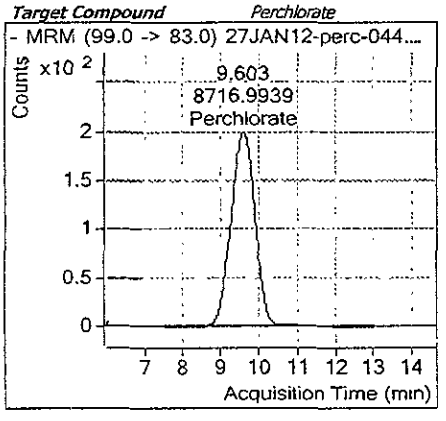
Quantitation Results

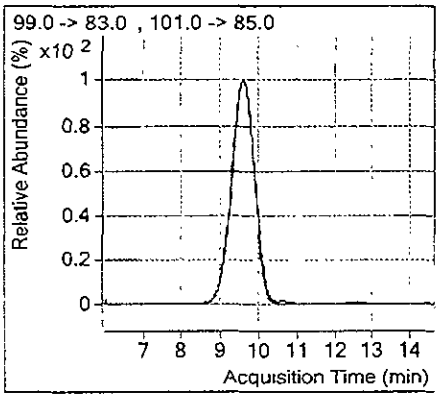
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.603	8717	99	83	0.97742	0.97742	1
Perchlorate-(35Cl18O4)	ISTD	9.608	107420	107	89			1
							-2.3 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2873	101	85	3.03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	33636	109	91	3.19	2.30	3.80	In Control

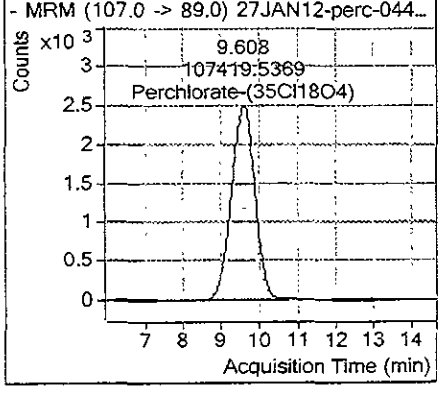
Compound Graphics

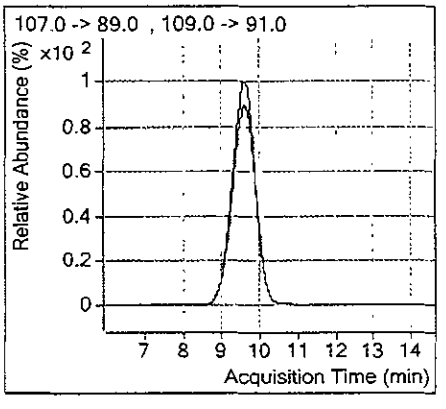
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:00
Analyst	lores
Data File	27JAN12-perc-045.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

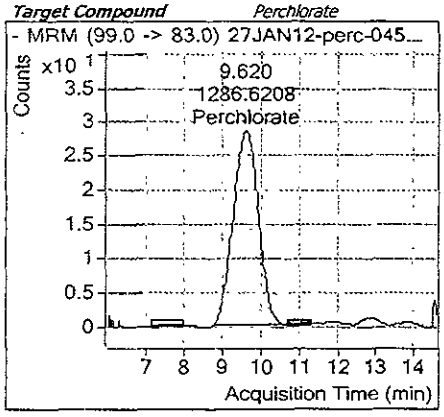
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.620	1287	99	83	0.16412	0.16412	1
Perchlorate-(35Cl18O4)	ISTD	9.617	103051	107	89			1
							9.4 % Deviation	

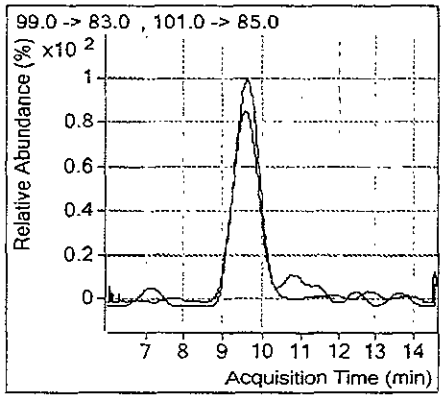
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	438	101	85	2.94	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	32905	109	91	3.13	2.30	3.80	In Control

Compound Graphics

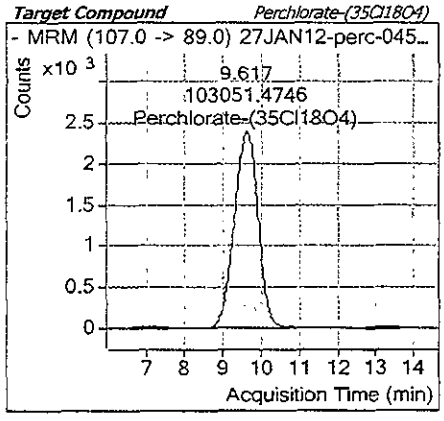
m 2/2/12

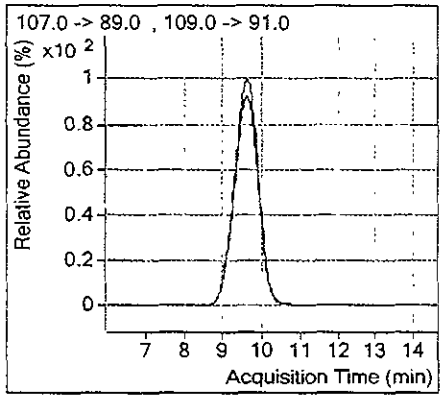
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D.\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:17
Analyst	lores
Data File	27JAN12-perc-046.d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

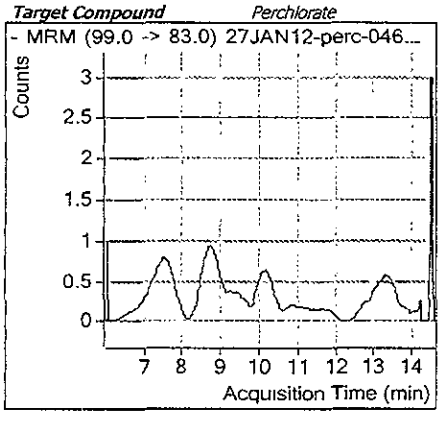
Quantitation Results

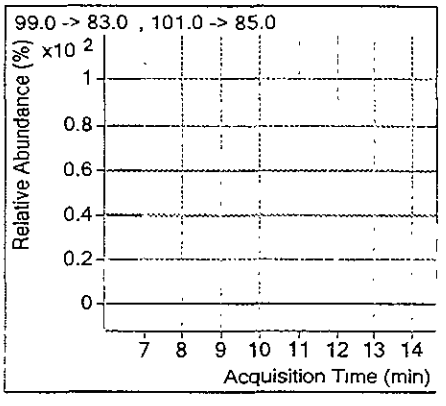
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.616	159119	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	50156	109	91	3.17	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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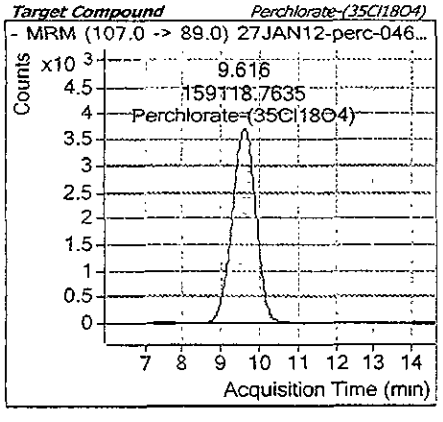
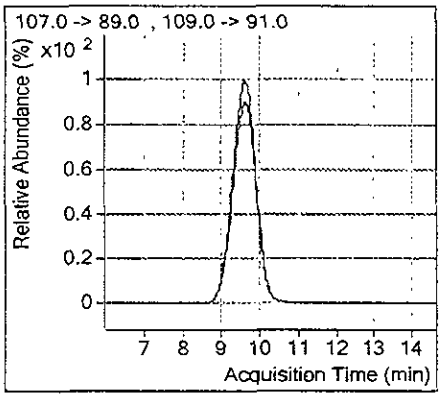
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:15
Analyst	lores
Data File	27JAN12-perc-057.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-5 12LCMS0068 Perchlorate Std 2 0ng/mL
Sample Identification	CCV5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.615	27081	99	83	1.82370	1.82370	1
Perchlorate-(35Cl18O4)	ISTD	9.607	177470	107	89			1
							-8.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	9082	101	85	2.98	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55608	109	91	3.19	2.30	3.80	In Control

Compound Graphics

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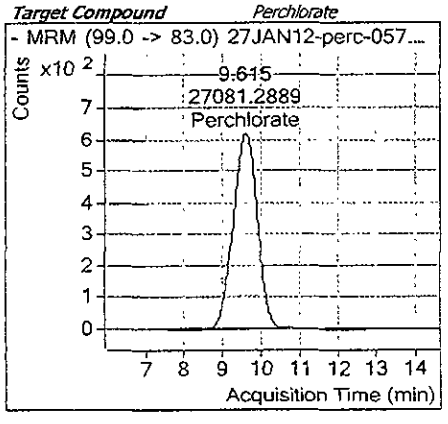
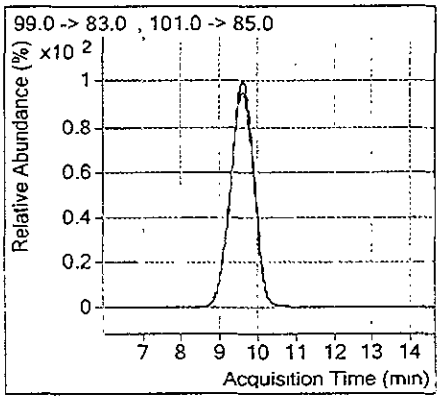
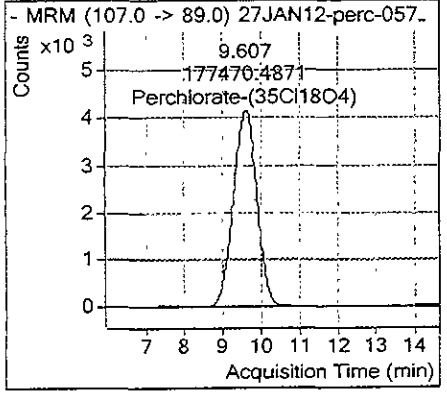
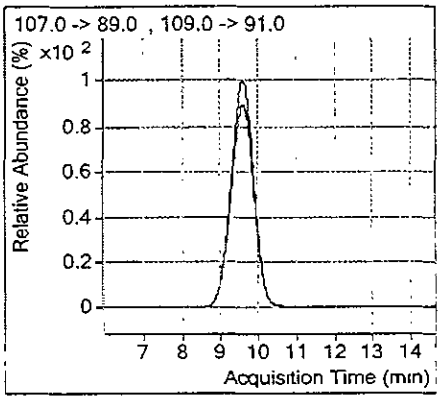
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 06:31
Analyst	lores
Data File	27JAN12-perc-058 d
Acquisition Method	PercMRM_2 m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

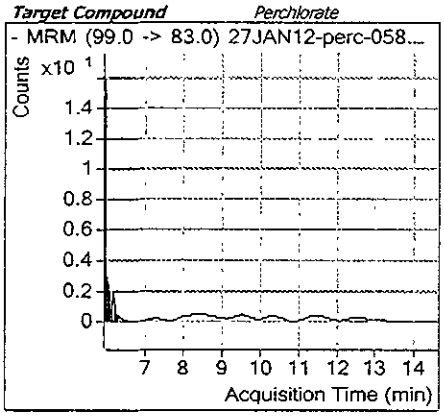
Quantitation Results

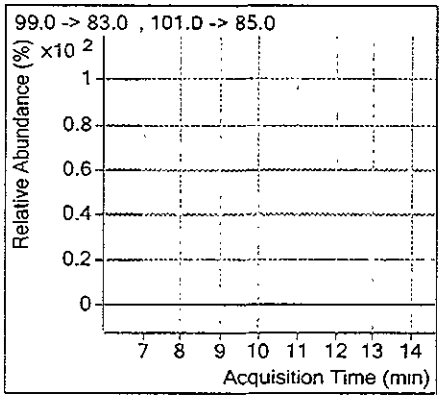
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.608	172615	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	53854	109	91	3.21	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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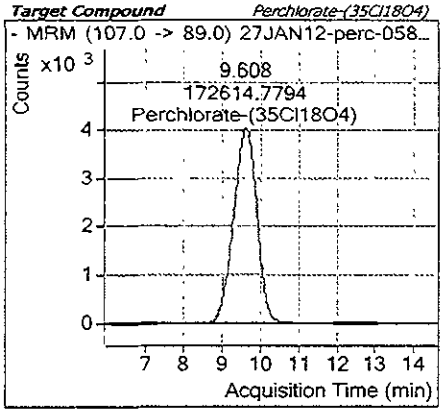
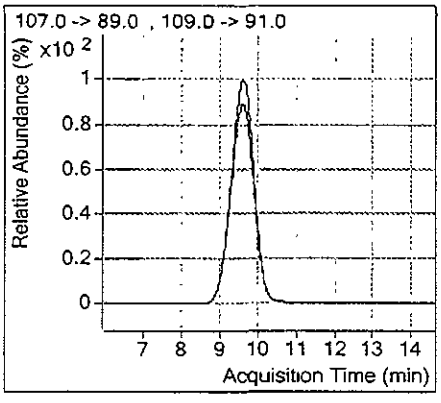
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:25
Analyst	lores
Data File	27JAN12-perc-065.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1 0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 607	13752	99	83	0.92952	0.92952	1
Perchlorate-(35Cl18O4)	ISTD	9 602	178353	107	89			1
							-7.0 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4832	101	85	2.85	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55704	109	91	3.20	2.30	3.80	In Control

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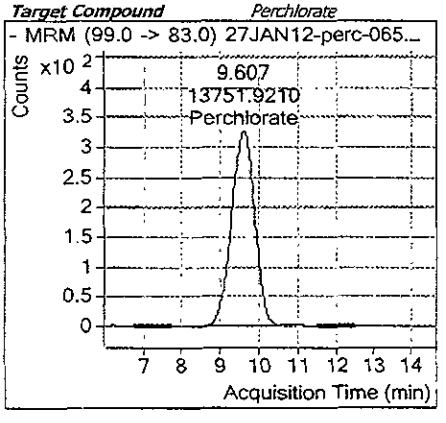
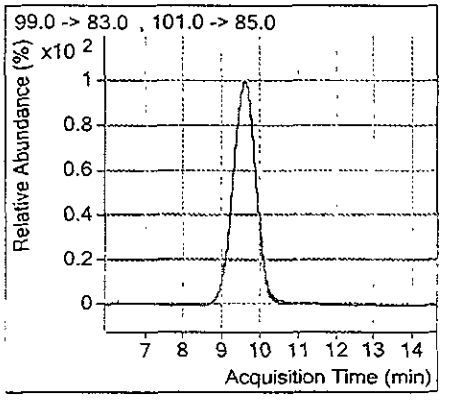
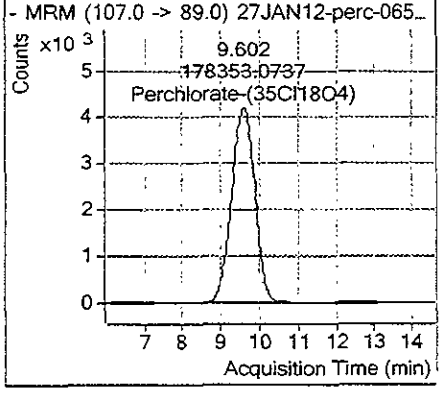
Compound Graphics

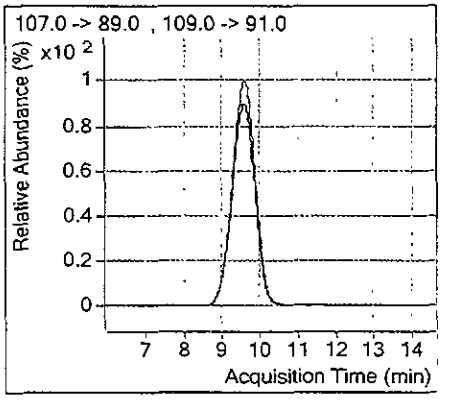
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:41
Analyst	lores
Data File	27JAN12-perc-066.d
Acquisition Method	PercMRM_2 m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.595	2043	99	83	0.15376	0.15376	1
Perchlorate-(35Cl18O4)	ISTD	9.603	175950	107	89			1
							2.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	786	101	85	2.60	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	54998	109	91	3.20	2.30	3.80	In Control

Compound Graphics

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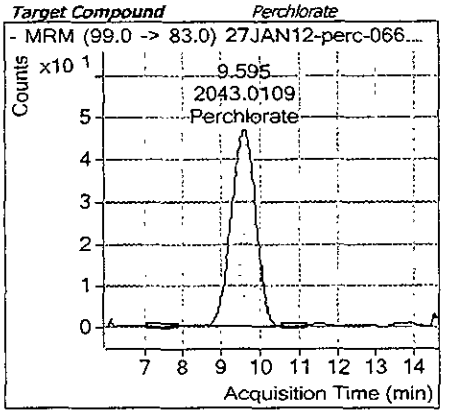
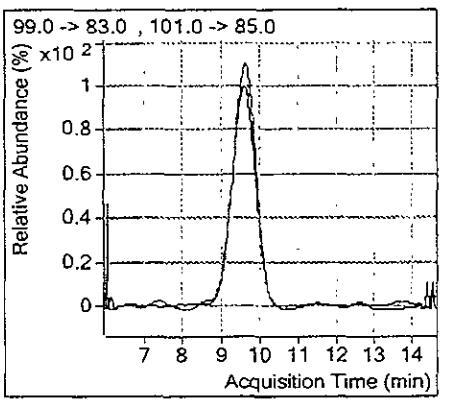
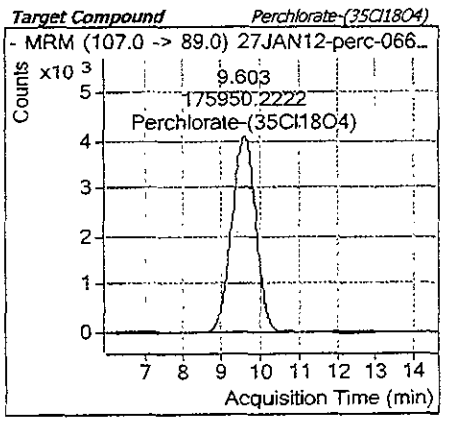
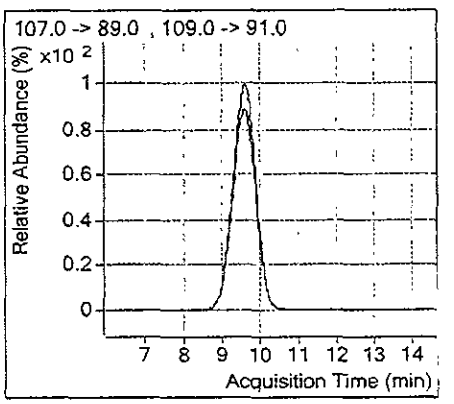
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 08:57
Analyst	lores
Data File	27JAN12-perc-067.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

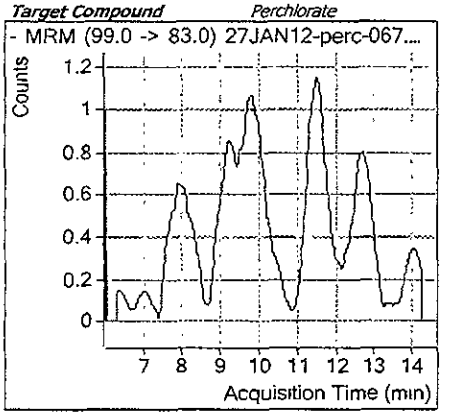
Quantitation Results

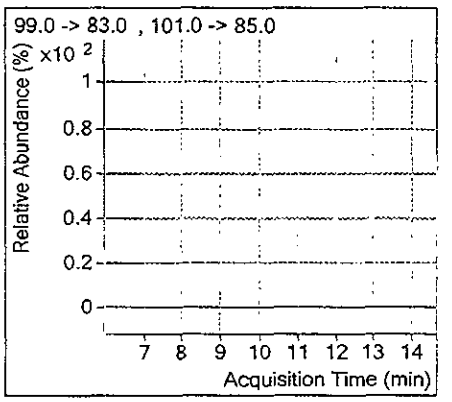
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.602	173900	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	54242	109	91	3.21	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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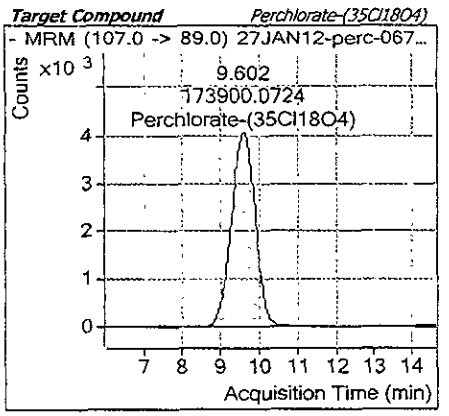
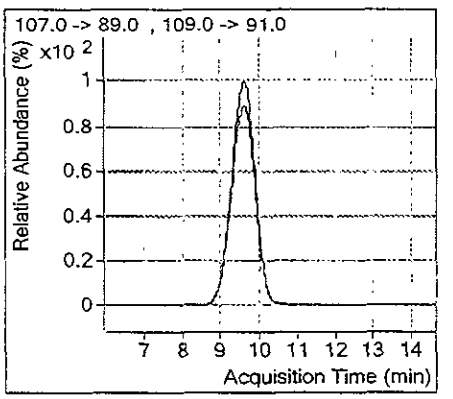
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:20
Analyst	lores
Data File	09FEB12-perc-015.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

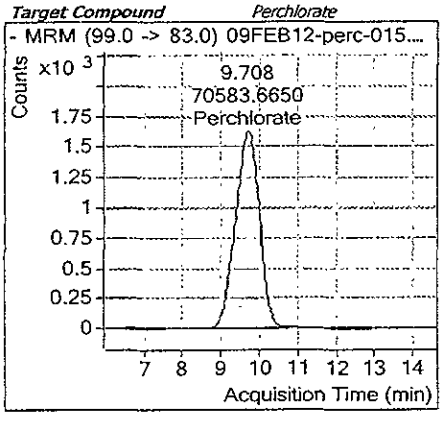
Quantitation Results

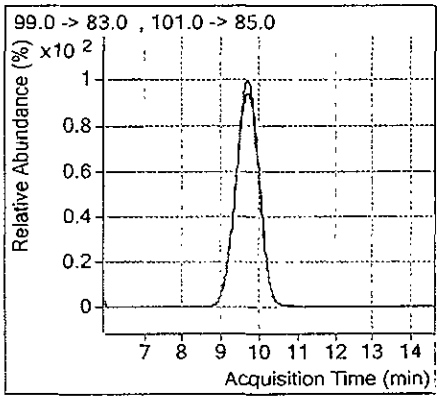
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.708	70584	99	83	4.82348	4.82348	1
Perchlorate-(35Cl18O4)	ISTD	9 698	170202	107	89			1
							-3.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	23649	101	85	2.98	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	55409	109	91	3.07	2 30	3.80	In Control

Compound Graphics

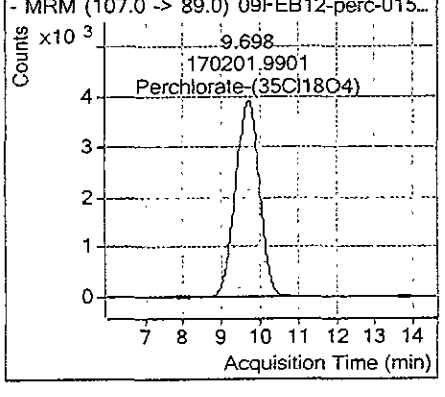
Target Compound *Perchlorate*

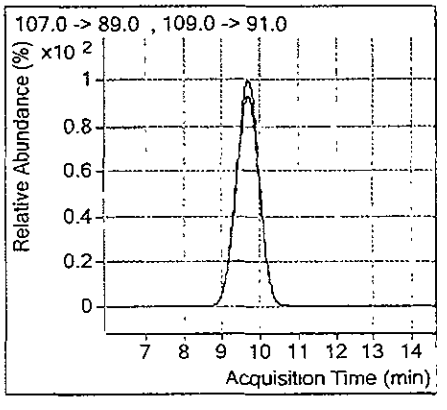




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 12:36
Analyst	lores
Data File	09FEB12-perc-016.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0.15
Injection Volume	50

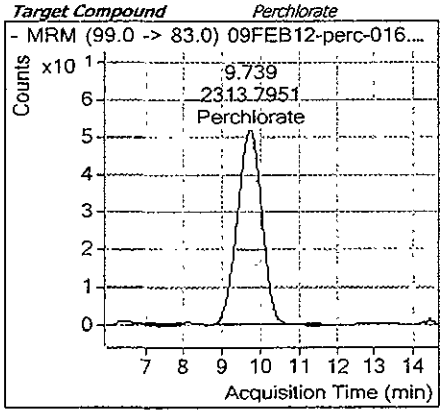
Quantitation Results

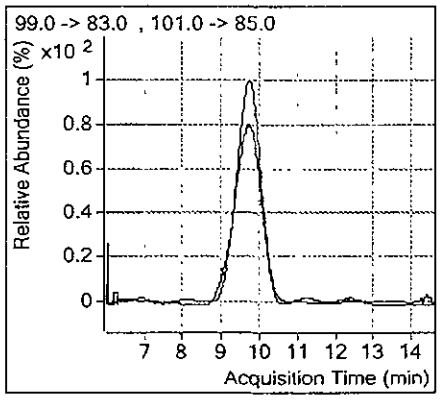
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 739	2314	99	83	0.17082	0.17082	1
Perchlorate-(35Cl18O4)	ISTD	9 704	175607	107	89			1
							13.9 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	699	101	85	3.31	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	56496	109	91	3.11	2.30	3 80	In Control

Compound Graphics

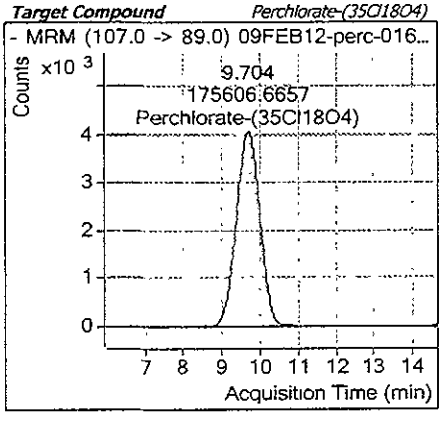
Target Compound *Perchlorate*

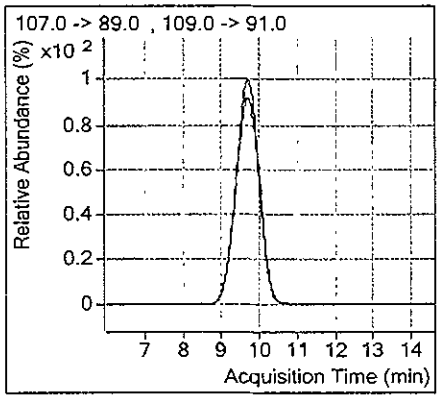




DEL 2-9-12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 13:57
Analyst	lores
Data File	09FEB12-perc-021 d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

Quantitation Results

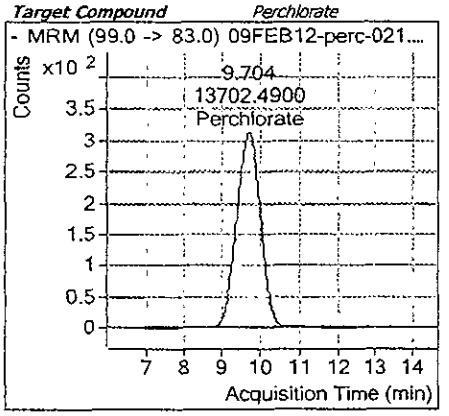
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.704	13702	99	83	0.95018	0.95018	1
Perchlorate-(35Cl18O4)	ISTD	9.708	170354	107	89			1
							-5.0 % Deviation	

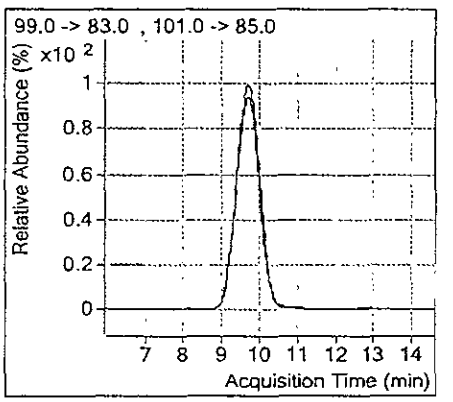
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	4477	101	85	3.06	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	53905	109	91	3.16	2.30	3.80	In Control

Compound Graphics

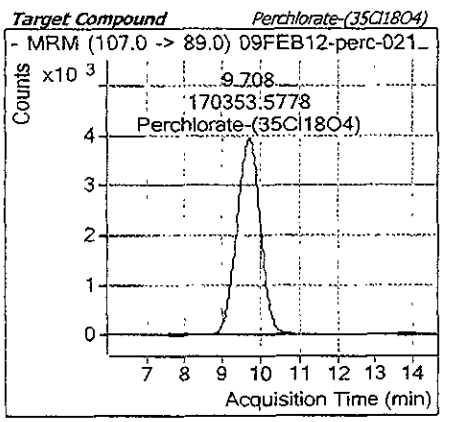
DEL 2-9-12

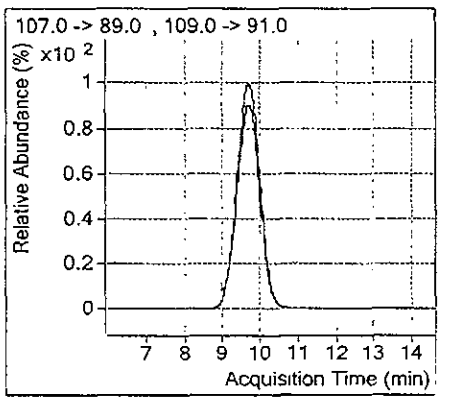
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 14:13
Analyst	lores
Data File	09FEB12-perc-022.d
Acquisition Method	PercMRM_2.m
Sample Name	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-B2
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

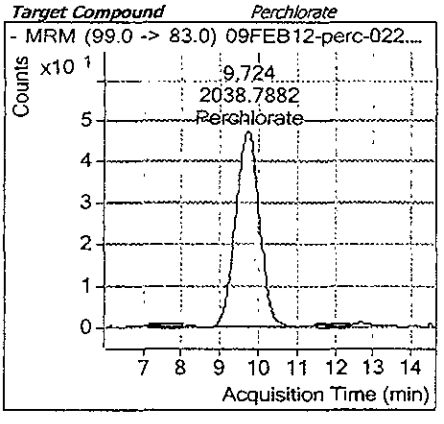
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.724	2039	99	83	0.15800	0.15800	1
Perchlorate-(35Cl18O4)	ISTD	9.713	168912	107	89			1
							5.3 % Deviation	

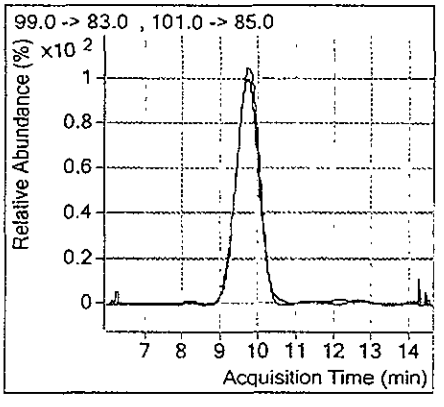
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	756	101	85	2.70	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	53870	109	91	3.14	2.30	3.80	In Control

Compound Graphics

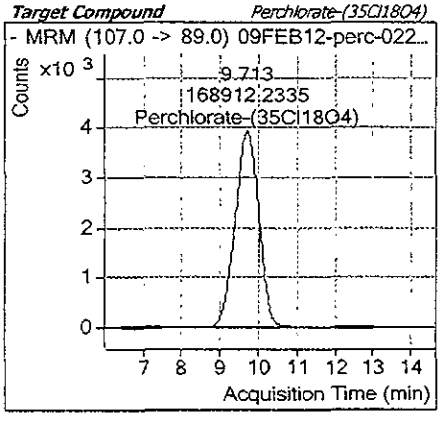
DEh 2-9-12

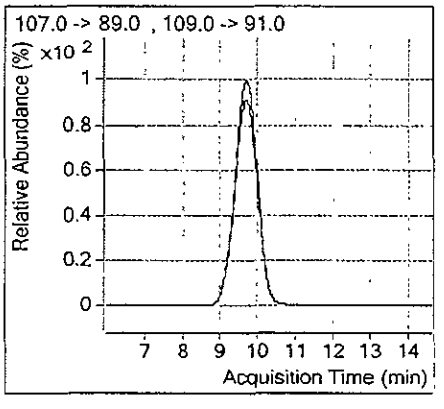
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

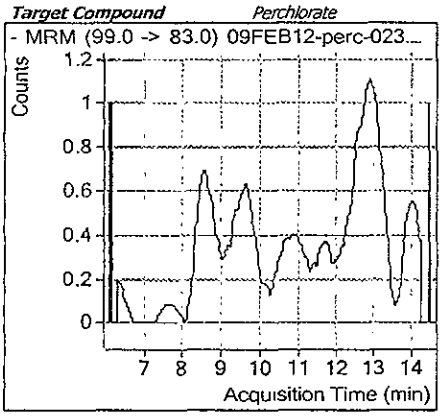
Analysis Information

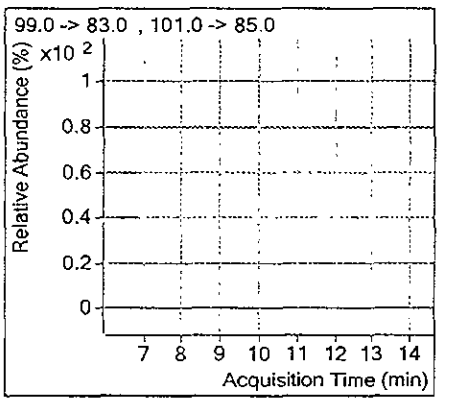
Acquisition Date - Time	2/9/2012 14:29
Analyst	lores
Data File	09FEB12-perc-023.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-B1
Exp. Concentration	
Injection Volume	50

No IS recovery - vial was emptied, see RI DGL 2-9-12

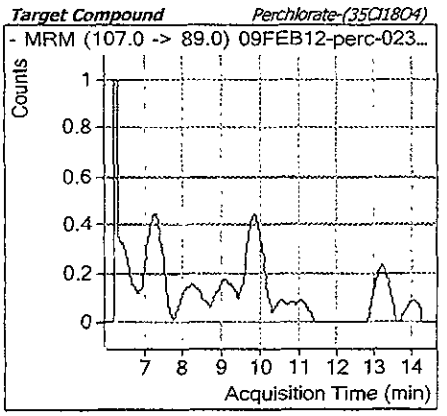
Compound Graphics

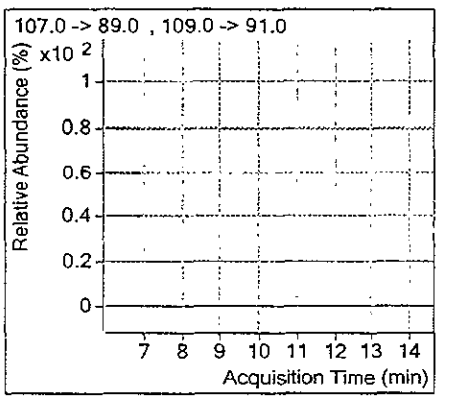
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:15
Analyst	lores
Data File	09FEB12-perc-024.d
Acquisition Method	PercMRM_2.m
Sample Name	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL
Sample Identification	CCV 4
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C5
Exp. Concentration	1.00
Injection Volume	50

System re-started on standard DEH 2-9-12

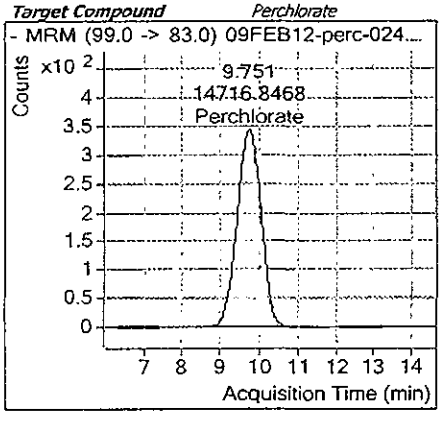
Quantitation Results

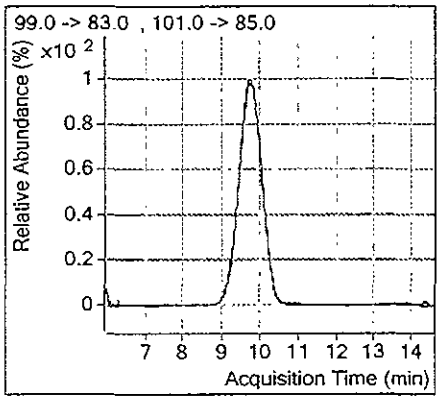
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.751	14717	99	83	0.94154	0.94154	1
Perchlorate-(35Cl18O4)	ISTD	9 754	184677	107	89			1
							-5.8 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5184	101	85	2.84	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	59614	109	91	3.10	2 30	3 80	In Control

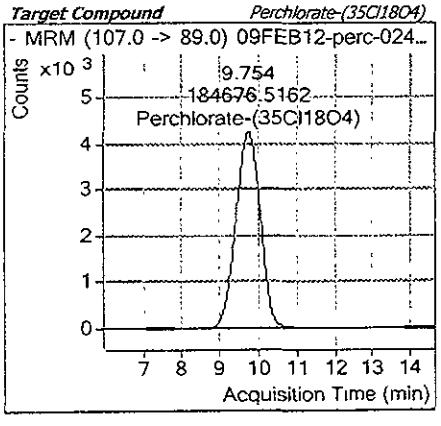
Compound Graphics

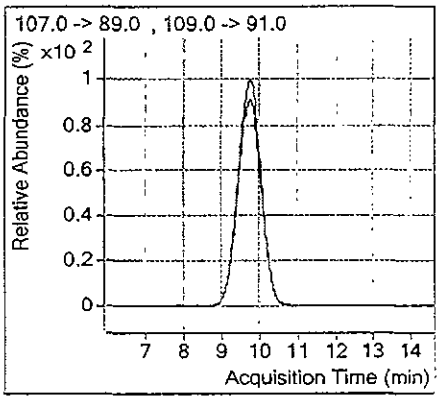
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D.\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	2/9/2012 18:31
Analyst	lores
Data File	09FEB12-perc-025.d
Acquisition Method	PercMRM_2.m
Sample Name	Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

Blank + IS in control. DEL 2-9-12

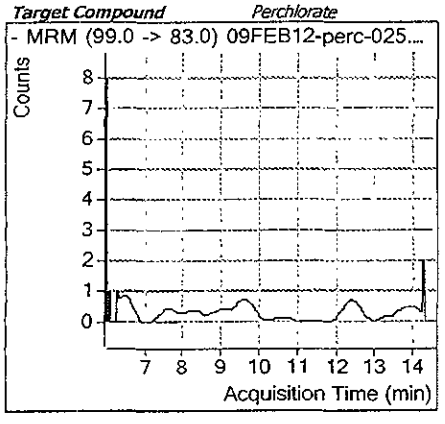
Quantitation Results

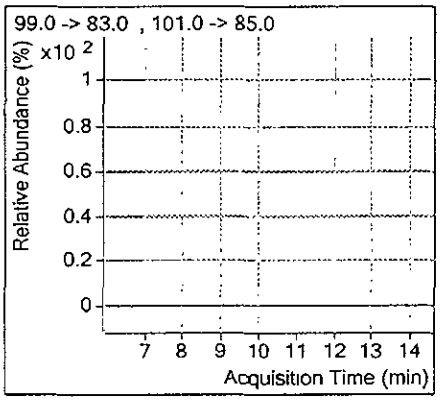
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.754	179947	107	89			1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56904	109	91	3.16	2.30	3.80	In Control

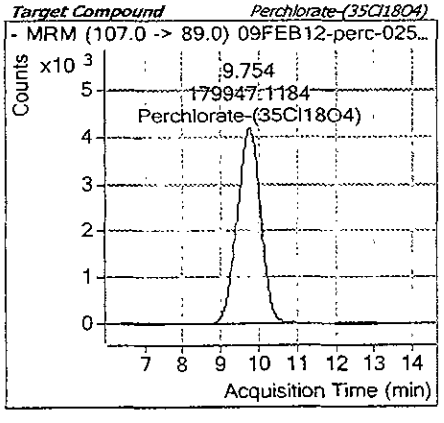
Compound Graphics

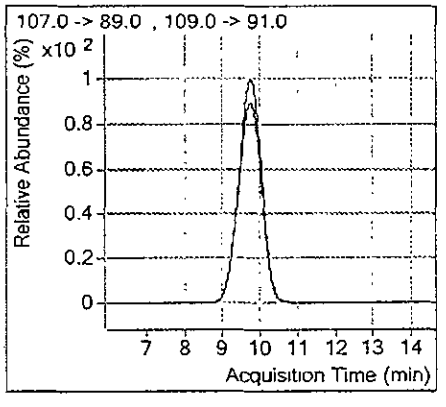
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Raw QC Data

Tune Data

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-01-27 15:00		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00		0.70	0.70	0.10	0.00		86113		
301.98	302.00	0.10	-0.02		0.71	0.70	0.10	0.01		121445		
601.98	601.98	0.10	0.00		0.70	0.70	0.10	0.00		601674		
1033.99	1033.99	0.10	0.00		0.70	0.70	0.10	0.00		503189		
1333.94	1333.97	0.10	-0.03		0.70	0.70	0.10	0.00		778406		
1633.89	1633.95	0.10	-0.06		0.71	0.70	0.10	0.01		530504		

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.10	0.06		0.67	0.70	0.10	-0.03		268924		
302.03	302.00	0.10	0.03		0.67	0.70	0.10	-0.03		127050		
602.04	601.98	0.10	0.06		0.67	0.70	0.10	-0.03		352493		
1034.04	1033.99	0.10	0.05		0.65	0.70	0.10	-0.05		272718		
1334.02	1333.97	0.10	0.05		0.65	0.70	0.10	-0.05		631495		
1634.01	1633.95	0.10	0.06		0.67	0.70	0.10	-0.03		446816		

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.30	-0.01		1.21	1.20	0.60	0.01		101764		
301.92	302.00	0.30	-0.08		1.30	1.20	0.60	0.10		171483		
601.92	601.98	0.30	-0.06		1.32	1.20	0.60	0.12		896539		
1033.87	1033.99	0.30	-0.12		1.37	1.20	0.60	0.17		918881		
1333.85	1333.97	0.30	-0.12		1.34	1.20	0.60	0.14		1681241		
1633.87	1633.95	0.30	-0.08		1.25	1.20	0.60	0.05		1466771		

QQQ Checktune Report

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.30	0.06	Pass	1.18	1.20	0.60	-0.02		360448	0	
302.03	302.00	0.30	0.03	Pass	1.23	1.20	0.60	0.03		185456	0	
601.99	601.98	0.30	0.01	Pass	1.19	1.20	0.60	-0.01		579567	0	
1033.99	1033.99	0.30	0.00	Pass	1.18	1.20	0.60	-0.02		529624	0	
1333.98	1333.97	0.30	0.01	Pass	1.20	1.20	0.60	0.00		1187491	0	
1633.98	1633.95	0.30	0.03	Pass	1.16	1.20	0.60	-0.04		854545	0	

Analyzer:* *MS1 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.90	112.99	0.50	-0.09		2.58	2.50	1.25	0.08		121944	0	
301.89	302.00	0.50	-0.11		2.66	2.50	1.25	0.16		231367	0	
601.89	601.98	0.50	-0.09		2.74	2.50	1.25	0.24		1078188	0	
1033.90	1033.99	0.50	-0.09		2.71	2.50	1.25	0.21		1342840	0	
1333.93	1333.97	0.50	-0.04		2.67	2.50	1.25	0.17		2459597	0	
1633.98	1633.95	0.50	0.03		2.51	2.50	1.25	0.01		2386958	0	

Analyzer:* *MS2 ***Polarity:* *Negative*** ***Width:* *Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.93	112.99	0.50	-0.06		2.43	2.50	1.25	-0.07		453616	0	
301.96	302.00	0.50	-0.04		2.41	2.50	1.25	-0.09		267389	0	
601.98	601.98	0.50	0.00		2.41	2.50	1.25	-0.09		903553	0	
1034.06	1033.99	0.50	0.07		2.28	2.50	1.25	-0.22		1084148	0	
1334.02	1333.97	0.50	0.05		2.33	2.50	1.25	-0.17		2454479	0	
1634.06	1633.95	0.50	0.11		2.25	2.50	1.25	-0.25		2048619	0	

[1] *NOTE: 1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-02-09 08:24		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.10	-0.01		0.70	0.70	0.10	0.00		95029		
301.98	302.00	0.10	-0.02		0.69	0.70	0.10	-0.01		142512		
601.95	601.98	0.10	-0.03		0.68	0.70	0.10	-0.02		716830		
1033.98	1033.99	0.10	-0.01		0.71	0.70	0.10	0.01		569273		
1333.94	1333.97	0.10	-0.03		0.69	0.70	0.10	-0.01		847230		
1633.88	1633.95	0.10	-0.07		0.68	0.70	0.10	-0.02		581498		

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.05	112.99	0.10	0.06		0.67	0.70	0.10	-0.03		314948	0	
302.05	302.00	0.10	0.05		0.66	0.70	0.10	-0.04		143294	0	
602.06	601.98	0.10	0.08		0.64	0.70	0.10	-0.06		413785	0	
1034.06	1033.99	0.10	0.07		0.64	0.70	0.10	-0.06		293314	0	
1334.05	1333.97	0.10	0.08		0.65	0.70	0.10	-0.05		673202	0	
1634.04	1633.95	0.10	0.09		0.65	0.70	0.10	-0.05		498580	0	

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.96	112.99	0.30	-0.03		1.21	1.20	0.60	0.01		114855		
301.92	302.00	0.30	-0.08		1.29	1.20	0.60	0.09		199884		
601.91	601.98	0.30	-0.07		1.32	1.20	0.60	0.12		1048791		
1033.86	1033.99	0.30	-0.13		1.37	1.20	0.60	0.17		1041317		
1333.86	1333.97	0.30	-0.11		1.30	1.20	0.60	0.10		1876355		
1633.87	1633.95	0.30	-0.08		1.26	1.20	0.60	0.06		1600876		

QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.08	112.99	0.30	0.09		1.13	1.20	0.60	-0.07		414618		
302.05	302.00	0.30	0.05		1.20	1.20	0.60	0.00		211793		
602.01	601.98	0.30	0.03		1.19	1.20	0.60	-0.01		668030		
1034.03	1033.99	0.30	0.04		1.16	1.20	0.60	-0.04		588664		
1334.01	1333.97	0.30	0.04		1.16	1.20	0.60	-0.04		1260364		
1634.01	1633.95	0.30	0.06		1.14	1.20	0.60	-0.06		936254		

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.88	112.99	0.50	-0.11		2.62	2.50	1.25	0.12		138210		
301.88	302.00	0.50	-0.12		2.65	2.50	1.25	0.15		272537		
601.87	601.98	0.50	-0.11		2.74	2.50	1.25	0.24		1260782		
1033.88	1033.99	0.50	-0.11		2.71	2.50	1.25	0.21		1478273		
1333.93	1333.97	0.50	-0.04		2.65	2.50	1.25	0.15		2718572		
1633.98	1633.95	0.50	0.03		2.52	2.50	1.25	0.02		2605726		

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.50	-0.01		2.43	2.50	1.25	-0.07		521240	0	
302.02	302.00	0.50	0.02		2.43	2.50	1.25	-0.07		299258	0	
602.00	601.98	0.50	0.02		2.38	2.50	1.25	-0.12		1100304	0	
1034.11	1033.99	0.50	0.12		2.22	2.50	1.25	-0.28		1228682	0	
1334.05	1333.97	0.50	0.08		2.32	2.50	1.25	-0.18		2697575	0	
1634.10	1633.95	0.50	0.15		2.21	2.50	1.25	-0.29		2348577	0	

[1] *NOTE: 1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

Blank Data

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AA **Matrix.....:** WATER
MB Lot-Sample #: G2A260000-097

Prep Date.....: 01/26/12
Analysis Date..: 01/28/12 **Prep Batch #...:** 2026097
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
Perchlorate	0.25 U	0.50	ug/L	SW846 6850_DOD Ha

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:33
Analyst	lores
Data File	27JAN12-perc-047.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L
Sample Identification	MQE631AAB
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P1-C6
Exp. Concentration	
Injection Volume	50

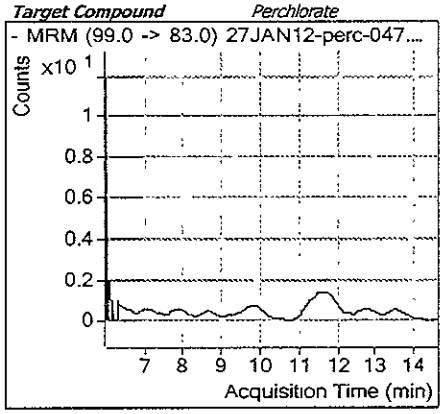
Quantitation Results

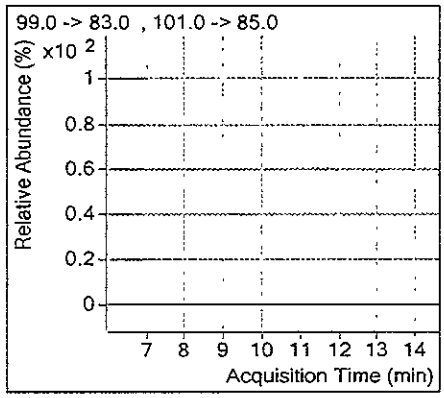
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.612	178313	107	89			1
							Perchlorate = ND	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	56215	109	91	3.17	2.30	3.80	In Control

Compound Graphics

Target Compound *Perchlorate*





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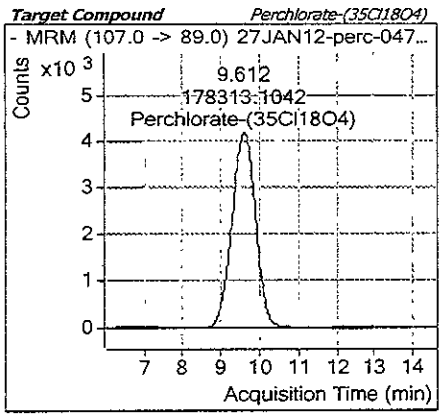
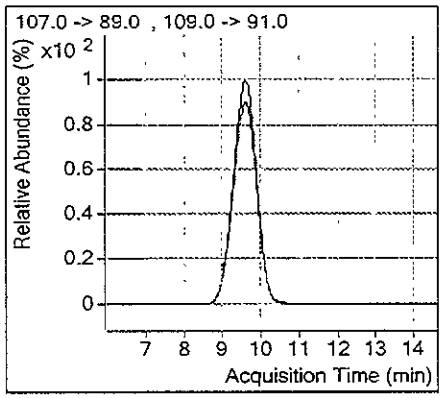
Target Compound *Perchlorate-(35Cl18O4)*





LCS/LCSD Data

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.486**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**97**	**(80 - 120)**	**SW846 6850_DOD Handb**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 03:49
Analyst	iores
Data File	27JAN12-perc-048.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A260000-LCS, 2026097, 20mL/20mL
Sample Identification	MQE631ACC
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-C7
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.606	7006	99	83	0.48560	0.48560	1
Perchlorate-(35Cl18O4)	ISTD	9.613	176810	107	89			1
							97.1 % Recovery	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2517	101	85	2.78	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56121	109	91	3.15	2.30	3.80	In Control

Compound Graphics

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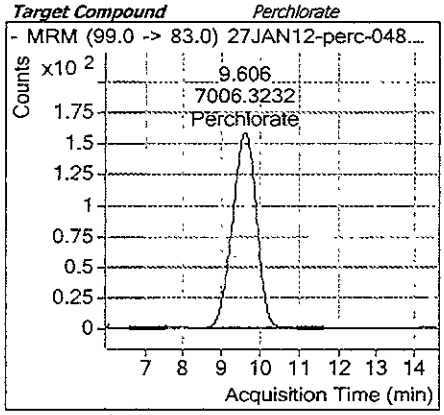
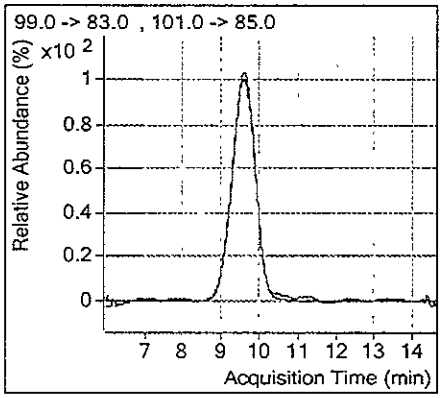
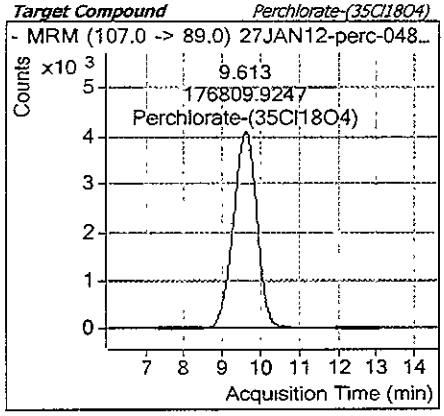
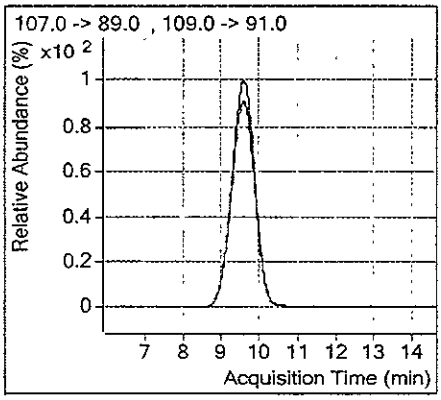
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQE631AD **Matrix.....:** WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	**0.500**	**0.483**	**ug/L**	**97**	**SW846 6850_DO**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQE631AD Matrix.....: WATER
LCS Lot-Sample#: G2A260000-097
Prep Date.....: 01/26/12 Analysis Date..: 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 04:05
Analyst	lores
Data File	27JAN12-perc-049.d
Acquisition Method	PercMRM_2.m
Sample Name	G2A260000-SMCS, 2026097, 20mL/20mL
Sample Identification	MQE631ADC
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-C8
Exp. Concentration	0.50
Injection Volume	50

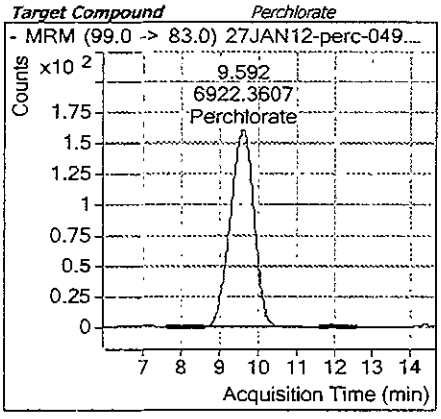
Quantitation Results

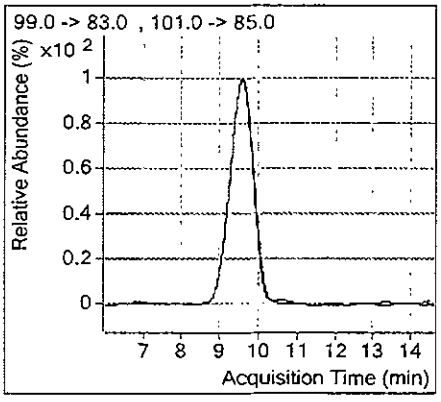
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.592	6922	99	83	0.48255	0.48255	1
Perchlorate-(35Cl18O4)	ISTD	9 587	175833	107	89			1
							96.5 % Recovery	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2336	101	85	2.96	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	56341	109	91	3.12	2.30	3.80	In Control

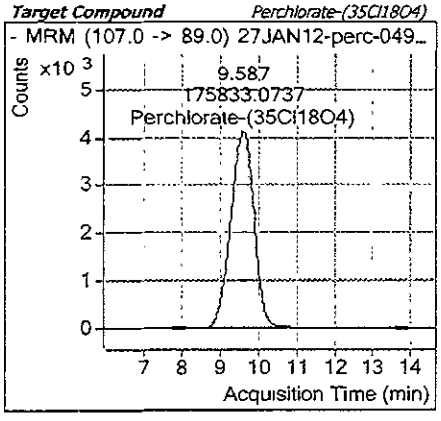
Compound Graphics

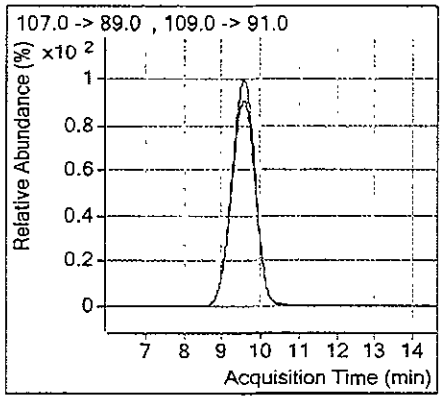
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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MS/MSD Data

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	0.25 U	0.500	0.461	ug/L	92		SW846 6850_DOD Handb
	0.25 U	0.500	0.476	ug/L	95	3.3	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQAVV1AU-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AV-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/26/12 **Analysis Date..:** 01/28/12
Prep Batch #...: 2026097
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	92	(80 - 120)			SW846 6850_DOD Handb
	95	(80 - 120)	3.3	(0-15)	SW846 6850_DOD Handb

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path 0:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:26
Analyst	lores
Data File	27JAN12-perc-054 d
Acquisition Method	PercMRM_2.m
Sample Name	G2A190474-4MS, 2026097, 20mL/20mL,
Sample Identification	MQAVV1AUS
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-D4
Exp. Concentration	0.50
Injection Volume	50

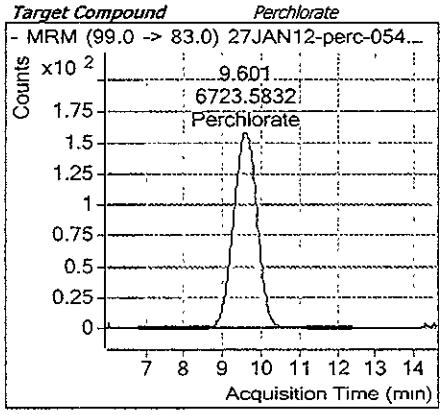
Quantitation Results

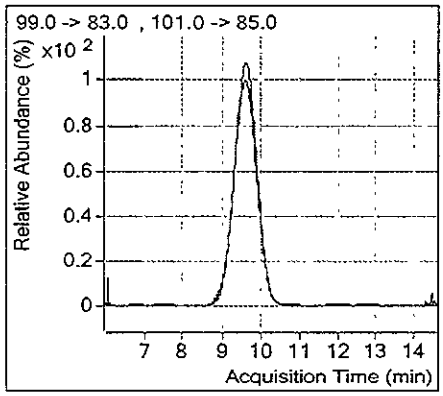
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.601	6724	99	83	0.46067	0.46067	1
Perchlorate-(35Cl18O4)	ISTD	9.606	179192	107	89			1
							92.1 % Recovery	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2511	101	85	2.68	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	55931	109	91	3.20	2.30	3 80	In Control

Compound Graphics

Target Compound *Perchlorate*





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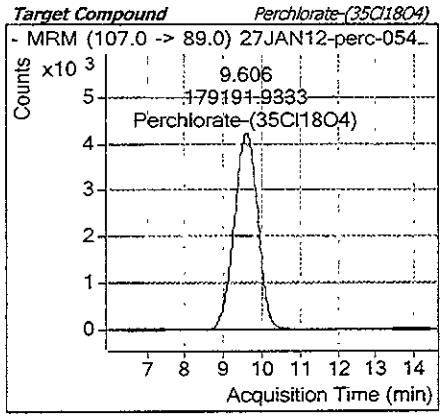
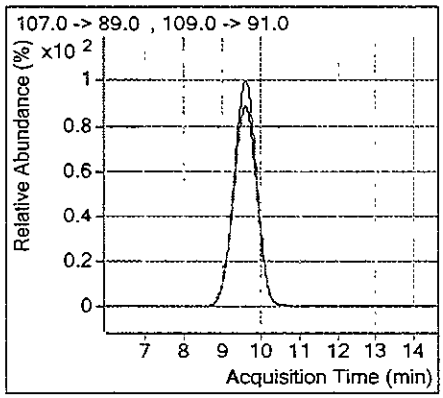
Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	1/28/2012 05:43
Analyst	lores
Data File	27JAN12-perc-055.d
Acquisition Method	PercMRM_2 m
Sample Name	G2A190474-4SD, 2026097, 20mL/20mL,
Sample Identification	MQAVV1AVD
Sample Information	IC-Pak Anion HR 75x4.6mm T=40*C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P1-D5
Exp. Concentration	0.50
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.598	6720	99	83	0.47595	0.47595	1
Perchlorate-(35Cl18O4)	ISTD	9 602	173155	107	89			1
							95.2 % Recovery	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2240	101	85	3.00	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	54871	109	91	3.16	2.30	3.80	In Control

Compound Graphics

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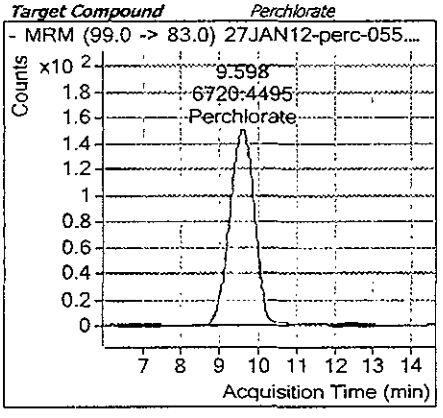
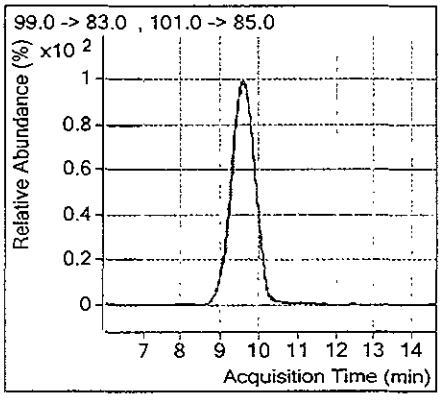
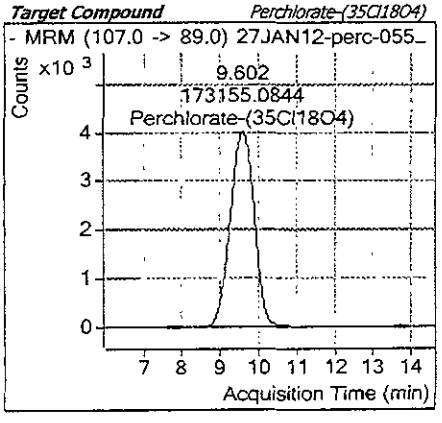
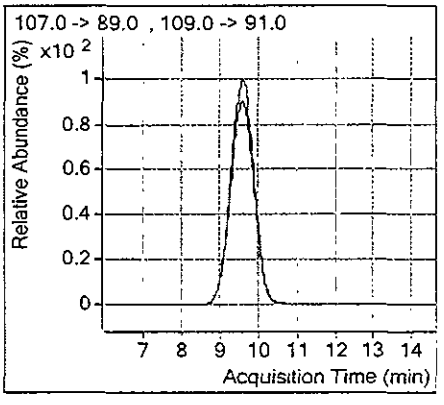
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Run Log

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\27JAN2012\QuantResults\27January2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
27JAN12-perc-003.d	Blank No IS	P2-A5		Sample	1/27/2012 15:39
27JAN12-perc-004.d	Blank + IS	P2-B1		Sample	1/27/2012 15:55
27JAN12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	1/27/2012 16:12
27JAN12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	1/27/2012 16:28
27JAN12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	1/27/2012 16:44
27JAN12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	1/27/2012 17:00
27JAN12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	1/27/2012 17:16
27JAN12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	1/27/2012 17:33
27JAN12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	1/27/2012 17:49
27JAN12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	1/27/2012 18:05
27JAN12-perc-013.d	Blank + IS	P2-C1		Sample	1/27/2012 18:21
27JAN12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	1/27/2012 18:38
27JAN12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	1/27/2012 18:54
27JAN12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/27/2012 19:10
27JAN12-perc-017.d	G2A250000-MB, 2025195, 3.00g/10mL, 6850-DOD-S	P1-A1		Sample	1/27/2012 19:26
27JAN12-perc-018.d	G2A250000-LCS, 2025195, 3.00g/10mL	P1-A2	LCS_5	QC	1/27/2012 19:42
27JAN12-perc-019.d	G2A250000-SMCS, 2025195, 3.00g/10mL	P1-A3	SMCS_5	QC	1/27/2012 19:59
27JAN12-perc-020.d	G2A210417-1, 2025195, 3.20g/10mL	P1-A4		Sample	1/27/2012 20:15
27JAN12-perc-021.d	G2A210417-1MS, 2025195, 3.15g/10mL	P1-A5		Sample	1/27/2012 20:31
27JAN12-perc-022.d	G2A210417-1SD, 2025195, 3.03g/10mL	P1-A6		Sample	1/27/2012 20:47
27JAN12-perc-023.d	G2A210417-2, 202519S, 3.16g/10mL	P1-A7		Sample	1/27/2012 21:04
27JAN12-perc-024.d	G2A210417-3, 2025195, 3.13g/10mL	P1-A8		Sample	1/27/2012 21:20
27JAN12-perc-025.d	G2A210417-4, 2025195, 3.09g/10mL	P1-A9		Sample	1/27/2012 21:36
27JAN12-perc-026.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/27/2012 21:52
27JAN12-perc-027.d	Blank + IS	P2-B1		Sample	1/27/2012 22:08
27JAN12-perc-028.d	G2A210417-6, 2025195, 3.18g/10mL	P1-B2		Sample	1/27/2012 22:25

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-029.d	G2A210417-7, 2025195, 3.08g/10mL	P1-B3		Sample	1/27/2012 22:41
27JAN12-perc-030.d	G2A210417-8, 2025195, 3.00g/10mL	P1-B4		Sample	1/27/2012 22:57
27JAN12-perc-031.d	G2A210417-9, 2025195, 2.97g/10mL	P1-B5		Sample	1/27/2012 23:13
27JAN12-perc-032.d	G2A210417-10, 2025195, 3.13g/10mL	P1-B6		Sample	1/27/2012 23:29
27JAN12-perc-033.d	G2A210417-11, 2025195, 3.01g/10mL	P1-B7		Sample	1/27/2012 23:46
27JAN12-perc-034.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 00:02
27JAN12-perc-035.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 00:18
27JAN12-perc-036.d	Blank + IS	P2-B1		Sample	1/28/2012 00:34
27JAN12-perc-037.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	1/28/2012 00:51
27JAN12-perc-038.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	1/28/2012 01:07
27JAN12-perc-039.d	G2A240000-SMCS, 2024066, 20mL/20mL	P1-C1	LCS_0.5	QC	1/28/2012 01:23
27JAN12-perc-040.d	G2A140424-2, 2024066, 20mL/20mL,	P1-C2		Sample	1/28/2012 01:39
27JAN12-perc-041.d	G2A210417-5, 2024066, 20mL/20mL,	P1-C3		Sample	1/28/2012 01:55
27JAN12-perc-042.d	G2A210417-5MS, 2024066, 20mL/20mL,	P1-C4	MS_0.5	QC	1/28/2012 02:12
27JAN12-perc-043.d	G2A210417-5SD, 2024066, 20mL/20mL,	P1-C5	MS_0.5	QC	1/28/2012 02:28
27JAN12-perc-044.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 02:44
27JAN12-perc-045.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 03:00
27JAN12-perc-046.d	Blank + IS	P2-B1		Sample	1/28/2012 03:17
27JAN12-perc-047.d	G2A260000-MB, 2026097, 20mL/20mL, 6850-DOD-L	P1-C6		Sample	1/28/2012 03:33
27JAN12-perc-048.d	G2A260000-LCS, 2026097, 20mL/20mL	P1-C7	LCS_0.5	QC	1/28/2012 03:49
27JAN12-perc-049.d	G2A260000-SMCS, 2026097, 20mL/20mL	P1-C8	LCS_0.5	QC	1/28/2012 04:05
27JAN12-perc-050.d	G2A190474-1, 2026097, 20mL/20mL,	P1-C9		Sample	1/28/2012 04:22
27JAN12-perc-051.d	G2A190474-2, 2026097, 20mL/20mL, See RI. Ratio failure.	P1-D1		Sample	1/28/2012 04:38
27JAN12-perc-052.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	1/28/2012 04:54
27JAN12-perc-053.d	G2A190474-4, 2026097, 20mL/20mL,	P1-D3		Sample	1/28/2012 05:10
27JAN12-perc-054.d	G2A190474-4MS, 2026097, 20mL/20mL,	P1-D4	MS_0.5	QC	1/28/2012 05:26
27JAN12-perc-055.d	G2A190474-4SD, 2026097, 20mL/20mL,	P1-D5	MS_0.5	QC	1/28/2012 05:43
27JAN12-perc-056.d	G2A190474-5, 2026097, 20mL/20mL,	P1-D6		Sample	1/28/2012 05:59
27JAN12-perc-057.d	CCV-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-C6	CCV5	QC	1/28/2012 06:15

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-058.d	Blank + IS	P2-B1		Sample	1/28/2012 06:31
27JAN12-perc-059.d	G2A200474-1, 2026097, 20mL/20mL,	P1-D7		Sample	1/28/2012 06:47
27JAN12-perc-060.d	G2A200474-2, 2026097, 20mL/20mL,	P1-D8		Sample	1/28/2012 07:04
27JAN12-perc-061.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	1/28/2012 07:20
27JAN12-perc-062.d	G2A200474-4, 2026097, 20mL/20mL,	P1-E1		Sample	1/28/2012 07:36
27JAN12-perc-063.d	G2A200474-5, 2026097, 20mL/20mL,	P1-E2		Sample	1/28/2012 07:52
27JAN12-perc-064.d	G2A200474-6, 2026097, 20mL/20mL,	P1-E3		Sample	1/28/2012 08:08
27JAN12-perc-065.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	1/28/2012 08:25
27JAN12-perc-066.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	1/28/2012 08:41
27JAN12-perc-067.d	Blank + IS	P2-B1		Sample	1/28/2012 08:57

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate	Sample				
27JAN12-perc-004.d	Perchlorate	Sample				
27JAN12-perc-005.d	Perchlorate	Calibration	0.1500	2801	109.9	
27JAN12-perc-006.d	Perchlorate	Calibration	0.3000	5404	102.3	
27JAN12-perc-007.d	Perchlorate	Calibration	0.5000	9177	99.0	
27JAN12-perc-008.d	Perchlorate	Calibration	1.0000	17438	96.2	
27JAN12-perc-009.d	Perchlorate	Calibration	2.0000	34849	95.2	
27JAN12-perc-010.d	Perchlorate	Calibration	5.0000	87739	96.3	
27JAN12-perc-011.d	Perchlorate	Calibration	10.0000	171805	99.3	
27JAN12-perc-012.d	Perchlorate	Calibration	20.0000	306806	101.9	
27JAN12-perc-013.d	Perchlorate	Sample				
27JAN12-perc-014.d	Perchlorate	QC	5.0000	83936	101.3	
27JAN12-perc-015.d	Perchlorate	QC	5.0000	80689	97.6	
27JAN12-perc-016.d	Perchlorate	QC	0.1500	2565	106.0	
27JAN12-perc-017.d	Perchlorate	Sample				
27JAN12-perc-018.d	Perchlorate	QC	5.0000	23240	29.5	
27JAN12-perc-019.d	Perchlorate	QC	5.0000	22371	30.5	
27JAN12-perc-020.d	Perchlorate	Sample		14534		
27JAN12-perc-021.d	Perchlorate	Sample		34033		
27JAN12-perc-022.d	Perchlorate	Sample		32681		
27JAN12-perc-023.d	Perchlorate	Sample		16035		
27JAN12-perc-024.d	Perchlorate	Sample		15853		
27JAN12-perc-025.d	Perchlorate	Sample		14618		
27JAN12-perc-026.d	Perchlorate	QC	1.0000	14647	96.0	
27JAN12-perc-027.d	Perchlorate	Sample				
27JAN12-perc-028.d	Perchlorate	Sample		3998		

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-029.d	Perchlorate	Sample		2751	
27JAN12-perc-030.d	Perchlorate	Sample		6938	
27JAN12-perc-031.d	Perchlorate	Sample		6710	
27JAN12-perc-032.d	Perchlorate	Sample		742	
27JAN12-perc-033.d	Perchlorate	Sample		563	
27JAN12-perc-034.d	Perchlorate	QC	2.0000	27816	94.6
27JAN12-perc-035.d	Perchlorate	QC	0.1500	1981	106.2
27JAN12-perc-036.d	Perchlorate	Sample			
27JAN12-perc-037.d	Perchlorate	Sample			
27JAN12-perc-038.d	Perchlorate	QC	0.5000	7080	100.6
27JAN12-perc-039.d	Perchlorate	QC	0.5000	7079	96.1
27JAN12-perc-040.d	Perchlorate	Sample		196240	
27JAN12-perc-041.d	Perchlorate	Sample		11609	
27JAN12-perc-042.d	Perchlorate	QC	0.5000	18064	250.4
27JAN12-perc-043.d	Perchlorate	QC	0.5000	17693	256.4
27JAN12-perc-044.d	Perchlorate	QC	1.0000	8717	97.7
27JAN12-perc-045.d	Perchlorate	QC	0.1500	1287	109.4
27JAN12-perc-046.d	Perchlorate	Sample			
27JAN12-perc-047.d	Perchlorate	Sample			
27JAN12-perc-048.d	Perchlorate	QC	0.5000	7006	97.1
27JAN12-perc-049.d	Perchlorate	QC	0.5000	6922	96.5
27JAN12-perc-050.d	Perchlorate	Sample		276	
27JAN12-perc-051.d	Perchlorate	Sample		1203	
27JAN12-perc-052.d	Perchlorate	Sample		1180	
27JAN12-perc-053.d	Perchlorate	Sample			
27JAN12-perc-054.d	Perchlorate	QC	0.5000	6724	92.1
27JAN12-perc-055.d	Perchlorate	QC	0.5000	6720	95.2
27JAN12-perc-056.d	Perchlorate	Sample		154	
27JAN12-perc-057.d	Perchlorate	QC	2.0000	27081	91.2

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-058.d	Perchlorate	Sample			
27JAN12-perc-059.d	Perchlorate	Sample			
27JAN12-perc-060.d	Perchlorate	Sample			
27JAN12-perc-061.d	Perchlorate	Sample		2937	
27JAN12-perc-062.d	Perchlorate	Sample			
27JAN12-perc-063.d	Perchlorate	Sample			
27JAN12-perc-064.d	Perchlorate	Sample			
27JAN12-perc-065.d	Perchlorate	QC	1.0000	13752	93.0
27JAN12-perc-066.d	Perchlorate	QC	0.1500	2043	102.5
27JAN12-perc-067.d	Perchlorate	Sample			

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
27JAN12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
27JAN12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		211488		
27JAN12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	223283		
27JAN12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	220220		
27JAN12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	227031		
27JAN12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218398		
27JAN12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	218746		
27JAN12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	216575		
27JAN12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	205344		
27JAN12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178484	213510.2	Averge ICAL IS area response
27JAN12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		215378	0.9	% Dev from average
27JAN12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	196970	-7.7	
27JAN12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	196515	-8.0	
27JAN12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	212887	-0.3	
27JAN12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		195538	-8.4	
27JAN12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	188710	-11.6	
27JAN12-perc-019.d	Perchlorate-(35Cl18O4)	QC	10.0000	175846	-17.6	
27JAN12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		153808	-28.0	
27JAN12-perc-021.d	Perchlorate-(35Cl18O4)	Sample		143338	-32.9	
27JAN12-perc-022.d	Perchlorate-(35Cl18O4)	Sample		145700	-31.8	
27JAN12-perc-023.d	Perchlorate-(35Cl18O4)	Sample		149523	-30.0	
27JAN12-perc-024.d	Perchlorate-(35Cl18O4)	Sample		138647	-35.1	
27JAN12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		139526	-34.7	
27JAN12-perc-026.d	Perchlorate-(35Cl18O4)	QC	10.0000	183855	-13.9	
27JAN12-perc-027.d	Perchlorate-(35Cl18O4)	Sample		176320	-17.4	
27JAN12-perc-028.d	Perchlorate-(35Cl18O4)	Sample		163374	-23.5	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-029.d	Perchlorate-(35Cl18O4)	Sample		164633	-22.9
27JAN12-perc-030.d	Perchlorate-(35Cl18O4)	Sample		145400	-31.9
27JAN12-perc-031.d	Perchlorate-(35Cl18O4)	Sample		152782	-28.4
27JAN12-perc-032.d	Perchlorate-(35Cl18O4)	Sample		124945	-41.5
27JAN12-perc-033.d	Perchlorate-(35Cl18O4)	Sample		126496	-40.8
27JAN12-perc-034.d	Perchlorate-(35Cl18O4)	QC	10.0000	175657	-17.7
27JAN12-perc-035.d	Perchlorate-(35Cl18O4)	QC	10.0000	164057	-23.2
27JAN12-perc-036.d	Perchlorate-(35Cl18O4)	Sample		182675	-14.4
27JAN12-perc-037.d	Perchlorate-(35Cl18O4)	Sample		173391	-18.8
27JAN12-perc-038.d	Perchlorate-(35Cl18O4)	QC	10.0000	172284	-19.3
27JAN12-perc-039.d	Perchlorate-(35Cl18O4)	QC	10.0000	180536	-15.4
27JAN12-perc-040.d	Perchlorate-(35Cl18O4)	Sample		156395	-26.8
27JAN12-perc-041.d	Perchlorate-(35Cl18O4)	Sample		178444	-16.4
27JAN12-perc-042.d	Perchlorate-(35Cl18O4)	QC	10.0000	173173	-18.9
27JAN12-perc-043.d	Perchlorate-(35Cl18O4)	QC	10.0000	165599	-22.4
27JAN12-perc-044.d	Perchlorate-(35Cl18O4)	QC	10.0000	107420	-49.7
27JAN12-perc-045.d	Perchlorate-(35Cl18O4)	QC	10.0000	103051	-51.7
27JAN12-perc-046.d	Perchlorate-(35Cl18O4)	Sample		159119	-25.5
27JAN12-perc-047.d	Perchlorate-(35Cl18O4)	Sample		178313	-16.5
27JAN12-perc-048.d	Perchlorate-(35Cl18O4)	QC	10.0000	176810	-17.2
27JAN12-perc-049.d	Perchlorate-(35Cl18O4)	QC	10.0000	175833	-17.6
27JAN12-perc-050.d	Perchlorate-(35Cl18O4)	Sample		183614	-14.0
27JAN12-perc-051.d	Perchlorate-(35Cl18O4)	Sample		174824	-18.1
27JAN12-perc-052.d	Perchlorate-(35Cl18O4)	Sample		184680	-13.5
27JAN12-perc-053.d	Perchlorate-(35Cl18O4)	Sample		178081	-16.6
27JAN12-perc-054.d	Perchlorate-(35Cl18O4)	QC	10.0000	179192	-16.1
27JAN12-perc-055.d	Perchlorate-(35Cl18O4)	QC	10.0000	173155	-18.9
27JAN12-perc-056.d	Perchlorate-(35Cl18O4)	Sample		184409	-13.6
27JAN12-perc-057.d	Perchlorate-(35Cl18O4)	QC	10.0000	177470	-16.9

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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27JAN12-perc-058.d	Perchlorate-(35Cl18O4)	Sample		172615	-19.2
27JAN12-perc-059.d	Perchlorate-(35Cl18O4)	Sample		172828	-19.1
27JAN12-perc-060.d	Perchlorate-(35Cl18O4)	Sample		176299	-17.4
27JAN12-perc-061.d	Perchlorate-(35Cl18O4)	Sample		172234	-19.3
27JAN12-perc-062.d	Perchlorate-(35Cl18O4)	Sample		174129	-18.4
27JAN12-perc-063.d	Perchlorate-(35Cl18O4)	Sample		174800	-18.1
27JAN12-perc-064.d	Perchlorate-(35Cl18O4)	Sample		175962	-17.6
27JAN12-perc-065.d	Perchlorate-(35Cl18O4)	QC	10.0000	178353	-16.5
27JAN12-perc-066.d	Perchlorate-(35Cl18O4)	QC	10.0000	175950	-17.6
27JAN12-perc-067.d	Perchlorate-(35Cl18O4)	Sample		173900	-18.6

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\09FEB2012\QuantResults\09February2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
09FEB12-perc-003.d	Blank No IS	P2-A5		Sample	2/9/2012 09:05
09FEB12-perc-004.d	Blank + IS	P2-B1		Sample	2/9/2012 09:21
09FEB12-perc-005.d	ICAL-1 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	1	Calibration	2/9/2012 09:37
09FEB12-perc-006.d	ICAL-2 12LCMS0065 Perchlorate Std 0.30ng/mL	P2-B3	2	Calibration	2/9/2012 09:54
09FEB12-perc-007.d	ICAL-3 12LCMS0066 Perchlorate Std 0.50ng/mL	P2-B4	3	Calibration	2/9/2012 10:10
09FEB12-perc-008.d	ICAL-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-B5	4	Calibration	2/9/2012 10:26
09FEB12-perc-009.d	ICAL-5 12LCMS0068 Perchlorate Std 2.0ng/mL	P2-B6	5	Calibration	2/9/2012 10:42
09FEB12-perc-010.d	ICAL-6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-B7	6	Calibration	2/9/2012 10:59
09FEB12-perc-011.d	ICAL-7 12LCMS0070 Perchlorate Std 10ng/mL	P2-B8	7	Calibration	2/9/2012 11:15
09FEB12-perc-012.d	ICAL-8 12LCMS0071 Perchlorate Std 20ng/mL	P2-B9	8	Calibration	2/9/2012 11:31
09FEB12-perc-013.d	Blank + IS	P2-C1		Sample	2/9/2012 11:47
09FEB12-perc-014.d	ICV 12LCMS0073 Perchlorate Std 5.0ng/mL	P2-C2	ICV	QC	2/9/2012 12:03
09FEB12-perc-015.d	CCV_6 12LCMS0069 Perchlorate Std 5.0ng/mL	P2-C7	CCV6	QC	2/9/2012 12:20
09FEB12-perc-016.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 12:36
09FEB12-perc-017.d	G2A240000-MB, 2024066, 20mL/20mL, 6850-DOD-L	P1-B8		Sample	2/9/2012 12:52
09FEB12-perc-018.d	G2A240000-LCS, 2024066, 20mL/20mL	P1-B9	LCS_0.5	QC	2/9/2012 13:08
09FEB12-perc-019.d	G2A190474-3, 2026097, 20mL/20mL,	P1-D2		Sample	2/9/2012 13:25
09FEB12-perc-020.d	G2A200474-3, 2026097, 20mL/20mL,	P1-D9		Sample	2/9/2012 13:41
09FEB12-perc-021.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL	P2-C5	CCV4	QC	2/9/2012 13:57
09FEB12-perc-022.d	LODV 12LCMS0064 Perchlorate Std 0.15ng/mL	P2-B2	LODV	QC	2/9/2012 14:13
09FEB12-perc-023.d	Blank + IS Emptied-no IS recovery	P2-B1		Sample	2/9/2012 14:29
09FEB12-perc-024.d	CCV-4 12LCMS0067 Perchlorate Std 1.0ng/mL RI	P2-C5	CCV4	QC	2/9/2012 18:15
09FEB12-perc-025.d	Blank + IS RI	P2-C1		Sample	2/9/2012 18:31

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy
09FEB12-perc-003.d	Perchlorate	Sample			
09FEB12-perc-004.d	Perchlorate	Sample			
09FEB12-perc-005.d	Perchlorate	Calibration	0.1500	1994	98.5
09FEB12-perc-006.d	Perchlorate	Calibration	0.3000	4939	110.2
09FEB12-perc-007.d	Perchlorate	Calibration	0.5000	7366	99.0
09FEB12-perc-008.d	Perchlorate	Calibration	1.0000	14708	97.7
09FEB12-perc-009.d	Perchlorate	Calibration	2.0000	29275	96.8
09FEB12-perc-010.d	Perchlorate	Calibration	5.0000	72149	97.4
09FEB12-perc-011.d	Perchlorate	Calibration	10.0000	142220	99.0
09FEB12-perc-012.d	Perchlorate	Calibration	20.0000	267911	101.4
09FEB12-perc-013.d	Perchlorate	Sample			
09FEB12-perc-014.d	Perchlorate	QC	5.0000	73040	99.0
09FEB12-perc-015.d	Perchlorate	QC	5.0000	70584	96.5
09FEB12-perc-016.d	Perchlorate	QC	0.1500	2314	113.9
09FEB12-perc-017.d	Perchlorate	Sample			
09FEB12-perc-018.d	Perchlorate	QC	0.5000	6429	93.2
09FEB12-perc-019.d	Perchlorate	Sample		1270	
09FEB12-perc-020.d	Perchlorate	Sample		2732	
09FEB12-perc-021.d	Perchlorate	QC	1.0000	13702	95.0
09FEB12-perc-022.d	Perchlorate	QC	0.1500	2039	105.3
09FEB12-perc-023.d	Perchlorate	Sample			
09FEB12-perc-024.d	Perchlorate	QC	1.0000	14717	94.2
09FEB12-perc-025.d	Perchlorate	Sample			

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Compound *Perchlorate-(35Cl18O4)*

Data File	Compound	Sample Type	Exp Conc	Response		
09FEB12-perc-003.d	Perchlorate-(35Cl18O4)	Sample				
09FEB12-perc-004.d	Perchlorate-(35Cl18O4)	Sample		178134		
09FEB12-perc-005.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	178318		
09FEB12-perc-006.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	183239		
09FEB12-perc-007.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	179006		
09FEB12-perc-008.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	177774		
09FEB12-perc-009.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	176957		
09FEB12-perc-010.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	172263		
09FEB12-perc-011.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	166692		
09FEB12-perc-012.d	Perchlorate-(35Cl18O4)	Calibration	10.0000	153143	173423.8	Average ICAL IS area response
09FEB12-perc-013.d	Perchlorate-(35Cl18O4)	Sample		175351	1.1	% Deviation from ICAL IS average
09FEB12-perc-014.d	Perchlorate-(35Cl18O4)	QC	10.0000	171605	-1.0	
09FEB12-perc-015.d	Perchlorate-(35Cl18O4)	QC	10.0000	170202	-1.9	
09FEB12-perc-016.d	Perchlorate-(35Cl18O4)	QC	10.0000	175607	1.3	
09FEB12-perc-017.d	Perchlorate-(35Cl18O4)	Sample		170093	-1.9	
09FEB12-perc-018.d	Perchlorate-(35Cl18O4)	QC	10.0000	166351	-4.1	
09FEB12-perc-019.d	Perchlorate-(35Cl18O4)	Sample		179135	3.3	
09FEB12-perc-020.d	Perchlorate-(35Cl18O4)	Sample		175345	1.1	
09FEB12-perc-021.d	Perchlorate-(35Cl18O4)	QC	10.0000	170354	-1.8	
09FEB12-perc-022.d	Perchlorate-(35Cl18O4)	QC	10.0000	168912	-2.6	
09FEB12-perc-023.d	Perchlorate-(35Cl18O4)	Sample			-100.0	(vial was emptied)
09FEB12-perc-024.d	Perchlorate-(35Cl18O4)	QC	10.0000	184677	6.5	
09FEB12-perc-025.d	Perchlorate-(35Cl18O4)	Sample		179947	3.8	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

Prep Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica West Sacramento

LCMS Data Review Checklist

Lot ID: G2A200474 **Test:** 6850-PDD-L **PM:** LCL

Prep Batch(es) 2026097 **Due:** 2/9/12

A. Calibration/Instrument Run QC	Analyst	Reviewer	N/A
1. ICAL or ICAL Summary and CCV included.	✓	✓	
2. ICAL, CCV Frequency & Criteria met.	✓	✓	
• $RF_{average}$ criteria appropriate for the method (see footnote for criteria).			✓
• Linear Regression criteria appropriate if required ($r \geq 0.995$).	✓	✓	
• Quadratic fit criteria appropriate if required ($r^2 \geq 0.990$).			✓
• For Linear Regression and Quadratic fit – Does the y-intercept support ½ the reporting limit as described in CA-Q-S-005?	✓	✓	
• All curve points show calculated concentrations.	✓	✓	
3. Peaks correctly ID'd by data system.	✓	✓	
4. Copy of logbook for ICAL included	✓	✓	
5. Tune check frequency & criteria met and copy included.	✓	✓	
6. Method Number is identified on data.	✓	✓	
B. QA/QC			
1. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
2. LCS/LCSD and MB data is included.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present in Clouseau.	✓	✓	
4. MS/MSD data complete.	✓	✓	
5. Holding Times were met. E: 2/16/12	✓	✓	
6. IS/Surrogate recoveries meet criteria or properly noted.	✓	✓	
C. Sample Analysis			
1. Logbook copies for all injections made, including ICV standards and ICAL.	✓	✓	
2. Logbooks/prep sheets properly filled out.	✓	✓	
3. Manual Integrations reviewed and appropriate.			✓
4. All raw data for samples is included (applies to unused data as well)	✓	✓	
5. All analytes correctly reported.	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all non-conformances documented appropriately?	✓	✓	
2. Quantims entry correct, including dates and times.	✓	✓	
3. Appropriate footnotes used.	✓	✓	
4. Report sheets included and error-free.	✓	✓	

Analyst: [signature] DEG Date: 2/8/12 / 2-9-12

2nd Level Reviewer: DEGall [signature] Date: 2-8-2012 / 2/10/12

Comments:

Opening LOQV failed, Sample 3 reanalyzed - DEG 2-9-12

Criteria for $RF_{average}$

- PPCP – NS by Isotope Dilution ≤ 30%.
- PPCP – NS by Internal Standard ≤ 50%.
- PPCP – IS by Internal Standard ≤ 50%.
- All other LCMS methods ≤ 20%

Delivered To Instruments 1/26/12 - Entered on 2/08/12
Received @ Instruments 1/26/12 - entered on 2/8/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento
ESC-Extraction Master Sheet

Holding Time Due: 2/14/12
BATCH #: 2026097
Test: Perch 1.685 Dod Hbk - L

Project Due: 2/08/12
Initiated By: [signature] Date: 1/26/12
Extn Comp'd By: [signature] Date: 1/26/12

QC Code	Lot ID	Sample #	Sample Size / Initial Mass	Final Volume / Final Mass	Chlorine checked
B		-MB	20.00 mL	20.00 mL	NA
C		-LCS	20.00 mL	20.00 mL	
	62A190474	-1	20.00 mL	20.00 mL	
		-2	20.00 mL	20.00 mL	
		-3	20.00 mL	20.00 mL	
		-4	20.00 mL	20.00 mL	
S		-4MS	20.00 mL	20.00 mL	
D		-4SD	20.00 mL	20.00 mL	
		-5	20.00 mL	20.00 mL	
	62A200474	-1	20.00 mL	20.00 mL	
		-2	20.00 mL	20.00 mL	
		-3	20.00 mL	20.00 mL	
		-4	20.00 mL	20.00 mL	
		-5	20.00 mL	20.00 mL	
		-6	20.00 mL	20.00 mL	
C	Synth Matrix	-SMCS	20.00 mL	20.00 mL	Y

SOP No.: MS-LC-0012
EXTRACTION COMMENTS:
Multi-incremental Sampling/Date: NA
Dried/Date NA Ground//Date NA
Sonicated - Start: NA End: NA Date: NA
Cleanup by/Date Dilution by/Date NA
Synthetic Matrix: 3844-089D
Final Vialling /Date 1/26/12
Filters: Millipore : 0.45 : R1TA91854
Millipore Water Dispensed / Date 1/24/12
Filters: Millex : 0.2 : R1EA59190
SPE Cartridge: Waters Lot # NA
Dionex Cartridges: 11/007-2.5-Ba/Ag/H

QCCodes

QCCodes	Standard Information				
	Volume	STD ID	Expire	STD Name	Std Conc.
All	200 µL	11LCMS0952-06	7/26/12	ISTD	1.0 µg/mL
C, S, D	100 µL	12LCMS0096	7/8/12	Perchlorate	0.1 µg/mL

Spiked By / Date: [signature] 1/26/12 Witnessed By / Date: NA 1-26-12

1/26/12

QC Codes: B = MB, C = LCS, L = LCSD, S = MS, D = SD, FB = Filter Blank

G2A200474
TestAmerica West Sacramento (916) 373-5600
187 of 908

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/26/12
Time: 17:58:00

LEV 1	LEV 2		LEV 1	LEV 2	
Y	_	Blank	Y	_	Weights/Volumes
Y	_	Check	Y	_	Spike & Surrogate Worksheet
Y	_	MS/MSD	Y	_	Vial contains correct volume
			Y	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
Y Bench Sheet Copied
_ Package Submitted to AnalyticalGrou
_ Bench Sheet Copied per COC

Extractionist: 002531 Jonathan Reed

Concentrationist: 002531 Jonathan Reed

****
* *
* QC BATCH: 2026097 *
* *
****

PREP DATE: 1/26/12 13:04
COMP DATE: 1/26/12 17:01

Reviewer/Date: REEDJ / 1/26/12

Perchlorate by LC/MS/MS
FILTRATION (DISS)

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	2/08/12	G2A190474-001 MQAVQ-1-AJ	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-002 MQAVR-1-AJ	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-003 MQAVT-1-AJ	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 MQAVV-1-AJ	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 MQAVV-1-AUS	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-004 MQAVV-1-AVD	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	2/08/12	G2A190474-005 MQAVW-1-AJ	2026051 D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 1/26/12
Time: 17:58:00

QC BATCH: 2026097

PREP DATE: 1/26/12 13:04
COMP DATE: 1/26/12 17:01

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	2/09/12	G2A200474-001 2026051 MQCM3-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-002 2026051 MQCM4-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-003 2026051 MQCM5-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-004 2026051 MQCM6-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-005 2026051 MQCM7-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	2/09/12	G2A200474-006 2026051 MQCM8-1-AJ	D	87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 MQE63-1-AAB		87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 MQE63-1-ACC		87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:															
0/00/00	0/00/00	G2A260000-097 MQE63-1-ADC		87	71	WATER	20.00mL 20.00mL	NA	NA	NA	NA	.0	NA	.0	12LCMS0096 100UL 11LCMS0952 200UL
COMMENTS:	SYNTHETIC MATRIX														

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 2026097 **Test:** Perchlorate 6850 DoD Hbk - L

Prep Date: 1/26/12 **Holding Times:** 2/14/12 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)		✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet		✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	✓
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: NA Date: 1-26-12

2nd Level Reviewer: MM Date: 2/8/12

Comments:

WATER, 8330A, Explosives

ICV/CCV Summaries and Run Logs

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 4: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Level 5: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Level 6: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Level 7: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Level 8: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
2 TNX	+++++	+++++	53.70000	60.74000	61.33000	61.55500		
	57.56200	62.90600					59.63217	5.712
3 DNX	+++++	+++++	82.05000	92.56000	94.32000	94.87500		
	89.65200	97.07100					91.75467	5.845
4 HMX	99.00000	96.20000	95.90000	94.56000	96.75000	93.59000		
	87.43800	70.82000					91.78225	9.939
5 MNX	+++++	+++++	97.90000	108	112	112		
	107	113					108	5.152
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	102	95.30000	94.60000	93.90000	96.01000	91.97000		
	85.35600	68.88900					90.95313	10.987
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	120	115	117	128	127	121		
	112	102					118	7.195

2/1/12

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
10 1,3,5-Trinitrobenzene	211	210	207	206	211	208		
	201	182					205	4.640
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	219	220	215	215	221	217		
	211	193					214	4.218
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	144	143	141	139	143	142		
	138	129					140	3.725
16 TETRYL	114	111	111	110	114	114		
	113	111					112	1.307
17 Nitrobenzene	100	93.50000	87.05000	93.60000	96.72000	95.08000		
	92.21600	84.77000					92.91700	5.415
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	120	121	119	118	121	122		
	120	117					120	1.309
20 4-AM-2,6-DNT	97.00000	97.40000	96.60000	95.46000	97.64000	97.75000		
	96.13600	92.28600					96.28400	1.863

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	109	108	107	106	109	109		
	107	102					107	2.198
22 2,6-Dinitrotoluene	76.40000	76.20000	73.30000	73.16000	74.88000	74.72000		
	73.58800	71.51800					74.22075	2.221
23 2,4-Dinitrotoluene	124	123	122	120	124	123		
	122	118					122	1.601
24 2-Nitrotoluene	58.00000	53.90000	48.25000	52.36000	53.60000	53.46000		
	52.77200	51.06700					52.92612	5.204
25 4-Nitrotoluene	61.60000	66.20000	59.05000	62.88000	64.64000	64.59500		
	63.84600	62.14000					63.11888	3.512
26 3-Nitrotoluene	64.80000	64.80000	57.35000	62.22000	63.92000	63.79000		
	63.20600	61.77500					62.73262	3.879
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 1 3,4-Dinitrotoluene	69.80000	65 40000	63.95000	64.88000	67.78000	67.97500		
	68.71000	68.11200					67.07587	3.080

B

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Level 4: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Level 5: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Level 6: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Level 7: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Level 8: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	176	167	171	187	185	178			
	162	138					171	9.104	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Picramic Acid	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
12 2,4-Dinitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 2-Nitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 3,5-Dinitroaniline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 TETRYL	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Nitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 Nitroglycerin	+++++ / 87.71000	+++++ / 85.97900	69.40000	79.80000	87.13000	88.24000	83.04317	8.861	
19 2,4,6-Trinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 4-AM-2,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 2,6-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
23 2,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 2-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 4-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
26 3-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
27 PETN	+++++ / 49.40400	+++++ / 49.44000	43.45000	46.14000	49.53000	49.66000	47.93733	5.382
$ 1 3,4-Dinitrotoluene	130 / 131	124 / 130	120	124	130	131	127	3.347

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 47

Inst ID: LC11 Batch ID: 01262012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K478/5
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: RD 01/30/12

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 01:38 File ID: 01262012C.B/M-000014.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.492	0.000	19981	217.7	8.9					
2	RDX	200	23.726	0.000	19040	209.3	4.7					
3	1,3,5-Trinitrobenz	200	25.669	0.000	42142	206.0	3.0					
4	Picric ACID	500	25.949	0.000	59562	506.0	1.2	25.949	0.000	87153	510.8	2.2
5	1,3-Dinitrobenzene	200	28.409	0.000	42353	198.0	-1.0					
6	3,5-Dinitroaniline	200	29.542	0.000	29363	210.3	5.2					
7	Nitrobenzene	200	30.026	0.000	19145	206.0	3.0					
8	TETRYL	200	30.346	0.000	23886	213.0	6.5					
9	2,4,6-Trinitrotolu	200	31.592	0.000	24900	208.0	4.0					
10	4-AM-2,6-DNT	200	32.586	0.000	19050	197.8	-1.1					
11	3,4-Dinitrotoluene	200	not spiked									
12	2-AM-4,6-DNT	200	33.282	0.000	21564	201.2	0.60					
13	2,6-Dinitrotoluene	200	34.539	0.000	14974	201.7	0.85					
14	2,4-Dinitrotoluene	200	34.929	0.000	24852	203.6	1.8					
15	2-Nitrotoluene	200	37.872	0.000	10714	202.4	1.2					
16	4-Nitrotoluene	200	39.116	0.000	13065	207.0	3.5					
17	3-Nitrotoluene	200	40.642	0.000	12888	205.4	2.7					
18	EGDN	200										
19	Nitroglycerin	200						30.852	0.000	18822	226.6	13
20	PETN	200						41.352	0.000	10640	222.0	11

ICV passes ± 15%
TCD 1/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:24

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 48

Inst ID: LC11 Batch ID: 01302012C Eluents: Water: M01022012
Test: SOP WS-LC-0009 ACN: K448/5
Method: Method 8330 50:50 H2O:MeOH+0.4% H3PO4 4457-25M
ICAL Date: See Calibration Report MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: TDM 1/31/12

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : ICV E110811E METAB
Analyzed : 30-JAN-2012 23:28
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000011.d
Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.418	0.000	12346	207.0	3.5					
2	DNX	200	19.211	0.000	17488	190 6	-4.7					
3	MNX	200	21.968	0.000	20795	192.0	-4.0					

ICV passes ±15%
RD 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:27

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K 47813
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD_06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD_06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD_05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD_05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD_05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD_05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 1-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 50

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD 05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD 05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD 05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD 05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 E110811I METAB 200ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 11:25 File ID: 02012012.B/M-000003.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
			Side A					Side B				
1	TNX	200	15.436	0.000	12281	205.9	3.0					
2	DNX	200	19.219	0.000	18964	206.7	3.4					
3	MNX	200	21.962	0.000	22322	206.2	3.1					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 12:17

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 200ng/mL
Analyzed : 01-FEB-2012 12:22
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000004.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.547	0.000	18798	204.8	2.4					
2	RDX	200	23.730	0.000	18461	203.0	1.5					
3	1,3,5-Trinitrobenz	200	25.670	0.000	41451	202.6	1.3					
4	Picric ACID	500	25.913	0.000	61106	519.2	3.8	25.913	0.000	89203	522.8	4.6
5	1,3-Dinitrobenzene	200	28.393	0.000	43583	203.7	1.9					
6	3,5-Dinitroaniline	200	29.530	0.000	28348	203.0	1.5					
7	Nitrobenzene	200	30.000	0.000	19130	205.9	3.0					
8	TETRYL	200	30.353	0.000	22595	201.5	0.75					
9	2,4,6-Trinitrotolu	200	31.597	0.000	24203	202.2	1.1					
10	4-AM-2,6-DNT	200	32.577	0.000	19568	203.2	1.6					
11	3,4-Dinitrotoluene	200	32.940	0.000	13565	202.2	1.1	32.940	0.000	26067	204.5	2.3
12	2-AM-4,6-DNT	200	33.267	0.000	21818	203.6	1.8					
13	2,6-Dinitrotoluene	200	34.527	0.000	14946	201.4	0.70					
14	2,4-Dinitrotoluene	200	34.917	0.000	24667	202.1	1.1					
15	2-Nitrotoluene	200	37.847	0.000	10675	201.7	0.85					
16	4-Nitrotoluene	200	39.087	0.000	12936	204.9	2.5					
17	3-Nitrotoluene	200	40.607	0.000	12815	204.3	2.2					
18	EGDN	200										
19	Nitroglycerin	200						30.860	0.000	17573	211.6	5.8
20	PETN	200						41.363	0.000	9919	206.9	3.5

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 13:15

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 20:57 File ID: 02012012.B/M-000013.D
Operator : rn Sublist: 2_CALMET

		Side A						Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	100	15.426	0.000	6127	102.7	2.7					
2	DNX	100	19.212	0.000	9445	102.9	2.9					
3	MNX	100	21.962	0.000	11125	102.7	2.7					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 21:49

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 01-FEB-2012 21:54
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000014.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.529	0.000	9695	105.6	5.6					
2	RDX	100	23.739	0.000	9598	105.5	5.5					
3	1,3,5-Trinitrobenz	100	25.676	0.000	21065	103.0	3.0					
4	Picric ACID	200	25.979	0.000	25483	216.5	8.3	25.979	0.000	37419	219.3	9.7
5	1,3-Dinitrobenzene	100	28.412	0.000	22007	102.9	2.9					
6	3,5-Dinitroaniline	100	29.556	0.000	14215	101.8	1.8					
7	Nitrobenzene	100	30.029	0.000	9613	103.4	3.4					
8	TETRYL	100	30.366	0.000	11223	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.612	0.000	12075	100.9	0.90					
10	4-AM-2,6-DNT	100	32.609	0.000	9713	100.9	0.90					
11	3,4-Dinitrotoluene	100	32.962	0.000	6762	100.8	0.80	32.959	0.000	12965	101.7	1.7
12	2-AM-4,6-DNT	100	33.306	0.000	10831	101.0	1.0					
13	2,6-Dinitrotoluene	100	34.562	0.000	7436	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.952	0.000	12260	100.5	0.50					
15	2-Nitrotoluene	100	37.892	0.000	5315	100.4	0.40					
16	4-Nitrotoluene	100	39.132	0.000	6406	101.5	1.5					
17	3-Nitrotoluene	100	40.656	0.000	6340	101.1	1.1					
18	EGDN	100										
19	Nitroglycerin	100						30.869	0.000	8669	104.4	4.4
20	PETN	100						41.376	0.000	4873	101.6	1.6

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 22:46

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 06:29 File ID: 02012012.B/M-000023.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.421	0.000	6131	102.8	2.8					
2	DNX	100	19.214	0.000	9454	103.0	3.0					
3	MNX	100	21.964	0.000	11115	102.6	2.6					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 07:21

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 07:26
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000024.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9643	105.1	5.1					
2	RDX	100	23.740	0.000	9553	105.0	5.0					
3	1,3,5-Trinitrobenz	100	25.677	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.984	0.000	25461	216.3	8.2	25.987	0.000	37308	218.6	9.3
5	1,3-Dinitrobenzene	100	28.410	0.000	21931	102.5	2.5					
6	3,5-Dinitroaniline	100	29.550	0.000	14151	101.3	1.3					
7	Nitrobenzene	100	30.027	0.000	9406	101.2	1.2					
8	TETRYL	100	30.360	0.000	11195	99.83	-0.17					
9	2,4,6-Trinitrotolu	100	31.600	0.000	12053	100.7	0.70					
10	4-AM-2,6-DNT	100	32.590	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.947	0.000	6766	100.9	0.90	32.947	0.000	12938	101.5	1.5
12	2-AM-4,6-DNT	100	33.284	0.000	10855	101.3	1.3					
13	2,6-Dinitrotoluene	100	34.540	0.000	7450	100.4	0.40					
14	2,4-Dinitrotoluene	100	34.930	0.000	12312	100.9	0.90					
15	2-Nitrotoluene	100	37.867	0.000	5229	98.80	-1.2					
16	4-Nitrotoluene	100	39.107	0.000	6357	100.7	0.70					
17	3-Nitrotoluene	100	40.627	0.000	6267	99.90	-0.10					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8611	103.7	3.7
20	PETN	100						41.364	0.000	4907	102.4	2.4

RDM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 08:18

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 16:01 File ID: 02012012.B/M-000033.D
Operator : rm Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.425	0.000	6182	103.7	3.7					
2	DNX	100	19.208	0.000	9491	103.4	3.4					
3	MNX	100	21.962	0.000	11182	103.3	3.3					

RM 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 16:54

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 16:59
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000034.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.525	0.000	9672	105.4	5.4					
2	RDX	100	23.735	0.000	9563	105.1	5.1					
3	1,3,5-Trinitrobenz	100	25.671	0.000	21095	103.1	3.1					
4	Picric ACID	200	25.981	0.000	25435	216.1	8.1	25.984	0.000	37257	218.3	9.2
5	1,3-Dinitrobenzene	100	28.405	0.000	21943	102.6	2.6					
6	3,5-Dinitroaniline	100	29.545	0.000	14204	101.7	1.7					
7	Nitrobenzene	100	30.021	0.000	9597	103.3	3.3					
8	TETRYL	100	30.361	0.000	11284	100.6	0.60					
9	2,4,6-Trinitrotolu	100	31.605	0.000	12083	100.9	0.90					
10	4-AM-2,6-DNT	100	32.591	0.000	9720	101.0	1.0					
11	3,4-Dinitrotoluene	100	32.951	0.000	6716	100.1	0.10	32.951	0.000	12944	101.5	1.5
12	2-AM-4,6-DNT	100	33.291	0.000	10841	101.1	1.1					
13	2,6-Dinitrotoluene	100	34.545	0.000	7418	99.94	-0.060					
14	2,4-Dinitrotoluene	100	34.935	0.000	12281	100.6	0.60					
15	2-Nitrotoluene	100	37.878	0.000	5314	100.4	0.40					
16	4-Nitrotoluene	100	39.118	0.000	6431	101.9	1.9					
17	3-Nitrotoluene	100	40.648	0.000	6372	101.6	1.6					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8681	104.5	4.5
20	PETN	100						41.381	0.000	4923	102.7	2.7

RM 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 17:51

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 21:44 File ID: 02012012.B/M-000039.d
Operator : rn Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	100	15.416	0.000	6113	102.5	2.5					
2	DNX	100	19.209	0.000	9415	102.6	2.6					
3	MNX	100	21.962	0.000	11085	102.4	2.4					

RDM 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/08/2012 12:26

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 22:41
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000040.d
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9627	104.9	4.9					
2	RDX	100	23.730	0.000	9530	104.8	4.8					
3	1,3,5-Trinitrobenz	100	25.667	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.977	0.000	25302	215.0	7.5	25.976	0.000	37063	217.2	8.6
5	1,3-Dinitrobenzene	100	28.397	0.000	21968	102.7	2.7					
6	3,5-Dinitroaniline	100	29.537	0.000	14183	101.6	1.6					
7	Nitrobenzene	100	30.010	0.000	9509	102.3	2.3					
8	TETRYL	100	30.353	0.000	11227	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.597	0.000	12072	100.8	0.80					
10	4-AM-2,6-DNT	100	32.583	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.940	0.000	6755	100.7	0.70	32.940	0.000	12932	101.4	1.4
12	2-AM-4,6-DNT	100	33.280	0.000	10849	101.2	1.2					
13	2,6-Dinitrotoluene	100	34.537	0.000	7434	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.930	0.000	12281	100.6	0.60					
15	2-Nitrotoluene	100	37.877	0.000	5251	99.21	-0.79					
16	4-Nitrotoluene	100	39.120	0.000	6373	101.0	1.0					
17	3-Nitrotoluene	100	40.643	0.000	6272	99.98	-0.020					
18	EGDN	100										
19	Nitroglycerin	100						30.856	0.000	8650	104.2	4.2
20	PETN	100						41.386	0.000	4865	101.5	1.5

RM 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/08/2012 12:27

TestAmerica West Sacramento

A

INITIAL CALIBRATION DATA

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
2 TNX	+++++	+++++	52.90000	58.92000	60.55000	60.25000		
	57.23800	60.81300					58.44517	5.174
3 DNX	+++++	+++++	55.15000	60.76000	62.35000	62 35000		
	59.78400	63.11500					60.58483	4.832
4 HMX	62.00000	62.10000	61.35000	60.74000	62.33000	61.66500		
	60.03200	55.64500					60.73275	3.610
5 MNX	+++++	+++++	53.20000	57.96000	59.90000	59.69000		
	57.66200	60.08100					58.08217	4.484
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	64.60000	54.80000	51.75000	48.88000	48.64000	46.98500		
	44.60000	38.86800					49.89037	15.236
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
10 1,3,5-Trinitrobenzene	80.40000	80.50000	77.70000	77.18000	78.17000	76.84000		
	74.02600	65.39500					76.27638	6.366
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	108	106	103	103	105	102		
	95.56400	79.85200					100	9.103
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	93.60000	87.40000	85.20000	83.24000	84.29000	81.91000		
	77.31600	65.28900					82.28063	10.078
16 TETRYL	121	121	117	116	120	119		
	118	115					118	2.039
17 Nitrobenzene	52.80000	48.60000	44.50000	47.62000	49.01000	46.80000		
	43.06200	34.72200					45.88925	11.744
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	80.00000	83.00000	79.65000	79.16000	81.68000	81.20500		
	79.32400	73.81800					79.72962	3.425
20 4-AM-2,6-DNT	65.60000	64.10000	62.15000	61.96000	63.29000	62.27500		
	59.92200	52.89900					61.52450	6.279

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
21 2-AM-4,6-DNT	78.40000	75.50000	74.10000	72.50000	73.57000	72.34000			
	69.19600	60.42600					72.00400	7.466	
22 2,6-Dinitrotoluene	62.80000	56.50000	54.05000	53.62000	53.84000	52.70000			
	50.56600	44.27800					53.54425	9.735	
23 2,4-Dinitrotoluene	98.40000	92.70000	89.15000	88.58000	89.64000	87.80000			
	84.18400	73.56800					88.00275	8.120	
24 2-Nitrotoluene	33.10000	30.45000	27.77500	29.83000	30.51000	29.68500			
	28.13900	24.06300					29.19400	9.032	
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
26 3-Nitrotoluene	46.80000	40.20000	36.35000	38.26000	38.90000	37.78000			
	36.10200	32.30200					38.33675	10.849	
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
$ 1 3,4-Dinitrotoluene	48.00000	46.80000	45.45000	46.42000	49.00000	48.00500			
	46.26000	41.31400					46.40613	5.076	

TestAmerica West Sacramento

(B)

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
	500.000 Level 7	1000.000 Level 8							
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
15 3,5-Dinitroaniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
16 TETRYL	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
18 Nitroglycerin	+++++	+++++	71.30000	78.16000	85.12000	86.04000			
	85.00600	81.58200					81.20133	6.981	
19 2,4,6-Trinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 4-AM-2,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
21 2-AM-4,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
24 2-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
26 3-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
27 PETN	+++++	+++++	138	141	146	147		
	146	147					144	2.624
$ 1 3,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 10

Inst ID: LC12 Batch ID: 01262012C

Test: SOP WS-LC-0009

Method: Method 8330

ICAL Date: See Calibration Report

Eluents: Water: 4457-23C

ACN: K14815

MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_ICV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/27/12

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 04:46 File ID: 01262012C.B/C-000012.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	21.924	0.000	9732	212.1	6.1					
2	1,3-Dinitrobenzene	200	24.898	0.000	20270	201.8	0.90					
3	1,3,5-Trinitrobenz	200	27.648	0.000	15645	205.1	2.6					
4	2-Nitrotoluene	400	28.998	0.000	12223	418.7	4.7					
5	3-Nitrotoluene	200	29.578	0.000	7855	204.9	2.5					
6	3,5-Dinitroaniline	200	30.961	0.000	17369	211.1	5.6					
7	RDX	200	31.534	0.000	9670	193.8	-3.1					
8	2,4-Dinitrotoluene	200	32.668	0.000	18048	205.1	2.6					
9	2,6-Dinitrotoluene	200	33.694	0.000	10822	202.1	1.1					
10	2-AM-4,6-DNT	200	35.748	0.000	14679	203.9	2.0					
11	4-AM-2,6-DNT	200	36.388	0.000	12366	201.0	0.50					
12	3,4-Dinitrotoluene	200	38.134	0.000	84	1.810	-99	NA not spiked				
13	2,4,6-Trinitrotolu	200	40.251	0.000	16693	209.4	4.7					
14	HMX	200	41.981	0.000	12849	211.6	5.8					
15	TETRYL	200	46.254	0.000	25168	212.5	6.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.798	0.000	31225	216.8	8.4
19	Picric ACID	500										
20	Nitroglycerin	200						44.541	0.000	18382	226.4	13

ICV passes ±15 %
RM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:30

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K14815
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	MQCM42AK
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3	C-000024	986.89 mL	20 mL	1	MQCM52AK
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	MQCM62AK
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	MQCM72AK
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	MQCM82AK
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: ECJ 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:48	RN	5	STD_05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 2/3/12

TestAmerica West Sacramento

Dual Column Continuing Calibration Report

Sample : STD 06 E110811D ICV 200ng/mL
Analyzed : 02-FEB-2012 02:26
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000012.d
Sublist: 2_CALMET
SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	18.341	0.000	12148	207.8	3.9					
2	DNX	200	23.661	0.000	11544	190.5	-4.8					
3	MNX	200	28.061	0.000	11164	192.2	-3.9					

ICV passes ±15%.
RPM 2/2/12.

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:06

TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 03:32 File ID: 02012012.B/C-000013.d
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	22.250	0.000	9444	205.8	2.9					
2	1,3-Dinitrobenzene	200	25.240	0.000	20499	204.0	2.0					
3	1,3,5-Trinitrobenz	200	27.990	0.000	15534	203.6	1.8					
4	2-Nitrotoluene	400	29.366	0.000	12034	412.2	3.1					
5	3-Nitrotoluene	200	29.940	0.000	7648	199.5	-0.25					
6	3,5-Dinitroaniline	200	31.326	0.000	16465	200.1	0.050					
7	RDX	200	31.903	0.000	9304	186.5	-6.8					
8	2,4-Dinitrotoluene	200	33.066	0.000	17650	200.6	0.30					
9	2,6-Dinitrotoluene	200	34.096	0.000	10551	197.0	-1.5					
10	2-AM-4,6-DNT	200	36.160	0.000	14493	201.3	0.65					
11	4-AM-2,6-DNT	200	36.790	0.000	12724	206.8	3.4					
12	3,4-Dinitrotoluene	200	38.473	0.000	9905	213.4	6.7					
13	2,4,6-Trinitrotolu	200	40.583	0.000	16675	209.1	4.6					
14	HMX	200	42.256	0.000	12429	204.6	2.3					
15	TETRYL	200	46.476	0.000	24454	206.5	3.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.930	0.000	29369	203.9	2.0
19	Picric ACID	500										
20	Nitroglycerin	200						44.783	0.000	17384	214.1	7.1

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 11:30

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 13:21 File ID: 02012012.B/C-000022.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	100	22.267	0.000	4888	106.5	6.5					
2	1,3-Dinitrobenzene	100	25.264	0.000	10515	104.7	4.7					
3	1,3,5-Trinitrobenz	100	28.007	0.000	7829	102.6	2.6					
4	2-Nitrotoluene	200	29.397	0.000	6087	208.5	4.3					
5	3-Nitrotoluene	100	29.984	0.000	3862	100.7	0.70					
6	3,5-Dinitroaniline	100	31.357	0.000	8360	101.6	1.6					
7	RDX	100	31.944	0.000	4704	94.29	-5.7					
8	2,4-Dinitrotoluene	100	33.114	0.000	8906	101.2	1.2					
9	2,6-Dinitrotoluene	100	34.140	0.000	5314	99.24	-0.76					
10	2-AM-4,6-DNT	100	36.210	0.000	7322	101.7	1.7					
11	4-AM-2,6-DNT	100	36.847	0.000	6433	104.6	4.6					
12	3,4-Dinitrotoluene	100	38.527	0.000	4981	107.3	7.3					
13	2,4,6-Trinitrotolu	100	40.617	0.000	8394	105.3	5.3					
14	HMX	100	42.274	0.000	6250	102.9	2.9					
15	TETRYL	100	46.470	0.000	12307	103.9	3.9					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.957	0.000	14321	99.44	-0.56
19	Picric ACID	200										
20	Nitroglycerin	100						44.790	0.000	8614	106.1	6.1

RM 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 14:26

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 22:04 File ID: 02012012.B/C-000030.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	100	22.313	0.000	4820	105.0	5.0					
2	1,3-Dinitrobenzene	100	25.306	0.000	10501	104.5	4.5					
3	1,3,5-Trinitrobenz	100	28.056	0.000	7827	102.6	2.6					
4	2-Nitrotoluene	200	29.433	0.000	6040	206.9	3.5					
5	3-Nitrotoluene	100	30.013	0.000	3828	99.85	-0.15					
6	3,5-Dinitroaniline	100	31.386	0.000	8386	101.9	1.9					
7	RDX	100	31.963	0.000	4741	95.03	-5.0					
8	2,4-Dinitrotoluene	100	33.129	0.000	8893	101.0	1.0					
9	2,6-Dinitrotoluene	100	34.169	0.000	5307	99.11	-0.89					
10	2-AM-4,6-DNT	100	36.236	0.000	7295	101.3	1.3					
11	4-AM-2,6-DNT	100	36.866	0.000	6426	104.4	4.4					
12	3,4-Dinitrotoluene	100	38.539	0.000	4996	107.6	7.6					
13	2,4,6-Trinitrotolu	100	40.636	0.000	8338	104.6	4.6					
14	HMX	100	42.299	0.000	6195	102.0	2.0					
15	TETRYL	100	46.523	0.000	12144	102.6	2.6					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.966	0.000	14294	99.26	-0.74
19	Picric ACID	200										
20	Nitroglycerin	100						44.836	0.000	8608	106.0	6.0

RN 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 23:09

Sample Extraction/Preparation Log Copies and Checklists

TestAmerica West Sacramento
Energetic Prep Log
8330 Aqueous

Box # JM

Shared QC Batch: NA

Shares QC With Lots(s): NA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Internal COC:	
Delivered to Inst.:	TP 1/25/12
Inst Receipt:	SL 1/25/12

Batch: 2024017

MS Run #: 2024007

Prep Date: 1/24/2012

Method: A0 8330/8330A

Matrix: I WATER

Prep Reagents		
Reagent	Supplier	Date/Lot #
0.1% HOAc/ACN	NA	3844-095A
Millipore Water Dispense Date		1/13/12
SPE Catridge:	Waters	003631222A
0.45 Filter	Millipore	RIJA91854

SAC: A0 - I - 20 - D4

WS-LC-0009

Extraction Table

Sample ID	Suff	Work Order	Extraction Hold Time Expires	Sample size 1000mL nom.	Final Volume 20mL	Final Volume Other	Analysis Hold Time Expires
G2A190474 - 1		MQAVQ1AK	1/24/2012	984.22	20mL		3/4/2012
G2A190474 - 2		MQAVR1AK	1/24/2012	985.64	20mL		3/4/2012
G2A190474 - 3		MQAVT1AK	1/25/2012	967.93	20mL		3/4/2012
G2A190474 - 4		MQAVV1AK	1/25/2012	980.52	20mL		3/4/2012
G2A190474 - 4	S	MQAVV1AW	1/25/2012	989.06	20mL		3/4/2012
G2A190474 - 4	D	MQAVV1AX	1/25/2012	985.59	20mL		3/4/2012
G2A190474 - 5		MQAVW1AK	1/25/2012	982.01	20mL		3/4/2012
G2A200474 - 1		MQCM31AK	1/26/2012	978.66	20mL		3/4/2012
G2A200474 - 2		MQCM41AK	1/26/2012	986.02	20mL	1/25/12	3/4/2012
G2A200474 - 3		MQCM51AK	1/26/2012	986.89	20mL		3/4/2012
G2A200474 - 4		MQCM61AK	1/26/2012	977.49	20mL		3/4/2012
G2A200474 - 5		MQCM71AK	1/26/2012	974.29	20mL		3/4/2012
G2A200474 - 6		MQCM81AK	1/26/2012	935.08	20mL		3/4/2012
G2A240000 - 17	B	MQDFC1AA	1/24/2012	1000.00	20mL		3/4/2012
G2A240000 - 17	C	MQDFC1AC	1/24/2012	1000.00	20mL		3/4/2012

Sample volumes recorded from balance are on

Comments/NCMs:

	ID	Spike Exp Date:	Spiked By:	Witnessed By:	Date:
Surrogate Spike (All Samples)	50uL 11GCSV0536	4/19/12	TP	[illegible]	1/24/12
Spike Mix LCS/LCSD/MS/MSD	20uL 11GCSV0346	2/8/12	TP	[illegible]	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0509	5/8/12	TP	[illegible]	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0541	4/10/12	TP	[illegible]	1/24/12
Spike Mix LCS/LCSD/MS/MSD	80uL E110802B	2/2/12	TP	[illegible]	1/24/12

Extracted Analyst/Date: TP 1/24/12

Clean Up Analyst/Dat: TP 1/25/12

Dilution Analyst/Date: TP 1/25/12

Final Volume Analyst/Date: TP 1/25/12

Review Analyst/Date: [illegible] 1/25/12

TestAmerica

West Sacramento

Weight Difference Worksheet

Batch Id: 120124T

Created Date: 1/24/12 6:30:56 AM

Test Date: 1/24/12

Group Comments:

ANALYST: TP

TEST: 8330

BALANCE ID: QA-036

QuantIMS Batch: 2024017

Sample ID:	Initial Weight (g)	Weight after rinse (g)	Weight Diff (g)	Comments:
G2A190474-1	1484.50	500.28	984.22	
G2A190474-2	1487.30	501.66	985.64	
G2A190474-3	1470.20	502.27	967.93	
G2A190474-4	1480.50	499.98	980 52	
G2A190474-4S	1488.40	499.34	989.06	
G2A190474-4D	1486.20	500.61	985.59	
G2A190474-5	1480.90	498.89	982.01	
G2A200474-1	1480.70	502.04	978.66	
G2A200474-2	1488.00	501.98	986.02	
G2A200474-3	1486.80	499.91	986.89	
G2A200474-4	1478.10	500.61	977.49	
G2A200474-5	1473.70	499.41	974.29	
G2A200474-6	1434.60	499.52	935.08	

Water Weight Different Worksheet, Revised 12/31/2008 ERS Printed Tuesday, January 24, 2012 11:52:58 AM

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

LEV 1	LEV 2		LEV 1	LEV 2	
_	_	Blank	_	_	Weights/Volumes
_	_	Check	_	_	Spike & Surrogate Worksheet
_	_	MS/MSD	_	_	Vial contains correct volume
			_	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

****
* QC BATCH: 2024017 *
****

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

Reviewer/Date: PHANT / 1/24/12

Nitroaromatics & Nitramines: Explosives (8330/A)
EXTRACTION, SOLID PHASE

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJT	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/24/12	2/08/12	G2A190474-001 MQAVQ-1-AK	D	20	A0	WATER	984.22mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	2/08/12	G2A190474-002 MQAVR-1-AK	D	20	A0	WATER	985.64mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-003 MQAVT-1-AK	D	20	A0	WATER	967.93mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 MQAVV-1-AK	D	20	A0	WATER	980.52mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 MQAVV-1-AWS	D	20	A0	WATER	989.06mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 MQAVV-1-AXD	D	20	A0	WATER	985.59mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-005 MQAVW-1-AK	D	20	A0	WATER	982.01mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

****
* *
* QC BATCH: 2024017 *
* *
****

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/26/12	2/09/12	G2A200474-001 MQCM3-1-AK	D	20	A0	WATER	978.66mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-001 MQCM3-2-AK	D	20	A0	WATER	978.66mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-002 MQCM4-1-AK	D	20	A0	WATER	986.02mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-002 MQCM4-2-AK	D	20	A0	WATER	986.02mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-003 MQCM5-1-AK	D	20	A0	WATER	986.89mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-003 MQCM5-2-AK	D	20	A0	WATER	986.89mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-004 MQCM6-1-AK	D	20	A0	WATER	977.49mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-004 MQCM6-2-AK	D	20	A0	WATER	977.49mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-005 MQCM7-1-AK	D	20	A0	WATER	974.29mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-005 MQCM7-2-AK	D	20	A0	WATER	974.29mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/26/12	2/09/12	G2A200474-006 MQCM8-1-AK	D	20	A0	WATER	935.08mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-006 MQCM8-2-AK	D	20	A0	WATER	935.08mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 MQDFC-1-AAB		20	A0	WATER	1000.00mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 MQDFC-1-ACC		20	A0	WATER	1000.00mL 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															

LCS 20UL-11GCSV0346,100UL-11GCSV0509,100UL-11GCSV0541,80UL-E110802B

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 21

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 2024017 **Test:** 8330-L

Prep Date: 1/24/12 **Holding Times:** 1/24/12 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)	✓	✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet	✓	✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	✓
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: GB Date: 1-24-12

2nd Level Reviewer: [signature] Date: 1/25/12

Comments:

QC Summary

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQDFC1AC **Matrix.....:** WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 **Analysis Date..:** 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	**1.00**	**1.02**	**ug/L**	**102**	**SW846 8330/83**
4-Amino-2,6-dinitrotoluene	**1.00**	**1.00**	**ug/L**	**100**	**SW846 8330/83**
1,3-Dinitrobenzene	**1.00**	**1.05**	**ug/L**	**105**	**SW846 8330/83**
2,4-Dinitrotoluene	**1.00**	**1.01**	**ug/L**	**101**	**SW846 8330/83**
2,6-Dinitrotoluene	**1.00**	**1.01**	**ug/L**	**101**	**SW846 8330/83**
RDX	**1.00**	**1.14**	**ug/L**	**114**	**SW846 8330/83**
1,3,5-Trinitrobenzene	**1.00**	**1.07**	**ug/L**	**107**	**SW846 8330/83**
2,4,6-Trinitrotoluene	**1.00**	**0.794**	**ug/L**	**79**	**SW846 8330/83**
MNX	**4.00**	**4.21**	**ug/L**	**105**	**SW846 8330/83**
TNX	**4.00**	**3.87**	**ug/L**	**97**	**SW846 8330/83**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	**102**	**(50 - 155)**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**100**	**(55 - 155)**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**105**	**(45 - 160)**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**101**	**(60 - 135)**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**101**	**(60 - 135)**	**SW846 8330/8330A**
RDX	**114**	**(50 - 160)**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**107**	**(65 - 140)**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**79**	**(50 - 145)**	**SW846 8330/8330A**
MNX	**105**	**(70 - 130)**	**SW846 8330/8330A**
TNX	**97**	**(70 - 130)**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 **Work Order #...:** MQAVV1AW-MS **Matrix.....:** WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 **Date Received..:** 01/19/12
Prep Date.....: 01/24/12 **Analysis Date..:** 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	**0.10 U**	**1.01**	**1.00**	**ug/L**	**99**		**SW846 8330/8330A**
	0.10 U	**1.01**	**1.02**	**ug/L**	**100**	**1.8**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**0.051 U**	**1.01**	**0.982**	**ug/L**	**97**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.999**	**ug/L**	**99**	**1.8**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**0.051 U**	**1.01**	**1.05**	**ug/L**	**104**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.07**	**ug/L**	**105**	**1.7**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**0.051 U**	**1.01**	**0.996**	**ug/L**	**99**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.02**	**ug/L**	**100**	**1.9**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**0.051 U**	**1.01**	**0.986**	**ug/L**	**98**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.00**	**ug/L**	**99**	**1.6**	**SW846 8330/8330A**
RDX	**0.051 U**	**1.01**	**1.20**	**ug/L**	**118**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.23**	**ug/L**	**121**	**2.8**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**0.051 U**	**1.01**	**1.08**	**ug/L**	**106**		**SW846 8330/8330A**
	0.051 U	**1.01**	**1.10**	**ug/L**	**109**	**2.6**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**0.051 U**	**1.01**	**0.789**	**ug/L**	**78**		**SW846 8330/8330A**
	0.051 U	**1.01**	**0.802**	**ug/L**	**79**	**1.6**	**SW846 8330/8330A**
MNX	**1.0 U**	**4.04**	**4.28**	**ug/L**	**106**		**SW846 8330/8330A**
	1.0 U	**4.06**	**4.25**	**ug/L**	**105**	**0.68**	**SW846 8330/8330A**
TNX	**0.15 U**	**4.04**	**3.95**	**ug/L**	**98**		**SW846 8330/8330A**
	0.15 U	**4.06**	**3.83**	**ug/L**	**94**	**3.0**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	**99**	**(50 - 155)**			**SW846 8330/8330A**
	100	**(50 - 155)**	**1.8**	**(0-30)**	**SW846 8330/8330A**
4-Amino-2,6-dinitrotoluene	**97**	**(55 - 155)**			**SW846 8330/8330A**
	99	**(55 - 155)**	**1.8**	**(0-30)**	**SW846 8330/8330A**
1,3-Dinitrobenzene	**104**	**(45 - 160)**			**SW846 8330/8330A**
	105	**(45 - 160)**	**1.7**	**(0-30)**	**SW846 8330/8330A**
2,4-Dinitrotoluene	**99**	**(60 - 135)**			**SW846 8330/8330A**
	100	**(60 - 135)**	**1.9**	**(0-30)**	**SW846 8330/8330A**
2,6-Dinitrotoluene	**98**	**(60 - 135)**			**SW846 8330/8330A**
	99	**(60 - 135)**	**1.6**	**(0-30)**	**SW846 8330/8330A**
RDX	**118**	**(50 - 160)**			**SW846 8330/8330A**
	121	**(50 - 160)**	**2.8**	**(0-30)**	**SW846 8330/8330A**
1,3,5-Trinitrobenzene	**106**	**(65 - 140)**			**SW846 8330/8330A**
	109	**(65 - 140)**	**2.6**	**(0-30)**	**SW846 8330/8330A**
2,4,6-Trinitrotoluene	**78**	**(50 - 145)**			**SW846 8330/8330A**
	79	**(50 - 145)**	**1.6**	**(0-30)**	**SW846 8330/8330A**
MNX	**106**	**(70 - 130)**			**SW846 8330/8330A**
	105	**(70 - 130)**	**0.68**	**(0-30)**	**SW846 8330/8330A**
TNX	**98**	**(70 - 130)**			**SW846 8330/8330A**
	94	**(70 - 130)**	**3.0**	**(0-30)**	**SW846 8330/8330A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 47

Inst ID: LC11 Batch ID: 01262012C Eluents: Water: M0102 2012
Test: SOP WS-LC-0009 ACN: R4/5/5
Method: Method 8330 50:50 H2O:MeOH+0.4% H3PO4 4457-25A
ICAL Date: See Calibration Report MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: RD 2/1/2012

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 48

Inst ID: LC11 Batch ID: 01302012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M01022012
ACN: 1341815
50:50 H2O:MeOH+0.4% H3PO4 4457-254
MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/31/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0102 2012
ACN: K 41815
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD 06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD 06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD 05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD 05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD 05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD 05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 50

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD_05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD_05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD_05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD_05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 10

Inst ID: LC12 Batch ID: 01262012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: 1457-23C
ACN: K14815
MeOH: K0E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_ICV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/27/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K14815
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	MQCM42AK
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3	C-000024	986.89 mL	20 mL	1	MQCM52AK
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	MQCM62AK
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	MQCM72AK
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	MQCM82AK
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

2/9/12

GC-LC Log 2011-12-14 ERS

Sequence Checked: EC 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:48	RN	5	STD_05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: EEF 2/3/12

Sample Data

White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM31AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM31AK 2024017 A200474-1
Analyzed : 02-FEB-2012 01:43
Operator : rn
Matrix : WATER
Sample Amt: 978.66 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000018.D
Sublist: WATERMET

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 DNX									
3 HMX									
4 MNX									
5 RDX	23.603	-0.136	3908	0.8781					
6 1,3,5-Trinitrobenz	25.560	-0.116	755	0.07542					
7 Picric ACID	25.830	-0.149	2472	0.4292					
8 1,3-Dinitrobenzene									
9 3,5-Dinitroaniline									
10 Nitrobenzene									
11 TETRYL									
12 2,4,6-Trinitrotolu									
13 4-AM-2,6-DNT									
14 3,4-Dinitrotoluene	32.943	-0.019	8425	2.567	32.943	-0.016	16332	2.618	2.0
15 2-AM-4,6-DNT									
16 2,6-Dinitrotoluene									
17 2,4-Dinitrotoluene									
18 2-Nitrotoluene									
19 4-Nitrotoluene									
20 3-Nitrotoluene									
21 EGDN									
22 Nitroglycerin									
23 PETN									

not conf.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.554	2.567	100.5	2.618	102.5	(84-125)

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 02:35

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000018.D
Lab Smp Id: MQCM31AK 2024017 A2
Inj Date : 02-FEB-2012 01:43
Operator : rn Inst ID: LC11.i
Smp Info : MQCM31AK 2024017 A200474-1;0;
Misc Info : ;;978.66;;20;1;WATERMET.sub;;0;;;;MQCM31AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	978.660	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.603	765473	3908	0.005	20.82	7 RDX
24.643	178084	1549	0.009	8.25	
24.933	18538	599	0.032	3.19	
25.560	10439	755	0.072	4.02	10 1,3,5-Trinitrobenze
25.830	629100	2472	0.004	13.17	9 Picric ACID
32.943	295556	8425	0.029	44.94	$ 1 3,4-Dinitrotoluene
41.410	11007	464	0.042	2.47	
42.030	19569	590	0.030	3.14	
	1927767	18762		100.000	

Total unknown % height = 17.05

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000018.D

Date : 02-FEB-2012 01:43

Client ID:

Instrument: LC11.i

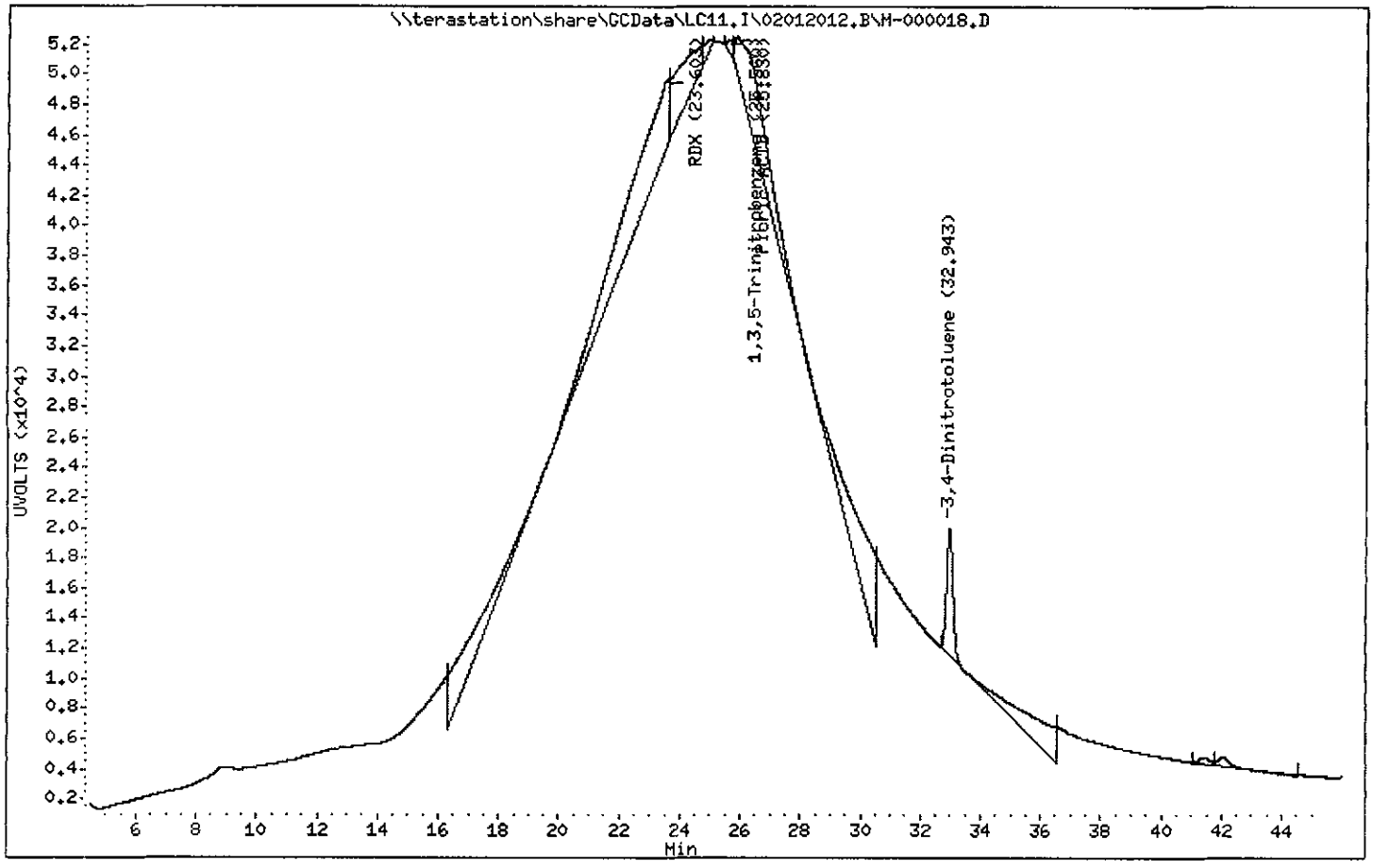
Sample Info: MQCM31AK 2024017 A200474-1;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000018.D\M-000018
Lab Smp Id: MQCM31AK 2024017 A2
Inj Date : 02-FEB-2012 01:43
Operator : rn Inst ID: LC11.i
Smp Info : MQCM31AK 2024017 A200474-1;0;
Misc Info : ;;978.66;;20;1;WATERMET.sub;;0;;;;MQCM31AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	978.660	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.053	2490	52	0.021	0.25	
23.263	333	0	0.000	0.00	
23.460	394	68	0.173	0.33	
23.610	522	67	0.128	0.33	
23.767	624	71	0.114	0.35	
23.990	902	70	0.078	0.34	
25.177	162	43	0.265	0.21	
32.943	332252	16332	0.049	81.21	$ 1 3,4-Dinitrotoluene
36.567	9326	377	0.040	1.87	
39.307	30269	967	0.032	4.80	
41.410	5402	308	0.057	1.53	
42.060	58684	1768	0.030	8.78	
	441359	20123		100.000	

Total unknown % height = 18.79

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000018.D\M-000018.D

Date : 02-FEB-2012 01:43

Client ID:

Instrument: LC11.i

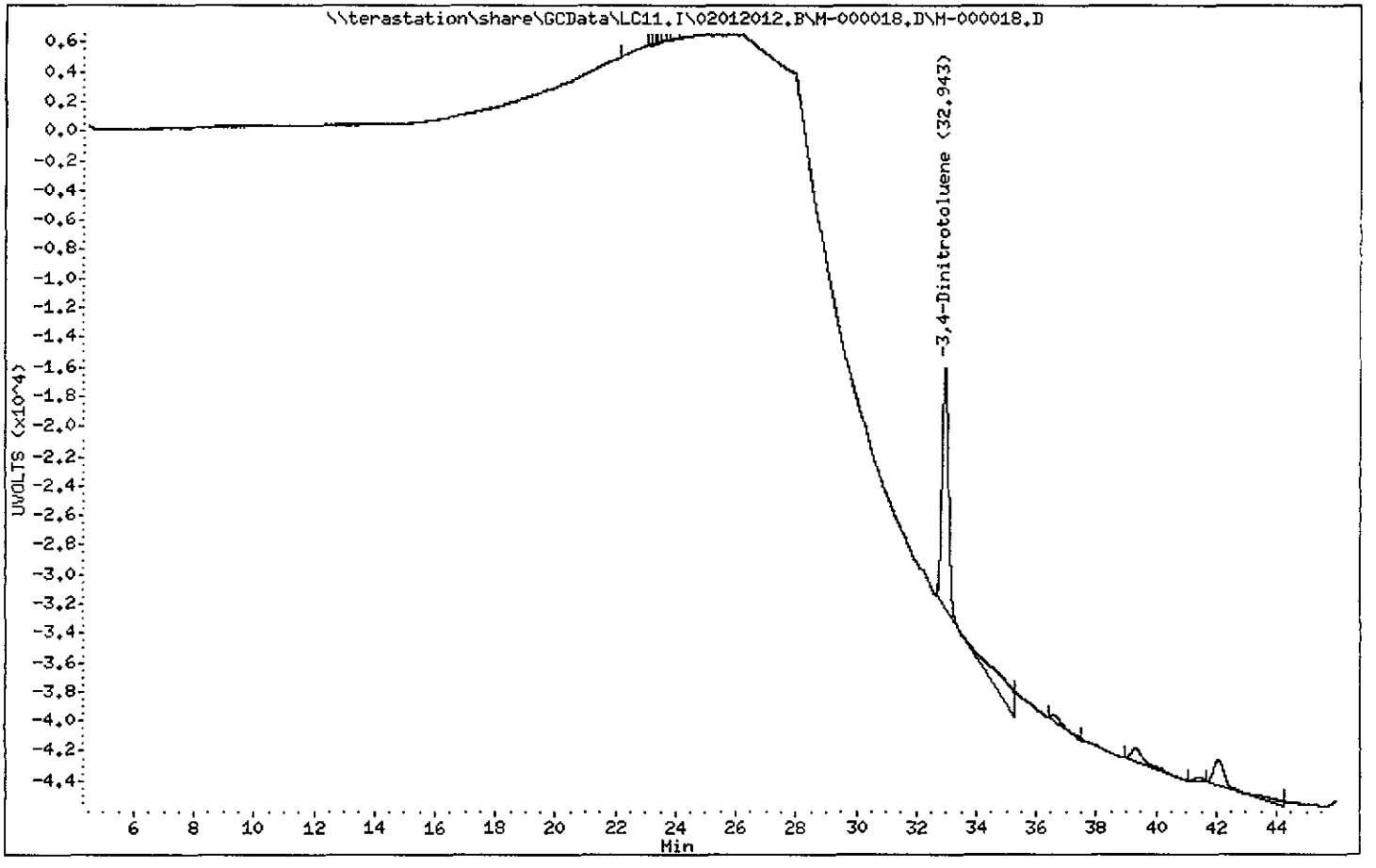
Sample Info: MQCM31AK 2024017 A200474-1:0:

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02MW13A-20120119

HPLC

Lot-Sample #...: G2A200474-001 Work Order #...: MQCM32AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	116 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

TestAmerica
Dual Column Chromatography Summary

2 RM 2/9/12

Sample : MQCM3LAK 2024017 A200474-1
Analyzed : 02-FEB-2012 11:10
Operator : RN
Matrix : WATER
Sample Amt: 978.66 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000020.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	Nitrobenzene	22.085	-0.165	146	0.06502					
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz									
6	MNX									
7	2-Nitrotoluene	29.168	-0.198	115	0.08050					
8	3-Nitrotoluene									
9	3,5-Dinitroaniline									
10	RDX									
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT									
15	3,4-Dinitrotoluene	38.535	0.062	6704	2.952					
16	2,4,6-Trinitrotolu									
17	HMX									
18	TETRYL									
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

RT OK

RT OK

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.554	2.952	115.6*			(79-111)

see NCM

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 12:15

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000020.D
Lab Smp Id: MQCM31AK 2024017 A2
Inj Date : 02-FEB-2012 11:10
Operator : RN 2 RRM 2/9/12 Inst ID: LC12.i
Smp Info : MQCM31AK 2024017 A200474-1;0;
Misc Info : ;;978.66;;20;1;WATERMETQSM.sub;;0;;;;MQCM31AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	978.660	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.085	14005	146	0.010	1.36	17 Nitrobenzene
26.518	10486	568	0.054	5.31	
27.228	52277	1568	0.030	14.68	
29.168	3138	115	0.037	1.07	24 2-Nitrotoluene
30.831	184	23	0.125	0.21	
31.448	474	37	0.078	0.34	
31.871	261	14	0.054	0.13	
36.888	137	23	0.168	0.21	
37.311	158	23	0.146	0.21	
38.535	154110	6704	0.044	62.88	$ 1 3,4-Dinitrotoluene
39.985	944	82	0.087	0.76	
40.165	1584	78	0.049	0.73	
40.731	352	90	0.256	0.84	
41.145	1276	91	0.071	0.85	
41.541	363	73	0.201	0.68	
41.708	2014	86	0.043	0.80	
42.695	622	41	0.066	0.38	
43.465	2598	172	0.066	1.61	
46.315	2564	120	0.047	1.12	
47.321	1502	96	0.064	0.89	
47.975	454	40	0.088	0.37	
48.361	2100	159	0.076	1.48	
48.941	3403	330	0.097	3.09	
	255007	10679		100.000	

Total unknown % height = 34.69

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000020.D

Date : 02-FEB-2012 11:10

Client ID: 2 DM 2/9/12

Instrument: LC12.i

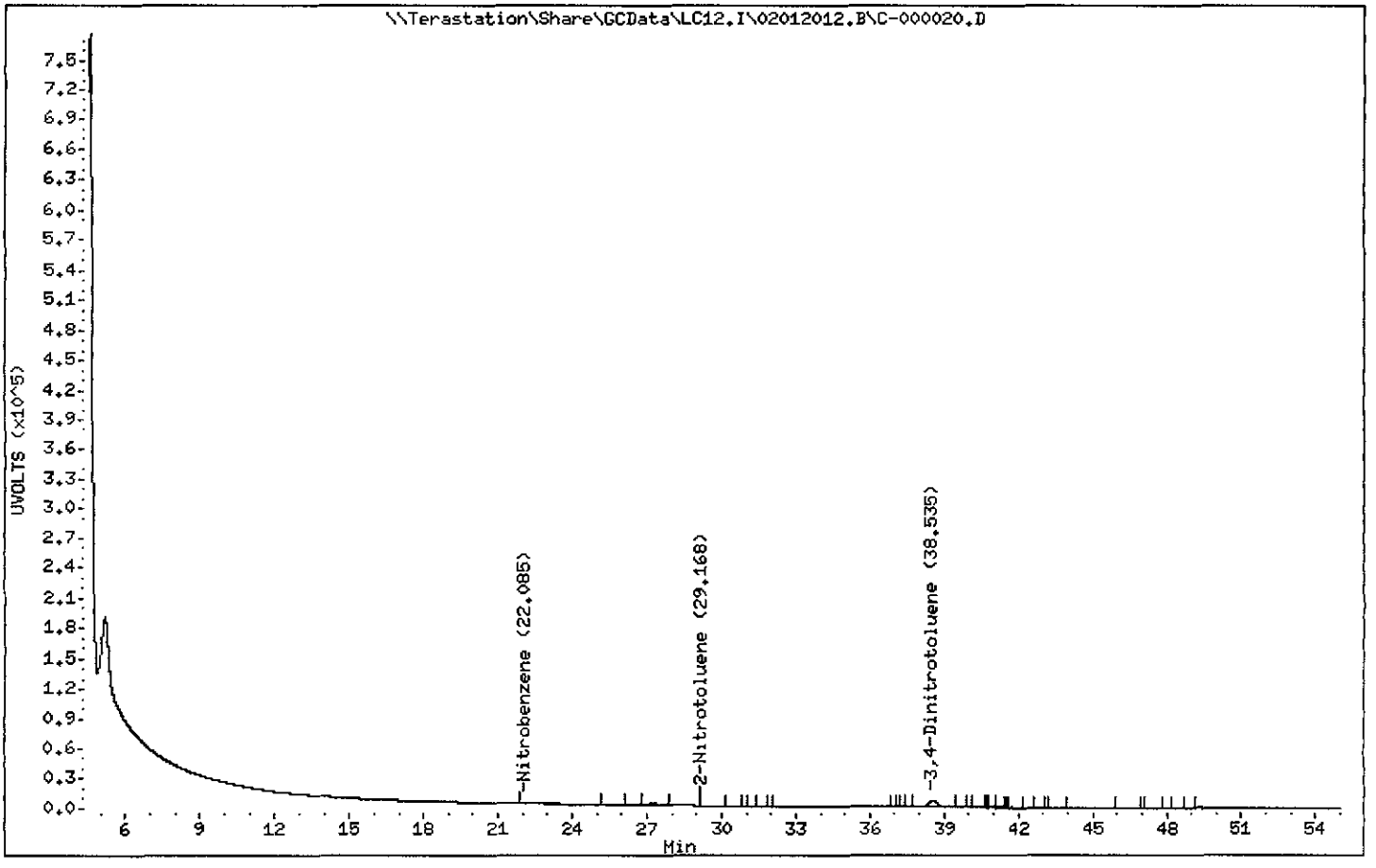
Sample Info: MQCM3LAK 2024017 A200474-1:0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000020.D\C-000020
Lab Smp Id: MQCM31AK 2024017 A2
Inj Date : 02-FEB-2012 11:10
Operator : RN 2 RTM 2/9/12 Inst ID: LC12.i
Smp Info : MQCM31AK 2024017 A200474-1;0;
Misc Info : ;;978.66;;20;1;WATERMETQSM.sub;;0;;;;MQCM31AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	978.660	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.575	5250	560	0.107	95.41	
53.351	274	27	0.099	4.59	
	5524	587		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000020.D\C-000020.D

Date : 02-FEB-2012 11:10

Client ID: 2 DRN 2/9/12

Instrument: LC12.i

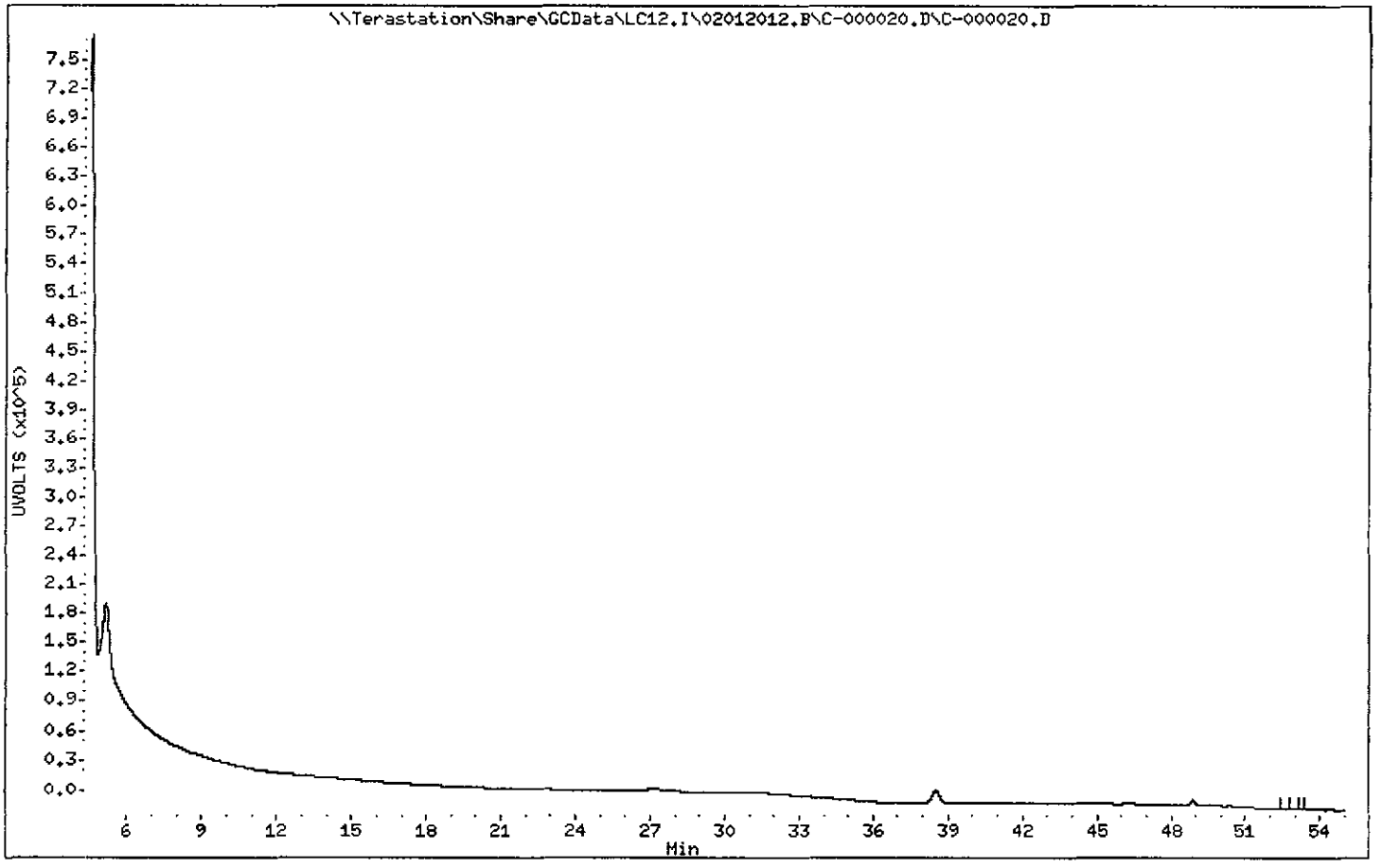
Sample Info: MQCM31AK 2024017 A200474-1:0:

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...: G2A200474-002 Work Order #...: MQCM41AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM41AK 2024017 A200474-2
Analyzed : 02-FEB-2012 02:40
Operator : rn
Matrix : WATER
Sample Amt: 986.02 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000019.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX									
6	1,3,5-Trinitrobenz	25.552	-0.124	1117	0.1107					
7	Picric ACID	25.832	-0.147	3636	0.6266					
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.939	-0.024	8265	2.499	32.939	-0.020	15991	2.544	1.8
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN					41.392	0.017	833	0.3525	

not conf. NA rm 2/7/12

NA

Surrogates	Spiked	Recovered	%Rec		Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.535	2.499	98.57		2.544	100.4	(84-125)

rm 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 03:32

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000019.D
Lab Smp Id: MQCM41AK 2024017 A2
Inj Date : 02-FEB-2012 02:40
Operator : rn Inst ID: LC11.i
Smp Info : MQCM41AK 2024017 A200474-2;0;
Misc Info : ;;986.02;;20;1;WATERMET.sub;;0;;;;MQCM41AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.020	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
23.512	875747	5138	0.006	24.10		
24.945	251376	1296	0.005	6.07		
25.152	4414	282	0.064	1.32		
25.552	15545	1117	0.072	5.24		10 1,3,5-Trinitrobenze
25.832	766962	3636	0.005	17.05		9 Picric ACID
32.939	178115	8265	0.046	38.81	$	1 3,4-Dinitrotoluene
41.432	13244	672	0.051	3.15		
42.045	33195	910	0.027	4.26		
	2138599	21316		100.000		

Total unknown % height = 38.90

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000019.D

Date : 02-FEB-2012 02:40

Client ID:

Instrument: LC11.i

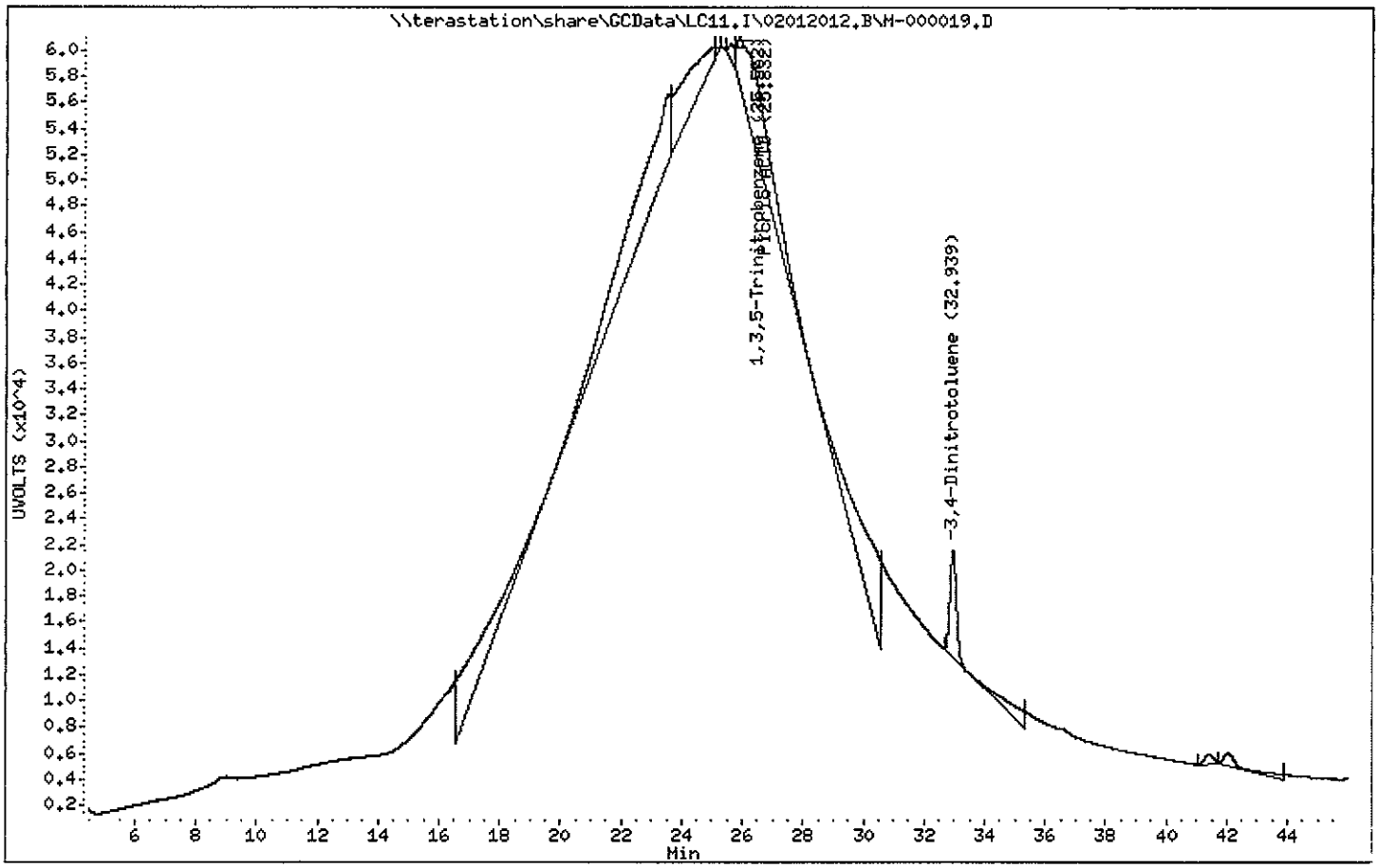
Sample Info: MQCM41AK 2024017 A200474-2;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000019.D\M-000019
Lab Smp Id: MQCM41AK 2024017 A2
Inj Date : 02-FEB-2012 02:40
Operator : rn Inst ID: LC11.i
Smp Info : MQCM41AK 2024017 A200474-2;0;
Misc Info : ;;986.02;;20;1;WATERMET.sub;;0;;;;MQCM41AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.020	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.235	29155	342	0.012	1.45	
23.369	2134	314	0.147	1.33	
23.579	3098	230	0.074	0.98	
23.695	1594	207	0.130	0.88	
23.802	1536	183	0.119	0.78	
24.042	1582	74	0.047	0.31	
32.939	338910	15991	0.047	68.28	$ 1 3,4-Dinitrotoluene
36.549	30453	215	0.007	0.91	
39.312	49060	1516	0.031	6.46	
41.392	18517	833	0.045	3.55	27 PETN
42.045	102113	3534	0.035	15.07	
	578151	23439		100.000	

Total unknown % height = 28.17

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000019.D\M-000019.D

Date : 02-FEB-2012 02:40

Client ID:

Instrument: LC11.i

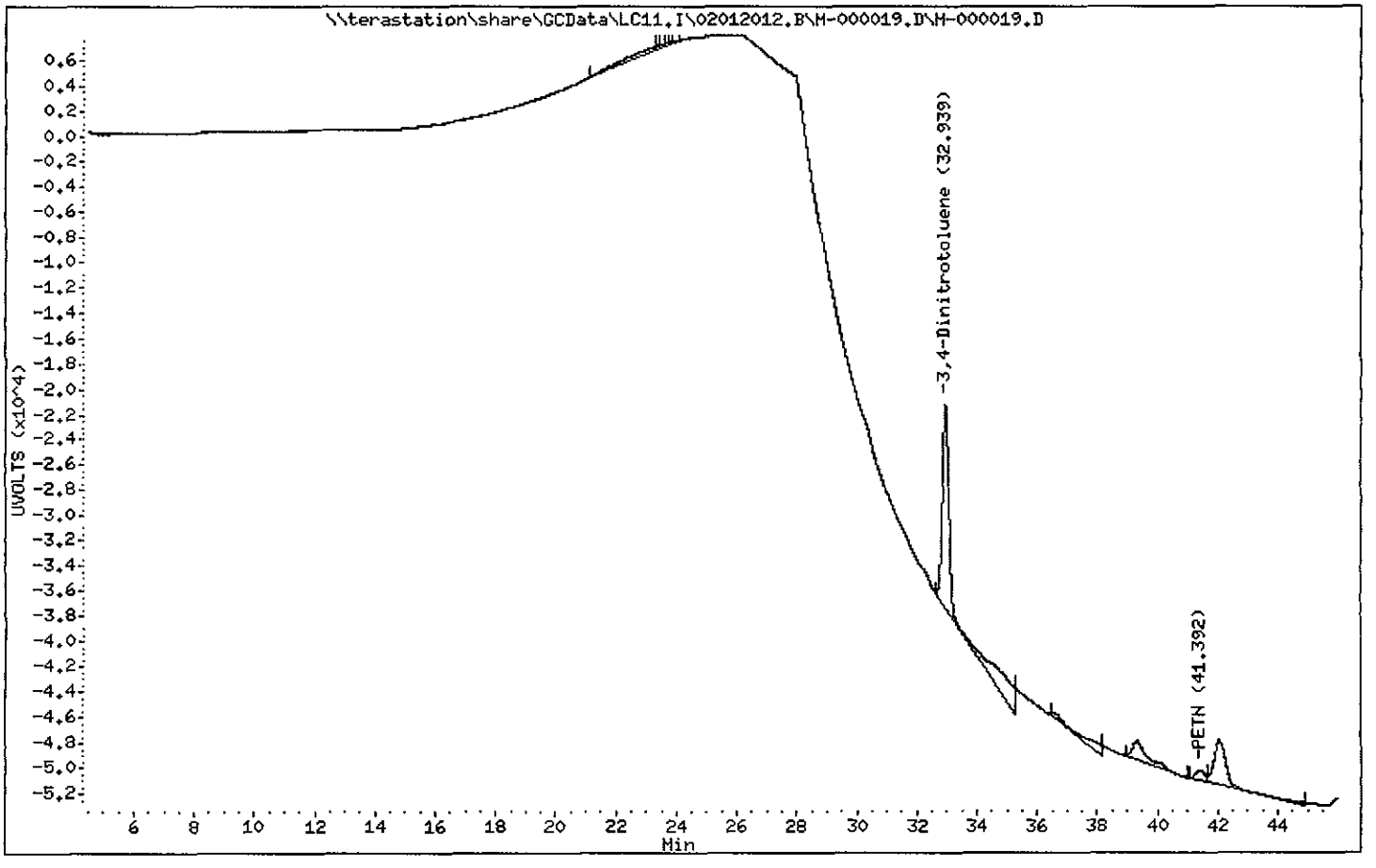
Sample Info: MQCM41AK 2024017 A200474-2;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02DUP01-20120119

HPLC

Lot-Sample #...:	G2A200474-002	Work Order #...:	MQCM42AK	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.01	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.050 U	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	113 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

TestAmerica
Dual Column Chromatography Summary

2 RM 2/9/12

Sample : MQCM4AK 2024017 A200474-2
Analyzed : 02-FEB-2012 14:26
Operator : RN
Matrix : WATER
Sample Amt: 986.02 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000023.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 Nitrobenzene	22.105	-0.162	272	0.1202					
3 DNX									
4 1,3-Dinitrobenzene									
5 1,3,5-Trinitrobenz	ND								
6 MNX									
7 2-Nitrotoluene									
8 3-Nitrotoluene									
9 3,5-Dinitroaniline									
10 RDX	ND								
11 2,4-Dinitrotoluene									
12 2,6-Dinitrotoluene									
13 2-AM-4,6-DNT									
14 4-AM-2,6-DNT									
15 3,4-Dinitrotoluene	38.571	0.045	6543	2.860					
16 2,4,6-Trinitrotolu	40.488	-0.129	122	0.03104					
17 HMX									
18 TETRYL									
19 4-Nitrotoluene									
20 EGDN									
21 PETN									
22 Nitroglycerin									
23 Picric ACID									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.535	2.860	112.8*			(79-111)

see NCM

~~not used~~ RM 2/2/12

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 15:31

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000023.D
Lab Smp Id: MQCM41AK 2024017 A2
Inj Date : 02-FEB-2012 14:26
Operator : RN 2 RDR 2/9/12 Inst ID: LC12.i
Smp Info : MQCM41AK 2024017 A200474-2;0;
Misc Info : ;;986.02;;20;1;WATERMETQSM.sub;;0;;;;MQCM41AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.020	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.105	13444	272	0.020	2.06	17 Nitrobenzene
26.508	23898	1111	0.046	8.44	
27.228	85958	2903	0.034	22.07	
28.038	10672	591	0.055	4.49	
29.285	3181	77	0.024	0.58	
31.548	1712	81	0.047	0.61	
35.538	163	26	0.159	0.19	
36.411	92	33	0.360	0.25	
37.088	344	26	0.075	0.19	
37.498	502	58	0.116	0.44	
38.571	153019	6543	0.043	49.88	$ 1 3,4-Dinitrotoluene
39.691	954	55	0.058	0.41	
40.488	2059	122	0.059	0.92	19 2,4,6-Trinitrotolue
41.745	3998	131	0.033	0.99	
42.505	436	71	0.163	0.53	
42.828	1928	96	0.050	0.73	
43.431	4010	250	0.062	1.90	
45.015	53	13	0.247	0.09	
46.235	2125	99	0.047	0.75	
47.021	128	30	0.234	0.22	
47.295	1604	94	0.059	0.71	
47.985	360	41	0.114	0.31	
48.345	1498	128	0.085	0.97	
48.915	3183	299	0.094	2.27	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
	315320	13150		100.000	

Total unknown % height = 47.14

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000023.D

Date : 02-FEB-2012 14:26

Client ID: 2 RDM 2/9/12

Instrument: LC12.i

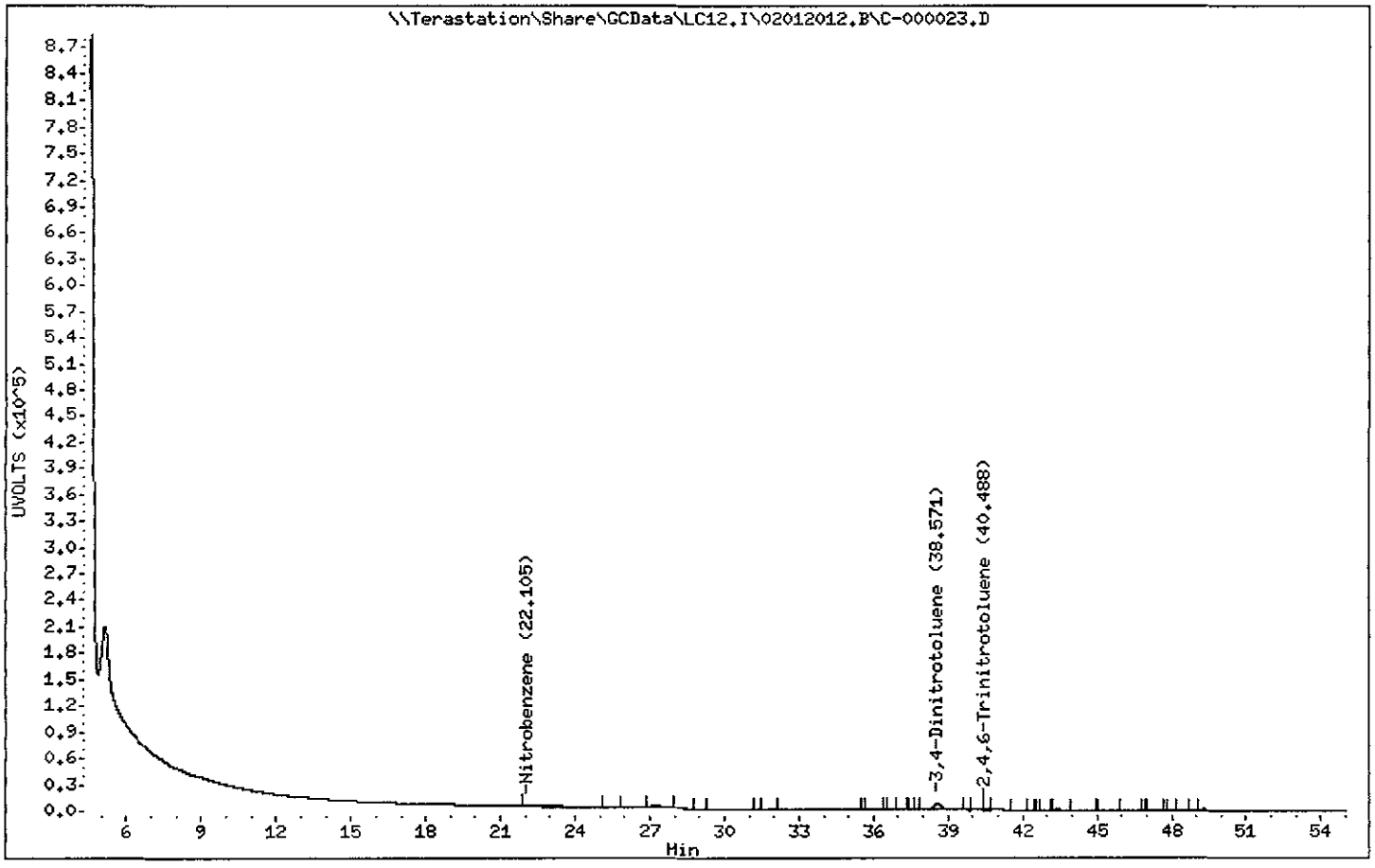
Sample Info: MQCH4/AK 2024017 A200474-2:0:

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000023.D\C-000023
Lab Smp Id: MQCM41AK 2024017 A2
Inj Date : 02-FEB-2012 14:26
Operator : RN RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM41AK 2024017 A200474-2;0;
Misc Info : ;;986.02;;20;1;WATERMETQSM.sub;;0;;;;MQCM41AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.020	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.561	6260	682	0.109	41.18	
53.551	20060	974	0.049	58.82	
	26320	1656		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000023.D\C-000023.D

Date : 02-FEB-2012 14:26

Client ID: 2 RDN 2/9/12

Instrument: LC12.i

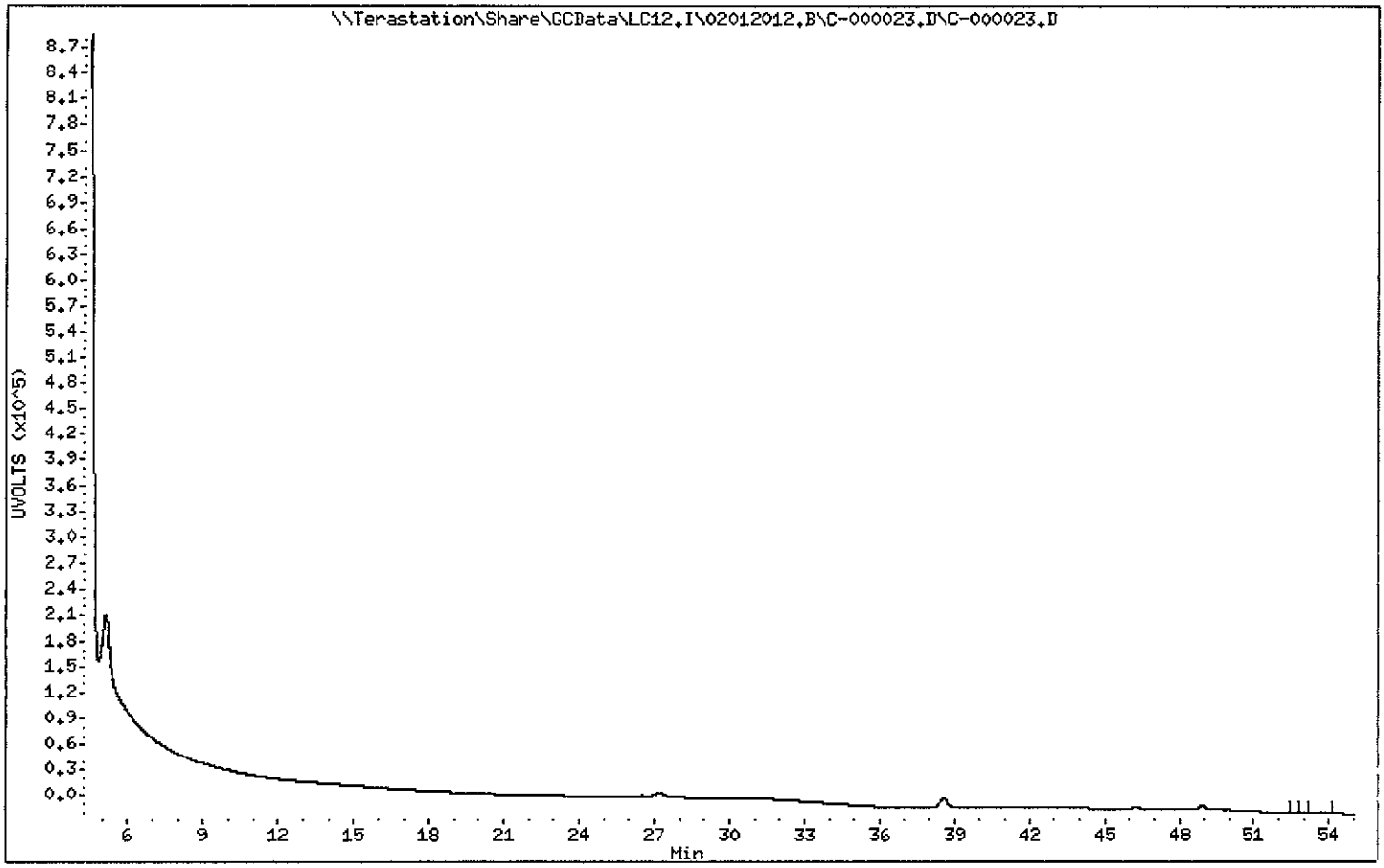
Sample Info: MQCM4LAK 2024017 A200474-2;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM51AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM51AK 2024017 A200474-3
Analyzed : 02-FEB-2012 03:37
Operator : rn
Matrix : WATER
Sample Amt: 986.89 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000020.D
Sublist: WATERMET

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 DNX									
3 HMX									
4 MNX									
5 RDX	23.749	0.010	1203	0.2680					
6 1,3,5-Trinitrobenz									
7 Picric ACID									
8 1,3-Dinitrobenzene									
9 3,5-Dinitroaniline									
10 Nitrobenzene									
11 TETRYL									
12 2,4,6-Trinitrotolu									
13 4-AM-2,6-DNT									
14 3,4-Dinitrotoluene	32.942	-0.020	8480	2.562	32.942	-0.016	16446	2.614	2.0
15 2-AM-4,6-DNT									
16 2,6-Dinitrotoluene									
17 2,4-Dinitrotoluene									
18 2-Nitrotoluene									
19 4-Nitrotoluene									
20 3-Nitrotoluene									
21 EGDN									
22 Nitroglycerin									
23 PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.533	2.562	101.1	2.614	103.2	(84-125)

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 04:30

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000020.D
Lab Smp Id: MQCM51AK 2024017 A2
Inj Date : 02-FEB-2012 03:37
Operator : rn Inst ID: LC11.i
Smp Info : MQCM51AK 2024017 A200474-3;0;
Misc Info : ;;986.89;;20;1;WATERMET.sub;;0;;;;MQCM51AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.890	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.556	95794	76	0.001	0.71	
23.749	36805	1203	0.033	11.38	7 RDX
24.663	2005	140	0.070	1.32	
26.169	29692	377	0.013	3.56	
32.943	128139	8480	0.066	80.27	$ 1 3,4-Dinitrotoluene
41.462	3144	136	0.043	1.28	
42.013	4724	157	0.033	1.48	
	300303	10569		100.000	

Total unknown % height = 8.350

Data File: \\terastation\share\GCData\LC11.I\02012012.B\H-000020.D

Date : 02-FEB-2012 03:37

Client ID:

Instrument: LC11.i

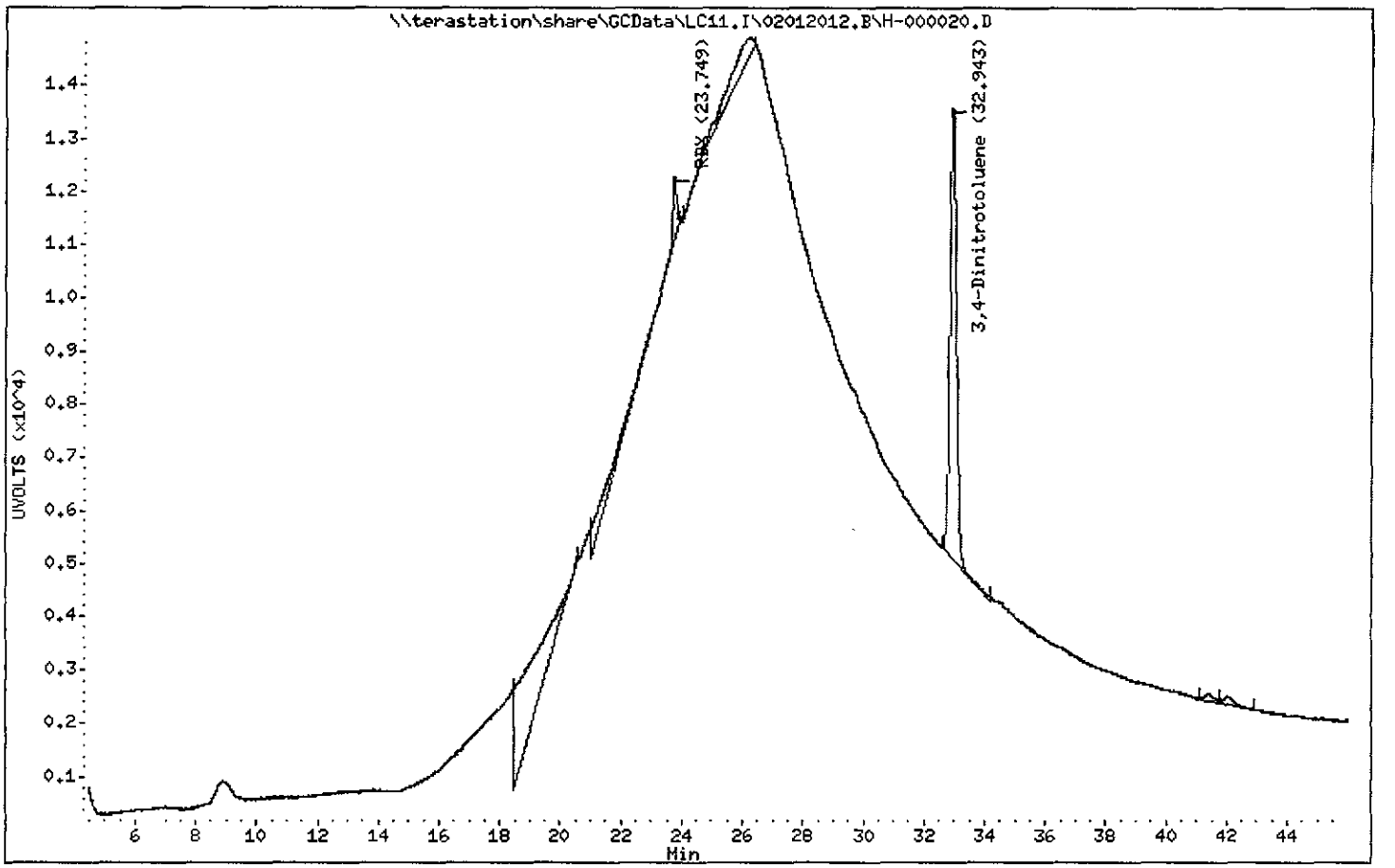
Sample Info: MQCM51AK 2024017 A200474-3;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000020.D\M-000020
Lab Smp Id: MQCM51AK 2024017 A2
Inj Date : 02-FEB-2012 03:37
Operator : rn Inst ID: LC11.i
Smp Info : MQCM51AK 2024017 A200474-3;0;
Misc Info : ;;986.89;;20;1;WATERMET.sub;;0;;;;MQCM51AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.890	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.056	169	28	0.166	0.15	
24.123	163	41	0.251	0.22	
24.803	155	45	0.290	0.24	
25.456	155	28	0.181	0.15	
25.963	191	37	0.194	0.20	
26.079	357	47	0.132	0.25	
32.256	5060	327	0.065	1.77	
32.943	246116	16446	0.067	89.14	$ 1 3,4-Dinitrotoluene
34.493	4470	183	0.041	0.99	
36.639	6878	367	0.053	1.98	
39.326	15733	421	0.027	2.28	
42.066	13570	486	0.036	2.63	
	293017	18456		100.000	

Total unknown % height = 10.86

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000020.D\M-000020.D

Date : 02-FEB-2012 03:37

Client ID:

Instrument: LC11.i

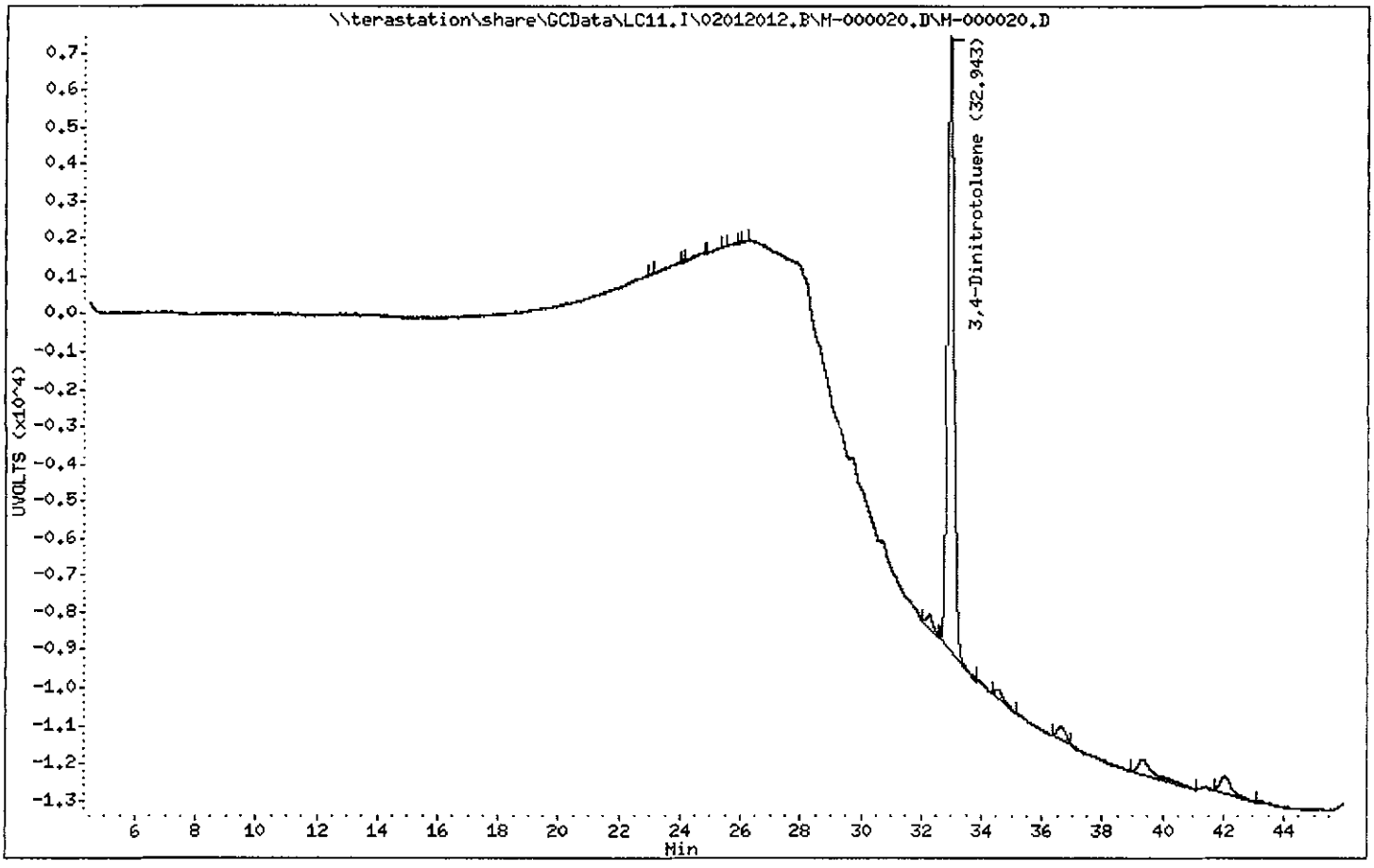
Sample Info: MQCM51AK 2024017 A200474-3;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02SW101-20120119

HPLC

Lot-Sample #...: G2A200474-003 Work Order #...: MQCM52AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.01 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	0.030
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	0.050
4-Amino-2,6-dinitrotoluene	0.050 U CON	0.10	ug/L	0.050
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	0.050
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	0.050
RDX	0.27	0.10	ug/L	0.036
MNX	1.0 U	2.0	ug/L	0.55

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	114 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM51AK 2024017 A200474-3 2
Analyzed : 02-FEB-2012 15:32
Operator : RN
Matrix : WATER
Sample Amt: 986.89 mL
Dilution Factor: 1

RM 2/9/12

Instrument: LC12
File ID: 02012012.B/C-000024.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	Nitrobenzene									
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz									
6	MNX									
7	2-Nitrotoluene	29.487	0.090	178	0.1236					
8	3-Nitrotoluene	30.030	0.047	155	0.08194					
9	3,5-Dinitroaniline	31.464	0.107	125	0.03079					
10	RDX	31.964	0.020	669	0.2718					
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT									
15	3,4-Dinitrotoluene	38.557	0.030	6610	2.887					
16	2,4,6-Trinitrotolu									
17	HMX	42.307	0.033	118	0.03937					
18	TETRYL									
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

conf.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.533	2.887	114.0*			(79-111)

See NCM

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 16:37

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000024.D
Lab Smp Id: MQCM51AK 2024017 A2
Inj Date : 02-FEB-2012 15:32
Operator : RN 2 RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM51AK 2024017 A200474-3;0;
Misc Info : ;;986.89;;20;1;WATERMETQSM.sub;;0;;;;MQCM51AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.890	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.527	2860	151	0.053	1.43	
27.264	17170	547	0.032	5.18	
27.650	8194	493	0.060	4.67	
28.047	12281	413	0.034	3.91	
29.064	876	181	0.207	1.71	
29.487	3693	178	0.048	1.68	24 2-Nitrotoluene
30.030	1342	155	0.115	1.47	26 3-Nitrotoluene
30.770	3397	133	0.039	1.26	
31.464	805	125	0.155	1.18	15 3,5-Dinitroaniline
31.964	17901	669	0.037	6.34	7 RDX
33.107	351	32	0.091	0.30	
35.174	87	23	0.264	0.21	
37.020	94	18	0.191	0.17	
37.210	106	22	0.208	0.20	
37.480	252	28	0.111	0.26	
37.754	281	34	0.121	0.32	
38.557	148723	6610	0.044	62.83	$ 1 3,4-Dinitrotoluene
39.970	166	28	0.169	0.26	
40.437	154	30	0.195	0.28	
40.794	285	45	0.158	0.42	
41.154	497	52	0.105	0.49	
41.784	576	34	0.059	0.32	
42.307	2242	118	0.053	1.11	4 HMX
42.797	796	37	0.046	0.35	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
43.427	1399	64	0.046	0.60	
46.197	1991	109	0.055	1.03	
47.774	117	21	0.179	0.19	
48.307	1677	131	0.078	1.24	
48.874	802	63	0.079	0.59	
	229114	10544		100.000	

Total unknown % height = 25.39

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000024.D

Date : 02-FEB-2012 15:32

Client ID: 2 RM 2/9/12

Instrument: LC12.i

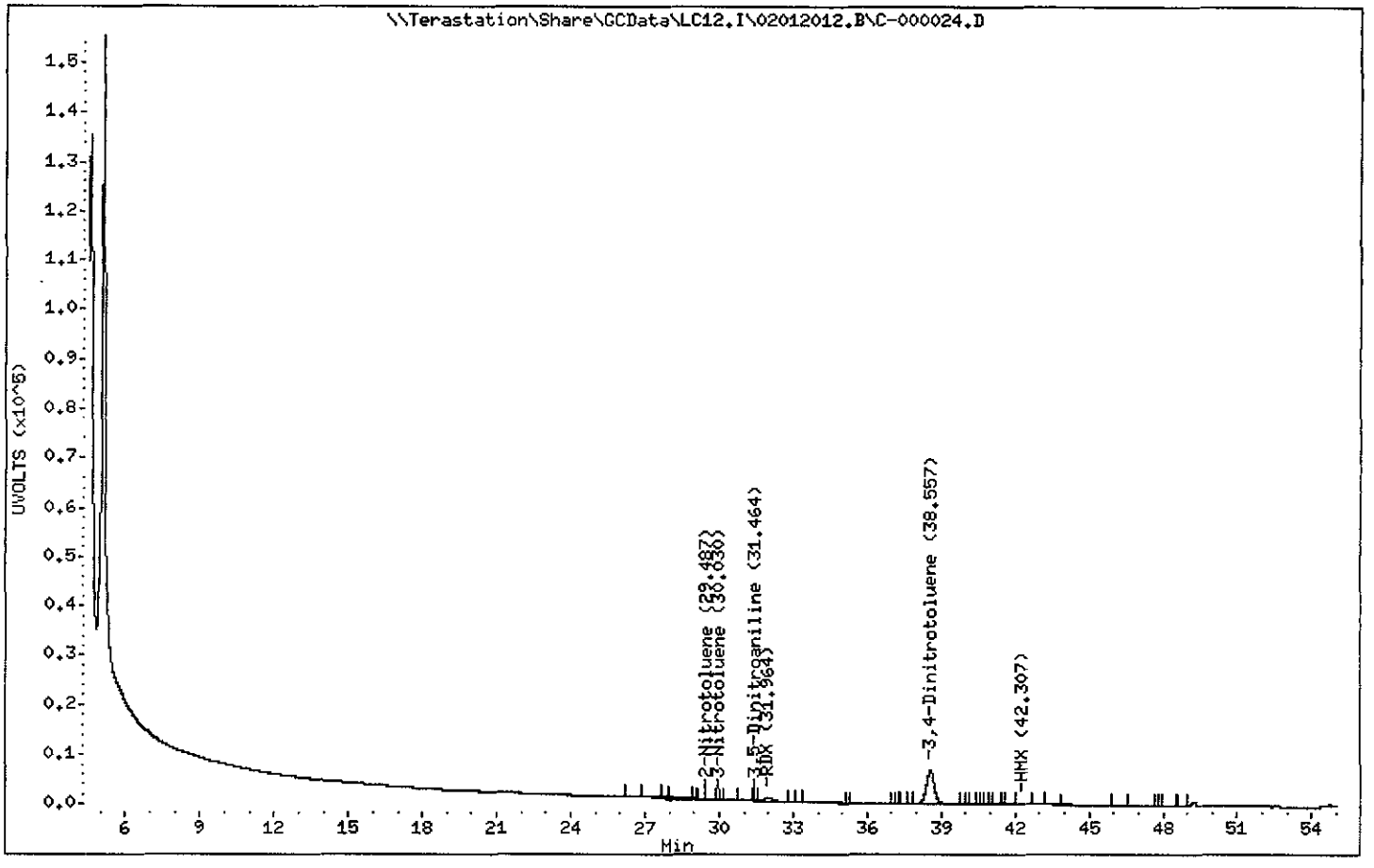
Sample Info: MQCM51AK 2024017 A200474-3:0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000024.D\C-000024
Lab Smp Id: MQCM51AK 2024017 A2
Inj Date : 02-FEB-2012 15:32
Operator : RN RM 2/9/12 Inst ID: LC12.i
Smp Info : MQCM51AK 2024017 A200474-3;0;
Misc Info : ;;986.89;;20;1;WATERMETQSM.sub;;0;;;;MQCM51AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	986.890	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.507	10629	1122	0.106	48.32	
53.500	23633	1200	0.051	51.68	
	34262	2322		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000024.D\C-000024.D

Date : 02-FEB-2012 15:32

Client ID:

Instrument: LC12.i

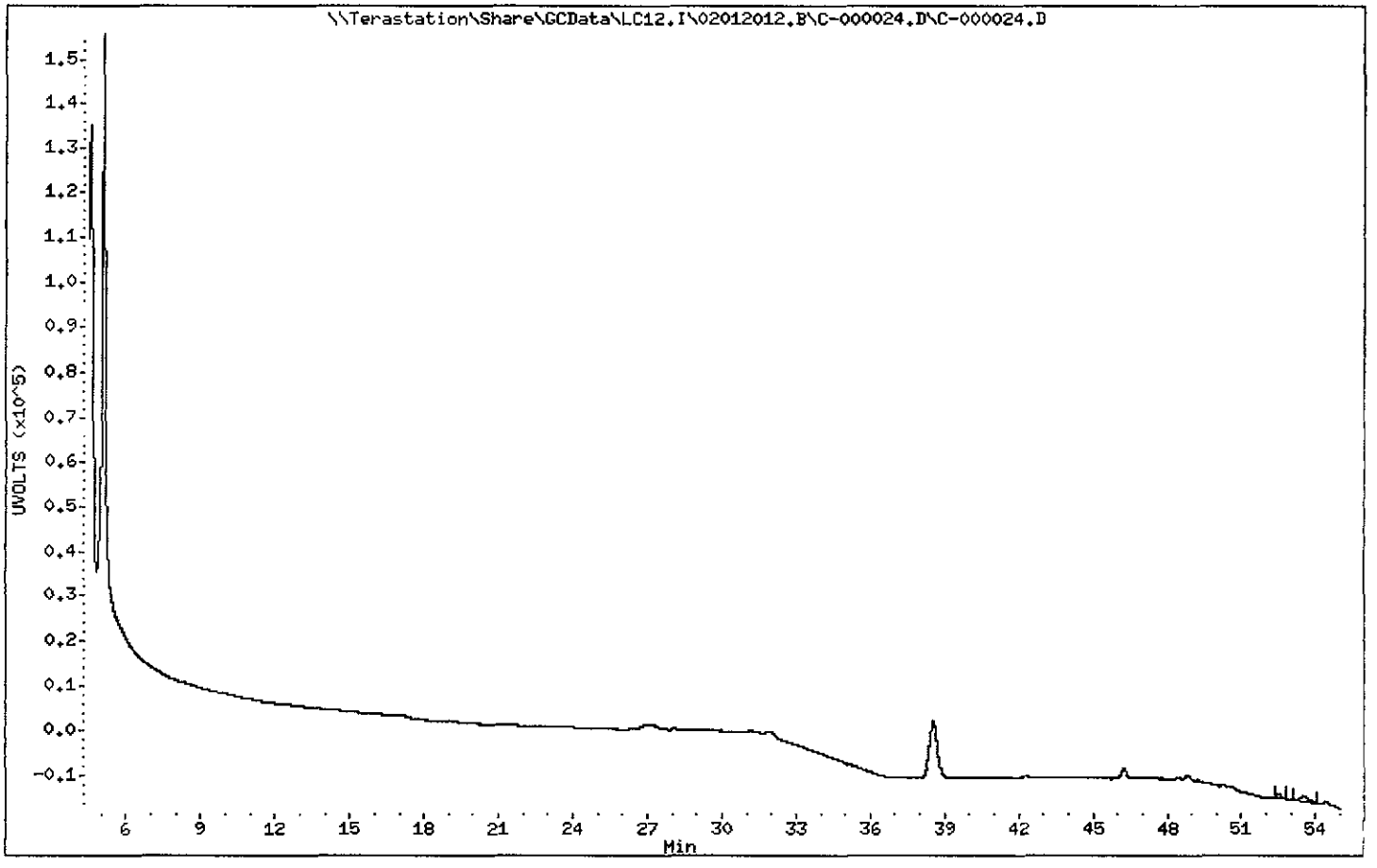
Sample Info: MQCM51AK 2024017 A200474-3;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...: G2A200474-004 Work Order #...: MQCM61AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	99	(79 - 111)

TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : MQCM61AK 2024017 A200474-4
Analyzed : 02-FEB-2012 04:34
Operator : rn
Matrix : WATER
Sample Amt: 977.49 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000021.d
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX	23.657	-0.082	0	0.0000M					
6	1,3,5-Trinitrobenz	25.704	0.028	102256	10.23					
7	Picric ACID									
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.940	-0.022	8293	2.530M	32.940	-0.018	16532	2.653	4.7
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN					41.417	0.042	1089	0.4648	

not cnf
NA not cnfg.
TAM 2/7/12

NA

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.558	2.530	98.91	2.653	103.7	(84-125)

M = Compound was manually integrated.

