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LONG TERM GROUNDWATER MONITORING REPORT FOR ROUND 13 NOVEMBER 2010 FOR SITE 2 AND 3 FORRESTAL LANDFILL AND SUPPLYSIDE LANDFILL NSTC GREAT LAKES IL

9/1/2011

TETRA TECH NUS

Long-Term Groundwater Monitoring Report Round 13 (November 2010)

for

Site 2 – Forrestal Landfill
Site 3 – Supplyside Landfill

Naval Station Great Lakes
Great Lakes, Illinois

Naval Facilities Engineering Command Midwest

Contract Number N62472-03-D-0057

Contract Task Order F273

September 2011

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LONG-TERM GROUNDWATER MONITORING REPORT
ROUND 13 NOVEMBER 2010
FOR
SITE 2 - FORRESTAL LANDFILL AND
SITE 3 - SUPPLYSIDE LANDFILL

NAVAL STATION GREAT LAKES
GREAT LAKES, ILLINOIS

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Naval Facilities Engineering Command Midwest
201 Decatur Avenue, Building 1A
Great Lakes, Illinois 60088

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

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PREPARED UNDER THE DIRECTION OF:

TIMOTHY S. EVANS
PROJECT MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA

APPROVED FOR SUBMISSION BY:

JOHN TREPANOWSKI, PE
PROGRAM MANAGER
TETRA TECH NUS, INC.
KING OF PRUSSIA, PENNSYLVANIA

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ACRONYMS AND ABBREVIATIONS

BGS	Below Ground Surface
BOD	Biological Oxygen Demand
CLEAN	Comprehensive Long-Term Environmental Action Navy
COD	Chemical Oxygen Demand
DoD	Department of Defense
DWEL	Drinking Water Equivalence Level
ELAP	Environmental Laboratory Accreditation Program
GRO	Groundwater Remediation Objective
EPA	Illinois Environmental Protection Agency
K	Hydraulic Conductivity
MCL	Maximum Contaminant Level
MSL	Mean Sea Level
NAVFAC	Naval Facilities Engineering Command
NSGL	Naval Station Great Lakes
NTU	Nephelometric Turbidity Unit
PCB	Polychlorinated Biphenyl
PNA	Polynuclear Aromatic
RACR	Remedial Action Completion Report
RSL	Regional Screening Level
SIM	Selected Ion Monitoring
SMCL	Secondary Maximum Contaminant Level
SVOC	Semi-volatile Organic Compound
TACO	Tiered Approach to Corrective Action Objectives
TAL	Target Analyte List
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
TSS	Total Suspended Solids
TPVC	Top of PVC Riser
Tetra Tech	Tetra Tech NUS, Inc.
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
µg/L	Microgram per Liter
mg/L	Milligram per Liter

1.0 INTRODUCTION

This Long-Term Groundwater Monitoring Report presents the results for Round 13 (November 2010) of long-term groundwater monitoring at the Forrestal Landfill (Site 2) and Supplyside Landfill (Site 3) at Naval Station Great Lakes (NSGL), Great Lakes, Illinois.

Tetra Tech NUS, Inc. (Tetra Tech) has prepared this report for the United States Department of Navy, Naval Facilities Engineering Command (NAVFAC) Midwest under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62472-03-D-0057, Contract Task Order F273.

1.1 OBJECTIVE AND SCOPE

The objective of this Round 13 Groundwater Monitoring Report is to present and evaluate the results of the thirteenth round of long-term monitoring at the Forrestal and Supplyside Landfills. The monitoring is being conducted to comply with federal and Illinois requirements for closure of the landfills under the Resource Conservation and Recovery Act. Round 13 is the first round in the fifth year of monitoring. Monitoring is currently being conducted semi-annually, beginning with Round 10 (May 2009). Previously, monitoring had been conducted quarterly.

Evaluation of data from the thirteenth round of monitoring includes a comparison of results to the State of Illinois Tiered Approach to Corrective Action Objectives (TACO) criteria or, in the absence of a TACO criterion, to United States Environmental Protection Agency (USEPA) primary or secondary Maximum Contaminant Levels (MCLs) or Regional Screening Levels (RSLs) (which were developed by the Oak Ridge National Laboratory under an Interagency Agreement with USEPA). Evaluation also includes a comparison of the results of this round of sampling to the twelve previous rounds of groundwater monitoring.