RE-INTEGRATION CODES
1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

TAM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/07/2012 14:10

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000021.d
Lab Smp Id: MQCM61AK 2024017 A2
Inj Date : 02-FEB-2012 04:34
Operator : rn Inst ID: LC11.i
Smp Info : MQCM61AK 2024017 A200474-4;0;
Misc Info : ;;977.49;;20;1;WATERMET.sub;;0;;;;MQCM61AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M
Meth Date : 07-Feb-2012 13:41 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	977.490	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
23.657	28535	0	0.000	0.00		7 RDX
24.651	4032770	101404	0.025	24.18		
24.947	1913168	102254	0.053	24.42		
25.301	2387637	102224	0.043	24.37		
25.704	1491344	102256	0.069	24.38		10 1,3,5-Trinitrobenze
32.941	119915	8293	0.069	1.97	$	1 3,4-Dinitrotoluene
41.431	30292	1276	0.042	0.30		
42.047	59408	1603	0.027	0.38		
	10063071	419310		100.000		

Total unknown % height = 73.65

RE-INTEGRATION CODES
1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)
ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/7/12

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000021.d

Date : 02-FEB-2012 04:34

Client ID:

Instrument: LC11.i

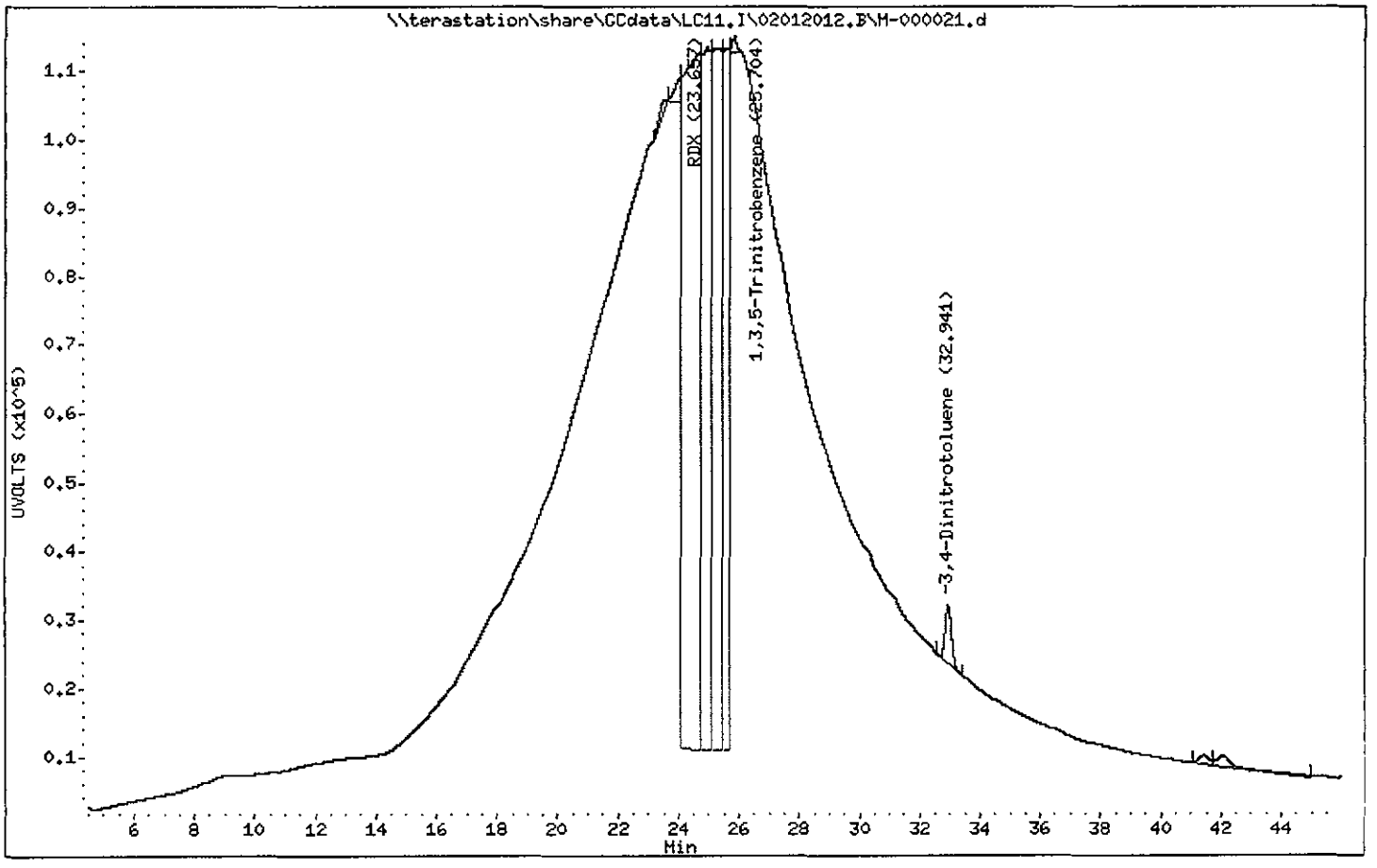
Sample Info: MQCM61AK 2024017 A200474-4;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/7/12

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000021.D\M-000021
Lab Smp Id: MQCM61AK 2024017 A2
Inj Date : 02-FEB-2012 04:34
Operator : rn Inst ID: LC11.i
Smp Info : MQCM61AK 2024017 A200474-4;0;
Misc Info : ;;977.49;;20;1;WATERMET.sub;;0;;;;MQCM61AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	977.490	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.661	162749	961	0.006	2.37	
24.071	17200	514	0.030	1.26	
24.371	8960	409	0.046	1.00	
24.831	504	83	0.165	0.20	
25.191	6546	432	0.066	1.06	
25.654	845	103	0.122	0.25	
29.504	108060	5024	0.046	12.39	
30.634	43828	3478	0.079	8.58	
31.111	111400	4812	0.043	11.87	
32.941	791695	16532	0.021	40.85	$ 1 3,4-Dinitrotoluene
39.301	54166	1753	0.032	4.32	
41.417	23418	1089	0.047	2.68	27 PETN
42.051	161307	5340	0.033	13.17	
	1490678	40530		100.000	

Total unknown % height = 56.47

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000021.D\M-000021.D

Date : 02-FEB-2012 04:34

Client ID:

Instrument: LC11.i

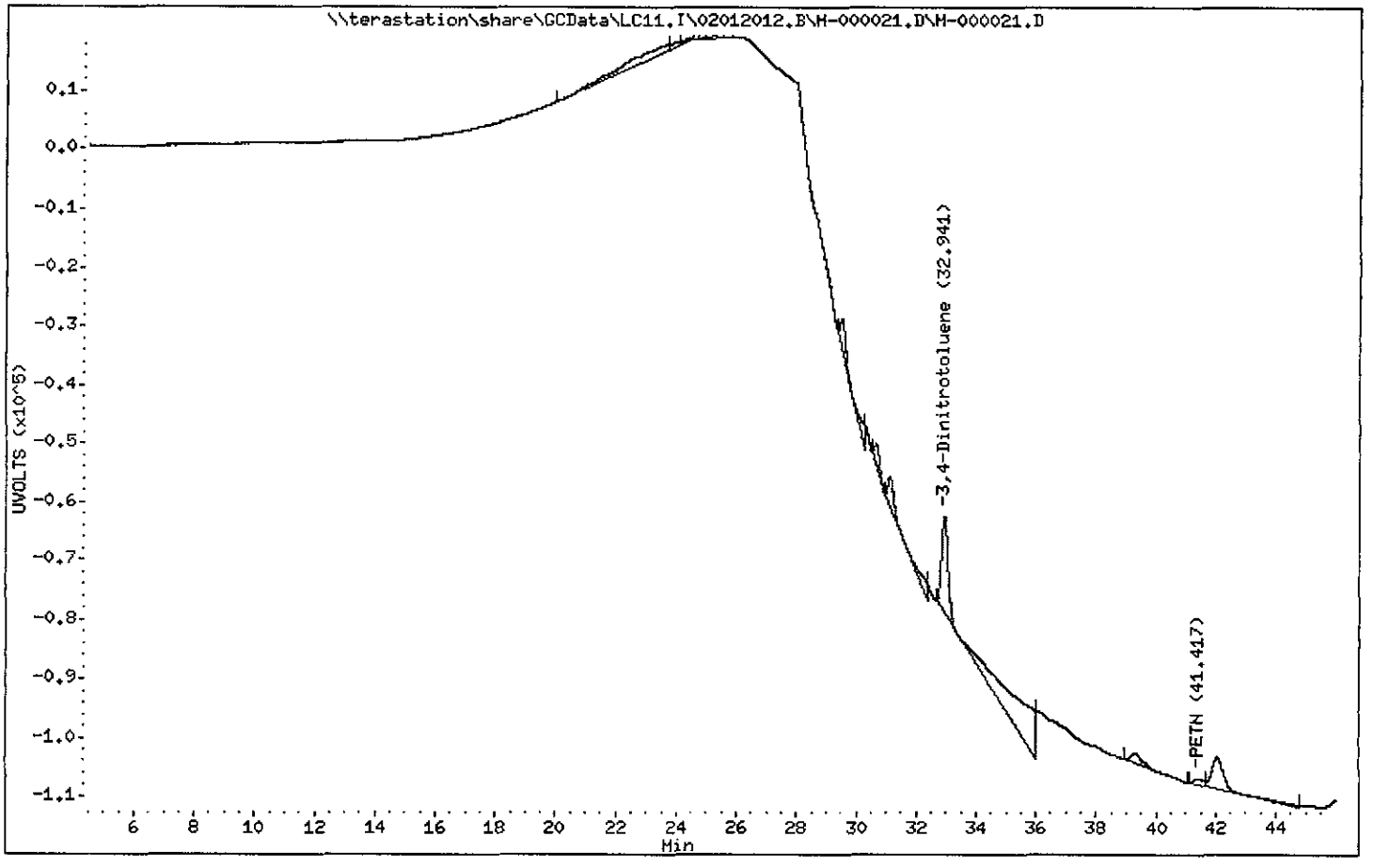
Sample Info: MQCM61AK 2024017 A200474-4;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000021.D
Lab Smp Id: MQCM61AK 2024017 A2
Inj Date : 02-FEB-2012 04:34
Operator : rn Inst ID: LC11.i
Smp Info : MQCM61AK 2024017 A200474-4;0;
Misc Info : ;;977.49;;20;1;WATERMET.sub;;0;;;;MQCM61AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	977.490	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.554	19842964	94610	0.005	12.96	7 RDX
24.071	2902331	97922	0.034	13.42	
24.651	4032770	101404	0.025	13.89	
24.947	1913168	102254	0.053	14.01	
25.301	2387637	102224	0.043	14.01	
25.704	1491344	102256	0.069	14.01	10 1,3,5-Trinitrobenze
25.831	20278404	104048	0.005	14.32	9 Picric ACID
32.941	2559294	21947	0.009	3.00	$ 1 3,4-Dinitrotoluene
41.431	30292	1276	0.042	0.17	
42.047	59408	1603	0.027	0.21	
	55497613	729544		100.000	

Total unknown % height = 55.71

See reintegration.

RM 2/7/12

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000021.D

Date : 02-FEB-2012 04:34

Client ID:

Instrument: LC11.i

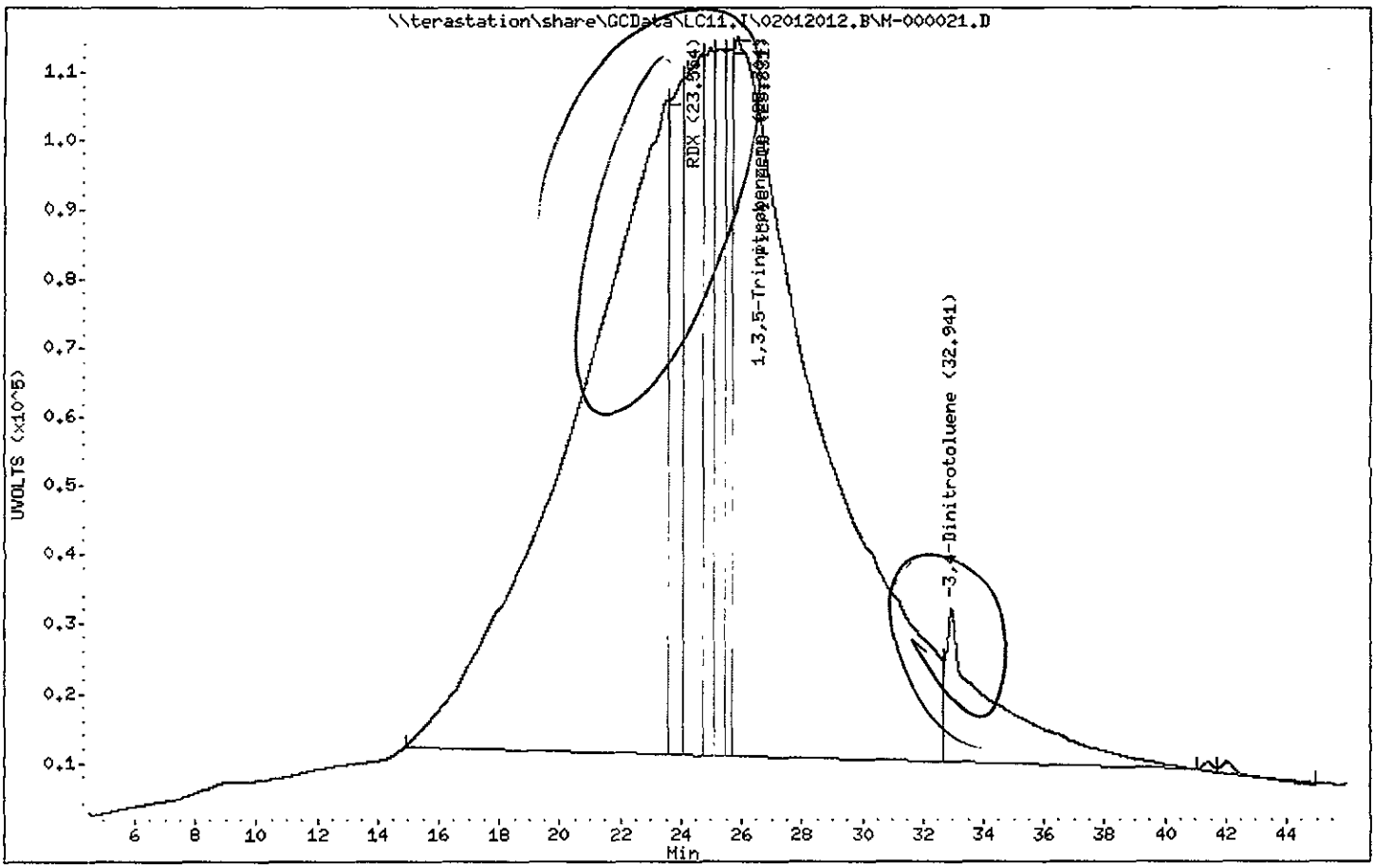
Sample Info: MQCM61AK 2024017 A200474-4;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



See reintegration.

RAM 2/7/12

White Water Associates

Client Sample ID: 02SW102-20120119

HPLC

Lot-Sample #...:	G2A200474-004	Work Order #...:	MQCM62AK	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.02	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.051 U	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	118 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM6 2 AK 2024017 A200474-4
Analyzed : 02-FEB-2012 16:37
Operator : RN
Matrix : WATER
Sample Amt: 977.49 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000025.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A				Side B				
	Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1	TNX									
2	Nitrobenzene	22.122	-0.145	665	0.2965					
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz	ND								
6	MNX									
7	2-Nitrotoluene									
8	3-Nitrotoluene									
9	3,5-Dinitroaniline									
10	RDX	ND								
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT	37.029	0.182	112	0.03725					
15	3,4-Dinitrotoluene	38.522	-0.005	6835	3.014					
16	2,4,6-Trinitrotolu									
17	HMX									
18	TETRYL									
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.558	3.014	117.8*			(79-111)

See NCM

RM 2/7/12
~~Not used~~
RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 17:42

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000025.D
Lab Smp Id: MQCM61AK 2024017 A2
Inj Date : 02-FEB-2012 16:37
Operator : RN 2 rm 2/9/12 Inst ID: LC12.i
Smp Info : MQCM61AK 2024017 A200474-4;0;
Misc Info : ;;977.49;;20;1;WATERMETQSM.sub;;0;;;;MQCM61AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	977.490	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.122	56873	665	0.012	3.71	17 Nitrobenzene
26.506	27187	1457	0.054	8.14	
27.232	105296	4032	0.038	22.54	
28.039	23392	655	0.028	3.66	
30.296	17112	217	0.013	1.21	
36.609	298	40	0.134	0.22	
37.029	1245	112	0.090	0.62	20 4-AM-2,6-DNT
37.276	1602	192	0.120	1.07	
37.479	2862	257	0.090	1.43	
37.812	4563	345	0.076	1.92	
37.939	3981	421	0.106	2.35	
38.522	172905	6835	0.040	38.32	$ 1 3,4-Dinitrotoluene
39.979	8048	214	0.027	1.19	
41.086	9025	370	0.041	2.06	
41.652	5271	227	0.043	1.26	
42.586	9922	314	0.032	1.75	
43.776	1877	104	0.055	0.58	
44.992	7824	395	0.050	2.20	
46.236	4692	271	0.058	1.51	
47.326	1415	114	0.081	0.63	
48.006	844	96	0.114	0.53	
48.362	4267	322	0.075	1.80	
48.902	2220	233	0.105	1.30	
	472722	17888		100.000	

Total unknown % height = 57.35

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000025.D

Date : 02-FEB-2012 16:37

Client ID: 2 TRM 2/9/12

Instrument: LC12.i

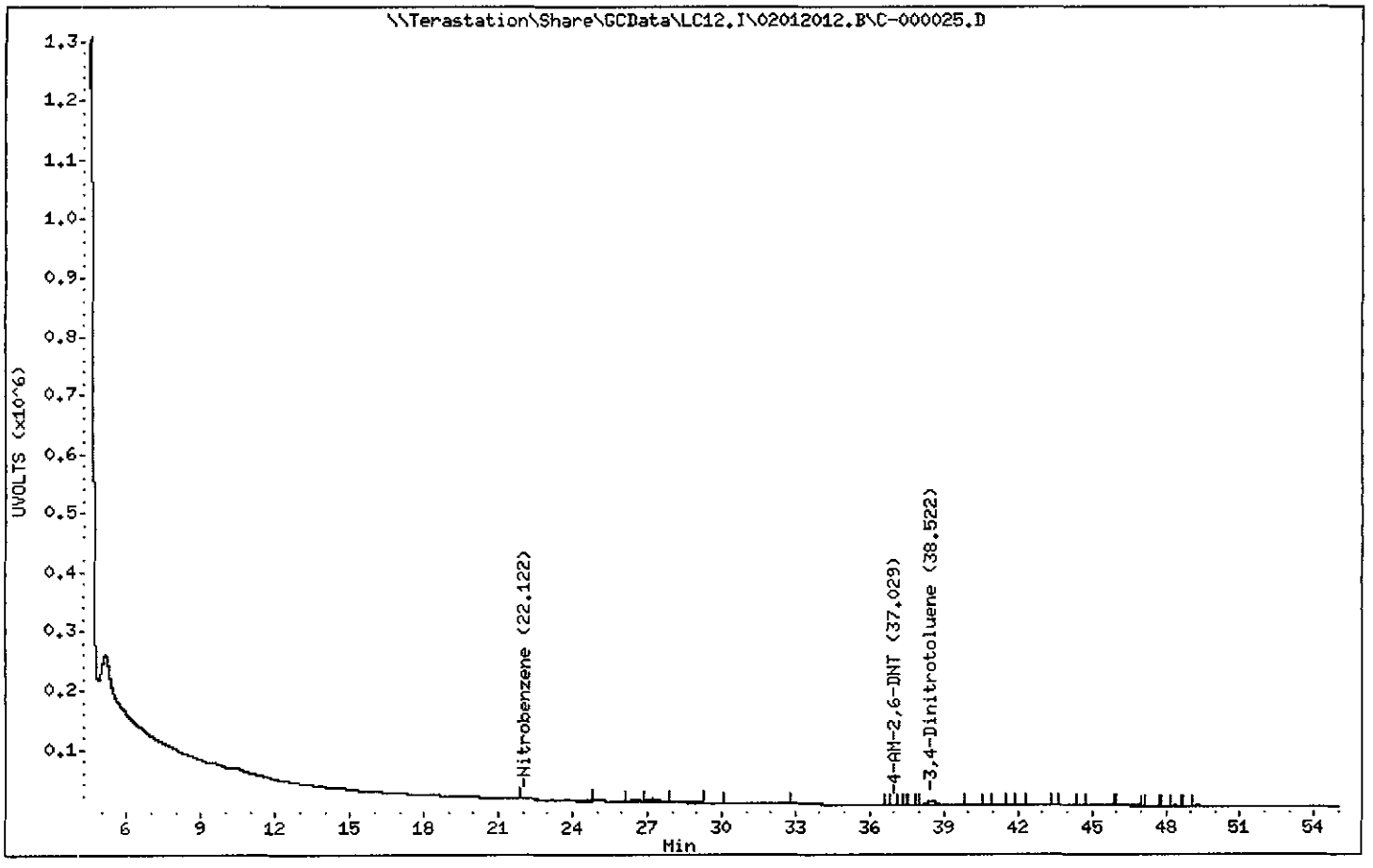
Sample Info: MQCM61AK 2024017 A200474-4;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000025.D\C-000025
Lab Smp Id: MQCM61AK 2024017 A2
Inj Date : 02-FEB-2012 16:37
Operator : RN 2 RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM61AK 2024017 A200474-4;0;
Misc Info : ;;977.49;;20;1;WATERMETQSM.sub;;0;;;;MQCM61AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	977.490	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
43.776	9118	596	0.065	6.22	
52.546	61276	6535	0.107	68.21	
53.539	36231	2450	0.068	25.57	
	106625	9581		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000025.D\C-000025.D

Date : 02-FEB-2012 16:37

Client ID: 2 RM 2/9/12

Instrument: LC12.i

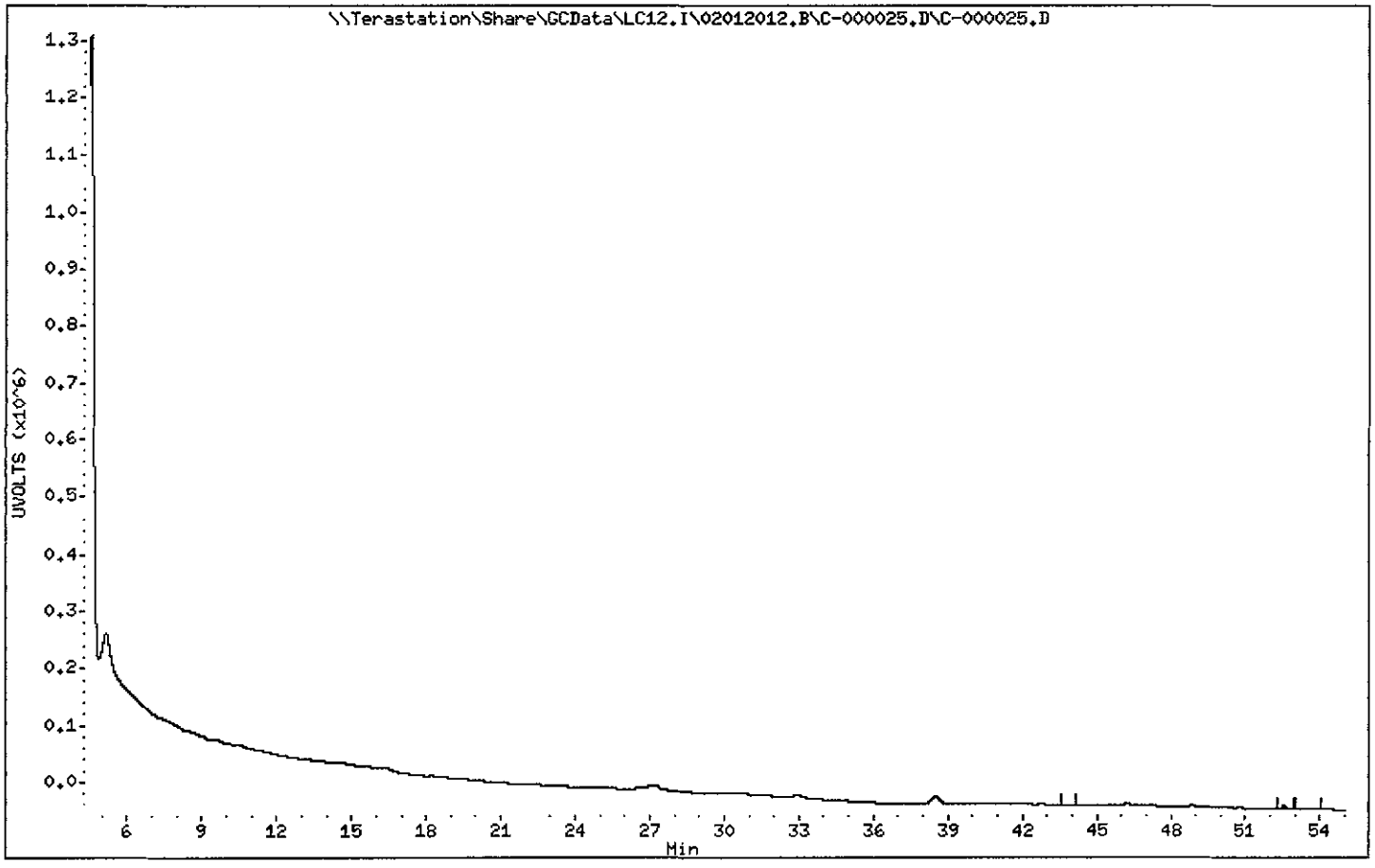
Sample Info: MQCM61AK 2024017 A200474-4;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...: G2A200474-005 Work Order #...: MQCM71AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.02 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.050 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

J Estimated result. Result is less than RL.

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM71AK 2024017 A200474-5
Analyzed : 02-FEB-2012 05:31
Operator : rn
Matrix : WATER
Sample Amt: 974.29 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000022.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX									
6	1,3,5-Trinitrobenz	25.589	-0.086	502	0.05037					
7	Picric ACID									
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.946	-0.016	8575	2.624	32.946	-0.013	16667	2.684	2.3
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

rm 2/8/12
~~AA~~ conf.

Surrogates	Spiked	Recovered	%Rec		Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.566	2.624	102.3		2.684	104.6	(84-125)

rm 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 06:24

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000022.D
Lab Smp Id: MQCM71AK 2024017 A2
Inj Date : 02-FEB-2012 05:31
Operator : rn Inst ID: LC11.i
Smp Info : MQCM71AK 2024017 A200474-5;0;
Misc Info : ;;974.29;;20;1;WATERMET.sub;;0;;;;MQCM71AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	974.290	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.093	1946	141	0.072	1.29	
18.183	105	24	0.228	0.22	
18.609	312	38	0.122	0.34	
19.759	99	25	0.253	0.22	
20.546	1479	123	0.083	1.13	
20.683	922	88	0.095	0.80	
21.703	62	26	0.421	0.23	
22.609	94	14	0.150	0.12	
24.606	3904	332	0.085	3.05	
24.916	354	65	0.184	0.59	
25.589	5836	502	0.086	4.61	10 1,3,5-Trinitrobenze
26.119	188	26	0.139	0.23	
26.323	614	55	0.090	0.50	
26.613	765	55	0.072	0.50	
27.023	897	70	0.078	0.64	
27.306	950	71	0.075	0.65	
28.396	1195	103	0.086	0.94	
28.873	632	59	0.093	0.54	
29.153	974	87	0.089	0.79	
32.946	130092	8575	0.066	78.95	$ 1 3,4-Dinitrotoluene
34.216	154	30	0.195	0.27	
34.546	229	25	0.109	0.22	
35.433	520	44	0.085	0.40	
38.013	103	24	0.233	0.22	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
38.399	212	33	0.155	0.30	
39.106	143	30	0.210	0.27	
39.889	163	32	0.197	0.29	
40.223	625	33	0.053	0.30	
41.396	1674	79	0.047	0.72	
45.333	1658	74	0.045	0.67	
	156900	10883		100.000	

Total unknown % height = 16.44

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000022.D

Date : 02-FEB-2012 05:31

Client ID:

Instrument: LC11.i

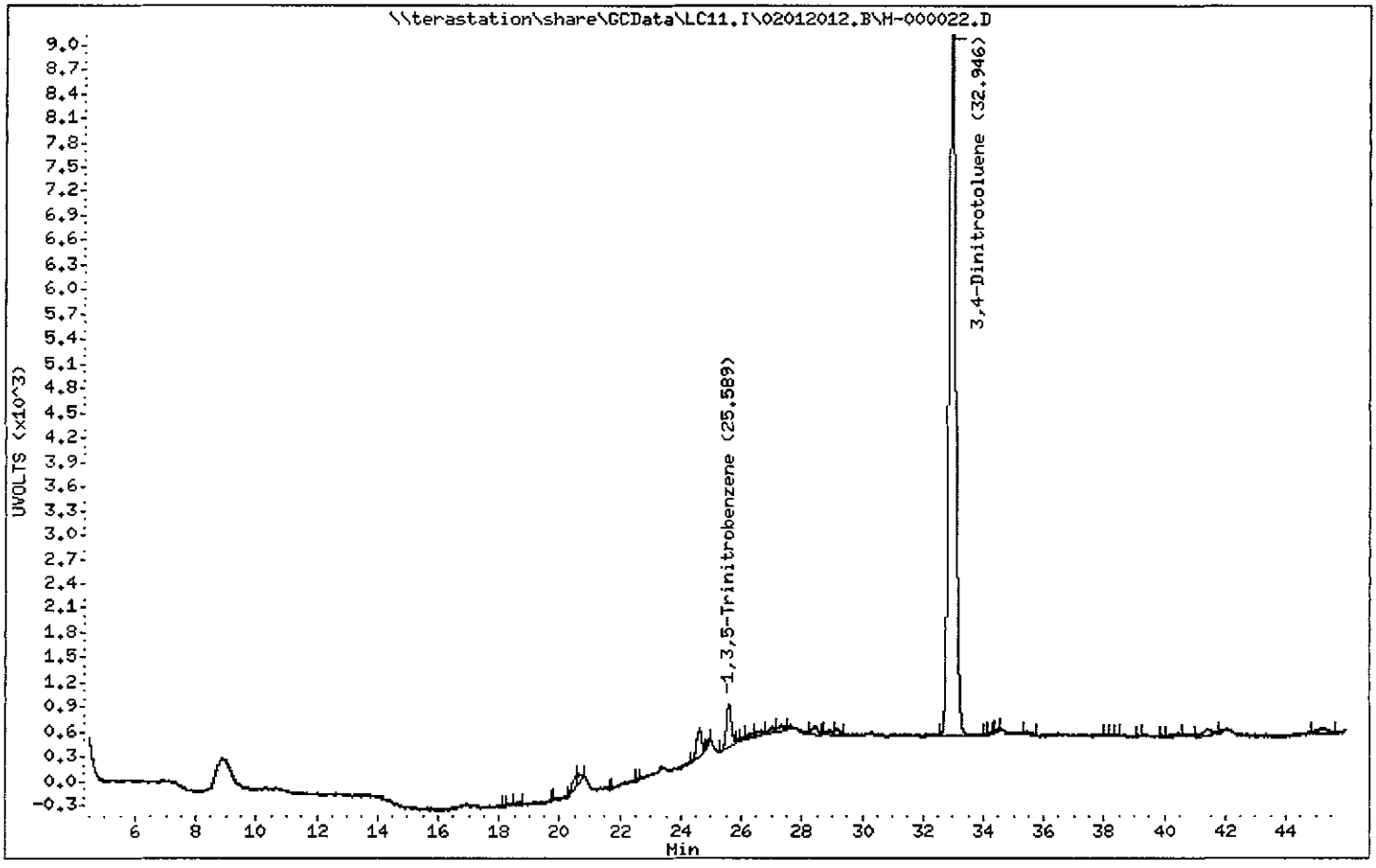
Sample Info: MQCM71AK 2024017 A200474-5:0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000022.D\M-000022
Lab Smp Id: MQCM71AK 2024017 A2
Inj Date : 02-FEB-2012 05:31
Operator : rn Inst ID: LC11.i
Smp Info : MQCM71AK 2024017 A200474-5;0;
Misc Info : ;;974.29;;20;1;WATERMET.sub;;0;;;;MQCM71AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	974.290	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.323	188	34	0.181	0.18	
26.116	296	50	0.169	0.26	
28.773	169	33	0.196	0.17	
31.246	181	31	0.171	0.16	
32.166	417	90	0.216	0.48	
32.399	2313	146	0.063	0.78	
32.946	253441	16667	0.066	89.48	$ 1 3,4-Dinitrotoluene
33.536	211	34	0.161	0.18	
34.573	1195	102	0.085	0.54	
35.559	1303	95	0.073	0.50	
36.403	175	32	0.183	0.17	
37.896	206	24	0.116	0.12	
38.429	556	52	0.093	0.27	
39.289	9558	332	0.035	1.78	
40.446	5416	151	0.028	0.80	
41.406	372	32	0.086	0.17	
42.089	7798	279	0.036	1.49	
43.356	568	51	0.090	0.27	
43.749	1528	72	0.047	0.38	
45.816	7901	341	0.043	1.82	
	293792	18648		100.000	

Total unknown % height = 10.52

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000022.D\M-000022.D

Date : 02-FEB-2012 05:31

Client ID:

Instrument: LC11.i

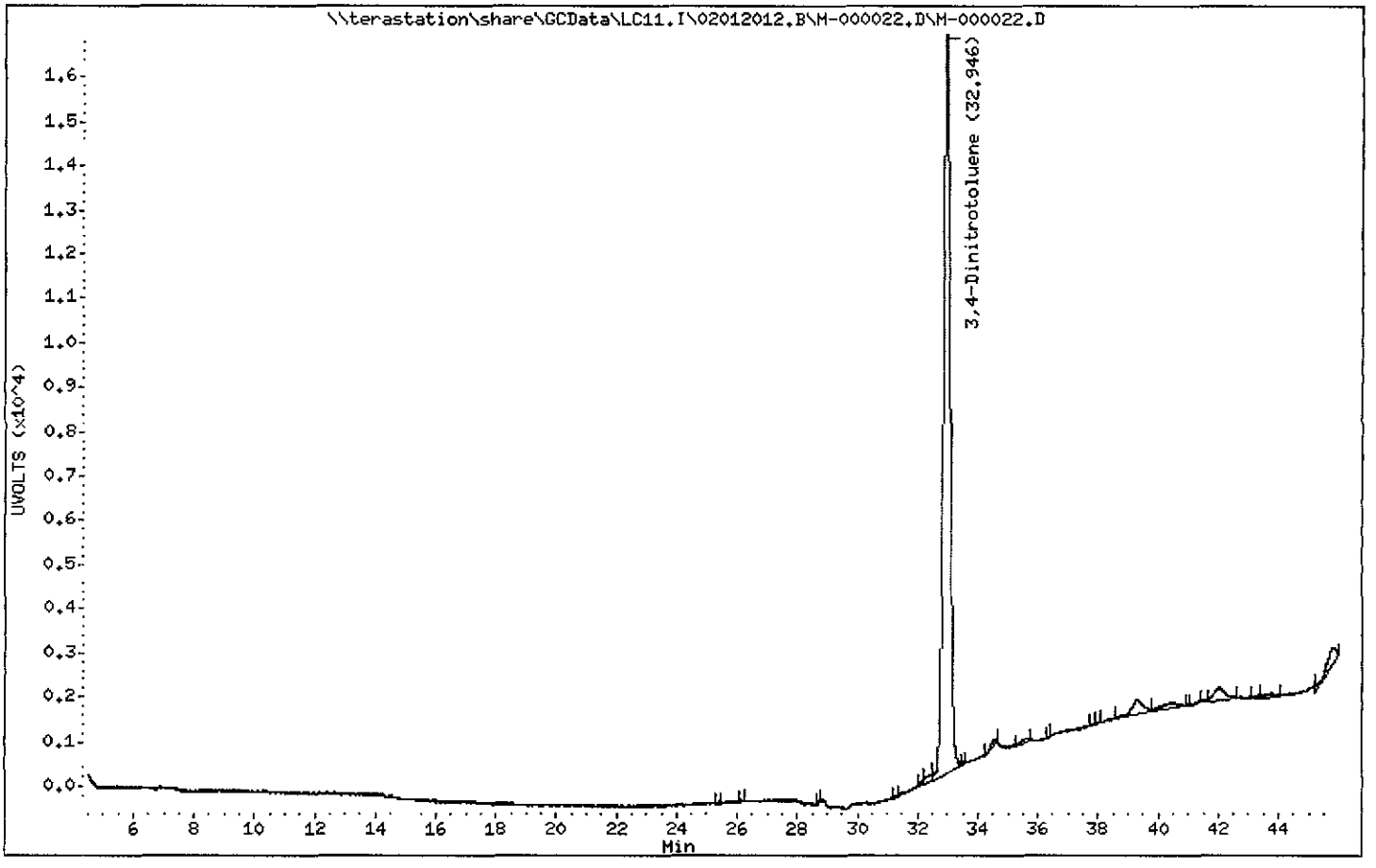
Sample Info: MQCH71AK 2024017 A200474-5;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02FB01-20120119

HPLC

Lot-Sample #...:	G2A200474-005	Work Order #...:	MQCM72AK	Matrix.....:	WG
Date Sampled...:	01/19/12	Date Received..:	01/20/12		
Prep Date.....:	01/24/12	Analysis Date..:	02/02/12		
Prep Batch #...:	2024017				
Dilution Factor:	1.02	Method.....:	SW846 8330/8330A		

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.051 U CON	0.10	ug/L	0.051
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	0.10
1,3-Dinitrobenzene	0.051 U	0.10	ug/L	0.051
2,4-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
2,6-Dinitrotoluene	0.051 U	0.10	ug/L	0.051
RDX	0.051 U	0.10	ug/L	0.037
MNX	1.0 U	2.0	ug/L	0.55
TNX	0.15 U	2.0	ug/L	0.057
1,3,5-Trinitrobenzene	0.054 J	0.10	ug/L	0.031
2,4,6-Trinitrotoluene	0.051 U	0.10	ug/L	0.051

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

J Estimated result. Result is less than RL.

TestAmerica
Dual Column Chromatography Summary

2 RM 2/9/12

Sample : MQCM7LAK 2024017 A200474-5
Analyzed : 02-FEB-2012 17:43
Operator : RN
Matrix : WATER
Sample Amt: 974.29 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000026.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 Nitrobenzene									
3 DNX									
4 1,3-Dinitrobenzene									
5 1,3,5-Trinitrobenz	27.918	-0.089	200	0.05382					
6 MNX									
7 2-Nitrotoluene									
8 3-Nitrotoluene									
9 3,5-Dinitroaniline									
10 RDX									
11 2,4-Dinitrotoluene									
12 2,6-Dinitrotoluene									
13 2-AM-4,6-DNT									
14 4-AM-2,6-DNT									
15 3,4-Dinitrotoluene	38.515	-0.012	6649	2.941					
16 2,4,6-Trinitrotolu									
17 HMX									
18 TETRYL									
19 4-Nitrotoluene									
20 EGDN									
21 PETN									
22 Nitroglycerin									
23 Picric ACID									

conf.

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.566	2.941	114.6*			(79-111)

See NCM

~~not used~~ RM 2/8/12
RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 18:48

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000026.D
Lab Smp Id: MQCM71AK 2024017 A2
Inj Date : 02-FEB-2012 17:43
Operator : RN 2 RM 2/9/12 Inst ID: LC12.i
Smp Info : MQCM71AK 2024017 A200474-5;0;
Misc Info : ;;974.29;;20;1;WATERMETQSM.sub;;0;;;;MQCM71AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	974.290	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.511	8518	260	0.031	2.52	
16.858	1827	63	0.034	0.61	
18.608	1458	54	0.037	0.52	
20.911	1650	49	0.030	0.47	
24.665	380	32	0.084	0.31	
25.678	1497	54	0.036	0.52	
26.568	2332	113	0.048	1.09	
27.245	17673	464	0.026	4.50	
27.918	4095	200	0.049	1.94	10 1,3,5-Trinitrobenze
28.585	513	49	0.096	0.47	
28.901	623	58	0.093	0.56	
29.115	663	42	0.063	0.40	
29.428	450	51	0.113	0.49	
29.715	475	47	0.099	0.45	
29.835	886	60	0.068	0.58	
30.171	282	45	0.159	0.43	
30.301	148	39	0.263	0.37	
30.398	859	50	0.058	0.48	
30.785	690	46	0.067	0.44	
31.091	221	47	0.213	0.45	
31.198	980	62	0.063	0.60	
31.468	346	81	0.234	0.78	
31.638	1723	80	0.046	0.77	
31.981	572	94	0.164	0.91	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
32.218	3713	140	0.038	1.35	
32.845	789	78	0.099	0.75	
33.055	1416	89	0.063	0.86	
33.871	142	30	0.212	0.29	
34.115	302	39	0.129	0.37	
34.608	237	33	0.139	0.32	
34.888	464	35	0.075	0.33	
35.605	463	27	0.058	0.26	
36.045	242	34	0.140	0.33	
36.511	298	31	0.104	0.30	
37.488	150	26	0.174	0.25	
37.648	205	32	0.156	0.31	
38.515	147357	6649	0.045	64.73	$ 1 3,4-Dinitrotoluene
39.365	1732	102	0.059	0.99	
39.911	67	21	0.316	0.20	
40.258	302	30	0.099	0.29	
40.501	129	26	0.201	0.25	
41.155	468	31	0.066	0.30	
41.685	367	31	0.085	0.30	
41.945	204	31	0.152	0.30	
42.258	207	27	0.131	0.26	
42.528	160	29	0.182	0.28	
43.048	973	67	0.069	0.65	
44.531	308	22	0.071	0.21	
45.301	167	28	0.168	0.27	
46.248	2091	112	0.054	1.08	
48.331	2314	158	0.068	1.53	
48.898	3862	205	0.053	1.98	
	217987	10303		100.000	

Total unknown % height = 33.33

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000026.D

Date : 02-FEB-2012 17:43

Client ID: 2 RN 2/9/12

Instrument: LC12.i

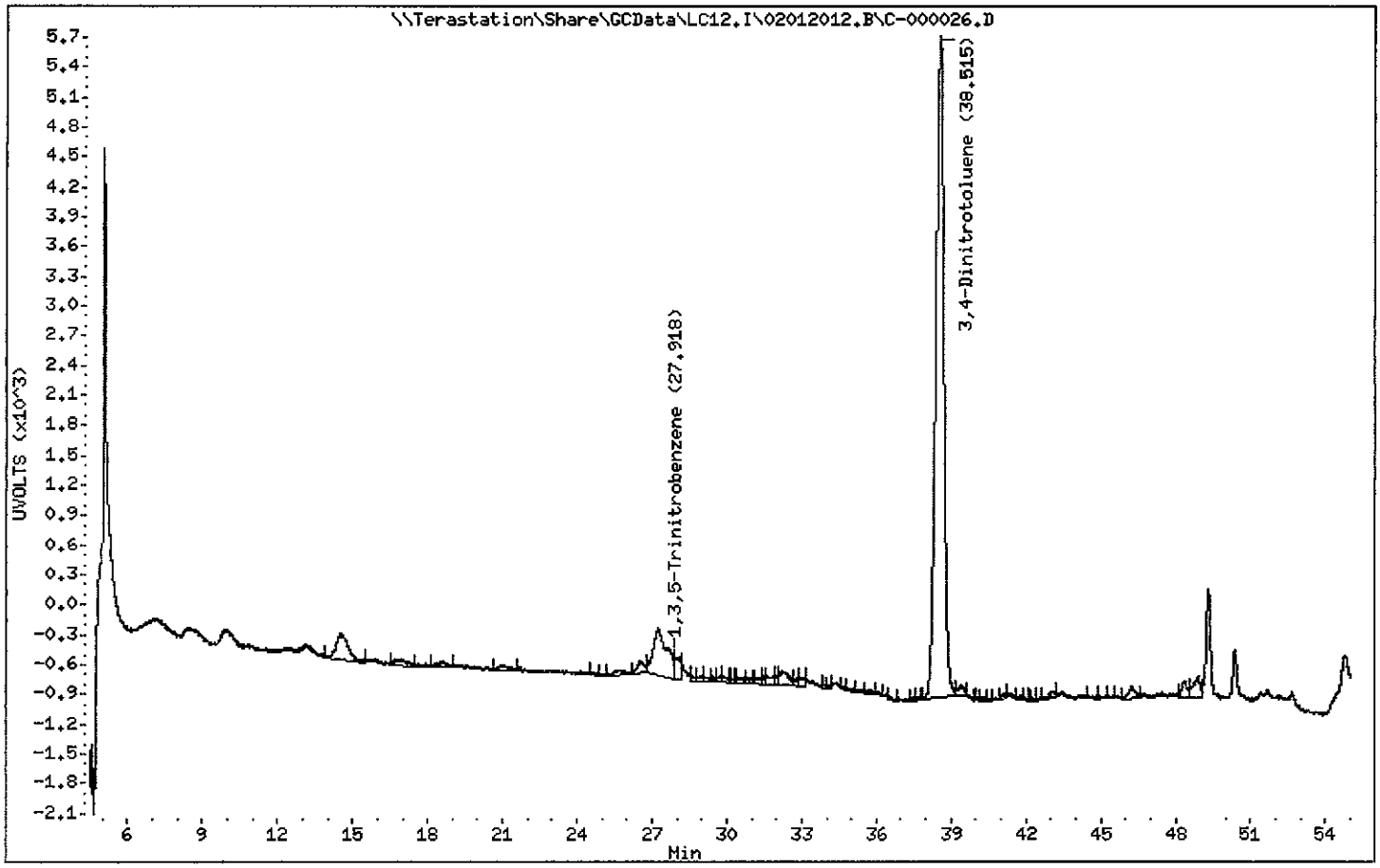
Sample Info: MQCM7/AK 2024017 A200474-5;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000026.D\C-000026
Lab Smp Id: MQCM71AK 2024017 A2
Inj Date : 02-FEB-2012 17:43
Operator : RN 2 RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM71AK 2024017 A200474-5;0;
Misc Info : ;;974.29;;20;1;WATERMETQSM.sub;;0;;;;MQCM71AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	974.290	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.541	11243	1160	0.103	53.31	
53.538	18144	1016	0.056	46.69	
	29387	2176		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000026.D\C-000026.D

Date : 02-FEB-2012 17:43

Client ID:

2/9/12

Instrument: LC12.i

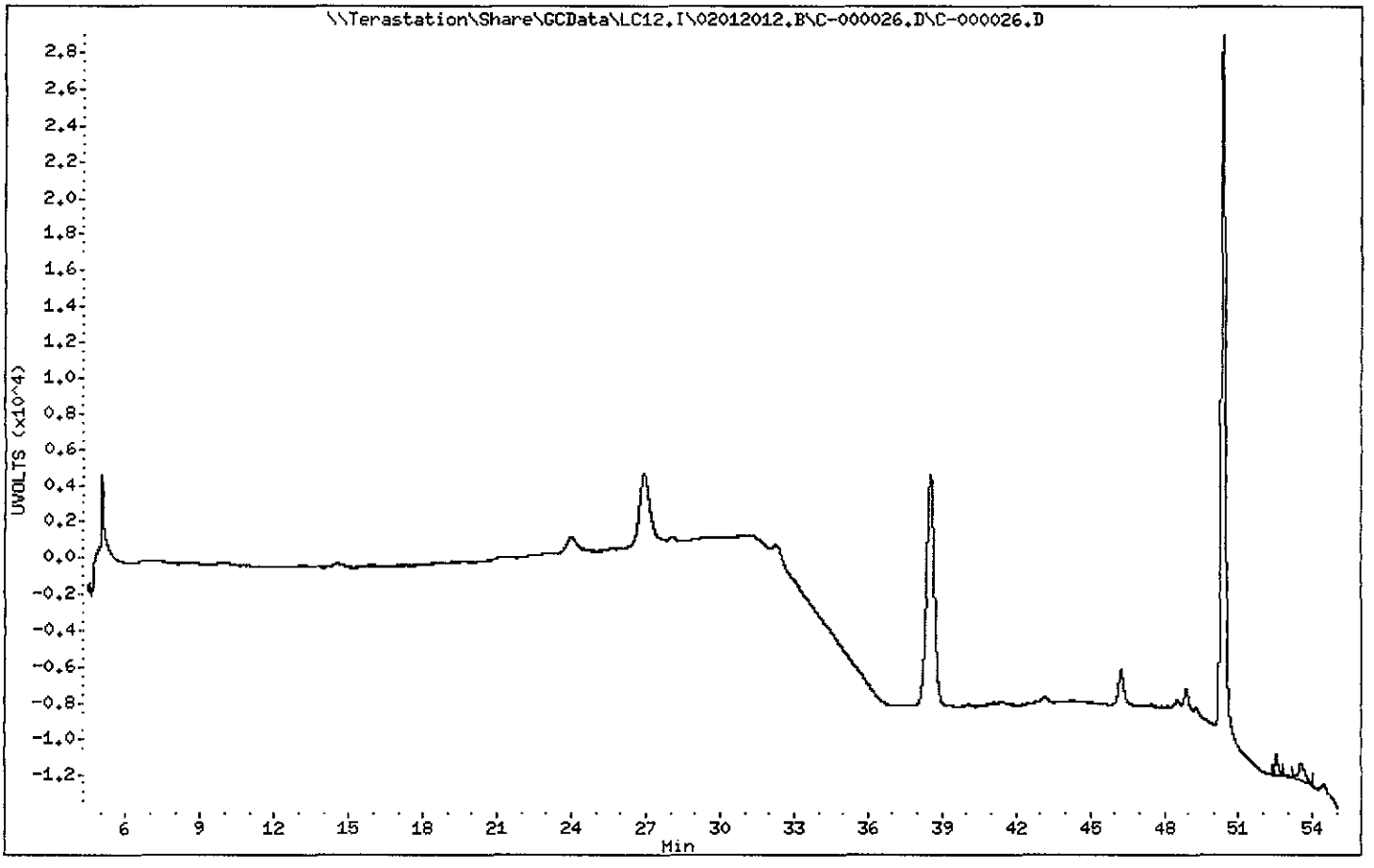
Sample Info: MQCM7/AK 2024017 A200474-5;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM81AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053
2-Amino-4,6-dinitrotoluene	0.11 U	0.21	ug/L	0.11
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	101	(79 - 111)

TestAmerica
Dual Column Chromatography Summary

Sample : MQCM81AK 2024017 A200474-6
Analyzed : 02-FEB-2012 08:23
Operator : rn
Matrix : WATER
Sample Amt: 935.08 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000025.D
Sublist: WATERMET

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 DNX									
3 HMX									
4 MNX									
5 RDX									
6 1,3,5-Trinitrobenz	25.592	-0.085	460	0.04809					
7 Picric ACID									
8 1,3-Dinitrobenzene									
9 3,5-Dinitroaniline									
10 Nitrobenzene									
11 TETRYL									
12 2,4,6-Trinitrotolu									
13 4-AM-2,6-DNT									
14 3,4-Dinitrotoluene	32.965	0.018	8490	2.707	32.965	0.018	16417	2.754	1.7
15 2-AM-4,6-DNT									
16 2,6-Dinitrotoluene									
17 2,4-Dinitrotoluene									
18 2-Nitrotoluene									
19 4-Nitrotoluene									
20 3-Nitrotoluene									
21 EGDN									
22 Nitroglycerin									
23 PETN									

not conf. RM 2/8/12

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.674	2.707	101.2	2.754	103.0	(84-125)

RM 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 09:16

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000025.D
Lab Smp Id: MQCM81AK 2024017 A2
Inj Date : 02-FEB-2012 08:23
Operator : rn Inst ID: LC11.i
Smp Info : MQCM81AK 2024017 A200474-6;0;
Misc Info : ;;935.08;;20;1;WATERMET.sub;;0;;;;MQCM81AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	935.080	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
16.845	681	46	0.067	0.44	
20.485	701	96	0.137	0.93	
20.625	1132	95	0.084	0.92	
24.625	3680	308	0.084	3.00	
24.945	360	47	0.131	0.45	
25.592	5611	460	0.082	4.48	10 1,3,5-Trinitrobenze
26.585	305	44	0.144	0.42	
27.028	338	39	0.115	0.38	
28.432	1353	119	0.088	1.15	
28.778	62	29	0.468	0.28	
28.922	664	66	0.099	0.64	
29.162	828	87	0.105	0.84	
31.285	105	23	0.219	0.22	
32.965	129765	8490	0.065	82.85	$ 1 3,4-Dinitrotoluene
33.708	87	27	0.309	0.26	
34.542	999	66	0.066	0.64	
35.062	309	34	0.110	0.33	
36.902	314	34	0.108	0.33	
39.222	492	30	0.061	0.29	
39.682	201	22	0.109	0.21	
40.108	145	24	0.165	0.23	
41.512	1491	73	0.049	0.71	
	149624	10259		100.000	

Total unknown % height = 12.67

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000025.D

Date : 02-FEB-2012 08:23

Client ID:

Instrument: LC11.i

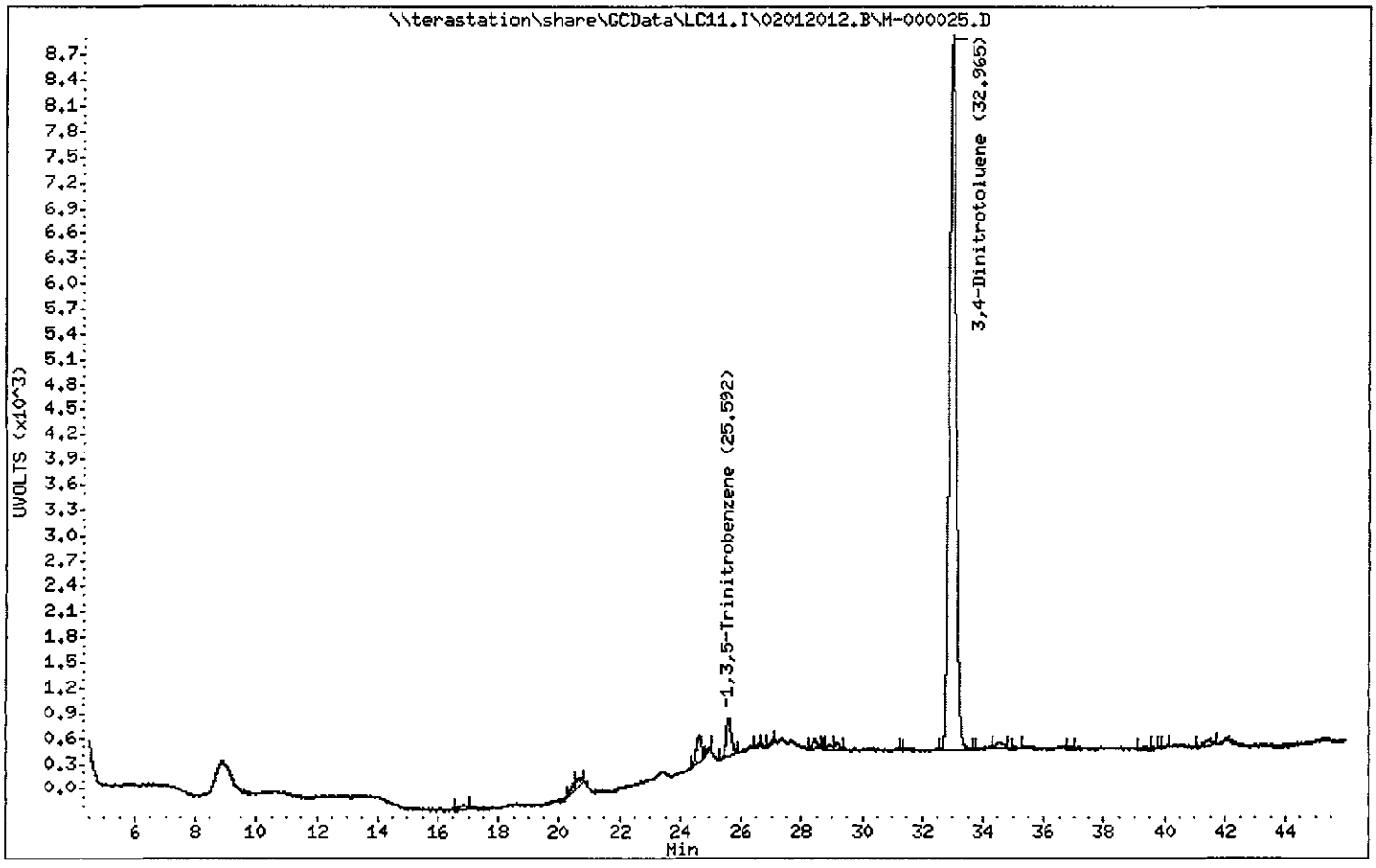
Sample Info: MQCM81AK 2024017 A200474-6;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000025.D\M-000025
Lab Smp Id: MQCM81AK 2024017 A2
Inj Date : 02-FEB-2012 08:23
Operator : rn Inst ID: LC11.i
Smp Info : MQCM81AK 2024017 A200474-6;0;
Misc Info : ;;935.08;;20;1;WATERMET.sub;;0;;;;MQCM81AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	935.080	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.075	153	35	0.229	0.19	
26.558	179	28	0.157	0.15	
28.168	292	37	0.127	0.20	
28.778	495	65	0.131	0.35	
30.308	469	63	0.134	0.34	
30.735	1257	112	0.089	0.61	
32.285	327	30	0.092	0.16	
32.965	247960	16417	0.066	90.36	$ 1 3,4-Dinitrotoluene
34.602	3396	214	0.063	1.17	
36.322	163	43	0.264	0.23	
38.688	605	51	0.084	0.28	
39.342	9737	367	0.038	2.01	
40.498	5289	129	0.024	0.70	
41.522	656	35	0.053	0.19	
42.122	6587	279	0.042	1.53	
43.355	449	39	0.087	0.21	
45.838	5920	241	0.041	1.32	
	283934	18185		100.000	

Total unknown % height = 9.640

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000025.D\M-000025.D

Date : 02-FEB-2012 08:23

Client ID:

Instrument: LC11.i

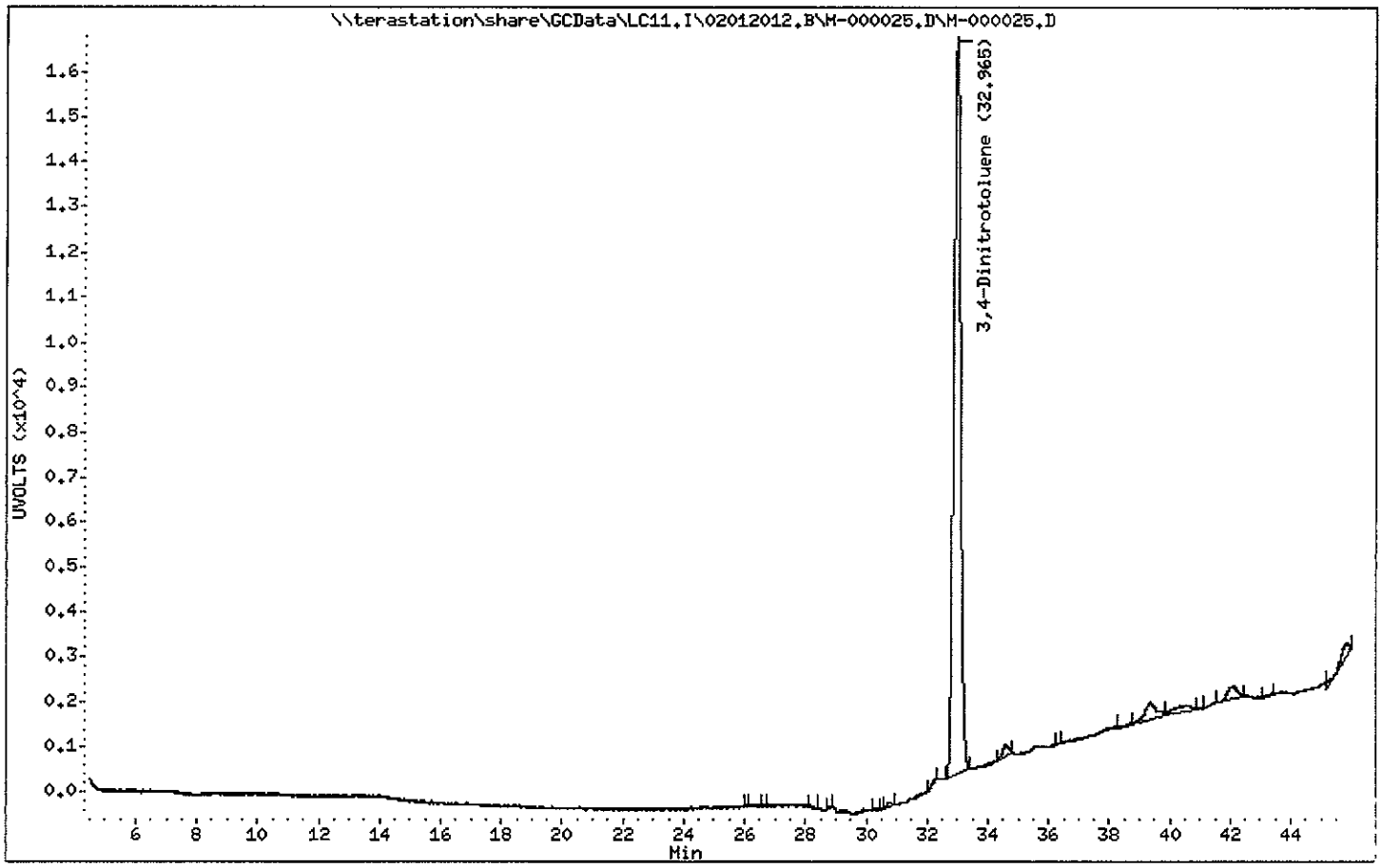
Sample Info: MQCM81AK 2024017 A200474-6;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



White Water Associates

Client Sample ID: 02RB01-20120119

HPLC

Lot-Sample #...: G2A200474-006 Work Order #...: MQCM82AK Matrix.....: WG
Date Sampled...: 01/19/12 Date Received..: 01/20/12
Prep Date.....: 01/24/12 Analysis Date..: 02/02/12
Prep Batch #...: 2024017
Dilution Factor: 1.06 Method.....: SW846 8330/8330A

PARAMETER	RESULT	LOQ	UNITS	DL
2-Amino-4,6-dinitrotoluene	0.11 U CON	0.21	ug/L	0.11
1,3,5-Trinitrobenzene	0.053 U	0.11	ug/L	0.032
2,4,6-Trinitrotoluene	0.053 U	0.11	ug/L	0.053
1,3-Dinitrobenzene	0.053 U	0.11	ug/L	0.053
2,4-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
2,6-Dinitrotoluene	0.053 U	0.11	ug/L	0.053
RDX	0.053 U	0.11	ug/L	0.038
MNX	1.1 U	2.1	ug/L	0.57
TNX	0.16 U	2.1	ug/L	0.059
4-Amino-2,6-dinitrotoluene	0.053 U	0.11	ug/L	0.053

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	115 *	(79 - 111)

NOTE(S):

* Surrogate recovery is outside stated control limits.

CON Confirmation analysis.

TestAmerica
Dual Column Chromatography Summary

2 RON 2/9/12

Sample : MQCM81AK 2024017 A200474-6
Analyzed : 02-FEB-2012 18:48
Operator : RN
Matrix : WATER
Sample Amt: 935.08 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000027.D
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	Nitrobenzene									
3	DNX									
4	1,3-Dinitrobenzene									
5	1,3,5-Trinitrobenz	ND								
6	MNX									
7	2-Nitrotoluene									
8	3-Nitrotoluene									
9	3,5-Dinitroaniline									
10	RDX									
11	2,4-Dinitrotoluene									
12	2,6-Dinitrotoluene									
13	2-AM-4,6-DNT									
14	4-AM-2,6-DNT									
15	3,4-Dinitrotoluene	38.566	0.039	6676	3.077					
16	2,4,6-Trinitrotolu									
17	HMX									
18	TETRYL									
19	4-Nitrotoluene									
20	EGDN									
21	PETN									
22	Nitroglycerin									
23	Picric ACID									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.674	3.077	115.1*			(79-111)

See NCM

~~Not used~~ RON 2/8/12
RON 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 19:53

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000027.D
Lab Smp Id: MQCM81AK 2024017 A2
Inj Date : 02-FEB-2012 18:48
Operator : RN RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM81AK 2024017 A200474-6;0;
Misc Info : ;;935.08;;20;1;WATERMETQSM.sub;;0;;;;MQCM81AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	935.080	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.533	7199	230	0.032	2.08	
16.866	293	29	0.099	0.26	
18.353	1568	48	0.031	0.43	
20.206	553	27	0.049	0.24	
25.159	228	30	0.131	0.27	
25.739	1096	55	0.050	0.49	
26.513	2915	131	0.045	1.18	
27.273	13992	451	0.032	4.09	
27.703	4867	275	0.057	2.49	
28.073	4514	222	0.049	2.01	
28.786	361	46	0.127	0.41	
29.046	873	43	0.049	0.39	
29.379	411	40	0.097	0.36	
29.613	262	53	0.202	0.48	
29.763	500	56	0.112	0.50	
30.029	280	45	0.161	0.40	
30.236	103	36	0.349	0.32	
30.376	328	40	0.122	0.36	
30.486	151	38	0.251	0.34	
30.833	436	40	0.092	0.36	
31.133	342	42	0.123	0.38	
31.289	439	47	0.107	0.42	
31.426	309	55	0.178	0.49	
31.639	989	65	0.066	0.58	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
31.853	566	85	0.150	0.77	
32.179	4268	143	0.034	1.29	
32.743	402	66	0.164	0.59	
33.043	2366	83	0.035	0.75	
34.099	499	41	0.082	0.37	
34.299	950	61	0.064	0.55	
34.533	453	57	0.126	0.51	
34.969	156	23	0.147	0.20	
35.713	313	27	0.086	0.24	
36.073	246	24	0.097	0.21	
36.939	106	28	0.263	0.25	
37.103	145	26	0.179	0.23	
37.433	69	30	0.433	0.27	
37.696	260	28	0.108	0.25	
37.993	186	37	0.199	0.33	
38.566	148531	6676	0.045	60.88	$ 1 3,4-Dinitrotoluene
39.489	4117	178	0.043	1.61	
40.769	69	22	0.320	0.19	
41.113	95	20	0.210	0.18	
41.166	101	33	0.328	0.29	
41.326	140	23	0.164	0.20	
41.706	151	22	0.145	0.19	
42.096	258	35	0.136	0.31	
42.796	161	28	0.174	0.25	
43.049	284	45	0.159	0.40	
43.456	630	45	0.071	0.40	
44.373	400	21	0.052	0.19	
45.703	312	31	0.099	0.28	
46.076	265	35	0.132	0.31	
46.329	2345	129	0.055	1.17	
47.346	900	54	0.060	0.48	
47.783	355	43	0.121	0.39	
48.003	686	59	0.086	0.53	
48.369	3331	198	0.059	1.79	
48.793	1683	175	0.104	1.58	
48.899	3001	247	0.082	2.24	
	221808	11022		100.000	

Total unknown % height = 39.12

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000027.D

Date : 02-FEB-2012 18:48

Client ID: 2 RAM 2/9/12

Instrument: LC12.i

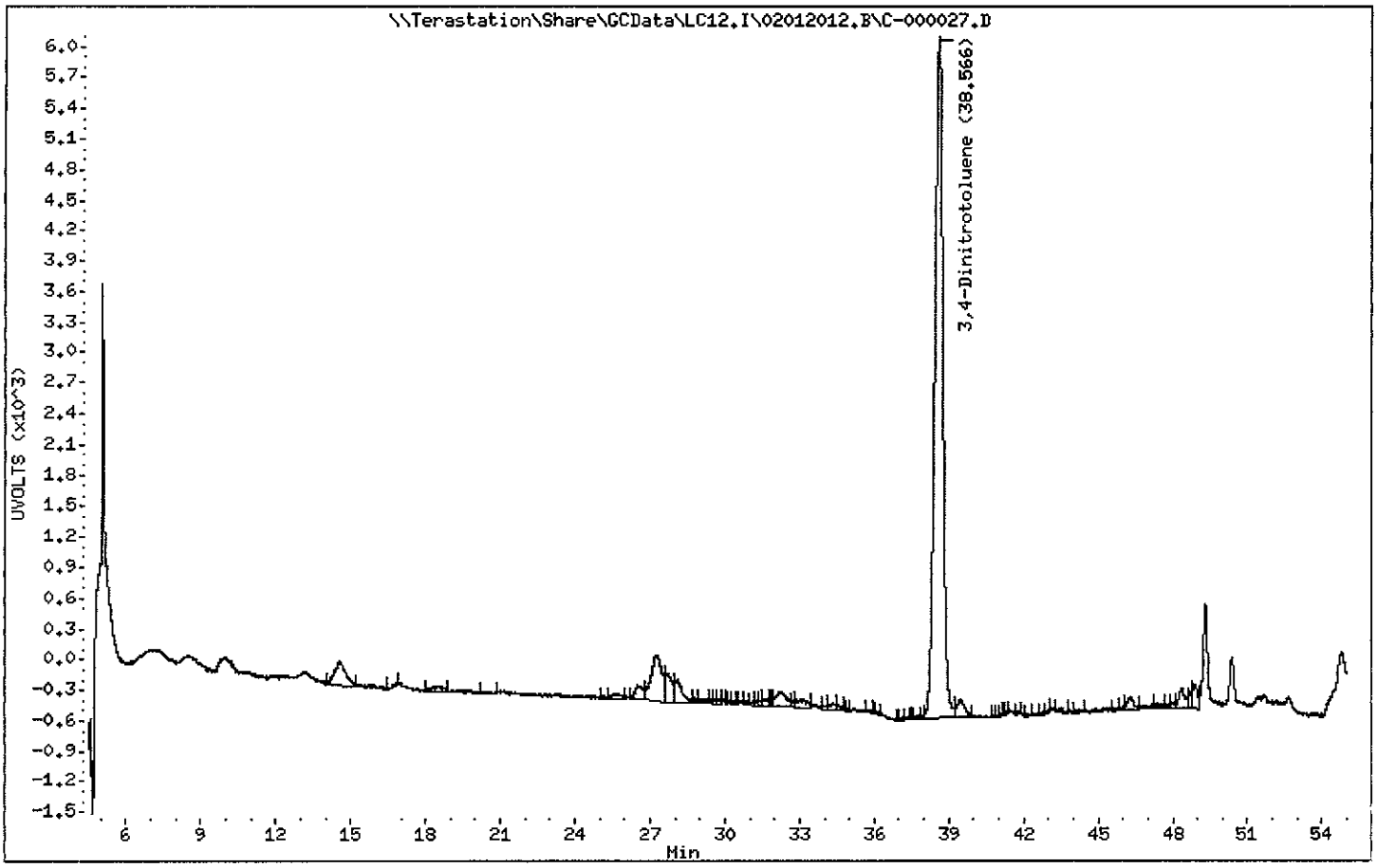
Sample Info: MQCM81AK 2024017 A200474-6;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



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2 Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000027.D\C-000027
Lab Smp Id: MQCM81AK 2024017 A2
Inj Date : 02-FEB-2012 18:48
Operator : RN 2 RN 2/9/12 Inst ID: LC12.i
Smp Info : MQCM81AK 2024017 A200474-6;0;
Misc Info : ;;935.08;;20;1;WATERMETQSM.sub;;0;;;;MQCM81AK
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACPLC12

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	935.080	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.543	12357	1268	0.103	54.54	
53.536	17546	1057	0.060	45.46	
	29903	2325		100.000	

Total unknown % height = 100.0

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000027.D\C-000027.D

Date : 02-FEB-2012 18:48

Client ID: 2 RDM 2/9/12.

Instrument: LC12.i

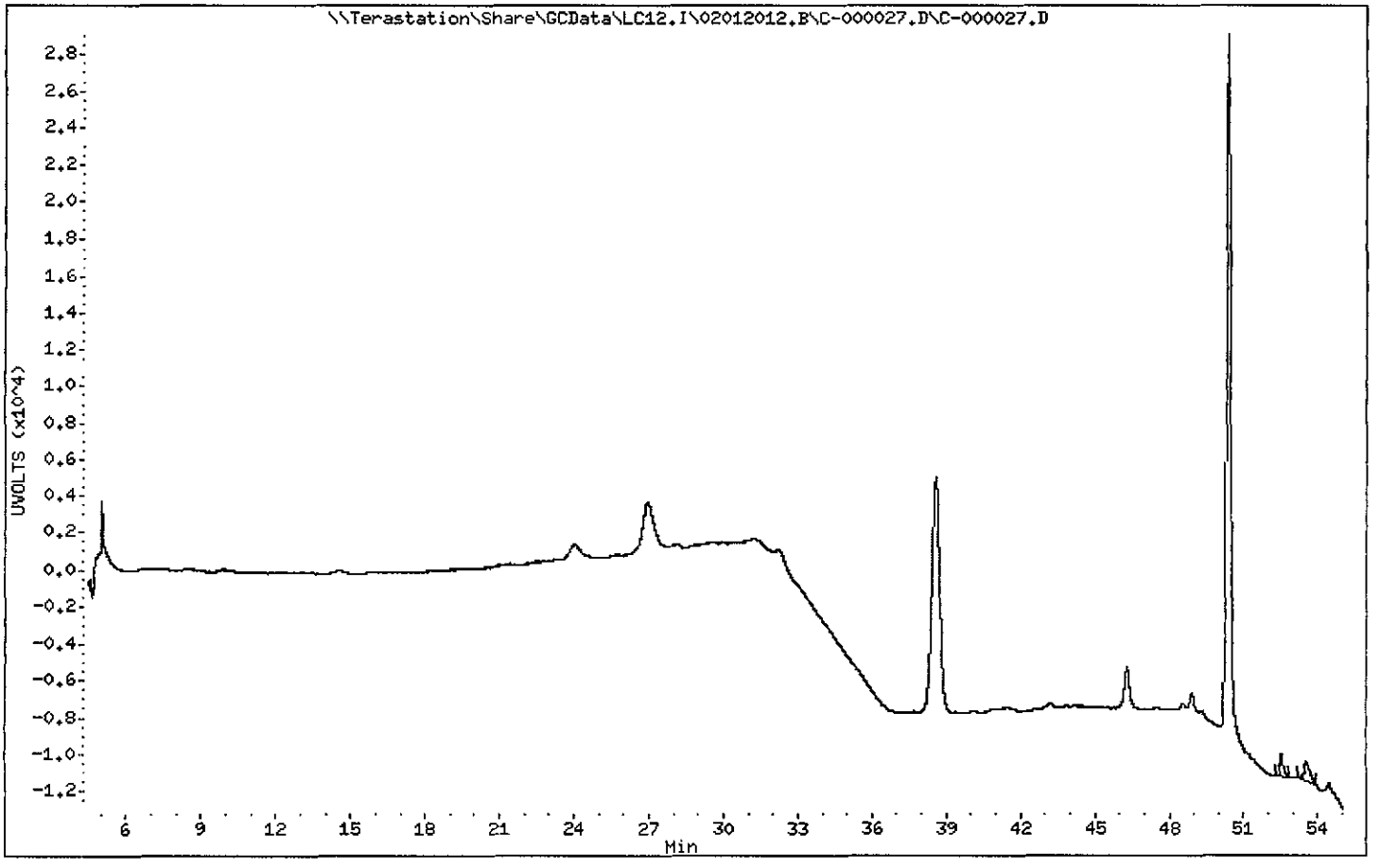
Sample Info: MQCM8IAK 2024017 A200474-6;0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Standards Data

ICAL Data

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THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC11 ICAL ID: 013020120 Method: 8330 A/B

Analytes Included in curve (with dates): 8330 All, NG, PETN + Picric Acid (1/26/12)
MNX, TNX + DNX (1/30/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/1/12

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Level 4: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Level 5: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Level 6: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Level 7: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Level 8: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
2 TNX	+++++	+++++	53.70000	60.74000	61.33000	61.55500		
	57.56200	62.90600					59.63217	5.712
3 DNX	+++++	+++++	82.05000	92.56000	94.32000	94.87500		
	89.65200	97.07100					91.75467	5.845
4 HMX	99.00000	96.20000	95.90000	94.56000	96.75000	93.59000		
	87.43800	70.82000					91.78225	9.939
5 MNX	+++++	+++++	97.90000	108	112	112		
	107	113					108	5.152
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	102	95.30000	94.60000	93.90000	96.01000	91.97000		
	85.35600	68.88900					90.95313	10.987
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	120	115	117	128	127	121		
	112	102					118	7.195

2/1/12

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
10 1,3,5-Trinitrobenzene	211	210	207	206	211	208		
	201	182					205	4.640
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	219	220	215	215	221	217		
	211	193					214	4.218
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	144	143	141	139	143	142		
	138	128					140	3.725
16 TETRYL	114	111	111	110	114	114		
	113	111					112	1.307
17 Nitrobenzene	100	93.50000	87.05000	93.60000	96.72000	95.08000		
	92.21600	84.77000					92.91700	5.415
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	120	121	119	118	121	122		
	120	117					120	1.309
20 4-AM-2,6-DNT	97.00000	97.40000	96.60000	95.46000	97.64000	97.75000		
	96.13600	92.28600					96.28400	1.863

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

A

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Last Edit : 01-Feb-2012 09:27 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	109	108	107	106	109	109		
	107	102					107	2.198
22 2,6-Dinitrotoluene	76.40000	76.20000	73.30000	73.16000	74.88000	74.72000		
	73.58800	71.51800					74.22075	2.221
23 2,4-Dinitrotoluene	124	123	122	120	124	123		
	122	118					122	1.601
24 2-Nitrotoluene	58.00000	53.90000	48.25000	52.36000	53.60000	53.46000		
	52.77200	51.06700					52.92612	5.204
25 4-Nitrotoluene	61.60000	66.20000	59.05000	62.88000	64.64000	64.59500		
	63.84600	62.14000					63.11888	3.512
26 3-Nitrotoluene	64.80000	64.80000	57.35000	62.22000	63.92000	63.79000		
	63.20600	61.77500					62.73262	3.879
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 1 3,4-Dinitrotoluene	69.80000	65.40000	63.95000	64.88000	67.78000	67.97500		
	68.71000	68.11200					67.07587	3.080

B

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Level 2: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Level 3: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Level 4: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Level 5: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Level 6: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Level 7: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Level 8: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
	500.000 Level 7	1000.000 Level 8							
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	176	167	171	187	185	178			
	162	138					171	9.104	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
11 Picramic Acid	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
12 2,4-Dinitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
14 2-Nitrophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 3,5-Dinitroaniline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
16 TETRYL	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
17 Nitrobenzene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
18 Nitroglycerin	+++++ / 67.71000	+++++ / 85.97900	69.40000	79.80000	87.13000	88.24000	83.04317	8.861	
19 2,4,6-Trinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	
20 4-AM-2,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\
Last Edit : 31-Jan-2012 11:23 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
21 2-AM-4,6-DNT	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
22 2,6-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
23 2,4-Dinitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
24 2-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
25 4-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
26 3-Nitrotoluene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++
27 PETN	+++++ / 49.40400	+++++ / 49.44000	43.45000	46.14000	49.53000	49.66000	47.93733	5.382
$ 1 3,4-Dinitrotoluene	130 / 131	124 / 130	120	124	130	131	127	3.347

Report Date: 01-Feb-2012 09:45

(A)

Calibration History

Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M
Start Cal Date: 28-DEC-2011 16:38
End Cal Date : 30-JAN-2012 21:34
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
30-JAN-2012 16:49	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
26-JAN-2012 16:06	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 17:03	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Cal Level: 3 , Cal Amount: 20.00000		
30-JAN-2012 16:49	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
26-JAN-2012 18:00	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d
Cal Level: 4 , Cal Amount: 50.00000		
30-JAN-2012 17:46	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d
Cal Level: 5 , Cal Amount: 100.00000		
30-JAN-2012 18:43	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d
Cal Level: 6 , Cal Amount: 200.00000		
30-JAN-2012 19:40	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
26-JAN-2012 20:52	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d

A

Cal Level: 7 , Cal Amount: 500.00000		
30-JAN-2012 20:37	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
26-JAN-2012 21:49	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d

Cal Level: 8 , Cal Amount: 1000.00000		
30-JAN-2012 21:34	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d
26-JAN-2012 22:47	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

31-JAN-2012 00:25	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d
30-JAN-2012 23:28	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d
30-JAN-2012 18:43	2_CALMET	\\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
27-JAN-2012 01:38	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d
27-JAN-2012 00:41	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d

Report Date: 01-Feb-2012 09:45

(B)

Calibration History

Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.M
Start Cal Date: 28-DEC-2011 16:38
End Cal Date : 26-JAN-2012 22:47
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 16:06	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 17:03	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d
Cal Level: 3 , Cal Amount: 20.00000		
26-JAN-2012 18:00	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-000006.d
Cal Level: 4 , Cal Amount: 50.00000		
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d
Cal Level: 5 , Cal Amount: 100.00000		
26-JAN-2012 19:55	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d
Cal Level: 6 , Cal Amount: 200.00000		
26-JAN-2012 20:52	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-000009.d
Cal Level: 7 , Cal Amount: 500.00000		
26-JAN-2012 21:49	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-000010.d
Cal Level: 8 , Cal Amount: 1000.00000		

26-JAN-2012 22:47	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

B

Continuing Calibration
Ccal Level Mode: BY SAMPLE

27-JAN-2012 01:38	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d\M-000014.d
27-JAN-2012 00:41	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-000013.d
26-JAN-2012 18:58	1_CAL	\\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-000007.d

TestAmerica West Sacramento

Calibration Standard Level Reference Sheet

8330, 8330A, 8330B

	Concentration (ppb)							
Analyte	Level 1	2	3	4	5	6	7	8
3,4-Dinitrotoluene (surr)		10	20	50	100	200	300	500
HMX	5	10	20	50	100	200	500	1000
MNX	5	10	20	50	100	200	500	1000
DNX	5	10	20	50	100	200	500	1000
TNX	5	10	20	50	100	200	500	1000
RDX	5	10	20	50	100	200	500	1000
1,3,5-Trinitrobenzene	5	10	20	50	100	200	500	1000
1,3-Dinitrotoluene	5	10	20	50	100	200	500	1000
3.5-Dinitroaniline	5	10	20	50	100	200	500	1000
TETRYL	5	10	20	50	100	200	500	1000
Nitrobenzene	5	10	20	50	100	200	500	1000
2,4,6-Trinitrotoluene	5	10	20	50	100	200	500	1000
4-Amino-2,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2-Amino-4,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2,6-Dinitrotoluene	5	10	20	50	100	200	500	1000
2,4-Dinitrotoluene	5	10	20	50	100	200	500	1000
2-Nitrotoluene	5	10	20	50	100	200	500	1000
4-Nitrotoluene	5	10	20	50	100	200	500	1000
3-Nitrotoluene	5	10	20	50	100	200	500	1000
Picric Acid	10	20	50	100	200	500	1000	2000
Nitroglycerin			20	50	100	200	500	1000
PETN			20	50	100	200	500	1000
EGDN			20	50	100	200	500	1000

Revision Date: 6/24/2010

TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 15:09
Operator : SV
Matrix : NONE

Instrument: LC11
File ID: 01262012C.B/M-000003.d
Sublist: 1_CAL
SpikeList:

		Side A				Side B				
	Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1	HMX									
2	RDX									
3	1,3,5-Trinitrobenz	25.719	0.050	26	0.1271					
4	Picric ACID	26.049	0.100	25	0.2124					
5	1,3-Dinitrobenzene									
6	3,5-Dinitroaniline									
7	Nitrobenzene									
8	TETRYL									
9	2,4,6-Trinitrotolu	31.712	0.120	32	0.2673					
10	4-AM-2,6-DNT	32.642	0.057	31	0.3220					
11	3,4-Dinitrotoluene									
12	2-AM-4,6-DNT									
13	2,6-Dinitrotoluene									
14	2,4-Dinitrotoluene									
15	2-Nitrotoluene									
16	4-Nitrotoluene									
17	3-Nitrotoluene									
18	EGDN									
19	Nitroglycerin									
20	PETN									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 15:09
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.432	77	22	0.287	4.15	
19.302	87	25	0.286	4.72	
20.282	172	29	0.169	5.48	
22.505	56	24	0.427	4.53	
23.192	106	25	0.236	4.72	
24.859	74	24	0.325	4.53	
25.719	349	26	0.075	4.91	10 1,3,5-Trinitrobenze
26.049	199	25	0.126	4.72	9 Picric ACID
27.252	782	48	0.061	9.17	
31.712	201	32	0.159	6.04	19 2,4,6-Trinitrotolue
31.982	315	30	0.095	5.67	
32.642	182	31	0.171	5.86	20 4-AM-2,6-DNT
35.145	211	32	0.151	6.04	
36.002	312	32	0.102	6.04	
36.679	304	38	0.125	7.18	
37.215	405	32	0.079	6.04	
39.802	333	25	0.075	4.72	
43.862	160	29	0.181	5.48	
	4325	529		100.000	

Total unknown % height = 78.47

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d

Date : 26-JAN-2012 15:09

Client ID:

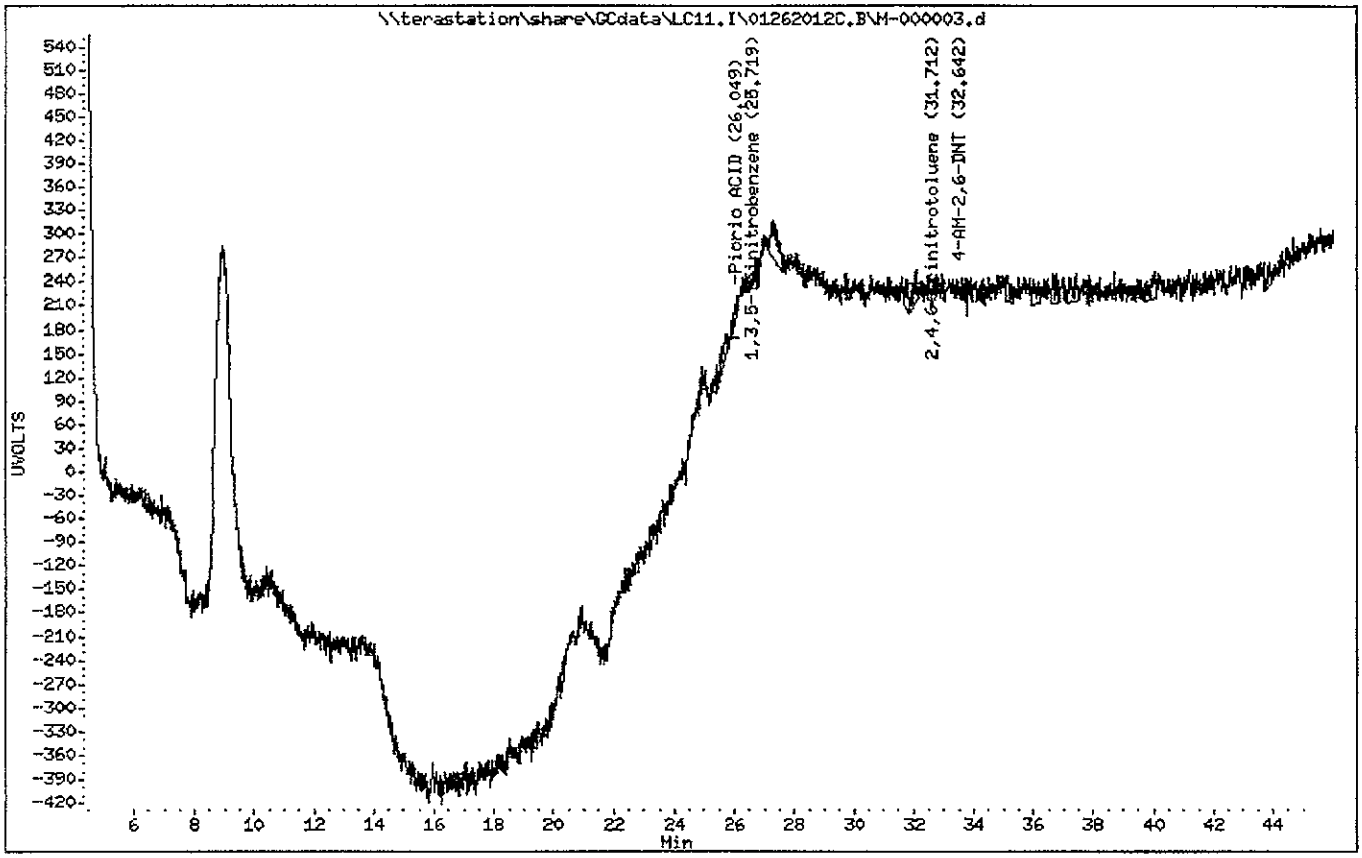
Instrument: LC11.i

Sample Info: BLANK:0:

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d\M-00000
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 15:09
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.419	203	28	0.138	7.19	
24.992	244	37	0.152	9.51	
27.885	313	41	0.131	10.53	
38.662	278	10	0.036	2.57	
39.649	721	39	0.054	10.02	
40.229	1214	51	0.042	13.16	
40.529	436	28	0.064	7.19	
42.062	1809	47	0.026	12.08	
42.569	542	45	0.083	11.56	
43.292	527	33	0.063	8.48	
44.295	228	30	0.132	7.71	
45.932	1484	0	0.000	0.00	
	7999	389		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000003.d\M-000003.d

Date : 26-JAN-2012 15:09

Client ID:

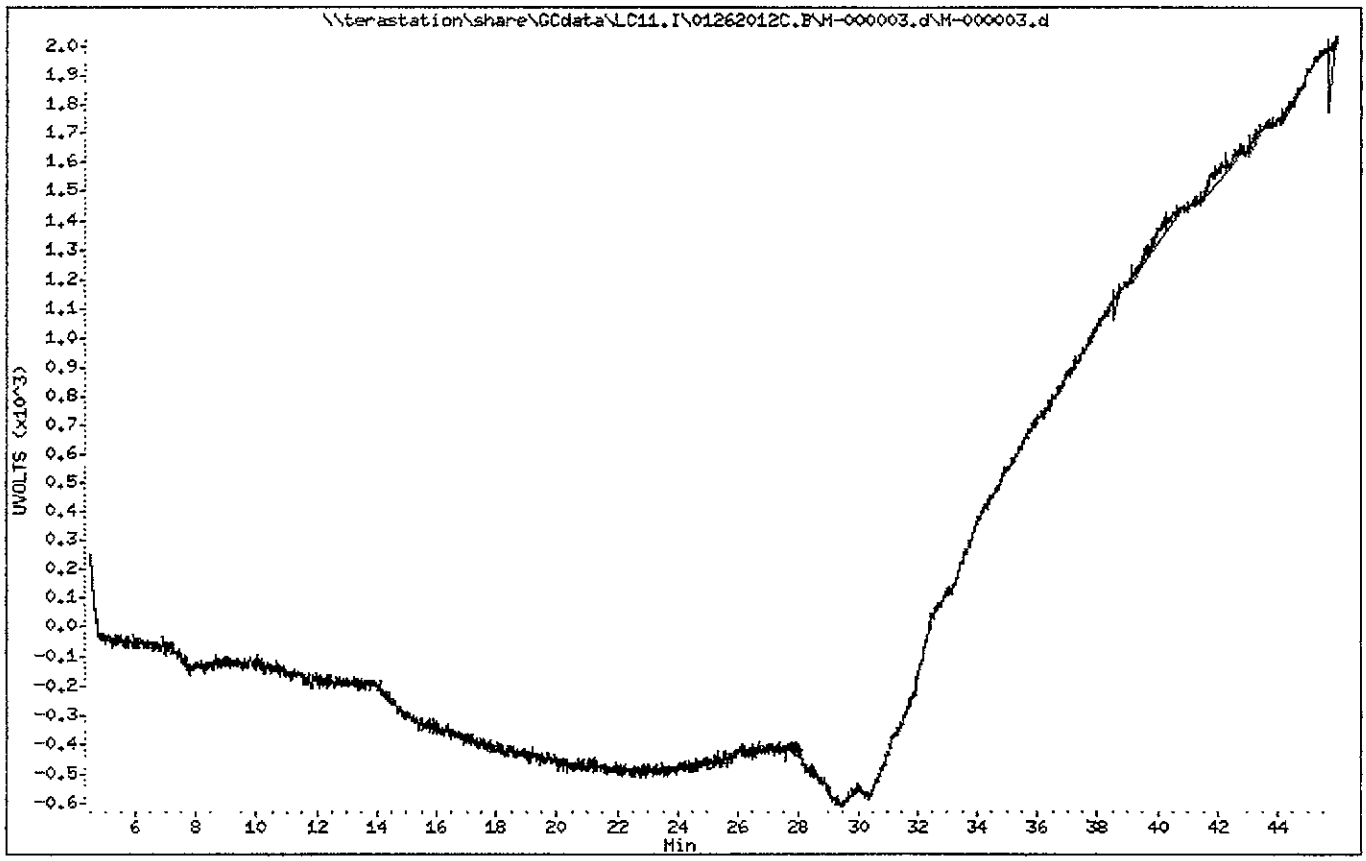
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_01 12GCSV0104 8330 5 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 16:06 File ID: 01262012C.B/M-000004.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	5.00	20.502	0.000	495	99.00000				
2	RDX	5.00	23.742	0.000	508	101.6000				
3	1,3,5-Trinitrobenz	5.00	25.675	0.000	1055	211.0000				
4	Picric ACID	10.0	26.032	0.000	1201	120.1000	26.028	0.000	1756	175.6000
5	1,3-Dinitrobenzene	5.00	28.422	0.000	1094	218.8000				
6	3,5-Dinitroaniline	5.00	29.552	0.000	719	143.8000				
7	Nitrobenzene	5.00	30.028	0.000	502	100.4000				
8	TETRYL	5.00	30.365	0.000	568	113.6000				
9	2,4,6-Trinitrotolu	5.00	31.612	0.000	598	119.6000				
10	4-AM-2,6-DNT	5.00	32.605	0.000	485	97.00000				
11	3,4-Dinitrotoluene	5.00	32.958	0.000	349	69.80000	32.962	0.000	650	130.0000
12	2-AM-4,6-DNT	5.00	33.308	0.000	547	109.4000				
13	2,6-Dinitrotoluene	5.00	34.568	0.000	382	76.40000				
14	2,4-Dinitrotoluene	5.00	34.962	0.000	620	124.0000				
15	2-Nitrotoluene	5.00	37.908	0.000	290	58.00000				
16	4-Nitrotoluene	5.00	39.168	0.000	308	61.60000				
17	3-Nitrotoluene	5.00	40.685	0.000	324	64.80000				
18	EGDN	5.00								
19	Nitroglycerin	5.00					30.865	0.000	379	75.80000
20	PETN	5.00					41.398	0.000	224	44.80000

NOT USED

PTM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:07

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 16:06
Operator : SV Inst ID: LC11.i
Smp Info : STD_01 12GCSV0104 8330 5 ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:06 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 16:06 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.502	4345	495	0.114	4.79		4 HMX
21.618	77	28	0.364	0.27		
22.755	92	31	0.338	0.30		
23.742	4894	508	0.104	4.92		7 RDX
24.895	299	40	0.134	0.38		
25.675	10415	1055	0.101	10.22		10 1,3,5-Trinitrobenzene
26.032	12056	1201	0.100	11.74		9 Picric ACID
26.732	97	30	0.308	0.29		
27.155	1173	54	0.046	0.52		
28.422	12842	1094	0.085	10.59		13 1,3-Dinitrobenzene
29.552	9443	719	0.076	6.96		15 3,5-Dinitroaniline
30.028	6382	502	0.079	4.86		17 Nitrobenzene
30.365	7884	568	0.072	5.50		16 TETRYL
31.612	8715	598	0.069	5.79		19 2,4,6-Trinitrotoluene
32.605	7582	485	0.064	4.69		20 4-AM-2,6-DNT
32.958	4599	349	0.076	3.38	$	1 3,4-Dinitrotoluene
33.308	9146	547	0.060	5.29		21 2-AM-4,6-DNT
34.568	6302	382	0.061	3.70		22 2,6-Dinitrotoluene
34.962	11041	620	0.056	6.00		23 2,4-Dinitrotoluene
36.652	169	37	0.218	0.35		
37.478	186	29	0.156	0.28		
37.908	6433	290	0.045	2.80		24 2-Nitrotoluene
39.168	6420	308	0.048	2.98		25 4-Nitrotoluene
40.685	8165	324	0.040	3.13		26 3-Nitrotoluene
45.455	205	28	0.137	0.27		
	138961	10322		100.000		

Total unknown % height = 2.660

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d

Date : 26-JAN-2012 16:06

Client ID:

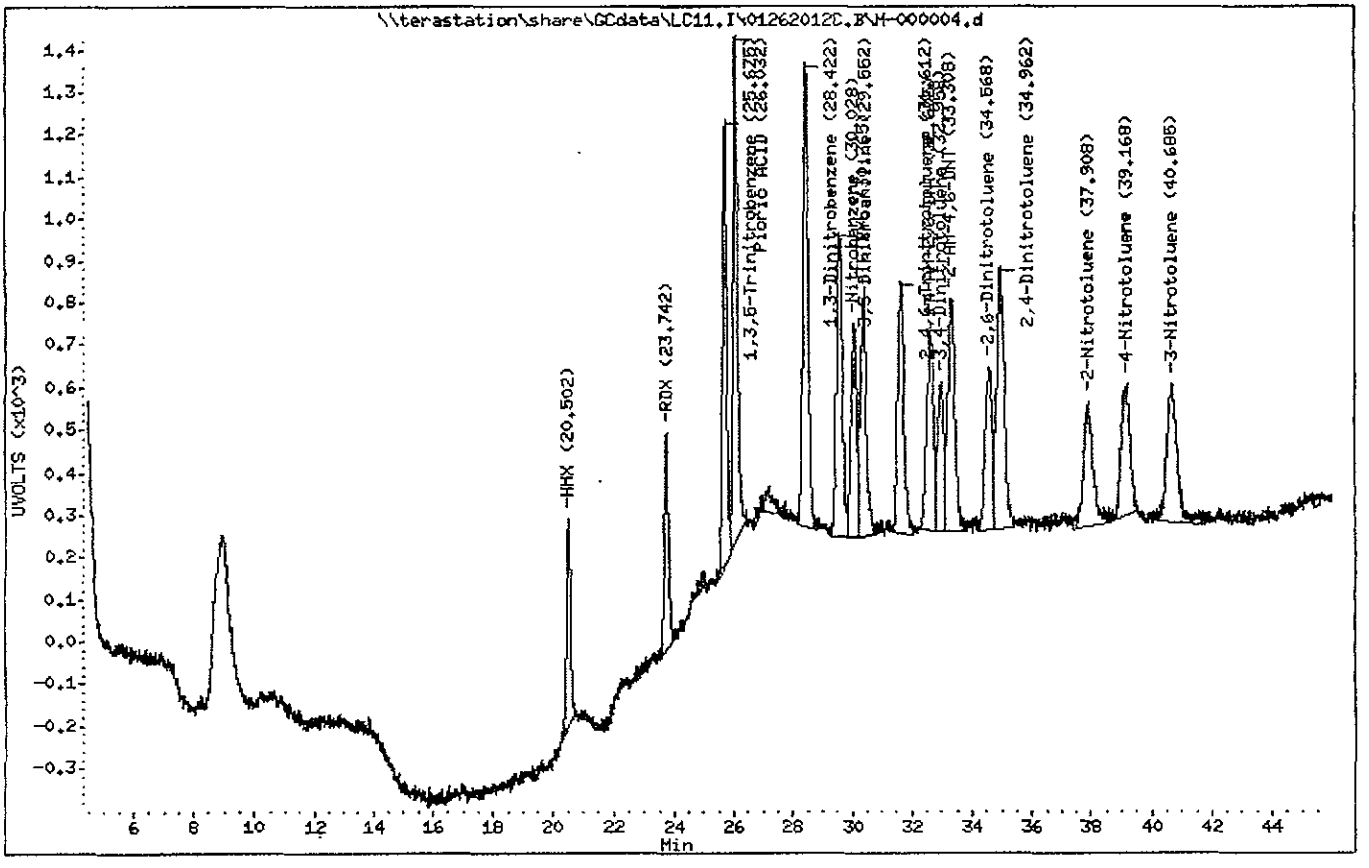
Instrument: LC11.i

Sample Info: STD_01 12GCSV0104 8330 5 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-00000
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 16:06
Operator : SV Inst ID: LC11.i
Smp Info : STD_01 12GCSV0104 8330 5 ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:06 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 16:06 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.028	17291	1756	0.102	16.43	9 Picric ACID
28.408	6539	554	0.085	5.15	
29.558	8045	681	0.085	6.33	
30.038	8698	729	0.084	6.77	
30.365	8161	668	0.082	6.21	
30.865	4498	379	0.084	3.52	18 Nitroglycerin
31.608	8519	613	0.072	5.69	
32.605	12046	740	0.061	6.87	
32.962	9970	650	0.065	6.04	$ 1 3,4-Dinitrotoluene
33.308	8416	540	0.064	5.02	
34.552	10785	669	0.062	6.21	
34.938	8682	493	0.057	4.58	
36.678	257	39	0.152	0.36	
37.908	12647	643	0.051	5.97	
39.168	10893	477	0.044	4.43	
40.085	1485	86	0.058	0.79	
40.645	15827	663	0.042	6.16	
41.398	5301	224	0.042	2.08	27 PETN
42.852	516	37	0.072	0.34	
43.065	155	37	0.239	0.34	
43.425	546	46	0.084	0.42	
45.102	2181	32	0.015	0.29	
	161458	10756		100.000	

Total unknown % height = 71.93

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000004.d\M-000004.d

Date : 26-JAN-2012 16:06

Client ID:

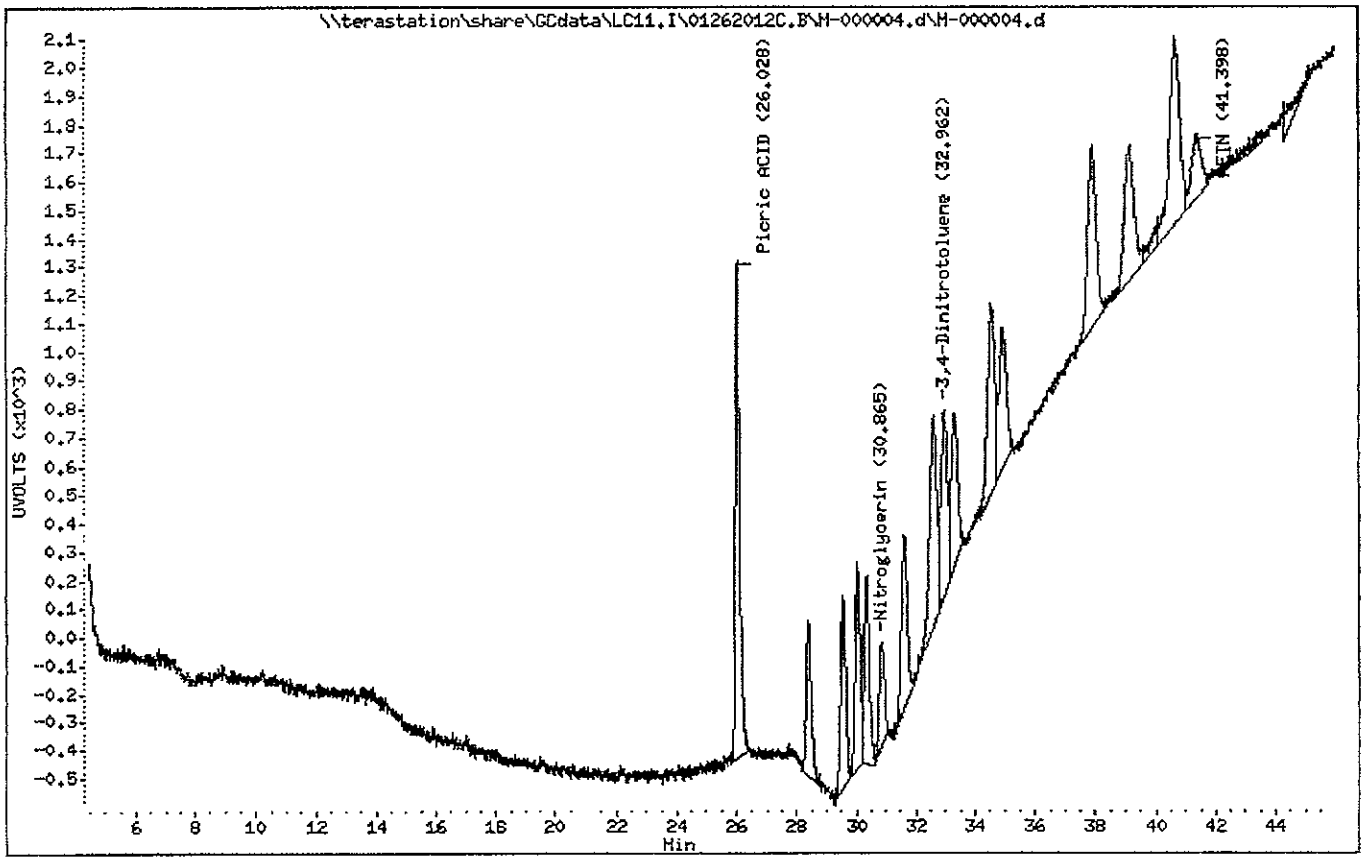
Instrument: LC11.i

Sample Info: STD_01 12GCSW0104 8330 5 mg/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_02 12GCSV0095 8330 10 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 17:03 File ID: 01262012C.B/M-000005.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A RF	Side B RT	Side B RT Diff	Side B Response	Side B RF
1	HMX	10.0	20.490	0.000	962	96.20000				
2	RDX	10.0	23.730	0.000	953	95.30000				
3	1,3,5-Trinitrobenz	10.0	25.674	0.000	2103	210.3000				
4	Picric ACID	20.0	26.024	0.000	2293	114.6500	26.024	0.000	3349	167.4500
5	1,3-Dinitrobenzene	10.0	28.417	0.000	2202	220.2000				
6	3,5-Dinitroaniline	10.0	29.560	0.000	1434	143.4000				
7	Nitrobenzene	10.0	30.044	0.000	935	93.50000				
8	TETRYL	10.0	30.360	0.000	1111	111.1000				
9	2,4,6-Trinitrotolu	10.0	31.610	0.000	1208	120.8000				
10	4-AM-2,6-DNT	10.0	32.600	0.000	974	97.40000				
11	3,4-Dinitrotoluene	10.0	32.970	0.000	654	65.40000	32.957	0.000	1236	123.6000
12	2-AM-4,6-DNT	10.0	33.304	0.000	1079	107.9000				
13	2,6-Dinitrotoluene	10.0	34.564	0.000	762	76.20000				
14	2,4-Dinitrotoluene	10.0	34.957	0.000	1233	123.3000				
15	2-Nitrotoluene	10.0	37.897	0.000	539	53.90000				
16	4-Nitrotoluene	10.0	39.137	0.000	662	66.20000				
17	3-Nitrotoluene	10.0	40.677	0.000	648	64.80000				
18	EGDN	10.0								
19	Nitroglycerin	10.0					30.867	0.000	487	48.70000
20	PETN	10.0					41.400	0.000	516	51.60000

NOT USED

RM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:07

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 17:03
Operator : SV Inst ID: LC11.i
Smp Info : STD_02 12GCSV0095 8330 10 ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 17:03 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.094	1594	126	0.079	0.61		
18.057	102	22	0.216	0.10		
18.277	102	32	0.315	0.15		
20.017	101	28	0.278	0.13		
20.490	8395	962	0.115	4.70	4	HMX
21.727	120	31	0.258	0.15		
22.034	71	22	0.308	0.10		
23.730	9755	953	0.098	4.66	7	RDX
24.844	81	18	0.222	0.08		
25.674	20597	2103	0.102	10.29	10	1,3,5-Trinitrobenze
26.024	22638	2293	0.101	11.40	9	Picric ACID
26.640	94	24	0.254	0.11		
26.847	633	52	0.082	0.25		
27.110	1288	110	0.085	0.53		
27.420	416	61	0.147	0.29		
28.417	26098	2202	0.084	10.77	13	1,3-Dinitrobenzene
29.560	17981	1434	0.080	7.01	15	3,5-Dinitroaniline
30.044	12036	935	0.078	4.57	17	Nitrobenzene
30.360	14889	1111	0.075	5.43	16	TETRYL
31.107	134	30	0.224	0.14		
31.610	18004	1208	0.067	5.91	19	2,4,6-Trinitrotolue
32.600	15409	974	0.063	4.76	20	4-AM-2,6-DNT
32.970	9428	654	0.069	3.20	$ 1	3,4-Dinitrotoluene
33.304	17904	1079	0.060	5.28	21	2-AM-4,6-DNT
34.237	207	46	0.222	0.22		
34.564	12641	762	0.060	3.72	22	2,6-Dinitrotoluene
34.957	22092	1233	0.056	6.03	23	2,4-Dinitrotoluene
37.897	11479	539	0.047	2.63	24	2-Nitrotoluene
39.137	14684	662	0.045	3.23	25	4-Nitrotoluene
40.677	15726	648	0.041	3.17	26	3-Nitrotoluene
42.550	156	42	0.269	0.20		
45.620	209	37	0.177	0.18		
	275063	20433		100.000		

Total unknown % height = 3.240

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000005.d

Date : 26-JAN-2012 17:03

Client ID:

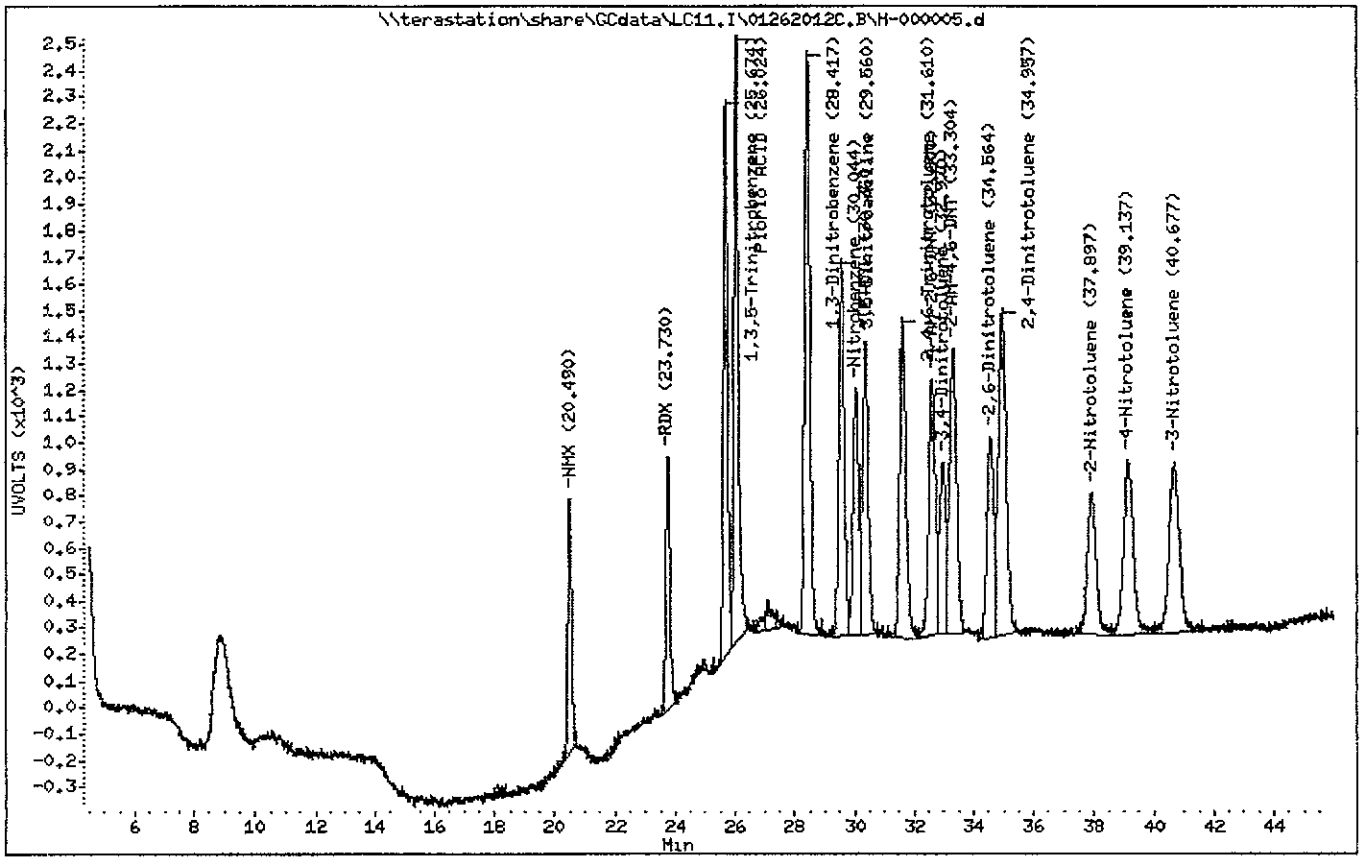
Instrument: LC11.i

Sample Info: STD_02 12GCSV0095 8330 10 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-00000
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 17:03
Operator : SV Inst ID: LC11.i
Smp Info : STD_02 12GCSV0095 8330 10 ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 17:03 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.084	197	44	0.224	0.20	
26.024	32154	3349	0.104	16.08	9 Picric ACID
28.004	427	53	0.124	0.25	
28.417	13298	1132	0.085	5.39	
29.554	16927	1393	0.082	6.63	
30.047	17287	1393	0.081	6.63	
30.360	17005	1400	0.082	6.66	
30.867	6193	487	0.079	2.31	18 Nitroglycerin
31.624	18072	1263	0.070	6.01	
32.134	175	26	0.149	0.12	
32.607	21976	1435	0.065	6.83	
32.957	18186	1236	0.068	5.88	$ 1 3,4-Dinitrotoluene
33.304	18163	1103	0.061	5.25	
33.900	226	22	0.097	0.10	
34.567	21761	1302	0.060	6.20	
34.957	17154	994	0.058	4.73	
37.420	154	37	0.240	0.17	
37.897	27554	1304	0.047	6.21	
39.144	25118	1008	0.040	4.80	
40.674	35589	1345	0.038	6.40	
41.400	14255	516	0.036	2.45	27 PETN
42.314	372	43	0.116	0.20	
43.450	584	25	0.043	0.11	
44.684	621	37	0.060	0.17	
45.407	1334	48	0.036	0.22	
	324781	20995		100.000	

Total unknown % height = 73.28

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000005.d\M-000005.d

Date : 26-JAN-2012 17:03

Client ID:

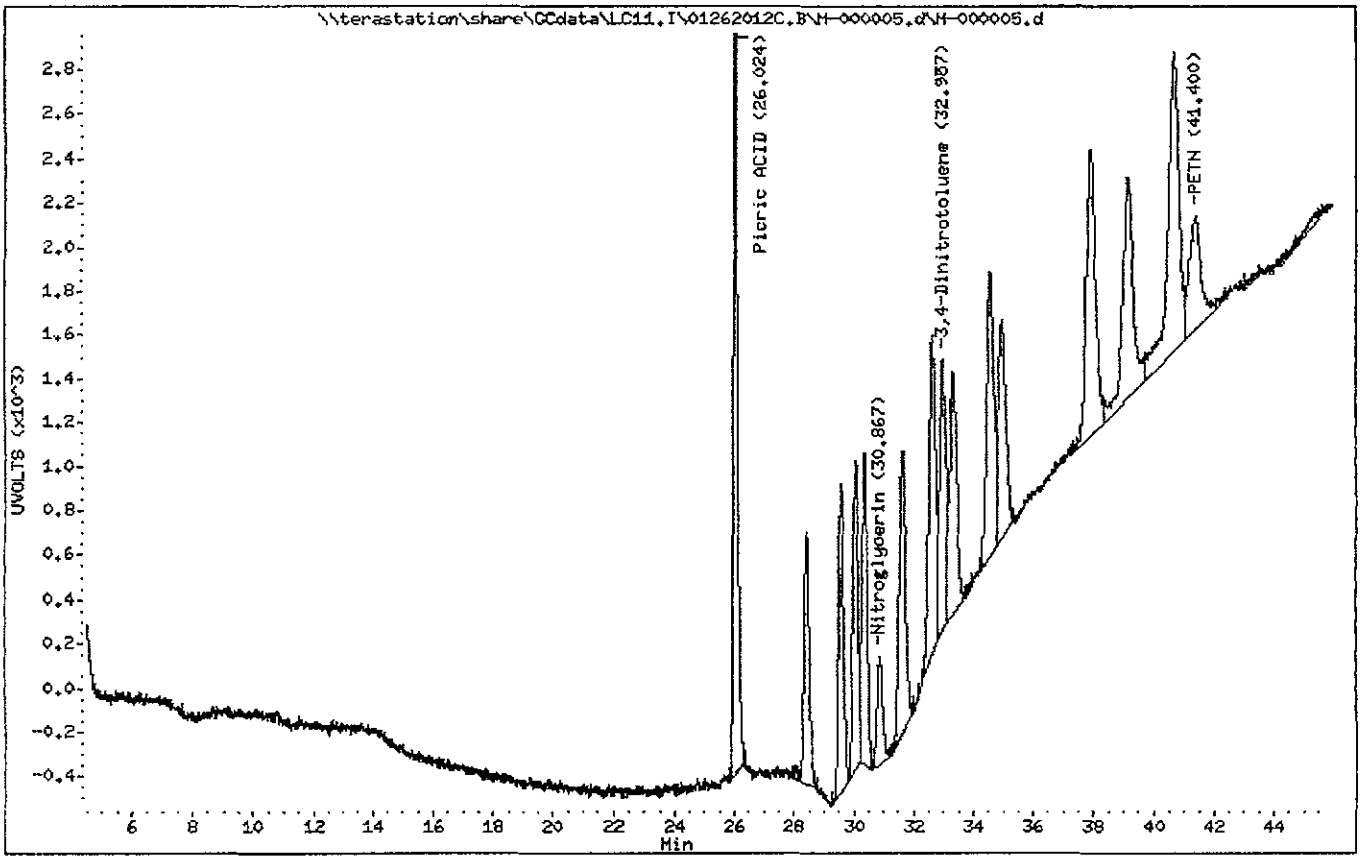
Instrument: LC11.i

Sample Info: STD_02 12GCSV0095 8330 10 ng/mL:1:

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_03 12GCSV0096 8330 20 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 18:00 File ID: 01262012C.B/M-000006.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	20.0	20.487	0.000	1918	95.90000				
2	RDX	20.0	23.717	0.000	1892	94.60000				
3	1,3,5-Trinitrobenz	20.0	25.660	0.000	4141	207.0500				
4	Picric ACID	50.0	25.997	0.000	5846	116.9200	25.997	0.000	8569	171.3800
5	1,3-Dinitrobenzene	20.0	28.400	0.000	4294	214.7000				
6	3,5-Dinitroaniline	20.0	29.540	0.000	2811	140.5500				
7	Nitrobenzene	20.0	30.020	0.000	1741	87.05000				
8	TETRYL	20.0	30.343	0.000	2227	111.3500				
9	2,4,6-Trinitrotolu	20.0	31.587	0.000	2384	119.2000				
10	4-AM-2,6-DNT	20.0	32.580	0.000	1932	96.60000				
11	3,4-Dinitrotoluene	20.0	32.930	0.000	1279	63.95000	32.933	0.000	2403	120.1500
12	2-AM-4,6-DNT	20.0	33.283	0.000	2138	106.9000				
13	2,6-Dinitrotoluene	20.0	34.533	0.000	1466	73.30000				
14	2,4-Dinitrotoluene	20.0	34.923	0.000	2430	121.5000				
15	2-Nitrotoluene	20.0	37.857	0.000	965	48.25000				
16	4-Nitrotoluene	20.0	39.117	0.000	1181	59.05000				
17	3-Nitrotoluene	20.0	40.607	0.000	1147	57.35000				
18	EGDN	20.0								
19	Nitroglycerin	20.0					30.850	0.000	1388	69.40000
20	PETN	20.0					41.310	0.000	869	43.45000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:08

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 18:00
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 12GCSV0096 8330 20 ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:07 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:00 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.257	81	30	0.373	0.07		
20.487	17431	1918	0.110	4.78	4	HMX
23.717	18722	1892	0.101	4.71	7	RDX
24.627	148	31	0.210	0.07		
24.757	291	32	0.110	0.07		
24.967	273	47	0.172	0.11		
25.660	40142	4141	0.103	10.32	10	1,3,5-Trinitrobenze
25.997	56775	5846	0.103	14.71	9	Picric ACID
27.097	1427	120	0.084	0.29		
28.400	50910	4294	0.084	10.70	13	1,3-Dinitrobenzene
29.540	35514	2811	0.079	7.00	15	3,5-Dinitroaniline
30.020	22773	1741	0.076	4.34	17	Nitrobenzene
30.343	29405	2227	0.076	5.55	16	TETRYL
31.587	34175	2384	0.070	5.94	19	2,4,6-Trinitrotolue
32.580	30226	1932	0.064	4.81	20	4-AM-2,6-DNT
32.930	17779	1279	0.072	3.18	$ 1	3,4-Dinitrotoluene
33.283	36197	2138	0.059	5.33	21	2-AM-4,6-DNT
34.533	23825	1466	0.062	3.65	22	2,6-Dinitrotoluene
34.923	43856	2430	0.055	6.05	23	2,4-Dinitrotoluene
36.013	394	39	0.099	0.09		
37.280	109	18	0.165	0.04		
37.857	20204	965	0.048	2.40	24	2-Nitrotoluene
39.117	25490	1181	0.046	2.94	25	4-Nitrotoluene
40.607	26743	1147	0.043	2.85	26	3-Nitrotoluene
	532890	40109		100.000		

Total unknown % height = 0.7400

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d

Page 2

Date : 26-JAN-2012 18:00

Client ID:

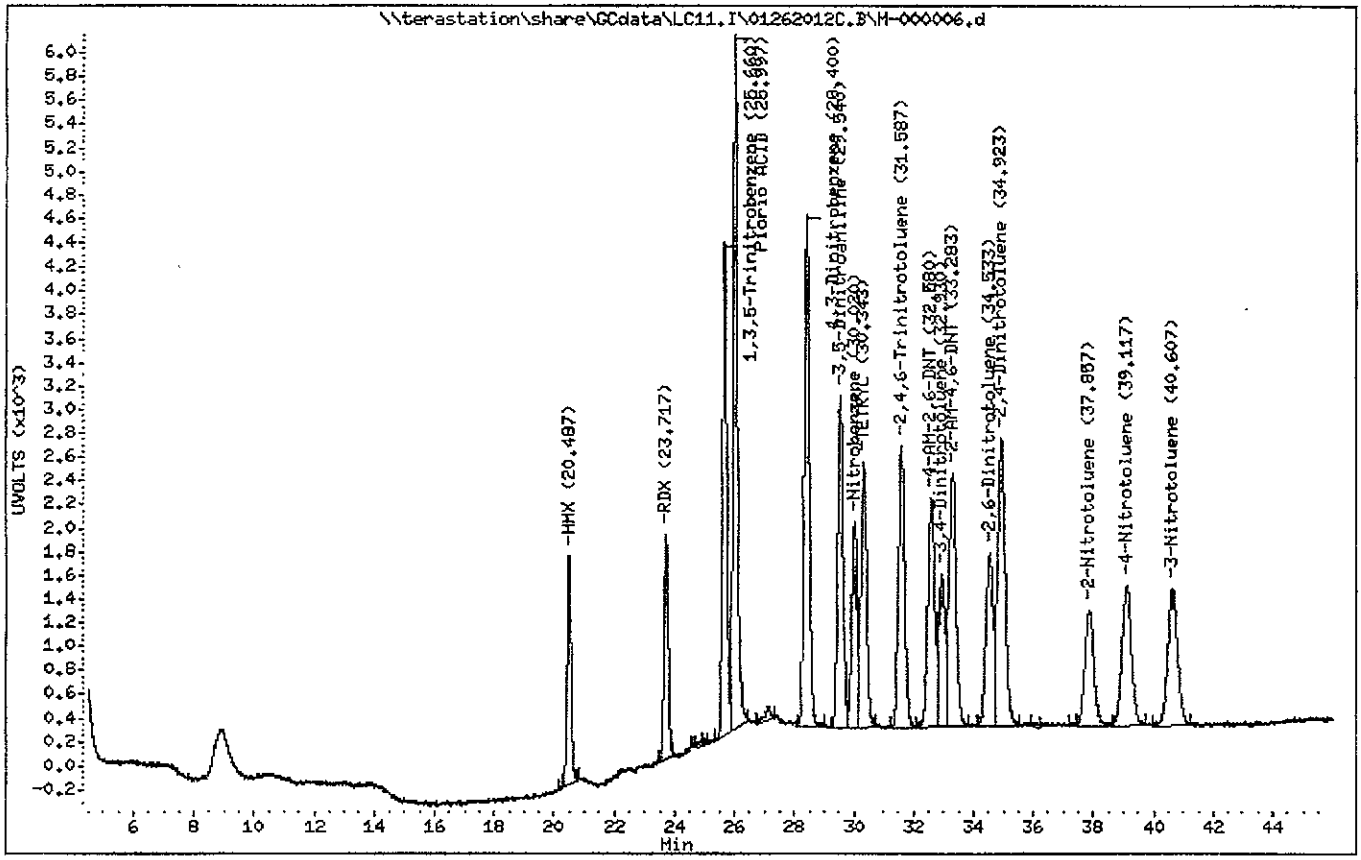
Instrument: LC11.i

Sample Info: STD_03 12GCSV0096 8330 20 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000006.d\M-00000
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 18:00
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 12GCSV0096 8330 20 ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:00 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.453	174	47	0.270	0.11	
23.603	341	52	0.153	0.12	
25.630	576	56	0.097	0.13	
25.997	82524	8569	0.104	20.23	9 Picric ACID
28.400	25356	2188	0.086	5.14	
29.537	34112	2799	0.082	6.57	
30.020	33111	2666	0.081	6.26	
30.343	35272	2817	0.080	6.62	
30.850	17855	1388	0.078	3.26	18 Nitroglycerin
31.590	36035	2534	0.070	5.95	
32.580	44050	2812	0.064	6.60	
32.933	35129	2403	0.068	5.64	$ 1 3,4-Dinitrotoluene
33.283	36426	2214	0.061	5.20	
34.537	41915	2523	0.060	5.92	
34.927	33762	1932	0.057	4.54	
37.863	49666	2382	0.048	5.59	
39.107	41448	1806	0.044	4.24	
40.003	2648	105	0.040	0.24	
40.633	55624	2358	0.042	5.54	
41.310	22322	869	0.039	2.04	27 PETN
44.093	389	27	0.069	0.06	
	628735	42547		100.000	

Total unknown % height = 68.83

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000006.d\H-000006.d

Page 2

Date : 26-JAN-2012 18:00

Client ID:

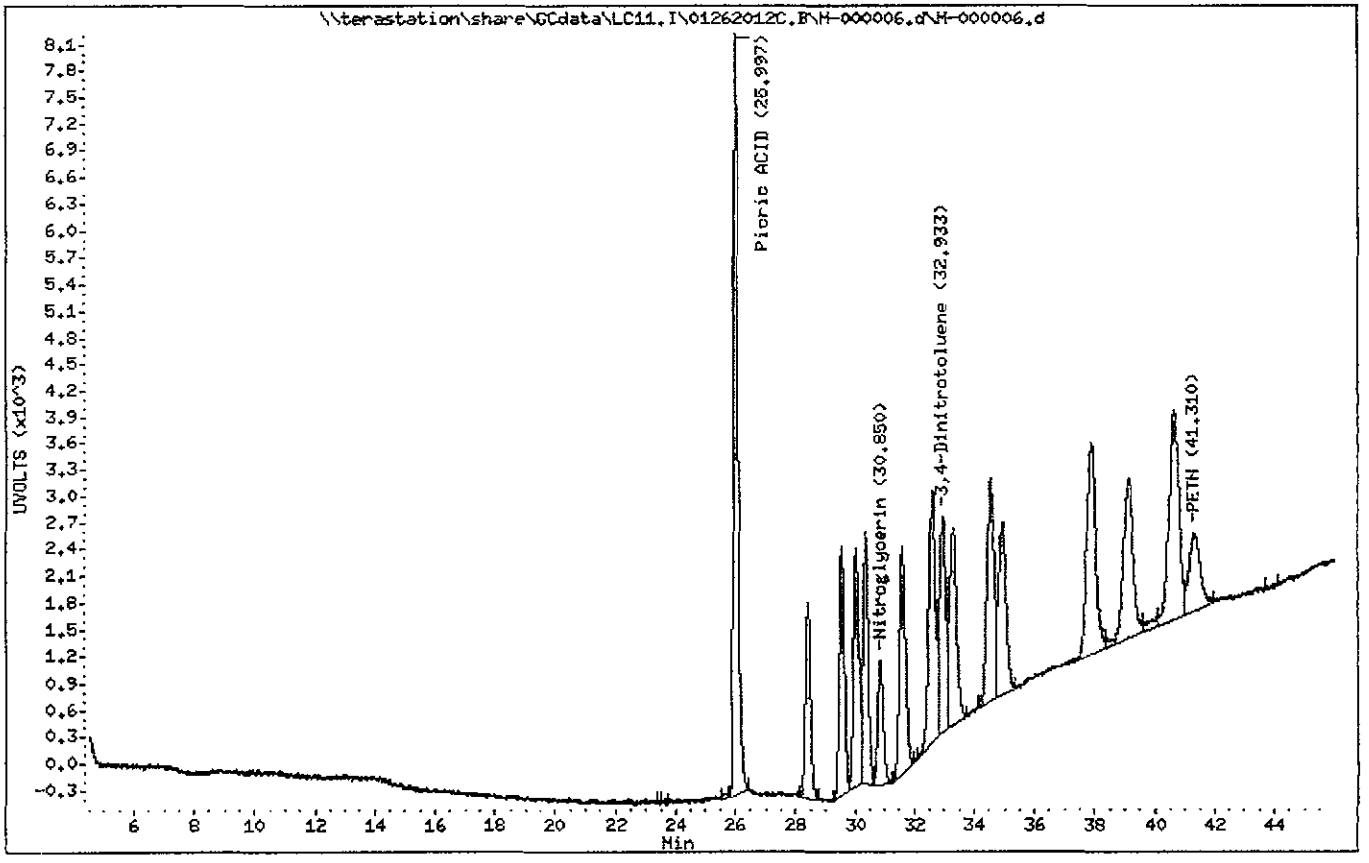
Instrument: LC11.i

Sample Info: STD_03 12GCSV0096 8330 20 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 12GCSV0097 8330 50 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 18:58 File ID: 01262012C.B/M-000007.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	50.0	20.495	0.000	4728	94.56000				
2	RDX	50.0	23.728	0.000	4695	93.90000				
3	1,3,5-Trinitrobenz	50.0	25.672	0.000	10311	206.2200				
4	Picric ACID	100	26.002	0.000	12835	128.3500	26.002	0.000	18742	187.4200
5	1,3-Dinitrobenzene	50.0	28.415	0.000	10769	215.3800				
6	3,5-Dinitroaniline	50.0	29.555	0.000	6956	139.1200				
7	Nitrobenzene	50.0	30.038	0.000	4680	93.60000				
8	TETRYL	50.0	30.358	0.000	5517	110.3400				
9	2,4,6-Trinitrotolu	50.0	31.608	0.000	5900	118.0000				
10	4-AM-2,6-DNT	50.0	32.605	0.000	4773	95.46000				
11	3,4-Dinitrotoluene	50.0	32.962	0.000	3244	64.88000	32.958	0.000	6192	123.8400
12	2-AM-4,6-DNT	50.0	33.302	0.000	5309	106.1800				
13	2,6-Dinitrotoluene	50.0	34.562	0.000	3658	73.16000				
14	2,4-Dinitrotoluene	50.0	34.952	0.000	6024	120.4800				
15	2-Nitrotoluene	50.0	37.905	0.000	2618	52.36000				
16	4-Nitrotoluene	50.0	39.142	0.000	3144	62.88000				
17	3-Nitrotoluene	50.0	40.672	0.000	3111	62.22000				
18	EGDN	50.0								
19	Nitroglycerin	50.0					30.865	0.000	3990	79.80000
20	PETN	50.0					41.368	0.000	2307	46.14000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:08

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 18:58
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 12GCSV0097 8330 50 ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:58 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.085	1770	131	0.074	0.13		
20.495	41644	4728	0.114	4.78	4	HMX
22.868	64	12	0.188	0.01		
23.728	47456	4695	0.099	4.74	7	RDX
25.672	100540	10311	0.103	10.42	10	1,3,5-Trinitrobenzene
26.002	128544	12835	0.100	13.09	9	Picric ACID
27.122	7848	386	0.049	0.39		
28.415	127107	10769	0.085	10.89	13	1,3-Dinitrobenzene
29.555	87597	6956	0.079	7.03	15	3,5-Dinitroaniline
30.038	60312	4680	0.078	4.73	17	Nitrobenzene
30.358	73406	5517	0.075	5.58	16	TETRYL
31.608	84537	5900	0.070	5.96	19	2,4,6-Trinitrotoluene
32.605	73808	4773	0.065	4.82	20	4-AM-2,6-DNT
32.962	46637	3244	0.070	3.28	$ 1	3,4-Dinitrotoluene
33.302	89417	5309	0.059	5.36	21	2-AM-4,6-DNT
34.562	58964	3658	0.062	3.69	22	2,6-Dinitrotoluene
34.952	108253	6024	0.056	6.09	23	2,4-Dinitrotoluene
37.328	208	30	0.144	0.03		
37.905	53792	2618	0.049	2.64	24	2-Nitrotoluene
39.142	68085	3144	0.046	3.17	25	4-Nitrotoluene
40.672	73039	3111	0.043	3.14	26	3-Nitrotoluene
41.875	69	25	0.364	0.02		
44.532	131	12	0.092	0.01		
	1333225	98868		100.000		

Total unknown % height = 0.5900

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000007.d

Date : 26-JAN-2012 18:58

Client ID:

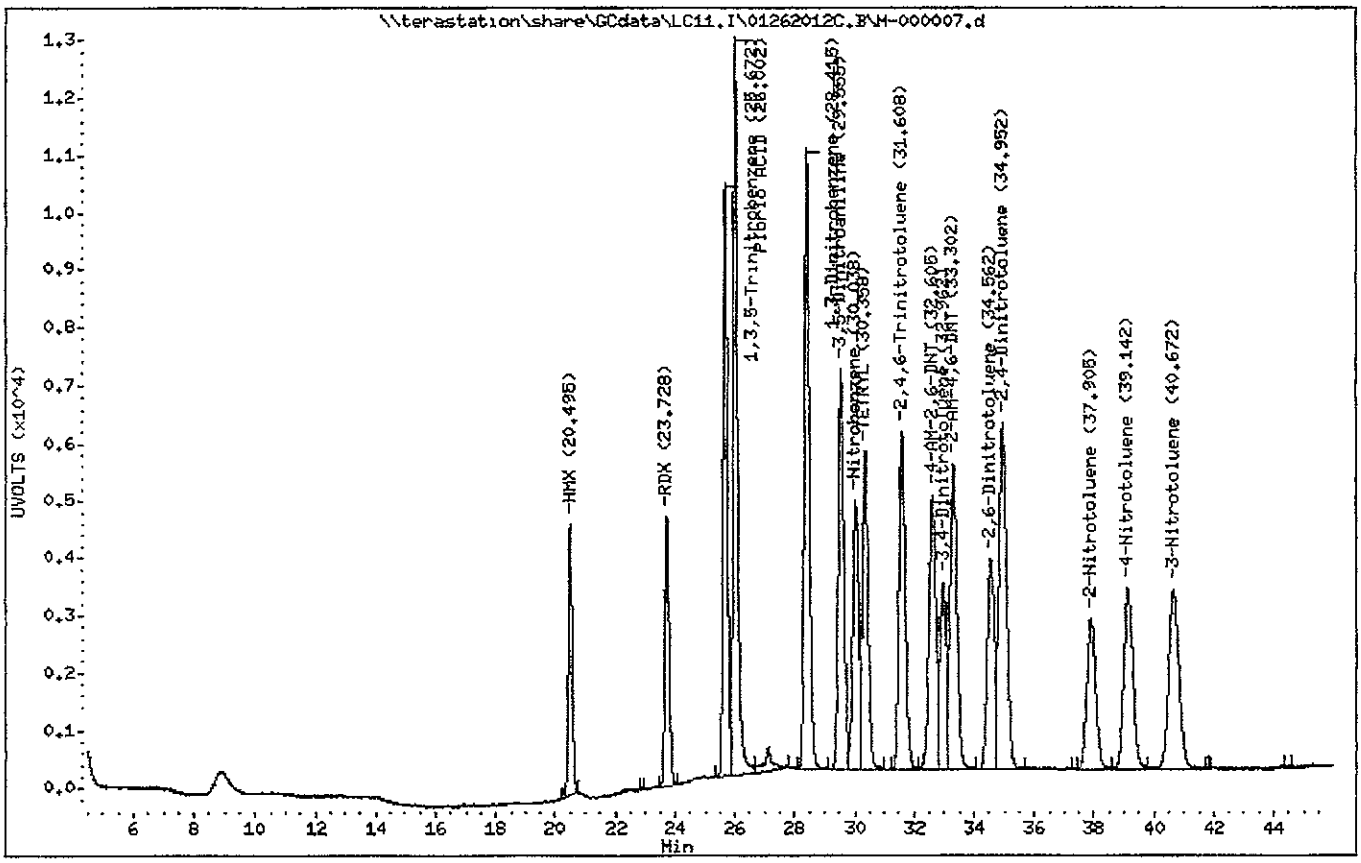
Instrument: LC11.i

Sample Info: STD_04 12GCSV0097 8330 50 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000007.d\M-00000
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 18:58
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 12GCSV0097 8330 50 ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:08 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 18:58 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
25.662	1303	144	0.111	0.13		
26.002	179122	18742	0.105	17.73		9 Picric ACID
28.418	65189	5571	0.085	5.24		
29.555	87581	7055	0.081	6.64		
30.038	95197	7409	0.078	6.97		
30.358	93853	7261	0.077	6.83		
30.865	51944	3990	0.077	3.75		18 Nitroglycerin
31.608	89040	6274	0.070	5.90		
32.605	108092	7049	0.065	6.63		
32.958	93053	6192	0.067	5.83	$	1 3,4-Dinitrotoluene
33.302	89663	5496	0.061	5.17		
34.562	106475	6358	0.060	5.98		
34.952	85828	4875	0.057	4.59		
36.462	151	25	0.165	0.02		
37.905	128930	6330	0.049	5.96		
39.145	102326	4727	0.046	4.45		
40.668	146995	6298	0.043	5.93		
41.368	56918	2307	0.041	2.17		27 PETN
43.361	536	56	0.104	0.05		
43.945	565	37	0.066	0.03		
	1582761	106196		100.000		

Total unknown % height = 70.52

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000007.d\H-000007.d

Date : 26-JAN-2012 18:58

Client ID:

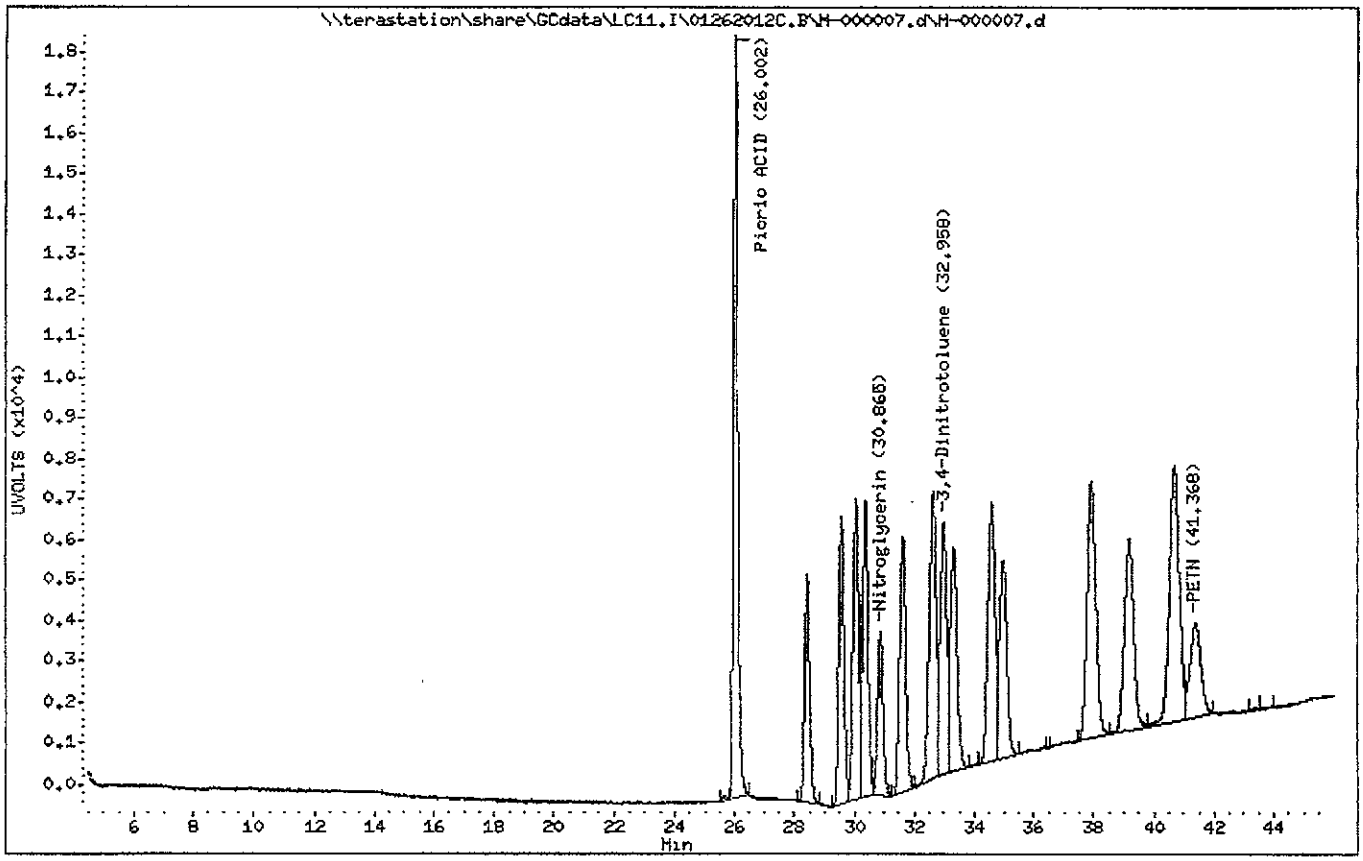
Instrument: LC11.i

Sample Info: STD_04 12GCSV0097 8330 50 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_05 12GCSV0099 8330 100 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 19:55 File ID: 01262012C.B/M-000008.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	100	20.483	0.000	9675	96.75000				
2	RDX	100	23.729	0.000	9601	96.01000				
3	1,3,5-Trinitrobenz	100	25.673	0.000	21082	210.8200				
4	Picric ACID	200	25.986	0.000	25300	126.5000	25.986	0.000	37044	185.2200
5	1,3-Dinitrobenzene	100	28.416	0.000	22095	220.9500				
6	3,5-Dinitroaniline	100	29.553	0.000	14301	143.0100				
7	Nitrobenzene	100	30.043	0.000	9672	96.72000				
8	TETRYL	100	30.356	0.000	11368	113.6800				
9	2,4,6-Trinitrotolu	100	31.606	0.000	12137	121.3700				
10	4-AM-2,6-DNT	100	32.596	0.000	9764	97.64000				
11	3,4-Dinitrotoluene	100	32.953	0.000	6778	67.78000	32.953	0.000	13038	130.3800
12	2-AM-4,6-DNT	100	33.293	0.000	10901	109.0100				
13	2,6-Dinitrotoluene	100	34.553	0.000	7488	74.88000				
14	2,4-Dinitrotoluene	100	34.943	0.000	12355	123.5500				
15	2-Nitrotoluene	100	37.889	0.000	5360	53.60000				
16	4-Nitrotoluene	100	39.133	0.000	6464	64.64000				
17	3-Nitrotoluene	100	40.653	0.000	6392	63.92000				
18	EGDN	100								
19	Nitroglycerin	100					30.863	0.000	8713	87.13000
20	PETN	100					41.359	0.000	4953	49.53000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:09

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 19:55
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 8330 100 ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 19:55 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.066	647	100	0.154	0.04		
19.326	82	23	0.280	0.01		
20.483	87309	9675	0.111	4.79	4	HMX
21.666	147	46	0.313	0.02		
22.486	756	81	0.107	0.04		
23.729	96944	9601	0.099	4.76	7	RDX
25.673	204668	21082	0.103	10.45	10	1,3,5-Trinitrobenze
25.986	251419	25300	0.101	12.66	9	Picric ACID
27.103	7870	593	0.075	0.29		
28.416	261350	22095	0.085	10.95	13	1,3-Dinitrobenzene
29.553	179829	14301	0.080	7.09	15	3,5-Dinitroaniline
30.043	124925	9672	0.077	4.79	17	Nitrobenzene
30.356	152493	11368	0.075	5.63	16	TETRYL
31.606	173648	12137	0.070	6.01	19	2,4,6-Trinitrotolue
32.596	150561	9764	0.065	4.84	20	4-AM-2,6-DNT
32.953	97351	6778	0.070	3.36	$ 1	3,4-Dinitrotoluene
33.293	180829	10901	0.060	5.40	21	2-AM-4,6-DNT
34.553	120319	7488	0.062	3.71	22	2,6-Dinitrotoluene
34.943	222005	12355	0.056	6.12	23	2,4-Dinitrotoluene
36.863	313	35	0.112	0.01		
37.889	108255	5360	0.050	2.65	24	2-Nitrotoluene
39.133	138413	6464	0.047	3.20	25	4-Nitrotoluene
40.653	145858	6392	0.044	3.17	26	3-Nitrotoluene
43.599	155	29	0.187	0.01		
	2706145	201640		100.000		

Total unknown % height = 0.4200

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000008.d

Date : 26-JAN-2012 19:55

Client ID:

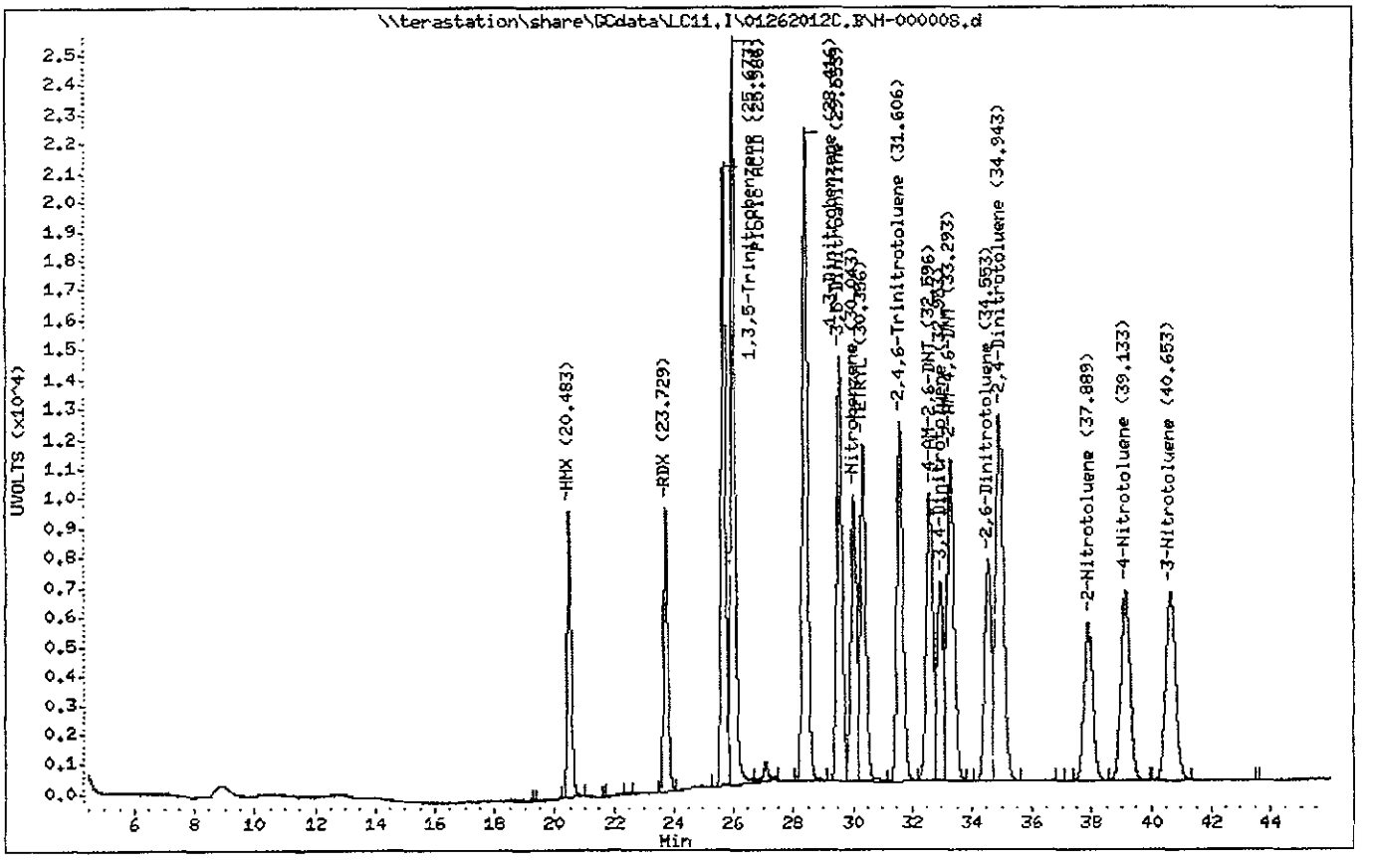
Instrument: LC11.i

Sample Info: STD_05 12CCSV0099 8330 100 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-00000
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 19:55
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 8330 100 ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 19:55 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.666	2566	278	0.108	0.12	
25.986	358413	37044	0.103	17.07	9 Picric ACID
28.416	134199	11412	0.085	5.22	
29.553	181076	14502	0.080	6.64	
30.039	200039	15451	0.077	7.07	
30.356	197772	15135	0.077	6.93	
30.863	115899	8713	0.075	3.99	18 Nitroglycerin
31.606	183199	12913	0.070	5.91	
32.599	220638	14436	0.065	6.61	
32.953	196247	13038	0.066	5.97	$ 1 3,4-Dinitrotoluene
33.293	185139	11329	0.061	5.18	
34.553	218996	13109	0.060	6.00	
34.943	176694	10006	0.057	4.58	
35.826	155	39	0.251	0.01	
37.889	265133	13097	0.049	5.99	
39.133	210920	9765	0.046	4.47	
40.656	300848	13011	0.043	5.95	
41.359	123557	4953	0.040	2.26	27 PETN
43.386	625	38	0.061	0.01	
44.366	257	25	0.097	0.01	
45.349	601	33	0.055	0.01	
	3272976	218327		100.000	

Total unknown % height = 70.71

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000008.d\M-000008.d

Date : 26-JAN-2012 19:55

Client ID:

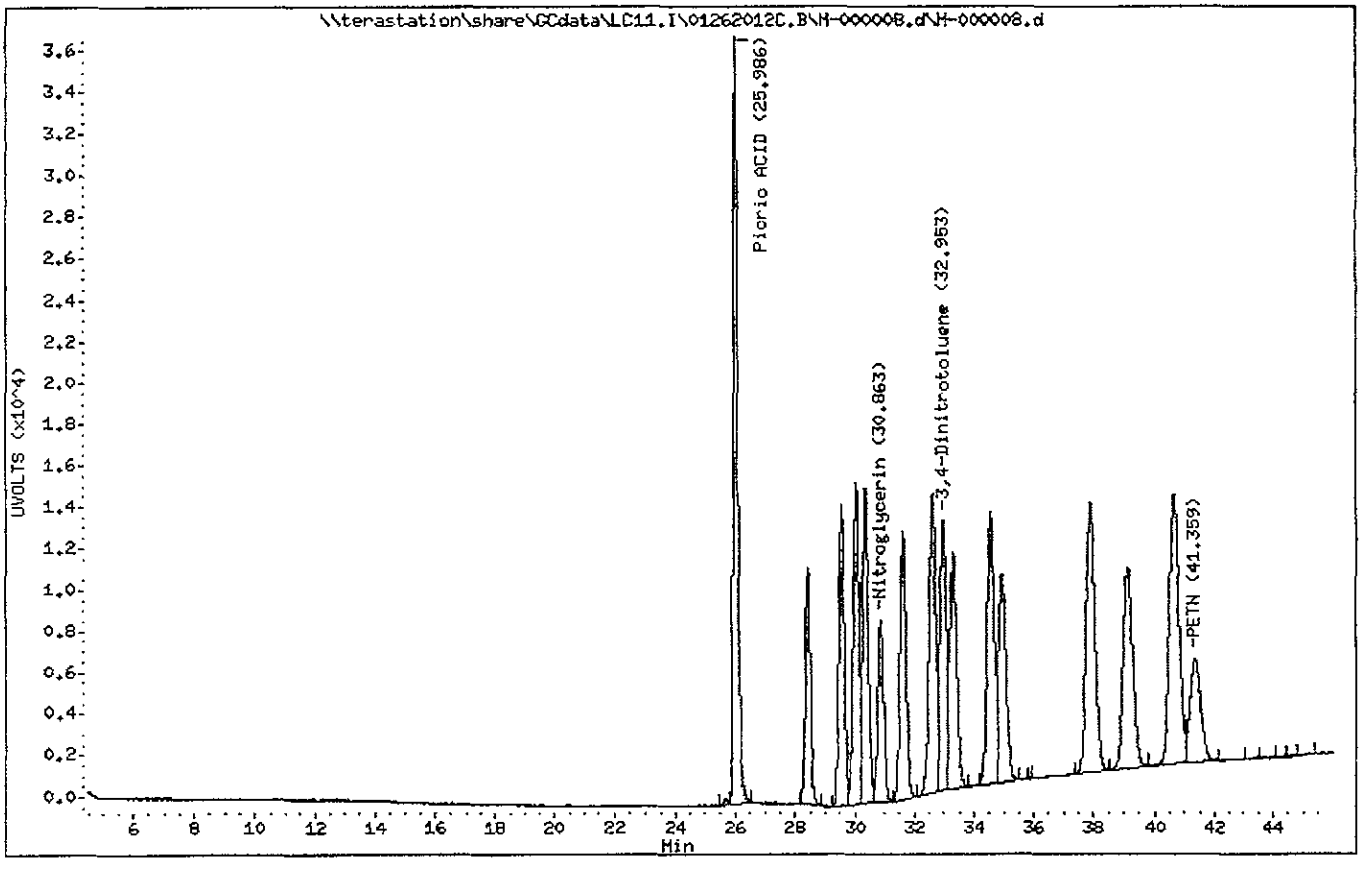
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 8330 100 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Dual Column Summary - ICAL RFs

Sample : STD_06 12GCSV0100 8330 200 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 20:52 File ID: 01262012C.B/M-000009.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	200	20.480	0.000	18718	93.59000				
2	RDX	200	23.723	0.000	18394	91.97000				
3	1,3,5-Trinitrobenz	200	25.670	0.000	41512	207.5600				
4	Picric ACID	500	25.950	0.000	60651	121.3020	25.950	0.000	88761	177.5220
5	1,3-Dinitrobenzene	200	28.413	0.000	43478	217.3900				
6	3,5-Dinitroaniline	200	29.546	0.000	28313	141.5650				
7	Nitrobenzene	200	30.033	0.000	19016	95.08000				
8	TETRYL	200	30.353	0.000	22776	113.8800				
9	2,4,6-Trinitrotolu	200	31.600	0.000	24302	121.5100				
10	4-AM-2,6-DNT	200	32.593	0.000	19550	97.75000				
11	3,4-Dinitrotoluene	200	32.950	0.000	13595	67.97500	32.950	0.000	26119	130.5950
12	2-AM-4,6-DNT	200	33.290	0.000	21825	109.1250				
13	2,6-Dinitrotoluene	200	34.553	0.000	14944	74.72000				
14	2,4-Dinitrotoluene	200	34.943	0.000	24676	123.3800				
15	2-Nitrotoluene	200	37.890	0.000	10692	53.46000				
16	4-Nitrotoluene	200	39.130	0.000	12919	64.59500				
17	3-Nitrotoluene	200	40.660	0.000	12758	63.79000				
18	EGDN	200								
19	Nitroglycerin	200					30.856	0.000	17648	88.24000
20	PETN	200					41.356	0.000	9932	49.66000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:10

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 20:52
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 8330 200 ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 20:52 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.113	1683	129	0.077	0.03		
20.480	173684	18718	0.108	4.56		4 HMX
21.703	786	88	0.112	0.02		
22.460	1633	141	0.086	0.03		
23.723	194999	18394	0.094	4.48		7 RDX
25.670	405383	41512	0.102	10.12		10 1,3,5-Trinitrobenzene
25.950	634149	60651	0.096	14.91		9 Picric ACID
27.106	16274	1301	0.080	0.31		
28.413	522912	43478	0.083	10.60		13 1,3-Dinitrobenzene
29.546	360590	28313	0.079	6.90		15 3,5-Dinitroaniline
30.033	249331	19016	0.076	4.64		17 Nitrobenzene
30.353	302809	22776	0.075	5.55		16 TETRYL
31.600	348067	24302	0.070	5.93		19 2,4,6-Trinitrotoluene
32.593	304004	19550	0.064	4.77		20 4-AM-2,6-DNT
32.950	194018	13595	0.070	3.31	$	1 3,4-Dinitrotoluene
33.290	366311	21825	0.060	5.32		21 2-AM-4,6-DNT
34.553	239141	14944	0.062	3.64		22 2,6-Dinitrotoluene
34.943	445518	24676	0.055	6.02		23 2,4-Dinitrotoluene
36.793	250	30	0.120	0.00		
37.890	215916	10692	0.050	2.60		24 2-Nitrotoluene
39.130	276067	12919	0.047	3.15		25 4-Nitrotoluene
40.660	295553	12758	0.043	3.11		26 3-Nitrotoluene
	5549078	409808		100.000		

Total unknown % height = 0.3900

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d

Date : 26-JAN-2012 20:52

Client ID:

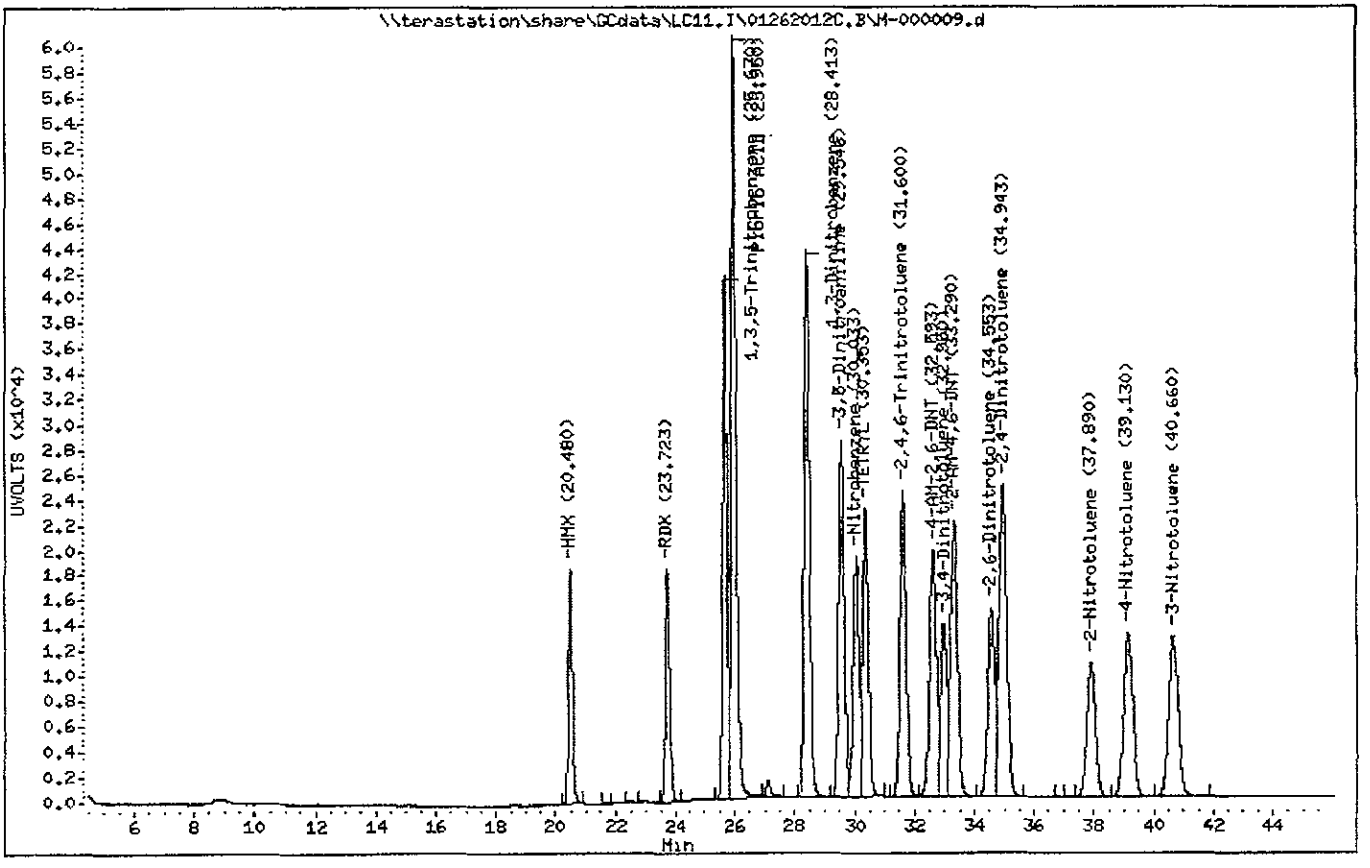
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 8330 200 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000009.d\M-00000
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 20:52
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 8330 200 ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:09 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 20:52 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.063	255	27	0.106	0.00	
25.676	5011	537	0.107	0.11	
25.950	904991	88761	0.098	19.80	9 Picric ACID
28.413	271075	22500	0.083	4.99	
29.546	366049	28815	0.079	6.39	
30.033	402763	30521	0.076	6.77	
30.350	403627	30605	0.076	6.78	
30.856	237174	17648	0.074	3.91	18 Nitroglycerin
31.600	368282	25892	0.070	5.74	
32.593	443489	28855	0.065	6.40	
32.950	393517	26119	0.066	5.79	$ 1 3,4-Dinitrotoluene
33.290	371976	22686	0.061	5.03	
34.553	438680	26145	0.060	5.79	
34.943	354360	20028	0.057	4.44	
35.673	183	30	0.164	0.00	
35.933	320	46	0.144	0.01	
37.050	230	37	0.161	0.00	
37.890	530215	26106	0.049	5.79	
39.133	418936	19481	0.047	4.32	
40.660	597770	25890	0.043	5.74	
41.356	247487	9932	0.040	2.20	27 PETN
43.220	256	42	0.164	0.00	
44.450	633	31	0.049	0.00	
44.986	459	41	0.089	0.00	
45.420	435	21	0.048	0.00	
	6758174	450796		100.000	

Total unknown % height = 68.30

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\M-000009.d\M-000009.d Page 2

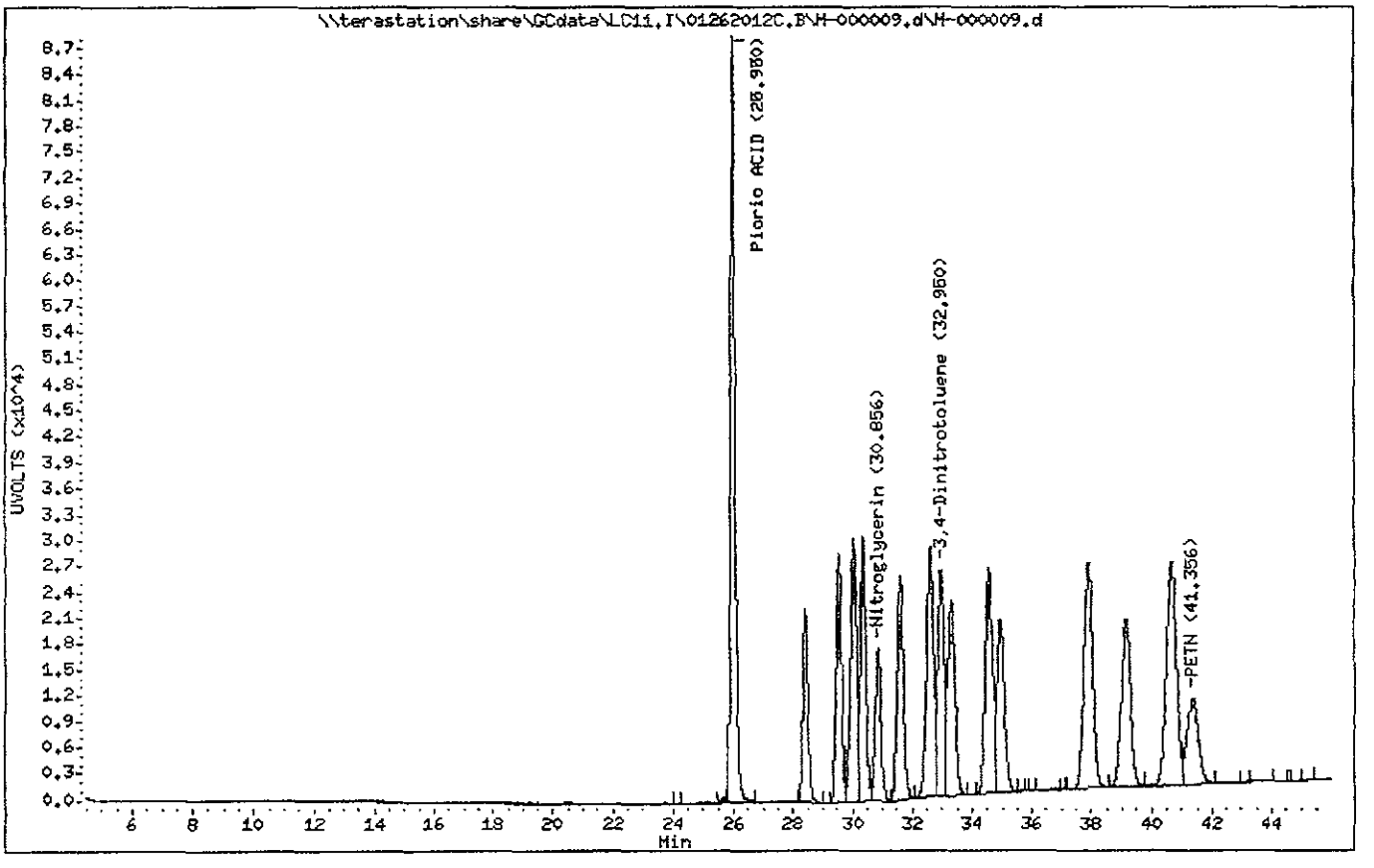
Date : 26-JAN-2012 20:52

Client ID: Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 8330 200 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_07 12GCSV0101 8330 500 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 21:49 File ID: 01262012C.B/M-000010.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	500	20.470	0.000	43719	87.43800				
2	RDX	500	23.717	0.000	42678	85.35600				
3	1,3,5-Trinitrobenz	500	25.667	0.000	100632	201.2640				
4	Picric ACID	1000	25.907	0.000	111815	111.8150	25.910	0.000	162032	162.0320
5	1,3-Dinitrobenzene	500	28.414	0.000	105554	211.1080				
6	3,5-Dinitroaniline	500	29.554	0.000	68877	137.7540				
7	Nitrobenzene	500	30.037	0.000	46108	92.21600				
8	TETRYL	500	30.360	0.000	56290	112.5800				
9	2,4,6-Trinitrotolu	500	31.607	0.000	60022	120.0440				
10	4-AM-2,6-DNT	500	32.600	0.000	48068	96.13600				
11	3,4-Dinitrotoluene	300	32.954	0.000	20613	68.71000	32.954	0.000	39393	131.3100
12	2-AM-4,6-DNT	500	33.300	0.000	53372	106.7440				
13	2,6-Dinitrotoluene	500	34.560	0.000	36794	73.58800				
14	2,4-Dinitrotoluene	500	34.950	0.000	60910	121.8200				
15	2-Nitrotoluene	500	37.897	0.000	26386	52.77200				
16	4-Nitrotoluene	500	39.144	0.000	31923	63.84600				
17	3-Nitrotoluene	500	40.674	0.000	31603	63.20600				
18	EGDN	500								
19	Nitroglycerin	500					30.864	0.000	43855	87.71000
20	PETN	500					41.380	0.000	24702	49.40400

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:11

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 26-JAN-2012 21:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 12GCSV0101 8330 500 ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:10 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 21:49 Cal File: M-000010.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
17.760	135	29	0.215	0.00		
18.487	133	0	0.000	0.00		
19.514	214	36	0.169	0.00		
19.824	110	24	0.219	0.00		
20.470	432309	43719	0.101	4.60	4	HMX
21.684	1759	189	0.107	0.01		
22.440	4466	356	0.080	0.03		
22.944	2079	160	0.077	0.01		
23.717	486203	42678	0.088	4.49	7	RDX
24.314	99	32	0.323	0.00		
24.520	73	15	0.205	0.00		
24.670	163	32	0.196	0.00		
25.667	982853	100632	0.102	10.60	10	1,3,5-Trinitrobenze
25.907	1295947	111815	0.086	11.92	9	Picric ACID
27.110	29944	2950	0.099	0.31		
27.700	301	36	0.120	0.00		
28.050	142	28	0.198	0.00		
28.414	1303922	105554	0.081	11.11	13	1,3-Dinitrobenzene
29.554	900005	68877	0.077	7.25	15	3,5-Dinitroaniline
30.037	623864	46108	0.074	4.85	17	Nitrobenzene
30.360	752343	56290	0.075	5.92	16	TETRYL
31.607	868457	60022	0.069	6.32	19	2,4,6-Trinitrotolue
32.600	771595	48068	0.062	5.06	20	4-AM-2,6-DNT
32.954	270912	20613	0.076	2.17	$ 1	3,4-Dinitrotoluene
33.300	918849	53372	0.058	5.62	21	2-AM-4,6-DNT
34.560	598640	36794	0.061	3.87	22	2,6-Dinitrotoluene
34.950	1116710	60910	0.055	6.41	23	2,4-Dinitrotoluene
36.750	145	27	0.187	0.00		
37.897	539085	26386	0.049	2.77	24	2-Nitrotoluene
39.144	689951	31923	0.046	3.36	25	4-Nitrotoluene
40.674	737206	31603	0.043	3.32	26	3-Nitrotoluene
	13328612	949278		100.000		

Total unknown % height = 0.3600

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d

Page 2

Date : 26-JAN-2012 21:49

Client ID:

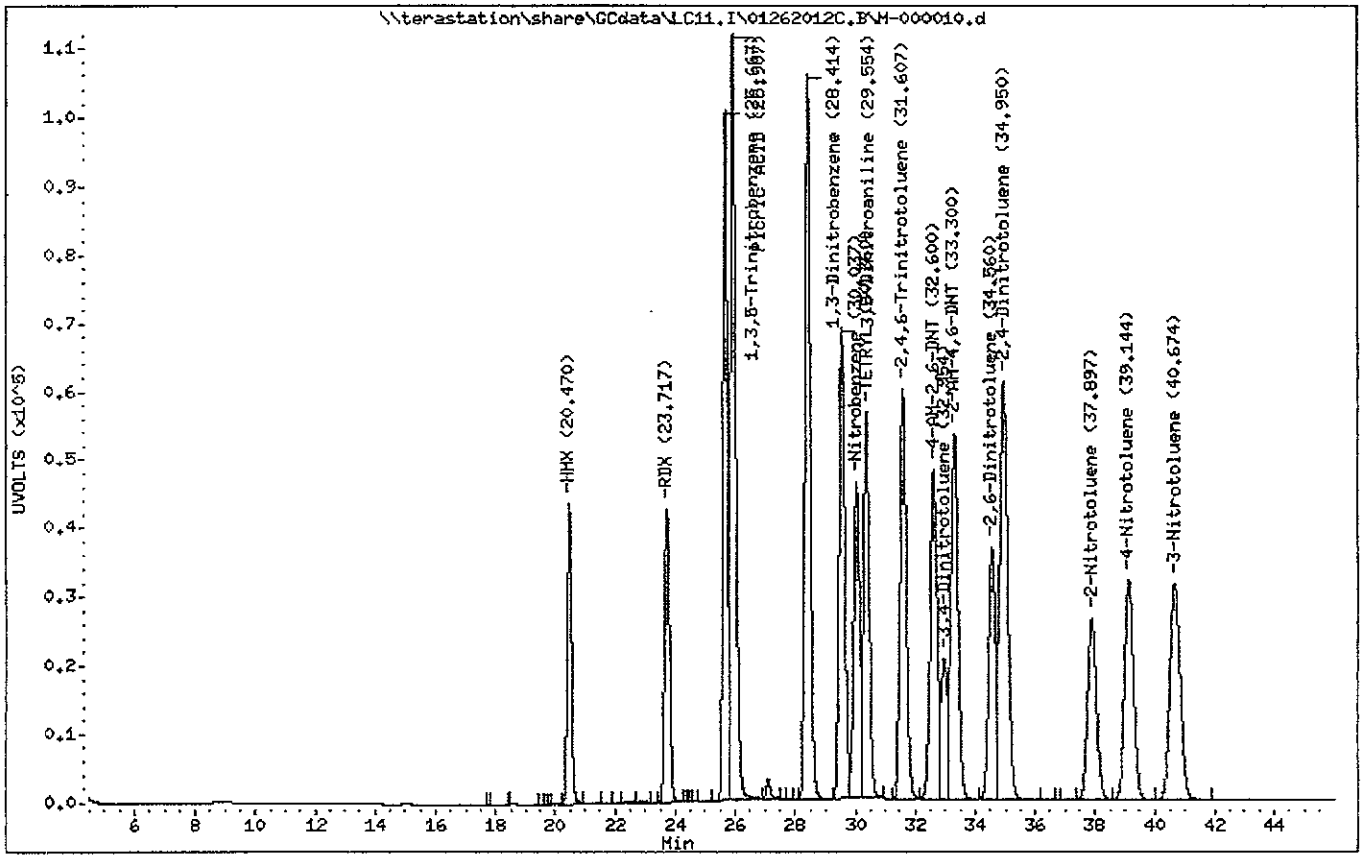
Instrument: LC11.i

Sample Info: STD_07 12GCSV0101 8330 500 mg/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000010.d\M-00001
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 26-JAN-2012 21:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 12GCSV0101 8330 500 ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:10 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 21:49 Cal File: M-000010.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
23.680	630	62	0.098	0.00		
24.030	175	34	0.195	0.00		
24.310	206	28	0.136	0.00		
25.664	12326	1376	0.112	0.13		
25.910	1821895	162032	0.089	15.87		9 Picric ACID
27.067	974	85	0.087	0.00		
28.064	266	64	0.240	0.00		
28.414	677002	54678	0.081	5.32		
29.554	917466	70220	0.077	6.83		
30.037	1012697	74184	0.073	7.22		
30.360	1012793	76003	0.075	7.40		
30.864	599050	43855	0.073	4.27		18 Nitroglycerin
31.607	921003	63984	0.069	6.23		
32.600	1128761	70923	0.063	6.90		
32.954	565175	39393	0.070	3.83	$	1 3,4-Dinitrotoluene
33.297	942366	55313	0.059	5.38		
34.560	1083595	64108	0.059	6.24		
34.947	884699	49302	0.056	4.80		
37.897	1318624	64368	0.049	6.26		
39.144	1043392	48126	0.046	4.68		
40.674	1486251	64108	0.043	6.24		
41.380	617777	24702	0.040	2.40		27 PETN
42.644	560	41	0.073	0.00		
44.554	774	21	0.027	0.00		
	16048458	1027010		100.000		

Total unknown % height = 73.63

Data File: \\terastation\share\GCdata\LC11.I\012620120.B\H-000010.d\H-000010.d

Date : 26-JAN-2012 21:49

Client ID:

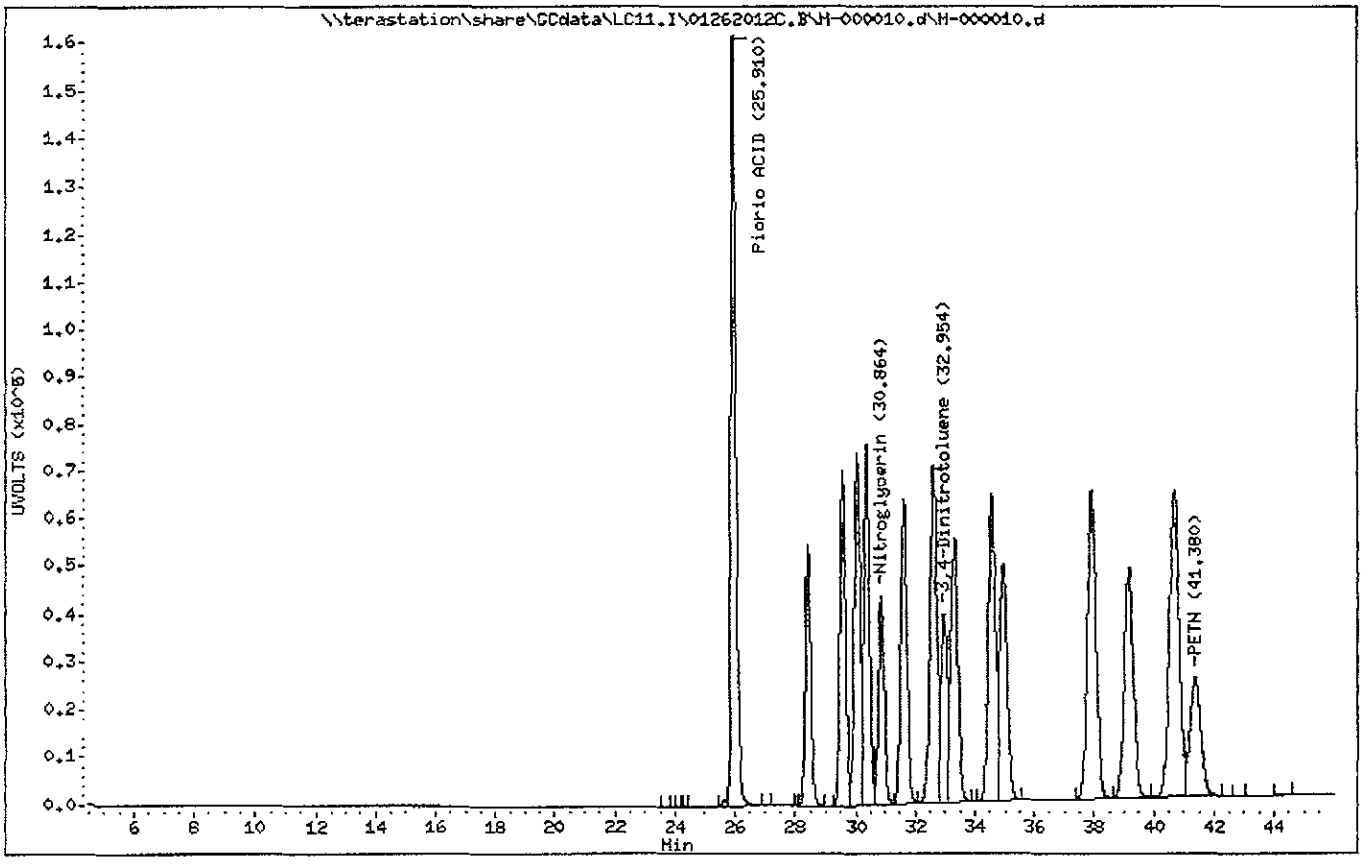
Instrument: LC11.i

Sample Info: STD_07 12GCSV0101 S330 500 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_08 12GCSV0102 8330 1000 ng/mL Instrument: LC11
Analyzed : 26-JAN-2012 22:47 File ID: 01262012C.B/M-000011.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	HMX	1000	20.454	0.000	70820	70.82000				
2	RDX	1000	23.698	0.000	68889	68.88900				
3	1,3,5-Trinitrobenz	1000	25.651	0.000	182459	182.4590				
4	Picric ACID	2000	25.824	0.000	203917	101.9585	25.834	0.000	276836	138.4180
5	1,3-Dinitrobenzene	1000	28.398	0.000	193073	193.0730				
6	3,5-Dinitroaniline	1000	29.538	0.000	127882	127.8820				
7	Nitrobenzene	1000	30.018	0.000	84770	84.77000				
8	TETRYL	1000	30.354	0.000	110599	110.5990				
9	2,4,6-Trinitrotolu	1000	31.601	0.000	117122	117.1220				
10	4-AM-2,6-DNT	1000	32.588	0.000	92286	92.28600				
11	3,4-Dinitrotoluene	500	32.944	0.000	34056	68.11200	32.944	0.000	64989	129.9780
12	2-AM-4,6-DNT	1000	33.284	0.000	102179	102.1790				
13	2,6-Dinitrotoluene	1000	34.548	0.000	71518	71.51800				
14	2,4-Dinitrotoluene	1000	34.934	0.000	118238	118.2380				
15	2-Nitrotoluene	1000	37.878	0.000	51067	51.06700				
16	4-Nitrotoluene	1000	39.121	0.000	62140	62.14000				
17	3-Nitrotoluene	1000	40.648	0.000	61775	61.77500				
18	EGDN	1000								
19	Nitroglycerin	1000					30.854	0.000	85979	85.97900
20	PETN	1000					41.364	0.000	49440	49.44000

DualCalc.Mac Rev 1 02 11/27/2011 ERS Printed : 01/31/2012 11.11

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 26-JAN-2012 22:47
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 12GCSV0102 8330 1000 ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M
Meth Date : 31-Jan-2012 11:11 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT			COMPOUNDS
0.088	975	111	0.114	0.00			
18.328	191	30	0.157	0.00			
19.971	223	23	0.103	0.00			
20.454	865980	70820	0.082	4.02		4	HMX
21.671	3678	316	0.086	0.01			
22.414	9345	577	0.062	0.03			
22.884	3860	255	0.066	0.01			
23.698	969857	68889	0.071	3.91		7	RDX
24.701	1060	110	0.104	0.00			
25.651	1730259	182459	0.105	10.36		10	1,3,5-Trinitrobenzene
25.824	2824268	203917	0.072	11.70		9	Picric ACID
27.101	66501	6056	0.091	0.34			
27.724	1303	113	0.087	0.00			
28.398	2604054	193073	0.074	10.96		13	1,3-Dinitrobenzene
29.538	1795397	127882	0.071	7.26		15	3,5-Dinitroaniline
30.018	1251328	84770	0.068	4.81		17	Nitrobenzene
30.354	1506691	110599	0.073	6.28		16	TETRYL
31.601	1726788	117122	0.068	6.65		19	2,4,6-Trinitrotoluene
32.588	1539523	92286	0.060	5.24		20	4-AM-2,6-DNT
32.944	415736	34056	0.082	1.93	$	1	3,4-Dinitrotoluene
33.284	1838923	102179	0.056	5.80		21	2-AM-4,6-DNT
34.548	1187964	71518	0.060	4.06		22	2,6-Dinitrotoluene
34.934	2233551	118238	0.053	6.71		23	2,4-Dinitrotoluene
37.878	1071324	51067	0.048	2.90		24	2-Nitrotoluene
39.121	1374752	62140	0.045	3.52		25	4-Nitrotoluene
40.648	1470743	61775	0.042	3.50		26	3-Nitrotoluene
43.964	170	24	0.141	0.00			
44.608	644	34	0.053	0.00			
	26495091	1760439		100.000			

Total unknown % height = 0.3900

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d

Date : 26-JAN-2012 22:47

Client ID:

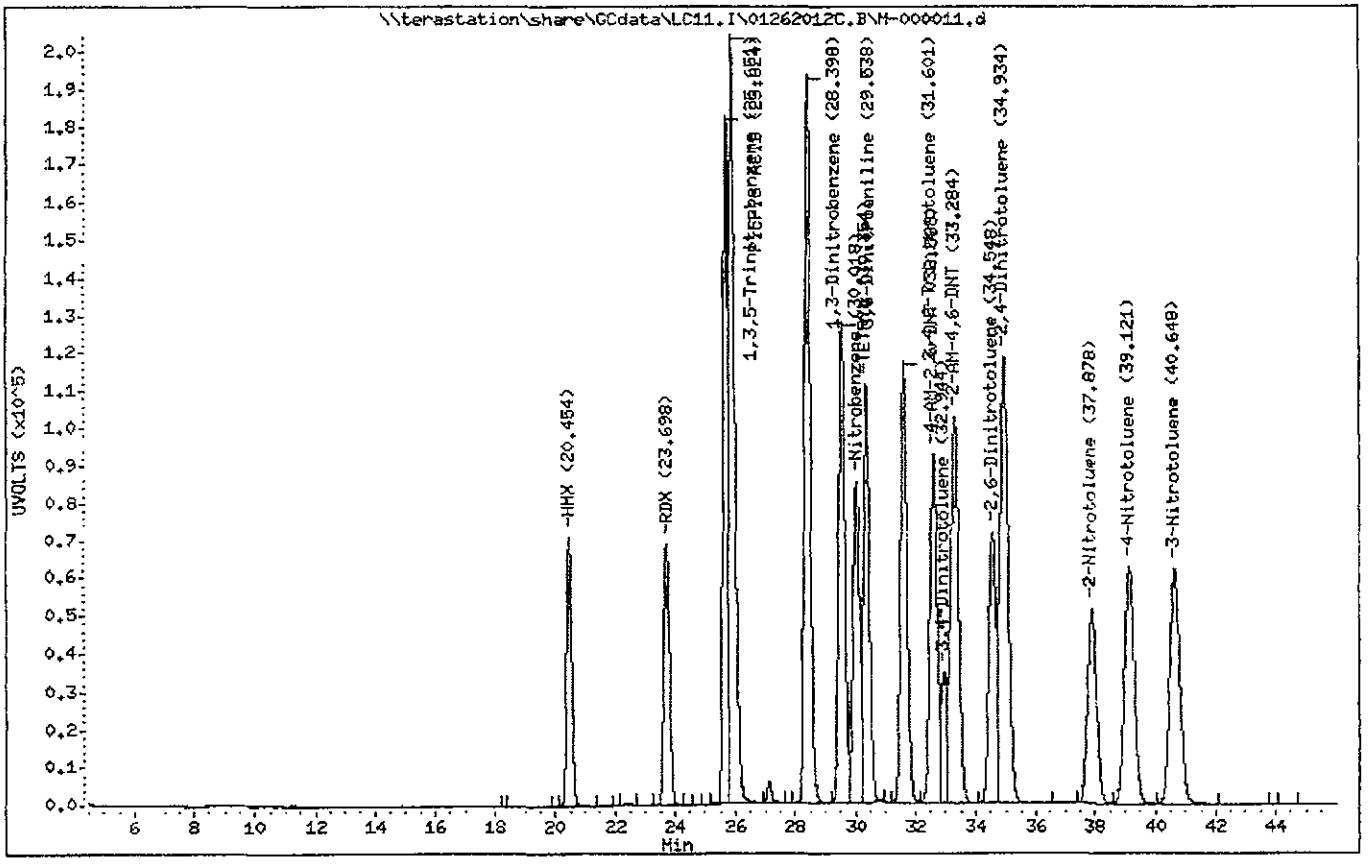
Instrument: LC11.i

Sample Info: STD_08 12GCSV0102 8330 1000 ng/mL:1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-00001
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 26-JAN-2012 22:47
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 12GCSV0102 8330 1000 ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:11 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.638	771	68	0.088	0.00	
24.154	238	32	0.134	0.00	
25.661	17799	2459	0.138	0.12	
25.834	3654598	276836	0.076	14.48	9 Picric ACID
27.078	4708	353	0.075	0.01	
27.334	1550	161	0.104	0.00	
28.028	247	82	0.332	0.00	
28.398	1356044	100111	0.074	5.19	
29.538	1826623	130259	0.071	6.75	
30.018	2012758	136088	0.068	7.05	
30.354	2035578	149249	0.073	7.74	
30.854	1198074	85979	0.072	4.46	18 Nitroglycerin
31.601	1838179	124988	0.068	6.48	
32.588	2260387	136507	0.060	7.08	
32.944	920853	64989	0.071	3.37	$ 1 3,4-Dinitrotoluene
33.284	1887194	106085	0.056	5.50	
34.548	2179889	124476	0.057	6.45	
34.931	1756253	95954	0.055	4.97	
36.424	219	40	0.182	0.00	
36.618	2113	121	0.057	0.00	
37.878	2624218	124643	0.047	6.46	
39.121	2068255	93484	0.045	4.84	
40.648	2957036	125153	0.042	6.49	
41.364	1235991	49440	0.040	2.56	27 PETN
43.411	382	18	0.047	0.00	
44.168	429	24	0.056	0.00	
44.854	1401	55	0.039	0.00	
45.444	2261	71	0.031	0.00	
45.761	710	46	0.065	0.00	
	31844759	1927771		100.000	

Total unknown % height = 75.13

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000011.d\M-000011.d

Date : 26-JAN-2012 22:47

Client ID:

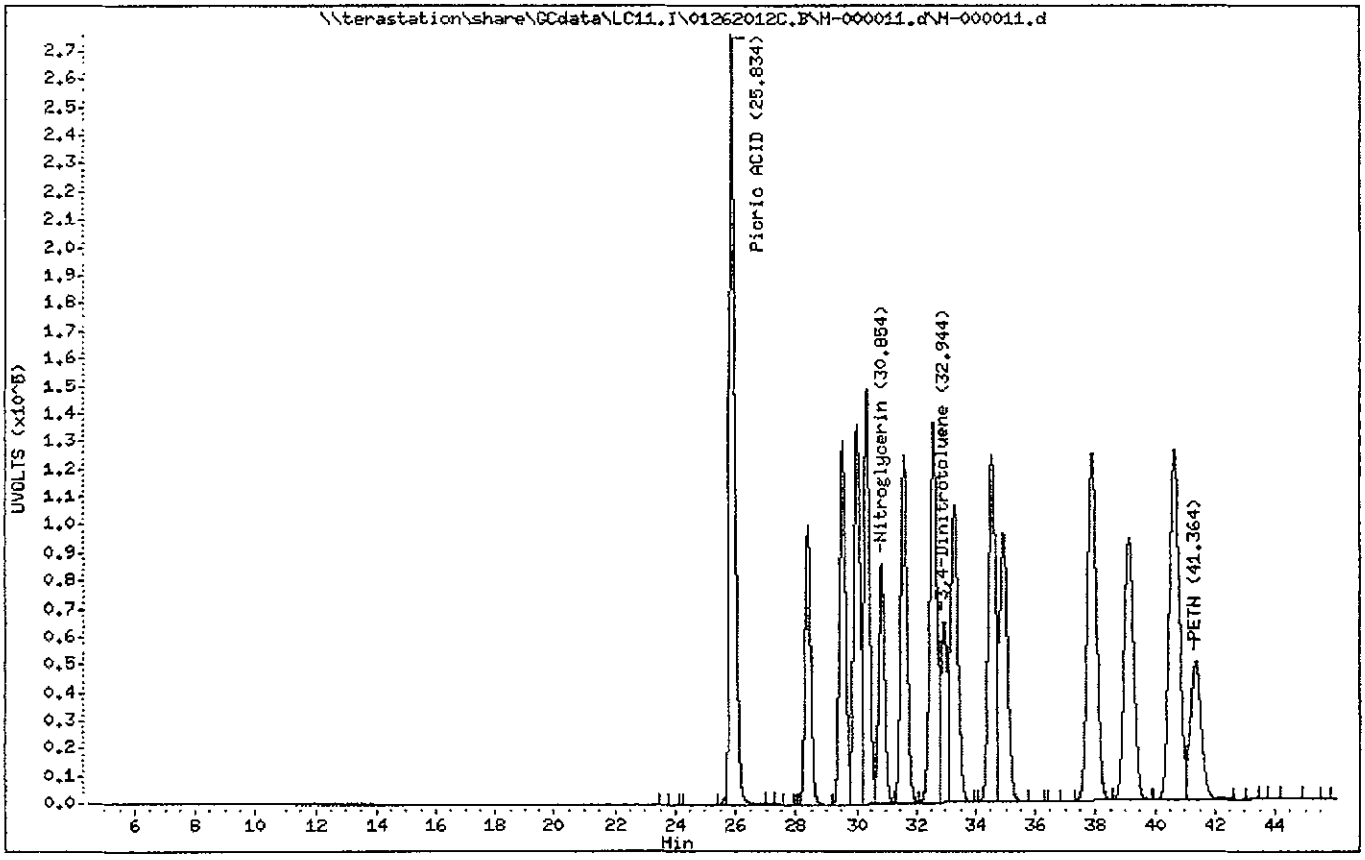
Instrument: LC11.i

Sample Info: STD_08 12GCSV0102 8330 1000 ng/mL;1;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 23:44
Operator : SV
Matrix : NONE

Instrument: LC11
File ID: 01262012C.B/M-000012.d
Sublist: 1_CAL
SpikeList:

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	HMX									
2	RDX									
3	1,3,5-Trinitrobenz	25.730	0.061	30	0.1466					
4	Picric ACID	26.083	0.134	20	0.1699					
5	1,3-Dinitrobenzene									
6	3,5-Dinitroaniline									
7	Nitrobenzene									
8	TETRYL	30.430	0.084	24	0.2140					
9	2,4,6-Trinitrotolu	31.510	-0.083	20	0.1671					
10	4-AM-2,6-DNT									
11	3,4-Dinitrotoluene					33.136	0.195	36	0.2824	
12	2-AM-4,6-DNT									
13	2,6-Dinitrotoluene									
14	2,4-Dinitrotoluene									
15	2-Nitrotoluene									
16	4-Nitrotoluene									
17	3-Nitrotoluene									
18	EGDN									
19	Nitroglycerin									
20	PETN									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 23:44
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.803	51	17	0.332	4.17	
21.933	56	14	0.250	3.43	
22.533	172	36	0.210	8.84	
24.620	87	17	0.195	4.17	
24.853	177	46	0.260	11.30	
24.970	504	53	0.105	13.09	
25.730	467	30	0.064	7.37	10 1,3,5-Trinitrobenze
26.083	350	20	0.057	4.91	9 Picric ACID
26.963	323	39	0.121	9.58	
27.730	176	29	0.164	7.12	
30.430	102	24	0.234	5.89	16 TETRYL
31.510	63	20	0.317	4.91	19 2,4,6-Trinitrotolue
39.463	255	33	0.129	8.10	
40.006	344	29	0.084	7.12	
	3128	407		100.000	

Total unknown % height = 76.92

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d

Date : 26-JAN-2012 23:44

Client ID:

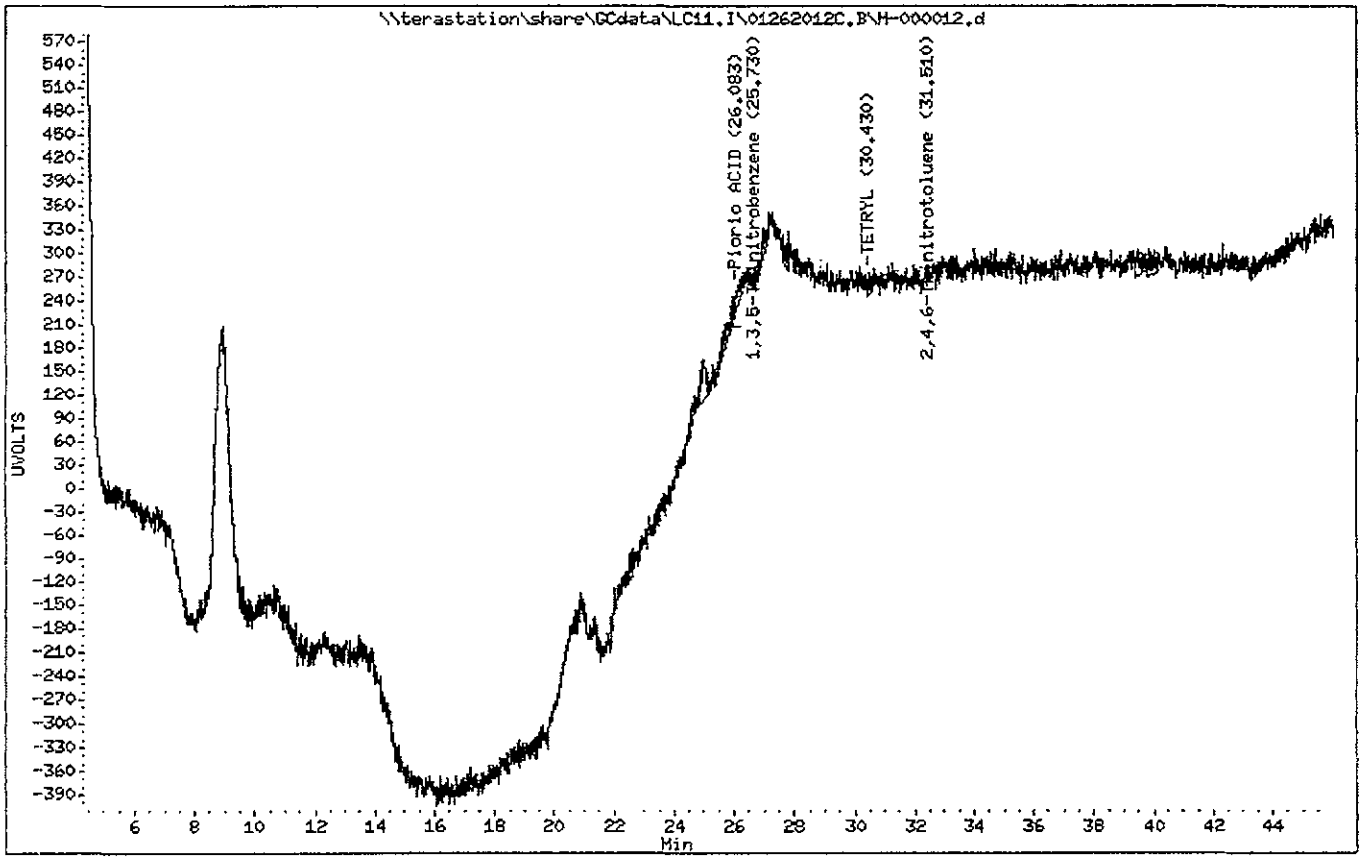
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d\M-00001
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 23:44
Operator : SV Inst ID: LC11.i
Smp Info : BLANK;0;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.340	317	51	0.161	7.96	
23.613	229	32	0.140	5.00	
26.963	194	44	0.227	6.87	
27.510	165	28	0.170	4.37	
30.643	198	42	0.212	6.56	
33.136	165	36	0.218	5.62	$ 1 3,4-Dinitrotoluene
35.823	153	34	0.222	5.31	
35.950	270	46	0.170	7.18	
37.646	167	32	0.192	5.00	
38.573	852	62	0.073	9.75	
39.550	550	28	0.051	4.37	
40.013	479	34	0.071	5.31	
41.993	1472	44	0.030	6.87	
42.753	366	34	0.093	5.31	
44.410	454	39	0.086	6.09	
44.963	484	22	0.045	3.43	
45.506	902	32	0.035	5.00	
	7416	640		100.000	

Total unknown % height = 94.38

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000012.d\M-000012.d

Date : 26-JAN-2012 23:44

Client ID:

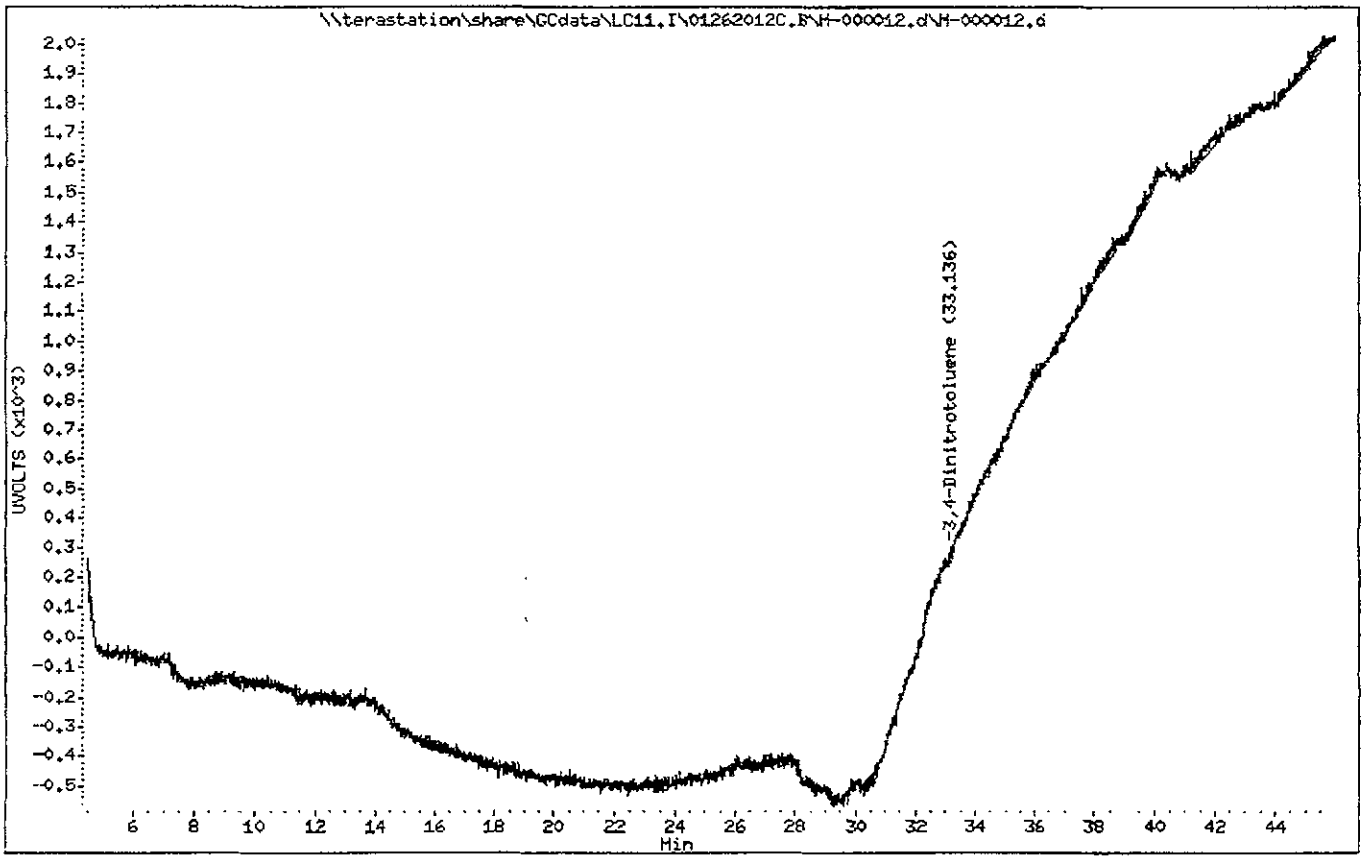
Instrument: LC11.i

Sample Info: BLANK;0;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_MRL 11GCSV0468 8330 5-50 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 00:41 File ID: 01262012C.B/M-000013.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

		Side A						Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	5.00	20.498	0.000	550	5.992	20					
2	RDX	5.00	23.732	0.000	556	6.113	22					
3	1,3,5-Trinitrobenz	5.00	25.675	0.000	1211	5.919	18					
4	Picric ACID	50.0	26.015	0.000	6086	51.71	3.4	26.015	0.000	8958	52.50	5.0
5	1,3-Dinitrobenzene	5.00	28.415	0.000	1214	5.674	13					
6	3,5-Dinitroaniline	5.00	29.545	0.000	801	5.736	15					
7	Nitrobenzene	5.00	30.048	0.000	521	5.607	12					
8	TETRYL	5.00	30.372	0.000	557	4.967	-0.66					
9	2,4,6-Trinitrotolu	5.00	31.588	0.000	603	5.037	0.74					
10	4-AM-2,6-DNT	5.00	32.585	0.000	552	5.733	15					
11	3,4-Dinitrotoluene	20.0	32.948	0.000	1302	19.41	-3.0	32.942	0.000	2544	19.96	-0.20
12	2-AM-4,6-DNT	5.00	33.285	0.000	649	6.055	21					
13	2,6-Dinitrotoluene	5.00	34.555	0.000	428	5.766	15					
14	2,4-Dinitrotoluene	5.00	34.938	0.000	696	5.703	14					
15	2-Nitrotoluene	5.00	37.872	0.000	301	5.687	14					
16	4-Nitrotoluene	5.00	39.115	0.000	371	5.878	18					
17	3-Nitrotoluene	5.00	40.632	0.000	366	5.834	17					
18	EGDN	5.00										
19	Nitroglycerin	20.0						30.852	0.000	1659	19.98	-0.10
20	PETN	20.0						41.352	0.000	1052	21.94	9.7

MRL passes S:N>5:1

TRM 1/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:23

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 00:41
Operator : SV Inst ID: LC11.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;
Misc Info : MRL;9;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:22 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.498	4705	550	0.117	3.23		4 HMX
22.902	129	26	0.201	0.15		
23.732	5437	556	0.102	3.27		7 RDX
24.018	61	26	0.428	0.15		
25.675	11871	1211	0.102	7.12		10 1,3,5-Trinitrobenze
26.015	59332	6086	0.103	35.92		9 Picric ACID
26.865	241	32	0.133	0.18		
28.415	13939	1214	0.087	7.14		13 1,3-Dinitrobenzene
29.545	10170	801	0.079	4.71		15 3,5-Dinitroaniline
30.048	6779	521	0.077	3.06		17 Nitrobenzene
30.372	7281	557	0.077	3.27		16 TETRYL
30.908	218	41	0.188	0.24		
31.588	8832	603	0.068	3.54		19 2,4,6-Trinitrotolue
32.585	8436	552	0.065	3.24		20 4-AM-2,6-DNT
32.948	20322	1302	0.064	7.66	$	1 3,4-Dinitrotoluene
33.285	10192	649	0.064	3.81		21 2-AM-4,6-DNT
34.555	7217	428	0.059	2.51		22 2,6-Dinitrotoluene
34.938	12242	696	0.057	4.09		23 2,4-Dinitrotoluene
36.348	373	42	0.113	0.24		
37.872	6284	301	0.048	1.77		24 2-Nitrotoluene
39.115	8064	371	0.046	2.18		25 4-Nitrotoluene
40.632	8727	366	0.042	2.15		26 3-Nitrotoluene
42.312	488	29	0.059	0.17		
42.595	539	34	0.063	0.20		
	211879	16994		100.000		

Total unknown % height = 1.330

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d

Date : 27-JAN-2012 00:41

Client ID:

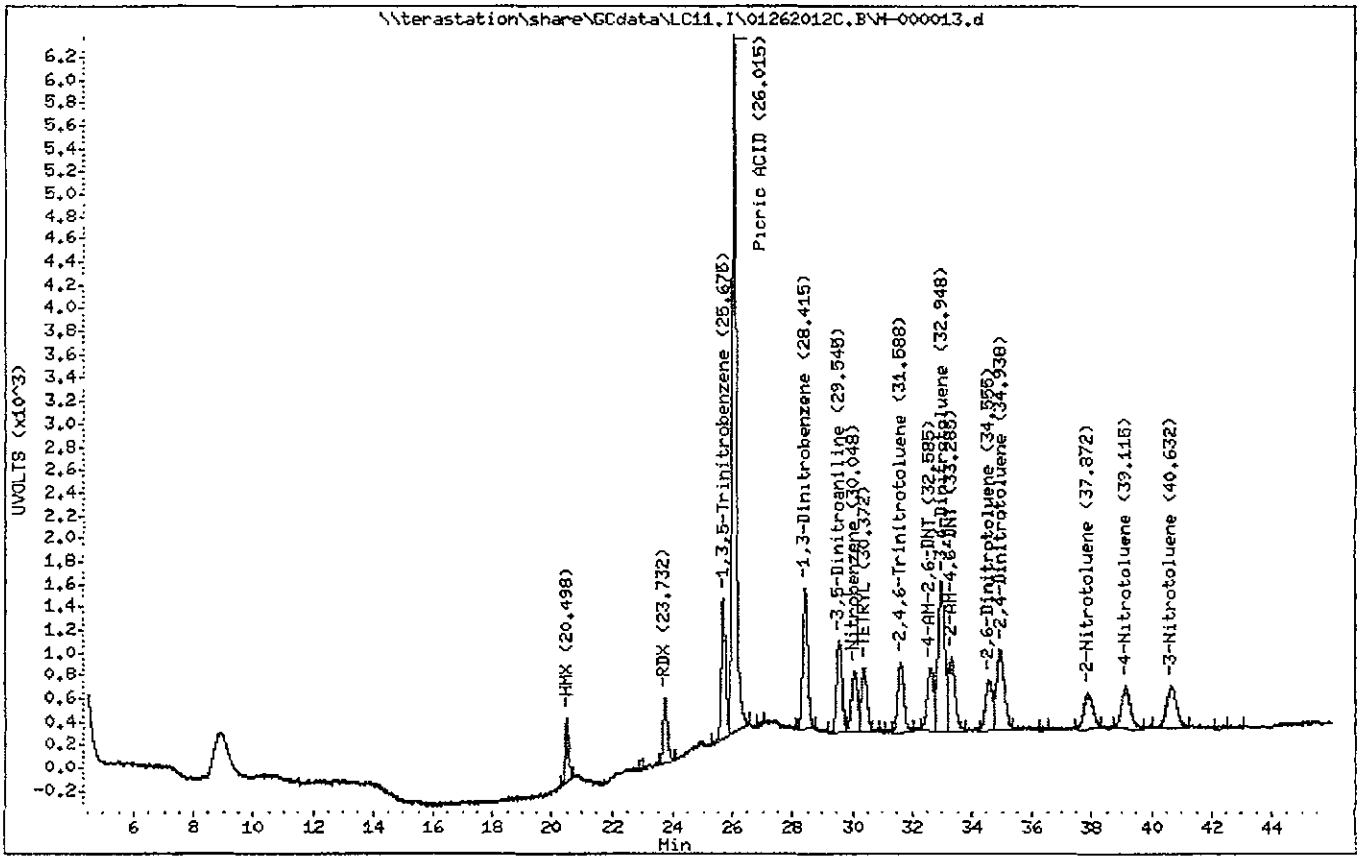
Instrument: LC11.i

Sample Info: STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-00001
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 00:41
Operator : SV Inst ID: LC11.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;
Misc Info : MRL;9;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.355	208	36	0.173	0.15	
26.015	86518	8958	0.104	38.92	9 Picric ACID
27.968	496	54	0.109	0.23	
28.405	3306	655	0.198	2.83	
29.545	9314	780	0.084	3.37	
30.048	9932	804	0.081	3.48	
30.362	8326	655	0.079	2.83	
30.852	21671	1659	0.077	7.18	18 Nitroglycerin
31.612	8597	618	0.072	2.67	
32.245	186	27	0.145	0.11	
32.581	13695	880	0.064	3.81	
32.942	39703	2544	0.064	11.01	$ 1 3,4-Dinitrotoluene
33.285	10409	687	0.066	2.97	
33.721	284	44	0.155	0.19	
34.568	12319	750	0.061	3.24	
34.932	10323	575	0.056	2.49	
35.712	319	58	0.182	0.25	
36.361	224	41	0.183	0.17	
37.875	16522	741	0.045	3.20	
39.122	14754	566	0.038	2.45	
40.118	2663	105	0.039	0.45	
40.632	18287	757	0.041	3.27	
41.352	26893	1052	0.039	4.55	27 PETN
45.111	483	42	0.087	0.18	
	315432	23088		100.000	

Total unknown % height = 38.34

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000013.d\M-000013.d

Date : 27-JAN-2012 00:41

Client ID:

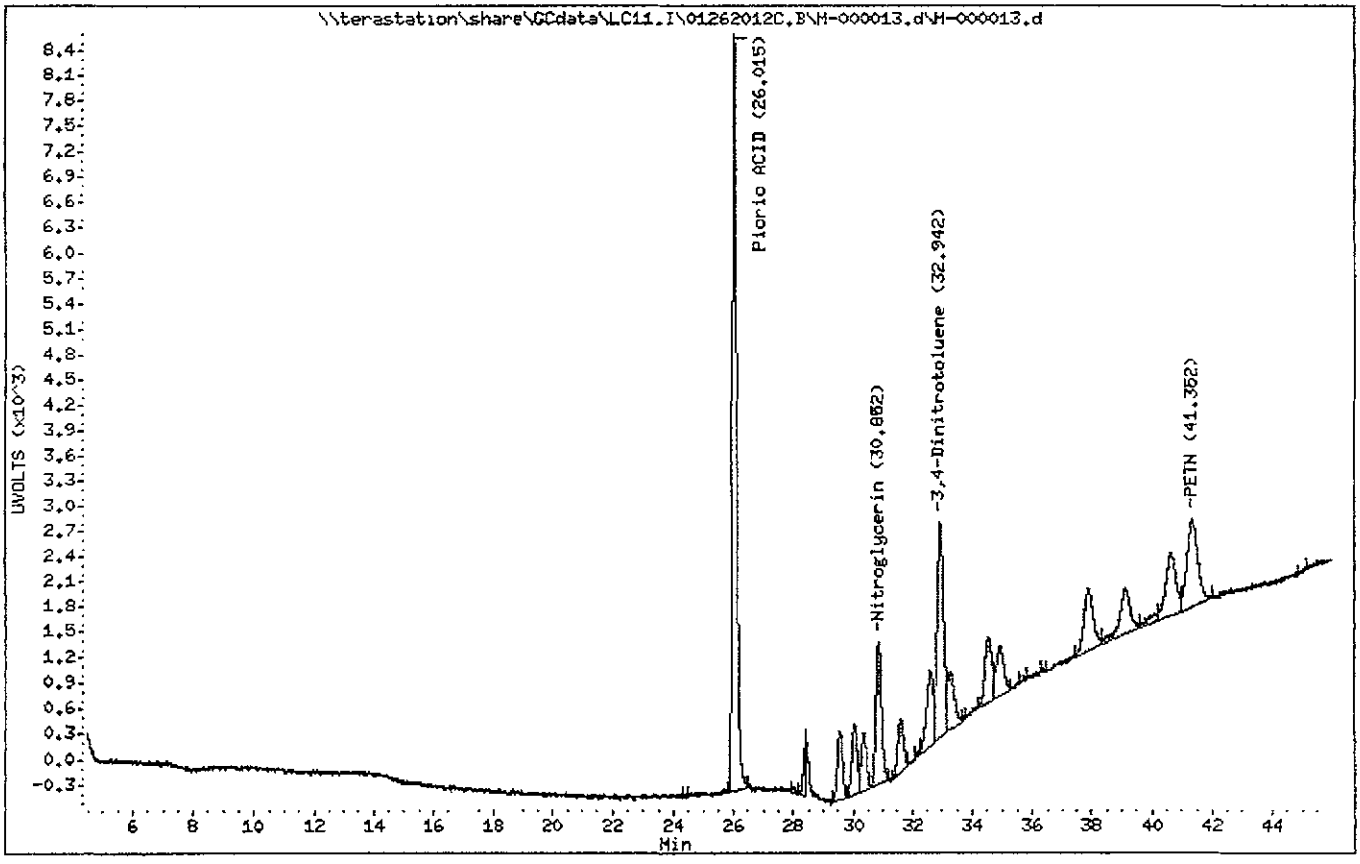
Instrument: LC11.I

Sample Info: STD_MRL 11GCSV0468 8330 5-50 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200 ng/mL Instrument: LC11
Analyzed : 27-JAN-2012 01:38 File ID: 01262012C.B/M-000014.d
Operator : SV Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.492	0.000	19981	217.7	8.9					
2	RDX	200	23.726	0.000	19040	209.3	4.7					
3	1,3,5-Trinitrobenz	200	25.669	0.000	42142	206.0	3.0					
4	Picric ACID	500	25.949	0.000	59562	506.0	1.2	25.949	0.000	87153	510.8	2.2
5	1,3-Dinitrobenzene	200	28.409	0.000	42353	198.0	-1.0					
6	3,5-Dinitroaniline	200	29.542	0.000	29363	210.3	5.2					
7	Nitrobenzene	200	30.026	0.000	19145	206.0	3.0					
8	TETRYL	200	30.346	0.000	23886	213.0	6.5					
9	2,4,6-Trinitrotolu	200	31.592	0.000	24900	208.0	4.0					
10	4-AM-2,6-DNT	200	32.586	0.000	19050	197.8	-1.1					
11	3,4-Dinitrotoluene	200	not spiked.									
12	2-AM-4,6-DNT	200	33.282	0.000	21564	201.2	0.60					
13	2,6-Dinitrotoluene	200	34.539	0.000	14974	201.7	0.85					
14	2,4-Dinitrotoluene	200	34.929	0.000	24852	203.6	1.8					
15	2-Nitrotoluene	200	37.872	0.000	10714	202.4	1.2					
16	4-Nitrotoluene	200	39.116	0.000	13065	207.0	3.5					
17	3-Nitrotoluene	200	40.642	0.000	12888	205.4	2.7					
18	EGDN	200										
19	Nitroglycerin	200						30.852	0.000	18822	226.6	13
20	PETN	200						41.352	0.000	10640	222.0	11

ICV passes ± 15%.
TCM 1/31/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/31/2012 11:24

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 01:38
Operator : SV Inst ID: LC11.i
Smp Info : STD_ICV 11GCSV0515 8330 200 ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.m
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.969	1096	116	0.106	0.02	
20.492	179879	19981	0.111	5.01	4 HMX
21.939	144	32	0.223	0.00	
22.039	147	47	0.319	0.01	
22.649	103	25	0.243	0.00	
22.839	108	18	0.167	0.00	
23.726	193813	19040	0.098	4.78	7 RDX
24.482	86	25	0.290	0.00	
25.669	406315	42142	0.104	10.58	10 1,3,5-Trinitrobenze
25.949	623312	59562	0.096	15.07	9 Picric ACID
27.109	8930	360	0.040	0.09	
27.679	2663	155	0.058	0.03	
28.409	504323	42353	0.084	10.63	13 1,3-Dinitrobenzene
29.542	371162	29363	0.079	7.37	15 3,5-Dinitroaniline
30.026	248470	19145	0.077	4.80	17 Nitrobenzene
30.346	315575	23886	0.076	5.99	16 TETRYL
31.592	356419	24900	0.070	6.25	19 2,4,6-Trinitrotolue
32.586	295976	19050	0.064	4.78	20 4-AM-2,6-DNT
33.282	353142	21564	0.061	5.41	21 2-AM-4,6-DNT
34.539	242874	14974	0.062	3.75	22 2,6-Dinitrotoluene
34.929	448275	24852	0.055	6.23	23 2,4-Dinitrotoluene
36.962	124	29	0.234	0.00	
37.872	216021	10714	0.050	2.69	24 2-Nitrotoluene
39.116	278921	13065	0.047	3.28	25 4-Nitrotoluene
40.642	294046	12888	0.044	3.23	26 3-Nitrotoluene
	5341922	398286		100.000	

Total unknown % height = 0.1500

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d

Date : 27-JAN-2012 01:38

Client ID:

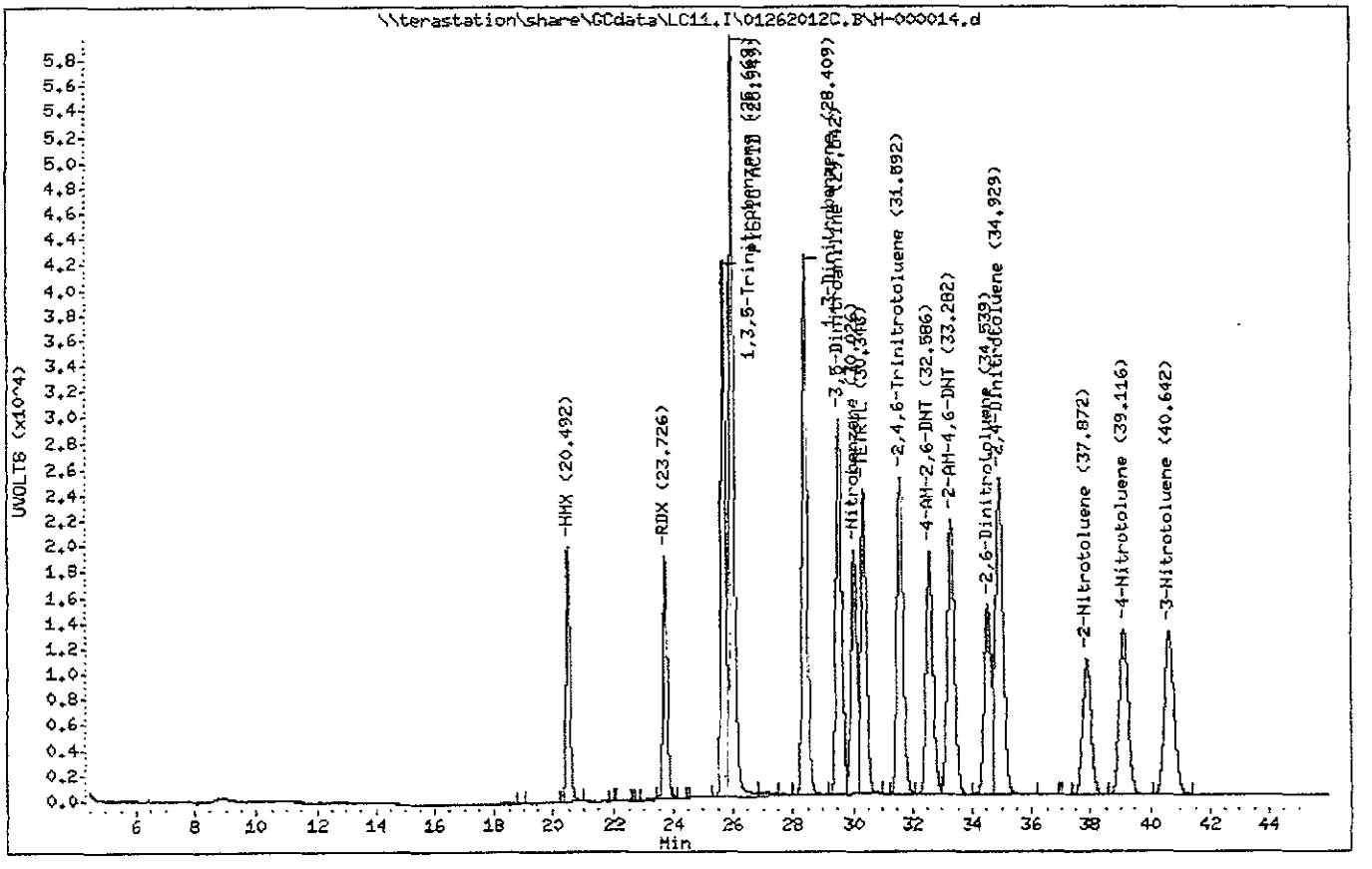
Instrument: LC11.I

Sample Info: STD_ICV 11GCSV0515 8330 200 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01262012C.B\M-000014.d\M-00001
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 01:38
Operator : SV Inst ID: LC11.i
Smp Info : STD_ICV 11GCSV0515 8330 200 ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01262012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.616	216	41	0.190	0.00	
23.716	280	50	0.179	0.01	
25.676	5286	593	0.112	0.13	
25.949	888625	87153	0.098	20.52	9 Picric ACID
26.839	454	77	0.170	0.01	
27.502	214	44	0.205	0.01	
28.409	260132	21892	0.084	5.12	
29.542	376766	29886	0.079	6.99	
30.026	401640	30773	0.077	7.19	
30.346	420503	32117	0.076	7.51	
30.852	252639	18822	0.075	4.40	18 Nitroglycerin
31.592	378104	26545	0.070	6.20	
32.586	436855	28082	0.064	6.56	
33.282	364397	22255	0.061	5.20	
34.102	848	104	0.123	0.02	
34.539	436839	26050	0.060	6.09	
34.929	358555	20171	0.056	4.71	
37.872	528095	26136	0.049	6.11	
39.116	424115	19726	0.047	4.61	
40.642	602944	26248	0.044	6.13	
41.352	266750	10640	0.040	2.48	27 PETN
43.399	450	28	0.062	0.00	
44.299	415	38	0.092	0.00	
45.396	1695	26	0.015	0.00	
	6406816	427497		100.000	

Total unknown % height = 72.60

Data File: \\terastation\share\GCdata\LC11.I\01262012C.B\H-000014.d\H-000014.d

Date : 27-JAN-2012 01:38

Client ID:

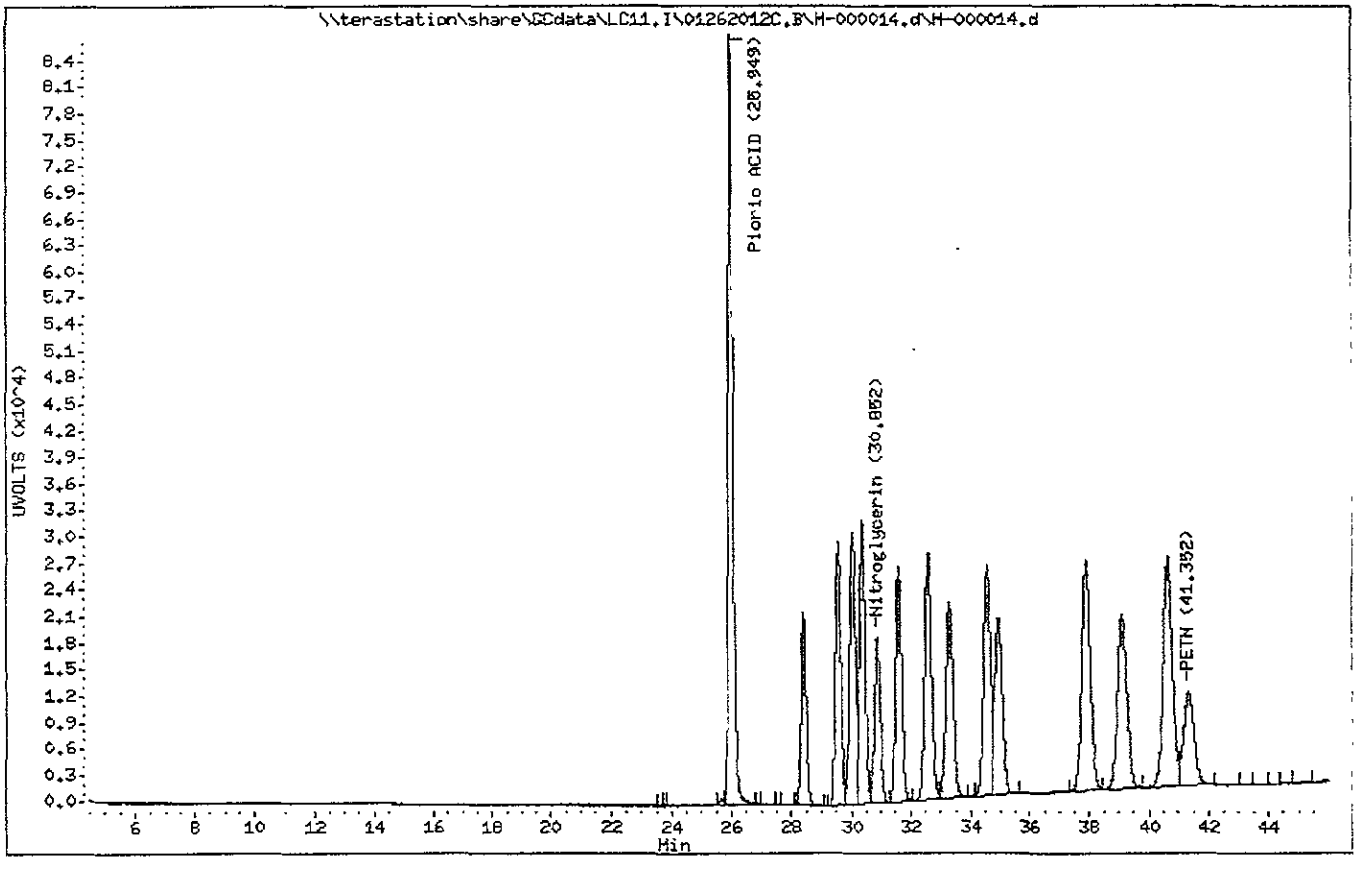
Instrument: LC11.I

Sample Info: STD_ICV 11GCSW0515 8330 200 ng/mL;2;

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : Blank
Analyzed : 30-JAN-2012 15:52
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000003.d
Sublist: 2_CALMET

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX	21.902	-0.062	13	0.1201					

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 10:19

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 15:52
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.902	78	13	0.167	4.36	5 MNX
24.448	51	17	0.331	5.70	
25.888	487	28	0.058	9.39	
26.955	275	32	0.116	10.73	
27.648	115	32	0.279	10.73	
28.592	343	33	0.096	11.07	
31.285	195	39	0.200	13.13	
32.642	89	26	0.291	8.72	
33.468	270	27	0.100	9.06	
36.508	184	27	0.146	9.06	
45.265	109	24	0.220	8.05	
	2196	298		100.000	

Total unknown % height = 95.64

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000003.d

Page 2

Date : 30-JAN-2012 15:52

Client ID:

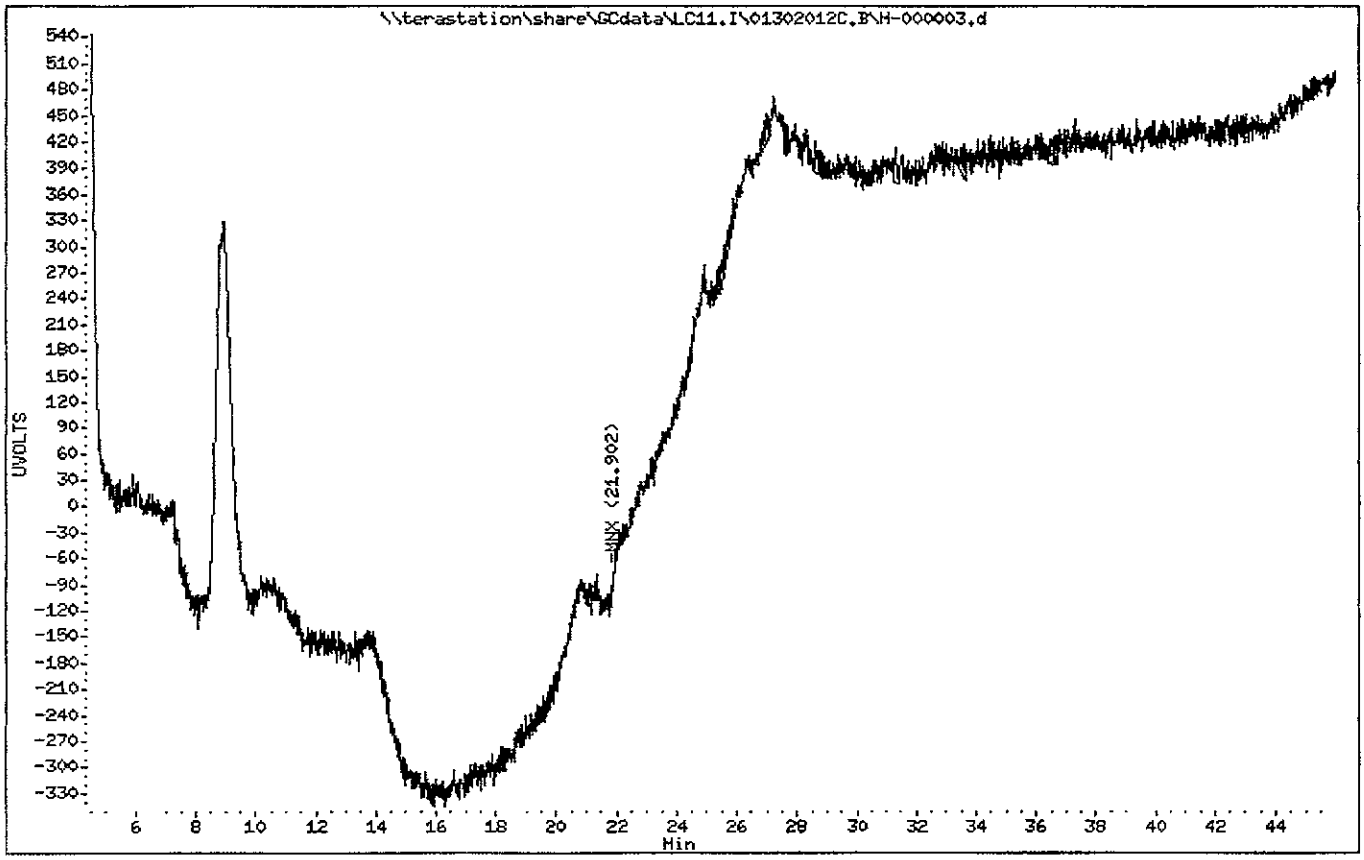
Instrument: LC11.i

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d\M-00000
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 15:52
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.648	161	50	0.310	5.91	
30.252	208	39	0.187	4.61	
31.482	215	53	0.247	6.27	
32.312	162	25	0.155	2.95	
32.655	163	29	0.178	3.43	
33.035	170	41	0.241	4.85	
34.042	167	26	0.156	3.07	
34.915	391	73	0.187	8.74	
35.025	247	52	0.211	6.15	
35.215	270	47	0.174	5.56	
35.672	340	50	0.147	5.91	
36.032	153	43	0.281	5.08	
38.012	200	46	0.230	5.44	
38.508	438	32	0.073	3.78	
39.485	307	36	0.117	4.26	
39.955	492	37	0.075	4.37	
41.788	666	33	0.050	3.90	
43.898	472	51	0.108	6.03	
44.185	317	31	0.098	3.66	
45.272	1445	51	0.035	6.03	
	6985	845		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000003.d\M-000003.d

Date : 30-JAN-2012 15:52

Client ID:

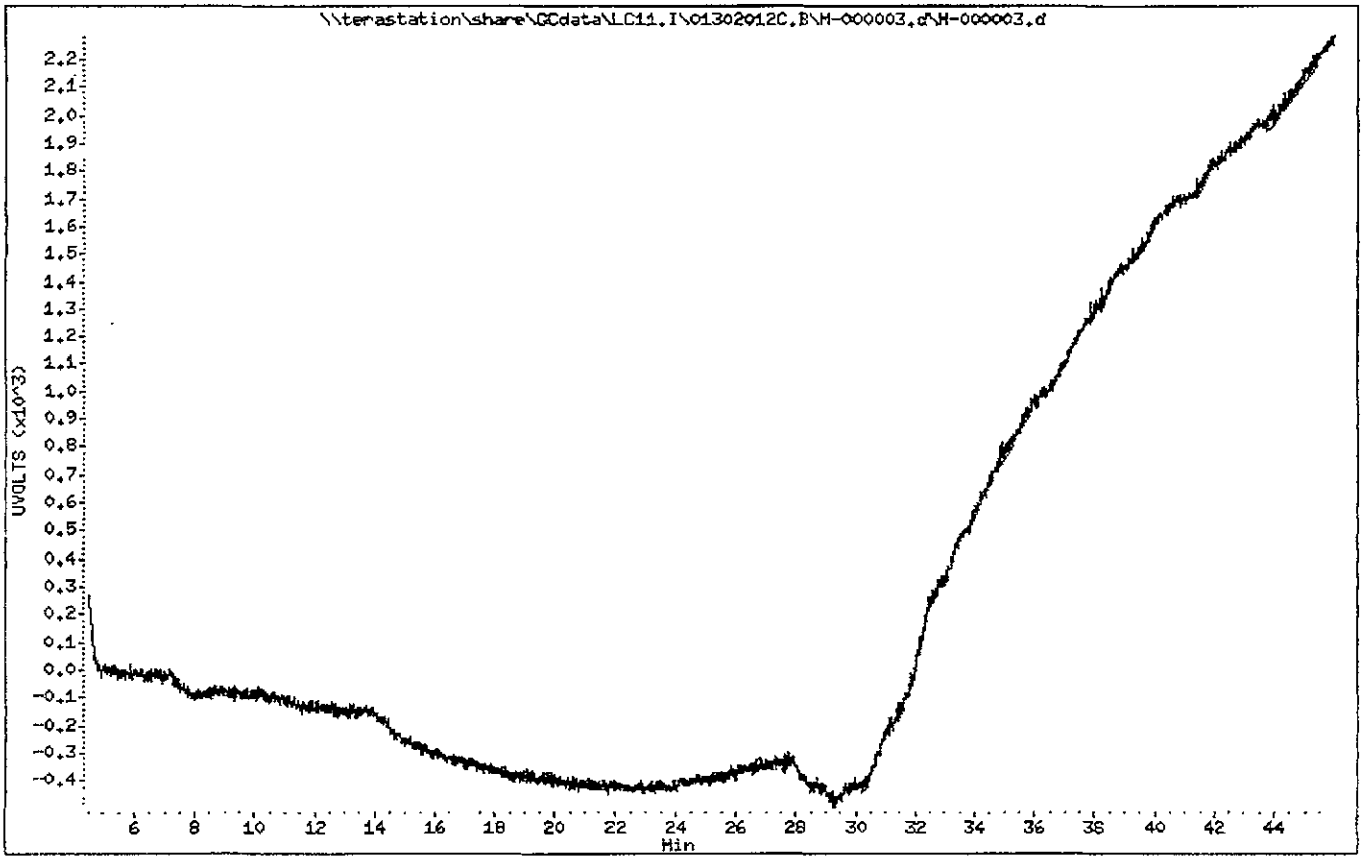
Instrument: LC11.1

Sample Info: Blank;0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_03 E110811F METAB ICAL
Analyzed : 30-JAN-2012 16:49
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000004.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	20.0	15.459	0.000	1074	53.70000				
2	DNX	20.0	19.209	0.000	1641	82.05000				
3	MNX	20.0	21.973	0.000	1958	97.90000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:10

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d
Lab Smp Id: STD_03 E110811F MET
Inj Date : 30-JAN-2012 16:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 E110811F METAB ICAL ;1
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:10 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 16:49 Cal File: M-000004.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.459	29123	1074	0.037	21.25	2 TNX
19.209	26383	1641	0.062	32.47	3 DNX
21.973	23590	1958	0.083	38.81	5 MNX
23.663	51	20	0.391	0.39	
25.643	776	52	0.067	1.02	
26.029	185	27	0.146	0.53	
26.189	75	27	0.358	0.53	
27.269	92	0	0.000	0.00	
31.003	77	34	0.443	0.67	
35.216	365	34	0.093	0.67	
35.536	267	28	0.105	0.55	
36.509	725	40	0.055	0.79	
37.349	285	36	0.126	0.71	
38.929	222	30	0.135	0.59	
39.329	415	29	0.070	0.57	
39.919	125	23	0.184	0.45	
	82756	5053		100.000	

Total unknown % height = 7.470

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d

Date : 30-JAN-2012 16:49

Client ID:

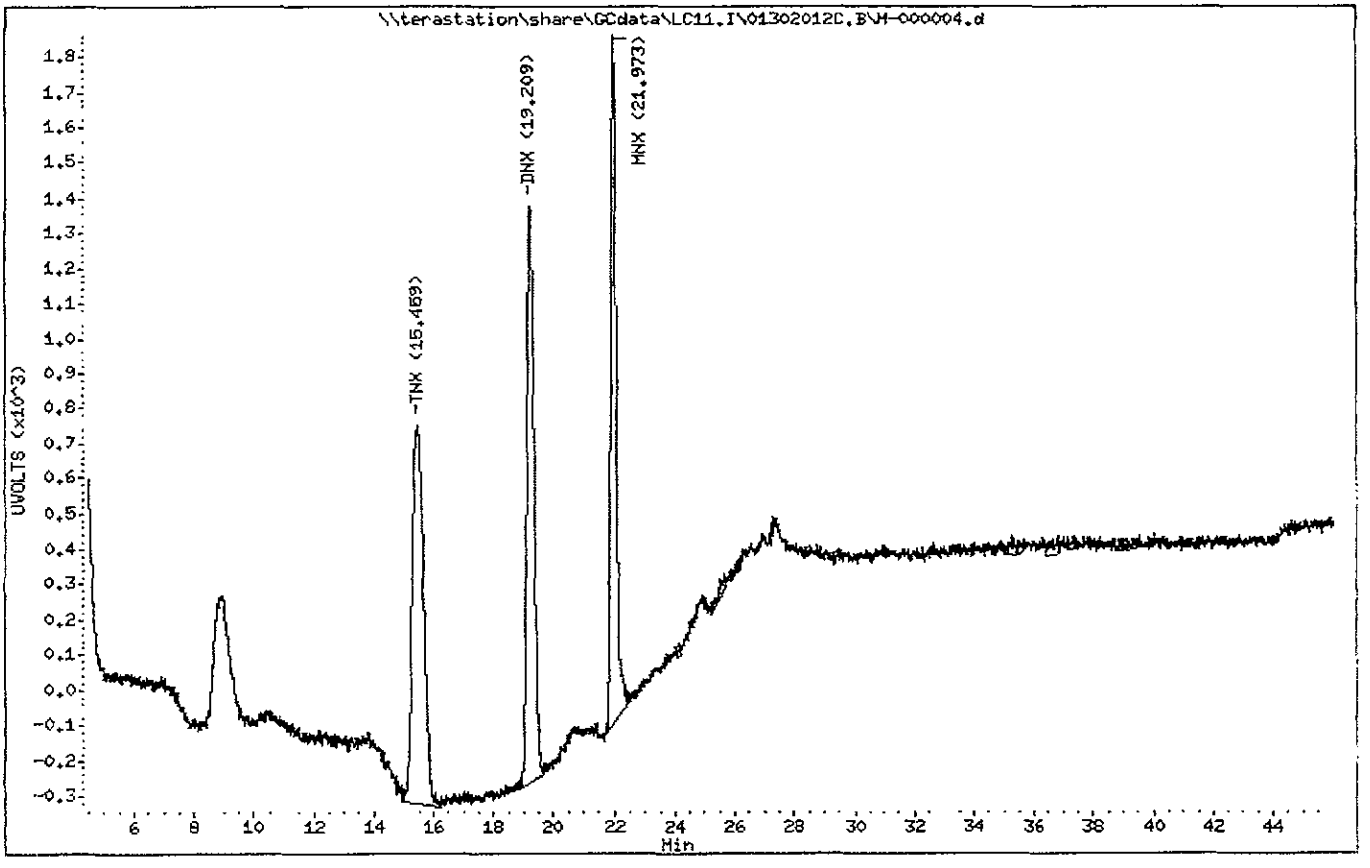
Instrument: LC11.i

Sample Info: STD_03 E110811F METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d\M-00000
Lab Smp Id: STD_03 E110811F MET
Inj Date : 30-JAN-2012 16:49
Operator : SV Inst ID: LC11.i
Smp Info : STD_03 E110811F METAB ICAL ;1
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.059	161	32	0.199	3.61	
29.149	162	39	0.241	4.40	
30.056	244	48	0.197	5.42	
33.433	260	39	0.150	4.40	
34.339	160	49	0.306	5.53	
34.489	250	51	0.204	5.76	
34.883	265	57	0.215	6.44	
34.999	300	47	0.157	5.31	
35.546	151	37	0.244	4.18	
35.733	358	30	0.084	3.38	
38.213	603	40	0.066	4.51	
38.693	772	50	0.065	5.64	
39.493	326	37	0.113	4.18	
40.089	1075	58	0.054	6.65	
41.739	921	54	0.059	6.10	
42.709	331	43	0.130	4.85	
43.446	550	45	0.082	5.08	
44.773	322	28	0.087	3.16	
45.103	591	52	0.088	5.87	
45.409	670	49	0.073	5.53	
	8474	885		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000004.d\M-000004.d

Date : 30-JAN-2012 16:49

Client ID:

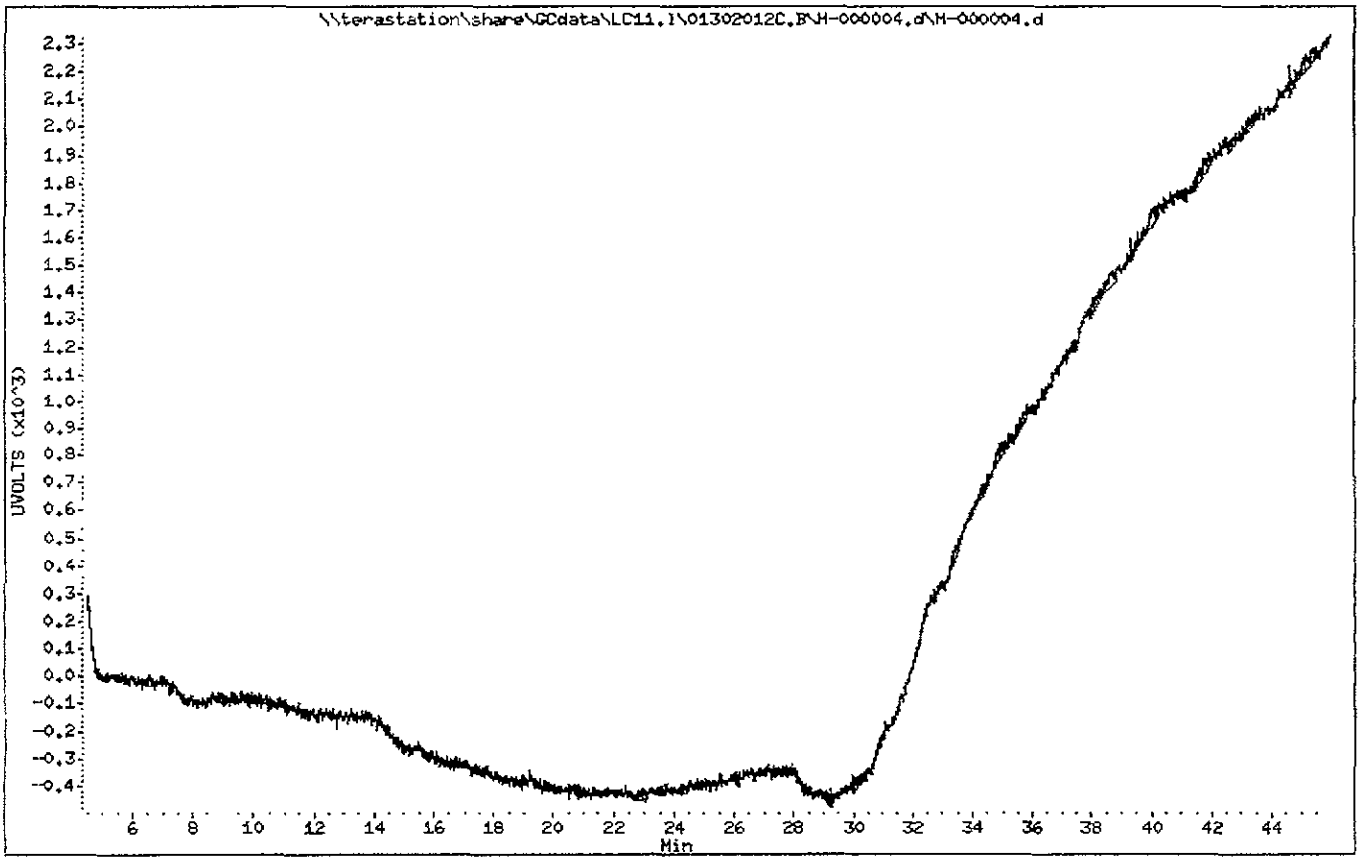
Instrument: LC11.i

Sample Info: STD_03 E110811F METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 E110811G METAB ICAL
Analyzed : 30-JAN-2012 17:46
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000005.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	50.0	15.427	0.000	3037	60.74000				
2	DNX	50.0	19.214	0.000	4628	92.56000				
3	MNX	50.0	21.957	0.000	5404	108.0800				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d
Lab Smp Id: STD_04 E110811G MET
Inj Date : 30-JAN-2012 17:46
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 E110811G METAB ICAL ;1
Misc Info : ;4;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:10 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 17:46 Cal File: M-000005.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.427	76735	3037	0.040	22.18	2 TNX
19.214	70737	4628	0.065	33.80	3 DNX
21.957	60175	5404	0.090	39.54	5 MNX
23.477	136	27	0.198	0.19	
25.630	590	42	0.071	0.30	
26.084	163	35	0.214	0.25	
26.564	838	69	0.082	0.50	
26.930	409	51	0.125	0.37	
27.377	3189	181	0.057	1.32	
28.410	231	26	0.112	0.18	
29.270	132	26	0.197	0.18	
31.474	64	24	0.373	0.17	
32.190	152	22	0.145	0.16	
32.467	220	28	0.127	0.20	
37.764	306	30	0.098	0.21	
38.267	247	33	0.134	0.24	
44.564	441	29	0.066	0.21	
	214766	13692		100.000	

Total unknown % height = 4.480

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d

Date : 30-JAN-2012 17:46

Client ID:

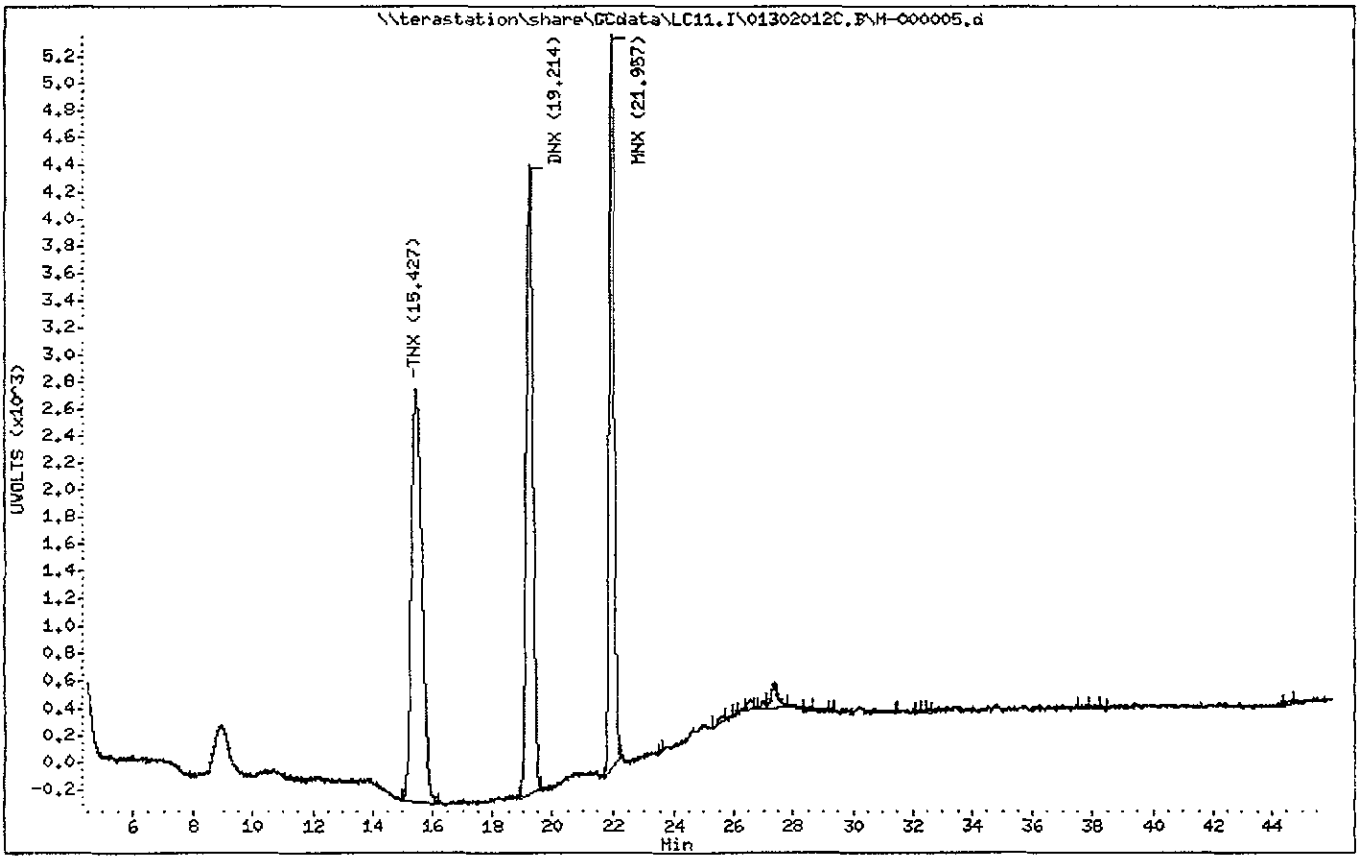
Instrument: LC11.I

Sample Info: STD_04 E110811G METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d\M-00000
Lab Smp Id: STD_04 E110811G MET
Inj Date : 30-JAN-2012 17:46
Operator : SV Inst ID: LC11.i
Smp Info : STD_04 E110811G METAB ICAL ;1
Misc Info : ;4;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.290	160	31	0.193	5.55	
30.257	806	70	0.087	12.61	
31.194	156	24	0.154	4.30	
33.370	172	38	0.220	6.81	
34.074	263	57	0.216	10.21	
35.647	173	20	0.115	3.58	
36.587	230	38	0.165	6.81	
38.990	1271	32	0.025	5.73	
39.523	496	28	0.056	5.01	
40.034	451	35	0.078	6.27	
40.520	194	34	0.175	6.09	
41.100	219	23	0.105	4.12	
41.900	783	40	0.051	7.16	
42.347	221	15	0.068	2.68	
44.274	295	28	0.095	5.01	
45.147	584	45	0.077	8.06	
	6476	558		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000005.d\M-000005.d

Date : 30-JAN-2012 17:46

Client ID:

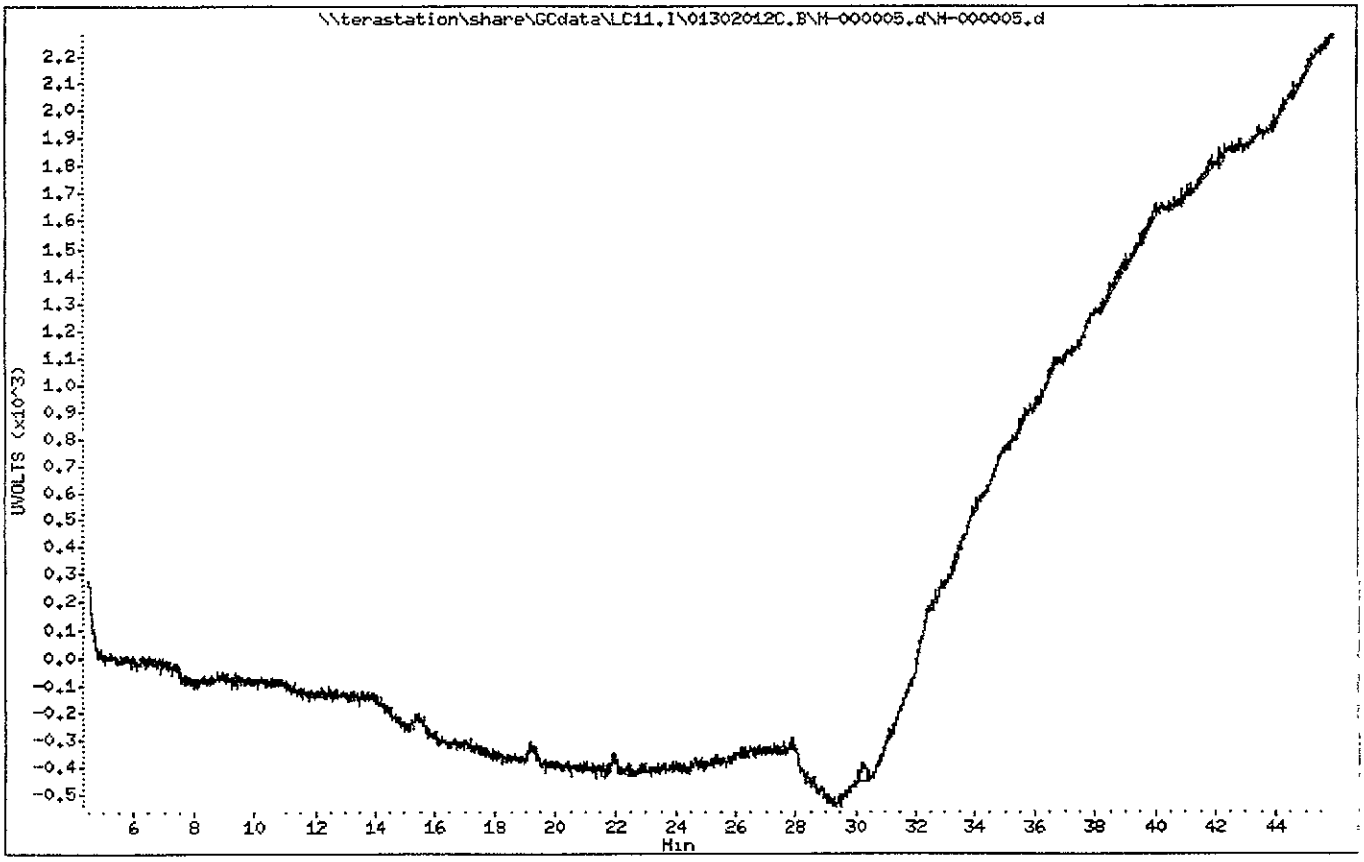
Instrument: LC11.I

Sample Info: STD_04 E110811G METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_05 E110811H METAB ICAL
Analyzed : 30-JAN-2012 18:43
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000006.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	100	15.423	0.000	6133	61.33000				
2	DNX	100	19.207	0.000	9432	94.32000				
3	MNX	100	21.957	0.000	11153	111.5300				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:11

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d
Lab Smp Id: STD_05 E110811H MET
Inj Date : 30-JAN-2012 18:43
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB ICAL ;1
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:11 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 18:43 Cal File: M-000006.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.063	940	126	0.134	0.44	
15.423	160079	6133	0.038	21.85	2 TNX
19.207	147973	9432	0.064	33.60	3 DNX
21.957	127496	11153	0.087	39.86	5 MNX
22.763	73	20	0.275	0.07	
23.693	341	44	0.129	0.15	
24.607	201	39	0.194	0.13	
24.913	76	15	0.197	0.05	
25.557	1677	134	0.080	0.47	
26.537	1947	169	0.087	0.60	
26.943	537	64	0.119	0.22	
27.367	6545	341	0.052	1.21	
27.987	347	39	0.112	0.13	
28.283	128	21	0.165	0.07	
30.063	106	36	0.339	0.12	
30.270	1183	82	0.069	0.29	
31.100	179	30	0.167	0.10	
31.480	156	35	0.224	0.12	
33.000	262	41	0.157	0.14	
33.950	77	22	0.286	0.07	
35.103	156	32	0.205	0.11	
37.203	164	31	0.189	0.11	
42.883	170	28	0.165	0.09	
	450812	28067		100.000	

Total unknown % height = 4.690

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d

Date : 30-JAN-2012 18:43

Client ID:

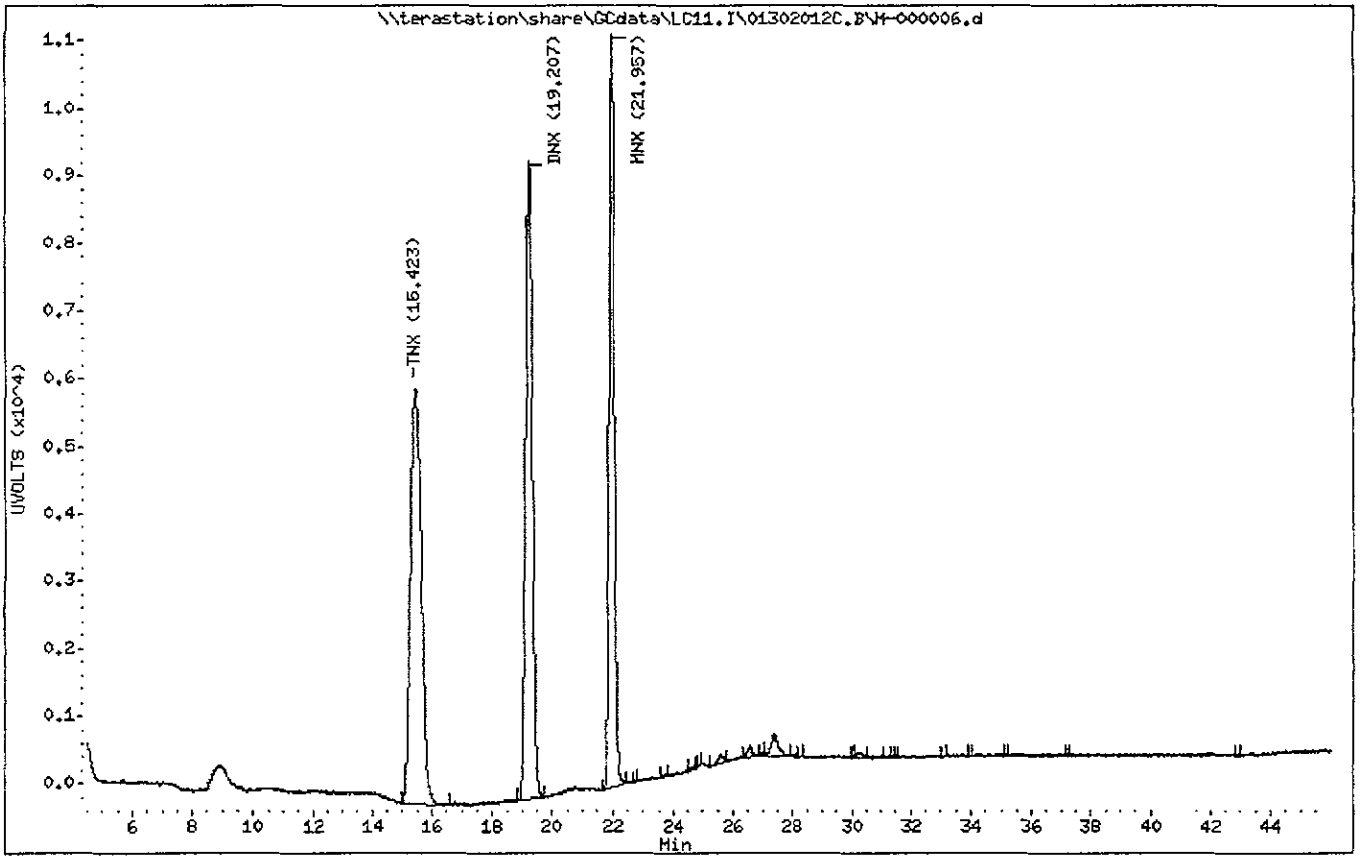
Instrument: LC11.I

Sample Info: STD_05 E110811H METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d\M-00000
Lab Smp Id: STD_05 E110811H MET
Inj Date : 30-JAN-2012 18:43
Operator : SV Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB ICAL ;1
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.590	182	36	0.198	5.48	
27.840	178	43	0.242	6.55	
30.283	2077	188	0.090	28.72	
31.607	257	20	0.078	3.04	
31.737	214	38	0.178	5.79	
32.230	200	29	0.145	4.42	
38.763	717	26	0.036	3.96	
39.416	331	32	0.097	4.87	
39.963	636	50	0.079	7.62	
42.020	1562	53	0.034	8.07	
42.420	1763	79	0.045	12.04	
43.500	474	31	0.065	4.72	
45.490	934	31	0.033	4.72	
	9525	656		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000006.d\M-000006.d

Date : 30-JAN-2012 18:43

Client ID:

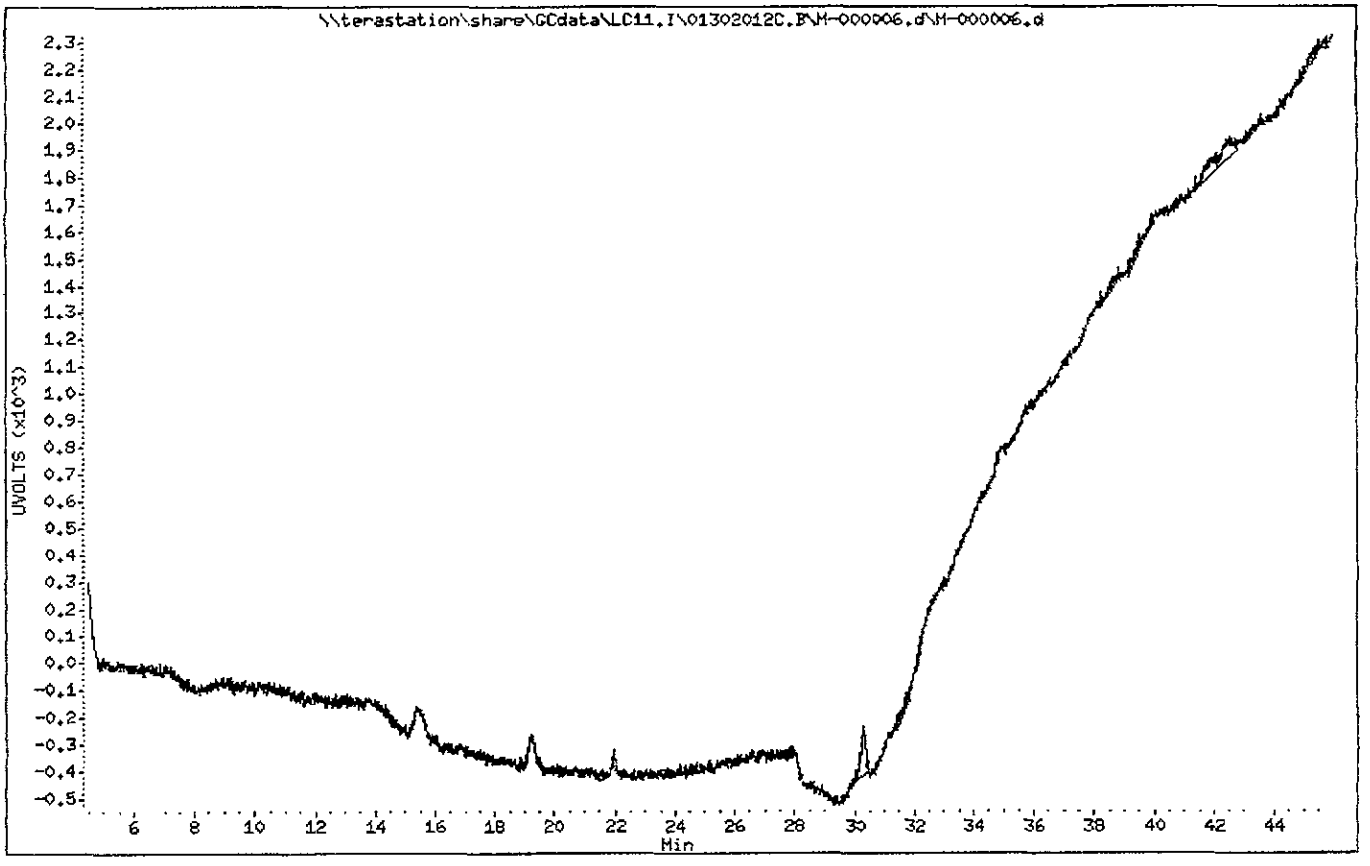
Instrument: LC11.I

Sample Info: STD_05 E110811H METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_06 E110811I METAB ICAL
Analyzed : 30-JAN-2012 19:40
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000007.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	200	15.428	0.000	12311	61.55500				
2	DNX	200	19.211	0.000	18975	94.87500				
3	MNX	200	21.961	0.000	22367	111.8350				

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d
Lab Smp Id: STD_06 E110811I MET
Inj Date : 30-JAN-2012 19:40
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB ICAL;1
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:12 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 19:40 Cal File: M-000007.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.428	319246	12311	0.039	22.22	2 TNX
19.211	295993	18975	0.064	34.26	3 DNX
20.494	86	14	0.163	0.02	
21.961	254847	22367	0.088	40.46	5 MNX
23.708	522	61	0.117	0.11	
24.601	163	19	0.116	0.03	
24.984	162	19	0.117	0.03	
25.548	3272	248	0.076	0.44	
26.544	3979	318	0.080	0.57	
27.381	13225	637	0.048	1.15	
28.584	213	27	0.127	0.04	
29.828	500	44	0.088	0.07	
30.258	2912	173	0.059	0.31	
31.238	378	39	0.103	0.07	
35.748	65	30	0.465	0.05	
36.344	586	39	0.067	0.07	
40.088	428	29	0.068	0.05	
43.561	119	21	0.176	0.03	
44.411	176	12	0.068	0.02	
	896872	55383		100.000	

Total unknown % height = 3.060

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d

Date : 30-JAN-2012 19:40

Client ID:

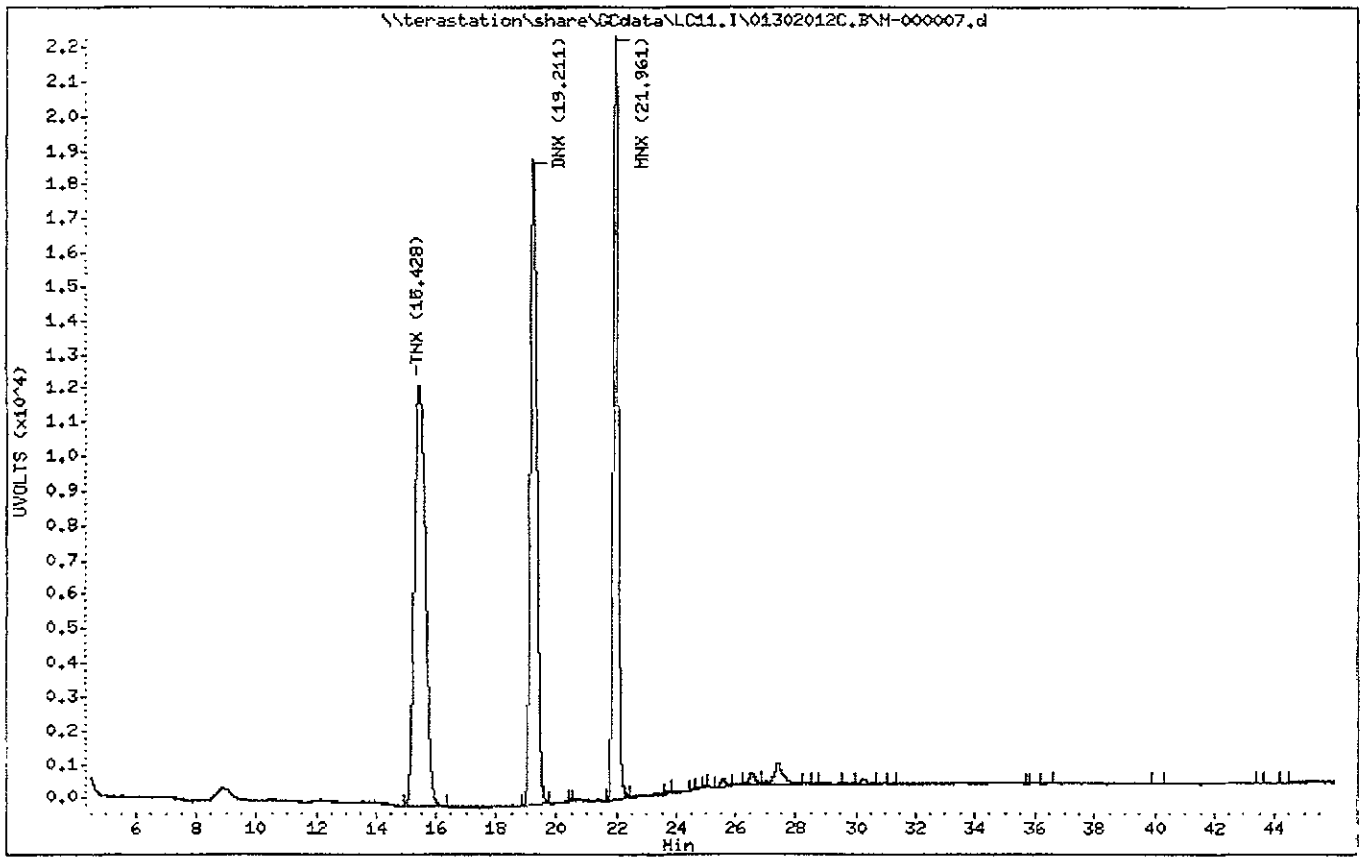
Instrument: LC11.I

Sample Info: STD_06 E110811I METAB ICAL;1

Operator: SW

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000007.d\M-00000
Lab Smp Id: STD_06 E110811I MET
Inj Date : 30-JAN-2012 19:40
Operator : SV Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB ICAL;1
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.834	160	30	0.188	3.12	
25.938	158	58	0.368	6.03	
30.284	6096	418	0.069	43.55	
31.958	150	20	0.133	2.08	
32.648	679	44	0.065	4.57	
34.911	150	31	0.206	3.22	
38.061	572	45	0.079	4.68	
38.761	1045	25	0.024	2.60	
39.578	302	33	0.109	3.43	
40.148	1437	62	0.043	6.45	
41.884	625	38	0.061	3.95	
42.474	1138	61	0.054	6.34	
44.511	993	28	0.028	2.91	
44.854	419	28	0.067	2.91	
45.534	1344	40	0.030	4.16	
	15269	961		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000007.d\H-000007.d

Date : 30-JAN-2012 19:40

Client ID:

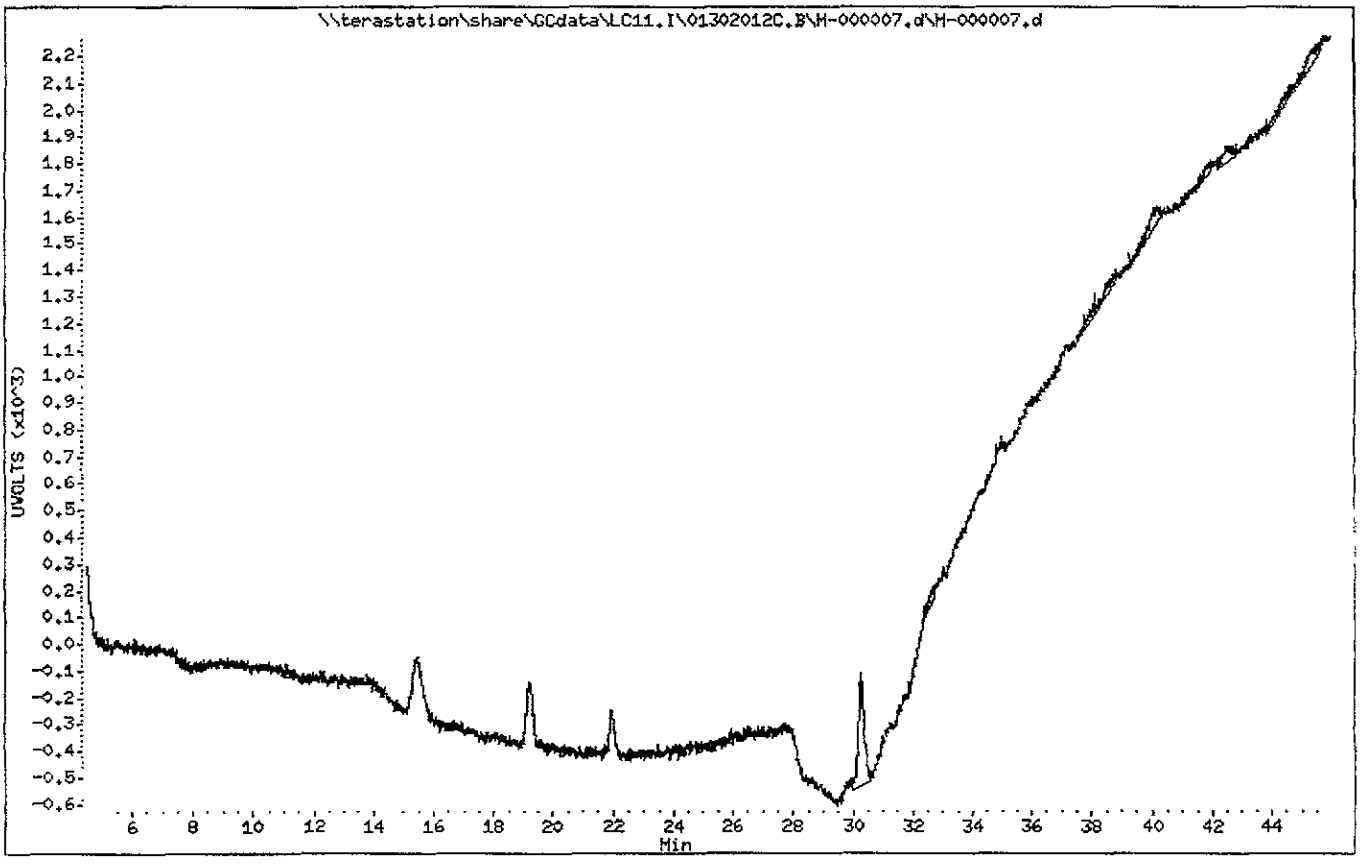
Instrument: LC11.I

Sample Info: STD_06 E110811I METAB ICAL;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_07 E110811J METAB ICAL
Analyzed : 30-JAN-2012 20:37
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000008.d
Sublist: 2_CALMET

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	500	15.400	0.000	28781	57.56200				
2	DNX	500	19.193	0.000	44826	89.65200				
3	MNX	500	21.946	0.000	53602	107.2040				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:13

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Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d
Lab Smp Id: STD_07 E110811J MET
Inj Date : 30-JAN-2012 20:37
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 E110811J METAB ICAL ;1
Misc Info : ;7;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:12 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 20:37 Cal File: M-000008.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.103	2156	143	0.066	0.10	
15.400	801367	28781	0.036	21.89	2 TNX
19.193	741572	44826	0.060	34.09	3 DNX
20.500	111	14	0.126	0.01	
21.946	634539	53602	0.084	40.87	5 MNX
23.743	1751	176	0.101	0.13	
24.833	154	51	0.331	0.03	
25.046	2882	221	0.077	0.16	
25.553	8377	618	0.074	0.47	
26.330	172	31	0.180	0.02	
26.540	8873	757	0.085	0.57	
27.376	25786	1525	0.059	1.15	
29.206	142	30	0.212	0.02	
29.886	333	49	0.147	0.03	
30.263	5546	378	0.068	0.28	
31.570	372	40	0.107	0.03	
32.556	246	25	0.102	0.01	
33.766	148	25	0.169	0.01	
37.930	429	33	0.077	0.02	
38.533	293	28	0.095	0.02	
39.669	120	27	0.225	0.02	
40.496	538	30	0.056	0.02	
42.540	259	40	0.154	0.03	
44.686	231	30	0.130	0.02	
	2236400	131480		100.000	

Total unknown % height = 3.150

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d

Date : 30-JAN-2012 20:37

Client ID:

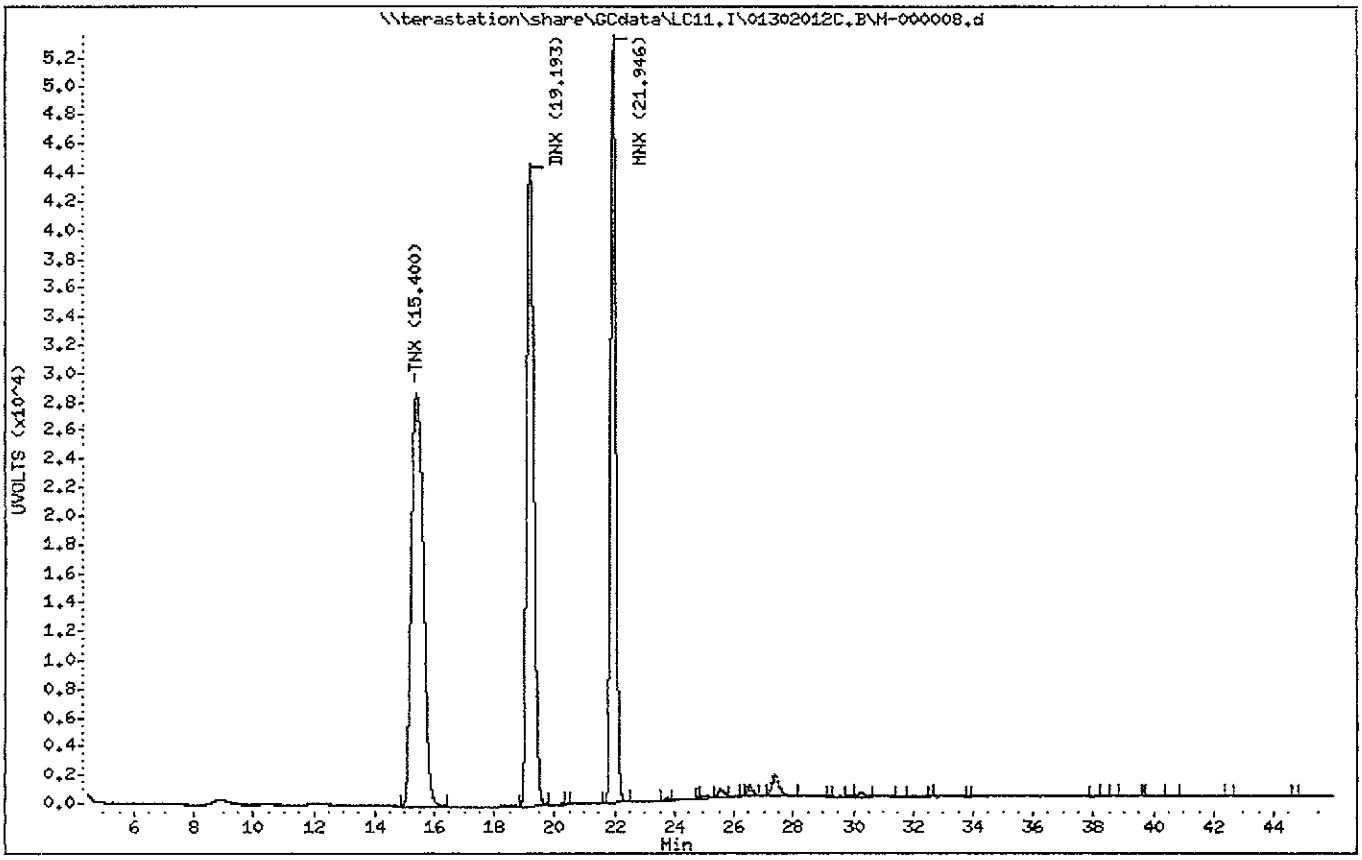
Instrument: LC11.I

Sample Info: STD_07 E110811J METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000008.d\M-00000
Lab Smp Id: STD_07 E110811J MET
Inj Date : 30-JAN-2012 20:37
Operator : SV Inst ID: LC11.i
Smp Info : STD_07 E110811J METAB ICAL ;1
Misc Info : ;7;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.956	4829	387	0.080	18.51	
23.483	249	34	0.136	1.62	
24.383	204	48	0.236	2.29	
24.900	175	35	0.200	1.67	
30.273	13750	981	0.071	47.03	
32.666	152	34	0.224	1.62	
35.266	215	33	0.153	1.57	
36.643	995	74	0.074	3.54	
38.553	349	47	0.135	2.24	
38.863	404	35	0.087	1.67	
39.446	338	25	0.074	1.19	
40.070	4068	149	0.037	7.12	
40.786	1351	49	0.036	2.34	
41.896	887	41	0.046	1.96	
43.360	663	42	0.063	2.00	
44.693	1279	41	0.032	1.96	
45.413	952	35	0.037	1.67	
	30861	2090		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000008.d\H-000008.d

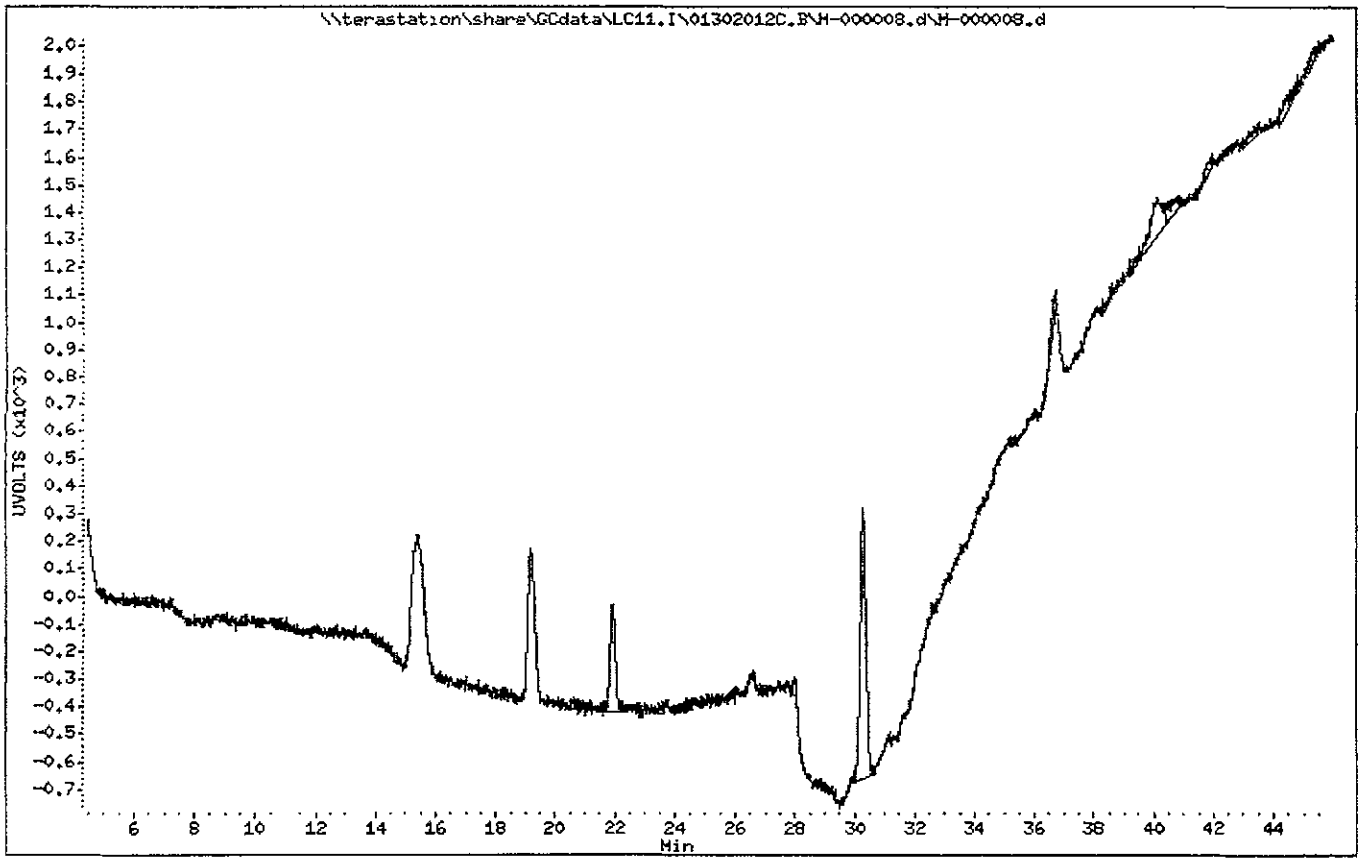
Date : 30-JAN-2012 20:37

Client ID: Instrument: LC11.i

Sample Info: STD_07 E110811J METAB ICAL ;i

Operator: SV

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_08 E110811K METAB ICAL
Analyzed : 30-JAN-2012 21:34
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000009.d
Sublist: 2_CALMET

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	1000	15 422	0.000	62906	62.90600				
2	DNX	1000	19.208	0.000	97071	97.07100				
3	MNX	1000	21.962	0.000	113126	113.1260				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:13

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d
Lab Smp Id: STD_08 E110811K MET
Inj Date : 30-JAN-2012 21:34
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 E110811K METAB ICAL ;1
Misc Info : ;8;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:13 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.422	1606269	62906	0.039	22.36	2 TNX
18.135	94	24	0.255	0.00	
19.208	1481175	97071	0.066	34.50	3 DNX
20.605	1492	115	0.077	0.04	
21.962	1265641	113126	0.089	40.35	5 MNX
23.742	3102	342	0.110	0.12	
24.108	92	24	0.261	0.00	
25.055	5138	446	0.087	0.15	
25.565	16612	1254	0.075	0.44	
26.268	127	21	0.165	0.00	
26.548	19397	1615	0.083	0.57	
27.398	52662	3229	0.061	1.14	
30.285	10849	760	0.070	0.27	
30.868	125	27	0.216	0.00	
31.632	699	55	0.079	0.01	
33.132	104	25	0.241	0.00	
33.462	599	38	0.063	0.01	
35.112	1292	75	0.058	0.02	
36.382	137	35	0.255	0.01	
36.785	203	22	0.108	0.00	
38.105	226	35	0.155	0.01	
38.935	134	19	0.142	0.00	
39.588	77	24	0.310	0.00	
40.965	265	25	0.094	0.00	
44.825	96	18	0.188	0.00	
	4466608	281331		100.000	

Total unknown % height = 2.790

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000009.d

Date : 30-JAN-2012 21:34

Client ID:

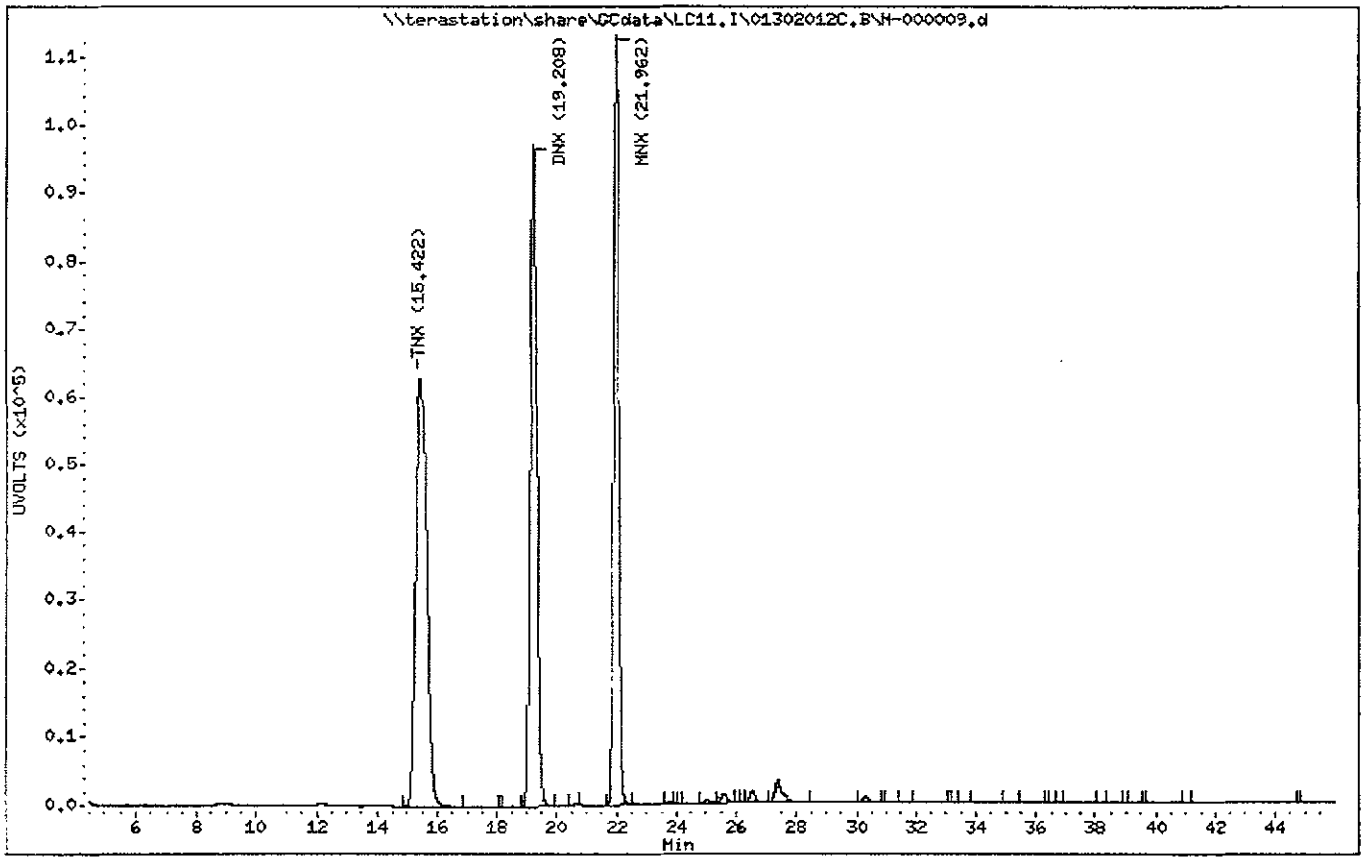
Instrument: LC11.I

Sample Info: STD_08 E110811K METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d\M-00000
Lab Smp Id: STD_08 E110811K MET
Inj Date : 30-JAN-2012 21:34
Operator : SV Inst ID: LC11.i
Smp Info : STD_08 E110811K METAB ICAL ;1
Misc Info : ;8;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.965	9029	797	0.088	21.47	
26.548	1546	165	0.107	4.44	
30.288	28461	2044	0.072	55.15	
31.632	403	57	0.141	1.53	
32.058	165	22	0.133	0.59	
33.498	505	52	0.103	1.40	
35.108	343	35	0.102	0.94	
39.272	346	34	0.098	0.91	
40.075	6063	214	0.035	5.76	
40.642	571	54	0.095	1.45	
41.892	2071	99	0.048	2.66	
42.548	1065	56	0.053	1.50	
44.328	535	45	0.084	1.21	
45.605	1968	37	0.019	0.99	
	53068	3711		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000009.d\M-000009.d

Date : 30-JAN-2012 21:34

Client ID:

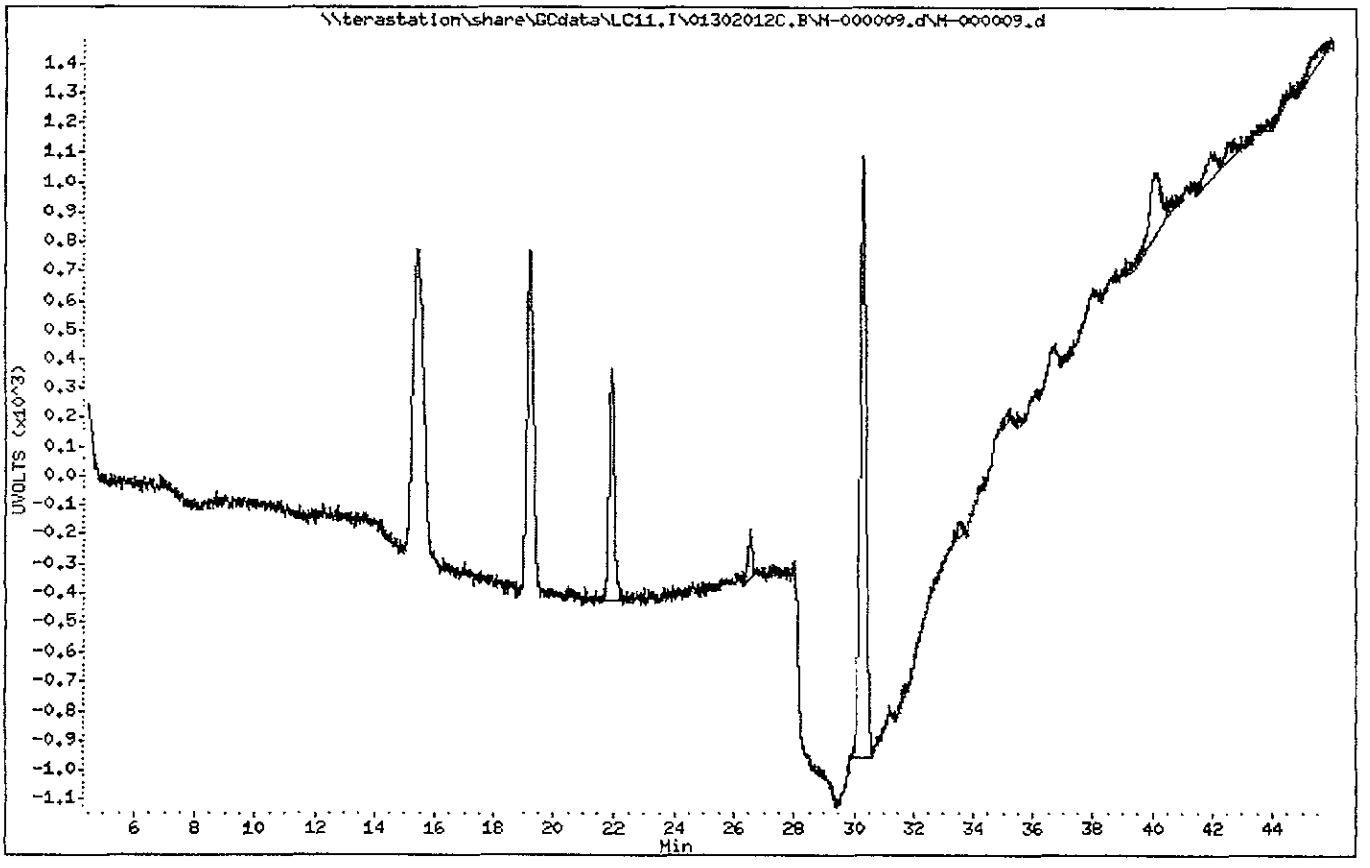
Instrument: LC11.I

Sample Info: STD_08 E110811K METAB ICAL ;1

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : Blank
Analyzed : 30-JAN-2012 22:31
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000010.d
Sublist: 2_CALMET

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:26

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 22:31
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:24 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.227	91	24	0.264	4.19	
24.324	78	25	0.322	4.37	
25.997	273	30	0.110	5.24	
26.904	116	38	0.329	6.64	
28.024	484	33	0.068	5.76	
29.480	129	27	0.210	4.72	
29.620	88	18	0.206	3.14	
30.197	76	30	0.394	5.24	
30.600	600	32	0.053	5.59	
31.977	161	37	0.230	6.46	
32.354	217	27	0.124	4.72	
34.660	394	31	0.079	5.41	
35.600	129	27	0.209	4.72	
37.357	286	41	0.144	7.27	
37.670	354	28	0.079	4.89	
38.894	353	31	0.088	5.41	
39.287	300	29	0.097	5.06	
39.480	169	33	0.195	5.76	
40.367	293	31	0.106	5.41	
	4589	572		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\H-000010.d

Date : 30-JAN-2012 22:31

Client ID:

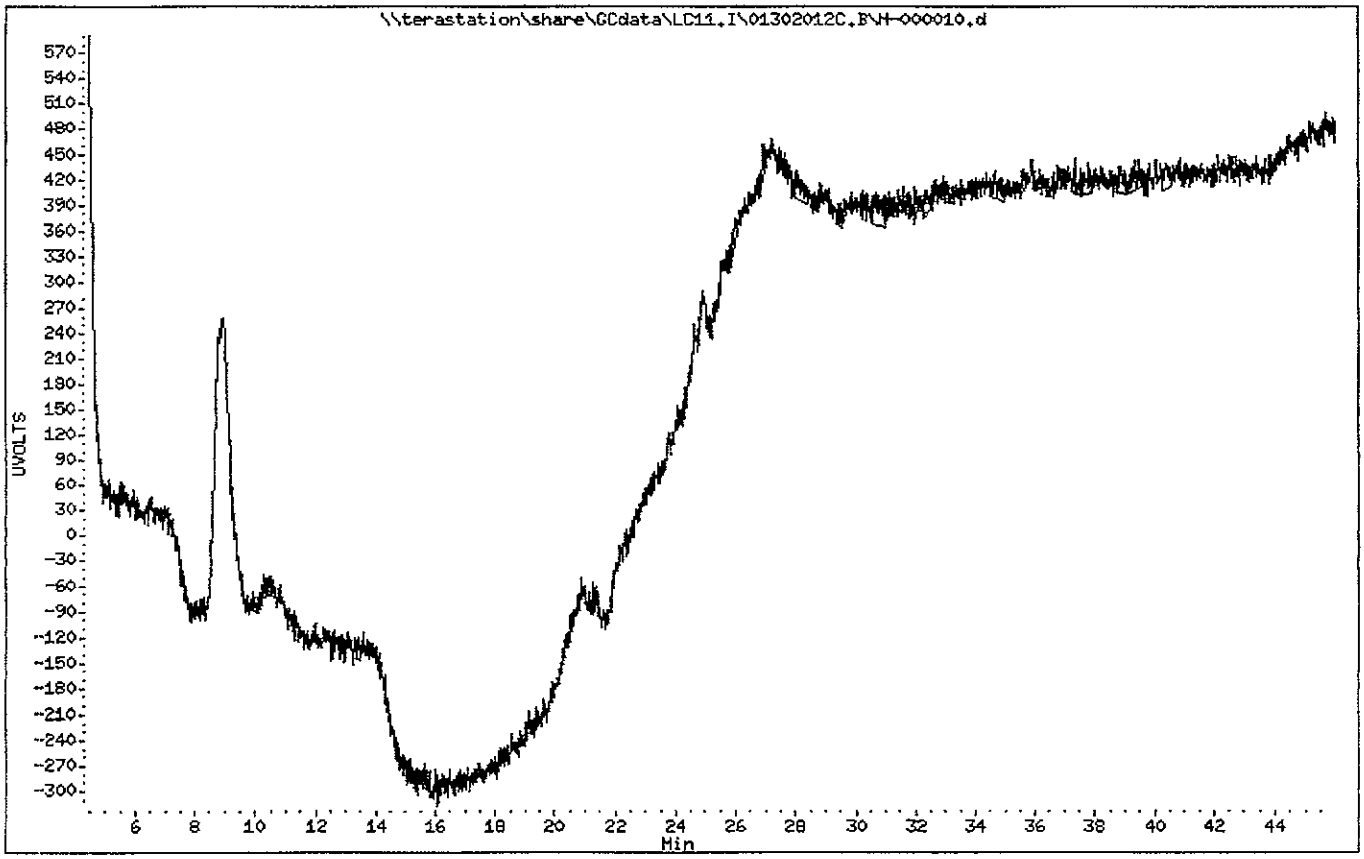
Instrument: LC11.i

Sample Info: Blank:0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d\M-00001
Lab Smp Id: Blank
Inj Date : 30-JAN-2012 22:31
Operator : SV Inst ID: LC11.i
Smp Info : Blank;0
Misc Info : ;;;;;3;2_CALMET.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.640	197	37	0.188	10.00	
27.650	159	35	0.220	9.45	
30.170	217	32	0.147	8.64	
33.494	264	30	0.114	8.10	
35.907	159	36	0.226	9.72	
38.584	353	29	0.082	7.83	
39.450	743	11	0.015	2.97	
40.084	503	33	0.066	8.91	
41.624	271	37	0.137	10.00	
44.400	508	18	0.035	4.86	
44.944	304	31	0.102	8.37	
45.537	293	41	0.140	11.15	
	3971	370		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000010.d\M-000010.d

Date : 30-JAN-2012 22:31

Client ID:

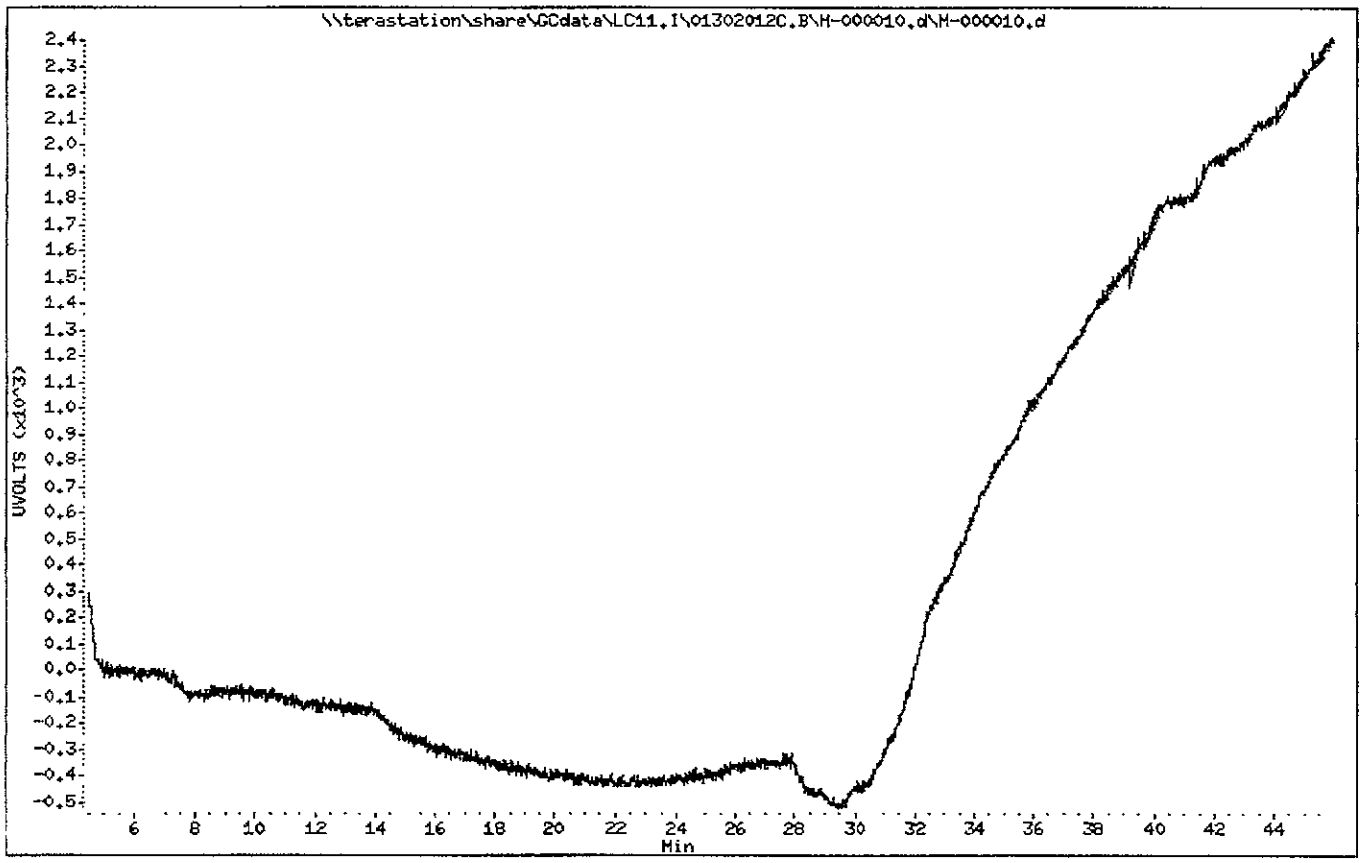
Instrument: LC11.i

Sample Info: Blank:0

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : ICV E110811E METAB
Analyzed : 30-JAN-2012 23:28
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000011.d
Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.418	0.000	12346	207.0	3.5					
2	DNX	200	19.211	0.000	17488	190.6	-4.7					
3	MNX	200	21.968	0.000	20795	192.0	-4.0					

ICV passes ±15%
RD 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:27

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d
Lab Smp Id: ICV E110811E METAB
Inj Date : 30-JAN-2012 23:28
Operator : SV Inst ID: LC11.i
Smp Info : ICV E110811E METAB ;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:27 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.088	2273	136	0.060	0.26	
15.418	328420	12346	0.038	24.12	2 TNX
18.494	117	24	0.205	0.04	
19.211	279178	17488	0.063	34.17	3 DNX
21.968	242531	20795	0.086	40.69	5 MNX
22.671	108	24	0.222	0.04	
23.741	467	63	0.135	0.12	
25.681	872	60	0.069	0.11	
26.308	325	31	0.095	0.06	
26.548	97	27	0.278	0.05	
31.198	168	23	0.137	0.04	
32.301	200	32	0.160	0.06	
36.594	171	22	0.129	0.04	
36.864	160	31	0.194	0.06	
37.148	137	26	0.190	0.05	
37.374	91	26	0.285	0.05	
44.311	223	24	0.108	0.04	
	855538	51178		100.000	

Total unknown % height = 1.020

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d

Date : 30-JAN-2012 23:28

Client ID:

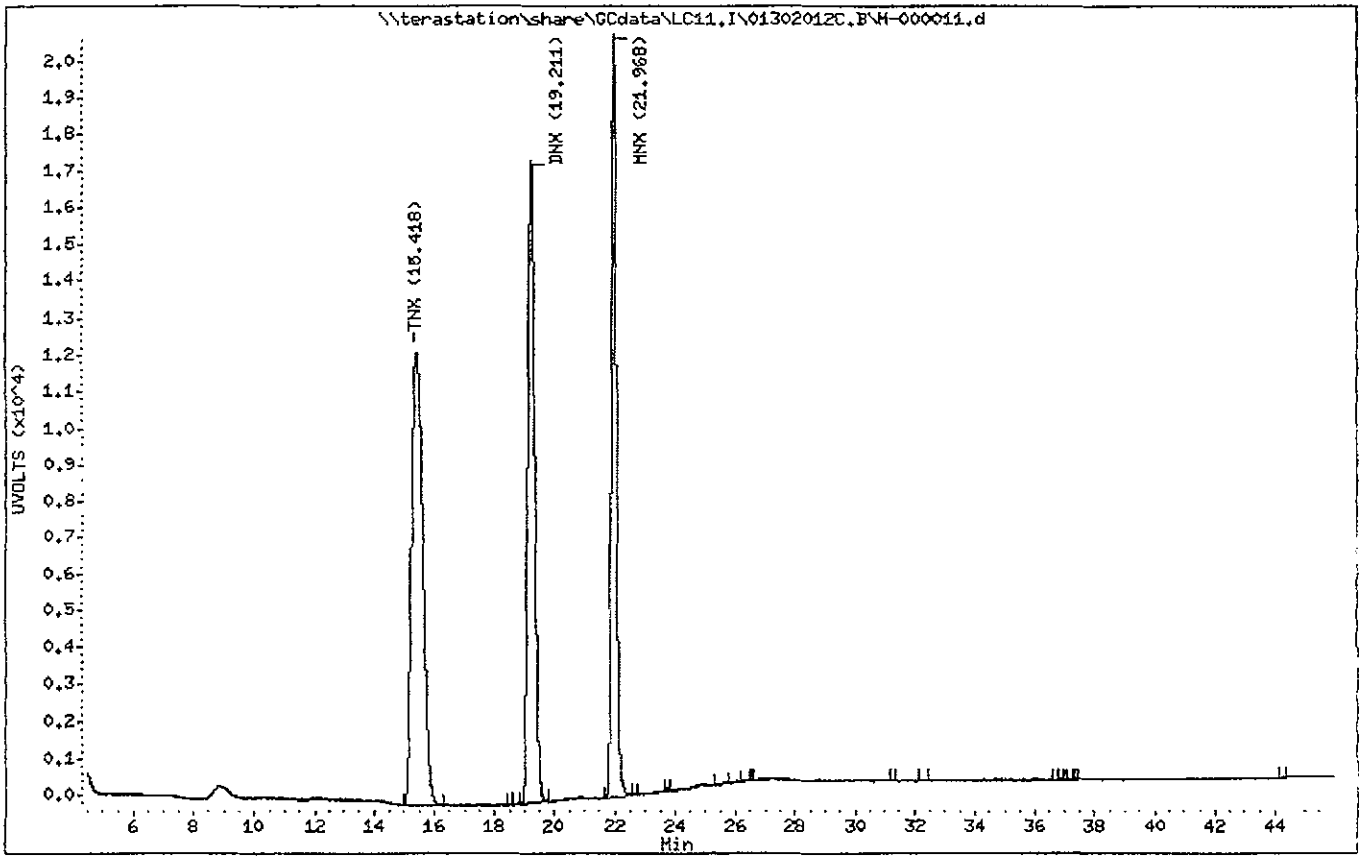
Instrument: LC11.I

Sample Info: ICV E110811E METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d\M-00001
Lab Smp Id: ICV E110811E METAB
Inj Date : 30-JAN-2012 23:28
Operator : SV Inst ID: LC11.i
Smp Info : ICV E110811E METAB ;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.571	160	33	0.206	6.12	
34.788	168	31	0.184	5.75	
34.921	183	34	0.186	6.30	
36.524	179	24	0.134	4.45	
38.671	434	43	0.099	7.97	
40.091	521	39	0.075	7.23	
40.764	339	33	0.097	6.12	
42.008	1328	27	0.020	5.00	
42.368	168	37	0.221	6.86	
43.587	1059	44	0.042	8.16	
44.948	546	34	0.062	6.30	
45.818	580	160	0.276	29.74	
	5663	539		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000011.d\M-000011.d

Date : 30-JAN-2012 23:28

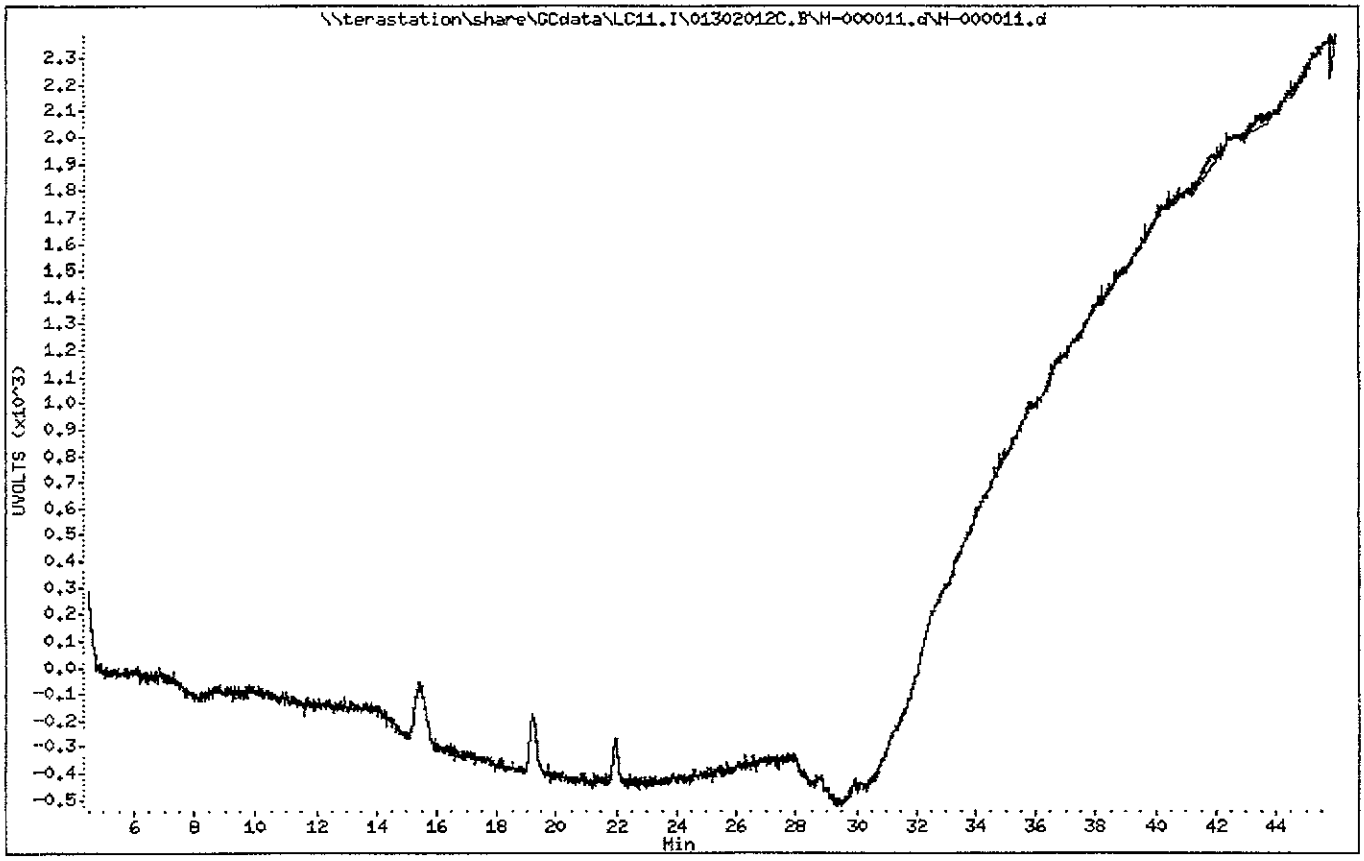
Client ID: Instrument: LC11.i

Sample Info: ICV E110811E METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : MRL E110811F METAB
Analyzed : 31-JAN-2012 00:25
Operator : SV

Instrument: LC11
File ID: 01302012C.B/M-000012.d
Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	20.0	15.403	0.000	1059	17.76	-11					
2	DNX	20.0	19.213	0.000	1629	17.75	-11					
3	MNX	20.0	21.963	0.000	1938	17.90	-11					

MRL passes S:N > 5:1

RM 2/1/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 09:28

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d
Lab Smp Id: MRL E110811F METAB
Inj Date : 31-JAN-2012 00:25
Operator : SV Inst ID: LC11.i
Smp Info : MRL E110811F METAB ;2
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.m
Meth Date : 01-Feb-2012 09:27 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.403	28385	1059	0.037	20.78	2 TNX
19.213	26083	1629	0.062	31.97	3 DNX
21.707	58	21	0.362	0.41	
21.963	22564	1938	0.086	38.12	5 MNX
24.500	65	15	0.231	0.29	
24.830	60	25	0.419	0.49	
25.603	418	30	0.072	0.58	
26.057	174	17	0.097	0.33	
26.573	287	39	0.136	0.76	
27.217	179	42	0.235	0.82	
27.390	1150	71	0.062	1.39	
28.043	168	26	0.154	0.51	
29.583	63	20	0.319	0.39	
30.643	99	23	0.233	0.45	
31.910	90	32	0.356	0.62	
32.573	177	21	0.119	0.41	
39.537	430	27	0.063	0.52	
39.997	152	31	0.204	0.60	
44.663	580	29	0.050	0.56	
	81181	5095		100.000	

Total unknown % height = 9.130

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d

Date : 31-JAN-2012 00:25

Client ID:

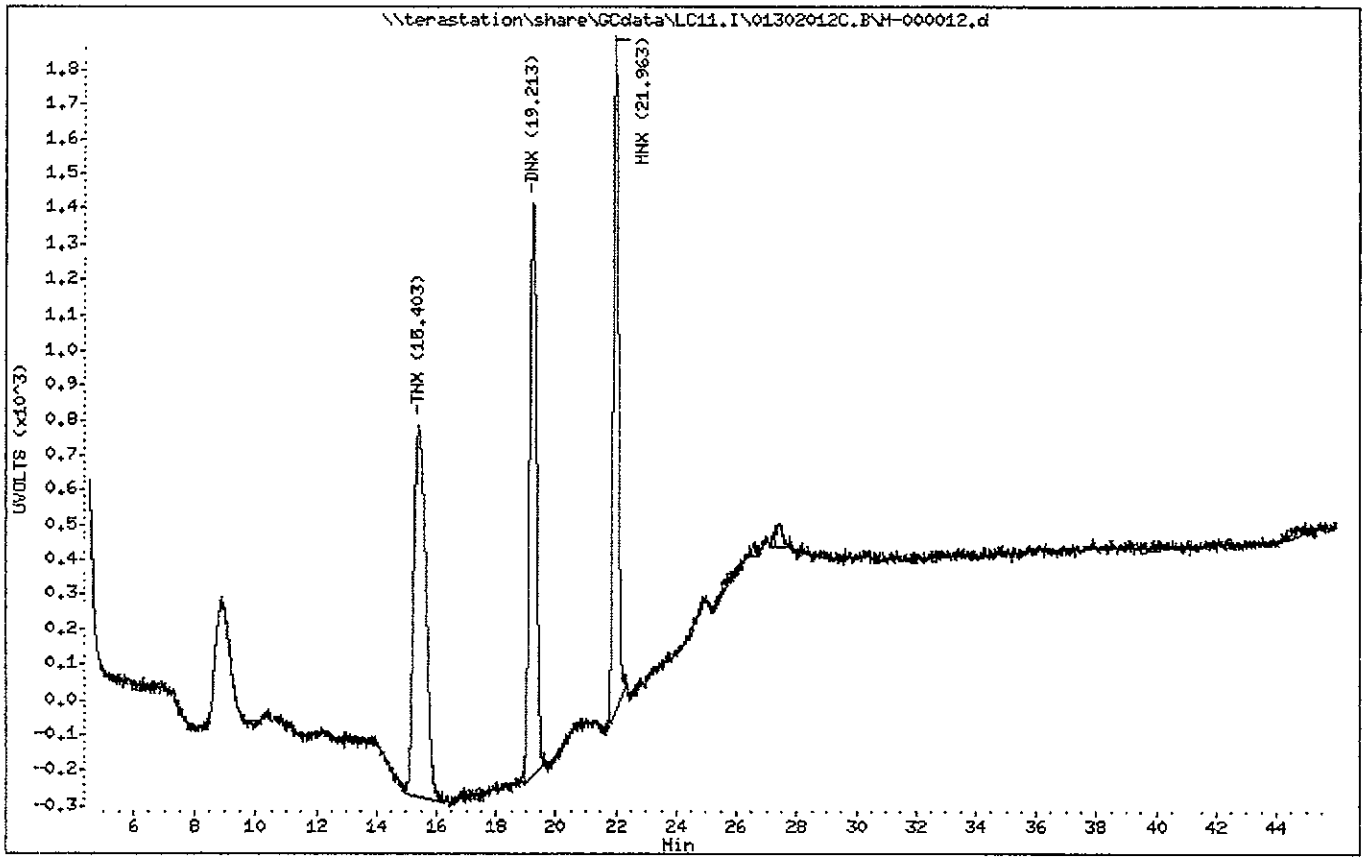
Instrument: LC11.i

Sample Info: MRL E110811F METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d\M-00001
Lab Smp Id: MRL E110811F METAB
Inj Date : 31-JAN-2012 00:25
Operator : SV Inst ID: LC11.i
Smp Info : MRL E110811F METAB ;2
Misc Info : ;3;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\01302012C.B\8330METAB.M\83302.
Meth Date : 31-Jan-2012 11:23 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
30.860	208	37	0.178	8.56	
31.603	151	34	0.226	7.87	
32.103	163	28	0.172	6.48	
36.867	163	40	0.246	9.25	
38.617	725	45	0.062	10.41	
38.893	186	35	0.189	8.10	
39.507	658	29	0.044	6.71	
39.763	214	22	0.103	5.09	
40.110	611	39	0.064	9.02	
41.837	992	50	0.050	11.63	
42.367	185	40	0.216	9.25	
44.743	640	33	0.052	7.63	
	4893	432		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\01302012C.B\M-000012.d\M-000012.d

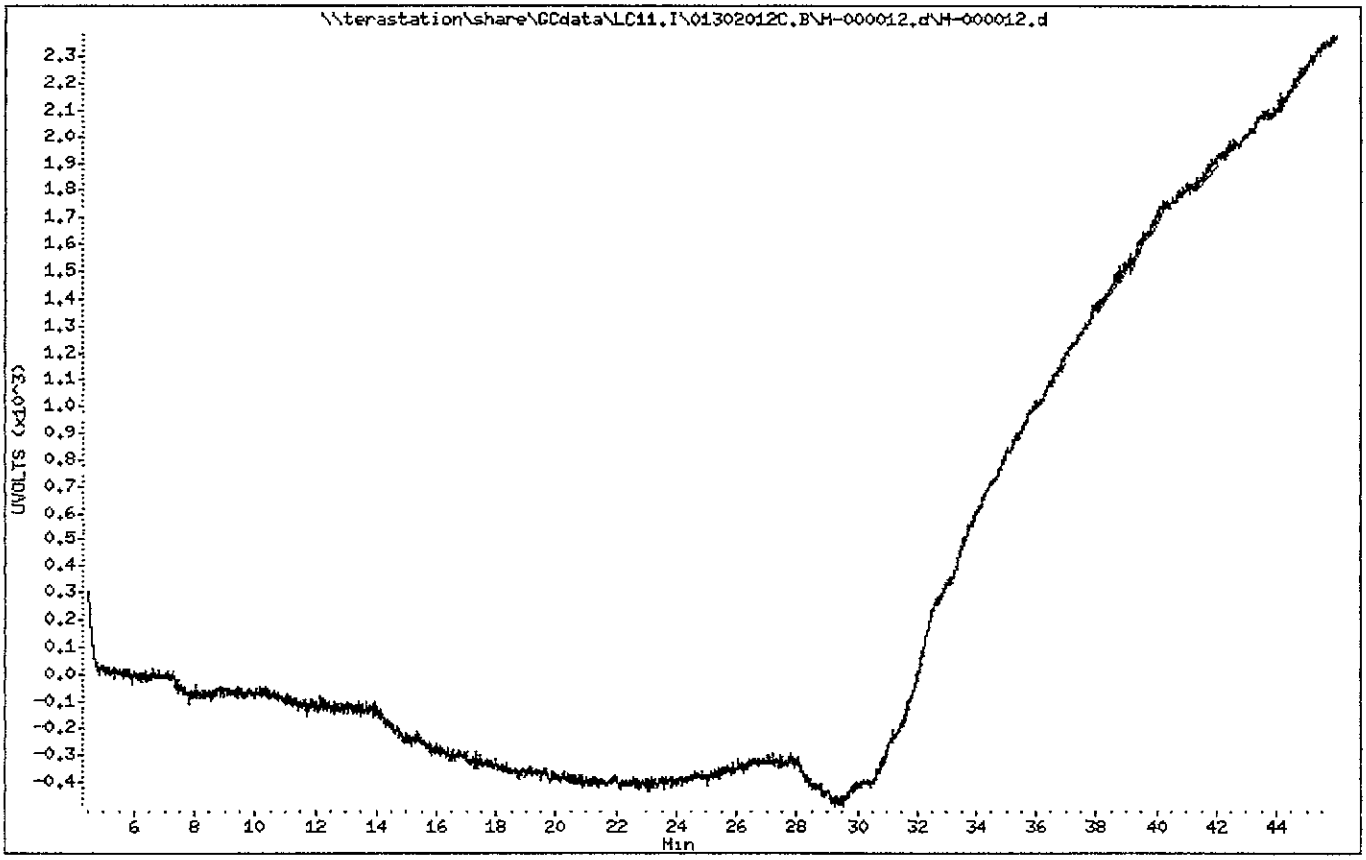
Date : 31-JAN-2012 00:25

Client ID: Instrument: LC11.i

Sample Info: MRL E110811F METAB ;2

Operator: SV

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



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West Sacramento

GC/HPLC ICAL Checklist

Instrument ID: LC12 ICAL ID: 02022012 Method: 8330 A/B

Analytes Included in curve (with dates): 8330, NG+PETN (1/26/12)
MNX, TNX+DNX (2/1/12)

A. Included Sections of ICAL	Analyst	Reviewer	N/A
1. ICAL Summary included (for both columns if applicable).	✓	✓	
2. ICAL Runlog included.	✓	✓	
3. ICAL's are in chronological order.	✓	✓	
4. PEM meets requirements and is included for 8081.			✓
5. Alkane Marker included for 8015 TPH.			✓
6. ICAL Raw Data included for all analytes.	✓	✓	
B. ICAL Summary			
1. All analytes meet %RSD or linear regression requirements.	✓	✓	
2. ICAL meets requirements stated in SOP.	✓	✓	
2. Any levels dropped are reviewed and appropriate.			✓
3. All analytes in ICAL are in the ICAL summary.	✓	✓	
4. RFs are calculated correctly. Perform Manual calculation.	✓	✓	
C. ICAL Analysis			
1. Manual Integrations reviewed and appropriate.			✓
2. All peaks correctly identified.	✓	✓	
3. No analytes have saturated peaks.	✓	✓	
4. RT windows set correctly (8015 TPH).			✓
5. ICV meets requirements and is run after the ICAL.	✓	✓	
6. Standards used in ICAL are current.	✓	✓	
7. ICAL is copied to source method.	✓	✓	

Curve Valid for:	Yes	No	Criteria
Standard SOP	✓		RSD ≤20%, r≥ 0.995 (intercept <1/2RL for 8081,8082, NQ, 8310) and (<RL for 8330) and r>0.990 (intercept <RL for 8015), ICV≤15%, PEM ≤15%
DOD QSM V3	✓		RSD ≤20%, r≥ 0.995, ICV≤20%, PEM ≤15%
AFCEE 3.1	✓		RSD ≤20%, r≥ 0.995, ICV≤15%, PEM ≤15%
AFCEE 4.0	✓		RSD ≤20%, r≥ 0.995, ICV≤20% (8081, 8082, 8015) and ICV≤25% (8330,8310), PEM ≤15%

Analyst: [signature] Date: 2/2/12

Reviewer: [signature] Date: 2/3/12

Comments:

Q:\FORMS\Checklists\QA-575 GC_HPLC ICAL Checklist

QA-575 GC/HPLC ICAL Checklist
4/16/2008 DAW

TestAmerica West Sacramento

A

INITIAL CALIBRATION DATA

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
2 TNX	+++++	+++++	52.90000	58.92000	60.55000	60.25000		
	57.23800	60.81300					58.44517	5.174
3 DNX	+++++	+++++	55.15000	60.76000	62.35000	62.35000		
	59.78400	63.11500					60.58483	4.832
4 HMX	62.00000	62.10000	61.35000	60.74000	62.33000	61.66500		
	60.03200	55.64500					60.73275	3.610
5 MNX	+++++	+++++	53.20000	57.96000	59.90000	59.69000		
	57.66200	60.08100					58.08217	4.484
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
7 RDX	64.60000	54.80000	51.75000	48.88000	48.64000	46.98500		
	44.60000	38.86800					49.89037	15.236
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

(A)

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
10 1,3,5-Trinitrobenzene	80.40000	80.50000	77.70000	77.18000	78.17000	76.84000		
	74.02600	65.39500					76.27638	6.366
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
13 1,3-Dinitrobenzene	108	106	103	103	105	102		
	95.56400	79.85200					100	9.103
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 3,5-Dinitroaniline	93.60000	87.40000	85.20000	83.24000	84.29000	81.91000		
	77.31600	65.28900					82.28063	10.078
16 TETRYL	121	121	117	116	120	119		
	118	115					118	2.039
17 Nitrobenzene	52.80000	48.60000	44.50000	47.62000	49.01000	46.80000		
	43.06200	34.72200					45.88925	11.744
18 Nitroglycerin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 2,4,6-Trinitrotoluene	80.00000	83.00000	79.65000	79.16000	81.68000	81.20500		
	79.32400	73.81800					79.72962	3.425
20 4-AM-2,6-DNT	65.60000	64.10000	62.15000	61.96000	63.29000	62.27500		
	59.92200	52.89900					61.52450	6.279

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INITIAL CALIBRATION DATA

A

Start Cal Date : 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Last Edit : 02-Feb-2012 11:01 noonanr
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
21 2-AM-4,6-DNT	78.40000	75.50000	74.10000	72.50000	73.57000	72.34000			
	69.19600	60.42600					72.00400	7.466	
22 2,6-Dinitrotoluene	62.80000	56.50000	54.05000	53.62000	53.84000	52.70000			
	50.56600	44.27800					53.54425	9.735	
23 2,4-Dinitrotoluene	98.40000	92.70000	89.15000	88.58000	89.64000	87.80000			
	84.18400	73.56800					88.00275	8.120	
24 2-Nitrotoluene	33.10000	30.45000	27.77500	29.83000	30.51000	29.68500			
	28.13900	24.06300					29.19400	9.032	
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
26 3-Nitrotoluene	46.80000	40.20000	36.35000	38.26000	38.90000	37.78000			
	36.10200	32.30200					38.33675	10.849	
27 PETN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
$ 1 3,4-Dinitrotoluene	48.00000	46.80000	45.45000	46.42000	49.00000	48.00500			
	46.26000	41.31400					46.40613	5.076	

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(B)

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Calibration File Names:
Level 1: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Level 2: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Level 3: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Level 4: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Level 5: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Level 6: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Level 7: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Level 8: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
	500.000 Level 7	1000.000 Level 8							
2 TNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 DNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 HMX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 MNX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 EGDN	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
7 RDX	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
8 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
9 Picric ACID	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1 / 500.000 Level 7	10.000 Level 2 / 1000.000 Level 8	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD	
10 1,3,5-Trinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
11 Picramic Acid	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
12 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
13 1,3-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
14 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
15 3,5-Dinitroaniline	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
16 TETRYL	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
17 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
18 Nitroglycerin	+++++	+++++	71.30000	78.16000	85.12000	86.04000			
	85.00600	81.58200					81.20133	6.981	
19 2,4,6-Trinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
20 4-AM-2,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

TestAmerica West Sacramento

INITIAL CALIBRATION DATA

B

Start Cal Date : 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83
Last Edit : 02-Feb-2012 04:37 tap
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
	500.000 Level 7	1000.000 Level 8						
21 2-AM-4,6-DNT	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
24 2-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 4-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
26 3-Nitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
27 PETN	+++++	+++++	138	141	146	147		
	146	147					144	2.624
$ 1 3,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Report Date: 02-Feb-2012 11:03

(A)

Calibration History

Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M
Start Cal Date: 26-JAN-2012 17:51
End Cal Date : 02-FEB-2012 01:21
Last Cal Level: 3
Last Cal Type : Initial Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 17:51	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 18:56	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Cal Level: 3 , Cal Amount: 20.00000		
01-FEB-2012 17:43	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
26-JAN-2012 20:02	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d
Cal Level: 4 , Cal Amount: 50.00000		
01-FEB-2012 18:48	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d
Cal Level: 5 , Cal Amount: 100.00000		
01-FEB-2012 19:54	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
26-JAN-2012 22:13	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d
Cal Level: 6 , Cal Amount: 200.00000		
01-FEB-2012 20:59	2_CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
26-JAN-2012 23:19	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d

| Cal Level: 7 , Cal Amount: 500.00000 |

01-FEB-2012 22:04	2 CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
27-JAN-2012 00:24	1 CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d

| Cal Level: 8 , Cal Amount: 1000.00000 |

01-FEB-2012 23:10	2 CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d
27-JAN-2012 01:30	1 CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

02-FEB-2012 02:26	2 CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d
01-FEB-2012 19:54	2 CALMET	\\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
02-FEB-2012 03:32	1 CAL	\\Terastation\Share\GCData\LC12.I\02012012.B\C-000013.D
27-JAN-2012 04:46	1 CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d
27-JAN-2012 03:41	1 CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d
26-JAN-2012 22:13	1 CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d

Report Date: 02-Feb-2012 10:44

5

Calibration History

Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.M
Start Cal Date: 02-NOV-2011 23:06
End Cal Date : 27-JAN-2012 01:30
Last Cal Level: 8
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
26-JAN-2012 17:51	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d
Cal Level: 2 , Cal Amount: 10.00000		
26-JAN-2012 18:56	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d
Cal Level: 3 , Cal Amount: 20.00000		
26-JAN-2012 20:02	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d
Cal Level: 4 , Cal Amount: 50.00000		
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
Cal Level: 5 , Cal Amount: 100.00000		
26-JAN-2012 22:13	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d
Cal Level: 6 , Cal Amount: 200.00000		
26-JAN-2012 23:19	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d
Cal Level: 7 , Cal Amount: 500.00000		
27-JAN-2012 00:24	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d
Cal Level: 8 , Cal Amount: 1000.00000		

B

27-JAN-2012 01:30	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Continuing Calibration
Ccal Level Mode: BY SAMPLE

02-FEB-2012 03:32	1_CAL	\\Terastation\Share\GCData\LC12.I\02012012.B\C-000013.D\C-000013.D
01-FEB-2012 14:24	1_CAL	\\Terastation\Share\GCData\LC12.I\02012012.B\C-000001.D\C-000001.D
27-JAN-2012 04:46	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d
27-JAN-2012 03:41	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d
27-JAN-2012 04:46	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d
27-JAN-2012 03:41	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d
26-JAN-2012 21:08	1_CAL	\\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d

TestAmerica West Sacramento

Calibration Standard Level Reference Sheet

8330, 8330A, 8330B

	Concentration (ppb)							
Analyte	Level 1	2	3	4	5	6	7	8
3,4-Dinitrotoluene (surr)		10	20	50	100	200	300	500
HMX	5	10	20	50	100	200	500	1000
MNX	5	10	20	50	100	200	500	1000
DNX	5	10	20	50	100	200	500	1000
TNX	5	10	20	50	100	200	500	1000
RDX	5	10	20	50	100	200	500	1000
1,3,5-Trinitrobenzene	5	10	20	50	100	200	500	1000
1,3-Dinitrotoluene	5	10	20	50	100	200	500	1000
3.5-Dinitroaniline	5	10	20	50	100	200	500	1000
TETRYL	5	10	20	50	100	200	500	1000
Nitrobenzene	5	10	20	50	100	200	500	1000
2,4,6-Trinitrotoluene	5	10	20	50	100	200	500	1000
4-Amino-2,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2-Amino-4,6-dinitrotoluene	5	10	20	50	100	200	500	1000
2,6-Dinitrotoluene	5	10	20	50	100	200	500	1000
2,4-Dinitrotoluene	5	10	20	50	100	200	500	1000
2-Nitrotoluene	5	10	20	50	100	200	500	1000
4-Nitrotoluene	5	10	20	50	100	200	500	1000
3-Nitrotoluene	5	10	20	50	100	200	500	1000
Picric Acid			50	100	200	500	1000	2000
Nitroglycerin			20	50	100	200	500	1000
PETN			20	50	100	200	500	1000
EGDN			20	50	100	200	500	1000

Revision Date: 6/24/2010

TestAmerica
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 26-JAN-2012 16:43
Operator : SV

Instrument: LC12
File ID: 01262012C.B/C-000001.d
Sublist: CAL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	Nitrobenzene									
2	1,3-Dinitrobenzene									
3	1,3,5-Trinitrobenz	27.808	0.160	54	0.7080					
4	2-Nitrotoluene	29.028	0.030	38	1.302					
5	3-Nitrotoluene	29.584	0.007	52	1.356					
6	3,5-Dinitroaniline	30.951	-0.010	56	0.6806					
7	RDX	31.474	-0.060	75	1.503					
8	2,4-Dinitrotoluene									
9	2,6-Dinitrotoluene	33.801	0.107	42	0.7844					
10	2-AM-4,6-DNT	35.911	0.163	27	0.3750					
11	4-AM-2,6-DNT									
12	3,4-Dinitrotoluene									
13	2,4,6-Trinitrotolu	40.221	-0.030	32	0.4014					
14	HMX	41.944	-0.037	22	0.3622					
15	TETRYL	46.174	-0.080	67	0.5658					
16	4-Nitrotoluene									
17	EGDN									
18	PETN									
19	Picric ACID									
20	Nitroglycerin									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 01/27/2012 11:18

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d
Lab Smp Id: BLANK
Inj Date : 26-JAN-2012 16:43
Operator : SV Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 10:36 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
26.941	784	35	0.045	1.37	
27.398	889	47	0.053	1.84	
27.808	531	54	0.102	2.12	10 1,3,5-Trinitrobenze
28.048	509	37	0.073	1.45	
28.294	774	48	0.062	1.88	
28.734	455	50	0.110	1.96	
28.861	433	51	0.118	2.00	
29.028	434	38	0.088	1.49	24 2-Nitrotoluene
29.248	232	46	0.198	1.80	
29.378	452	43	0.095	1.68	
29.584	506	52	0.103	2.04	26 3-Nitrotoluene
29.811	421	53	0.126	2.08	
29.954	663	54	0.081	2.12	
30.211	403	47	0.117	1.84	
30.438	594	42	0.071	1.64	
30.774	246	46	0.187	1.80	
30.951	278	56	0.202	2.19	15 3,5-Dinitroaniline
31.074	363	49	0.135	1.92	
31.241	538	56	0.104	2.19	
31.341	446	68	0.152	2.67	
31.474	741	75	0.101	2.94	7 RDX
31.634	1074	75	0.070	2.94	
31.914	448	69	0.154	2.71	
33.114	223	41	0.184	1.61	
33.508	503	41	0.081	1.61	
33.801	244	42	0.172	1.64	22 2,6-Dinitrotoluene
34.278	455	38	0.084	1.49	
35.248	215	28	0.130	1.09	
35.911	392	27	0.069	1.06	21 2-AM-4,6-DNT
36.941	223	14	0.063	0.54	
37.481	274	19	0.069	0.74	
37.808	125	22	0.176	0.86	
38.508	130	32	0.247	1.25	
38.974	230	25	0.109	0.98	
39.211	125	29	0.231	1.13	
39.528	203	21	0.103	0.82	

Data File: C-000001.d
Report Date: 27-Jan-2012 11:17

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.944	331	32	0.097	1.25	
40.221	355	32	0.090	1.25	19 2,4,6-Trinitrotolue
40.471	297	29	0.098	1.13	
40.921	119	20	0.169	0.78	
41.191	179	24	0.134	0.94	
41.944	95	22	0.233	0.86	4 HMX
42.214	524	34	0.065	1.33	
42.531	184	26	0.141	1.02	
43.051	271	31	0.114	1.21	
43.388	167	22	0.132	0.86	
43.751	124	32	0.257	1.25	
44.651	95	34	0.358	1.33	
45.231	602	52	0.086	2.04	
45.518	412	57	0.138	2.23	
46.174	689	67	0.097	2.63	16 TETRYL
47.758	1782	110	0.062	4.32	
48.011	1651	173	0.105	6.79	
48.544	1097	179	0.163	7.29	
	24530	2546		100.000	

Total unknown % height = 81.78

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d

Date : 26-JAN-2012 16:43

Client ID:

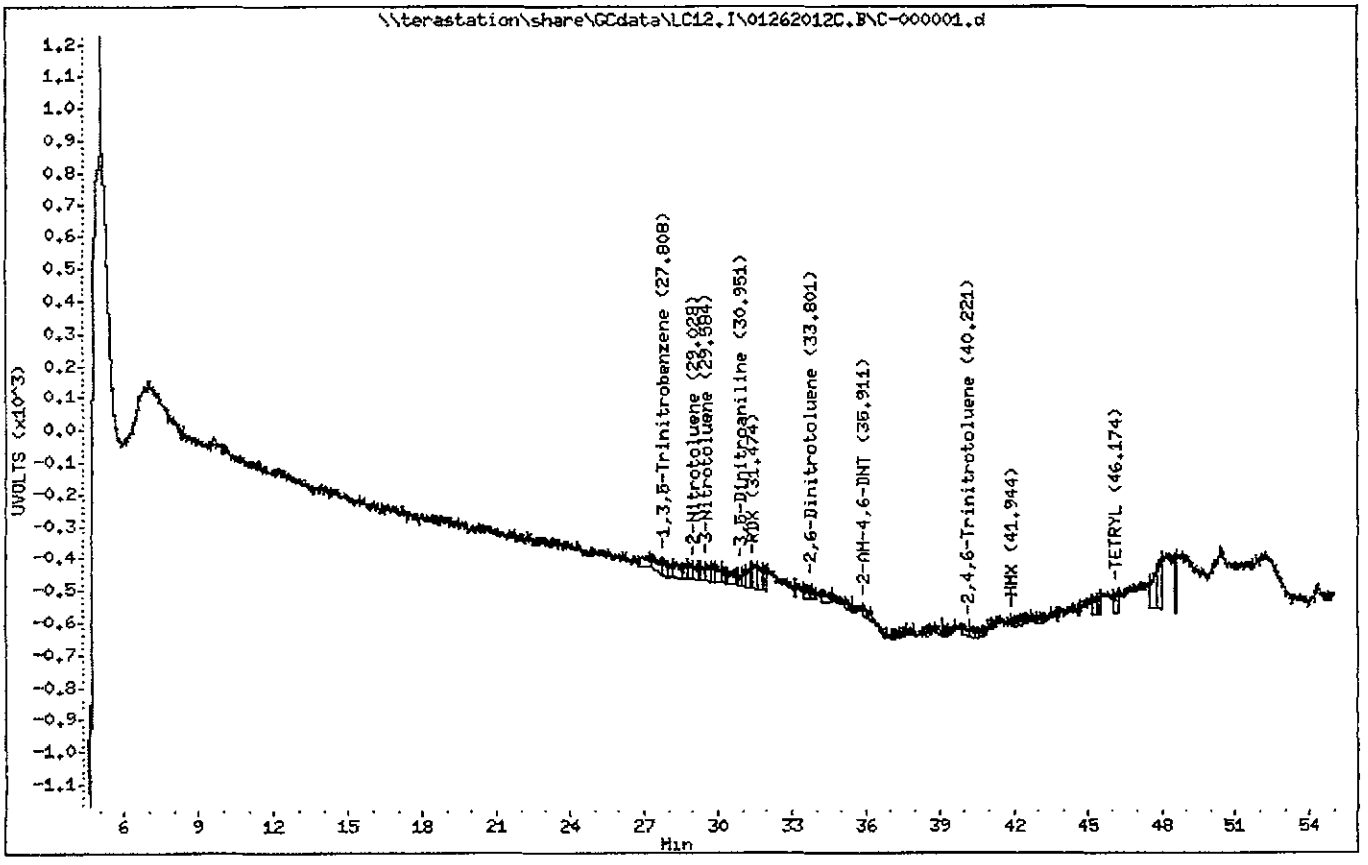
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SW

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000001.d\C-000001.d

Page 1

Date : 26-JAN-2012 16:43

Client ID:

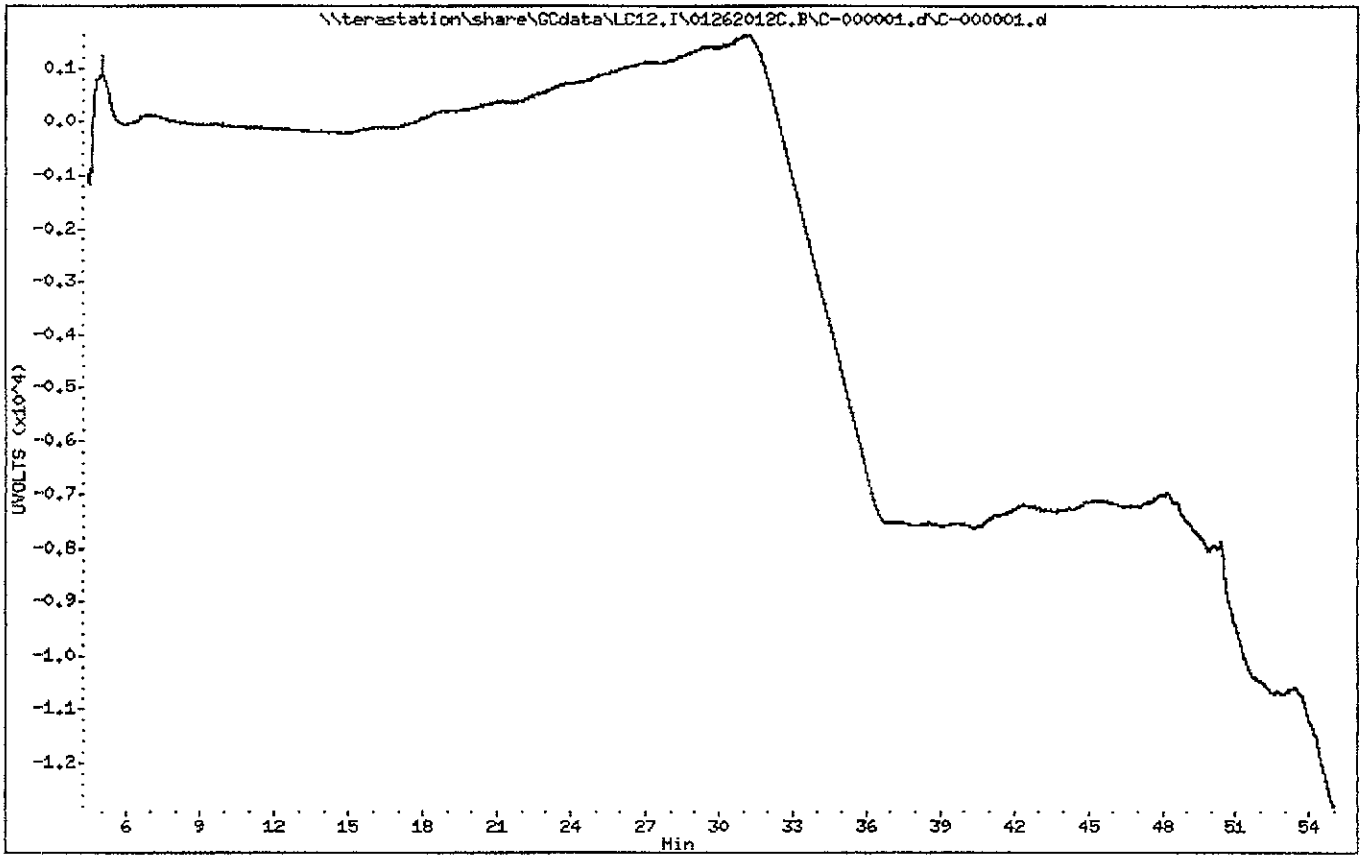
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_01 12GCSV0104 8330 5ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 17:51 File ID: 01262012C.B/C-000002.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	5.00	22.011	0.087	264	52.80000				
2	1,3-Dinitrobenzene	5.00	24.965	0.067	542	108.4000				
3	1,3,5-Trinitrobenz	5.00	27.751	0.104	402	80.40000				
4	2-Nitrotoluene	10.0	29.068	0.070	331	33.10000				
5	3-Nitrotoluene	5.00	29.601	0.024	234	46.80000				
6	3,5-Dinitroaniline	5.00	31.048	0.087	468	93.60000				
7	RDX	5.00	31.615	0.080	323	64.60000				
8	2,4-Dinitrotoluene	5.00	32.751	0.084	492	98.40000				
9	2,6-Dinitrotoluene	5.00	33.751	0.057	314	62.80000				
10	2-AM-4,6-DNT	5.00	35.788	0.040	392	78.40000				
11	4-AM-2,6-DNT	5.00	36.411	0.024	328	65.60000				
12	3,4-Dinitrotoluene	5.00	38.118	-0.016	240	48.00000				
13	2,4,6-Trinitrotolu	5.00	40.308	0.057	400	80.00000				
14	HMX	5.00	42.008	0.027	310	62.00000				
15	TETRYL	5.00	46.255	0.000	607	121.4000				
16	4-Nitrotoluene	5.00								
17	EGDN	5.00								
18	PETN	5.00					52.821	0.024	766	153.2000
19	Picric ACID	10.0								
20	Nitroglycerin	5.00								

Not used

PDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:19

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 17:51
Operator : SV Inst ID: LC12.i
Smp Info : STD_01 12GCSV0104 8330 5ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:18 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
22.011	7378	264	0.036	4.18		17 Nitrobenzene
24.965	15899	542	0.034	8.60		13 1,3-Dinitrobenzene
27.198	407	39	0.096	0.61		
27.751	12454	402	0.032	6.37		10 1,3,5-Trinitrobenze
29.068	9489	331	0.035	5.25		24 2-Nitrotoluene
29.601	6352	234	0.037	3.71		26 3-Nitrotoluene
31.048	12280	468	0.038	7.42		15 3,5-Dinitroaniline
31.615	9449	323	0.034	5.12		7 RDX
32.751	14568	492	0.034	7.80		23 2,4-Dinitrotoluene
33.751	9691	314	0.032	4.98		22 2,6-Dinitrotoluene
35.358	202	38	0.188	0.60		
35.788	9813	392	0.040	6.22		21 2-AM-4,6-DNT
36.411	8534	328	0.038	5.20		20 4-AM-2,6-DNT
37.701	81	37	0.459	0.58		
38.118	5204	240	0.046	3.80	$	1 3,4-Dinitrotoluene
38.771	51	18	0.352	0.28		
39.868	204	29	0.142	0.46		
40.308	9386	400	0.043	6.34		19 2,4,6-Trinitrotolue
41.725	168	30	0.178	0.47		
42.008	4691	310	0.066	4.91		4 HMX
42.978	84	18	0.214	0.28		
43.295	269	26	0.097	0.41		
44.811	197	24	0.122	0.38		
45.151	892	43	0.048	0.68		
46.255	8742	607	0.069	9.77		16 TETRYL
47.068	447	50	0.112	0.79		
47.491	925	60	0.065	0.95		
48.785	1325	105	0.079	1.66		
48.951	1216	138	0.113	2.18		
	150401	6302		100.000		

Total unknown % height = 10.33

Data File: \\terastation\share\GCdata\LC12.I\012620120.B\C-000002.d

Date : 26-JAN-2012 17:51

Client ID:

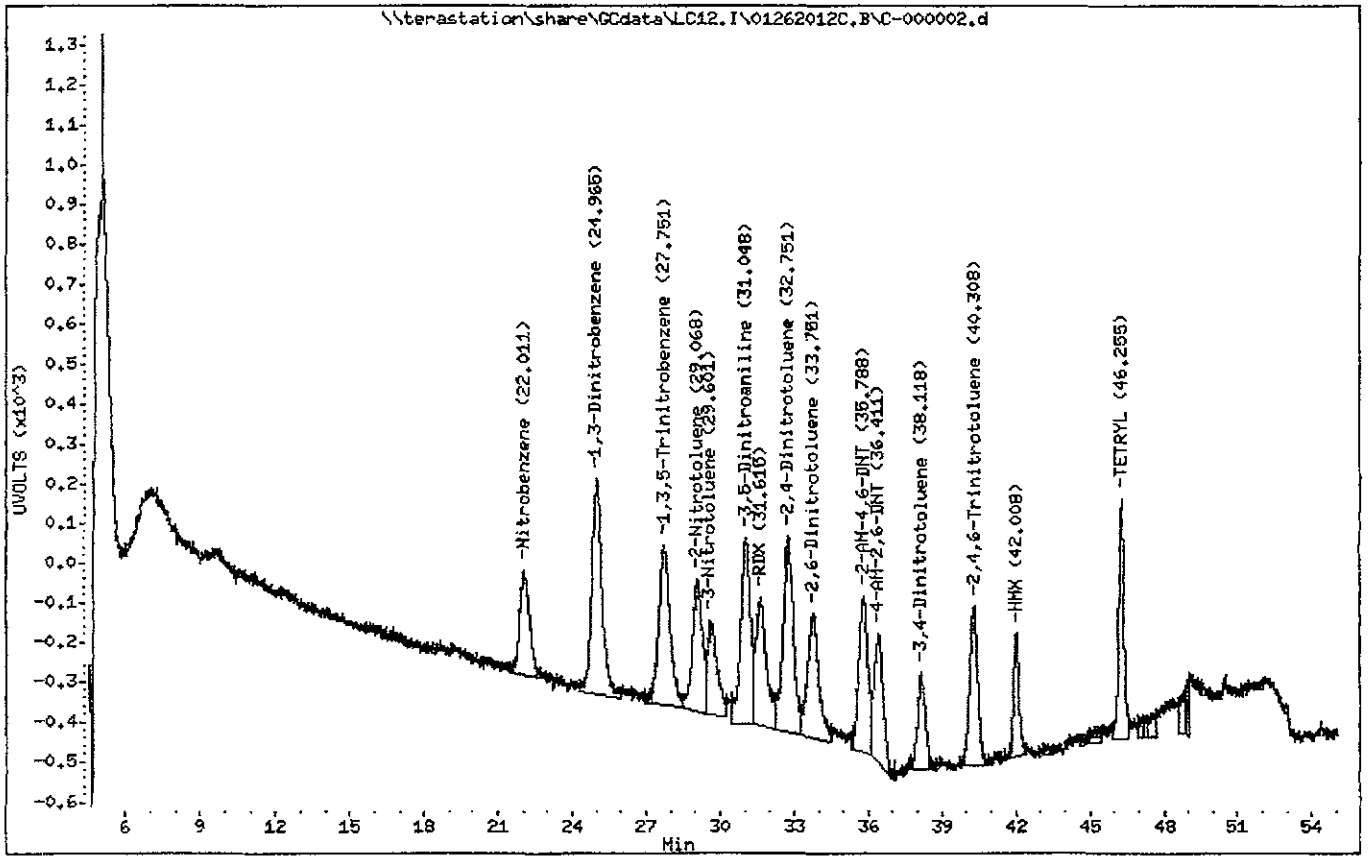
Instrument: LC12.i

Sample Info: STD_01 12CCSV0104 8330 5ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-00000
Lab Smp Id: STD_01 12GCSV0104 8
Inj Date : 26-JAN-2012 17:51
Operator : SV Inst ID: LC12.i
Smp Info : STD_01 12GCSV0104 8330 5ng/mL;1;
Misc Info : ;1;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:18 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.821	7354	766	0.104	100.00	27 PETN
	7354	766		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000002.d\C-000002.d

Date : 26-JAN-2012 17:51

Client ID:

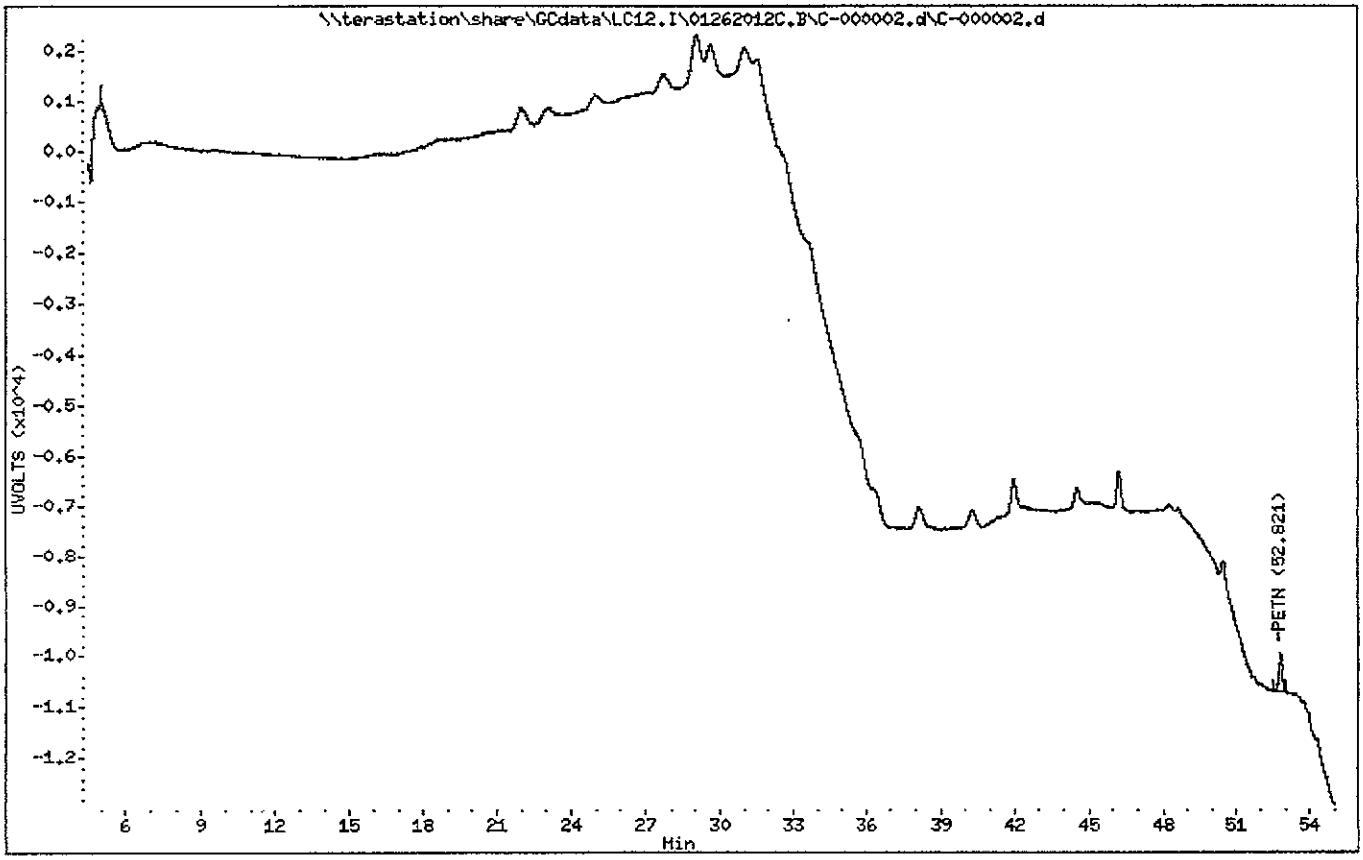
Instrument: LC12.i

Sample Info: STD_01 12GCSV0104 8330 5ng/mL:1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_02 12GCSV0095 8330 10ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 18:56 File ID: 01262012C.B/C-000003.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	10.0	22.023	0.098	486	48.60000				
2	1,3-Dinitrobenzene	10.0	24.989	0.092	1060	106.0000				
3	1,3,5-Trinitrobenz	10.0	27.736	0.088	805	80.50000				
4	2-Nitrotoluene	20.0	29.059	0.062	609	30.45000				
5	3-Nitrotoluene	10.0	29.643	0.065	402	40.20000				
6	3,5-Dinitroaniline	10.0	31.053	0.092	874	87.40000				
7	RDX	10.0	31.623	0.088	548	54.80000				
8	2,4-Dinitrotoluene	10.0	32.763	0.095	927	92.70000				
9	2,6-Dinitrotoluene	10.0	33.776	0.082	565	56.50000				
10	2-AM-4,6-DNT	10.0	35.826	0.078	755	75.50000				
11	4-AM-2,6-DNT	10.0	36.449	0.062	641	64.10000				
12	3,4-Dinitrotoluene	10.0	38.119	-0.015	468	46.80000				
13	2,4,6-Trinitrotolu	10.0	40.323	0.072	830	83.00000				
14	HMX	10.0	42.039	0.058	621	62.10000				
15	TETRYL	10.0	46.283	0.028	1212	121.2000				
16	4-Nitrotoluene	10.0								
17	EGDN	10.0								
18	PETN	10.0					52.816	0.018	1408	140.8000
19	Picric ACID	20.0								
20	Nitroglycerin	10.0					44.569	0.028	440	44.00000

not used RDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:20

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 18:56
Operator : SV Inst ID: LC12.i
Smp Info : STD_02 12GCSV0095 8330 10ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:19 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
22.023	14683	486	0.033	4.21		17 Nitrobenzene
24.989	30702	1060	0.035	9.20		13 1,3-Dinitrobenzene
26.996	166	20	0.120	0.17		
27.173	173	36	0.208	0.31		
27.736	24439	805	0.033	6.98		10 1,3,5-Trinitrobenze
29.059	16390	609	0.037	5.28		24 2-Nitrotoluene
29.643	10677	402	0.038	3.48		26 3-Nitrotoluene
31.053	21929	874	0.040	7.58		15 3,5-Dinitroaniline
31.623	14426	548	0.038	4.75		7 RDX
32.763	25932	927	0.036	8.04		23 2,4-Dinitrotoluene
33.776	16761	565	0.034	4.90		22 2,6-Dinitrotoluene
34.933	701	43	0.061	0.37		
35.826	20956	755	0.036	6.55		21 2-AM-4,6-DNT
36.449	16097	641	0.040	5.56		20 4-AM-2,6-DNT
37.383	141	25	0.178	0.21		
38.119	11211	468	0.042	4.06	$	1 3,4-Dinitrotoluene
38.839	114	40	0.350	0.34		
39.856	198	36	0.182	0.31		
40.323	19772	830	0.042	7.20		19 2,4,6-Trinitrotolue
40.996	104	25	0.241	0.21		
41.233	124	23	0.186	0.19		
41.629	59	15	0.255	0.13		
42.039	9888	621	0.063	5.39		4 HMX
42.746	291	30	0.103	0.26		
45.083	893	47	0.053	0.40		
45.619	551	44	0.080	0.38		
46.283	17650	1212	0.069	10.67		16 TETRYL
48.163	1388	86	0.062	0.74		
48.683	1305	105	0.080	0.91		
49.033	1746	141	0.081	1.22		
	279465	11519		100.000		

Total unknown % height = 6.150

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d

Date : 26-JAN-2012 18:56

Client ID:

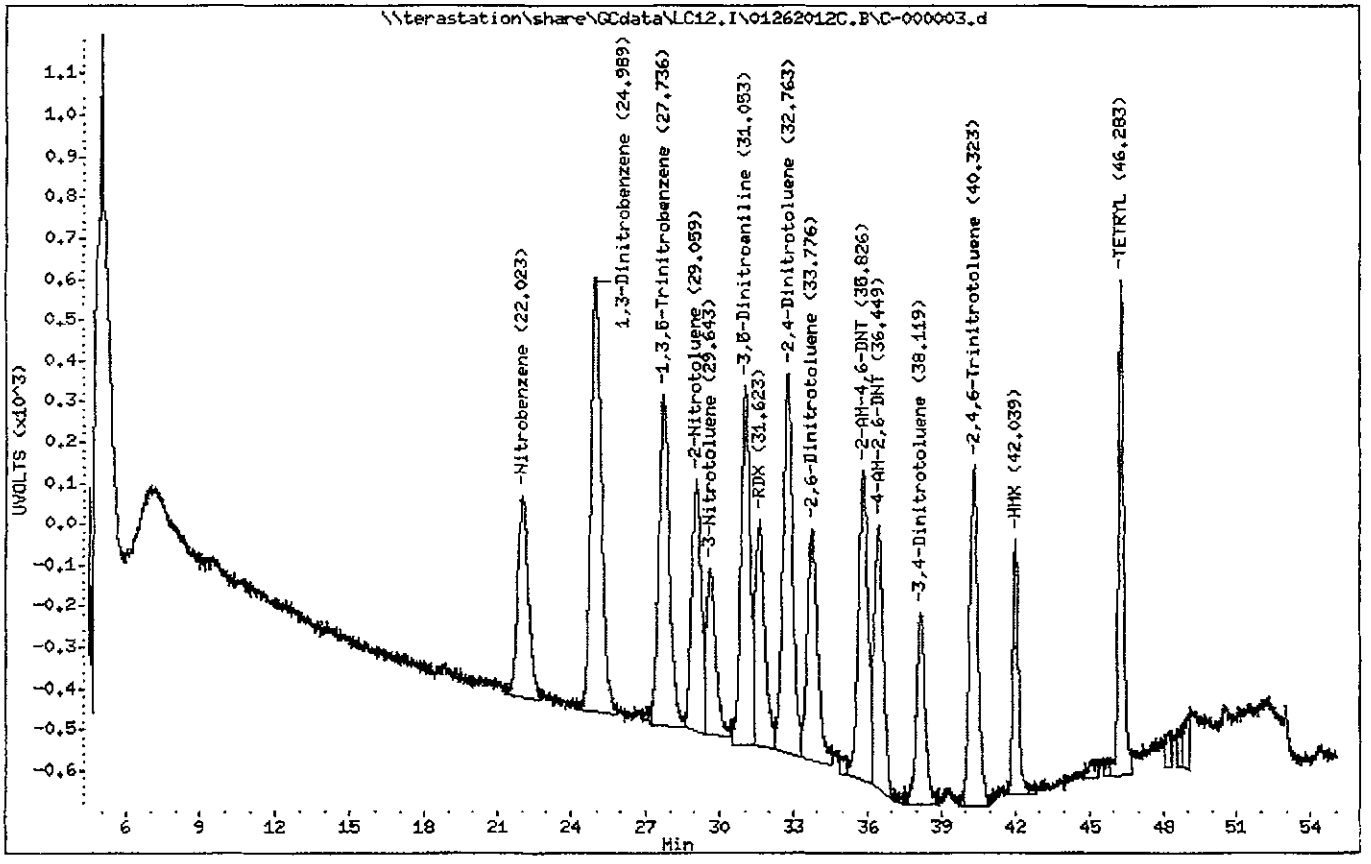
Instrument: LC12.I

Sample Info: STD_02 12GCSV0095 8330 10ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-00000
Lab Smp Id: STD_02 12GCSV0095 8
Inj Date : 26-JAN-2012 18:56
Operator : SV Inst ID: LC12.i
Smp Info : STD_02 12GCSV0095 8330 10ng/mL;1;
Misc Info : ;2;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:19 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.569	5733	440	0.077	23.80	18 Nitroglycerin
52.816	12858	1408	0.110	76.20	27 PETN
	18591	1848		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000003.d\C-000003.d

Date : 26-JAN-2012 18:56

Client ID:

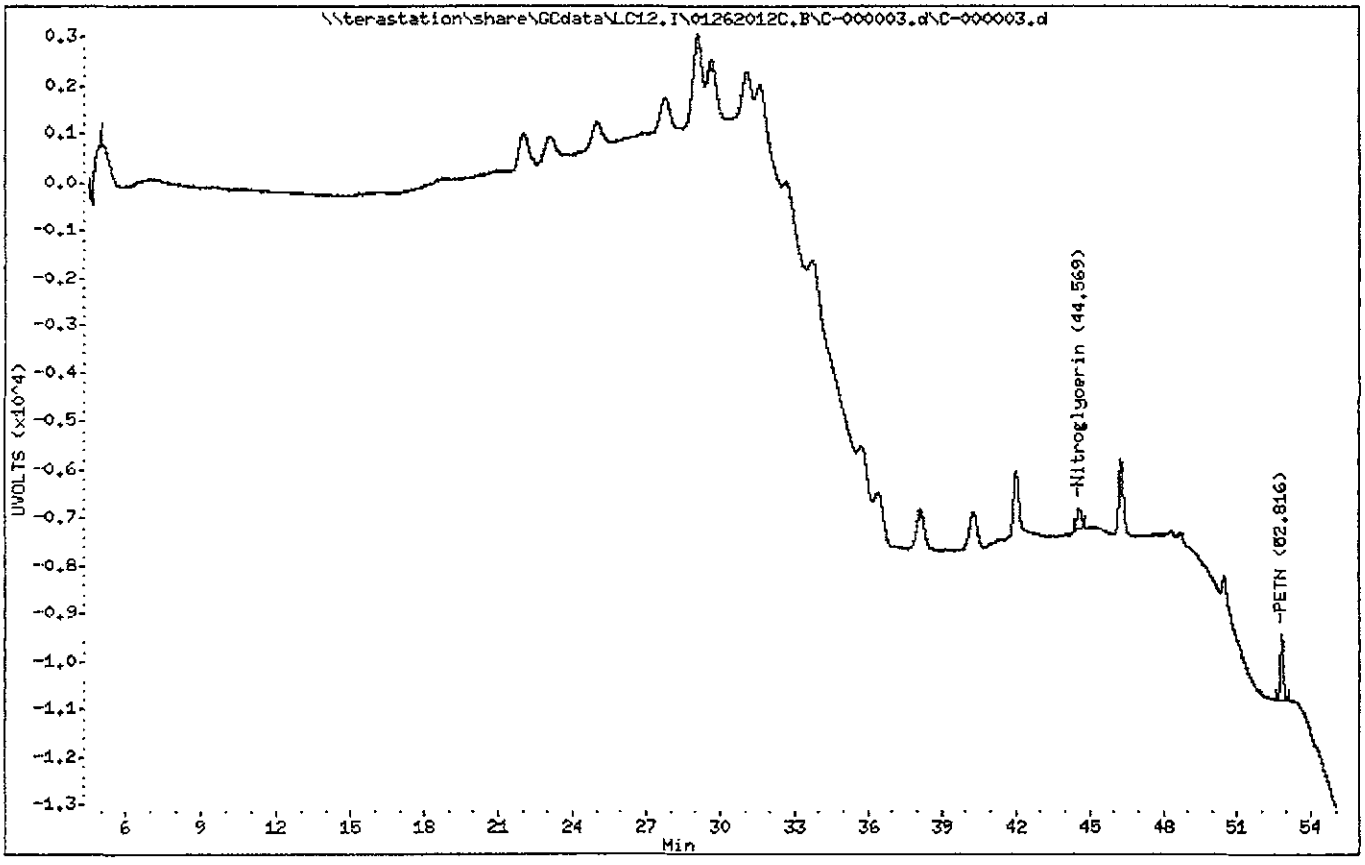
Instrument: LC12.i

Sample Info: STD_02 12GCSV0095 8330 10mg/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_03 12GCSV0096 8330 20ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 20:02 File ID: 01262012C.B/C-000004.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	20.0	21.986	0.062	890	44.50000				
2	1,3-Dinitrobenzene	20.0	24.963	0.065	2066	103.3000				
3	1,3,5-Trinitrobenz	20.0	27.709	0.062	1554	77.70000				
4	2-Nitrotoluene	40.0	29.036	0.038	1111	27.77500				
5	3-Nitrotoluene	20.0	29.639	0.062	727	36.35000				
6	3,5-Dinitroaniline	20.0	31.009	0.048	1704	85.20000				
7	RDX	20.0	31.589	0.055	1035	51.75000				
8	2,4-Dinitrotoluene	20.0	32.736	0.068	1783	89.15000				
9	2,6-Dinitrotoluene	20.0	33.739	0.045	1081	54.05000				
10	2-AM-4,6-DNT	20.0	35.786	0.038	1482	74.10000				
11	4-AM-2,6-DNT	20.0	36.429	0.042	1243	62.15000				
12	3,4-Dinitrotoluene	20.0	38.146	0.012	909	45.45000				
13	2,4,6-Trinitrotolu	20.0	40.303	0.052	1593	79.65000				
14	HMX	20.0	42.016	0.035	1227	61.35000				
15	TETRYL	20.0	46.273	0.018	2332	116.6000				
16	4-Nitrotoluene	20.0								
17	EGDN	20.0								
18	PETN	20.0					52.793	-0.005	2755	137.7500
19	Picric ACID	50.0								
20	Nitroglycerin	20.0					44.566	0.025	1426	71.30000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:21

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 20:02
Operator : SV Inst ID: LC12.i
Smp Info : STD_03 12GCSV0096 8330 20ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:20 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.786	236	30	0.127	0.13	
21.986	26042	890	0.034	4.13	17 Nitrobenzene
24.963	59739	2066	0.035	9.60	13 1,3-Dinitrobenzene
27.099	142	31	0.218	0.14	
27.709	46433	1554	0.033	7.22	10 1,3,5-Trinitrobenze
29.036	29586	1111	0.038	5.16	24 2-Nitrotoluene
29.639	19929	727	0.036	3.37	26 3-Nitrotoluene
31.009	42683	1704	0.040	7.92	15 3,5-Dinitroaniline
31.589	26618	1035	0.039	4.81	7 RDX
32.736	50410	1783	0.035	8.28	23 2,4-Dinitrotoluene
33.739	31679	1081	0.034	5.02	22 2,6-Dinitrotoluene
34.589	265	56	0.211	0.26	
35.079	415	51	0.123	0.23	
35.786	39408	1482	0.038	6.88	21 2-AM-4,6-DNT
36.429	33149	1243	0.037	5.77	20 4-AM-2,6-DNT
37.313	123	22	0.179	0.10	
37.623	76	29	0.381	0.13	
38.146	21188	909	0.043	4.22	$ 1 3,4-Dinitrotoluene
38.869	199	25	0.126	0.11	
39.196	1354	68	0.050	0.31	
40.303	38820	1593	0.041	7.40	19 2,4,6-Trinitrotolue
41.143	389	28	0.072	0.13	
42.016	19197	1227	0.064	5.70	4 HMX
42.786	115	21	0.182	0.09	
44.139	153	20	0.131	0.09	
45.273	105	29	0.276	0.13	
45.666	110	27	0.245	0.12	
46.273	32076	2332	0.073	10.99	16 TETRYL
48.083	535	64	0.120	0.29	
48.276	1219	71	0.058	0.33	
48.706	852	87	0.102	0.40	
49.063	2509	117	0.047	0.54	
	525754	21513		100.000	

Total unknown % height = 3.530

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d

Date : 26-JAN-2012 20:02

Client ID:

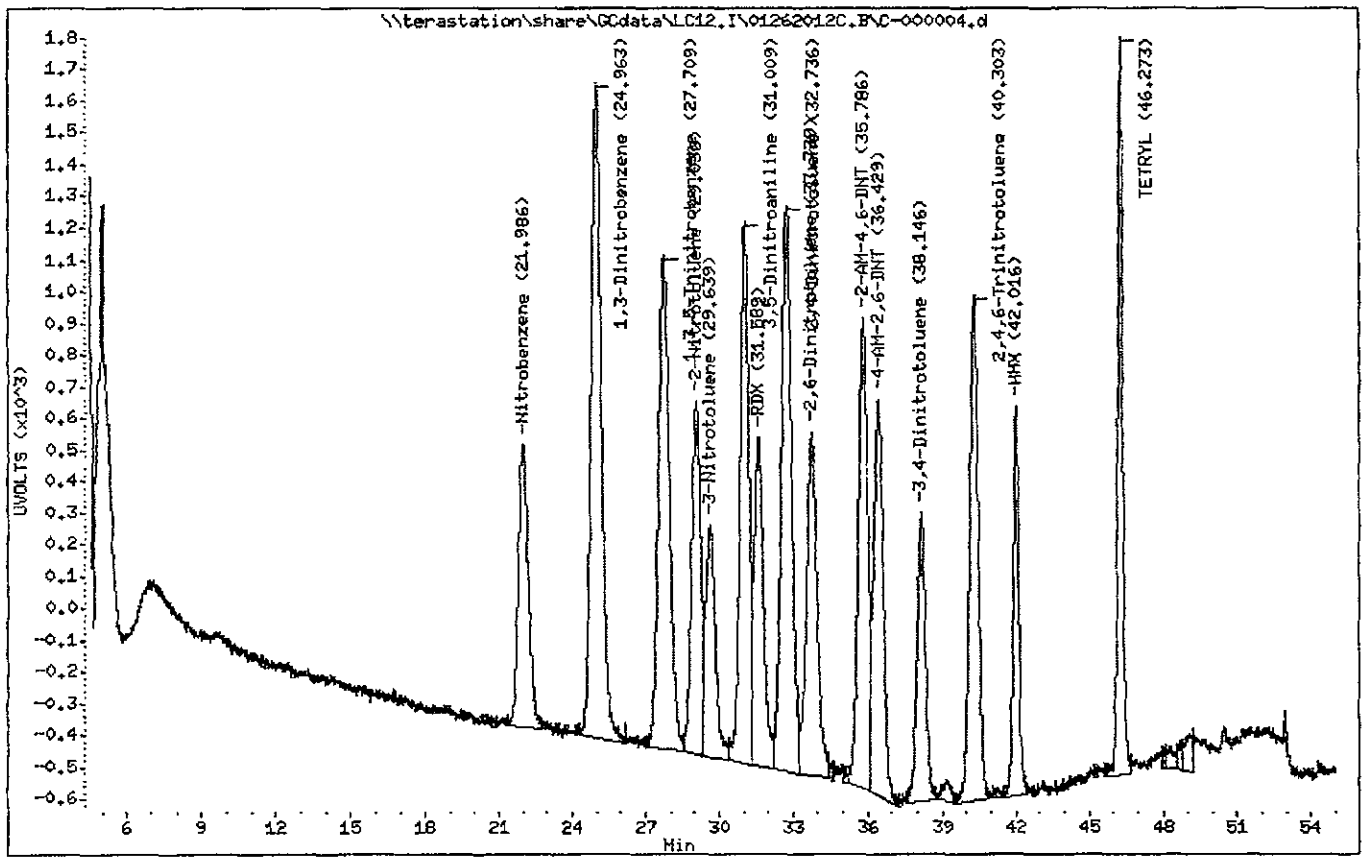
Instrument: LC12.i

Sample Info: STD_03 12GCSV0096 8330 20ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-00000
Lab Smp Id: STD_03 12GCSV0096 8
Inj Date : 26-JAN-2012 20:02
Operator : SV Inst ID: LC12.i
Smp Info : STD_03 12GCSV0096 8330 20ng/mL;1;
Misc Info : ;3;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:20 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.566	26136	1426	0.055	34.10	18 Nitroglycerin
52.793	27522	2755	0.100	65.90	27 PETN
	53658	4181		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000004.d\C-000004.d

Date : 26-JAN-2012 20:02

Client ID:

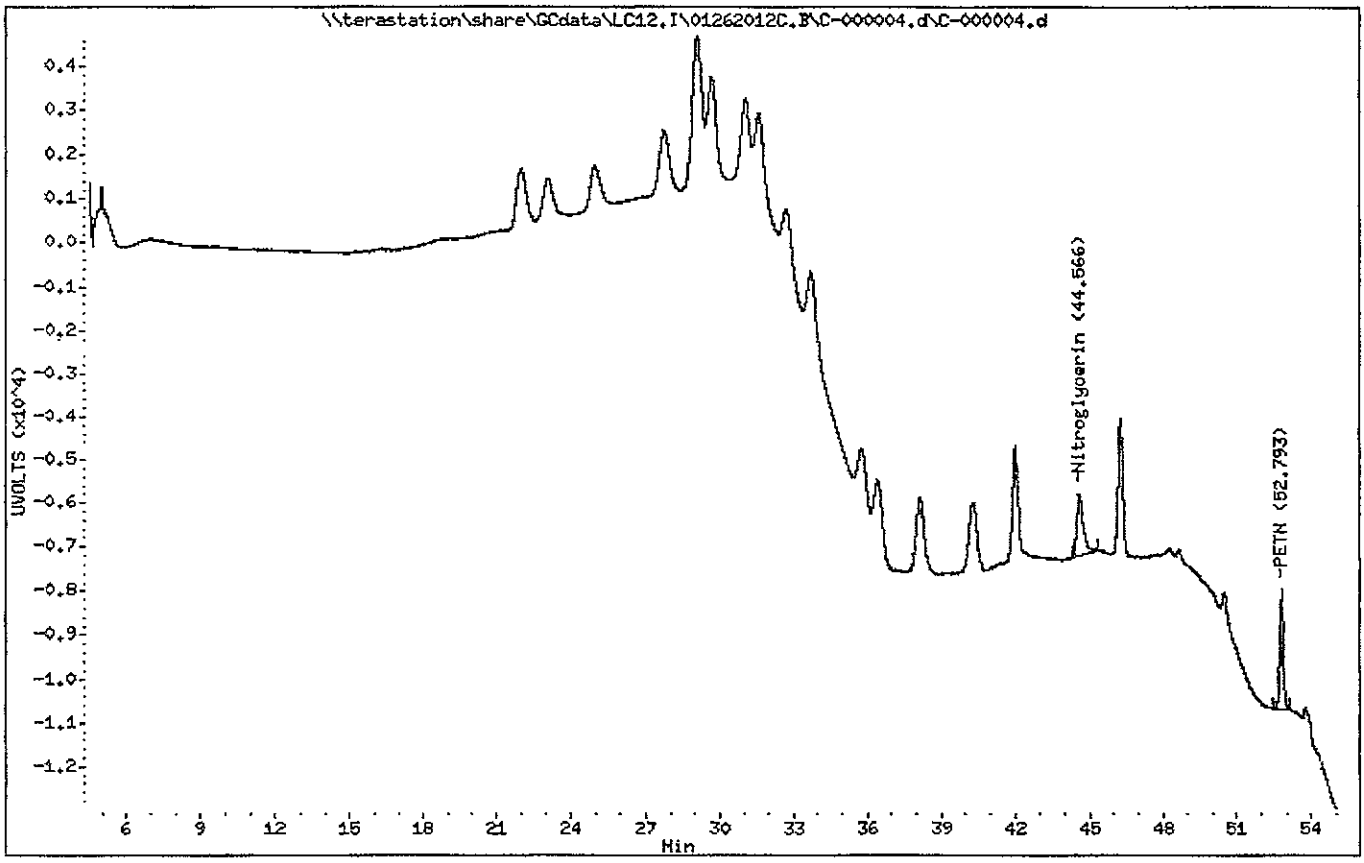
Instrument: LC12.i

Sample Info: STD_03 12GCSV0096 8330 20ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_04 12GCSV0097 8330 50ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 21:08 File ID: 01262012C.B/C-000005.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	50.0	22.014	0.090	2381	47.62000				
2	1,3-Dinitrobenzene	50.0	24.988	0.090	5162	103.2400				
3	1,3,5-Trinitrobenz	50.0	27.731	0.083	3859	77.18000				
4	2-Nitrotoluene	100	29.078	0.080	2983	29.83000				
5	3-Nitrotoluene	50.0	29.644	0.067	1913	38.26000				
6	3,5-Dinitroaniline	50.0	31.034	0.073	4162	83.24000				
7	RDX	50.0	31.611	0.077	2444	48.88000				
8	2,4-Dinitrotoluene	50.0	32.744	0.077	4429	88.58000				
9	2,6-Dinitrotoluene	50.0	33.754	0.060	2681	53.62000				
10	2-AM-4,6-DNT	50.0	35.804	0.057	3625	72.50000				
11	4-AM-2,6-DNT	50.0	36.451	0.063	3098	61.96000				
12	3,4-Dinitrotoluene	50.0	38.148	0.013	2321	46.42000				
13	2,4,6-Trinitrotolu	50.0	40.301	0.050	3958	79.16000				
14	HMX	50.0	42.004	0.023	3037	60.74000				
15	TETRYL	50.0	46.281	0.027	5822	116.4400				
16	4-Nitrotoluene	50.0								
17	EGDN	50.0								
18	PETN	50.0					52.798	0.000	7052	141.0400
19	Picric ACID	100								
20	Nitroglycerin	50.0					44.578	0.037	3908	78.16000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:22

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 21:08
Operator : SV Inst ID: LC12.i
Smp Info : STD_04 12GCSV0097 8330 50ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:21 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
14.738	493	34	0.069	0.06		
22.014	70651	2381	0.034	4.54		17 Nitrobenzene
24.988	151081	5162	0.034	9.84		13 1,3-Dinitrobenzene
27.731	117087	3859	0.033	7.35		10 1,3,5-Trinitrobenze
29.078	79798	2983	0.037	5.68		24 2-Nitrotoluene
29.644	51428	1913	0.037	3.64		26 3-Nitrotoluene
31.034	101120	4162	0.041	7.93		15 3,5-Dinitroaniline
31.611	61375	2444	0.040	4.66		7 RDX
32.744	123332	4429	0.036	8.44		23 2,4-Dinitrotoluene
33.754	77068	2681	0.035	5.11		22 2,6-Dinitrotoluene
35.091	275	36	0.131	0.06		
35.804	95455	3625	0.038	6.91		21 2-AM-4,6-DNT
36.451	83480	3098	0.037	5.90		20 4-AM-2,6-DNT
37.361	203	33	0.162	0.06		
38.148	54149	2321	0.043	4.42	$	1 3,4-Dinitrotoluene
39.201	2701	133	0.049	0.25		
39.771	76	25	0.331	0.04		
40.301	95235	3958	0.042	7.54		19 2,4,6-Trinitrotolue
41.354	293	19	0.065	0.03		
42.004	47996	3037	0.063	5.79		4 HMX
42.874	107	24	0.224	0.04		
44.494	611	30	0.049	0.05		
45.051	496	51	0.103	0.09		
45.728	577	60	0.104	0.11		
46.281	79663	5822	0.073	11.23		16 TETRYL
48.988	1470	123	0.084	0.23		
	1296219	52443		100.000		

Total unknown % height = 1.020

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d

Page 2

Date : 26-JAN-2012 21:08

Client ID:

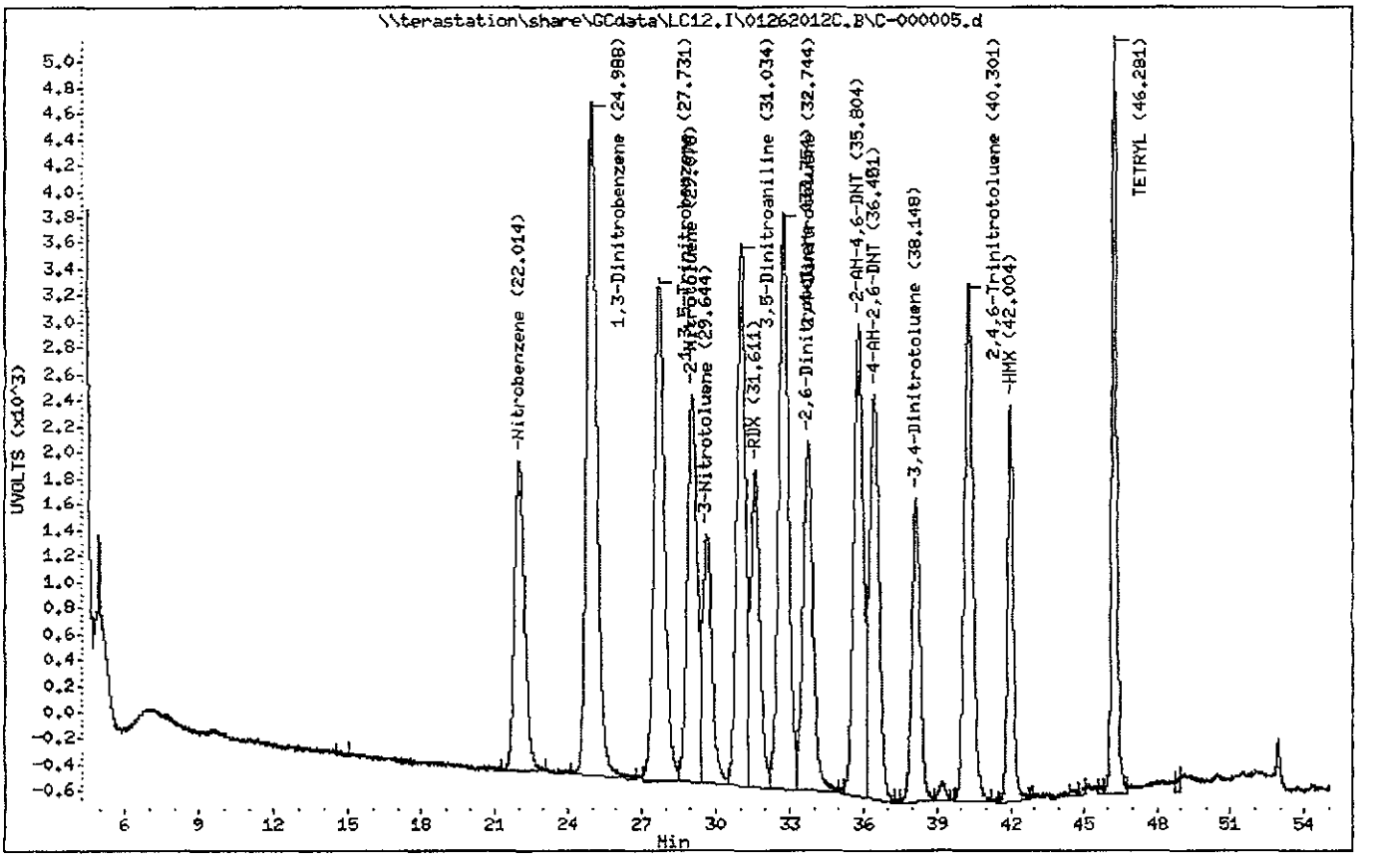
Instrument: LC12.i

Sample Info: STD_04 12GCSV0097 8330 50ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-00000
Lab Smp Id: STD_04 12GCSV0097 8
Inj Date : 26-JAN-2012 21:08
Operator : SV Inst ID: LC12.i
Smp Info : STD_04 12GCSV0097 8330 50ng/mL;1;
Misc Info : ;4;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:22 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.578	63715	3908	0.061	35.65	18 Nitroglycerin
52.798	64712	7052	0.109	64.35	27 PETN
	128427	10960		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000005.d\C-000005.d

Date : 26-JAN-2012 21:08

Client ID:

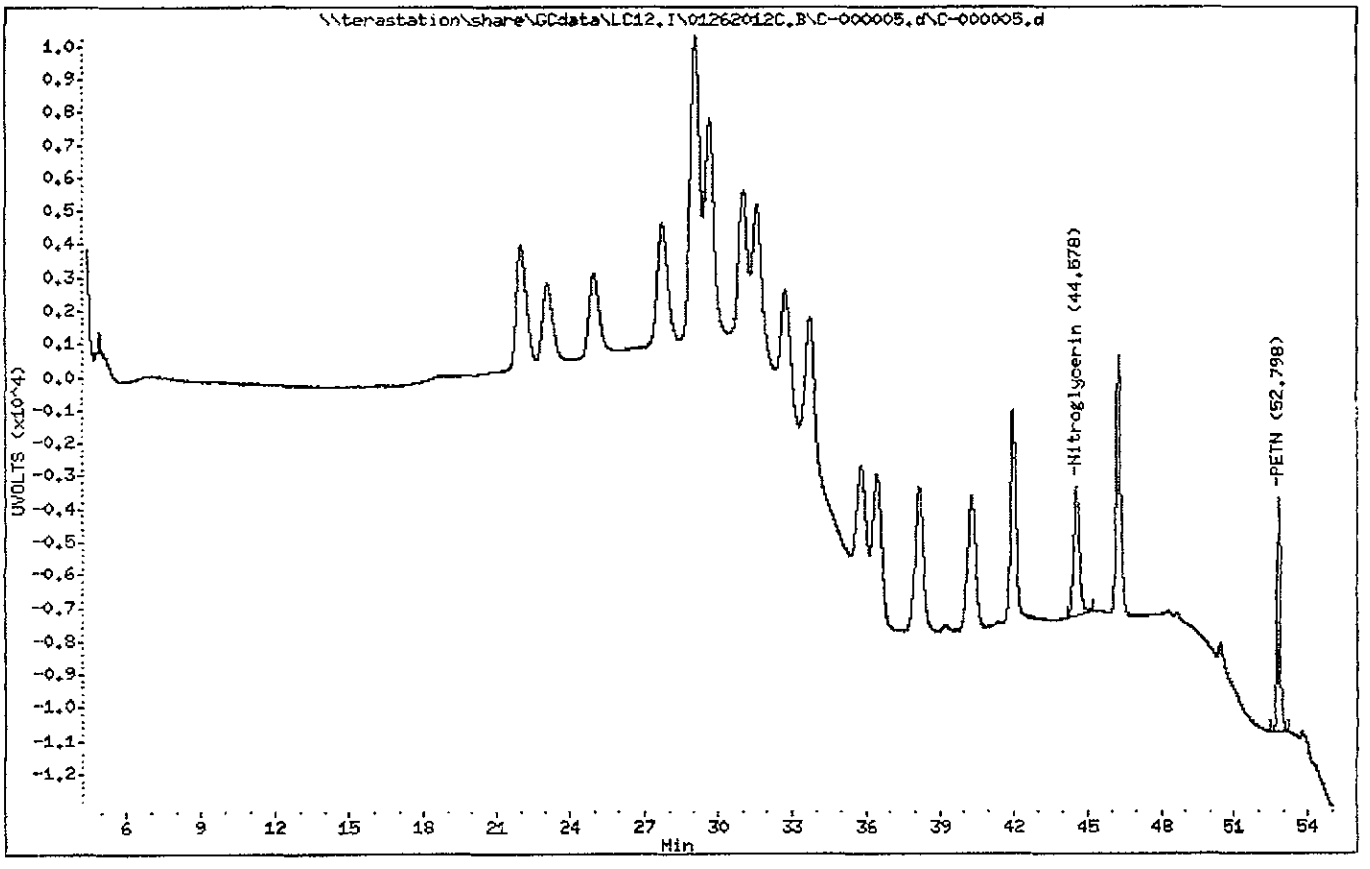
Instrument: LC12.i

Sample Info: STD_04 12GCSV0097 8330 50ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_05 12GCSV0099 8330 100ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 22:13 File ID: 01262012C.B/C-000006.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	100	22.001	0.076	4901	49.01000				
2	1,3-Dinitrobenzene	100	24.984	0.086	10548	105.4800				
3	1,3,5-Trinitrobenz	100	27.734	0.086	7817	78.17000				
4	2-Nitrotoluene	200	29.081	0.083	6102	30.51000				
5	3-Nitrotoluene	100	29.661	0.083	3890	38.90000				
6	3,5-Dinitroaniline	100	31.054	0.093	8429	84.29000				
7	RDX	100	31.631	0.096	4864	48.64000				
8	2,4-Dinitrotoluene	100	32.767	0.100	8964	89.64000				
9	2,6-Dinitrotoluene	100	33.794	0.100	5384	53.84000				
10	2-AM-4,6-DNT	100	35.851	0.103	7357	73.57000				
11	4-AM-2,6-DNT	100	36.494	0.106	6329	63.29000				
12	3,4-Dinitrotoluene	100	38.184	0.050	4900	49.00000				
13	2,4,6-Trinitrotolu	100	40.341	0.090	8168	81.68000				
14	HMX	100	42.041	0.060	6233	62.33000				
15	TETRYL	100	46.294	0.040	11965	119.6500				
16	4-Nitrotoluene	100								
17	EGDN	100								
18	PETN	100					52.814	0.016	14555	145.5500
19	Picric ACID	200								
20	Nitroglycerin	100					44.591	0.050	8512	85.12000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:24

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 22:13
Operator : SV Inst ID: LC12.i
Smp Info : STD_05 12GCSV0099 8330 100ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:23 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
22.001	147874	4901	0.033	4.59		17 Nitrobenzene
24.984	307226	10548	0.034	9.88		13 1,3-Dinitrobenzene
27.734	237221	7817	0.033	7.32		10 1,3,5-Trinitrobenze
29.081	163972	6102	0.037	5.71		24 2-Nitrotoluene
29.661	102784	3890	0.038	3.64		26 3-Nitrotoluene
31.054	204697	8429	0.041	7.89		15 3,5-Dinitroaniline
31.631	122035	4864	0.040	4.55		7 RDX
32.767	247812	8964	0.036	8.39		23 2,4-Dinitrotoluene
33.794	153274	5384	0.035	5.04		22 2,6-Dinitrotoluene
35.851	194532	7357	0.038	6.89		21 2-AM-4,6-DNT
36.494	170341	6329	0.037	5.93		20 4-AM-2,6-DNT
38.184	113101	4900	0.043	4.59	$	1 3,4-Dinitrotoluene
38.904	164	67	0.409	0.06		
39.227	5976	270	0.045	0.25		
40.341	196575	8168	0.042	7.65		19 2,4,6-Trinitrotolue
41.374	274	28	0.102	0.02		
42.041	95674	6233	0.065	5.84		4 HMX
42.901	100	17	0.169	0.01		
43.437	302	29	0.096	0.02		
44.421	91	31	0.341	0.02		
44.617	698	66	0.095	0.06		
45.161	1704	69	0.040	0.06		
46.294	160940	11965	0.074	11.33		16 TETRYL
47.877	373	46	0.123	0.04		
48.124	988	66	0.067	0.06		
48.347	1270	70	0.055	0.06		
48.991	2482	115	0.046	0.10		
	2632480	106725		100.000		

Total unknown % height = 0.7600

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d

Date : 26-JAN-2012 22:13

Client ID:

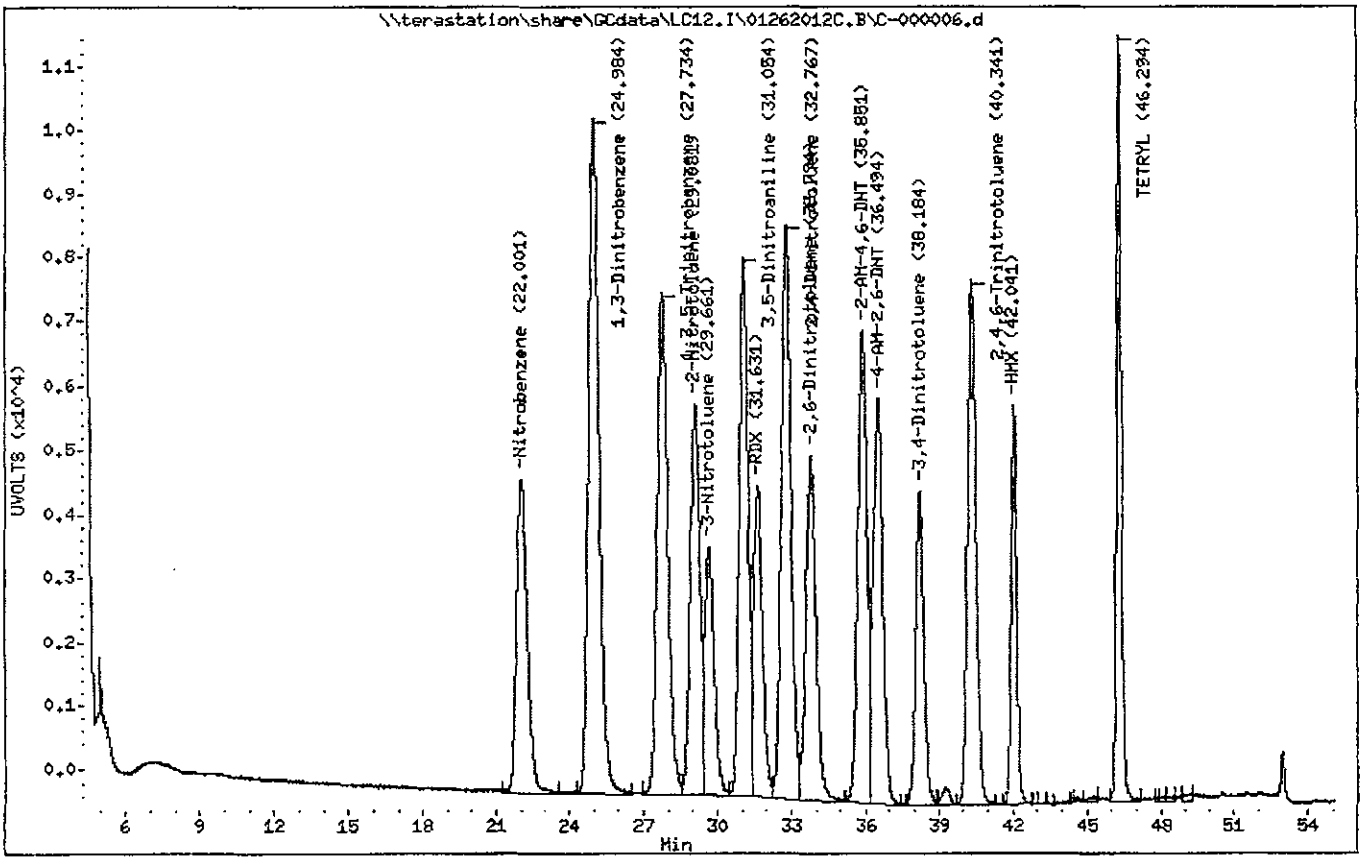
Instrument: LC12.i

Sample Info: STD_05 12GCSV0099 8330 100ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-00000
Lab Smp Id: STD_05 12GCSV0099 8
Inj Date : 26-JAN-2012 22:13
Operator : SV Inst ID: LC12.i
Smp Info : STD_05 12GCSV0099 8330 100ng/mL;1;
Misc Info : ;5;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:23 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.591	130939	8512	0.065	36.90	18 Nitroglycerin
52.814	128012	14555	0.114	63.10	27 PETN
	258951	23067		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000006.d\C-000006.d