1.2 REPORT ORGANIZATION

Section 1.0 of the report is this brief introduction including the objective and scope and descriptions of the facility and sites. Section 2.0 describes the field sampling activities. Section 3.0 presents and evaluates the laboratory results for samples from the Forrestal Landfill, and Section 4.0 presents and evaluates the laboratory results for samples from the Supplyside Landfill. Additionally, conclusions and recommendations are provided in Sections 3.0 and 4.0 based on the data evaluations.

1.3 FACILITY AND SITE BACKGROUND

NSGL, located in Lake County, Illinois, approximately 30 miles north of Chicago, covers 1,632 acres and has 1.5 miles of shoreline along Lake Michigan. Figure 1-1 illustrates the general location and layout of NSGL. NSGL began Naval training operations in 1911 and is currently used to support training. Current tenants Commands include the Administrative Command, Recruit Training Command (including the Navy's only boot camp), and Service School Command.

Sites 2 and 3 are located in the southwestern corner of NSGL. Figure 1-1 illustrates the locations of these sites within NSGL.

1.3.1 Forrestal Landfill

The Forrestal Landfill (Site 2) is located between Superior Street and Skokie Ditch, south of Virginia Court (Figure 1-2). The landfill was the first controlled disposal area used by NSGL. Operations at the landfill began in 1967 and ceased in 1969.

The site was operated as a trench-type landfill with no burning. It is estimated that approximately 276,000 cubic yards of refuse were disposed of at the landfill. The total volume of material disposed of at the landfill was limited by the size of the parcel (approximately 4 acres) and by the fact that disposed refuse was not burned. In addition, the period during which the site operated coincided with the period during which housing waste collection switched from the Navy to a private contractor, with disposal on Navy property. The waste disposed of in the Forrestal Landfill was primarily mixed office waste from the Administrative Command and the various training schools. Shop waste was also disposed of at the Forrestal Landfill (Rogers, Golden, & Halpern, 1986).

In 2004, a cover system consisting of low-permeability clay with 6 inches of vegetated topsoil was constructed on the Forrestal Landfill. A passive gas collection and venting system was installed consisting of three parallel trenches excavated in the waste material, with horizontal collector pipes in granular bedding.

1.3.2 Supplyside Landfill

The Supplyside Landfill (Site 3) is adjacent to the NSGL facility boundary and south of the Supply Department warehouse (Building 3503) and extends almost to the westward extension of Alabama Avenue (Figure 1-3). The landfill covers approximately 15 acres. A railroad spur formerly crossed the southeastern third of the landfill and serviced the warehouses north of the site.

Operations at the landfill began in 1969. The landfill was operated as a trench-type landfill with four parallel trenches. There was no burning of refuse at this site. It is estimated that approximately 1 million cubic yards of refuse were disposed of at the landfill. The total volume of material disposed of at the landfill was limited by the size of the parcel. The main component of disposed material at the Supplyside Landfill site was general office waste. No liquids, metals, or sanitary wastes were accepted for disposal at the Supplyside Landfill (Rogers, Golden, and Halpern, 1986). The waste was deposited in two cells – one north of the former rail road spur and one south/southeast of the former spur. Portions of these cells were located on top of lagoons and filter beds that were presumably used for wastewater treatment. Disposal operations ended at the landfill in 1983.

A soil cover was placed on the landfill in 1985. The cover grading and seeding were performed by the Navy Construction Battalion 401, a tenant command at NSGL during that time period. Between 1999 and 2001, the Navy removed the railroad tracks, filled the area between the two cells, and placed additional cover on top of the landfill cells (GASA, 2004).

In 2004, a new cap was constructed on the Supplyside Landfill. Prior to installation of the cover system, the landfill sub grade was regraded to create a flat surface with a gradual slope from west to east across the top of the landfill. A 3-percent slope was used for the top surface of the landfill for drainage and erosion protection, and a 3 (horizontal)-to-1 (vertical) slope was used around the perimeter of the landfill. The final cover was to consist of 18 inches of low-permeability clay with 6 inches of topsoil to protect against erosion. A passive gas collection and venting system was installed consisting of shallow trenches excavated in the waste material, with horizontal collector pipes in granular bedding. Additionally, geotextile fabric and additional soil cover were installed in 2005 over approximately 330 feet by 550 feet of the northern end of the landfill to cover approximately 12,000 cubic yards of soil with asbestos-containing material (non-friable transite) (TolTest, 2006).