Date : 26-JAN-2012 22:13

Client ID:

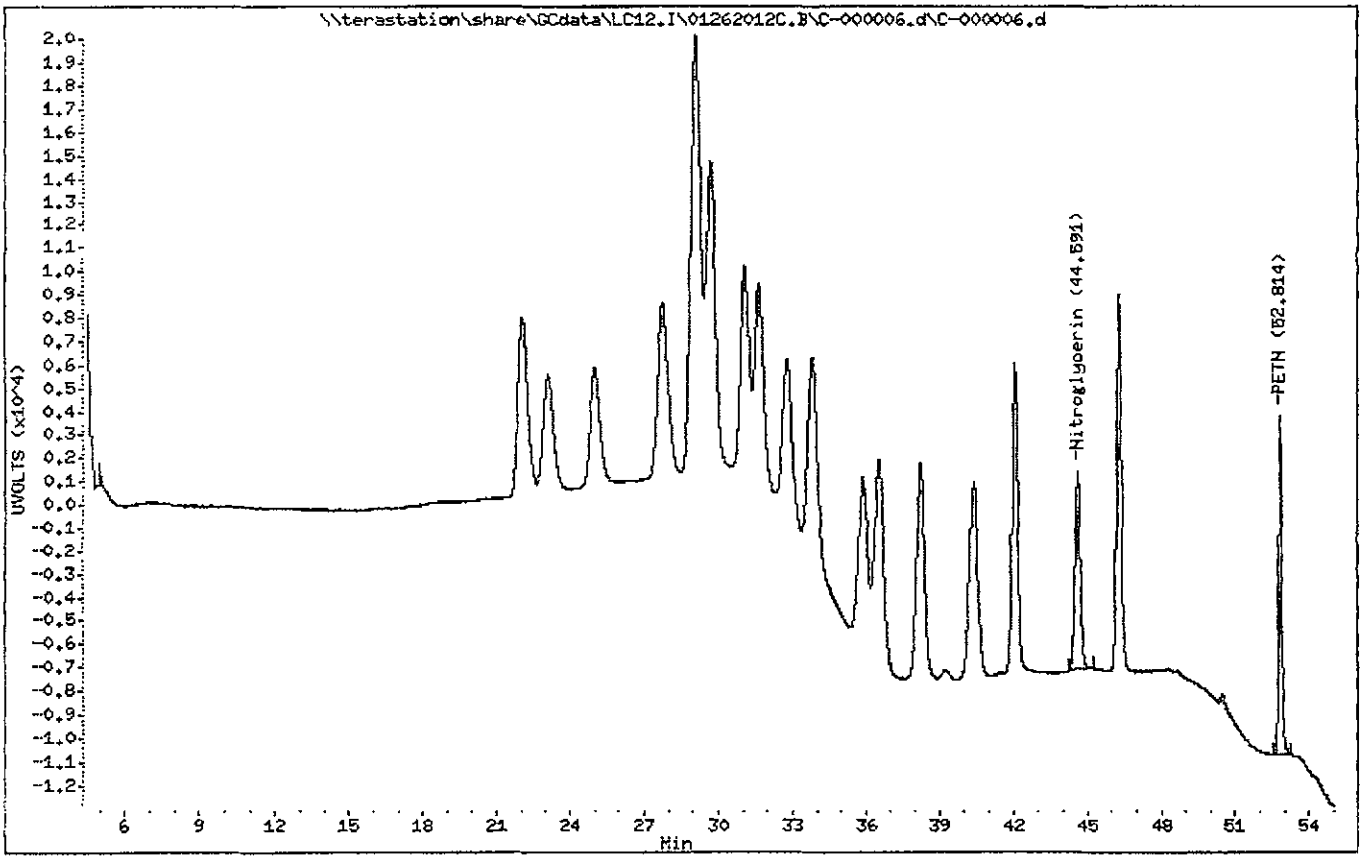
Instrument: LC12.i

Sample Info: STD_05 12GCSV0099 B330 100ng/mL:1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 26-JAN-2012 23:19 File ID: 01262012C.B/C-000007.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	200	21.984	0.059	9360	46.80000				
2	1,3-Dinitrobenzene	200	24.960	0.063	20375	101.8750				
3	1,3,5-Trinitrobenz	200	27.724	0.076	15368	76.84000				
4	2-Nitrotoluene	400	29.060	0.063	11874	29.68500				
5	3-Nitrotoluene	200	29.634	0.056	7556	37.78000				
6	3,5-Dinitroaniline	200	31.034	0.073	16382	81.91000				
7	RDX	200	31.604	0.069	9397	46.98500				
8	2,4-Dinitrotoluene	200	32.744	0.076	17560	87.80000				
9	2,6-Dinitrotoluene	200	33.767	0.073	10540	52.70000				
10	2-AM-4,6-DNT	200	35.814	0.066	14468	72.34000				
11	4-AM-2,6-DNT	200	36.454	0.066	12455	62.27500				
12	3,4-Dinitrotoluene	200	38.157	0.023	9601	48.00500				
13	2,4,6-Trinitrotolu	200	40.314	0.063	16241	81.20500				
14	HMX	200	42.020	0.039	12333	61.66500				
15	TETRYL	200	46.277	0.023	23797	118.9850				
16	4-Nitrotoluene	200								
17	EGDN	200								
18	PETN	200					52.800	0.003	29476	147.3800
19	Picric ACID	500								
20	Nitroglycerin	200					44.577	0.036	17208	86.04000

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:25

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 23:19
Operator : SV Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:24 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
21.984	294064	9360	0.032	4.48		17 Nitrobenzene
24.064	357	44	0.123	0.02		
24.960	614388	20375	0.033	9.77		13 1,3-Dinitrobenzene
27.724	472067	15368	0.033	7.37		10 1,3,5-Trinitrobenze
29.060	327273	11874	0.036	5.69		24 2-Nitrotoluene
29.634	203368	7556	0.037	3.62		26 3-Nitrotoluene
31.034	409069	16382	0.040	7.85		15 3,5-Dinitroaniline
31.604	237986	9397	0.039	4.50		7 RDX
32.744	494022	17560	0.036	8.42		23 2,4-Dinitrotoluene
33.767	302256	10540	0.035	5.05		22 2,6-Dinitrotoluene
35.814	390139	14468	0.037	6.93		21 2-AM-4,6-DNT
36.454	342281	12455	0.036	5.97		20 4-AM-2,6-DNT
38.157	226239	9601	0.042	4.60	$	1 3,4-Dinitrotoluene
39.224	12870	552	0.043	0.26		
40.314	395982	16241	0.041	7.79		19 2,4,6-Trinitrotolue
42.020	192448	12333	0.064	5.91		4 HMX
42.887	449	26	0.058	0.01		
43.964	93	34	0.366	0.01		
44.100	195	28	0.144	0.01		
44.594	2140	131	0.061	0.06		
45.034	772	101	0.131	0.04		
45.227	2022	131	0.065	0.06		
46.277	320449	23797	0.074	11.53		16 TETRYL
48.214	958	56	0.058	0.02		
48.674	1060	73	0.069	0.03		
	5242947	208483		100.000		

Total unknown % height = 0.5200

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d

Page 2

Date : 26-JAN-2012 23:19

Client ID:

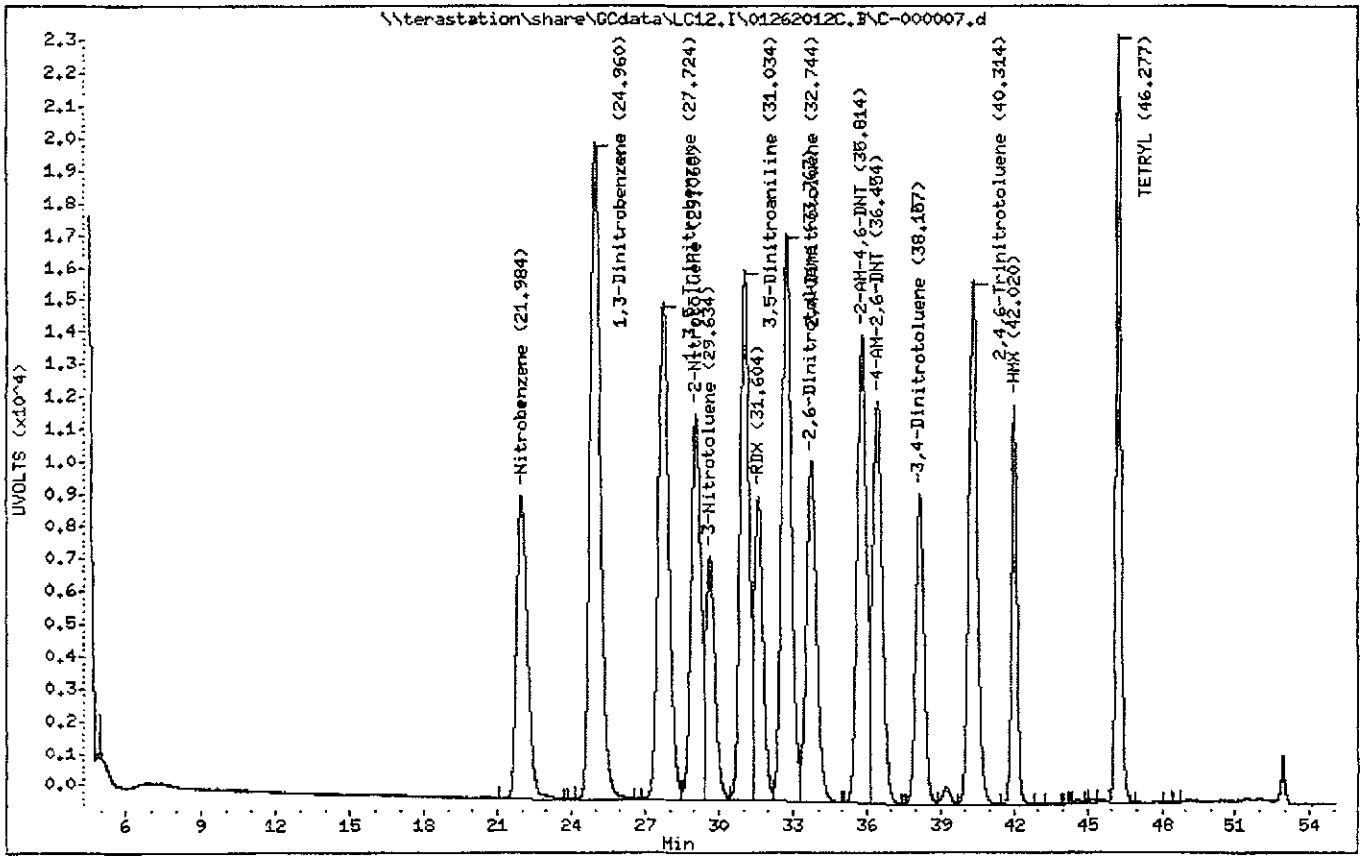
Instrument: LC12.i

Sample Info: STD_06 12GCSW0100 8330 200mg/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-00000
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 26-JAN-2012 23:19
Operator : SV Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;1;
Misc Info : ;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:25 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.577	268248	17208	0.064	36.86	18 Nitroglycerin
52.800	262180	29476	0.112	63.14	27 PETN
	530428	46684		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000007.d\C-000007.d Page 2

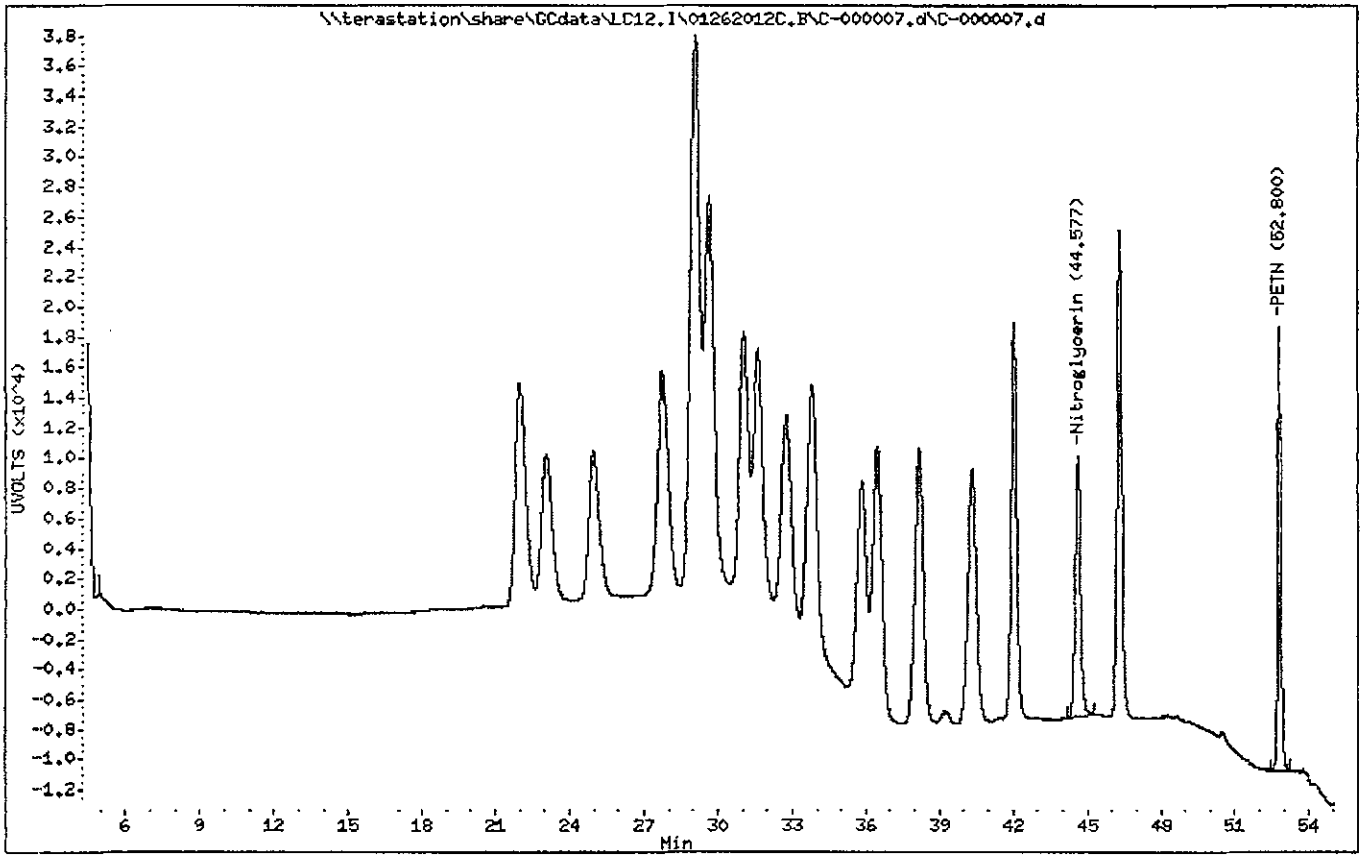
Date : 26-JAN-2012 23:19

Client ID: Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_07 12GCSV0101 8330 500ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 00:24 File ID: 01262012C.B/C-000008.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	500	21.927	0.003	21531	43.06200				
2	1,3-Dinitrobenzene	500	24.907	0.009	47782	95.56400				
3	1,3,5-Trinitrobenz	500	27.670	0.023	37013	74.02600				
4	2-Nitrotoluene	1000	29.007	0.009	28139	28.13900				
5	3-Nitrotoluene	500	29.577	-0.001	18051	36.10200				
6	3,5-Dinitroaniline	500	30.987	0.026	38658	77.31600				
7	RDX	500	31.550	0.016	22300	44.60000				
8	2,4-Dinitrotoluene	500	32.694	0.026	42092	84.18400				
9	2,6-Dinitrotoluene	500	33.717	0.023	25283	50.56600				
10	2-AM-4,6-DNT	500	35.770	0.023	34598	69.19600				
11	4-AM-2,6-DNT	500	36.407	0.019	29961	59.92200				
12	3,4-Dinitrotoluene	300	38.124	-0.011	13878	46.26000				
13	2,4,6-Trinitrotolu	500	40.284	0.033	39662	79.32400				
14	HMX	500	41.994	0.013	30016	60.03200				
15	TETRYL	500	46.267	0.013	59227	118.4540				
16	4-Nitrotoluene	500								
17	EGDN	500								
18	PETN	500					52.794	-0.004	72909	145.8180
19	Picric ACID	1000								
20	Nitroglycerin	500					44.564	0.023	42503	85.00600

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:26

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 27-JAN-2012 00:24
Operator : SV Inst ID: LC12.i
Smp Info : STD_07 12GCSV0101 8330 500ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:25 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
14.137	177	31	0.175	0.00		
18.127	309	37	0.120	0.00		
20.554	2703	85	0.031	0.01		
21.927	733420	21531	0.029	4.38	17	Nitrobenzene
24.907	1531560	47782	0.031	9.74	13	1,3-Dinitrobenzene
27.670	1186263	37013	0.031	7.54	10	1,3,5-Trinitrobenze
29.007	825693	28139	0.034	5.73	24	2-Nitrotoluene
29.577	508837	18051	0.035	3.67	26	3-Nitrotoluene
30.987	1031799	38658	0.037	7.88	15	3,5-Dinitroaniline
31.550	587057	22300	0.038	4.54	7	RDX
32.694	1235159	42092	0.034	8.58	23	2,4-Dinitrotoluene
33.717	758533	25283	0.033	5.15	22	2,6-Dinitrotoluene
35.770	973633	34598	0.036	7.05	21	2-AM-4,6-DNT
36.407	857300	29961	0.035	6.10	20	4-AM-2,6-DNT
38.124	338092	13878	0.041	2.82	$ 1	3,4-Dinitrotoluene
39.194	31667	1340	0.042	0.27		
40.284	986509	39662	0.040	8.08	19	2,4,6-Trinitrotolue
41.994	477093	30016	0.063	6.11	4	HMX
42.904	354	35	0.099	0.00		
43.354	892	41	0.046	0.00		
44.560	4819	325	0.067	0.06		
45.197	11888	299	0.025	0.06		
46.267	801185	59227	0.074	12.22	16	TETRYL
47.967	146	28	0.192	0.00		
48.694	630	40	0.064	0.00		
48.954	1543	71	0.046	0.01		
	12887262	490523		100.000		

Total unknown % height = 0.4100

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d

Date : 27-JAN-2012 00:24

Client ID:

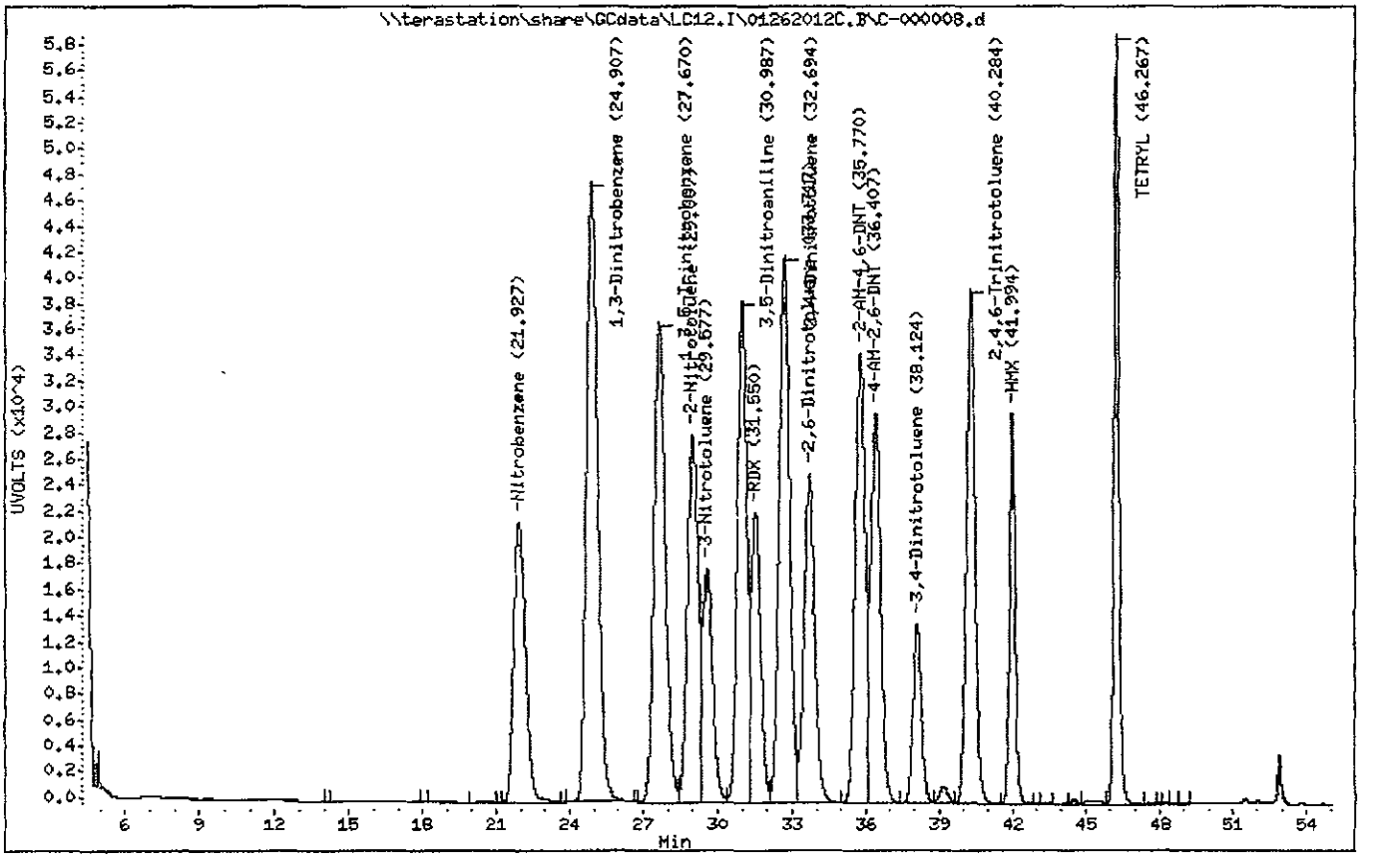
Instrument: LC12.1

Sample Info: STD_07 12GCSV0101 8330 500ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-00000
Lab Smp Id: STD_07 12GCSV0101 8
Inj Date : 27-JAN-2012 00:24
Operator : SV Inst ID: LC12.i
Smp Info : STD_07 12GCSV0101 8330 500ng/mL;1;
Misc Info : ;7;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.564	684246	42503	0.062	36.82	18 Nitroglycerin
52.794	644063	72909	0.113	63.18	27 PETN
	1328309	115412		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000008.d\C-000008.d

Date : 27-JAN-2012 00:24

Client ID:

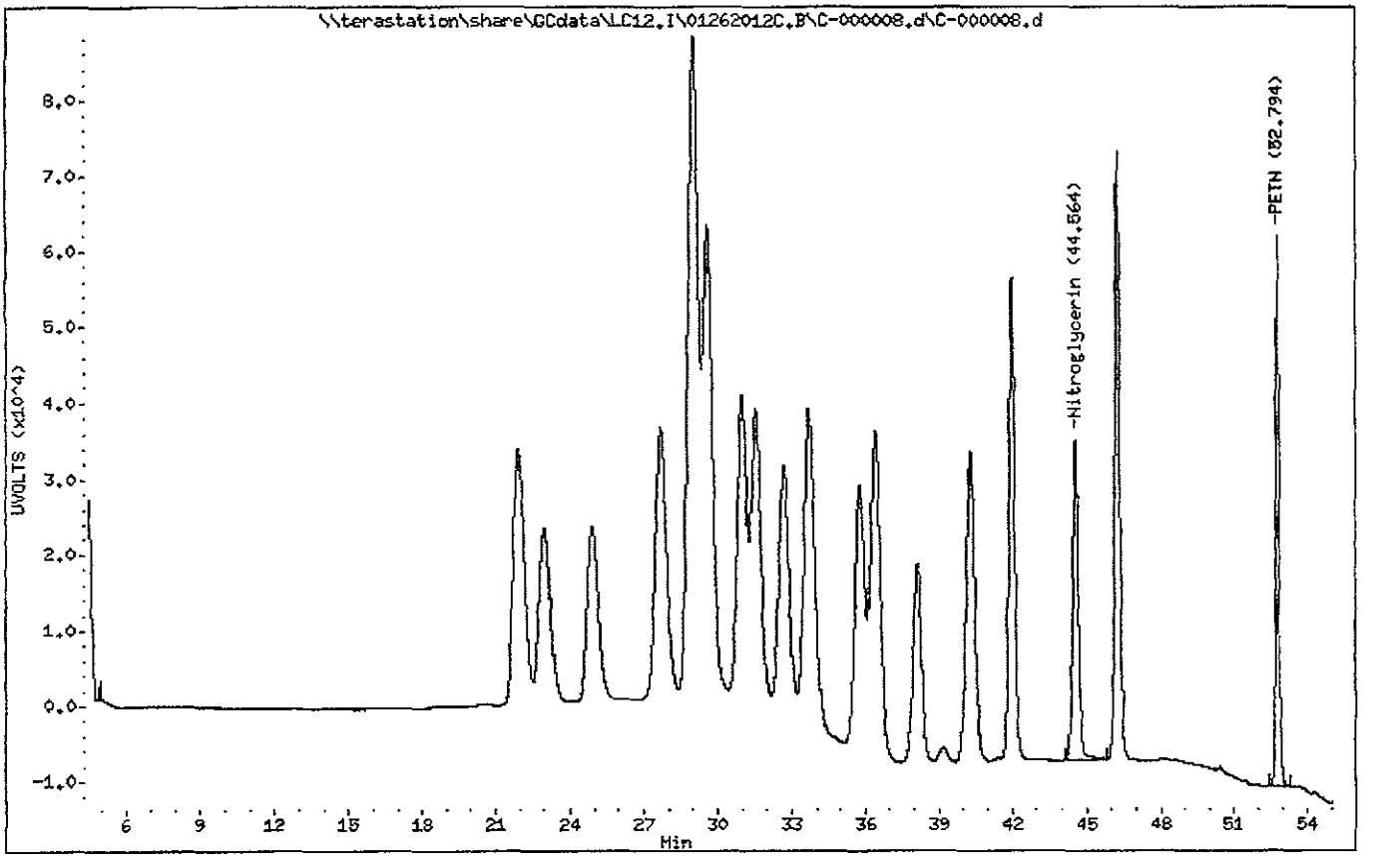
Instrument: LC12.i

Sample Info: STD_07 12GCSV0101 8330 500ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Dual Column Summary - ICAL RFs

Sample : STD_08 12GCSV0102 8330 1000ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 01:30 File ID: 01262012C.B/C-000009.d
Operator : SV Sublist: 1_CAL

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	Nitrobenzene	1000	21.846	-0.078	34722	34.72200				
2	1,3-Dinitrobenzene	1000	24.833	-0.065	79852	79.85200				
3	1,3,5-Trinitrobenz	1000	27.600	-0.048	65395	65.39500				
4	2-Nitrotoluene	2000	28.940	-0.058	48126	24.06300				
5	3-Nitrotoluene	1000	29.430	-0.148	32302	32.30200				
6	3,5-Dinitroaniline	1000	30.930	-0.031	65289	65.28900				
7	RDX	1000	31.433	-0.101	38868	38.86800				
8	2,4-Dinitrotoluene	1000	32.633	-0.035	73568	73.56800				
9	2,6-Dinitrotoluene	1000	33.653	-0.041	44278	44.27800				
10	2-AM-4,6-DNT	1000	35.720	-0.028	60426	60.42600				
11	4-AM-2,6-DNT	1000	36.346	-0.041	52899	52.89900				
12	3,4-Dinitrotoluene	500	38.073	-0.061	20657	41.31400				
13	2,4,6-Trinitrotolu	1000	40.236	-0.015	73818	73.81800				
14	HMX	1000	41.956	-0.025	55645	55.64500				
15	TETRYL	1000	46.236	-0.018	114530	114.5300				
16	4-Nitrotoluene	1000								
17	EGDN	1000								
18	PETN	1000					52.776	-0.021	146536	146.5360
19	Picric ACID	2000								
20	Nitroglycerin	1000					44.526	-0.015	81582	81.58200

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:27

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 27-JAN-2012 01:30
Operator : SV Inst ID: LC12.i
Smp Info : STD_08 12GCSV0102 8330 1000ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.266	685	40	0.058	0.00		
21.846	1463193	34722	0.024	4.01	17	Nitrobenzene
24.833	3060241	79852	0.026	9.24	13	1,3-Dinitrobenzene
27.600	2363752	65395	0.028	7.56	10	1,3,5-Trinitrobenze
28.940	1742180	48126	0.028	5.56	24	2-Nitrotoluene
29.430	926410	32302	0.035	3.73	26	3-Nitrotoluene
30.930	2169935	65289	0.030	7.55	15	3,5-Dinitroaniline
31.433	1054089	38868	0.037	4.49	7	RDX
32.633	2467371	73568	0.030	8.51	23	2,4-Dinitrotoluene
33.653	1513766	44278	0.029	5.12	22	2,6-Dinitrotoluene
35.720	1952844	60426	0.031	6.99	21	2-AM-4,6-DNT
36.346	1701187	52899	0.031	6.12	20	4-AM-2,6-DNT
38.073	562093	20657	0.037	2.39	$ 1	3,4-Dinitrotoluene
39.146	63491	2447	0.039	0.28		
40.236	1971909	73818	0.037	8.54	19	2,4,6-Trinitrotolue
41.956	951690	55645	0.058	6.43	4	HMX
44.000	885	62	0.070	0.00		
44.536	9404	594	0.063	0.06		
45.160	21041	549	0.026	0.06		
46.236	1601906	114530	0.071	13.36	16	TETRYL
47.676	687	32	0.047	0.00		
48.600	116	12	0.104	0.00		
49.036	242	38	0.157	0.00		
	25599117	864149		100.000		

Total unknown % height = 0.4000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d

Date : 27-JAN-2012 01:30

Client ID:

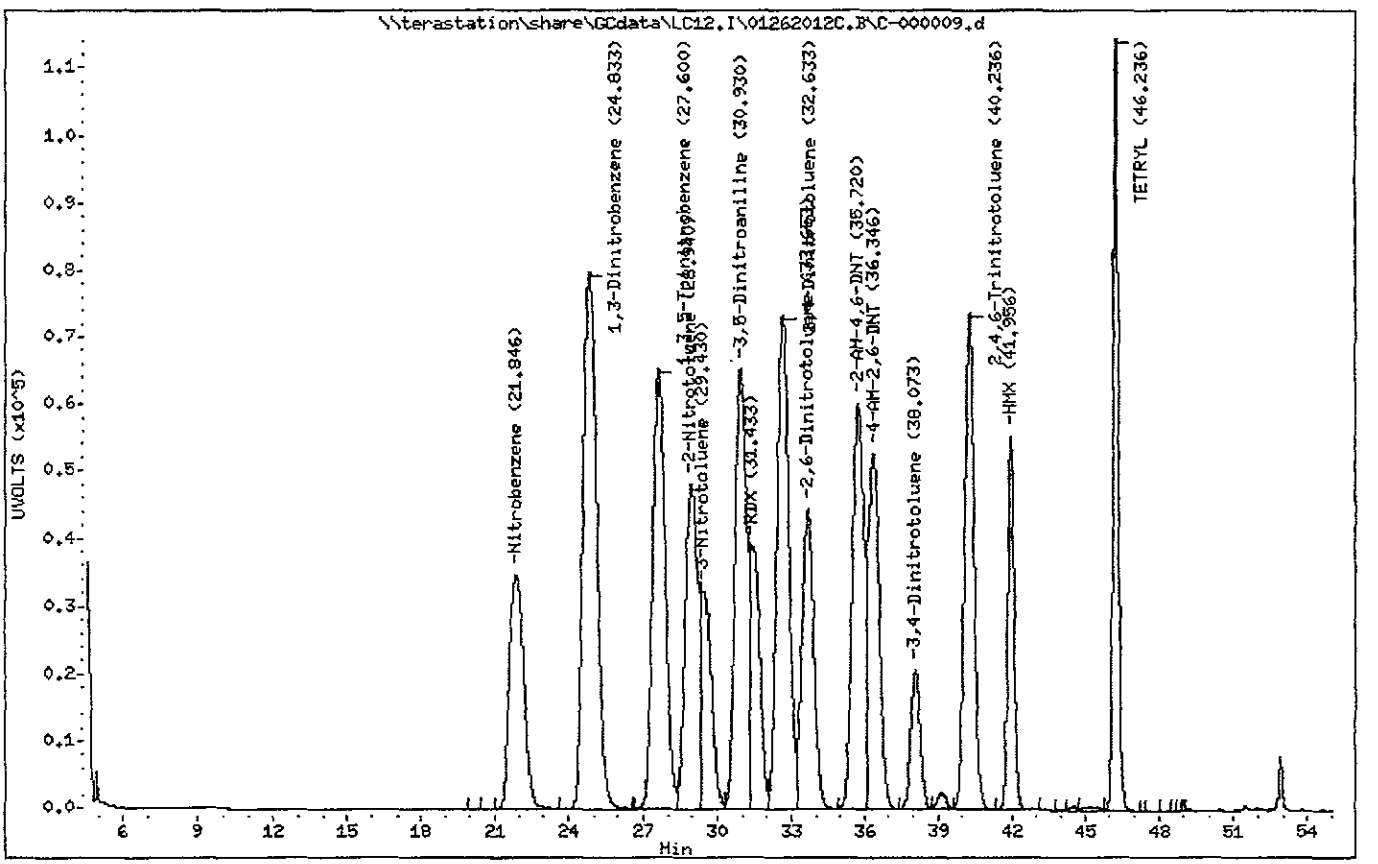
Instrument: LC12.i

Sample Info: STD_08 12GCSV0102 8330 1000ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-00000
Lab Smp Id: STD_08 12GCSV0102 8
Inj Date : 27-JAN-2012 01:30
Operator : SV Inst ID: LC12.i
Smp Info : STD_08 12GCSV0102 8330 1000ng/mL;1;
Misc Info : ;8;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:27 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.526	1367473	81582	0.060	35.76	18 Nitroglycerin
52.776	1290535	146536	0.114	64.24	27 PETN
	2658008	228118		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000009.d\C-000009.d

Date : 27-JAN-2012 01:30

Client ID:

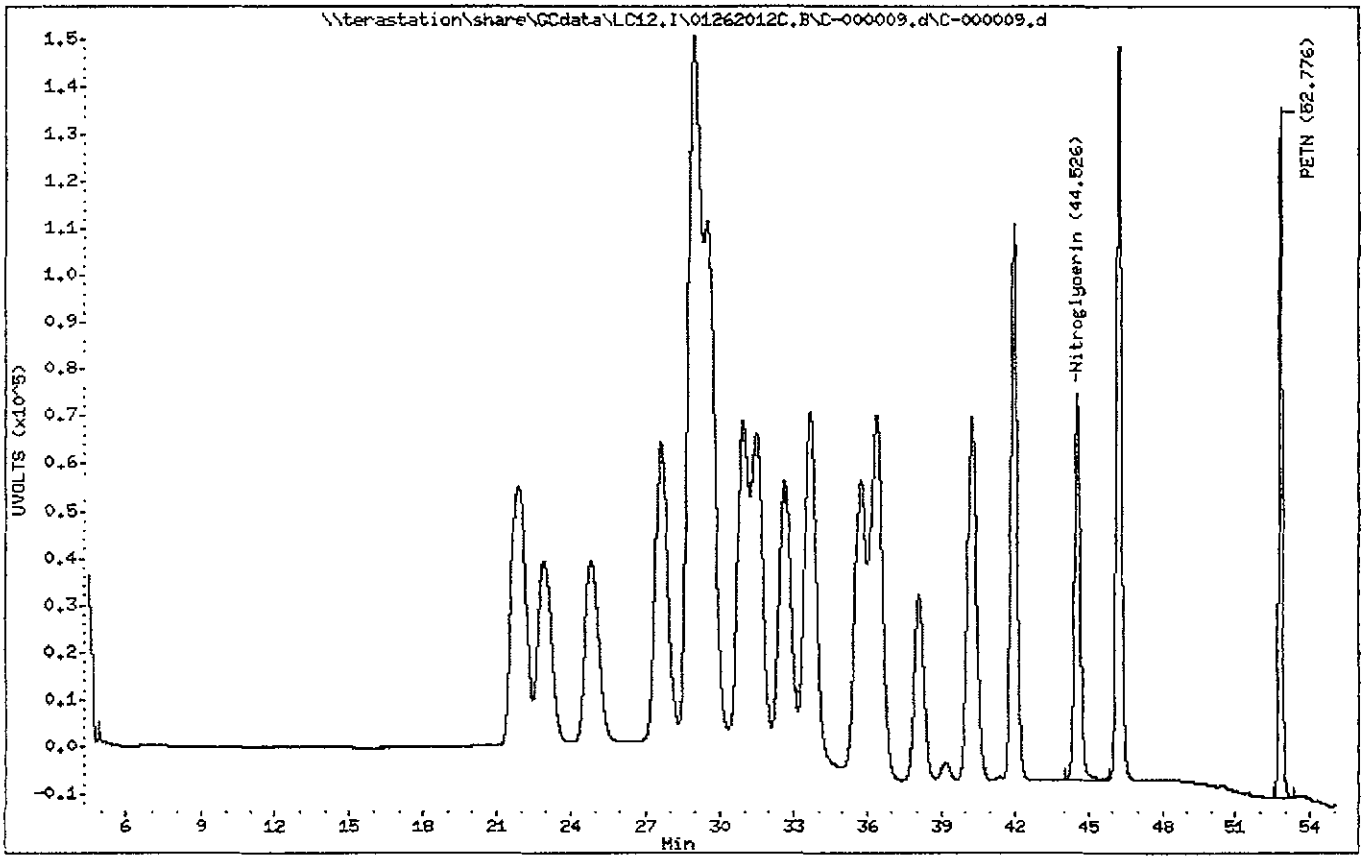
Instrument: LC12.i

Sample Info: STD_08 12GCSV0102 8330 1000ng/mL;1;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 27-JAN-2012 02:35
Operator : SV

Instrument: LC12
File ID: 01262012C.B/C-000010.d
Sublist: CAL

	Side A				Side B				
	Compound	RT	RTDiff	Response	Conc ng	RT	RTDiff	Response	Conc ng	RPD
1	Nitrobenzene									
2	1,3-Dinitrobenzene									
3	1,3,5-Trinitrobenz	27.598	-0.050	34	0.4457					
4	2-Nitrotoluene	28.888	-0.110	38	1.302					
5	3-Nitrotoluene	29.644	0.067	34	0.8869					
6	3,5-Dinitroaniline	30.894	-0.067	34	0.4132					
7	RDX	31.448	-0.087	62	1.243					
8	2,4-Dinitrotoluene	32.764	0.097	46	0.5227					
9	2,6-Dinitrotoluene	33.524	-0.170	32	0.5976					
10	2-AM-4,6-DNT	35.561	-0.187	32	0.4444					
11	4-AM-2,6-DNT									
12	3,4-Dinitrotoluene									
13	2,4,6-Trinitrotolu	40.261	0.010	21	0.2634					
14	HMX	42.221	0.240	27	0.4446					
15	TETRYL									
16	4-Nitrotoluene									
17	EGDN									
18	PETN									
19	Picric ACID									
20	Nitroglycerin									

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 01/27/2012 11:28

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d
Lab Smp Id: BLANK
Inj Date : 27-JAN-2012 02:35
Operator : SV Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:26 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 81
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
22.884	349	38	0.109	2.02	
26.981	447	29	0.065	1.54	
27.258	481	25	0.052	1.32	
27.598	256	34	0.133	1.80	10 1,3,5-Trinitrobenze
27.818	155	32	0.206	1.70	
28.014	477	40	0.084	2.12	
28.404	611	29	0.047	1.54	
28.731	133	27	0.202	1.43	
28.888	299	38	0.127	2.02	24 2-Nitrotoluene
29.144	570	33	0.058	1.75	
29.644	371	34	0.092	1.80	26 3-Nitrotoluene
29.858	307	47	0.153	2.49	
30.058	648	42	0.065	2.23	
30.504	332	26	0.078	1.38	
30.894	347	34	0.098	1.80	15 3,5-Dinitroaniline
31.071	130	41	0.314	2.17	
31.254	466	59	0.127	3.13	
31.344	399	68	0.171	3.61	
31.448	457	62	0.136	3.29	7 RDX
31.688	334	80	0.239	4.25	
31.944	709	75	0.106	3.98	
32.764	591	46	0.078	2.44	23 2,4-Dinitrotoluene
33.524	344	32	0.093	1.70	22 2,6-Dinitrotoluene
34.084	334	26	0.078	1.38	
34.648	162	34	0.210	1.80	
34.994	292	39	0.134	2.07	
35.561	230	32	0.139	1.70	21 2-AM-4,6-DNT
37.344	246	35	0.142	1.86	
37.784	215	26	0.121	1.38	
38.474	406	32	0.079	1.70	
39.191	150	23	0.153	1.22	
39.571	100	21	0.210	1.11	
39.998	113	28	0.247	1.48	
40.261	92	21	0.229	1.11	19 2,4,6-Trinitrotolue
40.791	121	27	0.223	1.43	
41.124	154	12	0.078	0.63	

Data File: C-000010.d
Report Date: 27-Jan-2012 11:28

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.508	171	22	0.129	1.16	
42.221	249	27	0.108	1.43	4 HMX
42.481	155	24	0.155	1.27	
43.138	233	23	0.099	1.22	
43.784	224	27	0.120	1.43	
45.901	639	61	0.096	3.24	
46.981	327	63	0.193	3.34	
47.318	812	70	0.086	3.72	
47.924	762	91	0.119	4.83	
49.008	4543	146	0.032	7.98	
	19945	1881		100.000	

Total unknown % height = 80.91

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d

Date : 27-JAN-2012 02:35

Client ID:

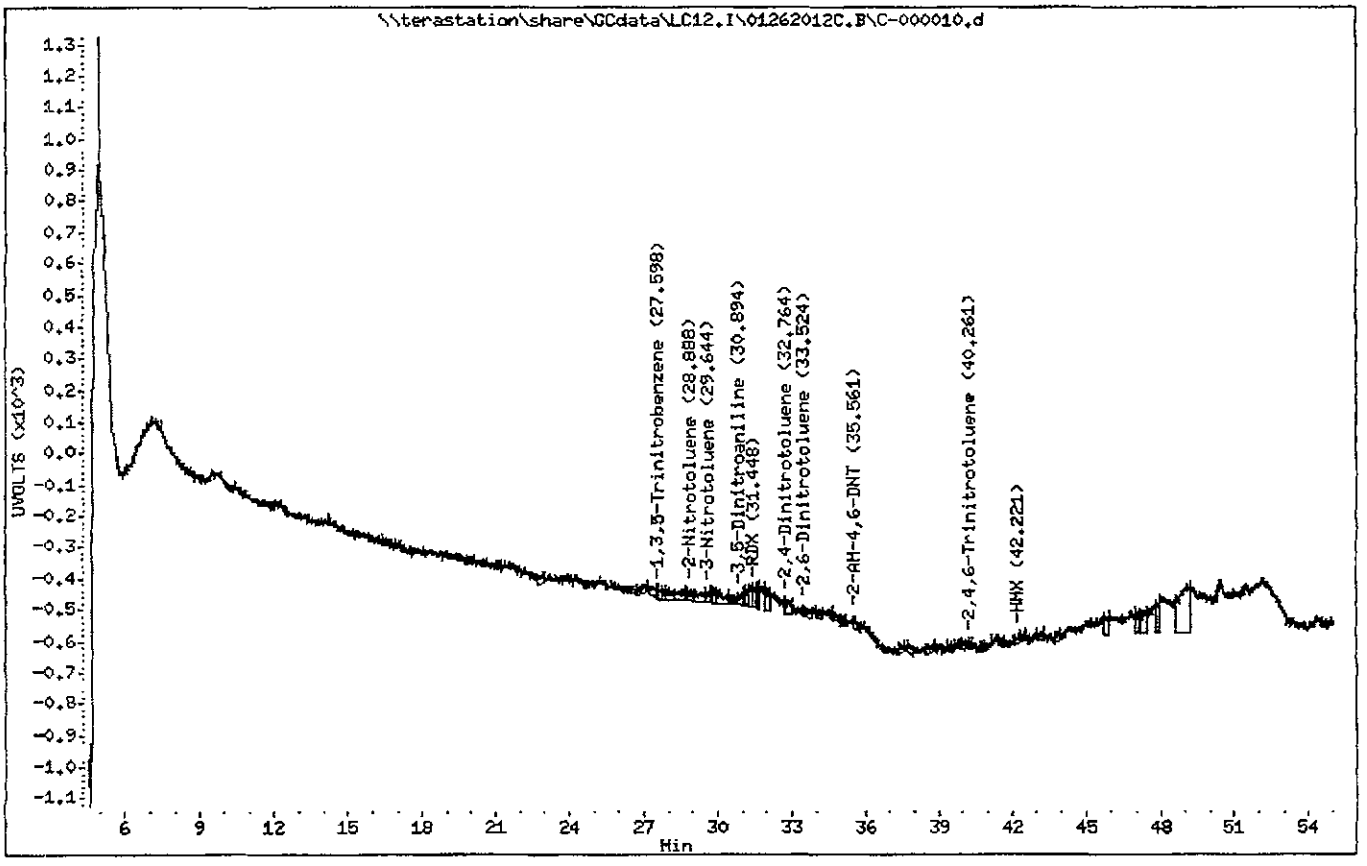
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000010.d\C-000010.d Page 1

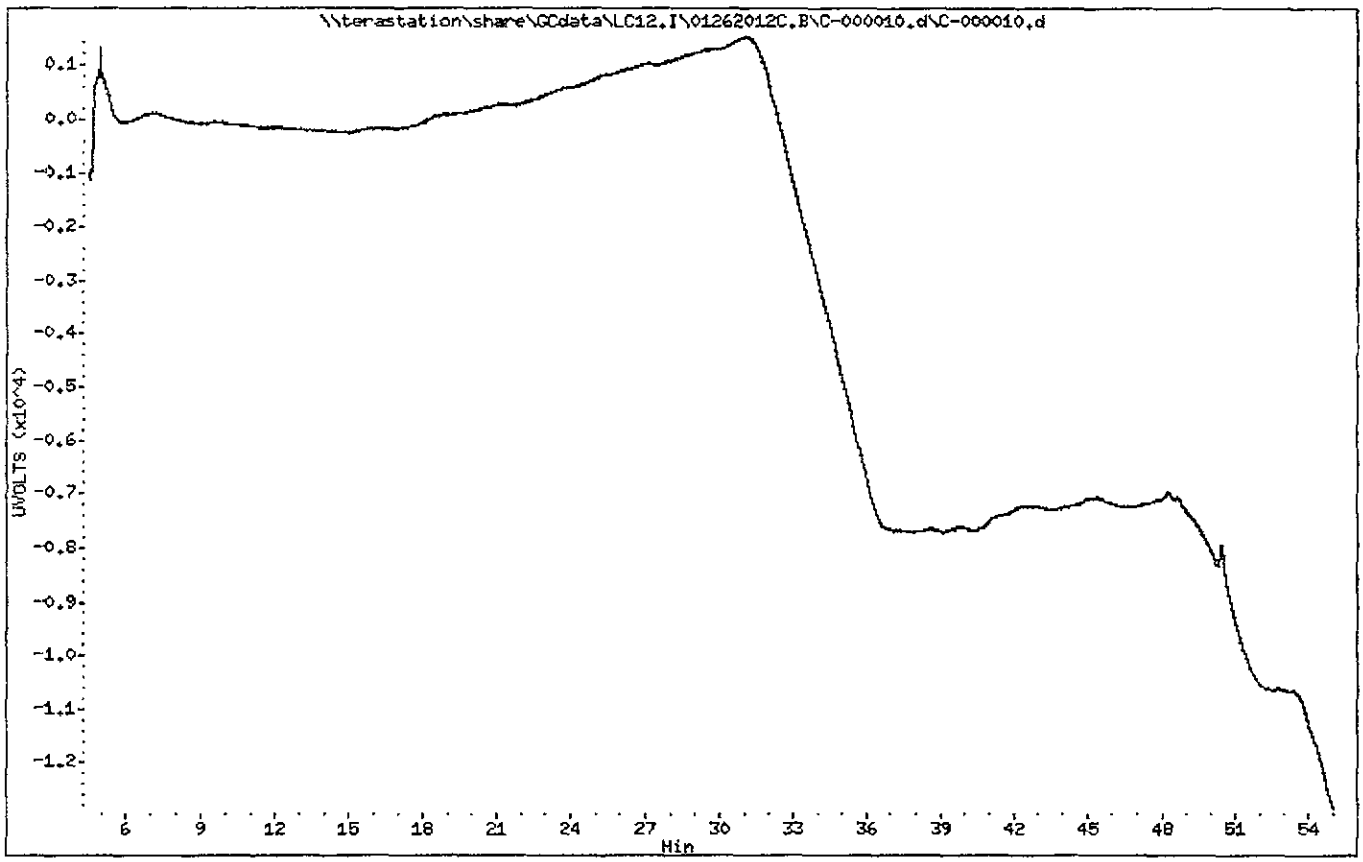
Date : 27-JAN-2012 02:35

Client ID: Instrument: LC12.i

Sample Info: BLANK;0;

Operator: SV

Column phase: Zorbax Cyano Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_MRL 11GCSV0468 8330 5-50ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 03:41 File ID: 01262012C.B/C-000011.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	5.00	21.904	0.000	284	6.189	24					
2	1,3-Dinitrobenzene	5.00	24.904	0.000	611	6.082	22					
3	1,3,5-Trinitrobenz	5.00	27.624	0.000	446	5.847	17					
4	2-Nitrotoluene	10.0	28.977	0.000	346	11.85	19					
5	3-Nitrotoluene	5.00	29.597	0.000	225	5.869	17					
6	3,5-Dinitroaniline	5.00	30.967	0.000	501	6.089	22					
7	RDX	5.00	31.574	0.000	319	6.394	28					
8	2,4-Dinitrotoluene	5.00	32.677	0.000	537	6.102	22					
9	2,6-Dinitrotoluene	5.00	33.704	0.000	328	6.126	23					
10	2-AM-4,6-DNT	5.00	35.780	0.000	441	6.125	23					
11	4-AM-2,6-DNT	5.00	36.370	0.000	363	5.900	18					
12	3,4-Dinitrotoluene	20.0	38.114	0.000	942	20.30	1.5					
13	2,4,6-Trinitrotolu	5.00	40.280	0.000	422	5.293	5.9					
14	HMX	5.00	41.970	0.000	357	5.878	18					
15	TETRYL	5.00	46.254	0.000	636	5.371	7.4					
16	4-Nitrotoluene											
17	EGDN											
18	PETN	20.0						52.804	0.000	3039	21.10	5.5
19	Picric ACID	50.0										
20	Nitroglycerin	20.0						44.554	0.000	1618	19.92	-0.40

MRL passes S/N > 5:1
RDM 1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:29

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 03:41
Operator : SV Inst ID: LC12.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50ng/mL;2;
Misc Info : MRL;10;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.577	340	24	0.071	0.31		
20.904	282	25	0.089	0.32		
21.277	314	36	0.115	0.47		
21.904	8589	284	0.033	3.73	17	Nitrobenzene
24.904	18622	611	0.033	8.03	13	1,3-Dinitrobenzene
27.000	241	33	0.137	0.43		
27.624	13648	446	0.033	5.86	10	1,3,5-Trinitrobenze
28.477	176	24	0.137	0.31		
28.977	8751	346	0.040	4.54	24	2-Nitrotoluene
29.597	6454	225	0.035	2.95	26	3-Nitrotoluene
30.967	12346	501	0.041	6.58	15	3,5-Dinitroaniline
31.574	6899	319	0.046	4.19	7	RDX
32.260	675	83	0.123	1.09		
32.677	15113	537	0.036	7.06	23	2,4-Dinitrotoluene
33.704	9025	328	0.036	4.31	22	2,6-Dinitrotoluene
34.284	149	51	0.341	0.67		
34.537	561	36	0.064	0.47		
35.780	11453	441	0.039	5.79	21	2-AM-4,6-DNT
36.370	9652	363	0.038	4.77	20	4-AM-2,6-DNT
37.170	249	34	0.137	0.44		
38.114	22113	942	0.043	12.54	$ 1	3,4-Dinitrotoluene
38.924	110	21	0.191	0.27		
39.620	110	25	0.227	0.32		
40.280	10858	422	0.039	5.54	19	2,4,6-Trinitrotolue
41.147	96	24	0.250	0.31		
41.317	84	21	0.250	0.27		
41.754	174	36	0.207	0.47		
41.970	5872	357	0.061	4.69	4	HMX
43.070	120	26	0.217	0.34		
44.980	632	51	0.081	0.67		
46.254	10009	636	0.064	8.36	16	TETRYL
47.507	603	67	0.111	0.88		
48.634	857	95	0.111	1.24		
49.030	2801	136	0.049	1.78		
	177980	7606		100.000		

Total unknown % height = 11.06

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d

Date : 27-JAN-2012 03:41

Client ID:

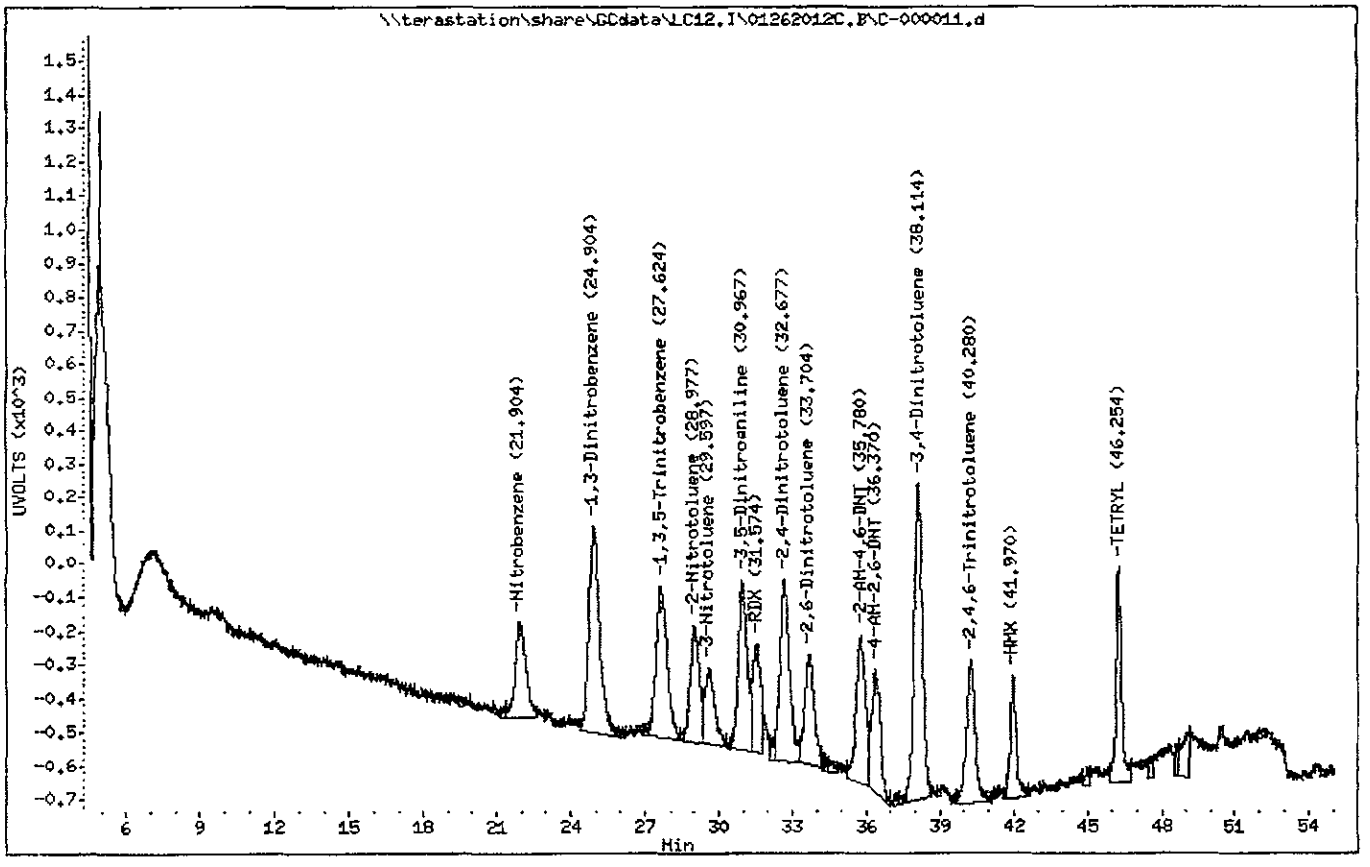
Instrument: LC12.i

Sample Info: STD_MRL 11GCSV0468 8330 5-50mg/mL:2:

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-00001
Lab Smp Id: STD_MRL 11GCSV0468
Inj Date : 27-JAN-2012 03:41
Operator : SV Inst ID: LC12.i
Smp Info : STD_MRL 11GCSV0468 8330 5-50ng/mL;2;
Misc Info : MRL;10;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.554	23888	1618	0.068	34.74	18 Nitroglycerin
52.804	26263	3039	0.116	65.26	27 PETN
	50152	4657		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000011.d\C-000011.d

Date : 27-JAN-2012 03:41

Client ID:

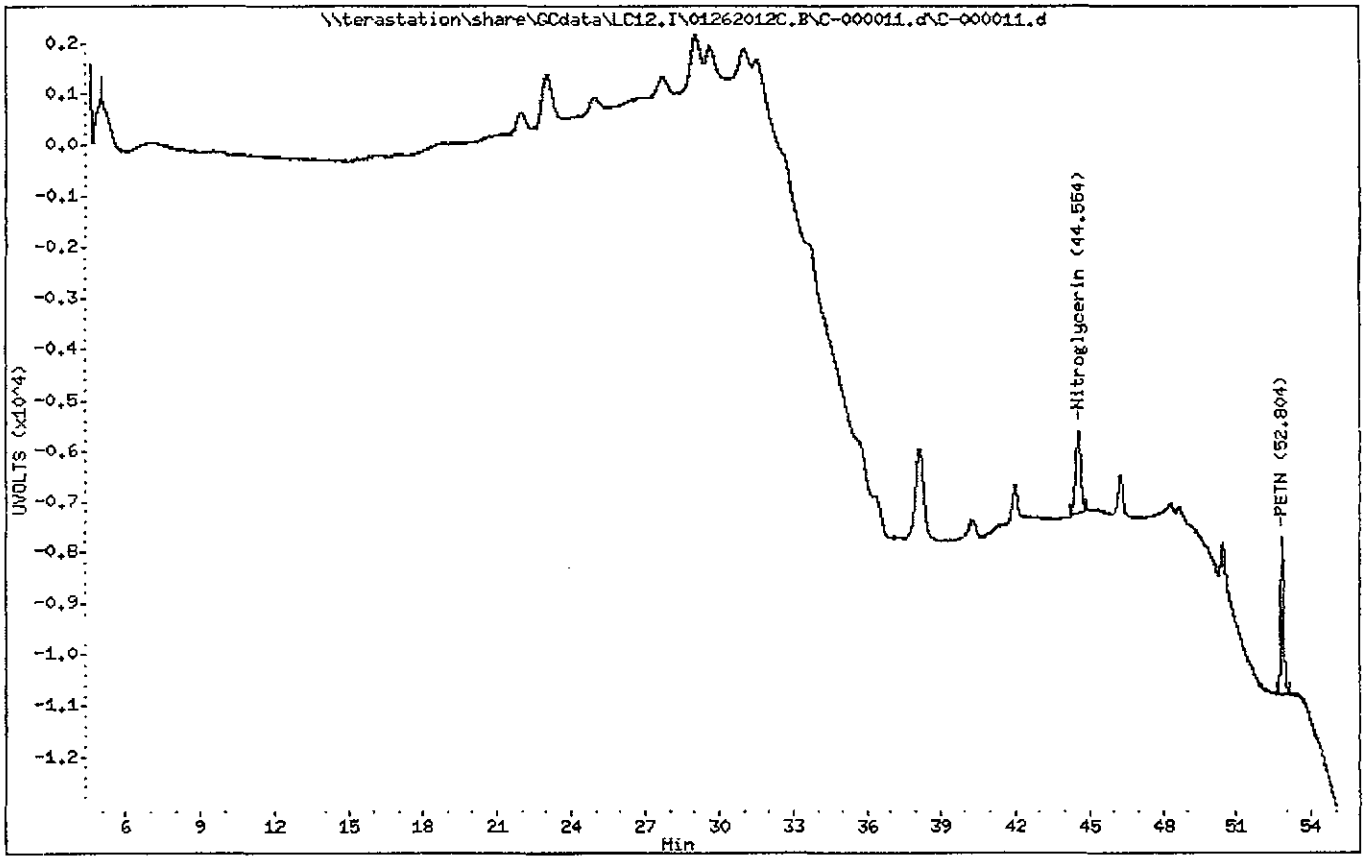
Instrument: LC12.i

Sample Info: STD_HRL 11GCSV0468 8330 5-50ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_ICV 11GCSV0515 8330 200ng/mL Instrument: LC12
Analyzed : 27-JAN-2012 04:46 File ID: 01262012C.B/C-000012.d
Operator : SV Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	21.924	0.000	9732	212.1	6.1					
2	1,3-Dinitrobenzene	200	24.898	0.000	20270	201.8	0.90					
3	1,3,5-Trinitrobenz	200	27.648	0.000	15645	205.1	2.6					
4	2-Nitrotoluene	400	28.998	0.000	12223	418.7	4.7					
5	3-Nitrotoluene	200	29.578	0.000	7855	204.9	2.5					
6	3,5-Dinitroaniline	200	30.961	0.000	17369	211.1	5.6					
7	RDX	200	31.534	0.000	9670	193.8	-3.1					
8	2,4-Dinitrotoluene	200	32.668	0.000	18048	205.1	2.6					
9	2,6-Dinitrotoluene	200	33.694	0.000	10822	202.1	1.1					
10	2-AM-4,6-DNT	200	35.748	0.000	14679	203.9	2.0					
11	4-AM-2,6-DNT	200	36.388	0.000	12366	201.0	0.50					
12	3,4-Dinitrotoluene	200	38.134	0.000	84	1.810	-99					
13	2,4,6-Trinitrotolu	200	40.251	0.000	16693	209.4	4.7					
14	HMX	200	41.981	0.000	12849	211.6	5.8					
15	TETRYL	200	46 254	0.000	25166	212.5	6.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.798	0.000	31225	216.8	8.4
19	Picric ACID	500										
20	Nitroglycerin	200						44.541	0.000	18382	226.4	13

2A not spiked 1/26/12

ICV passes ±15 %
1/27/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 01/27/2012 11:30

TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 04:46
Operator : SV Inst ID: LC12.i
Smp Info : STD_ICV 11GCSV0515 8330 200ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.m
Meth Date : 27-Jan-2012 11:29 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.924	290579	9732	0.033	4.76	17 Nitrobenzene
24.898	589470	20270	0.034	9.92	13 1,3-Dinitrobenzene
27.648	474856	15645	0.033	7.65	10 1,3,5-Trinitrobenze
28.998	330541	12223	0.037	5.98	24 2-Nitrotoluene
29.578	206943	7855	0.038	3.84	26 3-Nitrotoluene
30.961	423943	17369	0.041	8.50	15 3,5-Dinitroaniline
31.534	239975	9670	0.040	4.73	7 RDX
32.668	498227	18048	0.036	8.83	23 2,4-Dinitrotoluene
33.694	306447	10822	0.035	5.29	22 2,6-Dinitrotoluene
35.748	388425	14679	0.038	7.18	21 2-AM-4,6-DNT
36.388	336419	12366	0.037	6.05	20 4-AM-2,6-DNT
37.814	123	25	0.203	0.01	
38.134	1514	84	0.055	0.04	$ 1 3,4-Dinitrotoluene
38.751	83	20	0.240	0.00	
39.168	2870	131	0.046	0.06	
40.251	405775	16693	0.041	8.17	19 2,4,6-Trinitrotolue
41.981	198660	12849	0.065	6.28	4 HMX
42.931	1184	49	0.041	0.02	
43.311	275	36	0.131	0.01	
44.561	2055	141	0.069	0.06	
45.004	543	51	0.094	0.02	
45.404	794	90	0.113	0.04	
46.254	337501	25166	0.075	12.43	16 TETRYL
47.504	386	29	0.075	0.01	
47.838	500	48	0.096	0.02	
48.111	823	62	0.075	0.03	
48.564	2550	162	0.064	0.07	
	5041462	204315		100.000	

Total unknown % height = 0.3500

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d

Date : 27-JAN-2012 04:46

Client ID:

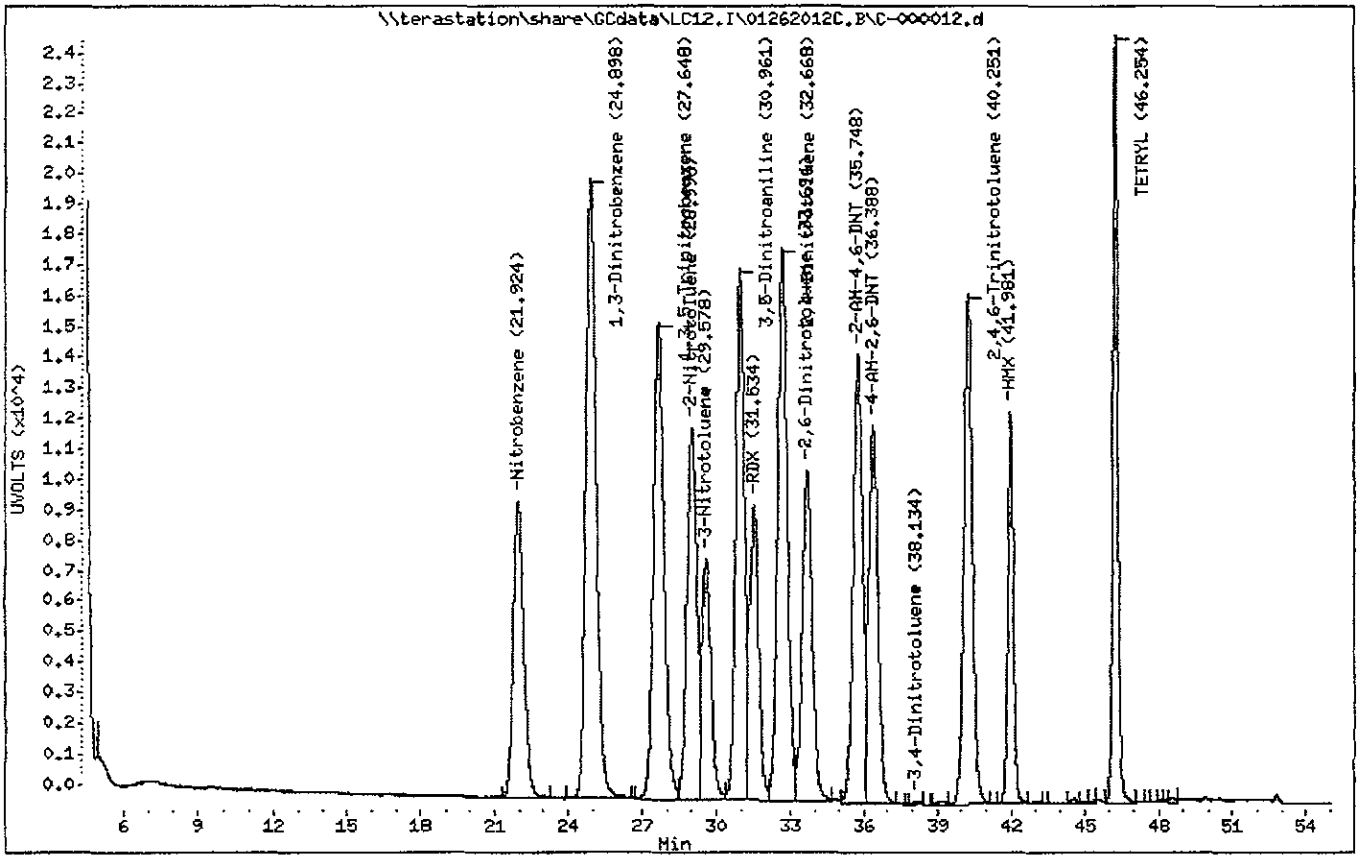
Instrument: LC12.i

Sample Info: STD_ICV 11GCSV0515 8330 200ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-00001
Lab Smp Id: STD_ICV 11GCSV0515
Inj Date : 27-JAN-2012 04:46
Operator : SV Inst ID: LC12.i
Smp Info : STD_ICV 11GCSV0515 8330 200ng/mL;2;
Misc Info : ICV;6;;;;3;1_CAL.sub;;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\01262012C.B\8330CNAB.M\83302.m
Meth Date : 27-Jan-2012 11:30 valmoress Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: TAISAC-309SV

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.541	285162	18382	0.064	36.75	18 Nitroglycerin
52.381	3916	407	0.104	0.81	
52.798	269134	31225	0.116	62.44	27 PETN
	558211	50014		100.000	

Total unknown % height = 0.8100

Data File: \\terastation\share\GCdata\LC12.I\01262012C.B\C-000012.d\C-000012.d

Date : 27-JAN-2012 04:46

Client ID:

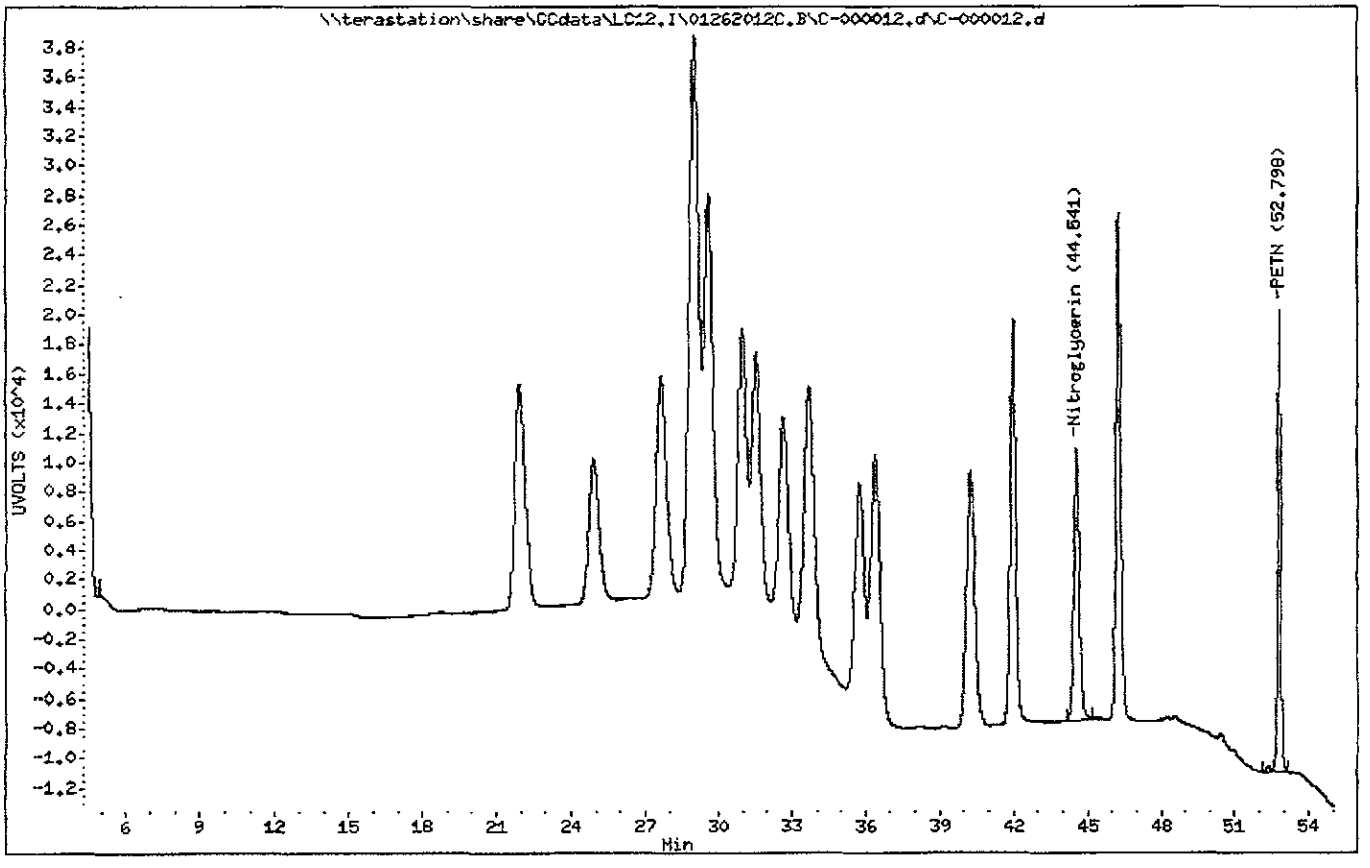
Instrument: LC12.i

Sample Info: STD_ICV 11GCSV0515 8330 200ng/mL;2;

Operator: SV

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 01-FEB-2012 16:37
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000003.d
Sublist: 2_CALMET
SpikeList:

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX	28.083	0.022	49	0.84/9					

not real peak

2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:47

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d
Lab Smp Id: BLANK
Inj Date : 01-FEB-2012 16:37
Operator : RN Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:44 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.766	556	36	0.065	1.42	
27.179	615	53	0.086	2.09	
27.513	801	61	0.076	2.40	
27.666	612	67	0.109	2.64	
27.886	667	52	0.078	2.05	
28.083	934	49	0.052	1.93	5 MNX
28.453	264	50	0.189	1.97	
28.603	311	49	0.158	1.93	
28.759	398	41	0.103	1.61	
28.959	530	45	0.085	1.77	
29.233	189	39	0.206	1.53	
29.396	525	54	0.103	2.13	
29.636	770	57	0.074	2.24	
29.869	759	50	0.066	1.97	
30.246	650	53	0.082	2.09	
30.399	376	60	0.160	2.36	
30.583	300	45	0.150	1.77	
30.779	557	47	0.084	1.85	
31.129	412	45	0.109	1.77	
31.193	305	51	0.167	2.01	
31.343	418	63	0.151	2.48	
31.529	1291	85	0.066	3.35	
31.843	674	92	0.136	3.63	
32.019	1739	83	0.048	3.27	
32.419	1284	72	0.056	2.84	
32.959	337	50	0.148	1.97	
33.849	389	47	0.121	1.85	
34.299	636	42	0.066	1.65	
34.686	684	38	0.056	1.49	
35.399	192	32	0.167	1.26	
35.739	205	24	0.117	0.94	
36.129	569	32	0.056	1.26	
37.126	141	23	0.163	0.90	
37.453	158	23	0.146	0.90	
37.969	218	24	0.110	0.94	
38.269	66	22	0.335	0.86	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d Page 2
Report Date: 02-Feb-2012 10:47

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
38.569	735	32	0.044	1.26	
39.049	232	32	0.138	1.26	
39.783	354	29	0.082	1.14	
40.123	162	21	0.129	0.82	
40.589	374	30	0.080	1.18	
40.983	358	36	0.101	1.42	
41.199	577	46	0.080	1.81	
41.529	667	43	0.064	1.69	
41.833	133	34	0.255	1.34	
42.056	203	27	0.133	1.06	
42.309	194	26	0.134	1.02	
42.873	80	30	0.375	1.18	
43.023	699	36	0.051	1.42	
44.396	888	46	0.052	1.81	
46.139	975	84	0.086	3.31	
46.743	428	91	0.213	3.59	
48.209	1076	135	0.126	5.57	
	27665	2534		100.000	

Total unknown % height = 98.07

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d

Page 3

Date : 01-FEB-2012 16:37

Client ID:

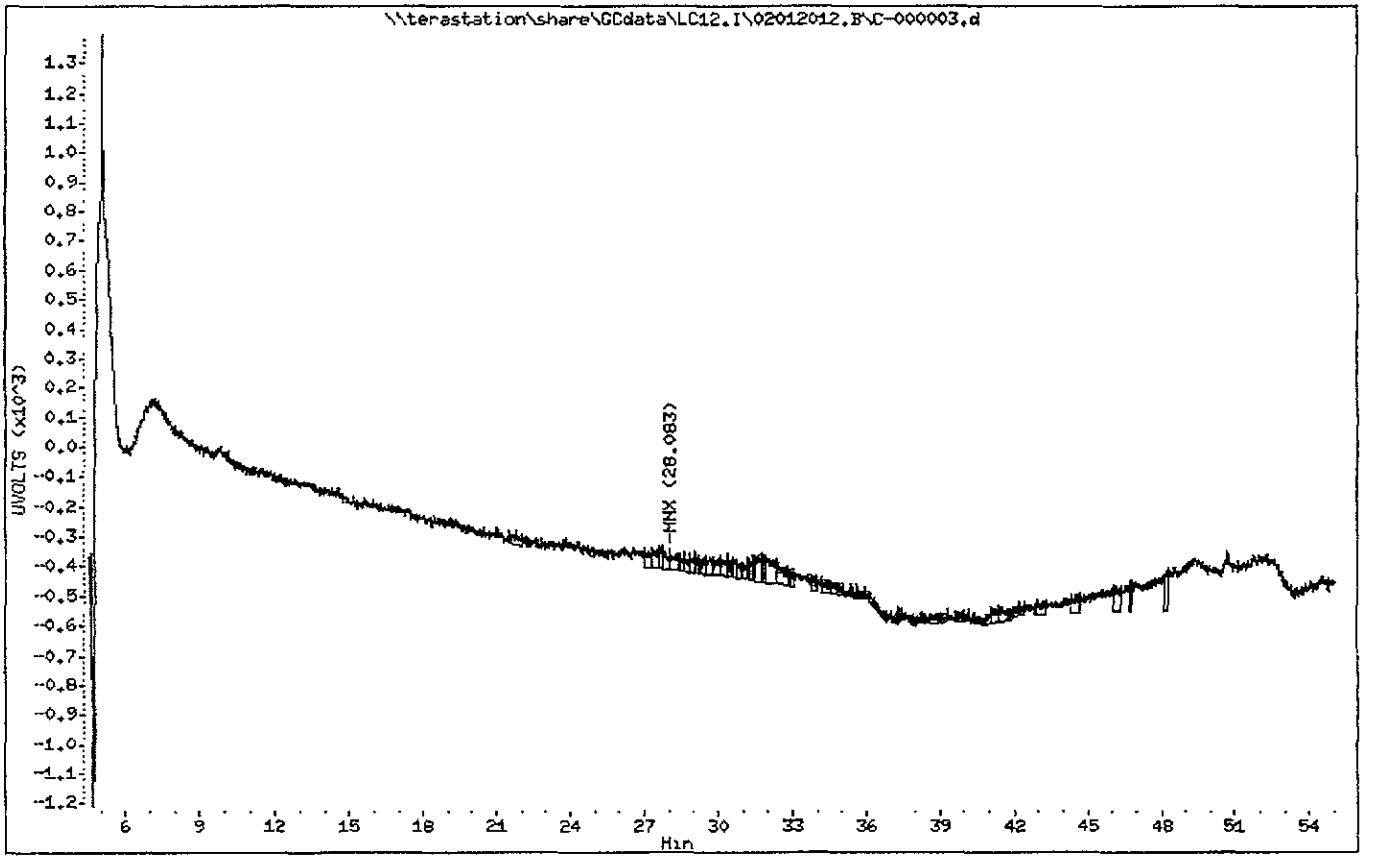
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000003.d\C-000003.d

Page 1

Date : 01-FEB-2012 16:37

Client ID:

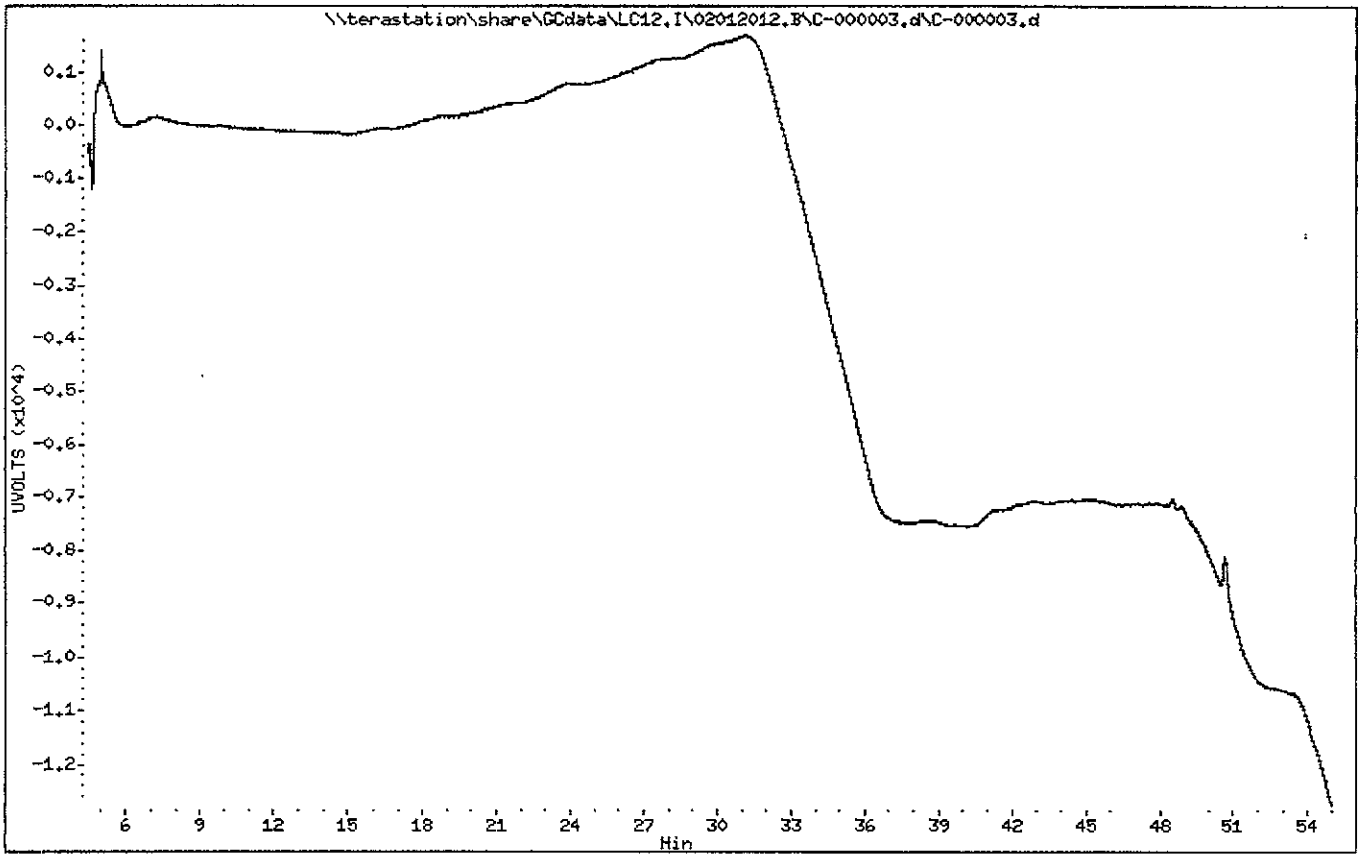
Instrument: LC12.i

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_03 E110811F 20ng/mL
Analyzed : 01-FEB-2012 17:43
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000004.d
Sublist: 2_CALMET
SpikeList:

		Side A					Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	20.0	18.337	0.000	1058	52.90000				
2	DNX	20.0	23.647	0.000	1103	55.15000				
3	MNX	20.0	28.027	0.000	1064	53.20000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:48

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d
Lab Smp Id: STD_03 E110811F 20n
Inj Date : 01-FEB-2012 17:43
Operator : RN Inst ID: LC12.i
Smp Info : STD_03 E110811F 20ng/mL;1;
Misc Info : ;3;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:47 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
18.337	34270	1058	0.031	21.39	2 TNX
23.647	32316	1103	0.034	22.55	3 DNX
27.054	299	40	0.134	0.80	
27.247	681	54	0.079	1.09	
28.027	28980	1064	0.037	21.51	5 MNX
28.957	424	37	0.087	0.74	
29.251	315	27	0.086	0.54	
29.467	111	36	0.325	0.72	
29.594	198	38	0.192	0.76	
29.771	704	38	0.054	0.76	
30.107	210	38	0.181	0.76	
30.354	429	39	0.091	0.78	
30.451	179	47	0.263	0.95	
30.687	573	57	0.100	1.15	
30.837	308	46	0.149	0.93	
31.021	526	44	0.084	0.88	
31.244	323	45	0.139	0.91	
31.447	401	54	0.135	1.09	
31.631	621	69	0.111	1.39	
31.744	694	84	0.121	1.69	
31.927	771	80	0.104	1.61	
33.821	137	32	0.234	0.64	
33.957	207	20	0.097	0.40	
34.507	286	25	0.087	0.50	
35.634	165	21	0.127	0.42	
37.017	87	21	0.240	0.42	
37.697	118	24	0.204	0.48	
38.544	429	26	0.061	0.52	
38.934	308	34	0.110	0.68	
39.734	568	34	0.060	0.68	
40.121	185	27	0.146	0.54	
40.257	171	25	0.146	0.50	
40.731	192	33	0.172	0.66	
40.984	293	28	0.096	0.56	
41.611	130	23	0.177	0.46	
42.097	209	28	0.134	0.56	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d Page 2
Report Date: 02-Feb-2012 10:48

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.544	214	32	0.149	0.64	
42.707	212	29	0.137	0.58	
43.004	286	22	0.077	0.44	
44.777	417	40	0.096	0.80	
45.957	771	67	0.087	1.35	
47.717	1737	95	0.055	1.92	
48.457	4249	161	0.038	3.25	
	114701	4945		100.000	

Total unknown % height = 34.55

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d

Date : 01-FEB-2012 17:43

Client ID:

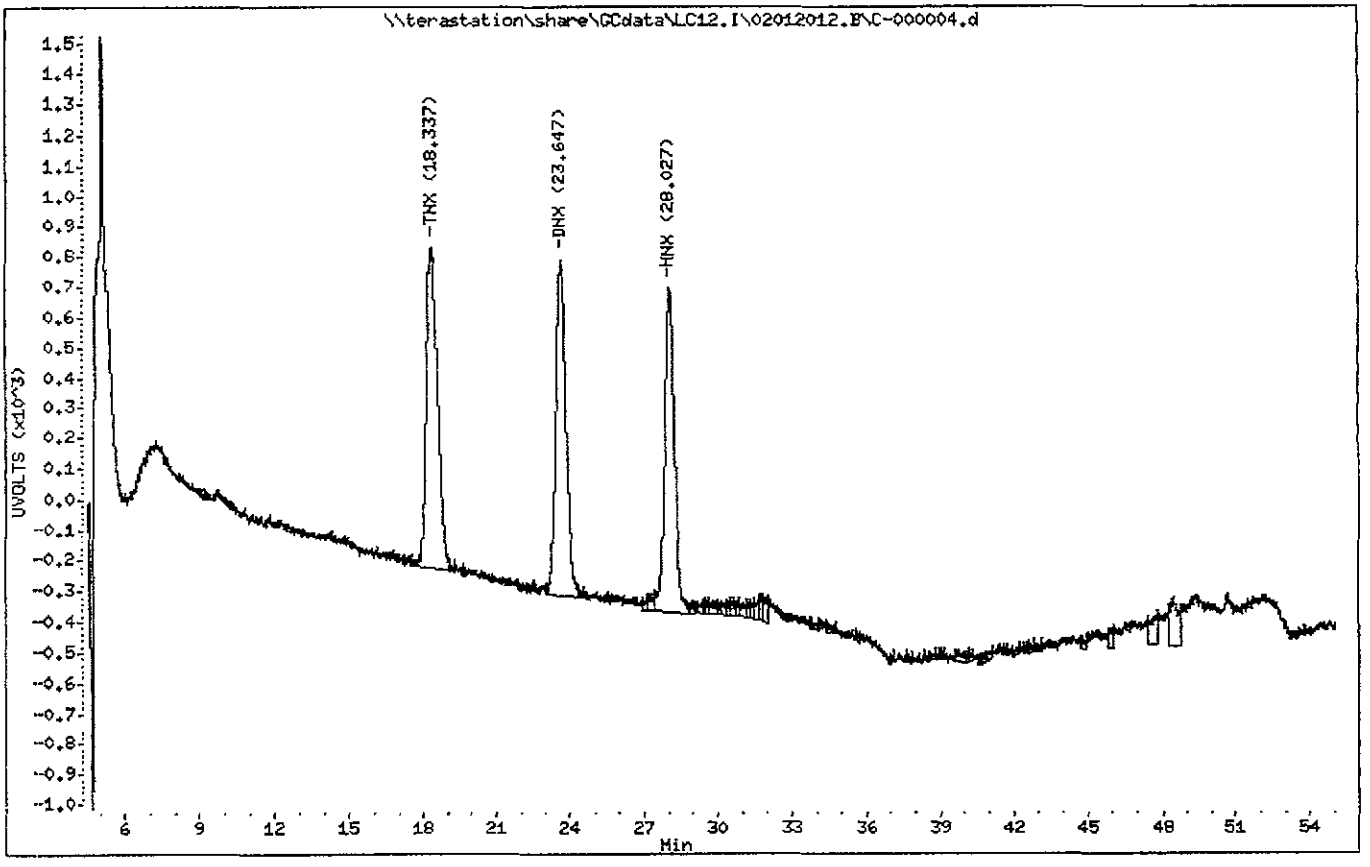
Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000004.d\C-000004.d

Page 1

Date : 01-FEB-2012 17:43

Client ID:

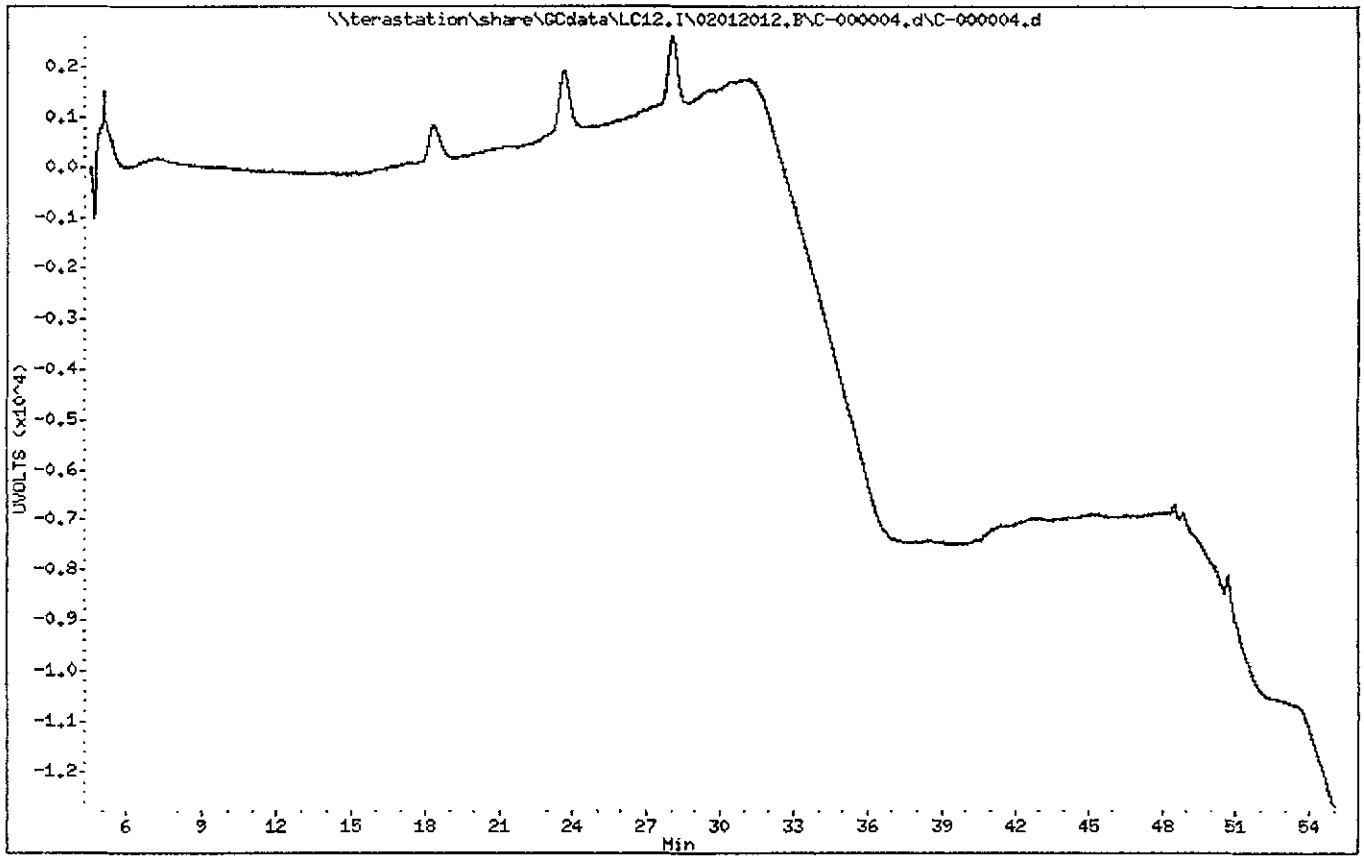
Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_04 E110811G 50ng/mL
Analyzed : 01-FEB-2012 18:48
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000005.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	50.0	18.350	0.000	2946	58.92000				
2	DNX	50.0	23.654	0.000	3038	60.76000				
3	MNX	50.0	28.060	0.000	2898	57.96000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:48

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d
Lab Smp Id: STD_04 E110811G 50n
Inj Date : 01-FEB-2012 18:48
Operator : RN Inst ID: LC12.i
Smp Info : STD_04 E110811G 50ng/mL;1;
Misc Info : ;4;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:48 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 18:48 Cal File: C-000005.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.980	1935	63	0.033	0.56	
16.664	648	36	0.056	0.32	
18.350	92282	2946	0.032	26.22	2 TNX
23.654	84352	3038	0.036	27.27	3 DNX
26.580	374	33	0.088	0.29	
27.074	460	44	0.096	0.39	
27.200	761	51	0.067	0.45	
27.474	259	63	0.244	0.56	
28.060	74424	2898	0.039	25.79	5 MNX
29.120	453	35	0.077	0.31	
29.380	147	37	0.252	0.32	
29.557	570	45	0.079	0.40	
29.840	825	55	0.067	0.48	
30.110	859	42	0.049	0.37	
30.504	297	58	0.195	0.51	
30.607	852	59	0.069	0.52	
30.927	453	52	0.115	0.46	
31.130	508	52	0.102	0.46	
31.257	256	62	0.242	0.55	
31.390	337	64	0.190	0.56	
31.584	883	82	0.093	0.72	
31.717	512	95	0.185	0.84	
31.960	3795	97	0.026	0.86	
32.824	524	59	0.113	0.52	
34.214	320	43	0.134	0.38	
34.317	516	54	0.105	0.48	
34.924	229	41	0.179	0.36	
35.587	133	31	0.233	0.27	
36.027	531	31	0.058	0.27	
37.277	371	26	0.070	0.23	
37.730	64	17	0.265	0.15	
37.940	172	30	0.175	0.26	
38.240	176	32	0.182	0.28	
38.767	277	18	0.065	0.16	
39.170	322	33	0.103	0.29	
39.400	167	15	0.090	0.13	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d Page 2
Report Date: 02-Feb-2012 10:48

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.924	191	21	0.110	0.18	
40.610	228	29	0.127	0.25	
40.954	202	21	0.104	0.18	
41.130	307	25	0.081	0.22	
41.387	129	33	0.256	0.29	
41.834	128	23	0.180	0.20	
42.524	252	17	0.067	0.15	
42.804	143	29	0.203	0.25	
43.980	154	26	0.169	0.23	
44.564	142	29	0.204	0.25	
45.230	163	37	0.227	0.32	
45.784	296	33	0.111	0.29	
46.500	240	58	0.242	0.51	
46.864	825	62	0.075	0.55	
47.790	1875	86	0.046	0.76	
48.457	3925	139	0.035	1.23	
48.930	1671	130	0.078	1.15	
	280913	11235		100.000	

Total unknown % height = 20.72

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d

Date : 01-FEB-2012 18:48

Client ID:

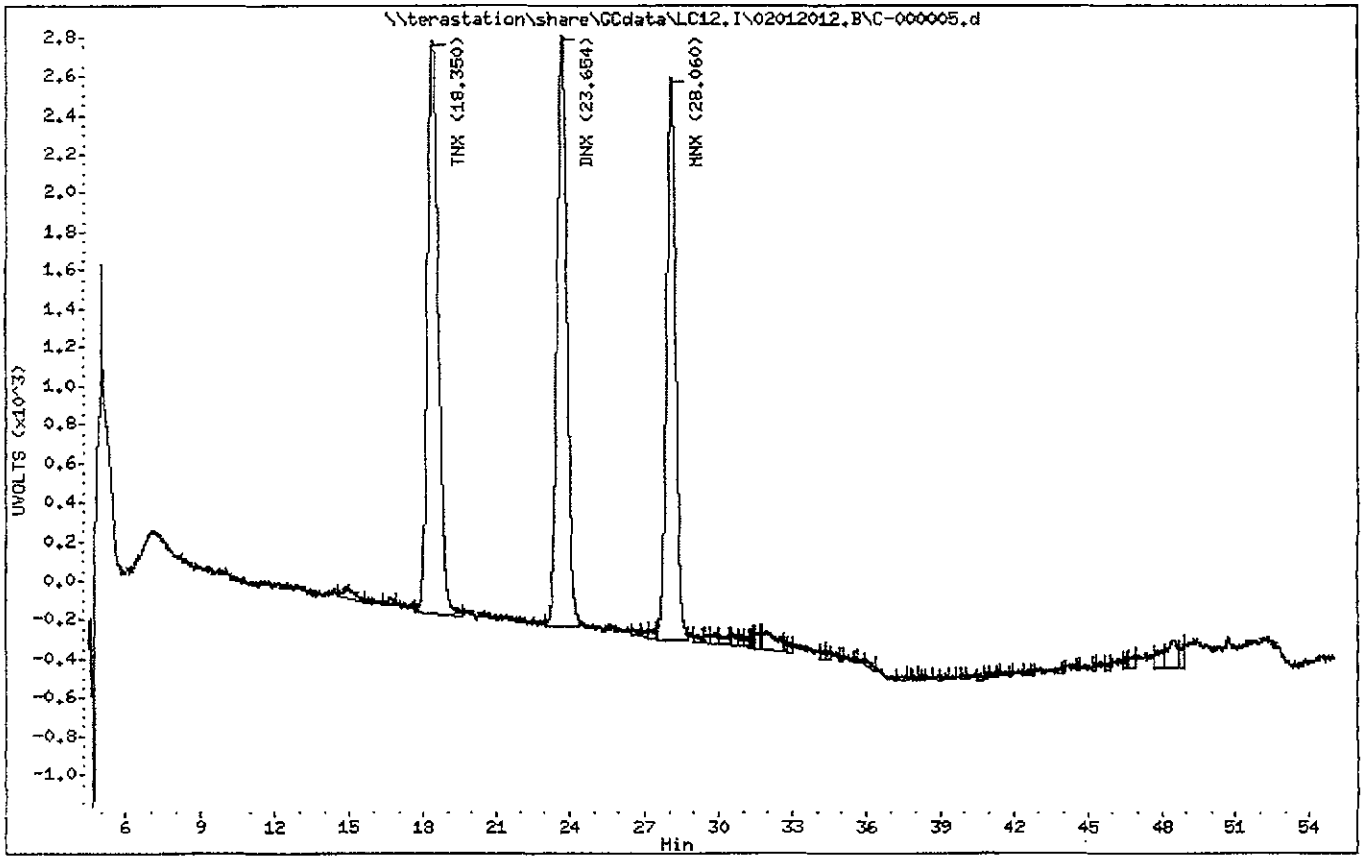
Instrument: LC12.i

Sample Info: STD_04 E110811G 50ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000005.d\C-000005.d

Page 1

Date : 01-FEB-2012 18:48

Client ID:

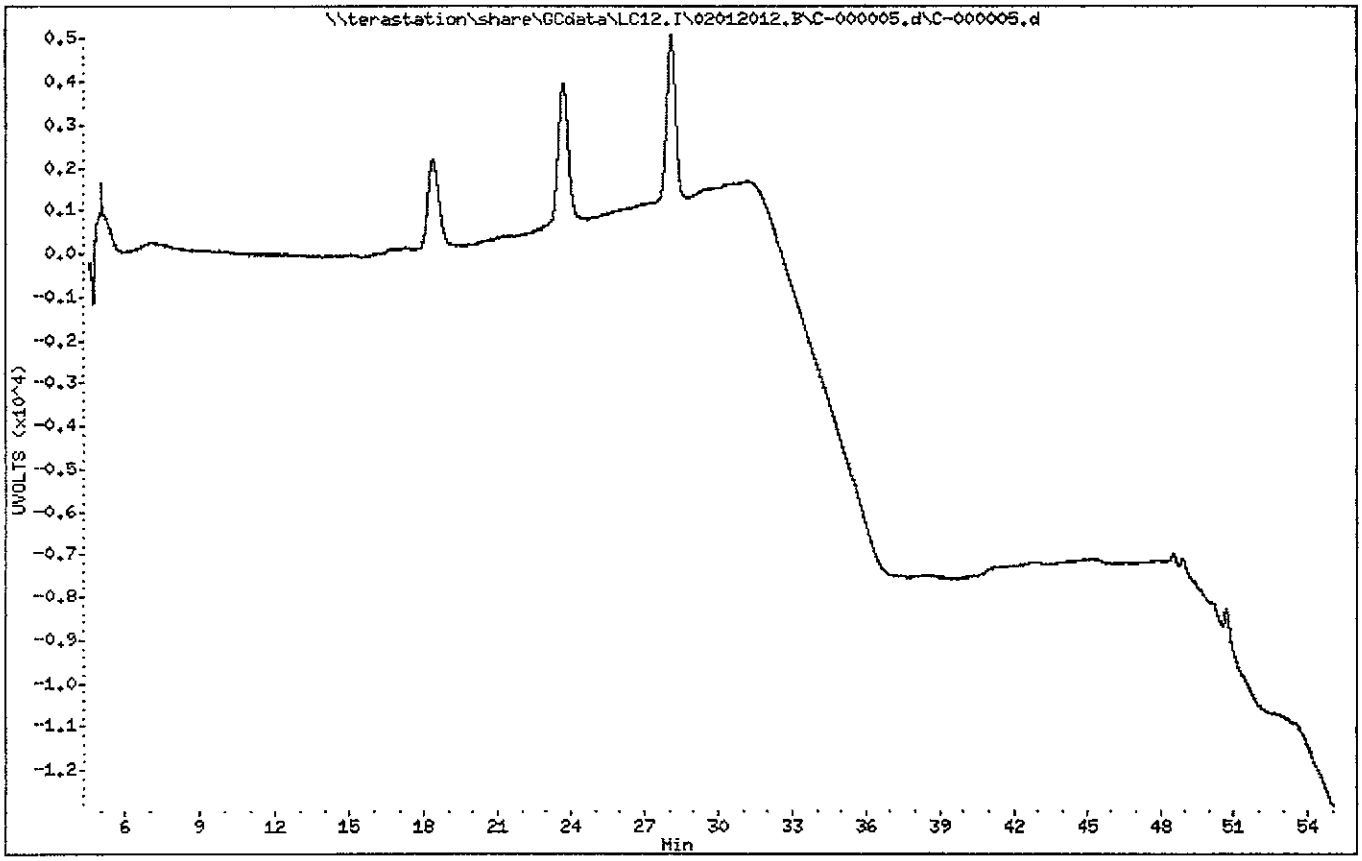
Instrument: LC12.i

Sample Info: STD_04 E110811G 50ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_05 E110811H 100ng/mL
Analyzed : 01-FEB-2012 19:54
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000006.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	100	18.329	0.000	6055	60.55000				
2	DNX	100	23.636	0.000	6235	62.35000				
3	MNX	100	28.032	0.000	5990	59.90000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:49

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d
Lab Smp Id: STD_05 E110811H 100
Inj Date : 01-FEB-2012 19:54
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 E110811H 100ng/mL;1;
Misc Info : ;5;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:49 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 19:54 Cal File: C-000006.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.979	2646	93	0.035	0.44	
16.539	886	36	0.041	0.17	
18.329	188669	6055	0.032	29.16	2 TNX
23.636	175095	6235	0.036	30.29	3 DNX
25.689	739	23	0.031	0.11	
27.172	396	34	0.086	0.16	
27.279	590	55	0.093	0.26	
28.032	152800	5990	0.039	28.84	5 MNX
29.046	599	35	0.058	0.16	
29.416	181	37	0.204	0.17	
29.596	473	42	0.089	0.20	
29.822	307	50	0.163	0.24	
30.069	542	53	0.098	0.25	
30.279	648	62	0.096	0.29	
30.489	167	63	0.377	0.30	
30.592	1044	60	0.057	0.28	
30.992	462	55	0.119	0.26	
31.256	605	52	0.086	0.25	
31.446	481	72	0.150	0.34	
31.569	815	79	0.097	0.38	
31.832	1161	100	0.086	0.48	
31.932	1865	107	0.057	0.51	
32.739	463	62	0.134	0.29	
32.969	1138	59	0.052	0.28	
33.892	569	51	0.090	0.24	
34.989	648	46	0.071	0.22	
35.229	481	47	0.098	0.22	
35.942	258	31	0.120	0.14	
37.109	200	22	0.110	0.10	
37.476	327	26	0.079	0.12	
37.909	84	25	0.298	0.12	
38.159	115	16	0.139	0.07	
38.569	84	24	0.286	0.11	
38.826	285	25	0.088	0.12	
39.376	179	32	0.178	0.15	
39.676	458	33	0.072	0.15	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d Page 2
Report Date: 02-Feb-2012 10:49

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
40.002	343	34	0.099	0.16	
40.286	194	31	0.160	0.14	
40.659	112	18	0.161	0.08	
40.999	53	19	0.358	0.09	
41.232	217	21	0.097	0.10	
41.606	341	30	0.088	0.14	
41.939	95	29	0.306	0.13	
42.226	461	22	0.048	0.10	
42.542	337	25	0.074	0.12	
42.879	203	29	0.143	0.13	
44.102	910	46	0.051	0.22	
44.729	954	56	0.059	0.26	
45.929	228	43	0.189	0.20	
46.259	615	80	0.130	0.38	
47.246	780	79	0.101	0.38	
48.359	3770	166	0.044	0.79	
48.816	1729	148	0.086	0.71	
	547802	20763		100.000	

Total unknown % height = 11.71

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000006.d

Date : 01-FEB-2012 19:54

Client ID:

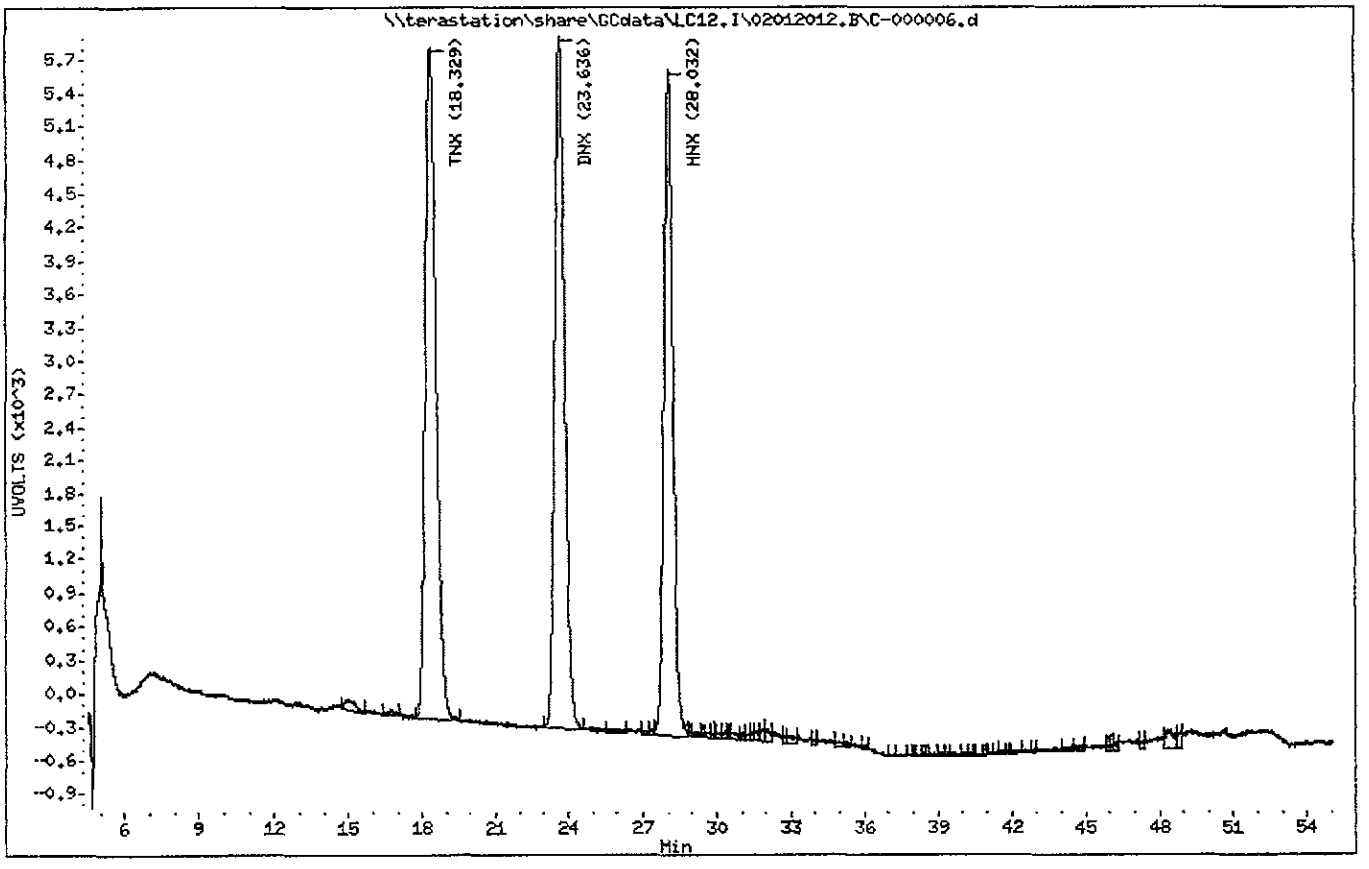
Instrument: LC12.i

Sample Info: STD_05 E110811H 100ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



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Date : 01-FEB-2012 19:54

Client ID:

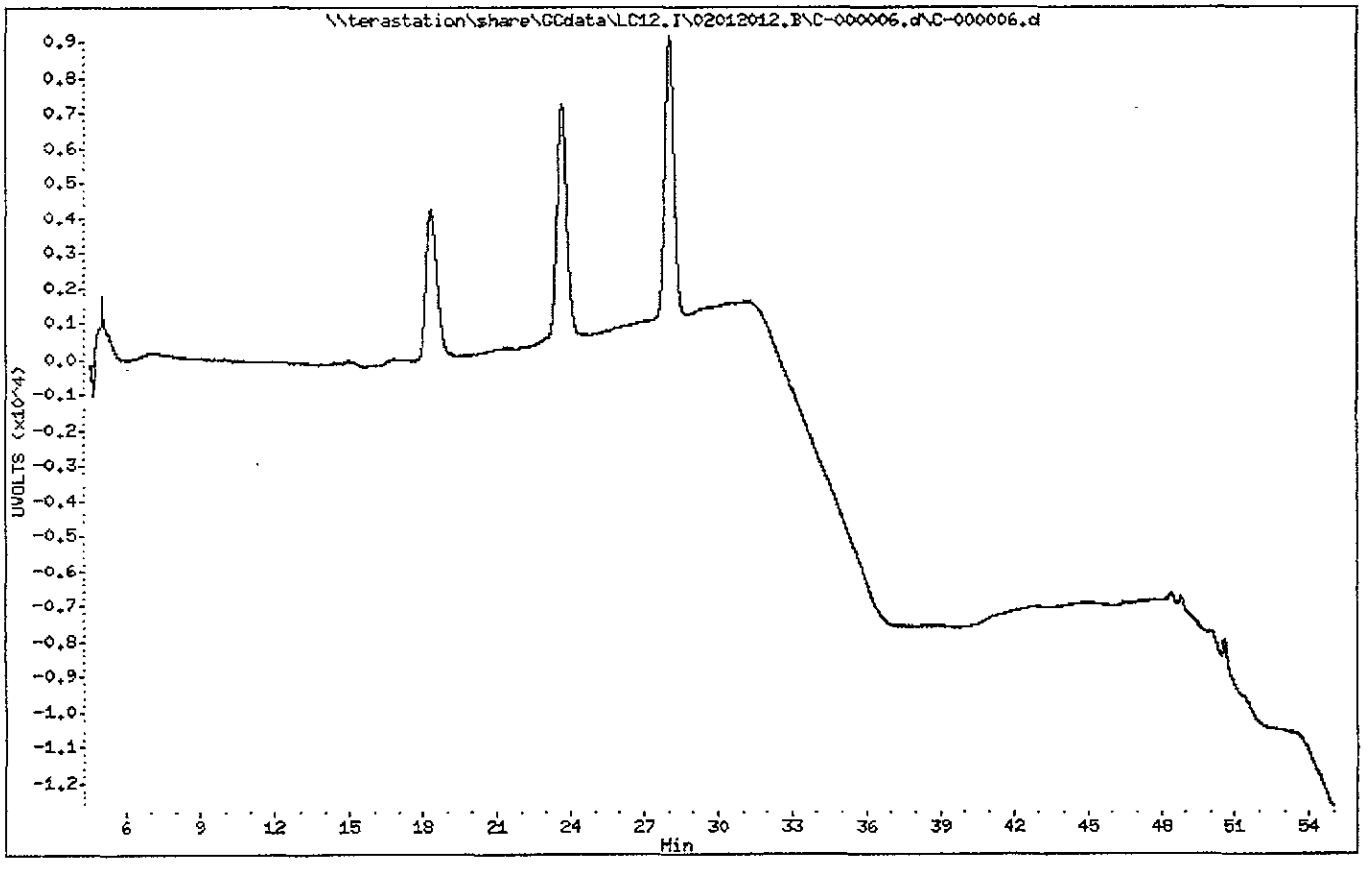
Instrument: LC12.i

Sample Info: STD_05 E110811H 100ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_06 E110811I 200ng/mL
Analyzed : 01-FEB-2012 20:59
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000007.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	200	18.326	0.000	12050	60.25000				
2	DNX	200	23.633	0.000	12470	62.35000				
3	MNX	200	28.033	0.000	11938	59.69000				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:50

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d
Lab Smp Id: STD_06 E110811I 200
Inj Date : 01-FEB-2012 20:59
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 E110811I 200ng/mL;1;
Misc Info : ;6;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:49 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 20:59 Cal File: C-000007.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.936	10462	226	0.022	0.57	
15.793	1532	55	0.036	0.14	
16.683	889	45	0.051	0.11	
18.326	376142	12050	0.032	30.85	2 TNX
23.633	350438	12470	0.036	32.19	3 DNX
27.186	1072	57	0.053	0.14	
28.033	304197	11938	0.039	30.56	5 MNX
29.306	439	51	0.116	0.13	
29.626	553	54	0.098	0.13	
29.716	283	59	0.209	0.15	
29.859	1167	66	0.057	0.16	
30.433	1389	64	0.046	0.16	
30.703	481	69	0.143	0.17	
30.926	490	62	0.127	0.15	
31.179	570	66	0.116	0.16	
31.319	588	70	0.119	0.17	
31.576	869	94	0.108	0.24	
31.943	4045	129	0.032	0.33	
32.916	790	67	0.085	0.17	
33.219	1294	65	0.050	0.16	
34.109	628	57	0.091	0.14	
34.409	426	58	0.136	0.14	
35.153	218	45	0.206	0.11	
36.143	142	27	0.189	0.06	
36.483	90	23	0.254	0.05	
37.286	129	20	0.155	0.05	
37.499	295	23	0.078	0.05	
38.119	197	27	0.137	0.06	
38.363	283	30	0.106	0.07	
38.683	378	25	0.066	0.06	
38.936	280	37	0.132	0.09	
39.669	212	25	0.118	0.06	
40.103	101	21	0.207	0.05	
40.593	169	27	0.160	0.06	
40.929	107	24	0.224	0.06	
41.253	317	36	0.114	0.09	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d Page 2
Report Date: 02-Feb-2012 10:50

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.709	176	30	0.171	0.07	
42.063	114	19	0.166	0.04	
42.259	312	27	0.087	0.06	
42.606	79	19	0.242	0.04	
43.019	149	22	0.148	0.05	
45.503	828	51	0.062	0.13	
45.959	1741	70	0.040	0.17	
47.406	660	71	0.108	0.18	
47.786	1165	87	0.075	0.22	
48.166	951	97	0.102	0.24	
48.399	3084	164	0.053	0.41	
48.866	2615	138	0.053	0.35	
	1073540	39057		100.000	

Total unknown % height = 6.400

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d

Date : 01-FEB-2012 20:59

Client ID:

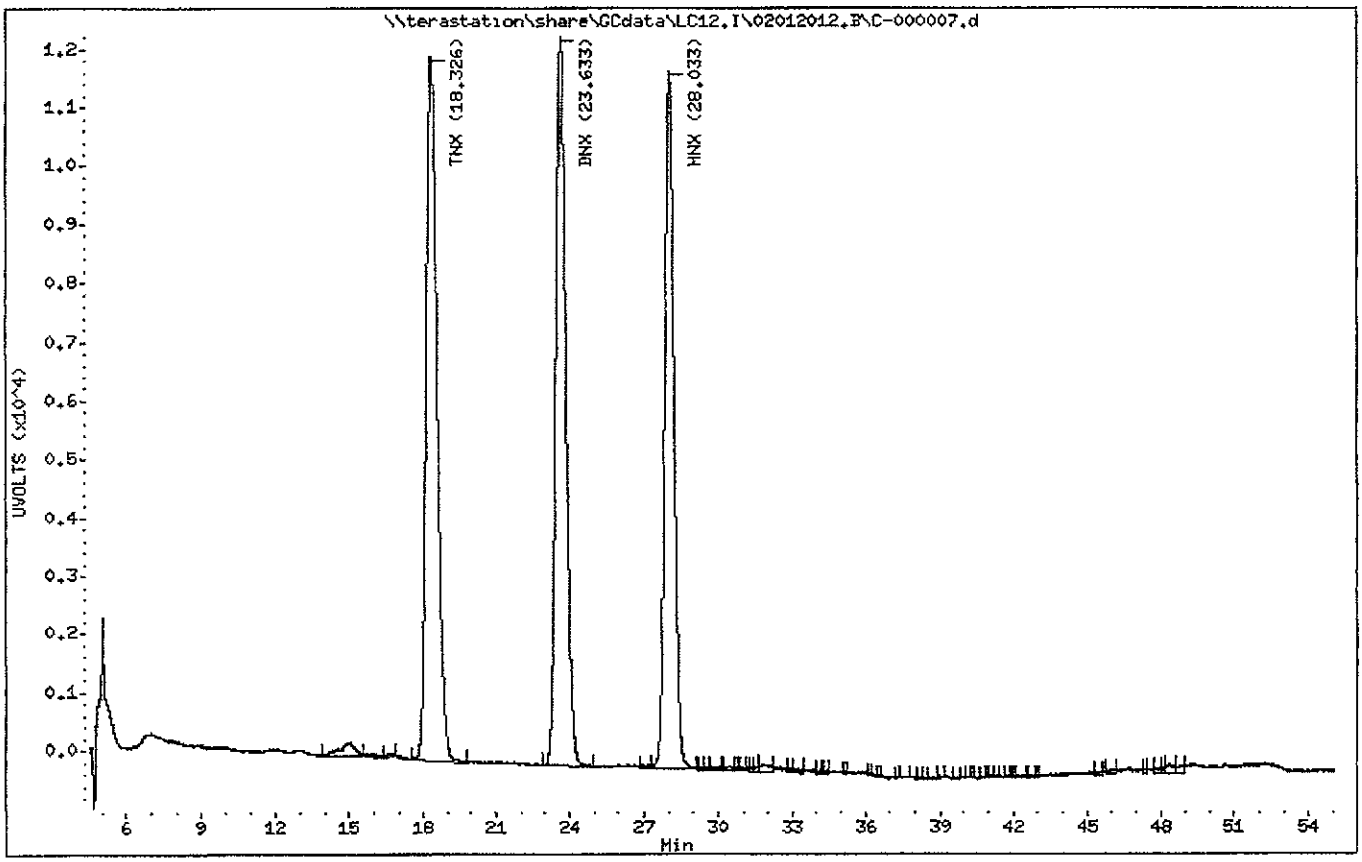
Instrument: LC12.i

Sample Info: STD_06 E110811I 200ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000007.d\C-000007.d

Page 1

Date : 01-FEB-2012 20:59

Client ID:

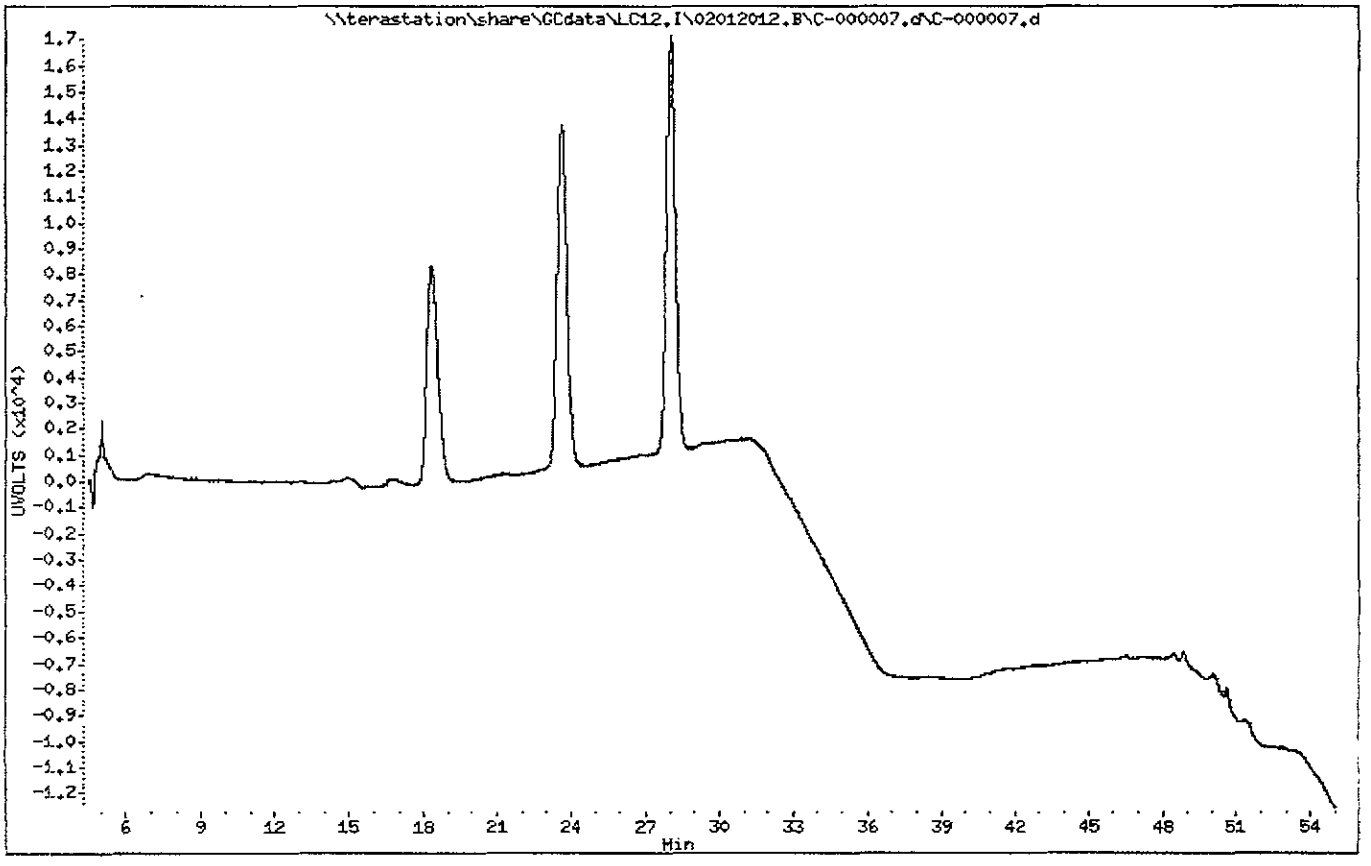
Instrument: LC12.i

Sample Info: STD_06 E110811I 200ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Summary - ICAL RFs

Sample : STD_07 E110811J 500ng/mL
Analyzed : 01-FEB-2012 22:04
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000008.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	500	18.297	0.000	28619	57.23800				
2	DNX	500	23.611	0.000	29892	59.78400				
3	MNX	500	28.011	0.000	28831	57.66200				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:50

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d
Lab Smp Id: STD_07 E110811J 500
Inj Date : 01-FEB-2012 22:04
Operator : RN Inst ID: LC12.i
Smp Info : STD_07 E110811J 500ng/mL;1;
Misc Info : ;7;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 22:04 Cal File: C-000008.d
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.447	5789	250	0.043	0.27	
14.901	26989	584	0.022	0.64	
16.711	7885	201	0.025	0.22	
18.297	941754	28619	0.030	31.40	2 TNX
23.611	872134	29892	0.034	33.02	3 DNX
27.004	493	53	0.107	0.05	
27.181	300	52	0.173	0.05	
28.011	754008	28831	0.038	31.63	5 MNX
29.401	469	50	0.107	0.05	
29.647	856	62	0.072	0.06	
29.921	902	66	0.073	0.07	
30.347	1835	73	0.040	0.08	
30.861	994	65	0.065	0.07	
31.224	231	61	0.264	0.06	
31.434	832	80	0.096	0.08	
31.601	933	98	0.105	0.10	
31.917	6273	178	0.028	0.19	
32.914	901	71	0.079	0.07	
33.647	1175	75	0.064	0.08	
34.094	397	62	0.156	0.06	
34.871	876	47	0.054	0.05	
36.741	216	21	0.097	0.02	
37.337	137	27	0.198	0.02	
37.517	116	28	0.241	0.03	
37.774	151	23	0.152	0.02	
38.117	239	20	0.084	0.02	
38.374	127	20	0.158	0.02	
38.731	114	20	0.176	0.02	
39.247	269	32	0.119	0.03	
39.801	92	30	0.325	0.03	
40.034	96	26	0.271	0.02	
40.234	92	26	0.283	0.02	
40.604	163	25	0.154	0.02	
41.094	142	21	0.148	0.02	
41.311	211	23	0.109	0.02	
41.861	163	21	0.129	0.02	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d Page 2
Report Date: 02-Feb-2012 10:50

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.341	344	35	0.102	0.03	
42.637	81	25	0.310	0.02	
43.364	208	25	0.120	0.02	
44.054	142	44	0.311	0.04	
44.677	649	47	0.072	0.05	
45.304	817	58	0.071	0.06	
46.047	2589	130	0.050	0.14	
46.324	2800	149	0.053	0.16	
46.577	3655	140	0.038	0.15	
47.121	2628	131	0.050	0.14	
48.087	1419	117	0.082	0.12	
48.401	4886	186	0.038	0.20	
48.824	3417	221	0.065	0.24	
	2651987	91141		100.000	

Total unknown % height = 3.950

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d

Date : 01-FEB-2012 22:04

Client ID:

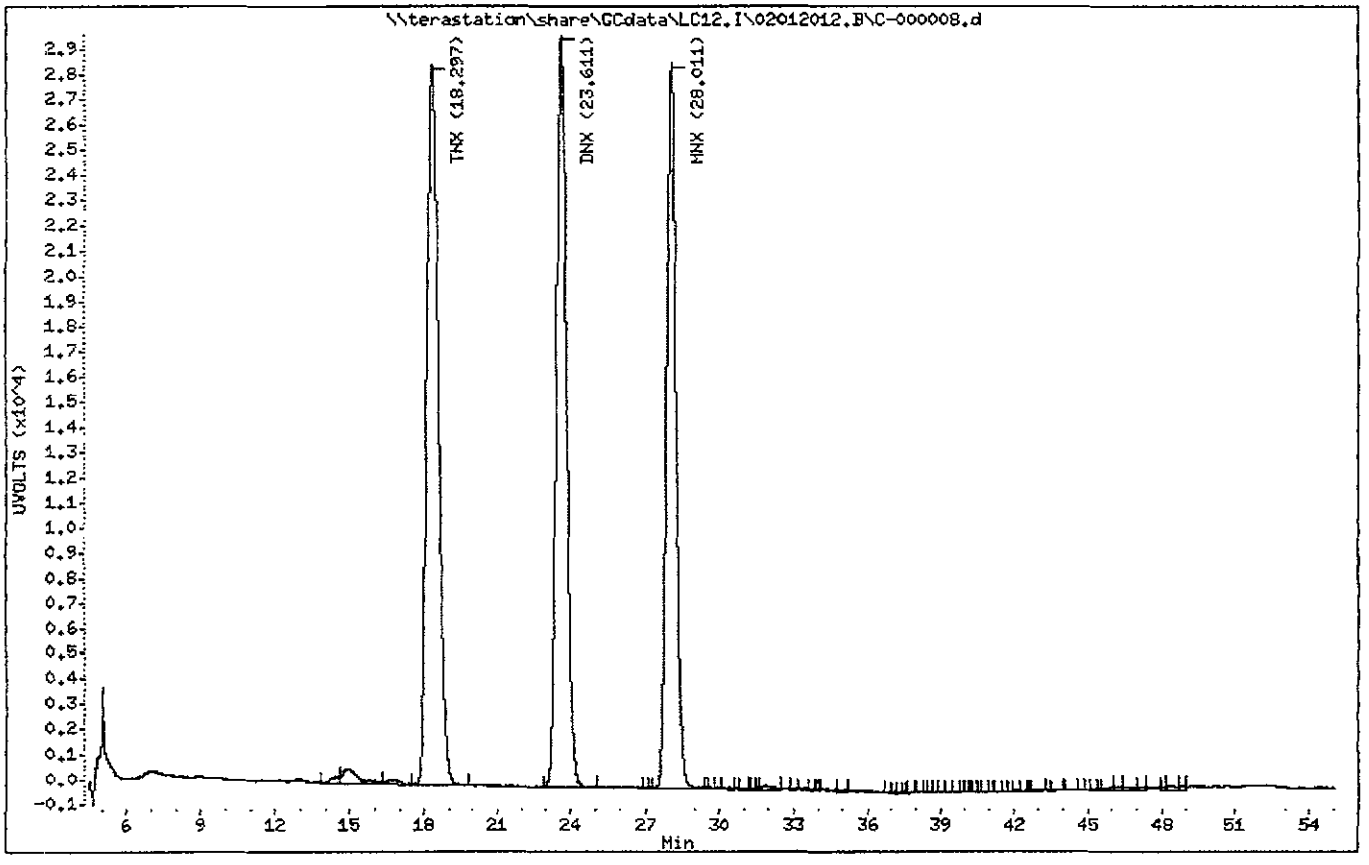
Instrument: LC12.i

Sample Info: STD_07 E110811J 500ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000008.d\C-000008.d

Date : 01-FEB-2012 22:04

Client ID:

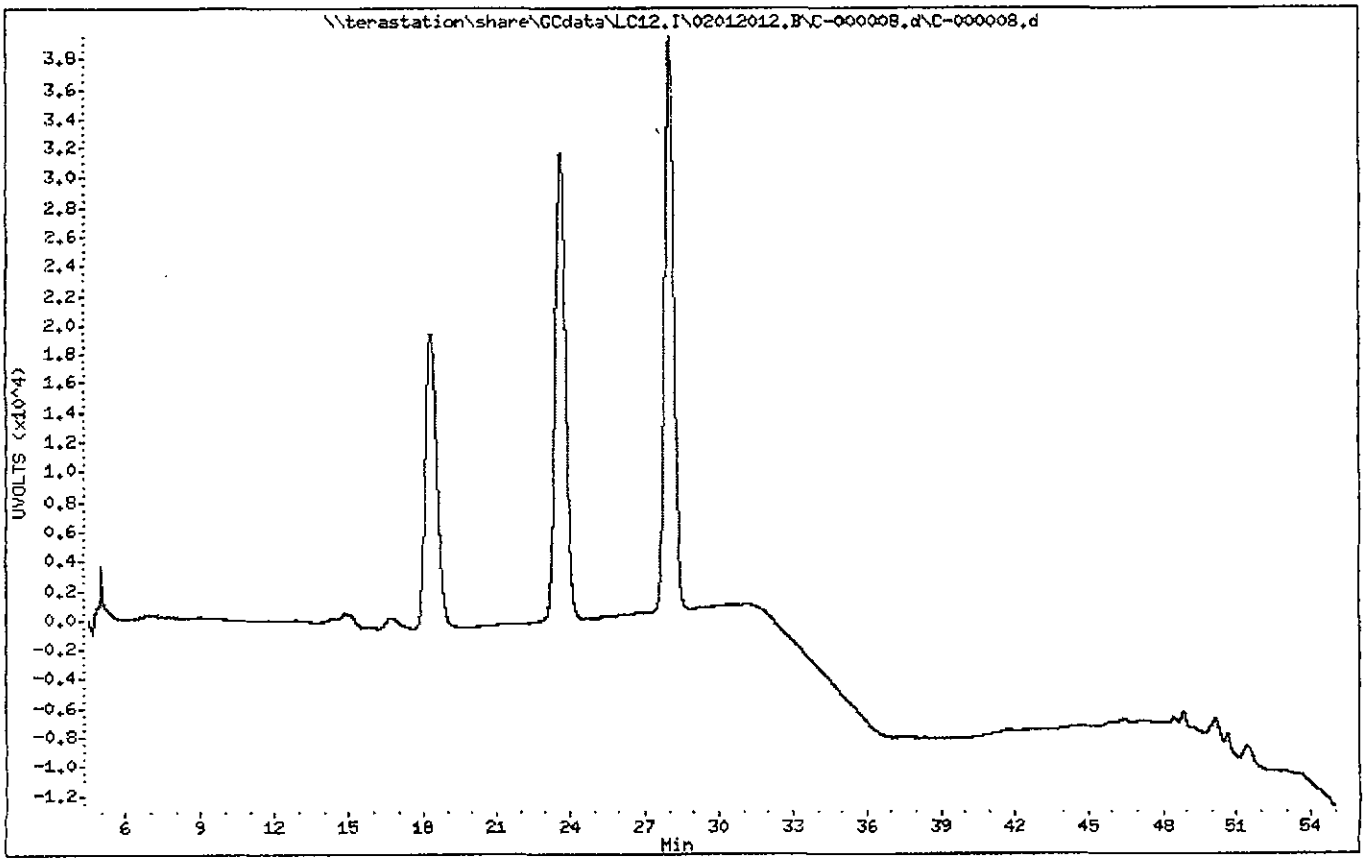
Instrument: LC12.I

Sample Info: STD_07 E110811J 500ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Summary - ICAL RFs

Sample : STD_08 E110811K 1000ng/mL
Analyzed : 01-FEB-2012 23:10
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000009.d
Sublist: 2_CALMET
SpikeList:

			Side A				Side B			
	Compound	StdAmt	RT	RTDiff	Response	RF	RT	RT Diff	Response	RF
1	TNX	1000	18.326	0.000	60813	60.81300				
2	DNX	1000	23.639	0.000	63115	63.11500				
3	MNX	1000	28.039	0.000	60081	60.08100				

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d
Lab Smp Id: STD_08 E110811K 100
Inj Date : 01-FEB-2012 23:10
Operator : RN Inst ID: LC12.i
Smp Info : STD_08 E110811K 1000ng/mL;1;
Misc Info : ;8;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 23:10 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.553	12051	518	0.043	0.27	
15.009	44319	1219	0.028	0.64	
15.859	10218	329	0.032	0.17	
16.726	13927	416	0.030	0.21	
18.326	1879733	60813	0.032	32.07	2 TNX
21.553	1352	46	0.034	0.02	
22.656	947	49	0.052	0.02	
23.639	1742952	63115	0.036	33.52	3 DNX
27.073	317	42	0.132	0.02	
28.039	1503748	60081	0.040	31.68	5 MNX
29.359	125	43	0.343	0.02	
29.513	1197	47	0.039	0.02	
30.089	308	50	0.162	0.02	
30.236	319	50	0.157	0.02	
30.426	612	74	0.121	0.03	
30.589	1033	78	0.075	0.04	
30.886	546	64	0.117	0.03	
31.169	384	47	0.122	0.02	
31.396	648	67	0.103	0.03	
31.573	538	93	0.173	0.04	
31.969	8369	238	0.028	0.12	
32.909	944	62	0.066	0.03	
33.189	1205	86	0.071	0.04	
33.706	1426	66	0.046	0.03	
34.169	452	69	0.153	0.03	
35.223	186	24	0.129	0.01	
37.063	160	30	0.188	0.01	
37.529	357	37	0.104	0.01	
37.869	561	41	0.073	0.02	
38.139	193	30	0.156	0.01	
38.376	296	41	0.139	0.02	
38.673	159	21	0.132	0.01	
39.353	247	29	0.117	0.01	
39.643	254	28	0.110	0.01	
40.163	156	32	0.205	0.01	
40.393	266	27	0.101	0.01	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d Page 2
Report Date: 02-Feb-2012 10:51

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
40.503	275	39	0.142	0.02	
41.056	98	19	0.194	0.01	
41.309	269	22	0.082	0.01	
41.526	320	32	0.100	0.01	
42.156	221	17	0.077	0.00	
42.543	151	17	0.113	0.00	
42.889	245	29	0.118	0.01	
44.726	620	37	0.060	0.01	
45.179	678	60	0.088	0.03	
45.456	1226	122	0.099	0.06	
45.643	1694	163	0.096	0.08	
47.116	3292	171	0.052	0.09	
47.716	2993	134	0.045	0.07	
48.116	1523	152	0.100	0.08	
48.396	4657	185	0.040	0.09	
48.853	5967	321	0.054	0.16	
	5254732	189622		100.000	

Total unknown % height = 2.730

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d

Date : 01-FEB-2012 23:10

Client ID:

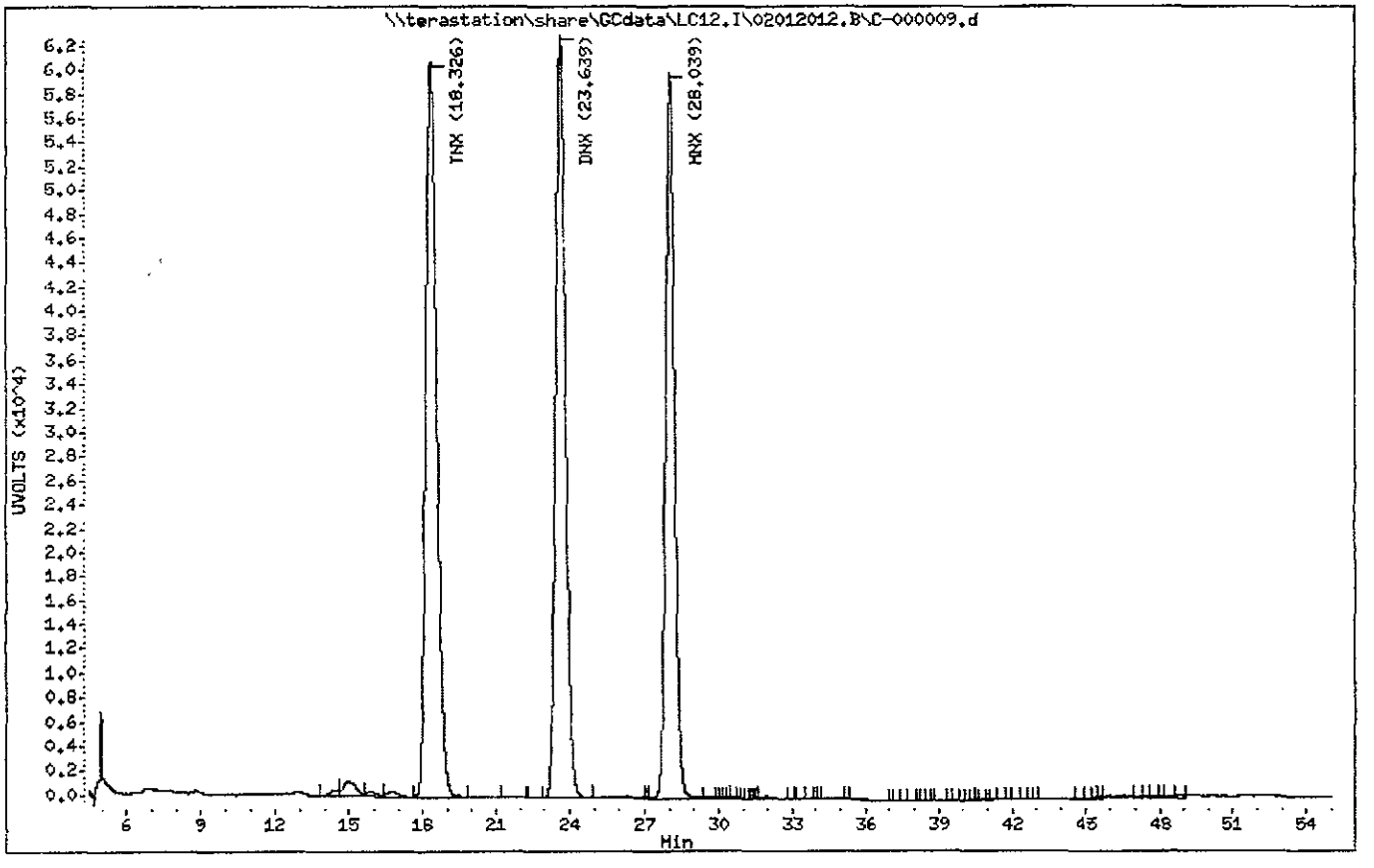
Instrument: LC12.I

Sample Info: STD_08 E110811K 1000ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d\C-000009
Lab Smp Id: STD_08 E110811K 100
Inj Date : 01-FEB-2012 23:10
Operator : RN Inst ID: LC12.i
Smp Info : STD_08 E110811K 1000ng/mL;1;
Misc Info : ;8;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 10:45 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 16 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.966	1918	177	0.092	100.00	
	1918	177		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000009.d\C-000009.d

Date : 01-FEB-2012 23:10

Client ID:

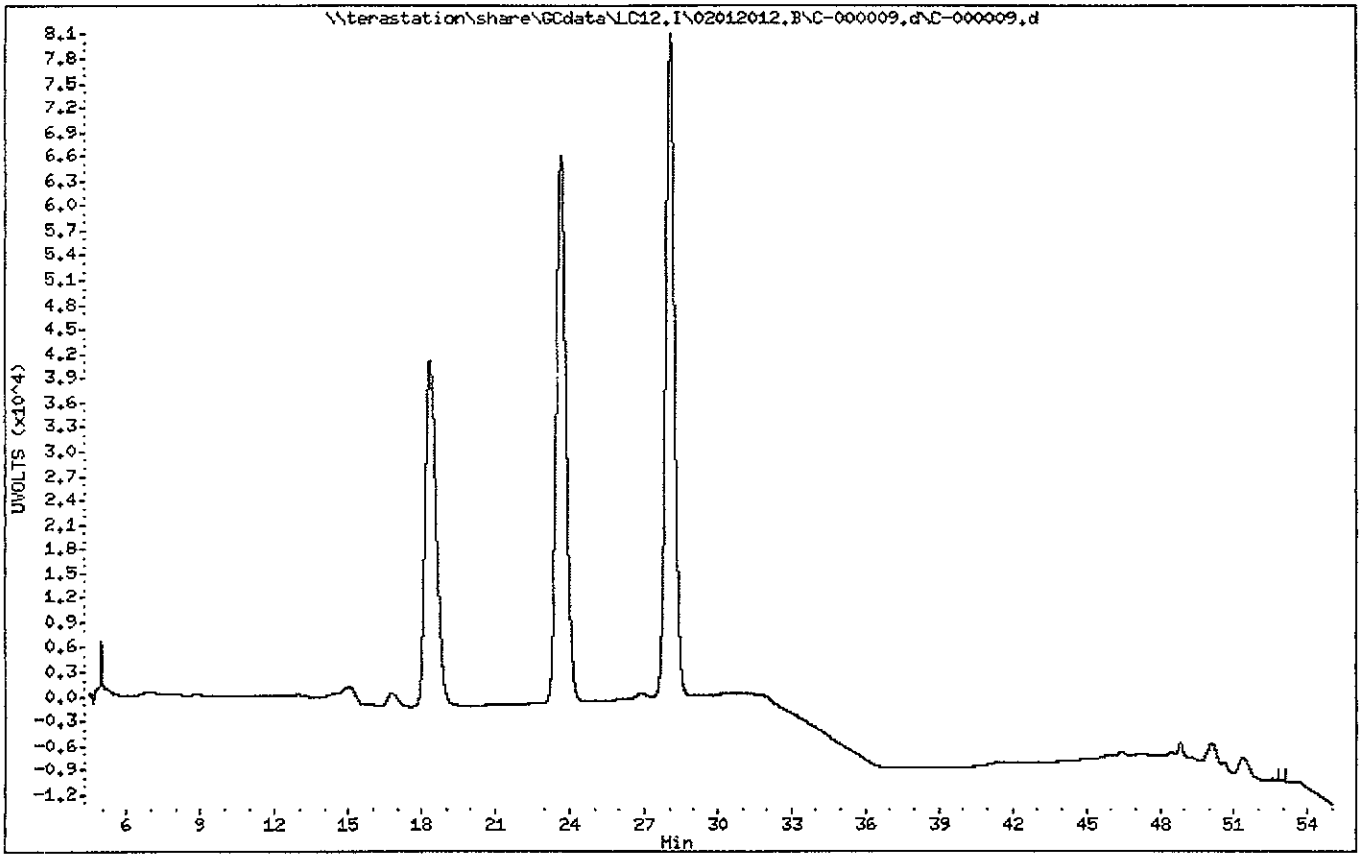
Instrument: LC12.I

Sample Info: STD_08 E110811K 1000ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : BLANK
Analyzed : 02-FEB-2012 00:15
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000010.d
Sublist: 2_CALMET
SpikeList:

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	RPD
1	TNX									
2	DNX									
3	MNX	28.009	-0.030	42	0.7~~31~~					

not real peak.

RN 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 10:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d
Lab Smp Id: BLANK
Inj Date : 02-FEB-2012 00:15
Operator : RN Inst ID: LC12.i
Smp Info : BLANK;0;
Misc Info : ;;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:50 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 23:10 Cal File: C-000009.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.126	384	40	0.104	2.04	
27.432	307	50	0.163	2.56	
27.496	745	50	0.067	2.56	
27.936	303	45	0.148	2.30	
28.009	509	42	0.083	2.15	5 MNX
28.346	276	34	0.123	1.74	
28.486	160	46	0.287	2.35	
28.882	249	35	0.140	1.79	
29.059	247	36	0.146	1.84	
29.206	444	35	0.079	1.79	
29.419	178	36	0.203	1.84	
29.596	910	41	0.045	2.09	
30.169	624	45	0.072	2.30	
30.306	624	42	0.067	2.15	
30.642	189	43	0.227	2.20	
30.789	205	41	0.200	2.09	
30.989	331	38	0.115	1.94	
31.192	293	47	0.160	2.40	
31.546	956	62	0.065	3.17	
31.636	184	66	0.358	3.37	
31.802	1306	75	0.057	3.84	
32.202	790	64	0.081	3.27	
32.409	713	55	0.077	2.81	
32.772	534	51	0.095	2.61	
34.322	257	30	0.117	1.53	
34.526	290	33	0.114	1.68	
35.222	297	24	0.081	1.22	
35.842	281	22	0.078	1.12	
37.422	329	32	0.097	1.63	
38.242	133	24	0.180	1.22	
38.589	254	22	0.087	1.12	
39.372	74	20	0.272	1.02	
39.669	296	33	0.111	1.68	
39.982	312	34	0.109	1.74	
40.306	349	25	0.072	1.28	
40.752	331	29	0.088	1.48	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d Page 2
Report Date: 02-Feb-2012 10:51

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.226	132	22	0.167	1.12	
41.712	78	17	0.219	0.87	
42.416	204	28	0.137	1.43	
42.716	118	31	0.263	1.58	
45.986	457	42	0.092	2.15	
46.302	1084	55	0.051	2.81	
46.602	283	56	0.198	2.86	
46.746	697	68	0.098	3.48	
47.299	448	66	0.147	3.37	
48.309	2760	121	0.044	6.41	
	20924	1953		100.000	

Total unknown % height = 97.85

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d

Date : 02-FEB-2012 00:15

Client ID:

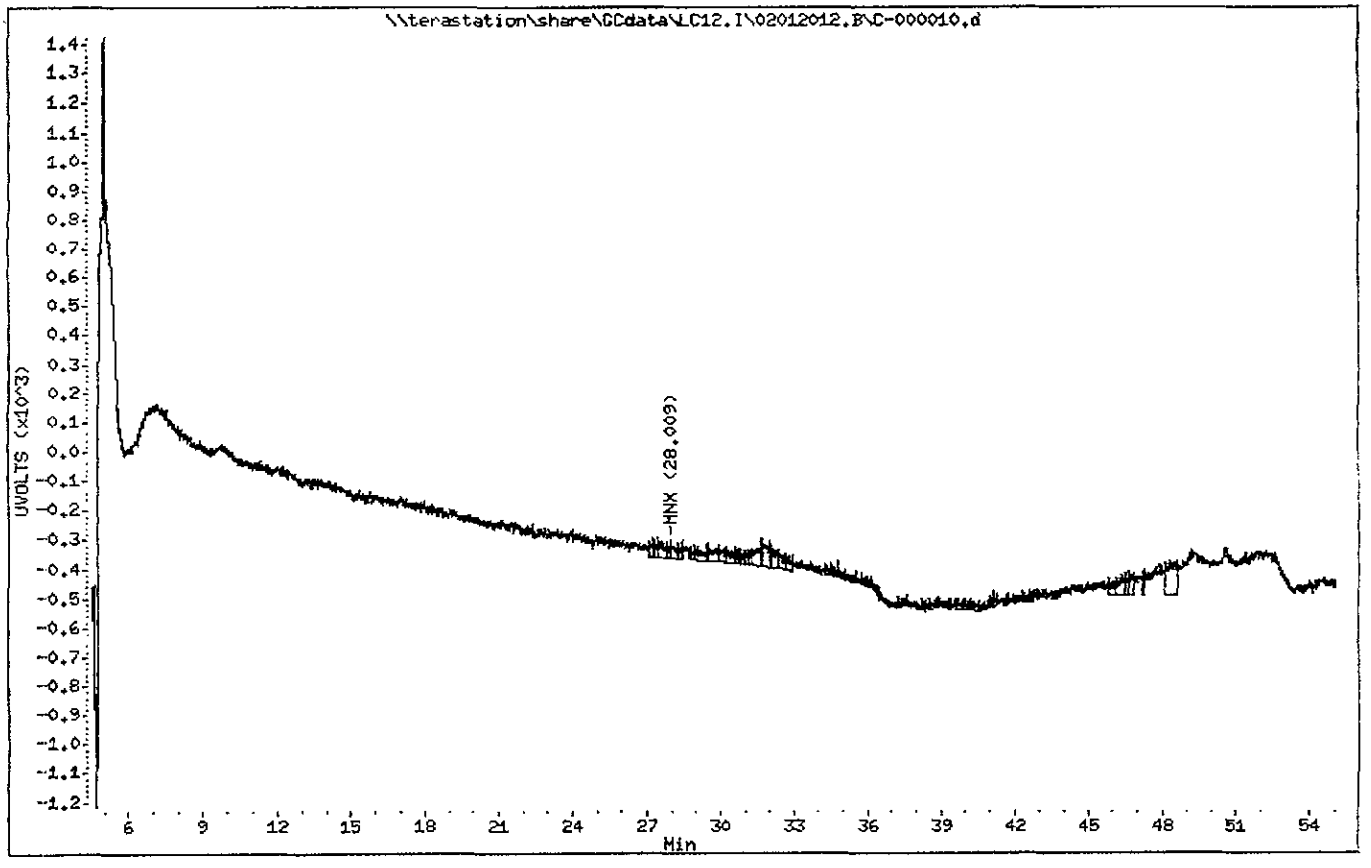
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000010.d\C-000010.d

Page 1

Date : 02-FEB-2012 00:15

Client ID:

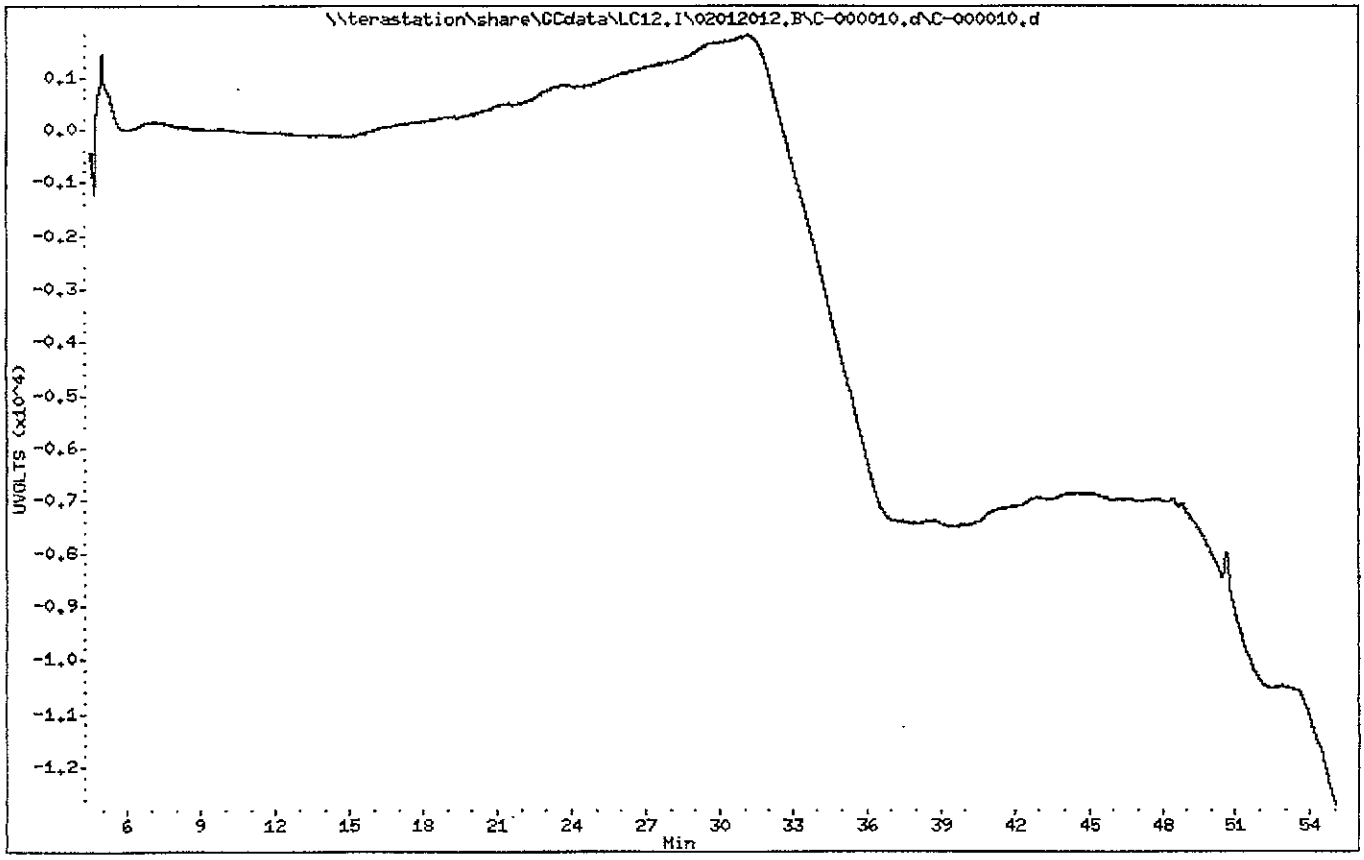
Instrument: LC12.I

Sample Info: BLANK;0;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_03 E110811F 20ng/mL
Analyzed : 02-FEB-2012 01:21
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000011.d
Sublist: 2_CALMET
SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	20.0	18.370	0.000	1049	17.95	-10					
2	DNX	20.0	23.686	0.000	1093	18.04	-9.8					
3	MNX	20.0	28.106	0.000	1070	18.42	-7.9					

MRL passes S:N >5:1

RDM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:05

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d
Lab Smp Id: STD_03 E110811F 20n
Inj Date : 02-FEB-2012 01:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_03 E110811F 20ng/mL;1;
Misc Info : ;3;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:51 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.950	677	38	0.056	0.69	
18.370	33499	1049	0.031	19.26	2 TNX
23.686	32315	1093	0.034	20.32	3 DNX
27.046	419	41	0.098	0.75	
27.233	441	46	0.104	0.84	
27.370	443	44	0.099	0.80	
28.106	28712	1070	0.037	19.64	5 MNX
29.056	188	34	0.181	0.62	
29.260	553	43	0.078	0.78	
29.503	278	51	0.183	0.93	
29.676	708	50	0.071	0.91	
29.980	507	54	0.106	0.99	
30.290	538	49	0.091	0.89	
30.560	1483	65	0.044	1.19	
31.116	283	53	0.187	0.97	
31.216	236	68	0.289	1.24	
31.323	387	70	0.181	1.28	
31.430	396	76	0.192	1.39	
31.630	949	87	0.092	1.59	
31.830	999	89	0.089	1.63	
31.910	1359	86	0.063	1.57	
32.560	571	71	0.124	1.30	
32.976	975	64	0.066	1.17	
34.173	1087	57	0.052	1.04	
34.520	875	47	0.054	0.86	
35.870	223	26	0.116	0.47	
36.220	237	28	0.118	0.51	
37.080	108	19	0.176	0.34	
37.446	142	15	0.106	0.27	
37.770	161	27	0.168	0.49	
37.986	261	27	0.104	0.49	
38.226	88	24	0.274	0.44	
38.370	82	22	0.269	0.40	
38.870	249	28	0.113	0.51	
39.663	210	25	0.119	0.45	
39.843	137	29	0.212	0.53	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d Page 2
Report Date: 02-Feb-2012 10:52

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
39.960	144	35	0.243	0.64	
40.330	102	24	0.235	0.44	
40.823	152	24	0.158	0.44	
41.216	202	25	0.124	0.45	
41.620	86	19	0.221	0.34	
41.856	157	27	0.172	0.49	
42.306	159	35	0.220	0.64	
42.426	435	27	0.062	0.49	
42.766	90	32	0.354	0.58	
42.953	422	35	0.083	0.64	
45.000	694	48	0.069	0.88	
47.973	1186	85	0.072	1.56	
48.426	3759	149	0.040	2.73	
48.936	2682	116	0.043	2.13	
	121043	5446		100.000	

Total unknown % height = 40.78

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d

Date : 02-FEB-2012 01:21

Client ID:

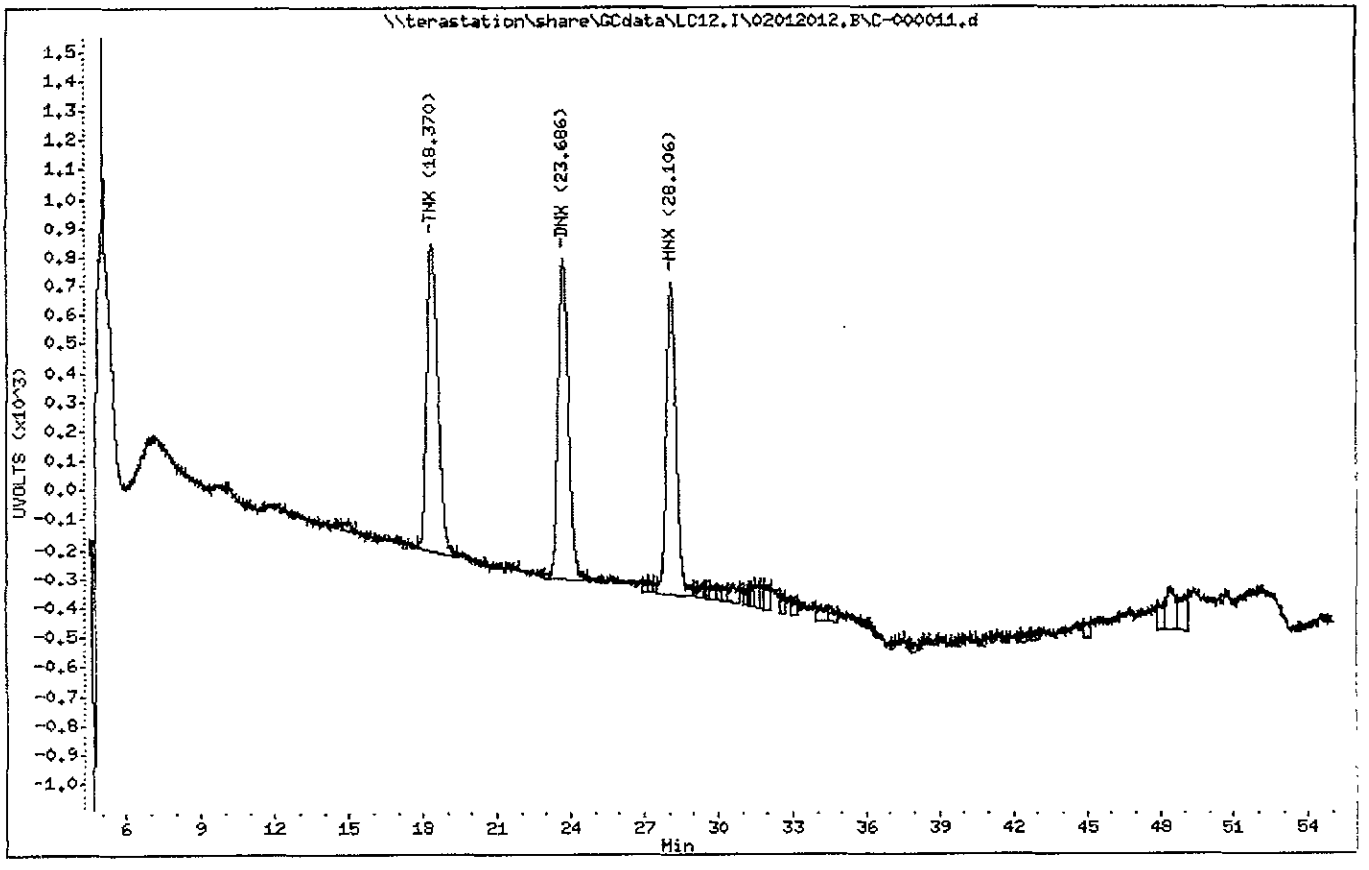
Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL;1;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000011.d\C-000011.d Page 1

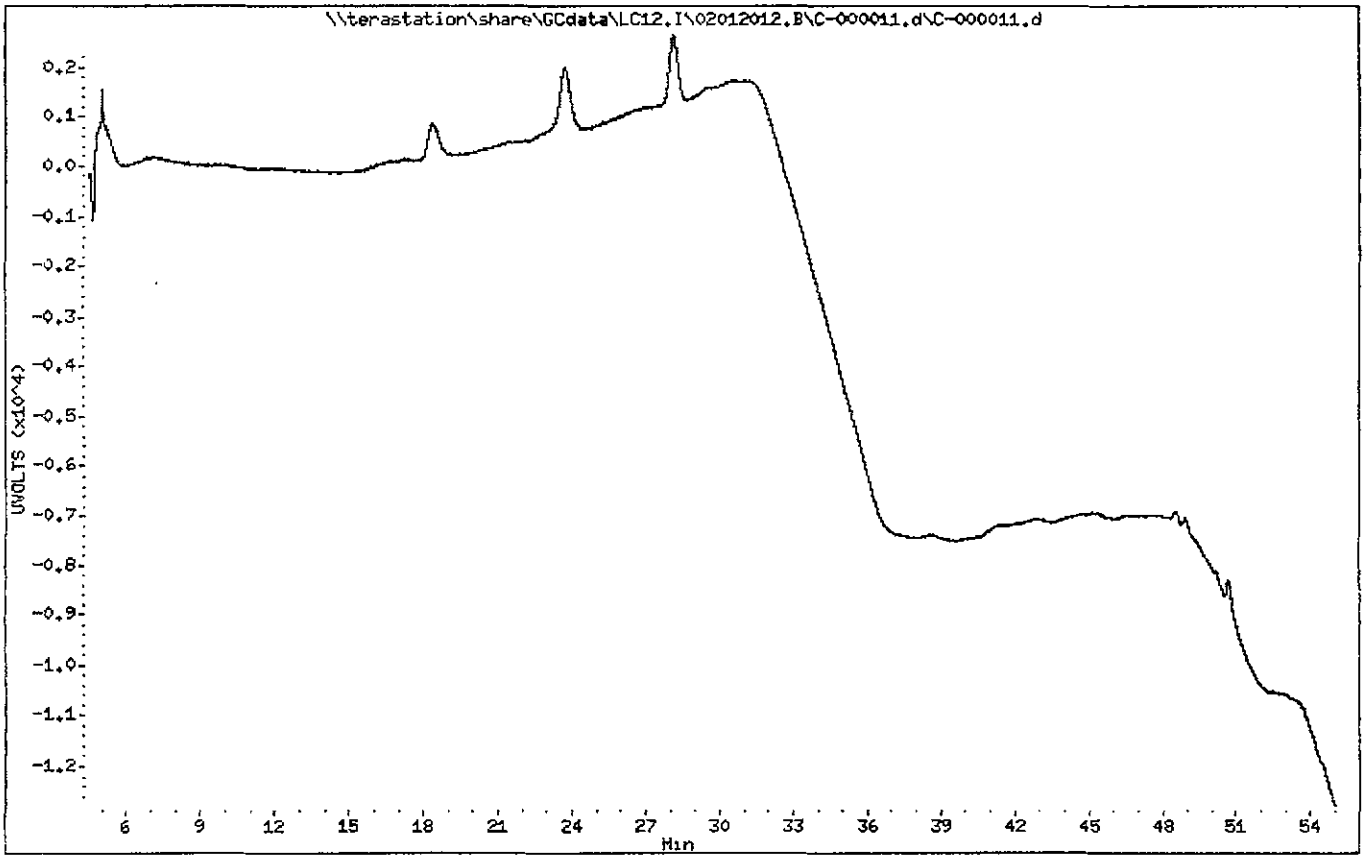
Date : 02-FEB-2012 01:21

Client ID: Instrument: LC12.I

Sample Info: STD_03 E110811F 20ng/mL:1:

Operator: RN

Column phase: Zorbax Cyano Column diameter: 4.60



TestAmerica West Sacramento

Dual Column Continuing Calibration Report

Sample : STD_06 E110811D ICV 200ng/mL
Analyzed : 02-FEB-2012 02:26
Operator : RN
Matrix : NONE

Instrument: LC12
File ID: 02012012.B/C-000012.d
Sublist: 2_CALMET
SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	200	18.341	0.000	12148	207.8	3.9					
2	DNX	200	23.661	0.000	11544	190.5	-4.8					
3	MNX	200	28.061	0.000	11164	192.2	-3.9					

ICV passes ±15%
RPN 2/2/12.

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:06

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d
Lab Smp Id: STD_06 E110811D ICV
Inj Date : 02-FEB-2012 02:26
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 E110811D ICV 200ng/mL;2;
Misc Info : ;6;;;;3;2_CALMET.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 10:52 noonanr Quant Type: AREA%
Cal Date : 02-FEB-2012 01:21 Cal File: C-000011.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
16.621	781	49	0.063	0.13	
18.341	382410	12148	0.032	33.01	2 TNX
23.661	328209	11544	0.035	31.20	3 DNX
27.167	947	52	0.055	0.14	
28.061	286386	11164	0.039	30.17	5 MNX
29.241	270	38	0.141	0.10	
29.461	381	56	0.147	0.15	
29.627	321	52	0.162	0.14	
29.867	1090	58	0.053	0.15	
30.151	1174	56	0.048	0.15	
30.561	1123	64	0.057	0.17	
30.927	714	49	0.069	0.13	
31.287	517	60	0.116	0.16	
31.437	633	81	0.128	0.21	
31.574	910	80	0.088	0.21	
31.857	1294	124	0.096	0.33	
32.547	506	75	0.148	0.20	
32.691	387	76	0.196	0.20	
32.887	1315	70	0.053	0.18	
33.227	881	66	0.075	0.17	
33.621	649	57	0.088	0.15	
34.094	1277	46	0.036	0.12	
34.817	470	47	0.100	0.12	
35.141	321	36	0.112	0.09	
35.354	201	27	0.134	0.07	
35.857	285	27	0.095	0.07	
37.157	142	24	0.169	0.06	
37.351	124	20	0.161	0.05	
37.784	198	19	0.096	0.05	
38.074	301	20	0.066	0.05	
38.557	228	18	0.079	0.04	
39.111	246	27	0.110	0.07	
39.681	292	24	0.082	0.06	
40.031	85	27	0.318	0.07	
40.821	64	18	0.283	0.04	
41.084	517	37	0.072	0.10	

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d Page 2
Report Date: 02-Feb-2012 10:52

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
42.077	114	27	0.237	0.07	
42.514	125	30	0.240	0.08	
42.747	93	17	0.182	0.04	
43.927	277	27	0.098	0.07	
45.111	121	25	0.207	0.06	
46.277	398	39	0.098	0.10	
47.744	792	67	0.085	0.18	
48.381	4566	215	0.047	0.58	
48.841	1202	117	0.097	0.31	
	1023339	37000		100.000	

Total unknown % height = 5.620

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d

Date : 02-FEB-2012 02:26

Client ID:

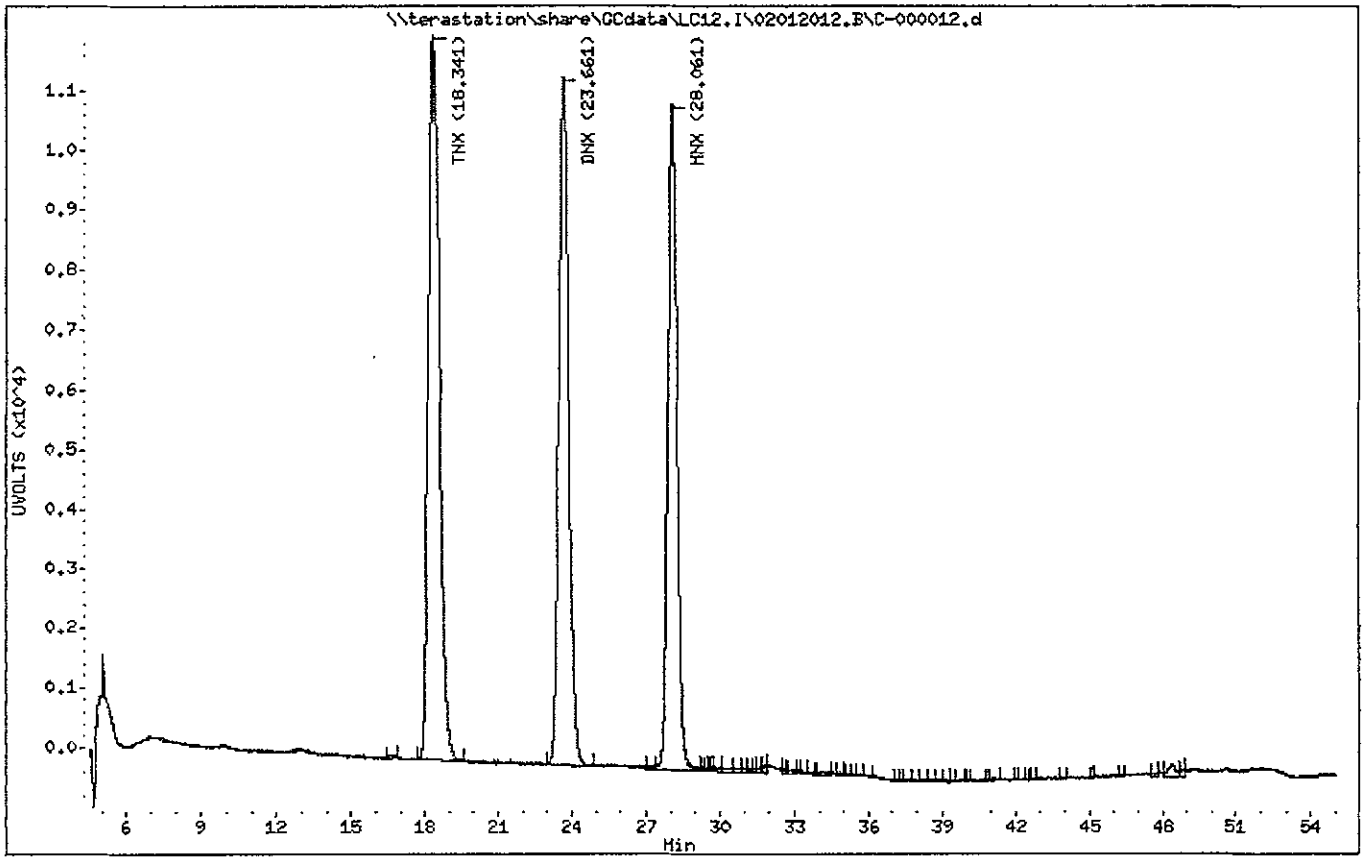
Instrument: LC12.i

Sample Info: STD_06 E110811D ICV 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000012.d\C-000012.d Page 1

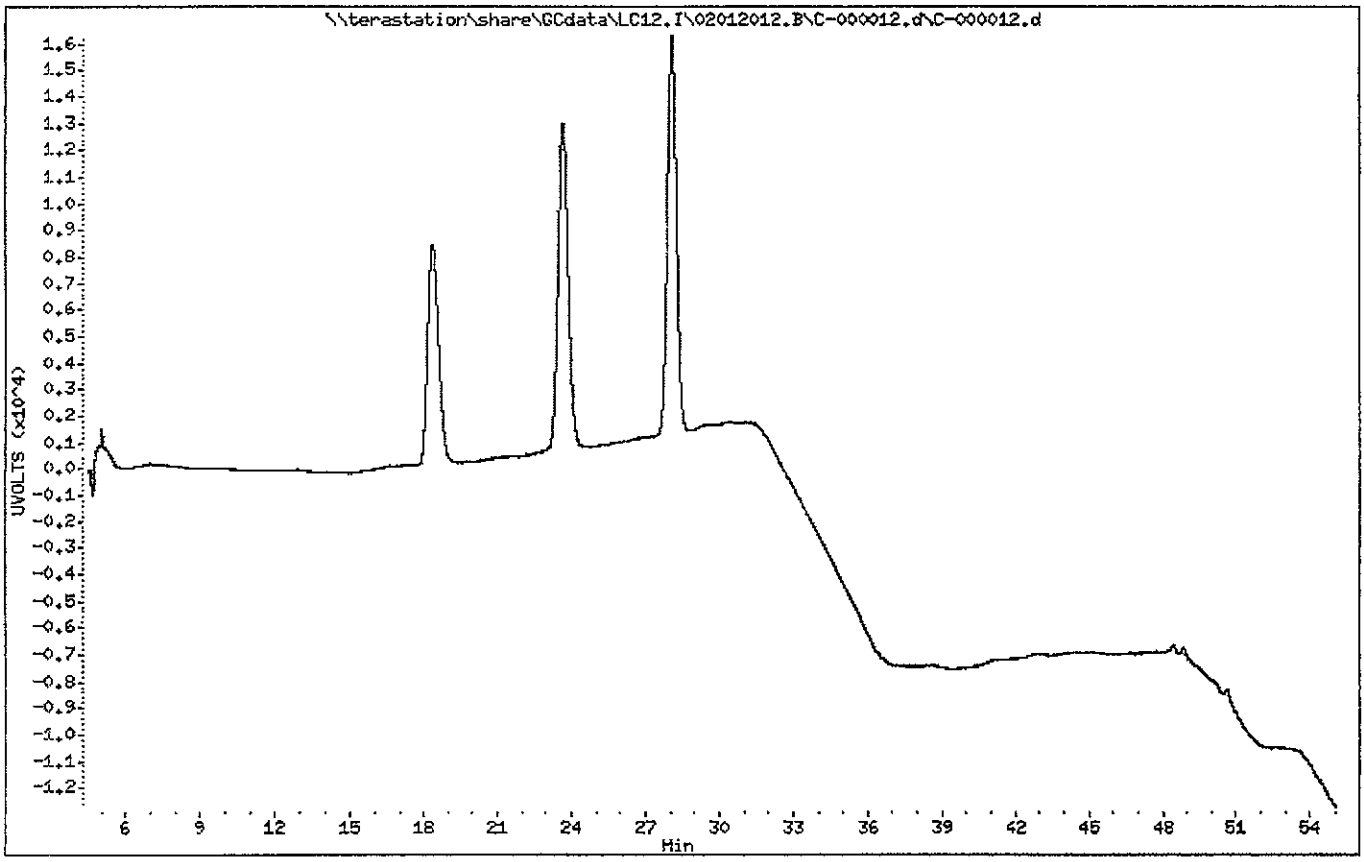
Date : 02-FEB-2012 02:26

Client ID: Instrument: LC12.i

Sample Info: STD_06 E110811D ICV 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano Column diameter: 4.60



CCAL Data

TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 E110811I METAB 200ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 11:25 File ID: 02012012.B/M-000003.D
Operator : rn Sublist: 2_CALMET

	Compound	Side A StdAmt	RT	RTDiff	Response	Conc ng	%D	Side B RT	RTDiff	Response	Conc ng	%D
1	TNX	200	15.436	0.000	12281	205.9	3.0					
2	DNX	200	19.219	0.000	18964	206.7	3.4					
3	MNX	200	21.962	0.000	22322	206.2	3.1					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 12:17

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D
Lab Smp Id: STD_06 E110811I MET
Inj Date : 01-FEB-2012 11:25
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB 200ng/mL;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 12:17 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.072	1699	124	0.073	0.22	
15.436	319764	12281	0.038	21.98	2 TNX
19.219	295832	18964	0.064	33.94	3 DNX
20.556	106	20	0.189	0.03	
21.962	254995	22322	0.088	40.06	5 MNX
23.746	283	36	0.127	0.06	
24.246	81	23	0.284	0.04	
24.986	1813	117	0.065	0.20	
25.552	4447	279	0.063	0.49	
26.042	1306	93	0.071	0.16	
26.276	919	101	0.110	0.18	
26.519	6165	401	0.065	0.71	
26.936	1686	124	0.074	0.22	
27.362	13200	677	0.051	1.21	
28.762	138	31	0.225	0.05	
30.262	1860	149	0.080	0.26	
31.306	57	21	0.370	0.03	
33.056	302	41	0.136	0.07	
40.059	212	26	0.123	0.04	
42.392	317	32	0.101	0.05	
	905182	55862		100.000	

Total unknown % height = 4.020

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D

Date : 01-FEB-2012 11:25

Client ID:

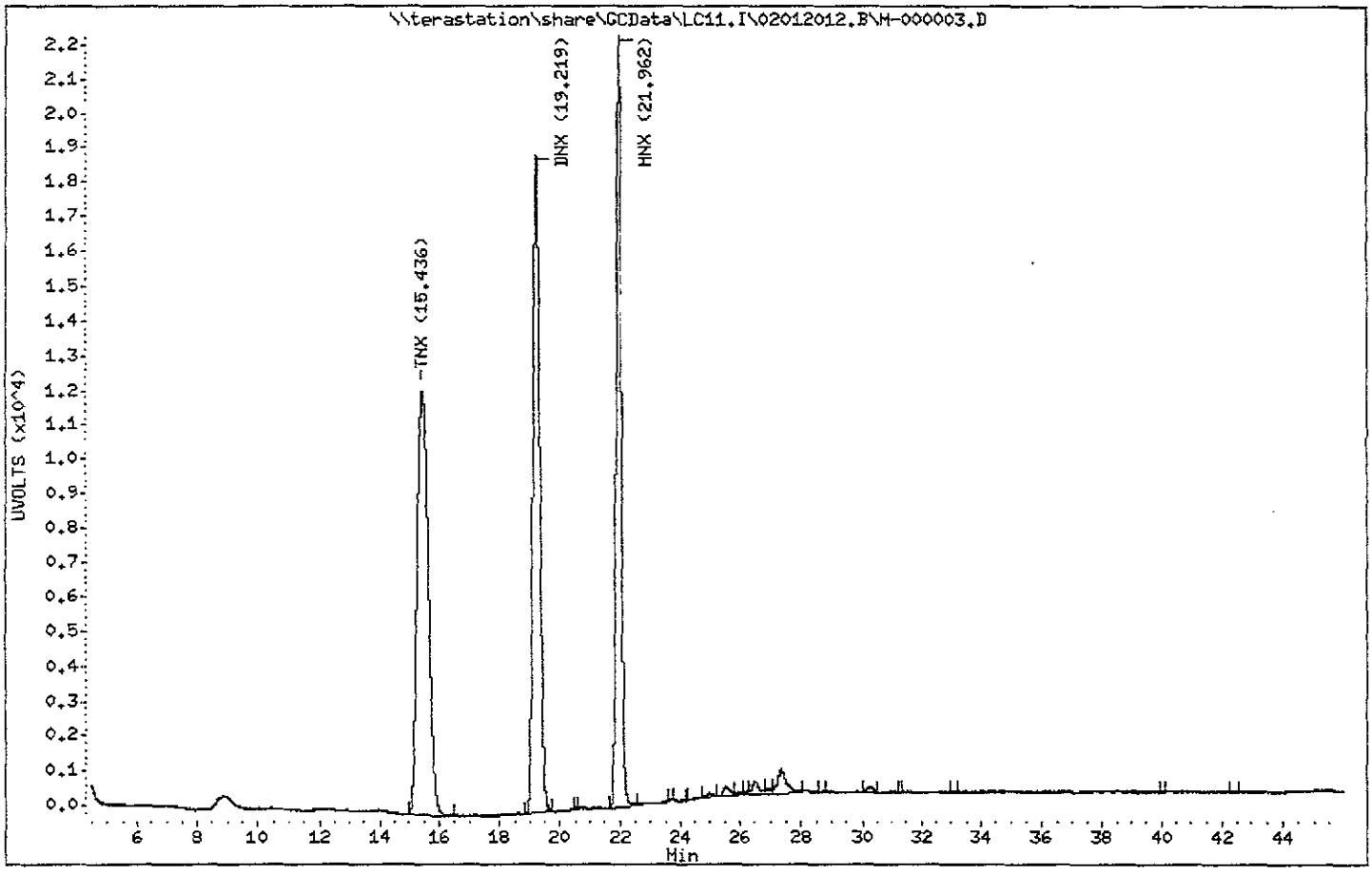
Instrument: LC11.i

Sample Info: STD_06 E110811I METAB 200ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D\M-000003
Lab Smp Id: STD_06 E110811I MET
Inj Date : 01-FEB-2012 11:25
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 E110811I METAB 200ng/mL;2
Misc Info : ;6;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 09:45 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.219	180	53	0.294	4.20	
27.302	154	47	0.306	3.73	
27.766	171	29	0.169	2.30	
29.776	171	29	0.170	2.30	
29.882	172	38	0.221	3.01	
30.266	5485	397	0.072	31.57	
31.036	172	31	0.181	2.46	
31.619	560	37	0.066	2.93	
32.306	572	41	0.072	3.25	
32.466	290	41	0.141	3.25	
35.869	189	30	0.159	2.38	
38.769	2123	105	0.049	8.33	
39.492	209	42	0.201	3.33	
40.149	1742	78	0.045	6.19	
41.959	2061	68	0.033	5.39	
42.529	2173	77	0.035	6.11	
43.259	364	35	0.096	2.77	
43.632	451	44	0.097	3.49	
45.129	205	38	0.185	3.01	
	17444	1260		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000003.D\M-000003.D

Date : 01-FEB-2012 11:25

Client ID:

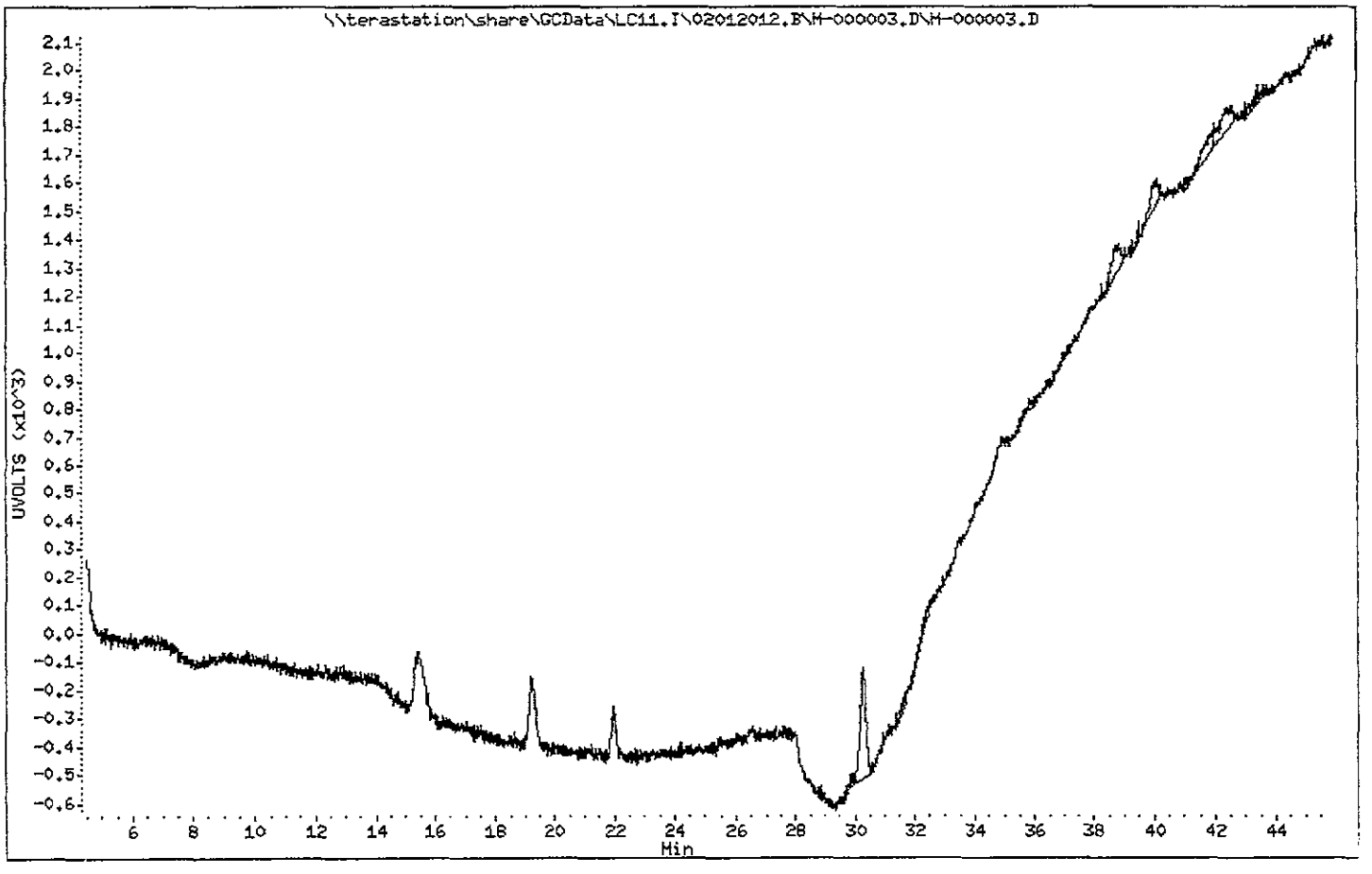
Instrument: LC11.i

Sample Info: STD_06 E110811I METAB 200ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 200ng/mL
Analyzed : 01-FEB-2012 12:22
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000004.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	200	20.547	0.000	18798	204.8	2.4					
2	RDX	200	23.730	0.000	18461	203.0	1.5					
3	1,3,5-Trinitrobenz	200	25.670	0.000	41451	202.6	1.3					
4	Picric ACID	500	25.913	0.000	61106	519.2	3.8	25.913	0.000	89203	522.8	4.6
5	1,3-Dinitrobenzene	200	28.393	0.000	43583	203.7	1.9					
6	3,5-Dinitroaniline	200	29.530	0.000	28348	203.0	1.5					
7	Nitrobenzene	200	30.000	0.000	19130	205.9	3.0					
8	TETRYL	200	30.353	0.000	22595	201.5	0.75					
9	2,4,6-Trinitrotolu	200	31.597	0.000	24203	202.2	1.1					
10	4-AM-2,6-DNT	200	32.577	0.000	19568	203.2	1.6					
11	3,4-Dinitrotoluene	200	32.940	0.000	13565	202.2	1.1	32.940	0.000	26067	204.5	2.3
12	2-AM-4,6-DNT	200	33.267	0.000	21818	203.6	1.8					
13	2,6-Dinitrotoluene	200	34.527	0.000	14946	201.4	0.70					
14	2,4-Dinitrotoluene	200	34.917	0.000	24667	202.1	1.1					
15	2-Nitrotoluene	200	37.847	0.000	10675	201.7	0.85					
16	4-Nitrotoluene	200	39.087	0.000	12936	204.9	2.5					
17	3-Nitrotoluene	200	40.607	0.000	12815	204.3	2.2					
18	EGDN	200										
19	Nitroglycerin	200						30.860	0.000	17573	211.6	5.8
20	PETN	200						41.363	0.000	9919	206.9	3.5

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 13:15

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D
Lab Smp Id: STD_06 12GCSV0100 2
Inj Date : 01-FEB-2012 12:22
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 200ng/mL;2
Misc Info : ;6;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.357	132	34	0.257	0.00		
20.547	173773	18798	0.108	4.58		4 HMX
22.217	107	38	0.355	0.00		
22.450	669	73	0.109	0.01		
22.870	75	21	0.279	0.00		
23.730	194658	18461	0.095	4.49		7 RDX
24.533	65	27	0.417	0.00		
24.633	62	24	0.385	0.00		
24.940	242	43	0.178	0.01		
25.670	394428	41451	0.105	10.10		10 1,3,5-Trinitrobenze
25.913	635793	61106	0.096	15.04		9 Picric ACID
27.113	9624	1121	0.116	0.27		
28.393	522374	43583	0.083	10.62		13 1,3-Dinitrobenzene
29.530	360915	28348	0.079	6.90		15 3,5-Dinitroaniline
30.000	255068	19130	0.075	4.66		17 Nitrobenzene
30.353	299569	22595	0.075	5.50		16 TETRYL
30.867	2056	180	0.088	0.04		
31.597	347349	24203	0.070	5.89		19 2,4,6-Trinitrotolue
32.577	303253	19568	0.065	4.76		20 4-AM-2,6-DNT
32.940	191824	13565	0.071	3.30	$	1 3,4-Dinitrotoluene
33.267	367435	21818	0.059	5.31		21 2-AM-4,6-DNT
34.526	239972	14946	0.062	3.64		22 2,6-Dinitrotoluene
34.916	444352	24667	0.056	6.01		23 2,4-Dinitrotoluene
37.170	215	24	0.112	0.00		
37.846	214764	10675	0.050	2.60		24 2-Nitrotoluene
39.087	275695	12936	0.047	3.15		25 4-Nitrotoluene
40.607	295885	12815	0.043	3.12		26 3-Nitrotoluene
	5530354	410250		100.000		

Total unknown % height = 0.3300

Data File: \\terastation\share\GCData\LC11.I\02012012.B\H-000004.D

Date : 01-FEB-2012 12:22

Client ID:

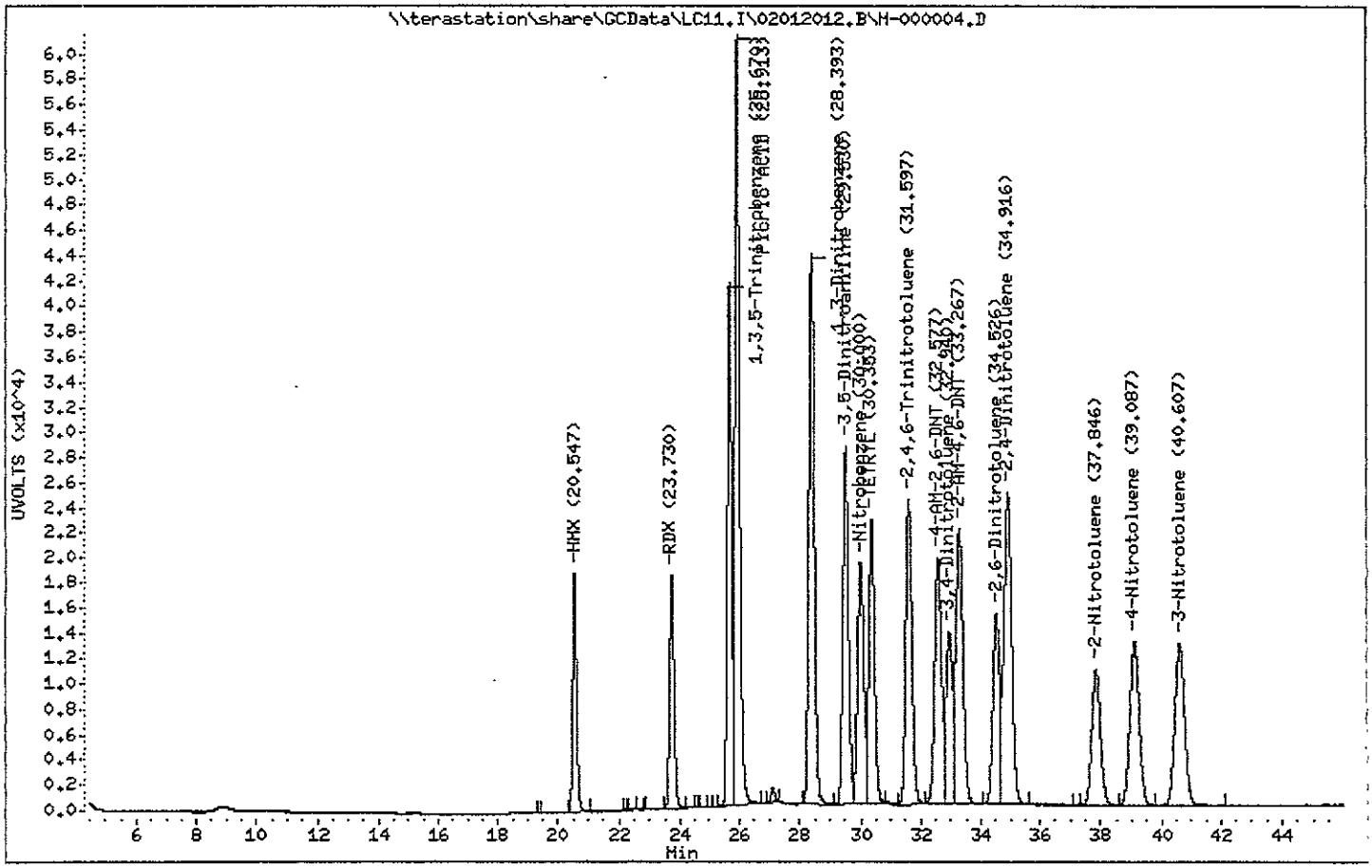
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 200ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D\M-000004
Lab Smp Id: STD_06 12GCSV0100 2
Inj Date : 01-FEB-2012 12:22
Operator : rn Inst ID: LC11.i
Smp Info : STD_06 12GCSV0100 200ng/mL;2
Misc Info : ;6;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.263	293	50	0.171	0.01	
23.717	424	46	0.108	0.01	
24.153	308	37	0.120	0.00	
24.663	185	32	0.173	0.00	
25.673	5145	572	0.111	0.12	
25.913	906882	89203	0.098	19.91	9 Picric ACID
28.393	271637	22569	0.083	5.00	
29.530	365519	28832	0.079	6.39	
30.003	406175	30587	0.075	6.78	
30.353	397157	30199	0.076	6.69	
30.860	235540	17573	0.075	3.89	18 Nitroglycerin
31.600	368119	25800	0.070	5.71	
32.577	444960	28856	0.065	6.39	
32.940	391506	26067	0.067	5.77	$ 1 3,4-Dinitrotoluene
33.267	370574	22718	0.061	5.03	
34.526	436642	26138	0.060	5.79	
34.913	354058	19992	0.056	4.43	
37.077	418	35	0.084	0.00	
37.846	530956	26158	0.049	5.79	
39.087	422690	19560	0.046	4.33	
40.607	600966	26061	0.043	5.77	
41.363	248177	9919	0.040	2.19	27 PETN
43.507	1013	37	0.037	0.00	
44.763	365	40	0.110	0.00	
	6759710	451081		100.000	

Total unknown % height = 68.24

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000004.D\M-000004.D

Date : 01-FEB-2012 12:22

Client ID:

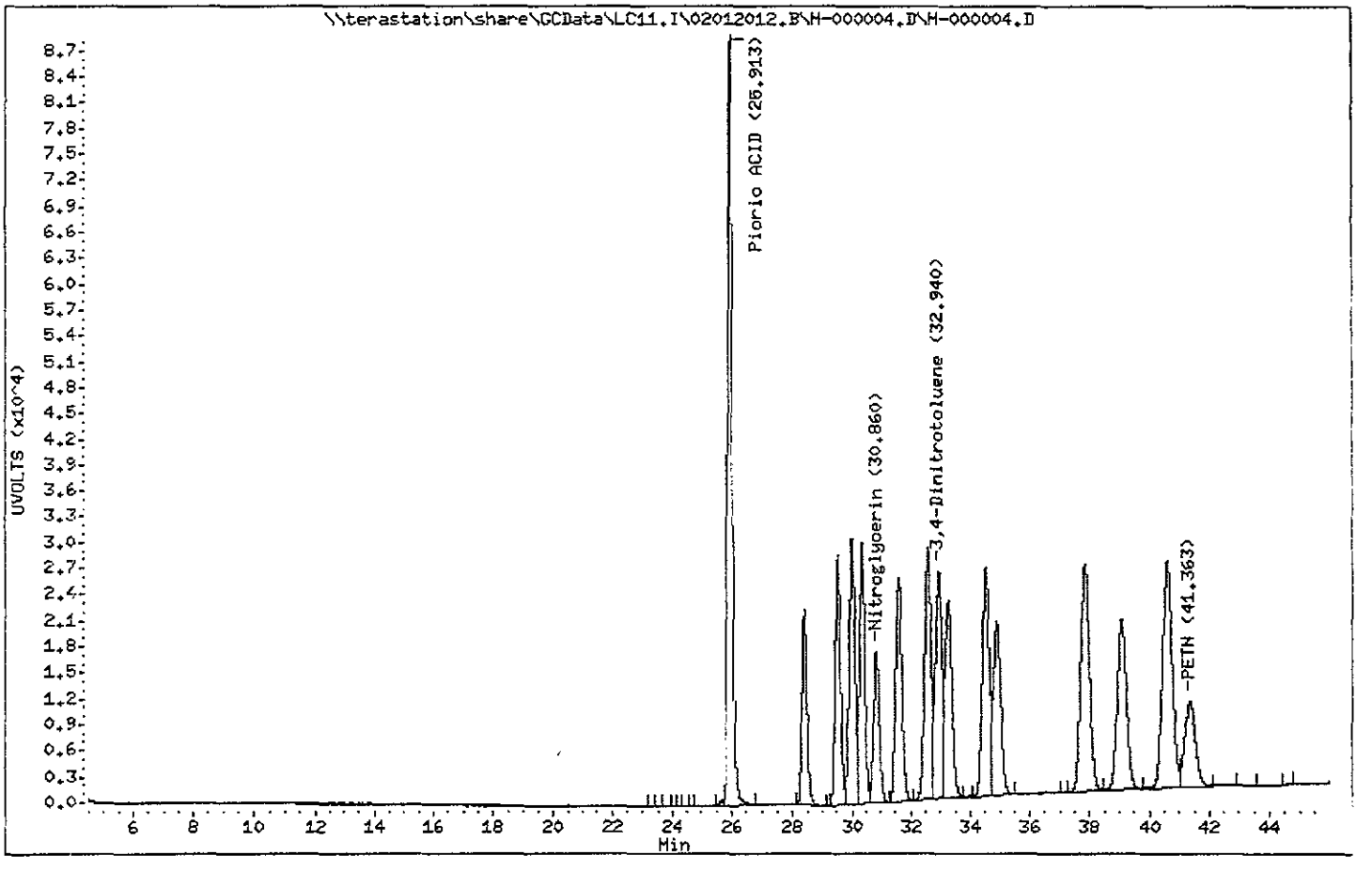
Instrument: LC11.i

Sample Info: STD_06 12GCSV0100 200ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 01-FEB-2012 20:57 File ID: 02012012.B/M-000013.D
Operator : rn Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	100	15.426	0.000	6127	102.7	2.7					
2	DNX	100	19.212	0.000	9445	102.9	2.9					
3	MNX	100	21.962	0.000	11125	102.7	2.7					