1.4 PREVIOUS ENVIRONMENTAL ACTIVITIES

Investigations were performed at the landfills in 2001 to determine the presence of methane and volatile organic compounds (VOCs). In 2002 and 2003, investigations were conducted to determine the thickness and properties of the existing soil caps and to collect samples of groundwater from the waste mass (TolTest, 2007).

In 2002, a Project Plan and Report Final Cover Study (Clayton, 2004) was prepared for the Navy for the Forrestal Landfill. In 2003, a similar Existing Conditions Investigation and Proposed Modifications to Landfill Cover System (Versar, 2003) was prepared for the Supplyside Landfill. In 2004, TolTest, Inc. (TolTest) constructed new caps for each of the landfills in accordance with their respective designs.

In 2006, TolTest installed groundwater monitoring wells around the perimeters of the landfills, including six wells (FL-01 through FL-06) at the Forrestal Landfill and six wells (SSL-01 through SSL-06) at the Supplyside Landfill (TolTest, 2007). The locations of the monitoring wells at Forrestal Landfill are illustrated on Figure 1-2, and the locations of the monitoring wells at Supplyside Landfill are illustrated on Figure 1-3.

Remedial Action Completion Reports (RACRs) were prepared and submitted to the Illinois Environmental Protection Agency (EPA) for each site in 2009. The main purpose of the RACRs was to document implementation of the cover work plan (TolTest, 2004a and 2004b) for the landfills. The RACR for Forrestal Landfill (Tetra Tech, 2009b) was approved by Illinois EPA in November 2009, and the RACR for the Supplyside Landfill (Tetra Tech, 2009c) was approved in January 2010.

TolTest conducted quarterly groundwater monitoring events at both sites in August 2006 (Round 1), January 2007 (Round 2), April 2007 (Round 3), and August 2007 (Round 4). Tetra Tech conducted Rounds 5 through 9 of the groundwater monitoring quarterly in November 2007, February 2008, May 2008, August 2008, and November 2008 respectively. Tetra Tech conducted Rounds 10 through 13 as a semi-annual basis in May 2009, November 2009, May 2010 and November 2010, respectively.