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/01/2012 21:49

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D
Lab Smp Id: STD_05 E110811H MET
Inj Date : 01-FEB-2012 20:57
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 21:49 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.426	159505	6127	0.038	22.07	2 TNX
19.212	147481	9445	0.064	34.02	3 DNX
21.962	126566	11125	0.088	40.13	5 MNX
23.959	51	23	0.455	0.08	
25.579	2249	143	0.064	0.51	
26.269	423	42	0.099	0.15	
26.519	2319	185	0.080	0.66	
26.976	1137	78	0.069	0.28	
27.369	5990	339	0.057	1.22	
29.832	266	33	0.124	0.11	
30.272	1461	89	0.061	0.32	
35.976	118	24	0.203	0.08	
36.509	123	22	0.178	0.07	
36.842	247	28	0.113	0.10	
41.449	649	26	0.040	0.09	
44.589	439	31	0.071	0.11	
	449024	27760		100.000	

Total unknown % height = 3.780

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D

Date : 01-FEB-2012 20:57

Client ID:

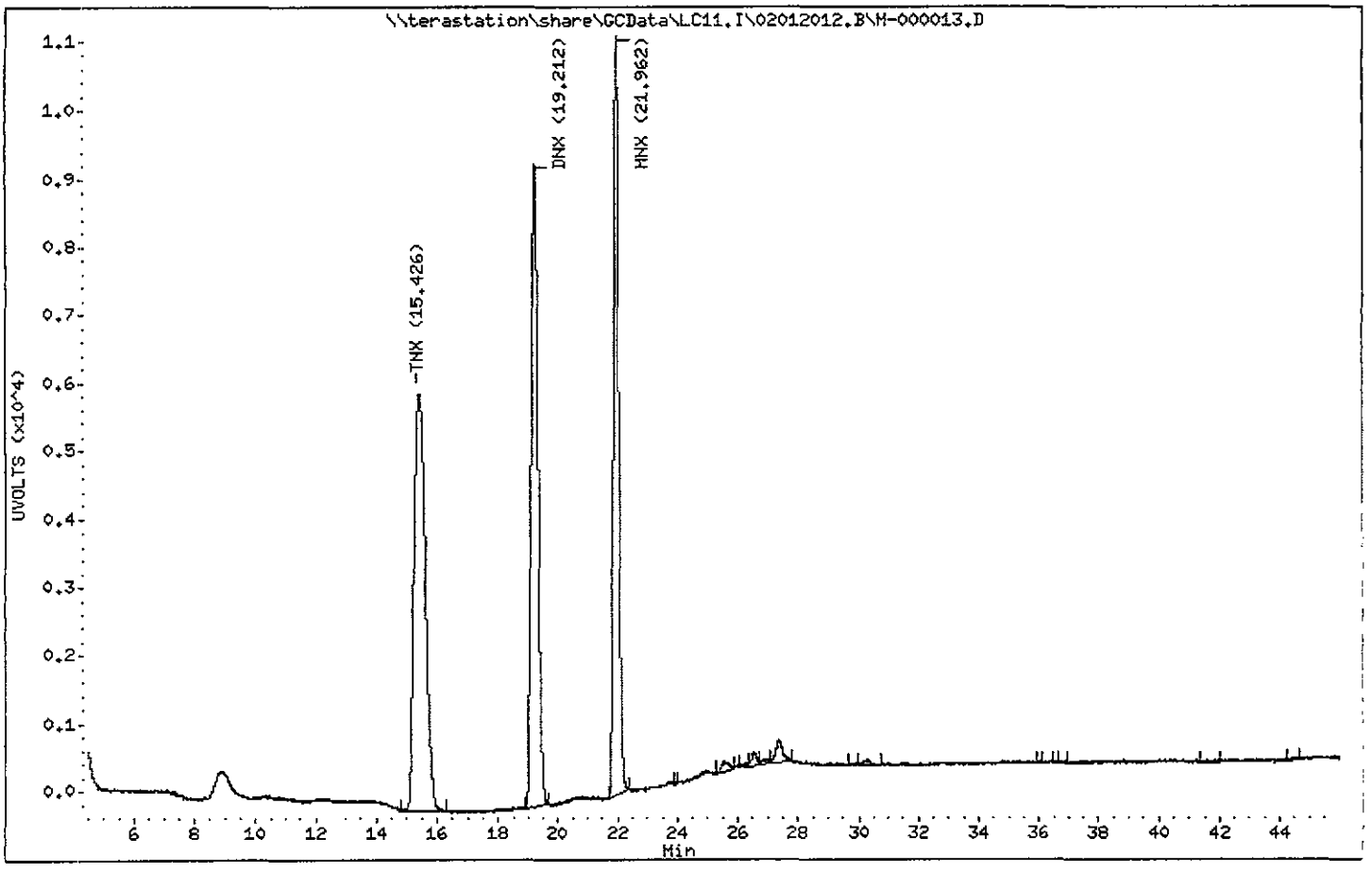
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D\M-000013
Lab Smp Id: STD_05 E110811H MET
Inj Date : 01-FEB-2012 20:57
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.249	281	39	0.139	5.50	
24.616	194	23	0.119	3.24	
29.859	170	15	0.088	2.11	
30.269	316	48	0.152	6.77	
31.619	357	34	0.095	4.80	
32.376	172	17	0.099	2.40	
33.416	160	31	0.194	4.37	
37.106	199	44	0.221	6.21	
37.672	159	21	0.132	2.96	
38.859	2653	98	0.037	13.93	
40.116	2161	87	0.040	12.28	
40.796	297	43	0.145	6.07	
41.842	2124	74	0.035	10.45	
42.419	759	51	0.067	7.20	
42.932	513	36	0.070	5.08	
45.386	2712	47	0.017	6.63	
	13225	708		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000013.D\M-000013.D

Date : 01-FEB-2012 20:57

Client ID:

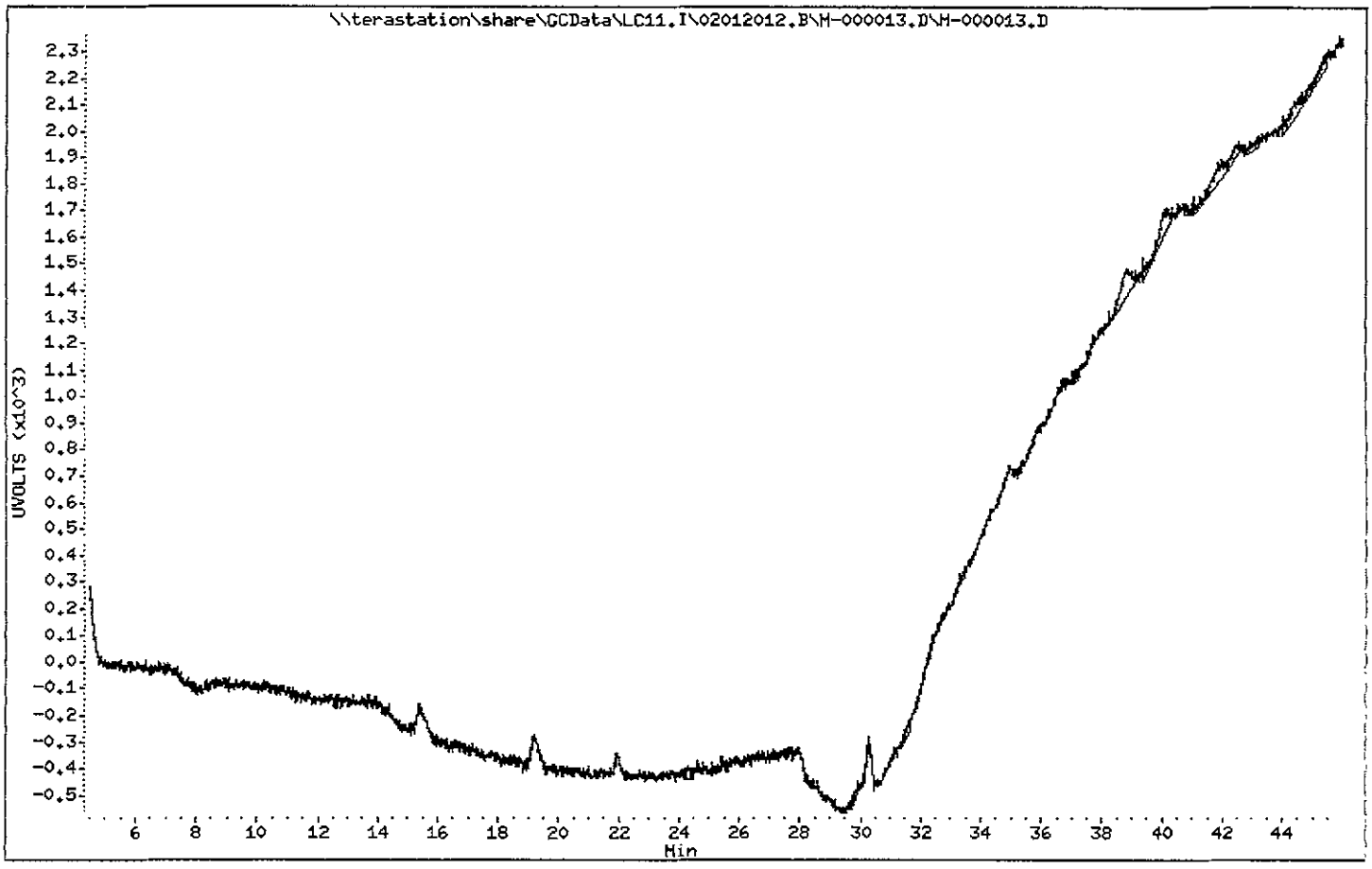
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 01-FEB-2012 21:54
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000014.D
Sublist: 1_CAL

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	HMX	100	20.529	0.000	9695	105.6	5.6					
2	RDX	100	23.739	0.000	9598	105.5	5.5					
3	1,3,5-Trinitrobenz	100	25.676	0.000	21065	103.0	3.0					
4	Picric ACID	200	25.979	0.000	25483	216.5	8.3	25.979	0.000	37419	219.3	9.7
5	1,3-Dinitrobenzene	100	28.412	0.000	22007	102.9	2.9					
6	3,5-Dinitroaniline	100	29.556	0.000	14215	101.8	1.8					
7	Nitrobenzene	100	30.029	0.000	9613	103.4	3.4					
8	TETRYL	100	30.366	0.000	11223	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.612	0.000	12075	100.9	0.90					
10	4-AM-2,6-DNT	100	32.609	0.000	9713	100.9	0.90					
11	3,4-Dinitrotoluene	100	32.962	0.000	6762	100.8	0.80	32.959	0.000	12965	101.7	1.7
12	2-AM-4,6-DNT	100	33.306	0.000	10831	101.0	1.0					
13	2,6-Dinitrotoluene	100	34.562	0.000	7436	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.952	0.000	12260	100.5	0.50					
15	2-Nitrotoluene	100	37.892	0.000	5315	100.4	0.40					
16	4-Nitrotoluene	100	39.132	0.000	6406	101.5	1.5					
17	3-Nitrotoluene	100	40.656	0.000	6340	101.1	1.1					
18	EGDN	100										
19	Nitroglycerin	100						30.869	0.000	8669	104.4	4.4
20	PETN	100						41.376	0.000	4873	101.6	1.6

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DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 22:46

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 01-FEB-2012 21:54
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
19.289	62	27	0.433	0.01		
20.529	86814	9695	0.112	4.82	4	HMX
21.552	65	25	0.388	0.01		
22.469	718	71	0.099	0.03		
23.739	96894	9598	0.099	4.78	7	RDX
25.676	203605	21065	0.103	10.49	10	1,3,5-Trinitrobenze
25.979	248997	25483	0.102	12.79	9	Picric ACID
27.119	6220	566	0.091	0.28		
28.412	261091	22007	0.084	10.96	13	1,3-Dinitrobenzene
29.556	179792	14215	0.079	7.08	15	3,5-Dinitroaniline
30.029	125905	9613	0.076	4.78	17	Nitrobenzene
30.366	148694	11223	0.075	5.59	16	TETRYL
31.612	174651	12075	0.069	6.01	19	2,4,6-Trinitrotolue
32.609	151830	9713	0.064	4.83	20	4-AM-2,6-DNT
32.962	97686	6762	0.069	3.36	$ 1	3,4-Dinitrotoluene
33.306	183189	10831	0.059	5.39	21	2-AM-4,6-DNT
34.562	119790	7436	0.062	3.70	22	2,6-Dinitrotoluene
34.952	223662	12260	0.055	6.10	23	2,4-Dinitrotoluene
36.876	198	26	0.132	0.01		
37.892	107967	5315	0.049	2.64	24	2-Nitrotoluene
39.132	138085	6406	0.046	3.19	25	4-Nitrotoluene
40.656	145968	6340	0.043	3.15	26	3-Nitrotoluene
	2701883	200752		100.000		

Total unknown % height = 0.3400

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D

Date : 01-FEB-2012 21:54

Client ID:

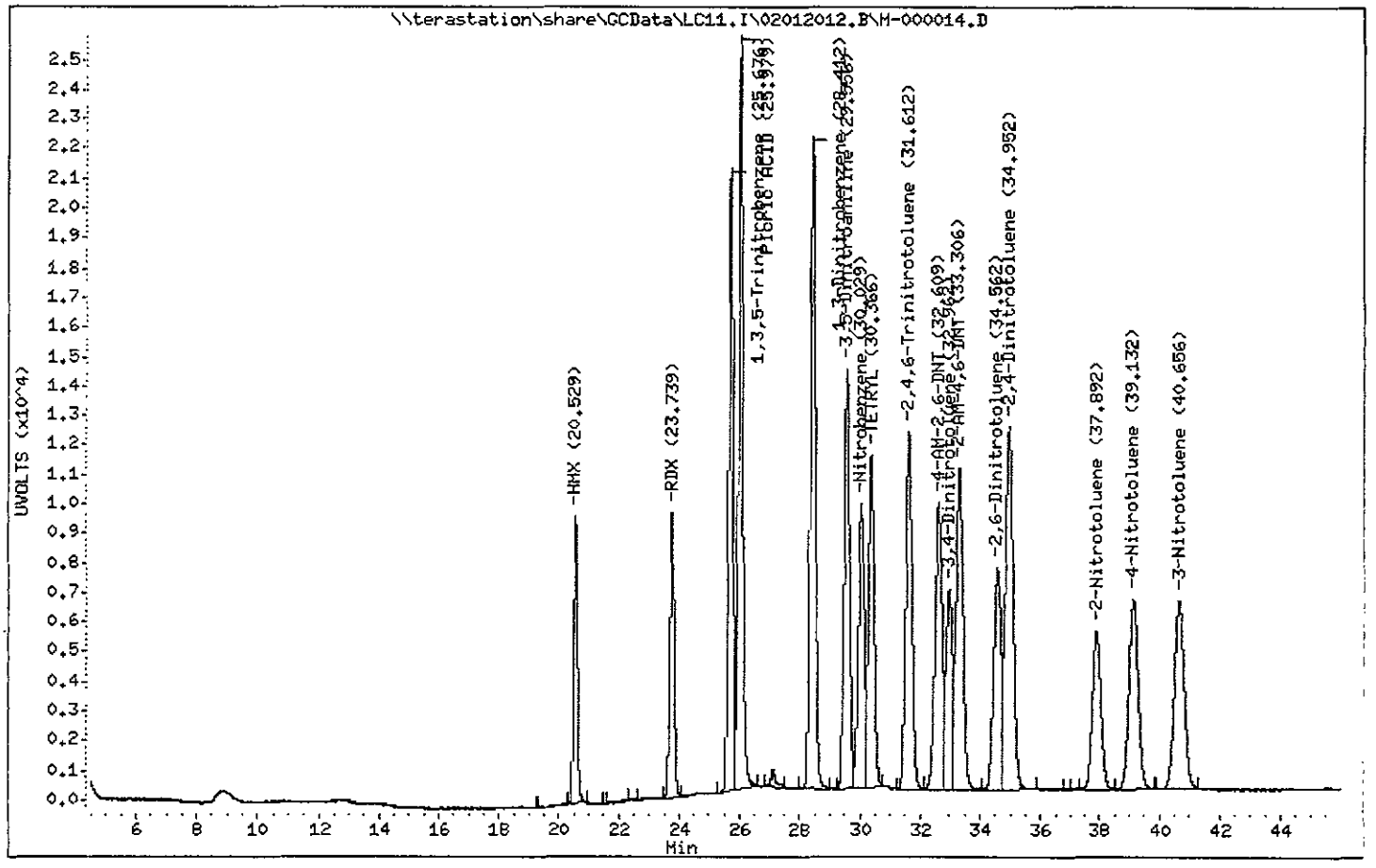
Instrument: LC11.i

Sample Info: STD_05 12GCSW0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D\M-000014
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 01-FEB-2012 21:54
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.506	222	43	0.194	0.01	
25.682	2580	287	0.111	0.13	
25.979	361080	37419	0.104	17.30	9 Picric ACID
27.662	168	35	0.209	0.01	
28.412	136494	11416	0.084	5.24	
29.556	182185	14446	0.079	6.63	
30.029	202008	15428	0.076	7.08	
30.366	197371	15018	0.076	6.89	
30.869	116585	8669	0.074	3.98	18 Nitroglycerin
31.612	183576	12860	0.070	5.90	
32.609	221838	14307	0.064	6.56	
32.959	196021	12965	0.066	5.95	$ 1 3,4-Dinitrotoluene
33.306	185296	11223	0.061	5.15	
33.916	153	37	0.242	0.01	
34.559	218531	12986	0.059	5.96	
34.952	175807	9910	0.056	4.55	
36.739	162	63	0.389	0.02	
37.892	264694	12968	0.049	5.95	
39.132	211877	9672	0.046	4.44	
40.659	301735	12909	0.043	5.92	
41.376	122769	4873	0.040	2.23	27 PETN
42.359	1370	70	0.051	0.03	
43.212	186	36	0.193	0.01	
44.046	216	41	0.190	0.01	
44.522	333	35	0.105	0.01	
45.332	1648	55	0.033	0.02	
45.916	249	27	0.108	0.01	
	3285154	217798		100.000	

Total unknown % height = 70.54

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000014.D\M-000014.D

Date : 01-FEB-2012 21:54

Client ID:

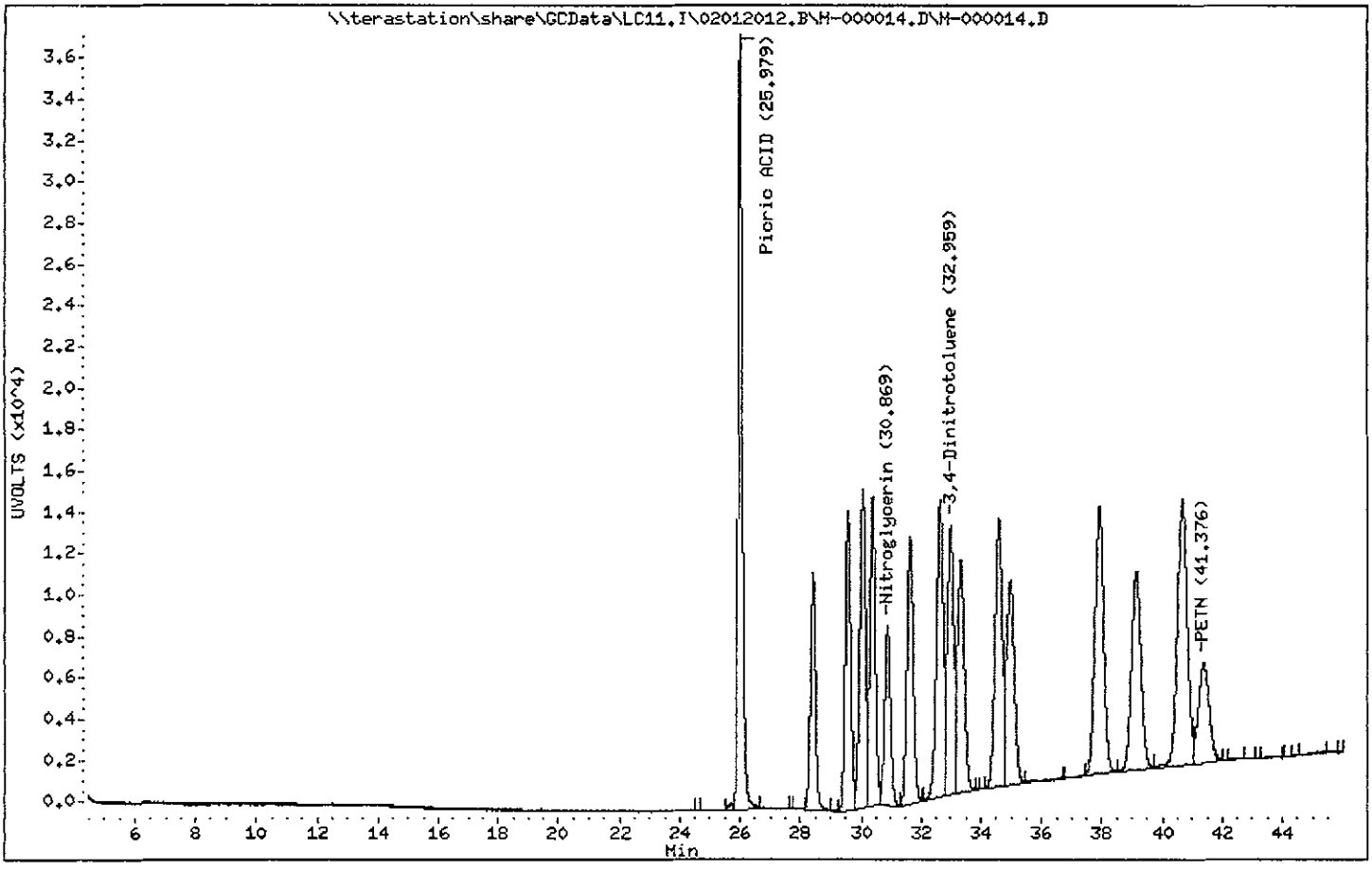
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 06:29 File ID: 02012012.B/M-000023.D
Operator : rn Sublist: 2_CALMET

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	TNX	100	15.421	0.000	6131	102.8	2.8					
2	DNX	100	19.214	0.000	9454	103.0	3.0					
3	MNX	100	21.964	0.000	11115	102.5	2.6					

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DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 07:21

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 06:29
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 07:21 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.071	1847	150	0.081	0.53	
15.421	160132	6131	0.038	21.86	2 TNX
18.374	188	27	0.144	0.09	
19.214	148080	9454	0.064	33.71	3 DNX
20.364	50	16	0.319	0.05	
21.964	127101	11115	0.087	39.73	5 MNX
25.594	1999	143	0.072	0.50	
26.301	316	54	0.171	0.19	
26.544	2427	187	0.077	0.66	
26.974	1082	86	0.079	0.30	
27.401	6889	349	0.051	1.24	
30.151	282	63	0.223	0.22	
30.281	1385	99	0.072	0.35	
31.051	279	25	0.090	0.08	
31.451	270	26	0.096	0.09	
32.020	373	28	0.075	0.09	
34.984	126	25	0.199	0.08	
37.394	247	34	0.138	0.12	
44.654	251	33	0.132	0.11	
	453322	28045		100.000	

Total unknown % height = 4.700

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D

Date : 02-FEB-2012 06:29

Client ID:

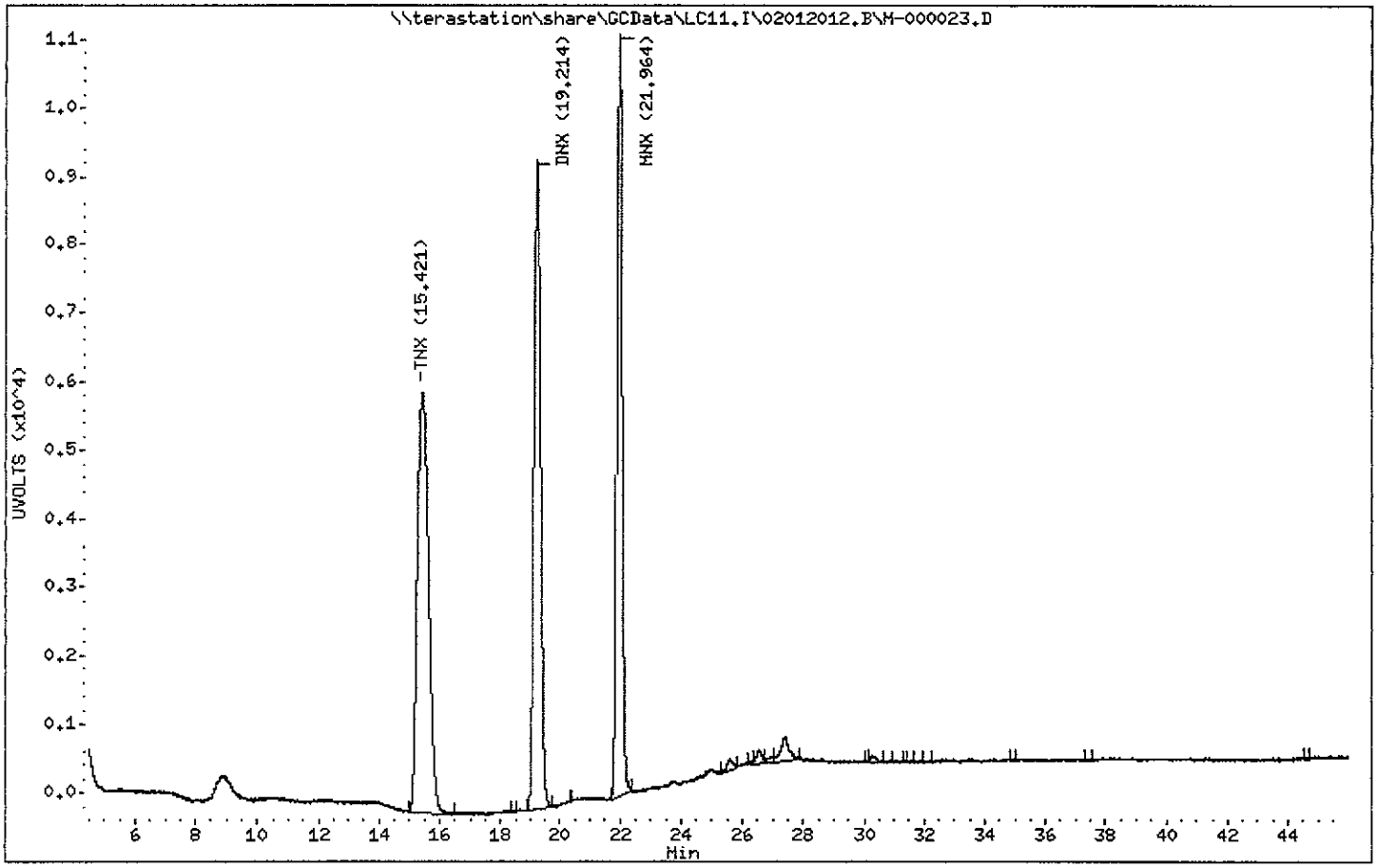
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D\M-000023
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 06:29
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.317	213	50	0.235	4.85	
26.184	167	39	0.234	3.78	
27.677	168	36	0.214	3.49	
27.937	409	53	0.130	5.14	
29.887	515	51	0.099	4.95	
30.284	2817	203	0.072	19.78	
31.247	293	29	0.099	2.81	
32.211	186	30	0.161	2.91	
32.461	356	39	0.110	3.78	
37.464	241	33	0.137	3.20	
38.081	387	41	0.106	3.98	
38.877	2336	101	0.043	9.80	
40.127	2351	88	0.037	8.54	
41.754	478	54	0.113	5.24	
42.037	670	60	0.090	5.82	
42.501	2721	90	0.033	8.73	
45.244	930	33	0.035	3.20	
	15239	1030		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000023.D\M-000023.D

Date : 02-FEB-2012 06:29

Client ID:

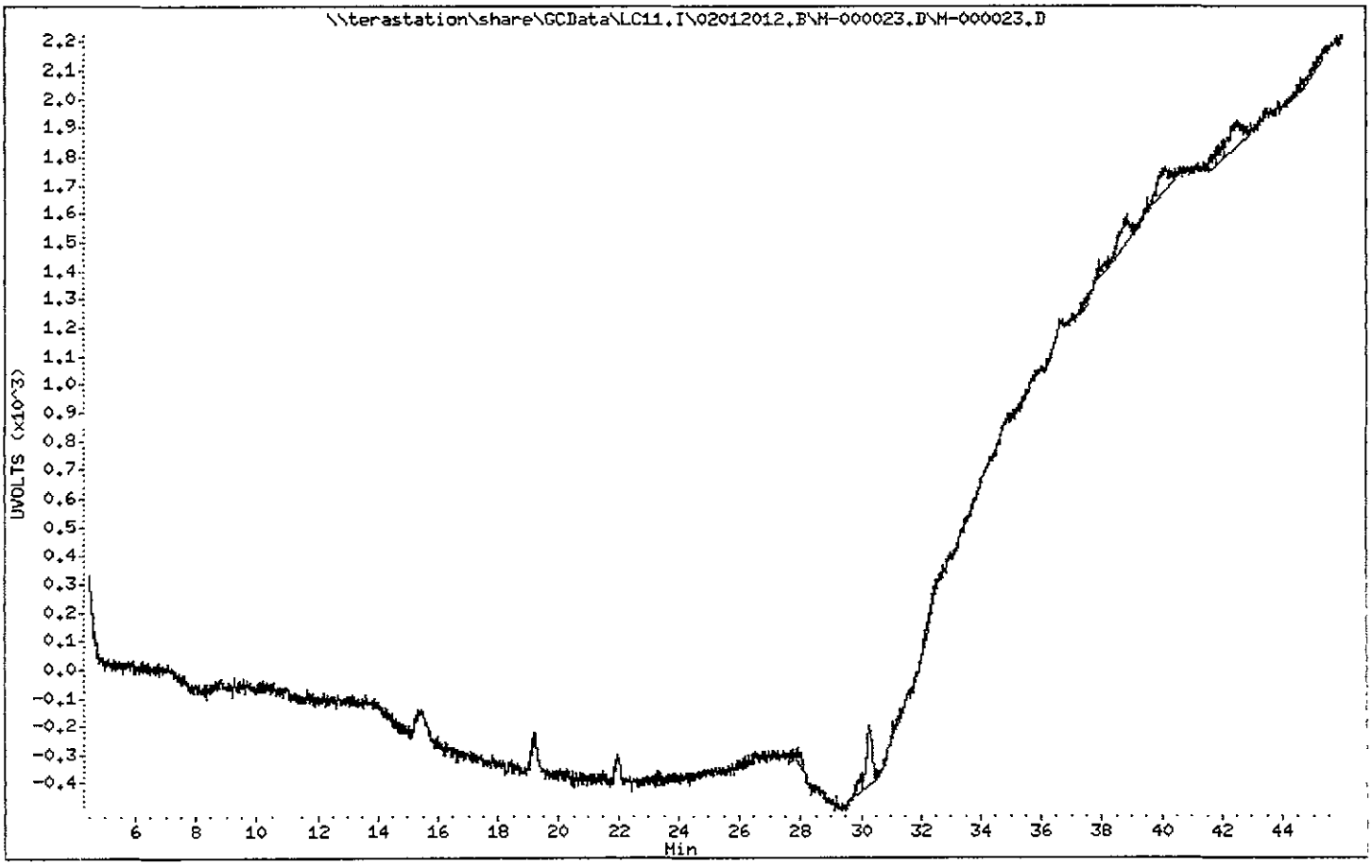
Instrument: LC11.i

Sample Info: STD_05 E110611M METAB100 ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 07:26
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000024.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9643	105.1	5.1					
2	RDX	100	23.740	0.000	9553	105.0	5.0					
3	1,3,5-Trinitrobenz	100	25.677	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.984	0.000	25461	216.3	8.2	25.987	0.000	37308	218.6	9.3
5	1,3-Dinitrobenzene	100	28.410	0.000	21931	102.5	2.5					
6	3,5-Dinitroaniline	100	29.550	0.000	14151	101.3	1.3					
7	Nitrobenzene	100	30.027	0.000	9406	101.2	1.2					
8	TETRYL	100	30.360	0.000	11195	99.83	-0.17					
9	2,4,6-Trinitrotolu	100	31.600	0.000	12053	100.7	0.70					
10	4-AM-2,6-DNT	100	32.590	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.947	0.000	6766	100.9	0.90	32.947	0.000	12938	101.5	1.5
12	2-AM-4,6-DNT	100	33.284	0.000	10855	101.3	1.3					
13	2,6-Dinitrotoluene	100	34.540	0.000	7450	100.4	0.40					
14	2,4-Dinitrotoluene	100	34.930	0.000	12312	100.9	0.90					
15	2-Nitrotoluene	100	37.867	0.000	5229	98.80	-1.2					
16	4-Nitrotoluene	100	39.107	0.000	6357	100.7	0.70					
17	3-Nitrotoluene	100	40.627	0.000	6267	99.90	-0.10					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8611	103.7	3.7
20	PETN	100						41.364	0.000	4907	102.4	2.4

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 08:18

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 07:26
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.060	1632	120	0.074	0.05		
20.287	52	27	0.520	0.01		
20.517	86673	9643	0.111	4.81		4 HMX
21.940	67	14	0.208	0.00		
22.434	340	45	0.132	0.02		
22.974	474	54	0.114	0.02		
23.740	97354	9553	0.098	4.76		7 RDX
24.664	77	24	0.310	0.01		
25.254	121	29	0.239	0.01		
25.677	204830	20963	0.102	10.46		10 1,3,5-Trinitrobenze
25.984	252460	25461	0.101	12.86		9 Picric ACID
26.964	885	75	0.085	0.03		
27.107	6732	595	0.088	0.29		
27.947	120	28	0.233	0.01		
28.410	260613	21931	0.084	10.94		13 1,3-Dinitrobenzene
29.550	179487	14151	0.079	7.06		15 3,5-Dinitroaniline
30.027	123391	9406	0.076	4.69		17 Nitrobenzene
30.360	148992	11195	0.075	5.58		16 TETRYL
31.600	174487	12053	0.069	6.01		19 2,4,6-Trinitrotolue
32.590	152306	9711	0.064	4.84		20 4-AM-2,6-DNT
32.947	96564	6766	0.070	3.37	$	1 3,4-Dinitrotoluene
33.284	184237	10855	0.059	5.41		21 2-AM-4,6-DNT
34.540	119530	7450	0.062	3.71		22 2,6-Dinitrotoluene
34.930	224696	12312	0.055	6.14		23 2,4-Dinitrotoluene
36.203	157	38	0.241	0.01		
37.867	105812	5229	0.049	2.60		24 2-Nitrotoluene
39.107	136644	6357	0.047	3.17		25 4-Nitrotoluene
40.627	145097	6267	0.043	3.12		26 3-Nitrotoluene
44.300	461	31	0.067	0.01		
	2704292	200383		100.000		

Total unknown % height = 0.4700

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D

Date : 02-FEB-2012 07:26

Client ID:

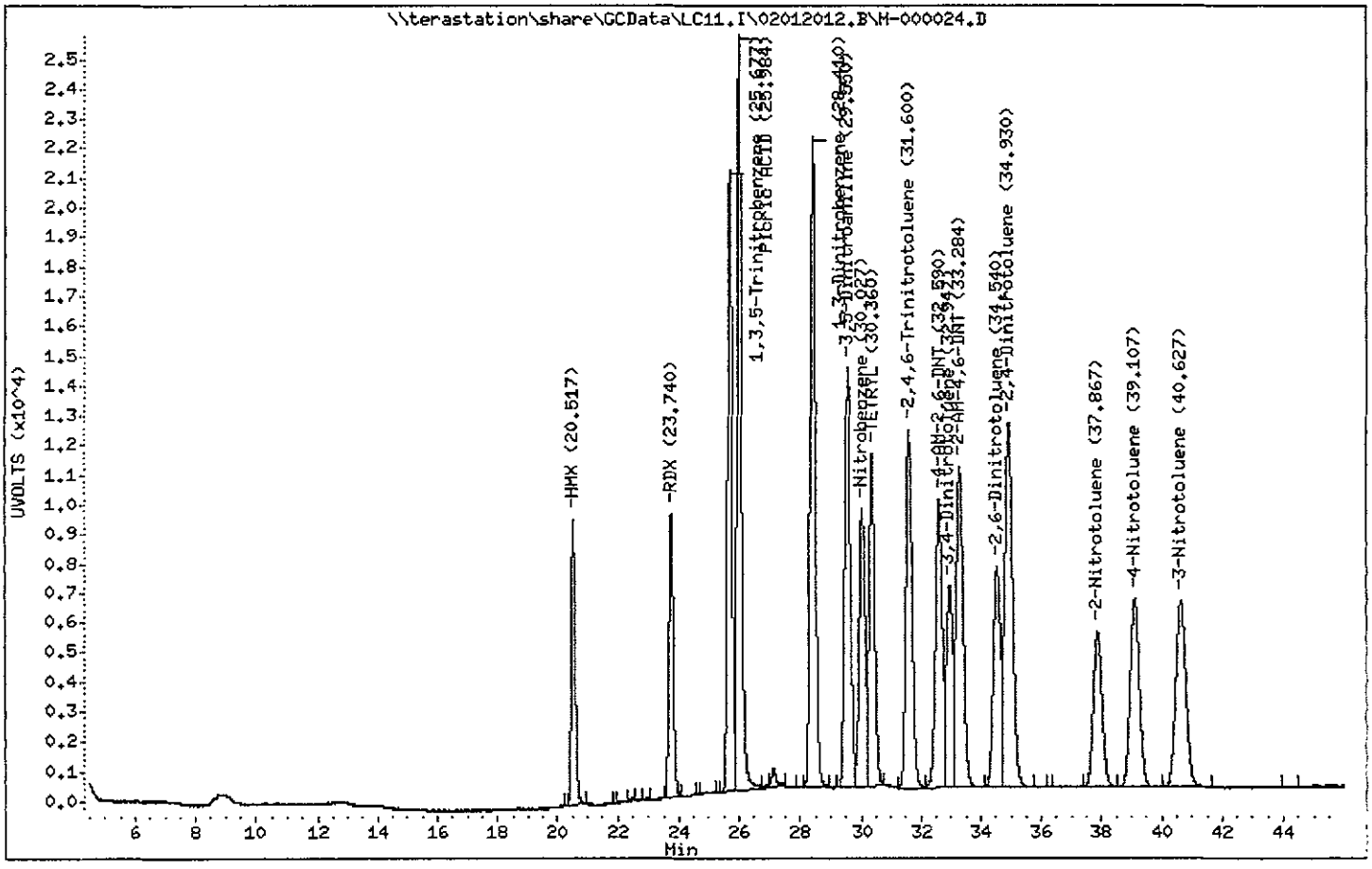
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D\M-000024
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 07:26
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
25.677	2685	294	0.110	0.13	
25.987	361998	37308	0.103	17.33	9 Picric ACID
27.370	373	45	0.121	0.02	
28.410	135447	11360	0.084	5.24	
29.550	181749	14394	0.079	6.64	
30.027	197957	15082	0.076	6.96	
30.357	197168	14946	0.076	6.90	
30.864	115619	8611	0.074	3.97	18 Nitroglycerin
31.604	183993	12826	0.070	5.92	
32.590	222139	14304	0.064	6.60	
32.947	195363	12938	0.066	5.97	$ 1 3,4-Dinitrotoluene
33.280	185590	11245	0.061	5.19	
34.540	219733	13006	0.059	6.00	
34.927	176496	9953	0.056	4.59	
37.864	260876	12797	0.049	5.91	
39.107	210969	9618	0.046	4.44	
40.630	298998	12778	0.043	5.90	
41.364	124072	4907	0.040	2.26	27 PETN
44.340	476	36	0.076	0.01	
44.910	780	31	0.040	0.01	
45.347	434	39	0.090	0.01	
	3272913	216518		100.000	

Total unknown % height = 70.47

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000024.D\M-000024.D

Date : 02-FEB-2012 07:26

Client ID:

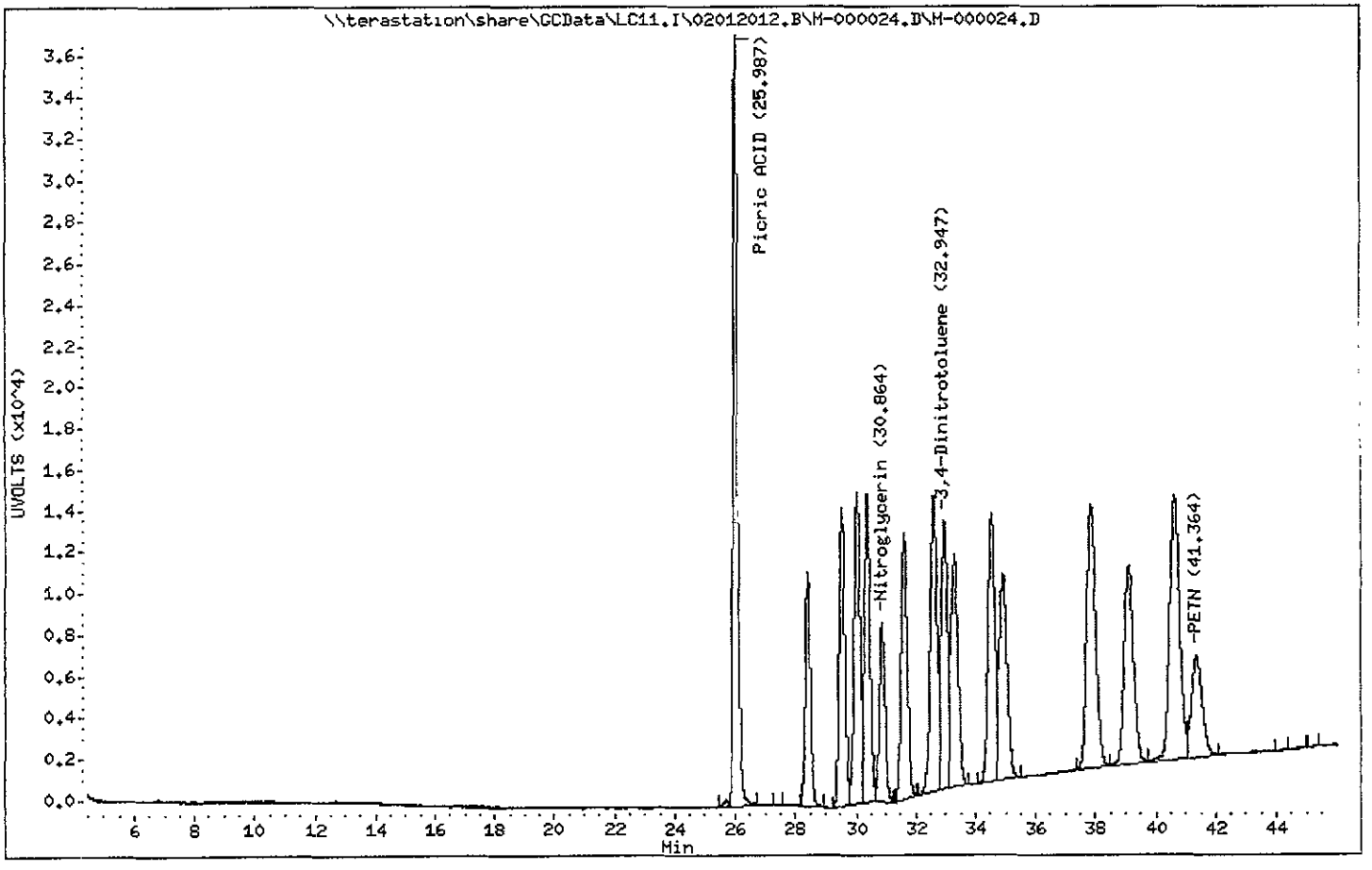
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 16:01 File ID: 02012012.B/M-000033.D
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.425	0.000	6182	103.7	3.7					
2	DNX	100	19.208	0.000	9491	103.4	3.4					
3	MNX	100	21.962	0.000	11182	103.3	3.3					

RM 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 16:54

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000033.D
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 16:01
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 16:54 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.425	160842	6182	0.038	22.13	2 TNX
17.638	369	29	0.079	0.10	
19.208	148416	9491	0.064	33.97	3 DNX
21.302	258	28	0.108	0.10	
21.962	128174	11182	0.087	40.11	5 MNX
22.872	125	34	0.273	0.12	
25.608	2474	167	0.068	0.59	
26.542	1747	155	0.089	0.55	
27.378	5372	327	0.061	1.17	
29.182	281	31	0.110	0.11	
29.632	274	41	0.150	0.14	
30.328	958	64	0.067	0.22	
31.412	72	19	0.263	0.06	
32.015	143	33	0.230	0.11	
32.502	101	23	0.229	0.08	
37.505	183	33	0.180	0.11	
38.038	186	31	0.166	0.11	
42.028	254	33	0.130	0.11	
44.352	289	31	0.107	0.11	
	450520	27934		100.000	

Total unknown % height = 3.790

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000033.D

Date : 02-FEB-2012 16:01

Client ID:

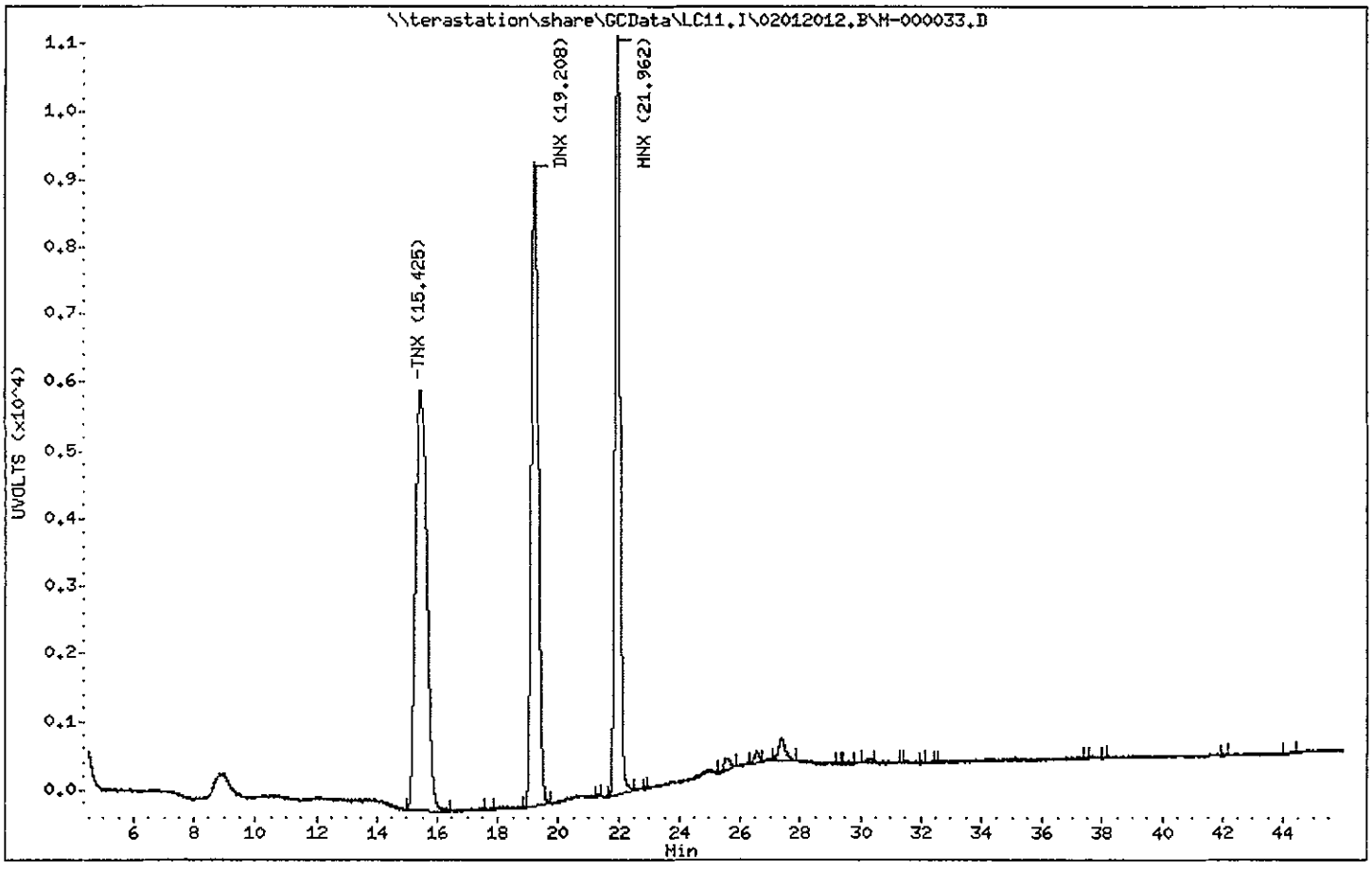
Instrument: LC11.i

Sample Info: STD_05 E110811M METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000033.D\M-000033
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 16:01
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 02-Feb-2012 08:18 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.095	263	30	0.114	4.86	
27.878	335	45	0.134	7.29	
30.202	325	99	0.305	16.04	
30.295	1895	169	0.089	27.44	
35.498	183	26	0.142	4.21	
35.808	168	17	0.101	2.75	
38.085	334	30	0.090	4.86	
38.665	558	35	0.063	5.67	
40.008	1294	41	0.032	6.64	
41.828	501	25	0.050	4.05	
43.575	1115	52	0.047	8.42	
44.658	734	18	0.025	2.91	
45.265	524	30	0.057	4.86	
	8229	617		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000033.D\M-000033.D

Date : 02-FEB-2012 16:01

Client ID:

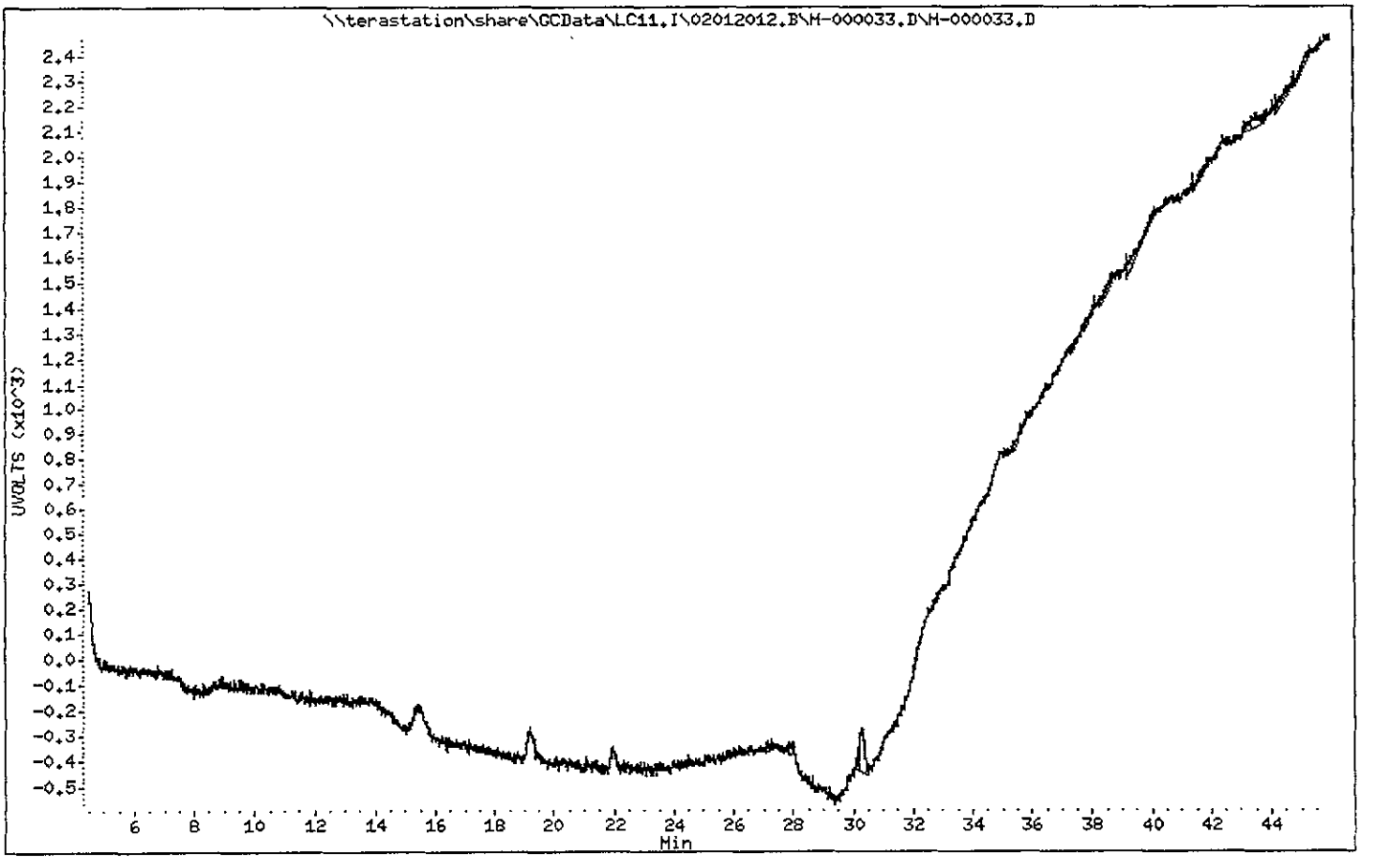
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 16:59
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000034.D
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.525	0.000	9672	105.4	5.4					
2	RDX	100	23.735	0.000	9563	105.1	5.1					
3	1,3,5-Trinitrobenz	100	25.671	0.000	21095	103.1	3.1					
4	Picric ACID	200	25.981	0.000	25435	216.1	8.1	25.984	0.000	37257	218.3	9.2
5	1,3-Dinitrobenzene	100	28.405	0.000	21943	102.6	2.6					
6	3,5-Dinitroaniline	100	29.545	0.000	14204	101.7	1.7					
7	Nitrobenzene	100	30.021	0.000	9597	103.3	3.3					
8	TETRYL	100	30.361	0.000	11284	100.6	0.60					
9	2,4,6-Trinitrotolu	100	31.605	0.000	12083	100.9	0.90					
10	4-AM-2,6-DNT	100	32.591	0.000	9720	101.0	1.0					
11	3,4-Dinitrotoluene	100	32.951	0.000	6716	100.1	0.10	32.951	0.000	12944	101.5	1.5
12	2-AM-4,6-DNT	100	33.291	0.000	10841	101.1	1.1					
13	2,6-Dinitrotoluene	100	34.545	0.000	7418	99.94	-0.060					
14	2,4-Dinitrotoluene	100	34.935	0.000	12281	100.6	0.60					
15	2-Nitrotoluene	100	37.878	0.000	5314	100.4	0.40					
16	4-Nitrotoluene	100	39.118	0.000	6431	101.9	1.9					
17	3-Nitrotoluene	100	40.648	0.000	6372	101.6	1.6					
18	EGDN	100										
19	Nitroglycerin	100						30.864	0.000	8681	104.5	4.5
20	PETN	100						41.381	0.000	4923	102.7	2.7

RM 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 17:51

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000034.D
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 16:59
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 02-Feb-2012 17:51 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.058	117	26	0.222	0.01		
20.525	86946	9672	0.111	4.81	4	HMX
22.478	307	50	0.163	0.02		
23.735	97041	9563	0.099	4.76	7	RDX
24.768	53	22	0.417	0.01		
25.671	205513	21095	0.103	10.51	10	1,3,5-Trinitrobenze
25.981	250406	25435	0.102	12.78	9	Picric ACID
26.861	267	26	0.097	0.01		
27.111	4589	537	0.117	0.26		
28.405	261747	21943	0.084	10.93	13	1,3-Dinitrobenzene
29.545	180159	14204	0.079	7.07	15	3,5-Dinitroaniline
30.021	125662	9597	0.076	4.78	17	Nitrobenzene
30.361	151761	11284	0.074	5.62	16	TETRYL
31.605	173509	12083	0.070	6.02	19	2,4,6-Trinitrotolue
32.591	151523	9720	0.064	4.84	20	4-AM-2,6-DNT
32.951	95849	6716	0.070	3.34	$ 1	3,4-Dinitrotoluene
33.291	182974	10841	0.059	5.40	21	2-AM-4,6-DNT
34.544	119580	7418	0.062	3.69	22	2,6-Dinitrotoluene
34.935	223939	12281	0.055	6.11	23	2,4-Dinitrotoluene
36.681	233	25	0.107	0.01		
37.878	107688	5314	0.049	2.64	24	2-Nitrotoluene
39.118	138255	6431	0.047	3.20	25	4-Nitrotoluene
40.648	148448	6372	0.043	3.17	26	3-Nitrotoluene
44.281	175	30	0.171	0.01		
	2706742	200685		100.000		

Total unknown % height = 0.3300

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000034.D

Date : 02-FEB-2012 16:59

Client ID:

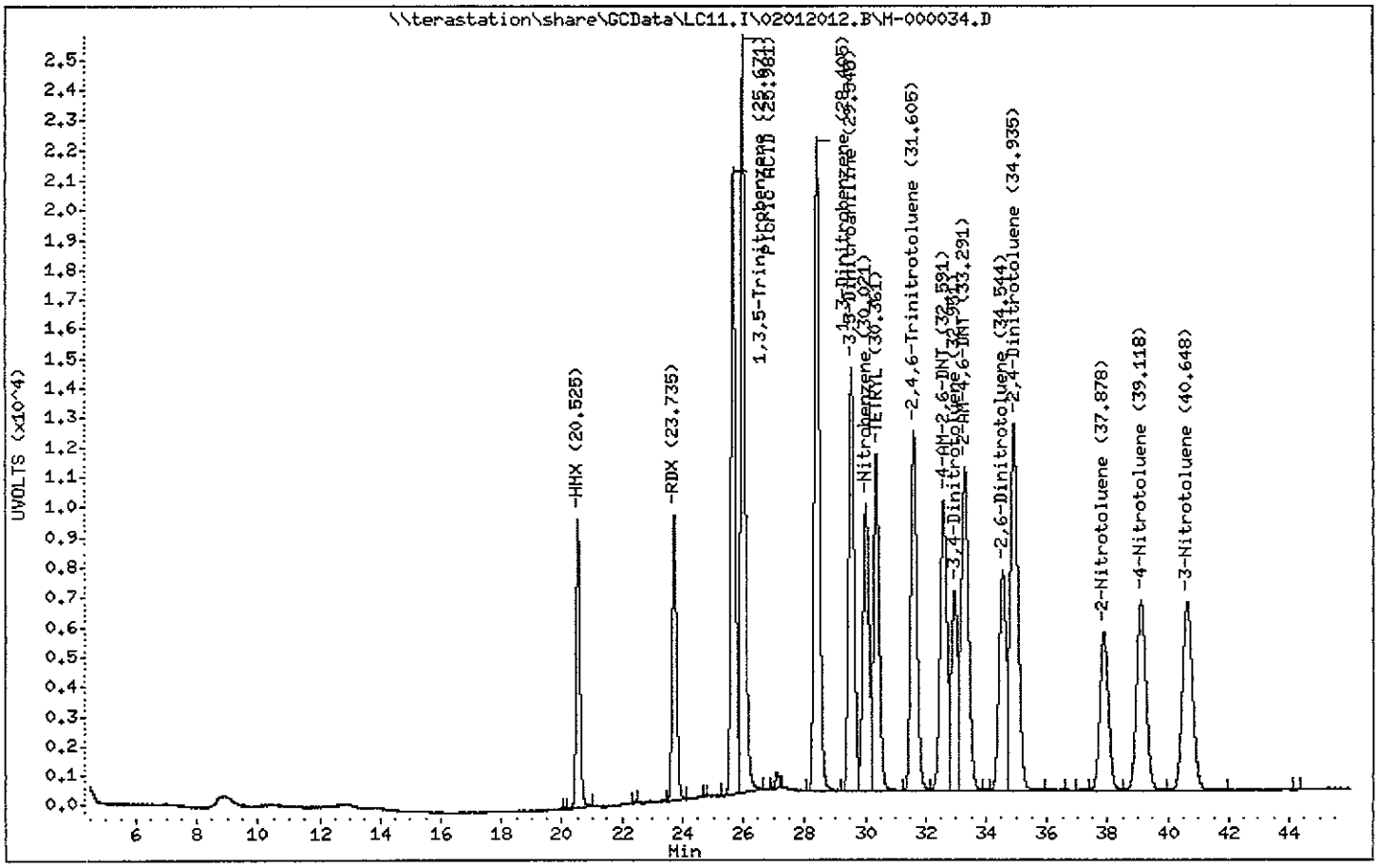
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000034.D\M-000034
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 16:59
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 02-Feb-2012 17:51 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACPLC11A

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.728	362	37	0.102	0.01	
25.668	2353	281	0.119	0.12	
25.985	358798	37257	0.104	17.22	9 Picric ACID
28.405	135745	11367	0.084	5.22	
29.545	182449	14436	0.079	6.63	
30.021	201816	15379	0.076	7.06	
30.358	198270	15061	0.076	6.91	
30.865	116517	8681	0.075	3.98	18 Nitroglycerin
31.605	183676	12875	0.070	5.91	
32.595	222028	14367	0.065	6.60	
32.951	195407	12944	0.066	5.94	$ 1 3,4-Dinitrotoluene
33.291	187104	11285	0.060	5.18	
34.075	758	40	0.053	0.01	
34.544	219306	12979	0.059	5.96	
34.935	176496	9947	0.056	4.57	
37.878	266685	13004	0.049	5.97	
39.115	212297	9740	0.046	4.47	
40.648	302614	12982	0.043	5.96	
41.381	124675	4923	0.039	2.26	27 PETN
43.465	367	39	0.106	0.01	
44.558	529	6	0.011	0.00	
45.358	779	28	0.036	0.01	
	3289031	217658		100.000	

Total unknown % height = 70.60

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000034.D\M-000034.D

Date : 02-FEB-2012 16:59

Client ID:

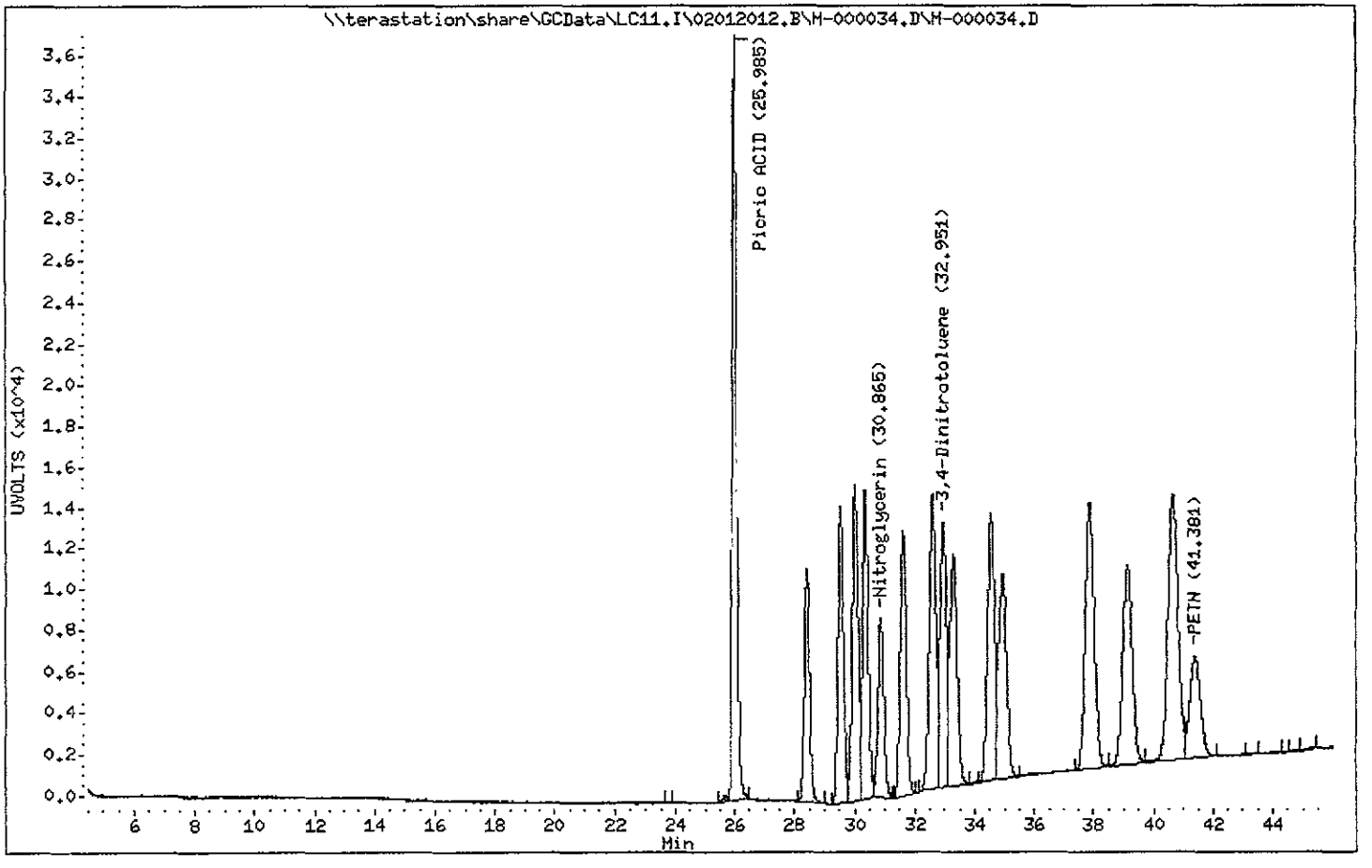
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_05 E110811H METAB100 ng/mL Instrument: LC11
Analyzed : 02-FEB-2012 21:44 File ID: 02012012.B/M-000039.d
Operator : rn Sublist: 2_CALMET

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	TNX	100	15.416	0.000	6113	102.5	2.5					
2	DNX	100	19.209	0.000	9415	102.6	2.6					
3	MNX	100	21.962	0.000	11085	102.4	2.4					

RDM 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/08/2012 12:26

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000039.d
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 21:44
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M
Meth Date : 08-Feb-2012 12:25 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.416	159409	6113	0.038	22.03	2 TNX
18.076	106	31	0.293	0.11	
19.209	148569	9415	0.063	33.93	3 DNX
21.962	127058	11085	0.087	40.05	5 MNX
22.659	134	22	0.164	0.07	
23.642	55	28	0.508	0.10	
24.612	83	34	0.411	0.12	
24.866	149	18	0.121	0.06	
25.609	2680	157	0.059	0.56	
26.542	1697	153	0.090	0.55	
26.982	542	57	0.105	0.20	
27.372	6138	356	0.058	1.28	
28.469	72	24	0.332	0.08	
29.482	195	34	0.174	0.12	
30.052	95	24	0.254	0.08	
30.292	1078	84	0.078	0.30	
30.879	212	22	0.104	0.07	
33.002	52	16	0.308	0.05	
35.659	60	13	0.217	0.04	
37.779	202	35	0.173	0.12	
44.462	312	24	0.077	0.08	
	448897	27745		100.000	

Total unknown % height = 3.990

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000039.d

Date : 02-FEB-2012 21:44

Client ID:

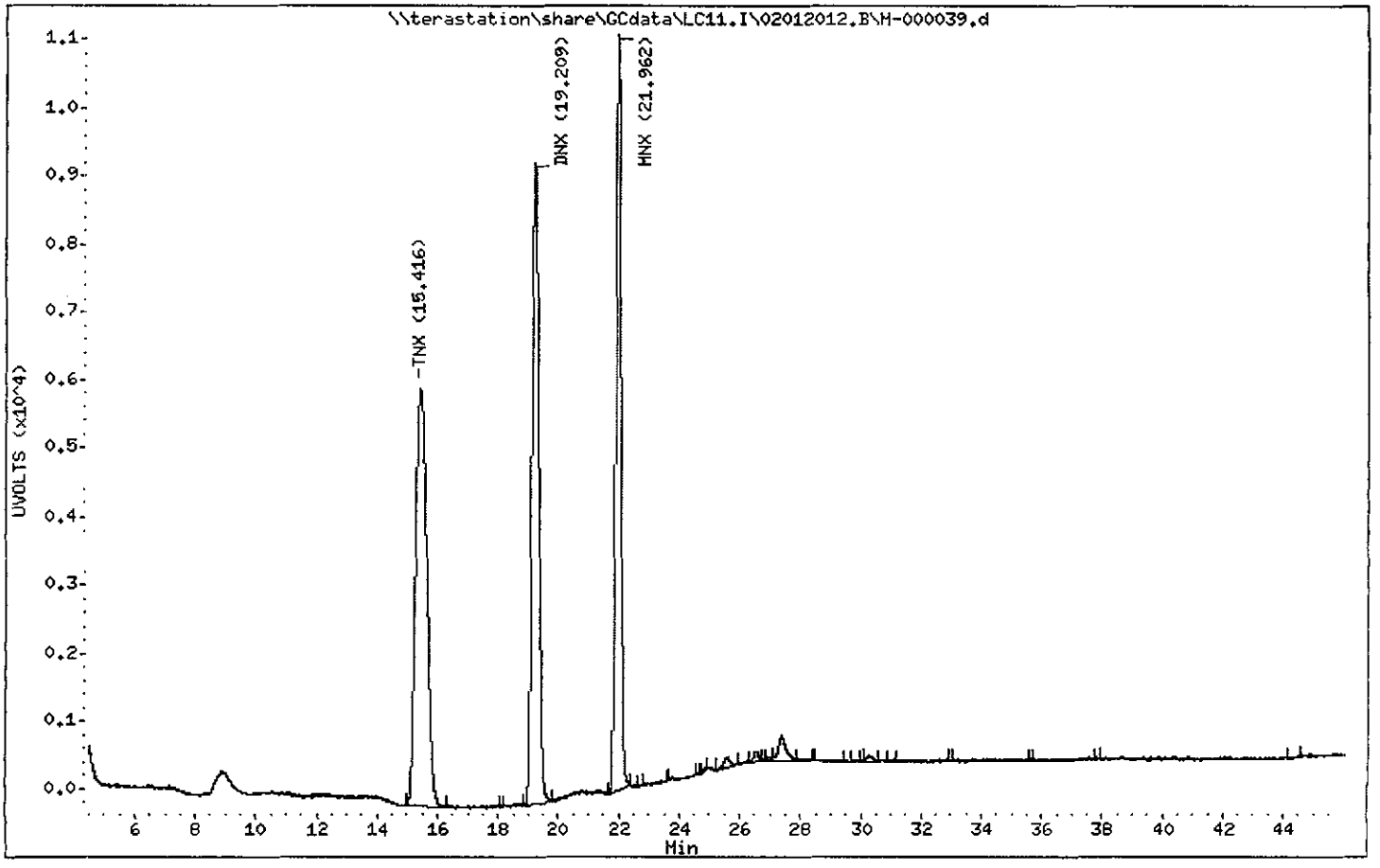
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000039.d\M-000039
Lab Smp Id: STD_05 E110811H MET
Inj Date : 02-FEB-2012 21:44
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 E110811H METAB100 ng/mL;2
Misc Info : ;5;;;;3;2_CALMET.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 08-Feb-2012 12:25 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 2_CALMET.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
27.286	224	63	0.281	9.03	
30.289	2130	184	0.086	26.48	
31.099	270	43	0.159	6.16	
32.436	233	25	0.108	3.58	
35.866	262	33	0.126	4.73	
38.656	695	47	0.068	6.74	
40.199	2238	57	0.025	8.17	
41.542	542	34	0.063	4.87	
42.556	870	41	0.047	5.88	
42.972	213	31	0.145	4.44	
43.392	384	34	0.089	4.87	
44.492	426	22	0.052	3.15	
44.652	246	45	0.183	6.45	
45.239	452	38	0.084	5.45	
	9186	697		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000039.d\M-000039.d

Date : 02-FEB-2012 21:44

Client ID:

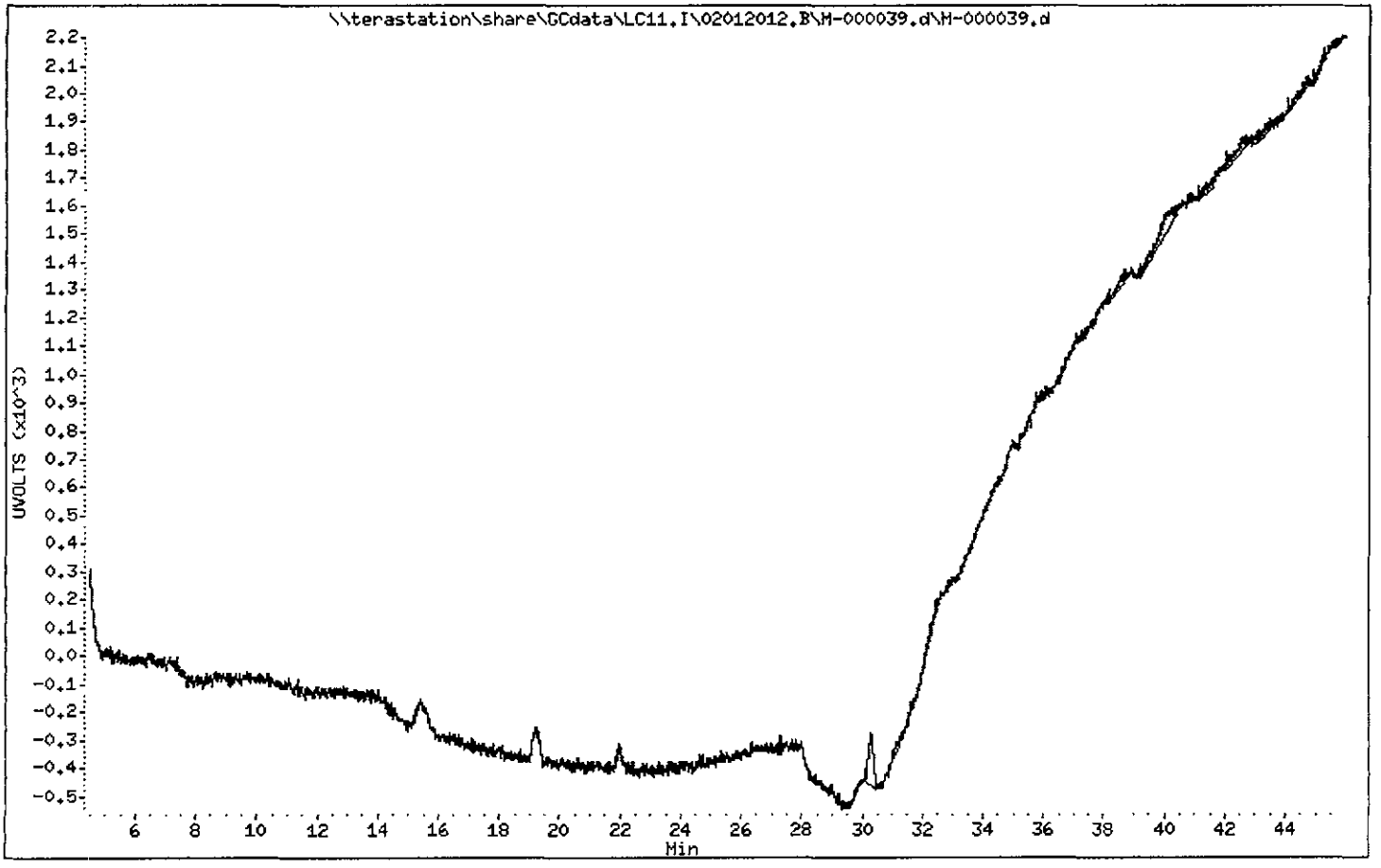
Instrument: LC11.i

Sample Info: STD_05 E110811H METAB100 ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV0099 100ng/mL
Analyzed : 02-FEB-2012 22:41
Operator : rn

Instrument: LC11
File ID: 02012012.B/M-000040.d
Sublist: 1_CAL

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	HMX	100	20.517	0.000	9627	104.9	4.9					
2	RDX	100	23.730	0.000	9530	104.8	4.8					
3	1,3,5-Trinitrobenz	100	25.667	0.000	20963	102.5	2.5					
4	Picric ACID	200	25.977	0.000	25302	215.0	7.5	25.976	0.000	37063	217.2	8.6
5	1,3-Dinitrobenzene	100	28.397	0.000	21968	102.7	2.7					
6	3,5-Dinitroaniline	100	29.537	0.000	14183	101.6	1.6					
7	Nitrobenzene	100	30.010	0.000	9509	102.3	2.3					
8	TETRYL	100	30.353	0.000	11227	100.1	0.10					
9	2,4,6-Trinitrotolu	100	31.597	0.000	12072	100.8	0.80					
10	4-AM-2,6-DNT	100	32.583	0.000	9711	100.8	0.80					
11	3,4-Dinitrotoluene	100	32.940	0.000	6755	100.7	0.70	32.940	0.000	12932	101.4	1.4
12	2-AM-4,6-DNT	100	33.280	0.000	10849	101.2	1.2					
13	2,6-Dinitrotoluene	100	34.537	0.000	7434	100.2	0.20					
14	2,4-Dinitrotoluene	100	34.930	0.000	12281	100.6	0.60					
15	2-Nitrotoluene	100	37.877	0.000	5251	99.21	-0.79					
16	4-Nitrotoluene	100	39.120	0.000	6373	101.0	1.0					
17	3-Nitrotoluene	100	40.643	0.000	6272	99.98	-0.020					
18	EGDN	100										
19	Nitroglycerin	100						30.856	0.000	8650	104.2	4.2
20	PETN	100						41.386	0.000	4865	101.5	1.5

RM 2/8/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/08/2012 12:27

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000040.d
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 22:41
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M
Meth Date : 08-Feb-2012 12:26 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
0.076	2058	140	0.068	0.06		
20.517	86287	9627	0.112	4.80		4 HMX
22.467	437	63	0.144	0.03		
23.730	96811	9530	0.098	4.75		7 RDX
24.350	65	21	0.323	0.01		
24.647	83	23	0.278	0.01		
25.137	105	31	0.294	0.01		
25.667	205906	20963	0.102	10.47		10 1,3,5-Trinitrobenze
25.977	251998	25302	0.100	12.75		9 Picric ACID
27.107	7419	570	0.077	0.28		
28.397	262164	21968	0.084	10.97		13 1,3-Dinitrobenzene
29.537	179689	14183	0.079	7.08		15 3,5-Dinitroaniline
30.010	124933	9509	0.076	4.74		17 Nitrobenzene
30.353	150214	11227	0.075	5.60		16 TETRYL
31.207	102	34	0.333	0.01		
31.597	174156	12072	0.069	6.02		19 2,4,6-Trinitrotolue
32.583	151498	9711	0.064	4.85		20 4-AM-2,6-DNT
32.940	96884	6755	0.070	3.37	$	1 3,4-Dinitrotoluene
33.280	183266	10849	0.059	5.41		21 2-AM-4,6-DNT
34.537	120289	7434	0.062	3.71		22 2,6-Dinitrotoluene
34.930	222061	12281	0.055	6.13		23 2,4-Dinitrotoluene
37.877	106969	5251	0.049	2.62		24 2-Nitrotoluene
39.120	137817	6373	0.046	3.18		25 4-Nitrotoluene
40.643	145451	6272	0.043	3.13		26 3-Nitrotoluene
42.707	132	27	0.204	0.01		
	2706795	200216		100.000		

Total unknown % height = 0.4200

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000040.d

Date : 02-FEB-2012 22:41

Client ID:

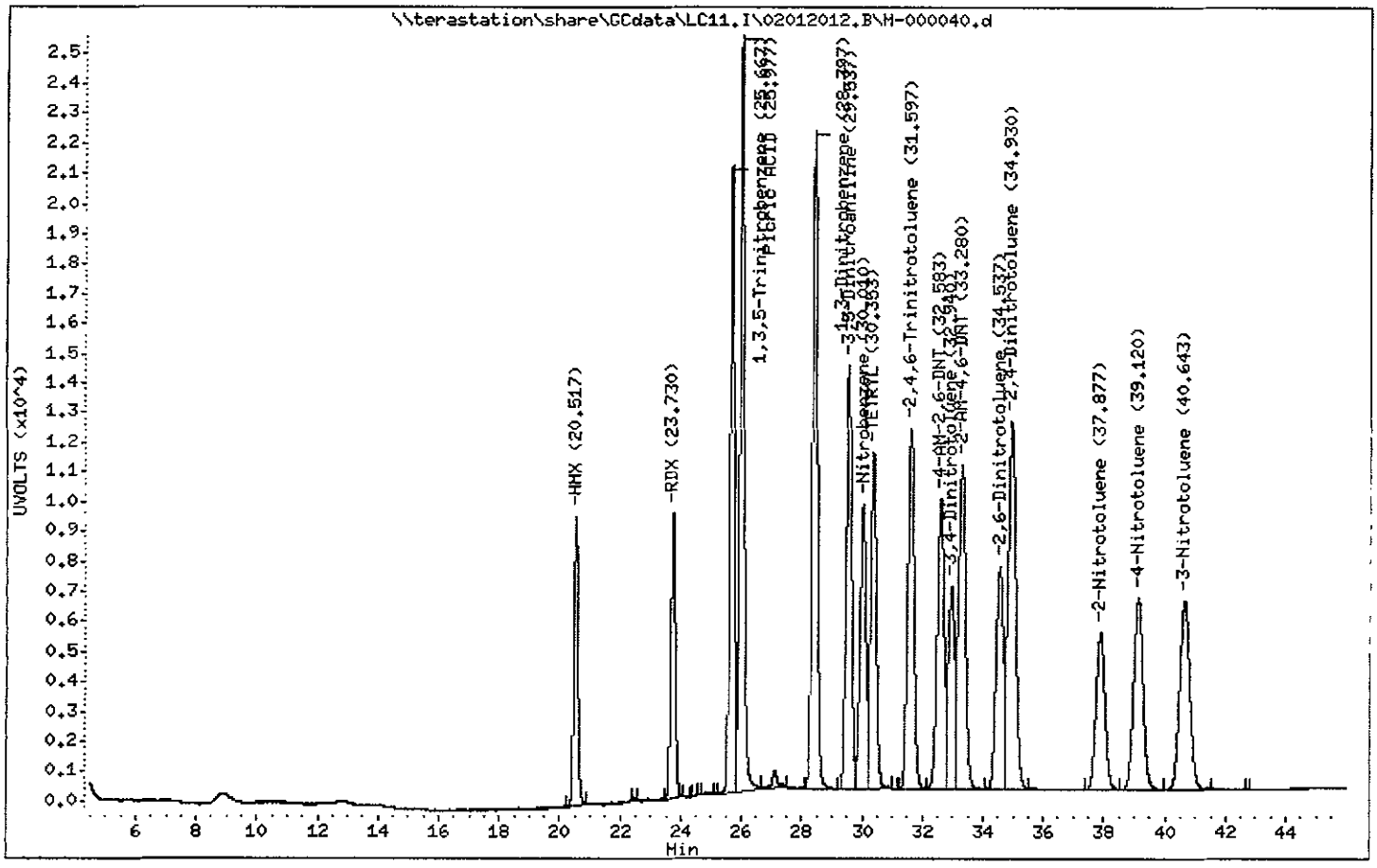
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL;2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000040.d\M-000040
Lab Smp Id: STD_05 12GCSV0099 1
Inj Date : 02-FEB-2012 22:41
Operator : rn Inst ID: LC11.i
Smp Info : STD_05 12GCSV0099 100ng/mL;2
Misc Info : ;5;;;;3;1_CAL.sub;;0;1
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 08-Feb-2012 12:26 noonanr Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.sub
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.170	155	39	0.252	0.01	
25.297	158	31	0.196	0.01	
25.650	2745	293	0.107	0.13	
25.977	360857	37063	0.103	17.22	9 Picric ACID
27.440	249	43	0.173	0.01	
28.397	136544	11375	0.083	5.25	
29.537	181859	14414	0.079	6.65	
30.010	199833	15221	0.076	7.02	
30.350	196718	14978	0.076	6.91	
30.857	115985	8650	0.075	3.99	18 Nitroglycerin
31.597	183298	12830	0.070	5.92	
32.583	220866	14304	0.065	6.60	
32.940	196049	12932	0.066	5.96	$ 1 3,4-Dinitrotoluene
33.280	184927	11249	0.061	5.19	
34.040	171	47	0.275	0.02	
34.537	219199	13013	0.059	6.00	
34.927	177566	9966	0.056	4.59	
37.873	262995	12840	0.049	5.92	
39.120	209965	9637	0.046	4.44	
40.643	297131	12766	0.043	5.89	
41.387	123422	4865	0.039	2.24	27 PETN
43.517	442	22	0.050	0.01	
44.453	325	19	0.059	0.00	
44.990	559	36	0.064	0.01	
45.297	238	28	0.118	0.01	
	3272256	216661		100.000	

Total unknown % height = 70.59

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000040.d\M-000040.d

Date : 02-FEB-2012 22:41

Client ID:

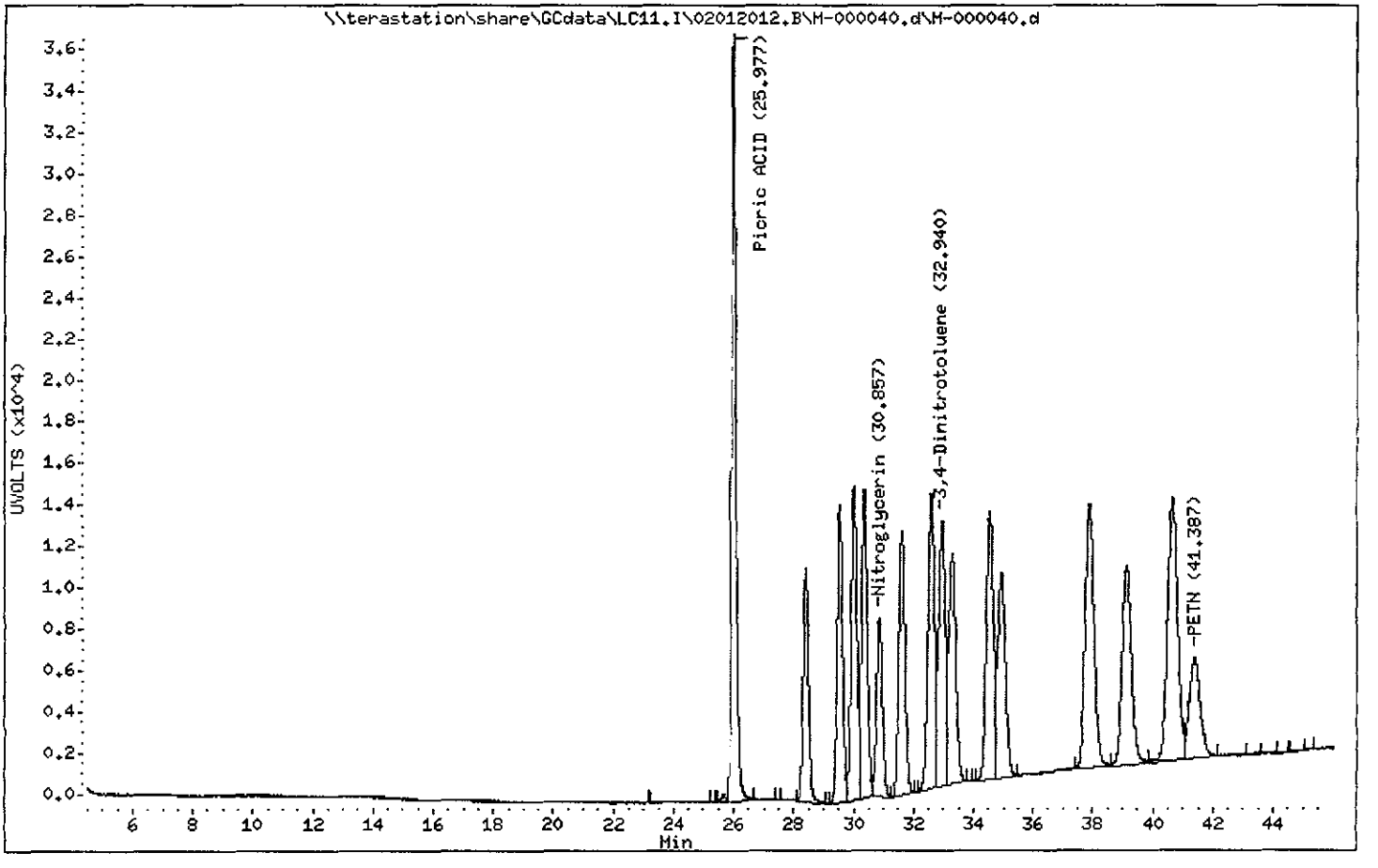
Instrument: LC11.i

Sample Info: STD_05 12GCSV0099 100ng/mL:2

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Continuing Calibration Report

Sample : STD_06 12GCSV0100 8330 200ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 03:32 File ID: 02012012.B/C-000013.d
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	200	22.250	0.000	9444	205.8	2.9					
2	1,3-Dinitrobenzene	200	25.240	0.000	20499	204.0	2.0					
3	1,3,5-Trinitrobenz	200	27.990	0.000	15534	203.6	1.8					
4	2-Nitrotoluene	400	29.366	0.000	12034	412.2	3.1					
5	3-Nitrotoluene	200	29.940	0.000	7648	199.5	-0.25					
6	3,5-Dinitroaniline	200	31.326	0.000	16465	200.1	0.050					
7	RDX	200	31.903	0.000	9304	186.5	-6.8					
8	2,4-Dinitrotoluene	200	33.066	0.000	17650	200.6	0.30					
9	2,6-Dinitrotoluene	200	34.096	0.000	10551	197.0	-1.5					
10	2-AM-4,6-DNT	200	36.160	0.000	14493	201.3	0.65					
11	4-AM-2,6-DNT	200	36.790	0.000	12724	206.8	3.4					
12	3,4-Dinitrotoluene	200	38.473	0.000	9905	213.4	6.7					
13	2,4,6-Trinitrotolu	200	40.583	0.000	16675	209.1	4.6					
14	HMX	200	42.256	0.000	12429	204.6	2.3					
15	TETRYL	200	46.476	0.000	24454	206.5	3.3					
16	4-Nitrotoluene	200										
17	EGDN	200										
18	PETN	200						52.930	0.000	29369	203.9	2.0
19	Picric ACID	500										
20	Nitroglycerin	200						44.783	0.000	17384	214.1	7.1

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 11:30

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 02-FEB-2012 03:32
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;2;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
20.656	2124	56	0.026	0.02	
22.250	296281	9444	0.032	4.47	17 Nitrobenzene
25.240	621676	20499	0.033	9.71	13 1,3-Dinitrobenzene
27.106	224	35	0.156	0.01	
27.990	485200	15534	0.032	7.36	10 1,3,5-Trinitrobenze
29.366	337515	12034	0.036	5.70	24 2-Nitrotoluene
29.940	206108	7648	0.037	3.62	26 3-Nitrotoluene
31.326	422769	16465	0.039	7.80	15 3,5-Dinitroaniline
31.903	240407	9304	0.039	4.40	7 RDX
33.066	503424	17650	0.035	8.36	23 2,4-Dinitrotoluene
34.096	307743	10551	0.034	4.99	22 2,6-Dinitrotoluene
36.160	398868	14493	0.036	6.86	21 2-AM-4,6-DNT
36.790	343203	12724	0.037	6.02	20 4-AM-2,6-DNT
38.473	229758	9905	0.043	4.69	$ 1 3,4-Dinitrotoluene
39.510	13442	577	0.043	0.27	
40.583	402574	16675	0.041	7.90	19 2,4,6-Trinitrotolue
42.256	194145	12429	0.064	5.88	4 HMX
42.970	250	30	0.120	0.01	
43.683	303	25	0.082	0.01	
44.353	642	43	0.067	0.02	
44.780	2531	149	0.059	0.07	
45.353	3314	123	0.037	0.05	
46.476	330745	24454	0.074	11.69	16 TETRYL
47.726	540	68	0.126	0.03	
48.913	2460	131	0.053	0.06	
	5346249	211046		100.000	

Total unknown % height = 0.5500

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d

Date : 02-FEB-2012 03:32

Client ID:

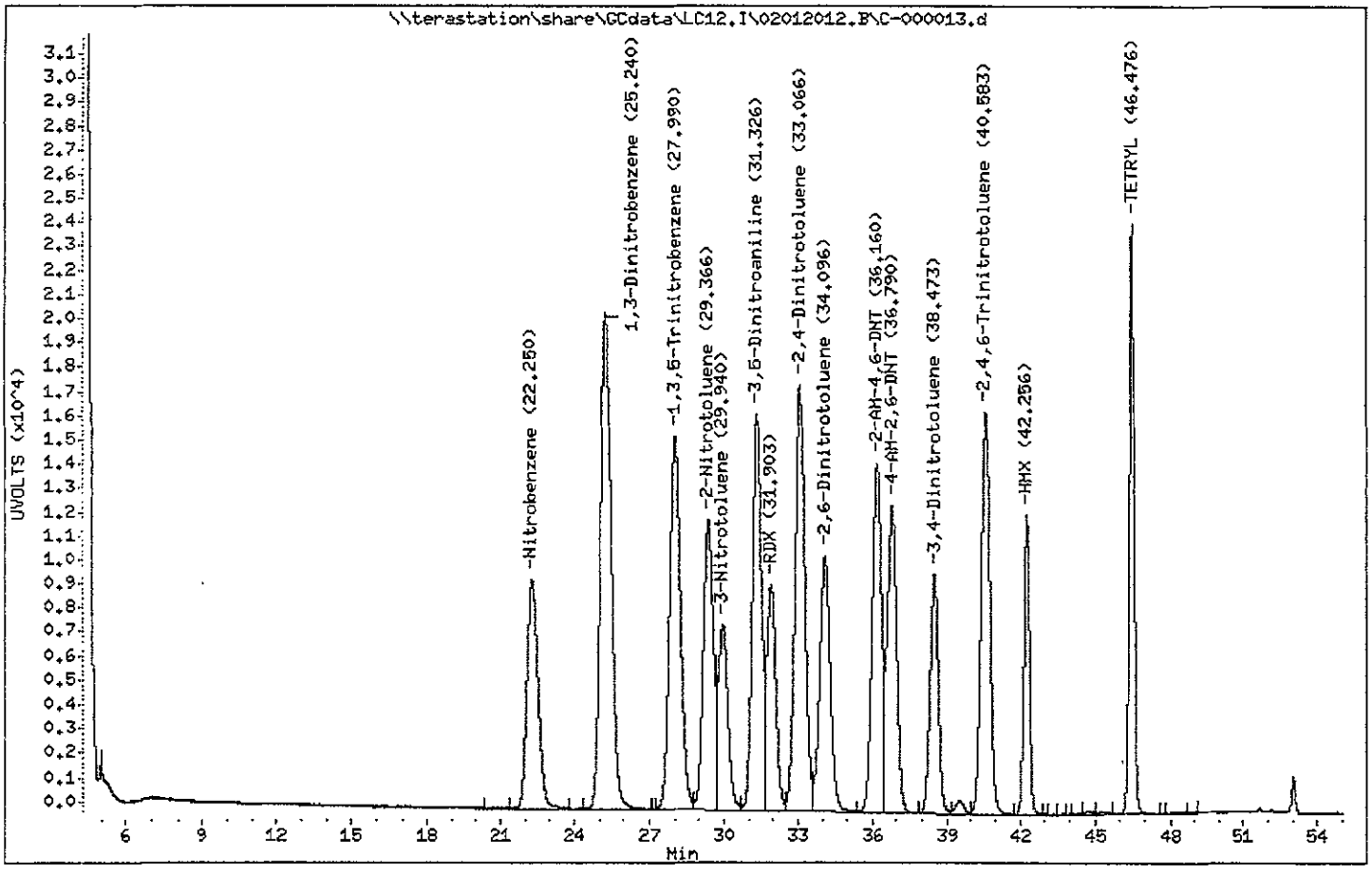
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d\C-000013
Lab Smp Id: STD_06 12GCSV0100 8
Inj Date : 02-FEB-2012 03:32
Operator : RN Inst ID: LC12.i
Smp Info : STD_06 12GCSV0100 8330 200ng/mL;2;
Misc Info : ;6;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACP307RY

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.783	279401	17384	0.062	37.18	18 Nitroglycerin
52.930	260132	29369	0.113	62.82	27 PETN
	539533	46753		100.000	

Total unknown % height = 0.0000

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000013.d\C-000013.d

Date : 02-FEB-2012 03:32

Client ID:

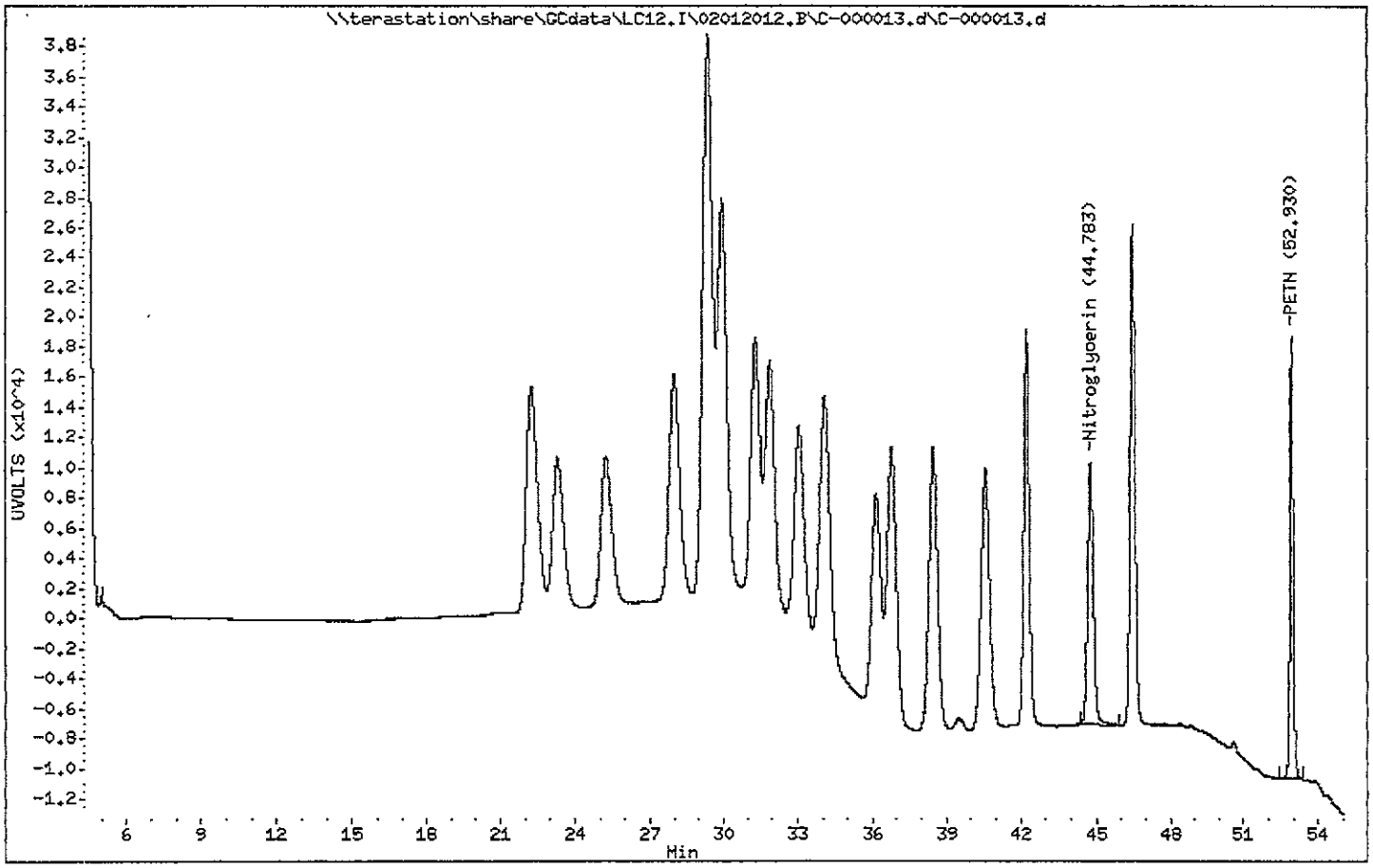
Instrument: LC12.i

Sample Info: STD_06 12GCSV0100 8330 200ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 13:21 File ID: 02012012.B/C-000022.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

			Side A					Side B				
	Compound	StdAmt	RT	RTDiff	Response	Conc ng	%D	RT	RTDiff	Response	Conc ng	%D
1	Nitrobenzene	100	22.267	0.000	4888	106.5	6.5					
2	1,3-Dinitrobenzene	100	25.264	0.000	10515	104.7	4.7					
3	1,3,5-Trinitrobenz	100	28.007	0.000	7829	102.6	2.6					
4	2-Nitrotoluene	200	29.397	0.000	6087	208.5	4.3					
5	3-Nitrotoluene	100	29.984	0.000	3862	100.7	0.70					
6	3,5-Dinitroaniline	100	31.357	0.000	8360	101.6	1.6					
7	RDX	100	31.944	0.000	4704	94.29	-5.7					
8	2,4-Dinitrotoluene	100	33.114	0.000	8906	101.2	1.2					
9	2,6-Dinitrotoluene	100	34.140	0.000	5314	99.24	-0.76					
10	2-AM-4,6-DNT	100	36.210	0.000	7322	101.7	1.7					
11	4-AM-2,6-DNT	100	36.847	0.000	6433	104.6	4.6					
12	3,4-Dinitrotoluene	100	38.527	0.000	4981	107.3	7.3					
13	2,4,6-Trinitrotolu	100	40.617	0.000	8394	105.3	5.3					
14	HMX	100	42.274	0.000	6250	102.9	2.9					
15	TETRYL	100	46.470	0.000	12307	103.9	3.9					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.957	0.000	14321	99.44	-0.56
19	Picric ACID	200										
20	Nitroglycerin	100						44.790	0.000	8614	106.1	6.1

RM 2/6/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 14:26

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 13:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
20.670	252	20	0.079	0.01		
22.267	145300	4888	0.034	4.57	17	Nitrobenzene
25.264	308476	10515	0.034	9.84	13	1,3-Dinitrobenzene
27.060	156	30	0.193	0.02		
28.007	238834	7829	0.033	7.32	10	1,3,5-Trinitrobenze
29.397	165823	6087	0.037	5.69	24	2-Nitrotoluene
29.984	100622	3862	0.038	3.61	26	3-Nitrotoluene
31.357	207144	8360	0.040	7.82	15	3,5-Dinitroaniline
31.944	118930	4704	0.040	4.40	7	RDX
33.114	248131	8906	0.036	8.33	23	2,4-Dinitrotoluene
34.140	151910	5314	0.035	4.97	22	2,6-Dinitrotoluene
35.347	78	20	0.257	0.01		
36.210	199481	7322	0.037	6.85	21	2-AM-4,6-DNT
36.847	168711	6433	0.038	6.02	20	4-AM-2,6-DNT
38.527	114220	4981	0.044	4.66	$ 1	3,4-Dinitrotoluene
39.587	5988	263	0.044	0.24		
40.617	200109	8394	0.042	7.85	19	2,4,6-Trinitrotolue
41.714	94	32	0.342	0.02		
42.274	96570	6250	0.065	5.85	4	HMX
44.314	209	21	0.101	0.01		
44.750	1098	69	0.063	0.06		
45.407	749	53	0.071	0.04		
45.987	217	29	0.134	0.02		
46.470	163103	12307	0.075	11.67	16	TETRYL
48.054	576	58	0.101	0.05		
48.847	833	79	0.095	0.07		
	2637611	106826		100.000		

Total unknown % height = 0.5500

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D

Date : 02-FEB-2012 13:21

Client ID:

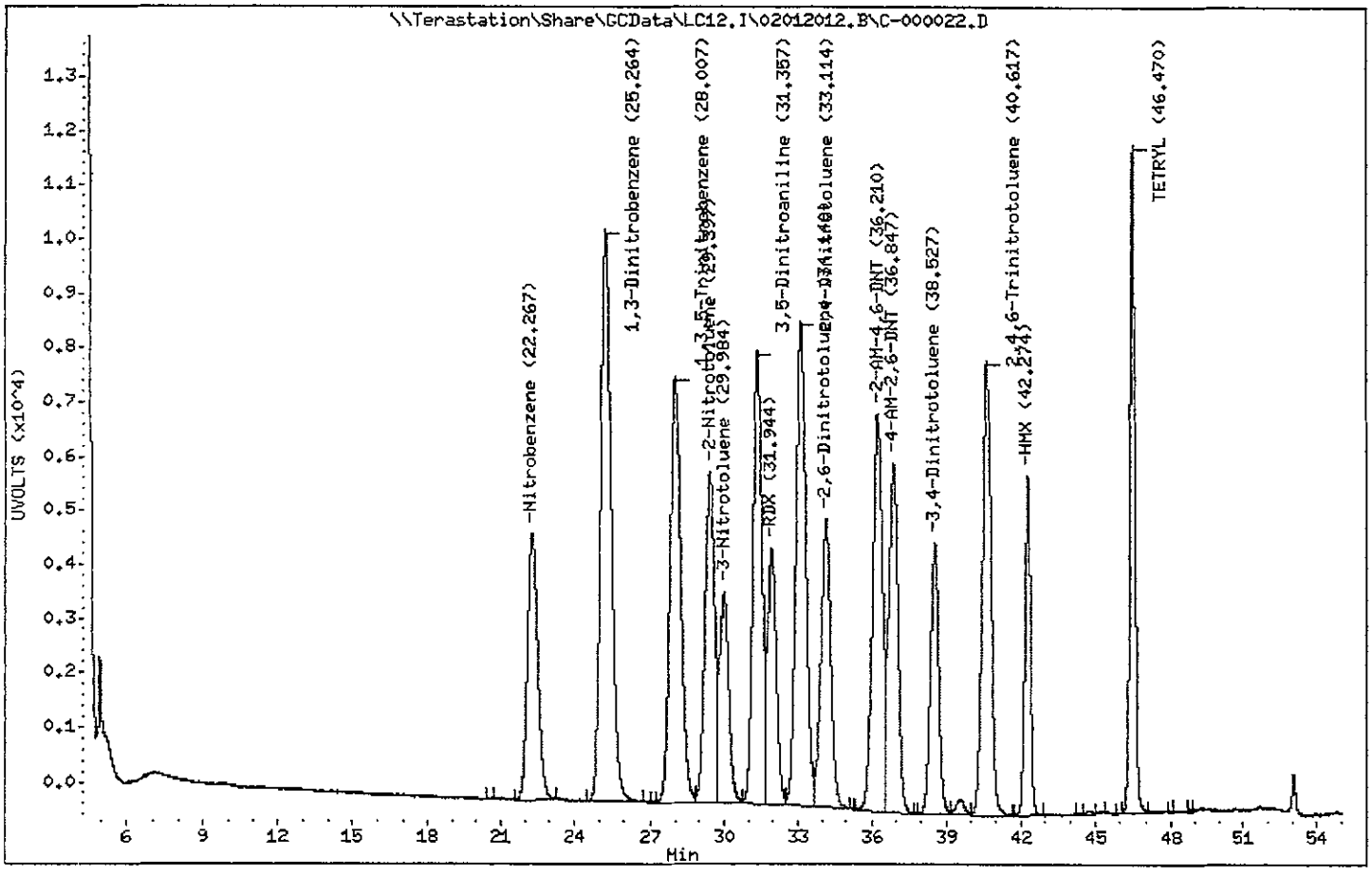
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D\C-000022
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 13:21
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 14:26 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.790	136482	8614	0.063	37.55	18 Nitroglycerin
52.957	125951	14321	0.114	62.45	27 PETN
	262433	22935		100.000	

Total unknown % height = 0.0000

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000022.D\C-000022.D

Date : 02-FEB-2012 13:21

Client ID:

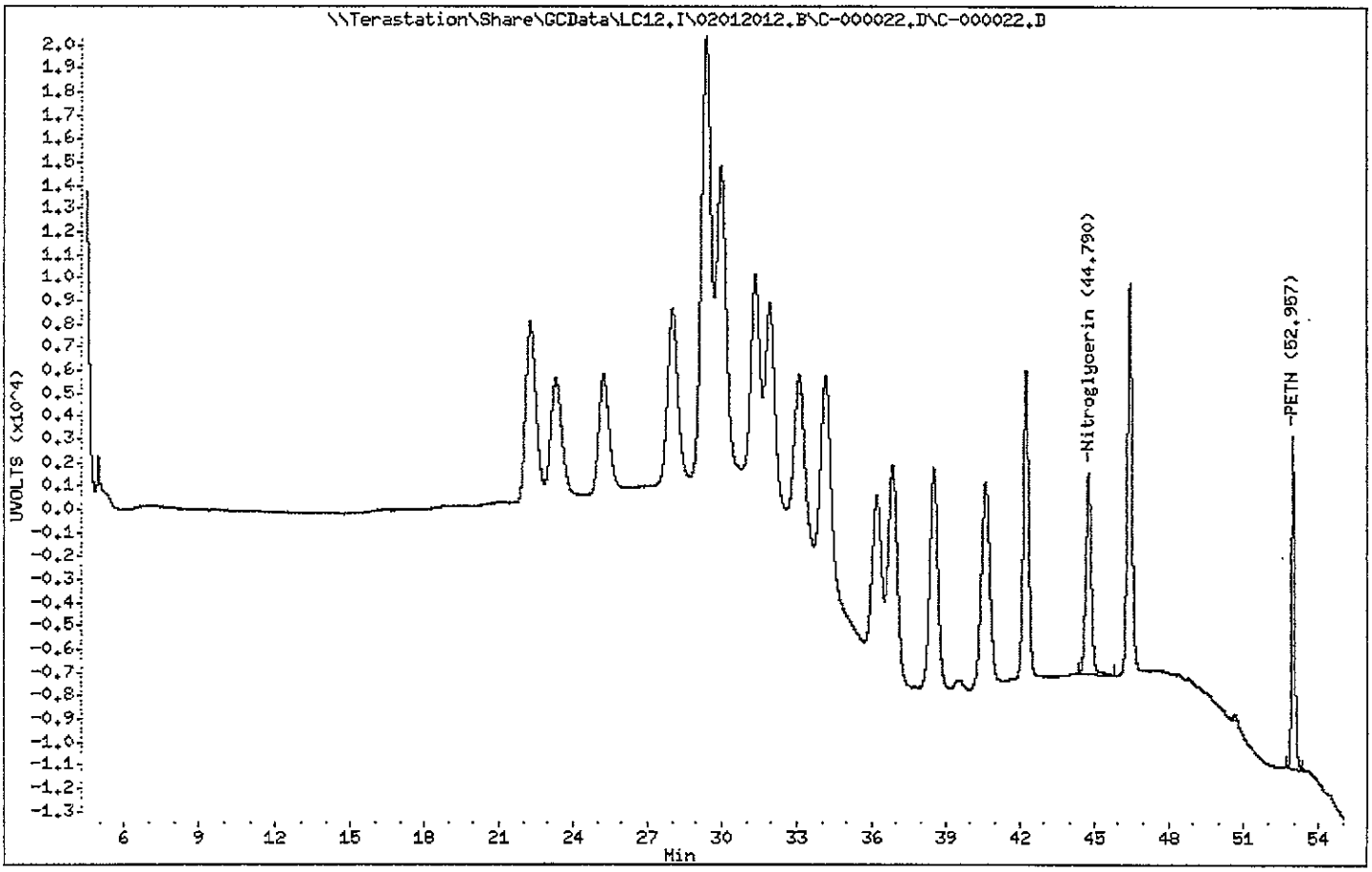
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica
Dual Column Continuing Calibration Report

Sample : STD_05 12GCSV099 8330 100ng/mL Instrument: LC12
Analyzed : 02-FEB-2012 22:04 File ID: 02012012.B/C-000030.D
Operator : RN Sublist: 1_CAL
Matrix : NONE SpikeList:

	Compound	StdAmt	Side A RT	Side A RTDiff	Side A Response	Side A Conc ng	Side A %D	Side B RT	Side B RTDiff	Side B Response	Side B Conc ng	Side B %D
1	Nitrobenzene	100	22.313	0.000	4820	105.0	5.0					
2	1,3-Dinitrobenzene	100	25.306	0.000	10501	104.5	4.5					
3	1,3,5-Trinitrobenz	100	28.056	0.000	7827	102.6	2.6					
4	2-Nitrotoluene	200	29.433	0.000	6040	206.9	3.5					
5	3-Nitrotoluene	100	30.013	0.000	3828	99.85	-0.15					
6	3,5-Dinitroaniline	100	31.386	0.000	8386	101.9	1.9					
7	RDX	100	31.963	0.000	4741	95.03	-5.0					
8	2,4-Dinitrotoluene	100	33.129	0.000	8893	101.0	1.0					
9	2,6-Dinitrotoluene	100	34.169	0.000	5307	99.11	-0.89					
10	2-AM-4,6-DNT	100	36.236	0.000	7295	101.3	1.3					
11	4-AM-2,6-DNT	100	36.866	0.000	6426	104.4	4.4					
12	3,4-Dinitrotoluene	100	38.539	0.000	4996	107.6	7.6					
13	2,4,6-Trinitrotolu	100	40.636	0.000	8338	104.6	4.6					
14	HMX	100	42.299	0.000	6195	102.0	2.0					
15	TETRYL	100	46.523	0.000	12144	102.6	2.6					
16	4-Nitrotoluene	100										
17	EGDN	100										
18	PETN	100						52.966	0.000	14294	99.26	-0.74
19	Picric ACID	200										
20	Nitroglycerin	100						44.836	0.000	8608	106.0	6.0

RN 2/3/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS Printed : 02/02/2012 23:09

TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000030.D
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 22:04
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCData\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 23:09 tap Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
17.059	243	25	0.103	0.02		
22.313	142106	4820	0.034	4.52		17 Nitrobenzene
25.306	307335	10501	0.034	9.86		13 1,3-Dinitrobenzene
27.353	142	19	0.134	0.01		
28.056	238531	7827	0.033	7.35		10 1,3,5-Trinitrobenze
29.433	163012	6040	0.037	5.67		24 2-Nitrotoluene
30.013	100733	3828	0.038	3.59		26 3-Nitrotoluene
31.386	207947	8386	0.040	7.87		15 3,5-Dinitroaniline
31.963	119284	4741	0.040	4.45		7 RDX
33.129	249241	8893	0.036	8.35		23 2,4-Dinitrotoluene
34.169	152269	5307	0.035	4.98		22 2,6-Dinitrotoluene
36.236	196683	7295	0.037	6.85		21 2-AM-4,6-DNT
36.866	170129	6426	0.038	6.03		20 4-AM-2,6-DNT
38.539	113621	4996	0.044	4.69	$	1 3,4-Dinitrotoluene
39.559	5883	264	0.045	0.24		
40.636	198231	8338	0.042	7.83		19 2,4,6-Trinitrotolue
41.723	66	23	0.348	0.02		
42.299	96015	6195	0.065	5.81		4 HMX
43.409	406	28	0.069	0.02		
44.876	1135	77	0.068	0.07		
45.359	1476	66	0.045	0.06		
46.523	163684	12144	0.074	11.51		16 TETRYL
47.843	1193	51	0.043	0.04		
48.369	1508	79	0.052	0.07		
48.929	1265	100	0.079	0.09		
	2632139	106469		100.000		

Total unknown % height = 0.6400

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000030.D

Date : 02-FEB-2012 22:04

Client ID:

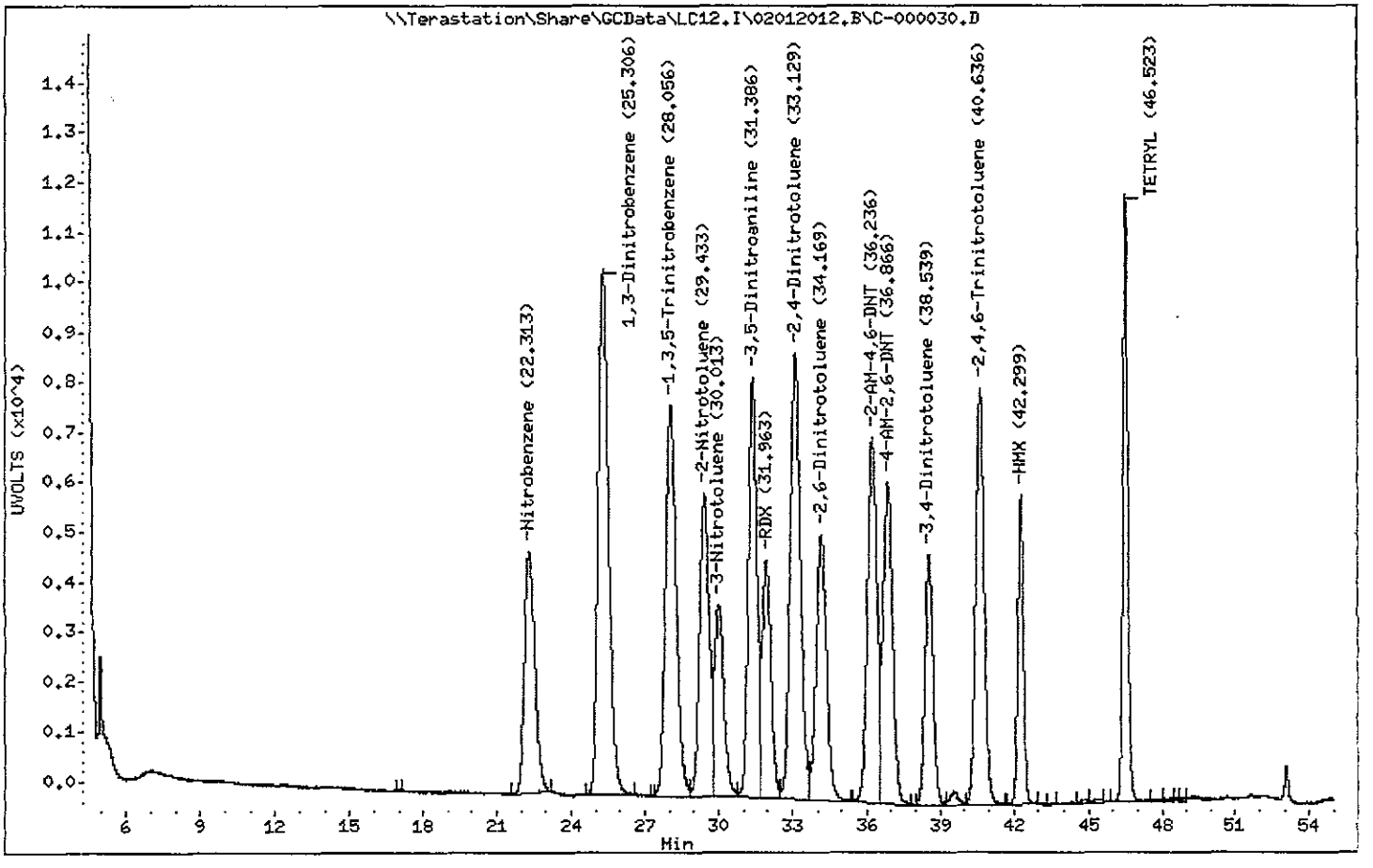
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\Terastation\Share\GCData\LC12.I\02012012.B\C-000030.D\C-000030
Lab Smp Id: STD_05 12GCSV099 83
Inj Date : 02-FEB-2012 22:04
Operator : RN Inst ID: LC12.i
Smp Info : STD_05 12GCSV099 8330 100ng/mL;2;
Misc Info : ;5;;;;3;1_CAL.SUB;0;1;
Comment : SOP WS-LC-0009
Method : \\Terastation\Share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 23:09 tap Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: 1_CAL.SUB
Target Version: 4.14
Processing Host: SACPLC12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
44.836	136896	8608	0.063	37.58	18 Nitroglycerin
52.966	125454	14294	0.114	62.42	27 PETN
	262350	22902		100.000	

Total unknown % height = 0.0000

Data File: \\Terastation\Share\GCData\LC12.I\02012012.B\C-000030.D\C-000030.D

Date : 02-FEB-2012 22:04

Client ID:

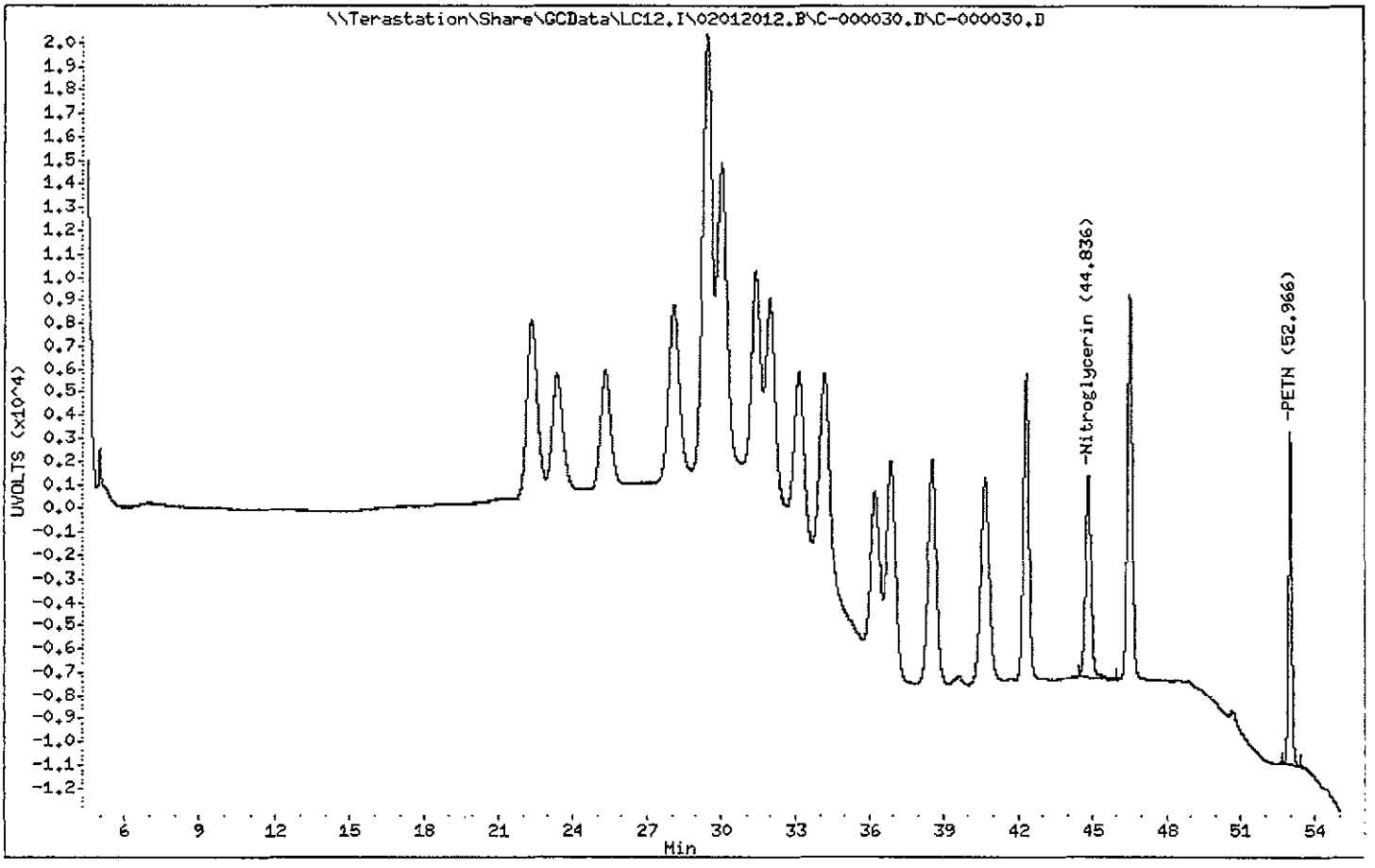
Instrument: LC12.i

Sample Info: STD_05 12GCSV099 8330 100ng/mL;2;

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



Raw QC Data

Blank Data

METHOD BLANK REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AA Matrix.....: WATER
MB Lot-Sample #: G2A240000-017

Prep Date.....: 01/24/12
Analysis Date..: 02/01/12 Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	RESULT	LOQ	UNITS	METHOD
1,3-Dinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,6-Dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.050 U	0.10	ug/L	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
RDX	0.050 U	0.10	ug/L	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.050 U	0.10	ug/L	SW846 8330/8330A
2-Amino-4,6-dinitrotoluene	0.10 U	0.20	ug/L	SW846 8330/8330A
MNX	1.0 U	2.0	ug/L	SW846 8330/8330A
TNX	0.15 U	2.0	ug/L	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	103	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

TestAmerica
Dual Column Chromatography Summary

Sample : MQDFC1AA 2024017 MB
Analyzed : 01-FEB-2012 15:14
Operator : rn
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000007.D
Sublist: WATERMET

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 DNX									
3 HMX									
4 MNX									
5 RDX									
6 1,3,5-Trinitrobenz									
7 Picric ACID									
8 1,3-Dinitrobenzene									
9 3,5-Dinitroaniline									
10 Nitrobenzene									
11 TETRYL									
12 2,4,6-Trinitrotolu									
13 4-AM-2,6-DNT									
14 3,4-Dinitrotoluene	32.928	-0.012	8619	2.570	32.931	-0.009	16735	2.625	2.1
15 2-AM-4,6-DNT									
16 2,6-Dinitrotoluene									
17 2,4-Dinitrotoluene									
18 2-Nitrotoluene									
19 4-Nitrotoluene									
20 3-Nitrotoluene									
21 EGDN									
22 Nitroglycerin									
23 PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.500	2.570	102.8	2.625	105.0	(84-125)

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 16:06

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 01-FEB-2012 15:14
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMET.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.108	987	110	0.111	1.04	
16.718	619	41	0.066	0.39	
18.648	126	24	0.191	0.22	
19.341	103	27	0.263	0.25	
20.138	51	24	0.472	0.22	
20.418	72	24	0.333	0.22	
22.744	100	28	0.281	0.26	
22.954	118	22	0.186	0.20	
23.378	71	32	0.452	0.30	
24.071	94	19	0.202	0.18	
24.604	1115	131	0.117	1.24	
24.881	220	31	0.141	0.29	
25.411	128	32	0.251	0.30	
25.574	1723	137	0.080	1.30	
26.101	574	73	0.127	0.69	
26.514	500	56	0.112	0.53	
26.944	582	54	0.093	0.51	
27.331	1705	113	0.066	1.07	
27.604	4108	320	0.078	3.04	
28.861	685	65	0.095	0.61	
29.681	51	31	0.609	0.29	
30.228	667	39	0.058	0.37	
30.758	97	31	0.321	0.29	
30.904	281	27	0.096	0.25	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
31.498	185	34	0.184	0.32	
32.928	130332	8619	0.066	82.23	$ 1 3,4-Dinitrotoluene
34.468	1359	74	0.054	0.70	
36.501	335	26	0.078	0.24	
37.371	225	28	0.124	0.26	
39.068	132	24	0.182	0.22	
41.428	1996	79	0.040	0.75	
42.064	1809	84	0.046	0.79	
45.188	925	30	0.032	0.28	
45.864	92	16	0.174	0.15	
	152165	10505		100.000	

Total unknown % height = 17.77

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D

Date : 01-FEB-2012 15:14

Client ID:

Instrument: LC11.i

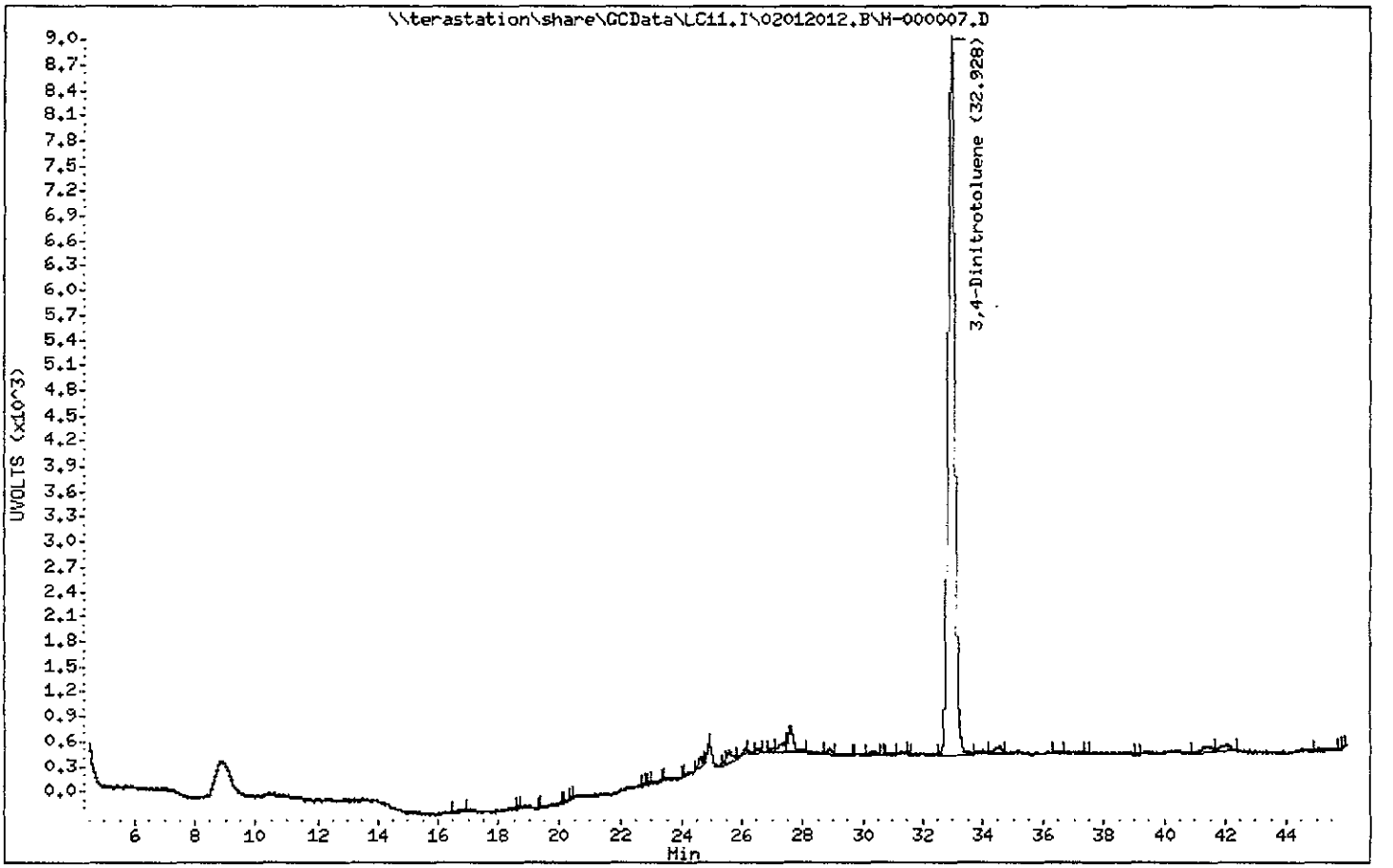
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D\M-000007
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 01-FEB-2012 15:14
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMET.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.768	251	47	0.187	0.25	
26.091	345	67	0.194	0.36	
28.791	612	60	0.098	0.32	
29.764	183	30	0.164	0.16	
30.234	300	50	0.167	0.27	
30.698	838	85	0.101	0.46	
32.198	1206	173	0.143	0.94	
32.284	2163	187	0.086	1.02	
32.931	254159	16735	0.066	91.85	$ 1 3,4-Dinitrotoluene
33.598	598	45	0.075	0.24	
34.121	162	29	0.179	0.15	
34.558	2438	168	0.069	0.92	
38.461	427	44	0.103	0.24	
39.344	3697	167	0.045	0.91	
40.171	857	43	0.050	0.23	
41.201	228	26	0.114	0.14	
42.024	6746	269	0.040	1.47	
45.611	3380	14	0.004	0.07	
	278589	18239		100.000	

Total unknown % height = 8.150

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000007.D\M-000007.D

Date : 01-FEB-2012 15:14

Client ID:

Instrument: LC11.i

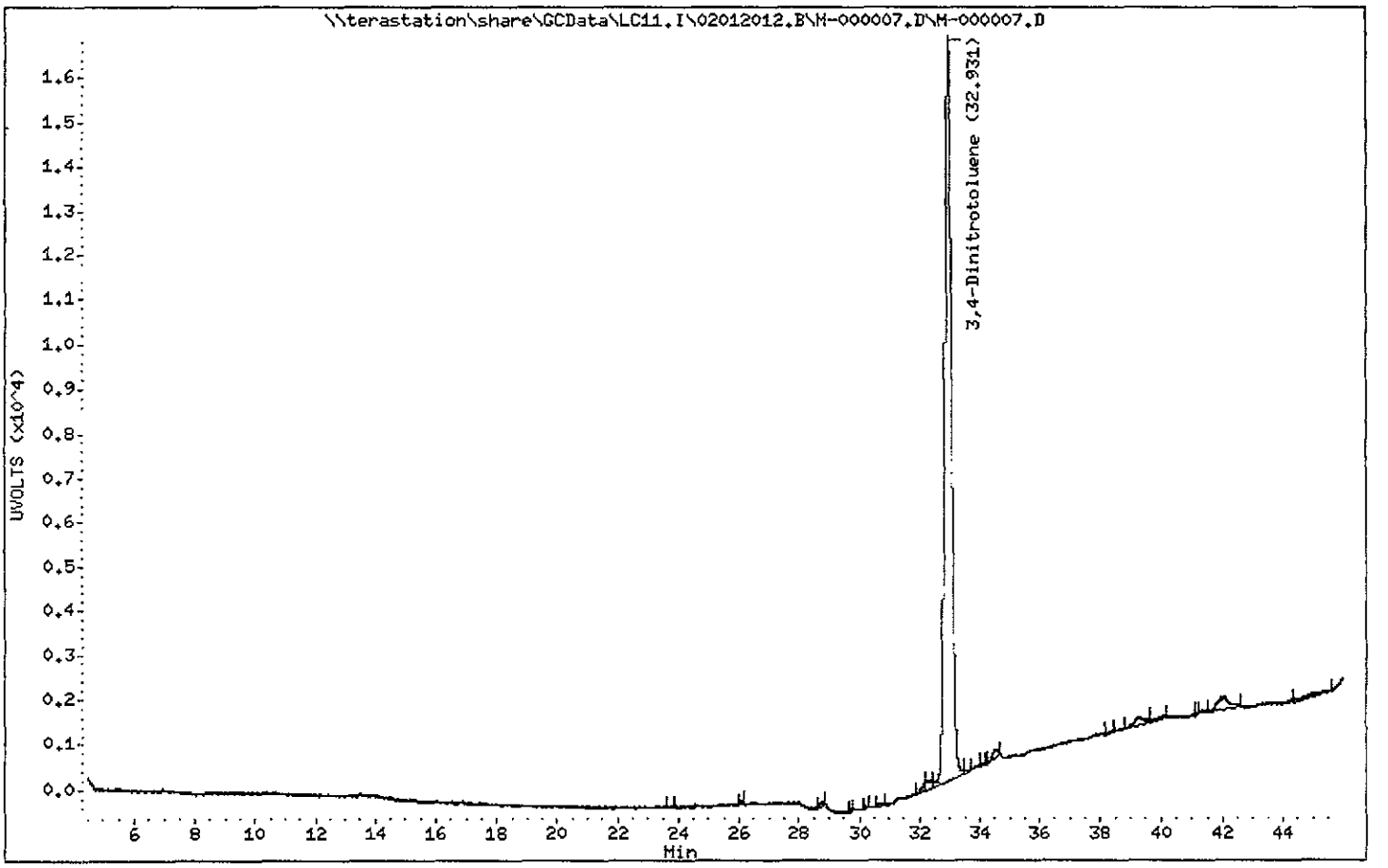
Sample Info: MQDFC1AA 2024017 MB;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Chromatography Summary

Sample : MQDFC1AA 2024017 MB
Analyzed : 02-FEB-2012 06:48
Operator : RN
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC12
File ID: 02012012.B/C-000016.d
Sublist: WATERMETQSM

Extract Vol: 20 mL

	Side A				Side B				
Compound	RT	RTDiff	Response	Conc ug/L	RT	RTDiff	Response	Conc ug/L	RPD
1 TNX									
2 Nitrobenzene									
3 DNX									
4 1,3-Dinitrobenzene									
5 1,3,5-Trinitrobenz	27.724	-0.265	289	0.07578					
6 MNX									
7 2-Nitrotoluene									
8 3-Nitrotoluene									
9 3,5-Dinitroaniline									
10 RDX									
11 2,4-Dinitrotoluene									
12 2,6-Dinitrotoluene									
13 2-AM-4,6-DNT									
14 4-AM-2,6-DNT									
15 3,4-Dinitrotoluene	38.594	0.121	6730	2.900					
16 2,4,6-Trinitrotolu									
17 HMX									
18 TETRYL									
19 4-Nitrotoluene									
20 EGDN									
21 PETN									
22 Nitroglycerin									
23 Picric ACID									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.500	2.900	116.0*			(79-111)

RTN 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/02/2012 11:32

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 02-FEB-2012 06:48
Operator : RN Inst ID: LC12.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMETQSM.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 01-FEB-2012 17:43 Cal File: C-000004.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
14.548	1014	50	0.049	0.49	
15.898	4120	134	0.033	1.31	
19.428	192	29	0.151	0.28	
25.744	1281	55	0.043	0.54	
26.711	1698	91	0.054	0.89	
27.301	10534	326	0.031	3.20	
27.724	8805	289	0.033	2.84	10 1,3,5-Trinitrobenze
28.671	408	58	0.142	0.57	
28.944	400	54	0.135	0.53	
29.158	186	49	0.264	0.48	
29.344	564	48	0.085	0.47	
29.548	440	50	0.114	0.49	
29.804	734	60	0.082	0.59	
30.038	585	53	0.091	0.52	
30.318	470	41	0.087	0.40	
30.538	265	48	0.181	0.47	
30.714	611	44	0.072	0.43	
30.948	142	45	0.317	0.44	
31.111	340	46	0.135	0.45	
31.284	170	50	0.295	0.49	
31.394	311	61	0.196	0.59	
31.588	1166	81	0.069	0.79	
31.821	541	87	0.161	0.85	
31.964	1024	73	0.071	0.71	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
32.658	444	46	0.104	0.45	
32.918	951	42	0.044	0.41	
33.914	222	35	0.158	0.34	
34.278	353	29	0.082	0.28	
34.668	415	31	0.075	0.30	
35.258	239	26	0.109	0.25	
35.471	284	27	0.095	0.26	
35.768	573	33	0.058	0.32	
36.388	122	27	0.221	0.26	
37.194	182	20	0.110	0.19	
37.734	66	34	0.519	0.33	
37.994	54	21	0.390	0.20	
38.594	148476	6730	0.045	66.44	$ 1 3,4-Dinitrotoluene
39.884	109	24	0.221	0.23	
40.938	212	29	0.137	0.28	
41.138	632	44	0.070	0.43	
41.618	143	20	0.139	0.19	
41.744	142	28	0.197	0.27	
42.114	140	28	0.200	0.27	
42.248	307	31	0.101	0.30	
42.644	65	23	0.353	0.22	
42.861	96	25	0.261	0.24	
43.518	942	65	0.069	0.63	
43.998	109	28	0.257	0.27	
44.778	250	40	0.160	0.39	
46.198	2152	87	0.040	0.85	
46.611	572	64	0.112	0.62	
47.001	462	68	0.147	0.66	
47.274	1592	85	0.053	0.83	
47.758	632	78	0.123	0.76	
48.358	4495	210	0.047	2.06	
48.811	3904	168	0.043	1.65	
	205337	10168		100.000	

Total unknown % height = 30.72

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d

Date : 02-FEB-2012 06:48

Client ID:

Instrument: LC12.i

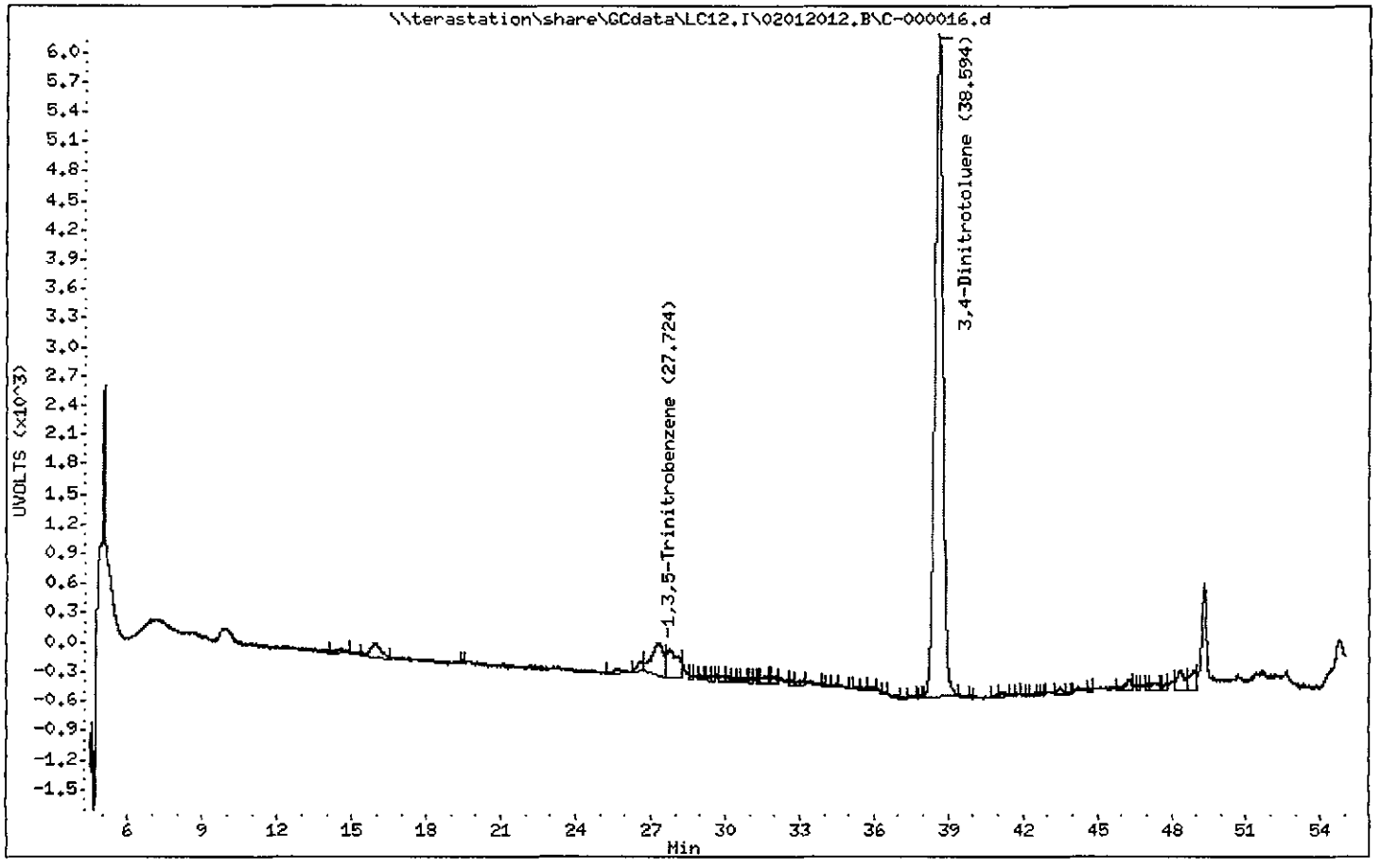
Sample Info: MQDFC1AA 2024017 MB:0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d\C-000016
Lab Smp Id: MQDFC1AA 2024017 MB
Inj Date : 02-FEB-2012 06:48
Operator : RN Inst ID: LC12.i
Smp Info : MQDFC1AA 2024017 MB;0;
Misc Info : ;;1000.00;;20;1;WATERMETQSM.sub;;0;;;;MQDFC1AA
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC12.I\02012012.B\8330CNAB.M\83302.m
Meth Date : 02-Feb-2012 11:30 noonanr Quant Type: AREA%
Cal Date : 27-JAN-2012 01:30 Cal File: C-000009.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMETQSM.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
52.508	6437	647	0.101	40.01	
53.501	20225	970	0.048	59.99	
	26663	1617		100.000	

Total unknown % height = 100.0

Data File: \\terastation\share\GCdata\LC12.I\02012012.B\C-000016.d\C-000016.d

Date : 02-FEB-2012 06:48

Client ID:

Instrument: LC12.i

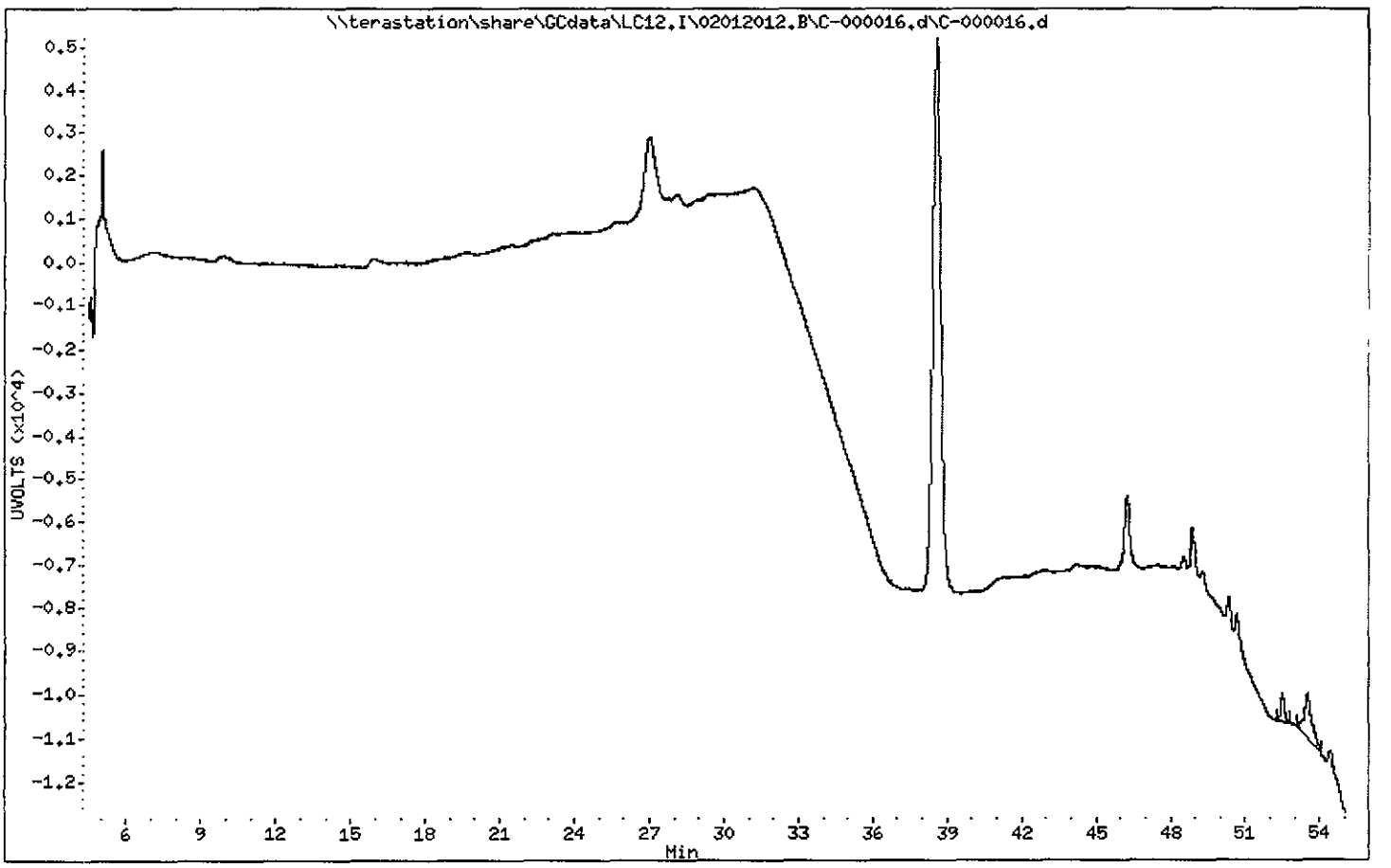
Sample Info: MQDFC1AA 2024017 MB:0;

Volume Injected (uL): 500.0

Operator: RN

Column phase: Zorbax Cyano

Column diameter: 4.60



LCS/LCSD Data

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Amino-4,6-dinitrotoluene	1.00	1.02	ug/L	102	SW846 8330/83
4-Amino-2,6-dinitrotoluene	1.00	1.00	ug/L	100	SW846 8330/83
1,3-Dinitrobenzene	1.00	1.05	ug/L	105	SW846 8330/83
2,4-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/83
2,6-Dinitrotoluene	1.00	1.01	ug/L	101	SW846 8330/83
RDX	1.00	1.14	ug/L	114	SW846 8330/83
1,3,5-Trinitrobenzene	1.00	1.07	ug/L	107	SW846 8330/83
2,4,6-Trinitrotoluene	1.00	0.794	ug/L	79	SW846 8330/83
MNX	4.00	4.21	ug/L	105	SW846 8330/83
TNX	4.00	3.87	ug/L	97	SW846 8330/83

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQDFC1AC Matrix.....: WATER
LCS Lot-Sample#: G2A240000-017
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	102	(50 - 155)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	100	(55 - 155)	SW846 8330/8330A
1,3-Dinitrobenzene	105	(45 - 160)	SW846 8330/8330A
2,4-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
2,6-Dinitrotoluene	101	(60 - 135)	SW846 8330/8330A
RDX	114	(50 - 160)	SW846 8330/8330A
1,3,5-Trinitrobenzene	107	(65 - 140)	SW846 8330/8330A
2,4,6-Trinitrotoluene	79	(50 - 145)	SW846 8330/8330A
MNX	105	(70 - 130)	SW846 8330/8330A
TNX	97	(70 - 130)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	102	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
Dual Column Spike Report

Sample : MQDFC1AC 2024017 LCS
Analyzed : 01-FEB-2012 16:11
Operator : rn
Matrix : WATER
Sample Amt: 1000 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000008.D
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

		Side A				Side B				
	Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1	TNX	4.000	15.473	11533	3.868	96.70					(70-130)
2	DNX	4.000	19.236	19367	4.221	105.5					(70-130)
3	HMX	1.000	20.536	5124	1.116	111.6					(80-115)
4	MNX	4.000	21.976	22769	4.206	105.1					(70-130)
5	RDX	1.000	23.750	5188	1.141	114.1					(50-160)
6	1,3,5-Trinitrobenz	1.000	25.680	10971	1.072	107.2					(65-140)
7	Picric ACID	0.0000									(0-0)
8	1,3-Dinitrobenzene	1.000	28.413	11239	1.051	105.1					(45-160)
9	3,5-Dinitroaniline	1.000	29.550	7075	1.013	101.3					(40-140)
10	Nitrobenzene	1.000	30.030	4832	1.040	104.0					(50-140)
11	TETRYL	1.000	30.350	4919	0.8773	87.73					(20-175)
12	2,4,6-Trinitrotolu	1.000	31.600	4750	0.7936	79.36					(50-145)
13	4-AM-2,6-DNT	1.000	32.586	4837	1.005	100.5					(55-155)
14	3,4-Dinitrotoluene	2.500	32.943	8551	2.550	102.0	32.943	16507	2.590	103.6	(84-125)
15	2-AM-4,6-DNT	1.000	33.283	5475	1.022	102.2					(50-155)
16	2,6-Dinitrotoluene	1.000	34.540	3752	1.011	101.1					(60-135)
17	2,4-Dinitrotoluene	1.000	34.930	6152	1.008	100.8					(60-135)
18	2-Nitrotoluene	1.000	37.870	2598	0.9817	98.17					(45-135)
19	4-Nitrotoluene	1.000	39.110	3153	0.9991	99.91					(50-130)
20	3-Nitrotoluene	1.000	40.626	3099	0.9880	98.80					(50-130)
21	EGDN	5.000									(70-130)
22	Nitroglycerin	5.000					30.856	22437	5.404	108.1	(85-115)
23	PETN	5.000					41.340	12171	5.078	101.6	(84-117)

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 17:03

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D
Lab Smp Id: MQDFC1AC 2024017 LC
Inj Date : 01-FEB-2012 16:11
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AC 2024017 LCS;3;
Misc Info : LCS;;1000.00;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQDFC1A30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
0.106	2084	160	0.077	0.10	
15.473	257038	11533	0.045	7.76	2 TNX
19.236	264143	19367	0.073	13.04	3 DNX
20.536	44411	5124	0.115	3.45	4 HMX
21.976	235641	22769	0.097	15.51	5 MNX
22.983	205	42	0.204	0.02	
23.416	81	28	0.344	0.01	
23.750	47526	5188	0.109	3.49	7 RDX
24.650	574	58	0.101	0.03	
24.923	642	76	0.118	0.05	
25.680	109651	10971	0.100	7.39	10 1,3,5-Trinitrobenze
26.550	9065	871	0.096	0.58	
27.133	291	37	0.127	0.02	
27.406	16834	1177	0.070	0.79	
28.413	128928	11239	0.087	7.57	13 1,3-Dinitrobenzene
29.550	86845	7075	0.081	4.76	15 3,5-Dinitroaniline
30.030	61517	4832	0.079	3.25	17 Nitrobenzene
30.350	66105	4919	0.074	3.31	16 TETRYL
30.853	2705	200	0.074	0.13	
31.600	69682	4750	0.068	3.19	19 2,4,6-Trinitrotolue
32.586	75391	4837	0.064	3.25	20 4-AM-2,6-DNT
32.943	131050	8551	0.065	5.75	$ 1 3,4-Dinitrotoluene
33.283	87819	5475	0.062	3.68	21 2-AM-4,6-DNT
34.540	60354	3752	0.062	2.52	22 2,6-Dinitrotoluene

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
34.930	112195	6152	0.055	4.14	23 2,4-Dinitrotoluene
36.183	349	31	0.089	0.02	
36.443	762	37	0.049	0.02	
37.870	52933	2598	0.049	1.75	24 2-Nitrotoluene
39.110	68061	3153	0.046	2.12	25 4-Nitrotoluene
39.963	703	61	0.087	0.04	
40.626	72641	3099	0.043	2.08	26 3-Nitrotoluene
41.349	3724	176	0.047	0.11	
42.036	3488	118	0.034	0.07	
	2073438	148456		100.000	

Total unknown % height = 1.990

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D

Date : 01-FEB-2012 16:11

Client ID:

Instrument: LC11.i

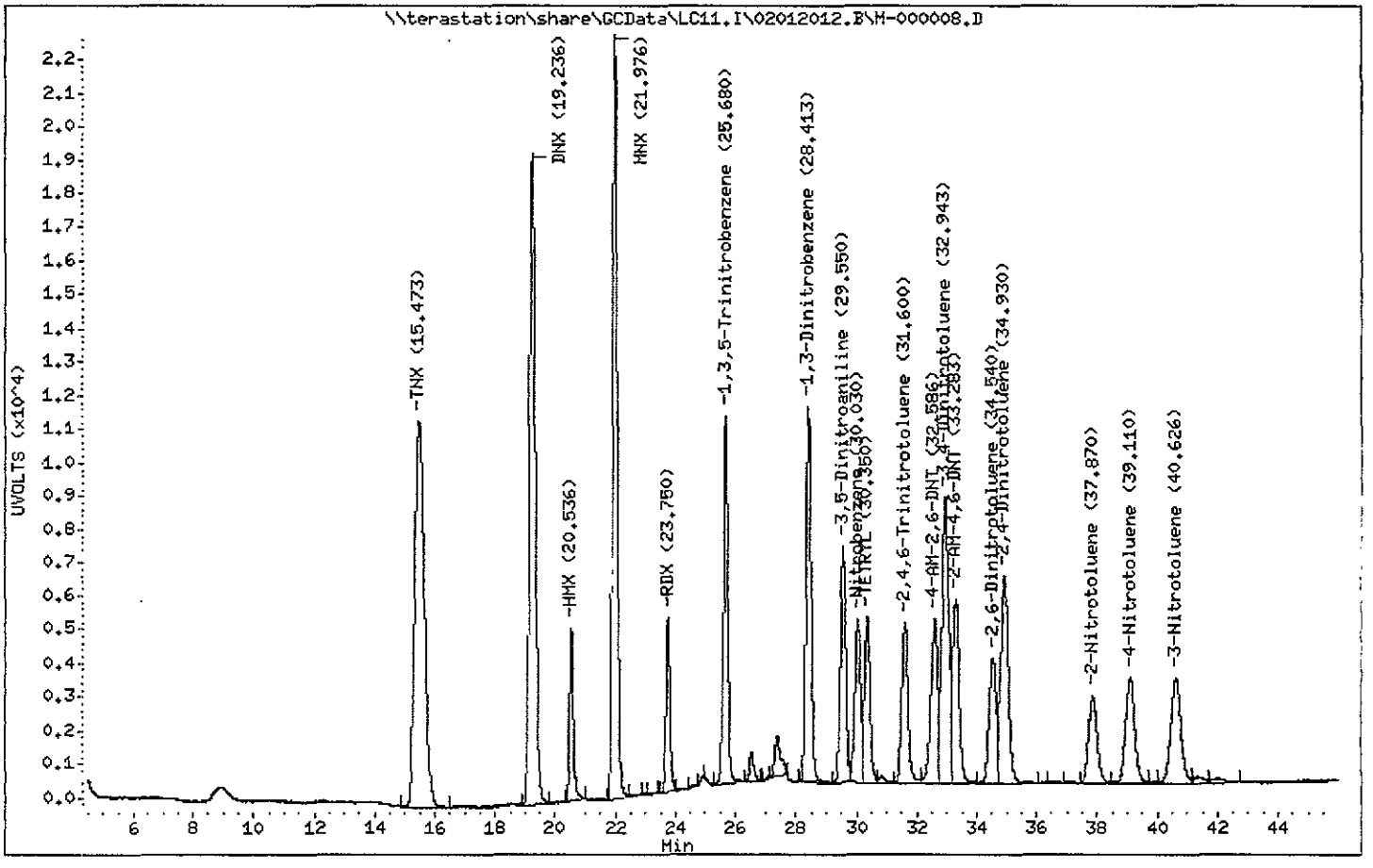
Sample Info: MQDFC1AC 2024017 LCS;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D\M-000008
Lab Smp Id: MQDFC1AC 2024017 LC
Inj Date : 01-FEB-2012 16:11
Operator : rn Inst ID: LC11.i
Smp Info : MQDFC1AC 2024017 LCS;3;
Misc Info : LCS;;1000.00;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQDFC1A26-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.126	252	25	0.099	0.01	
24.333	224	46	0.206	0.03	
25.686	1287	159	0.124	0.12	
26.043	342	39	0.114	0.03	
26.526	1154	102	0.088	0.08	
28.413	64159	5743	0.090	4.55	
29.550	86325	7116	0.082	5.64	
30.030	96833	7668	0.079	6.08	
30.343	93366	6939	0.074	5.50	
30.856	299749	22437	0.075	17.92	18 Nitroglycerin
31.600	69388	4967	0.072	3.94	
32.590	111049	7138	0.064	5.66	
32.943	256027	16507	0.064	13.09	$ 1 3,4-Dinitrotoluene
33.279	87544	5760	0.066	4.57	
33.959	233	39	0.168	0.03	
34.540	111804	6682	0.060	5.30	
34.926	90285	5043	0.056	4.00	
35.653	219	33	0.151	0.02	
36.500	188	45	0.239	0.03	
37.130	303	47	0.155	0.03	
37.866	126043	6302	0.050	5.00	
39.113	104138	4764	0.046	3.78	
40.076	2083	154	0.074	0.12	
40.626	134170	6058	0.045	4.80	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
41.340	295751	12171	0.041	9.65	27 PETN
44.703	329	35	0.106	0.02	
	2033245	126019		100.000	

Total unknown % height = 59.34

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000008.D\M-000008.D

Date : 01-FEB-2012 16:11

Client ID:

Instrument: LC11.i

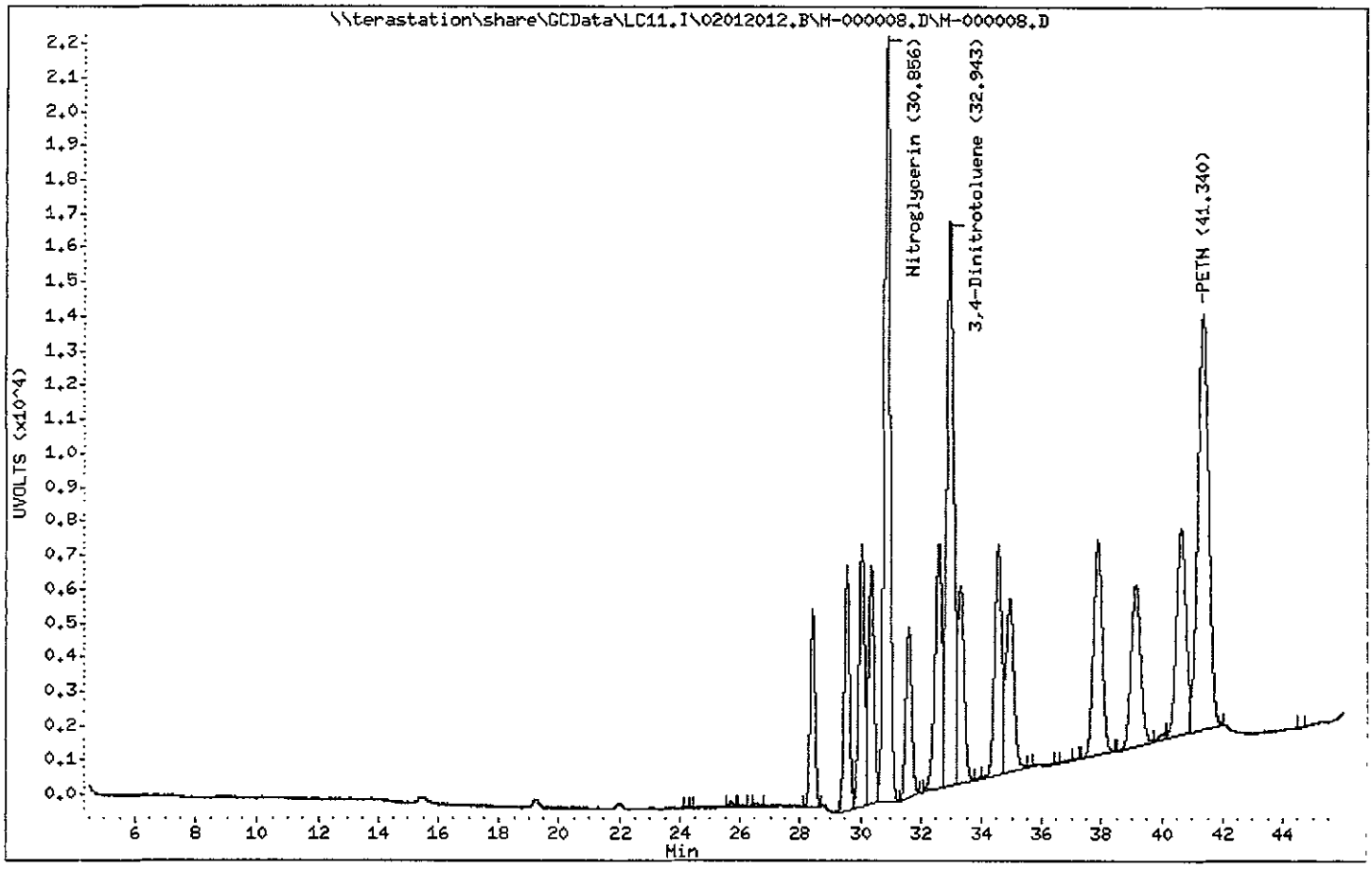
Sample Info: HQDFC1AC 2024017 LCS;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



MS/MSD Data

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Amino-4,6-dinitrotoluene	0.10 U	1.01	1.00	ug/L	99		SW846 8330/8330A
	0.10 U	1.01	1.02	ug/L	100	1.8	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	0.051 U	1.01	0.982	ug/L	97		SW846 8330/8330A
	0.051 U	1.01	0.999	ug/L	99	1.8	SW846 8330/8330A
1,3-Dinitrobenzene	0.051 U	1.01	1.05	ug/L	104		SW846 8330/8330A
	0.051 U	1.01	1.07	ug/L	105	1.7	SW846 8330/8330A
2,4-Dinitrotoluene	0.051 U	1.01	0.996	ug/L	99		SW846 8330/8330A
	0.051 U	1.01	1.02	ug/L	100	1.9	SW846 8330/8330A
2,6-Dinitrotoluene	0.051 U	1.01	0.986	ug/L	98		SW846 8330/8330A
	0.051 U	1.01	1.00	ug/L	99	1.6	SW846 8330/8330A
RDX	0.051 U	1.01	1.20	ug/L	118		SW846 8330/8330A
	0.051 U	1.01	1.23	ug/L	121	2.8	SW846 8330/8330A
1,3,5-Trinitrobenzene	0.051 U	1.01	1.08	ug/L	106		SW846 8330/8330A
	0.051 U	1.01	1.10	ug/L	109	2.6	SW846 8330/8330A
2,4,6-Trinitrotoluene	0.051 U	1.01	0.789	ug/L	78		SW846 8330/8330A
	0.051 U	1.01	0.802	ug/L	79	1.6	SW846 8330/8330A
MNX	1.0 U	4.04	4.28	ug/L	106		SW846 8330/8330A
	1.0 U	4.06	4.25	ug/L	105	0.68	SW846 8330/8330A
TNX	0.15 U	4.04	3.95	ug/L	98		SW846 8330/8330A
	0.15 U	4.06	3.83	ug/L	94	3.0	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: G2A200474 Work Order #...: MQAVV1AW-MS Matrix.....: WATER
MS Lot-Sample #: G2A190474-004 MQAVV1AX-MSD
Date Sampled...: 01/18/12 Date Received..: 01/19/12
Prep Date.....: 01/24/12 Analysis Date..: 02/01/12
Prep Batch #...: 2024017
Dilution Factor: 1.01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2-Amino-4,6-dinitrotoluene	99	(50 - 155)			SW846 8330/8330A
	100	(50 - 155)	1.8	(0-30)	SW846 8330/8330A
4-Amino-2,6-dinitrotoluene	97	(55 - 155)			SW846 8330/8330A
	99	(55 - 155)	1.8	(0-30)	SW846 8330/8330A
1,3-Dinitrobenzene	104	(45 - 160)			SW846 8330/8330A
	105	(45 - 160)	1.7	(0-30)	SW846 8330/8330A
2,4-Dinitrotoluene	99	(60 - 135)			SW846 8330/8330A
	100	(60 - 135)	1.9	(0-30)	SW846 8330/8330A
2,6-Dinitrotoluene	98	(60 - 135)			SW846 8330/8330A
	99	(60 - 135)	1.6	(0-30)	SW846 8330/8330A
RDX	118	(50 - 160)			SW846 8330/8330A
	121	(50 - 160)	2.8	(0-30)	SW846 8330/8330A
1,3,5-Trinitrobenzene	106	(65 - 140)			SW846 8330/8330A
	109	(65 - 140)	2.6	(0-30)	SW846 8330/8330A
2,4,6-Trinitrotoluene	78	(50 - 145)			SW846 8330/8330A
	79	(50 - 145)	1.6	(0-30)	SW846 8330/8330A
MNX	106	(70 - 130)			SW846 8330/8330A
	105	(70 - 130)	0.68	(0-30)	SW846 8330/8330A
TNX	98	(70 - 130)			SW846 8330/8330A
	94	(70 - 130)	3.0	(0-30)	SW846 8330/8330A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
3,4-Dinitrotoluene	100	(79 - 111)
	101	(79 - 111)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

TestAmerica
Dual Column Chromatography Summary

Sample : MQAVV1AK 2024017 A190474-4
Analyzed : 01-FEB-2012 19:59
Operator : rn
Matrix : WATER
Sample Amt: 980.52 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000012.D
Sublist: WATERMET

Extract Vol: 20 mL

	Compound	Side A RT	Side A RTDiff	Side A Response	Side A Conc ug/L	Side B RT	Side B RTDiff	Side B Response	Side B Conc ug/L	RPD
1	TNX									
2	DNX									
3	HMX									
4	MNX									
5	RDX	23.532	-0.198 RT	1051	0.2357 ND					
6	1,3,5-Trinitrobenz									
7	Picric ACID	25.828	-0.085	1799	0.3118 NA					
8	1,3-Dinitrobenzene									
9	3,5-Dinitroaniline									
10	Nitrobenzene									
11	TETRYL									
12	2,4,6-Trinitrotolu									
13	4-AM-2,6-DNT									
14	3,4-Dinitrotoluene	32.962	0.022	8619	2.621	32.962	0.022	16712	2.674	2.0
15	2-AM-4,6-DNT									
16	2,6-Dinitrotoluene									
17	2,4-Dinitrotoluene									
18	2-Nitrotoluene									
19	4-Nitrotoluene									
20	3-Nitrotoluene									
21	EGDN									
22	Nitroglycerin									
23	PETN									

Surrogates	Spiked	Recovered	%Rec	Recovered	%Rec	Limits
3,4-Dinitrotoluene	2.550	2.621	102.8	2.674	104.9	(84-125)

RM 2/2/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 20:52

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D
Lab Smp Id: MQAVV1AK 2024017 A1
Inj Date : 01-FEB-2012 19:59
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AK 2024017 A190474-4;0;
Misc Info : ;;980.52;;20;1;WATERMET.sub;;0;;;;MQAVV1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 13:14 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	980.520	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
15.518	567	9	0.016	0.04		
15.968	410	28	0.068	0.14		
18.208	11099	21	0.002	0.10		
18.478	252	29	0.115	0.14		
19.058	86	17	0.198	0.08		
19.225	61	17	0.281	0.08		
19.712	237	29	0.123	0.14		
20.858	7933	222	0.028	1.13		
21.048	2427	235	0.097	1.20		
22.015	19647	492	0.025	2.51		
23.532	67339	1051	0.016	5.37		7 RDX
24.282	47143	1159	0.025	5.92		
24.665	30784	1322	0.043	6.75		
24.925	31400	1370	0.044	7.00		
25.315	14002	1202	0.086	6.14		
25.828	55437	1799	0.032	9.19		9 Picric ACID
26.155	44985	1166	0.026	5.95		
28.062	15030	182	0.012	0.92		
30.275	10076	175	0.017	0.89		
32.962	130535	8619	0.066	44.16	$	1 3,4-Dinitrotoluene
34.488	739	61	0.082	0.31		
37.512	208	31	0.149	0.15		
41.471	2842	130	0.046	0.66		
42.068	4072	170	0.042	0.86		

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
45.315	336	35	0.104	0.17	
	497647	19571		100.000	

Total unknown % height = 41.28

Data File: \\terastation\share\GCData\LC11.I\02012012.B\H-000012.D

Date : 01-FEB-2012 19:59

Client ID:

Instrument: LC11.i

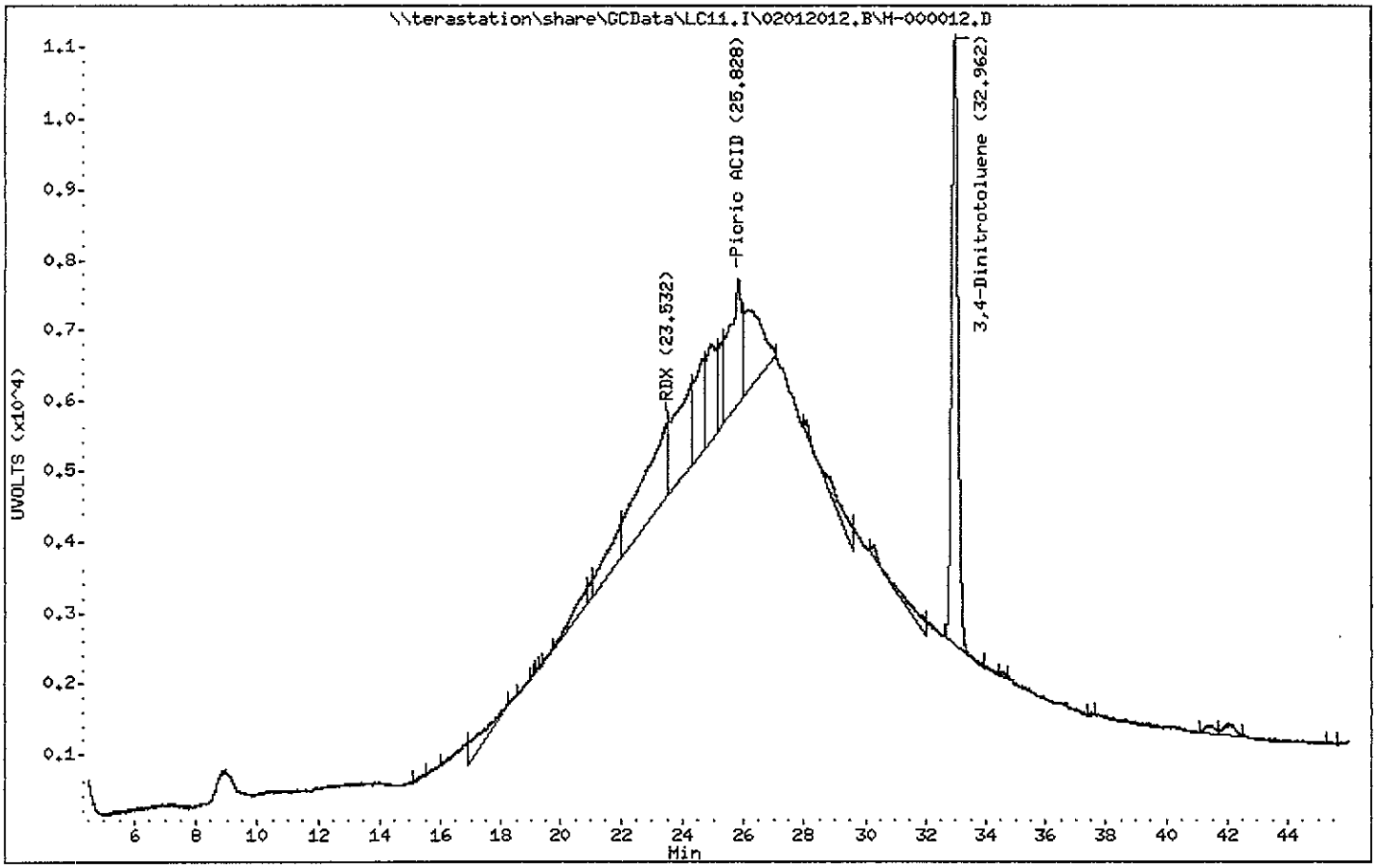
Sample Info: MQAWV1AK 2024017 A190474-4:0:

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D\M-000012
Lab Smp Id: MQAVV1AK 2024017 A1
Inj Date : 01-FEB-2012 19:59
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AK 2024017 A190474-4;0;
Misc Info : ;;980.52;;20;1;WATERMET.sub;;0;;;;MQAVV1AK
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 13:15 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	980.520	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
23.028	165	43	0.260	0.21	
23.785	160	34	0.213	0.17	
24.385	234	39	0.166	0.19	
24.565	237	37	0.156	0.18	
27.852	154	32	0.208	0.16	
28.788	10845	450	0.041	2.26	
30.295	5897	479	0.081	2.41	
32.202	1131	106	0.094	0.53	
32.962	251801	16712	0.066	84.32	$ 1 3,4-Dinitrotoluene
34.182	252	40	0.159	0.20	
34.778	744	50	0.067	0.25	
37.558	163	30	0.183	0.15	
38.808	2091	136	0.065	0.68	
39.382	9165	430	0.047	2.16	
40.068	12017	445	0.037	2.24	
41.515	2785	130	0.047	0.65	
42.048	26223	643	0.025	3.24	
	324063	19836		100.000	

Total unknown % height = 15.68

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000012.D\M-000012.D

Date : 01-FEB-2012 19:59

Client ID:

Instrument: LC11.1

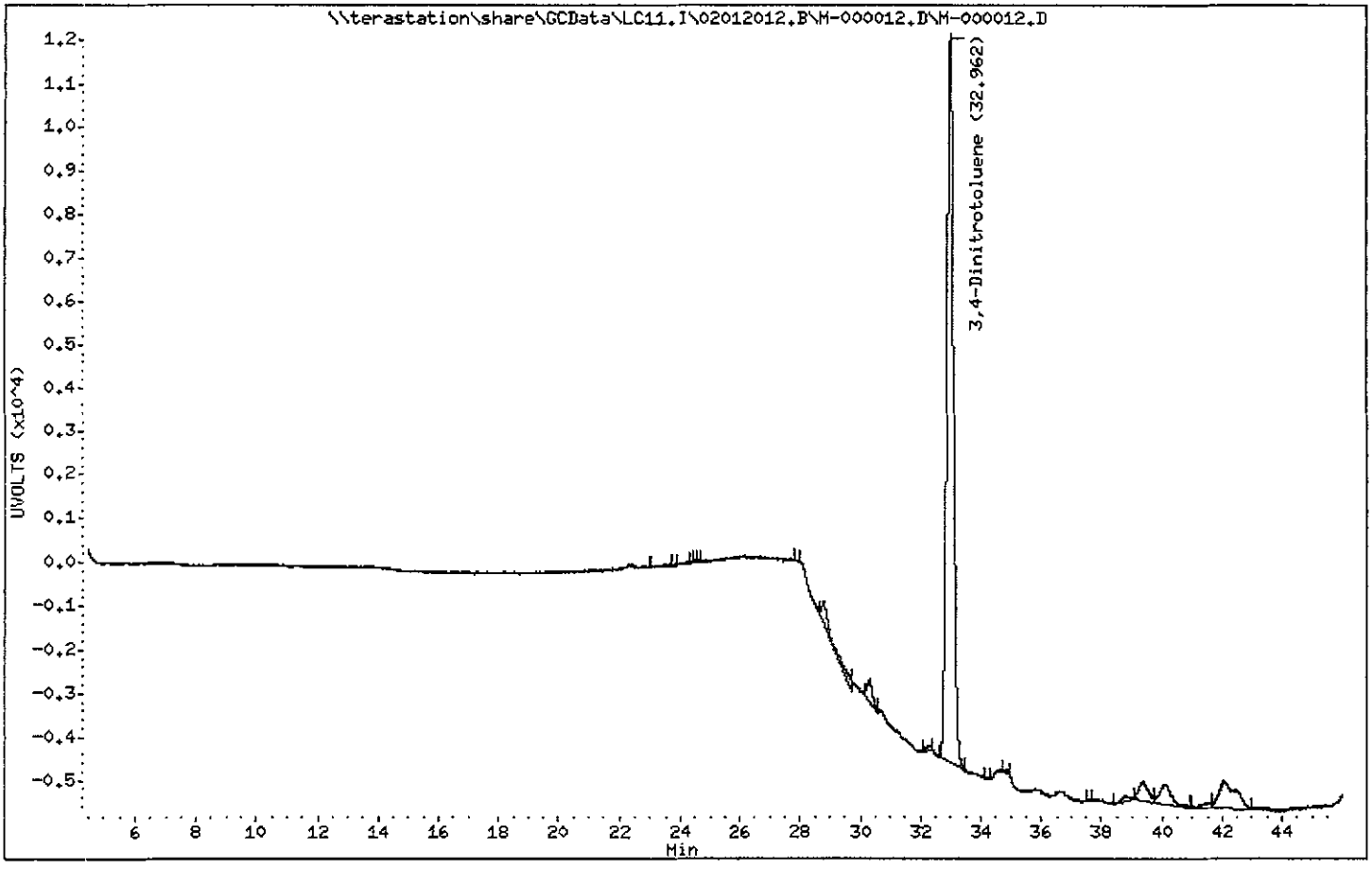
Sample Info: MQAVV1AK 2024017 A190474-4;0;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica
Dual Column Spike Report

Sample : MQAVV1AW 2024017 A190474-4S
Analyzed : 01-FEB-2012 22:51
Operator : rn
Matrix : WATER
Sample Amt: 989.06 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000015.D
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

		Side A				Side B				
	Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1	TNX	4.044	15.452	11650	3.950	97.68					(70-130)
2	DNX	4.044	19.225	19456	4.288	106.0					(70-130)
3	HMX	1.011	20.528	5101	1.124	111.2					(80-115)
4	MNX	4.044	21.968	22920	4.280	105.8					(70-130)
5	RDX	1.011	23.745	5380	1.196	118.3					(50-160)
6	1,3,5-Trinitrobenz	1.011	25.678	10891	1.076	106.5					(65-140)
7	Picric ACID	0.0000									(0-0)
8	1,3-Dinitrobenzene	1.011	28.412	11119	1.051	103.9					(45-160)
9	3,5-Dinitroaniline	1.011	29.555	6935	1.004	99.33					(40-140)
10	Nitrobenzene	1.011	30.032	4565	0.9935	98.26					(50-140)
11	TETRYL	1.011	30.355	4853	0.8751	86.55					(20-175)
12	2,4,6-Trinitrotolu	1.011	31.605	4669	0.7887	78.01					(50-145)
13	4-AM-2,6-DNT	1.011	32.598	4676	0.9820	97.13					(55-155)
14	3,4-Dinitrotoluene	2.528	32.952	8359	2.520	99.70	32.952	16425	2.605	103.1	(84-125)
15	2-AM-4,6-DNT	1.011	33.295	5301	1.000	98.92					(50-155)
16	2,6-Dinitrotoluene	1.011	34.555	3620	0.9862	97.55					(60-135)
17	2,4-Dinitrotoluene	1.011	34.942	6010	0.9959	98.50					(60-135)
18	2-Nitrotoluene	1.011	37.888	2627	1.004	99.27					(45-135)
19	4-Nitrotoluene	1.011	39.132	3169	1.015	100.4					(50-130)
20	3-Nitrotoluene	1.011	40.672	3102	0.9999	98.90					(50-130)
21	EGDN	5.055									(70-130)
22	Nitroglycerin	5.055					30.865	21799	5.308	105.0	(85-115)
23	PETN	5.055					41.382	12062	5.088	100.6	(84-117)

RDM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/01/2012 23:44

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D
Lab Smp Id: MQAVV1AW 2024017 A1
Inj Date : 01-FEB-2012 22:51
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AW 2024017 A190474-4S;3;
Misc Info : MS;;989.06;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AW
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	989.060	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.452	256477	11650	0.045	7.86	2 TNX
17.318	3870	15	0.004	0.01	
18.048	646	22	0.034	0.01	
18.152	62	0	0.000	0.00	
18.451	130	18	0.138	0.01	
18.722	185	15	0.081	0.01	
19.225	262985	19456	0.074	13.13	3 DNX
19.932	193	22	0.114	0.01	
20.528	43644	5101	0.117	3.44	4 HMX
21.115	135	15	0.111	0.01	
21.968	237692	22920	0.096	15.63	5 MNX
22.468	140	35	0.250	0.02	
22.652	138	24	0.174	0.01	
23.745	56382	5380	0.095	3.63	7 RDX
24.385	3735	179	0.048	0.12	
24.611	3445	297	0.086	0.20	
25.048	9349	325	0.035	0.21	
25.678	123335	10891	0.088	7.35	10 1,3,5-Trinitrobenze
26.538	10169	865	0.085	0.58	
27.388	20246	1360	0.067	0.91	
28.085	1247	176	0.141	0.11	
28.412	125862	11119	0.088	7.50	13 1,3-Dinitrobenzene
29.555	82387	6935	0.084	4.68	15 3,5-Dinitroaniline
30.032	55286	4565	0.083	3.08	17 Nitrobenzene

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
30.355	63941	4853	0.076	3.27	16 TETRYL
31.605	66711	4669	0.070	3.15	19 2,4,6-Trinitrotolue
32.598	71112	4676	0.066	3.15	20 4-AM-2,6-DNT
32.952	126455	8359	0.066	5.64	$ 1 3,4-Dinitrotoluene
33.295	84107	5301	0.063	3.57	21 2-AM-4,6-DNT
34.555	57491	3620	0.063	2.44	22 2,6-Dinitrotoluene
34.942	107600	6010	0.056	4.05	23 2,4-Dinitrotoluene
37.888	52958	2627	0.050	1.77	24 2-Nitrotoluene
39.132	67362	3169	0.047	2.13	25 4-Nitrotoluene
40.062	203	29	0.143	0.01	
40.672	70392	3102	0.044	2.09	26 3-Nitrotoluene
41.425	3568	163	0.046	0.11	
42.115	4008	154	0.038	0.10	
	2073648	148117		100.000	

Total unknown % height = 2.440

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D

Date : 01-FEB-2012 22:51

Client ID:

Instrument: LC11.i

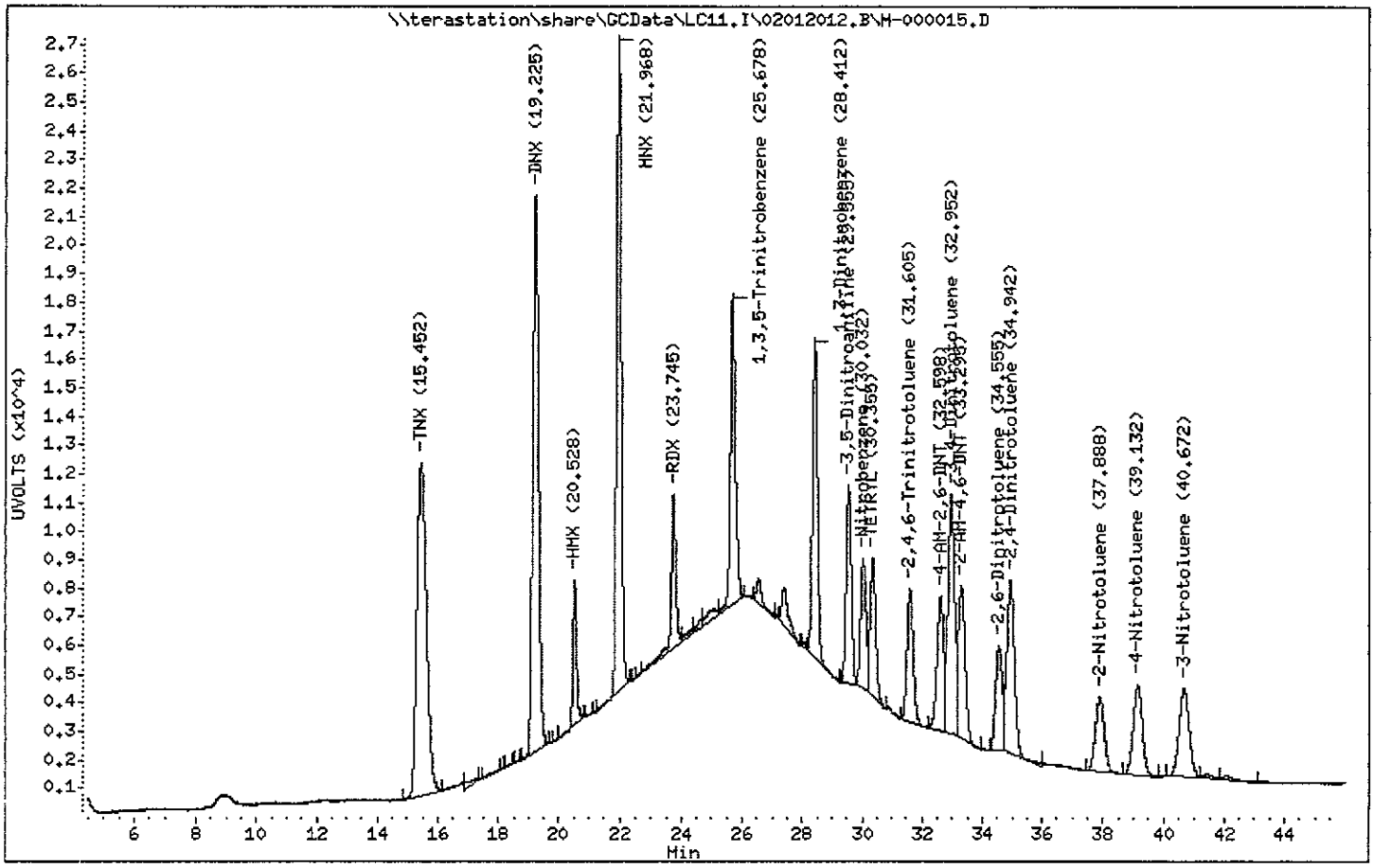
Sample Info: MQAVV1AW 2024017 A190474-4S;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D\M-000015
Lab Smp Id: MQAVV1AW 2024017 A1
Inj Date : 01-FEB-2012 22:51
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AW 2024017 A190474-4S;3;
Misc Info : MS;;989.06;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AW
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	989.060	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
21.968	1764	180	0.102	0.14	
24.205	155	42	0.272	0.03	
25.678	1000	125	0.125	0.09	
26.545	1230	114	0.093	0.09	
27.348	161	51	0.317	0.04	
28.412	61093	5639	0.092	4.46	
28.762	3230	173	0.054	0.13	
29.555	82548	7027	0.085	5.56	
30.035	90544	7402	0.082	5.86	
30.345	90211	6964	0.077	5.51	
30.865	286569	21799	0.076	17.38	18 Nitroglycerin
31.605	68838	4930	0.072	3.90	
32.595	112482	7093	0.063	5.61	
32.952	256154	16425	0.064	13.01	$ 1 3,4-Dinitrotoluene
33.288	85252	5697	0.067	4.51	
34.552	110912	6628	0.060	5.25	
34.932	91578	5179	0.057	4.10	
36.628	5866	266	0.045	0.21	
37.885	129186	6430	0.050	5.09	
39.138	105860	4785	0.045	3.79	
40.088	18280	985	0.054	0.78	
40.658	137683	6133	0.045	4.85	
41.382	297277	12062	0.041	9.55	27 PETN
45.221	1518	81	0.053	0.06	

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
	2039391	126210		100.000	

Total unknown % height = 60.06

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000015.D\M-000015.D

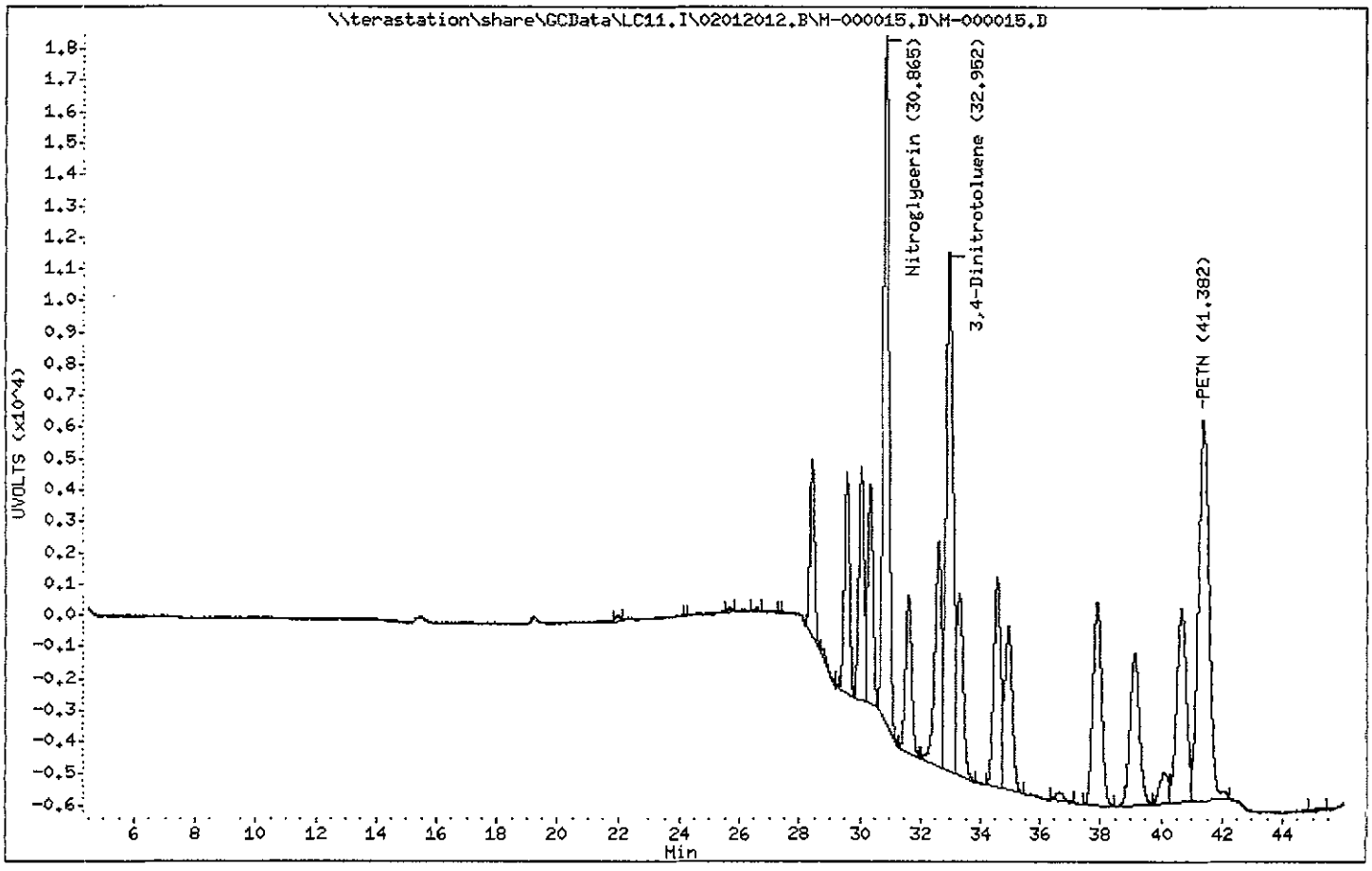
Date : 01-FEB-2012 22:51

Client ID: Instrument: LC11.i

Sample Info: MQAVV1AW 2024017 A190474-4S;3;

Volume Injected (uL): 500.0 Operator: rn

Column phase: SYNERGI HYDRORP C18 Column diameter: 4.60



TestAmerica West Sacramento
Dual Column Spike Report

Sample : MQAVV1AX 2024017 A190474-4D
Analyzed : 01-FEB-2012 23:48
Operator : rn
Matrix : WATER
Sample Amt: 985.59 mL
Dilution Factor: 1

Instrument: LC11
File ID: 02012012.B/M-000016.d
Sublist: WATERMET
SpikeList: WATERMETQSM
Extract Vol: 20 mL

			Side A			Side B				
Compound	Spike	RT	Response	Conc ug/L	%R	RT	Response	Conc ug/L	%R	Limits
1 TNX	4.058	15.439	11267	3.834	94.47					(70-130)
2 DNX	4.058	19.223	19000	4.202	103.5					(70-130)
3 HMX	1.015	20.529	5207	1.151M	113.5					(80-115)
4 MNX	4.058	21.969	22683	4.251M	104.7					(70-130)
5 RDX	1.015	23.743	5512	1.230M	121.2					(50-160)
6 1,3,5-Trinitrobenz	1.015	25.676	11143	1.105M	108.9					(65-140)
7 Picric ACID	0.0000									(0-0)
8 1,3-Dinitrobenzene	1.015	28.413	11269	1.069M	105.3					(45-160)
9 3,5-Dinitroaniline	1.015	29.553	7161	1.041M	102.6					(40-140)
10 Nitrobenzene	1.015	30.029	5036	1.100M	108.4					(50-140)
11 TETRYL	1.015	30.349	5156	0.9330M	91.96					(20-175)
12 2,4,6-Trinitrotolu	1.015	31.599	4730	0.8018	79.03					(50-145)
13 4-AM-2,6-DNT	1.015	32.589	4742	0.9994	98.50					(55-155)
14 3,4-Dinitrotoluene	2.536	32.949	8437	2.552	100.6	32.949	16617	2.645	104.3	(84-125)
15 2-AM-4,6-DNT	1.015	33.286	5378	1.018	100.4					(50-155)
16 2,6-Dinitrotoluene	1.015	34.549	3665	1.002	98.76					(60-135)
17 2,4-Dinitrotoluene	1.015	34.939	6103	1.015	100.0					(60-135)
18 2-Nitrotoluene	1.015	37.883	2659	1.019	100.5					(45-135)
19 4-Nitrotoluene	1.015	39.133	3206	1.031	101.6					(50-130)
20 3-Nitrotoluene	1.015	40.663	3151	1.019	100.4					(50-130)
21 EGDN	5.073									(70-130)
22 Nitroglycerin	5.073					30.863	21886	5.348	105.4	(85-115)
23 PETN	5.073					41.383	12183	5.157	101.6	(84-117)

M = Compound was manually integrated.