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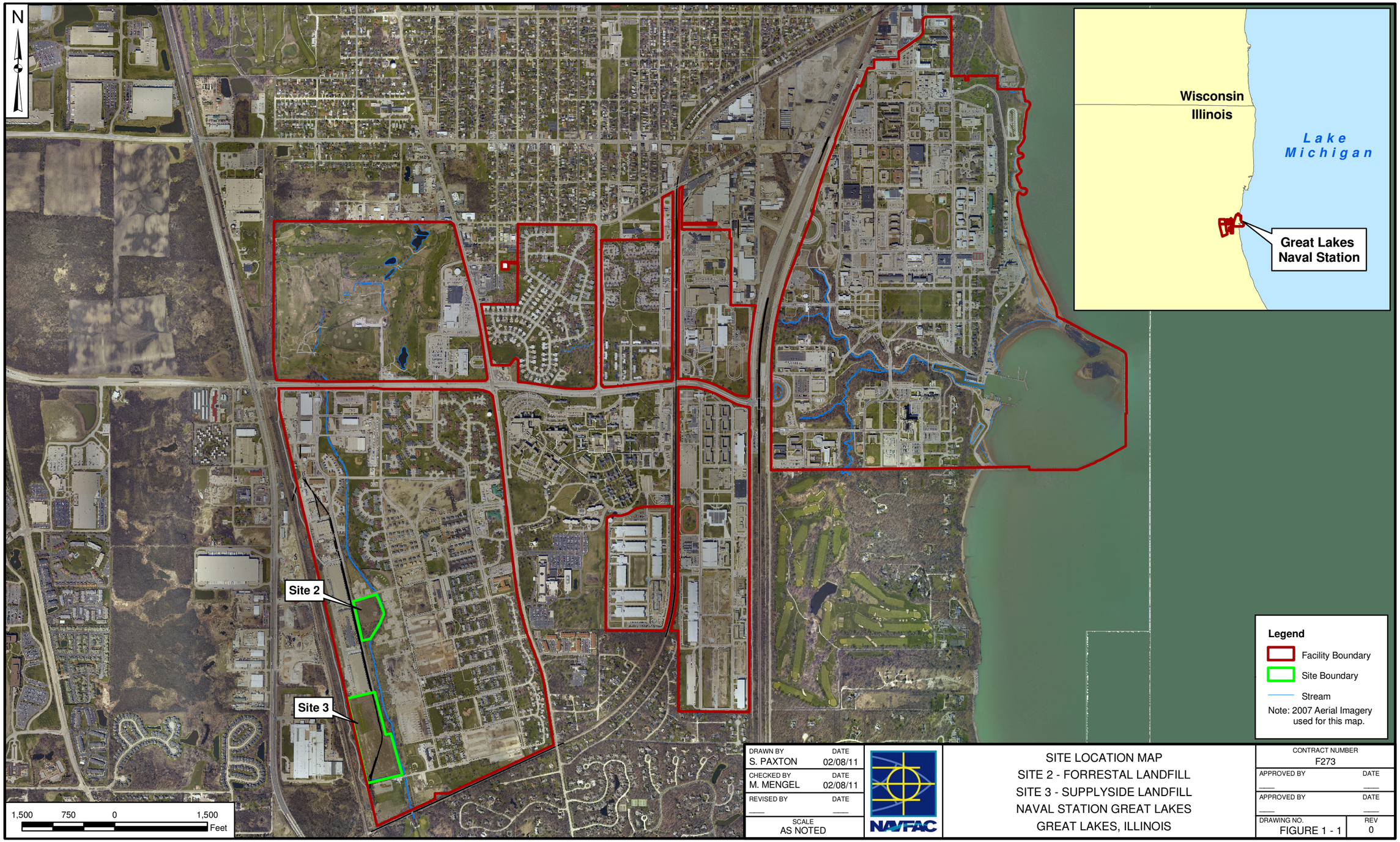
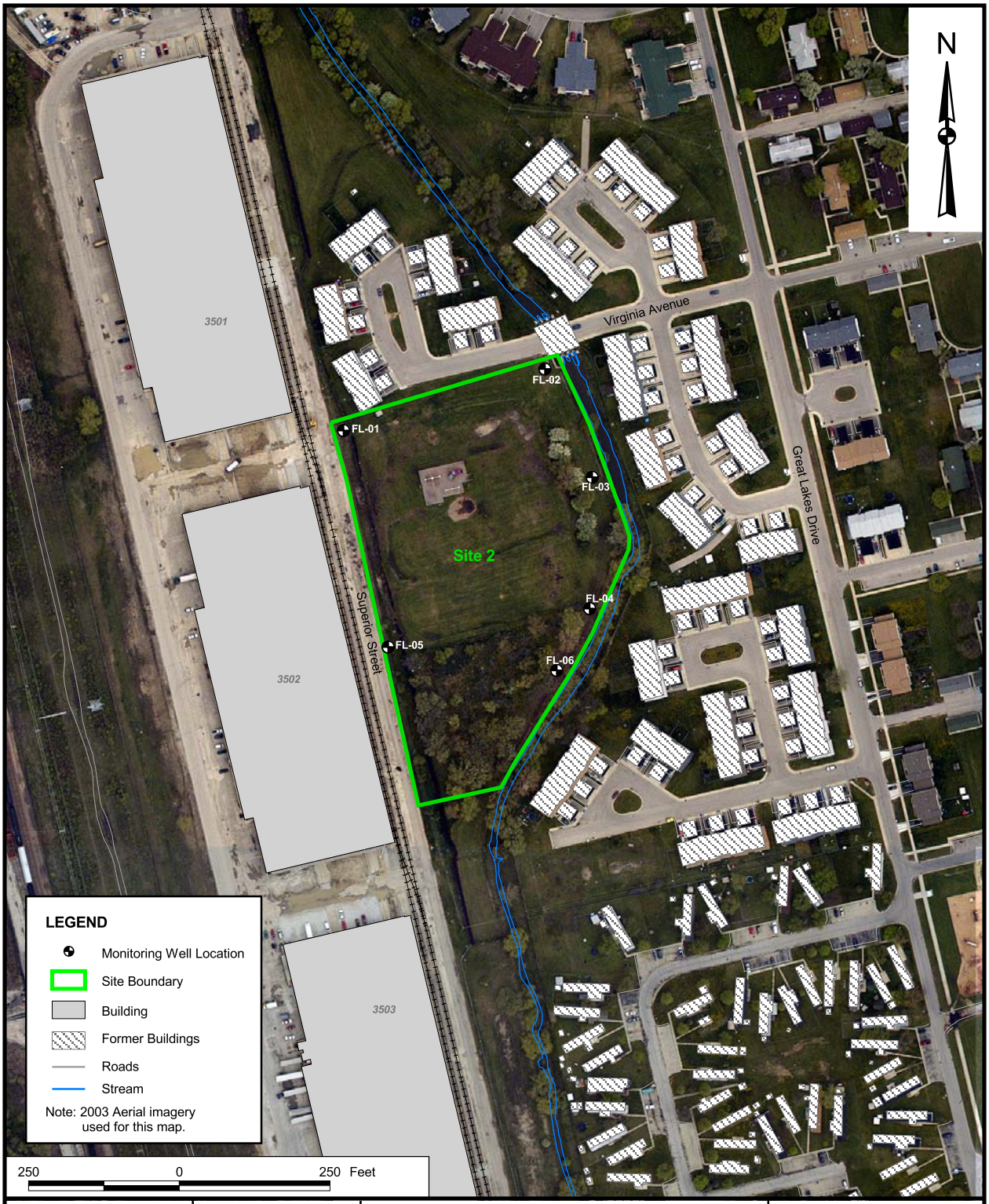


DRAWN BY S. PAXTON	DATE 02/08/11	SITE LOCATION MAP SITE 2 - FORRESTAL LANDFILL SITE 3 - SUPPLYSIDE LANDFILL NAVAL STATION GREAT LAKES GREAT LAKES, ILLINOIS	CONTRACT NUMBER F273
CHECKED BY M. MENGEL	DATE 02/08/11		APPROVED BY ___ DATE ___
REVISED BY ___	DATE ___		APPROVED BY ___ DATE ___
SCALE AS NOTED			DRAWING NO. FIGURE 1 - 1 / REV 0



DRAWN BY S. STROZ	DATE 10/23/07	SITE 2 FORRESTAL LANDFILL NAVAL STATION GREAT LAKES GREAT LAKES, ILLINOIS	CONTRACT NUMBER 0478
CHECKED BY T. EVANS	DATE 8/14/08		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 1-2 REV 0

P:\GIS\GREATLAKES_NS\MAPDOCS\APR\SITE1.APR SITE 2 MW LOCATION MAP 8/14/08 SS

DRAWN BY S. STROZ	DATE 10/23/07	SITE 3 SUPPLYSIDE LANDFILL NAVAL STATION GREAT LAKES GREAT LAKES, ILLINOIS	CONTRACT NUMBER 0478
CHECKED BY T. EVANS	DATE 08/14/08		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 1-3 REV 0

P:\GIS\GREATLAKES_NS\MAPDOCS\APR\SITE1.APR SITE 3 MW LOCATION MAP 8/14/08 SS

2.0 FIELD INVESTIGATION ACTIVITIES

Field investigation activities as part of the Round 13 (November 2010) groundwater monitoring event included collection of groundwater level measurements and groundwater samples at 12 monitoring wells (six at each site). These activities were performed in accordance with the procedures and methodologies described in the Sampling and Analyses Plan for Site 2 - Forrestal Landfill and Site 3 - Supplyside Landfill, Long-Term Groundwater Monitoring (Tetra Tech, 2007). Copies of the field forms generated during Round 13 are provided in Appendix A.

2.1 WATER LEVEL MEASUREMENTS

Water levels were measured in the 12 monitoring wells at the two landfills from November 15 through November 18, 2010. The water levels were measured within a 24-hour period at each site and prior to purging and sampling activities.

Table 2-1 summarizes the water level measurements collected during the November 2010 sampling event. Figures 3-1 and 4-1 are the potentiometric surface maps for the Forrestal and Supplyside Landfills, respectively, generated based on Round 13 data.

2.2 GROUNDWATER SAMPLING

The 12 monitoring wells were sampled during the Round 13 groundwater monitoring event using low-flow purging and sampling techniques, in accordance with the Sampling and Analysis Plan (Tetra Tech, 2007). The wells were purged prior to sampling using dedicated bladder pumps. Nitrogen gas was used as the air source for the bladder pumps.

During purging, groundwater quality parameters, including pH, specific conductivity, temperature, dissolved oxygen, and oxidation-reduction potential, were measured at 5- to 10-minute intervals using a QED MP20 water quality meter with a flow-through cell, and turbidity was measured at the same intervals using a LaMotte 2020 turbidimeter. Water levels were also measured during purging at 5- to 10-minute intervals. The groundwater quality parameters and water levels measured during purging were recorded electronically on low-flow purge data sheets. Copies of the low-flow purge data sheets are provided in Appendix A. Purge water was containerized in a 55-gallon drum for off-site disposal by a disposal subcontractor, as discussed in Section 2.3.