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/7/12

DualCalc.Mac Rev 1.02 11/27/2011 ERS

Printed : 02/07/2012 11:51

TestAmerica West Sacramento

Method 8330

Data file : \\terastation\share\GCdata\LC11.I\02012012.B\M-000016.d
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M
Meth Date : 07-Feb-2012 11:47 noonanr Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACP307RY

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.439	255725	11267	0.044	7.49	2 TNX
18.089	5616	24	0.004	0.01	
18.306	181	28	0.154	0.01	
18.499	117	21	0.180	0.01	
18.703	240	24	0.100	0.01	
19.223	263479	19000	0.072	12.64	3 DNX
19.726	55	23	0.420	0.01	
19.909	245	62	0.253	0.04	
20.139	657	60	0.091	0.03	
20.529	45178	5207	0.115	3.46	4 HMX
20.959	442	37	0.084	0.02	
21.206	264	16	0.061	0.01	
21.463	551	25	0.045	0.01	
21.533	143	23	0.160	0.01	
21.969	238182	22683	0.095	15.28	5 MNX
22.696	2155	122	0.057	0.08	
23.019	2790	166	0.060	0.11	
23.499	7005	305	0.044	0.20	
23.743	56086	5512	0.098	3.66	7 RDX
24.629	7094	187	0.026	0.12	
25.009	5273	221	0.042	0.14	
25.676	122501	11143	0.091	7.41	10 1,3,5-Trinitrobenze
26.226	9337	454	0.049	0.30	
26.543	23072	1194	0.052	0.79	

RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
27.393	23788	1423	0.060	0.94		
28.413	126806	11269	0.089	7.49		13 1,3-Dinitrobenzene
29.553	89033	7161	0.080	4.76		15 3,5-Dinitroaniline
30.029	66027	5036	0.076	3.35		17 Nitrobenzene
30.353	71722	5156	0.072	3.43		16 TETRYL
31.599	67475	4730	0.070	3.14		19 2,4,6-Trinitrotolue
32.589	72035	4742	0.066	3.15		20 4-AM-2,6-DNT
32.949	128120	8437	0.066	5.61	$	1 3,4-Dinitrotoluene
33.286	84229	5378	0.064	3.57		21 2-AM-4,6-DNT
34.549	57792	3665	0.063	2.43		22 2,6-Dinitrotoluene
34.939	108795	6103	0.056	4.06		23 2,4-Dinitrotoluene
37.883	53431	2659	0.050	1.76		24 2-Nitrotoluene
39.133	68407	3206	0.047	2.13		25 4-Nitrotoluene
40.663	72294	3151	0.044	2.09		26 3-Nitrotoluene
41.426	4255	197	0.046	0.13		
42.076	5095	180	0.035	0.11		
	2145691	150297		100.000		

Total unknown % height = 3.090

Data File: \\terastation\share\GCdata\LC11.I\02012012.B\M-000016.d

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

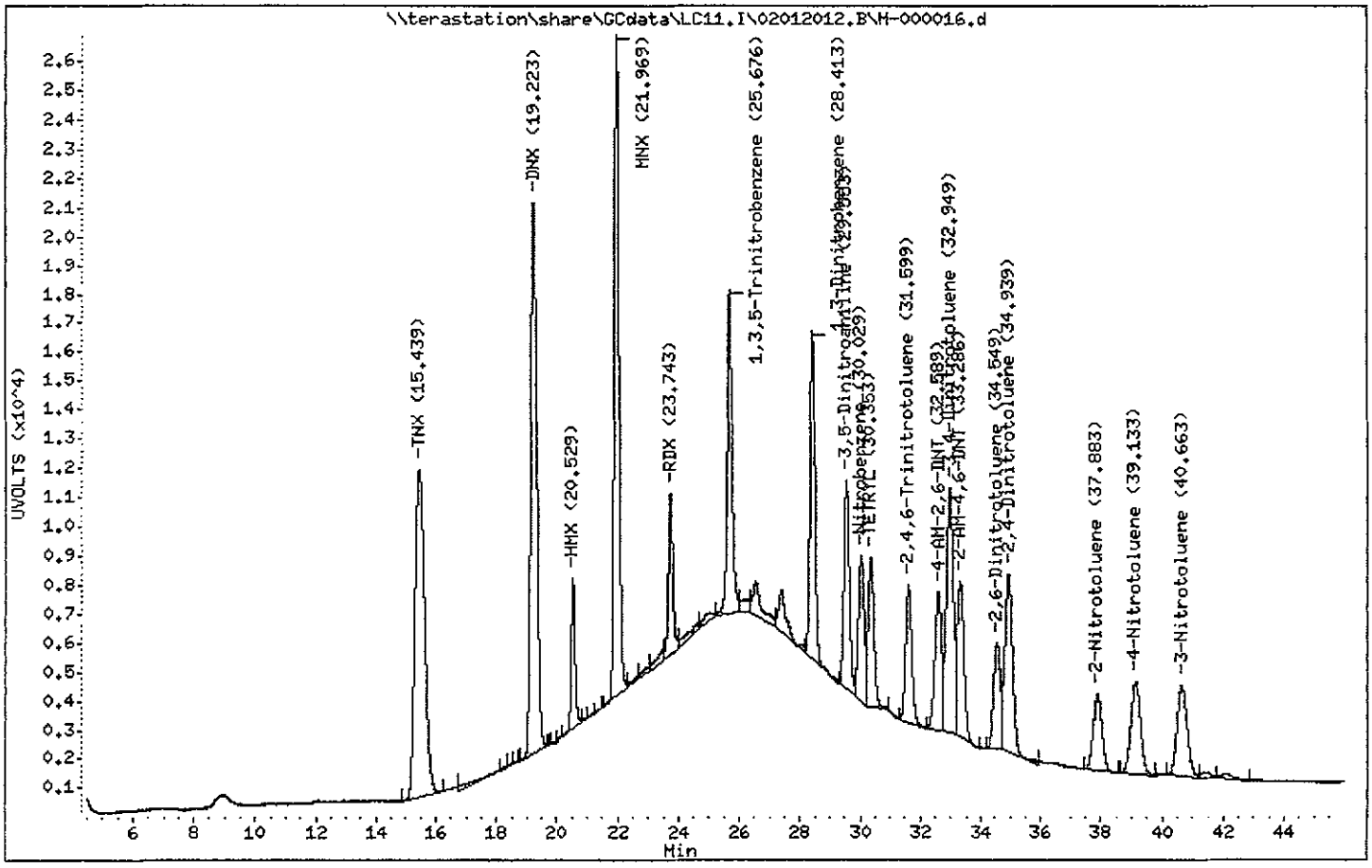
Sample Info: MQAVV1AX 2024017 A190474-4D;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



RE-INTEGRATION CODES

1 Poor Peak Shape
2 Poor Peak Resolution
3 Peak Not Integrated
4 Sample Matrix Interference
5 "Peak Not Labeled"
6 Baseline Correction
7 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED, DATED AND CODED

RM 2/17/12

TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D\M-000016
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX26-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCdata\LC11.I\02012012.B\8330METAB.M\83302.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 26-JAN-2012 22:47 Cal File: M-000011.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
24.389	166	34	0.205	0.02	
25.679	1848	175	0.095	0.13	
26.199	184	41	0.223	0.03	
28.413	61795	5667	0.092	4.47	
28.776	3834	265	0.069	0.20	
29.553	83341	7058	0.085	5.57	
30.029	91657	7447	0.081	5.88	
30.346	87318	6808	0.078	5.38	
30.863	288024	21886	0.076	17.41	18 Nitroglycerin
31.603	69797	4999	0.072	3.95	
32.173	489	122	0.250	0.09	
32.589	112798	7212	0.064	5.70	
32.949	259224	16617	0.064	13.13	$ 1 3,4-Dinitrotoluene
33.279	86096	5786	0.067	4.57	
34.546	112246	6723	0.060	5.31	
34.936	93911	5321	0.057	4.20	
36.583	1575	134	0.085	0.10	
37.889	132422	6546	0.049	5.17	
39.133	111521	4924	0.044	3.89	
40.103	4890	321	0.066	0.25	
40.663	137586	6190	0.045	4.89	
41.383	301619	12183	0.040	9.63	27 PETN
45.326	629	49	0.078	0.03	
	2042969	126508		100.000	

Total unknown % height = 59.83

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D\M-000016.D

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

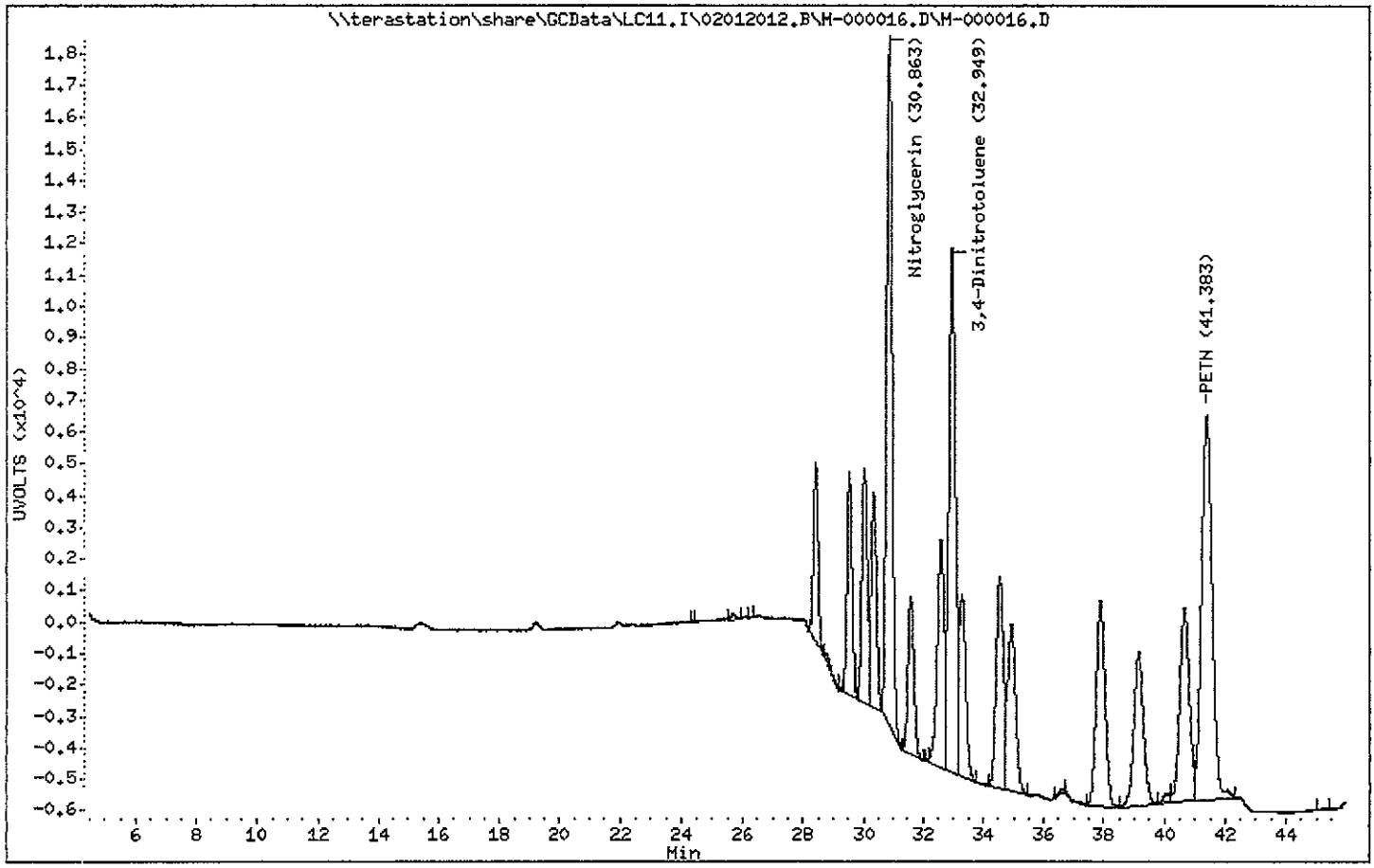
Sample Info: MQAVV1AX 2024017 A190474-4D:3:

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



TestAmerica

Method 8330

Data file : \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D
Lab Smp Id: MQAVV1AX 2024017 A1
Inj Date : 01-FEB-2012 23:48
Operator : rn Inst ID: LC11.i
Smp Info : MQAVV1AX 2024017 A190474-4D;3;
Misc Info : MSD;;985.59;;20;1;WATERMET.sub;WATERMETQSM.spk;1;;;;MQAVV1AX30-J
Comment : SOP WS-LC-0009
Method : \\terastation\share\GCData\LC11.I\02012012.B\8330METAB.m
Meth Date : 01-Feb-2012 22:46 tap Quant Type: AREA%
Cal Date : 30-JAN-2012 21:34 Cal File: M-000009.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: WATERMET.sub
Target Version: 4.14
Processing Host: SACPLC11A

Concentration Formula: Amt * DF * Uf*Vt / Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	20.000	Volume of final extract (mL)
Vo	985.590	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% HEIGHT	COMPOUNDS
15.439	255725	11267	0.044	5.92	2 TNX
18.089	5616	24	0.004	0.01	
18.306	181	28	0.154	0.01	
18.499	117	21	0.180	0.01	
18.703	240	24	0.100	0.01	
19.223	263479	19000	0.072	9.98	3 DNX
19.726	55	23	0.420	0.01	
19.909	245	62	0.253	0.03	
20.139	1896	219	0.116	0.11	
20.529	61685	5643	0.091	2.96	4 HMX
20.959	8060	769	0.095	0.40	
21.206	10157	882	0.087	0.46	
21.463	15089	1055	0.070	0.55	
21.533	4553	1100	0.242	0.57	
21.969	304823	24115	0.079	12.86	5 MNX
22.696	42360	2057	0.049	1.08	
23.019	41274	2323	0.056	1.22	
23.499	76349	2792	0.037	1.46	
23.743	135658	8170	0.060	4.29	7 RDX
24.629	126123	3631	0.029	1.90	
25.009	124975	3938	0.032	2.07	
25.676	311411	14984	0.048	7.87	10 1,3,5-Trinitrobenze
26.226	91683	4267	0.047	2.24	
26.543	198077	4878	0.025	2.56	

See reintegration.

RDM 2/7/12

RT	AREA	HEIGHT	HT/AREA	% HEIGHT		COMPOUNDS
27.393	187467	4489	0.024	2.36		
28.413	238183	13286	0.056	6.98		13 1,3-Dinitrobenzene
29.553	115868	8009	0.069	4.21		15 3,5-Dinitroaniline
30.029	74329	5395	0.073	2.83		17 Nitrobenzene
30.353	75737	5307	0.070	2.79		16 TETRYL
31.599	67475	4730	0.070	2.48		19 2,4,6-Trinitrotolue
32.589	72035	4742	0.066	2.49		20 4-AM-2,6-DNT
32.949	128120	8437	0.066	4.43	$	1 3,4-Dinitrotoluene
33.286	84229	5378	0.064	2.82		21 2-AM-4,6-DNT
34.549	57792	3665	0.063	1.92		22 2,6-Dinitrotoluene
34.939	108795	6103	0.056	3.20		23 2,4-Dinitrotoluene
37.883	53431	2659	0.050	1.39		24 2-Nitrotoluene
39.133	68407	3206	0.047	1.68		25 4-Nitrotoluene
40.663	72294	3151	0.044	1.65		26 3-Nitrotoluene
41.426	4255	197	0.046	0.10		
42.076	5095	180	0.035	0.09		
	3493343	190206		100.000		

Total unknown % height = 17.25

Data File: \\terastation\share\GCData\LC11.I\02012012.B\M-000016.D

Date : 01-FEB-2012 23:48

Client ID:

Instrument: LC11.i

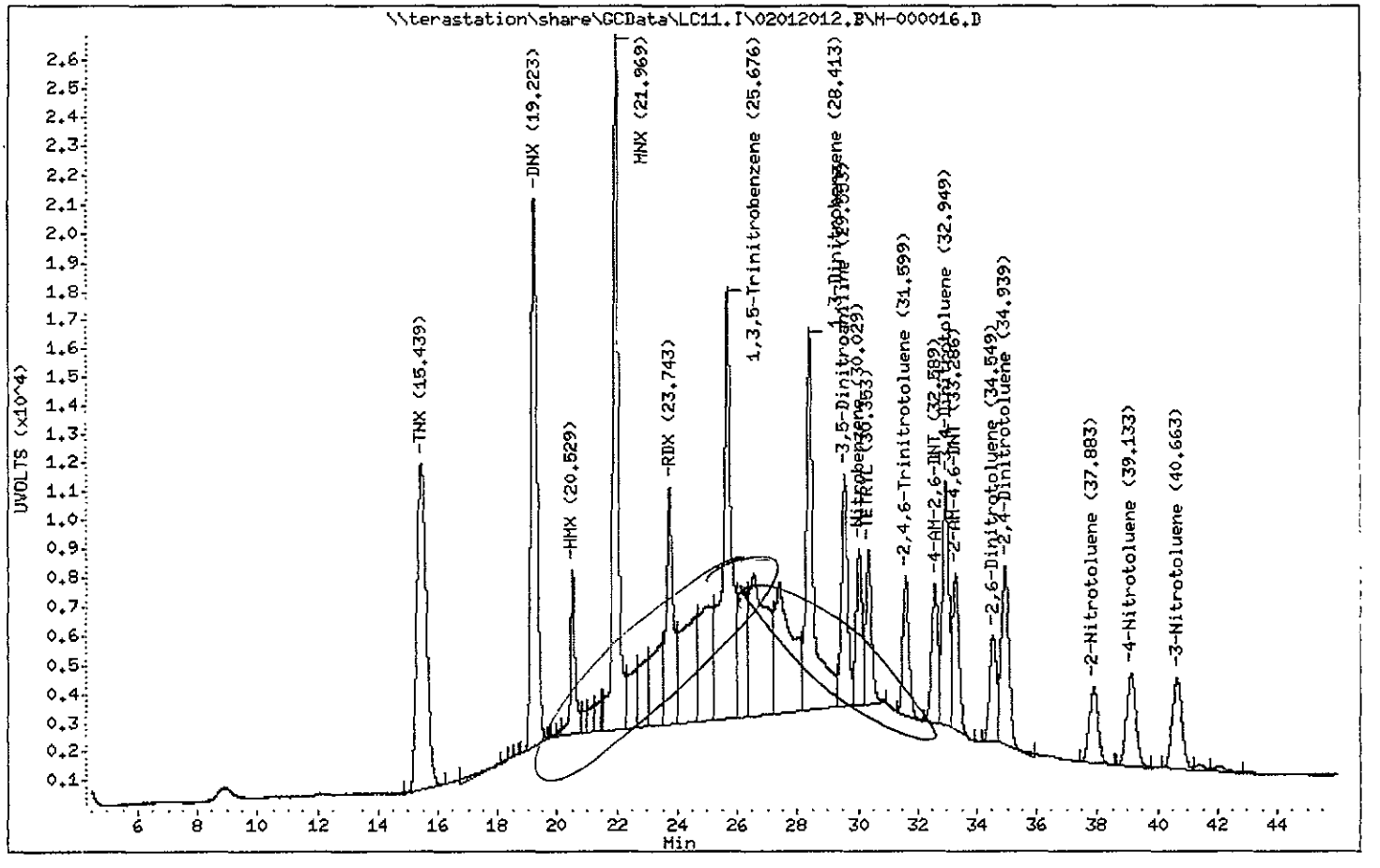
Sample Info: MQAVV1AX 2024017 A190474-4D;3;

Volume Injected (uL): 500.0

Operator: rn

Column phase: SYNERGI HYDRORP C18

Column diameter: 4.60



See reintegration.

2/7/12

Run Log

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 47

Inst ID: LC11 Batch ID: 01262012C

Test: SOP WS-LC-0009

Method: Method 8330

ICAL Date: See Calibration Report

Eluents: Water: M0102 2012

ACN: K415/5

50:50 H2O:MeOH+0.4% H3PO4 4457-25A

MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	13:11	SV	1	PRIMER	M-000001	--	--	--	
26-JAN-2012	14:11	SV	1	PRIMER	M-000002	--	--	--	
26-JAN-2012	15:09	SV	81	BLANK	M-000003	--	--	--	
26-JAN-2012	16:06	SV	11	STD_01 12GCSV0104 8330 5 ng/mL	M-000004	--	--	--	
26-JAN-2012	17:03	SV	12	STD_02 12GCSV0095 8330 10 ng/m	M-000005	--	--	--	
26-JAN-2012	18:00	SV	13	STD_03 12GCSV0096 8330 20 ng/m	M-000006	--	--	--	
26-JAN-2012	18:58	SV	14	STD_04 12GCSV0097 8330 50 ng/m	M-000007	--	--	--	
26-JAN-2012	19:55	SV	15	STD_05 12GCSV0099 8330 100 ng/	M-000008	--	--	--	
26-JAN-2012	20:52	SV	16	STD_06 12GCSV0100 8330 200 ng/	M-000009	--	--	--	
26-JAN-2012	21:49	SV	17	STD_07 12GCSV0101 8330 500 ng/	M-000010	--	--	--	
26-JAN-2012	22:47	SV	18	STD_08 12GCSV0102 8330 1000 ng	M-000011	--	--	--	
26-JAN-2012	23:44	SV	81	BLANK	M-000012	--	--	--	
27-JAN-2012	00:41	SV	21	STD_MRL 11GCSV0468 8330 5-50 n	M-000013	--	--	--	
27-JAN-2012	01:38	SV	22	STD_ICV 11GCSV0515 8330 200 ng	M-000014	--	--	--	
27-JAN-2012	02:35	SV	2	STD_05 11GCSV0384 8330 100ng/m	M-000015	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: TRD 2/1/30/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 48

Inst ID: LC11 Batch ID: 01302012C
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M01022012
ACN: K418/5
50:50 H2O:MeOH+0.4% H3PO4 4457-2314
MeOH : K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
30-JAN-2012	13:56	SV	1	PRIMER	M-000001	--	--	--	
30-JAN-2012	14:55	SV	1	PRIMER	M-000002	--	--	--	
30-JAN-2012	15:52	SV	81	Blank	M-000003	--	--	--	
30-JAN-2012	16:49	SV	11	STD_03 E110811F METAB ICAL	M-000004	--	--	--	
30-JAN-2012	17:46	SV	12	STD_04 E110811G METAB ICAL	M-000005	--	--	--	
30-JAN-2012	18:43	SV	13	STD_05 E110811H METAB ICAL	M-000006	--	--	--	
30-JAN-2012	19:40	SV	14	STD_06 E110811I METAB ICAL	M-000007	--	--	--	
30-JAN-2012	20:37	SV	15	STD_07 E110811J METAB ICAL	M-000008	--	--	--	
30-JAN-2012	21:34	SV	16	STD_08 E110811K METAB ICAL	M-000009	--	--	--	
30-JAN-2012	22:31	SV	81	Blank	M-000010	--	--	--	
30-JAN-2012	23:28	SV	17	ICV E110811E METAB	M-000011	--	--	--	
31-JAN-2012	00:25	SV	18	MRL E110811F METAB	M-000012	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 1/31/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 49

Inst ID: LC11 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M01022012
ACN: K41815
50:50 H2O:MeOH+0.4% H3PO4 4457-25A
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	09:24	rn	1	PRIMER	M-000001	--	--	--	
01-FEB-2012	10:27	rn	1	PRIMER	M-000002	--	--	--	
01-FEB-2012	11:25	rn	2	STD_06 E110811I METAB 200ng/mL	M-000003	--	--	--	
01-FEB-2012	12:22	rn	3	STD_06 12GCSV0100 200ng/mL	M-000004	--	--	--	
01-FEB-2012	13:19	rn	41	Metab 8330 L LOD MB	M-000005	1000 mL	20 mL	1	
01-FEB-2012	14:17	rn	42	Metab 8330 L LOD	M-000006	1000 mL	20 mL	1	
01-FEB-2012	15:14	rn	11	MQDFC1AA 2024017 MB	M-000007	1000 mL	20 mL	1	
01-FEB-2012	16:11	rn	12	MQDFC1AC 2024017 LCS	M-000008	1000 mL	20 mL	1	
01-FEB-2012	17:08	rn	13	MQAVQ1AK 2024017 A190474-1	M-000009	984.22 mL	20 mL	1	
01-FEB-2012	18:05	rn	14	MQAVR1AK 2024017 A190474-2	M-000010	985.64 mL	20 mL	1	
01-FEB-2012	19:02	rn	15	MQAVT1AK 2024017 A190474-3	M-000011	967.93 mL	20 mL	1	
01-FEB-2012	19:59	rn	16	MQAVV1AK 2024017 A190474-4	M-000012	980.52 mL	20 mL	1	
01-FEB-2012	20:57	rn	4	STD_05 E110811H METAB100 ng/mL	M-000013	--	--	--	
01-FEB-2012	21:54	rn	5	STD_05 12GCSV0099 100ng/mL	M-000014	--	--	--	
01-FEB-2012	22:51	rn	17	MQAVV1AW 2024017 A190474-4S	M-000015	989.06 mL	20 mL	1	
01-FEB-2012	23:48	rn	18	MQAVV1AX 2024017 A190474-4D	M-000016	985.59 mL	20 mL	1	
02-FEB-2012	00:46	rn	19	MQAVW1AK 2024017 A190474-5	M-000017	982.01 mL	20 mL	1	
02-FEB-2012	01:43	rn	20	MQCM31AK 2024017 A200474-1	M-000018	978.66 mL	20 mL	1	
02-FEB-2012	02:40	rn	21	MQCM41AK 2024017 A200474-2	M-000019	986.02 mL	20 mL	1	
02-FEB-2012	03:37	rn	22	MQCM51AK 2024017 A200474-3	M-000020	986.89 mL	20 mL	1	
02-FEB-2012	04:34	rn	23	MQCM61AK 2024017 A200474-4	M-000021	977.49 mL	20 mL	1	
02-FEB-2012	05:31	rn	24	MQCM71AK 2024017 A200474-5	M-000022	974.29 mL	20 mL	1	
02-FEB-2012	06:29	rn	4	STD_05 E110811H METAB100 ng/mL	M-000023	--	--	--	
02-FEB-2012	07:26	rn	5	STD_05 12GCSV0099 100ng/mL	M-000024	--	--	--	
02-FEB-2012	08:23	rn	25	MQCM81AK 2024017 A200474-6	M-000025	935.08 mL	20 mL	1	
02-FEB-2012	09:20	rn	26	MQGF81AA 2030024 MB	M-000026	1000 mL	20 mL	1	
02-FEB-2012	10:17	rn	27	MQGF81AC 2030024 LCS	M-000027	1000 mL	20 mL	1	
02-FEB-2012	11:15	rn	28	MQE6Q1AC 2030024 A260438-1	M-000028	997.47 mL	20 mL	1	
02-FEB-2012	12:12	rn	29	MQE6V1AC 2030024 A260438-2	M-000029	965.89 mL	20 mL	1	
02-FEB-2012	13:09	rn	30	MQE6W1AC 2030024 A260438-3	M-000030	982.09 mL	20 mL	1	
02-FEB-2012	14:06	rn	31	MQE6X1AE 2030024 A260438-4	M-000031	985.41 mL	20 mL	1	
02-FEB-2012	15:04	rn	32	MQE6X1AF 2030024 A260438-4S	M-000032	991.48 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 50

Inst ID: LC11 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
02-FEB-2012	16:01	rn	6	STD 05 E110811H METAB100 ng/mL	M-000033	--	--	--	
02-FEB-2012	16:59	rn	7	STD 05 12GCSV0099 100ng/mL	M-000034	--	--	--	
02-FEB-2012	17:56	rn	33	MQE6X1AG 2030024 A260438-4D	M-000035	978.87 mL	20 mL	1	
02-FEB-2012	18:53	rn	34	MQE601AA 2030024 A260438-5	M-000036	962.01 mL	20 mL	1	
02-FEB-2012	19:50	rn	35	MQE611AC 2030024 A260438-6	M-000037	978.41 mL	20 mL	1	
02-FEB-2012	20:47	rn	36	MQE621AC 2030024 A260438-7	M-000038	997.06 mL	20 mL	1	
02-FEB-2012	21:44	rn	6	STD 05 E110811H METAB100 ng/mL	M-000039	--	--	--	
02-FEB-2012	22:41	rn	7	STD 05 12GCSV0099 100ng/mL	M-000040	--	--	--	
02-FEB-2012	23:38	rn	41	QC CHECK E120201A	M-000041	1000 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: 2-3-12

TestAmerica West Sacramento GC/LC INSTRUMENT LOG Page# 10

Inst ID: LC12 Batch ID: 01262012C Eluents: Water: 1457-23C
Test: SOP WS-LC-0009 ACN: K14815
Method: Method 8330 MeOH: K04E22
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
26-JAN-2012	16:43	SV	81	BLANK	C-000001	--	--	--	
26-JAN-2012	17:51	SV	11	STD_01 12GCSV0104 8330 5ng/mL	C-000002	--	--	--	
26-JAN-2012	18:56	SV	12	STD_02 12GCSV0095 8330 10ng/mL	C-000003	--	--	--	
26-JAN-2012	20:02	SV	13	STD_03 12GCSV0096 8330 20ng/mL	C-000004	--	--	--	
26-JAN-2012	21:08	SV	14	STD_04 12GCSV0097 8330 50ng/mL	C-000005	--	--	--	
26-JAN-2012	22:13	SV	15	STD_05 12GCSV0099 8330 100ng/m	C-000006	--	--	--	
26-JAN-2012	23:19	SV	16	STD_06 12GCSV0100 8330 200ng/m	C-000007	--	--	--	
27-JAN-2012	00:24	SV	17	STD_07 12GCSV0101 8330 500ng/m	C-000008	--	--	--	
27-JAN-2012	01:30	SV	18	STD_08 12GCSV0102 8330 1000ng/	C-000009	--	--	--	
27-JAN-2012	02:35	SV	81	BLANK	C-000010	--	--	--	
27-JAN-2012	03:41	SV	19	STD_MRL 11GCSV0468 8330 5-50ng	C-000011	--	--	--	
27-JAN-2012	04:46	SV	20	STD_ICV 11GCSV0515 8330 200ng/	C-000012	--	--	--	

GC-LC Log 2011-12-14 ERS Sequence Checked: 1/27/12

TestAmerica West Sacramento

GC/LC INSTRUMENT LOG

Page# 15

Inst ID: LC12 Batch ID: 02012012
Test: SOP WS-LC-0009
Method: Method 8330
ICAL Date: See Calibration Report

Eluents: Water: M0125 2012
ACN: K19815
MeOH: K04E22

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
01-FEB-2012	14:24	RN	1	PRIMER	C-000001	--	--	--	
01-FEB-2012	15:32	RN	1	PRIMER	C-000002	--	--	--	
01-FEB-2012	16:37	RN	10	BLANK	C-000003	--	--	--	
01-FEB-2012	17:43	RN	11	STD_03 E110811F 20ng/mL	C-000004	--	--	--	
01-FEB-2012	18:48	RN	12	STD_04 E110811G 50ng/mL	C-000005	--	--	--	
01-FEB-2012	19:54	RN	13	STD_05 E110811H 100ng/mL	C-000006	--	--	--	
01-FEB-2012	20:59	RN	14	STD_06 E110811I 200ng/mL	C-000007	--	--	--	
01-FEB-2012	22:04	RN	15	STD_07 E110811J 500ng/mL	C-000008	--	--	--	
01-FEB-2012	23:10	RN	16	STD_08 E110811K 1000ng/mL	C-000009	--	--	--	
02-FEB-2012	00:15	RN	10	BLANK	C-000010	--	--	--	
02-FEB-2012	01:21	RN	11	STD_03 E110811F 20ng/mL	C-000011	--	--	--	
02-FEB-2012	02:26	RN	17	STD_06 E110811D ICV 200ng/mL	C-000012	--	--	--	
02-FEB-2012	03:32	RN	2	STD_06 12GCSV0100 8330 200ng/m	C-000013	--	--	--	
02-FEB-2012	04:37	RN	41	METAB 830 L LOD MB	C-000014	1000 mL	20 mL	1	
02-FEB-2012	05:43	RN	42	METAB 830 L LOD B	C-000015	1000 mL	20 mL	1	
02-FEB-2012	06:48	RN	21	MQDFC1AA 2024017 MB	C-000016	1000 mL	20 mL	1	
02-FEB-2012	07:53	RN	22	MQAVQ1AK 2024017 A190474-1	C-000017	984.22 mL	20 mL	1	
02-FEB-2012	08:59	RN	23	MQAVR1AK 2024017 A190474-2	C-000018	985.64 mL	20 mL	1	
02-FEB-2012	10:04	RN	24	MQAVT1AK 2024017 A190474-3	C-000019	967.93 mL	20 mL	1	
02-FEB-2012	11:10	RN	27	MQCM31AK 2024017 A200474-1	C-000020	978.66 mL	20 mL	1	
02-FEB-2012	12:15	RN	4	STD_05 E110811H 100ng/mL	C-000021	--	--	--	
02-FEB-2012	13:21	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000022	--	--	--	
02-FEB-2012	14:26	RN	28	MQCM41AK 2024017 A200474-2	C-000023	986.02 mL	20 mL	1	MQCM42AK
02-FEB-2012	15:32	RN	29	MQCM51AK 2024017 A200474-3 2/9/12	C-000024	986.89 mL	20 mL	1	MQCM52AK
02-FEB-2012	16:37	RN	30	MQCM61AK 2024017 A200474-4	C-000025	977.49 mL	20 mL	1	MQCM62AK
02-FEB-2012	17:43	RN	31	MQCM71AK 2024017 A200474-5	C-000026	974.29 mL	20 mL	1	MQCM72AK
02-FEB-2012	18:48	RN	32	MQCM81AK 2024017 A200474-6	C-000027	935.08 mL	20 mL	1	MQCM82AK
02-FEB-2012	19:54	RN	33	MQGF81AA 2030024 MB	C-000028	1000 mL	20 mL	1	
02-FEB-2012	20:59	RN	4	STD_05 E110811H 100ng/mL	C-000029	--	--	--	
02-FEB-2012	22:04	RN	3	STD_05 12GCSV099 8330 100ng/mL	C-000030	--	--	--	
02-FEB-2012	23:10	RN	34	MQE6Q1AC 2030024 A260438-1	C-000031	997.47 mL	20 mL	1	
03-FEB-2012	00:15	RN	35	MQE6V1AC 2030024 A260438-2	C-000032	965.89 mL	20 mL	1	

GC-LC Log 2011-12-14 ERS

Sequence Checked: ECJ 2/3/12

TestAmerica West Sacramento
GC/LC INSTRUMENT LOG

Page# 16

Inst ID: LC12 Batch ID: 02012012 Test: SOP WS-LC-0009
Method : Method 8330
ICAL Date: See Calibration Report

Date	Time	Init	ALS #	Sample ID	File ID	Vol or Wt	Extract Vol	Diln	Comments
03-FEB-2012	01:20	RN	36	MQE6W1AC 2030024 A260438-3	C-000033	982.09 mL	20 mL	1	
03-FEB-2012	02:26	RN	37	MQE6X1AE 2030024 A260438-4	C-000034	985.41 mL	20 mL	1	
03-FEB-2012	03:31	RN	38	MQE601AA 2030024 A260438-5	C-000035	962.01 mL	20 mL	1	
03-FEB-2012	04:37	RN	39	MQE611AC 2030024 A260438-6	C-000036	978.41 mL	20 mL	1	
03-FEB-2012	05:42	RN	40	MQE621AC 2030024 A260438-7	C-000037	997.06 mL	20 mL	1	
03-FEB-2012	06:48	RN	5	STD_05 E110811H 100ng/mL	C-000038	--	--	--	
03-FEB-2012	07:53	RN	6	STD_05 12GCSV099 8330 100ng/mL	C-000039	--	--	--	

GC-LC Log 2011-12-14 ERS

Sequence Checked: [illegible] 2/3/12

Prep Data

2/9/12

TestAmerica West Sacramento

GC/HPLC Data Review Checklist

Batch: 2024017 **Method ID:** Nitroaromatics & Nitramines: Explosives (8330/A) A8.

NCM: (Y) N G2A200474

A. Calibration/Instrument Run QC	Analyst	Reviewer	N/A
1. ICAL or ICAL Summary and CCV included.	✓	✓	
2. ICAL, CCV criteria met.	✓	✓	
3. Multiple-eluters (TPH-D, 8081A, 8082) ICAL/CCVs appropriate and within criteria		✓	✓
4. CCVs every 10 samples/12 hours, all samples bracketed front and back.	✓	✓	
5. PEM frequency and criteria met.			✓
6. Peaks correctly ID'd by data system.	✓	✓	
7. Method Number is identified on data.	✓	✓	
B. QA/QC			
1. Method blank, LCS/LCSD and MS/SD frequencies met.	✓	✓	
2. LCS/LCSD and MB data is included.	✓	✓	
3. LCS/LCSD and MB data are within control limits. If not, NCM is present in Clouseau.	✓	✓	
4. MS/MSD data complete.	✓	✓	
5. Holding Times were met.	✓	✓	
C. Sample Analysis			
1. Logbook copies for all injections made, including ICV standards and ICAL.	✓	✓	
2. Logbooks/prep sheets properly filled out.	✓	✓	
3. Manual Integrations reviewed and appropriate.	✓	✓	
4. All raw data for samples is included (applies to unused data as well)	✓	✓	
5. All analytes correctly reported.	✓	✓	
6. Correct reporting limits used. (based on client request, prep factors, and dilutions)	✓	✓	
D. Documentation			
1. Are all nonconformances documented appropriately?	✓	✓	
2. Quantims entry correct, including dates and times.	✓	✓	
3. Appropriate footnotes used.	✓	✓	
4. Report sheets included and error-free.	✓	✓	

Analyst: Robyn Thoomer Date: 2/9/12

2nd Level Reviewer: J. DeMott Date: 2/9/12

Comments:

q:\forms\qa-507_gc_review.doc

QA-508 GC Review
3/4/02 ERS

TestAmerica West Sacramento
Energetic Prep Log
8330 Aqueous

Box # JM

Shared QC Batch: NA

Shares QC With Lots(s): NA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Internal COC:	
Delivered to Inst.:	TP 1/25/12
Inst Receipt:	SN 4/25/12

Batch: 2024017

MS Run #: 2024007

Prep Date: 1/24/2012

Method: A0 8330/8330A

Matrix: I WATER

Prep Reagents		
Reagent	Supplier	Date/Lot #
0.1% HOAc/ACN	NA	3844-095A
Millipore Water Dispense Date		1/13/12
SPE Catridge:	Waters	003631222A
0.45 Filter	Millipore	RIJA91854

SAC: A0 - I - 20 - D4

WS-LC-0009

Extraction Table

Sample ID	Suff	Work Order	Extraction Hold Time Expires	Sample size 1000mL nom.	Final Volume 20mL	Final Volume Other	Analysis Hold Time Expires
G2A190474 - 1		MQAVQ1AK	1/24/2012	984.22	20mL		3/4/2012
G2A190474 - 2		MQAVR1AK	1/24/2012	985.64	20mL		3/4/2012
G2A190474 - 3		MQAVT1AK	1/25/2012	967.93	20mL		3/4/2012
G2A190474 - 4		MQAVV1AK	1/25/2012	980.52	20mL		3/4/2012
G2A190474 - 4	S	MQAVV1AW	1/25/2012	989.06	20mL		3/4/2012
G2A190474 - 4	D	MQAVV1AX	1/25/2012	985.59	20mL		3/4/2012
G2A190474 - 5		MQAVW1AK	1/25/2012	982.01	20mL		3/4/2012
G2A200474 - 1		MQCM31AK	1/26/2012	978.66	20mL		3/4/2012
G2A200474 - 2		MQCM41AK	1/26/2012	986.02	20mL	1/25/12	3/4/2012
G2A200474 - 3		MQCM51AK	1/26/2012	986.89	20mL		3/4/2012
G2A200474 - 4		MQCM61AK	1/26/2012	977.49	20mL		3/4/2012
G2A200474 - 5		MQCM71AK	1/26/2012	974.29	20mL		3/4/2012
G2A200474 - 6		MQCM81AK	1/26/2012	935.08	20mL		3/4/2012
G2A240000 - 17	B	MQDFC1AA	1/24/2012	1000.00	20mL		3/4/2012
G2A240000 - 17	C	MQDFC1AC	1/24/2012	1000.00	20mL		3/4/2012

Sample volumes recorded from balance are on

Comments/NCMs:

	ID	Spike Exp Date:	Spiked By:	Witnessed By:	Date:
Surrogate Spike (All Samples)	50uL 11GCSV0536	4/19/12	TP	GMS	1/24/12
Spike Mix LCS/LCSD/MS/MSD	20uL 11GCSV0346	2/8/12	TP	GMS	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0509	5/8/12	TP	GMS	1/24/12
Spike Mix LCS/LCSD/MS/MSD	100uL 11GCSV0541	4/10/12	TP	GMS	1/24/12
Spike Mix LCS/LCSD/MS/MSD	80uL E110802B	2/2/12	TP	GMS	1/24/12

Extracted Analyst/Date	TP 1/24/12	Clean Up Analyst/Dat	TP 1/25/12	Dilution Analyst/Date	TP 1/25/12
Final Volume Analyst/Date	TP 1/25/12	Review Analyst/Date	1/25/12		

TestAmerica

West Sacramento

Weight Difference Worksheet

Batch Id: 120124T

Created Date: 1/24/12 6:30:56 AM

Test Date: 1/24/12

Group Comments:

ANALYST: TP

TEST: 8330

BALANCE ID: QA-036

QuantIMS Batch: 2024017

Sample ID:	Initial Weight (g)	Weight after rinse (g)	Weight Diff (g)	Comments:
G2A190474-1	1484.50	500.28	984.22	
G2A190474-2	1487.30	501.66	985.64	
G2A190474-3	1470.20	502.27	967.93	
G2A190474-4	1480.50	499.98	980.52	
G2A190474-4S	1488.40	499.34	989.06	
G2A190474-4D	1486.20	500.61	985.59	
G2A190474-5	1480.90	498.89	982.01	
G2A200474-1	1480.70	502.04	978.66	
G2A200474-2	1488.00	501.98	986.02	
G2A200474-3	1486.80	499.91	986.89	
G2A200474-4	1478.10	500.61	977.49	
G2A200474-5	1473.70	499.41	974.29	
G2A200474-6	1434.60	499.52	935.08	

Water Weight Different Worksheet, Revised 12/31/2008 ERS Printed Tuesday, January 24, 2012 11:52:58 AM

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

LEV 1	LEV 2		LEV 1	LEV 2	
_	_	Blank	_	_	Weights/Volumes
_	_	Check	_	_	Spike & Surrogate Worksheet
_	_	MS/MSD	_	_	Vial contains correct volume
			_	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

Reviewer/Date: PHANT / 1/24/12

Nitroaromatics & Nitramines: Explosives (8330/A)
EXTRACTION, SOLID PHASE

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/24/12	2/08/12	G2A190474-001 **MQAVQ-1-AK**	D	20	A0	WATER	**984.22mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	2/08/12	G2A190474-002 **MQAVR-1-AK**	D	20	A0	WATER	**985.64mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-003 **MQAVT-1-AK**	D	20	A0	WATER	**967.93mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AK**	D	20	A0	WATER	**980.52mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AWS**	D	20	A0	WATER	**989.06mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-004 **MQAVV-1-AXD**	D	20	A0	WATER	**985.59mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															
1/25/12	2/08/12	G2A190474-005 **MQAVW-1-AK**	D	20	A0	WATER	**982.01mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJI	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/26/12	2/09/12	G2A200474-001 **MQCM3-1-AK**	D	20	A0	WATER	**978.66mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-001 **MQCM3-2-AK**	D	20	A0	WATER	**978.66mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-002 **MQCM4-1-AK**	D	20	A0	WATER	**986.02mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-002 **MQCM4-2-AK**	D	20	A0	WATER	**986.02mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-003 **MQCM5-1-AK**	D	20	A0	WATER	**986.89mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-003 **MQCM5-2-AK**	D	20	A0	WATER	**986.89mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-004 **MQCM6-1-AK**	D	20	A0	WATER	**977.49mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-004 **MQCM6-2-AK**	D	20	A0	WATER	**977.49mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-005 **MQCM7-1-AK**	D	20	A0	WATER	**974.29mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-005 **MQCM7-2-AK**	D	20	A0	WATER	**974.29mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 2/09/12
Time: 11:03:51

QC BATCH: 2024017

PREP DATE: 1/24/12 7:00
COMP DATE: 1/25/12 9:00

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
1/26/12	2/09/12	G2A200474-006 **MQCM8-1-AK**	D	20	A0	WATER	**935.08mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/26/12	2/09/12	G2A200474-006 **MQCM8-2-AK**	D	20	A0	WATER	**935.08mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 **MQDFC-1-AAB**		20	A0	WATER	**1000.00mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	50UL-11GCSV0536
COMMENTS:															
1/24/12	0/00/00	G2A240000-017 **MQDFC-1-ACC**		20	A0	WATER	**1000.00mL** 20.00mL	NA	NA	NA	HOAC/ACN	4.5	HOAC/ACN	5.0	SEE BENCH SHEET COMMENT 50UL-11GCSV0536
COMMENTS:															

LCS 20UL-11GCSV0346,100UL-11GCSV0509,100UL-11GCSV0541,80UL-E110802B

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD
‡

NUMBER OF WORK ORDERS IN BATCH: 21

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

West Sacramento

Preparation Data Review Checklist

Prep Batch(es) 2024017 **Test:** 8330-L

Prep Date: 1/24/12 **Holding Times:** 1/24/12 **NCM:** Y (N)

A. Spike Witness/Batch setup	Spike Witness	Reviewer
1. **Holding times checked?** NCMs filed as appropriate	✓	✓
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)	✓	✓
3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.	✓	NA
4. Worksheets have been checked for required spiking compounds	✓	✓
5. Spiking volumes are correctly documented	✓	✓
6. Std ID numbers on spike labels match numbers on bench sheet	✓	NA
7. Expiration dates have been checked	✓	✓
8. Calibration expiration dates on pipettors have been checked	✓	NA
9. Spiker and spike witness have signed and dated bench sheet	✓	✓
B. Weights and Volumes		
1. Recorded weights are in anticipated range	NA	✓
2. Balance upload or raw data for weights is included	NA	✓
3. Weights and volumes have been transcribed correctly to LIMS.	NA	✓
4. Weights are not targeted to meet exact weights.	NA	✓
5. Each weight or volume measurement is a unique record (no dittos or line downs)	NA	✓
C. Standards and Reagents		
1. Lot numbers for all reagents, including clean up stages, are recorded.	NA	✓
2. Are dates and analysts for cleanups recorded?	NA	✓
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	✓
D. Documentation		
1. Are all nonconformances documented appropriately?	NA	✓
2. QuantIMs entry correct, including dates and times.	NA	✓
3. Are all fields completed?	NA	✓

Spike witness: GB Date: 1-24-12

2nd Level Reviewer: [signature] Date: 1/25/12

Comments:

q:\forms\checklists\qa-588 prep_review.doc *QA-588 Revised 12/30/2008 ERS*

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

LOT RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT WHITEWATER PM LL

LOT# (QUANTIMS ID) G2A200474 QUOTE# 90036 LOCATION

Checked (✓)

DATE RECEIVED 1/20/12 TIME RECEIVED 9:00 ☑

DELIVERED BY ☑ FEDEX ☐ ON TRAC ☐ OTHER

☐ GOLDENSTATE ☐ UPS ☐ EZ PARCEL

☐ TAL COURIER ☐ TAL SF ☐ CLIENT ☑

SHIPPPING CONTAINER(S) ☑ TAL ☐ CLIENT ☐ N/A

MULIT-COOLER(S) (If checked see multi-cooler form) ☑

SINGLE COOLER INFORMATION N/A

CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☐ N/A ☑ ☐

CUSTODY SEAL #(S) _____

COC #(S) _____ ☑ ☐

TEMPERATURE BLANK Observed: _____ Corrected: _____

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: _____ Average _____ Corrected Average _____

LABORATORY THERMOMETER ID:

IR UNIT: #4 ☐ #5 ☐ ☐ OTHER _____ ☑ ☐

	Initials	Date
	CH	1/20/12

==========

pH MEASURED ☑ YES ☐ ANOMALY ☐ N/A ☑

LABELED BY..... CH ☑

LOGGED IN BY..... CH ☑

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING ☑

WETCHEM ☑ N/A ☑

VOA-ENCORES ☑ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☐ N/A ☑

☑ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A ☑

☐ CLOUSEAU ☐ TEMPERATURE EXCEEDED (0 °C – 6 °C)*1 ☑ N/A

☑ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED

	Initials	Date
	CH	1/20/12

Notes _____

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

QA-185 10/09 RKE, Page 1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

MULTI COOLER RECEIPT CHECKLIST
TestAmerica West Sacramento

CLIENT: WHITEWATER LOT# (QUANTIMS ID): G2A200474

Checked (✓)

COOLER ID **AIRBILL/TRACKING #** 874459639584 ☑
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑
CUSTODY SEAL #(S) SEALS ☑
COC #(S) 2745
SHIPPPING CONTAINER(S) ☑ TAL ☐ CLIENT ☐ N/A ☑
TEMPERATURE BLANK: OBSERVED: NA CORRECTED NA ☑
SAMPLE TEMPERATURE:
OBSERVED: 1,2,3 AVERAGE: 2 CORRECTED 2 ☑
SAMPLES / TESTS (IF NCM REQUIRED): ☑
LABORATORY THERMOMETER ID:
IR UNIT: #4☑ #5☐ ☐ OTHER

COOLER ID **AIRBILL/TRACKING #** 795542954265 ☑ Initials CH
CUSTODY SEAL STATUS ☑ INTACT ☐ BROKEN ☐ N/A ☑
CUSTODY SEAL #(S) SEALS ☑
COC #(S) 2745
SHIPPPING CONTAINER(S) ☑ TAL ☐ CLIENT ☐ N/A ☑
TEMPERATURE BLANK: OBSERVED: NA CORRECTED NA ☑
SAMPLE TEMPERATURE:
OBSERVED: 1,2,3 AVERAGE: 2 CORRECTED 2 ☑
SAMPLES / TESTS (IF NCM REQUIRED): ☑
LABORATORY THERMOMETER ID:
IR UNIT: #4☑ #5☐ ☐ OTHER ☑

COOLER ID **AIRBILL/TRACKING #** ☐ Initials CH
CUSTODY SEAL STATUS ☐ INTACT ☐ BROKEN ☐ N/A ☐
CUSTODY SEAL #(S) ☐
COC #(S)
SHIPPPING CONTAINER(S) ☐ TAL ☐ CLIENT ☐ N/A ☐
TEMPERATURE BLANK: OBSERVED: CORRECTED ☐
SAMPLE TEMPERATURE:
OBSERVED: AVERAGE: CORRECTED ☐
SAMPLES / TESTS (IF NCM REQUIRED): ☐
LABORATORY THERMOMETER ID:
IR UNIT: #4☐ #5☐ ☐ OTHER ☐

CH 1/20/12
Initials **Date**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Bottle Lot Inventory

Lot ID: G2A200474

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*																				
VOAh*																				
VOAmeoh																				
AGB	2	2	2	2	2	2														
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
____AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
125AGJmeoh																				
____CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn	1	1	1	1	1	1														
500PJna																				
500PJzn/na																				
250PJ	1	1	1	1	1	1														
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
_____"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
		1	1																	
																				1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 10/09 RKE, Page 2

DO NOT LIFT USING THIS TAG DO NOT LIFT USING THIS TAG

ALIGN FEDEX AIRBILL POUCH HERE

ORIGIN ID: KPDA (810) 491-9688
TETRA TECH NUS INC GOVT
234 MALL BLVD STE 260
KING OF PRUSSIA, PA 194062954
UNITED STATES US

SHIP DATE: 19JAN12
ACTWGT: 47.0 LB MAN
CAD: /POS1242
DIMS: 24x13x14 IN
BILL SENDER

Part # 156257-435 Rev 12/01/11

TO SAMPLE RECEIVING
TEST AMERICA
880 RIVERSIDE PARK WAY

WEST SACRAMENTO CA 95605
(916) 374-4362 REF:
INV:
PO: DEPT:

FedEx Express

2 of 2
MPS# 0681 7955 4295 4265
Mstr# 8744 5963 9684 0215

FRI - 20 JAN A1
PRIORITY OVERNIGHT

XH BLUA

95605
CA-US SMF

4

100

FedEx Express — *US Airbill*

FedEx Tracking Number* 8744 5963 9584

1 From This portion can be removed for Recipient's records.

Date

FedEx Tracking Number 874459639584

Sender's Name

Phone

Company

Address

City

Dept./Floor/Suite/Room

State ZIP

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

2 Your Internal Billing Reference

3 To

Recipient's Name

Phone

Company

Address

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for confirmation of your shipping address.

City

State ZIP

☐ HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8744 5963 9584

4a Express Package Service * To most locations.

Packages up to 150 lbs.

☒ FedEx Priority Overnight — Next business morning.* FedEx Shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

☐ FedEx First Overnight — Earliest next business morning delivery to select locations.*

☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service * To most locations.

Packages over 150 lbs.

☐ FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight Box is required.

☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* — Includes FedEx Small Pak and FedEx Large Pak. ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx Express Saver or FedEx 3Day Freight.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required.

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Dry Ice — Dry Ice, 9, UN 1845 ___ kg

☐ Cargo Aircraft Only

7 Payment *Bill to:*

☐ Sender — Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Enter FedEx Acct. No. or Credit Card No. below

Obtain recip Acct. No. ☐

Total Packages 2 Total Weight 75 lbs.

Credit Card Auth.

605

fedex.com 1.800.GoFedEx 1.800.463.3339

TestAmerica

West Sacramento
Sample Receiving Preservation Check

Lot ID: G2A200474

Instructions: Check or x the container type, then check or x the pH measurement if it meets. Write the actual pH if out.

Container					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
AGBs	AGBh	250AG Bs	500PJn	250PJn	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2	pH≤2
			X		X	X	X	X	X	X														
500PJ na	500PJ zn/na	250PJ na	250PJ zn/na		pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2	pH ≥2

QA-611 Pres Check xls Sheet1

QA-611
Revised 3/24/2010 ERS

G2A200474

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 2745 G2A200474 PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
112603605 CTO WE72	NWS Earle	Jennifer Lambert	610 382 3779	TEST America Linda Lavet
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Donald Whalen		Donald Whalen	610 382 1536	880 Riverside Pkwy
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fed Ex 8744 5963 9584		West Sacramento, CA

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: / / HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	Explosives	Perchlorate	Total Metals					COMMENTS
1/19	0925	02MW13A-20120119				GW	G	4	X	X	X					
	1015	02DUP01-20120119				GW	G	4	X	X	X					
	1030	02SW101-20120119				SW	G	4	X	X	X					
	1110	02SW102-20120119				SW	G	4	X	X	X					
	1230	02FB01-20120119				QC	G	4	X	X	X					Field Blank
	1245	02RB01-20120119				QC	G	4	X	X	X					Rinsate Blank

	DATE	TIME		DATE	TIME
1 RELINQUISHED BY Donald Whalen	1/19/12	1800	1 RECEIVED BY [illegible]	1-20-12	1210
2. RELINQUISHED BY	DATE	TIME	2 RECEIVED BY	DATE	TIME
3 RELINQUISHED BY	DATE	TIME	3 RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO TINUS-001

WATER, 6020,
Total Metals

Performed at TestAmerica Pittsburgh
Report# 180-7794-2

ANALYTICAL REPORT

Job Number: 180-7794-2

Job Description: WhiteWater Metals 6020 DOD

For:
TestAmerica Laboratories, Inc.
880 Riverside Parkway
West Sacramento, CA 95605

Attention: Linda Laver

Approved for release.
Alexandra Cox
Project Manager I
2/7/2012 1:45 PM

Alexandra Cox
Project Manager I
alexandra.cox@testamericainc.com
02/07/2012

"I certify that this Sample Data Package is in compliance with the terms and conditions of the DOD QSM, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature."

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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CASE NARRATIVE

Client: TestAmerica Laboratories, Inc.

Project: WhiteWater Metals 6020 DOD

Report Number: 180-7794-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 01/27/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 C.

METALS (ICPMS)

Samples 02MW13A-20120119 (180-7794-1), 02DUP01-20120119 (180-7794-2), 02SW101-20120119 (180-7794-3), 02SW102-20120119 (180-7794-4), 02FB01-20120119 (180-7794-5) and 02RB01-20120119 (180-7794-6) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/30/2012 and analyzed on 02/05/2012.

Iron was detected in method blank MB 180-27202/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-7794-1	02MW13A-20120119	Water	01/19/2012 0925	01/27/2012 0920
180-7794-2	02DUP01-20120119	Water	01/19/2012 1015	01/27/2012 0920
180-7794-3	02SW101-20120119	Water	01/19/2012 1030	01/27/2012 0920
180-7794-4	02SW102-20120119	Water	01/19/2012 1110	01/27/2012 0920
180-7794-5	02FB01-20120119	Water	01/19/2012 1230	01/27/2012 0920
180-7794-6	02RB01-20120119	Water	01/19/2012 1245	01/27/2012 0920

EXECUTIVE SUMMARY - Detections

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-7794-1	**02MW13A-20120119**					
Arsenic		0.54	J	1.0	ug/L	6020/DOD
Chromium		7.8		2.0	ug/L	6020/DOD
Copper		1.3	J Q	2.0	ug/L	6020/DOD
Iron		2500		50	ug/L	6020/DOD
Lead		1.0	Q	1.0	ug/L	6020/DOD
Zinc		31	Q	5.0	ug/L	6020/DOD
180-7794-2	**02DUP01-20120119**					
Arsenic		0.78	J	1.0	ug/L	6020/DOD
Chromium		7.6		2.0	ug/L	6020/DOD
Copper		1.3	J Q	2.0	ug/L	6020/DOD
Iron		2400		50	ug/L	6020/DOD
Lead		0.99	J Q	1.0	ug/L	6020/DOD
Antimony		1.4	J	2.0	ug/L	6020/DOD
Zinc		31	Q	5.0	ug/L	6020/DOD
180-7794-3	**02SW101-20120119**					
Chromium		4.3		2.0	ug/L	6020/DOD
Copper		1.1	J Q	2.0	ug/L	6020/DOD
Iron		470		50	ug/L	6020/DOD
Lead		1.0	Q	1.0	ug/L	6020/DOD
Zinc		9.1	Q	5.0	ug/L	6020/DOD
180-7794-4	**02SW102-20120119**					
Arsenic		1.3		1.0	ug/L	6020/DOD
Chromium		5.7		2.0	ug/L	6020/DOD
Copper		3.3	Q	2.0	ug/L	6020/DOD
Iron		2600		50	ug/L	6020/DOD
Lead		12	Q	1.0	ug/L	6020/DOD
Antimony		1.3	J	2.0	ug/L	6020/DOD
Zinc		24	Q	5.0	ug/L	6020/DOD
180-7794-5	**02FB01-20120119**					
Chromium		1.3	J	2.0	ug/L	6020/DOD
Copper		0.39	J Q	2.0	ug/L	6020/DOD
180-7794-6	**02RB01-20120119**					
Chromium		1.4	J	2.0	ug/L	6020/DOD
Copper		0.27	J Q	2.0	ug/L	6020/DOD
Iron		14	J	50	ug/L	6020/DOD

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP/MS)	TAL PIT	SW846 6020/DOD	
Preparation, Total Metals			SW846 3010A

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Method	Analyst	Analyst ID
SW846 6020/DOD	Reinheimer, Bill	BR

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02MW13A-20120119**

Lab Sample ID: 180-7794-1

Client Matrix: Water

Date Sampled: 01/19/2012 0925

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1748			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.54	J	0.29	1.0
Chromium	7.8		0.54	2.0
Copper	1.3	J Q	0.24	2.0
Iron	2500		11	50
Lead	1.0	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	31	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02DUP01-20120119**

Lab Sample ID: 180-7794-2

Client Matrix: Water

Date Sampled: 01/19/2012 1015

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1807			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.78	J	0.29	1.0
Chromium	7.6		0.54	2.0
Copper	1.3	J Q	0.24	2.0
Iron	2400		11	50
Lead	0.99	J Q	0.15	1.0
Antimony	1.4	J	0.46	2.0
Zinc	31	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02SW101-20120119**

Lab Sample ID: 180-7794-3

Client Matrix: Water

Date Sampled: 01/19/2012 1030

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1811			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	4.3		0.54	2.0
Copper	1.1	J Q	0.24	2.0
Iron	470		11	50
Lead	1.0	Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	9.1	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Client Sample ID: **02SW102-20120119**

Lab Sample ID: 180-7794-4 Date Sampled: 01/19/2012 1110
Client Matrix: Water Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1815			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	1.3		0.29	1.0
Chromium	5.7		0.54	2.0
Copper	3.3	Q	0.24	2.0
Iron	2600		11	50
Lead	12	Q	0.15	1.0
Antimony	1.3	J	0.46	2.0
Zinc	24	Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02FB01-20120119**

Lab Sample ID: 180-7794-5

Client Matrix: Water

Date Sampled: 01/19/2012 1230

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1820			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.3	J	0.54	2.0
Copper	0.39	J Q	0.24	2.0
Iron	20	U	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Client Sample ID: **02RB01-20120119**

Lab Sample ID: 180-7794-6

Client Matrix: Water

Date Sampled: 01/19/2012 1245

Date Received: 01/27/2012 0920

6020/DOD Metals (ICP/MS)

Analysis Method:	6020/DOD	Analysis Batch:	180-27774	Instrument ID:	M
Prep Method:	3010A	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1824			Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.4	J	0.54	2.0
Copper	0.27	J Q	0.24	2.0
Iron	14	J	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Method Blank - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	MB 180-27202/1-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1736	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Result	Qual	DL	LOQ
Arsenic	0.50	U	0.29	1.0
Chromium	1.0	U	0.54	2.0
Copper	0.50	U Q	0.24	2.0
Iron	21.6	J	11	50
Lead	0.30	U Q	0.15	1.0
Antimony	0.90	U	0.46	2.0
Zinc	2.0	U Q	0.96	5.0

Lab Control Sample - Batch: 180-27202

Method: 6020/DOD
Preparation: 3010A

Lab Sample ID:	LCS 180-27202/2-A	Analysis Batch:	180-27774	Instrument ID:	M
Client Matrix:	Water	Prep Batch:	180-27202	Lab File ID:	M20205A.xml
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	02/05/2012 1740	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	01/30/2012 1419				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	40.0	37.7	94	80 - 120	
Chromium	200	202	101	80 - 120	
Copper	250	246	99	80 - 120	Q
Iron	1000	1110	111	80 - 120	
Lead	20.0	20.3	101	80 - 120	Q
Antimony	500	499	100	80 - 120	
Zinc	500	460	92	80 - 120	Q

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Lab Section	Qualifier	Description
Metals		
	J	Estimated: The analyte was positively identified; the quantitation is an estimation
	Q	One or more quality control criteria failed.
	U	Undetected at the Limit of Detection.

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 180-27202					
LCS 180-27202/2-A	Lab Control Sample	T	Water	3010A	
MB 180-27202/1-A	Method Blank	T	Water	3010A	
180-7794-1	02MW13A-20120119	T	Water	3010A	
180-7794-2	02DUP01-20120119	T	Water	3010A	
180-7794-3	02SW101-20120119	T	Water	3010A	
180-7794-4	02SW102-20120119	T	Water	3010A	
180-7794-5	02FB01-20120119	T	Water	3010A	
180-7794-6	02RB01-20120119	T	Water	3010A	
Analysis Batch:180-27774					
LCS 180-27202/2-A	Lab Control Sample	T	Water	6020/DOD	180-27202
MB 180-27202/1-A	Method Blank	T	Water	6020/DOD	180-27202
180-7794-1	02MW13A-20120119	T	Water	6020/DOD	180-27202
180-7794-2	02DUP01-20120119	T	Water	6020/DOD	180-27202
180-7794-3	02SW101-20120119	T	Water	6020/DOD	180-27202
180-7794-4	02SW102-20120119	T	Water	6020/DOD	180-27202
180-7794-5	02FB01-20120119	T	Water	6020/DOD	180-27202
180-7794-6	02RB01-20120119	T	Water	6020/DOD	180-27202

Report Basis

T = Total

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Laboratory Chronicle

Lab ID: 180-7794-1 **Client ID: 02MW13A-20120119**

Sample Date/Time: 01/19/2012 09:25 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-1-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-1-A		180-27774	180-27202	02/05/2012 17:48	1	TAL PIT	BR

Lab ID: 180-7794-2 **Client ID: 02DUP01-20120119**

Sample Date/Time: 01/19/2012 10:15 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-2-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-2-A		180-27774	180-27202	02/05/2012 18:07	1	TAL PIT	BR

Lab ID: 180-7794-3 **Client ID: 02SW101-20120119**

Sample Date/Time: 01/19/2012 10:30 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-3-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-3-A		180-27774	180-27202	02/05/2012 18:11	1	TAL PIT	BR

Lab ID: 180-7794-4 **Client ID: 02SW102-20120119**

Sample Date/Time: 01/19/2012 11:10 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-4-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-4-A		180-27774	180-27202	02/05/2012 18:15	1	TAL PIT	BR

Lab ID: 180-7794-5 **Client ID: 02FB01-20120119**

Sample Date/Time: 01/19/2012 12:30 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-5-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-5-A		180-27774	180-27202	02/05/2012 18:20	1	TAL PIT	BR

Lab ID: 180-7794-6 **Client ID: 02RB01-20120119**

Sample Date/Time: 01/19/2012 12:45 Received Date/Time: 01/27/2012 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	180-7794-A-6-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	180-7794-A-6-A		180-27774	180-27202	02/05/2012 18:24	1	TAL PIT	BR

Client: TestAmerica Laboratories, Inc. Job Number: 180-7794-2

Laboratory Chronicle

Lab ID: **MB** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	MB 180-27202/1-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	MB 180-27202/1-A		180-27774	180-27202	02/05/2012 17:36	1	TAL PIT	BR

Lab ID: **LCS** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	LCS 180-27202/2-A		180-27774	180-27202	01/30/2012 14:19	1	TAL PIT	CNS
A:6020/DOD	LCS 180-27202/2-A		180-27774	180-27202	02/05/2012 17:40	1	TAL PIT	BR

Lab References:
TAL PIT = TestAmerica Pittsburgh

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MCCV1X_00015	03/01/12	01/19/12	DI Water, Lot K35N55	500 mL	MCALSPECAREV_00002	10 mL	Arsenic	0.1 ppm
							Chromium	0.1 ppm
							Copper	0.1 ppm
							Iron	25 ppm
							Lead	0.1 ppm
							Zinc	0.1 ppm
					MCALSPECB_00003	10 mL	Antimony	0.1 ppm
.MCALSPECAREV_00002	03/01/12	Inorganic Ventures, Lot D2-MEB317133			(Purchased Reagent)		Arsenic	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Zinc	5 ppm
.MCALSPECB_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317134			(Purchased Reagent)		Antimony	5 ppm
MCRIX_00010	03/19/12	12/19/11	HNO3, Lot J38N72	250 mL	MMSCRI-1B_00001	1 mL	Arsenic	0.001 ppm
							Chromium	0.002 ppm
							Copper	0.002 ppm
							Iron	0.05 ppm
							Lead	0.001 ppm
							Zinc	0.005 ppm
					MMSCRI-2_00003	1 mL	Antimony	0.002 ppm
.MMSCRI-1B_00001	11/01/12	Inorganic Ventures, Lot E2-MEB391155			(Purchased Reagent)		Arsenic	0.25 ppm
							Chromium	0.5 ppm
							Copper	0.5 ppm
							Iron	12.5 ppm
							Lead	0.25 ppm
							Zinc	1.25 ppm
.MMSCRI-2_00003	10/01/12	Inorganic Ventures, Lot D2-MEB350035			(Purchased Reagent)		Antimony	0.5 ppm
MICPMSICV_00006	04/01/12	01/01/12	2% Nitric Acid, Lot K09N65	250 mg/L	MICPMSICV_00005	10 mg/L	Antimony	0.08 mg/L
							Arsenic	0.08 mg/L
							Chromium	0.08 mg/L
							Copper	0.08 mg/L
							Iron	20 mg/L
							Lead	0.08 mg/L
							Zinc	0.08 mg/L
.MICPMSICV_00005	12/30/12	SPEX CertiPrep, Lot 26-209JB			(Purchased Reagent)		Antimony	2 ppm
							Arsenic	2 ppm
							Chromium	2 ppm
							Copper	2 ppm
							Iron	500 ppm
							Lead	2 ppm
							Zinc	2 ppm
MICSABX_00013	02/07/12	12/07/11	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00002	10 mL	Al	100 ppm
							Ca	100 ppm
							Iron	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Na	100 ppm
							Ti	2 ppm
					M6020ICS-0B_00003	1 mL	Ag	0.02 ppm
							Arsenic	0.02 ppm
							Cd	0.02 ppm
							Chromium	0.02 ppm
							Co	0.02 ppm
							Copper	0.02 ppm
							Mn	0.0225 ppm
							Ni	0.02 ppm
							Zinc	0.025 ppm
					MMSICSAB-1_00003	0.2 mL	Ba	0.02 ppm
							Be	0.02 ppm
							Lead	0.02 ppm
							Sr	0.02 ppm
							Tl	0.02 ppm
							V	0.02 ppm
					MMSICSAB-2_00003	0.2 mL	Antimony	0.02 ppm
							B	0.05 ppm
							Se	0.05 ppm
							Si	0.5 ppm
							Sn	0.1 ppm
.M6020ICS-0A_00002	11/01/12	Inorganic Ventures, Lot E2-MEB371022			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Iron	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
.M6020ICS-0B_00003	11/01/12	Inorganic Ventures, Lot E2-MEB369155			(Purchased Reagent)		Ag	2 ppm
							Arsenic	2 ppm
							Cd	2 ppm
							Chromium	2 ppm
							Co	2 ppm
							Copper	2 ppm
							Mn	2.25 ppm
							Ni	2 ppm
							Zinc	2.5 ppm
.MMSICSAB-1_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317136			(Purchased Reagent)		Ba	10 ppm
							Be	10 ppm
							Lead	10 ppm
							Sr	10 ppm
							Tl	10 ppm
							V	10 ppm
.MMSICSAB-2_00003	03/01/12	Inorganic Ventures, Lot E2-MEB361116			(Purchased Reagent)		Antimony	10 ppm
							B	25 ppm
							Se	25 ppm
							Si	250 ppm
							Sn	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MICSAX_00010	04/26/12	01/26/12	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00002	10 mL	Al	100 ppm
							Ca	100 ppm
							Iron	100 ppm
							K	100 ppm
							Mg	100 ppm
							Mo	2 ppm
							Na	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00002	11/01/12	Inorganic Ventures, Lot E2-MEB371022			(Purchased Reagent)		Al	1000 ppm
							Ca	1000 ppm
							Iron	1000 ppm
							K	1000 ppm
							Mg	1000 ppm
							Mo	20 ppm
							Na	1000 ppm
							Ti	20 ppm
MSTD2X_00008	03/01/12	01/19/12	DI Water, Lot K35N55	250 mL	MCALSPECAREV_00002	10 mL	Arsenic	0.2 ppm
							Chromium	0.2 ppm
							Copper	0.2 ppm
							Iron	50 ppm
							Lead	0.2 ppm
							Zinc	0.2 ppm
.MCALSPECAREV_00002	03/01/12	Inorganic Ventures, Lot D2-MEB317133			(Purchased Reagent)		Arsenic	5 ppm
							Chromium	5 ppm
							Copper	5 ppm
							Iron	1250 ppm
							Lead	5 ppm
							Zinc	5 ppm
MSTD3X_00009	03/01/12	01/19/12	DI Water, Lot K35N55	250 mL	MCALSPECB_00003	10 mL	Antimony	0.2 ppm
.MCALSPECB_00003	03/01/12	Inorganic Ventures, Lot D2-MEB317134			(Purchased Reagent)		Antimony	5 ppm
MTAPITTICPMS_00005	10/01/12	INORGANIC VENTURES, Lot E2-MEB379097			(Purchased Reagent)		Ag	5 ug/mL
							Al	200 ug/mL
							Arsenic	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL
							Cd	5 ug/mL
							Chromium	20 ug/mL
							Co	50 ug/mL
							Copper	25 ug/mL
							Iron	100 ug/mL
							Lead	2 ug/mL
							Mn	50 ug/mL
							Ni	50 ug/mL
							Se	1 ug/mL
							Sr	100 ug/mL
							Tl	5 ug/mL
							V	50 ug/mL
							Zinc	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTAPITTMSA_00005	12/01/12	INORGANIC VENTURES, Lot E2-MEB373098			(Purchased Reagent)		Ca	5000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
MTAPITTMSC_00010	12/01/12	Inorganic Ventures, Lot E2-MEB398146			(Purchased Reagent)		Antimony	50 ug/mL
							Mo	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL

Certification Summary

Client: TestAmerica Laboratories, Inc.
Project/Site: WhiteWater Metals 6020 DOD

TestAmerica Job ID: 180-7794-2

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	ACLASS	DoD ELAP		ADE-1422
TestAmerica Pittsburgh	Arkansas	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAC	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAC	4	E871008
TestAmerica Pittsburgh	Illinois	NELAC	5	002602
TestAmerica Pittsburgh	Kansas	NELAC	7	E-10350
TestAmerica Pittsburgh	Louisiana	NELAC	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAC	1	203011
TestAmerica Pittsburgh	New Jersey	NELAC	2	PA005
TestAmerica Pittsburgh	New York	NELAC	2	11182
TestAmerica Pittsburgh	North Carolina	North Carolina DENR	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAC	3	02-00416
TestAmerica Pittsburgh	Pennsylvania	State Program	3	02-416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014002
TestAmerica Pittsburgh	USDA	USDA		P330-10-00139
TestAmerica Pittsburgh	USDA	USDA		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAC	8	STLP
TestAmerica Pittsburgh	Virginia	NELAC	3	460189
TestAmerica Pittsburgh	West Virginia	West Virginia DEP	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-2

SDG No.:

Project: WhiteWater Metals 6020 DOD

Client Sample ID	Lab Sample ID
02MW13A-20120119	180-7794-1
02DUP01-20120119	180-7794-2
02SW101-20120119	180-7794-3
02SW102-20120119	180-7794-4
02FB01-20120119	180-7794-5
02RB01-20120119	180-7794-6

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02MW13A-20120119
Lab Sample ID: 180-7794-1
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 09:25
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.54	1.0	0.50	0.29	ug/L	J		1	6020/DOD
Chromium	7.8	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	1.3	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	2500	50	20	11	ug/L			1	6020/DOD
Lead	1.0	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	31	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02DUP01-20120119
Lab Sample ID: 180-7794-2
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 10:15
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.78	1.0	0.50	0.29	ug/L	J		1	6020/DOD
Chromium	7.6	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	1.3	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	2400	50	20	11	ug/L			1	6020/DOD
Lead	0.99	1.0	0.30	0.15	ug/L	J	Q	1	6020/DOD
Antimony	1.4	2.0	0.90	0.46	ug/L	J		1	6020/DOD
Zinc	31	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02SW101-20120119
Lab Sample ID: 180-7794-3
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 10:30
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	4.3	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	1.1	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	470	50	20	11	ug/L			1	6020/DOD
Lead	1.0	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	9.1	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02SW102-20120119
Lab Sample ID: 180-7794-4
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 11:10
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	1.3	1.0	0.50	0.29	ug/L			1	6020/DOD
Chromium	5.7	2.0	1.0	0.54	ug/L			1	6020/DOD
Copper	3.3	2.0	0.50	0.24	ug/L		Q	1	6020/DOD
Iron	2600	50	20	11	ug/L			1	6020/DOD
Lead	12	1.0	0.30	0.15	ug/L		Q	1	6020/DOD
Antimony	1.3	2.0	0.90	0.46	ug/L	J		1	6020/DOD
Zinc	24	5.0	2.0	0.96	ug/L		Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02FB01-20120119
Lab Sample ID: 180-7794-5
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 12:30
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	1.3	2.0	1.0	0.54	ug/L	J		1	6020/DOD
Copper	0.39	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	20	50	20	11	ug/L	U		1	6020/DOD
Lead	0.30	1.0	0.30	0.15	ug/L	U	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	2.0	5.0	2.0	0.96	ug/L	U	Q	1	6020/DOD

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 02RB01-20120119
Lab Sample ID: 180-7794-6
Lab Name: TestAmerica Pittsburgh
Job No.: 180-7794-2
SDG ID.:
Matrix: Water
Date Sampled: 01/19/2012 12:45
Reporting Basis: WET
Date Received: 01/27/2012 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.50	1.0	0.50	0.29	ug/L	U		1	6020/DOD
Chromium	1.4	2.0	1.0	0.54	ug/L	J		1	6020/DOD
Copper	0.27	2.0	0.50	0.24	ug/L	J	Q	1	6020/DOD
Iron	14	50	20	11	ug/L	J		1	6020/DOD
Lead	0.30	1.0	0.30	0.15	ug/L	U	Q	1	6020/DOD
Antimony	0.90	2.0	0.90	0.46	ug/L	U		1	6020/DOD
Zinc	2.0	5.0	2.0	0.96	ug/L	U	Q	1	6020/DOD

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

ICV Source: MICPMSICV_00006 Concentration Units: ug/L

CCV Source: MCCV1X_00015

Analyte	ICV 180-27774/5 02/05/2012 13:57				CCV 180-27774/10 02/05/2012 14:24				CCV 180-27774/34 02/05/2012 16:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	83.7		80.0	105	96.1		100	96	93.6		100	94
Arsenic	82.6		80.0	103	101		100	101	100		100	100
Chromium	80.1		80.0	100	100		100	100	99.8		100	100
Copper	82.5		80.0	103	98.9		100	99	100		100	100
Iron	20000		20000	100	25200		25000	101	25900		25000	104
Lead	79.3		80.0	99	102		100	102	97.9		100	98
Zinc	83.3		80.0	104	102		100	102	100		100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

ICV Source: MICPMSICV_00006 Concentration Units: ug/L

CCV Source: MCCV1X_00015

Analyte	CCV 180-27774/46 02/05/2012 17:55				CCV 180-27774/58 02/05/2012 18:52				CCV 180-27774/70 02/05/2012 20:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	93.0		100	93	92.3		100	92	93.4		100	93
Arsenic	101		100	101	100		100	100	99.5		100	100
Chromium	98.8		100	99	97.4		100	97	98.1		100	98
Copper	99.8		100	100	98.8		100	99	96.9		100	97
Iron	25900		25000	104	25600		25000	102	25700		25000	103
Lead	96.5		100	97	96.2		100	96	96.0		100	96
Zinc	99.9		100	100	98.4		100	98	98.8		100	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Method: 6020/DOD Instrument ID: M

Lab Sample ID: CRI 180-27774/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00010

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.17		117	80-120
Chromium	2.00	1.94	J	97	80-120
Copper	2.00	1.84	J	92	80-120
Iron	50.0	55.2		110	80-120
Lead	1.00	1.09		109	80-120
Antimony	2.00	2.16		108	80-120
Zinc	5.00	4.45	J	89	80-120

Lab Sample ID: CRI 180-27774/128 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00010

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.06		106	80-120
Chromium	2.00	1.90	J	95	80-120
Copper	2.00	1.77	J	89	80-120
Iron	50.0	49.2	J	98	80-120
Lead	1.00	1.09		109	80-120
Antimony	2.00	1.82	J	91	80-120
Zinc	5.00	4.54	J	91	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-27774/6 02/05/2012 14:04		CCB 180-27774/11 02/05/2012 14:32		CCB3 180-27774/35 02/05/2012 16:55		CCB4 180-27774/47 02/05/2012 18:02	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.90	U	0.648	J	0.613	J	0.574	J
Arsenic	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Chromium	2.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	0.50	U	0.50	U	0.50	U	0.50	U
Iron	50	20	U	20	U	20	U	20	U
Lead	1.0	0.30	U	0.30	U	0.255	J	0.190	J
Zinc	5.0	2.0	U	2.0	U	2.0	U	2.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB5 180-27774/59 02/05/2012 19:00		CCB6 180-27774/71 02/05/2012 20:10					
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.584	J	0.501	J				
Arsenic	1.0	0.50	U	0.50	U				
Chromium	2.0	1.0	U	1.0	U				
Copper	2.0	0.50	U	0.50	U				
Iron	50	20	U	20	U				
Lead	1.0	0.30	U	0.168	J				
Zinc	5.0	2.0	U	2.0	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-27202/1-A

Instrument Code: M Batch No.: 27774

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6020_DoD
7440-47-3	Chromium	1.0	U		6020_DoD
7440-50-8	Copper	0.50	U	Q	6020_DoD
7439-89-6	Iron	21.6	J		6020_DoD
7439-92-1	Lead	0.30	U	Q	6020_DoD
7440-36-0	Antimony	0.90	U		6020_DoD
7440-66-6	Zinc	2.0	U	Q	6020_DoD

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Lab Sample ID: ICSA 180-27774/8 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSAX_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.537**	
Arsenic		**0.442**	
Chromium		**0.350**	
Copper		**0.962**	
Iron	**100000**	**102000**	**102**
Lead		**0.672**	
Zinc		**8.14**	
Aluminum	*100000*	*100700*	*101*
Barium		*0.270*	
Beryllium		*0.0070*	
Boron		*2.21*	
Cadmium		*0.696*	
Calcium	*100000*	*101800*	*102*
Cobalt		*0.111*	
Magnesium	*100000*	*106400*	*106*
Manganese		*0.647*	
Molybdenum	*2000*	*2100*	*105*
Nickel		*-0.0110*	
Potassium	*100000*	*98030*	*98*
Selenium		*0.312*	
Silicon		*16.7*	
Silver		*0.149*	
Sodium	*100000*	*95920*	*96*
Strontium		*0.514*	
Thallium		*0.0360*	
Tin		*0.300*	
Titanium	*2000*	*2219*	*111*
Vanadium		*-0.218*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Lab Sample ID: ICSAB 180-27774/9 Instrument ID: M

Lab File ID: M20205A.xml ICS Source: MICSABX_00013

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**22.7**	**113**
Arsenic	**20.0**	**21.7**	**109**
Chromium	**20.0**	**21.4**	**107**
Copper	**20.0**	**21.1**	**106**
Iron	**100000**	**104733**	**105**
Lead	**20.0**	**22.1**	**110**
Zinc	**25.0**	**24.9**	**100**
Aluminum	*100000*	*104967*	*105*
Barium	*20.0*	*22.4*	*112*
Beryllium	*20.0*	*20.1*	*100*
Boron	*50.0*	*50.0*	*100*
Cadmium	*20.0*	*22.6*	*113*
Calcium	*100000*	*104000*	*104*
Cobalt	*20.0*	*20.2*	*101*
Magnesium	*100000*	*111600*	*112*
Manganese	*22.5*	*23.2*	*103*
Molybdenum	*2000*	*2229*	*111*
Nickel	*20.0*	*20.6*	*103*
Potassium	*100000*	*98827*	*99*
Selenium	*50.0*	*55.3*	*111*
Silicon	*500*	*593*	*119*
Silver	*20.0*	*22.2*	*111*
Sodium	*100000*	*96537*	*97*
Strontium	*20.0*	*21.4*	*107*
Thallium	*20.0*	*21.4*	*107*
Tin	*100*	*107*	*107*
Titanium	*2000*	*2131*	*107*
Vanadium	*20.0*	*20.9*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 180-27202/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

Sample Matrix: Water LCS Source: MTAPITTICPMS_00005

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	40.0	37.7		94	80	120		6020/DOD
Chromium	200	202		101	80	120		6020/DOD
Copper	250	246		99	80	120	Q	6020/DOD
Iron	1000	1110		111	80	120		6020/DOD
Lead	20.0	20.3		101	80	120	Q	6020/DOD
Antimony	500	499		100	80	120		6020/DOD
Zinc	500	460		92	80	120	Q	6020/DOD

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-2

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020/DOD DL Date: 01/26/2010 16:35

Prep Method: 3010A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Antimony	121	2	0.459
Arsenic	75	1	0.2908
Chromium	52	2	0.5433
Copper	65	2	0.2443
Iron	56	50	10.77
Lead	208	1	0.154
Zinc	66	5	0.9609

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-7794-2

SDG Number:

Matrix: Water Instrument ID: M

Method: 6020/DOD XMDL Date: 01/26/2010 16:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.459
Arsenic	75	1	0.2908
Chromium	52	2	0.5433
Copper	65	2	0.2443
Iron	56	50	10.77
Lead	208	1	0.154
Zinc	66	5	0.9609

FORM IX - IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh Job No: 180-7794-2

SDG No.:

Instrument ID: M Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		4500	6020/DOD
Chromium		13500	6020/DOD
Copper		20000	6020/DOD
Iron		450000	6020/DOD
Lead		20000	6020/DOD
Antimony		13500	6020/DOD
Zinc		25000	6020/DOD

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-27202/1-A	01/30/2012 14:19	27202		50	50
LCS 180-27202/2-A	01/30/2012 14:19	27202		50	50
180-7794-1	01/30/2012 14:19	27202		50	50
180-7794-2	01/30/2012 14:19	27202		50	50
180-7794-3	01/30/2012 14:19	27202		50	50
180-7794-4	01/30/2012 14:19	27202		50	50
180-7794-5	01/30/2012 14:19	27202		50	50
180-7794-6	01/30/2012 14:19	27202		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ITUNE 180-27774/1			12:46																				
STD1 180-27774/2 IC	1		13:43	X	X	X	X	X	X	X													
STD2 180-27774/3 IC	1		13:49	X	X	X	X	X	X	X													
STD3 180-27774/4 IC	1		13:53	X	X	X	X	X	X	X													
ICV 180-27774/5	1		13:57	X	X	X	X	X	X	X													
ICB 180-27774/6	1		14:04	X	X	X	X	X	X	X													
CRI 180-27774/7	1		14:09	X	X	X	X	X	X	X													
ICSA 180-27774/8	1		14:13	X	X	X	X	X	X	X													
ICSAB 180-27774/9	1		14:17	X	X	X	X	X	X	X													
CCV 180-27774/10	1		14:24	X	X	X	X	X	X	X													
CCB 180-27774/11	1		14:32	X	X	X	X	X	X	X													
ZZZZZZ			14:39																				
ZZZZZZ			14:43																				
ZZZZZZ			14:47																				
ZZZZZZ			14:55																				
ZZZZZZ			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:18																				
ZZZZZZ			15:22																				
ZZZZZZ			15:30																				
ZZZZZZ			15:34																				
CCV 180-27774/22			15:41																				
CCB2 180-27774/23			15:48																				
ZZZZZZ			15:56																				
ZZZZZZ			16:00																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:21																				
ZZZZZZ			16:25																				
ZZZZZZ			16:32																				
ZZZZZZ			16:37																				
ZZZZZZ			16:41																				
CCV 180-27774/34	1		16:48	X	X	X	X	X	X	X													
CCB3 180-27774/35	1		16:55	X	X	X	X	X	X	X													
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:11																				
ZZZZZZ			17:15																				
ZZZZZZ			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
MB 180-27202/1-A	1	T	17:36	X	X	X	X	X	X	X													
LCS 180-27202/2-A	1	T	17:40	X	X	X	X	X	X	X													
180-7794-1	1	T	17:48	X	X	X	X	X	X	X													
CCV 180-27774/46	1		17:55	X	X	X	X	X	X	X													
CCB4 180-27774/47	1		18:02	X	X	X	X	X	X	X													
180-7794-2	1	T	18:07	X	X	X	X	X	X	X													
180-7794-3	1	T	18:11	X	X	X	X	X	X	X													
180-7794-4	1	T	18:15	X	X	X	X	X	X	X													
180-7794-5	1	T	18:20	X	X	X	X	X	X	X													
180-7794-6	1	T	18:24	X	X	X	X	X	X	X													
ZZZZZZ			18:28																				
ZZZZZZ			18:32																				
ZZZZZZ			18:37																				
ZZZZZZ			18:41																				
ZZZZZZ			18:45																				
CCV 180-27774/58	1		18:52	X	X	X	X	X	X	X													
CCB5 180-27774/59	1		19:00	X	X	X	X	X	X	X													
ZZZZZZ			19:04																				
ZZZZZZ			19:08																				
ZZZZZZ			19:16																				
ZZZZZZ			19:24																				
ZZZZZZ			19:28																				
ZZZZZZ			19:35																				
ZZZZZZ			19:40																				
ZZZZZZ			19:44																				
ZZZZZZ			19:48																				
ZZZZZZ			19:55																				
CCV 180-27774/70	1		20:03	X	X	X	X	X	X	X													
CCB6 180-27774/71	1		20:10	X	X	X	X	X	X	X													
ZZZZZZ			20:14																				
ZZZZZZ			20:18																				
ZZZZZZ			20:23																				
ZZZZZZ			20:27																				
ZZZZZZ			20:31																				
ZZZZZZ			20:38																				
ZZZZZZ			20:43																				
ZZZZZZ			20:50																				
ZZZZZZ			20:54																				
ZZZZZZ			20:58																				
CCV 180-27774/82			21:06																				
CCB7 180-27774/83			21:13																				
ZZZZZZ			21:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ZZZZZZ			21:24																				
ZZZZZZ			21:29																				
ZZZZZZ			21:33																				
ZZZZZZ			21:37																				
ZZZZZZ			21:41																				
ZZZZZZ			21:46																				
ZZZZZZ			21:50																				
ZZZZZZ			21:58																				
ZZZZZZ			22:02																				
CCV 180-27774/94			22:09																				
CCB8 180-27774/95			22:17																				
ZZZZZZ			22:21																				
ZZZZZZ			22:25																				
ZZZZZZ			22:30																				
ZZZZZZ			22:34																				
ZZZZZZ			22:38																				
ZZZZZZ			22:42																				
ZZZZZZ			22:47																				
ZZZZZZ			22:51																				
ZZZZZZ			22:55																				
ZZZZZZ			23:00																				
CCV 180-27774/106			23:07																				
CCB9 180-27774/107			23:15																				
ZZZZZZ			23:19																				
ZZZZZZ			23:23																				
ZZZZZZ			23:28																				
ZZZZZZ			23:32																				
ZZZZZZ			23:36																				
ZZZZZZ			23:41																				
ZZZZZZ			23:45																				
ZZZZZZ			23:49																				
ZZZZZZ			23:53																				
ZZZZZZ			23:58																				
CCV 180-27774/118			00:05																				
CCB10 180-27774/119			00:12																				
ZZZZZZ			00:16																				
ZZZZZZ			00:21																				
ZZZZZZ			00:25																				
ZZZZZZ			00:29																				
ZZZZZZ			00:37																				
ZZZZZZ			00:42																				
ZZZZZZ			00:46																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Instrument ID: M Method: 6020/DOD

Start Date: 02/05/2012 12:46 End Date: 02/06/2012 01:21

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Cr	Cu	Fe	Pb	Sb	Zn													
ZZZZZZ			00:50																				
CRI 180-27774/128	1		00:59	X	X	X	X	X	X	X													
CCV 180-27774/129			01:14																				
CCB11 180-27774/130			01:21																				

Prep Types
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

ICP-MS Instrument ID: M Start Date: 02/05/2012 End Date: 02/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Y-89	Q	Element Rh-103	Q	Element In	Q
STD1 180-27774/2 IC	13:43	100		100		100		100		100	
STD2 180-27774/3 IC	13:49	99		103		102		97		101	
STD3 180-27774/4 IC	13:53	103		104		104		104		104	
ICV 180-27774/5	13:57	103		107		106		104		105	
ICB 180-27774/6	14:04	101		103		103		104		103	
CRI 180-27774/7	14:09	96		106		107		100		110	
ICSA 180-27774/8	14:13	93		99		103		91		95	
ICSAB 180-27774/9	14:17	95		102		105		92		102	
CCV 180-27774/10	14:24	93		99		100		97		99	
CCB 180-27774/11	14:32	96		100		102		103		102	
CCV 180-27774/34	16:48	96		95		94		94		92	
CCB3 180-27774/35	16:55	99		97		96		100		96	
MB 180-27202/1-A	17:36	102		110		104		101		95	
LCS 180-27202/2-A	17:40	91		94		94		94		91	
180-7794-1	17:48	96		96		96		98		94	
CCV 180-27774/46	17:55	100		97		93		95		92	
CCB4 180-27774/47	18:02	100		112		107		94		106	
180-7794-2	18:07	95		95		95		98		93	
180-7794-3	18:11	93		94		93		96		91	
180-7794-4	18:15	95		94		94		97		92	
180-7794-5	18:20	91		93		93		96		91	
180-7794-6	18:24	95		94		93		97		91	
CCV 180-27774/58	18:52	95		94		91		93		90	
CCB5 180-27774/59	19:00	98		106		104		109		106	
CCV 180-27774/70	20:03	86		88		86		87		86	
CCB6 180-27774/71	20:10	97		104		99		105		102	
CRI 180-27774/128	00:59	85		86		82		84		98	

FORM XV - IN

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

ICP-MS Instrument ID: M Start Date: 02/05/2012 End Date: 02/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Bi	Q	Element	Q	Element	Q	Element	Q
STD1 180-27774/2 IC	13:43	100		100							
STD2 180-27774/3 IC	13:49	102		98							
STD3 180-27774/4 IC	13:53	102		102							
ICV 180-27774/5	13:57	102		101							
ICB 180-27774/6	14:04	103		102							
CRI 180-27774/7	14:09	102		105							
ICSA 180-27774/8	14:13	101		100							
ICSAB 180-27774/9	14:17	104		105							
CCV 180-27774/10	14:24	103		99							
CCB 180-27774/11	14:32	105		104							
CCV 180-27774/34	16:48	95		93							
CCB3 180-27774/35	16:55	96		99							
MB 180-27202/1-A	17:36	95		97							
LCS 180-27202/2-A	17:40	96		93							
180-7794-1	17:48	96		99							
CCV 180-27774/46	17:55	92		91							
CCB4 180-27774/47	18:02	105		108							
180-7794-2	18:07	95		97							
180-7794-3	18:11	94		98							
180-7794-4	18:15	95		98							
180-7794-5	18:20	93		97							
180-7794-6	18:24	94		96							
CCV 180-27774/58	18:52	91		90							
CCB5 180-27774/59	19:00	103		107							
CCV 180-27774/70	20:03	87		89							
CCB6 180-27774/71	20:10	100		105							
CRI 180-27774/128	00:59	85		93							

FORM XV - IN

Dilution Corrected Concentrations

STD1 317572 INT STD 2/5/2012 1:43:29 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	100.579%	-0.005	0.230	0.094	0.000	0.061	-0.246	-0.065
2	13:44:54	99.838%	0.010	-0.117	-0.021	0.000	-0.084	0.059	0.010
3	13:45:37	99.583%	-0.005	-0.113	-0.073	0.000	0.023	0.188	0.056
x		100.000%	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.000
σ		0.518%	0.008	0.199	0.086	0.000	0.076	0.223	0.061
%RSD		0.518	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.014	-0.432	0.000	-0.345	-4.349	-0.025	100.048%	0.044
2	13:44:54	-0.006	0.123	0.000	0.200	-4.386	-1.419	100.573%	-0.023
3	13:45:37	-0.008	0.309	0.000	0.145	8.734	1.444	99.379%	-0.021
x		0.000	0.000	0.000	-0.000	0.000	0.000	100.000%	0.000
σ		0.012	0.386	0.000	0.300	7.564	1.431	0.598%	0.038
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.598	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	-0.008	-0.022	0.000	0.621	-0.526	-0.001	-0.016	-0.022
2	13:44:54	-0.007	0.015	0.006	-0.882	0.314	0.000	-0.030	0.019
3	13:45:37	0.015	0.007	-0.006	0.262	0.212	0.001	0.046	0.003
x		0.000	0.000	-0.000	0.000	0.000	0.000	0.000	-0.000
σ		0.013	0.019	0.006	0.785	0.458	0.001	0.040	0.021
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.059	-0.044	-0.173	0.054	0.071	0.373	0.000	-0.001
2	13:44:54	0.004	-0.023	0.252	-0.106	-0.196	-0.534	0.000	-0.001
3	13:45:37	-0.063	0.067	-0.079	0.052	0.125	0.161	0.000	0.002
x		0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.061	0.059	0.223	0.092	0.172	0.475	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	99.660%	-0.005	0.006	99.985%	-0.005	0.000	0.040	0.030
2	13:44:54	99.985%	0.004	0.004	99.779%	0.004	0.001	-0.053	-0.042
3	13:45:37	100.356%	0.001	-0.009	100.236%	0.001	-0.002	0.012	0.012
x		100.000%	0.000	0.000	100.000%	-0.000	-0.000	-0.000	-0.000
σ		0.348%	0.005	0.008	0.229%	0.004	0.002	0.048	0.037
%RSD		0.348	0.000	0.000	0.229	0.000	0.000	0.000	0.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	98.845%	0.020	0.001	-0.014	-0.001	-0.017	99.294%	99.310%
2	13:44:54	100.453%	0.002	-0.002	-0.007	0.020	0.008	100.461%	100.710%
3	13:45:37	100.702%	-0.022	0.001	0.021	-0.019	0.008	100.245%	99.979%
x		100.000%	0.000	-0.000	-0.000	0.000	-0.000	100.000%	100.000%
σ		1.008%	0.021	0.002	0.019	0.020	0.015	0.621%	0.700%
%RSD		1.008	0.000	0.000	0.000	0.000	0.000	0.621	0.700

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:44:11	0.005	0.002	0.006	-0.004	-0.001	99.254%
2	13:44:54	-0.002	-0.003	-0.005	-0.010	-0.003	100.027%
3	13:45:37	-0.003	0.001	-0.001	0.014	0.004	100.719%
x		0.000	0.000	0.000	0.000	0.000	100.000%
σ		0.004	0.003	0.005	0.012	0.004	0.733%
%RSD		0.000	0.000	0.000	0.000	0.000	0.733

STD2 309489 2/5/2012 1:49:04 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	98.176%	199.600	0.871	0.486	0.000	99510.000	99160.000	99220.000
2	13:50:30	99.845%	197.400	0.791	0.525	0.000	100100.000	99640.000	99460.000
3	13:51:13	99.068%	203.000	0.488	0.709	0.000	100400.000	101200.000	101300.000
x		99.030%	200.000	0.717	0.573	0.000	100000.000	100000.000	100000.000
σ		0.835%	2.809	0.202	0.119	0.000	452.200	1064.000	1149.000
%RSD		0.843	1.404	28.170	20.790	0.000	0.452	1.064	1.149

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	997.700	7.731	0.000	100300.000	100000.000	98750.000	102.142%	0.102
2	13:50:30	992.000	7.526	0.000	99180.000	99330.000	99840.000	103.500%	0.098
3	13:51:13	1010.000	8.297	0.000	100500.000	100700.000	101400.000	103.468%	0.098
x		1000.000	7.851	0.000	100000.000	100000.000	100000.000	103.037%	0.100
σ		9.341	0.399	0.000	718.600	661.200	1333.000	0.775%	0.002
%RSD		0.934	5.082	0.000	0.719	0.661	1.333	0.752	2.491

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	198.800	198.500	990.700	49650.000	49800.000	199.400	199.800	199.900
2	13:50:30	201.400	201.100	1000.000	50030.000	50120.000	201.000	199.700	197.800
3	13:51:13	199.800	200.400	1009.000	50320.000	50080.000	199.600	200.500	202.300
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		1.353	1.361	9.193	335.900	176.200	0.852	0.446	2.248
%RSD		0.677	0.680	0.919	0.672	0.352	0.426	0.223	1.124

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	199.200	198.700	198.800	199.500	197.400	198.800	0.000	199.400
2	13:50:30	200.100	201.900	202.900	200.000	199.800	199.200	0.000	199.300
3	13:51:13	200.700	199.300	198.300	200.500	202.800	202.100	0.000	201.300
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		0.777	1.702	2.534	0.531	2.683	1.803	0.000	1.133
%RSD		0.388	0.851	1.267	0.265	1.341	0.901	0.000	0.566

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	100.739%	0.070	0.065	96.276%	197.900	199.200	198.800	199.700
2	13:50:30	102.845%	0.065	0.058	97.283%	200.400	200.700	200.100	200.000
3	13:51:13	103.227%	0.073	0.101	97.882%	201.800	200.100	201.100	200.300
x		102.270%	0.069	0.074	97.147%	200.000	200.000	200.000	200.000
σ		1.340%	0.004	0.023	0.812%	1.978	0.759	1.152	0.302
%RSD		1.310	6.198	31.280	0.836	0.989	0.379	0.576	0.151

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	99.176%	0.026	0.038	0.018	198.900	198.900	100.763%	101.450%
2	13:50:30	101.166%	0.029	0.038	0.025	200.800	199.700	102.473%	103.004%
3	13:51:13	101.510%	0.027	0.058	0.043	200.300	201.400	102.854%	103.303%
x		100.617%	0.027	0.045	0.029	200.000	200.000	102.030%	102.586%
σ		1.260%	0.002	0.011	0.013	1.017	1.293	1.114%	0.995%
%RSD		1.252	6.050	25.590	45.550	0.508	0.647	1.092	0.970

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:47	196.400	196.900	196.300	196.500	196.600	98.059%
2	13:50:30	201.100	201.100	201.500	201.700	201.300	97.921%
3	13:51:13	202.500	202.000	202.200	201.800	202.100	97.581%
x		200.000	200.000	200.000	200.000	200.000	97.854%
σ		3.214	2.705	3.264	3.010	2.960	0.246%
%RSD		1.607	1.352	1.632	1.505	1.480	0.252

STD3 309496 2/5/2012 1:53:19 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	105.209%	0.083	195.300	197.700	0.000	58.090	50.120	50.870
2	13:54:45	103.261%	0.120	195.600	196.800	0.000	54.290	49.970	48.780
3	13:55:28	99.828%	0.153	209.100	205.600	0.000	54.600	48.950	49.330
x		102.766%	0.119	200.000	200.000	0.000	55.660	49.680	49.660
σ		2.724%	0.035	7.878	4.854	0.000	2.109	0.635	1.082
%RSD		2.651	29.620	3.939	2.427	0.000	3.789	1.279	2.180

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	6.308	9878.000	0.000	46.340	53.670	109.100	105.291%	197.400
2	13:54:45	4.631	9952.000	0.000	42.010	60.380	100.500	104.536%	202.100
3	13:55:28	4.143	10170.000	0.000	41.000	31.510	99.710	103.305%	200.600
x		5.027	10000.000	0.000	43.120	48.520	103.100	104.377%	200.000
σ		1.135	151.900	0.000	2.839	15.110	5.204	1.003%	2.406
%RSD		22.580	1.519	0.000	6.585	31.140	5.048	0.961	1.203

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.209	0.086	0.704	148.100	144.100	0.116	0.135	0.158
2	13:54:45	0.179	0.114	0.638	69.400	64.550	0.090	0.122	0.044
3	13:55:28	0.167	0.090	0.616	49.320	46.270	0.091	0.104	0.091
x		0.185	0.097	0.653	88.940	84.990	0.099	0.121	0.098
σ		0.022	0.015	0.046	52.200	52.030	0.015	0.015	0.057
%RSD		11.810	15.360	7.070	58.700	61.230	14.630	12.710	58.800

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.221	0.127	0.130	0.664	2.517	2.398	0.000	0.368
2	13:54:45	0.089	0.094	0.117	0.613	1.654	1.689	0.000	0.347
3	13:55:28	0.115	0.169	-0.137	0.367	0.966	1.077	0.000	0.315
x		0.141	0.130	0.037	0.548	1.712	1.721	0.000	0.344
σ		0.070	0.038	0.150	0.159	0.777	0.661	0.000	0.027
%RSD		49.400	28.950	408.200	29.030	45.380	38.400	0.000	7.827

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	103.198%	196.700	196.800	104.493%	0.211	0.179	0.116	-0.276
2	13:54:45	104.211%	200.500	200.700	104.066%	0.153	0.178	0.143	-0.301
3	13:55:28	104.086%	202.800	202.500	103.570%	0.189	0.152	0.030	-0.392
x		103.832%	200.000	200.000	104.043%	0.184	0.170	0.096	-0.323
σ		0.552%	3.072	2.900	0.461%	0.029	0.015	0.059	0.061
%RSD		0.532	1.536	1.450	0.444	15.980	8.884	61.400	18.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	103.848%	198.400	194.700	194.700	0.178	0.356	102.008%	101.868%
2	13:54:45	104.335%	199.600	200.300	200.700	0.172	0.333	101.971%	102.678%
3	13:55:28	103.102%	201.900	205.000	204.600	0.211	0.281	103.058%	103.597%
x		103.762%	200.000	200.000	200.000	0.187	0.323	102.346%	102.715%
σ		0.621%	1.797	5.141	4.957	0.021	0.039	0.617%	0.865%
%RSD		0.598	0.899	2.571	2.478	11.180	11.930	0.603	0.842

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:02	0.117	0.130	0.372	0.380	0.396	101.307%
2	13:54:45	0.113	0.106	0.230	0.254	0.237	101.933%
3	13:55:28	0.113	0.102	0.192	0.222	0.192	102.253%
x		0.114	0.113	0.265	0.285	0.275	101.831%
σ		0.002	0.015	0.095	0.084	0.107	0.481%
%RSD		2.094	13.240	35.800	29.300	38.830	0.473

ICV 298682 2/5/2012 1:57:36 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.407%	81.030	77.350	76.320	0.000	39590.000	39110.000	38870.000
2	13:59:01	104.178%	80.020	77.280	75.020	0.000	38800.000	39220.000	39170.000
3	13:59:44	101.706%	80.740	74.340	77.230	0.000	39060.000	39910.000	39950.000
x		103.430%	100.745%	95.406%	95.238%	0.000	97.872%	98.532%	98.331%
σ		1.498%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.448	0.643	2.249	1.459	0.000	1.031	1.091	1.416

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	392.900	3902.000	0.000	40110.000	38820.000	37510.000	106.807%	79.470
2	13:59:01	396.600	3903.000	0.000	39560.000	38780.000	37380.000	108.251%	78.980
3	13:59:44	403.000	3971.000	0.000	40020.000	39490.000	39270.000	106.571%	78.340
x		99.370%	98.129%	0.000	99.736%	97.579%	95.138%	107.209%	98.665%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.910%	n/a
%RSD		1.283	1.002	0.000	0.745	1.025	2.764	0.849	0.716

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	79.230	80.290	416.100	20160.000	20820.000	81.300	81.280	83.600
2	13:59:01	77.750	79.010	411.700	19920.000	20530.000	79.560	80.900	82.180
3	13:59:44	79.030	80.950	415.300	19950.000	20820.000	80.520	81.290	82.260
x		98.337%	100.103%	103.595%	100.047%	103.613%	100.573%	101.443%	103.354%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.018	1.232	0.565	0.634	0.802	1.080	0.275	0.964

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	83.750	84.330	85.170	83.050	82.960	84.050	0.000	78.280
2	13:59:01	81.960	82.840	83.240	82.960	82.210	81.940	0.000	78.600
3	13:59:44	81.710	82.620	85.020	81.910	81.850	80.450	0.000	78.430
x		103.092%	104.078%	105.596%	103.301%	102.924%	102.686%	0.000	98.044%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.350	1.115	1.275	0.763	0.689	2.203	0.000	0.204

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.796%	80.620	81.670	104.078%	77.960	78.150	78.290	80.030
2	13:59:01	107.098%	81.480	81.220	104.539%	79.810	79.450	79.600	80.470
3	13:59:44	106.719%	81.770	82.030	104.303%	79.270	78.580	80.080	80.920
x		106.204%	101.612%	102.053%	104.306%	98.769%	98.408%	99.155%	100.592%
σ		1.234%	n/a	n/a	0.231%	n/a	n/a	n/a	n/a
%RSD		1.162	0.735	0.500	0.221	1.208	0.839	1.164	0.555

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	104.700%	77.450	84.880	84.830	82.110	81.480	100.211%	100.755%
2	13:59:01	105.714%	78.860	83.450	82.880	80.710	81.720	102.772%	102.420%
3	13:59:44	105.809%	78.540	82.910	81.850	81.080	81.330	102.649%	102.141%
x		105.408%	97.857%	104.680%	103.984%	101.626%	101.890%	101.877%	101.772%
σ		0.615%	n/a	n/a	n/a	n/a	n/a	1.444%	0.892%
%RSD		0.583	0.946	1.219	1.815	0.889	0.245	1.418	0.876

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:18	82.040	81.650	78.790	77.400	78.200	99.897%
2	13:59:01	83.240	82.630	80.430	77.740	79.450	100.792%
3	13:59:44	82.900	83.440	81.990	79.490	80.370	100.954%
x		103.411%	103.214%	100.503%	97.759%	99.177%	100.548%
σ		n/a	n/a	n/a	n/a	n/a	0.569%
%RSD		0.749	1.087	1.989	1.436	1.376	0.566

ICB 2/5/2012 2:04:46 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	102.573%	0.016	0.853	0.465	0.000	-0.216	0.668	0.165
2	14:06:12	101.496%	0.002	0.838	0.272	0.000	-0.206	0.096	0.327
3	14:06:55	99.279%	0.010	0.486	0.295	0.000	-0.833	0.007	-0.050
x		101.116%	0.009	0.725	0.344	0.000	-0.418	0.257	0.147
σ		1.679%	0.007	0.207	0.105	0.000	0.359	0.359	0.189
%RSD		1.661	75.470	28.600	30.640	0.000	85.750	139.600	128.500

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-1.472	1.192	0.000	-1.981	22.120	11.580	103.074%	-0.171
2	14:06:12	-1.629	1.084	0.000	-4.698	17.560	12.000	102.566%	-0.043
3	14:06:55	-1.533	0.732	0.000	-5.040	9.695	14.870	102.565%	-0.154
x		-1.545	1.003	0.000	-3.906	16.460	12.820	102.735%	-0.123
σ		0.080	0.240	0.000	1.676	6.285	1.790	0.294%	0.070
%RSD		5.148	23.960	0.000	42.910	38.190	13.960	0.286	56.780

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	0.023	-0.017	-0.014	2.247	5.782	0.006	-0.014	-0.126
2	14:06:12	-0.009	-0.015	-0.039	-1.730	1.812	0.007	-0.095	-0.125
3	14:06:55	-0.017	-0.026	-0.039	-5.125	-0.904	0.013	-0.069	-0.146
x		-0.001	-0.019	-0.031	-1.536	2.230	0.009	-0.059	-0.132
σ		0.021	0.006	0.014	3.690	3.363	0.004	0.041	0.012
%RSD		1926.000	30.950	47.070	240.200	150.800	45.730	70.070	8.912

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-0.115	-0.731	-0.736	0.098	-0.526	0.252	0.000	-0.009
2	14:06:12	-0.170	-0.889	-0.819	-0.012	-0.110	-0.120	0.000	-0.015
3	14:06:55	-0.192	-0.883	-0.878	0.222	0.429	0.488	0.000	-0.016
x		-0.159	-0.834	-0.811	0.102	-0.069	0.206	0.000	-0.013
σ		0.040	0.090	0.072	0.117	0.479	0.307	0.000	0.004
%RSD		24.910	10.770	8.822	114.600	693.600	148.600	0.000	30.420

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	103.023%	0.641	0.607	103.198%	0.003	0.007	0.038	0.033
2	14:06:12	103.354%	0.470	0.520	103.562%	0.001	0.006	0.013	0.018
3	14:06:55	102.923%	0.403	0.476	103.760%	0.002	-0.002	-0.071	-0.044
x		103.100%	0.504	0.534	103.506%	0.002	0.004	-0.007	0.002
σ		0.225%	0.123	0.067	0.285%	0.001	0.005	0.057	0.041
%RSD		0.219	24.360	12.500	0.275	41.510	136.400	869.500	1805.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	102.718%	-0.103	0.173	0.112	-0.008	-0.014	100.776%	101.389%
2	14:06:12	103.132%	-0.113	0.147	0.179	-0.036	0.023	102.727%	103.050%
3	14:06:55	103.830%	-0.163	0.141	0.116	-0.031	0.001	104.096%	103.521%
x		103.227%	-0.126	0.154	0.136	-0.025	0.003	102.533%	102.654%
σ		0.562%	0.032	0.017	0.038	0.015	0.019	1.669%	1.120%
%RSD		0.544	25.490	11.140	27.840	58.680	591.400	1.628	1.091

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:29	-0.001	0.004	0.148	0.141	0.140	100.188%
2	14:06:12	-0.005	0.001	0.043	0.014	0.033	102.295%
3	14:06:55	-0.006	-0.003	0.031	0.006	0.016	102.255%
x		-0.004	0.001	0.074	0.053	0.063	101.579%
σ		0.002	0.003	0.064	0.076	0.067	1.205%
%RSD		60.800	617.800	86.900	141.800	107.000	1.186

CRI 289521 2/5/2012 2:09:04 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	98.840%	1.039	6.004	5.445	0.000	112.400	113.600	114.400
2	14:10:30	95.526%	1.193	5.212	5.364	0.000	110.100	119.600	118.800
3	14:11:13	94.402%	0.957	4.744	5.230	0.000	111.000	116.600	121.300
x		96.256%	106.307%	106.400%	106.922%	0.000	111.172%	116.603%	118.138%
σ		2.307%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.397	11.270	11.970	2.033	0.000	1.054	2.599	2.954

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	33.210	520.900	0.000	105.200	107.000	109.400	106.070%	4.686
2	14:10:30	34.200	526.600	0.000	105.400	81.480	104.100	105.697%	4.687
3	14:11:13	34.110	530.500	0.000	102.000	129.600	105.000	105.501%	4.493
x		112.804%	105.202%	0.000	104.203%	106.021%	106.155%	105.756%	92.438%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.289%	n/a
%RSD		1.610	0.915	0.000	1.832	22.690	2.678	0.274	2.420

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	0.997	1.954	5.489	56.840	60.000	0.516	0.989	1.997
2	14:10:30	0.970	1.941	5.300	55.160	58.190	0.533	0.966	1.920
3	14:11:13	0.858	1.921	5.305	53.500	53.730	0.496	1.019	1.896
x		94.143%	96.919%	1072.915%	110.340%	114.613%	103.033%	99.158%	96.887%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.844	0.859	2.009	3.027	5.630	3.616	2.656	2.726

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	1.961	4.462	3.914	1.231	4.385	5.135	0.000	4.812
2	14:10:30	1.776	4.568	3.925	1.188	4.238	5.089	0.000	4.868
3	14:11:13	1.769	4.311	4.355	1.102	4.051	4.899	0.000	4.863
x		91.769%	88.941%	81.296%	117.401%	84.495%	100.822%	0.000	96.953%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		5.929	2.912	6.185	5.606	3.963	2.482	0.000	0.644

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	106.848%	5.046	5.211	99.857%	1.031	1.088	0.970	0.974
2	14:10:30	107.142%	5.073	5.193	99.922%	0.998	0.964	1.008	0.955
3	14:11:13	107.756%	4.961	5.284	99.062%	1.121	1.057	1.036	0.938
x		107.248%	100.535%	104.587%	99.614%	104.993%	103.621%	100.460%	95.567%
σ		0.464%	n/a	n/a	0.479%	n/a	n/a	n/a	n/a
%RSD		0.432	1.159	0.928	0.481	6.106	6.211	3.323	1.919

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	109.013%	6.091	2.164	2.108	9.426	9.696	101.383%	98.614%
2	14:10:30	109.980%	6.723	2.093	2.026	9.378	9.550	101.719%	99.891%
3	14:11:13	110.601%	6.353	2.211	2.102	9.555	9.604	103.924%	99.834%
x		109.864%	127.782%	107.781%	103.924%	94.529%	96.170%	102.342%	99.446%
σ		0.801%	n/a	n/a	n/a	n/a	n/a	1.381%	0.722%
%RSD		0.729	4.967	2.757	2.202	0.971	0.767	1.349	0.726

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:47	1.021	0.947	1.145	1.095	1.135	105.477%
2	14:10:30	0.958	0.956	1.085	1.043	1.059	105.809%
3	14:11:13	0.989	0.994	1.030	1.104	1.085	105.155%
x		98.910%	96.568%	108.651%	108.051%	109.303%	105.481%
σ		n/a	n/a	n/a	n/a	n/a	0.327%
%RSD		3.171	2.602	5.294	3.070	3.538	0.310

ICSA 315568 2/5/2012 2:13:23 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	94.633%	-0.004	1.045	2.307	0.000	97710.000	104100.000	104400.000
2	14:14:49	92.269%	0.005	1.747	2.272	0.000	95800.000	106400.000	106800.000
3	14:15:32	91.662%	0.020	2.322	2.035	0.000	94240.000	107100.000	107900.000
x		92.855%	0.007	1.705	2.205	0.000	95920.000	105900.000	106400.000
σ		1.570%	0.012	0.639	0.148	0.000	1737.000	1571.000	1774.000
%RSD		1.690	171.200	37.520	6.720	0.000	1.811	1.484	1.668

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	99040.000	16.740	0.000	98880.000	99130.000	101600.000	98.592%	2206.000
2	14:14:49	101400.000	16.340	0.000	98610.000	100500.000	102500.000	98.658%	2230.000
3	14:15:32	101700.000	17.060	0.000	96600.000	97870.000	101400.000	100.058%	2221.000
x		100700.000	16.710	0.000	98030.000	99190.000	101800.000	99.103%	2219.000
σ		1441.000	0.361	0.000	1249.000	1337.000	589.000	0.828%	12.400
%RSD		1.431	2.160	0.000	1.274	1.348	0.579	0.836	0.559

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	-0.196	0.353	0.631	102400.000	101900.000	0.111	-0.144	0.680
2	14:14:49	-0.262	0.371	0.648	102300.000	101600.000	0.115	0.069	0.660
3	14:15:32	-0.197	0.325	0.662	101300.000	99670.000	0.106	0.042	0.755
x		-0.218	0.350	0.647	102000.000	101000.000	0.111	-0.011	0.698
σ		0.038	0.023	0.015	636.000	1198.000	0.005	0.116	0.050
%RSD		17.200	6.595	2.368	0.624	1.186	4.088	1080.000	7.194

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	1.074	8.338	7.188	0.197	-0.357	0.200	0.000	0.524
2	14:14:49	0.949	8.168	7.055	0.507	-0.551	0.251	0.000	0.502
3	14:15:32	0.864	7.924	7.548	0.623	-0.843	0.486	0.000	0.516
x		0.962	8.143	7.264	0.442	-0.584	0.312	0.000	0.514
σ		0.106	0.208	0.255	0.220	0.245	0.153	0.000	0.011
%RSD		10.980	2.552	3.513	49.800	41.950	48.950	0.000	2.220

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	101.079%	2074.000	2098.000	89.549%	0.169	0.164	0.582	0.543
2	14:14:49	103.935%	2098.000	2085.000	91.110%	0.149	0.170	0.919	0.616
3	14:15:32	104.511%	2135.000	2115.000	91.820%	0.130	0.146	0.586	0.619
x		103.175%	2102.000	2100.000	90.826%	0.149	0.160	0.696	0.593
σ		1.838%	30.900	15.160	1.162%	0.019	0.012	0.194	0.043
%RSD		1.781	1.470	0.722	1.279	13.070	7.779	27.820	7.246

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	93.242%	0.381	0.539	0.570	0.226	0.245	98.077%	98.957%
2	14:14:49	94.826%	0.285	0.570	0.522	0.255	0.236	100.892%	101.792%
3	14:15:32	95.912%	0.233	0.501	0.447	0.232	0.327	103.525%	103.535%
x		94.660%	0.300	0.537	0.513	0.238	0.270	100.831%	101.428%
σ		1.343%	0.075	0.034	0.062	0.015	0.050	2.725%	2.311%
%RSD		1.419	25.020	6.369	12.080	6.350	18.690	2.702	2.278

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:14:06	0.022	0.039	0.836	0.754	0.802	100.809%
2	14:14:49	0.038	0.029	0.684	0.679	0.654	99.561%
3	14:15:32	0.027	0.042	0.560	0.569	0.560	99.553%
x		0.029	0.036	0.693	0.668	0.672	99.975%
σ		0.008	0.007	0.138	0.093	0.122	0.723%
%RSD		26.960	18.500	19.890	13.900	18.180	0.723

ICSAB 291571 2/5/2012 2:17:41 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	97.649%	20.150	48.280	51.370	0.000	96970.000	108200.000	109200.000
2	14:19:08	94.599%	19.800	47.530	49.440	0.000	96200.000	110200.000	112000.000
3	14:19:51	91.836%	20.280	46.810	49.060	0.000	96440.000	112500.000	113600.000
x		94.695%	100.390%	95.077%	99.912%	0.000	96.538%	110.305%	111.619%
σ		2.908%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.071	1.233	1.543	2.482	0.000	0.409	1.964	2.026

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	103100.000	585.700	0.000	99730.000	100700.000	104800.000	102.601%	2148.000
2	14:19:08	105800.000	598.500	0.000	99940.000	99820.000	103800.000	102.410%	2133.000
3	14:19:51	106000.000	595.300	0.000	96810.000	99030.000	103400.000	102.187%	2112.000
x		104.947%	118.633%	0.000	98.825%	99.847%	104.010%	102.399%	106.544%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.207%	n/a
%RSD		1.540	1.129	0.000	1.771	0.827	0.726	0.203	0.848

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	21.150	21.600	23.150	105300.000	104200.000	20.480	21.490	21.260
2	14:19:08	21.320	21.700	23.390	104800.000	103800.000	20.340	19.910	20.520
3	14:19:51	20.310	20.920	22.980	104100.000	102400.000	19.670	20.260	20.480
x		104.639%	107.036%	100.756%	104.739%	103.473%	100.810%	102.773%	103.752%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.580	1.963	0.892	0.582	0.932	2.139	4.043	2.111

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	21.590	24.950	23.680	22.000	54.840	54.210	0.000	21.340
2	14:19:08	21.020	24.710	24.140	21.360	55.120	55.400	0.000	21.630
3	14:19:51	20.770	25.020	23.440	21.830	55.180	56.180	0.000	21.260
x		105.628%	99.563%	95.015%	108.656%	110.088%	110.528%	0.000	107.046%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.999	0.656	1.512	1.513	0.331	1.798	0.000	0.897

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	104.697%	2212.000	2203.000	91.718%	22.120	21.930	22.810	22.680
2	14:19:08	105.200%	2236.000	2230.000	92.754%	22.070	21.690	22.810	21.280
3	14:19:51	104.749%	2266.000	2255.000	91.954%	22.490	22.120	22.260	21.800
x		104.882%	111.901%	111.457%	92.142%	111.134%	109.550%	113.130%	109.590%
σ		0.276%	n/a	n/a	0.543%	n/a	n/a	n/a	n/a
%RSD		0.264	1.209	1.167	0.589	1.020	0.978	1.411	3.226

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	100.966%	106.000	22.350	22.530	22.120	22.340	102.387%	103.025%
2	14:19:08	101.949%	107.400	22.960	22.590	21.800	22.460	104.380%	105.134%
3	14:19:51	101.671%	108.500	22.720	22.630	22.400	22.390	105.138%	105.224%
x		101.529%	107.315%	113.378%	112.897%	110.527%	111.982%	103.968%	104.461%
σ		0.506%	n/a	n/a	n/a	n/a	n/a	1.421%	1.244%
%RSD		0.499	1.159	1.371	0.229	1.355	0.277	1.367	1.191

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:18:24	20.960	20.990	21.920	21.880	21.920	104.410%
2	14:19:08	21.420	21.470	22.030	22.100	22.090	105.159%
3	14:19:51	21.300	21.690	22.260	21.950	22.190	105.504%
x		106.136%	106.924%	110.368%	109.867%	110.329%	105.024%
σ		n/a	n/a	n/a	n/a	n/a	0.559%
%RSD		1.110	1.682	0.782	0.512	0.621	0.533

CCV 309497 2/5/2012 2:24:51 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	94.630%	100.400	92.990	95.670	0.000	49150.000	51460.000	52020.000
2	14:26:17	92.454%	100.200	94.190	95.580	0.000	48190.000	51840.000	52590.000
3	14:27:00	92.175%	96.600	89.170	95.820	0.000	48970.000	52260.000	52410.000
x		93.086%	99.061%	92.116%	95.691%	0.000	97.537%	103.713%	104.680%
σ		1.344%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.444	2.155	2.842	0.123	0.000	1.049	0.768	0.552

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	539.900	5152.000	0.000	49710.000	49240.000	48300.000	98.770%	100.100
2	14:26:17	535.800	5133.000	0.000	48760.000	48470.000	46430.000	98.711%	98.930
3	14:27:00	528.900	5101.000	0.000	49250.000	49660.000	50490.000	98.240%	98.350
x		106.978%	102.577%	0.000	98.478%	98.252%	96.814%	98.574%	99.126%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.290%	n/a
%RSD		1.040	0.499	0.000	0.965	1.229	4.190	0.295	0.896

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	98.160	99.990	520.300	25460.000	26270.000	99.450	100.400	99.060
2	14:26:17	98.820	99.780	519.800	25140.000	25740.000	97.740	96.810	98.570
3	14:27:00	98.070	100.600	518.400	24950.000	25840.000	98.510	96.620	97.870
x		98.352%	100.119%	103.895%	100.718%	103.792%	98.569%	97.957%	98.501%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.416	0.418	0.188	1.022	1.084	0.866	2.191	0.606

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	100.600	102.900	101.700	100.800	102.200	102.600	0.000	99.630
2	14:26:17	98.430	101.100	100.400	101.600	102.000	105.100	0.000	99.370
3	14:27:00	97.780	101.200	100.900	100.000	101.300	103.300	0.000	99.920
x		98.931%	101.756%	100.983%	100.807%	101.835%	103.668%	0.000	99.642%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.491	0.984	0.666	0.772	0.505	1.266	0.000	0.276

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	100.027%	107.000	107.700	97.349%	98.980	100.000	100.900	101.400
2	14:26:17	100.791%	108.300	109.500	96.532%	99.220	99.660	101.500	102.000
3	14:27:00	100.278%	106.600	108.300	96.070%	99.190	99.260	100.900	101.100
x		100.365%	107.325%	108.513%	96.650%	99.131%	99.645%	101.108%	101.492%
σ		0.389%	n/a	n/a	0.648%	n/a	n/a	n/a	n/a
%RSD		0.388	0.835	0.855	0.670	0.132	0.377	0.303	0.434

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	98.851%	96.290	93.820	93.680	98.560	98.890	101.701%	102.407%
2	14:26:17	99.267%	97.260	96.990	96.690	100.300	99.900	103.237%	103.873%
3	14:27:00	99.128%	97.510	97.400	97.670	99.100	99.540	103.110%	103.563%
x		99.082%	97.023%	96.069%	96.013%	99.322%	99.446%	102.683%	103.281%
σ		0.212%	n/a	n/a	n/a	n/a	n/a	0.853%	0.772%
%RSD		0.214	0.664	2.039	2.166	0.901	0.514	0.831	0.748

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:25:34	101.000	101.000	102.800	101.200	101.800	97.616%
2	14:26:17	101.200	101.100	101.900	101.500	102.100	98.717%
3	14:27:00	100.800	101.100	102.400	101.700	102.200	99.442%
x		100.980%	101.076%	102.354%	101.478%	102.032%	98.592%
σ		n/a	n/a	n/a	n/a	n/a	0.920%
%RSD		0.199	0.071	0.433	0.232	0.184	0.933

CCB 2/5/2012 2:32:01 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	97.874%	-0.012	0.151	0.350	0.000	1.939	0.993	0.824
2	14:33:26	96.389%	0.003	0.627	0.267	0.000	1.301	1.021	0.837
3	14:34:10	93.583%	0.020	0.351	-0.158	0.000	6.184	7.380	6.029
x		95.949%	0.004	0.376	0.153	0.000	3.141	3.131	2.563
σ		2.179%	0.016	0.239	0.272	0.000	2.654	3.680	3.002
%RSD		2.271	418.800	63.530	177.700	0.000	84.480	117.500	117.100

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.404	0.183	0.000	-2.632	18.110	4.413	100.815%	-0.040
2	14:33:26	-0.639	-0.025	0.000	-3.337	21.440	7.315	100.549%	-0.088
3	14:34:10	0.849	0.868	0.000	0.928	13.730	13.070	99.293%	-0.087
x		-0.065	0.342	0.000	-1.680	17.760	8.265	100.219%	-0.071
σ		0.800	0.467	0.000	2.286	3.870	4.404	0.813%	0.027
%RSD		1236.000	136.600	0.000	136.100	21.790	53.290	0.811	38.460

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.030	-0.017	-0.099	6.159	10.200	-0.004	-0.097	-0.160
2	14:33:26	0.017	-0.009	-0.106	1.322	4.223	-0.002	-0.036	-0.196
3	14:34:10	-0.002	-0.003	-0.053	2.120	3.059	-0.008	-0.048	-0.185
x		-0.005	-0.009	-0.086	3.200	5.828	-0.005	-0.060	-0.180
σ		0.024	0.007	0.029	2.593	3.833	0.003	0.032	0.018
%RSD		482.200	74.540	33.610	81.030	65.760	67.520	53.470	10.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.193	-0.873	-0.992	0.001	0.100	0.310	0.000	-0.008
2	14:33:26	-0.234	-0.848	-0.775	-0.062	0.136	0.252	0.000	-0.011
3	14:34:10	-0.309	-0.803	-0.763	0.029	-0.334	-0.060	0.000	0.005
x		-0.245	-0.841	-0.844	-0.011	-0.033	0.167	0.000	-0.005
σ		0.059	0.035	0.129	0.046	0.262	0.199	0.000	0.009
%RSD		23.910	4.208	15.280	427.600	799.400	118.900	0.000	189.300

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	102.062%	2.725	2.595	102.714%	0.002	0.002	0.045	0.029
2	14:33:26	102.777%	2.574	2.408	102.486%	-0.002	0.003	-0.081	-0.052
3	14:34:10	102.424%	2.212	2.247	102.766%	0.002	0.005	-0.022	-0.003
x		102.421%	2.504	2.417	102.655%	0.001	0.003	-0.019	-0.008
σ		0.358%	0.264	0.174	0.149%	0.002	0.002	0.063	0.041
%RSD		0.349	10.540	7.212	0.145	424.000	45.590	328.000	483.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	102.928%	-0.076	0.706	0.772	-0.004	0.001	104.718%	104.139%
2	14:33:26	102.203%	-0.099	0.684	0.554	-0.004	-0.011	104.622%	104.047%
3	14:34:10	102.159%	-0.073	0.552	0.525	-0.026	0.026	104.634%	104.671%
x		102.430%	-0.083	0.647	0.617	-0.011	0.005	104.658%	104.286%
σ		0.431%	0.014	0.083	0.135	0.013	0.019	0.052%	0.337%
%RSD		0.421	17.320	12.840	21.890	113.700	376.400	0.050	0.323

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:43	-0.001	0.007	0.189	0.209	0.200	103.474%
2	14:33:26	0.001	-0.001	0.068	0.085	0.078	104.356%
3	14:34:10	0.008	0.009	0.117	0.091	0.089	105.064%
x		0.003	0.005	0.125	0.129	0.122	104.298%
σ		0.004	0.005	0.061	0.070	0.067	0.796%
%RSD		154.300	108.200	48.810	54.400	55.200	0.764

MB 180-27326/1-A 2/5/2012 2:39:09 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	92.077%	0.005	0.212	-0.020	0.000	7.642	1.037	1.395
2	14:40:36	90.154%	-0.018	0.072	-0.263	0.000	7.859	1.903	2.067
3	14:41:19	88.510%	0.022	-0.391	-0.285	0.000	9.346	3.389	2.333
x		90.247%	0.003	-0.035	-0.189	0.000	8.282	2.110	1.932
σ		1.785%	0.020	0.316	0.147	0.000	0.928	1.190	0.483
%RSD		1.978	723.400	892.700	77.630	0.000	11.200	56.390	25.030

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	1.361	1.956	0.000	0.286	-0.656	2.057	96.419%	-0.032
2	14:40:36	1.338	1.872	0.000	-2.153	4.570	-0.875	95.466%	-0.098
3	14:41:19	1.310	1.687	0.000	-2.080	-3.913	4.428	95.337%	0.022
x		1.336	1.838	0.000	-1.316	-0.000	1.870	95.741%	-0.036
σ		0.026	0.138	0.000	1.387	4.279	2.656	0.591%	0.060
%RSD		1.939	7.480	0.000	105.500	8678000.000	142.100	0.617	166.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	0.017	0.257	-0.066	4.679	2.609	-0.008	-0.069	-0.041
2	14:40:36	0.030	0.240	-0.093	1.915	-0.404	-0.003	-0.082	-0.022
3	14:41:19	0.102	0.224	-0.056	0.291	-1.327	-0.014	-0.091	-0.067
x		0.050	0.240	-0.072	2.295	0.292	-0.008	-0.081	-0.043
σ		0.046	0.017	0.019	2.219	2.058	0.005	0.011	0.023
%RSD		92.370	7.001	26.790	96.680	703.600	65.180	13.540	52.170

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	-0.073	-0.915	-1.005	-0.145	0.065	0.087	0.000	0.015
2	14:40:36	-0.074	-0.962	-1.066	0.005	-0.457	-0.024	0.000	0.007
3	14:41:19	-0.086	-0.962	-0.791	-0.229	0.353	0.018	0.000	0.011
x		-0.078	-0.947	-0.954	-0.123	-0.013	0.027	0.000	0.011
σ		0.007	0.027	0.145	0.119	0.411	0.056	0.000	0.004
%RSD		9.492	2.854	15.160	96.580	3184.000	207.100	0.000	38.870

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	98.175%	1.754	1.878	99.045%	0.000	0.017	0.032	0.050
2	14:40:36	97.956%	1.569	1.838	99.118%	0.016	0.015	-0.012	-0.001
3	14:41:19	98.139%	1.705	1.703	98.198%	0.017	0.013	-0.062	-0.046
x		98.090%	1.676	1.806	98.787%	0.011	0.015	-0.014	0.001
σ		0.117%	0.096	0.092	0.511%	0.009	0.002	0.047	0.048
%RSD		0.120	5.713	5.090	0.518	85.290	13.260	331.300	4325.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	98.175%	0.164	0.418	0.476	-0.001	-0.001	99.955%	100.446%
2	14:40:36	98.327%	0.135	0.445	0.402	-0.007	0.018	101.489%	102.893%
3	14:41:19	97.733%	0.065	0.345	0.355	0.021	0.028	102.120%	101.909%
x		98.078%	0.122	0.403	0.411	0.004	0.015	101.188%	101.749%
σ		0.309%	0.051	0.051	0.061	0.015	0.015	1.113%	1.231%
%RSD		0.315	42.080	12.750	14.790	364.700	95.730	1.100	1.210

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:39:53	0.024	0.034	0.368	0.327	0.319	107.083%
2	14:40:36	0.015	0.022	0.212	0.168	0.194	104.864%
3	14:41:19	0.012	0.010	0.179	0.161	0.163	102.981%
x		0.017	0.022	0.253	0.219	0.225	104.976%
σ		0.006	0.012	0.101	0.094	0.083	2.053%
%RSD		37.660	53.030	39.920	42.950	36.830	1.956

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	97.060%	49.470	933.100	939.200	0.000	46450.000	51770.000	52480.000
2	14:44:50	95.005%	48.520	933.200	976.800	0.000	46020.000	52520.000	53000.000
3	14:45:32	92.364%	46.930	951.400	987.200	0.000	46330.000	53810.000	54490.000
x		94.809%	48.300	939.200	967.700	0.000	46270.000	52700.000	53330.000
σ		2.354%	1.285	10.510	25.210	0.000	219.300	1033.000	1042.000
%RSD		2.483	2.659	1.119	2.605	0.000	0.474	1.961	1.954

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	1985.000	9345.000	0.000	48950.000	49690.000	49410.000	96.537%	969.400
2	14:44:50	2004.000	9477.000	0.000	48720.000	48910.000	49250.000	95.429%	986.600
3	14:45:32	2053.000	9611.000	0.000	48670.000	49440.000	50280.000	94.934%	981.100
x		2014.000	9478.000	0.000	48780.000	49350.000	49650.000	95.633%	979.000
σ		35.210	132.600	0.000	145.700	395.500	552.600	0.821%	8.776
%RSD		1.748	1.399	0.000	0.299	0.801	1.113	0.858	0.896

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	506.600	202.400	524.000	1050.000	1267.000	489.300	497.700	252.000
2	14:44:50	514.900	205.000	527.800	1047.000	1253.000	488.600	487.900	247.600
3	14:45:32	511.200	201.800	526.800	1039.000	1256.000	484.300	487.600	243.400
x		510.900	203.100	526.200	1045.000	1258.000	487.400	491.100	247.600
σ		4.131	1.707	1.985	5.577	7.317	2.655	5.735	4.297
%RSD		0.809	0.840	0.377	0.533	0.582	0.545	1.168	1.735

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	252.600	477.800	478.800	37.740	9.760	10.710	0.000	967.300
2	14:44:50	251.000	476.800	477.000	38.150	9.296	10.590	0.000	968.000
3	14:45:32	248.400	468.400	471.000	37.620	10.260	10.350	0.000	969.400
x		250.700	474.300	475.600	37.840	9.771	10.550	0.000	968.200
σ		2.113	5.177	4.068	0.279	0.480	0.183	0.000	1.096
%RSD		0.843	1.091	0.855	0.738	4.913	1.735	0.000	0.113

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	96.165%	1034.000	1036.000	91.564%	50.920	51.170	51.320	48.490
2	14:44:50	96.104%	1038.000	1045.000	91.560%	50.870	51.220	52.400	47.420
3	14:45:32	96.624%	1035.000	1038.000	91.901%	50.590	51.210	52.000	49.650
x		96.298%	1036.000	1040.000	91.675%	50.790	51.200	51.900	48.520
σ		0.284%	2.123	4.399	0.196%	0.177	0.023	0.546	1.112
%RSD		0.295	0.205	0.423	0.214	0.349	0.044	1.052	2.293

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	92.765%	1883.000	504.200	501.500	2001.000	1988.000	98.160%	98.800%
2	14:44:50	93.773%	1877.000	503.900	504.200	1998.000	1992.000	99.508%	100.006%
3	14:45:32	93.496%	1820.000	505.200	506.500	2008.000	1991.000	100.260%	100.767%
x		93.344%	1860.000	504.400	504.100	2002.000	1990.000	99.309%	99.858%
σ		0.521%	35.030	0.687	2.494	4.838	1.874	1.064%	0.992%
%RSD		0.558	1.883	0.136	0.495	0.242	0.094	1.071	0.994

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:07	48.620	48.870	20.440	21.600	21.090	96.439%
2	14:44:50	49.300	49.800	20.750	21.970	21.420	98.306%
3	14:45:32	49.460	49.870	20.870	22.150	21.500	99.589%
x		49.120	49.510	20.690	21.900	21.340	98.111%
σ		0.448	0.559	0.219	0.281	0.221	1.584%
%RSD		0.911	1.128	1.059	1.285	1.034	1.615

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	96.886%	49.020	916.800	962.600	0.000	46880.000	53780.000	54250.000
2	14:49:04	94.616%	46.430	908.000	948.000	0.000	46220.000	54570.000	55280.000
3	14:49:47	92.773%	47.840	940.300	973.700	0.000	46420.000	55110.000	55650.000
x		94.758%	47.770	921.700	961.400	0.000	46510.000	54490.000	55060.000
σ		2.060%	1.298	16.710	12.890	0.000	337.000	665.400	724.800
%RSD		2.174	2.717	1.813	1.341	0.000	0.725	1.221	1.316

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	2040.000	9683.000	0.000	48980.000	50100.000	50720.000	97.193%	995.300
2	14:49:04	2052.000	9615.000	0.000	47860.000	49540.000	48800.000	96.566%	996.100
3	14:49:47	2084.000	9799.000	0.000	47760.000	49570.000	51460.000	96.331%	1004.000
x		2059.000	9699.000	0.000	48200.000	49730.000	50330.000	96.697%	998.600
σ		23.170	93.170	0.000	678.200	318.800	1370.000	0.445%	5.072
%RSD		1.126	0.961	0.000	1.407	0.641	2.723	0.460	0.508

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	515.100	205.300	533.100	1056.000	1259.000	497.100	499.400	252.600
2	14:49:04	507.200	203.800	528.600	1045.000	1251.000	485.400	489.700	246.700
3	14:49:47	511.500	203.700	533.600	1043.000	1233.000	485.900	489.200	245.700
x		511.200	204.300	531.800	1048.000	1248.000	489.400	492.800	248.300
σ		3.959	0.928	2.769	7.199	13.100	6.631	5.763	3.709
%RSD		0.774	0.454	0.521	0.687	1.050	1.355	1.169	1.493

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	252.400	482.100	481.200	38.860	10.390	11.360	0.000	995.600
2	14:49:04	247.900	475.400	476.500	38.950	9.940	10.870	0.000	983.800
3	14:49:47	249.000	474.100	477.300	38.000	9.903	10.700	0.000	999.700
x		249.700	477.200	478.300	38.600	10.080	10.980	0.000	993.100
σ		2.375	4.274	2.535	0.527	0.271	0.343	0.000	8.255
%RSD		0.951	0.895	0.530	1.364	2.691	3.120	0.000	0.831

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	96.259%	1072.000	1074.000	91.563%	52.360	52.720	53.090	50.580
2	14:49:04	96.987%	1080.000	1080.000	91.135%	52.530	51.740	52.350	50.870
3	14:49:47	96.996%	1081.000	1083.000	91.185%	51.820	53.250	52.250	50.330
x		96.748%	1078.000	1079.000	91.295%	52.240	52.570	52.560	50.590
σ		0.423%	4.752	4.682	0.234%	0.367	0.768	0.460	0.267
%RSD		0.437	0.441	0.434	0.256	0.703	1.462	0.875	0.527

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	93.234%	1923.000	522.500	522.300	2059.000	2054.000	98.145%	99.124%
2	14:49:04	94.091%	1925.000	524.800	522.800	2066.000	2060.000	99.709%	101.594%
3	14:49:47	93.887%	1946.000	522.100	522.500	2041.000	2044.000	101.198%	100.934%
x		93.737%	1931.000	523.100	522.600	2055.000	2053.000	99.684%	100.551%
σ		0.448%	13.060	1.429	0.244	12.720	8.209	1.527%	1.279%
%RSD		0.478	0.676	0.273	0.047	0.619	0.400	1.531	1.272

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:48:21	50.520	50.780	21.350	22.580	22.010	98.334%
2	14:49:04	50.800	50.970	21.930	22.870	22.480	100.202%
3	14:49:47	50.940	50.990	21.540	23.150	22.280	102.051%
x		50.750	50.910	21.610	22.870	22.260	100.196%
σ		0.213	0.119	0.291	0.285	0.236	1.859%
%RSD		0.419	0.234	1.349	1.247	1.061	1.855

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	0.000	0.073	2883.000	2960.000	0.000	839900.000	26770.000	26690.000
2	14:56:53	0.000	0.028	2822.000	2911.000	0.000	820400.000	26850.000	26990.000
3	14:57:36	0.000	0.067	2767.000	2847.000	0.000	807700.000	26950.000	27160.000
x		0.000	0.056	2824.000	2906.000	0.000	822700.000	26860.000	26950.000
σ		0.000	0.025	58.250	56.640	0.000	16220.000	85.410	237.900
%RSD		0.000	44.120	2.063	1.949	0.000	1.972	0.318	0.883

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	2.110	375.900	0.000	2339.000	302900.000	302200.000	93.875%	27.840
2	14:56:53	2.003	369.300	0.000	2313.000	303000.000	303600.000	93.210%	27.650
3	14:57:36	1.955	358.300	0.000	2245.000	294100.000	300000.000	92.873%	24.840
x		2.023	367.800	0.000	2299.000	300000.000	301900.000	93.319%	26.770
σ		0.079	8.892	0.000	48.540	5104.000	1799.000	0.510%	1.681
%RSD		3.918	2.417	0.000	2.111	1.701	0.596	0.546	6.278

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	-8.458	-20.970	175.000	5144.000	6263.000	0.354	-0.675	6.352
2	14:56:53	-7.789	-20.190	174.800	5087.000	6206.000	0.324	-0.526	6.279
3	14:57:36	-7.912	-19.460	173.900	5033.000	5975.000	0.324	-0.879	6.348
x		-8.053	-20.210	174.600	5088.000	6148.000	0.334	-0.693	6.326
σ		0.356	0.753	0.537	55.620	152.600	0.017	0.177	0.041
%RSD		4.422	3.729	0.308	1.093	2.482	5.127	25.600	0.642

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	32.960	66.840	-1667.000	2.028	0.567	11.270	0.000	81280.000
2	14:56:53	32.100	65.890	-1532.000	0.815	0.339	11.310	0.000	81200.000
3	14:57:36	31.120	63.800	-1508.000	1.187	0.913	10.980	0.000	81060.000
x		32.060	65.510	-1569.000	1.344	0.607	11.180	0.000	81180.000
σ		0.922	1.554	85.510	0.622	0.289	0.176	0.000	107.600
%RSD		2.876	2.372	5.450	46.250	47.690	1.571	0.000	0.133

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	92.384%	8.367	8.156	84.555%	0.069	0.035	0.257	0.164
2	14:56:53	94.074%	6.480	6.626	85.394%	0.076	0.033	0.069	0.044
3	14:57:36	94.543%	5.594	5.377	84.631%	0.063	0.020	0.139	0.097
x		93.667%	6.814	6.720	84.860%	0.069	0.029	0.155	0.102
σ		1.135%	1.416	1.392	0.464%	0.006	0.008	0.095	0.060
%RSD		1.212	20.780	20.710	0.547	8.725	28.910	61.470	59.010

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	86.961%	6.457	1.024	4.218	200400.000	198100.000	92.365%	92.683%
2	14:56:53	86.946%	4.623	1.007	4.293	200500.000	199100.000	94.979%	95.363%
3	14:57:36	87.645%	3.550	0.980	4.507	198800.000	197900.000	95.183%	95.486%
x		87.184%	4.877	1.004	4.339	199900.000	198400.000	94.176%	94.511%
σ		0.399%	1.470	0.022	0.150	917.800	666.800	1.571%	1.584%
%RSD		0.458	30.150	2.220	3.457	0.459	0.336	1.669	1.676

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:56:10	0.148	0.173	2.377	2.117	2.259	83.953%
2	14:56:53	0.130	0.115	2.236	2.130	2.176	86.051%
3	14:57:36	0.113	0.110	2.211	2.092	2.158	87.381%
x		0.130	0.133	2.274	2.113	2.198	85.795%
σ		0.017	0.035	0.089	0.020	0.054	1.728%
%RSD		13.290	26.540	3.928	0.927	2.449	2.015

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	79.091%	0.001	634.900	665.300	0.000	181300.000	5793.000	5812.000
2	15:01:09	78.904%	0.019	636.200	658.500	0.000	181400.000	5854.000	5875.000
3	15:01:52	79.262%	0.019	624.900	650.800	0.000	182400.000	5868.000	5854.000
x		79.086%	0.013	632.000	658.200	0.000	181700.000	5838.000	5847.000
σ		0.179%	0.010	6.190	7.271	0.000	620.300	40.010	31.840
%RSD		0.227	82.570	0.979	1.105	0.000	0.341	0.685	0.544

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	0.582	81.120	0.000	488.400	59800.000	60190.000	93.114%	3.926
2	15:01:09	3.156	83.840	0.000	496.700	59390.000	59380.000	91.127%	3.528
3	15:01:52	3.465	81.460	0.000	483.600	59310.000	59200.000	92.032%	3.848
x		2.401	82.140	0.000	489.600	59500.000	59590.000	92.091%	3.768
σ		1.583	1.481	0.000	6.616	264.400	525.800	0.995%	0.211
%RSD		65.920	1.803	0.000	1.351	0.444	0.882	1.081	5.606

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	-1.386	-3.783	33.990	1030.000	1243.000	0.109	-0.113	1.572
2	15:01:09	-1.390	-3.791	35.070	1033.000	1261.000	0.141	-0.061	1.650
3	15:01:52	-1.624	-3.762	34.480	1018.000	1232.000	0.149	-0.057	1.581
x		-1.467	-3.778	34.520	1027.000	1245.000	0.133	-0.077	1.601
σ		0.136	0.015	0.541	7.604	14.290	0.021	0.031	0.043
%RSD		9.299	0.394	1.568	0.740	1.147	16.060	40.410	2.670

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	6.346	12.300	2.595	0.645	0.249	2.582	0.000	16270.000
2	15:01:09	6.495	12.120	0.122	0.219	-0.158	1.867	0.000	16250.000
3	15:01:52	5.938	12.620	2.202	0.646	-0.202	3.022	0.000	16270.000
x		6.260	12.350	1.639	0.503	-0.037	2.491	0.000	16270.000
σ		0.288	0.252	1.329	0.246	0.249	0.583	0.000	11.270
%RSD		4.605	2.041	81.060	48.940	676.500	23.410	0.000	0.069

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	94.644%	1.534	1.494	91.900%	0.020	0.006	0.019	-0.003
2	15:01:09	95.116%	1.598	1.611	91.573%	0.018	0.012	0.027	0.017
3	15:01:52	94.707%	1.624	1.572	90.914%	0.021	0.007	0.057	0.034
x		94.822%	1.585	1.559	91.463%	0.020	0.008	0.034	0.016
σ		0.256%	0.046	0.060	0.503%	0.002	0.004	0.020	0.019
%RSD		0.270	2.895	3.828	0.550	8.402	42.580	59.230	117.600

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	92.075%	0.636	0.194	0.469	39430.000	39160.000	97.040%	98.205%
2	15:01:09	92.132%	0.729	0.248	0.541	39660.000	39270.000	97.853%	98.981%
3	15:01:52	92.199%	0.770	0.288	0.507	39140.000	38990.000	98.806%	98.923%
x		92.135%	0.712	0.243	0.505	39410.000	39140.000	97.900%	98.703%
σ		0.062%	0.068	0.047	0.036	260.900	138.500	0.884%	0.432%
%RSD		0.068	9.616	19.450	7.131	0.662	0.354	0.903	0.438

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:00:26	0.046	0.049	0.250	0.286	0.277	94.806%
2	15:01:09	0.065	0.046	0.354	0.344	0.362	95.064%
3	15:01:52	0.047	0.061	0.358	0.294	0.325	95.176%
x		0.053	0.052	0.321	0.308	0.321	95.015%
σ		0.011	0.008	0.061	0.031	0.043	0.190%
%RSD		20.110	15.680	19.040	10.150	13.250	0.199

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	87.549%	0.006	302.700	303.200	0.000	87850.000	2720.000	2718.000
2	15:05:24	84.034%	-0.001	307.000	311.400	0.000	87100.000	2726.000	2807.000
3	15:06:07	83.888%	0.008	300.300	306.100	0.000	86720.000	2767.000	2809.000
x		85.157%	0.004	303.300	306.900	0.000	87220.000	2737.000	2778.000
σ		2.073%	0.005	3.420	4.183	0.000	574.500	25.370	51.660
%RSD		2.434	104.800	1.127	1.363	0.000	0.659	0.927	1.860

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	-0.637	39.020	0.000	232.900	29660.000	28400.000	93.198%	1.327
2	15:05:24	0.298	39.940	0.000	238.200	29070.000	28040.000	91.661%	1.226
3	15:06:07	1.848	38.590	0.000	236.300	28740.000	28160.000	91.507%	1.586
x		0.503	39.180	0.000	235.800	29160.000	28200.000	92.122%	1.380
σ		1.255	0.692	0.000	2.698	467.900	183.400	0.935%	0.185
%RSD		249.600	1.765	0.000	1.144	1.605	0.650	1.015	13.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	-0.916	-1.947	17.160	522.300	603.600	0.042	-0.074	0.697
2	15:05:24	-0.492	-1.826	17.670	526.400	620.500	0.027	-0.070	0.843
3	15:06:07	-0.768	-1.977	17.250	520.500	607.800	0.042	0.006	0.752
x		-0.725	-1.917	17.360	523.100	610.600	0.037	-0.046	0.764
σ		0.215	0.079	0.274	3.002	8.774	0.009	0.045	0.074
%RSD		29.640	4.145	1.575	0.574	1.437	24.020	97.730	9.632

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	2.979	5.631	3.426	0.104	-0.165	1.004	0.000	8109.000
2	15:05:24	3.316	5.755	-1.592	0.376	0.084	1.498	0.000	8083.000
3	15:06:07	2.824	5.688	-2.599	0.407	-0.281	1.461	0.000	8120.000
x		3.040	5.691	-0.255	0.296	-0.121	1.321	0.000	8104.000
σ		0.252	0.062	3.227	0.167	0.187	0.275	0.000	18.690
%RSD		8.287	1.096	1266.000	56.310	154.600	20.810	0.000	0.231

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	93.494%	0.852	0.848	92.065%	-0.001	-0.005	-0.037	-0.026
2	15:05:24	93.926%	0.742	0.775	91.903%	-0.005	-0.010	0.016	0.010
3	15:06:07	94.313%	0.749	0.757	92.000%	0.003	0.006	-0.032	-0.034
x		93.911%	0.781	0.793	91.989%	-0.001	-0.003	-0.018	-0.017
σ		0.410%	0.062	0.048	0.082%	0.004	0.008	0.029	0.023
%RSD		0.437	7.882	6.091	0.089	479.000	251.900	164.700	139.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	92.700%	0.083	0.051	0.148	19530.000	19330.000	96.655%	96.663%
2	15:05:24	92.898%	0.080	0.070	0.168	19440.000	19440.000	97.364%	99.009%
3	15:06:07	92.899%	0.131	0.080	0.164	19520.000	19440.000	98.105%	98.511%
x		92.832%	0.098	0.067	0.160	19500.000	19400.000	97.375%	98.061%
σ		0.114%	0.029	0.015	0.010	50.430	64.830	0.725%	1.236%
%RSD		0.123	29.370	22.410	6.492	0.259	0.334	0.745	1.261

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:04:41	0.015	0.020	0.146	0.108	0.121	95.475%
2	15:05:24	0.024	0.014	0.134	0.113	0.134	96.394%
3	15:06:07	0.008	0.018	0.187	0.181	0.182	96.734%
x		0.015	0.017	0.156	0.134	0.145	96.201%
σ		0.008	0.003	0.028	0.041	0.033	0.651%
%RSD		50.750	15.670	17.920	30.610	22.420	0.677

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	95.733%	-0.019	4.742	3.791	0.000	6.223	-0.136	-0.485
2	15:19:32	94.591%	-0.004	3.427	3.476	0.000	9.622	0.213	-0.117
3	15:20:15	92.414%	-0.019	3.620	3.404	0.000	10.230	0.038	-0.025
x		94.246%	-0.014	3.930	3.557	0.000	8.691	0.038	-0.209
σ		1.686%	0.009	0.710	0.206	0.000	2.159	0.174	0.243
%RSD		1.789	64.310	18.070	5.791	0.000	24.840	454.300	116.400

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	-0.486	0.107	0.000	-3.010	20.540	0.598	93.132%	-0.095
2	15:19:32	-0.400	0.107	0.000	-3.785	22.740	2.834	91.898%	-0.147
3	15:20:15	-0.503	0.389	0.000	-3.675	26.430	3.201	91.567%	-0.129
x		-0.463	0.201	0.000	-3.490	23.240	2.211	92.199%	-0.124
σ		0.055	0.163	0.000	0.419	2.979	1.409	0.825%	0.026
%RSD		11.990	81.090	0.000	12.010	12.820	63.720	0.895	21.290

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	0.082	0.007	-0.054	-10.310	-8.361	0.003	-0.077	-0.149
2	15:19:32	0.030	-0.019	-0.037	-10.650	-6.492	-0.005	-0.072	-0.109
3	15:20:15	0.034	-0.001	-0.043	-10.860	-6.423	-0.007	-0.072	-0.153
x		0.049	-0.004	-0.045	-10.610	-7.092	-0.003	-0.074	-0.137
σ		0.029	0.013	0.009	0.279	1.099	0.005	0.003	0.024
%RSD		59.510	297.700	19.910	2.626	15.500	187.300	4.352	17.730

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	-0.138	0.757	0.544	0.028	-0.436	-0.029	0.000	0.253
2	15:19:32	-0.215	0.947	0.782	0.123	-0.702	0.446	0.000	0.479
3	15:20:15	-0.227	0.464	0.673	0.144	-0.375	0.634	0.000	0.452
x		-0.193	0.723	0.666	0.098	-0.504	0.350	0.000	0.395
σ		0.049	0.243	0.119	0.062	0.174	0.342	0.000	0.124
%RSD		25.180	33.700	17.890	63.190	34.450	97.460	0.000	31.360

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	92.295%	0.290	0.221	94.956%	0.003	-0.003	0.004	-0.011
2	15:19:32	93.548%	0.196	0.243	95.184%	-0.004	-0.005	0.014	0.008
3	15:20:15	93.185%	0.194	0.285	94.594%	-0.004	-0.003	-0.004	0.006
x		93.009%	0.226	0.250	94.911%	-0.002	-0.004	0.004	0.001
σ		0.645%	0.055	0.033	0.298%	0.004	0.001	0.009	0.010
%RSD		0.693	24.230	13.010	0.314	222.600	31.480	201.400	880.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	92.958%	-0.142	-0.021	-0.024	1.973	1.784	95.050%	95.143%
2	15:19:32	94.084%	-0.083	-0.003	-0.010	2.361	2.323	96.082%	95.154%
3	15:20:15	94.002%	-0.148	-0.013	-0.021	2.183	2.192	96.099%	95.828%
x		93.681%	-0.124	-0.013	-0.018	2.172	2.100	95.744%	95.375%
σ		0.628%	0.036	0.009	0.007	0.194	0.281	0.601%	0.392%
%RSD		0.670	28.890	74.820	38.640	8.941	13.380	0.628	0.411

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:18:49	0.004	-0.001	0.194	0.185	0.177	97.830%
2	15:19:32	-0.003	0.003	0.119	0.112	0.111	98.331%
3	15:20:15	0.003	0.001	0.058	0.061	0.060	98.040%
x		0.001	0.001	0.123	0.119	0.116	98.067%
σ		0.004	0.002	0.068	0.062	0.058	0.252%
%RSD		287.600	283.700	55.390	52.220	50.480	0.257

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	94.780%	48.150	895.700	926.000	0.000	46810.000	51450.000	52690.000
2	15:23:47	94.077%	45.660	874.000	919.500	0.000	46380.000	52950.000	53200.000
3	15:24:30	89.400%	47.440	909.400	954.500	0.000	46550.000	54390.000	55060.000
x		92.752%	47.080	893.000	933.300	0.000	46580.000	52930.000	53650.000
σ		2.924%	1.280	17.890	18.610	0.000	214.800	1467.000	1249.000
%RSD		3.153	2.719	2.004	1.993	0.000	0.461	2.771	2.328

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	2004.000	4197.000	0.000	48440.000	49010.000	47810.000	94.112%	960.800
2	15:23:47	2002.000	4137.000	0.000	47770.000	48650.000	48510.000	92.849%	960.200
3	15:24:30	2068.000	4256.000	0.000	47650.000	48550.000	48540.000	92.166%	965.000
x		2025.000	4196.000	0.000	47950.000	48740.000	48280.000	93.042%	962.000
σ		37.740	59.660	0.000	426.100	244.800	414.300	0.987%	2.611
%RSD		1.864	1.422	0.000	0.889	0.502	0.858	1.061	0.271

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	493.800	205.600	512.400	1098.000	1285.000	480.900	483.700	244.000
2	15:23:47	501.000	209.900	517.500	1088.000	1285.000	482.700	482.400	241.300
3	15:24:30	491.000	205.100	518.000	1085.000	1242.000	471.700	475.000	239.500
x		495.300	206.900	516.000	1090.000	1271.000	478.400	480.400	241.600
σ		5.182	2.652	3.133	7.137	24.470	5.918	4.682	2.310
%RSD		1.046	1.282	0.607	0.655	1.925	1.237	0.975	0.956

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	246.400	463.000	464.200	36.150	9.067	9.562	0.000	965.300
2	15:23:47	244.000	462.500	464.500	35.190	8.515	9.550	0.000	961.700
3	15:24:30	238.500	459.000	456.800	36.210	8.835	9.226	0.000	954.400
x		243.000	461.500	461.900	35.850	8.806	9.446	0.000	960.500
σ		4.077	2.179	4.379	0.571	0.277	0.190	0.000	5.515
%RSD		1.678	0.472	0.948	1.592	3.144	2.016	0.000	0.574

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	93.772%	998.000	998.100	90.977%	49.000	49.460	50.130	47.970
2	15:23:47	94.490%	1009.000	1006.000	90.403%	49.410	49.660	49.340	48.110
3	15:24:30	94.168%	1015.000	1017.000	89.440%	49.730	49.120	50.380	45.630
x		94.143%	1007.000	1007.000	90.273%	49.380	49.410	49.950	47.240
σ		0.359%	8.431	9.775	0.776%	0.367	0.274	0.545	1.392
%RSD		0.382	0.837	0.971	0.860	0.744	0.554	1.091	2.946

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	91.085%	1805.000	488.500	488.000	1945.000	1948.000	96.777%	96.711%
2	15:23:47	91.837%	1838.000	487.600	489.200	1957.000	1954.000	97.924%	98.514%
3	15:24:30	91.607%	1851.000	488.700	490.800	1943.000	1943.000	98.272%	98.812%
x		91.510%	1831.000	488.300	489.400	1948.000	1948.000	97.658%	98.013%
σ		0.385%	23.710	0.574	1.413	7.675	5.444	0.782%	1.137%
%RSD		0.421	1.294	0.117	0.289	0.394	0.279	0.801	1.160

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:05	49.600	49.910	20.970	21.890	21.520	90.824%
2	15:23:47	50.350	50.650	20.840	22.150	21.540	93.340%
3	15:24:30	49.960	50.610	21.230	22.360	21.850	93.744%
x		49.970	50.390	21.010	22.130	21.640	92.636%
σ		0.377	0.417	0.202	0.236	0.183	1.582%
%RSD		0.755	0.827	0.959	1.065	0.845	1.708

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	87.826%	1.331	48.710	48.330	0.000	1774.000	747000.000	748500.000
2	15:31:39	84.815%	1.520	49.480	49.240	0.000	1756.000	763600.000	771400.000
3	15:32:22	85.374%	1.259	46.670	48.620	0.000	1737.000	757300.000	766400.000
x		86.005%	1.370	48.290	48.730	0.000	1756.000	756000.000	762100.000
σ		1.602%	0.135	1.452	0.466	0.000	18.390	8385.000	12050.000
%RSD		1.863	9.817	3.008	0.955	0.000	1.048	1.109	1.582

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	12160.000	2143.000	0.000	1811.000	1354000.000	1387000.000	90.662%	631.500
2	15:31:39	12450.000	2151.000	0.000	1783.000	1345000.000	1374000.000	90.625%	631.000
3	15:32:22	12390.000	2183.000	0.000	1796.000	1346000.000	1374000.000	89.867%	631.900
x		12330.000	2159.000	0.000	1797.000	1348000.000	1378000.000	90.384%	631.500
σ		152.200	21.000	0.000	14.300	4791.000	7860.000	0.449%	0.441
%RSD		1.234	0.973	0.000	0.796	0.355	0.570	0.497	0.070

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	102.600	58.430	3487.000	72450.000	77520.000	21.920	31.810	72.340
2	15:31:39	103.300	57.900	3501.000	72470.000	76880.000	21.430	31.410	73.580
3	15:32:22	102.400	58.860	3495.000	72410.000	77030.000	21.450	30.340	72.310
x		102.800	58.400	3494.000	72450.000	77140.000	21.600	31.190	72.740
σ		0.516	0.483	7.184	31.510	331.100	0.282	0.758	0.727
%RSD		0.502	0.828	0.206	0.043	0.429	1.304	2.430	0.999

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	75.250	521.900	524.200	21.790	1.470	2.839	0.000	472.200
2	15:31:39	76.620	525.500	529.300	22.800	1.920	2.297	0.000	481.200
3	15:32:22	75.020	520.700	524.800	23.470	1.487	2.808	0.000	473.700
x		75.630	522.700	526.100	22.690	1.626	2.648	0.000	475.700
σ		0.867	2.473	2.815	0.845	0.255	0.304	0.000	4.812
%RSD		1.146	0.473	0.535	3.723	15.680	11.480	0.000	1.012

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	0.000	12.240	12.290	81.348%	0.134	0.142	2.473	2.379
2	15:31:39	0.000	11.610	11.620	80.834%	0.163	0.139	2.464	2.240
3	15:32:22	0.000	10.900	10.740	82.530%	0.141	0.139	2.359	2.133
x		0.000	11.580	11.550	81.571%	0.146	0.140	2.432	2.251
σ		0.000	0.672	0.779	0.870%	0.015	0.002	0.063	0.123
%RSD		0.000	5.803	6.744	1.066	10.510	1.363	2.601	5.483

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	82.164%	38.190	1.272	1.560	196.300	194.200	92.192%	92.666%
2	15:31:39	83.549%	37.030	1.092	1.590	195.900	194.300	93.712%	94.614%
3	15:32:22	83.360%	35.640	1.192	1.508	194.900	192.200	94.113%	94.833%
x		83.024%	36.950	1.185	1.553	195.700	193.600	93.339%	94.038%
σ		0.751%	1.276	0.090	0.041	0.734	1.223	1.014%	1.193%
%RSD		0.905	3.453	7.621	2.654	0.375	0.632	1.086	1.268

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:56	0.426	0.419	178.800	169.700	173.300	79.954%
2	15:31:39	0.433	0.415	178.300	169.500	173.600	81.678%
3	15:32:22	0.409	0.402	178.300	169.900	173.600	81.908%
x		0.423	0.412	178.500	169.700	173.500	81.180%
σ		0.012	0.009	0.309	0.182	0.174	1.068%
%RSD		2.895	2.081	0.173	0.107	0.100	1.315

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	88.058%	1.187	42.280	43.480	0.000	2170.000	610300.000	615000.000
2	15:35:56	85.800%	1.126	41.840	43.550	0.000	2149.000	614700.000	622000.000
3	15:36:39	84.870%	1.349	40.960	42.730	0.000	2151.000	622800.000	622500.000
x		86.243%	1.221	41.700	43.250	0.000	2157.000	615900.000	619800.000
σ		1.639%	0.115	0.674	0.455	0.000	11.480	6314.000	4222.000
%RSD		1.901	9.455	1.617	1.053	0.000	0.532	1.025	0.681

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	23480.000	2610.000	0.000	2873.000	1047000.000	1068000.000	92.555%	1278.000
2	15:35:56	23790.000	2658.000	0.000	2841.000	1041000.000	1060000.000	91.688%	1303.000
3	15:36:39	23780.000	2610.000	0.000	2840.000	1050000.000	1068000.000	90.893%	1285.000
x		23680.000	2626.000	0.000	2851.000	1046000.000	1065000.000	91.712%	1289.000
σ		174.300	27.930	0.000	18.530	4409.000	4372.000	0.831%	12.870
%RSD		0.736	1.064	0.000	0.650	0.421	0.410	0.907	0.999

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	137.900	109.500	3338.000	93800.000	96230.000	28.720	66.080	126.700
2	15:35:56	138.000	109.300	3327.000	93440.000	96290.000	28.350	65.150	125.000
3	15:36:39	137.800	110.200	3345.000	92530.000	96180.000	28.510	64.420	124.700
x		137.900	109.700	3336.000	93260.000	96230.000	28.530	65.220	125.500
σ		0.117	0.445	9.149	651.300	55.180	0.185	0.830	1.075
%RSD		0.085	0.406	0.274	0.698	0.057	0.649	1.273	0.857

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	128.700	673.800	680.700	22.030	1.775	2.600	0.000	394.900
2	15:35:56	129.500	670.300	667.800	21.580	1.493	2.593	0.000	399.100
3	15:36:39	126.700	669.400	675.100	22.160	1.681	1.928	0.000	400.000
x		128.300	671.200	674.500	21.920	1.649	2.374	0.000	398.000
σ		1.474	2.325	6.477	0.302	0.143	0.386	0.000	2.709
%RSD		1.149	0.346	0.960	1.379	8.694	16.280	0.000	0.681

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.000	14.060	13.870	83.521%	0.221	0.182	2.036	2.081
2	15:35:56	0.000	13.190	13.620	84.055%	0.222	0.183	1.952	1.955
3	15:36:39	0.000	13.630	13.560	83.398%	0.186	0.179	2.163	1.951
x		0.000	13.630	13.690	83.658%	0.210	0.181	2.050	1.996
σ		0.000	0.434	0.166	0.349%	0.021	0.002	0.107	0.074
%RSD		0.000	3.185	1.211	0.417	9.874	0.928	5.195	3.696

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	84.979%	33.670	3.645	3.921	200.000	202.700	94.489%	95.245%
2	15:35:56	85.792%	32.770	3.707	4.151	201.700	200.900	96.616%	97.184%
3	15:36:39	85.132%	31.660	3.750	3.857	201.300	201.000	96.603%	96.103%
x		85.301%	32.700	3.701	3.976	201.000	201.500	95.903%	96.177%
σ		0.432%	1.007	0.053	0.155	0.894	1.019	1.224%	0.972%
%RSD		0.506	3.078	1.422	3.887	0.445	0.506	1.276	1.010

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.595	0.577	357.800	347.400	353.100	83.106%
2	15:35:56	0.570	0.564	359.900	351.000	353.900	84.923%
3	15:36:39	0.545	0.591	358.000	348.300	351.800	85.487%
x		0.570	0.577	358.600	348.900	353.000	84.506%
σ		0.025	0.014	1.169	1.875	1.057	1.244%
%RSD		4.351	2.379	0.326	0.537	0.299	1.473

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	96.542%	101.800	95.610	94.990	0.000	50790.000	50780.000	50970.000
2	15:43:04	94.509%	99.410	93.760	95.850	0.000	50700.000	51230.000	51960.000
3	15:43:47	94.453%	96.420	90.090	93.820	0.000	49610.000	51530.000	52090.000
x		95.168%	99.216%	93.156%	94.885%	0.000	100.735%	102.358%	103.347%
σ		1.190%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.251	2.720	3.016	1.071	0.000	1.301	0.736	1.188

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	519.100	5181.000	0.000	51480.000	50820.000	49150.000	94.067%	100.800
2	15:43:04	526.400	5248.000	0.000	51080.000	50040.000	49060.000	94.174%	99.200
3	15:43:47	519.800	5126.000	0.000	50040.000	49420.000	48980.000	94.738%	99.290
x		104.360%	103.697%	0.000	101.734%	100.180%	98.120%	94.326%	99.757%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.360%	n/a
%RSD		0.772	1.180	0.000	1.464	1.398	0.174	0.382	0.894

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	100.400	101.700	521.700	26220.000	26610.000	102.300	101.600	103.000
2	15:43:04	102.600	102.200	522.200	26250.000	26500.000	101.400	101.800	102.100
3	15:43:47	99.380	100.800	524.700	25980.000	26040.000	100.700	100.100	102.200
x		100.793%	101.538%	104.573%	104.594%	105.539%	101.478%	101.158%	102.432%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.631	0.685	0.312	0.573	1.162	0.783	0.943	0.469

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	104.100	104.300	103.100	105.200	105.200	104.200	0.000	101.200
2	15:43:04	101.600	102.500	102.000	102.200	103.800	104.000	0.000	101.500
3	15:43:47	102.000	103.500	102.200	103.400	102.400	104.100	0.000	101.000
x		102.552%	103.452%	102.451%	103.584%	103.792%	104.115%	0.000	101.232%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.296	0.883	0.535	1.464	1.339	0.110	0.000	0.229

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	91.958%	97.470	96.870	91.348%	100.100	100.200	100.900	102.200
2	15:43:04	93.666%	98.860	99.690	93.011%	98.980	100.000	102.200	102.100
3	15:43:47	93.762%	101.300	101.000	92.897%	99.390	100.300	102.100	103.300
x		93.129%	99.227%	99.184%	92.419%	99.483%	100.159%	101.748%	102.540%
σ		1.015%	n/a	n/a	0.929%	n/a	n/a	n/a	n/a
%RSD		1.090	1.978	2.125	1.005	0.561	0.106	0.705	0.649

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	91.553%	97.770	93.260	93.260	99.810	101.100	93.129%	92.536%
2	15:43:04	92.645%	98.710	96.600	96.880	100.400	99.510	94.751%	95.006%
3	15:43:47	92.505%	97.870	97.840	98.530	101.200	101.200	95.077%	95.713%
x		92.235%	98.119%	95.902%	96.225%	100.451%	100.599%	94.319%	94.419%
σ		0.594%	n/a	n/a	n/a	n/a	n/a	1.043%	1.668%
%RSD		0.645	0.526	2.470	2.802	0.683	0.936	1.106	1.767

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:21	98.480	98.540	100.900	100.100	100.600	91.084%
2	15:43:04	99.810	99.980	101.600	100.900	101.800	91.982%
3	15:43:47	99.740	99.950	102.600	102.000	102.000	92.822%
x		99.342%	99.493%	101.668%	101.019%	101.473%	91.962%
σ		n/a	n/a	n/a	n/a	n/a	0.869%
%RSD		0.752	0.827	0.848	0.971	0.738	0.945

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	101.631%	-0.005	2.694	2.091	0.000	0.921	2.345	1.930
2	15:50:14	99.058%	-0.005	1.905	1.894	0.000	2.009	3.573	3.592
3	15:50:56	99.438%	-0.019	2.221	1.697	0.000	3.829	10.340	10.870
x		100.042%	-0.010	2.273	1.894	0.000	2.253	5.419	5.464
σ		1.389%	0.008	0.397	0.197	0.000	1.469	4.305	4.755
%RSD		1.388	85.990	17.470	10.410	0.000	65.200	79.440	87.020

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	-1.097	0.338	0.000	-2.055	2.421	4.681	97.862%	0.050
2	15:50:14	-1.036	-0.190	0.000	-3.869	17.090	4.954	98.642%	-0.135
3	15:50:56	-0.947	0.278	0.000	-2.125	57.810	15.050	96.624%	-0.083
x		-1.027	0.142	0.000	-2.683	25.780	8.227	97.709%	-0.056
σ		0.076	0.289	0.000	1.028	28.700	5.907	1.017%	0.095
%RSD		7.372	203.800	0.000	38.300	111.300	71.800	1.041	169.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	0.074	0.006	0.029	5.440	8.884	-0.021	-0.115	-0.187
2	15:50:14	-0.003	-0.026	0.055	0.404	1.938	-0.010	-0.112	-0.237
3	15:50:56	0.011	-0.004	0.067	-0.526	2.772	-0.006	-0.083	-0.236
x		0.027	-0.008	0.050	1.773	4.531	-0.012	-0.103	-0.220
σ		0.041	0.017	0.019	3.210	3.793	0.007	0.018	0.029
%RSD		151.400	203.700	38.780	181.100	83.700	61.200	17.040	12.980

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	-0.273	-0.961	-0.899	-0.114	0.193	0.108	0.000	0.002
2	15:50:14	-0.197	-0.934	-1.027	-0.056	-0.399	0.035	0.000	0.005
3	15:50:56	-0.225	-0.809	-0.909	0.159	-0.355	0.226	0.000	0.047
x		-0.231	-0.901	-0.945	-0.004	-0.187	0.123	0.000	0.018
σ		0.039	0.081	0.071	0.144	0.330	0.096	0.000	0.025
%RSD		16.640	8.963	7.505	4109.000	176.500	78.340	0.000	138.200

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	96.662%	0.745	0.720	100.919%	0.001	0.003	-0.086	-0.064
2	15:50:14	97.845%	0.628	0.633	100.903%	-0.002	-0.002	0.005	0.008
3	15:50:56	96.754%	0.483	0.532	100.990%	0.004	0.009	-0.086	-0.056
x		97.087%	0.619	0.628	100.937%	0.001	0.003	-0.056	-0.037
σ		0.658%	0.131	0.094	0.046%	0.003	0.005	0.052	0.040
%RSD		0.678	21.180	15.000	0.046	283.400	146.300	94.150	106.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	97.377%	-0.040	0.626	0.663	0.111	0.119	96.667%	96.778%
2	15:50:14	97.583%	-0.036	0.569	0.582	0.109	0.150	98.653%	97.820%
3	15:50:56	96.145%	-0.093	0.509	0.544	0.181	0.284	98.061%	98.396%
x		97.035%	-0.056	0.568	0.596	0.133	0.184	97.793%	97.665%
σ		0.778%	0.032	0.059	0.061	0.041	0.088	1.020%	0.820%
%RSD		0.801	56.660	10.310	10.180	30.720	47.570	1.043	0.840

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:31	0.021	0.009	0.270	0.263	0.262	98.703%
2	15:50:14	0.012	0.010	0.213	0.174	0.185	100.141%
3	15:50:56	0.014	0.021	0.199	0.178	0.196	100.874%
x		0.016	0.013	0.227	0.205	0.214	99.906%
σ		0.005	0.006	0.037	0.050	0.042	1.104%
%RSD		30.760	48.600	16.470	24.430	19.530	1.105

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	90.381%	1.134	40.270	43.200	0.000	2084.000	299400.000	303600.000
2	15:58:07	90.040%	1.290	43.910	45.310	0.000	2050.000	304300.000	308600.000
3	15:58:49	90.191%	1.557	44.310	43.700	0.000	2045.000	307100.000	309900.000
x		90.204%	1.327	42.830	44.070	0.000	2060.000	303600.000	307400.000
σ		0.171%	0.214	2.224	1.106	0.000	20.930	3887.000	3307.000
%RSD		0.189	16.130	5.193	2.510	0.000	1.016	1.280	1.076

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	21310.000	2849.000	0.000	2675.000	568900.000	596300.000	93.227%	1001.000
2	15:58:07	21570.000	2844.000	0.000	2696.000	574200.000	603700.000	92.942%	1017.000
3	15:58:49	21410.000	2812.000	0.000	2608.000	561900.000	597400.000	94.119%	1001.000
x		21430.000	2835.000	0.000	2660.000	568300.000	599100.000	93.430%	1006.000
σ		128.900	19.940	0.000	45.910	6193.000	4014.000	0.614%	9.340
%RSD		0.602	0.703	0.000	1.726	1.090	0.670	0.657	0.928

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	106.500	103.500	2802.000	102600.000	104200.000	31.050	68.280	177.700
2	15:58:07	108.700	104.700	2844.000	104100.000	105100.000	31.120	68.670	178.500
3	15:58:49	105.200	103.000	2847.000	102900.000	102900.000	31.070	69.510	178.300
x		106.800	103.700	2831.000	103200.000	104000.000	31.080	68.820	178.200
σ		1.770	0.875	25.060	805.400	1084.000	0.038	0.628	0.392
%RSD		1.658	0.843	0.885	0.780	1.042	0.124	0.912	0.220

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	181.100	973.900	984.200	17.880	1.903	3.407	0.000	428.700
2	15:58:07	180.700	968.700	983.900	16.500	2.176	3.202	0.000	432.900
3	15:58:49	177.900	966.700	983.400	18.140	1.979	3.181	0.000	434.300
x		179.900	969.800	983.800	17.510	2.019	3.264	0.000	431.900
σ		1.725	3.687	0.400	0.878	0.141	0.125	0.000	2.913
%RSD		0.959	0.380	0.041	5.018	6.998	3.829	0.000	0.674

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	0.000	18.100	18.090	86.059%	0.230	0.219	3.009	2.833
2	15:58:07	0.000	18.120	18.290	86.962%	0.234	0.220	2.910	2.604
3	15:58:49	0.000	18.300	18.340	86.449%	0.227	0.208	2.946	2.704
x		0.000	18.170	18.240	86.490%	0.230	0.216	2.955	2.714
σ		0.000	0.113	0.133	0.453%	0.003	0.007	0.050	0.115
%RSD		0.000	0.623	0.731	0.524	1.465	3.147	1.703	4.227

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	86.723%	53.720	2.910	3.008	416.600	417.600	95.517%	94.929%
2	15:58:07	86.759%	55.260	2.617	2.721	423.800	419.400	96.641%	96.958%
3	15:58:49	87.849%	54.760	2.548	2.535	424.900	418.500	97.711%	97.675%
x		87.110%	54.580	2.692	2.755	421.700	418.500	96.623%	96.521%
σ		0.640%	0.787	0.192	0.238	4.493	0.907	1.097%	1.424%
%RSD		0.734	1.442	7.145	8.650	1.065	0.217	1.135	1.476

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:24	0.471	0.483	683.400	667.400	673.000	86.140%
2	15:58:07	0.435	0.475	680.800	664.200	670.000	88.023%
3	15:58:49	0.446	0.484	688.100	670.000	676.500	87.741%
x		0.451	0.481	684.100	667.200	673.200	87.302%
σ		0.019	0.005	3.714	2.896	3.211	1.016%
%RSD		4.181	1.064	0.543	0.434	0.477	1.164

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	98.776%	0.244	10.230	9.308	0.000	415.200	57120.000	58180.000
2	16:02:23	95.872%	0.161	10.520	9.683	0.000	420.400	58400.000	59150.000
3	16:03:06	94.604%	0.277	9.732	9.636	0.000	412.700	58540.000	59620.000
x		96.417%	0.228	10.160	9.542	0.000	416.100	58020.000	58980.000
σ		2.139%	0.060	0.398	0.204	0.000	3.939	781.500	736.700
%RSD		2.218	26.270	3.921	2.141	0.000	0.947	1.347	1.249

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	4070.000	546.400	0.000	529.600	111700.000	116700.000	97.229%	196.300
2	16:02:23	4123.000	554.700	0.000	528.100	112500.000	117200.000	96.338%	192.400
3	16:03:06	4120.000	546.900	0.000	513.700	110700.000	116300.000	97.126%	196.800
x		4104.000	549.300	0.000	523.800	111600.000	116800.000	96.898%	195.200
σ		29.890	4.650	0.000	8.766	937.100	467.400	0.487%	2.416
%RSD		0.728	0.846	0.000	1.673	0.840	0.400	0.503	1.238

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	20.250	19.690	549.600	20430.000	20570.000	5.915	13.420	36.440
2	16:02:23	20.790	20.280	546.800	20190.000	20560.000	5.908	13.210	35.370
3	16:03:06	19.970	19.960	542.000	19910.000	20350.000	5.911	13.270	34.640
x		20.340	19.980	546.100	20180.000	20500.000	5.911	13.300	35.480
σ		0.419	0.296	3.870	261.000	122.100	0.004	0.108	0.907
%RSD		2.062	1.483	0.709	1.294	0.596	0.059	0.810	2.557

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	36.240	198.600	197.400	3.417	-0.680	0.415	0.000	75.420
2	16:02:23	34.960	198.800	197.800	2.765	-0.099	-0.351	0.000	76.030
3	16:03:06	34.980	193.400	195.000	3.156	0.268	-0.132	0.000	75.900
x		35.390	196.900	196.700	3.113	-0.170	-0.023	0.000	75.780
σ		0.735	3.081	1.485	0.328	0.478	0.395	0.000	0.323
%RSD		2.075	1.565	0.755	10.540	280.500	1737.000	0.000	0.426

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	101.760%	3.423	3.326	96.631%	0.043	0.026	0.575	0.561
2	16:02:23	102.202%	3.051	3.353	96.537%	0.034	0.051	0.674	0.555
3	16:03:06	102.744%	3.085	3.129	96.713%	0.044	0.036	0.448	0.390
x		102.235%	3.186	3.269	96.627%	0.040	0.038	0.566	0.502
σ		0.493%	0.206	0.122	0.088%	0.006	0.013	0.113	0.097
%RSD		0.482	6.459	3.729	0.091	13.700	33.860	20.010	19.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	93.791%	8.295	0.430	0.489	80.100	81.060	99.041%	98.382%
2	16:02:23	93.888%	8.258	0.461	0.434	80.290	80.740	99.315%	99.544%
3	16:03:06	93.993%	8.267	0.420	0.432	81.240	80.780	100.253%	100.266%
x		93.891%	8.273	0.437	0.452	80.540	80.860	99.536%	99.397%
σ		0.101%	0.019	0.022	0.033	0.609	0.174	0.635%	0.950%
%RSD		0.108	0.233	4.931	7.197	0.756	0.215	0.638	0.956

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:01:39	0.063	0.094	136.500	133.700	134.900	88.369%
2	16:02:23	0.096	0.093	137.400	133.500	135.500	89.956%
3	16:03:06	0.088	0.082	137.100	132.900	135.000	90.621%
x		0.083	0.090	137.000	133.400	135.200	89.648%
σ		0.017	0.007	0.427	0.404	0.335	1.157%
%RSD		20.500	7.392	0.312	0.303	0.248	1.291

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	90.593%	51.230	963.700	1001.000	0.000	50030.000	307300.000	311700.000
2	16:06:37	87.676%	50.410	975.500	1010.000	0.000	49200.000	312900.000	318600.000
3	16:07:20	86.687%	48.820	967.200	1022.000	0.000	49690.000	318200.000	320300.000
x		88.319%	50.150	968.800	1011.000	0.000	49640.000	312800.000	316900.000
σ		2.031%	1.226	6.042	10.470	0.000	417.600	5481.000	4565.000
%RSD		2.299	2.444	0.624	1.035	0.000	0.841	1.752	1.441

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	40200.000	10090.000	0.000	55550.000	529500.000	556000.000	97.212%	2291.000
2	16:06:37	41140.000	10170.000	0.000	54920.000	521500.000	555600.000	96.470%	2301.000
3	16:07:20	41130.000	10220.000	0.000	55690.000	528300.000	560400.000	95.682%	2299.000
x		40820.000	10160.000	0.000	55390.000	526500.000	557300.000	96.455%	2297.000
σ		538.500	65.560	0.000	411.400	4299.000	2683.000	0.766%	5.681
%RSD		1.319	0.645	0.000	0.743	0.817	0.481	0.794	0.247

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	635.200	360.700	3468.000	119900.000	120500.000	504.800	550.300	391.200
2	16:06:37	636.900	363.700	3506.000	120700.000	121100.000	503.900	548.000	396.300
3	16:07:20	636.600	364.200	3496.000	120100.000	120700.000	501.700	544.200	391.000
x		636.200	362.900	3490.000	120300.000	120800.000	503.500	547.500	392.900
σ		0.904	1.887	20.140	441.800	259.000	1.627	3.123	2.987
%RSD		0.142	0.520	0.577	0.367	0.215	0.323	0.570	0.760

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	395.400	1666.000	1691.000	62.640	10.700	12.720	0.000	1490.000
2	16:06:37	394.300	1671.000	1685.000	62.340	11.180	12.930	0.000	1500.000
3	16:07:20	396.500	1670.000	1694.000	62.140	11.930	12.980	0.000	1502.000
x		395.400	1669.000	1690.000	62.370	11.270	12.880	0.000	1497.000
σ		1.103	2.353	4.456	0.256	0.617	0.138	0.000	6.565
%RSD		0.279	0.141	0.264	0.410	5.476	1.070	0.000	0.439

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	0.000	1048.000	1049.000	88.808%	48.070	48.830	51.710	47.830
2	16:06:37	0.000	1075.000	1073.000	88.717%	48.040	48.780	53.310	50.040
3	16:07:20	0.000	1077.000	1074.000	88.349%	48.600	48.890	51.830	49.100
x		0.000	1067.000	1065.000	88.625%	48.240	48.840	52.280	48.990
σ		0.000	16.620	14.150	0.243%	0.316	0.055	0.894	1.109
%RSD		0.000	1.558	1.328	0.274	0.654	0.113	1.710	2.264

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	88.682%	1881.000	455.100	454.900	2409.000	2389.000	97.926%	98.609%
2	16:06:37	88.302%	1910.000	462.100	459.200	2403.000	2391.000	100.421%	99.946%
3	16:07:20	87.711%	1916.000	464.900	463.100	2420.000	2401.000	100.122%	99.356%
x		88.232%	1902.000	460.700	459.100	2411.000	2394.000	99.490%	99.304%
σ		0.489%	18.380	5.038	4.094	8.585	6.396	1.362%	0.670%
%RSD		0.554	0.966	1.093	0.892	0.356	0.267	1.369	0.675

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:54	49.780	50.150	283.100	277.600	279.500	88.998%
2	16:06:37	50.720	50.650	283.700	279.800	281.100	90.428%
3	16:07:20	50.290	50.240	283.100	276.800	280.400	90.752%
x		50.270	50.350	283.300	278.100	280.300	90.059%
σ		0.470	0.269	0.362	1.531	0.850	0.933%
%RSD		0.935	0.534	0.128	0.551	0.303	1.036

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	95.663%	49.810	940.200	961.300	0.000	49200.000	330300.000	333300.000
2	16:10:51	91.300%	51.230	977.300	1005.000	0.000	49220.000	341000.000	345000.000
3	16:11:34	88.090%	48.030	966.600	1013.000	0.000	49280.000	346100.000	349100.000
x		91.684%	49.690	961.400	992.900	0.000	49230.000	339100.000	342500.000
σ		3.801%	1.602	19.110	27.670	0.000	43.830	8073.000	8192.000
%RSD		4.146	3.224	1.988	2.786	0.000	0.089	2.380	2.392

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	39640.000	9482.000	0.000	54750.000	598000.000	637800.000	98.557%	2720.000
2	16:10:51	40810.000	9698.000	0.000	53600.000	595100.000	635500.000	97.277%	2743.000
3	16:11:34	41090.000	9707.000	0.000	54270.000	600400.000	637500.000	96.342%	2739.000
x		40510.000	9629.000	0.000	54200.000	597900.000	636900.000	97.392%	2734.000
σ		771.700	127.100	0.000	576.600	2667.000	1254.000	1.112%	12.270
%RSD		1.905	1.320	0.000	1.064	0.446	0.197	1.142	0.449

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	649.600	303.200	3955.000	122700.000	123400.000	503.700	550.500	398.900
2	16:10:51	650.100	301.400	4004.000	123500.000	123500.000	500.300	544.800	397.600
3	16:11:34	648.100	301.200	3991.000	122200.000	122600.000	495.400	536.800	391.100
x		649.300	302.000	3983.000	122800.000	123100.000	499.800	544.000	395.900
σ		1.018	1.101	25.600	630.600	508.100	4.195	6.866	4.172
%RSD		0.157	0.365	0.643	0.513	0.413	0.839	1.262	1.054

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	401.000	1327.000	1345.000	62.020	11.820	14.050	0.000	1506.000
2	16:10:51	398.000	1325.000	1337.000	62.270	12.200	12.720	0.000	1532.000
3	16:11:34	394.800	1322.000	1339.000	63.320	11.190	13.030	0.000	1535.000
x		397.900	1325.000	1340.000	62.540	11.730	13.270	0.000	1525.000
σ		3.055	2.643	4.304	0.691	0.509	0.696	0.000	15.890
%RSD		0.768	0.200	0.321	1.105	4.340	5.250	0.000	1.042

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	0.000	1050.000	1051.000	89.038%	48.190	47.950	52.200	49.830
2	16:10:51	0.000	1080.000	1077.000	88.164%	48.560	48.690	52.260	48.900
3	16:11:34	0.000	1077.000	1072.000	88.072%	48.070	48.400	51.230	48.580
x		0.000	1069.000	1067.000	88.424%	48.270	48.350	51.900	49.100
σ		0.000	16.590	13.700	0.533%	0.257	0.372	0.575	0.650
%RSD		0.000	1.552	1.285	0.603	0.532	0.768	1.109	1.324

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	88.250%	1885.000	446.600	445.900	2558.000	2514.000	97.565%	97.470%
2	16:10:51	88.384%	1904.000	449.200	447.200	2547.000	2530.000	99.777%	100.037%
3	16:11:34	88.094%	1903.000	447.600	446.100	2534.000	2528.000	99.682%	99.594%
x		88.243%	1897.000	447.800	446.400	2546.000	2524.000	99.008%	99.034%
σ		0.145%	10.400	1.310	0.713	12.360	8.676	1.251%	1.372%
%RSD		0.164	0.548	0.293	0.160	0.485	0.344	1.263	1.386

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:08	50.780	50.840	236.900	229.500	232.700	86.437%
2	16:10:51	51.140	50.810	236.400	230.700	233.200	88.623%
3	16:11:34	50.600	51.230	236.300	230.700	233.300	88.792%
x		50.840	50.960	236.500	230.300	233.100	87.951%
σ		0.272	0.234	0.302	0.672	0.314	1.314%
%RSD		0.534	0.460	0.128	0.292	0.135	1.494

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	90.910%	54.800	1012.000	1039.000	0.000	53990.000	356300.000	359500.000
2	16:15:07	86.081%	53.160	1028.000	1077.000	0.000	54260.000	364600.000	368100.000
3	16:15:50	83.547%	52.540	1044.000	1083.000	0.000	53190.000	367900.000	373400.000
x		86.846%	53.500	1028.000	1067.000	0.000	53810.000	362900.000	367000.000
σ		3.741%	1.167	15.750	23.710	0.000	555.900	5940.000	7018.000
%RSD		4.307	2.182	1.532	2.223	0.000	1.033	1.637	1.912

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	23130.000	13510.000	0.000	55230.000	605600.000	642700.000	94.071%	2034.000
2	16:15:07	23690.000	13820.000	0.000	55340.000	595600.000	639400.000	93.177%	2041.000
3	16:15:50	23990.000	13940.000	0.000	55150.000	597900.000	643100.000	91.902%	2045.000
x		23600.000	13760.000	0.000	55240.000	599700.000	641700.000	93.050%	2040.000
σ		435.300	220.100	0.000	96.660	5237.000	2029.000	1.090%	5.285
%RSD		1.844	1.600	0.000	0.175	0.873	0.316	1.172	0.259

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	654.600	317.400	3317.000	101800.000	103500.000	552.700	586.900	433.600
2	16:15:07	660.800	316.800	3291.000	101400.000	103200.000	547.800	577.700	428.000
3	16:15:50	654.600	315.400	3332.000	101500.000	102500.000	539.200	575.300	429.000
x		656.600	316.500	3313.000	101600.000	103000.000	546.600	580.000	430.200
σ		3.596	1.064	20.610	228.400	525.900	6.858	6.138	2.998
%RSD		0.548	0.336	0.622	0.225	0.510	1.255	1.058	0.697

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	431.600	1421.000	1436.000	59.420	13.210	13.320	0.000	1532.000
2	16:15:07	429.500	1410.000	1415.000	58.500	12.180	13.150	0.000	1544.000
3	16:15:50	427.300	1416.000	1428.000	58.750	12.910	13.420	0.000	1556.000
x		429.500	1416.000	1427.000	58.890	12.770	13.300	0.000	1544.000
σ		2.129	5.759	10.360	0.477	0.527	0.136	0.000	11.630
%RSD		0.496	0.407	0.726	0.811	4.132	1.026	0.000	0.753

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	0.000	1189.000	1180.000	86.743%	53.530	53.780	57.280	53.050
2	16:15:07	0.000	1200.000	1196.000	86.508%	53.210	53.520	57.050	54.260
3	16:15:50	0.000	1200.000	1201.000	85.687%	53.460	53.700	57.270	53.340
x		0.000	1196.000	1192.000	86.313%	53.400	53.670	57.200	53.550
σ		0.000	6.414	10.980	0.554%	0.171	0.131	0.130	0.631
%RSD		0.000	0.536	0.921	0.642	0.320	0.245	0.227	1.178

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	87.388%	2138.000	540.200	539.500	2561.000	2544.000	97.785%	97.196%
2	16:15:07	87.564%	2132.000	541.500	543.000	2569.000	2550.000	98.266%	97.899%
3	16:15:50	86.538%	2147.000	545.400	543.300	2566.000	2556.000	98.122%	97.852%
x		87.163%	2139.000	542.400	541.900	2565.000	2550.000	98.058%	97.649%
σ		0.549%	7.526	2.691	2.119	4.056	6.264	0.247%	0.393%
%RSD		0.630	0.352	0.496	0.391	0.158	0.246	0.252	0.403

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:14:24	56.000	55.920	682.900	666.900	671.100	87.004%
2	16:15:07	55.690	55.910	678.200	663.200	668.300	89.633%
3	16:15:50	55.460	55.630	675.100	663.700	666.000	89.963%
x		55.710	55.820	678.800	664.600	668.500	88.867%
σ		0.270	0.164	3.926	2.025	2.571	1.622%
%RSD		0.484	0.294	0.578	0.305	0.385	1.825

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	97.724%	-0.012	8.911	8.197	0.000	25.740	28.630	27.550
2	16:22:59	93.251%	-0.011	8.136	7.755	0.000	25.720	28.020	29.750
3	16:23:41	90.269%	-0.018	7.236	7.138	0.000	26.750	42.520	46.910
x		93.748%	-0.014	8.094	7.697	0.000	26.070	33.060	34.740
σ		3.752%	0.004	0.838	0.532	0.000	0.586	8.201	10.600
%RSD		4.003	30.290	10.360	6.911	0.000	2.249	24.810	30.520

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	1.692	8.935	0.000	6.604	83.560	58.660	94.241%	0.511
2	16:22:59	1.409	8.183	0.000	5.251	64.090	57.320	93.052%	0.538
3	16:23:41	2.887	8.159	0.000	7.600	88.490	86.010	93.165%	0.238
x		1.996	8.426	0.000	6.485	78.710	67.330	93.486%	0.429
σ		0.784	0.441	0.000	1.179	12.900	16.190	0.656%	0.166
%RSD		39.300	5.238	0.000	18.180	16.390	24.050	0.702	38.640

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	-0.060	0.433	0.322	33.690	31.050	0.036	-0.015	0.315
2	16:22:59	0.082	0.391	0.368	22.900	23.240	0.051	-0.045	0.321
3	16:23:41	-0.036	0.384	0.478	20.850	22.100	0.077	0.048	0.318
x		-0.005	0.403	0.390	25.810	25.460	0.055	-0.004	0.318
σ		0.076	0.026	0.080	6.901	4.871	0.020	0.048	0.003
%RSD		1676.000	6.566	20.570	26.730	19.130	37.430	1171.000	0.883

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	0.384	-0.230	-0.480	-0.170	-1.052	1.085	0.000	0.205
2	16:22:59	0.347	-0.358	-0.552	-0.293	0.183	0.647	0.000	0.228
3	16:23:41	0.246	-0.357	-0.429	-0.039	-0.530	0.662	0.000	0.309
x		0.326	-0.315	-0.487	-0.168	-0.466	0.798	0.000	0.247
σ		0.071	0.073	0.062	0.127	0.620	0.248	0.000	0.055
%RSD		21.860	23.270	12.750	75.870	133.000	31.110	0.000	22.210

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	94.303%	3.425	3.492	96.898%	-0.009	-0.006	-0.087	-0.089
2	16:22:59	93.653%	2.724	2.673	97.885%	-0.010	0.002	-0.041	-0.053
3	16:23:41	94.351%	2.511	2.273	96.422%	-0.001	-0.000	-0.075	-0.046
x		94.102%	2.887	2.813	97.069%	-0.006	-0.001	-0.067	-0.063
σ		0.390%	0.478	0.622	0.746%	0.005	0.004	0.024	0.023
%RSD		0.414	16.550	22.100	0.769	78.730	344.500	34.990	37.140

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	99.471%	5.449	0.136	0.123	0.651	0.679	94.977%	94.686%
2	16:22:59	99.837%	4.840	0.103	0.113	0.793	0.577	96.659%	96.545%
3	16:23:41	99.431%	4.299	0.107	0.119	0.823	0.701	96.954%	96.744%
x		99.580%	4.862	0.115	0.118	0.755	0.652	96.197%	95.992%
σ		0.224%	0.575	0.018	0.005	0.092	0.066	1.066%	1.135%
%RSD		0.225	11.830	15.430	4.233	12.170	10.160	1.109	1.182

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:15	0.136	0.129	0.212	0.161	0.189	98.256%
2	16:22:59	0.105	0.122	0.123	0.152	0.149	98.076%
3	16:23:41	0.090	0.074	0.187	0.182	0.184	97.956%
x		0.110	0.108	0.174	0.165	0.174	98.096%
σ		0.024	0.030	0.046	0.016	0.022	0.151%
%RSD		21.300	27.530	26.260	9.390	12.450	0.154

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	97.263%	46.920	929.600	942.200	0.000	45500.000	52370.000	53350.000
2	16:27:15	94.775%	45.830	938.900	964.400	0.000	45080.000	53190.000	54060.000
3	16:27:58	93.615%	45.700	919.000	967.300	0.000	45190.000	53730.000	53920.000
x		95.218%	46.150	929.200	958.000	0.000	45260.000	53100.000	53770.000
σ		1.864%	0.670	9.944	13.720	0.000	215.400	681.500	377.400
%RSD		1.958	1.453	1.070	1.432	0.000	0.476	1.283	0.702

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	2046.000	5958.000	0.000	47720.000	47350.000	45770.000	97.679%	954.600
2	16:27:15	2065.000	5979.000	0.000	47280.000	47320.000	45290.000	96.459%	956.100
3	16:27:58	2044.000	5965.000	0.000	48170.000	47720.000	47810.000	94.859%	964.300
x		2052.000	5967.000	0.000	47720.000	47460.000	46290.000	96.332%	958.300
σ		12.040	10.690	0.000	447.000	223.700	1338.000	1.414%	5.186
%RSD		0.587	0.179	0.000	0.937	0.471	2.890	1.468	0.541

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	485.100	194.000	504.800	1089.000	1231.000	462.900	468.900	240.100
2	16:27:15	485.900	192.400	502.200	1071.000	1215.000	461.200	463.000	239.100
3	16:27:58	497.400	197.600	503.600	1063.000	1219.000	462.700	466.800	233.300
x		489.500	194.700	503.500	1074.000	1222.000	462.300	466.200	237.500
σ		6.898	2.638	1.291	13.250	8.520	0.919	2.977	3.637
%RSD		1.409	1.355	0.256	1.234	0.697	0.199	0.638	1.531

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	241.600	434.900	432.100	34.480	8.538	9.770	0.000	943.600
2	16:27:15	240.300	432.800	430.900	35.340	8.918	10.180	0.000	952.500
3	16:27:58	237.700	433.800	433.400	33.280	9.108	9.518	0.000	952.900
x		239.900	433.800	432.100	34.370	8.855	9.823	0.000	949.700
σ		2.019	1.016	1.239	1.034	0.290	0.336	0.000	5.265
%RSD		0.842	0.234	0.287	3.010	3.275	3.415	0.000	0.554

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	96.724%	992.500	984.000	93.679%	48.640	49.050	47.920	45.360
2	16:27:15	95.888%	994.200	994.500	93.656%	47.580	48.300	48.460	45.210
3	16:27:58	96.307%	993.000	985.900	93.434%	47.530	48.490	47.160	46.140
x		96.306%	993.200	988.200	93.590%	47.920	48.610	47.850	45.570
σ		0.418%	0.866	5.617	0.135%	0.625	0.391	0.654	0.500
%RSD		0.434	0.087	0.569	0.145	1.305	0.805	1.366	1.096

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	92.326%	1868.000	472.300	473.300	1912.000	1905.000	97.695%	98.371%
2	16:27:15	92.632%	1861.000	470.600	472.400	1920.000	1903.000	98.352%	98.622%
3	16:27:58	93.007%	1810.000	469.200	472.600	1901.000	1903.000	98.276%	99.177%
x		92.655%	1846.000	470.700	472.800	1911.000	1904.000	98.108%	98.723%
σ		0.342%	31.910	1.564	0.459	9.527	1.121	0.360%	0.412%
%RSD		0.369	1.728	0.332	0.097	0.499	0.059	0.367	0.418

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:26:31	43.910	43.530	20.020	21.280	20.600	103.852%
2	16:27:15	43.910	43.800	19.680	21.050	20.210	106.080%
3	16:27:58	44.360	44.450	19.880	20.640	20.170	105.891%
x		44.060	43.920	19.860	20.990	20.320	105.274%
σ		0.262	0.475	0.170	0.327	0.236	1.235%
%RSD		0.595	1.081	0.857	1.557	1.162	1.173

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	91.327%	1.285	61.740	63.200	0.000	2131.000	533400.000	541300.000
2	16:34:23	87.727%	1.058	57.510	63.170	0.000	2093.000	545100.000	550400.000
3	16:35:05	85.495%	1.195	58.800	62.980	0.000	2119.000	551700.000	557800.000
x		88.183%	1.179	59.350	63.120	0.000	2114.000	543400.000	549800.000
σ		2.943%	0.114	2.170	0.119	0.000	19.630	9304.000	8295.000
%RSD		3.337	9.659	3.657	0.189	0.000	0.928	1.712	1.509

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	25900.000	10370.000	0.000	5123.000	1172000.000	1191000.000	96.666%	1320.000
2	16:34:23	26530.000	10460.000	0.000	5028.000	1149000.000	1173000.000	95.469%	1319.000
3	16:35:05	26650.000	10510.000	0.000	5060.000	1155000.000	1183000.000	94.025%	1313.000
x		26360.000	10450.000	0.000	5070.000	1159000.000	1182000.000	95.387%	1317.000
σ		405.000	72.240	0.000	48.510	11650.000	9099.000	1.323%	3.805
%RSD		1.536	0.691	0.000	0.957	1.005	0.769	1.387	0.289

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	113.300	65.660	4624.000	95290.000	99180.000	34.640	83.100	136.300
2	16:34:23	114.700	64.620	4601.000	94850.000	97580.000	34.030	82.870	133.800
3	16:35:05	114.900	65.310	4598.000	94560.000	97280.000	34.710	82.690	133.300
x		114.300	65.200	4608.000	94900.000	98010.000	34.460	82.880	134.500
σ		0.853	0.529	14.320	365.100	1025.000	0.374	0.205	1.645
%RSD		0.747	0.812	0.311	0.385	1.046	1.085	0.247	1.223

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	139.000	992.200	1001.000	30.290	1.266	2.573	0.000	418.600
2	16:34:23	138.000	980.800	991.400	30.860	1.807	2.877	0.000	419.000
3	16:35:05	137.100	989.600	998.600	29.330	1.924	2.749	0.000	422.100
x		138.000	987.500	996.800	30.160	1.666	2.733	0.000	419.900
σ		0.928	5.968	4.809	0.772	0.351	0.153	0.000	1.923
%RSD		0.672	0.604	0.482	2.561	21.080	5.590	0.000	0.458

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	0.000	28.810	28.660	85.190%	1.012	0.884	5.675	5.591
2	16:34:23	0.000	27.660	27.050	85.326%	0.973	0.955	5.852	5.739
3	16:35:05	0.000	26.100	26.180	84.879%	1.005	0.926	6.119	5.747
x		0.000	27.520	27.300	85.132%	0.997	0.921	5.882	5.692
σ		0.000	1.358	1.257	0.229%	0.021	0.036	0.224	0.088
%RSD		0.000	4.935	4.606	0.269	2.057	3.861	3.802	1.543

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	85.885%	54.980	1.291	1.588	76.490	75.810	95.499%	95.731%
2	16:34:23	86.495%	45.970	1.129	1.480	74.560	75.780	97.336%	97.398%
3	16:35:05	86.259%	38.680	1.069	1.409	75.770	75.330	96.939%	97.166%
x		86.213%	46.540	1.163	1.493	75.600	75.640	96.591%	96.765%
σ		0.308%	8.169	0.115	0.090	0.975	0.267	0.967%	0.903%
%RSD		0.357	17.550	9.889	6.053	1.290	0.352	1.001	0.933

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:33:39	1.350	1.373	57.160	54.280	55.340	94.948%
2	16:34:23	1.311	1.310	57.540	54.550	55.800	95.838%
3	16:35:05	1.354	1.342	57.870	54.780	55.860	95.735%
x		1.338	1.341	57.520	54.540	55.670	95.507%
σ		0.023	0.031	0.357	0.253	0.282	0.487%
%RSD		1.751	2.322	0.621	0.463	0.506	0.510

180-7454-B-1-D SD@5 2/5/2012 4:37:13 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	92.821%	0.307	15.340	14.400	0.000	425.000	105000.000	106900.000
2	16:38:39	92.176%	0.255	14.240	14.750	0.000	425.200	106500.000	107900.000
3	16:39:22	90.260%	0.308	13.030	14.370	0.000	421.900	106700.000	108400.000
x		91.752%	0.290	14.200	14.510	0.000	424.000	106100.000	107700.000
σ		1.332%	0.030	1.154	0.213	0.000	1.843	943.200	776.900
%RSD		1.452	10.520	8.124	1.466	0.000	0.435	0.889	0.721

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	5123.000	2127.000	0.000	1045.000	224800.000	237700.000	92.707%	256.100
2	16:38:39	5147.000	2108.000	0.000	1029.000	225000.000	238800.000	92.827%	260.900
3	16:39:22	5148.000	2123.000	0.000	1017.000	221900.000	236700.000	93.421%	266.300
x		5139.000	2119.000	0.000	1031.000	223900.000	237700.000	92.985%	261.100
σ		14.080	9.715	0.000	14.070	1732.000	1022.000	0.383%	5.129
%RSD		0.274	0.458	0.000	1.365	0.774	0.430	0.411	1.964

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	23.190	13.040	919.600	19300.000	19840.000	7.084	17.220	27.960
2	16:38:39	22.370	12.940	918.200	19010.000	19540.000	6.959	17.320	27.500
3	16:39:22	22.670	12.760	905.800	18950.000	19330.000	6.844	16.420	27.210
x		22.740	12.910	914.500	19090.000	19570.000	6.962	16.980	27.560
σ		0.413	0.143	7.615	185.200	253.800	0.120	0.494	0.377
%RSD		1.817	1.109	0.833	0.970	1.297	1.726	2.909	1.366

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	27.990	208.800	213.100	6.842	-0.504	0.401	0.000	74.160
2	16:38:39	27.580	208.900	212.200	6.805	-0.898	0.145	0.000	73.310
3	16:39:22	27.140	209.000	208.900	6.805	-0.884	0.618	0.000	73.240
x		27.570	208.900	211.400	6.817	-0.762	0.388	0.000	73.570
σ		0.427	0.096	2.170	0.021	0.224	0.237	0.000	0.513
%RSD		1.548	0.046	1.027	0.314	29.380	60.980	0.000	0.698

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	99.049%	4.559	4.887	90.721%	0.209	0.195	1.114	1.060
2	16:38:39	100.196%	4.696	4.841	91.150%	0.226	0.216	1.157	1.162
3	16:39:22	100.415%	4.766	5.000	91.280%	0.173	0.197	1.030	1.100
x		99.887%	4.674	4.909	91.050%	0.203	0.202	1.100	1.107
σ		0.734%	0.105	0.082	0.293%	0.027	0.012	0.065	0.051
%RSD		0.735	2.254	1.662	0.321	13.270	5.685	5.869	4.606

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	88.395%	5.160	0.257	0.237	14.820	14.640	94.445%	94.700%
2	16:38:39	89.368%	5.382	0.256	0.251	15.390	14.940	96.282%	96.080%
3	16:39:22	89.537%	5.271	0.269	0.287	15.430	14.750	96.060%	97.235%
x		89.100%	5.271	0.261	0.258	15.210	14.780	95.596%	96.005%
σ		0.616%	0.111	0.007	0.026	0.339	0.154	1.003%	1.269%
%RSD		0.692	2.108	2.808	10.060	2.231	1.043	1.049	1.322

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:37:56	0.281	0.323	11.550	11.000	11.170	94.307%
2	16:38:39	0.270	0.280	11.820	11.050	11.330	95.779%
3	16:39:22	0.294	0.290	11.310	10.870	11.050	96.634%
x		0.282	0.298	11.560	10.970	11.190	95.574%
σ		0.012	0.022	0.255	0.097	0.138	1.177%
%RSD		4.206	7.464	2.209	0.882	1.238	1.232

180-7454-B-1-E MS 2/5/2012 4:41:30 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	90.001%	42.970	848.400	883.100	0.000	41660.000	568100.000	578200.000
2	16:42:56	88.171%	41.430	837.800	869.100	0.000	41820.000	584500.000	587100.000
3	16:43:39	83.520%	42.280	879.500	915.500	0.000	42110.000	590800.000	597200.000
x		87.230%	42.230	855.300	889.200	0.000	41860.000	581100.000	587500.000
σ		3.341%	0.772	21.690	23.790	0.000	229.800	11720.000	9501.000
%RSD		3.831	1.829	2.536	2.675	0.000	0.549	2.016	1.617

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	38380.000	17900.000	0.000	49350.000	1210000.000	1244000.000	96.647%	2194.000
2	16:42:56	38650.000	17850.000	0.000	49490.000	1226000.000	1248000.000	94.800%	2207.000
3	16:43:39	39410.000	18150.000	0.000	49010.000	1213000.000	1239000.000	93.124%	2202.000
x		38810.000	17970.000	0.000	49280.000	1216000.000	1244000.000	94.857%	2201.000
σ		535.000	158.400	0.000	249.300	8652.000	4739.000	1.762%	6.617
%RSD		1.378	0.882	0.000	0.506	0.711	0.381	1.857	0.301

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	552.400	234.700	6637.000	97040.000	100500.000	427.700	465.700	282.500
2	16:42:56	555.700	237.200	6627.000	96370.000	99930.000	430.300	463.800	281.200
3	16:43:39	556.300	234.900	6598.000	96200.000	99550.000	422.200	454.500	280.500
x		554.800	235.600	6621.000	96540.000	99990.000	426.700	461.300	281.400
σ		2.134	1.426	20.110	446.500	462.700	4.134	5.966	1.037
%RSD		0.385	0.605	0.304	0.463	0.463	0.969	1.293	0.368

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	287.600	627.300	630.300	62.910	8.761	11.670	0.000	1295.000
2	16:42:56	282.600	625.000	637.200	61.220	9.119	10.810	0.000	1326.000
3	16:43:39	284.000	626.900	630.100	62.080	9.446	11.130	0.000	1331.000
x		284.700	626.400	632.500	62.070	9.108	11.200	0.000	1318.000
σ		2.584	1.222	4.029	0.845	0.343	0.436	0.000	19.430
%RSD		0.908	0.195	0.637	1.361	3.763	3.894	0.000	1.475

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	0.000	909.300	912.800	84.895%	43.470	43.210	43.080	39.500
2	16:42:56	0.000	933.900	929.100	83.143%	44.730	43.980	41.870	40.710
3	16:43:39	0.000	931.700	931.600	82.652%	43.800	44.350	42.590	39.100
x		0.000	925.000	924.500	83.563%	44.000	43.850	42.520	39.770
σ		0.000	13.590	10.240	1.179%	0.651	0.583	0.607	0.839
%RSD		0.000	1.469	1.107	1.411	1.481	1.330	1.427	2.110

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	85.418%	1598.000	376.500	377.000	1744.000	1732.000	95.513%	95.142%
2	16:42:56	85.636%	1600.000	378.800	378.300	1754.000	1741.000	95.916%	96.039%
3	16:43:39	84.052%	1619.000	382.200	382.100	1751.000	1740.000	96.971%	96.693%
x		85.035%	1606.000	379.100	379.100	1750.000	1738.000	96.134%	95.958%
σ		0.859%	11.500	2.862	2.637	5.035	4.616	0.753%	0.778%
%RSD		1.010	0.717	0.755	0.696	0.288	0.266	0.783	0.811

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:12	39.950	39.990	67.640	65.960	66.290	91.979%
2	16:42:56	39.970	40.000	66.640	65.270	65.790	94.701%
3	16:43:39	40.140	40.270	67.240	65.540	65.950	94.966%
x		40.020	40.090	67.170	65.590	66.010	93.882%
σ		0.102	0.159	0.503	0.346	0.256	1.654%
%RSD		0.254	0.397	0.750	0.527	0.388	1.761

CCV 309497 2/5/2012 4:48:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	97.272%	95.880	94.020	97.300	0.000	49110.000	50040.000	50450.000
2	16:50:04	95.855%	95.260	96.520	97.220	0.000	48950.000	50770.000	51790.000
3	16:50:47	95.401%	95.770	94.690	97.250	0.000	49080.000	51220.000	51490.000
x		96.176%	95.636%	95.075%	97.255%	0.000	98.094%	101.348%	102.489%
σ		0.976%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.015	0.347	1.363	0.045	0.000	0.172	1.180	1.375

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	506.000	5205.000	0.000	50930.000	48340.000	47560.000	95.223%	95.960
2	16:50:04	516.500	5223.000	0.000	50160.000	48520.000	48200.000	94.512%	99.670
3	16:50:47	511.300	5251.000	0.000	51000.000	48960.000	48280.000	94.049%	98.740
x		102.255%	104.523%	0.000	101.403%	97.218%	96.028%	94.595%	98.123%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.591%	n/a
%RSD		1.024	0.439	0.000	0.919	0.653	0.818	0.625	1.971

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	98.520	99.450	509.700	25880.000	25650.000	98.290	99.740	99.510
2	16:50:04	99.290	99.440	514.000	25960.000	25780.000	99.130	98.350	99.980
3	16:50:47	99.810	100.500	515.100	25870.000	26040.000	99.120	97.760	98.210
x		99.207%	99.806%	102.585%	103.625%	103.290%	98.848%	98.619%	99.236%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.655	0.629	0.562	0.194	0.779	0.489	1.030	0.923

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	101.300	101.200	101.400	100.700	99.110	100.700	0.000	98.080
2	16:50:04	100.500	99.770	99.720	99.380	102.100	99.770	0.000	97.670
3	16:50:47	99.220	100.400	100.800	100.700	100.600	102.800	0.000	99.080
x		100.338%	100.463%	100.638%	100.237%	100.622%	101.103%	0.000	98.279%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.055	0.705	0.829	0.745	1.509	1.534	0.000	0.738

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	92.491%	95.050	95.710	92.826%	97.020	96.560	99.990	99.690
2	16:50:04	94.033%	98.080	98.510	93.773%	95.670	97.620	97.570	99.720
3	16:50:47	93.927%	99.430	99.330	94.480%	96.450	97.140	97.900	99.090
x		93.483%	97.520%	97.850%	93.693%	96.380%	97.108%	98.487%	99.497%
σ		0.861%	n/a	n/a	0.830%	n/a	n/a	n/a	n/a
%RSD		0.921	2.300	1.942	0.885	0.699	0.544	1.334	0.354

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	91.414%	96.020	90.620	90.270	97.480	98.400	92.896%	93.315%
2	16:50:04	92.546%	96.960	93.930	93.740	97.830	97.740	95.436%	94.973%
3	16:50:47	92.113%	96.670	96.220	95.820	97.770	97.900	95.574%	95.746%
x		92.024%	96.547%	93.589%	93.278%	97.691%	98.013%	94.635%	94.678%
σ		0.571%	n/a	n/a	n/a	n/a	n/a	1.508%	1.242%
%RSD		0.621	0.499	3.008	3.010	0.192	0.347	1.593	1.312

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:21	96.340	95.960	97.560	96.880	97.120	91.965%
2	16:50:04	97.530	96.980	98.910	97.530	98.180	93.110%
3	16:50:47	97.090	97.270	98.640	97.380	98.380	93.514%
x		96.985%	96.737%	98.369%	97.264%	97.895%	92.863%
σ		n/a	n/a	n/a	n/a	n/a	0.803%
%RSD		0.619	0.710	0.726	0.348	0.689	0.865

CCB3 2/5/2012 4:55:49 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	100.713%	-0.012	3.406	3.097	0.000	1.887	5.830	6.186
2	16:57:14	98.763%	0.017	3.498	2.742	0.000	3.122	9.437	9.080
3	16:57:57	96.592%	0.011	2.363	2.542	0.000	6.499	14.500	16.900
x		98.689%	0.005	3.089	2.794	0.000	3.836	9.921	10.720
σ		2.062%	0.015	0.631	0.281	0.000	2.388	4.354	5.543
%RSD		2.089	286.300	20.420	10.070	0.000	62.250	43.880	51.700

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.916	1.206	0.000	-0.256	42.500	4.342	97.041%	-0.016
2	16:57:14	-0.648	1.054	0.000	-0.186	21.160	11.790	96.215%	0.088
3	16:57:57	-0.062	2.303	0.000	1.744	37.900	27.130	96.453%	-0.015
x		-0.542	1.521	0.000	0.434	33.850	14.420	96.570%	0.019
σ		0.437	0.682	0.000	1.135	11.230	11.620	0.425%	0.060
%RSD		80.600	44.810	0.000	261.500	33.170	80.580	0.440	308.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.043	0.005	0.210	7.632	10.430	-0.006	-0.092	-0.203
2	16:57:14	0.017	0.040	0.265	4.238	4.021	0.004	-0.087	-0.178
3	16:57:57	0.012	-0.009	0.298	3.949	3.578	0.012	-0.128	-0.167
x		-0.005	0.012	0.258	5.273	6.009	0.003	-0.102	-0.183
σ		0.033	0.025	0.045	2.048	3.833	0.009	0.023	0.018
%RSD		686.100	208.500	17.350	38.850	63.790	275.700	22.160	10.010

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	-0.283	-0.805	-0.898	0.065	-0.364	0.671	0.000	0.030
2	16:57:14	-0.196	-0.770	-0.907	0.143	-0.026	0.765	0.000	0.031
3	16:57:57	-0.184	-0.839	-0.818	0.258	-0.264	0.705	0.000	0.070
x		-0.221	-0.805	-0.874	0.155	-0.218	0.713	0.000	0.044
σ		0.054	0.034	0.049	0.097	0.174	0.048	0.000	0.023
%RSD		24.530	4.283	5.635	62.560	79.690	6.713	0.000	52.590

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	95.143%	1.173	1.043	99.716%	0.000	0.009	0.010	0.007
2	16:57:14	96.031%	1.029	1.025	100.334%	0.005	0.014	-0.010	-0.014
3	16:57:57	95.896%	0.893	0.925	100.086%	0.008	0.015	0.032	0.051
x		95.690%	1.031	0.998	100.045%	0.004	0.013	0.010	0.014
σ		0.479%	0.140	0.063	0.311%	0.004	0.003	0.021	0.033
%RSD		0.500	13.590	6.338	0.311	88.410	26.110	203.600	232.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	95.496%	0.197	0.635	0.674	0.067	0.028	94.543%	94.146%
2	16:57:14	96.224%	0.188	0.622	0.581	0.048	0.104	95.481%	95.746%
3	16:57:57	95.030%	0.117	0.582	0.516	0.136	0.150	97.786%	96.961%
x		95.583%	0.167	0.613	0.591	0.083	0.094	95.937%	95.618%
σ		0.602%	0.044	0.028	0.079	0.046	0.062	1.669%	1.412%
%RSD		0.630	26.310	4.531	13.420	55.490	65.630	1.740	1.477

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:32	0.032	0.039	0.337	0.284	0.309	97.929%
2	16:57:14	0.039	0.042	0.250	0.217	0.232	98.935%
3	16:57:57	0.057	0.043	0.237	0.216	0.224	99.079%
x		0.042	0.041	0.275	0.239	0.255	98.648%
σ		0.013	0.002	0.055	0.039	0.047	0.626%
%RSD		30.470	4.513	19.920	16.300	18.320	0.635

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	91.535%	48.290	990.900	1020.000	0.000	48400.000	620600.000	628000.000
2	17:01:33	90.437%	47.250	957.600	995.100	0.000	47200.000	627200.000	628300.000
3	17:02:16	86.768%	46.850	958.200	1009.000	0.000	47420.000	638200.000	641500.000
x		89.580%	47.460	968.900	1008.000	0.000	47670.000	628700.000	632600.000
σ		2.496%	0.746	19.070	12.220	0.000	641.300	8882.000	7738.000
%RSD		2.787	1.572	1.968	1.212	0.000	1.345	1.413	1.223

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	43100.000	22230.000	0.000	57630.000	1259000.000	1273000.000	98.378%	2407.000
2	17:01:33	43040.000	22000.000	0.000	56490.000	1253000.000	1279000.000	97.121%	2407.000
3	17:02:16	44060.000	22240.000	0.000	57060.000	1257000.000	1280000.000	95.669%	2397.000
x		43400.000	22150.000	0.000	57060.000	1256000.000	1277000.000	97.056%	2404.000
σ		571.400	134.100	0.000	568.100	2690.000	3495.000	1.356%	5.392
%RSD		1.317	0.606	0.000	0.996	0.214	0.274	1.397	0.224

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	616.300	264.100	7335.000	114400.000	118500.000	482.200	524.600	330.400
2	17:01:33	614.700	267.600	7322.000	112500.000	115900.000	473.700	513.000	321.400
3	17:02:16	616.500	267.200	7381.000	113100.000	116200.000	475.500	515.900	324.000
x		615.800	266.300	7346.000	113400.000	116800.000	477.100	517.800	325.300
σ		0.990	1.947	31.110	979.800	1413.000	4.480	6.025	4.671
%RSD		0.161	0.731	0.423	0.864	1.210	0.939	1.163	1.436

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	334.300	2009.000	2040.000	66.950	11.180	12.680	0.000	1454.000
2	17:01:33	323.400	1990.000	2012.000	68.140	10.900	12.420	0.000	1471.000
3	17:02:16	326.100	1987.000	2025.000	68.940	10.380	12.980	0.000	1482.000
x		327.900	1995.000	2026.000	68.010	10.820	12.700	0.000	1469.000
σ		5.636	11.970	14.040	1.004	0.406	0.281	0.000	14.060
%RSD		1.719	0.600	0.693	1.476	3.751	2.214	0.000	0.957

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	0.000	1050.000	1050.000	84.015%	47.290	46.840	49.550	46.940
2	17:01:33	0.000	1060.000	1058.000	83.702%	46.900	46.200	49.630	47.890
3	17:02:16	0.000	1067.000	1060.000	82.989%	46.520	46.690	49.530	45.960
x		0.000	1059.000	1056.000	83.569%	46.900	46.580	49.570	46.930
σ		0.000	8.342	5.309	0.526%	0.382	0.335	0.055	0.969
%RSD		0.000	0.788	0.503	0.629	0.814	0.720	0.111	2.065

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	85.026%	1825.000	420.900	422.400	1971.000	1949.000	96.723%	95.462%
2	17:01:33	86.431%	1777.000	417.300	416.400	1966.000	1953.000	97.278%	97.132%
3	17:02:16	85.302%	1841.000	422.400	423.400	1979.000	1971.000	97.253%	97.096%
x		85.586%	1814.000	420.200	420.800	1972.000	1958.000	97.085%	96.563%
σ		0.744%	33.140	2.620	3.779	6.411	11.350	0.314%	0.954%
%RSD		0.870	1.827	0.623	0.898	0.325	0.580	0.323	0.988

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:50	43.680	44.120	69.470	67.000	68.010	94.380%
2	17:01:33	43.360	43.580	68.390	66.160	67.030	98.126%
3	17:02:16	43.620	43.670	69.070	66.710	67.560	98.220%
x		43.550	43.790	68.980	66.620	67.530	96.909%
σ		0.169	0.292	0.546	0.429	0.487	2.190%
%RSD		0.389	0.667	0.792	0.643	0.722	2.260

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	88.064%	53.160	1044.000	1068.000	0.000	52230.000	575900.000	587900.000
2	17:05:51	85.146%	53.190	1057.000	1077.000	0.000	51620.000	582900.000	593100.000
3	17:06:33	85.217%	51.710	1025.000	1084.000	0.000	52600.000	587500.000	589000.000
x		86.142%	52.680	1042.000	1076.000	0.000	52150.000	582100.000	590000.000
σ		1.665%	0.847	16.120	7.935	0.000	496.900	5838.000	2773.000
%RSD		1.933	1.607	1.547	0.737	0.000	0.953	1.003	0.470

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	27670.000	20730.000	0.000	56550.000	1181000.000	1198000.000	93.517%	2325.000
2	17:05:51	27910.000	20680.000	0.000	55180.000	1165000.000	1194000.000	92.726%	2321.000
3	17:06:33	27500.000	20580.000	0.000	55980.000	1186000.000	1206000.000	90.765%	2307.000
x		27690.000	20660.000	0.000	55900.000	1177000.000	1200000.000	92.336%	2317.000
σ		207.800	79.810	0.000	689.900	10660.000	5975.000	1.417%	9.464
%RSD		0.750	0.386	0.000	1.234	0.905	0.498	1.535	0.408

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	648.400	271.100	5014.000	93350.000	97370.000	529.000	571.800	374.100
2	17:05:51	640.000	267.400	5014.000	92360.000	95500.000	522.200	563.400	372.700
3	17:06:33	641.500	272.300	5030.000	92830.000	96520.000	531.200	575.500	371.800
x		643.300	270.200	5019.000	92850.000	96460.000	527.400	570.200	372.900
σ		4.495	2.554	9.077	493.200	938.900	4.702	6.213	1.167
%RSD		0.699	0.945	0.181	0.531	0.973	0.891	1.090	0.313

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	378.900	1392.000	1402.000	71.580	11.640	12.990	0.000	1514.000
2	17:05:51	372.800	1391.000	1418.000	73.550	11.920	13.010	0.000	1522.000
3	17:06:33	380.200	1412.000	1427.000	71.790	12.120	13.290	0.000	1531.000
x		377.300	1398.000	1416.000	72.310	11.890	13.100	0.000	1522.000
σ		3.947	12.190	12.900	1.085	0.241	0.166	0.000	8.950
%RSD		1.046	0.872	0.911	1.501	2.029	1.270	0.000	0.588

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	0.000	1201.000	1195.000	83.302%	51.580	52.110	57.030	53.480
2	17:05:51	0.000	1219.000	1213.000	81.308%	52.420	52.690	58.190	53.320
3	17:06:33	0.000	1213.000	1205.000	81.204%	52.180	52.310	56.090	53.690
x		0.000	1211.000	1204.000	81.938%	52.060	52.370	57.110	53.490
σ		0.000	9.564	9.072	1.182%	0.434	0.294	1.052	0.186
%RSD		0.000	0.790	0.753	1.443	0.833	0.562	1.842	0.348

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	83.990%	2092.000	527.300	526.600	2172.000	2165.000	93.046%	93.681%
2	17:05:51	83.542%	2107.000	529.100	530.500	2175.000	2161.000	94.324%	94.476%
3	17:06:33	83.506%	2094.000	526.400	524.900	2163.000	2158.000	94.091%	93.447%
x		83.679%	2098.000	527.600	527.300	2170.000	2161.000	93.820%	93.868%
σ		0.269%	7.769	1.397	2.903	6.206	3.943	0.681%	0.539%
%RSD		0.322	0.370	0.265	0.550	0.286	0.183	0.725	0.575

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:05:08	51.960	52.030	76.700	74.830	75.390	88.798%
2	17:05:51	51.100	51.110	74.630	72.440	73.230	92.246%
3	17:06:33	51.070	50.720	73.260	72.260	72.450	92.856%
x		51.380	51.290	74.870	73.180	73.690	91.300%
σ		0.502	0.673	1.734	1.434	1.525	2.188%
%RSD		0.978	1.313	2.316	1.960	2.069	2.397

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	91.142%	1.179	65.040	66.490	0.000	2207.000	512900.000	518400.000
2	17:13:01	88.173%	1.202	62.730	68.730	0.000	2182.000	524400.000	529300.000
3	17:13:44	85.275%	1.141	64.570	65.990	0.000	2205.000	535300.000	536100.000
x		88.197%	1.174	64.110	67.070	0.000	2198.000	524200.000	527900.000
σ		2.933%	0.031	1.223	1.460	0.000	14.130	11210.000	8914.000
%RSD		3.326	2.607	1.907	2.177	0.000	0.643	2.140	1.689

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	25300.000	12960.000	0.000	5792.000	1136000.000	1150000.000	94.549%	1240.000
2	17:13:01	25500.000	13070.000	0.000	5747.000	1135000.000	1151000.000	92.973%	1259.000
3	17:13:44	25550.000	13000.000	0.000	5672.000	1120000.000	1157000.000	91.437%	1251.000
x		25450.000	13010.000	0.000	5737.000	1130000.000	1153000.000	92.986%	1250.000
σ		133.700	54.790	0.000	60.570	8935.000	3367.000	1.556%	9.225
%RSD		0.525	0.421	0.000	1.056	0.790	0.292	1.674	0.738

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	118.000	75.150	5145.000	89580.000	93510.000	27.870	68.580	138.700
2	17:13:01	118.400	75.990	5134.000	89280.000	93170.000	27.930	68.250	136.500
3	17:13:44	117.900	76.270	5187.000	88990.000	92000.000	27.900	68.810	137.100
x		118.100	75.800	5156.000	89290.000	92890.000	27.900	68.550	137.400
σ		0.293	0.586	27.950	296.500	792.400	0.029	0.283	1.126
%RSD		0.248	0.773	0.542	0.332	0.853	0.103	0.413	0.820

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	140.700	352.400	356.800	23.610	2.387	4.097	0.000	411.000
2	17:13:01	139.700	353.700	357.600	22.430	2.713	3.392	0.000	416.300
3	17:13:44	139.800	352.200	356.600	23.860	3.012	3.852	0.000	422.600
x		140.000	352.800	357.000	23.300	2.704	3.780	0.000	416.600
σ		0.560	0.820	0.526	0.765	0.313	0.358	0.000	5.786
%RSD		0.400	0.233	0.147	3.285	11.550	9.468	0.000	1.389

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	0.000	22.130	22.610	84.128%	0.730	0.728	2.795	2.789
2	17:13:01	0.000	19.480	19.690	83.627%	0.784	0.758	3.206	2.855
3	17:13:44	0.000	18.680	18.790	82.080%	0.734	0.744	2.969	2.556
x		0.000	20.100	20.370	83.279%	0.749	0.744	2.990	2.734
σ		0.000	1.805	1.998	1.068%	0.030	0.015	0.207	0.157
%RSD		0.000	8.981	9.812	1.282	4.036	2.043	6.910	5.736

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	84.253%	53.530	2.512	2.801	100.100	99.470	92.984%	93.285%
2	17:13:01	84.098%	46.040	2.611	2.635	100.300	100.500	94.363%	94.994%
3	17:13:44	84.368%	41.780	2.533	2.615	100.300	100.100	94.573%	94.355%
x		84.240%	47.120	2.552	2.684	100.200	100.000	93.973%	94.211%
σ		0.136%	5.950	0.052	0.102	0.125	0.527	0.863%	0.864%
%RSD		0.161	12.630	2.044	3.810	0.125	0.527	0.918	0.917

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:18	1.687	1.715	174.100	168.500	170.700	87.987%
2	17:13:01	1.677	1.693	174.600	169.700	172.100	89.343%
3	17:13:44	1.716	1.721	178.600	171.300	174.400	88.369%
x		1.693	1.710	175.800	169.800	172.400	88.566%
σ		0.020	0.015	2.453	1.406	1.884	0.699%
%RSD		1.194	0.873	1.396	0.828	1.092	0.790

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	90.433%	4.984	169.900	173.200	0.000	3657.000	450300.000	457700.000
2	17:17:17	88.282%	4.943	169.100	175.300	0.000	3714.000	469200.000	473100.000
3	17:18:00	86.722%	4.883	177.700	177.000	0.000	3718.000	470700.000	476100.000
x		88.479%	4.936	172.300	175.200	0.000	3696.000	463400.000	469000.000
σ		1.863%	0.051	4.764	1.905	0.000	33.970	11340.000	9902.000
%RSD		2.106	1.027	2.766	1.087	0.000	0.919	2.446	2.111

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	100600.000	17360.000	0.000	25310.000	926600.000	947500.000	98.104%	3150.000
2	17:17:17	102700.000	17620.000	0.000	25270.000	924300.000	953500.000	98.274%	3147.000
3	17:18:00	103300.000	17450.000	0.000	24920.000	917900.000	944100.000	99.169%	3135.000
x		102200.000	17480.000	0.000	25170.000	923000.000	948400.000	98.516%	3144.000
σ		1414.000	131.900	0.000	217.200	4544.000	4725.000	0.572%	7.790
%RSD		1.384	0.755	0.000	0.863	0.492	0.498	0.581	0.248

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	237.600	168.500	3933.000	146900.000	148800.000	67.250	165.800	159.400
2	17:17:17	237.700	170.400	3951.000	145800.000	147700.000	67.200	164.200	158.900
3	17:18:00	235.500	169.300	3951.000	146400.000	146900.000	66.590	162.700	158.000
x		236.900	169.400	3945.000	146400.000	147800.000	67.010	164.200	158.700
σ		1.227	0.947	10.190	574.900	911.500	0.370	1.561	0.707
%RSD		0.518	0.559	0.258	0.393	0.617	0.551	0.951	0.445

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	162.600	315.100	313.200	20.880	1.337	3.235	0.000	841.200
2	17:17:17	160.700	316.100	319.800	23.300	1.881	3.960	0.000	848.100
3	17:18:00	160.600	312.200	313.400	21.030	2.225	4.045	0.000	846.500
x		161.300	314.500	315.500	21.740	1.814	3.747	0.000	845.300
σ		1.122	2.038	3.790	1.358	0.448	0.445	0.000	3.582
%RSD		0.696	0.648	1.202	6.249	24.670	11.890	0.000	0.424

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	0.000	18.390	18.370	83.813%	0.398	0.312	1.695	1.443
2	17:17:17	0.000	18.910	18.200	84.463%	0.386	0.267	1.684	1.410
3	17:18:00	0.000	18.090	18.240	85.368%	0.428	0.287	1.756	1.390
x		0.000	18.460	18.270	84.548%	0.404	0.289	1.712	1.414
σ		0.000	0.414	0.091	0.781%	0.021	0.023	0.039	0.027
%RSD		0.000	2.240	0.500	0.924	5.287	7.847	2.271	1.889

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	84.236%	27.030	1.074	1.307	525.200	520.700	94.946%	94.999%
2	17:17:17	86.432%	26.160	1.087	1.117	523.100	523.100	97.994%	97.951%
3	17:18:00	86.317%	25.570	1.070	1.140	523.700	523.100	98.102%	97.964%
x		85.662%	26.250	1.077	1.188	524.000	522.300	97.014%	96.971%
σ		1.236%	0.732	0.009	0.104	1.082	1.417	1.792%	1.708%
%RSD		1.443	2.790	0.812	8.741	0.207	0.271	1.847	1.761

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:16:34	1.973	1.997	70.130	64.010	67.020	85.169%
2	17:17:17	1.890	2.002	71.500	64.590	67.950	86.706%
3	17:18:00	1.996	1.995	71.560	64.680	67.940	87.258%
x		1.953	1.998	71.060	64.420	67.640	86.378%
σ		0.056	0.003	0.809	0.364	0.532	1.082%
%RSD		2.861	0.174	1.138	0.565	0.786	1.253

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	89.006%	5.291	187.500	191.800	0.000	3482.000	471200.000	477300.000
2	17:21:32	84.959%	5.768	183.500	193.700	0.000	3500.000	488100.000	492300.000
3	17:22:15	85.160%	5.311	185.100	191.900	0.000	3441.000	485600.000	489600.000
x		86.375%	5.457	185.400	192.500	0.000	3474.000	481700.000	486400.000
σ		2.281%	0.270	2.002	1.051	0.000	30.180	9121.000	8013.000
%RSD		2.641	4.948	1.080	0.546	0.000	0.869	1.894	1.648

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	109500.000	15820.000	0.000	27210.000	937600.000	950900.000	100.318%	3385.000
2	17:21:32	112200.000	16030.000	0.000	27220.000	936200.000	957000.000	98.516%	3413.000
3	17:22:15	110500.000	15690.000	0.000	26540.000	932600.000	950900.000	98.799%	3381.000
x		110800.000	15840.000	0.000	26990.000	935400.000	952900.000	99.211%	3393.000
σ		1372.000	171.000	0.000	390.700	2584.000	3527.000	0.969%	17.230
%RSD		1.239	1.079	0.000	1.448	0.276	0.370	0.977	0.508

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	253.300	174.600	3826.000	151200.000	152700.000	68.780	168.600	168.700
2	17:21:32	253.000	176.500	3829.000	149600.000	151500.000	68.470	167.400	166.800
3	17:22:15	252.600	175.200	3816.000	149200.000	150500.000	67.880	166.000	165.800
x		253.000	175.400	3824.000	150000.000	151600.000	68.380	167.300	167.100
σ		0.355	0.941	6.917	1084.000	1055.000	0.454	1.272	1.485
%RSD		0.140	0.536	0.181	0.723	0.696	0.665	0.760	0.888

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	173.200	311.300	311.000	21.430	1.908	4.676	0.000	925.200
2	17:21:32	171.500	313.900	314.000	21.670	2.027	4.747	0.000	936.100
3	17:22:15	167.000	309.400	309.400	22.620	3.115	4.165	0.000	936.400
x		170.600	311.500	311.500	21.910	2.350	4.529	0.000	932.500
σ		3.195	2.230	2.294	0.630	0.665	0.318	0.000	6.360
%RSD		1.873	0.716	0.737	2.874	28.310	7.015	0.000	0.682

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	0.000	15.720	15.580	86.430%	0.431	0.329	2.090	1.740
2	17:21:32	0.000	15.490	15.350	86.482%	0.443	0.320	2.010	1.601
3	17:22:15	0.000	15.360	15.200	86.299%	0.413	0.331	1.896	1.583
x		0.000	15.520	15.380	86.404%	0.429	0.327	1.999	1.641
σ		0.000	0.181	0.193	0.094%	0.015	0.006	0.097	0.086
%RSD		0.000	1.168	1.253	0.109	3.553	1.800	4.873	5.219

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	86.262%	23.310	0.976	1.047	581.200	581.300	97.857%	97.756%
2	17:21:32	86.736%	23.210	0.998	1.118	583.200	580.900	99.144%	99.342%
3	17:22:15	87.215%	22.240	0.982	1.105	588.000	579.700	100.655%	99.973%
x		86.737%	22.920	0.985	1.090	584.100	580.600	99.219%	99.024%
σ		0.477%	0.588	0.012	0.038	3.517	0.843	1.401%	1.142%
%RSD		0.549	2.567	1.180	3.459	0.602	0.145	1.412	1.153

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:49	1.994	2.009	73.940	68.610	71.160	84.007%
2	17:21:32	2.023	2.014	74.750	68.060	71.480	85.538%
3	17:22:15	1.993	1.965	75.140	68.500	71.790	86.249%
x		2.003	1.996	74.610	68.390	71.480	85.265%
σ		0.017	0.027	0.611	0.294	0.313	1.146%
%RSD		0.839	1.347	0.818	0.430	0.438	1.344

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	87.841%	4.551	171.800	173.500	0.000	2656.000	474000.000	478300.000
2	17:25:47	84.227%	4.440	170.500	177.400	0.000	2653.000	481800.000	487000.000
3	17:26:30	84.929%	4.585	164.400	173.600	0.000	2624.000	482500.000	482700.000
x		85.666%	4.525	168.900	174.900	0.000	2644.000	479400.000	482600.000
σ		1.916%	0.076	3.986	2.239	0.000	17.560	4745.000	4332.000
%RSD		2.237	1.676	2.360	1.280	0.000	0.664	0.990	0.898

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	90090.000	14660.000	0.000	23820.000	890800.000	917600.000	100.816%	2655.000
2	17:25:47	91430.000	15010.000	0.000	23840.000	884900.000	918700.000	100.456%	2645.000
3	17:26:30	90130.000	14590.000	0.000	23570.000	894700.000	925100.000	99.292%	2626.000
x		90550.000	14750.000	0.000	23740.000	890200.000	920500.000	100.188%	2642.000
σ		759.500	228.100	0.000	150.100	4942.000	4040.000	0.797%	14.890
%RSD		0.839	1.546	0.000	0.632	0.555	0.439	0.795	0.564

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	209.800	148.800	3517.000	136200.000	137000.000	58.670	147.400	138.100
2	17:25:47	211.100	147.500	3493.000	134700.000	134800.000	57.790	144.600	136.100
3	17:26:30	209.100	147.400	3457.000	132700.000	134800.000	58.600	144.800	136.000
x		210.000	147.900	3489.000	134500.000	135500.000	58.350	145.600	136.700
σ		1.000	0.765	30.450	1741.000	1258.000	0.485	1.523	1.202
%RSD		0.476	0.518	0.873	1.294	0.928	0.831	1.046	0.879

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	140.400	308.200	309.100	30.400	2.018	3.432	0.000	900.100
2	17:25:47	137.700	302.100	302.500	30.230	2.482	4.494	0.000	909.900
3	17:26:30	136.900	304.800	306.900	30.300	2.772	3.419	0.000	915.300
x		138.300	305.100	306.100	30.310	2.424	3.781	0.000	908.400
σ		1.839	3.083	3.357	0.087	0.380	0.617	0.000	7.718
%RSD		1.330	1.011	1.096	0.288	15.690	16.320	0.000	0.850

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	0.000	20.130	19.980	88.262%	0.407	0.264	1.514	1.234
2	17:25:47	0.000	19.480	19.890	87.476%	0.333	0.249	1.587	1.237
3	17:26:30	0.000	19.800	19.710	87.508%	0.363	0.276	1.984	1.570
x		0.000	19.810	19.860	87.749%	0.368	0.263	1.695	1.347
σ		0.000	0.327	0.138	0.444%	0.037	0.014	0.253	0.193
%RSD		0.000	1.652	0.693	0.506	10.170	5.288	14.930	14.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	86.840%	20.520	1.009	1.159	353.500	352.700	98.624%	97.818%
2	17:25:47	87.978%	20.690	0.960	1.122	351.400	350.100	99.661%	99.015%
3	17:26:30	87.036%	20.510	1.005	1.157	355.900	354.900	98.447%	98.367%
x		87.285%	20.570	0.991	1.146	353.600	352.600	98.910%	98.400%
σ		0.608%	0.099	0.027	0.020	2.256	2.431	0.656%	0.599%
%RSD		0.697	0.480	2.774	1.775	0.638	0.690	0.663	0.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:04	2.065	2.072	71.380	67.240	69.210	83.637%
2	17:25:47	2.091	2.156	72.170	66.630	69.330	85.041%
3	17:26:30	2.009	2.140	72.520	67.050	69.450	85.001%
x		2.055	2.123	72.020	66.980	69.330	84.560%
σ		0.042	0.045	0.583	0.314	0.117	0.799%
%RSD		2.026	2.099	0.809	0.468	0.169	0.945

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	90.982%	4.912	162.700	168.600	0.000	2494.000	448900.000	454000.000
2	17:30:03	88.048%	4.369	157.700	163.500	0.000	2474.000	461300.000	463100.000
3	17:30:46	84.067%	4.456	163.400	170.000	0.000	2490.000	465600.000	469100.000
x		87.699%	4.579	161.300	167.300	0.000	2486.000	458600.000	462100.000
σ		3.471%	0.292	3.100	3.430	0.000	10.270	8678.000	7598.000
%RSD		3.958	6.377	1.922	2.050	0.000	0.413	1.892	1.644

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	92180.000	17330.000	0.000	23480.000	907300.000	921100.000	101.492%	2780.000
2	17:30:03	93210.000	17280.000	0.000	23040.000	894300.000	920200.000	101.681%	2773.000
3	17:30:46	94520.000	17470.000	0.000	22930.000	890300.000	918600.000	100.688%	2808.000
x		93300.000	17360.000	0.000	23150.000	897300.000	920000.000	101.287%	2787.000
σ		1171.000	100.000	0.000	291.900	8868.000	1248.000	0.528%	18.630
%RSD		1.255	0.576	0.000	1.261	0.988	0.136	0.521	0.669

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	210.500	162.200	3428.000	137400.000	139300.000	64.360	159.600	142.900
2	17:30:03	210.500	162.100	3469.000	137000.000	137100.000	63.170	158.300	140.800
3	17:30:46	209.200	161.400	3431.000	135800.000	137600.000	62.470	155.500	139.300
x		210.000	161.900	3443.000	136700.000	138000.000	63.330	157.800	141.000
σ		0.746	0.448	22.720	798.300	1147.000	0.955	2.115	1.853
%RSD		0.355	0.277	0.660	0.584	0.831	1.507	1.340	1.314

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	144.000	327.700	330.800	26.090	2.077	3.107	0.000	1008.000
2	17:30:03	142.900	322.300	324.900	24.340	2.363	3.463	0.000	1025.000
3	17:30:46	140.600	322.500	326.200	25.990	2.573	3.592	0.000	1027.000
x		142.500	324.200	327.300	25.470	2.337	3.387	0.000	1020.000
σ		1.764	3.093	3.064	0.986	0.249	0.251	0.000	10.480
%RSD		1.238	0.954	0.936	3.869	10.650	7.407	0.000	1.028

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	0.000	18.280	18.490	89.435%	0.350	0.283	1.721	1.564
2	17:30:03	0.000	18.900	19.250	88.465%	0.368	0.263	1.826	1.413
3	17:30:46	0.000	18.990	18.600	88.450%	0.349	0.260	1.585	1.321
x		0.000	18.730	18.780	88.783%	0.355	0.269	1.711	1.433
σ		0.000	0.387	0.411	0.564%	0.011	0.013	0.121	0.123
%RSD		0.000	2.067	2.189	0.635	2.965	4.701	7.056	8.549

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	87.896%	17.830	0.948	1.069	425.700	420.500	98.631%	97.730%
2	17:30:03	88.657%	17.980	0.894	1.112	426.600	424.600	99.579%	99.914%
3	17:30:46	87.868%	17.720	0.927	1.039	427.700	427.200	99.524%	99.737%
x		88.141%	17.850	0.923	1.073	426.700	424.100	99.245%	99.127%
σ		0.448%	0.131	0.027	0.037	1.014	3.384	0.532%	1.213%
%RSD		0.508	0.731	2.919	3.435	0.238	0.798	0.536	1.223

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:29:20	1.815	1.931	73.850	67.440	70.620	83.055%
2	17:30:03	1.938	1.911	74.310	68.340	71.050	85.040%
3	17:30:46	1.842	1.909	73.680	67.630	70.750	86.201%
x		1.865	1.917	73.950	67.800	70.810	84.765%
σ		0.065	0.013	0.327	0.474	0.222	1.591%
%RSD		3.464	0.657	0.442	0.699	0.314	1.877

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	103.699%	-0.020	2.909	2.592	0.000	3.535	26.460	27.590
2	17:37:54	102.623%	-0.012	2.910	2.062	0.000	3.174	37.390	40.550
3	17:38:37	100.453%	-0.026	2.614	2.269	0.000	4.171	53.000	56.550
x		102.258%	-0.019	2.811	2.308	0.000	3.627	38.950	41.560
σ		1.654%	0.007	0.171	0.267	0.000	0.505	13.340	14.510
%RSD		1.617	35.850	6.082	11.580	0.000	13.920	34.250	34.900

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	8.551	4.530	0.000	-12.060	46.340	43.080	110.526%	0.524
2	17:37:54	9.868	4.505	0.000	-13.260	70.820	60.680	111.289%	0.682
3	17:38:37	11.350	5.451	0.000	-11.280	121.800	96.830	108.944%	0.595
x		9.924	4.828	0.000	-12.200	79.670	66.860	110.253%	0.600
σ		1.402	0.539	0.000	0.996	38.530	27.400	1.196%	0.079
%RSD		14.120	11.170	0.000	8.162	48.360	40.980	1.085	13.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	0.077	0.245	0.172	25.490	20.590	-0.015	-0.113	-0.165
2	17:37:54	-0.011	0.249	0.330	20.100	14.560	-0.008	-0.122	-0.161
3	17:38:37	0.129	0.225	0.413	19.140	15.410	-0.009	-0.080	-0.159
x		0.065	0.240	0.305	21.580	16.850	-0.011	-0.105	-0.161
σ		0.071	0.013	0.123	3.422	3.268	0.004	0.022	0.003
%RSD		109.000	5.239	40.210	15.860	19.390	33.160	20.810	1.947

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	-0.185	-1.092	-1.076	0.163	-0.827	-0.142	0.000	0.054
2	17:37:54	-0.175	-0.971	-1.005	0.127	-0.604	0.163	0.000	0.069
3	17:38:37	-0.163	-1.023	-0.982	-0.140	-0.269	0.055	0.000	0.136
x		-0.174	-1.029	-1.021	0.050	-0.567	0.025	0.000	0.086
σ		0.011	0.060	0.049	0.165	0.281	0.155	0.000	0.044
%RSD		6.416	5.874	4.810	333.400	49.600	616.200	0.000	50.620

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	103.690%	0.188	0.175	100.877%	-0.005	-0.004	-0.074	-0.038
2	17:37:54	103.741%	0.129	0.136	100.487%	-0.008	-0.003	-0.067	-0.035
3	17:38:37	104.619%	0.122	0.112	100.837%	-0.009	-0.009	-0.123	-0.087
x		104.017%	0.146	0.141	100.734%	-0.007	-0.005	-0.088	-0.053
σ		0.522%	0.037	0.032	0.214%	0.002	0.003	0.030	0.029
%RSD		0.502	25.030	22.680	0.213	29.180	67.190	34.370	54.720

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	94.948%	-0.022	-0.011	-0.021	0.007	0.038	93.840%	93.552%
2	17:37:54	95.746%	-0.061	-0.009	-0.015	0.031	0.018	94.401%	95.142%
3	17:38:37	95.609%	-0.080	-0.015	-0.009	0.077	0.091	96.042%	95.312%
x		95.435%	-0.054	-0.012	-0.015	0.039	0.049	94.761%	94.669%
σ		0.427%	0.030	0.003	0.006	0.036	0.038	1.144%	0.971%
%RSD		0.447	54.390	25.320	38.340	92.440	76.940	1.208	1.026

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:11	0.007	0.003	0.079	0.064	0.065	97.196%
2	17:37:54	0.001	0.003	0.020	0.027	0.026	97.176%
3	17:38:37	0.002	0.004	0.013	0.000	0.003	97.096%
x		0.003	0.003	0.037	0.030	0.032	97.156%
σ		0.003	0.001	0.037	0.032	0.031	0.053%
%RSD		95.230	19.500	97.870	104.300	98.480	0.054

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	95.289%	48.070	939.000	966.000	0.000	47690.000	54310.000	55430.000
2	17:42:10	90.943%	48.680	940.700	968.800	0.000	47170.000	55550.000	56850.000
3	17:42:53	88.105%	48.060	939.300	989.500	0.000	48120.000	57300.000	57590.000
x		91.446%	48.270	939.700	974.800	0.000	47660.000	55720.000	56620.000
σ		3.618%	0.357	0.918	12.810	0.000	473.200	1503.000	1098.000
%RSD		3.957	0.739	0.098	1.314	0.000	0.993	2.697	1.939

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	2128.000	10280.000	0.000	51080.000	49730.000	52410.000	95.472%	984.100
2	17:42:10	2158.000	10280.000	0.000	49710.000	48930.000	51990.000	95.204%	979.600
3	17:42:53	2194.000	10430.000	0.000	50790.000	49490.000	50560.000	92.336%	997.200
x		2160.000	10330.000	0.000	50520.000	49380.000	51650.000	94.337%	987.000
σ		33.220	87.400	0.000	723.200	412.500	969.500	1.738%	9.138
%RSD		1.538	0.846	0.000	1.431	0.835	1.877	1.843	0.926

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	513.400	203.000	520.900	1125.000	1278.000	491.900	500.700	253.000
2	17:42:10	506.500	198.400	519.500	1098.000	1228.000	479.100	483.200	245.700
3	17:42:53	511.800	204.500	522.900	1096.000	1212.000	482.500	487.300	242.900
x		510.600	202.000	521.100	1106.000	1239.000	484.500	490.400	247.200
σ		3.599	3.195	1.702	16.120	34.260	6.628	9.138	5.212
%RSD		0.705	1.582	0.327	1.457	2.765	1.368	1.863	2.108

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	251.200	466.800	468.400	37.860	9.804	10.970	0.000	1005.000
2	17:42:10	245.500	454.200	453.100	37.710	9.745	10.450	0.000	995.000
3	17:42:53	242.300	458.700	461.800	37.480	9.719	10.420	0.000	1005.000
x		246.300	459.900	461.100	37.690	9.756	10.610	0.000	1002.000
σ		4.477	6.351	7.673	0.190	0.043	0.308	0.000	5.803
%RSD		1.817	1.381	1.664	0.503	0.446	2.905	0.000	0.579

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	94.260%	998.000	998.500	94.724%	49.530	50.160	50.730	48.010
2	17:42:10	95.113%	1016.000	1008.000	93.562%	50.580	49.830	50.210	47.700
3	17:42:53	93.759%	1014.000	1008.000	92.308%	49.850	49.850	50.450	47.460
x		94.378%	1009.000	1005.000	93.531%	49.980	49.950	50.460	47.730
σ		0.685%	9.980	5.439	1.209%	0.537	0.184	0.257	0.274
%RSD		0.726	0.989	0.541	1.292	1.073	0.367	0.509	0.575

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	90.598%	1884.000	498.100	498.900	2017.000	2002.000	94.450%	95.019%
2	17:42:10	91.251%	1880.000	497.400	497.000	1999.000	1985.000	96.909%	96.783%
3	17:42:53	90.615%	1897.000	500.100	498.400	2009.000	2008.000	95.776%	95.966%
x		90.822%	1887.000	498.500	498.100	2009.000	1998.000	95.712%	95.923%
σ		0.372%	9.238	1.391	0.988	9.052	11.740	1.230%	0.883%
%RSD		0.410	0.489	0.279	0.198	0.451	0.588	1.285	0.920

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:41:27	49.620	49.510	19.560	21.000	20.310	90.979%
2	17:42:10	49.510	50.270	19.620	21.000	20.300	93.074%
3	17:42:53	49.890	50.010	19.540	20.940	20.180	94.402%
x		49.670	49.930	19.570	20.980	20.260	92.818%
σ		0.197	0.386	0.041	0.034	0.068	1.726%
%RSD		0.397	0.774	0.207	0.162	0.338	1.860

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	99.342%	0.090	26.400	29.430	0.000	2540.000	455.100	461.800
2	17:50:01	94.743%	0.019	26.350	28.820	0.000	2517.000	461.700	472.900
3	17:50:44	92.901%	0.005	26.340	27.240	0.000	2509.000	470.400	477.200
x		95.662%	0.038	26.360	28.500	0.000	2522.000	462.400	470.600
σ		3.317%	0.046	0.034	1.132	0.000	16.090	7.628	7.931
%RSD		3.468	120.500	0.130	3.972	0.000	0.638	1.650	1.685

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	2701.000	5012.000	0.000	645.900	515.800	518.700	96.682%	6.336
2	17:50:01	2769.000	5119.000	0.000	637.100	502.700	519.600	95.563%	6.340
3	17:50:44	2791.000	5055.000	0.000	618.300	490.200	505.300	95.449%	5.851
x		2754.000	5062.000	0.000	633.800	502.900	514.500	95.898%	6.176
σ		46.510	54.040	0.000	14.100	12.830	8.032	0.681%	0.281
%RSD		1.689	1.068	0.000	2.225	2.551	1.561	0.710	4.555

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	5.218	7.759	8.456	2474.000	2402.000	0.495	2.355	1.314
2	17:50:01	5.433	7.862	8.522	2440.000	2366.000	0.466	2.127	1.447
3	17:50:44	5.083	7.641	8.398	2451.000	2330.000	0.446	2.247	1.288
x		5.245	7.754	8.459	2455.000	2366.000	0.469	2.243	1.349
σ		0.177	0.111	0.062	17.750	35.860	0.025	0.114	0.085
%RSD		3.371	1.428	0.734	0.723	1.516	5.310	5.093	6.328

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	1.473	30.280	31.730	0.819	-0.507	0.796	0.000	5.432
2	17:50:01	1.177	30.690	30.580	0.832	-0.432	1.043	0.000	5.324
3	17:50:44	1.321	30.780	31.220	-0.044	-0.039	0.766	0.000	5.375
x		1.324	30.590	31.180	0.535	-0.326	0.868	0.000	5.377
σ		0.148	0.265	0.574	0.502	0.252	0.152	0.000	0.054
%RSD		11.160	0.866	1.842	93.740	77.120	17.530	0.000	1.007

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	95.320%	3.679	3.533	98.956%	-0.001	-0.003	0.140	0.089
2	17:50:01	95.802%	2.492	2.525	98.708%	-0.002	-0.003	0.077	0.063
3	17:50:44	95.498%	1.841	1.903	97.678%	-0.000	-0.000	0.088	-0.005
x		95.540%	2.671	2.654	98.447%	-0.001	-0.002	0.102	0.049
σ		0.243%	0.932	0.822	0.678%	0.001	0.002	0.034	0.049
%RSD		0.255	34.890	30.980	0.688	70.430	77.560	33.340	98.410

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	92.972%	16.370	0.386	0.439	13.790	13.410	94.270%	93.744%
2	17:50:01	93.197%	13.520	0.395	0.471	13.310	12.740	95.075%	95.433%
3	17:50:44	94.198%	11.130	0.451	0.390	12.950	12.980	97.210%	96.283%
x		93.455%	13.680	0.410	0.434	13.350	13.050	95.518%	95.153%
σ		0.652%	2.625	0.035	0.041	0.421	0.339	1.519%	1.292%
%RSD		0.698	19.190	8.543	9.476	3.155	2.598	1.590	1.358

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:18	0.123	0.118	1.035	0.999	1.024	97.624%
2	17:50:01	0.087	0.103	1.071	0.948	0.978	99.745%
3	17:50:44	0.084	0.083	0.976	0.984	1.000	100.053%
x		0.098	0.101	1.027	0.977	1.001	99.141%
σ		0.022	0.018	0.048	0.026	0.023	1.322%
%RSD		22.270	17.730	4.666	2.696	2.311	1.334

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	100.469%	96.990	91.840	90.000	0.000	48910.000	49280.000	50120.000
2	17:57:10	99.053%	97.510	90.550	91.950	0.000	49710.000	50200.000	50650.000
3	17:57:53	98.887%	95.230	90.540	90.970	0.000	49420.000	50540.000	51030.000
x		99.470%	96.575%	90.977%	90.975%	0.000	98.692%	100.013%	101.207%
σ		0.870%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.874	1.233	0.824	1.076	0.000	0.817	1.300	0.901

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	498.900	5221.000	0.000	51720.000	48660.000	51760.000	96.820%	95.190
2	17:57:10	502.000	5203.000	0.000	52400.000	49060.000	51220.000	96.334%	100.100
3	17:57:53	506.900	5258.000	0.000	51970.000	49100.000	51450.000	96.586%	97.940
x		100.524%	104.545%	0.000	104.053%	97.878%	102.956%	96.580%	97.750%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.243%	n/a
%RSD		0.803	0.532	0.000	0.662	0.499	0.521	0.252	2.528

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	97.620	97.770	501.600	25950.000	25450.000	98.980	99.290	100.700
2	17:57:10	99.760	99.550	505.100	25890.000	25640.000	99.820	100.000	99.440
3	17:57:53	98.900	99.200	506.800	25880.000	25760.000	99.830	99.430	100.300
x		98.763%	98.842%	100.896%	103.636%	102.471%	99.543%	99.579%	100.133%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.089	0.955	0.522	0.144	0.607	0.487	0.389	0.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	99.390	99.220	98.160	102.100	101.500	102.800	0.000	98.810
2	17:57:10	98.990	99.890	98.520	101.300	101.100	100.100	0.000	98.710
3	17:57:53	101.000	100.700	102.200	101.000	100.700	103.200	0.000	99.220
x		99.793%	99.940%	99.625%	101.474%	101.100%	102.015%	0.000	98.912%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.065	0.746	2.245	0.584	0.424	1.630	0.000	0.278

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	91.843%	93.890	92.020	94.041%	95.340	96.770	97.310	98.530
2	17:57:10	93.655%	95.740	95.910	95.346%	95.760	95.890	96.880	99.520
3	17:57:53	94.194%	98.760	96.840	96.222%	96.030	95.770	98.770	100.000
x		93.230%	96.133%	94.924%	95.203%	95.713%	96.142%	97.656%	99.354%
σ		1.232%	n/a	n/a	1.097%	n/a	n/a	n/a	n/a
%RSD		1.321	2.557	2.694	1.153	0.363	0.566	1.016	0.758

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	90.738%	94.810	90.160	90.410	99.260	97.820	91.030%	91.019%
2	17:57:10	92.037%	96.100	93.860	95.110	98.510	99.820	92.246%	92.790%
3	17:57:53	93.042%	95.350	94.880	96.150	101.900	99.020	93.010%	93.201%
x		91.939%	95.419%	92.967%	93.887%	99.896%	98.887%	92.095%	92.337%
σ		1.155%	n/a	n/a	n/a	n/a	n/a	0.999%	1.159%
%RSD		1.256	0.675	2.673	3.257	1.794	1.021	1.085	1.255

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:27	95.270	95.050	96.260	95.500	95.750	90.449%
2	17:57:10	96.250	95.880	97.000	95.900	96.720	91.290%
3	17:57:53	96.570	95.990	97.570	96.640	97.130	91.929%
x		96.032%	95.641%	96.944%	96.011%	96.534%	91.223%
σ		n/a	n/a	n/a	n/a	n/a	0.742%
%RSD		0.704	0.539	0.673	0.601	0.736	0.814

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	100.815%	-0.012	2.123	1.679	0.000	1.557	9.027	8.580
2	18:04:20	100.339%	0.002	1.783	1.533	0.000	4.174	10.440	11.020
3	18:05:03	98.408%	-0.012	2.004	1.391	0.000	8.030	14.350	14.980
x		99.854%	-0.007	1.970	1.534	0.000	4.587	11.270	11.530
σ		1.275%	0.008	0.173	0.144	0.000	3.256	2.757	3.228
%RSD		1.276	110.900	8.772	9.394	0.000	70.980	24.460	28.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.744	0.938	0.000	-6.664	30.030	3.142	111.114%	-0.026
2	18:04:20	-0.642	0.404	0.000	-6.417	36.910	9.240	112.199%	0.089
3	18:05:03	-0.379	0.986	0.000	-2.244	24.130	20.320	111.400%	-0.056
x		-0.589	0.776	0.000	-5.108	30.360	10.900	111.571%	0.002
σ		0.188	0.323	0.000	2.484	6.394	8.708	0.562%	0.077
%RSD		31.980	41.610	0.000	48.620	21.060	79.890	0.504	3711.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.074	0.066	0.082	1.758	3.609	-0.001	-0.114	-0.208
2	18:04:20	0.051	0.047	0.106	-0.102	0.991	0.004	-0.131	-0.237
3	18:05:03	-0.103	0.060	0.144	-0.762	-1.030	0.009	-0.094	-0.236
x		-0.042	0.058	0.111	0.298	1.190	0.004	-0.113	-0.227
σ		0.082	0.010	0.031	1.307	2.326	0.005	0.018	0.017
%RSD		194.700	16.690	28.430	439.000	195.400	130.100	16.290	7.408

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	-0.251	-0.817	-0.977	-0.102	-1.014	0.196	0.000	0.028
2	18:04:20	-0.204	-0.898	-1.003	-0.078	-0.734	-0.428	0.000	0.036
3	18:05:03	-0.255	-0.889	-0.825	-0.049	-1.146	0.063	0.000	0.058
x		-0.237	-0.868	-0.935	-0.076	-0.965	-0.056	0.000	0.041
σ		0.029	0.045	0.096	0.026	0.210	0.329	0.000	0.016
%RSD		12.050	5.140	10.280	34.570	21.800	584.000	0.000	38.110

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	106.239%	0.760	0.826	93.439%	-0.001	0.004	0.003	0.009
2	18:04:20	106.815%	0.668	0.702	93.943%	0.007	0.014	-0.081	-0.045
3	18:05:03	106.615%	0.669	0.584	93.005%	0.016	0.012	-0.022	-0.007
x		106.556%	0.699	0.704	93.462%	0.008	0.010	-0.034	-0.014
σ		0.292%	0.053	0.121	0.469%	0.009	0.005	0.043	0.028
%RSD		0.274	7.584	17.220	0.502	110.700	50.480	128.800	193.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	105.868%	-0.021	0.627	0.583	0.039	0.059	103.544%	103.161%
2	18:04:20	106.783%	-0.077	0.577	0.560	0.049	0.043	104.592%	104.305%
3	18:05:03	105.331%	-0.044	0.519	0.465	0.049	0.079	105.830%	104.756%
x		105.994%	-0.047	0.574	0.536	0.045	0.060	104.656%	104.074%
σ		0.734%	0.028	0.054	0.062	0.006	0.018	1.144%	0.822%
%RSD		0.693	59.070	9.457	11.650	12.630	30.430	1.093	0.790

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:03:37	0.008	0.019	0.226	0.218	0.215	107.244%
2	18:04:20	0.017	0.034	0.182	0.145	0.169	108.350%
3	18:05:03	0.025	0.029	0.178	0.175	0.185	108.077%
x		0.017	0.027	0.196	0.179	0.190	107.890%
σ		0.009	0.008	0.027	0.036	0.023	0.576%
%RSD		51.480	28.320	13.690	20.310	12.340	0.534

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	99.359%	0.010	22.120	22.900	0.000	2522.000	434.800	456.200
2	18:08:38	94.558%	0.042	21.780	22.660	0.000	2504.000	457.900	466.500
3	18:09:22	92.204%	0.013	22.310	22.870	0.000	2498.000	468.900	471.200
x		95.374%	0.022	22.070	22.810	0.000	2508.000	453.900	464.600
σ		3.647%	0.018	0.265	0.130	0.000	12.750	17.430	7.653
%RSD		3.824	82.910	1.202	0.569	0.000	0.508	3.840	1.647

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	2667.000	4960.000	0.000	638.500	517.500	528.400	96.036%	5.820
2	18:08:38	2725.000	4988.000	0.000	628.000	472.100	507.300	95.236%	5.900
3	18:09:22	2737.000	5032.000	0.000	625.600	459.900	516.100	93.980%	6.638
x		2709.000	4993.000	0.000	630.700	483.200	517.300	95.084%	6.119
σ		37.380	36.200	0.000	6.880	30.370	10.580	1.036%	0.451
%RSD		1.380	0.725	0.000	1.091	6.285	2.046	1.090	7.367

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	5.272	7.695	8.631	2459.000	2347.000	0.450	2.385	1.442
2	18:08:38	5.277	7.548	8.522	2422.000	2326.000	0.450	2.107	1.201
3	18:09:22	4.999	7.575	8.357	2381.000	2315.000	0.478	2.106	1.216
x		5.183	7.606	8.503	2421.000	2329.000	0.460	2.199	1.286
σ		0.159	0.078	0.138	38.680	15.910	0.016	0.161	0.135
%RSD		3.064	1.031	1.622	1.598	0.683	3.444	7.304	10.490

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	1.304	30.870	31.800	0.122	0.832	0.460	0.000	5.456
2	18:08:38	1.175	31.020	30.240	0.842	0.048	0.943	0.000	5.399
3	18:09:22	1.324	30.910	30.410	1.388	-0.149	1.031	0.000	5.320
x		1.268	30.930	30.820	0.784	0.244	0.811	0.000	5.392
σ		0.081	0.078	0.859	0.635	0.519	0.308	0.000	0.068
%RSD		6.397	0.252	2.786	80.970	213.100	37.920	0.000	1.270

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	93.890%	1.415	1.421	98.529%	-0.000	-0.002	0.110	0.139
2	18:08:38	94.943%	1.107	1.146	97.277%	0.007	0.003	0.061	0.086
3	18:09:22	95.386%	0.959	0.933	97.090%	0.009	-0.003	0.000	0.027
x		94.739%	1.160	1.167	97.632%	0.005	-0.001	0.057	0.084
σ		0.768%	0.233	0.245	0.783%	0.005	0.003	0.055	0.056
%RSD		0.811	20.070	20.960	0.802	96.590	401.000	96.210	66.620

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	92.309%	6.969	1.985	1.798	13.170	13.260	93.804%	93.808%
2	18:08:38	92.740%	6.910	1.188	1.183	13.500	13.340	94.683%	95.181%
3	18:09:22	92.370%	6.159	0.893	0.897	13.080	13.280	96.130%	94.954%
x		92.473%	6.679	1.355	1.293	13.250	13.290	94.873%	94.648%
σ		0.233%	0.452	0.565	0.460	0.222	0.039	1.174%	0.736%
%RSD		0.252	6.765	41.690	35.600	1.675	0.293	1.238	0.777

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:55	0.067	0.062	0.985	1.004	0.990	95.784%
2	18:08:38	0.047	0.053	1.039	0.950	0.986	97.665%
3	18:09:22	0.042	0.044	1.027	0.983	0.983	98.163%
x		0.052	0.053	1.017	0.979	0.986	97.204%
σ		0.014	0.009	0.029	0.027	0.004	1.255%
%RSD		26.150	16.410	2.809	2.781	0.357	1.291

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	95.004%	0.042	35.830	37.480	0.000	3891.000	723.900	758.200
2	18:12:56	92.632%	0.020	36.550	38.250	0.000	3848.000	756.200	776.900
3	18:13:39	90.589%	0.029	36.830	40.060	0.000	3872.000	756.700	775.800
x		92.742%	0.030	36.410	38.600	0.000	3870.000	745.600	770.300
σ		2.210%	0.011	0.515	1.324	0.000	21.620	18.800	10.510
%RSD		2.383	35.720	1.416	3.431	0.000	0.559	2.521	1.365

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	158.900	3979.000	0.000	904.800	5570.000	5509.000	95.379%	1.637
2	18:12:56	157.600	4031.000	0.000	900.500	5247.000	5561.000	93.600%	2.038
3	18:13:39	162.100	4059.000	0.000	916.000	5365.000	5549.000	92.729%	1.811
x		159.500	4023.000	0.000	907.100	5394.000	5540.000	93.903%	1.829
σ		2.285	40.400	0.000	7.974	163.500	26.930	1.351%	0.201
%RSD		1.432	1.004	0.000	0.879	3.031	0.486	1.439	11.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	1.530	4.433	5.127	466.700	468.600	0.266	0.781	1.192
2	18:12:56	1.552	4.396	5.196	471.100	475.900	0.272	0.770	1.278
3	18:13:39	1.875	4.167	5.293	465.600	473.500	0.265	0.620	1.064
x		1.652	4.332	5.205	467.800	472.700	0.268	0.724	1.178
σ		0.193	0.144	0.084	2.925	3.718	0.004	0.090	0.108
%RSD		11.690	3.317	1.607	0.625	0.786	1.377	12.420	9.145

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	1.148	8.854	8.631	-0.020	0.504	0.638	0.000	12.160
2	18:12:56	1.218	8.906	8.811	-0.254	0.131	0.813	0.000	12.150
3	18:13:39	0.975	9.393	8.776	-0.201	0.053	0.217	0.000	12.030
x		1.114	9.051	8.739	-0.158	0.230	0.556	0.000	12.110
σ		0.125	0.297	0.095	0.123	0.241	0.306	0.000	0.074
%RSD		11.260	3.287	1.089	77.470	104.900	55.030	0.000	0.612

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	93.066%	0.669	0.705	96.235%	0.008	0.000	-0.037	-0.022
2	18:12:56	92.919%	0.686	0.617	96.195%	-0.001	-0.010	-0.008	0.027
3	18:13:39	92.527%	0.578	0.599	95.657%	-0.000	-0.001	-0.020	0.010
x		92.837%	0.644	0.641	96.029%	0.002	-0.004	-0.022	0.005
σ		0.279%	0.058	0.057	0.323%	0.005	0.005	0.014	0.025
%RSD		0.300	8.958	8.844	0.336	225.600	149.000	65.910	515.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	91.117%	5.176	0.446	0.555	8.121	8.972	93.665%	92.439%
2	18:12:56	91.429%	4.936	0.443	0.482	8.283	8.120	94.270%	94.581%
3	18:13:39	91.223%	4.958	0.435	0.378	8.440	8.167	94.132%	94.190%
x		91.256%	5.023	0.441	0.472	8.281	8.420	94.022%	93.737%
σ		0.158%	0.133	0.005	0.089	0.160	0.479	0.317%	1.141%
%RSD		0.173	2.639	1.236	18.940	1.928	5.689	0.338	1.217

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:13	0.035	0.034	1.036	1.035	1.014	96.277%
2	18:12:56	0.025	0.027	1.064	0.974	1.010	98.161%
3	18:13:39	0.030	0.027	1.025	0.978	0.986	98.302%
x		0.030	0.029	1.042	0.996	1.003	97.580%
σ		0.005	0.004	0.020	0.034	0.015	1.131%
%RSD		17.390	13.260	1.964	3.435	1.484	1.159

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	98.419%	0.069	9.615	11.090	0.000	2756.000	384.400	398.100
2	18:17:14	95.853%	0.041	9.868	10.330	0.000	2725.000	396.400	404.500
3	18:17:57	91.940%	0.075	9.475	10.300	0.000	2741.000	400.900	403.100
x		95.404%	0.062	9.653	10.570	0.000	2741.000	393.900	401.900
σ		3.263%	0.018	0.199	0.448	0.000	15.680	8.520	3.388
%RSD		3.420	29.340	2.063	4.238	0.000	0.572	2.163	0.843

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	774.100	3690.000	0.000	554.500	1534.000	1569.000	94.394%	4.516
2	18:17:14	777.500	3638.000	0.000	536.600	1537.000	1584.000	95.490%	4.667
3	18:17:57	799.300	3735.000	0.000	541.800	1575.000	1587.000	92.644%	5.413
x		783.600	3688.000	0.000	544.300	1549.000	1580.000	94.176%	4.865
σ		13.680	48.760	0.000	9.194	22.590	9.591	1.435%	0.480
%RSD		1.746	1.322	0.000	1.689	1.459	0.607	1.524	9.873

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	2.855	5.834	15.270	2665.000	2610.000	0.327	1.623	3.597
2	18:17:14	3.167	5.498	15.260	2574.000	2490.000	0.308	1.407	3.513
3	18:17:57	3.625	5.827	15.210	2609.000	2539.000	0.313	1.272	3.145
x		3.216	5.720	15.250	2616.000	2546.000	0.316	1.434	3.418
σ		0.387	0.192	0.034	45.740	60.360	0.010	0.177	0.240
%RSD		12.050	3.354	0.225	1.748	2.371	3.130	12.350	7.024

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	3.317	24.950	24.200	0.978	0.035	0.521	0.000	6.150
2	18:17:14	3.324	23.250	24.020	1.056	0.112	0.947	0.000	6.231
3	18:17:57	3.268	23.160	23.810	1.722	0.131	1.049	0.000	6.377
x		3.303	23.790	24.010	1.252	0.093	0.839	0.000	6.253
σ		0.030	1.010	0.191	0.409	0.050	0.280	0.000	0.115
%RSD		0.918	4.244	0.797	32.650	54.480	33.400	0.000	1.837

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	93.951%	0.455	0.483	96.570%	0.005	0.002	0.121	0.091
2	18:17:14	95.141%	0.470	0.444	96.495%	0.001	0.002	0.021	0.046
3	18:17:57	94.015%	0.412	0.399	96.979%	0.003	0.006	0.092	0.082
x		94.369%	0.445	0.442	96.681%	0.003	0.003	0.078	0.073
σ		0.669%	0.030	0.042	0.261%	0.002	0.002	0.052	0.024
%RSD		0.709	6.809	9.468	0.270	74.140	70.900	66.280	33.170

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	91.437%	4.481	1.254	1.331	10.810	9.870	93.551%	93.890%
2	18:17:14	92.902%	4.427	1.312	1.281	10.720	10.680	94.991%	94.779%
3	18:17:57	91.433%	4.295	1.300	1.330	9.870	10.350	95.079%	95.702%
x		91.924%	4.401	1.289	1.314	10.470	10.300	94.540%	94.791%
σ		0.847%	0.096	0.031	0.028	0.518	0.405	0.858%	0.906%
%RSD		0.921	2.182	2.368	2.166	4.953	3.934	0.908	0.956

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:31	0.014	0.018	12.140	11.610	11.780	97.100%
2	18:17:14	0.007	0.012	12.040	11.640	11.830	98.414%
3	18:17:57	0.014	0.011	12.030	11.780	11.880	99.072%
x		0.011	0.014	12.070	11.670	11.830	98.195%
σ		0.004	0.004	0.063	0.095	0.050	1.004%
%RSD		33.810	26.480	0.523	0.817	0.421	1.023

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	93.828%	-0.026	1.672	1.962	0.000	5.015	0.363	0.073
2	18:21:32	89.842%	-0.002	1.450	1.440	0.000	5.380	-0.568	-0.394
3	18:22:15	89.990%	-0.018	1.054	1.359	0.000	5.599	0.114	-0.119
x		91.220%	-0.016	1.392	1.587	0.000	5.331	-0.031	-0.146
σ		2.260%	0.012	0.313	0.327	0.000	0.295	0.482	0.235
%RSD		2.477	77.550	22.480	20.610	0.000	5.533	1579.000	160.200

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	2.583	18.050	0.000	-6.561	-2.069	-10.670	93.676%	0.568
2	18:21:32	1.745	16.920	0.000	-7.898	-3.702	-10.460	92.826%	0.434
3	18:22:15	0.949	18.120	0.000	-7.795	0.015	-13.380	91.058%	0.393
x		1.759	17.690	0.000	-7.418	-1.919	-11.510	92.520%	0.465
σ		0.817	0.675	0.000	0.744	1.863	1.631	1.336%	0.092
%RSD		46.450	3.817	0.000	10.030	97.080	14.170	1.444	19.740

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	-0.124	1.376	0.047	9.038	2.433	-0.007	0.021	0.391
2	18:21:32	-0.483	1.203	0.016	6.756	3.659	0.003	0.036	0.434
3	18:22:15	-0.402	1.250	0.037	6.814	5.385	0.003	0.026	0.368
x		-0.337	1.276	0.033	7.536	3.826	-0.000	0.028	0.398
σ		0.188	0.089	0.016	1.301	1.483	0.006	0.008	0.034
%RSD		55.960	6.984	46.830	17.260	38.760	1328.000	28.470	8.452

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	0.370	0.409	0.465	-0.859	0.119	0.444	0.000	0.034
2	18:21:32	0.341	0.530	0.423	-0.551	-0.176	0.534	0.000	0.025
3	18:22:15	0.451	0.759	0.622	-0.413	0.498	0.754	0.000	0.030
x		0.388	0.566	0.503	-0.608	0.147	0.577	0.000	0.030
σ		0.057	0.178	0.105	0.228	0.338	0.159	0.000	0.005
%RSD		14.640	31.400	20.760	37.540	230.100	27.610	0.000	15.230

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	93.249%	0.385	0.273	96.810%	-0.004	-0.002	-0.086	-0.044
2	18:21:32	93.282%	0.371	0.281	95.493%	-0.002	0.001	-0.026	0.007
3	18:22:15	91.902%	0.263	0.285	95.507%	-0.001	-0.001	-0.097	-0.054
x		92.811%	0.340	0.280	95.937%	-0.002	-0.001	-0.070	-0.030
σ		0.788%	0.067	0.006	0.756%	0.002	0.002	0.038	0.033
%RSD		0.849	19.600	2.262	0.788	65.910	260.200	54.790	107.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	91.253%	3.018	0.125	0.127	0.021	0.040	92.920%	92.983%
2	18:21:32	90.338%	3.103	0.122	0.136	0.009	0.051	93.848%	93.760%
3	18:22:15	90.234%	3.196	0.129	0.124	0.040	0.051	93.385%	93.766%
x		90.608%	3.105	0.125	0.129	0.024	0.047	93.384%	93.503%
σ		0.561%	0.089	0.003	0.006	0.016	0.006	0.464%	0.451%
%RSD		0.619	2.862	2.604	4.981	66.060	12.910	0.497	0.482

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:49	-0.005	-0.006	0.114	0.104	0.106	95.589%
2	18:21:32	0.003	0.003	0.136	0.076	0.103	96.945%
3	18:22:15	-0.007	0.002	0.109	0.111	0.104	97.475%
x		-0.003	-0.000	0.120	0.097	0.105	96.669%
σ		0.005	0.005	0.014	0.019	0.002	0.973%
%RSD		200.800	1866.000	11.610	19.330	1.506	1.006

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	99.003%	-0.005	0.670	1.277	0.000	16.670	7.534	7.271
2	18:25:51	94.504%	-0.019	1.228	1.020	0.000	15.140	7.484	8.296
3	18:26:33	91.934%	-0.003	0.307	1.382	0.000	16.230	8.151	7.636
x		95.147%	-0.009	0.735	1.226	0.000	16.010	7.723	7.734
σ		3.578%	0.009	0.464	0.186	0.000	0.784	0.371	0.519
%RSD		3.761	99.850	63.150	15.180	0.000	4.896	4.809	6.717

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	4.934	23.910	0.000	-2.895	26.900	15.120	94.415%	0.267
2	18:25:51	5.429	23.880	0.000	-5.482	15.010	14.650	94.348%	0.650
3	18:26:33	5.622	22.660	0.000	-5.849	23.930	14.850	93.536%	0.412
x		5.328	23.490	0.000	-4.742	21.950	14.870	94.099%	0.443
σ		0.355	0.715	0.000	1.610	6.188	0.233	0.489%	0.193
%RSD		6.663	3.043	0.000	33.960	28.200	1.568	0.520	43.570

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	-0.234	1.548	0.128	14.830	14.290	0.010	0.127	0.361
2	18:25:51	-0.109	1.470	0.137	13.700	8.287	0.012	0.174	0.301
3	18:26:33	0.326	1.292	0.133	11.950	7.759	0.002	0.110	0.434
x		-0.006	1.437	0.132	13.500	10.110	0.008	0.137	0.365
σ		0.294	0.131	0.005	1.452	3.631	0.005	0.033	0.066
%RSD		5271.000	9.133	3.412	10.760	35.900	66.590	24.210	18.170

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	0.270	0.392	0.329	-0.313	0.091	0.516	0.000	0.144
2	18:25:51	0.335	0.298	0.283	0.097	0.011	0.945	0.000	0.139
3	18:26:33	0.211	0.380	0.633	-0.671	-0.085	0.757	0.000	0.150
x		0.272	0.357	0.415	-0.296	0.006	0.740	0.000	0.144
σ		0.062	0.051	0.190	0.384	0.088	0.215	0.000	0.006
%RSD		22.740	14.420	45.800	129.900	1594.000	29.060	0.000	3.964

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	93.004%	0.340	0.319	96.914%	-0.002	0.007	0.004	0.029
2	18:25:51	93.140%	0.310	0.300	97.308%	-0.001	-0.000	-0.050	-0.051
3	18:26:33	93.364%	0.240	0.315	96.494%	0.003	0.008	-0.117	-0.085
x		93.169%	0.297	0.312	96.905%	-0.000	0.005	-0.054	-0.036
σ		0.182%	0.052	0.010	0.407%	0.003	0.005	0.061	0.059
%RSD		0.195	17.370	3.137	0.420	1095.000	88.100	112.200	164.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	90.893%	2.826	0.108	0.136	0.146	0.121	92.327%	92.706%
2	18:25:51	91.390%	2.817	0.123	0.141	0.125	0.078	93.910%	93.774%
3	18:26:33	91.934%	2.960	0.140	0.107	0.027	0.105	94.829%	94.420%
x		91.406%	2.868	0.124	0.128	0.099	0.101	93.689%	93.633%
σ		0.521%	0.080	0.016	0.018	0.064	0.022	1.265%	0.866%
%RSD		0.570	2.795	12.890	14.480	64.260	21.560	1.350	0.925

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:25:07	-0.007	-0.001	0.128	0.127	0.105	94.418%
2	18:25:51	0.004	-0.001	0.100	0.087	0.091	96.752%
3	18:26:33	0.002	0.007	0.079	0.065	0.072	97.551%
x		-0.001	0.001	0.102	0.093	0.089	96.240%
σ		0.006	0.005	0.025	0.031	0.016	1.628%
%RSD		963.400	307.800	24.210	33.510	18.090	1.692

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	28.993%	0.514	193.500	185.200	0.000	18320.000	6688.000	6608.000
2	18:30:07	28.238%	0.528	183.000	189.700	0.000	17870.000	6754.000	6735.000
3	18:30:50	28.253%	0.480	188.100	186.700	0.000	17660.000	6789.000	6735.000
x		28.495%	0.508	188.200	187.200	0.000	17950.000	6744.000	6693.000
σ		0.432%	0.025	5.240	2.272	0.000	341.200	51.140	73.640
%RSD		1.516	4.888	2.784	1.213	0.000	1.901	0.758	1.100

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	1460.000	12350.000	0.000	4282.000	5781.000	5545.000	94.385%	5.874
2	18:30:07	1477.000	12510.000	0.000	4252.000	5531.000	5491.000	93.687%	5.758
3	18:30:50	1471.000	12440.000	0.000	4206.000	5559.000	5492.000	92.056%	6.482
x		1469.000	12430.000	0.000	4247.000	5624.000	5509.000	93.376%	6.038
σ		8.186	78.960	0.000	38.210	136.800	30.870	1.195%	0.389
%RSD		0.557	0.635	0.000	0.900	2.432	0.560	1.280	6.442

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	6.079	11.470	36.360	1302.000	1261.000	2.291	5.521	11.920
2	18:30:07	5.834	11.380	35.950	1294.000	1240.000	2.157	5.502	11.730
3	18:30:50	6.286	11.280	36.380	1298.000	1260.000	2.206	5.184	11.870
x		6.066	11.380	36.230	1298.000	1254.000	2.218	5.402	11.840
σ		0.226	0.097	0.243	3.904	11.760	0.068	0.189	0.100
%RSD		3.727	0.856	0.670	0.301	0.938	3.048	3.497	0.841

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	11.930	47.510	47.270	-0.118	-0.012	1.871	0.000	39.150
2	18:30:07	12.180	47.410	47.340	0.271	0.743	1.257	0.000	39.000
3	18:30:50	12.330	47.740	48.750	0.008	0.208	1.157	0.000	39.070
x		12.150	47.550	47.780	0.054	0.313	1.428	0.000	39.070
σ		0.202	0.169	0.839	0.198	0.389	0.386	0.000	0.078
%RSD		1.661	0.355	1.755	367.900	124.200	27.050	0.000	0.201

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	92.197%	0.340	0.322	94.455%	0.000	-0.003	0.106	0.124
2	18:30:07	92.748%	0.286	0.281	94.190%	-0.002	0.001	0.169	0.150
3	18:30:50	92.418%	0.342	0.326	92.990%	0.004	-0.003	0.123	0.163
x		92.454%	0.323	0.310	93.878%	0.001	-0.002	0.133	0.146
σ		0.277%	0.031	0.025	0.781%	0.003	0.003	0.032	0.020
%RSD		0.300	9.729	8.017	0.832	381.900	157.700	24.430	13.880

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	89.811%	2.589	0.128	0.181	49.500	49.900	92.898%	92.628%
2	18:30:07	89.726%	2.635	0.127	0.126	49.890	48.740	94.052%	94.577%
3	18:30:50	89.245%	2.701	0.135	0.162	48.960	50.170	94.408%	94.296%
x		89.594%	2.642	0.130	0.156	49.450	49.600	93.786%	93.833%
σ		0.305%	0.056	0.004	0.028	0.464	0.759	0.789%	1.053%
%RSD		0.341	2.128	3.373	17.780	0.938	1.531	0.841	1.123

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:24	0.079	0.072	2.165	2.023	2.064	94.331%
2	18:30:07	0.067	0.075	2.068	1.928	1.992	96.839%
3	18:30:50	0.057	0.081	2.026	1.990	1.999	97.903%
x		0.068	0.076	2.086	1.980	2.018	96.357%
σ		0.011	0.005	0.071	0.048	0.040	1.834%
%RSD		16.240	5.986	3.418	2.442	1.974	1.903

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	92.617%	0.067	21.490	22.980	0.000	3702.000	1359.000	1387.000
2	18:34:23	93.734%	0.066	20.360	20.950	0.000	3610.000	1384.000	1381.000
3	18:35:06	89.502%	0.094	18.330	21.300	0.000	3628.000	1399.000	1407.000
x		91.951%	0.076	20.060	21.740	0.000	3647.000	1380.000	1392.000
σ		2.193%	0.016	1.598	1.086	0.000	48.770	20.180	13.950
%RSD		2.385	21.140	7.966	4.995	0.000	1.337	1.462	1.002

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	360.000	6454.000	0.000	1787.000	5436.000	5620.000	92.211%	6.740
2	18:34:23	351.100	6343.000	0.000	1746.000	5389.000	5656.000	91.547%	8.073
3	18:35:06	351.300	6342.000	0.000	1734.000	5656.000	5633.000	90.911%	9.335
x		354.100	6380.000	0.000	1756.000	5494.000	5636.000	91.556%	8.049
σ		5.107	64.570	0.000	27.830	142.100	18.000	0.650%	1.298
%RSD		1.442	1.012	0.000	1.585	2.586	0.319	0.710	16.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	5.445	25.850	13.950	1450.000	1403.000	0.334	2.055	3.793
2	18:34:23	5.108	25.420	14.020	1425.000	1398.000	0.329	2.123	3.708
3	18:35:06	5.136	25.570	13.770	1418.000	1378.000	0.326	1.909	3.579
x		5.230	25.610	13.920	1431.000	1393.000	0.330	2.029	3.693
σ		0.187	0.221	0.131	16.320	13.350	0.004	0.110	0.108
%RSD		3.581	0.864	0.940	1.140	0.958	1.224	5.394	2.918

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	3.680	15.180	14.530	-0.788	-0.243	0.582	0.000	32.360
2	18:34:23	3.895	14.420	14.680	-0.584	0.352	1.011	0.000	32.460
3	18:35:06	3.495	14.820	14.820	-0.001	-0.422	1.247	0.000	32.320
x		3.690	14.810	14.680	-0.458	-0.104	0.947	0.000	32.380
σ		0.200	0.380	0.147	0.408	0.406	0.337	0.000	0.072
%RSD		5.417	2.563	0.998	89.180	388.900	35.620	0.000	0.222

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	91.726%	0.455	0.438	95.144%	-0.006	-0.003	-0.011	0.018
2	18:34:23	92.399%	0.435	0.494	94.388%	-0.001	0.002	0.024	0.034
3	18:35:06	91.935%	0.354	0.377	94.513%	0.000	-0.001	-0.011	0.006
x		92.020%	0.414	0.436	94.682%	-0.002	-0.001	0.001	0.019
σ		0.345%	0.054	0.058	0.406%	0.003	0.003	0.020	0.014
%RSD		0.375	12.940	13.390	0.428	141.100	490.300	3618.000	73.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	89.841%	2.520	0.101	0.133	19.700	19.450	92.775%	92.574%
2	18:34:23	90.023%	2.738	0.096	0.142	20.300	20.530	93.442%	93.950%
3	18:35:06	90.479%	2.685	0.139	0.157	19.200	19.960	93.979%	93.594%
x		90.114%	2.648	0.112	0.144	19.730	19.980	93.399%	93.373%
σ		0.329%	0.114	0.024	0.012	0.550	0.545	0.603%	0.714%
%RSD		0.365	4.288	21.230	8.388	2.789	2.728	0.646	0.765

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:40	0.052	0.034	0.667	0.558	0.606	95.685%
2	18:34:23	0.023	0.033	0.589	0.584	0.594	97.582%
3	18:35:06	0.051	0.035	0.555	0.564	0.573	97.821%
x		0.042	0.034	0.604	0.569	0.591	97.030%
σ		0.017	0.001	0.057	0.014	0.016	1.170%
%RSD		39.820	3.231	9.495	2.407	2.762	1.206

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	92.905%	0.105	15.150	16.410	0.000	2535.000	1807.000	1842.000
2	18:38:39	87.251%	0.048	17.830	15.910	0.000	2542.000	1868.000	1935.000
3	18:39:22	89.277%	0.102	14.470	15.180	0.000	2520.000	1863.000	1884.000
x		89.811%	0.085	15.820	15.830	0.000	2533.000	1846.000	1887.000
σ		2.865%	0.033	1.777	0.622	0.000	11.110	34.080	46.310
%RSD		3.190	38.220	11.230	3.926	0.000	0.439	1.846	2.454

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	400.300	3179.000	0.000	1778.000	1540.000	1586.000	92.708%	5.379
2	18:38:39	414.700	3127.000	0.000	1782.000	1498.000	1646.000	91.300%	5.121
3	18:39:22	403.700	3180.000	0.000	1754.000	1552.000	1616.000	90.598%	4.491
x		406.200	3162.000	0.000	1771.000	1530.000	1616.000	91.535%	4.997
σ		7.479	30.070	0.000	15.250	28.240	29.860	1.075%	0.457
%RSD		1.841	0.951	0.000	0.861	1.846	1.848	1.174	9.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	5.017	17.830	7.210	872.200	859.300	0.566	6.979	13.490
2	18:38:39	4.820	17.660	7.332	864.100	878.900	0.536	6.980	13.490
3	18:39:22	5.121	17.640	7.111	879.200	865.600	0.514	6.971	13.410
x		4.986	17.710	7.218	871.900	867.900	0.538	6.977	13.460
σ		0.153	0.102	0.110	7.566	10.000	0.026	0.005	0.047
%RSD		3.067	0.576	1.528	0.868	1.152	4.858	0.073	0.346

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	13.690	37.120	36.990	-0.108	0.026	1.009	0.000	15.550
2	18:38:39	13.470	37.160	37.050	-0.460	-0.021	0.801	0.000	15.840
3	18:39:22	13.280	36.140	36.380	-1.094	0.065	0.843	0.000	15.820
x		13.480	36.810	36.810	-0.554	0.023	0.884	0.000	15.730
σ		0.203	0.577	0.370	0.499	0.043	0.110	0.000	0.159
%RSD		1.502	1.566	1.006	90.180	186.800	12.430	0.000	1.012

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	92.229%	1.336	1.271	94.929%	-0.002	-0.005	-0.038	0.004
2	18:38:39	92.266%	1.155	1.122	95.050%	-0.002	0.001	-0.001	0.010
3	18:39:22	92.900%	1.287	1.173	93.937%	-0.005	-0.004	0.064	0.060
x		92.465%	1.259	1.189	94.638%	-0.003	-0.003	0.008	0.025
σ		0.377%	0.094	0.076	0.611%	0.002	0.003	0.052	0.030
%RSD		0.408	7.450	6.377	0.645	56.410	123.800	635.100	123.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	90.327%	2.327	0.113	0.137	18.330	18.430	93.114%	93.107%
2	18:38:39	91.316%	2.335	0.105	0.172	17.810	17.810	95.104%	94.955%
3	18:39:22	90.869%	2.361	0.102	0.084	18.620	18.470	95.157%	94.767%
x		90.838%	2.341	0.106	0.131	18.250	18.240	94.458%	94.276%
σ		0.495%	0.018	0.006	0.044	0.409	0.370	1.165%	1.017%
%RSD		0.545	0.749	5.387	33.640	2.238	2.028	1.233	1.079

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:56	0.001	0.003	1.299	1.194	1.252	96.241%
2	18:38:39	0.001	0.002	1.309	1.270	1.265	99.009%
3	18:39:22	-0.001	0.001	1.302	1.218	1.287	98.990%
x		0.001	0.002	1.303	1.228	1.268	98.080%
σ		0.001	0.001	0.005	0.039	0.017	1.593%
%RSD		214.100	45.950	0.368	3.169	1.363	1.624

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	93.528%	0.128	15.590	17.670	0.000	3926.000	1881.000	1915.000
2	18:42:55	90.226%	0.189	15.020	17.930	0.000	3922.000	1910.000	1922.000
3	18:43:38	88.176%	0.153	15.920	16.880	0.000	3910.000	1921.000	1981.000
x		90.644%	0.157	15.510	17.490	0.000	3919.000	1904.000	1939.000
σ		2.701%	0.031	0.452	0.548	0.000	8.412	20.680	35.990
%RSD		2.979	19.630	2.916	3.131	0.000	0.215	1.086	1.856

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	273.700	5288.000	0.000	1868.000	5040.000	5274.000	91.340%	4.403
2	18:42:55	274.900	5332.000	0.000	1872.000	5101.000	5302.000	90.530%	4.080
3	18:43:38	281.300	5370.000	0.000	1820.000	5086.000	5230.000	90.128%	4.208
x		276.600	5330.000	0.000	1853.000	5076.000	5269.000	90.666%	4.230
σ		4.080	40.940	0.000	28.860	31.810	36.500	0.617%	0.163
%RSD		1.475	0.768	0.000	1.557	0.627	0.693	0.681	3.856

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	2.284	5.377	80.830	591.100	583.200	3.598	3.062	0.619
2	18:42:55	3.117	5.409	80.930	584.300	578.800	3.583	3.064	0.778
3	18:43:38	1.712	5.162	81.060	586.200	582.100	3.633	2.752	0.568
x		2.371	5.316	80.940	587.200	581.300	3.605	2.959	0.655
σ		0.707	0.135	0.113	3.520	2.306	0.026	0.179	0.110
%RSD		29.810	2.532	0.139	0.599	0.397	0.709	6.061	16.760

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	0.555	7.044	7.605	-0.464	-0.119	0.766	0.000	24.470
2	18:42:55	0.634	6.674	7.113	-0.498	-0.201	0.909	0.000	24.290
3	18:43:38	0.598	6.963	6.724	-0.238	0.278	0.181	0.000	24.300
x		0.596	6.893	7.147	-0.400	-0.014	0.619	0.000	24.360
σ		0.040	0.194	0.441	0.141	0.257	0.386	0.000	0.102
%RSD		6.658	2.819	6.175	35.290	1841.000	62.320	0.000	0.417

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	91.613%	0.330	0.448	93.360%	-0.006	0.004	0.191	0.229
2	18:42:55	92.617%	0.403	0.379	93.350%	-0.004	0.000	0.206	0.203
3	18:43:38	91.963%	0.499	0.380	92.896%	-0.007	0.001	0.026	0.161
x		92.065%	0.411	0.402	93.202%	-0.006	0.002	0.141	0.198
σ		0.510%	0.085	0.040	0.265%	0.002	0.002	0.100	0.034
%RSD		0.554	20.630	9.830	0.284	28.340	92.630	70.890	17.360

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	88.760%	1.901	0.100	0.133	16.310	15.470	92.094%	92.256%
2	18:42:55	88.221%	2.194	0.093	0.103	16.440	15.990	93.166%	94.038%
3	18:43:38	89.187%	2.146	0.105	0.140	16.010	15.970	94.467%	93.991%
x		88.722%	2.080	0.100	0.125	16.250	15.810	93.242%	93.428%
σ		0.484%	0.157	0.006	0.020	0.223	0.296	1.188%	1.015%
%RSD		0.546	7.556	6.118	15.640	1.371	1.872	1.274	1.087

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:12	0.023	0.032	0.433	0.356	0.402	96.172%
2	18:42:55	0.023	0.044	0.407	0.323	0.371	97.807%
3	18:43:38	0.029	0.037	0.357	0.385	0.364	97.962%
x		0.025	0.037	0.399	0.354	0.379	97.313%
σ		0.003	0.006	0.038	0.031	0.020	0.992%
%RSD		13.340	15.970	9.634	8.774	5.302	1.019

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	91.826%	-0.003	2.628	3.286	0.000	787.000	364.900	378.700
2	18:47:11	87.710%	0.072	3.852	3.517	0.000	785.000	368.100	387.300
3	18:47:54	86.798%	0.015	3.771	3.495	0.000	782.600	381.500	385.400
x		88.778%	0.028	3.417	3.433	0.000	784.900	371.500	383.800
σ		2.678%	0.039	0.685	0.128	0.000	2.212	8.836	4.537
%RSD		3.017	139.100	20.040	3.720	0.000	0.282	2.378	1.182

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	54.390	1068.000	0.000	373.800	1105.000	1060.000	87.897%	0.823
2	18:47:11	54.700	1092.000	0.000	379.300	964.400	1069.000	86.952%	0.552
3	18:47:54	54.210	1084.000	0.000	372.300	1095.000	1079.000	86.017%	0.768
x		54.430	1081.000	0.000	375.100	1055.000	1069.000	86.955%	0.714
σ		0.246	11.870	0.000	3.699	78.460	9.558	0.940%	0.143
%RSD		0.451	1.098	0.000	0.986	7.438	0.894	1.081	20.060

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	0.364	1.147	16.210	116.000	109.100	0.710	0.710	0.048
2	18:47:11	0.636	1.066	16.260	115.200	110.500	0.737	0.643	0.083
3	18:47:54	0.492	1.097	16.110	112.700	106.800	0.688	0.530	0.007
x		0.498	1.103	16.190	114.600	108.800	0.712	0.628	0.046
σ		0.136	0.041	0.076	1.699	1.855	0.024	0.091	0.038
%RSD		27.320	3.730	0.469	1.482	1.705	3.394	14.480	83.490

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	0.076	0.759	1.034	-0.341	0.113	0.629	0.000	4.735
2	18:47:11	0.014	0.757	0.648	0.483	0.093	0.679	0.000	4.803
3	18:47:54	-0.011	0.818	0.519	-0.401	0.152	0.687	0.000	4.853
x		0.026	0.778	0.734	-0.087	0.119	0.665	0.000	4.797
σ		0.045	0.035	0.268	0.494	0.030	0.032	0.000	0.059
%RSD		170.000	4.449	36.570	570.600	25.520	4.765	0.000	1.234

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	90.586%	0.091	0.076	95.343%	-0.007	-0.003	-0.003	0.038
2	18:47:11	90.805%	0.084	0.101	95.174%	-0.005	-0.003	-0.110	-0.030
3	18:47:54	91.535%	0.094	0.072	94.783%	-0.008	-0.001	-0.066	-0.019
x		90.975%	0.090	0.083	95.100%	-0.007	-0.002	-0.060	-0.004
σ		0.497%	0.005	0.016	0.287%	0.002	0.001	0.054	0.036
%RSD		0.546	5.446	19.180	0.302	22.880	53.220	89.780	980.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	90.366%	0.062	-0.002	-0.026	3.057	3.059	91.412%	91.333%
2	18:47:11	89.822%	0.164	0.012	-0.008	3.153	3.264	93.163%	92.723%
3	18:47:54	89.916%	0.077	-0.003	-0.031	3.406	3.160	91.958%	92.767%
x		90.035%	0.101	0.002	-0.022	3.205	3.161	92.178%	92.274%
σ		0.291%	0.055	0.008	0.012	0.180	0.102	0.896%	0.816%
%RSD		0.323	54.450	393.100	54.780	5.630	3.239	0.972	0.884

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:28	-0.008	-0.002	0.097	0.079	0.087	95.954%
2	18:47:11	-0.007	-0.007	0.067	0.099	0.081	96.929%
3	18:47:54	-0.001	-0.008	0.056	0.079	0.074	97.957%
x		-0.005	-0.006	0.073	0.085	0.081	96.947%
σ		0.003	0.003	0.021	0.011	0.007	1.001%
%RSD		65.550	55.720	28.670	13.450	8.088	1.033

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	96.028%	97.590	86.710	89.360	0.000	48840.000	49150.000	49710.000
2	18:54:19	95.075%	97.180	89.950	92.130	0.000	48650.000	49600.000	50470.000
3	18:55:02	94.818%	94.220	89.990	92.760	0.000	49100.000	50390.000	50910.000
x		95.307%	96.332%	88.884%	91.418%	0.000	97.723%	99.429%	100.727%
σ		0.638%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.669	1.909	2.114	1.979	0.000	0.463	1.259	1.203

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	497.900	5189.000	0.000	51480.000	48590.000	45420.000	93.826%	98.390
2	18:54:19	502.500	5217.000	0.000	51070.000	48600.000	48670.000	94.562%	95.320
3	18:55:02	509.400	5262.000	0.000	51690.000	48830.000	45370.000	94.273%	94.990
x		100.646%	104.451%	0.000	102.830%	97.349%	92.975%	94.220%	96.237%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.371%	n/a
%RSD		1.150	0.709	0.000	0.610	0.279	4.069	0.394	1.948

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	97.090	96.610	499.700	25560.000	25350.000	97.660	97.900	98.050
2	18:54:19	96.440	97.260	503.000	25570.000	25300.000	97.260	96.040	97.820
3	18:55:02	99.030	98.190	500.200	25660.000	25500.000	97.230	97.520	98.530
x		97.521%	97.354%	100.195%	102.399%	101.539%	97.384%	97.154%	98.131%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.384	0.816	0.351	0.219	0.398	0.242	1.011	0.368

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	97.960	98.390	98.160	99.290	99.750	100.100	0.000	97.030
2	18:54:19	98.940	98.070	98.930	100.300	100.300	101.800	0.000	97.670
3	18:55:02	99.530	98.780	99.960	100.500	99.050	100.200	0.000	98.110
x		98.811%	98.413%	99.017%	100.030%	99.694%	100.709%	0.000	97.603%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.802	0.362	0.915	0.650	0.620	0.905	0.000	0.554

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	89.946%	91.380	89.880	91.788%	95.580	95.830	96.400	98.560
2	18:54:19	90.889%	94.920	95.900	92.738%	94.290	96.870	95.400	99.020
3	18:55:02	91.940%	96.840	96.790	93.641%	94.350	96.970	97.930	99.510
x		90.925%	94.379%	94.189%	92.722%	94.741%	96.556%	96.578%	99.031%
σ		0.997%	n/a	n/a	0.927%	n/a	n/a	n/a	n/a
%RSD		1.097	2.936	3.990	0.999	0.771	0.653	1.320	0.481

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	88.927%	94.460	89.180	89.620	98.710	97.690	90.083%	89.511%
2	18:54:19	90.544%	95.490	92.180	93.290	98.330	97.260	91.125%	91.246%
3	18:55:02	90.245%	95.690	95.500	95.460	98.080	97.830	92.452%	92.029%
x		89.906%	95.214%	92.285%	92.790%	98.372%	97.594%	91.220%	90.929%
σ		0.860%	n/a	n/a	n/a	n/a	n/a	1.187%	1.288%
%RSD		0.957	0.695	3.428	3.182	0.322	0.309	1.302	1.417

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	18:53:36	94.070	94.010	95.440	94.740	94.910	89.688%
2	18:54:19	95.490	95.100	96.100	96.250	96.270	90.289%
3	18:55:02	96.050	96.120	97.000	96.450	97.350	90.719%
x		95.205%	95.079%	96.182%	95.816%	96.176%	90.232%
σ		n/a	n/a	n/a	n/a	n/a	0.518%
%RSD		1.071	1.111	0.809	0.976	1.269	0.574

CCB5 2/5/2012 7:00:04 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	99.552%	-0.026	0.749	0.086	0.000	1.591	9.526	8.682
2	19:01:30	96.439%	0.003	-0.365	0.074	0.000	2.816	10.390	8.894
3	19:02:13	96.599%	0.025	0.326	0.199	0.000	10.470	15.720	19.080
x		97.530%	0.001	0.237	0.119	0.000	4.960	11.880	12.220
σ		1.753%	0.026	0.563	0.069	0.000	4.813	3.354	5.941
%RSD		1.797	3441.000	237.700	57.770	0.000	97.040	28.230	48.620

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.770	0.669	0.000	-5.949	20.800	9.770	107.588%	-0.096
2	19:01:30	-0.847	0.918	0.000	-4.199	21.470	10.490	105.528%	-0.094
3	19:02:13	-0.002	1.369	0.000	2.244	36.660	19.440	106.021%	-0.033
x		-0.540	0.986	0.000	-2.635	26.310	13.230	106.379%	-0.074
σ		0.468	0.355	0.000	4.315	8.970	5.390	1.075%	0.036
%RSD		86.650	35.980	0.000	163.800	34.100	40.730	1.011	48.490

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.029	0.033	0.039	1.488	2.582	0.000	-0.123	-0.185
2	19:01:30	-0.136	0.052	0.015	-2.083	-1.386	-0.008	-0.102	-0.238
3	19:02:13	0.052	0.068	0.139	0.622	0.280	0.001	-0.089	-0.188
x		-0.038	0.051	0.064	0.009	0.492	-0.002	-0.105	-0.204
σ		0.094	0.017	0.066	1.863	1.992	0.005	0.017	0.030
%RSD		249.900	33.780	102.100	21330.000	404.800	219.200	16.570	14.850

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	-0.239	-0.882	-0.898	-0.047	-0.649	-0.185	0.000	0.035
2	19:01:30	-0.246	-0.855	-0.972	-0.250	-0.759	0.138	0.000	0.021
3	19:02:13	-0.241	-0.797	-0.809	-0.114	-0.449	0.034	0.000	0.083
x		-0.242	-0.845	-0.893	-0.137	-0.619	-0.004	0.000	0.046
σ		0.003	0.043	0.081	0.103	0.157	0.165	0.000	0.033
%RSD		1.412	5.146	9.119	75.250	25.390	3761.000	0.000	70.790

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	103.746%	0.516	0.508	108.835%	0.007	-0.000	-0.093	-0.047
2	19:01:30	105.384%	0.428	0.462	108.807%	0.003	0.010	-0.056	-0.034
3	19:02:13	103.389%	0.402	0.457	108.431%	0.026	0.017	-0.089	-0.044
x		104.173%	0.449	0.476	108.691%	0.012	0.009	-0.079	-0.042
σ		1.064%	0.060	0.028	0.225%	0.012	0.009	0.021	0.007
%RSD		1.021	13.330	5.905	0.207	99.880	100.200	25.920	16.600

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	106.061%	-0.082	0.611	0.609	0.056	0.071	102.214%	102.538%
2	19:01:30	106.689%	-0.094	0.567	0.548	0.065	0.071	103.378%	103.453%
3	19:02:13	106.249%	-0.131	0.575	0.549	0.115	0.111	102.923%	103.520%
x		106.333%	-0.103	0.584	0.569	0.078	0.084	102.838%	103.170%
σ		0.323%	0.025	0.023	0.035	0.032	0.023	0.587%	0.549%
%RSD		0.304	24.800	3.957	6.089	40.300	27.280	0.571	0.532

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:00:47	0.011	0.014	0.169	0.150	0.166	106.943%
2	19:01:30	0.004	0.011	0.125	0.138	0.126	107.037%
3	19:02:13	0.017	0.020	0.163	0.136	0.146	108.065%
x		0.011	0.015	0.153	0.141	0.146	107.348%
σ		0.007	0.005	0.024	0.008	0.020	0.623%
%RSD		61.940	32.240	15.680	5.396	13.600	0.580

180-7794-A-10-B MS 2/5/2012 7:04:23 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	93.902%	48.930	931.400	959.100	0.000	51640.000	54730.000	55910.000
2	19:05:49	88.913%	48.530	955.600	981.800	0.000	50430.000	56170.000	57550.000
3	19:06:32	85.467%	49.510	976.600	1006.000	0.000	50970.000	57400.000	58580.000
x		89.427%	48.990	954.600	982.400	0.000	51010.000	56100.000	57340.000
σ		4.241%	0.494	22.630	23.600	0.000	603.500	1339.000	1347.000
%RSD		4.742	1.009	2.371	2.402	0.000	1.183	2.386	2.348

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	2288.000	15060.000	0.000	52950.000	53800.000	57850.000	92.811%	986.500
2	19:05:49	2324.000	15170.000	0.000	51700.000	53590.000	57360.000	91.831%	985.600
3	19:06:32	2376.000	15310.000	0.000	51610.000	52740.000	56750.000	91.574%	980.900
x		2329.000	15180.000	0.000	52090.000	53380.000	57320.000	92.072%	984.300
σ		44.540	127.000	0.000	749.200	556.900	552.300	0.653%	3.030
%RSD		1.912	0.837	0.000	1.438	1.043	0.964	0.709	0.308

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	504.800	201.800	592.700	1412.000	1556.000	487.000	495.600	247.400
2	19:05:49	507.700	201.100	597.200	1400.000	1535.000	482.200	486.300	248.100
3	19:06:32	500.200	198.700	589.300	1370.000	1499.000	475.000	477.900	243.500
x		504.200	200.500	593.100	1394.000	1530.000	481.400	486.600	246.300
σ		3.778	1.588	3.952	21.730	28.730	6.024	8.868	2.501
%RSD		0.749	0.792	0.666	1.559	1.878	1.251	1.822	1.015

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	246.500	465.900	464.900	37.650	9.629	9.791	0.000	1024.000
2	19:05:49	247.600	463.100	461.500	37.590	9.871	11.110	0.000	1019.000
3	19:06:32	240.800	459.400	455.100	37.800	10.570	10.800	0.000	1016.000
x		245.000	462.800	460.500	37.680	10.020	10.570	0.000	1020.000
σ		3.671	3.269	4.932	0.108	0.488	0.692	0.000	4.130
%RSD		1.499	0.706	1.071	0.286	4.872	6.543	0.000	0.405

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	91.128%	997.700	991.600	91.116%	49.270	49.550	49.470	48.010
2	19:05:49	91.014%	1010.000	1007.000	89.825%	49.340	49.950	50.160	46.600
3	19:06:32	91.112%	1009.000	1010.000	89.888%	48.740	49.320	48.970	48.330
x		91.085%	1006.000	1003.000	90.276%	49.120	49.610	49.530	47.650
σ		0.062%	6.953	10.090	0.728%	0.330	0.323	0.596	0.921
%RSD		0.068	0.691	1.006	0.806	0.672	0.652	1.202	1.932

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	88.091%	1891.000	498.200	497.400	2006.000	1987.000	92.105%	91.273%
2	19:05:49	87.861%	1904.000	502.300	502.900	2009.000	2009.000	92.638%	93.181%
3	19:06:32	87.899%	1887.000	499.500	501.000	2009.000	1988.000	93.462%	94.047%
x		87.950%	1894.000	500.000	500.400	2008.000	1995.000	92.735%	92.834%
σ		0.123%	8.793	2.102	2.782	1.778	12.240	0.683%	1.419%
%RSD		0.140	0.464	0.420	0.556	0.089	0.613	0.737	1.529

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:05:06	48.390	48.390	19.430	20.760	20.100	89.844%
2	19:05:49	48.300	48.760	19.230	20.730	19.930	92.856%
3	19:06:32	48.580	48.610	18.960	20.610	19.760	94.342%
x		48.420	48.590	19.210	20.700	19.930	92.347%
σ		0.144	0.186	0.238	0.080	0.167	2.291%
%RSD		0.297	0.382	1.237	0.385	0.838	2.481

180-7794-A-10-C MSD 2/5/2012 7:08:40 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	91.364%	47.990	929.000	969.300	0.000	50070.000	54190.000	55660.000
2	19:10:06	88.579%	46.860	936.100	982.600	0.000	49380.000	54730.000	56340.000
3	19:10:49	88.013%	45.760	935.200	958.100	0.000	49390.000	55550.000	56800.000
x		89.319%	46.870	933.500	970.000	0.000	49610.000	54820.000	56270.000
σ		1.794%	1.115	3.846	12.260	0.000	396.500	683.700	576.000
%RSD		2.008	2.378	0.412	1.264	0.000	0.799	1.247	1.024

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	2327.000	15010.000	0.000	51380.000	53020.000	53410.000	92.022%	972.300
2	19:10:06	2341.000	15110.000	0.000	51070.000	52310.000	56070.000	91.828%	958.900
3	19:10:49	2348.000	14980.000	0.000	50030.000	52370.000	56260.000	91.170%	957.400
x		2339.000	15030.000	0.000	50830.000	52570.000	55250.000	91.673%	962.900
σ		10.530	71.900	0.000	706.900	394.700	1596.000	0.447%	8.197
%RSD		0.450	0.478	0.000	1.391	0.751	2.888	0.487	0.851

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	495.800	197.900	583.200	1468.000	1617.000	475.500	478.600	240.000
2	19:10:06	494.200	197.700	574.800	1444.000	1597.000	468.300	462.400	234.300
3	19:10:49	488.300	196.000	578.800	1438.000	1555.000	465.800	468.000	237.600
x		492.800	197.200	579.000	1450.000	1590.000	469.900	469.700	237.300
σ		3.954	1.060	4.221	15.870	31.370	5.017	8.188	2.832
%RSD		0.802	0.537	0.729	1.095	1.974	1.068	1.743	1.193

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	240.700	458.600	455.700	36.910	9.248	11.160	0.000	994.500
2	19:10:06	237.000	453.600	444.700	37.360	9.636	11.710	0.000	985.400
3	19:10:49	236.100	448.100	445.700	36.890	9.448	10.100	0.000	993.100
x		237.900	453.400	448.700	37.050	9.444	10.990	0.000	991.000
σ		2.420	5.278	6.088	0.266	0.194	0.816	0.000	4.860
%RSD		1.017	1.164	1.357	0.718	2.058	7.423	0.000	0.490

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	91.455%	994.800	982.200	90.642%	48.400	48.470	48.830	46.470
2	19:10:06	92.298%	989.900	987.600	91.208%	47.700	48.360	49.400	46.100
3	19:10:49	91.901%	990.500	989.400	90.377%	47.940	48.310	48.220	46.910
x		91.885%	991.700	986.400	90.742%	48.010	48.380	48.820	46.500
σ		0.422%	2.638	3.737	0.424%	0.357	0.082	0.589	0.409
%RSD		0.459	0.266	0.379	0.468	0.744	0.169	1.206	0.879

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	88.115%	1866.000	488.100	490.800	1967.000	1940.000	92.936%	92.412%
2	19:10:06	88.166%	1874.000	492.500	491.800	1972.000	1954.000	93.215%	93.618%
3	19:10:49	88.087%	1868.000	487.400	486.900	1944.000	1946.000	94.072%	93.684%
x		88.123%	1869.000	489.300	489.800	1961.000	1946.000	93.408%	93.238%
σ		0.040%	4.104	2.738	2.618	14.910	6.797	0.592%	0.716%
%RSD		0.046	0.220	0.560	0.534	0.760	0.349	0.634	0.768

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:23	47.100	47.150	18.680	20.280	19.370	92.807%
2	19:10:06	46.920	47.340	18.570	19.780	19.150	94.861%
3	19:10:49	47.220	47.460	18.450	19.580	19.090	94.876%
x		47.080	47.320	18.570	19.880	19.200	94.182%
σ		0.151	0.157	0.114	0.359	0.146	1.190%
%RSD		0.321	0.333	0.611	1.809	0.760	1.264

180-7794-A-11-A 2/5/2012 7:16:32 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	93.403%	0.035	21.140	20.700	0.000	3397.000	782.300	782.100
2	19:17:58	90.289%	0.029	19.100	20.460	0.000	3385.000	794.300	804.600
3	19:18:41	86.587%	-0.010	19.770	19.680	0.000	3388.000	812.700	828.300
x		90.093%	0.018	20.000	20.280	0.000	3390.000	796.400	805.000
σ		3.412%	0.025	1.040	0.536	0.000	6.417	15.300	23.080
%RSD		3.788	134.100	5.202	2.642	0.000	0.189	1.921	2.867

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	299.700	8040.000	0.000	1530.000	21920.000	22480.000	92.302%	6.044
2	19:17:58	303.500	8166.000	0.000	1460.000	22270.000	22500.000	91.091%	6.826
3	19:18:41	307.100	8219.000	0.000	1502.000	22020.000	22830.000	90.494%	6.055
x		303.400	8141.000	0.000	1497.000	22070.000	22610.000	91.296%	6.308
σ		3.702	92.170	0.000	35.190	178.400	198.400	0.921%	0.448
%RSD		1.220	1.132	0.000	2.350	0.808	0.878	1.009	7.108

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	2.476	5.655	71.290	1049.000	1092.000	1.128	1.978	0.597
2	19:17:58	2.634	5.539	71.750	1051.000	1101.000	1.035	1.852	0.456
3	19:18:41	2.480	5.643	71.410	1035.000	1066.000	1.077	1.949	0.507
x		2.530	5.612	71.480	1045.000	1087.000	1.080	1.927	0.520
σ		0.090	0.064	0.239	8.520	18.520	0.046	0.066	0.071
%RSD		3.563	1.136	0.334	0.815	1.704	4.294	3.429	13.670

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	0.718	3.561	3.916	0.323	-0.154	0.950	0.000	40.150
2	19:17:58	0.570	3.723	3.427	-0.549	-0.459	0.255	0.000	40.840
3	19:18:41	0.525	3.370	2.878	-0.765	-0.019	0.512	0.000	40.660
x		0.604	3.551	3.407	-0.330	-0.211	0.572	0.000	40.550
σ		0.101	0.176	0.519	0.576	0.225	0.351	0.000	0.362
%RSD		16.680	4.965	15.230	174.500	106.900	61.370	0.000	0.892

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	91.181%	4.788	4.692	93.080%	-0.002	-0.001	0.102	0.051
2	19:17:58	90.548%	3.702	3.467	92.859%	-0.008	-0.004	0.021	0.082
3	19:18:41	91.047%	2.843	2.733	92.149%	-0.001	-0.002	-0.053	-0.038
x		90.925%	3.778	3.631	92.696%	-0.004	-0.002	0.024	0.032
σ		0.333%	0.975	0.990	0.486%	0.004	0.002	0.078	0.063
%RSD		0.367	25.810	27.270	0.525	112.000	74.290	327.300	198.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	89.462%	17.970	0.281	0.303	11.350	10.930	91.316%	90.920%
2	19:17:58	89.033%	15.460	0.233	0.267	11.460	11.260	92.106%	93.158%
3	19:18:41	89.408%	13.610	0.220	0.274	11.380	11.300	92.509%	92.777%
x		89.301%	15.680	0.244	0.281	11.400	11.160	91.977%	92.285%
σ		0.234%	2.189	0.032	0.019	0.055	0.204	0.607%	1.197%
%RSD		0.262	13.960	13.020	6.867	0.483	1.829	0.660	1.297

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:17:15	0.134	0.154	0.409	0.452	0.431	95.896%
2	19:17:58	0.116	0.101	0.451	0.380	0.408	98.721%
3	19:18:41	0.119	0.106	0.404	0.372	0.403	98.463%
x		0.123	0.120	0.421	0.402	0.414	97.693%
σ		0.010	0.030	0.026	0.044	0.015	1.562%
%RSD		7.871	24.540	6.112	10.930	3.615	1.598

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	93.937%	0.004	2.485	2.087	0.000	3.623	2.110	1.226
2	19:25:51	91.972%	-0.019	1.956	1.867	0.000	5.019	2.612	2.063
3	19:26:34	90.431%	0.013	1.842	2.461	0.000	4.603	1.187	1.744
x		92.113%	-0.000	2.094	2.138	0.000	4.415	1.970	1.677
σ		1.757%	0.017	0.343	0.301	0.000	0.716	0.723	0.423
%RSD		1.907	6217.000	16.370	14.060	0.000	16.230	36.710	25.200

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-1.375	6.053	0.000	-2.412	8.817	-10.250	91.255%	-0.003
2	19:25:51	-1.398	5.603	0.000	-2.090	15.970	-7.585	91.113%	-0.003
3	19:26:34	-1.327	5.175	0.000	-2.688	14.820	-7.149	89.016%	0.021
x		-1.367	5.611	0.000	-2.397	13.200	-8.329	90.461%	0.005
σ		0.036	0.439	0.000	0.299	3.841	1.680	1.254%	0.014
%RSD		2.636	7.825	0.000	12.470	29.100	20.180	1.386	261.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-0.064	0.188	-0.007	-3.473	-0.446	0.023	-0.059	-0.150
2	19:25:51	-0.133	0.200	0.015	-7.062	-6.659	0.003	-0.123	-0.162
3	19:26:34	-0.023	0.174	0.045	-7.638	-7.001	0.014	-0.121	-0.150
x		-0.073	0.187	0.018	-6.058	-4.702	0.013	-0.101	-0.154
σ		0.055	0.013	0.026	2.256	3.690	0.010	0.036	0.007
%RSD		75.600	7.100	147.500	37.250	78.470	74.510	35.800	4.596

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	-0.218	-1.117	-1.050	0.009	-0.020	0.233	0.000	0.021
2	19:25:51	-0.160	-1.100	-1.086	-0.302	-0.130	0.418	0.000	0.022
3	19:26:34	-0.267	-1.074	-1.184	0.125	0.062	1.177	0.000	0.028
x		-0.215	-1.097	-1.107	-0.056	-0.029	0.609	0.000	0.024
σ		0.054	0.022	0.069	0.221	0.096	0.500	0.000	0.003
%RSD		24.990	1.977	6.266	393.500	330.900	82.120	0.000	14.590

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	89.158%	0.906	0.963	94.795%	-0.006	-0.005	0.024	0.026
2	19:25:51	89.679%	0.734	0.733	94.467%	-0.004	-0.008	-0.083	-0.051
3	19:26:34	89.219%	0.673	0.644	94.323%	-0.006	-0.001	0.009	0.006
x		89.352%	0.771	0.780	94.528%	-0.005	-0.005	-0.017	-0.006
σ		0.285%	0.121	0.165	0.242%	0.001	0.004	0.058	0.040
%RSD		0.319	15.680	21.160	0.256	22.360	79.070	344.400	628.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	88.852%	0.143	0.015	0.017	0.018	0.022	88.003%	87.773%
2	19:25:51	88.621%	0.161	0.025	0.014	0.094	0.064	89.546%	89.983%
3	19:26:34	89.004%	0.111	0.025	-0.003	0.062	0.057	90.236%	89.840%
x		88.825%	0.139	0.022	0.010	0.058	0.048	89.262%	89.199%
σ		0.193%	0.025	0.006	0.011	0.038	0.023	1.143%	1.237%
%RSD		0.217	18.210	26.290	112.200	65.570	47.780	1.281	1.386

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:08	0.014	0.027	0.084	0.080	0.076	95.033%
2	19:25:51	0.029	0.028	0.051	0.027	0.045	93.968%
3	19:26:34	0.023	0.018	0.035	0.026	0.031	93.726%
x		0.022	0.024	0.057	0.044	0.051	94.242%
σ		0.008	0.006	0.025	0.031	0.023	0.695%
%RSD		35.380	23.080	44.180	69.130	45.880	0.738

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	88.160%	48.700	883.500	922.900	0.000	47010.000	53260.000	54480.000
2	19:30:09	85.726%	46.910	906.200	950.200	0.000	47440.000	54660.000	55250.000
3	19:30:52	84.480%	46.860	922.400	958.900	0.000	47240.000	55170.000	55790.000
x		86.122%	47.490	904.000	944.000	0.000	47230.000	54360.000	55170.000
σ		1.872%	1.048	19.560	18.770	0.000	215.600	988.500	660.700
%RSD		2.173	2.207	2.164	1.989	0.000	0.457	1.818	1.198

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	2061.000	10010.000	0.000	50450.000	49030.000	49230.000	88.437%	959.400
2	19:30:09	2079.000	10130.000	0.000	50360.000	48720.000	49360.000	86.793%	978.500
3	19:30:52	2081.000	10190.000	0.000	50480.000	48890.000	49800.000	85.842%	978.700
x		2074.000	10110.000	0.000	50430.000	48880.000	49460.000	87.024%	972.200
σ		10.970	93.080	0.000	57.980	151.300	296.000	1.313%	11.070
%RSD		0.529	0.921	0.000	0.115	0.310	0.598	1.508	1.138

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	496.000	196.100	513.500	1049.000	1196.000	478.400	482.400	245.700
2	19:30:09	499.600	197.600	513.300	1005.000	1176.000	472.100	473.700	242.300
3	19:30:52	505.100	200.400	514.900	1051.000	1193.000	477.600	475.700	240.000
x		500.200	198.100	513.900	1035.000	1188.000	476.000	477.300	242.600
σ		4.557	2.185	0.853	25.910	10.770	3.406	4.520	2.882
%RSD		0.911	1.103	0.166	2.503	0.907	0.716	0.947	1.188

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	243.500	481.100	479.200	38.900	10.540	10.550	0.000	993.000
2	19:30:09	240.700	479.200	477.000	38.510	10.710	10.590	0.000	992.900
3	19:30:52	241.700	476.900	480.800	38.970	10.750	10.400	0.000	995.500
x		242.000	479.100	479.000	38.790	10.670	10.510	0.000	993.800
σ		1.448	2.127	1.862	0.252	0.111	0.103	0.000	1.472
%RSD		0.598	0.444	0.389	0.648	1.042	0.982	0.000	0.148

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	86.803%	980.100	972.300	86.613%	49.190	49.570	51.500	47.990
2	19:30:09	87.447%	995.100	987.500	86.593%	48.790	49.540	51.050	48.060
3	19:30:52	87.010%	1009.000	1009.000	86.044%	48.690	48.990	50.130	48.260
x		87.087%	994.600	989.700	86.417%	48.890	49.370	50.890	48.100
σ		0.329%	14.200	18.600	0.323%	0.260	0.325	0.697	0.137
%RSD		0.378	1.427	1.880	0.374	0.533	0.659	1.369	0.285

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	84.828%	1885.000	506.500	507.900	1971.000	1956.000	89.270%	88.262%
2	19:30:09	84.768%	1896.000	509.600	512.700	1984.000	1973.000	89.324%	89.908%
3	19:30:52	84.792%	1901.000	509.100	509.800	1984.000	1969.000	90.028%	90.611%
x		84.796%	1894.000	508.400	510.100	1980.000	1966.000	89.540%	89.594%
σ		0.030%	8.325	1.657	2.410	7.280	9.062	0.423%	1.206%
%RSD		0.036	0.440	0.326	0.472	0.368	0.461	0.472	1.346

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:29:26	47.270	47.480	18.580	19.860	19.230	90.079%
2	19:30:09	47.950	48.030	18.670	20.120	19.380	91.670%
3	19:30:52	47.710	48.160	18.450	20.190	19.360	92.498%
x		47.650	47.890	18.570	20.060	19.320	91.415%
σ		0.345	0.361	0.115	0.173	0.084	1.229%
%RSD		0.724	0.754	0.618	0.862	0.432	1.345

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	86.892%	0.007	49.720	51.270	0.000	20420.000	7451.000	7613.000
2	19:37:19	83.801%	-0.018	51.030	51.250	0.000	20120.000	7664.000	7777.000
3	19:38:02	81.362%	0.000	47.960	50.400	0.000	19950.000	7752.000	7908.000
x		84.018%	-0.004	49.570	50.970	0.000	20160.000	7622.000	7766.000
σ		2.771%	0.013	1.540	0.497	0.000	237.200	154.400	147.700
%RSD		3.299	342.400	3.106	0.976	0.000	1.177	2.026	1.902

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	2.801	4370.000	0.000	3459.000	109500.000	119000.000	87.980%	1.066
2	19:37:19	2.888	4388.000	0.000	3465.000	110700.000	118800.000	87.339%	1.430
3	19:38:02	2.504	4426.000	0.000	3359.000	108100.000	120400.000	86.839%	0.931
x		2.731	4395.000	0.000	3428.000	109400.000	119400.000	87.386%	1.142
σ		0.201	28.920	0.000	59.330	1288.000	850.300	0.572%	0.258
%RSD		7.366	0.658	0.000	1.731	1.177	0.712	0.655	22.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.255	1.683	3.448	144.500	544.300	0.321	-0.586	0.472
2	19:37:19	0.033	1.541	3.511	141.200	517.500	0.303	-0.493	0.612
3	19:38:02	-0.138	1.573	3.438	143.200	514.900	0.308	-0.560	0.457
x		0.050	1.599	3.466	142.900	525.600	0.311	-0.547	0.514
σ		0.197	0.074	0.040	1.673	16.280	0.010	0.048	0.086
%RSD		395.300	4.650	1.151	1.170	3.098	3.084	8.751	16.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.569	1.054	0.984	-0.558	3.194	4.754	0.000	217.600
2	19:37:19	0.564	1.032	1.151	-0.634	3.162	3.754	0.000	217.500
3	19:38:02	0.623	0.988	0.809	-0.128	3.858	3.934	0.000	219.000
x		0.585	1.024	0.982	-0.440	3.405	4.147	0.000	218.000
σ		0.033	0.034	0.171	0.273	0.393	0.533	0.000	0.829
%RSD		5.656	3.293	17.460	61.980	11.540	12.850	0.000	0.380

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	87.001%	5.145	4.762	88.045%	-0.011	-0.003	-0.075	-0.050
2	19:37:19	87.951%	3.924	3.663	88.697%	-0.005	-0.006	-0.108	-0.098
3	19:38:02	87.173%	3.205	2.914	87.136%	-0.002	-0.001	-0.049	-0.033
x		87.375%	4.091	3.780	87.959%	-0.006	-0.003	-0.077	-0.060
σ		0.507%	0.981	0.930	0.784%	0.005	0.002	0.030	0.034
%RSD		0.580	23.970	24.600	0.891	77.740	73.050	38.660	56.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	85.837%	12.260	0.088	0.108	42.760	42.360	89.194%	89.251%
2	19:37:19	86.552%	10.780	0.094	0.126	43.170	42.020	90.607%	90.040%
3	19:38:02	84.843%	10.110	0.104	0.131	43.740	42.810	90.579%	90.714%
x		85.744%	11.050	0.095	0.122	43.220	42.400	90.127%	90.002%
σ		0.858%	1.101	0.008	0.012	0.492	0.399	0.808%	0.732%
%RSD		1.001	9.968	8.284	10.010	1.138	0.941	0.896	0.814

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:36:36	0.133	0.136	0.140	0.095	0.108	91.618%
2	19:37:19	0.108	0.107	0.066	0.068	0.075	93.098%
3	19:38:02	0.109	0.097	0.052	0.056	0.067	94.041%
x		0.117	0.113	0.086	0.073	0.083	92.919%
σ		0.014	0.020	0.047	0.020	0.021	1.221%
%RSD		11.920	17.690	55.290	27.360	25.610	1.314

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	90.001%	-0.018	12.800	12.210	0.000	4017.000	1427.000	1464.000
2	19:41:38	89.641%	-0.010	11.970	11.700	0.000	3978.000	1426.000	1457.000
3	19:42:21	88.346%	0.006	10.760	11.410	0.000	4021.000	1470.000	1494.000
x		89.329%	-0.007	11.840	11.770	0.000	4005.000	1441.000	1472.000
σ		0.870%	0.013	1.023	0.405	0.000	23.470	24.930	19.720
%RSD		0.974	167.500	8.640	3.439	0.000	0.586	1.730	1.340

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.579	845.500	0.000	683.400	21870.000	22160.000	88.538%	0.207
2	19:41:38	0.646	854.300	0.000	684.200	22290.000	22100.000	88.042%	0.135
3	19:42:21	0.352	857.300	0.000	689.100	22110.000	22090.000	87.099%	0.326
x		0.526	852.400	0.000	685.600	22090.000	22120.000	87.893%	0.223
σ		0.154	6.111	0.000	3.055	206.300	39.910	0.731%	0.097
%RSD		29.270	0.717	0.000	0.446	0.934	0.180	0.832	43.380

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	-0.047	0.396	0.660	22.170	101.500	0.070	-0.155	-0.051
2	19:41:38	-0.094	0.334	0.687	22.250	99.830	0.093	-0.243	-0.052
3	19:42:21	0.071	0.403	0.683	20.180	100.700	0.077	-0.203	-0.040
x		-0.023	0.378	0.677	21.530	100.700	0.080	-0.200	-0.048
σ		0.085	0.038	0.015	1.175	0.818	0.012	0.044	0.007
%RSD		368.700	10.140	2.196	5.459	0.812	14.660	22.020	14.320

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.007	0.074	-0.150	0.190	0.245	1.694	0.000	42.210
2	19:41:38	0.035	0.044	-0.003	0.055	0.274	1.469	0.000	42.900
3	19:42:21	-0.041	-0.075	-0.100	-0.002	0.852	1.262	0.000	42.130
x		0.000	0.014	-0.084	0.081	0.457	1.475	0.000	42.410
σ		0.039	0.079	0.075	0.098	0.342	0.216	0.000	0.425
%RSD		15280.000	553.700	88.410	121.300	74.870	14.660	0.000	1.002

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	88.010%	1.656	1.524	91.545%	-0.007	-0.004	-0.085	-0.044
2	19:41:38	87.714%	1.239	1.329	91.797%	-0.009	-0.004	-0.039	0.003
3	19:42:21	88.105%	1.035	1.203	92.338%	-0.009	-0.007	0.034	0.032
x		87.943%	1.310	1.352	91.893%	-0.008	-0.005	-0.030	-0.003
σ		0.204%	0.316	0.162	0.405%	0.001	0.002	0.060	0.038
%RSD		0.231	24.130	11.990	0.441	14.790	37.910	201.300	1412.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	87.749%	1.012	0.011	0.008	8.341	8.143	89.098%	88.973%
2	19:41:38	87.957%	0.888	0.009	-0.012	8.510	8.043	90.558%	90.540%
3	19:42:21	87.457%	0.816	0.009	0.005	8.696	8.353	90.414%	90.542%
x		87.721%	0.905	0.010	0.000	8.516	8.180	90.023%	90.018%
σ		0.251%	0.099	0.001	0.011	0.178	0.159	0.805%	0.905%
%RSD		0.286	10.920	8.236	4536.000	2.089	1.940	0.894	1.006

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:40:55	0.074	0.067	0.071	0.086	0.070	91.115%
2	19:41:38	0.041	0.059	0.004	0.024	0.011	92.608%
3	19:42:21	0.057	0.042	0.010	0.001	0.000	93.763%
x		0.057	0.056	0.028	0.037	0.027	92.495%
σ		0.016	0.013	0.037	0.044	0.038	1.327%
%RSD		28.380	22.370	130.900	119.200	138.100	1.435

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	84.574%	48.930	955.200	983.300	0.000	66550.000	60730.000	62180.000
2	19:45:55	83.258%	46.550	936.600	999.100	0.000	66970.000	61990.000	62850.000
3	19:46:38	78.395%	49.600	997.200	1019.000	0.000	67460.000	63870.000	65360.000
x		82.076%	48.360	963.000	1000.000	0.000	66990.000	62200.000	63460.000
σ		3.255%	1.607	31.030	17.680	0.000	454.500	1582.000	1676.000
%RSD		3.966	3.323	3.222	1.767	0.000	0.678	2.543	2.642

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	2066.000	14250.000	0.000	53100.000	159100.000	170700.000	87.871%	956.900
2	19:45:55	2084.000	14240.000	0.000	53140.000	160400.000	171500.000	85.659%	962.100
3	19:46:38	2163.000	14750.000	0.000	52830.000	158900.000	171300.000	84.729%	973.100
x		2104.000	14410.000	0.000	53020.000	159500.000	171200.000	86.086%	964.000
σ		51.360	289.600	0.000	173.000	800.600	427.500	1.614%	8.259
%RSD		2.441	2.010	0.000	0.326	0.502	0.250	1.875	0.857

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	491.000	193.600	503.400	1172.000	1722.000	465.500	467.900	236.100
2	19:45:55	497.400	198.800	509.900	1169.000	1681.000	465.700	466.400	231.800
3	19:46:38	496.200	194.100	511.700	1185.000	1670.000	462.600	456.900	233.300
x		494.900	195.500	508.300	1175.000	1691.000	464.600	463.700	233.700
σ		3.375	2.862	4.366	8.532	27.670	1.739	5.958	2.178
%RSD		0.682	1.464	0.859	0.726	1.636	0.374	1.285	0.932

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	236.400	461.500	463.200	38.170	13.490	14.260	0.000	1219.000
2	19:45:55	236.500	461.500	461.600	38.110	13.470	14.470	0.000	1205.000
3	19:46:38	234.700	459.700	455.600	38.950	13.930	14.130	0.000	1211.000
x		235.800	460.900	460.100	38.410	13.630	14.290	0.000	1212.000
σ		1.023	1.024	4.003	0.470	0.260	0.175	0.000	7.341
%RSD		0.434	0.222	0.870	1.223	1.906	1.225	0.000	0.606

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	86.027%	987.400	986.200	85.104%	48.220	48.610	49.610	49.550
2	19:45:55	86.861%	994.400	995.900	84.758%	48.020	48.720	50.250	47.710
3	19:46:38	85.988%	1007.000	1005.000	84.392%	48.130	48.810	50.610	47.890
x		86.292%	996.400	995.800	84.751%	48.120	48.710	50.160	48.380
σ		0.493%	10.140	9.520	0.356%	0.099	0.100	0.507	1.014
%RSD		0.571	1.018	0.956	0.420	0.205	0.205	1.011	2.097

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	83.652%	1844.000	501.800	502.300	1990.000	1985.000	89.168%	89.637%
2	19:45:55	84.251%	1881.000	502.100	501.200	1993.000	1985.000	90.370%	90.075%
3	19:46:38	83.538%	1891.000	507.400	505.600	2001.000	1993.000	90.266%	90.886%
x		83.814%	1872.000	503.800	503.000	1995.000	1987.000	89.935%	90.199%
σ		0.383%	24.700	3.160	2.277	5.883	4.644	0.666%	0.634%
%RSD		0.457	1.319	0.627	0.453	0.295	0.234	0.741	0.703

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:12	46.550	46.640	18.450	19.890	19.100	89.973%
2	19:45:55	47.420	47.140	18.520	19.390	19.060	92.199%
3	19:46:38	47.280	47.190	18.270	19.820	18.980	92.995%
x		47.080	46.990	18.410	19.700	19.050	91.723%
σ		0.464	0.306	0.127	0.267	0.063	1.566%
%RSD		0.986	0.651	0.688	1.357	0.331	1.708

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	86.238%	46.240	949.400	977.200	0.000	66370.000	60690.000	61630.000
2	19:50:11	84.479%	47.560	953.200	978.700	0.000	65750.000	60580.000	61930.000
3	19:50:54	84.298%	45.900	918.300	951.600	0.000	64840.000	60580.000	61840.000
x		85.005%	46.570	940.300	969.200	0.000	65660.000	60620.000	61800.000
σ		1.072%	0.879	19.110	15.200	0.000	768.300	66.900	153.800
%RSD		1.261	1.888	2.032	1.568	0.000	1.170	0.110	0.249

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	2046.000	14170.000	0.000	52440.000	157500.000	169200.000	86.261%	957.500
2	19:50:11	2046.000	14030.000	0.000	51810.000	156400.000	169000.000	87.232%	951.100
3	19:50:54	2029.000	13920.000	0.000	51310.000	157500.000	169100.000	86.511%	941.300
x		2040.000	14040.000	0.000	51850.000	157100.000	169100.000	86.668%	950.000
σ		10.020	127.500	0.000	567.500	640.300	78.740	0.504%	8.146
%RSD		0.491	0.909	0.000	1.094	0.408	0.047	0.582	0.858

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	492.500	194.200	503.100	1161.000	1672.000	462.700	471.100	236.600
2	19:50:11	485.500	191.300	502.300	1145.000	1639.000	455.600	458.100	229.800
3	19:50:54	484.300	192.500	504.400	1142.000	1605.000	453.200	454.000	228.800
x		487.500	192.600	503.200	1149.000	1639.000	457.200	461.100	231.700
σ		4.409	1.464	1.050	10.100	33.120	4.939	8.924	4.248
%RSD		0.904	0.760	0.209	0.879	2.021	1.080	1.936	1.833

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	238.600	458.900	456.500	38.010	13.500	14.850	0.000	1196.000
2	19:50:11	232.600	447.500	445.100	36.960	12.800	14.130	0.000	1186.000
3	19:50:54	229.500	449.000	451.900	38.120	12.660	13.620	0.000	1194.000
x		233.500	451.800	451.200	37.700	12.990	14.200	0.000	1192.000
σ		4.648	6.170	5.786	0.640	0.451	0.621	0.000	5.394
%RSD		1.990	1.366	1.282	1.697	3.470	4.372	0.000	0.453

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	85.528%	980.400	980.000	84.845%	47.950	48.290	49.780	47.510
2	19:50:11	86.887%	990.600	987.200	85.139%	47.830	47.920	48.810	45.160
3	19:50:54	86.568%	994.800	990.300	84.634%	47.890	47.660	49.670	46.110
x		86.328%	988.600	985.800	84.872%	47.890	47.960	49.420	46.260
σ		0.711%	7.375	5.311	0.253%	0.057	0.313	0.534	1.186
%RSD		0.824	0.746	0.539	0.299	0.118	0.652	1.081	2.563

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	82.465%	1886.000	497.100	499.600	1992.000	1980.000	88.478%	88.406%
2	19:50:11	84.315%	1865.000	495.600	495.000	1979.000	1974.000	90.125%	90.356%
3	19:50:54	85.056%	1861.000	489.200	489.200	1963.000	1949.000	91.222%	90.928%
x		83.945%	1870.000	493.900	494.600	1978.000	1968.000	89.942%	89.897%
σ		1.335%	13.220	4.179	5.247	14.510	16.570	1.381%	1.323%
%RSD		1.590	0.707	0.846	1.061	0.734	0.842	1.536	1.471

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:28	46.920	46.690	18.330	19.520	18.940	88.916%
2	19:50:11	46.730	46.980	18.070	19.790	19.000	91.180%
3	19:50:54	46.980	46.860	17.990	19.770	18.800	92.267%
x		46.880	46.840	18.130	19.690	18.920	90.788%
σ		0.129	0.141	0.178	0.154	0.102	1.709%
%RSD		0.276	0.302	0.981	0.780	0.541	1.883

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	86.615%	-0.001	229.900	244.200	0.000	20350.000	891.400	901.000
2	19:57:20	81.281%	0.035	233.900	248.500	0.000	20380.000	922.300	938.400
3	19:58:03	83.131%	0.043	225.700	239.200	0.000	20130.000	919.900	923.600
x		83.676%	0.026	229.800	244.000	0.000	20290.000	911.200	921.000
σ		2.709%	0.024	4.132	4.639	0.000	138.600	17.180	18.860
%RSD		3.237	92.780	1.798	1.901	0.000	0.683	1.886	2.048

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	343.800	2536.000	0.000	37150.000	120300.000	130800.000	87.429%	3.769
2	19:57:20	351.400	2589.000	0.000	37090.000	121600.000	130500.000	86.104%	4.283
3	19:58:03	346.300	2490.000	0.000	36180.000	120800.000	131000.000	85.397%	3.362
x		347.100	2539.000	0.000	36800.000	120900.000	130800.000	86.310%	3.805
σ		3.871	49.620	0.000	540.400	677.800	284.800	1.032%	0.461
%RSD		1.115	1.954	0.000	1.468	0.561	0.218	1.195	12.130

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	1.478	1.277	63.060	843.900	1258.000	0.784	3.724	1.540
2	19:57:20	1.757	1.354	63.760	843.100	1249.000	0.841	3.598	1.558
3	19:58:03	2.003	1.241	63.860	827.300	1201.000	0.834	3.592	1.633
x		1.746	1.291	63.560	838.100	1236.000	0.820	3.638	1.577
σ		0.263	0.058	0.436	9.361	30.840	0.031	0.074	0.049
%RSD		15.040	4.487	0.686	1.117	2.495	3.772	2.037	3.132

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	1.997	3.011	2.626	3.358	0.328	1.802	0.000	206.800
2	19:57:20	1.894	2.974	2.449	2.589	0.431	1.131	0.000	205.700
3	19:58:03	1.764	3.210	2.904	2.967	1.097	1.814	0.000	205.900
x		1.885	3.065	2.660	2.971	0.619	1.582	0.000	206.100
σ		0.117	0.127	0.230	0.385	0.417	0.391	0.000	0.588
%RSD		6.205	4.135	8.629	12.950	67.440	24.690	0.000	0.285

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	87.068%	34.850	34.120	88.356%	-0.010	-0.000	-0.024	-0.092
2	19:57:20	87.465%	34.350	33.910	86.855%	0.001	0.003	0.082	0.003
3	19:58:03	86.996%	34.040	33.460	85.628%	-0.002	0.001	-0.004	-0.029
x		87.176%	34.410	33.830	86.946%	-0.004	0.001	0.018	-0.039
σ		0.252%	0.405	0.339	1.366%	0.006	0.002	0.056	0.048
%RSD		0.289	1.176	1.003	1.571	159.600	133.400	309.400	123.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	85.085%	18.030	0.683	0.726	18.030	18.560	88.633%	89.119%
2	19:57:20	85.003%	16.220	0.695	0.732	18.310	18.760	89.651%	90.586%
3	19:58:03	84.864%	14.440	0.634	0.655	18.170	18.380	89.278%	89.277%
x		84.984%	16.230	0.671	0.704	18.170	18.570	89.187%	89.661%
σ		0.112%	1.792	0.032	0.042	0.138	0.192	0.515%	0.805%
%RSD		0.131	11.040	4.842	6.016	0.760	1.036	0.577	0.898

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:37	0.171	0.179	0.585	0.461	0.541	93.918%
2	19:57:20	0.151	0.171	0.544	0.520	0.518	94.972%
3	19:58:03	0.153	0.153	0.471	0.548	0.499	94.912%
x		0.158	0.168	0.534	0.510	0.519	94.601%
σ		0.011	0.013	0.058	0.044	0.021	0.592%
%RSD		7.184	7.963	10.820	8.679	4.106	0.626

CCV 309497 2/5/2012 8:03:03 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	88.055%	96.160	92.180	92.740	0.000	49180.000	50120.000	51070.000
2	20:04:28	86.671%	94.880	99.570	97.320	0.000	49170.000	50960.000	51950.000
3	20:05:11	83.771%	99.550	100.200	98.330	0.000	49450.000	51960.000	53310.000
x		86.166%	96.864%	97.318%	96.131%	0.000	98.536%	102.028%	104.217%
σ		2.187%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.538	2.490	4.583	3.096	0.000	0.321	1.807	2.167

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	504.800	5251.000	0.000	50960.000	48990.000	46750.000	87.151%	97.210
2	20:04:28	518.500	5294.000	0.000	52030.000	49250.000	48950.000	87.262%	95.110
3	20:05:11	530.900	5414.000	0.000	51440.000	48410.000	49120.000	88.473%	96.010
x		103.608%	106.397%	0.000	102.950%	97.759%	96.547%	87.629%	96.110%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.733%	n/a
%RSD		2.519	1.587	0.000	1.035	0.879	2.745	0.837	1.095

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	98.110	98.240	503.400	25800.000	25420.000	95.570	96.870	96.970
2	20:04:28	98.330	98.770	505.500	25630.000	25370.000	96.920	95.250	96.020
3	20:05:11	98.070	97.390	509.000	25800.000	25460.000	95.830	96.010	97.630
x		98.169%	98.134%	101.191%	102.980%	101.669%	96.108%	96.045%	96.873%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.141	0.706	0.562	0.376	0.191	0.747	0.844	0.838

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	96.550	98.290	99.810	98.440	100.500	100.600	0.000	97.440
2	20:04:28	96.530	99.760	99.880	100.800	101.600	101.700	0.000	98.650
3	20:05:11	97.700	98.460	96.910	99.300	102.300	103.300	0.000	97.940
x		96.929%	98.839%	98.867%	99.529%	101.471%	101.845%	0.000	98.010%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.692	0.813	1.714	1.227	0.869	1.310	0.000	0.619

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	84.553%	92.490	92.460	86.062%	95.270	96.120	97.910	99.950
2	20:04:28	85.772%	96.910	96.730	86.814%	94.430	96.360	97.980	99.370
3	20:05:11	86.732%	99.220	98.790	87.839%	95.710	96.950	96.660	98.750
x		85.686%	96.204%	95.993%	86.905%	95.137%	96.479%	97.516%	99.355%
σ		1.092%	n/a	n/a	0.892%	n/a	n/a	n/a	n/a
%RSD		1.274	3.552	3.360	1.026	0.681	0.445	0.764	0.607

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	84.067%	96.520	90.320	90.790	97.640	98.010	85.827%	86.781%
2	20:04:28	85.945%	95.470	93.540	93.770	96.990	97.640	87.506%	87.905%
3	20:05:11	86.667%	96.660	96.290	95.940	98.450	97.260	88.787%	88.845%
x		85.560%	96.217%	93.381%	93.499%	97.690%	97.638%	87.373%	87.844%
σ		1.342%	n/a	n/a	n/a	n/a	n/a	1.484%	1.033%
%RSD		1.569	0.676	3.198	2.762	0.750	0.381	1.699	1.176

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:45	94.400	93.210	94.500	93.890	94.060	88.457%
2	20:04:28	95.980	95.710	97.490	95.740	96.570	88.841%
3	20:05:11	95.510	95.810	98.290	96.370	97.290	89.420%
x		95.298%	94.911%	96.760%	95.336%	95.974%	88.906%
σ		n/a	n/a	n/a	n/a	n/a	0.485%
%RSD		0.849	1.550	2.066	1.351	1.767	0.545

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	99.376%	-0.019	2.275	3.195	0.000	3.004	9.283	9.476
2	20:11:40	96.555%	-0.004	2.907	2.545	0.000	7.626	12.240	13.830
3	20:12:23	96.142%	-0.004	2.149	2.232	0.000	10.330	16.680	15.980
x		97.358%	-0.009	2.444	2.657	0.000	6.987	12.740	13.100
σ		1.760%	0.009	0.406	0.491	0.000	3.705	3.725	3.315
%RSD		1.807	95.350	16.610	18.500	0.000	53.020	29.250	25.310

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	-0.805	1.095	0.000	-3.672	28.170	5.785	103.868%	-0.076
2	20:11:40	-0.398	1.002	0.000	-0.259	31.250	16.030	104.145%	-0.108
3	20:12:23	-0.201	1.063	0.000	2.374	41.360	16.400	102.652%	0.005
x		-0.468	1.054	0.000	-0.519	33.590	12.740	103.555%	-0.060
σ		0.308	0.047	0.000	3.031	6.897	6.022	0.794%	0.058
%RSD		65.860	4.505	0.000	584.200	20.530	47.290	0.767	98.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	0.032	0.030	0.065	-1.564	2.727	0.017	-0.090	-0.271
2	20:11:40	0.005	0.063	0.112	-3.800	-1.633	0.024	-0.107	-0.217
3	20:12:23	-0.088	0.041	0.120	-3.971	-1.967	0.037	-0.111	-0.230
x		-0.017	0.045	0.099	-3.112	-0.291	0.026	-0.102	-0.239
σ		0.063	0.017	0.030	1.343	2.619	0.010	0.011	0.029
%RSD		366.900	38.470	29.870	43.170	899.900	37.740	11.040	11.950

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	-0.313	-0.912	-0.797	-0.181	-1.447	-0.222	0.000	0.051
2	20:11:40	-0.283	-0.939	-0.919	-0.065	-0.656	-0.110	0.000	0.064
3	20:12:23	-0.215	-0.829	-0.796	0.285	-1.222	0.580	0.000	0.094
x		-0.271	-0.893	-0.838	0.013	-1.108	0.083	0.000	0.070
σ		0.050	0.057	0.071	0.243	0.407	0.434	0.000	0.022
%RSD		18.590	6.423	8.438	1875.000	36.780	525.600	0.000	31.690

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	98.971%	1.011	0.952	105.802%	0.007	0.003	-0.112	-0.062
2	20:11:40	98.882%	0.847	0.805	105.384%	0.011	0.014	0.013	0.020
3	20:12:23	99.796%	0.774	0.677	105.221%	0.015	0.018	-0.071	-0.042
x		99.216%	0.877	0.811	105.469%	0.011	0.012	-0.057	-0.028
σ		0.504%	0.121	0.137	0.300%	0.004	0.008	0.064	0.042
%RSD		0.508	13.810	16.920	0.284	38.780	67.920	112.600	150.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	101.814%	0.004	0.562	0.509	0.060	0.104	99.121%	98.341%
2	20:11:40	102.166%	-0.014	0.502	0.502	0.065	0.059	100.091%	100.247%
3	20:12:23	102.294%	-0.029	0.438	0.465	0.121	0.126	99.634%	100.013%
x		102.091%	-0.013	0.501	0.492	0.082	0.096	99.615%	99.534%
σ		0.249%	0.016	0.062	0.024	0.034	0.034	0.485%	1.040%
%RSD		0.244	123.700	12.370	4.800	41.540	35.450	0.487	1.045

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:10:57	0.038	0.041	0.199	0.199	0.187	103.664%
2	20:11:40	0.045	0.051	0.163	0.142	0.153	104.807%
3	20:12:23	0.055	0.054	0.158	0.165	0.164	105.103%
x		0.046	0.049	0.174	0.169	0.168	104.524%
σ		0.009	0.006	0.022	0.029	0.018	0.760%
%RSD		18.550	13.140	12.850	17.020	10.430	0.727

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	86.731%	0.139	70.900	70.510	0.000	16900.000	2315.000	2349.000
2	20:15:58	82.941%	0.025	69.100	75.130	0.000	16970.000	2379.000	2426.000
3	20:16:41	80.286%	0.072	73.160	74.040	0.000	16940.000	2408.000	2467.000
x		83.320%	0.079	71.060	73.230	0.000	16940.000	2367.000	2414.000
σ		3.239%	0.057	2.034	2.418	0.000	38.520	47.530	60.060
%RSD		3.888	72.670	2.863	3.302	0.000	0.227	2.008	2.488

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1302.000	6217.000	0.000	13740.000	36160.000	36620.000	88.754%	13.820
2	20:15:58	1332.000	6400.000	0.000	13750.000	35820.000	36900.000	87.675%	14.520
3	20:16:41	1363.000	6417.000	0.000	13420.000	35310.000	35960.000	87.247%	15.500
x		1333.000	6345.000	0.000	13640.000	35760.000	36490.000	87.892%	14.610
σ		30.300	111.100	0.000	186.900	428.600	481.800	0.777%	0.840
%RSD		2.273	1.752	0.000	1.371	1.199	1.320	0.884	5.748

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1.605	3.101	679.500	2775.000	2816.000	2.279	4.145	1.804
2	20:15:58	1.985	3.064	679.700	2757.000	2824.000	2.261	4.301	1.844
3	20:16:41	2.223	3.142	684.200	2761.000	2753.000	2.259	4.043	1.736
x		1.938	3.102	681.100	2764.000	2798.000	2.266	4.163	1.795
σ		0.312	0.039	2.670	9.626	38.880	0.011	0.130	0.055
%RSD		16.100	1.249	0.392	0.348	1.390	0.484	3.111	3.050

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	1.764	9.051	9.348	0.917	0.267	0.444	0.000	102.800
2	20:15:58	1.888	9.261	8.500	0.055	-0.026	0.698	0.000	102.900
3	20:16:41	1.963	9.041	8.664	0.730	0.198	0.775	0.000	102.500
x		1.872	9.118	8.838	0.567	0.146	0.639	0.000	102.700
σ		0.100	0.124	0.450	0.454	0.153	0.173	0.000	0.225
%RSD		5.363	1.360	5.090	79.980	104.900	27.140	0.000	0.219

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	87.479%	1.585	1.567	89.013%	-0.001	-0.000	0.108	0.115
2	20:15:58	88.585%	1.430	1.282	89.183%	-0.001	0.001	0.080	0.037
3	20:16:41	87.894%	1.331	1.238	88.484%	-0.006	-0.005	0.115	0.172
x		87.986%	1.449	1.362	88.894%	-0.003	-0.002	0.101	0.108
σ		0.559%	0.128	0.178	0.364%	0.003	0.003	0.019	0.068
%RSD		0.635	8.829	13.090	0.410	91.140	198.100	18.480	62.510

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	85.160%	11.760	1.530	1.571	38.980	39.870	89.103%	88.649%
2	20:15:58	86.555%	11.050	1.041	1.147	40.210	40.390	90.186%	90.873%
3	20:16:41	86.027%	10.870	0.868	0.897	41.060	40.540	89.741%	90.812%
x		85.914%	11.230	1.146	1.205	40.080	40.270	89.677%	90.111%
σ		0.705%	0.467	0.344	0.341	1.043	0.352	0.544%	1.267%
%RSD		0.820	4.158	29.980	28.250	2.602	0.875	0.607	1.406

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:15	0.097	0.087	1.379	1.398	1.380	93.720%
2	20:15:58	0.054	0.055	1.425	1.334	1.371	95.411%
3	20:16:41	0.045	0.060	1.445	1.402	1.381	96.100%
x		0.065	0.067	1.416	1.378	1.377	95.077%
σ		0.028	0.017	0.034	0.038	0.005	1.225%
%RSD		43.030	25.780	2.416	2.756	0.374	1.288

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	83.287%	0.008	30.460	32.820	0.000	206900.000	11570.000	11780.000
2	20:20:15	81.546%	0.009	32.090	33.710	0.000	204300.000	11830.000	11720.000
3	20:20:58	79.811%	0.054	31.790	33.450	0.000	207500.000	11960.000	12170.000
x		81.548%	0.024	31.450	33.330	0.000	206300.000	11780.000	11890.000
σ		1.738%	0.027	0.866	0.459	0.000	1674.000	198.400	244.100
%RSD		2.131	111.800	2.754	1.377	0.000	0.812	1.684	2.053

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	147.200	12830.000	0.000	1603.000	50850.000	51670.000	86.916%	2.664
2	20:20:15	149.200	12950.000	0.000	1598.000	50440.000	49810.000	85.864%	2.526
3	20:20:58	149.300	12780.000	0.000	1570.000	50730.000	46300.000	84.933%	2.439
x		148.600	12850.000	0.000	1590.000	50670.000	49260.000	85.904%	2.543
σ		1.168	88.110	0.000	17.910	210.000	2730.000	0.992%	0.113
%RSD		0.786	0.686	0.000	1.126	0.414	5.542	1.155	4.454

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	-0.157	1.345	9493.000	2759.000	2879.000	34.970	60.250	1.201
2	20:20:15	0.150	1.252	9451.000	2752.000	2852.000	34.100	61.310	1.178
3	20:20:58	0.010	1.231	9510.000	2730.000	2810.000	34.600	62.100	1.232
x		0.001	1.276	9485.000	2747.000	2847.000	34.550	61.220	1.204
σ		0.154	0.061	29.990	15.080	34.420	0.438	0.927	0.027
%RSD		12340.000	4.758	0.316	0.549	1.209	1.268	1.514	2.271

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	0.585	34.140	35.650	1.592	-0.043	1.386	0.000	197.800
2	20:20:15	0.770	35.480	35.350	0.863	-0.066	1.038	0.000	198.500
3	20:20:58	0.826	33.060	34.760	0.892	0.406	0.410	0.000	199.200
x		0.727	34.230	35.250	1.116	0.099	0.945	0.000	198.500
σ		0.126	1.216	0.453	0.413	0.266	0.495	0.000	0.693
%RSD		17.330	3.553	1.284	36.980	269.000	52.380	0.000	0.349

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	86.032%	0.995	1.013	84.678%	-0.008	-0.002	1.943	2.115
2	20:20:15	85.993%	0.954	0.908	84.919%	-0.001	0.008	1.797	1.875
3	20:20:58	86.028%	0.826	0.787	84.028%	-0.004	-0.008	1.953	2.012
x		86.018%	0.925	0.902	84.541%	-0.004	-0.001	1.898	2.001
σ		0.022%	0.088	0.113	0.461%	0.003	0.008	0.087	0.120
%RSD		0.025	9.545	12.520	0.545	82.650	1136.000	4.594	6.012

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	82.901%	9.631	0.379	0.418	44.430	43.830	87.656%	87.695%
2	20:20:15	83.181%	9.764	0.364	0.406	44.410	44.990	89.508%	90.204%
3	20:20:58	83.403%	9.528	0.327	0.316	43.770	43.940	89.438%	89.249%
x		83.162%	9.641	0.357	0.380	44.210	44.250	88.867%	89.049%
σ		0.252%	0.118	0.026	0.056	0.374	0.642	1.050%	1.266%
%RSD		0.303	1.228	7.410	14.660	0.847	1.450	1.181	1.422

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:32	0.096	0.108	0.363	0.333	0.346	91.094%
2	20:20:15	0.115	0.105	0.343	0.321	0.325	92.712%
3	20:20:58	0.133	0.095	0.277	0.322	0.308	93.835%
x		0.115	0.103	0.327	0.325	0.326	92.547%
σ		0.018	0.007	0.045	0.007	0.019	1.378%
%RSD		16.100	6.657	13.730	2.076	5.906	1.489

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	85.244%	-0.018	1.939	2.466	0.000	46.610	2.753	2.583
2	20:24:32	83.315%	-0.009	2.352	2.492	0.000	44.910	2.722	2.204
3	20:25:15	80.397%	-0.018	1.937	2.470	0.000	53.580	2.621	2.908
x		82.985%	-0.015	2.076	2.476	0.000	48.370	2.699	2.565
σ		2.440%	0.005	0.239	0.014	0.000	4.596	0.069	0.352
%RSD		2.940	33.300	11.500	0.564	0.000	9.503	2.543	13.740

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.778	14.950	0.000	0.673	28.170	3.399	87.826%	0.211
2	20:24:32	0.966	13.310	0.000	-1.701	15.810	6.753	86.106%	0.276
3	20:25:15	0.875	13.810	0.000	-3.255	42.090	8.832	86.408%	0.179
x		0.873	14.030	0.000	-1.428	28.690	6.328	86.780%	0.222
σ		0.094	0.841	0.000	1.979	13.150	2.741	0.918%	0.049
%RSD		10.740	5.997	0.000	138.600	45.830	43.310	1.058	22.140

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	-0.427	0.923	3.731	8.104	8.273	0.015	0.036	0.209
2	20:24:32	-0.101	0.898	3.576	3.280	5.157	0.010	0.019	0.161
3	20:25:15	-0.303	0.924	3.680	2.376	4.628	0.026	0.110	0.135
x		-0.277	0.915	3.662	4.587	6.020	0.017	0.055	0.168
σ		0.165	0.015	0.079	3.080	1.970	0.008	0.048	0.038
%RSD		59.490	1.599	2.152	67.140	32.720	48.430	87.500	22.460

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.121	0.884	0.698	-0.448	0.114	0.400	0.000	0.113
2	20:24:32	0.209	0.979	0.677	-0.209	0.686	1.251	0.000	0.113
3	20:25:15	0.072	0.717	0.756	0.295	-0.178	1.325	0.000	0.105
x		0.134	0.860	0.711	-0.121	0.207	0.992	0.000	0.110
σ		0.070	0.133	0.041	0.379	0.439	0.514	0.000	0.005
%RSD		51.800	15.450	5.753	314.300	212.200	51.850	0.000	4.186

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	86.751%	0.474	0.542	91.042%	-0.003	-0.003	-0.010	-0.041
2	20:24:32	87.259%	0.435	0.442	90.711%	-0.003	-0.006	-0.136	-0.093
3	20:25:15	87.147%	0.405	0.416	90.663%	-0.005	-0.000	-0.031	-0.019
x		87.052%	0.438	0.467	90.805%	-0.003	-0.003	-0.059	-0.051
σ		0.267%	0.035	0.067	0.207%	0.001	0.003	0.067	0.038
%RSD		0.307	7.960	14.290	0.228	37.240	91.060	114.300	74.090

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	86.358%	5.827	0.153	0.180	0.083	0.062	89.707%	88.809%
2	20:24:32	86.663%	6.041	0.138	0.172	0.057	0.105	90.562%	90.497%
3	20:25:15	86.098%	5.879	0.129	0.164	0.096	0.106	89.746%	90.203%
x		86.373%	5.915	0.140	0.172	0.079	0.091	90.005%	89.836%
σ		0.283%	0.112	0.012	0.008	0.020	0.025	0.482%	0.902%
%RSD		0.328	1.885	8.662	4.678	25.600	27.510	0.536	1.004

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:49	0.008	0.018	0.085	0.088	0.078	95.273%
2	20:24:32	0.005	0.010	0.061	0.056	0.060	97.276%
3	20:25:15	0.001	0.005	0.050	0.027	0.054	97.184%
x		0.005	0.011	0.065	0.057	0.064	96.578%
σ		0.003	0.006	0.018	0.030	0.012	1.131%
%RSD		71.780	58.180	27.320	52.840	19.590	1.171

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	85.346%	-0.001	301.100	313.000	0.000	21690.000	22500.000	22900.000
2	20:28:49	81.406%	0.009	302.000	317.600	0.000	21850.000	23230.000	23660.000
3	20:29:32	81.766%	0.026	294.900	310.200	0.000	21620.000	23170.000	23490.000
x		82.839%	0.011	299.300	313.600	0.000	21720.000	22970.000	23350.000
σ		2.178%	0.014	3.830	3.703	0.000	119.800	408.300	395.500
%RSD		2.629	122.500	1.279	1.181	0.000	0.552	1.778	1.694

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	2.593	6112.000	0.000	5407.000	155600.000	168700.000	87.072%	0.515
2	20:28:49	3.448	6163.000	0.000	5358.000	154700.000	167900.000	85.717%	0.584
3	20:29:32	2.391	6099.000	0.000	5294.000	154700.000	169300.000	85.197%	0.607
x		2.811	6124.000	0.000	5353.000	155000.000	168600.000	85.995%	0.569
σ		0.561	33.760	0.000	56.640	498.900	698.600	0.968%	0.048
%RSD		19.950	0.551	0.000	1.058	0.322	0.414	1.126	8.404

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.015	1.173	3286.000	2511.000	2984.000	2.009	1.130	0.492
2	20:28:49	-0.042	1.155	3306.000	2511.000	2960.000	1.950	0.965	0.370
3	20:29:32	-0.284	1.090	3282.000	2467.000	2911.000	1.979	0.954	0.458
x		-0.103	1.139	3292.000	2497.000	2952.000	1.979	1.016	0.440
σ		0.159	0.044	12.590	25.350	37.410	0.029	0.098	0.063
%RSD		153.500	3.849	0.383	1.015	1.268	1.486	9.675	14.260

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.762	1.628	1.329	1.545	-0.026	0.625	0.000	244.400
2	20:28:49	0.820	1.489	1.299	2.306	-0.349	1.130	0.000	246.000
3	20:29:32	0.566	1.494	1.524	1.584	-0.019	0.304	0.000	243.900
x		0.716	1.537	1.384	1.812	-0.131	0.686	0.000	244.800
σ		0.133	0.079	0.122	0.428	0.188	0.417	0.000	1.079
%RSD		18.620	5.136	8.836	23.640	143.300	60.700	0.000	0.441

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	85.673%	1.081	1.077	86.396%	-0.010	-0.001	-0.050	-0.032
2	20:28:49	85.991%	1.015	1.033	86.374%	-0.007	-0.001	-0.031	-0.047
3	20:29:32	85.921%	0.942	1.067	85.372%	-0.004	0.002	-0.067	-0.077
x		85.861%	1.012	1.059	86.047%	-0.007	-0.000	-0.049	-0.052
σ		0.167%	0.070	0.023	0.585%	0.003	0.002	0.018	0.023
%RSD		0.195	6.869	2.171	0.680	41.340	2259.000	36.390	44.230

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	83.509%	6.572	0.282	0.370	60.350	61.690	88.193%	88.543%
2	20:28:49	85.092%	6.706	0.270	0.365	60.410	59.640	90.014%	89.314%
3	20:29:32	84.112%	6.660	0.246	0.327	61.190	60.620	89.870%	89.686%
x		84.238%	6.646	0.266	0.354	60.650	60.650	89.359%	89.181%
σ		0.799%	0.068	0.018	0.024	0.471	1.024	1.012%	0.583%
%RSD		0.948	1.030	6.832	6.674	0.776	1.689	1.133	0.654

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:06	0.010	0.026	0.142	0.120	0.141	91.691%
2	20:28:49	0.009	0.024	0.121	0.178	0.150	93.584%
3	20:29:32	0.012	0.012	0.150	0.098	0.125	93.685%
x		0.010	0.020	0.138	0.132	0.139	92.987%
σ		0.001	0.008	0.015	0.042	0.013	1.123%
%RSD		11.800	37.910	11.030	31.520	9.068	1.208

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	86.409%	-0.010	18.670	19.450	0.000	350.700	7.812	7.396
2	20:33:06	82.377%	-0.018	18.500	19.510	0.000	353.600	10.010	9.186
3	20:33:50	81.390%	-0.018	17.580	19.030	0.000	350.800	8.880	9.451
x		83.392%	-0.015	18.250	19.330	0.000	351.700	8.900	8.678
σ		2.659%	0.005	0.587	0.261	0.000	1.655	1.098	1.118
%RSD		3.189	30.410	3.216	1.351	0.000	0.470	12.340	12.880

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	0.142	33.160	0.000	40.610	64.590	45.350	86.134%	0.143
2	20:33:06	0.758	33.940	0.000	39.580	83.850	56.790	85.913%	0.372
3	20:33:50	0.418	33.370	0.000	37.010	85.080	54.590	84.831%	0.302
x		0.440	33.490	0.000	39.070	77.840	52.240	85.626%	0.272
σ		0.309	0.402	0.000	1.852	11.490	6.071	0.697%	0.118
%RSD		70.230	1.201	0.000	4.740	14.760	11.620	0.815	43.170

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	-0.093	1.279	1.974	12.050	14.780	0.015	0.040	0.056
2	20:33:06	0.161	1.166	2.189	7.691	9.024	-0.006	-0.027	0.059
3	20:33:50	0.343	1.090	2.070	5.534	9.837	0.002	-0.041	0.109
x		0.137	1.178	2.078	8.425	11.210	0.003	-0.009	0.075
σ		0.219	0.095	0.108	3.319	3.115	0.010	0.043	0.030
%RSD		160.200	8.075	5.187	39.400	27.780	301.200	463.700	39.560

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	0.107	0.529	1.035	-0.574	-0.730	0.643	0.000	0.148
2	20:33:06	0.112	0.807	0.550	-0.456	-0.464	0.650	0.000	0.195
3	20:33:50	0.024	0.701	0.860	-0.316	-0.358	0.463	0.000	0.177
x		0.081	0.679	0.815	-0.449	-0.517	0.585	0.000	0.173
σ		0.049	0.140	0.246	0.129	0.192	0.106	0.000	0.024
%RSD		60.970	20.660	30.140	28.810	37.020	18.070	0.000	13.820

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	86.195%	0.410	0.335	89.451%	-0.011	-0.002	-0.059	-0.049
2	20:33:06	86.116%	0.347	0.295	89.591%	0.004	-0.000	-0.030	-0.028
3	20:33:50	87.134%	0.393	0.352	87.944%	-0.005	-0.000	-0.020	-0.022
x		86.482%	0.383	0.327	88.995%	-0.004	-0.001	-0.036	-0.033
σ		0.566%	0.033	0.029	0.913%	0.008	0.001	0.020	0.014
%RSD		0.655	8.496	8.919	1.026	199.100	90.590	55.610	43.320

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	85.304%	4.207	0.051	0.089	0.066	0.134	87.508%	88.214%
2	20:33:06	85.601%	4.387	0.085	0.100	0.091	0.077	89.460%	89.781%
3	20:33:50	85.917%	4.312	0.069	0.101	0.129	0.099	89.555%	89.131%
x		85.607%	4.302	0.068	0.097	0.095	0.103	88.841%	89.042%
σ		0.306%	0.090	0.017	0.007	0.032	0.029	1.155%	0.788%
%RSD		0.358	2.094	24.340	6.796	33.280	27.830	1.300	0.885

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:32:23	-0.001	0.013	0.082	0.075	0.078	93.836%
2	20:33:06	0.007	-0.001	0.072	0.074	0.054	95.567%
3	20:33:50	0.004	0.010	0.054	0.020	0.037	96.130%
x		0.003	0.007	0.069	0.057	0.056	95.178%
σ		0.004	0.007	0.014	0.031	0.021	1.196%
%RSD		126.700	95.090	20.810	55.740	36.670	1.256

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	89.659%	-0.010	2.586	1.225	0.000	2.119	0.373	0.227
2	20:40:17	85.305%	-0.010	1.988	1.656	0.000	3.881	1.283	1.678
3	20:41:00	85.921%	-0.018	1.271	1.292	0.000	4.324	2.891	1.610
x		86.962%	-0.013	1.948	1.391	0.000	3.441	1.516	1.171
σ		2.356%	0.005	0.659	0.232	0.000	1.166	1.275	0.819
%RSD		2.710	37.160	33.810	16.640	0.000	33.890	84.130	69.910

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-1.323	3.210	0.000	-2.600	4.184	-10.190	87.544%	-0.050
2	20:40:17	-1.309	3.370	0.000	-4.444	17.460	-11.290	86.701%	-0.067
3	20:41:00	-1.229	2.903	0.000	-4.122	24.860	-3.171	86.829%	-0.105
x		-1.287	3.161	0.000	-3.722	15.500	-8.217	87.025%	-0.074
σ		0.051	0.237	0.000	0.985	10.480	4.404	0.455%	0.028
%RSD		3.969	7.513	0.000	26.460	67.590	53.600	0.522	38.210

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-0.080	0.281	0.309	-6.760	-3.424	-0.005	-0.149	-0.226
2	20:40:17	-0.125	0.247	0.321	-8.118	-7.853	0.004	-0.068	-0.228
3	20:41:00	-0.204	0.202	0.402	-8.707	-9.269	-0.002	-0.149	-0.183
x		-0.136	0.243	0.344	-7.862	-6.849	-0.001	-0.122	-0.212
σ		0.063	0.040	0.050	0.998	3.049	0.004	0.047	0.026
%RSD		46.120	16.240	14.660	12.700	44.520	367.000	38.630	12.070

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	-0.231	-1.192	-1.126	-0.105	-0.247	0.864	0.000	0.005
2	20:40:17	-0.191	-1.102	-1.121	-0.129	-0.508	0.134	0.000	0.008
3	20:41:00	-0.227	-0.997	-1.217	-0.163	0.151	0.168	0.000	0.010
x		-0.217	-1.097	-1.155	-0.132	-0.201	0.389	0.000	0.007
σ		0.022	0.098	0.054	0.029	0.332	0.412	0.000	0.002
%RSD		10.290	8.900	4.693	22.080	165.000	106.000	0.000	32.120

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	85.870%	0.182	0.179	90.672%	-0.007	-0.007	-0.040	-0.014
2	20:40:17	86.134%	0.147	0.149	90.143%	-0.004	0.001	-0.054	-0.036
3	20:41:00	86.902%	0.185	0.174	89.683%	-0.009	-0.005	-0.014	0.002
x		86.302%	0.171	0.168	90.166%	-0.007	-0.004	-0.036	-0.016
σ		0.536%	0.021	0.016	0.495%	0.003	0.004	0.021	0.019
%RSD		0.621	12.220	9.643	0.549	42.110	106.100	57.490	119.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	86.183%	0.322	-0.012	-0.026	0.007	-0.006	86.149%	86.474%
2	20:40:17	86.058%	0.280	-0.003	0.017	-0.007	0.037	88.523%	87.609%
3	20:41:00	86.896%	0.208	-0.003	-0.010	0.013	0.022	88.394%	89.014%
x		86.379%	0.270	-0.006	-0.006	0.004	0.018	87.689%	87.699%
σ		0.452%	0.058	0.005	0.022	0.010	0.022	1.335%	1.272%
%RSD		0.523	21.300	89.200	363.900	222.900	125.700	1.522	1.451

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:34	0.000	-0.001	0.037	0.048	0.034	91.838%
2	20:40:17	0.001	-0.002	0.009	0.018	0.002	92.056%
3	20:41:00	-0.002	-0.001	-0.000	0.011	0.014	92.057%
x		-0.000	-0.001	0.015	0.026	0.017	91.984%
σ		0.002	0.000	0.019	0.020	0.016	0.126%
%RSD		398.500	38.030	126.600	75.250	97.770	0.137

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	82.467%	48.120	907.700	945.100	0.000	46810.000	54260.000	55060.000
2	20:44:35	81.123%	47.020	886.100	946.600	0.000	46350.000	54760.000	55680.000
3	20:45:18	81.398%	45.580	884.600	923.000	0.000	46030.000	55070.000	55790.000
x		81.663%	46.910	892.800	938.200	0.000	46400.000	54690.000	55510.000
σ		0.710%	1.277	12.950	13.210	0.000	391.500	404.700	391.800
%RSD		0.869	2.723	1.451	1.408	0.000	0.844	0.740	0.706

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	2078.000	10140.000	0.000	49340.000	47750.000	47890.000	85.990%	961.100
2	20:44:35	2068.000	9916.000	0.000	48820.000	47670.000	48460.000	85.102%	949.800
3	20:45:18	2062.000	9976.000	0.000	49160.000	47770.000	49260.000	84.056%	962.200
x		2070.000	10010.000	0.000	49110.000	47730.000	48540.000	85.049%	957.700
σ		8.175	117.900	0.000	265.700	55.670	686.700	0.968%	6.848
%RSD		0.395	1.177	0.000	0.541	0.117	1.415	1.139	0.715

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	489.200	193.900	500.600	991.900	1191.000	460.100	466.200	232.500
2	20:44:35	488.000	193.100	502.400	989.100	1158.000	455.200	457.700	229.500
3	20:45:18	482.100	193.300	503.400	1011.000	1164.000	457.500	462.300	231.100
x		486.400	193.400	502.100	997.300	1171.000	457.600	462.100	231.100
σ		3.790	0.402	1.432	11.940	17.180	2.427	4.255	1.513
%RSD		0.779	0.208	0.285	1.197	1.467	0.530	0.921	0.655

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	234.900	455.300	453.100	36.260	9.550	10.760	0.000	974.300
2	20:44:35	231.500	451.200	452.500	36.330	9.550	10.610	0.000	975.200
3	20:45:18	229.000	452.200	448.600	36.660	9.139	10.980	0.000	968.800
x		231.800	452.900	451.400	36.420	9.413	10.780	0.000	972.800
σ		2.970	2.129	2.432	0.216	0.237	0.188	0.000	3.442
%RSD		1.281	0.470	0.539	0.593	2.522	1.738	0.000	0.354

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	85.659%	980.500	973.200	84.669%	48.330	49.120	50.900	48.660
2	20:44:35	85.239%	996.400	990.300	83.797%	48.160	48.080	49.220	47.650
3	20:45:18	85.874%	992.700	985.200	84.137%	48.270	48.620	49.260	46.600
x		85.591%	989.900	982.900	84.201%	48.260	48.610	49.790	47.640
σ		0.323%	8.306	8.807	0.440%	0.085	0.517	0.958	1.029
%RSD		0.377	0.839	0.896	0.522	0.176	1.065	1.923	2.160

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	82.390%	1836.000	498.800	499.600	1942.000	1932.000	87.201%	88.123%
2	20:44:35	83.844%	1861.000	494.300	497.200	1929.000	1934.000	88.725%	88.783%
3	20:45:18	82.969%	1883.000	500.800	500.600	1947.000	1936.000	88.764%	89.531%
x		83.067%	1860.000	498.000	499.100	1939.000	1934.000	88.230%	88.812%
σ		0.732%	23.820	3.303	1.697	9.007	2.064	0.891%	0.704%
%RSD		0.881	1.281	0.663	0.340	0.464	0.107	1.010	0.793

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:52	44.490	44.590	17.870	19.080	18.260	92.530%
2	20:44:35	45.300	45.650	17.570	19.010	18.270	94.625%
3	20:45:18	45.240	45.560	17.790	19.050	18.450	95.308%
x		45.010	45.270	17.740	19.050	18.330	94.155%
σ		0.456	0.592	0.154	0.034	0.107	1.448%
%RSD		1.012	1.308	0.870	0.178	0.583	1.538

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	89.498%	-0.010	9.592	8.099	0.000	51.640	4.406	3.875
2	20:51:46	86.797%	0.007	7.669	8.333	0.000	51.960	4.854	4.718
3	20:52:29	84.395%	-0.018	6.318	7.044	0.000	51.930	4.606	5.149
x		86.897%	-0.007	7.860	7.825	0.000	51.850	4.622	4.581
σ		2.553%	0.013	1.645	0.687	0.000	0.176	0.224	0.648
%RSD		2.938	177.400	20.930	8.775	0.000	0.339	4.853	14.150

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	1.147	17.810	0.000	7.484	17.200	3.098	87.260%	0.776
2	20:51:46	1.163	17.350	0.000	6.504	26.990	3.062	86.176%	0.636
3	20:52:29	1.123	16.400	0.000	6.752	10.480	1.548	84.789%	0.611
x		1.144	17.190	0.000	6.914	18.220	2.569	86.075%	0.675
σ		0.020	0.720	0.000	0.510	8.304	0.885	1.239%	0.089
%RSD		1.746	4.188	0.000	7.374	45.570	34.430	1.439	13.180

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	-0.338	1.908	0.944	7.903	12.650	0.043	0.145	0.186
2	20:51:46	-0.383	1.837	0.932	5.549	6.074	0.058	0.117	0.137
3	20:52:29	-0.058	1.712	0.955	5.628	7.699	0.049	0.059	0.174
x		-0.260	1.819	0.944	6.360	8.808	0.050	0.107	0.166
σ		0.176	0.099	0.011	1.337	3.426	0.007	0.044	0.026
%RSD		67.750	5.457	1.189	21.020	38.900	14.840	40.900	15.680

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	0.160	1.066	1.251	-0.728	-0.153	0.508	0.000	0.630
2	20:51:46	0.116	1.085	1.119	-0.467	0.553	0.636	0.000	0.676
3	20:52:29	0.202	0.971	1.219	-0.729	0.048	0.774	0.000	0.647
x		0.159	1.041	1.197	-0.641	0.149	0.640	0.000	0.651
σ		0.043	0.061	0.069	0.151	0.363	0.133	0.000	0.023
%RSD		27.080	5.875	5.747	23.540	243.200	20.800	0.000	3.546

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	86.137%	4.468	4.176	89.788%	-0.005	0.004	-0.048	-0.085
2	20:51:46	85.983%	2.987	2.825	89.026%	-0.000	-0.006	-0.045	-0.011
3	20:52:29	85.701%	2.170	2.276	88.664%	-0.000	0.002	-0.005	0.020
x		85.940%	3.208	3.093	89.159%	-0.002	0.000	-0.033	-0.025
σ		0.221%	1.165	0.977	0.574%	0.003	0.005	0.024	0.054
%RSD		0.257	36.300	31.610	0.643	159.500	9233.000	73.180	215.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	85.068%	13.190	0.129	0.173	0.304	0.352	86.685%	86.454%
2	20:51:46	85.356%	11.400	0.126	0.229	0.190	0.322	88.054%	88.365%
3	20:52:29	84.451%	10.310	0.104	0.163	0.204	0.205	88.185%	88.453%
x		84.959%	11.630	0.120	0.188	0.233	0.293	87.641%	87.757%
σ		0.462%	1.453	0.014	0.035	0.062	0.078	0.831%	1.129%
%RSD		0.544	12.490	11.640	18.820	26.740	26.470	0.948	1.287

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:51:03	0.115	0.113	0.128	0.118	0.109	94.595%
2	20:51:46	0.085	0.095	0.096	0.068	0.080	95.643%
3	20:52:29	0.082	0.067	0.077	0.071	0.072	96.274%
x		0.094	0.092	0.100	0.086	0.087	95.504%
σ		0.018	0.023	0.026	0.028	0.019	0.848%
%RSD		19.590	25.480	25.620	32.980	22.360	0.888

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	86.355%	-0.018	2.968	2.762	0.000	14.030	2.117	2.085
2	20:56:05	83.038%	-0.018	2.795	2.890	0.000	15.360	1.844	2.796
3	20:56:48	82.485%	-0.026	3.065	2.748	0.000	14.110	2.456	2.618
x		83.960%	-0.021	2.943	2.800	0.000	14.500	2.139	2.500
σ		2.093%	0.005	0.136	0.078	0.000	0.745	0.307	0.370
%RSD		2.493	23.660	4.634	2.783	0.000	5.135	14.350	14.790

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	13.520	5.858	0.000	-1.287	19.650	-4.518	85.715%	-0.027
2	20:56:05	14.020	6.501	0.000	-1.782	10.280	-1.187	85.641%	0.107
3	20:56:48	14.350	6.057	0.000	-2.188	16.130	-6.874	85.126%	-0.007
x		13.970	6.139	0.000	-1.752	15.350	-4.193	85.494%	0.024
σ		0.417	0.329	0.000	0.451	4.734	2.858	0.321%	0.072
%RSD		2.983	5.360	0.000	25.760	30.830	68.150	0.375	297.500

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	-0.131	0.362	0.259	-7.136	-6.133	0.018	0.187	-0.017
2	20:56:05	0.150	0.392	0.258	-7.922	-9.506	0.016	0.243	-0.037
3	20:56:48	-0.140	0.382	0.241	-9.403	-6.977	0.015	0.156	-0.081
x		-0.040	0.379	0.253	-8.154	-7.539	0.016	0.195	-0.045
σ		0.165	0.015	0.010	1.151	1.755	0.002	0.044	0.033
%RSD		408.300	3.993	4.047	14.120	23.280	10.080	22.520	71.990

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	-0.116	-0.696	-0.684	0.110	0.413	0.174	0.000	0.136
2	20:56:05	-0.027	-0.756	-0.604	-0.054	-0.432	0.770	0.000	0.128
3	20:56:48	-0.108	-0.614	-0.870	-0.096	0.179	0.789	0.000	0.116
x		-0.084	-0.689	-0.720	-0.013	0.053	0.578	0.000	0.127
σ		0.049	0.071	0.137	0.109	0.436	0.350	0.000	0.010
%RSD		58.380	10.340	18.960	812.800	820.100	60.570	0.000	7.616

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	84.757%	0.790	0.831	89.209%	-0.012	0.004	-0.022	-0.007
2	20:56:05	85.279%	0.767	0.789	88.846%	0.002	-0.006	-0.060	-0.055
3	20:56:48	85.704%	0.665	0.682	88.281%	-0.007	-0.001	-0.028	-0.009
x		85.247%	0.741	0.767	88.778%	-0.006	-0.001	-0.037	-0.024
σ		0.474%	0.067	0.077	0.468%	0.007	0.005	0.021	0.027
%RSD		0.556	9.007	9.989	0.527	127.600	481.700	56.350	114.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	84.854%	1.396	0.011	0.007	0.047	0.057	87.278%	86.722%
2	20:56:05	85.600%	1.366	0.012	-0.001	0.059	0.060	87.570%	87.778%
3	20:56:48	84.874%	1.536	0.002	-0.002	0.040	0.105	87.881%	87.835%
x		85.109%	1.433	0.008	0.001	0.049	0.074	87.576%	87.445%
σ		0.425%	0.091	0.006	0.005	0.010	0.027	0.301%	0.627%
%RSD		0.499	6.351	66.880	326.700	20.100	36.280	0.344	0.717

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:22	0.030	0.033	0.039	0.042	0.040	91.585%
2	20:56:05	0.018	0.026	0.003	0.003	0.005	92.390%
3	20:56:48	0.036	0.034	0.012	-0.012	-0.002	92.114%
x		0.028	0.031	0.018	0.011	0.014	92.030%
σ		0.009	0.004	0.019	0.028	0.023	0.409%
%RSD		32.900	13.680	106.400	256.300	157.500	0.444

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	84.860%	48.390	914.500	948.700	0.000	46130.000	53190.000	54520.000
2	21:00:22	80.576%	47.690	942.600	973.900	0.000	46300.000	55040.000	56140.000
3	21:01:05	81.872%	46.700	878.100	941.400	0.000	45740.000	55010.000	55520.000
x		82.436%	47.590	911.700	954.700	0.000	46060.000	54410.000	55390.000
σ		2.197%	0.849	32.380	17.090	0.000	288.000	1060.000	814.600
%RSD		2.665	1.784	3.551	1.790	0.000	0.625	1.947	1.471

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	2068.000	10060.000	0.000	49750.000	48040.000	47800.000	85.923%	961.500
2	21:00:22	2124.000	10270.000	0.000	49140.000	48030.000	45320.000	83.548%	972.100
3	21:01:05	2074.000	9936.000	0.000	48520.000	46940.000	48170.000	83.998%	948.000
x		2089.000	10090.000	0.000	49140.000	47670.000	47100.000	84.490%	960.500
σ		30.890	166.500	0.000	619.500	632.300	1553.000	1.261%	12.110
%RSD		1.479	1.650	0.000	1.261	1.326	3.298	1.493	1.260

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	490.400	193.000	503.000	1029.000	1170.000	463.900	467.500	235.400
2	21:00:22	495.600	193.300	509.900	1032.000	1173.000	459.800	464.800	236.600
3	21:01:05	483.600	192.900	505.500	964.000	1150.000	455.700	458.400	231.100
x		489.900	193.100	506.100	1008.000	1164.000	459.800	463.600	234.400
σ		6.020	0.176	3.490	38.380	12.350	4.061	4.713	2.861
%RSD		1.229	0.091	0.690	3.806	1.061	0.883	1.017	1.221

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	238.100	461.900	458.400	37.220	9.217	10.980	0.000	978.700
2	21:00:22	237.400	457.700	453.200	36.620	9.080	9.774	0.000	977.400
3	21:01:05	230.200	450.400	457.500	36.870	9.372	11.460	0.000	978.200
x		235.200	456.600	456.400	36.900	9.223	10.740	0.000	978.100
σ		4.378	5.809	2.757	0.297	0.146	0.870	0.000	0.662
%RSD		1.861	1.272	0.604	0.806	1.588	8.100	0.000	0.068

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	84.136%	982.700	984.900	83.912%	49.010	49.280	49.670	47.610
2	21:00:22	84.605%	993.000	991.600	83.613%	48.320	49.390	51.230	46.790
3	21:01:05	84.929%	999.700	992.900	82.776%	48.720	48.500	48.730	47.110
x		84.557%	991.800	989.800	83.434%	48.680	49.050	49.880	47.170
σ		0.399%	8.572	4.316	0.589%	0.348	0.486	1.262	0.414
%RSD		0.471	0.864	0.436	0.705	0.715	0.991	2.530	0.878

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	81.406%	1882.000	497.900	499.600	1955.000	1941.000	86.040%	86.670%
2	21:00:22	81.408%	1892.000	501.200	500.100	1941.000	1944.000	88.023%	88.495%
3	21:01:05	82.953%	1878.000	493.400	494.100	1923.000	1918.000	88.768%	88.902%
x		81.922%	1884.000	497.500	497.900	1940.000	1934.000	87.610%	88.022%
σ		0.892%	7.419	3.902	3.329	16.180	14.210	1.410%	1.189%
%RSD		1.089	0.394	0.784	0.669	0.834	0.735	1.610	1.350

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	45.090	45.010	17.960	19.210	18.530	91.043%
2	21:00:22	45.600	45.420	17.920	18.820	18.370	93.009%
3	21:01:05	45.580	45.630	18.080	19.230	18.480	94.238%
x		45.420	45.350	17.990	19.090	18.460	92.763%
σ		0.286	0.314	0.085	0.230	0.082	1.611%
%RSD		0.630	0.691	0.470	1.206	0.447	1.737

CCV 309497 2/5/2012 9:06:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	88.895%	97.330	95.500	95.990	0.000	49580.000	50340.000	51010.000
2	21:07:32	87.537%	96.660	94.900	96.930	0.000	49290.000	51300.000	52240.000
3	21:08:15	88.664%	99.370	92.940	94.370	0.000	48840.000	51050.000	51800.000
x		88.365%	97.783%	94.449%	95.763%	0.000	98.477%	101.796%	103.365%
σ		0.727%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.822	1.443	1.417	1.353	0.000	0.754	0.975	1.205

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	504.900	5218.000	0.000	51600.000	48750.000	47690.000	87.636%	98.330
2	21:07:32	520.400	5321.000	0.000	51330.000	48510.000	47630.000	87.995%	100.500
3	21:08:15	510.200	5213.000	0.000	51260.000	49060.000	48350.000	89.273%	98.390
x		102.364%	105.018%	0.000	102.797%	97.545%	95.781%	88.301%	99.067%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.860%	n/a
%RSD		1.538	1.163	0.000	0.353	0.568	0.831	0.974	1.230

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	95.690	97.860	501.800	25760.000	25170.000	96.480	96.610	97.680
2	21:07:32	98.250	97.970	508.000	25820.000	25320.000	95.510	97.510	97.520
3	21:08:15	97.640	96.960	507.700	25580.000	25110.000	96.210	96.130	96.770
x		97.194%	97.595%	101.170%	102.877%	100.805%	96.069%	96.747%	97.321%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.378	0.568	0.686	0.484	0.416	0.518	0.722	0.501

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	96.740	99.350	97.960	99.490	98.490	102.000	0.000	97.660
2	21:07:32	95.540	97.630	96.380	98.370	101.100	99.380	0.000	98.480
3	21:08:15	95.650	96.330	99.430	98.700	98.780	98.570	0.000	98.470
x		95.977%	97.767%	97.923%	98.857%	99.447%	99.989%	0.000	98.204%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.691	1.548	1.558	0.583	1.422	1.795	0.000	0.478

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	85.074%	95.090	94.890	85.973%	95.400	95.940	97.660	99.970
2	21:07:32	86.329%	98.380	97.900	86.790%	95.650	97.040	98.080	100.400
3	21:08:15	86.810%	100.100	99.450	87.620%	95.210	96.620	96.290	99.050
x		86.071%	97.870%	97.412%	86.794%	95.421%	96.534%	97.346%	99.806%
σ		0.897%	n/a	n/a	0.823%	n/a	n/a	n/a	n/a
%RSD		1.042	2.620	2.382	0.949	0.230	0.576	0.962	0.686

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	84.226%	96.500	90.500	90.030	98.840	97.360	86.100%	86.483%
2	21:07:32	84.636%	97.500	94.380	94.750	97.460	97.560	87.756%	87.142%
3	21:08:15	86.571%	97.140	95.910	95.160	96.490	97.380	88.236%	87.858%
x		85.144%	97.048%	93.595%	93.311%	97.599%	97.432%	87.364%	87.161%
σ		1.252%	n/a	n/a	n/a	n/a	n/a	1.121%	0.687%
%RSD		1.471	0.524	2.980	3.055	1.210	0.114	1.283	0.789

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:49	94.270	93.860	96.080	94.830	95.290	87.688%
2	21:07:32	95.970	95.630	97.740	96.700	96.840	87.796%
3	21:08:15	95.100	95.740	97.780	97.340	97.490	88.328%
x		95.113%	95.075%	97.202%	96.291%	96.537%	87.937%
σ		n/a	n/a	n/a	n/a	n/a	0.343%
%RSD		0.894	1.107	1.000	1.359	1.173	0.390

CCB7 2/5/2012 9:13:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	90.404%	-0.010	3.027	3.031	0.000	5.841	12.530	12.060
2	21:14:43	89.643%	0.014	2.440	2.195	0.000	6.204	11.560	11.810
3	21:15:26	88.247%	0.014	2.186	1.913	0.000	10.710	15.670	16.560
x		89.431%	0.006	2.551	2.380	0.000	7.584	13.250	13.480
σ		1.094%	0.014	0.431	0.581	0.000	2.711	2.148	2.673
%RSD		1.223	241.300	16.910	24.420	0.000	35.740	16.210	19.830

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.509	1.880	0.000	5.375	41.360	13.730	90.256%	0.036
2	21:14:43	-0.480	1.889	0.000	4.519	14.410	12.030	90.474%	-0.182
3	21:15:26	-0.262	2.028	0.000	8.694	43.690	21.940	89.464%	-0.108
x		-0.417	1.932	0.000	6.196	33.150	15.900	90.064%	-0.085
σ		0.135	0.083	0.000	2.205	16.270	5.301	0.532%	0.111
%RSD		32.320	4.300	0.000	35.590	49.080	33.340	0.590	130.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.035	0.029	0.130	5.954	9.277	0.005	-0.097	-0.215
2	21:14:43	0.099	0.050	0.121	2.387	6.453	0.016	-0.083	-0.214
3	21:15:26	0.180	0.037	0.183	2.561	4.370	0.016	-0.008	-0.229
x		0.081	0.039	0.144	3.634	6.700	0.012	-0.063	-0.220
σ		0.109	0.011	0.033	2.011	2.463	0.006	0.048	0.008
%RSD		134.100	27.290	23.080	55.340	36.760	48.450	76.500	3.736

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	-0.211	-0.810	-0.846	0.209	0.542	0.577	0.000	0.054
2	21:14:43	-0.251	-0.808	-0.696	0.082	0.394	0.362	0.000	0.065
3	21:15:26	-0.301	-0.852	-0.748	0.101	-0.175	0.665	0.000	0.087
x		-0.254	-0.823	-0.764	0.131	0.254	0.535	0.000	0.069
σ		0.045	0.025	0.076	0.069	0.378	0.156	0.000	0.017
%RSD		17.630	2.990	9.992	52.540	149.200	29.100	0.000	24.970

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	88.060%	1.079	1.070	93.859%	0.009	0.011	0.005	0.046
2	21:14:43	88.795%	0.936	0.970	93.728%	0.009	0.013	-0.029	-0.005
3	21:15:26	88.554%	0.917	0.940	93.006%	0.020	0.025	-0.099	-0.065
x		88.470%	0.978	0.994	93.531%	0.013	0.016	-0.041	-0.008
σ		0.374%	0.089	0.068	0.460%	0.007	0.007	0.053	0.055
%RSD		0.423	9.058	6.853	0.491	54.170	43.450	129.100	702.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	88.890%	0.183	0.615	0.561	0.044	0.105	88.524%	88.002%
2	21:14:43	88.984%	0.095	0.597	0.566	0.094	0.054	88.745%	88.979%
3	21:15:26	88.949%	0.117	0.577	0.525	0.074	0.103	89.917%	89.301%
x		88.941%	0.132	0.596	0.551	0.071	0.087	89.062%	88.761%
σ		0.048%	0.046	0.019	0.022	0.026	0.029	0.749%	0.676%
%RSD		0.054	34.970	3.208	4.025	36.130	33.160	0.841	0.762

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:00	0.049	0.053	0.194	0.236	0.221	93.027%
2	21:14:43	0.047	0.041	0.150	0.108	0.128	94.204%
3	21:15:26	0.052	0.053	0.190	0.165	0.176	93.857%
x		0.049	0.049	0.178	0.169	0.175	93.696%
σ		0.003	0.007	0.024	0.064	0.046	0.605%
%RSD		5.192	15.050	13.630	37.870	26.540	0.646

180-7740-C-5-C MSD 2/5/2012 9:17:36 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	87.794%	48.360	917.700	937.700	0.000	46950.000	51970.000	53150.000
2	21:19:02	86.300%	46.540	880.500	912.700	0.000	45570.000	52900.000	53730.000
3	21:19:45	83.856%	46.800	890.800	938.000	0.000	45920.000	53940.000	54650.000
x		85.984%	47.230	896.300	929.500	0.000	46140.000	52930.000	53840.000
σ		1.988%	0.984	19.190	14.540	0.000	715.500	985.800	757.600
%RSD		2.312	2.082	2.141	1.565	0.000	1.551	1.862	1.407

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	2030.000	9811.000	0.000	50180.000	48040.000	47440.000	87.147%	956.300
2	21:19:02	2026.000	9774.000	0.000	48330.000	47190.000	47810.000	87.301%	936.500
3	21:19:45	2047.000	9869.000	0.000	47930.000	47210.000	46970.000	86.573%	946.700
x		2034.000	9818.000	0.000	48810.000	47480.000	47410.000	87.007%	946.500
σ		11.170	47.980	0.000	1199.000	486.700	418.000	0.383%	9.907
%RSD		0.549	0.489	0.000	2.457	1.025	0.882	0.441	1.047

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	487.200	194.300	502.200	1038.000	1186.000	467.100	470.700	240.200
2	21:19:02	476.600	190.500	497.200	998.700	1148.000	456.800	462.700	235.400
3	21:19:45	482.000	188.800	500.800	1008.000	1131.000	455.900	463.400	232.900
x		481.900	191.200	500.100	1015.000	1155.000	459.900	465.600	236.200
σ		5.296	2.864	2.567	20.610	28.410	6.230	4.394	3.721
%RSD		1.099	1.498	0.513	2.031	2.460	1.354	0.944	1.576

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	238.100	464.200	461.200	36.860	9.538	10.870	0.000	968.000
2	21:19:02	233.700	453.700	448.800	35.880	9.241	10.590	0.000	967.000
3	21:19:45	231.900	448.700	449.300	36.480	9.637	10.550	0.000	961.800
x		234.600	455.500	453.100	36.400	9.472	10.670	0.000	965.600
σ		3.213	7.922	7.026	0.494	0.206	0.176	0.000	3.361
%RSD		1.370	1.739	1.551	1.357	2.179	1.653	0.000	0.348

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	86.010%	972.100	966.100	85.877%	48.050	47.790	49.140	48.480
2	21:19:02	86.756%	987.500	978.000	85.497%	48.280	48.470	49.430	46.860
3	21:19:45	86.962%	988.600	985.700	84.619%	48.180	48.240	49.010	46.100
x		86.576%	982.700	976.600	85.331%	48.170	48.160	49.190	47.150
σ		0.501%	9.225	9.888	0.645%	0.118	0.347	0.212	1.214
%RSD		0.579	0.939	1.012	0.756	0.245	0.721	0.430	2.574

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	83.479%	1819.000	495.700	493.700	1933.000	1925.000	87.260%	87.642%
2	21:19:02	84.568%	1852.000	490.300	488.700	1921.000	1917.000	88.608%	88.871%
3	21:19:45	84.294%	1871.000	492.900	495.200	1931.000	1925.000	89.195%	89.718%
x		84.114%	1847.000	493.000	492.600	1928.000	1922.000	88.354%	88.744%
σ		0.566%	26.060	2.690	3.389	6.100	4.318	0.992%	1.044%
%RSD		0.673	1.411	0.546	0.688	0.316	0.225	1.123	1.176

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:18:19	45.070	45.390	18.000	19.560	18.670	89.786%
2	21:19:02	45.740	45.870	18.050	19.500	18.560	92.311%
3	21:19:45	46.260	45.880	18.080	19.130	18.620	92.821%
x		45.690	45.710	18.040	19.390	18.620	91.640%
σ		0.601	0.280	0.042	0.234	0.056	1.625%
%RSD		1.316	0.613	0.235	1.208	0.300	1.773

180-7740-C-11-A 2/5/2012 9:24:46 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	87.283%	-0.010	7.882	8.716	0.000	19.170	3.136	2.250
2	21:26:12	83.777%	-0.009	8.869	8.142	0.000	19.760	3.513	1.901
3	21:26:55	85.537%	0.007	6.485	6.731	0.000	18.800	1.719	2.268
x		85.532%	-0.004	7.745	7.863	0.000	19.240	2.789	2.140
σ		1.753%	0.010	1.198	1.021	0.000	0.482	0.946	0.207
%RSD		2.049	244.200	15.460	12.990	0.000	2.507	33.900	9.680

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.091	18.040	0.000	5.307	19.000	6.462	87.532%	0.736
2	21:26:12	-0.029	16.320	0.000	4.299	15.820	9.443	86.029%	0.809
3	21:26:55	-0.324	15.480	0.000	0.484	17.470	10.700	86.646%	0.462
x		-0.088	16.610	0.000	3.363	17.430	8.868	86.736%	0.669
σ		0.214	1.304	0.000	2.544	1.590	2.177	0.756%	0.183
%RSD		243.900	7.852	0.000	75.630	9.120	24.540	0.871	27.350

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.076	1.579	0.635	12.560	13.120	0.044	0.068	0.388
2	21:26:12	-0.377	1.467	0.639	11.220	10.150	0.056	0.020	0.249
3	21:26:55	-0.844	1.281	0.565	8.523	8.955	0.045	0.059	0.178
x		-0.382	1.442	0.613	10.770	10.740	0.048	0.049	0.272
σ		0.460	0.150	0.042	2.054	2.144	0.007	0.026	0.107
%RSD		120.600	10.430	6.812	19.080	19.960	13.650	52.500	39.350

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.376	0.585	0.688	-0.490	-0.097	0.286	0.000	0.151
2	21:26:12	0.296	0.979	0.723	-0.079	0.373	0.975	0.000	0.170
3	21:26:55	0.254	0.483	0.390	-0.525	-0.051	1.083	0.000	0.143
x		0.309	0.683	0.601	-0.364	0.075	0.781	0.000	0.155
σ		0.061	0.262	0.183	0.248	0.259	0.432	0.000	0.014
%RSD		19.910	38.410	30.470	68.100	344.900	55.330	0.000	8.820

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	85.835%	4.989	5.124	89.910%	-0.004	-0.005	0.033	0.021
2	21:26:12	86.423%	3.944	3.791	88.614%	-0.001	-0.001	-0.054	-0.028
3	21:26:55	86.317%	3.288	3.039	88.586%	0.004	-0.001	-0.101	-0.093
x		86.192%	4.074	3.985	89.037%	-0.000	-0.003	-0.040	-0.033
σ		0.314%	0.858	1.056	0.756%	0.004	0.002	0.068	0.057
%RSD		0.364	21.050	26.490	0.849	2753.000	76.880	167.200	172.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	84.589%	16.230	0.409	0.447	0.306	0.267	86.578%	86.933%
2	21:26:12	84.544%	14.440	0.332	0.355	0.205	0.354	87.775%	88.431%
3	21:26:55	85.623%	13.120	0.254	0.354	0.208	0.188	88.509%	88.699%
x		84.919%	14.600	0.332	0.385	0.240	0.270	87.620%	88.021%
σ		0.610%	1.562	0.077	0.053	0.057	0.083	0.975%	0.952%
%RSD		0.718	10.700	23.310	13.770	23.860	30.780	1.112	1.081

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:25:29	0.136	0.163	0.115	0.106	0.108	93.533%
2	21:26:12	0.132	0.141	0.082	0.086	0.073	95.636%
3	21:26:55	0.143	0.129	0.039	0.037	0.035	95.001%
x		0.137	0.144	0.078	0.076	0.072	94.723%
σ		0.006	0.017	0.038	0.036	0.036	1.079%
%RSD		4.130	12.080	48.200	46.610	50.260	1.139

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	82.248%	-0.000	81.240	86.650	0.000	582300.000	1227.000	1236.000
2	21:30:28	79.067%	-0.008	77.120	85.790	0.000	575000.000	1269.000	1271.000
3	21:31:11	73.715%	0.012	84.010	88.770	0.000	582800.000	1287.000	1312.000
x		78.343%	0.001	80.790	87.070	0.000	580000.000	1261.000	1273.000
σ		4.312%	0.010	3.466	1.533	0.000	4333.000	30.870	37.910
%RSD		5.505	780.200	4.290	1.760	0.000	0.747	2.447	2.978

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	30.950	4414.000	0.000	761.700	4748.000	4886.000	83.567%	2.152
2	21:30:28	30.640	4419.000	0.000	752.600	4746.000	4876.000	81.434%	2.312
3	21:31:11	32.820	4548.000	0.000	739.600	4866.000	4851.000	80.528%	1.771
x		31.470	4460.000	0.000	751.300	4787.000	4871.000	81.843%	2.078
σ		1.177	75.870	0.000	11.110	68.580	18.090	1.560%	0.278
%RSD		3.741	1.701	0.000	1.478	1.433	0.371	1.906	13.370

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	1.472	1.395	814.800	185.300	197.400	0.613	3.403	2.601
2	21:30:28	2.202	1.361	832.000	183.100	202.500	0.631	3.127	2.594
3	21:31:11	1.859	1.167	817.700	182.200	191.700	0.579	3.030	2.289
x		1.844	1.308	821.500	183.600	197.200	0.607	3.187	2.495
σ		0.365	0.123	9.184	1.598	5.428	0.026	0.194	0.178
%RSD		19.810	9.397	1.118	0.870	2.753	4.318	6.071	7.148

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	0.469	1.328	1.418	7.493	0.061	1.224	0.000	28.380
2	21:30:28	0.476	1.273	1.079	7.156	0.653	1.036	0.000	28.230
3	21:31:11	0.516	1.106	0.897	7.635	-0.138	1.403	0.000	27.940
x		0.487	1.235	1.131	7.428	0.192	1.221	0.000	28.180
σ		0.025	0.116	0.264	0.246	0.412	0.183	0.000	0.226
%RSD		5.217	9.361	23.380	3.313	214.200	15.000	0.000	0.801

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	82.957%	42.120	41.950	79.065%	-0.004	0.001	-0.006	0.009
2	21:30:28	83.050%	40.860	42.120	79.250%	0.004	-0.003	0.001	-0.025
3	21:31:11	82.799%	44.140	45.940	69.824%	-0.001	0.000	0.064	0.056
x		82.935%	42.370	43.340	76.046%	-0.000	-0.001	0.020	0.013
σ		0.127%	1.658	2.255	5.389%	0.004	0.002	0.039	0.041
%RSD		0.153	3.913	5.203	7.087	1154.000	262.500	193.200	306.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	79.863%	16.100	0.523	0.479	27.620	28.020	84.283%	84.792%
2	21:30:28	80.116%	15.580	0.507	0.506	26.740	27.900	85.876%	85.675%
3	21:31:11	78.841%	15.130	0.480	0.500	27.910	28.130	85.464%	85.646%
x		79.607%	15.610	0.504	0.495	27.420	28.020	85.208%	85.371%
σ		0.675%	0.484	0.021	0.014	0.607	0.112	0.827%	0.502%
%RSD		0.848	3.099	4.261	2.872	2.212	0.401	0.970	0.588

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:29:45	0.069	0.087	0.279	0.327	0.292	88.510%
2	21:30:28	0.079	0.073	0.281	0.297	0.274	90.271%
3	21:31:11	0.078	0.060	0.256	0.263	0.255	90.523%
x		0.076	0.073	0.272	0.295	0.274	89.768%
σ		0.006	0.014	0.014	0.032	0.019	1.097%
%RSD		7.272	18.670	5.285	10.710	6.771	1.222

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	74.675%	-0.007	71.420	80.600	0.000	610600.000	1296.000	1319.000
2	21:34:45	71.816%	0.003	76.120	80.400	0.000	605900.000	1323.000	1359.000
3	21:35:28	69.927%	0.014	75.850	83.040	0.000	608800.000	1342.000	1356.000
x		72.139%	0.004	74.460	81.350	0.000	608400.000	1320.000	1345.000
σ		2.390%	0.011	2.641	1.468	0.000	2383.000	23.460	22.670
%RSD		3.314	304.100	3.546	1.805	0.000	0.392	1.777	1.686

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	34.290	4164.000	0.000	723.000	4639.000	4783.000	79.484%	1.778
2	21:34:45	34.970	4148.000	0.000	722.300	4732.000	4856.000	79.501%	1.735
3	21:35:28	34.960	4209.000	0.000	722.500	4721.000	4836.000	78.111%	1.560
x		34.740	4174.000	0.000	722.600	4697.000	4825.000	79.032%	1.691
σ		0.387	31.150	0.000	0.345	50.850	37.650	0.798%	0.115
%RSD		1.115	0.746	0.000	0.048	1.083	0.780	1.009	6.820

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	1.539	1.307	791.100	161.000	170.400	0.515	3.093	2.464
2	21:34:45	1.380	1.250	787.400	160.100	168.600	0.535	3.154	2.670
3	21:35:28	1.736	1.297	793.100	162.100	168.200	0.553	2.786	2.465
x		1.552	1.285	790.500	161.000	169.100	0.534	3.011	2.533
σ		0.178	0.030	2.893	0.987	1.171	0.019	0.197	0.119
%RSD		11.480	2.370	0.366	0.613	0.693	3.504	6.539	4.682

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	0.492	0.537	0.545	7.132	0.696	1.608	0.000	28.340
2	21:34:45	0.593	0.555	0.581	7.476	0.126	2.042	0.000	28.430
3	21:35:28	0.453	0.544	0.416	6.615	0.484	0.985	0.000	28.640
x		0.513	0.546	0.514	7.074	0.435	1.545	0.000	28.470
σ		0.072	0.009	0.087	0.433	0.288	0.531	0.000	0.155
%RSD		14.060	1.675	16.930	6.122	66.100	34.400	0.000	0.543

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	80.429%	45.970	46.020	76.527%	-0.004	0.002	-0.010	-0.001
2	21:34:45	81.155%	46.880	47.890	75.830%	0.002	-0.005	0.016	-0.076
3	21:35:28	80.397%	46.970	46.630	74.169%	-0.005	0.003	0.042	0.049
x		80.660%	46.600	46.850	75.509%	-0.003	-0.000	0.016	-0.009
σ		0.428%	0.553	0.954	1.211%	0.004	0.005	0.026	0.063
%RSD		0.531	1.186	2.036	1.604	149.800	2251.000	160.400	687.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	77.724%	10.480	0.335	0.404	29.490	29.110	82.797%	83.779%
2	21:34:45	78.254%	11.080	0.403	0.404	30.160	28.460	84.407%	85.069%
3	21:35:28	76.932%	10.740	0.378	0.420	28.330	29.550	84.648%	85.090%
x		77.637%	10.770	0.372	0.409	29.320	29.040	83.951%	84.646%
σ		0.665%	0.301	0.034	0.009	0.924	0.550	1.006%	0.751%
%RSD		0.857	2.799	9.205	2.170	3.151	1.895	1.198	0.887

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:02	0.042	0.039	0.285	0.275	0.282	87.432%
2	21:34:45	0.040	0.036	0.298	0.245	0.282	88.674%
3	21:35:28	0.028	0.033	0.256	0.267	0.271	88.568%
x		0.037	0.036	0.280	0.262	0.278	88.225%
σ		0.007	0.003	0.022	0.016	0.006	0.689%
%RSD		20.170	8.518	7.747	5.950	2.291	0.781

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	78.997%	-0.008	152.900	155.500	0.000	208200.000	15310.000	15820.000
2	21:39:02	76.703%	-0.008	150.300	154.000	0.000	207000.000	15550.000	15990.000
3	21:39:45	75.024%	0.002	137.600	152.200	0.000	206000.000	15740.000	16110.000
x		76.908%	-0.005	146.900	153.900	0.000	207000.000	15540.000	15970.000
σ		1.995%	0.006	8.176	1.671	0.000	1067.000	215.200	143.400
%RSD		2.593	128.600	5.564	1.086	0.000	0.515	1.385	0.898

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	2.591	8442.000	0.000	3636.000	57720.000	62820.000	81.370%	1.230
2	21:39:02	2.330	8457.000	0.000	3661.000	57820.000	62850.000	81.169%	1.313
3	21:39:45	2.565	8377.000	0.000	3566.000	57220.000	62600.000	81.370%	1.330
x		2.495	8425.000	0.000	3621.000	57590.000	62760.000	81.303%	1.291
σ		0.143	42.980	0.000	49.170	322.800	134.800	0.116%	0.054
%RSD		5.747	0.510	0.000	1.358	0.561	0.215	0.143	4.153

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	-0.580	1.073	8526.000	14560.000	14280.000	0.553	0.309	0.987
2	21:39:02	0.023	1.003	8468.000	14380.000	14180.000	0.597	0.309	0.915
3	21:39:45	-0.480	0.943	8450.000	14120.000	13890.000	0.584	0.434	0.850
x		-0.346	1.006	8481.000	14350.000	14110.000	0.578	0.351	0.917
σ		0.324	0.065	39.810	224.200	201.500	0.022	0.072	0.068
%RSD		93.600	6.485	0.469	1.562	1.427	3.861	20.520	7.421

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	0.208	2.286	2.036	14.430	0.339	1.350	0.000	271.400
2	21:39:02	0.168	1.800	2.113	13.700	0.477	0.949	0.000	271.400
3	21:39:45	0.113	2.094	2.147	14.940	0.721	1.320	0.000	273.400
x		0.163	2.060	2.098	14.360	0.513	1.206	0.000	272.100
σ		0.048	0.245	0.057	0.623	0.193	0.224	0.000	1.189
%RSD		29.330	11.890	2.713	4.342	37.710	18.520	0.000	0.437

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	81.660%	3.028	3.013	79.068%	-0.002	-0.006	0.018	0.032
2	21:39:02	82.660%	2.980	2.790	79.567%	-0.007	-0.001	-0.024	-0.040
3	21:39:45	82.127%	3.005	2.594	80.321%	-0.010	0.001	-0.072	-0.086
x		82.149%	3.004	2.799	79.652%	-0.006	-0.002	-0.026	-0.031
σ		0.500%	0.024	0.210	0.631%	0.004	0.003	0.045	0.059
%RSD		0.609	0.803	7.494	0.792	59.240	173.000	174.100	189.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	78.852%	8.230	0.284	0.341	66.870	65.770	84.530%	85.246%
2	21:39:02	79.435%	8.549	0.252	0.329	66.770	66.120	85.305%	86.110%
3	21:39:45	80.209%	8.595	0.218	0.340	67.120	66.450	86.088%	86.208%
x		79.499%	8.458	0.251	0.337	66.920	66.110	85.308%	85.855%
σ		0.681%	0.199	0.033	0.007	0.184	0.339	0.779%	0.529%
%RSD		0.856	2.352	13.240	1.951	0.276	0.513	0.913	0.617

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:38:19	0.033	0.036	0.102	0.106	0.085	86.697%
2	21:39:02	0.027	0.024	0.078	0.079	0.078	88.414%
3	21:39:45	0.021	0.023	0.059	0.037	0.047	88.572%
x		0.027	0.028	0.080	0.074	0.070	87.894%
σ		0.006	0.007	0.021	0.035	0.020	1.040%
%RSD		21.100	25.160	26.770	47.020	29.210	1.183

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	81.460%	0.009	173.300	177.400	0.000	47120.000	24060.000	24440.000
2	21:43:20	77.598%	-0.017	179.000	186.700	0.000	48190.000	24700.000	25100.000
3	21:44:03	76.864%	0.002	170.500	181.400	0.000	46910.000	24720.000	25080.000
x		78.641%	-0.002	174.300	181.900	0.000	47410.000	24490.000	24870.000
σ		2.469%	0.013	4.292	4.656	0.000	688.800	373.800	372.000
%RSD		3.139	590.300	2.463	2.560	0.000	1.453	1.526	1.496

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	2.806	8810.000	0.000	5359.000	87030.000	96530.000	84.691%	1.039
2	21:43:20	2.960	9009.000	0.000	5396.000	88830.000	96590.000	83.575%	0.976
3	21:44:03	2.911	8926.000	0.000	5268.000	87190.000	97620.000	83.954%	1.224
x		2.892	8915.000	0.000	5341.000	87680.000	96910.000	84.073%	1.079
σ		0.079	100.200	0.000	65.930	997.100	613.300	0.568%	0.129
%RSD		2.724	1.124	0.000	1.234	1.137	0.633	0.675	11.950

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.627	0.834	17920.000	30310.000	29690.000	4.433	0.936	0.457
2	21:43:20	-0.275	0.741	17950.000	30610.000	29920.000	4.262	0.916	0.430
3	21:44:03	0.042	0.841	17810.000	30350.000	29650.000	4.290	0.826	0.397
x		0.132	0.805	17900.000	30420.000	29750.000	4.328	0.893	0.428
σ		0.457	0.056	71.900	163.400	146.600	0.092	0.058	0.030
%RSD		347.600	6.902	0.402	0.537	0.493	2.117	6.522	7.017

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.383	3.220	3.039	11.980	-0.183	1.674	0.000	379.900
2	21:43:20	0.426	3.165	3.417	11.780	0.745	1.058	0.000	382.400
3	21:44:03	0.238	2.882	2.903	11.580	0.998	1.342	0.000	379.200
x		0.349	3.089	3.119	11.780	0.520	1.358	0.000	380.500
σ		0.099	0.181	0.266	0.202	0.622	0.309	0.000	1.682
%RSD		28.340	5.865	8.541	1.718	119.600	22.720	0.000	0.442

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	83.332%	4.161	3.926	84.617%	-0.009	-0.007	0.036	0.011
2	21:43:20	84.175%	4.257	4.069	84.729%	-0.009	-0.003	-0.001	-0.029
3	21:44:03	84.320%	4.435	4.138	84.227%	0.001	-0.003	-0.071	-0.033
x		83.942%	4.284	4.044	84.524%	-0.006	-0.005	-0.012	-0.017
σ		0.534%	0.139	0.108	0.264%	0.005	0.002	0.055	0.024
%RSD		0.636	3.246	2.674	0.312	94.820	44.430	456.200	144.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	81.759%	5.777	0.217	0.240	74.760	73.500	86.008%	86.653%
2	21:43:20	82.018%	5.913	0.208	0.230	75.590	75.350	86.964%	87.528%
3	21:44:03	82.445%	5.854	0.219	0.262	74.660	74.900	87.499%	87.931%
x		82.074%	5.848	0.215	0.244	75.000	74.580	86.823%	87.370%
σ		0.346%	0.068	0.006	0.016	0.507	0.964	0.755%	0.653%
%RSD		0.422	1.165	2.714	6.580	0.676	1.292	0.870	0.748

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:37	0.023	0.015	0.105	0.108	0.108	88.600%
2	21:43:20	0.018	0.016	0.100	0.093	0.099	90.173%
3	21:44:03	0.008	0.013	0.079	0.057	0.080	91.089%
x		0.016	0.015	0.094	0.086	0.096	89.954%
σ		0.008	0.002	0.014	0.026	0.014	1.259%
%RSD		47.870	11.090	14.500	30.500	14.870	1.400

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	84.757%	0.016	4.121	6.195	0.000	75.160	6.409	6.879
2	21:47:38	82.813%	-0.026	5.113	4.495	0.000	64.170	3.909	3.341
3	21:48:21	80.956%	-0.009	4.083	4.073	0.000	61.320	3.373	3.549
x		82.842%	-0.006	4.439	4.921	0.000	66.880	4.564	4.590
σ		1.901%	0.021	0.584	1.123	0.000	7.308	1.621	1.985
%RSD		2.294	335.700	13.150	22.830	0.000	10.930	35.510	43.250

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	1.873	22.900	0.000	8.936	45.950	18.760	85.992%	0.201
2	21:47:38	1.965	21.020	0.000	7.710	22.050	9.030	84.572%	0.497
3	21:48:21	1.569	20.590	0.000	7.107	6.987	3.463	83.463%	0.291
x		1.802	21.500	0.000	7.918	25.000	10.420	84.676%	0.330
σ		0.207	1.225	0.000	0.932	19.650	7.745	1.268%	0.152
%RSD		11.480	5.696	0.000	11.770	78.610	74.330	1.498	46.110

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.142	1.220	5.585	30.130	27.580	0.001	-0.020	0.302
2	21:47:38	-0.582	1.064	3.664	13.740	9.706	0.004	-0.018	0.274
3	21:48:21	-0.296	1.068	3.110	8.290	8.714	0.006	-0.010	0.274
x		-0.245	1.117	4.120	17.390	15.330	0.004	-0.016	0.283
σ		0.364	0.089	1.299	11.370	10.620	0.003	0.005	0.016
%RSD		148.500	7.950	31.530	65.390	69.260	75.210	32.430	5.655

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.248	3.963	4.076	-0.275	0.052	0.549	0.000	0.191
2	21:47:38	0.154	4.068	4.285	-0.673	-0.405	0.990	0.000	0.168
3	21:48:21	0.212	3.912	4.411	-0.272	-0.034	0.969	0.000	0.129
x		0.205	3.981	4.257	-0.407	-0.129	0.836	0.000	0.163
σ		0.047	0.080	0.169	0.231	0.243	0.249	0.000	0.031
%RSD		23.020	1.999	3.973	56.660	188.400	29.720	0.000	19.190

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	85.246%	0.603	0.557	89.472%	-0.009	-0.005	0.049	0.028
2	21:47:38	85.490%	0.586	0.626	88.777%	-0.006	-0.001	-0.065	-0.003
3	21:48:21	84.448%	0.485	0.515	88.409%	-0.006	-0.005	0.037	0.020
x		85.061%	0.558	0.566	88.886%	-0.007	-0.004	0.007	0.015
σ		0.545%	0.064	0.056	0.539%	0.002	0.002	0.062	0.016
%RSD		0.640	11.400	9.897	0.607	29.010	54.260	875.800	106.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	84.518%	4.577	0.045	0.057	0.094	0.076	86.160%	87.007%
2	21:47:38	83.819%	4.701	0.056	0.083	0.047	0.072	88.025%	88.356%
3	21:48:21	84.092%	4.705	0.062	0.115	0.034	0.053	88.016%	88.461%
x		84.143%	4.661	0.054	0.085	0.058	0.067	87.400%	87.941%
σ		0.352%	0.073	0.009	0.029	0.032	0.012	1.074%	0.811%
%RSD		0.418	1.569	16.270	34.410	54.270	18.360	1.229	0.922

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:55	0.024	0.012	0.060	0.035	0.047	93.311%
2	21:47:38	0.020	0.015	0.005	0.012	0.010	94.683%
3	21:48:21	0.011	0.019	0.022	0.020	0.020	94.753%
x		0.019	0.015	0.029	0.022	0.025	94.249%
σ		0.007	0.003	0.028	0.012	0.019	0.813%
%RSD		35.020	21.190	95.880	52.590	75.310	0.862

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	81.144%	0.044	59.470	62.870	0.000	11120.000	11590.000	11650.000
2	21:51:57	78.193%	0.001	61.670	63.660	0.000	11170.000	11860.000	11980.000
3	21:52:40	77.753%	-0.008	54.250	62.850	0.000	10930.000	11770.000	11720.000
x		79.030%	0.013	58.460	63.130	0.000	11080.000	11740.000	11780.000
σ		1.844%	0.028	3.812	0.463	0.000	126.200	138.400	171.400
%RSD		2.333	223.800	6.521	0.733	0.000	1.139	1.179	1.455

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	1.016	5779.000	0.000	2338.000	50800.000	50460.000	84.087%	0.657
2	21:51:57	1.284	5791.000	0.000	2341.000	50340.000	50340.000	83.131%	0.844
3	21:52:40	1.294	5701.000	0.000	2307.000	50370.000	51750.000	82.606%	0.732
x		1.198	5757.000	0.000	2329.000	50500.000	50850.000	83.274%	0.744
σ		0.158	48.650	0.000	18.640	257.100	778.000	0.751%	0.094
%RSD		13.160	0.845	0.000	0.800	0.509	1.530	0.902	12.620

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	-0.042	1.328	2615.000	7513.000	7460.000	2.653	0.823	0.606
2	21:51:57	-0.032	1.165	2597.000	7447.000	7442.000	2.755	0.774	0.598
3	21:52:40	-0.258	1.180	2596.000	7340.000	7311.000	2.653	0.744	0.651
x		-0.111	1.224	2603.000	7433.000	7405.000	2.687	0.780	0.618
σ		0.128	0.090	10.890	86.930	81.390	0.059	0.040	0.029
%RSD		115.600	7.345	0.418	1.170	1.099	2.198	5.087	4.640

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	0.753	0.974	1.383	2.983	0.160	1.072	0.000	209.200
2	21:51:57	0.569	0.957	1.112	2.118	0.123	0.453	0.000	211.600
3	21:52:40	0.526	1.503	0.816	2.981	0.234	0.546	0.000	209.900
x		0.616	1.144	1.104	2.694	0.172	0.690	0.000	210.200
σ		0.120	0.310	0.284	0.499	0.056	0.334	0.000	1.203
%RSD		19.550	27.110	25.710	18.520	32.770	48.330	0.000	0.572

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	84.475%	3.748	3.837	85.955%	-0.007	-0.008	-0.092	-0.062
2	21:51:57	84.476%	3.686	4.133	85.590%	-0.009	-0.001	-0.010	-0.036
3	21:52:40	84.564%	3.988	4.038	85.144%	-0.009	-0.005	-0.099	-0.108
x		84.505%	3.807	4.003	85.563%	-0.008	-0.005	-0.067	-0.068
σ		0.051%	0.160	0.151	0.406%	0.001	0.004	0.049	0.036
%RSD		0.060	4.193	3.779	0.475	16.250	75.320	73.610	53.290

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	82.616%	3.861	0.201	0.294	143.300	142.400	87.418%	87.029%
2	21:51:57	83.002%	4.241	0.248	0.306	143.100	142.900	88.845%	88.614%
3	21:52:40	82.525%	4.247	0.233	0.230	145.100	145.100	88.175%	88.229%
x		82.714%	4.116	0.227	0.277	143.800	143.500	88.146%	87.958%
σ		0.253%	0.221	0.024	0.041	1.088	1.443	0.714%	0.827%
%RSD		0.306	5.372	10.510	14.770	0.756	1.006	0.810	0.940

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:14	0.005	0.003	0.060	0.051	0.044	90.768%
2	21:51:57	-0.005	0.006	0.035	0.038	0.041	93.323%
3	21:52:40	-0.004	0.009	0.047	0.018	0.031	93.376%
x		-0.001	0.006	0.047	0.036	0.039	92.489%
σ		0.006	0.003	0.012	0.017	0.007	1.491%
%RSD		441.200	48.280	25.620	46.790	18.340	1.612

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	87.196%	0.007	1.190	1.401	0.000	7.102	0.338	0.229
2	21:59:51	85.239%	0.007	1.858	1.126	0.000	8.885	1.052	0.880
3	22:00:35	83.102%	-0.009	1.267	1.078	0.000	9.421	1.268	1.158
x		85.179%	0.002	1.438	1.201	0.000	8.470	0.886	0.756
σ		2.048%	0.009	0.366	0.174	0.000	1.214	0.487	0.477
%RSD		2.404	566.400	25.420	14.490	0.000	14.340	54.970	63.050

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	1.422	1.979	0.000	-2.820	2.570	-8.904	86.243%	-0.085
2	21:59:51	1.338	2.193	0.000	-4.222	2.824	-10.000	84.834%	-0.122
3	22:00:35	1.649	1.768	0.000	-4.496	4.699	-6.022	85.122%	-0.103
x		1.470	1.980	0.000	-3.846	3.364	-8.309	85.400%	-0.103
σ		0.161	0.212	0.000	0.899	1.163	2.055	0.744%	0.018
%RSD		10.940	10.730	0.000	23.380	34.560	24.730	0.872	17.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	0.028	0.092	0.820	-5.418	-4.019	-0.013	-0.102	-0.259
2	21:59:51	0.089	0.045	0.896	-8.659	-6.654	-0.012	-0.096	-0.241
3	22:00:35	-0.064	0.067	0.923	-8.870	-9.144	-0.011	-0.132	-0.260
x		0.018	0.068	0.879	-7.649	-6.606	-0.012	-0.110	-0.253
σ		0.077	0.024	0.054	1.935	2.563	0.001	0.020	0.011
%RSD		435.500	34.720	6.109	25.300	38.800	9.560	17.800	4.277

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	-0.299	-1.165	-1.208	0.197	-0.065	0.642	0.000	-0.009
2	21:59:51	-0.344	-1.241	-1.178	-0.060	0.153	0.957	0.000	-0.001
3	22:00:35	-0.280	-1.202	-1.184	0.157	0.128	1.247	0.000	-0.001
x		-0.308	-1.202	-1.190	0.098	0.072	0.949	0.000	-0.004
σ		0.032	0.038	0.016	0.138	0.119	0.302	0.000	0.005
%RSD		10.520	3.139	1.313	140.900	166.500	31.890	0.000	120.800

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	83.823%	0.134	0.144	89.029%	-0.008	-0.003	-0.019	-0.002
2	21:59:51	84.401%	0.147	0.135	89.198%	-0.008	-0.006	-0.018	-0.001
3	22:00:35	84.136%	0.176	0.100	89.300%	-0.009	-0.000	0.013	0.032
x		84.120%	0.152	0.127	89.176%	-0.008	-0.003	-0.008	0.009
σ		0.289%	0.021	0.024	0.137%	0.001	0.003	0.018	0.019
%RSD		0.344	14.100	18.640	0.154	7.816	97.740	229.800	206.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	83.940%	-0.103	-0.011	-0.029	-0.025	0.021	84.992%	85.011%
2	21:59:51	84.544%	-0.205	-0.018	-0.034	0.008	0.005	85.577%	85.789%
3	22:00:35	84.275%	-0.210	-0.029	-0.042	-0.032	-0.006	86.066%	86.836%
x		84.253%	-0.173	-0.019	-0.035	-0.016	0.007	85.545%	85.878%
σ		0.303%	0.060	0.009	0.007	0.021	0.013	0.538%	0.916%
%RSD		0.359	34.760	49.270	19.980	131.500	204.500	0.629	1.066

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:09	-0.001	-0.004	0.068	0.056	0.064	89.882%
2	21:59:51	-0.012	0.001	0.022	0.009	0.021	90.338%
3	22:00:35	-0.003	-0.006	0.004	0.000	0.002	91.086%
x		-0.005	-0.003	0.031	0.022	0.029	90.435%
σ		0.006	0.004	0.033	0.030	0.032	0.608%
%RSD		110.500	111.800	106.200	138.900	111.100	0.672

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	77.298%	49.450	864.300	898.200	0.000	46580.000	50870.000	51750.000
2	22:04:10	74.861%	47.870	895.400	907.300	0.000	46060.000	52290.000	53010.000
3	22:04:53	73.508%	49.080	899.400	926.500	0.000	46090.000	52470.000	53490.000
x		75.222%	48.800	886.400	910.700	0.000	46240.000	51880.000	52750.000
σ		1.921%	0.829	19.220	14.450	0.000	292.000	874.400	899.900
%RSD		2.554	1.698	2.168	1.587	0.000	0.631	1.686	1.706

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	1988.000	9679.000	0.000	48590.000	45870.000	46090.000	85.187%	889.200
2	22:04:10	2018.000	9822.000	0.000	48400.000	46460.000	46010.000	84.720%	893.500
3	22:04:53	2030.000	9904.000	0.000	47620.000	45240.000	45990.000	83.842%	901.500
x		2012.000	9802.000	0.000	48200.000	45860.000	46030.000	84.583%	894.700
σ		22.020	114.100	0.000	513.000	609.500	54.010	0.683%	6.294
%RSD		1.094	1.164	0.000	1.064	1.329	0.117	0.808	0.704

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	463.900	181.400	477.900	915.400	1107.000	445.000	452.900	227.200
2	22:04:10	458.500	180.700	480.500	957.000	1093.000	439.800	445.000	225.300
3	22:04:53	468.100	181.500	477.900	937.100	1077.000	435.700	446.200	225.300
x		463.500	181.200	478.800	936.500	1092.000	440.100	448.000	225.900
σ		4.805	0.441	1.505	20.830	15.110	4.633	4.254	1.094
%RSD		1.037	0.243	0.314	2.224	1.384	1.053	0.950	0.484

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	226.200	455.000	454.300	36.960	9.461	9.857	0.000	922.900
2	22:04:10	224.000	451.500	453.900	36.830	9.438	11.300	0.000	916.200
3	22:04:53	227.500	452.600	453.200	36.300	10.480	10.160	0.000	901.100
x		225.900	453.000	453.800	36.690	9.794	10.440	0.000	913.400
σ		1.765	1.787	0.548	0.349	0.597	0.764	0.000	11.160
%RSD		0.781	0.394	0.121	0.951	6.092	7.316	0.000	1.222

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	84.231%	871.200	863.700	84.617%	45.590	45.830	46.830	43.820
2	22:04:10	84.287%	905.500	898.900	84.392%	45.120	45.630	46.980	43.680
3	22:04:53	83.832%	924.300	919.700	84.256%	45.520	46.650	48.460	45.200
x		84.117%	900.300	894.100	84.422%	45.410	46.040	47.420	44.240
σ		0.248%	26.950	28.340	0.182%	0.253	0.543	0.903	0.837
%RSD		0.295	2.993	3.170	0.216	0.558	1.179	1.904	1.892

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	83.383%	1770.000	468.500	468.200	1837.000	1823.000	86.098%	87.234%
2	22:04:10	83.165%	1790.000	471.100	469.700	1844.000	1839.000	87.142%	87.375%
3	22:04:53	81.852%	1819.000	477.400	479.400	1837.000	1839.000	87.156%	87.664%
x		82.800%	1793.000	472.300	472.400	1839.000	1834.000	86.799%	87.424%
σ		0.828%	24.600	4.606	6.104	3.978	9.337	0.606%	0.219%
%RSD		1.000	1.372	0.975	1.292	0.216	0.509	0.699	0.251

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	43.540	44.030	17.120	18.140	17.730	89.129%
2	22:04:10	45.070	45.760	17.680	18.850	18.240	88.259%
3	22:04:53	45.410	45.760	17.590	19.010	18.270	88.194%
x		44.670	45.180	17.470	18.670	18.080	88.528%
σ		0.994	0.997	0.299	0.463	0.304	0.522%
%RSD		2.226	2.206	1.711	2.479	1.683	0.590

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	86.385%	94.750	94.980	93.040	0.000	49540.000	50720.000	51100.000
2	22:11:21	83.315%	96.660	91.910	96.740	0.000	49910.000	52240.000	52580.000
3	22:12:04	83.949%	98.990	94.040	95.210	0.000	48770.000	51450.000	52380.000
x		84.549%	96.803%	93.643%	95.000%	0.000	98.817%	102.943%	104.036%
σ		1.621%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.917	2.194	1.685	1.957	0.000	1.171	1.484	1.538

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	501.400	5248.000	0.000	52240.000	48490.000	46150.000	85.689%	95.140
2	22:11:21	519.800	5352.000	0.000	52200.000	48980.000	48150.000	85.526%	97.510
3	22:12:04	521.600	5292.000	0.000	50930.000	47850.000	48560.000	87.439%	98.650
x		102.851%	105.947%	0.000	103.578%	96.882%	95.242%	86.218%	97.099%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.061%	n/a
%RSD		2.171	0.983	0.000	1.443	1.162	2.712	1.230	1.847

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	97.470	97.560	502.200	25840.000	25180.000	96.370	97.170	96.670
2	22:11:21	96.330	98.620	504.500	25750.000	25250.000	95.820	96.990	96.130
3	22:12:04	95.760	96.700	502.200	25490.000	24920.000	94.860	95.840	96.000
x		96.519%	97.626%	100.592%	102.769%	100.465%	95.681%	96.670%	96.267%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.899	0.985	0.260	0.716	0.699	0.801	0.745	0.367

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	96.780	99.170	96.920	99.570	99.840	101.600	0.000	98.190
2	22:11:21	96.640	98.270	98.670	97.540	100.800	101.000	0.000	98.330
3	22:12:04	95.070	97.230	97.800	98.840	99.500	98.150	0.000	97.840
x		96.164%	98.224%	97.799%	98.647%	100.039%	100.244%	0.000	98.117%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.988	0.991	0.892	1.043	0.659	1.840	0.000	0.255

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	83.262%	96.640	96.500	84.519%	94.030	95.010	97.180	98.070
2	22:11:21	84.351%	100.700	98.210	85.300%	95.020	95.870	98.430	99.470
3	22:12:04	85.241%	101.000	100.300	85.744%	94.660	95.940	96.590	97.970
x		84.285%	99.441%	98.322%	85.188%	94.571%	95.605%	97.400%	98.502%
σ		0.991%	n/a	n/a	0.620%	n/a	n/a	n/a	n/a
%RSD		1.176	2.441	1.914	0.728	0.526	0.544	0.967	0.855

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	83.037%	97.450	90.730	91.190	96.500	97.340	85.145%	84.639%
2	22:11:21	83.450%	97.510	94.580	95.320	97.670	98.230	86.214%	86.672%
3	22:12:04	85.157%	97.320	95.300	96.100	97.620	97.130	86.880%	87.506%
x		83.882%	97.428%	93.537%	94.203%	97.262%	97.563%	86.080%	86.273%
σ		1.124%	n/a	n/a	n/a	n/a	n/a	0.875%	1.475%
%RSD		1.340	0.104	2.625	2.804	0.678	0.600	1.016	1.709

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:10:38	92.780	92.640	93.770	93.310	93.700	87.313%
2	22:11:21	94.030	94.310	95.210	95.450	95.250	88.042%
3	22:12:04	94.490	93.550	96.040	95.500	95.520	88.651%
x		93.769%	93.498%	95.008%	94.751%	94.824%	88.002%
σ		n/a	n/a	n/a	n/a	n/a	0.670%
%RSD		0.944	0.895	1.208	1.318	1.039	0.761

CCB8 2/5/2012 10:17:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	89.441%	0.014	1.880	2.274	0.000	9.408	13.780	13.420
2	22:18:32	88.886%	-0.010	1.675	2.323	0.000	14.870	17.410	17.930
3	22:19:15	87.299%	-0.002	2.552	2.231	0.000	19.160	22.750	22.500
x		88.542%	0.001	2.036	2.276	0.000	14.480	17.980	17.950
σ		1.112%	0.012	0.459	0.046	0.000	4.888	4.515	4.536
%RSD		1.256	1788.000	22.550	2.024	0.000	33.760	25.110	25.270

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	-0.418	1.932	0.000	8.047	18.840	17.520	87.907%	-0.088
2	22:18:32	-0.462	2.963	0.000	12.950	37.140	23.320	88.103%	-0.051
3	22:19:15	0.031	3.085	0.000	15.130	71.310	31.470	86.952%	0.045
x		-0.283	2.660	0.000	12.040	42.430	24.100	87.654%	-0.031
σ		0.273	0.634	0.000	3.626	26.630	7.007	0.616%	0.069
%RSD		96.400	23.820	0.000	30.110	62.770	29.070	0.703	221.500

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	0.135	0.032	0.377	6.714	7.617	0.027	-0.078	-0.205
2	22:18:32	0.090	0.031	0.462	4.875	4.490	0.052	-0.084	-0.150
3	22:19:15	-0.016	0.008	0.462	4.284	4.831	0.042	-0.038	-0.224
x		0.070	0.024	0.434	5.291	5.646	0.041	-0.067	-0.193
σ		0.077	0.014	0.049	1.267	1.716	0.013	0.025	0.038
%RSD		110.900	58.500	11.340	23.950	30.380	31.520	37.900	19.710

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	-0.174	-0.622	-0.761	0.273	0.141	0.535	0.000	0.085
2	22:18:32	-0.267	-0.633	-0.761	-0.100	0.232	0.781	0.000	0.096
3	22:19:15	-0.235	-0.804	-0.906	0.091	0.109	0.544	0.000	0.142
x		-0.225	-0.686	-0.809	0.088	0.161	0.620	0.000	0.108
σ		0.047	0.102	0.084	0.187	0.064	0.139	0.000	0.030
%RSD		21.050	14.870	10.330	212.500	39.640	22.440	0.000	28.290

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	85.165%	1.259	1.267	92.204%	0.023	0.002	-0.032	-0.000
2	22:18:32	85.966%	1.110	1.064	91.687%	0.013	0.025	-0.006	0.024
3	22:19:15	85.856%	1.157	1.089	90.221%	0.018	0.027	-0.012	0.018
x		85.662%	1.175	1.140	91.371%	0.018	0.018	-0.017	0.014
σ		0.434%	0.077	0.110	1.029%	0.005	0.014	0.013	0.013
%RSD		0.507	6.516	9.686	1.126	26.010	78.860	78.980	91.660

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	87.000%	0.349	0.593	0.584	0.112	0.127	85.834%	85.625%
2	22:18:32	86.386%	0.391	0.616	0.553	0.163	0.181	87.305%	87.510%
3	22:19:15	86.590%	0.320	0.525	0.446	0.234	0.180	87.871%	87.020%
x		86.658%	0.353	0.578	0.527	0.170	0.163	87.003%	86.718%
σ		0.313%	0.036	0.047	0.073	0.061	0.031	1.051%	0.978%
%RSD		0.361	10.160	8.181	13.770	36.120	19.160	1.208	1.128

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:17:49	0.030	0.030	0.227	0.238	0.234	90.909%
2	22:18:32	0.039	0.041	0.179	0.205	0.185	92.466%
3	22:19:15	0.036	0.043	0.212	0.192	0.200	92.793%
x		0.035	0.038	0.206	0.211	0.207	92.056%
σ		0.004	0.007	0.025	0.024	0.025	1.007%
%RSD		12.690	17.590	12.000	11.200	12.180	1.094

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	86.052%	0.007	9.163	9.799	0.000	2668.000	3357.000	3418.000
2	22:22:52	84.351%	0.025	8.897	9.182	0.000	2678.000	3429.000	3483.000
3	22:23:35	82.602%	0.017	9.101	9.371	0.000	2652.000	3450.000	3513.000
x		84.335%	0.016	9.054	9.451	0.000	2666.000	3412.000	3471.000
σ		1.725%	0.009	0.139	0.316	0.000	13.150	49.030	48.670
%RSD		2.045	54.520	1.539	3.343	0.000	0.493	1.437	1.402

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	579.000	3682.000	0.000	1221.000	11430.000	11700.000	87.009%	6.595
2	22:22:52	586.400	3699.000	0.000	1199.000	11580.000	11800.000	86.220%	5.151
3	22:23:35	594.300	3751.000	0.000	1203.000	11540.000	11680.000	85.799%	5.904
x		586.500	3710.000	0.000	1208.000	11520.000	11730.000	86.343%	5.883
σ		7.646	35.940	0.000	11.690	76.380	63.490	0.614%	0.722
%RSD		1.304	0.969	0.000	0.968	0.663	0.541	0.711	12.270

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	0.756	0.755	130.600	1214.000	1210.000	0.558	1.454	3.859
2	22:22:52	0.878	0.752	131.000	1199.000	1196.000	0.532	1.243	3.778
3	22:23:35	0.637	0.691	132.800	1225.000	1220.000	0.563	1.326	3.850
x		0.757	0.733	131.500	1213.000	1209.000	0.551	1.341	3.829
σ		0.120	0.036	1.144	13.050	12.080	0.017	0.106	0.044
%RSD		15.890	4.946	0.870	1.076	0.999	3.094	7.927	1.160

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	3.590	14.240	14.180	1.046	-0.113	0.020	0.000	27.340
2	22:22:52	3.616	14.080	15.240	1.128	-0.002	1.005	0.000	27.740
3	22:23:35	3.759	14.000	14.000	0.791	0.328	0.438	0.000	27.820
x		3.655	14.110	14.480	0.988	0.071	0.488	0.000	27.630
σ		0.091	0.123	0.672	0.176	0.229	0.495	0.000	0.255
%RSD		2.485	0.873	4.641	17.820	322.200	101.400	0.000	0.923

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	85.811%	1.143	1.145	89.707%	0.015	0.015	0.039	0.021
2	22:22:52	86.814%	1.082	0.981	89.140%	0.005	0.005	0.020	0.031
3	22:23:35	86.022%	1.111	1.043	89.362%	0.001	0.016	0.005	0.025
x		86.216%	1.112	1.056	89.403%	0.007	0.012	0.022	0.026
σ		0.528%	0.030	0.083	0.286%	0.007	0.006	0.017	0.005
%RSD		0.613	2.727	7.838	0.320	103.000	47.420	78.930	19.510

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	85.348%	0.973	0.648	0.589	86.290	84.570	87.122%	86.552%
2	22:22:52	85.535%	0.810	0.504	0.645	84.730	84.340	87.557%	87.766%
3	22:23:35	86.171%	0.775	0.503	0.486	83.370	83.360	88.221%	88.236%
x		85.685%	0.852	0.552	0.573	84.800	84.090	87.633%	87.518%
σ		0.432%	0.106	0.084	0.081	1.459	0.639	0.553%	0.869%
%RSD		0.504	12.380	15.150	14.080	1.721	0.760	0.631	0.993

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:09	0.026	0.033	1.157	1.071	1.091	97.250%
2	22:22:52	0.024	0.025	1.174	1.094	1.121	95.859%
3	22:23:35	0.030	0.025	1.156	1.084	1.113	95.119%
x		0.027	0.028	1.162	1.083	1.109	96.076%
σ		0.003	0.004	0.010	0.011	0.016	1.082%
%RSD		11.020	15.900	0.877	1.058	1.404	1.126

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	85.388%	-0.001	85.210	83.710	0.000	15130.000	23970.000	24020.000
2	22:27:10	81.392%	0.000	87.790	87.950	0.000	15140.000	24350.000	24800.000
3	22:27:53	83.257%	0.008	79.910	82.300	0.000	14740.000	24300.000	24650.000
x		83.345%	0.002	84.300	84.650	0.000	15010.000	24210.000	24490.000
σ		2.000%	0.005	4.016	2.942	0.000	226.700	209.500	413.700
%RSD		2.399	212.100	4.764	3.475	0.000	1.511	0.866	1.689

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	4.367	6597.000	0.000	3197.000	36810.000	37270.000	84.563%	0.363
2	22:27:10	5.213	6728.000	0.000	3170.000	37030.000	37010.000	84.324%	0.325
3	22:27:53	4.894	6579.000	0.000	3117.000	36400.000	37170.000	84.445%	0.324
x		4.824	6635.000	0.000	3161.000	36750.000	37150.000	84.444%	0.337
σ		0.427	81.480	0.000	40.600	320.400	129.600	0.120%	0.022
%RSD		8.859	1.228	0.000	1.284	0.872	0.349	0.142	6.525

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	0.080	0.349	3.169	11.180	149.800	0.051	3.803	3.052
2	22:27:10	0.004	0.375	3.169	3.377	130.900	0.035	3.484	2.943
3	22:27:53	-0.223	0.316	3.085	0.264	121.000	0.035	3.293	3.081
x		-0.046	0.347	3.141	4.940	133.900	0.041	3.527	3.025
σ		0.158	0.030	0.048	5.623	14.600	0.009	0.258	0.073
%RSD		341.200	8.523	1.544	113.800	10.900	22.550	7.308	2.408

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	3.193	3.907	4.035	0.874	-0.024	0.461	0.000	739.700
2	22:27:10	3.134	3.382	3.544	0.603	-0.286	0.664	0.000	726.300
3	22:27:53	3.047	3.542	3.461	0.705	-0.438	0.531	0.000	711.600
x		3.124	3.611	3.680	0.727	-0.249	0.552	0.000	725.900
σ		0.074	0.269	0.310	0.137	0.209	0.103	0.000	14.040
%RSD		2.354	7.454	8.435	18.810	83.940	18.680	0.000	1.934

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	82.990%	1.707	1.659	86.419%	-0.007	-0.005	-0.094	-0.054
2	22:27:10	84.443%	1.532	1.496	86.886%	-0.008	-0.001	0.009	0.025
3	22:27:53	84.839%	1.451	1.480	86.148%	0.004	-0.002	-0.098	-0.069
x		84.091%	1.563	1.545	86.484%	-0.004	-0.003	-0.061	-0.033
σ		0.973%	0.131	0.099	0.373%	0.006	0.002	0.061	0.050
%RSD		1.158	8.390	6.417	0.432	175.300	62.430	99.400	154.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	82.865%	0.860	0.316	0.323	133.200	130.900	85.467%	84.930%
2	22:27:10	83.751%	0.760	0.264	0.317	132.600	133.700	86.434%	86.975%
3	22:27:53	84.050%	0.775	0.254	0.252	131.100	131.200	87.475%	87.439%
x		83.555%	0.798	0.278	0.297	132.300	131.900	86.458%	86.448%
σ		0.616%	0.054	0.033	0.039	1.066	1.533	1.004%	1.335%
%RSD		0.737	6.714	11.870	13.260	0.806	1.162	1.162	1.544

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:27	0.014	0.014	2.315	2.225	2.319	90.682%
2	22:27:10	0.017	0.011	2.355	2.317	2.330	90.697%
3	22:27:53	0.019	0.005	2.316	2.404	2.343	90.588%
x		0.017	0.010	2.328	2.315	2.331	90.656%
σ		0.002	0.004	0.023	0.090	0.012	0.059%
%RSD		14.930	43.580	0.969	3.880	0.499	0.065

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	82.541%	-0.000	131.900	137.800	0.000	39240.000	10640.000	10630.000
2	22:31:26	78.943%	-0.017	138.200	142.900	0.000	39190.000	10860.000	11010.000
3	22:32:09	79.185%	-0.017	128.200	138.300	0.000	38700.000	10920.000	11040.000
x		80.223%	-0.012	132.800	139.700	0.000	39040.000	10800.000	10900.000
σ		2.011%	0.010	5.056	2.821	0.000	298.800	145.500	227.900
%RSD		2.507	84.280	3.808	2.020	0.000	0.765	1.346	2.092

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	6.084	5034.000	0.000	2167.000	25380.000	25470.000	85.775%	0.336
2	22:31:26	7.646	5142.000	0.000	2193.000	25530.000	25650.000	83.905%	0.523
3	22:32:09	7.125	5068.000	0.000	2142.000	25960.000	25850.000	83.074%	0.373
x		6.952	5081.000	0.000	2167.000	25620.000	25660.000	84.252%	0.410
σ		0.795	55.100	0.000	25.500	299.500	188.500	1.383%	0.099
%RSD		11.440	1.084	0.000	1.177	1.169	0.735	1.642	24.210

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	0.012	0.292	2.202	77.560	164.800	0.036	-0.012	2.236
2	22:31:26	-0.039	0.204	2.238	77.530	164.400	0.026	0.001	2.193
3	22:32:09	-0.005	0.205	2.104	75.450	156.700	0.013	0.021	2.213
x		-0.011	0.234	2.181	76.850	162.000	0.025	0.004	2.214
σ		0.026	0.050	0.069	1.209	4.555	0.012	0.017	0.021
%RSD		238.200	21.560	3.177	1.574	2.812	46.640	476.100	0.967

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	2.023	1.723	1.641	0.191	0.189	0.269	0.000	349.300
2	22:31:26	2.134	1.899	2.441	0.269	0.155	0.974	0.000	351.000
3	22:32:09	2.134	1.759	1.555	0.342	0.630	0.347	0.000	349.700
x		2.097	1.794	1.879	0.267	0.325	0.530	0.000	350.000
σ		0.064	0.093	0.489	0.075	0.265	0.387	0.000	0.890
%RSD		3.069	5.189	26.000	28.100	81.650	72.960	0.000	0.254

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	84.322%	1.219	1.135	86.563%	-0.008	-0.004	0.001	0.032
2	22:31:26	83.635%	1.114	1.198	87.120%	-0.007	-0.001	-0.068	-0.044
3	22:32:09	84.024%	1.214	1.125	85.511%	-0.003	0.001	-0.139	-0.099
x		83.994%	1.183	1.153	86.398%	-0.006	-0.001	-0.069	-0.037
σ		0.345%	0.059	0.040	0.817%	0.002	0.002	0.070	0.066
%RSD		0.410	5.019	3.437	0.946	41.320	186.400	101.600	176.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	84.340%	0.434	0.135	0.144	140.600	140.500	86.899%	86.599%
2	22:31:26	84.148%	0.462	0.122	0.123	143.800	141.000	87.539%	88.236%
3	22:32:09	84.022%	0.415	0.149	0.140	142.900	142.500	87.848%	87.967%
x		84.170%	0.437	0.135	0.136	142.400	141.300	87.429%	87.601%
σ		0.160%	0.024	0.014	0.011	1.654	1.017	0.484%	0.878%
%RSD		0.190	5.411	10.350	8.076	1.161	0.720	0.554	1.002

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:43	0.002	0.006	0.310	0.291	0.286	92.159%
2	22:31:26	-0.002	0.007	0.256	0.258	0.260	92.851%
3	22:32:09	-0.002	0.001	0.210	0.212	0.232	92.778%
x		-0.001	0.004	0.259	0.254	0.259	92.596%
σ		0.002	0.003	0.050	0.040	0.027	0.380%
%RSD		353.300	72.570	19.340	15.680	10.330	0.410

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	87.159%	0.172	77.250	80.910	0.000	154.500	128.700	128.100
2	22:35:43	86.301%	0.215	77.850	82.140	0.000	152.800	127.700	127.700
3	22:36:26	85.817%	0.125	83.460	82.950	0.000	155.000	126.200	129.600
x		86.426%	0.171	79.520	82.000	0.000	154.100	127.500	128.500
σ		0.680%	0.045	3.428	1.030	0.000	1.123	1.277	1.024
%RSD		0.786	26.580	4.311	1.256	0.000	0.729	1.001	0.797

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	586.100	1049.000	0.000	133.900	86.520	86.040	86.661%	14.200
2	22:35:43	586.100	1058.000	0.000	128.200	68.850	87.240	87.683%	14.990
3	22:36:26	594.800	1070.000	0.000	129.700	132.500	79.920	86.026%	15.860
x		589.000	1059.000	0.000	130.600	95.940	84.400	86.790%	15.020
σ		5.007	10.490	0.000	2.976	32.830	3.925	0.836%	0.832
%RSD		0.850	0.990	0.000	2.278	34.220	4.650	0.963	5.540

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	1.358	5.149	39.110	673.400	653.900	0.267	3.766	0.357
2	22:35:43	1.417	5.076	38.870	677.800	664.800	0.236	3.623	0.418
3	22:36:26	1.528	5.246	39.130	681.900	677.800	0.218	3.505	0.418
x		1.434	5.157	39.030	677.700	665.500	0.240	3.631	0.397
σ		0.086	0.085	0.145	4.274	11.970	0.024	0.131	0.035
%RSD		6.018	1.653	0.371	0.631	1.799	10.170	3.601	8.858

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	0.364	2.400	2.750	0.038	-0.046	0.098	0.000	0.503
2	22:35:43	0.341	2.417	2.810	-0.080	0.035	0.393	0.000	0.530
3	22:36:26	0.297	2.591	2.455	0.115	-0.158	0.605	0.000	0.498
x		0.334	2.470	2.672	0.024	-0.056	0.365	0.000	0.510
σ		0.034	0.106	0.190	0.098	0.097	0.255	0.000	0.017
%RSD		10.260	4.290	7.125	405.000	171.900	69.670	0.000	3.356

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	85.383%	0.749	0.720	90.767%	-0.001	-0.003	-0.011	0.007
2	22:35:43	85.488%	0.717	0.863	90.831%	-0.005	-0.002	-0.005	-0.012
3	22:36:26	85.230%	0.662	0.692	89.875%	0.001	-0.005	-0.037	-0.017
x		85.367%	0.709	0.758	90.491%	-0.002	-0.003	-0.018	-0.008
σ		0.130%	0.044	0.092	0.534%	0.003	0.002	0.017	0.013
%RSD		0.152	6.220	12.120	0.591	152.100	54.900	96.140	167.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	85.871%	-0.072	0.092	0.070	17.090	17.090	86.256%	86.178%
2	22:35:43	86.378%	-0.026	0.072	0.076	17.650	17.130	87.755%	87.761%
3	22:36:26	86.565%	-0.040	0.055	0.077	16.910	17.180	87.284%	87.526%
x		86.271%	-0.046	0.073	0.074	17.220	17.140	87.099%	87.155%
σ		0.359%	0.024	0.018	0.004	0.390	0.046	0.766%	0.854%
%RSD		0.416	51.700	24.690	5.111	2.265	0.271	0.880	0.980

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:35:00	0.004	0.011	0.426	0.388	0.402	91.204%
2	22:35:43	0.001	0.004	0.338	0.368	0.347	92.407%
3	22:36:26	0.001	0.006	0.348	0.334	0.341	91.209%
x		0.002	0.007	0.371	0.363	0.364	91.607%
σ		0.002	0.004	0.048	0.027	0.034	0.693%
%RSD		83.590	54.750	12.960	7.537	9.240	0.757

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	86.850%	0.015	321.000	317.000	0.000	942.800	54.400	53.640
2	22:40:01	84.748%	0.008	328.900	314.400	0.000	917.000	53.870	55.880
3	22:40:44	82.288%	0.026	331.500	326.300	0.000	935.400	55.120	55.860
x		84.629%	0.016	327.100	319.200	0.000	931.700	54.470	55.130
σ		2.283%	0.009	5.498	6.250	0.000	13.290	0.630	1.286
%RSD		2.698	57.220	1.681	1.958	0.000	1.426	1.156	2.333

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	51.630	265.600	0.000	92.140	163.500	140.000	86.462%	2.738
2	22:40:01	52.690	264.500	0.000	88.970	137.700	149.700	86.343%	2.665
3	22:40:44	51.710	270.600	0.000	86.560	171.500	143.500	85.536%	2.653
x		52.010	266.900	0.000	89.220	157.500	144.400	86.114%	2.685
σ		0.587	3.215	0.000	2.803	17.670	4.934	0.503%	0.046
%RSD		1.128	1.205	0.000	3.141	11.220	3.417	0.585	1.717

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	0.141	0.294	2.770	81.100	84.720	0.013	0.076	-0.204
2	22:40:01	0.144	0.315	2.695	75.610	74.760	0.028	0.076	-0.178
3	22:40:44	0.161	0.342	2.693	73.420	71.920	0.023	0.083	-0.202
x		0.148	0.317	2.720	76.710	77.130	0.021	0.078	-0.195
σ		0.011	0.024	0.044	3.955	6.720	0.008	0.004	0.015
%RSD		7.303	7.554	1.603	5.157	8.712	36.680	5.011	7.544

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	-0.246	-0.550	-0.364	0.233	-0.120	0.821	0.000	0.718
2	22:40:01	-0.149	-0.650	-0.494	0.071	0.211	0.595	0.000	0.741
3	22:40:44	-0.232	-0.547	-0.511	0.213	0.024	1.338	0.000	0.735
x		-0.209	-0.582	-0.456	0.172	0.039	0.918	0.000	0.731
σ		0.053	0.059	0.081	0.088	0.166	0.381	0.000	0.012
%RSD		25.150	10.070	17.720	51.150	429.800	41.480	0.000	1.631

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	84.225%	0.285	0.277	89.603%	-0.009	-0.005	-0.021	-0.007
2	22:40:01	85.005%	0.276	0.330	89.434%	-0.005	-0.005	-0.048	-0.030
3	22:40:44	84.684%	0.256	0.292	89.125%	-0.005	0.001	-0.003	-0.003
x		84.638%	0.273	0.300	89.387%	-0.006	-0.003	-0.024	-0.013
σ		0.392%	0.015	0.028	0.243%	0.003	0.003	0.022	0.014
%RSD		0.463	5.390	9.193	0.271	41.990	110.600	91.620	107.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	85.821%	-0.084	0.046	0.045	5.739	5.712	85.630%	86.151%
2	22:40:01	86.127%	-0.127	0.022	0.001	5.557	5.770	86.721%	86.610%
3	22:40:44	84.758%	-0.134	0.028	0.063	5.463	5.796	88.264%	87.203%
x		85.569%	-0.115	0.032	0.036	5.586	5.759	86.872%	86.654%
σ		0.718%	0.027	0.012	0.032	0.140	0.043	1.323%	0.527%
%RSD		0.840	23.560	38.530	87.750	2.505	0.743	1.523	0.608

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:18	-0.004	-0.005	0.162	0.173	0.162	92.167%
2	22:40:01	-0.006	-0.007	0.110	0.096	0.087	92.779%
3	22:40:44	-0.007	-0.006	0.054	0.055	0.055	93.300%
x		-0.006	-0.006	0.109	0.108	0.101	92.749%
σ		0.002	0.001	0.054	0.060	0.055	0.567%
%RSD		30.470	24.270	49.500	55.580	54.200	0.612

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	88.104%	0.489	2022.000	1995.000	0.000	2590.000	302.000	300.600
2	22:44:18	87.403%	0.525	2016.000	1991.000	0.000	2532.000	304.400	307.700
3	22:45:01	87.194%	0.518	1959.000	2013.000	0.000	2587.000	300.900	302.200
x		87.567%	0.511	1999.000	2000.000	0.000	2569.000	302.400	303.500
σ		0.477%	0.019	34.420	11.800	0.000	32.500	1.779	3.714
%RSD		0.545	3.799	1.722	0.590	0.000	1.265	0.588	1.224

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	3935.000	1353.000	0.000	1091.000	1061.000	1069.000	87.889%	9.723
2	22:44:18	3967.000	1354.000	0.000	1117.000	1100.000	1064.000	88.563%	10.030
3	22:45:01	3943.000	1357.000	0.000	1124.000	1133.000	1054.000	87.762%	9.269
x		3948.000	1355.000	0.000	1111.000	1098.000	1062.000	88.071%	9.675
σ		16.760	1.854	0.000	17.180	36.110	7.641	0.430%	0.384
%RSD		0.424	0.137	0.000	1.547	3.288	0.719	0.489	3.969

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	0.114	1.949	977.200	360.800	348.800	1.191	4.987	4.516
2	22:44:18	0.094	2.063	969.900	360.200	355.800	1.136	4.951	4.710
3	22:45:01	-0.014	2.031	974.100	356.500	348.200	1.208	4.924	4.381
x		0.064	2.014	973.700	359.200	350.900	1.178	4.954	4.536
σ		0.069	0.059	3.653	2.288	4.235	0.037	0.032	0.166
%RSD		107.200	2.923	0.375	0.637	1.207	3.177	0.638	3.652

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	4.496	20.560	19.820	0.066	-0.240	0.184	0.000	4.271
2	22:44:18	4.381	20.190	19.480	0.077	-0.234	0.355	0.000	4.256
3	22:45:01	4.394	20.250	20.770	0.237	-0.003	0.493	0.000	4.352
x		4.424	20.340	20.020	0.127	-0.159	0.344	0.000	4.293
σ		0.063	0.198	0.668	0.096	0.135	0.155	0.000	0.052
%RSD		1.420	0.974	3.335	75.370	85.130	44.990	0.000	1.202

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	91.975%	0.402	0.494	90.339%	0.002	-0.000	0.035	0.093
2	22:44:18	93.283%	0.517	0.440	90.704%	0.008	0.012	-0.026	0.029
3	22:45:01	92.680%	0.439	0.495	90.855%	-0.003	0.004	0.114	0.122
x		92.646%	0.452	0.476	90.633%	0.002	0.005	0.041	0.081
σ		0.655%	0.059	0.031	0.265%	0.005	0.006	0.070	0.047
%RSD		0.707	13.010	6.583	0.293	221.200	122.200	172.600	58.070

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	86.195%	-0.122	0.021	0.006	83.700	83.690	87.691%	86.854%
2	22:44:18	87.234%	-0.053	0.035	0.007	83.750	83.860	88.719%	88.520%
3	22:45:01	87.266%	-0.121	0.039	0.017	85.620	84.630	89.165%	89.036%
x		86.898%	-0.099	0.032	0.010	84.360	84.060	88.525%	88.137%
σ		0.609%	0.039	0.010	0.006	1.093	0.505	0.756%	1.141%
%RSD		0.701	39.730	30.540	61.540	1.296	0.601	0.853	1.294

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:43:35	-0.005	-0.004	0.770	0.742	0.765	92.995%
2	22:44:18	-0.006	-0.005	0.787	0.754	0.778	93.552%
3	22:45:01	-0.006	-0.001	0.756	0.729	0.742	93.377%
x		-0.006	-0.003	0.771	0.742	0.761	93.308%
σ		0.001	0.002	0.015	0.013	0.018	0.285%
%RSD		9.809	55.210	1.990	1.720	2.407	0.305

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	87.724%	0.015	390.000	377.000	0.000	1028.000	60.670	59.640
2	22:48:36	84.492%	0.016	383.600	374.300	0.000	976.800	59.440	60.170
3	22:49:19	82.956%	0.043	388.900	381.500	0.000	1004.000	56.830	60.470
x		85.058%	0.025	387.500	377.600	0.000	1003.000	58.980	60.090
σ		2.434%	0.016	3.402	3.634	0.000	25.390	1.957	0.420
%RSD		2.862	64.590	0.878	0.962	0.000	2.532	3.318	0.699

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	86.040	300.700	0.000	106.900	179.300	159.300	86.008%	2.944
2	22:48:36	86.380	301.200	0.000	105.000	206.700	153.200	85.761%	3.545
3	22:49:19	86.310	302.100	0.000	104.200	206.600	160.000	85.081%	2.958
x		86.240	301.300	0.000	105.400	197.500	157.500	85.617%	3.149
σ		0.183	0.720	0.000	1.357	15.770	3.731	0.480%	0.343
%RSD		0.212	0.239	0.000	1.288	7.985	2.368	0.561	10.890

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	0.143	0.275	9.671	86.660	83.580	0.028	0.098	-0.133
2	22:48:36	0.257	0.409	9.518	83.690	84.460	0.024	0.109	-0.122
3	22:49:19	0.190	0.286	9.318	80.590	79.630	0.048	0.152	-0.159
x		0.197	0.323	9.502	83.640	82.560	0.033	0.120	-0.138
σ		0.057	0.074	0.177	3.034	2.574	0.013	0.029	0.019
%RSD		29.050	22.960	1.866	3.628	3.118	39.160	23.850	13.820

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	-0.240	-0.253	-0.304	-0.027	-0.344	0.432	0.000	0.806
2	22:48:36	-0.096	-0.426	-0.395	0.118	0.191	0.818	0.000	0.816
3	22:49:19	-0.163	-0.363	-0.524	-0.033	-0.091	0.844	0.000	0.819
x		-0.167	-0.347	-0.408	0.019	-0.082	0.698	0.000	0.814
σ		0.072	0.088	0.111	0.085	0.268	0.231	0.000	0.007
%RSD		43.330	25.290	27.160	444.800	328.300	33.110	0.000	0.855

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	83.637%	0.277	0.208	88.845%	-0.001	-0.003	-0.063	-0.039
2	22:48:36	83.742%	0.241	0.240	88.690%	-0.008	0.002	-0.022	-0.018
3	22:49:19	83.732%	0.202	0.224	88.182%	-0.004	-0.001	-0.069	-0.040
x		83.704%	0.240	0.224	88.572%	-0.004	-0.001	-0.052	-0.032
σ		0.058%	0.037	0.016	0.347%	0.003	0.002	0.026	0.013
%RSD		0.069	15.480	7.095	0.392	74.570	363.900	49.770	39.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	83.322%	-0.142	0.007	0.012	6.377	6.752	84.429%	84.417%
2	22:48:36	85.052%	-0.185	0.014	0.010	6.511	7.076	85.424%	85.567%
3	22:49:19	84.738%	-0.174	0.013	0.012	6.619	6.471	85.930%	86.776%
x		84.371%	-0.167	0.011	0.011	6.503	6.766	85.261%	85.586%
σ		0.922%	0.022	0.004	0.001	0.121	0.303	0.763%	1.180%
%RSD		1.092	13.140	32.830	8.400	1.865	4.472	0.895	1.379

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:53	-0.008	-0.009	0.197	0.177	0.177	90.634%
2	22:48:36	0.000	-0.005	0.117	0.104	0.097	91.893%
3	22:49:19	-0.007	-0.005	0.098	0.080	0.098	92.273%
x		-0.005	-0.006	0.137	0.120	0.124	91.600%
σ		0.004	0.003	0.052	0.050	0.046	0.858%
%RSD		90.460	41.790	38.270	41.840	37.340	0.936

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	85.731%	-0.010	16.660	15.070	0.000	9.473	2.147	1.979
2	22:52:54	84.027%	-0.009	11.750	12.270	0.000	9.868	1.443	1.866
3	22:53:37	83.516%	0.008	12.410	12.070	0.000	9.282	1.152	1.163
x		84.425%	-0.004	13.600	13.140	0.000	9.541	1.580	1.670
σ		1.160%	0.010	2.663	1.677	0.000	0.299	0.511	0.442
%RSD		1.374	281.000	19.580	12.760	0.000	3.130	32.360	26.480

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	2.637	4.617	0.000	1.940	12.280	-4.328	85.109%	-0.045
2	22:52:54	2.885	4.082	0.000	1.372	20.180	-3.968	84.390%	-0.102
3	22:53:37	2.261	4.825	0.000	0.830	12.730	-6.950	83.609%	-0.101
x		2.595	4.508	0.000	1.381	15.060	-5.082	84.369%	-0.082
σ		0.314	0.383	0.000	0.555	4.435	1.628	0.750%	0.033
%RSD		12.110	8.496	0.000	40.200	29.440	32.030	0.889	39.440

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	0.058	0.053	0.462	-4.014	2.144	0.002	-0.085	-0.070
2	22:52:54	-0.022	0.015	0.485	-5.970	-0.918	-0.013	-0.095	-0.079
3	22:53:37	-0.072	0.041	0.457	-5.781	-2.937	-0.002	-0.094	-0.082
x		-0.012	0.036	0.468	-5.255	-0.571	-0.004	-0.091	-0.077
σ		0.065	0.019	0.015	1.079	2.558	0.008	0.006	0.006
%RSD		548.100	53.170	3.226	20.530	448.400	188.300	6.099	8.225

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	-0.143	-0.362	-0.397	-0.097	0.287	0.771	0.000	0.006
2	22:52:54	-0.119	-0.351	-0.394	0.304	0.197	1.426	0.000	0.008
3	22:53:37	-0.186	-0.465	-0.402	0.288	-0.366	1.053	0.000	0.014
x		-0.149	-0.393	-0.398	0.165	0.039	1.083	0.000	0.009
σ		0.034	0.062	0.004	0.227	0.354	0.329	0.000	0.004
%RSD		22.810	15.910	0.996	137.200	898.200	30.330	0.000	47.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	82.719%	0.196	0.188	88.791%	-0.004	-0.007	-0.021	-0.003
2	22:52:54	82.884%	0.207	0.195	88.189%	-0.004	-0.004	-0.020	-0.010
3	22:53:37	82.986%	0.164	0.232	88.692%	-0.007	-0.006	0.010	0.004
x		82.863%	0.189	0.205	88.557%	-0.005	-0.006	-0.010	-0.003
σ		0.135%	0.023	0.024	0.323%	0.001	0.002	0.018	0.007
%RSD		0.163	12.040	11.580	0.365	24.730	31.550	173.800	223.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	83.714%	-0.138	0.001	-0.016	0.090	0.151	83.986%	83.926%
2	22:52:54	83.999%	-0.132	-0.005	-0.005	0.069	0.119	85.294%	84.517%
3	22:53:37	83.895%	-0.178	0.021	-0.023	0.123	0.123	85.110%	85.295%
x		83.869%	-0.150	0.006	-0.015	0.094	0.131	84.796%	84.579%
σ		0.144%	0.025	0.014	0.010	0.027	0.017	0.708%	0.686%
%RSD		0.172	16.750	240.000	64.530	28.920	13.310	0.835	0.811

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:52:11	-0.006	-0.010	0.111	0.107	0.109	92.142%
2	22:52:54	-0.010	-0.010	0.078	0.063	0.089	91.972%
3	22:53:37	-0.012	-0.003	0.073	0.079	0.064	91.919%
x		-0.009	-0.008	0.087	0.083	0.087	92.011%
σ		0.003	0.004	0.021	0.022	0.022	0.116%
%RSD		36.560	49.620	23.720	26.890	25.580	0.127

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	90.487%	-0.010	7.198	7.516	0.000	4.030	0.036	0.151
2	22:57:12	86.969%	-0.010	8.214	6.628	0.000	5.063	0.663	0.129
3	22:57:55	85.598%	-0.026	6.863	6.554	0.000	4.942	1.167	0.092
x		87.685%	-0.016	7.425	6.899	0.000	4.678	0.622	0.124
σ		2.522%	0.009	0.704	0.535	0.000	0.565	0.567	0.030
%RSD		2.876	60.460	9.474	7.756	0.000	12.070	91.110	23.970

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-1.163	0.526	0.000	-0.125	2.532	-10.140	86.302%	-0.218
2	22:57:12	-0.899	0.599	0.000	-1.455	4.644	-7.783	85.201%	-0.103
3	22:57:55	-1.302	0.682	0.000	-3.190	15.960	-11.130	85.485%	-0.199
x		-1.121	0.603	0.000	-1.590	7.713	-9.687	85.663%	-0.173
σ		0.205	0.078	0.000	1.537	7.222	1.722	0.572%	0.062
%RSD		18.260	12.940	0.000	96.700	93.640	17.780	0.668	35.660

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	0.044	-0.003	0.098	-8.735	-6.017	0.005	-0.112	-0.244
2	22:57:12	0.058	-0.021	0.127	-10.120	-8.694	-0.010	-0.090	-0.273
3	22:57:55	0.056	-0.043	0.126	-10.950	-7.310	-0.003	-0.127	-0.262
x		0.052	-0.022	0.117	-9.937	-7.340	-0.003	-0.110	-0.260
σ		0.008	0.020	0.017	1.121	1.339	0.008	0.018	0.015
%RSD		14.530	90.210	14.130	11.280	18.240	274.300	16.850	5.592

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-0.272	0.638	0.314	0.045	0.077	0.291	0.000	-0.016
2	22:57:12	-0.298	0.583	0.519	0.083	0.248	0.567	0.000	-0.002
3	22:57:55	-0.307	0.571	0.496	0.040	0.304	0.709	0.000	-0.008
x		-0.292	0.597	0.443	0.056	0.210	0.522	0.000	-0.008
σ		0.018	0.036	0.113	0.024	0.118	0.212	0.000	0.007
%RSD		6.251	5.996	25.400	42.520	56.490	40.610	0.000	84.310

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	83.422%	0.202	0.168	88.943%	-0.000	-0.004	-0.070	-0.035
2	22:57:12	83.338%	0.166	0.153	89.479%	-0.009	-0.007	-0.037	-0.010
3	22:57:55	83.427%	0.167	0.170	88.806%	-0.007	-0.007	-0.012	-0.001
x		83.396%	0.178	0.164	89.076%	-0.005	-0.006	-0.040	-0.015
σ		0.050%	0.021	0.010	0.356%	0.005	0.002	0.029	0.018
%RSD		0.060	11.620	5.898	0.399	86.740	32.760	73.820	118.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	85.024%	-0.211	-0.002	0.002	-0.032	0.021	83.714%	83.545%
2	22:57:12	83.573%	-0.190	0.000	-0.003	-0.012	0.005	85.788%	85.136%
3	22:57:55	85.013%	-0.185	-0.003	-0.005	-0.025	0.031	85.454%	85.510%
x		84.537%	-0.195	-0.002	-0.002	-0.023	0.019	84.985%	84.730%
σ		0.834%	0.014	0.002	0.004	0.010	0.013	1.113%	1.044%
%RSD		0.987	7.087	100.200	184.500	44.770	68.210	1.310	1.232

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	22:56:29	-0.007	-0.009	0.095	0.099	0.105	91.696%
2	22:57:12	-0.006	-0.006	0.069	0.055	0.060	92.038%
3	22:57:55	-0.009	-0.010	0.040	0.018	0.031	91.682%
x		-0.007	-0.008	0.068	0.057	0.065	91.805%
σ		0.002	0.002	0.028	0.041	0.038	0.202%
%RSD		22.700	23.140	40.740	71.050	57.710	0.219

180-7631-A-1-A@50 2/5/2012 11:00:05 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	86.388%	0.582	1019.000	1017.000	0.000	2470.000	198.800	196.400
2	23:01:31	85.353%	0.741	1015.000	1052.000	0.000	2440.000	198.300	199.800
3	23:02:14	86.552%	0.798	981.600	1012.000	0.000	2398.000	194.500	196.300
x		86.097%	0.707	1005.000	1027.000	0.000	2436.000	197.200	197.500
σ		0.650%	0.112	20.470	22.070	0.000	35.880	2.365	1.989
%RSD		0.755	15.830	2.037	2.148	0.000	1.473	1.199	1.007

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	2209.000	1846.000	0.000	386.700	393.500	299.200	86.958%	14.030
2	23:01:31	2234.000	1878.000	0.000	380.400	301.700	311.200	86.091%	15.190
3	23:02:14	2192.000	1845.000	0.000	375.700	326.400	297.900	85.950%	14.710
x		2212.000	1856.000	0.000	380.900	340.500	302.800	86.333%	14.640
σ		21.050	18.690	0.000	5.537	47.490	7.372	0.546%	0.582
%RSD		0.952	1.007	0.000	1.454	13.950	2.435	0.633	3.973

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	0.777	1.127	215.000	899.900	878.900	0.183	1.635	19.100
2	23:01:31	0.860	1.017	215.500	905.900	892.200	0.148	1.663	19.300
3	23:02:14	0.849	1.086	215.800	901.300	890.000	0.177	1.638	19.050
x		0.829	1.077	215.400	902.400	887.100	0.169	1.645	19.150
σ		0.045	0.056	0.433	3.160	7.106	0.019	0.015	0.133
%RSD		5.446	5.184	0.201	0.350	0.801	11.010	0.940	0.693

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	18.900	14.860	15.170	0.080	-0.021	0.500	0.000	1.723
2	23:01:31	19.140	15.750	14.780	0.127	-0.052	0.826	0.000	1.674
3	23:02:14	19.350	14.890	14.640	0.087	0.353	0.297	0.000	1.727
x		19.130	15.170	14.860	0.098	0.093	0.541	0.000	1.708
σ		0.224	0.503	0.271	0.025	0.225	0.267	0.000	0.030
%RSD		1.171	3.320	1.822	25.950	241.100	49.340	0.000	1.738

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	86.711%	0.266	0.286	89.494%	-0.005	-0.002	0.045	0.117
2	23:01:31	87.494%	0.277	0.350	89.860%	-0.006	-0.006	0.028	0.048
3	23:02:14	87.735%	0.263	0.272	89.530%	-0.009	-0.002	-0.012	0.039
x		87.313%	0.269	0.303	89.628%	-0.006	-0.003	0.020	0.068
σ		0.535%	0.007	0.041	0.202%	0.002	0.003	0.030	0.042
%RSD		0.613	2.771	13.690	0.226	35.350	86.070	144.100	62.450

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	85.423%	-0.074	0.023	0.001	8.265	8.658	86.468%	86.689%
2	23:01:31	86.453%	-0.019	0.022	0.011	8.852	9.128	87.329%	87.824%
3	23:02:14	86.472%	-0.029	0.005	0.012	8.453	8.526	87.628%	87.735%
x		86.116%	-0.041	0.017	0.008	8.523	8.771	87.142%	87.416%
σ		0.601%	0.029	0.010	0.006	0.299	0.316	0.602%	0.631%
%RSD		0.697	71.730	60.250	72.790	3.514	3.607	0.691	0.722

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:00:48	-0.015	-0.012	1.327	1.129	1.206	93.943%
2	23:01:31	-0.006	-0.005	1.241	1.165	1.216	94.295%
3	23:02:14	-0.008	-0.005	1.261	1.208	1.237	94.182%
x		-0.010	-0.007	1.276	1.167	1.220	94.140%
σ		0.005	0.004	0.045	0.040	0.016	0.180%
%RSD		46.510	54.090	3.515	3.408	1.326	0.191

CCV 309497 2/5/2012 11:07:15 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	86.545%	98.190	98.330	99.910	0.000	50630.000	49940.000	50400.000
2	23:08:41	83.398%	101.600	104.900	100.600	0.000	50650.000	50910.000	51240.000
3	23:09:24	81.964%	99.570	103.600	102.000	0.000	50030.000	51320.000	52290.000
x		83.969%	99.789%	102.277%	100.849%	0.000	100.876%	101.442%	102.626%
σ		2.343%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.791	1.726	3.405	1.060	0.000	0.701	1.399	1.847

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	499.900	5215.000	0.000	52930.000	50080.000	48550.000	85.282%	99.320
2	23:08:41	513.000	5290.000	0.000	52770.000	49650.000	48320.000	85.225%	95.960
3	23:09:24	518.200	5309.000	0.000	51680.000	48840.000	48790.000	85.405%	99.300
x		102.072%	105.422%	0.000	104.921%	99.044%	97.105%	85.304%	98.194%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.092%	n/a
%RSD		1.843	0.942	0.000	1.299	1.272	0.490	0.108	1.968

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	95.670	97.050	503.300	25860.000	25320.000	96.590	98.130	99.870
2	23:08:41	97.350	97.550	504.800	25920.000	25540.000	97.910	95.820	97.100
3	23:09:24	97.880	96.930	506.300	25910.000	25290.000	96.560	94.320	98.240
x		96.967%	97.177%	100.955%	103.592%	101.536%	97.019%	96.090%	98.402%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.191	0.335	0.300	0.111	0.522	0.793	1.996	1.411

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	99.400	100.200	102.200	101.200	102.400	100.800	0.000	99.240
2	23:08:41	98.290	102.200	100.100	101.200	102.300	105.400	0.000	100.100
3	23:09:24	97.110	100.200	100.500	100.000	100.500	100.800	0.000	99.050
x		98.269%	100.859%	100.925%	100.798%	101.738%	102.332%	0.000	99.469%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.166	1.138	1.118	0.682	1.054	2.595	0.000	0.566

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	81.103%	93.300	92.170	83.270%	95.660	97.510	99.360	100.700
2	23:08:41	82.107%	97.890	97.060	83.734%	96.030	97.810	97.720	100.900
3	23:09:24	83.260%	99.570	97.270	84.456%	95.780	96.700	99.050	99.720
x		82.157%	96.920%	95.501%	83.820%	95.827%	97.336%	98.710%	100.443%
σ		1.080%	n/a	n/a	0.598%	n/a	n/a	n/a	n/a
%RSD		1.314	3.349	3.027	0.713	0.198	0.589	0.878	0.626

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	81.103%	97.070	92.120	92.160	97.990	99.810	83.922%	83.189%
2	23:08:41	82.380%	96.810	95.630	96.360	99.690	97.420	85.417%	85.089%
3	23:09:24	82.971%	98.220	98.470	97.730	98.710	99.250	85.920%	85.785%
x		82.151%	97.369%	95.404%	95.416%	98.797%	98.826%	85.086%	84.688%
σ		0.955%	n/a	n/a	n/a	n/a	n/a	1.039%	1.344%
%RSD		1.162	0.768	3.335	3.042	0.866	1.267	1.221	1.587

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:58	91.990	91.420	92.560	92.640	92.260	87.740%
2	23:08:41	92.610	93.440	94.790	93.600	94.030	88.557%
3	23:09:24	94.300	93.360	95.300	94.890	95.150	88.660%
x		92.968%	92.742%	94.217%	93.709%	93.817%	88.319%
σ		n/a	n/a	n/a	n/a	n/a	0.504%
%RSD		1.288	1.231	1.546	1.204	1.552	0.571

CCB9 2/5/2012 11:15:10 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	96.920%	-0.019	3.779	3.341	0.000	10.020	16.120	15.820
2	23:16:36	95.404%	0.004	4.070	3.780	0.000	20.570	24.810	25.140
3	23:17:19	94.466%	0.019	4.625	3.855	0.000	25.440	30.000	29.790
x		95.597%	0.001	4.158	3.659	0.000	18.680	23.640	23.580
σ		1.238%	0.019	0.430	0.278	0.000	7.884	7.011	7.114
%RSD		1.295	1440.000	10.340	7.586	0.000	42.210	29.660	30.160

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	-0.341	-0.279	0.000	4.718	30.490	15.460	98.089%	-0.135
2	23:16:36	0.159	0.971	0.000	12.980	24.340	19.370	96.892%	-0.032
3	23:17:19	0.556	1.015	0.000	17.470	32.780	29.350	96.766%	0.036
x		0.125	0.569	0.000	11.720	29.210	21.390	97.249%	-0.043
σ		0.450	0.735	0.000	6.470	4.364	7.159	0.730%	0.086
%RSD		360.600	129.200	0.000	55.180	14.940	33.460	0.751	197.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	0.056	-0.034	0.179	-0.791	5.551	0.018	-0.109	-0.201
2	23:16:36	-0.007	0.013	0.306	0.732	3.483	0.042	-0.085	-0.255
3	23:17:19	0.042	0.003	0.378	1.934	5.217	0.043	-0.015	-0.222
x		0.031	-0.006	0.288	0.625	4.750	0.034	-0.070	-0.226
σ		0.033	0.024	0.101	1.366	1.110	0.014	0.049	0.027
%RSD		107.700	393.100	34.980	218.600	23.370	42.210	69.620	11.970

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	-0.261	-0.813	-0.954	0.128	-0.996	0.459	0.000	0.086
2	23:16:36	-0.284	-0.603	-0.602	0.036	-0.889	0.308	0.000	0.128
3	23:17:19	-0.268	-0.788	-0.762	0.257	-0.883	0.570	0.000	0.134
x		-0.271	-0.735	-0.773	0.141	-0.923	0.445	0.000	0.116
σ		0.012	0.114	0.176	0.111	0.063	0.132	0.000	0.026
%RSD		4.364	15.570	22.790	78.930	6.878	29.530	0.000	22.560

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	91.821%	0.472	0.480	97.618%	0.016	0.008	-0.057	-0.024
2	23:16:36	91.657%	0.378	0.428	97.760%	0.035	0.030	-0.032	-0.006
3	23:17:19	91.501%	0.448	0.390	97.047%	0.055	0.035	-0.094	-0.032
x		91.660%	0.433	0.433	97.475%	0.035	0.025	-0.061	-0.021
σ		0.160%	0.049	0.045	0.377%	0.020	0.014	0.031	0.014
%RSD		0.175	11.300	10.420	0.387	55.990	57.920	50.720	65.380

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	92.175%	-0.076	0.502	0.475	0.030	0.086	85.952%	85.716%
2	23:16:36	92.077%	-0.094	0.468	0.453	0.124	0.149	87.413%	87.631%
3	23:17:19	92.256%	-0.070	0.374	0.497	0.180	0.167	87.611%	87.691%
x		92.169%	-0.080	0.448	0.475	0.112	0.134	86.992%	87.013%
σ		0.090%	0.012	0.066	0.022	0.076	0.042	0.906%	1.123%
%RSD		0.097	15.610	14.790	4.561	67.910	31.650	1.042	1.291

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:15:53	0.014	0.015	0.165	0.147	0.157	92.013%
2	23:16:36	0.033	0.035	0.165	0.178	0.174	93.086%
3	23:17:19	0.048	0.039	0.180	0.195	0.197	93.157%
x		0.032	0.029	0.170	0.173	0.175	92.752%
σ		0.017	0.013	0.009	0.025	0.020	0.641%
%RSD		53.110	42.770	5.157	14.190	11.430	0.691

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	77.423%	37.940	54110.000	53530.000	0.000	118500.000	9769.000	9924.000
2	23:20:56	73.852%	39.000	54420.000	54460.000	0.000	117500.000	10030.000	10220.000
3	23:21:39	70.759%	39.040	55460.000	55460.000	0.000	117700.000	10260.000	10450.000
x		74.011%	38.660	54660.000	54490.000	0.000	117900.000	10020.000	10200.000
σ		3.335%	0.621	707.600	964.000	0.000	510.000	244.100	263.600
%RSD		4.506	1.606	1.294	1.769	0.000	0.433	2.437	2.585

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	109200.000	90370.000	0.000	18250.000	14520.000	14850.000	85.029%	721.200
2	23:20:56	113300.000	92520.000	0.000	18250.000	14490.000	15040.000	83.716%	728.800
3	23:21:39	115500.000	94620.000	0.000	18240.000	14530.000	14880.000	82.915%	734.500
x		112700.000	92500.000	0.000	18250.000	14510.000	14920.000	83.887%	728.200
σ		3188.000	2122.000	0.000	4.650	21.030	104.500	1.067%	6.696
%RSD		2.830	2.294	0.000	0.025	0.145	0.700	1.272	0.919

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	34.200	47.510	9065.000	37590.000	35850.000	6.768	68.940	678.600
2	23:20:56	34.640	47.400	9173.000	37580.000	35700.000	6.651	68.600	681.000
3	23:21:39	34.450	47.690	9153.000	37620.000	34360.000	6.699	68.300	678.200
x		34.430	47.530	9130.000	37590.000	35300.000	6.706	68.610	679.300
σ		0.221	0.147	57.240	20.930	820.700	0.059	0.319	1.529
%RSD		0.642	0.309	0.627	0.056	2.325	0.874	0.465	0.225

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	657.000	538.400	527.300	0.724	-3.011	0.299	0.000	38.200
2	23:20:56	663.200	541.000	528.800	0.712	-2.860	-0.189	0.000	38.190
3	23:21:39	660.800	544.100	529.300	0.257	-3.158	-0.607	0.000	38.570
x		660.300	541.200	528.400	0.565	-3.010	-0.166	0.000	38.320
σ		3.110	2.877	1.042	0.266	0.149	0.454	0.000	0.219
%RSD		0.471	0.532	0.197	47.180	4.958	274.000	0.000	0.571

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	190.166%	6.337	7.698	80.419%	0.176	0.157	3.533	3.236
2	23:20:56	193.639%	6.536	7.711	81.159%	0.174	0.158	3.263	3.176
3	23:21:39	191.773%	6.844	7.782	80.060%	0.162	0.178	3.202	3.175
x		191.859%	6.572	7.730	80.546%	0.171	0.164	3.332	3.196
σ		1.738%	0.255	0.046	0.561%	0.007	0.012	0.176	0.035
%RSD		0.906	3.886	0.590	0.696	4.367	7.581	5.278	1.082

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	80.121%	7.229	1.542	1.511	426.800	420.400	97.934%	95.228%
2	23:20:56	80.834%	7.187	1.518	1.441	427.200	422.000	99.676%	97.197%
3	23:21:39	79.787%	7.335	1.384	1.347	427.100	423.300	99.926%	97.559%
x		80.247%	7.250	1.481	1.433	427.000	421.900	99.179%	96.661%
σ		0.535%	0.077	0.085	0.082	0.186	1.461	1.085%	1.254%
%RSD		0.666	1.058	5.733	5.727	0.044	0.346	1.094	1.298

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:13	0.206	0.209	56.560	54.750	55.960	93.198%
2	23:20:56	0.216	0.212	59.070	58.120	58.900	91.117%
3	23:21:39	0.213	0.219	60.450	58.930	60.040	89.935%
x		0.211	0.214	58.700	57.270	58.300	91.417%
σ		0.005	0.005	1.975	2.219	2.104	1.652%
%RSD		2.329	2.387	3.365	3.874	3.609	1.807

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	76.913%	35.910	60000.000	59700.000	0.000	125800.000	4463.000	4529.000
2	23:25:16	75.897%	34.630	57360.000	58070.000	0.000	125000.000	4473.000	4561.000
3	23:25:59	73.647%	35.020	58990.000	59200.000	0.000	125200.000	4576.000	4659.000
x		75.486%	35.190	58780.000	58990.000	0.000	125400.000	4504.000	4583.000
σ		1.671%	0.655	1332.000	831.300	0.000	435.000	62.620	67.640
%RSD		2.214	1.862	2.266	1.409	0.000	0.347	1.390	1.476

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	51890.000	28860.000	0.000	14160.000	15170.000	15080.000	83.462%	3.128
2	23:25:16	51750.000	28830.000	0.000	13800.000	14980.000	15010.000	82.829%	2.294
3	23:25:59	52950.000	29340.000	0.000	13900.000	15040.000	15050.000	80.949%	1.993
x		52200.000	29010.000	0.000	13960.000	15060.000	15050.000	82.413%	2.472
σ		652.400	288.600	0.000	184.300	98.620	35.560	1.307%	0.588
%RSD		1.250	0.995	0.000	1.321	0.655	0.236	1.586	23.780

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	0.011	1.920	8189.000	116.200	157.200	2.374	45.340	24.370
2	23:25:16	-0.034	1.811	8106.000	64.880	100.600	2.451	43.990	23.770
3	23:25:59	-0.011	1.836	8273.000	49.000	88.550	2.518	45.650	23.640
x		-0.012	1.856	8189.000	76.700	115.500	2.448	44.990	23.920
σ		0.022	0.057	83.880	35.130	36.670	0.072	0.884	0.387
%RSD		191.200	3.083	1.024	45.800	31.760	2.929	1.965	1.618

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	23.320	273.700	271.700	0.111	-1.580	0.495	0.000	49.030
2	23:25:16	22.840	272.300	271.700	-0.440	-1.784	-0.051	0.000	49.070
3	23:25:59	22.980	275.700	275.600	-0.446	-1.602	0.100	0.000	49.490
x		23.050	273.900	273.000	-0.258	-1.656	0.181	0.000	49.200
σ		0.247	1.674	2.261	0.320	0.112	0.282	0.000	0.259
%RSD		1.073	0.611	0.828	123.700	6.749	155.400	0.000	0.526

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	119.127%	0.492	0.585	83.818%	-0.001	-0.003	2.734	2.646
2	23:25:16	120.292%	0.406	0.396	82.577%	0.003	0.011	2.812	2.737
3	23:25:59	118.923%	0.341	0.328	82.655%	-0.000	0.004	3.041	2.819
x		119.448%	0.413	0.436	83.016%	0.001	0.004	2.862	2.734
σ		0.739%	0.076	0.134	0.695%	0.002	0.007	0.160	0.087
%RSD		0.618	18.430	30.610	0.837	291.000	187.900	5.586	3.174

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	82.133%	0.593	0.326	0.276	157.600	155.000	88.367%	89.496%
2	23:25:16	81.830%	0.698	0.280	0.284	155.500	154.200	90.825%	91.431%
3	23:25:59	81.877%	0.665	0.233	0.204	156.400	156.300	90.753%	91.908%
x		81.947%	0.652	0.280	0.255	156.500	155.200	89.982%	90.945%
σ		0.163%	0.054	0.047	0.044	1.015	1.029	1.399%	1.277%
%RSD		0.199	8.274	16.700	17.260	0.648	0.663	1.555	1.404

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:33	0.082	0.062	1.578	1.470	1.559	88.840%
2	23:25:16	0.065	0.074	1.548	1.518	1.517	89.903%
3	23:25:59	0.063	0.069	1.617	1.408	1.517	89.970%
x		0.070	0.068	1.581	1.465	1.531	89.571%
σ		0.010	0.006	0.035	0.055	0.024	0.634%
%RSD		14.710	9.026	2.191	3.768	1.560	0.708

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	79.028%	8.652	4533.000	4579.000	0.000	6921.000	6378.000	6505.000
2	23:29:36	76.356%	8.923	4513.000	4592.000	0.000	6865.000	6495.000	6692.000
3	23:30:19	76.112%	8.690	4261.000	4535.000	0.000	6906.000	6499.000	6652.000
x		77.165%	8.755	4436.000	4568.000	0.000	6897.000	6457.000	6616.000
σ		1.618%	0.147	151.700	29.800	0.000	28.640	69.010	98.400
%RSD		2.097	1.677	3.419	0.652	0.000	0.415	1.069	1.487

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	30970.000	52610.000	0.000	6523.000	4061.000	4334.000	85.536%	739.000
2	23:29:36	31750.000	53350.000	0.000	6446.000	4360.000	4296.000	84.467%	742.300
3	23:30:19	31430.000	53190.000	0.000	6458.000	4079.000	4343.000	84.022%	734.000
x		31380.000	53050.000	0.000	6476.000	4166.000	4325.000	84.675%	738.400
σ		393.900	390.900	0.000	41.200	168.000	25.110	0.778%	4.175
%RSD		1.255	0.737	0.000	0.636	4.031	0.581	0.919	0.566

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	62.670	241.800	1871.000	32130.000	30820.000	10.860	167.300	27.040
2	23:29:36	63.200	243.000	1890.000	32440.000	30990.000	10.910	167.700	27.020
3	23:30:19	63.230	242.400	1874.000	32080.000	31170.000	10.960	166.400	26.460
x		63.030	242.400	1878.000	32220.000	30990.000	10.910	167.200	26.840
σ		0.314	0.584	10.270	195.800	176.000	0.052	0.681	0.329
%RSD		0.499	0.241	0.547	0.608	0.568	0.475	0.407	1.226

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	26.840	167.400	166.700	0.555	-1.396	0.337	0.000	16.250
2	23:29:36	26.890	166.900	165.700	0.600	-1.470	0.438	0.000	16.540
3	23:30:19	27.140	167.200	165.400	0.598	-1.415	-0.081	0.000	16.290
x		26.960	167.200	165.900	0.585	-1.427	0.231	0.000	16.360
σ		0.159	0.220	0.688	0.025	0.038	0.275	0.000	0.154
%RSD		0.588	0.132	0.414	4.315	2.692	118.800	0.000	0.942

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	103.064%	15.950	16.120	86.145%	0.031	0.043	0.381	0.406
2	23:29:36	103.577%	15.940	16.680	86.154%	0.033	0.064	0.381	0.402
3	23:30:19	103.787%	16.460	16.690	86.520%	0.046	0.036	0.361	0.404
x		103.476%	16.120	16.490	86.273%	0.037	0.048	0.375	0.404
σ		0.372%	0.298	0.325	0.214%	0.009	0.015	0.012	0.002
%RSD		0.359	1.848	1.968	0.248	23.290	30.300	3.137	0.540

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	84.387%	1.057	0.355	0.368	845.500	845.800	90.019%	90.142%
2	23:29:36	84.850%	1.046	0.333	0.323	847.700	843.700	91.387%	91.612%
3	23:30:19	83.904%	1.154	0.310	0.368	860.200	849.700	91.851%	91.375%
x		84.380%	1.086	0.332	0.353	851.100	846.400	91.086%	91.043%
σ		0.473%	0.059	0.023	0.026	7.906	3.015	0.952%	0.789%
%RSD		0.561	5.450	6.802	7.426	0.929	0.356	1.045	0.867

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:53	0.381	0.401	15.880	15.360	15.510	95.535%
2	23:29:36	0.422	0.426	15.910	15.290	15.700	95.106%
3	23:30:19	0.387	0.414	16.080	15.380	15.840	95.600%
x		0.397	0.414	15.960	15.340	15.680	95.414%
σ		0.022	0.012	0.107	0.048	0.168	0.269%
%RSD		5.590	3.008	0.672	0.315	1.074	0.282

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	80.246%	1.965	17710.000	17630.000	0.000	48640.000	2904.000	2940.000
2	23:33:56	79.167%	1.631	17800.000	17720.000	0.000	48720.000	2918.000	2997.000
3	23:34:39	79.463%	1.868	17820.000	18030.000	0.000	47890.000	2940.000	2991.000
x		79.625%	1.821	17780.000	17790.000	0.000	48420.000	2921.000	2976.000
σ		0.557%	0.172	56.800	209.100	0.000	460.700	18.080	31.480
%RSD		0.700	9.423	0.320	1.175	0.000	0.952	0.619	1.058

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	2903.000	14190.000	0.000	4799.000	7961.000	7922.000	85.782%	156.000
2	23:33:56	2928.000	14300.000	0.000	4837.000	7950.000	8099.000	83.658%	159.600
3	23:34:39	2942.000	14320.000	0.000	4826.000	8176.000	7995.000	84.160%	161.100
x		2925.000	14270.000	0.000	4821.000	8029.000	8005.000	84.533%	158.900
σ		19.720	72.120	0.000	19.260	127.400	88.980	1.110%	2.581
%RSD		0.674	0.505	0.000	0.400	1.587	1.112	1.313	1.624

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	10.270	18.430	134.800	4429.000	4222.000	1.470	10.270	2.821
2	23:33:56	10.580	18.320	137.000	4358.000	4229.000	1.465	9.898	2.989
3	23:34:39	10.890	18.400	136.100	4323.000	4199.000	1.517	9.774	2.904
x		10.580	18.380	136.000	4370.000	4217.000	1.484	9.980	2.905
σ		0.312	0.060	1.104	54.190	15.600	0.029	0.256	0.084
%RSD		2.945	0.328	0.812	1.240	0.370	1.931	2.566	2.888

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	2.921	34.620	35.160	0.307	2.390	2.246	0.000	37.030
2	23:33:56	3.037	35.950	35.800	0.352	1.685	3.045	0.000	36.380
3	23:34:39	2.831	35.540	35.330	0.026	1.764	2.864	0.000	36.980
x		2.930	35.370	35.430	0.228	1.946	2.718	0.000	36.800
σ		0.103	0.681	0.331	0.177	0.387	0.419	0.000	0.360
%RSD		3.515	1.927	0.933	77.410	19.870	15.410	0.000	0.979

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	88.239%	2.305	2.162	87.293%	0.023	0.048	0.013	0.046
2	23:33:56	88.922%	2.097	2.071	87.571%	0.047	0.041	0.128	0.129
3	23:34:39	88.872%	1.955	1.873	88.045%	0.049	0.064	0.112	0.116
x		88.677%	2.119	2.036	87.636%	0.039	0.051	0.084	0.097
σ		0.381%	0.176	0.148	0.380%	0.015	0.012	0.062	0.045
%RSD		0.429	8.312	7.260	0.434	37.210	23.190	73.960	46.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	83.888%	0.304	0.219	0.181	306.500	303.600	88.447%	88.816%
2	23:33:56	84.503%	0.313	0.194	0.156	303.900	301.800	89.905%	89.698%
3	23:34:39	84.748%	0.328	0.165	0.196	302.400	302.300	89.592%	89.484%
x		84.380%	0.315	0.192	0.178	304.300	302.600	89.315%	89.333%
σ		0.443%	0.012	0.027	0.020	2.074	0.905	0.768%	0.460%
%RSD		0.526	3.921	14.040	11.470	0.682	0.299	0.860	0.515

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:13	0.036	0.049	2.235	2.258	2.193	94.670%
2	23:33:56	0.060	0.044	2.275	2.298	2.274	94.309%
3	23:34:39	0.035	0.043	2.249	2.037	2.167	94.764%
x		0.043	0.046	2.253	2.197	2.211	94.581%
σ		0.014	0.003	0.020	0.140	0.056	0.240%
%RSD		32.220	6.542	0.899	6.389	2.514	0.254

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	78.430%	1.107	19350.000	19810.000	0.000	51580.000	2185.000	2246.000
2	23:38:14	74.955%	1.301	20010.000	20250.000	0.000	51780.000	2251.000	2294.000
3	23:38:58	75.873%	1.097	19110.000	19430.000	0.000	50760.000	2229.000	2266.000
x		76.419%	1.168	19490.000	19830.000	0.000	51370.000	2222.000	2268.000
σ		1.801%	0.115	465.600	413.300	0.000	539.200	33.730	24.110
%RSD		2.357	9.827	2.389	2.084	0.000	1.050	1.518	1.063

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	21.320	9710.000	0.000	3948.000	9095.000	9007.000	82.903%	1.143
2	23:38:14	20.020	9876.000	0.000	3906.000	9058.000	8946.000	81.259%	0.928
3	23:38:58	15.770	9646.000	0.000	3913.000	8861.000	9106.000	81.265%	0.868
x		19.040	9744.000	0.000	3922.000	9005.000	9020.000	81.809%	0.980
σ		2.907	119.000	0.000	22.450	125.700	80.960	0.947%	0.145
%RSD		15.270	1.222	0.000	0.572	1.396	0.898	1.158	14.770

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	0.137	2.923	8.350	39.110	70.490	0.042	2.100	1.058
2	23:38:14	0.438	2.979	8.545	23.950	44.490	0.043	2.061	1.026
3	23:38:58	0.178	3.126	8.205	15.890	41.020	0.047	1.943	1.094
x		0.251	3.009	8.367	26.320	52.000	0.044	2.035	1.059
σ		0.163	0.105	0.171	11.790	16.110	0.002	0.082	0.034
%RSD		64.930	3.487	2.038	44.800	30.970	5.304	4.009	3.178

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	0.818	18.110	18.030	0.311	1.315	3.563	0.000	42.160
2	23:38:14	0.903	18.110	17.930	0.214	1.800	2.370	0.000	42.430
3	23:38:58	0.906	18.610	18.530	-0.336	1.948	2.380	0.000	43.020
x		0.875	18.280	18.160	0.063	1.688	2.771	0.000	42.540
σ		0.050	0.292	0.323	0.349	0.331	0.686	0.000	0.439
%RSD		5.733	1.598	1.775	554.200	19.610	24.760	0.000	1.032

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	83.636%	0.512	0.552	86.243%	-0.002	-0.000	0.097	0.109
2	23:38:14	83.401%	0.753	0.526	85.990%	-0.005	-0.001	0.015	0.108
3	23:38:58	83.529%	0.573	0.597	85.459%	-0.004	-0.000	0.011	0.045
x		83.522%	0.613	0.558	85.898%	-0.004	-0.000	0.041	0.087
σ		0.118%	0.125	0.036	0.400%	0.002	0.001	0.048	0.037
%RSD		0.141	20.440	6.437	0.466	44.360	156.900	116.800	42.300

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	83.061%	0.203	0.109	0.113	298.600	296.400	87.237%	87.334%
2	23:38:14	82.981%	0.252	0.126	0.149	300.700	300.100	88.879%	89.053%
3	23:38:58	83.982%	0.341	0.086	0.098	302.400	299.000	88.198%	87.661%
x		83.341%	0.265	0.107	0.120	300.500	298.500	88.105%	88.016%
σ		0.556%	0.070	0.020	0.026	1.914	1.918	0.825%	0.913%
%RSD		0.668	26.280	18.810	21.940	0.637	0.643	0.936	1.037

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:32	-0.000	0.006	0.079	0.110	0.102	93.905%
2	23:38:14	0.000	0.002	0.075	0.082	0.089	94.795%
3	23:38:58	-0.006	-0.004	0.064	0.058	0.054	95.540%
x		-0.002	0.001	0.073	0.083	0.082	94.747%
σ		0.004	0.005	0.008	0.026	0.024	0.819%
%RSD		170.000	375.200	10.620	30.920	30.030	0.864

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	80.809%	0.178	3983.000	3997.000	0.000	10180.000	424.400	436.100
2	23:42:31	77.659%	0.223	4108.000	4069.000	0.000	10090.000	436.300	443.200
3	23:43:14	78.075%	0.194	3962.000	3952.000	0.000	10190.000	443.900	446.900
x		78.848%	0.198	4018.000	4006.000	0.000	10160.000	434.900	442.100
σ		1.712%	0.023	78.760	59.220	0.000	54.760	9.863	5.515
%RSD		2.171	11.410	1.960	1.478	0.000	0.539	2.268	1.247

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	6.195	1898.000	0.000	762.000	2006.000	1784.000	84.546%	0.130
2	23:42:31	7.423	1938.000	0.000	749.200	1969.000	1785.000	84.097%	0.093
3	23:43:14	6.672	1898.000	0.000	756.400	1705.000	1806.000	82.896%	0.018
x		6.763	1911.000	0.000	755.900	1894.000	1791.000	83.846%	0.081
σ		0.619	23.350	0.000	6.377	164.000	12.230	0.853%	0.057
%RSD		9.154	1.221	0.000	0.844	8.661	0.683	1.018	70.590

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	-0.098	0.741	2.023	2.722	6.413	0.009	0.341	0.261
2	23:42:31	0.120	0.721	2.110	1.708	8.394	-0.003	0.328	0.267
3	23:43:14	0.143	0.733	2.016	-0.546	3.633	-0.003	0.505	0.285
x		0.055	0.732	2.050	1.295	6.147	0.001	0.392	0.271
σ		0.133	0.010	0.053	1.673	2.391	0.007	0.099	0.013
%RSD		242.700	1.405	2.575	129.200	38.900	778.400	25.200	4.816

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	0.230	3.487	3.223	-0.271	0.532	0.961	0.000	8.212
2	23:42:31	0.227	3.343	3.547	0.002	0.781	0.960	0.000	8.312
3	23:43:14	0.237	3.650	3.493	0.090	0.496	0.790	0.000	8.455
x		0.232	3.493	3.421	-0.060	0.603	0.904	0.000	8.326
σ		0.005	0.154	0.174	0.188	0.156	0.098	0.000	0.122
%RSD		2.198	4.401	5.085	313.700	25.790	10.890	0.000	1.467

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	84.391%	0.265	0.271	88.566%	-0.006	-0.006	-0.023	0.026
2	23:42:31	84.486%	0.327	0.262	87.562%	-0.009	-0.005	-0.021	-0.013
3	23:43:14	84.454%	0.355	0.283	87.721%	-0.003	-0.001	-0.030	-0.030
x		84.444%	0.316	0.272	87.950%	-0.006	-0.004	-0.025	-0.006
σ		0.048%	0.046	0.010	0.540%	0.003	0.002	0.005	0.028
%RSD		0.057	14.630	3.852	0.614	46.890	58.750	19.410	487.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	85.006%	-0.222	0.046	0.020	59.430	58.340	87.833%	87.870%
2	23:42:31	85.634%	-0.163	0.056	0.016	58.800	59.330	89.200%	89.103%
3	23:43:14	85.052%	-0.224	0.069	0.030	58.750	59.210	88.671%	88.945%
x		85.231%	-0.203	0.057	0.022	58.990	58.960	88.568%	88.639%
σ		0.350%	0.035	0.011	0.007	0.375	0.538	0.689%	0.671%
%RSD		0.410	17.250	19.430	32.730	0.636	0.912	0.778	0.757

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:49	-0.012	-0.007	0.136	0.119	0.129	94.313%
2	23:42:31	-0.011	-0.009	0.120	0.113	0.123	94.651%
3	23:43:14	-0.011	-0.006	0.088	0.096	0.089	94.711%
x		-0.011	-0.007	0.114	0.109	0.114	94.559%
σ		0.001	0.002	0.024	0.012	0.021	0.215%
%RSD		7.743	22.730	21.210	11.040	18.670	0.227

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	76.139%	49.290	20520.000	20100.000	0.000	98180.000	54530.000	55290.000
2	23:46:48	74.826%	48.170	20070.000	20210.000	0.000	96460.000	55020.000	55930.000
3	23:47:31	72.909%	47.990	20360.000	20530.000	0.000	97540.000	55640.000	56550.000
x		74.625%	48.480	20320.000	20280.000	0.000	97390.000	55060.000	55930.000
σ		1.624%	0.704	226.300	222.800	0.000	867.200	556.500	633.800
%RSD		2.176	1.453	1.114	1.099	0.000	0.890	1.011	1.133

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	2032.000	19440.000	0.000	53120.000	55820.000	55070.000	81.475%	926.800
2	23:46:48	2035.000	19470.000	0.000	53250.000	56410.000	57120.000	79.250%	937.300
3	23:47:31	2060.000	19640.000	0.000	53000.000	56080.000	56550.000	79.204%	924.500
x		2042.000	19520.000	0.000	53120.000	56110.000	56250.000	79.977%	929.500
σ		15.200	109.800	0.000	124.500	295.300	1055.000	1.298%	6.839
%RSD		0.744	0.563	0.000	0.234	0.526	1.876	1.623	0.736

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	473.400	187.900	497.100	986.900	1174.000	451.400	453.900	231.200
2	23:46:48	480.100	191.000	500.600	1019.000	1198.000	452.900	455.800	228.100
3	23:47:31	477.300	191.000	500.800	1002.000	1194.000	447.400	450.600	227.300
x		476.900	190.000	499.500	1003.000	1189.000	450.600	453.500	228.900
σ		3.413	1.803	2.053	16.130	12.890	2.875	2.634	2.103
%RSD		0.716	0.949	0.411	1.609	1.085	0.638	0.581	0.919

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	230.800	476.700	477.700	37.180	10.980	12.990	0.000	999.700
2	23:46:48	232.500	479.500	482.700	37.730	11.940	12.880	0.000	1002.000
3	23:47:31	229.300	474.900	476.600	37.810	12.020	12.640	0.000	1005.000
x		230.900	477.000	479.000	37.570	11.650	12.840	0.000	1002.000
σ		1.619	2.331	3.231	0.341	0.579	0.182	0.000	2.603
%RSD		0.701	0.489	0.674	0.908	4.969	1.417	0.000	0.260

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	81.642%	919.000	912.300	80.910%	47.250	46.750	48.100	45.930
2	23:46:48	82.065%	947.300	944.500	80.955%	46.820	47.300	49.520	46.900
3	23:47:31	81.402%	957.500	960.500	79.789%	47.210	47.810	50.030	46.820
x		81.703%	941.300	939.100	80.551%	47.090	47.290	49.220	46.550
σ		0.336%	19.910	24.550	0.661%	0.235	0.531	0.996	0.539
%RSD		0.411	2.116	2.614	0.820	0.500	1.123	2.023	1.158

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	80.323%	1865.000	490.200	489.700	2187.000	2181.000	85.857%	86.322%
2	23:46:48	79.824%	1879.000	496.900	496.600	2213.000	2213.000	86.263%	87.236%
3	23:47:31	79.921%	1873.000	495.400	493.900	2209.000	2197.000	87.123%	87.816%
x		80.023%	1872.000	494.100	493.400	2203.000	2197.000	86.414%	87.124%
σ		0.264%	7.187	3.534	3.495	13.780	15.930	0.646%	0.753%
%RSD		0.330	0.384	0.715	0.708	0.625	0.725	0.748	0.865

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:05	43.980	43.330	17.590	18.960	18.190	90.120%
2	23:46:48	45.140	45.210	17.790	19.180	18.470	89.750%
3	23:47:31	46.050	45.910	17.860	19.260	18.540	89.397%
x		45.060	44.820	17.750	19.130	18.400	89.756%
σ		1.038	1.333	0.139	0.155	0.185	0.361%
%RSD		2.302	2.973	0.785	0.809	1.008	0.403

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	74.914%	48.920	20640.000	20500.000	0.000	97960.000	54540.000	55500.000
2	23:51:06	70.776%	49.190	21310.000	21210.000	0.000	98090.000	56010.000	57180.000
3	23:51:49	72.401%	47.310	20380.000	20870.000	0.000	97120.000	56160.000	56760.000
x		72.697%	48.470	20780.000	20860.000	0.000	97720.000	55570.000	56480.000
σ		2.085%	1.017	482.000	357.300	0.000	523.800	894.500	875.100
%RSD		2.868	2.098	2.320	1.713	0.000	0.536	1.610	1.549

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	2021.000	19550.000	0.000	52890.000	56420.000	53790.000	80.225%	919.000
2	23:51:06	2089.000	20000.000	0.000	52220.000	54790.000	55650.000	80.197%	935.300
3	23:51:49	2036.000	19910.000	0.000	53000.000	55680.000	56480.000	78.336%	943.700
x		2049.000	19820.000	0.000	52700.000	55630.000	55310.000	79.586%	932.700
σ		35.880	240.200	0.000	421.900	816.400	1377.000	1.083%	12.570
%RSD		1.752	1.212	0.000	0.800	1.468	2.490	1.360	1.347

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	480.400	190.200	498.700	1011.000	1194.000	448.000	448.300	227.600
2	23:51:06	475.100	188.100	499.000	1015.000	1179.000	437.900	445.100	227.400
3	23:51:49	484.200	191.800	500.500	1006.000	1198.000	450.100	450.300	227.000
x		479.900	190.000	499.400	1011.000	1190.000	445.300	447.900	227.400
σ		4.567	1.865	0.993	4.558	9.900	6.485	2.610	0.298
%RSD		0.952	0.982	0.199	0.451	0.832	1.456	0.583	0.131

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	230.700	475.000	476.700	37.840	11.340	12.750	0.000	1003.000
2	23:51:06	228.600	469.700	467.300	37.060	10.880	12.270	0.000	997.900
3	23:51:49	230.100	477.600	478.000	37.570	11.840	12.330	0.000	1005.000
x		229.800	474.100	474.000	37.490	11.350	12.450	0.000	1002.000
σ		1.089	4.039	5.814	0.395	0.485	0.261	0.000	3.686
%RSD		0.474	0.852	1.227	1.055	4.271	2.095	0.000	0.368

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	80.894%	935.800	934.900	80.441%	47.020	46.910	48.770	46.240
2	23:51:06	81.623%	954.400	954.400	80.074%	46.830	46.980	48.520	46.030
3	23:51:49	81.147%	961.700	960.000	80.474%	46.110	47.020	49.030	47.750
x		81.221%	950.700	949.800	80.330%	46.650	46.970	48.770	46.670
σ		0.370%	13.380	13.190	0.222%	0.476	0.057	0.258	0.937
%RSD		0.456	1.407	1.388	0.276	1.020	0.120	0.530	2.007

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	79.909%	1881.000	492.200	492.400	2193.000	2191.000	86.077%	87.010%
2	23:51:06	80.380%	1879.000	492.500	491.300	2182.000	2178.000	87.617%	87.807%
3	23:51:49	79.564%	1873.000	495.300	499.600	2212.000	2207.000	87.121%	87.538%
x		79.951%	1878.000	493.300	494.400	2196.000	2192.000	86.938%	87.452%
σ		0.410%	4.558	1.739	4.482	14.770	14.720	0.786%	0.406%
%RSD		0.513	0.243	0.353	0.907	0.673	0.672	0.904	0.464

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:23	45.750	45.200	17.880	19.280	18.510	88.933%
2	23:51:06	46.280	46.370	17.850	19.260	18.660	89.092%
3	23:51:49	46.230	46.430	17.960	19.270	18.600	89.502%
x		46.090	46.000	17.890	19.270	18.590	89.176%
σ		0.291	0.694	0.055	0.009	0.074	0.293%
%RSD		0.632	1.509	0.308	0.046	0.400	0.329

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	73.700%	29.990	108800.000	109100.000	0.000	129900.000	15660.000	16080.000
2	23:55:24	72.021%	28.810	109000.000	109000.000	0.000	128400.000	15630.000	16370.000
3	23:56:07	70.182%	30.630	109900.000	110300.000	0.000	127900.000	15840.000	16570.000
x		71.968%	29.810	109200.000	109500.000	0.000	128700.000	15710.000	16340.000
σ		1.760%	0.923	582.600	687.200	0.000	1071.000	109.000	246.600
%RSD		2.445	3.095	0.533	0.628	0.000	0.832	0.694	1.509

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	207300.000	69530.000	0.000	55480.000	52650.000	49240.000	82.167%	501.600
2	23:55:24	209000.000	69240.000	0.000	54260.000	51880.000	48800.000	82.394%	497.400
3	23:56:07	211200.000	70330.000	0.000	54260.000	50820.000	50680.000	82.442%	493.100
x		209200.000	69700.000	0.000	54670.000	51790.000	49570.000	82.334%	497.400
σ		1945.000	566.300	0.000	704.900	917.400	986.000	0.147%	4.248
%RSD		0.930	0.813	0.000	1.289	1.772	1.989	0.178	0.854

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	8.613	89.200	39590.000	14630.000	14110.000	43.210	177.600	150.100
2	23:55:24	8.372	87.730	39760.000	14580.000	14070.000	42.440	174.300	146.500
3	23:56:07	9.491	87.350	39370.000	14570.000	13910.000	41.940	172.800	147.700
x		8.825	88.090	39570.000	14590.000	14030.000	42.530	174.900	148.100
σ		0.589	0.978	193.200	32.370	107.000	0.637	2.445	1.826
%RSD		6.670	1.110	0.488	0.222	0.763	1.498	1.398	1.233

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	143.200	633.900	604.700	2.585	-3.203	0.921	0.000	52.560
2	23:55:24	141.300	625.400	591.700	2.803	-3.565	0.574	0.000	51.160
3	23:56:07	141.200	627.500	595.000	2.511	-3.415	0.442	0.000	51.170
x		141.900	628.900	597.100	2.633	-3.394	0.646	0.000	51.630
σ		1.095	4.415	6.780	0.152	0.182	0.247	0.000	0.806
%RSD		0.771	0.702	1.136	5.769	5.366	38.320	0.000	1.560

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	389.939%	16.780	22.120	75.297%	0.617	0.581	7.422	7.115
2	23:55:24	404.398%	13.680	17.970	77.220%	0.553	0.576	7.426	6.845
3	23:56:07	401.532%	11.370	15.500	78.689%	0.576	0.533	7.222	6.761
x		398.623%	13.940	18.530	77.069%	0.582	0.563	7.357	6.907
σ		7.656%	2.713	3.344	1.701%	0.032	0.026	0.117	0.185
%RSD		1.921	19.460	18.050	2.207	5.575	4.671	1.586	2.683

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	79.263%	11.260	0.358	0.442	3619.000	3532.000	128.567%	119.466%
2	23:55:24	80.370%	7.408	0.306	0.322	3576.000	3475.000	131.187%	121.440%
3	23:56:07	79.811%	5.343	0.252	0.222	3626.000	3526.000	131.117%	122.665%
x		79.815%	8.004	0.305	0.329	3607.000	3511.000	130.290%	121.190%
σ		0.553%	3.004	0.053	0.110	27.360	31.490	1.493%	1.614%
%RSD		0.693	37.530	17.280	33.490	0.758	0.897	1.146	1.332

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:41	0.395	0.450	34.300	33.270	34.720	87.925%
2	23:55:24	0.315	0.305	35.000	34.190	35.470	87.435%
3	23:56:07	0.251	0.245	35.390	34.790	35.830	87.532%
x		0.320	0.333	34.890	34.080	35.340	87.631%
σ		0.072	0.105	0.550	0.766	0.563	0.259%
%RSD		22.490	31.560	1.577	2.248	1.592	0.296

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	80.857%	1.704	18440.000	18580.000	0.000	49840.000	2878.000	2929.000
2	23:59:42	77.629%	1.760	18670.000	18580.000	0.000	49480.000	2938.000	2995.000
3	00:00:25	76.083%	2.164	18980.000	18930.000	0.000	49270.000	2970.000	3042.000
x		78.190%	1.876	18700.000	18700.000	0.000	49530.000	2929.000	2989.000
σ		2.436%	0.251	274.300	204.400	0.000	284.900	46.580	56.500
%RSD		3.115	13.380	1.467	1.093	0.000	0.575	1.590	1.890

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	3098.000	14590.000	0.000	4898.000	8115.000	8042.000	84.937%	152.600
2	23:59:42	3071.000	14530.000	0.000	4761.000	7859.000	7973.000	85.571%	153.900
3	00:00:25	3103.000	14900.000	0.000	4850.000	8146.000	8051.000	83.437%	156.300
x		3091.000	14670.000	0.000	4836.000	8040.000	8022.000	84.648%	154.300
σ		17.220	200.300	0.000	69.100	157.400	42.350	1.096%	1.887
%RSD		0.557	1.365	0.000	1.429	1.958	0.528	1.295	1.223

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	10.430	16.980	150.900	4319.000	4213.000	1.470	9.362	3.313
2	23:59:42	10.140	16.820	139.100	4218.000	4053.000	1.459	9.355	3.134
3	00:00:25	10.660	16.690	136.900	4279.000	4135.000	1.489	9.418	3.068
x		10.410	16.830	142.300	4272.000	4134.000	1.473	9.379	3.172
σ		0.261	0.145	7.492	50.930	80.250	0.015	0.034	0.127
%RSD		2.512	0.860	5.265	1.192	1.941	1.036	0.364	3.997

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	3.174	34.680	35.920	0.453	1.846	2.724	0.000	37.340
2	23:59:42	3.096	34.380	34.030	0.202	2.120	3.285	0.000	37.170
3	00:00:25	2.933	34.330	34.860	0.607	2.190	3.731	0.000	37.250
x		3.067	34.460	34.940	0.421	2.052	3.247	0.000	37.250
σ		0.123	0.189	0.951	0.204	0.182	0.505	0.000	0.084
%RSD		4.020	0.549	2.721	48.570	8.878	15.550	0.000	0.224

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	88.684%	5.543	5.245	88.131%	0.039	0.083	0.065	0.085
2	23:59:42	89.320%	4.634	4.596	87.975%	0.043	0.038	0.034	0.047
3	00:00:25	88.803%	4.256	4.260	87.754%	0.029	0.047	0.096	0.115
x		88.936%	4.811	4.700	87.954%	0.037	0.056	0.065	0.082
σ		0.338%	0.661	0.501	0.189%	0.007	0.024	0.031	0.034
%RSD		0.380	13.750	10.650	0.215	19.820	42.750	48.100	41.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	85.293%	2.398	0.234	0.203	304.500	303.400	89.710%	89.368%
2	23:59:42	86.135%	2.123	0.168	0.154	299.500	300.100	90.956%	91.076%
3	00:00:25	85.736%	1.667	0.163	0.106	303.300	300.300	90.929%	91.452%
x		85.722%	2.063	0.188	0.154	302.400	301.200	90.532%	90.632%
σ		0.421%	0.369	0.040	0.048	2.625	1.843	0.711%	1.111%
%RSD		0.491	17.890	20.980	31.460	0.868	0.612	0.786	1.226

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:58:59	0.117	0.129	2.236	2.041	2.159	94.956%
2	23:59:42	0.102	0.106	2.209	2.017	2.070	95.461%
3	00:00:25	0.102	0.096	2.115	2.001	2.015	96.448%
x		0.107	0.110	2.187	2.020	2.082	95.622%
σ		0.009	0.017	0.063	0.020	0.072	0.759%
%RSD		8.347	15.120	2.891	0.977	3.483	0.794

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	80.232%	99.300	457.700	466.200	0.000	50640.000	52090.000	52840.000
2	00:06:52	77.581%	99.590	459.900	459.500	0.000	50070.000	53120.000	53760.000
3	00:07:35	77.212%	97.910	439.500	444.000	0.000	49160.000	52750.000	53650.000
x		78.342%	98.934%	452.345%	456.559%	0.000	99.912%	105.305%	106.833%
σ		1.648%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.103	0.909	2.478	2.503	0.000	1.494	0.990	0.937

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	532.100	5454.000	0.000	52060.000	48760.000	48630.000	83.548%	98.580
2	00:06:52	536.300	5442.000	0.000	51540.000	49090.000	47640.000	83.277%	96.130
3	00:07:35	530.700	5430.000	0.000	51440.000	48990.000	47960.000	82.709%	96.530
x		106.607%	108.836%	0.000	103.358%	97.886%	96.149%	83.178%	97.082%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.428%	n/a
%RSD		0.550	0.219	0.000	0.642	0.345	1.054	0.515	1.352

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	96.070	96.500	504.800	25870.000	25280.000	96.080	96.080	96.540
2	00:06:52	96.580	96.620	504.400	25480.000	24980.000	95.050	93.610	95.880
3	00:07:35	97.710	96.690	506.200	25670.000	25230.000	94.140	93.550	94.770
x		96.786%	96.601%	101.028%	102.698%	100.654%	95.091%	94.416%	95.730%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.867	0.101	0.193	0.759	0.638	1.021	1.530	0.937

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	97.540	96.660	100.400	98.660	99.080	101.200	0.000	98.690
2	00:06:52	94.220	97.690	100.500	99.510	98.890	99.950	0.000	97.520
3	00:07:35	95.490	96.760	96.880	98.440	99.110	100.300	0.000	98.150
x		95.752%	97.035%	99.256%	98.867%	99.029%	100.481%	0.000	98.121%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.753	0.585	2.075	0.569	0.120	0.649	0.000	0.599

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	82.230%	93.300	93.450	83.887%	94.660	96.150	98.590	99.250
2	00:06:52	82.572%	96.550	96.880	83.451%	96.190	96.200	98.650	97.990
3	00:07:35	82.468%	98.590	97.680	84.001%	95.080	96.180	98.100	100.900
x		82.423%	96.149%	96.005%	83.780%	95.312%	96.177%	98.447%	99.388%
σ		0.175%	n/a	n/a	0.290%	n/a	n/a	n/a	n/a
%RSD		0.213	2.778	2.339	0.346	0.827	0.023	0.309	1.482

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	82.215%	96.520	92.120	91.350	97.950	97.190	86.162%	85.982%
2	00:06:52	82.441%	96.640	94.370	95.260	97.190	97.970	86.970%	86.760%
3	00:07:35	81.410%	98.360	97.580	97.760	98.080	99.000	86.523%	86.856%
x		82.022%	97.174%	94.687%	94.792%	97.741%	98.055%	86.551%	86.533%
σ		0.541%	n/a	n/a	n/a	n/a	n/a	0.404%	0.479%
%RSD		0.660	1.062	2.901	3.412	0.496	0.924	0.467	0.554

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:09	92.470	93.290	94.660	93.670	93.880	89.196%
2	00:06:52	93.980	93.400	95.580	94.520	95.000	89.259%
3	00:07:35	94.810	94.580	95.760	95.150	95.550	89.079%
x		93.751%	93.755%	95.333%	94.451%	94.809%	89.178%
σ		n/a	n/a	n/a	n/a	n/a	0.092%
%RSD		1.264	0.765	0.616	0.786	0.898	0.103

CCB10 2/6/2012 12:12:38 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	96.101%	-0.019	175.300	178.200	0.000	11.230	15.170	15.190
2	00:14:04	92.447%	0.005	184.000	178.800	0.000	20.110	20.660	21.050
3	00:14:47	92.007%	0.020	178.900	181.400	0.000	31.990	28.600	30.120
x		93.518%	0.002	179.400	179.500	0.000	21.110	21.480	22.120
σ		2.248%	0.020	4.383	1.672	0.000	10.410	6.750	7.525
%RSD		2.403	976.000	2.443	0.931	0.000	49.320	31.430	34.020

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.572	0.765	0.000	3.972	178.100	48.500	97.792%	-0.067
2	00:14:04	2.158	2.242	0.000	8.578	139.600	55.640	98.250%	-0.068
3	00:14:47	3.753	4.192	0.000	19.540	178.600	59.430	95.931%	-0.013
x		2.161	2.400	0.000	10.700	165.400	54.520	97.324%	-0.050
σ		1.590	1.719	0.000	7.996	22.370	5.552	1.228%	0.031
%RSD		73.590	71.650	0.000	74.760	13.520	10.180	1.262	63.270

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.099	0.015	0.700	0.791	3.617	0.019	-0.089	-0.217
2	00:14:04	0.003	0.016	1.054	0.689	4.090	0.050	-0.048	-0.221
3	00:14:47	0.097	0.042	1.671	2.699	6.033	0.046	-0.110	-0.192
x		0.066	0.025	1.142	1.393	4.580	0.038	-0.083	-0.210
σ		0.055	0.015	0.492	1.132	1.280	0.017	0.032	0.016
%RSD		83.330	62.020	43.070	81.290	27.950	43.800	38.410	7.535

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	-0.200	-0.852	-0.935	-0.096	-0.956	0.053	0.000	0.063
2	00:14:04	-0.260	-0.768	-0.879	0.095	-0.984	0.274	0.000	0.102
3	00:14:47	-0.206	-0.717	-0.846	0.096	-0.713	0.423	0.000	0.153
x		-0.222	-0.779	-0.887	0.032	-0.884	0.250	0.000	0.106
σ		0.033	0.068	0.045	0.110	0.149	0.186	0.000	0.045
%RSD		14.850	8.751	5.112	349.600	16.860	74.410	0.000	42.320

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	94.915%	1.035	0.993	101.182%	0.018	0.016	-0.033	0.000
2	00:14:04	94.667%	0.803	0.946	100.522%	0.024	0.029	0.013	0.002
3	00:14:47	94.682%	0.776	0.805	101.033%	0.043	0.049	0.020	0.044
x		94.755%	0.872	0.915	100.913%	0.028	0.031	0.000	0.015
σ		0.139%	0.142	0.097	0.346%	0.013	0.017	0.029	0.025
%RSD		0.147	16.330	10.650	0.343	46.030	53.740	8260.000	160.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	95.660%	0.181	0.558	0.623	0.118	0.197	96.850%	96.795%
2	00:14:04	96.763%	0.185	0.482	0.533	0.232	0.174	98.393%	98.189%
3	00:14:47	96.477%	0.148	0.480	0.478	0.268	0.277	98.030%	98.053%
x		96.300%	0.172	0.507	0.544	0.206	0.216	97.758%	97.679%
σ		0.572%	0.020	0.044	0.073	0.078	0.054	0.807%	0.769%
%RSD		0.594	11.860	8.695	13.470	37.960	25.020	0.825	0.787

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:13:20	0.029	0.029	0.202	0.171	0.180	103.922%
2	00:14:04	0.044	0.039	0.172	0.142	0.156	104.411%
3	00:14:47	0.069	0.058	0.179	0.157	0.170	105.106%
x		0.047	0.042	0.184	0.157	0.168	104.480%
σ		0.020	0.015	0.016	0.015	0.012	0.595%
%RSD		43.410	35.820	8.468	9.365	7.317	0.569

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	78.891%	1.185	18220.000	18080.000	0.000	51000.000	1894.000	1941.000
2	00:18:23	76.103%	1.283	17950.000	18180.000	0.000	50800.000	1965.000	1992.000
3	00:19:06	73.110%	1.166	18500.000	18460.000	0.000	50290.000	1967.000	2032.000
x		76.035%	1.211	18220.000	18240.000	0.000	50700.000	1942.000	1988.000
σ		2.891%	0.063	272.100	197.100	0.000	365.900	41.330	45.920
%RSD		3.802	5.211	1.493	1.081	0.000	0.722	2.128	2.310

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	3.143	9620.000	0.000	3746.000	7933.000	8061.000	81.381%	0.646
2	00:18:23	2.898	9838.000	0.000	3736.000	8067.000	8059.000	80.436%	0.371
3	00:19:06	2.552	9880.000	0.000	3642.000	7584.000	7958.000	81.378%	0.405
x		2.864	9779.000	0.000	3708.000	7862.000	8026.000	81.065%	0.474
σ		0.297	139.700	0.000	57.680	249.400	59.150	0.545%	0.150
%RSD		10.370	1.429	0.000	1.556	3.172	0.737	0.672	31.640

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	0.237	3.620	8.142	30.680	53.800	0.055	2.844	1.656
2	00:18:23	0.325	3.571	7.966	25.080	45.050	0.059	2.777	1.642
3	00:19:06	0.178	3.355	7.839	22.250	46.290	0.070	2.962	1.570
x		0.247	3.515	7.982	26.010	48.380	0.061	2.861	1.623
σ		0.074	0.141	0.152	4.286	4.737	0.008	0.094	0.046
%RSD		30.000	4.012	1.905	16.480	9.791	12.620	3.277	2.860

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	1.506	20.310	19.990	-0.044	2.835	3.256	0.000	37.720
2	00:18:23	1.407	20.520	20.710	0.110	2.819	3.833	0.000	37.860
3	00:19:06	1.380	20.150	20.190	0.218	2.771	3.371	0.000	37.910
x		1.431	20.330	20.300	0.095	2.808	3.487	0.000	37.830
σ		0.066	0.187	0.375	0.132	0.033	0.305	0.000	0.099
%RSD		4.634	0.918	1.847	138.900	1.176	8.756	0.000	0.262

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	81.956%	1.401	1.450	84.557%	0.002	-0.005	0.044	0.076
2	00:18:23	82.730%	1.436	1.385	84.702%	0.000	-0.001	0.042	0.106
3	00:19:06	81.944%	1.372	1.265	84.024%	0.004	0.007	0.031	0.059
x		82.210%	1.403	1.367	84.427%	0.002	0.001	0.039	0.080
σ		0.450%	0.032	0.094	0.357%	0.002	0.006	0.007	0.024
%RSD		0.548	2.297	6.864	0.423	86.780	1150.000	18.680	29.380

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	81.650%	1.057	0.629	0.627	265.500	263.800	84.995%	85.564%
2	00:18:23	82.301%	0.951	0.546	0.579	264.800	263.900	87.795%	87.022%
3	00:19:06	82.510%	0.825	0.407	0.433	263.900	263.400	87.628%	88.382%
x		82.154%	0.944	0.527	0.546	264.700	263.700	86.806%	86.989%
σ		0.448%	0.117	0.112	0.101	0.769	0.247	1.571%	1.409%
%RSD		0.546	12.340	21.230	18.430	0.290	0.094	1.809	1.620

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:17:40	0.032	0.031	0.143	0.138	0.144	97.111%
2	00:18:23	0.019	0.027	0.085	0.072	0.077	95.609%
3	00:19:06	0.018	0.022	0.045	0.054	0.050	95.483%
x		0.023	0.026	0.091	0.088	0.090	96.068%
σ		0.008	0.005	0.049	0.044	0.048	0.906%
%RSD		34.690	17.570	54.160	50.250	53.310	0.943

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	81.049%	0.222	3763.000	3746.000	0.000	10180.000	375.300	379.500
2	00:22:42	80.047%	0.198	3758.000	3752.000	0.000	10060.000	387.300	388.300
3	00:23:25	79.771%	0.271	3818.000	3738.000	0.000	9892.000	391.300	388.500
x		80.289%	0.230	3780.000	3745.000	0.000	10050.000	384.600	385.500
σ		0.672%	0.037	33.240	7.142	0.000	145.300	8.318	5.153
%RSD		0.837	16.080	0.879	0.191	0.000	1.447	2.163	1.337

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	-0.148	1900.000	0.000	731.500	1672.000	1593.000	83.667%	0.075
2	00:22:42	0.155	1937.000	0.000	722.300	1683.000	1611.000	82.835%	0.157
3	00:23:25	-0.471	1927.000	0.000	712.000	1656.000	1607.000	83.350%	0.116
x		-0.155	1921.000	0.000	721.900	1670.000	1604.000	83.284%	0.116
σ		0.313	18.870	0.000	9.738	13.630	9.395	0.420%	0.041
%RSD		202.100	0.982	0.000	1.349	0.816	0.586	0.504	35.300

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	-0.109	0.652	2.176	-1.642	1.731	0.007	0.350	0.189
2	00:22:42	-0.079	0.712	2.169	-2.932	2.518	0.012	0.428	0.190
3	00:23:25	-0.015	0.739	2.199	-3.718	5.154	0.009	0.567	0.125
x		-0.068	0.701	2.181	-2.764	3.134	0.009	0.449	0.168
σ		0.048	0.044	0.016	1.048	1.793	0.002	0.110	0.037
%RSD		70.730	6.309	0.718	37.930	57.200	25.470	24.530	22.270

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	0.209	3.158	3.552	0.020	0.557	0.648	0.000	7.482
2	00:22:42	0.120	3.280	2.857	0.113	0.387	1.381	0.000	7.365
3	00:23:25	0.077	3.234	2.875	0.008	-0.045	1.050	0.000	7.370
x		0.135	3.224	3.095	0.047	0.300	1.027	0.000	7.406
σ		0.067	0.062	0.396	0.057	0.310	0.367	0.000	0.066
%RSD		49.510	1.920	12.800	121.100	103.500	35.760	0.000	0.896

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	83.847%	0.735	0.749	88.019%	-0.004	-0.000	-0.023	0.013
2	00:22:42	83.892%	0.765	0.723	87.736%	-0.007	0.002	-0.073	-0.044
3	00:23:25	84.029%	0.749	0.661	86.903%	-0.011	-0.006	0.052	0.041
x		83.923%	0.750	0.711	87.553%	-0.007	-0.001	-0.015	0.003
σ		0.095%	0.015	0.045	0.580%	0.003	0.004	0.063	0.043
%RSD		0.113	1.965	6.352	0.663	45.510	295.600	427.400	1361.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	84.499%	0.178	0.206	0.229	52.480	52.400	86.913%	86.342%
2	00:22:42	85.532%	0.144	0.199	0.173	52.080	52.170	88.260%	88.548%
3	00:23:25	84.403%	0.098	0.201	0.177	52.370	52.050	88.765%	88.941%
x		84.811%	0.140	0.202	0.193	52.310	52.210	87.979%	87.943%
σ		0.626%	0.040	0.004	0.031	0.205	0.178	0.957%	1.401%
%RSD		0.738	28.690	1.769	16.150	0.393	0.341	1.088	1.593

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:59	0.004	0.010	0.117	0.108	0.105	93.303%
2	00:22:42	0.011	0.020	0.064	0.048	0.059	93.424%
3	00:23:25	0.004	0.002	0.018	0.025	0.015	94.284%
x		0.006	0.011	0.066	0.060	0.060	93.670%
σ		0.004	0.009	0.050	0.043	0.045	0.535%
%RSD		62.140	86.210	74.560	71.380	74.780	0.571

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	77.899%	46.180	18470.000	18450.000	0.000	95970.000	52540.000	53780.000
2	00:27:01	74.416%	47.240	19070.000	18880.000	0.000	95120.000	54200.000	55000.000
3	00:27:44	74.612%	46.870	18480.000	18600.000	0.000	95080.000	54270.000	54960.000
x		75.642%	46.760	18680.000	18640.000	0.000	95390.000	53670.000	54580.000
σ		1.957%	0.536	343.600	215.600	0.000	501.000	979.600	695.000
%RSD		2.587	1.147	1.840	1.156	0.000	0.525	1.825	1.273

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	1987.000	19130.000	0.000	52900.000	55010.000	54960.000	81.848%	915.300
2	00:27:01	2023.000	19370.000	0.000	52140.000	54310.000	52230.000	80.789%	922.000
3	00:27:44	2010.000	19390.000	0.000	52690.000	55410.000	55140.000	79.753%	926.200
x		2007.000	19300.000	0.000	52580.000	54910.000	54110.000	80.796%	921.200
σ		18.110	141.500	0.000	388.300	556.700	1630.000	1.048%	5.487
%RSD		0.902	0.734	0.000	0.739	1.014	3.013	1.297	0.596

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	467.300	186.400	493.300	1004.000	1184.000	450.600	451.700	228.000
2	00:27:01	469.000	186.900	493.500	1017.000	1181.000	444.400	451.600	227.800
3	00:27:44	474.600	188.400	493.000	1013.000	1175.000	448.800	450.400	225.600
x		470.300	187.200	493.300	1011.000	1180.000	447.900	451.200	227.100
σ		3.855	1.049	0.267	6.980	4.623	3.225	0.751	1.347
%RSD		0.820	0.560	0.054	0.690	0.392	0.720	0.167	0.593

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	230.600	472.800	470.600	37.490	12.500	11.710	0.000	987.600
2	00:27:01	226.600	469.600	470.700	37.870	12.550	13.530	0.000	988.500
3	00:27:44	228.200	474.400	473.000	36.890	11.750	12.210	0.000	995.600
x		228.500	472.300	471.400	37.410	12.270	12.480	0.000	990.600
σ		2.035	2.412	1.330	0.496	0.448	0.940	0.000	4.392
%RSD		0.891	0.511	0.282	1.325	3.655	7.529	0.000	0.443

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	81.597%	915.400	909.100	81.272%	45.650	46.540	48.240	46.850
2	00:27:01	81.879%	940.200	933.500	81.700%	45.910	46.890	48.920	45.540
3	00:27:44	81.529%	939.600	937.300	82.087%	45.730	46.580	48.350	44.660
x		81.668%	931.700	926.600	81.686%	45.760	46.670	48.510	45.680
σ		0.186%	14.140	15.290	0.407%	0.130	0.195	0.362	1.101
%RSD		0.227	1.518	1.650	0.499	0.283	0.418	0.747	2.411

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	80.603%	1841.000	482.100	485.700	2132.000	2126.000	85.345%	85.662%
2	00:27:01	80.402%	1854.000	488.200	487.400	2137.000	2128.000	87.320%	87.278%
3	00:27:44	80.876%	1845.000	486.300	488.300	2161.000	2136.000	86.791%	87.522%
x		80.627%	1847.000	485.500	487.100	2143.000	2130.000	86.486%	86.821%
σ		0.238%	6.971	3.104	1.320	15.600	5.075	1.022%	1.011%
%RSD		0.295	0.378	0.639	0.271	0.728	0.238	1.182	1.164

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:18	41.990	42.260	17.220	18.680	17.760	90.321%
2	00:27:01	43.720	43.930	17.660	19.230	18.470	89.396%
3	00:27:44	43.940	44.220	17.510	18.760	18.180	90.119%
x		43.220	43.470	17.460	18.890	18.140	89.945%
σ		1.071	1.060	0.219	0.297	0.358	0.487%
%RSD		2.477	2.438	1.253	1.572	1.972	0.541

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	75.178%	48.710	19490.000	19240.000	0.000	98590.000	54860.000	55870.000
2	00:31:20	74.156%	47.760	19180.000	19100.000	0.000	98690.000	55640.000	56030.000
3	00:32:04	72.045%	49.260	20140.000	19710.000	0.000	97780.000	55960.000	57400.000
x		73.793%	48.570	19600.000	19350.000	0.000	98350.000	55490.000	56430.000
σ		1.598%	0.759	491.400	319.800	0.000	497.200	564.500	839.800
%RSD		2.165	1.563	2.507	1.653	0.000	0.505	1.017	1.488

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	2071.000	20000.000	0.000	53410.000	54770.000	52640.000	80.999%	927.100
2	00:31:20	2043.000	19850.000	0.000	53290.000	55590.000	56160.000	79.508%	939.600
3	00:32:04	2090.000	20220.000	0.000	52880.000	54760.000	54820.000	79.684%	948.600
x		2068.000	20020.000	0.000	53190.000	55040.000	54540.000	80.064%	938.400
σ		23.540	187.400	0.000	276.100	477.700	1781.000	0.815%	10.790
%RSD		1.139	0.936	0.000	0.519	0.868	3.265	1.018	1.150

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	474.900	188.700	497.700	984.900	1183.000	453.500	455.500	232.100
2	00:31:20	479.800	192.400	503.200	1018.000	1169.000	452.000	458.300	230.300
3	00:32:04	478.900	190.700	502.200	1030.000	1191.000	448.600	457.500	233.200
x		477.900	190.600	501.000	1011.000	1181.000	451.400	457.100	231.900
σ		2.599	1.867	2.925	23.490	10.890	2.496	1.446	1.432
%RSD		0.544	0.979	0.584	2.323	0.922	0.553	0.316	0.618

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	232.500	477.100	482.400	37.630	12.080	13.240	0.000	998.500
2	00:31:20	229.500	480.700	481.800	37.990	12.820	14.720	0.000	1005.000
3	00:32:04	234.500	480.600	485.500	38.010	12.280	12.660	0.000	1005.000
x		232.200	479.500	483.300	37.880	12.390	13.540	0.000	1003.000
σ		2.549	1.998	2.008	0.215	0.380	1.063	0.000	3.664
%RSD		1.098	0.417	0.416	0.566	3.066	7.845	0.000	0.365

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	81.298%	940.100	938.000	80.426%	46.970	47.690	50.400	46.810
2	00:31:20	81.009%	963.400	962.500	80.303%	46.620	47.270	48.950	46.540
3	00:32:04	81.153%	967.000	970.500	80.850%	46.860	47.100	49.080	46.880
x		81.153%	956.900	957.000	80.526%	46.810	47.360	49.480	46.740
σ		0.145%	14.580	16.950	0.287%	0.178	0.302	0.801	0.178
%RSD		0.178	1.524	1.771	0.356	0.380	0.638	1.619	0.381

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	79.382%	1890.000	495.400	494.300	2197.000	2177.000	85.400%	85.839%
2	00:31:20	80.325%	1882.000	496.800	497.900	2192.000	2172.000	86.852%	86.765%
3	00:32:04	80.109%	1891.000	494.400	494.200	2178.000	2167.000	87.747%	87.456%
x		79.939%	1888.000	495.600	495.500	2189.000	2172.000	86.666%	86.687%
σ		0.494%	4.725	1.213	2.079	9.493	4.873	1.184%	0.811%
%RSD		0.618	0.250	0.245	0.420	0.434	0.224	1.367	0.936

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:37	43.560	43.670	17.550	19.030	18.220	89.985%
2	00:31:20	44.660	45.260	17.920	19.580	18.650	88.927%
3	00:32:04	45.420	45.210	18.130	19.480	18.840	89.062%
x		44.550	44.720	17.870	19.360	18.570	89.325%
σ		0.939	0.904	0.294	0.292	0.320	0.576%
%RSD		2.108	2.022	1.644	1.509	1.722	0.645

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	77.689%	0.011	238.500	238.700	0.000	135.700	38.680	39.140
2	00:39:16	75.740%	0.059	221.700	230.100	0.000	138.800	38.620	42.680
3	00:39:59	74.571%	0.079	216.600	219.200	0.000	140.600	44.440	43.200
x		76.000%	0.050	225.600	229.300	0.000	138.400	40.580	41.670
σ		1.575%	0.035	11.450	9.770	0.000	2.491	3.348	2.213
%RSD		2.072	71.220	5.078	4.261	0.000	1.801	8.250	5.311

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	106.700	164.800	0.000	106.200	142.100	64.750	80.837%	3.689
2	00:39:16	107.600	166.400	0.000	102.900	170.300	69.400	79.932%	3.279
3	00:39:59	106.300	168.300	0.000	104.100	140.600	54.650	79.607%	3.888
x		106.900	166.500	0.000	104.400	151.000	62.930	80.125%	3.619
σ		0.699	1.778	0.000	1.690	16.760	7.538	0.637%	0.310
%RSD		0.654	1.068	0.000	1.619	11.100	11.980	0.795	8.576

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	0.410	1.342	10.060	169.400	162.400	0.110	0.676	1.758
2	00:39:16	0.173	1.279	10.050	164.400	156.000	0.146	0.865	1.889
3	00:39:59	0.249	1.275	9.861	162.600	163.800	0.136	0.648	1.731
x		0.277	1.298	9.992	165.400	160.700	0.131	0.730	1.792
σ		0.121	0.037	0.114	3.559	4.183	0.019	0.118	0.085
%RSD		43.750	2.876	1.135	2.151	2.602	14.430	16.160	4.723

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	1.826	6.562	6.268	0.017	-0.205	0.883	0.000	0.382
2	00:39:16	1.655	6.783	6.176	-0.132	-0.450	0.080	0.000	0.427
3	00:39:59	1.766	6.459	6.717	-0.521	-0.464	0.476	0.000	0.429
x		1.749	6.601	6.387	-0.212	-0.373	0.479	0.000	0.413
σ		0.087	0.165	0.289	0.278	0.146	0.402	0.000	0.027
%RSD		4.962	2.506	4.528	131.300	39.060	83.750	0.000	6.454

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	80.920%	4.389	4.295	86.164%	0.005	0.004	-0.026	-0.003
2	00:39:16	81.723%	3.699	3.729	85.629%	0.004	0.006	-0.043	-0.009
3	00:39:59	81.906%	3.400	3.318	85.011%	0.003	0.009	-0.026	-0.022
x		81.516%	3.829	3.780	85.601%	0.004	0.006	-0.032	-0.011
σ		0.524%	0.507	0.491	0.577%	0.001	0.002	0.010	0.010
%RSD		0.643	13.250	12.980	0.675	27.190	41.000	31.450	85.260

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	82.406%	3.359	0.152	0.160	3.478	3.423	85.676%	85.495%
2	00:39:16	82.288%	2.790	0.174	0.176	3.348	3.807	86.367%	86.603%
3	00:39:59	81.764%	2.317	0.196	0.188	3.520	3.355	85.750%	86.063%
x		82.153%	2.822	0.174	0.175	3.449	3.528	85.931%	86.054%
σ		0.342%	0.522	0.022	0.014	0.090	0.244	0.379%	0.554%
%RSD		0.416	18.500	12.520	7.953	2.606	6.913	0.441	0.644

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:38:33	0.104	0.109	0.628	0.640	0.626	95.212%
2	00:39:16	0.097	0.086	0.682	0.614	0.642	94.285%
3	00:39:59	0.083	0.070	0.672	0.567	0.611	94.320%
x		0.095	0.088	0.661	0.607	0.626	94.606%
σ		0.011	0.020	0.029	0.037	0.015	0.525%
%RSD		11.310	22.540	4.313	6.037	2.465	0.555

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	81.670%	0.027	164.100	167.200	0.000	6.963	2.581	2.831
2	00:43:36	78.405%	-0.017	173.000	170.200	0.000	12.170	5.443	5.456
3	00:44:20	76.767%	0.002	157.400	171.100	0.000	8.552	3.299	4.206
x		78.947%	0.004	164.800	169.500	0.000	9.230	3.774	4.164
σ		2.496%	0.022	7.842	2.058	0.000	2.671	1.489	1.313
%RSD		3.162	603.500	4.757	1.214	0.000	28.940	39.460	31.530

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	0.672	17.510	0.000	3.200	115.000	18.560	81.292%	0.204
2	00:43:36	0.792	18.500	0.000	4.348	105.600	12.480	81.022%	0.206
3	00:44:20	0.668	18.490	0.000	3.264	125.400	16.430	80.004%	-0.055
x		0.711	18.170	0.000	3.604	115.300	15.820	80.773%	0.118
σ		0.070	0.568	0.000	0.645	9.906	3.086	0.679%	0.150
%RSD		9.920	3.126	0.000	17.910	8.589	19.510	0.840	126.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	-0.057	0.352	0.602	17.360	20.820	0.033	-0.109	-0.072
2	00:43:36	-0.005	0.287	0.588	15.270	15.360	0.049	-0.081	-0.072
3	00:44:20	-0.191	0.282	0.602	15.380	13.860	0.048	-0.096	-0.050
x		-0.084	0.307	0.597	16.000	16.680	0.044	-0.095	-0.065
σ		0.096	0.039	0.008	1.179	3.661	0.009	0.014	0.013
%RSD		113.700	12.690	1.315	7.365	21.950	20.560	14.370	19.440

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	-0.073	0.280	0.359	-0.142	-0.622	1.038	0.000	0.091
2	00:43:36	-0.054	0.289	-0.092	-0.127	-0.193	0.900	0.000	0.122
3	00:44:20	-0.036	0.247	0.244	-0.242	-0.132	0.158	0.000	0.097
x		-0.054	0.272	0.171	-0.170	-0.316	0.698	0.000	0.103
σ		0.019	0.022	0.234	0.063	0.267	0.473	0.000	0.016
%RSD		34.210	8.155	137.400	36.750	84.660	67.780	0.000	15.720

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	81.781%	2.463	2.338	85.926%	-0.004	0.000	0.046	0.047
2	00:43:36	81.904%	2.064	1.960	86.482%	0.004	0.002	0.023	0.010
3	00:44:20	81.311%	1.857	1.676	85.936%	-0.003	0.001	-0.068	-0.052
x		81.665%	2.128	1.992	86.115%	-0.001	0.001	0.000	0.002
σ		0.313%	0.308	0.332	0.318%	0.004	0.001	0.060	0.050
%RSD		0.383	14.480	16.680	0.369	344.800	98.030	23840.000	3172.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	82.639%	1.850	0.080	0.057	0.211	0.273	85.527%	85.006%
2	00:43:36	83.116%	1.721	0.086	0.084	0.343	0.365	86.383%	86.358%
3	00:44:20	82.740%	1.400	0.056	0.088	0.369	0.262	87.194%	87.700%
x		82.832%	1.657	0.074	0.076	0.308	0.300	86.368%	86.355%
σ		0.251%	0.232	0.016	0.017	0.085	0.057	0.833%	1.347%
%RSD		0.303	13.990	21.940	21.940	27.490	18.860	0.965	1.560

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:42:53	0.061	0.071	0.066	0.065	0.063	93.342%
2	00:43:36	0.050	0.057	0.039	0.046	0.051	93.578%
3	00:44:20	0.049	0.055	0.036	0.017	0.024	94.221%
x		0.053	0.061	0.047	0.043	0.046	93.713%
σ		0.007	0.009	0.016	0.024	0.020	0.455%
%RSD		12.680	14.060	34.460	56.970	43.100	0.486

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	81.578%	0.159	139.000	141.800	0.000	24.880	1550.000	1558.000
2	00:47:55	79.245%	0.109	142.000	145.100	0.000	27.130	1568.000	1608.000
3	00:48:38	77.445%	0.196	137.400	144.700	0.000	27.190	1627.000	1622.000
x		79.423%	0.155	139.400	143.900	0.000	26.400	1582.000	1596.000
σ		2.072%	0.043	2.330	1.781	0.000	1.319	40.740	33.750
%RSD		2.609	28.020	1.671	1.238	0.000	4.997	2.576	2.115

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	385.100	47.020	0.000	71.790	4009.000	3836.000	83.930%	13.380
2	00:47:55	393.600	48.080	0.000	70.360	3879.000	3803.000	82.980%	14.150
3	00:48:38	392.900	48.440	0.000	69.790	3849.000	3846.000	82.003%	14.510
x		390.500	47.840	0.000	70.650	3912.000	3829.000	82.971%	14.010
σ		4.691	0.735	0.000	1.030	85.290	22.560	0.964%	0.582
%RSD		1.201	1.536	0.000	1.458	2.180	0.589	1.162	4.152

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	1.078	0.565	15.820	962.200	1017.000	1.028	1.506	2.167
2	00:47:55	1.466	0.640	16.100	1031.000	1034.000	0.950	1.612	2.248
3	00:48:38	1.489	0.601	16.010	1017.000	1042.000	0.995	1.570	2.059
x		1.344	0.602	15.980	1003.000	1031.000	0.991	1.563	2.158
σ		0.231	0.038	0.143	36.140	12.610	0.039	0.053	0.095
%RSD		17.160	6.258	0.892	3.603	1.224	3.951	3.412	4.393

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	2.159	5197.000	5293.000	1.340	0.222	1.113	0.000	7.062
2	00:47:55	2.332	5226.000	5297.000	1.093	0.050	0.904	0.000	6.993
3	00:48:38	2.168	5250.000	5314.000	1.334	0.066	1.054	0.000	6.950
x		2.219	5224.000	5301.000	1.256	0.113	1.024	0.000	7.002
σ		0.097	26.170	11.300	0.141	0.095	0.108	0.000	0.057
%RSD		4.382	0.501	0.213	11.210	84.360	10.530	0.000	0.813

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	83.493%	1.393	1.347	87.040%	-0.008	0.005	5.770	5.804
2	00:47:55	84.063%	1.228	1.390	86.705%	0.007	0.014	5.368	5.594
3	00:48:38	83.916%	1.114	1.216	87.318%	0.013	0.020	5.781	5.724
x		83.824%	1.245	1.317	87.021%	0.004	0.013	5.640	5.707
σ		0.296%	0.140	0.090	0.307%	0.011	0.008	0.235	0.106
%RSD		0.353	11.260	6.861	0.353	258.400	59.790	4.170	1.859

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	84.099%	0.711	0.158	0.146	5.163	5.274	87.066%	85.921%
2	00:47:55	83.983%	0.664	0.160	0.156	5.088	5.394	87.053%	87.491%
3	00:48:38	85.094%	0.541	0.175	0.132	5.509	5.119	87.608%	87.983%
x		84.392%	0.639	0.164	0.145	5.253	5.262	87.242%	87.132%
σ		0.611%	0.087	0.009	0.012	0.225	0.138	0.317%	1.077%
%RSD		0.724	13.700	5.685	8.517	4.273	2.627	0.363	1.236

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:12	0.062	0.046	123.800	114.100	117.800	92.605%
2	00:47:55	0.042	0.049	124.300	114.800	118.700	93.568%
3	00:48:38	0.034	0.042	125.000	115.300	119.100	93.983%
x		0.046	0.046	124.300	114.700	118.500	93.385%
σ		0.015	0.004	0.608	0.591	0.691	0.707%
%RSD		32.280	7.705	0.489	0.515	0.583	0.757

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	81.989%	0.175	124.300	119.400	0.000	26.920	823.000	823.100
2	00:52:12	83.446%	0.206	119.100	118.300	0.000	27.050	803.800	816.300
3	00:52:55	81.011%	0.133	121.000	123.000	0.000	27.120	802.500	838.800
x		82.148%	0.172	121.500	120.200	0.000	27.030	809.700	826.000
σ		1.225%	0.037	2.664	2.473	0.000	0.101	11.480	11.530
%RSD		1.492	21.380	2.193	2.056	0.000	0.373	1.418	1.396

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	652.100	60.870	0.000	86.130	8642.000	8890.000	83.944%	13.250
2	00:52:12	641.700	58.700	0.000	82.640	9028.000	8788.000	84.964%	12.060
3	00:52:55	661.500	60.130	0.000	83.590	8789.000	8751.000	83.786%	12.480
x		651.800	59.900	0.000	84.120	8820.000	8810.000	84.231%	12.600
σ		9.887	1.102	0.000	1.806	194.900	71.770	0.639%	0.606
%RSD		1.517	1.840	0.000	2.147	2.210	0.815	0.759	4.813

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	1.449	0.858	17.800	1846.000	1796.000	0.729	1.326	3.807
2	00:52:12	1.304	0.788	17.880	1815.000	1789.000	0.642	1.168	3.750
3	00:52:55	1.338	0.853	18.130	1857.000	1793.000	0.671	1.317	3.692
x		1.364	0.833	17.940	1839.000	1793.000	0.681	1.270	3.750
σ		0.076	0.039	0.171	21.460	3.552	0.044	0.088	0.057
%RSD		5.559	4.652	0.952	1.167	0.198	6.473	6.959	1.526

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	3.686	2936.000	2968.000	1.487	-0.396	0.652	0.000	18.600
2	00:52:12	3.935	2914.000	2945.000	1.710	-0.332	0.589	0.000	18.760
3	00:52:55	3.451	2948.000	2953.000	1.579	0.066	1.141	0.000	18.830
x		3.691	2933.000	2955.000	1.592	-0.221	0.794	0.000	18.730
σ		0.242	17.260	11.400	0.112	0.250	0.302	0.000	0.121
%RSD		6.565	0.589	0.386	7.045	113.400	38.090	0.000	0.647

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	84.065%	1.096	1.086	87.841%	0.052	0.045	5.158	5.410
2	00:52:12	84.016%	1.027	1.143	88.136%	0.059	0.061	5.344	5.488
3	00:52:55	83.984%	1.067	0.973	87.999%	0.041	0.053	5.295	5.201
x		84.022%	1.063	1.067	87.992%	0.051	0.053	5.266	5.366
σ		0.041%	0.035	0.086	0.148%	0.009	0.008	0.096	0.149
%RSD		0.049	3.262	8.108	0.168	17.550	15.020	1.824	2.769

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	84.718%	0.612	0.141	0.162	6.821	6.849	86.261%	85.848%
2	00:52:12	85.192%	0.666	0.174	0.127	6.737	7.266	86.920%	87.098%
3	00:52:55	84.731%	0.684	0.132	0.149	6.810	6.920	88.063%	88.458%
x		84.880%	0.654	0.149	0.146	6.789	7.012	87.081%	87.135%
σ		0.270%	0.038	0.022	0.018	0.046	0.223	0.912%	1.305%
%RSD		0.319	5.768	14.710	12.200	0.672	3.179	1.047	1.498

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:29	0.019	0.036	604.700	555.700	568.000	93.551%
2	00:52:12	0.032	0.048	617.100	564.100	580.400	93.887%
3	00:52:55	0.032	0.049	614.900	568.300	582.200	94.171%
x		0.027	0.045	612.200	562.700	576.900	93.870%
σ		0.008	0.007	6.617	6.406	7.737	0.310%
%RSD		28.170	15.850	1.081	1.138	1.341	0.331

CRI 289521 2/6/2012 12:59:23 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	86.258%	0.833	97.220	93.100	0.000	103.200	113.400	113.800
2	01:00:49	83.384%	0.904	96.750	96.890	0.000	101.900	110.700	117.500
3	01:01:32	84.251%	0.869	91.650	93.340	0.000	102.100	113.100	115.200
x		84.631%	86.891%	1904.125%	1888.864%	0.000	102.410%	112.425%	115.484%
σ		1.474%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.742	4.090	3.247	2.249	0.000	0.720	1.298	1.590

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	32.320	514.900	0.000	105.300	236.100	117.600	86.625%	4.632
2	01:00:49	32.760	518.400	0.000	102.100	170.800	120.400	85.806%	4.980
3	01:01:32	33.150	508.100	0.000	101.500	214.900	117.100	86.245%	4.461
x		109.142%	102.763%	0.000	102.977%	207.275%	118.384%	86.226%	93.820%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.410%	n/a
%RSD		1.263	1.028	0.000	1.939	16.080	1.520	0.475	5.644

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	0.846	1.889	5.813	50.670	50.580	0.479	0.748	1.781
2	01:00:49	0.855	1.852	5.785	49.170	50.750	0.490	0.987	1.661
3	01:01:32	0.943	1.969	5.742	47.870	44.580	0.482	1.014	1.737
x		88.130%	95.168%	1156.004%	98.471%	97.281%	96.712%	91.626%	86.314%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		6.108	3.124	0.617	2.845	7.225	1.166	15.940	3.513

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	1.906	4.456	4.427	1.007	4.519	5.036	0.000	5.117
2	01:00:49	1.578	4.651	4.204	1.293	5.206	5.040	0.000	5.192
3	01:01:32	1.835	4.518	4.627	0.874	5.183	5.223	0.000	5.137
x		88.652%	90.825%	88.385%	105.799%	99.387%	101.993%	0.000	102.972%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		9.745	2.195	4.787	20.270	7.846	2.097	0.000	0.752

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	81.321%	5.219	4.996	83.961%	0.874	0.897	0.720	0.816
2	01:00:49	81.973%	5.249	5.318	83.581%	0.945	0.916	0.963	0.886
3	01:01:32	81.955%	5.363	5.429	83.504%	1.016	0.924	0.760	0.867
x		81.750%	105.541%	104.954%	83.682%	94.490%	91.238%	81.417%	85.640%
σ		0.372%	n/a	n/a	0.245%	n/a	n/a	n/a	n/a
%RSD		0.455	1.441	4.290	0.292	7.501	1.507	16.030	4.267

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	97.832%	6.894	1.787	1.663	8.730	9.047	84.706%	84.820%
2	01:00:49	97.467%	6.145	1.821	1.722	9.191	8.961	84.881%	85.415%
3	01:01:32	97.957%	5.844	1.863	1.825	9.121	9.324	85.175%	85.130%
x		97.752%	125.886%	91.180%	86.821%	90.140%	91.108%	84.921%	85.122%
σ		0.255%	n/a	n/a	n/a	n/a	n/a	0.237%	0.297%
%RSD		0.261	8.593	2.082	4.714	2.752	2.084	0.279	0.349

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:06	0.946	0.941	1.151	1.157	1.123	93.271%
2	01:00:49	0.903	0.914	1.106	1.000	1.070	93.645%
3	01:01:32	0.938	0.963	1.076	1.082	1.085	93.331%
x		92.877%	93.944%	111.069%	107.948%	109.257%	93.415%
σ		n/a	n/a	n/a	n/a	n/a	0.201%
%RSD		2.473	2.604	3.384	7.322	2.475	0.215

CCV 309497 2/6/2012 1:14:29 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	81.707%	97.760	156.500	160.100	0.000	49840.000	50210.000	50560.000
2	01:15:55	79.358%	97.460	169.500	166.800	0.000	49510.000	51660.000	52440.000
3	01:16:38	79.874%	96.090	161.600	158.200	0.000	49070.000	51840.000	52640.000
x		80.313%	97.101%	162.531%	161.662%	0.000	98.952%	102.467%	103.763%
σ		1.234%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.537	0.918	4.026	2.795	0.000	0.782	1.742	2.210

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	505.300	5222.000	0.000	51480.000	48230.000	47640.000	82.647%	97.650
2	01:15:55	523.300	5327.000	0.000	51960.000	48470.000	49040.000	81.717%	98.750
3	01:16:38	516.900	5271.000	0.000	51570.000	49090.000	49190.000	82.115%	95.930
x		103.031%	105.466%	0.000	103.340%	97.191%	97.244%	82.159%	97.444%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.466%	n/a
%RSD		1.774	0.990	0.000	0.497	0.911	1.764	0.568	1.459

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	96.380	96.140	498.300	25530.000	24880.000	95.550	95.900	96.950
2	01:15:55	96.540	97.180	507.000	25700.000	25170.000	95.090	94.460	95.230
3	01:16:38	94.740	97.050	503.800	25460.000	24870.000	94.440	95.220	95.050
x		95.888%	96.790%	100.609%	102.259%	99.895%	95.028%	95.194%	95.744%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.038	0.585	0.875	0.475	0.679	0.587	0.755	1.097

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	97.460	98.720	100.700	98.530	97.910	97.740	0.000	98.480
2	01:15:55	95.560	96.940	97.130	98.890	98.740	101.100	0.000	98.290
3	01:16:38	93.200	96.700	94.610	98.410	100.300	100.200	0.000	98.110
x		95.406%	97.453%	97.489%	98.610%	98.981%	99.659%	0.000	98.294%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.235	1.132	3.149	0.255	1.226	1.734	0.000	0.190

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	79.670%	92.780	92.610	81.467%	95.570	95.910	97.620	99.720
2	01:15:55	80.728%	97.770	96.850	82.203%	95.280	95.990	98.390	99.230
3	01:16:38	81.639%	97.670	97.510	81.975%	95.290	95.670	97.160	99.390
x		80.679%	96.073%	95.659%	81.881%	95.380%	95.855%	97.723%	99.447%
σ		0.986%	n/a	n/a	0.377%	n/a	n/a	n/a	n/a
%RSD		1.222	2.971	2.781	0.460	0.175	0.169	0.633	0.248

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	79.788%	95.820	92.410	92.680	97.590	95.920	83.333%	83.144%
2	01:15:55	80.259%	97.610	95.290	96.300	99.380	99.320	84.516%	85.416%
3	01:16:38	81.731%	96.990	97.160	96.750	98.570	97.500	84.849%	85.716%
x		80.593%	96.806%	94.951%	95.247%	98.514%	97.580%	84.232%	84.759%
σ		1.013%	n/a	n/a	n/a	n/a	n/a	0.797%	1.406%
%RSD		1.257	0.939	2.517	2.344	0.912	1.743	0.946	1.659

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:15:12	90.730	90.930	92.320	91.600	91.870	88.173%
2	01:15:55	92.890	92.180	93.930	93.070	93.510	88.766%
3	01:16:38	92.780	93.420	94.960	94.320	94.380	88.612%
x		92.134%	92.180%	93.734%	92.999%	93.251%	88.517%
σ		n/a	n/a	n/a	n/a	n/a	0.308%
%RSD		1.318	1.351	1.422	1.462	1.367	0.348

CCB11 2/6/2012 1:21:41 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	85.632%	0.049	53.260	54.970	0.000	19.710	22.570	22.420
2	01:23:07	84.700%	0.042	56.730	55.920	0.000	26.720	29.410	28.750
3	01:23:50	81.880%	-0.000	58.930	57.510	0.000	29.980	30.820	33.210
x		84.071%	0.030	56.310	56.130	0.000	25.470	27.600	28.130
σ		1.954%	0.027	2.860	1.284	0.000	5.250	4.413	5.420
%RSD		2.324	87.790	5.080	2.287	0.000	20.610	15.990	19.270

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.444	2.870	0.000	17.590	125.100	40.210	85.931%	-0.142
2	01:23:07	0.532	2.798	0.000	25.500	130.500	49.870	84.935%	-0.006
3	01:23:50	0.825	3.946	0.000	28.040	113.800	50.230	84.760%	-0.006
x		0.601	3.205	0.000	23.710	123.100	46.770	85.209%	-0.051
σ		0.200	0.643	0.000	5.449	8.511	5.681	0.632%	0.078
%RSD		33.220	20.060	0.000	22.980	6.912	12.150	0.742	152.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.035	0.013	0.461	10.470	14.060	0.042	-0.093	-0.221
2	01:23:07	0.084	0.064	0.585	10.040	12.760	0.073	-0.040	-0.216
3	01:23:50	0.107	0.034	0.579	9.224	9.641	0.069	-0.008	-0.174
x		0.075	0.037	0.542	9.911	12.150	0.062	-0.047	-0.204
σ		0.037	0.026	0.070	0.634	2.270	0.017	0.043	0.025
%RSD		48.840	69.140	12.840	6.398	18.680	27.520	90.610	12.510

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	-0.196	-0.670	-0.812	0.197	0.378	0.800	0.000	0.122
2	01:23:07	-0.195	-0.686	-0.736	0.112	0.043	0.452	0.000	0.107
3	01:23:50	-0.262	-0.695	-0.701	0.154	0.413	0.703	0.000	0.136
x		-0.218	-0.684	-0.750	0.154	0.278	0.652	0.000	0.122
σ		0.038	0.013	0.057	0.043	0.204	0.179	0.000	0.015
%RSD		17.560	1.893	7.552	27.580	73.520	27.520	0.000	11.980

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	84.361%	0.738	0.723	90.539%	0.033	0.036	-0.018	0.006
2	01:23:07	84.846%	0.662	0.704	90.222%	0.037	0.036	0.095	0.065
3	01:23:50	84.328%	0.581	0.588	90.031%	0.048	0.064	0.059	0.074
x		84.512%	0.660	0.671	90.264%	0.039	0.045	0.045	0.048
σ		0.290%	0.078	0.073	0.256%	0.007	0.016	0.058	0.037
%RSD		0.344	11.890	10.850	0.284	18.990	36.150	126.600	75.970

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	85.512%	0.085	0.671	0.680	0.086	0.198	86.705%	86.327%
2	01:23:07	86.352%	0.047	0.609	0.587	0.176	0.140	87.926%	87.636%
3	01:23:50	86.237%	-0.023	0.556	0.626	0.156	0.188	87.935%	88.338%
x		86.034%	0.036	0.612	0.631	0.139	0.175	87.522%	87.434%
σ		0.455%	0.055	0.058	0.047	0.047	0.031	0.707%	1.021%
%RSD		0.529	151.100	9.434	7.393	33.730	17.640	0.808	1.167

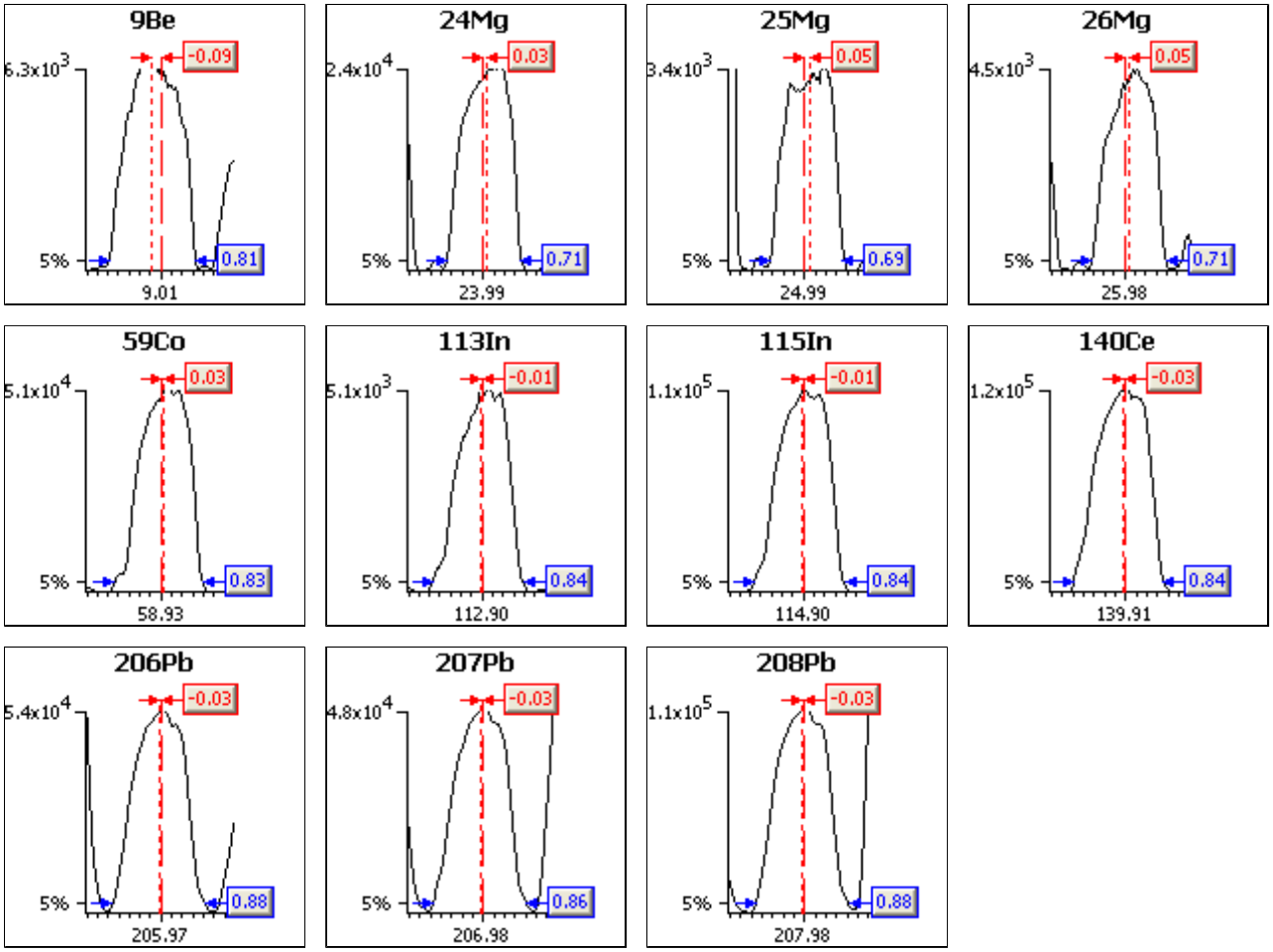
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:24	0.033	0.030	0.215	0.219	0.214	93.089%
2	01:23:07	0.043	0.039	0.171	0.221	0.188	94.056%
3	01:23:50	0.044	0.047	0.157	0.130	0.167	95.470%
x		0.040	0.039	0.181	0.190	0.190	94.205%
σ		0.006	0.009	0.031	0.052	0.023	1.197%
%RSD		15.950	22.770	16.910	27.280	12.380	1.271

Performance Report

Sample details
Sample name : ITUNE
Acquired at : 2/5/2012 12:46:57 PM
Report name : EPA ILMO5.2/6020A 2.1 [8/5/2011 12:59:56 PM]

Mass Calibration verification

Acquisition parameters
Sweeps : 25
Dwell : 2.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.81	-0.09
24Mg	0.90	0.45	0.10	0.71	0.03
25Mg	0.90	0.45	0.10	0.69	0.05
26Mg	0.90	0.45	0.10	0.71	0.05
59Co	0.90	0.45	0.10	0.83	0.03
113In	0.90	0.45	0.10	0.84	-0.01
115In	0.90	0.45	0.10	0.84	-0.01
140Ce	0.90	0.45	0.10	0.84	-0.03
206Pb	0.90	0.45	0.10	0.88	-0.03
207Pb	0.90	0.45	0.10	0.86	-0.03
208Pb	0.90	0.45	0.10	0.88	-0.03

Sample details
Sample name : ITUNE
Acquired at : 2/5/2012 12:46:57 PM
Report name : EPA ILMO5.2/6020A 2.1 [8/5/2011 12:59:56 PM]

Tune conditions

Major	
Extraction	-125
Lens 1	2.9
Focus	20.8
D1	-34.5
Pole Bias	-1.0
Hexapole Bias	-4.0
Nebuliser	0.77
Sampling Depth	130

Minor	
Lens 2	-22.7
Lens 3	-181.2
Forward power	1404
Horizontal	66
Vertical	596
D2	-141
DA	-58.0
Cool	13.0
Auxiliary	0.70

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
He/H2	0.00
He/NH3	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>10000	-
1	12:47:44 PM	0	6097	23509	3114	4017	148192	50033	2
2	12:49:09 PM	0	6074	22689	3118	3840	129586	49554	0
3	12:50:35 PM	0	5986	22239	3036	3724	124278	48739	0
4	12:52:00 PM	0	6096	22830	3102	3846	123492	48359	1
5	12:53:25 PM	0	6036	23190	3134	3975	123498	48832	1
x		0	6058	22891	3101	3880	129809	49104	1
σ		0.08	47.21	484.70	37.92	117.27	10586.72	675.87	0.89
%RSD		81.441	0.779	2.117	1.223	3.022	8.156	1.376	95.831

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	12:47:44 PM	17	0	4899	112872	809	124829	1062	48801
2	12:49:09 PM	8	0	4897	112000	721	124988	1070	48420
3	12:50:35 PM	9	0	4787	111172	671	124810	1028	47758
4	12:52:00 PM	12	0	4881	110635	755	122816	1039	47514
5	12:53:25 PM	13	0	4611	109731	769	122671	1032	46697
x		12	0	4815	111282	745	124023	1047	47838
σ		3.62	0.10	122.86	1212.60	51.82	1170.91	18.65	818.37
%RSD		30.744	94.786	2.551	1.090	6.956	0.944	1.782	1.711

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	12:47:44 PM	44832	107003	0
2	12:49:09 PM	44535	105489	0
3	12:50:35 PM	44498	104881	0
4	12:52:00 PM	43849	103477	0
5	12:53:25 PM	43023	102431	0
x		44147	104656	0
σ		723.84	1774.42	0.07
%RSD		1.640	1.695	100.000

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	12:47:44 PM	0
2	12:49:09 PM	0

3	12:50:35 PM	0
4	12:52:00 PM	0
5	12:53:25 PM	0
x		0.0084
σ		0.00
%RSD		1.4631

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-7794-2

SDG No.:

Batch Number: 27202 Batch Start Date: 01/30/12 13:00 Batch Analyst: Shook, Caitlin N

Batch Method: 3010A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00005	MTAPITTMSA 00005	MTAPITTMSC 00010	
MB 180-27202/1		3010A, 6020/DOD		50 mL	50 mL				
LCS 180-27202/2		3010A, 6020/DOD		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-7794-A-1	02MW13A-20120119	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-2	02DUP01-20120119	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-3	02SW101-20120119	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-4	02SW102-20120119	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-5	02FB01-20120119	3010A, 6020/DOD	T	50 mL	50 mL				
180-7794-A-6	02RB01-20120119	3010A, 6020/DOD	T	50 mL	50 mL				

Batch Notes	
Batch Comment	METALS A7
First End time	17:00
Lot # of hydrochloric acid	5mL 299966
Lot # of Nitric Acid	3mL 307501
Hot Block ID number	#1
Oven, Bath or Block Temperature 1	96 Degrees C
Pipette ID	03F95602
Person who witnessed spiking	CS
First Start time	13:00
ID number of the thermometer	IP02 (0.0)
Digestion Tube/Cup Lot #	1107181
Uncorrected Temperature	96 Degrees C
Vendor of Reagent used	Mallinckrodt

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Pittsburgh
301 Alpha Drive

Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Linda C. Laver		Date: 01/25/12
TestAmerica West Sacramento	linda.laver@testamericainc.com		Carrier: FedEx	Page 1 of 1 COCs
880 Riverside Parkway	Analysis Turnaround Time		
West Sacramento, CA 95605			
Direct Line: 916-374-4362	TAT if different from Below 02/10/12		
	☐ 2 weeks		Sample Specific Notes: Please refer to SOW sent to Alex Cox
Project Name: G2A200474	☐ 1 week		
Site: White Water, NWS Earle, CTO WE72	☐ 2 days		
P O # G2A200474	☐ 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	6020: Sb, As, Cr, Cu, Fe, Pb, Zn																	
02MW13A-20120119	1/19/2012	0925	500ml	GW	1		X																	G2A200474-01
02MW13A-20120119	1/19/2012	1015	500ml	GW	1		X																	G2A200474-02
02MW13A-20120119	1/19/2012	1030	500ml	SW	1		X																	G2A200474-03
02MW13A-20120119	1/19/2012	1110	500ml	SW	1		X																	G2A200474-04
02MW13A-20120119	1/19/2012	1230	500ml	QC	1		X																	G2A200474-05
02MW13A-20120119	1/19/2012	1245	500ml	QC	1		X																	G2A200474-06

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Special Instructions/QC Requirements & Comments: Please see workshare!!! QSM 4.2, Level IV, CLP type forms

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Linda C Laver	TAL West Sac	01/25/12 1600	[illegible]	TA Pitt	1/27/12 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

G2A200474

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 2745 PAGE 1 OF 1

PROJECT NO: CTO 112603605 WE72	FACILITY: NWS Earle	PROJECT MANAGER: Jennifer Lambert	PHONE NUMBER: 610 382 3779
LABORATORY NAME AND CONTACT: Test America Linda Lavek	SAMPLERS (SIGNATURE): Donald Whalen	FIELD OPERATIONS LEADER: Donald Whalen	PHONE NUMBER: 610 382 1536
ADDRESS: 880 Riverside Pkwy	CARRIER/WAYBILL NUMBER: Fed Ex 8744 5963 9584	CITY, STATE: West Sacramento, CA	

STANDARD TAT ☒
RUSH TAT ☐ ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G P P
PRESERVATIVE USED: - - HNO3

DATE YEAR 2012	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	Explosives	Perchlorate	Total Metals					COMMENTS
1/19	0925	02MW13A-20120119				GW	G	4	X	X	X					
	1015	02DUP01-20120119				GW	G	4	X	X	X					
	1030	02SW101-20120119				SW	G	4	X	X	X					
	1110	02SW102-20120119				SW	G	4	X	X	X					
	1230	02FB01-20120119				QC	G	4	X	X	X					Field Blank
✓	1245	02RB01-20120119				QC	G	4	X	X	X					Rinsate Blank

1. RELINQUISHED BY Donald Whalen	DATE 1/19/12	TIME 1800	1. RECEIVED BY [signature]	DATE 1-20-12	TIME 1210
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
02MW13A-20120119	180-7794-A-1	Plastic 500ml - with Nitric Acid	2		
02DUP01-20120119	180-7794-A-2	Plastic 500ml - with Nitric Acid	2		
02SW101-20120119	180-7794-A-3	Plastic 500ml - with Nitric Acid	2		
02SW102-20120119	180-7794-A-4	Plastic 500ml - with Nitric Acid	2		
02FB01-20120119	180-7794-A-5	Plastic 500ml - with Nitric Acid	2		
02RB01-20120119	180-7794-A-6	Plastic 500ml - with Nitric Acid	2		
02MW01C-20120117	180-7794-A-7	Plastic 500ml - with Nitric Acid	2		
02MW01F-20120117	180-7794-A-8	Plastic 500ml - with Nitric Acid	2		
02MW01A-20120118	180-7794-A-9	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10 MS	Plastic 500ml - with Nitric Acid	2		
02MW13B-20120118	180-7794-A-10 MSD	Plastic 500ml - with Nitric Acid	2		
02MW13C-20120118	180-7794-A-11	Plastic 500ml - with Nitric Acid	2		

ORIGIN ID: BLUA (916) 373-5600
SHIPPING
TESTAMERICA
880 RIVERSIDE PKWY

WEST SACRAMENTO, CA 95605
UNITED STATES US

SHIP DATE: 26JAN12
ACTWGT: 43.1 LB
CAD: 852262/CAFE2508

BILL RECIPIENT

TO SAMPLE RECEIVING
TAL PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
DEPT: SUB WORK

REF: SEND OUTS

FedEx Express

FRI - 27 JAN A2
PRIORITY OVERNIGHT

TRK# 0201 4895 5399 8636

XH AGCA

15238
PA-US PIT

Login Sample Receipt Checklist

Client: TestAmerica Laboratories, Inc.

Job Number: 180-7794-2

Login Number: 7794

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: O'Donnell, Brandon R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX G

SURVEY DATA

Dennis W. Sklar, Inc. - Professional Land Surveying

2837 Ogden Avenue - Bensalem - Pennsylvania - 19020

Telephone: 215-268-7988 Fax: 215-268-7966 Email: dwspls@comcast.net

Naval Weapons Station Earle
Mainside - Site 02
Colts Neck - Monmouth County - New Jersey

Project #: 1036 February 14, 2012

Horizontal Datum: New Jersey State Plane Coordinates - NAD 83

Vertical Datum: NAVD 88

Monuments Used: Horizontal: NGS "NJNT" (CORS 96) (EPOCH 2002.00) / Vertical: PVC Casing 02MW10A

Additional Comments: PVC Casing Elevation 02MW10A = 90.18' (Verified as NAVD 88)

	Elevations			Coordinates		
Monitoring Wells	Ground	Measuring Point	Protective	Northing	Easting	Date of Survey
02MW01A	102.48	104.76	105.18	521221.04	598436.10	February 14, 2012
02MW01B	102.01	104.20	104.69	521226.39	598444.21	February 14, 2012
02MW01C	101.68	103.67	104.16	521231.06	598453.28	February 14, 2012
02MW06A	91.59	93.81	93.99	521928.12	598372.74	February 14, 2012
02MW06B	91.08	93.11	93.39	521925.61	598363.64	February 14, 2012
02MW06C	91.60	93.54	94.27	521929.26	598381.65	February 14, 2012
02MW08A	92.05	94.23	94.79	522089.02	598185.36	February 14, 2012
02MW08B	91.93	94.04	94.49	522096.21	598186.75	February 14, 2012
02MW08C	91.60	93.39	94.00	522101.67	598191.01	February 14, 2012
02MW09A	88.11	90.01	90.43	522192.10	598399.98	February 14, 2012
02MW09B	88.19	90.35	90.70	522187.83	598406.77	February 14, 2012
02MW09C	88.18	89.70	90.14	522184.18	598412.29	February 14, 2012
02MW10A	88.10	90.18	90.59	522073.53	598595.20	February 14, 2012
02MW10B	88.23	90.29	90.66	522069.17	598601.76	February 14, 2012
02MW10C	88.26	90.35	90.63	522066.25	598606.59	February 14, 2012
02MW13A	79.46	82.09	82.61	524010.18	599548.42	February 14, 2012

Dennis W. Sklar, Inc. - Professional Land Surveying

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Naval Weapons Station Earle

Mainside - Site 02

Colts Neck - Monmouth County - New Jersey

Project #: 1036 February 14, 2012

Horizontal Datum: New Jersey State Plane Coordinates - NAD 83

Vertical Datum: NAVD 88

Monuments Used: Horizontal: NGS "NJNT" (CORS 96) (EPOCH 2002.00) / Vertical: PVC Casing 02MW10A

Additional Comments: PVC Casing Elevation 02MW10A = 90.18' (Verified as NAVD 88)

	Elevations			Coordinates		
Monitoring Wells	Ground	Measuring Point	Protective	Northing	Easting	Date of Survey
02MW13B	79.35	81.68	82.12	524014.94	599538.97	February 14, 2012
02MW13C	79.09	81.63	82.14	524019.23	599529.42	February 14, 2012

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Telephone: 215-268-7988 Fax: 215-268-7966 Email: dwspls@comcast.net

Naval Weapons Station Earle
Mainside - Site 02
Colts Neck - Monmouth County - New Jersey

Project #: 1036 February 14, 2012
Horizontal Datum: New Jersey State Plane Coordinates - NAD 83
Vertical Datum: NAVD 88

	Elevation in Feet	Coordinates in Feet		
Sampling		Y	X	
Point #	Ground	North	East	Date Of Survey
02SW101	77.3	523982.89	599493.72	February 14, 2012
02SW102	76.4	524044.64	599457.60	February 14, 2012

APPENDIX H

NJDEP COMMENTS ON PHASE III REPORT

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

Memorandum

Date: 7/19/2011

To: Robert Confer, Chief
Bureau of Landfill and Hazardous Waste Permitting

Through: Mary Anne Kuserk, Bureau Chief
Bureau of Ground Water Pollution Assessment

From: Joseph Marchesani, Hydrogeologist
Bureau of Ground Water Pollution Assessment

Subject: Phase III Sampling Report
Open Burning/ Open Detonation Unit, Delay of Closure Subpart X Miscellaneous Unit
Earle Naval Weapons Station, Colts, Neck, NJ
USEPA ID No. NJ0170022172 (HWC110001)

The Bureau of Ground Water Pollution Assessment has received and reviewed the subject document. The document is acceptable.

Summary:
Twenty-two ground water monitoring wells exist in association with the RCRA Sub-X unit. The first four monitoring wells were installed in 1986, three more in 1991, then fifteen additional monitoring wells were installed in 2010 as five clusters of three monitoring wells each. The 2010 installed clusters monitor three aquifer zones, shallow (5-20ft bgs), intermediate (25-35ft bgs), and deep (45-55ft bgs). The monitoring well clusters MW6, MW9, MW11and MW12 are located more towards the center of the OB/OD unit.

Groundwater flow is northerly in all aquifer zones. A shallow intermittent unnamed stream drains in a northerly direction. Stream baseflow is provided through groundwater discharge.

The document review was coordinated with a 21 July 2011 site inspection. Arriving at 10:00am, Scott Flemings and Eric Helms were contacted. A visit to the Open Burning/ Open Detonation (OB/OD) area ensued during fair and sunny weather. A berm exists surrounding the entire testing area, with an inner berm around a supposed OB/OD area. However evidence (damaged well casing, ground material…etc) supports a hypothesis that OD may also occur outside of the inner bermed area. There were only two craters, about 1.0 yard diameter and 1.0 foot deep, with no ponded water in the craters. Scott stated the area is graded yearly and that the last grading was during spring 2011. The area is not used often. Groundwater monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-7 were opened. Depth to water and total depth were measured for each well. A review of the total depth suggests that the monitoring wells suffer no siltation issues. A visual inspection of all other monitoring wells associated with the OB/OD area followed. The following issues were noticed:

- Monitoring well MW-12B has 3” to 4” of sand covering the flush mount
- Monitoring well MW-6C has a compromised outer and inner casing from projectile damage,
- Monitoring wells MW-11A,B, and C each have over 1.0-foot of sand covering each flush mount well

Discussion
Groundwater samples were analyzed for explosives, metals and inorganics. A review of the monitoring well sampling data shows that the shallow monitoring wells MW11A and MW6A have the greatest contamination with 160.0ug/l TNT, 56.0ug/l RDX, and 16.0ug/l perchlorate. The inorganic results were unremarkable except for intermediate and deep aquifer chromium exceedances. The chromium was not detected in the shallow aquifer, possibly indicating a natural and/or upgradient background aquifer condition.

Three surface water sample results, located ¼- mile northerly of the OB/OD unit along the unnamed intermittent stream, indicates relatively low levels of RDX (0.28ug/l), perchlorate (0.16ug/l), and lead (7.1ug/l). Again, lead was not detected above applicable criteria in shallow aquifer downgradient monitoring wells.

Comments:
1) Continued groundwater monitoring is recommended.
2) The report references the Class II-A Ground Water Quality Standards throughout. This is acceptable.
3) All monitoring well must have the ID’s and permit numbers permanently affixed to the wells, although there were no issues during the site visit.
4) Earle should propose a remedy, so as not to collect site runoff, for monitoring well MW12B and the MW-11A,B,C cluster, located in the center of the OB/OD unit.
5) The report recommendation to install two monitoring well clusters downgradient and northerly of the OB/OD unit is acceptable, however, the downgradient monitoring well cluster MW-13A,B,C should be relocated proximal to existing upgradient monitoring MW-01, and renamed MW-01A,B,C. The upgradient monitoring well cluster should be sampled to provide evidence for natural and/or upgradient, background aquifer conditions. The existing monitoring well MW-01 should be abandoned, sealed and replaced with the new monitoring well cluster.
6) Monitoring well MW-6C should be repaired and redeveloped to remove potential debris which probably entered the well.
7) All “stick-up” monitoring wells within the open pit should have a protective sand- bag barrier.
8) A monthly monitoring well inspection plan should be included within the monitoring program.
9) Monitoring wells MW-01, MW-02, MW-03, MW-04, MW-05, and MW-07 should be included into a quarterly monitoring program. Parameters for analysis should be the explosives list, lead, arsenic, antimony, copper, zinc, iron, and chromium. Metals using EPA Method 6010B should be adequate. However, chromium may require another method.
10) A potable supply well search within 1- mile of the site should be conducted. There is a residential area approximately ¾- mile northerly and downgradient of the OB/OD site.

If there are any questions, please contact me at 292-8427.

JM./