Purging continued at each well until the groundwater parameters stabilized to within the criteria defined in the Sampling and Analysis Plan and at least one stabilized well volume had been removed. Following

purging, samples were collected directly from the discharge end of the Teflon-lined pump tubing. The groundwater samples were collected and analyzed for L1 and L2 parameters listed in Table 2-2, as defined by Illinois EPA for the sites and as revised based on approval from Illinois EPA in February 2009.

For monitoring wells with turbidity readings greater than 10 nephelometric turbidity units (NTUs), additional filtered sample volume was collected for metals analysis. The additional filtered sample volume was collected for comparison of total and filtered metals analysis to determine the relative effect of suspended solids on metals concentrations. The filtered samples were collected through disposable 0.45-micron filters attached to the discharge tubing. During Round 13, filtered samples were collected from wells FL-05, FL-06, SL-02, SL-03, SL-05, and SL-06.

Laboratory analyses were performed by TriMatrix Laboratories of Grand Rapids, Michigan, and TestAmerica of University Park, Illinois, both accredited by the Illinois Environmental Laboratory Accreditation Program (ELAP) and Department of Defense (DoD) ELAP. Trimatrix was used for analyses with holding times greater than 3 days, and Test America was used for analyses with holding times less then 3 days. The laboratory analytical results for the groundwater samples are discussed in Sections 3.0 and 4.0. Groundwater sample log sheets and copies of the chain-of-custody records are provided in Appendix A.

2.3 DECONTAMINATION AND INVESTIGATION-DERIVED WASTE

The water quality and water level meters were decontaminated by rinsing with deionized water prior to and after use.

The investigation-derived waste generated during Round 13 (i.e., purge water) was staged in one 55-gallon drum under the control of NSGL for offsite disposal by NSGL. The waste manifest documenting disposal is provided in Appendix B.

TABLE 2-1

GROUNDWATER ELEVATION SUMMARY
LONG-TERM MONITORING
NAVAL STATION GREAT LAKES
GREAT LAKES, ILLINOIS

Location	Ground Elevation[1] (feet MSL)	TPVC Elevation[1] (feet MSL)	Screen Interval (feet BGS)	August 2006 (Round 1)[2] Toltest		January 2007 (Round 2)[2] Toltest		April/May 2007 (Round 3)[2] Toltest		August 2007 (Round 4)[2] Toltest	
				Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)
Site 2 - Forrestal Landfill											
FL-01	680.61	682.86	10 - 50	18.80	664.06	17.28	665.58	16.88	665.98	17.59	665.27
FL-02	674.82	677.01	10 - 50	42.85	634.16	43.60	633.41	39.65	637.36	39.56	637.45
FL-03	674.62	676.60	10 - 50	8.90	667.70	6.96	669.64	5.77	670.83	6.35	670.25
FL-04	675.27	677.33	10 - 50	8.55	668.78	8.20	669.13	7.09	670.24	7.95	669.38
FL-05	679.16	681.24	10 - 50	46.87	634.37	43.41	637.83	41.33	639.91	40.80	640.44
FL-06	675.87	677.91	15 - 35	10.95	666.96	10.47	667.44	8.75	669.16	10.44	667.47
Site 3 - Supplyside Landfill											
SSL-01	680.02	682.38	10 - 50	33.56	648.82	31.40	650.98	29.88	652.50	31.59	650.79
SSL-02	678.01	680.02	10 - 50	NM	--	47.57	632.45	45.59	634.43	NM	--
SSL-03	676.43	678.47	10 - 50	27.13	651.34	24.95	653.52	23.55	654.92	25.46	653.01
SSL-04	672.44	674.63	10 - 50	23.05	651.58	20.69	653.94	19.31	655.32	20.93	653.70
SSL-05	673.97	676.32	10 - 50	11.93	664.39	11.61	664.71	10.58	665.74	12.06	664.26
SSL-06	676.70	678.71	10 - 50	27.30	651.41	19.93	658.78	17.83	660.88	20.41	658.30

				November 2007 (Round 5) TtNUS		February 2008 (Round 6) TtNUS		May 2008 (Round 7) TtNUS		August 2008 (Round 8) TtNUS	
Site 2 - Forrestal Landfill											
FL-01	680.61	682.86	10 - 50	17.41	665.45	16.65	666.21	16.10	666.76	16.91	665.95
FL-02	674.82	677.01	10 - 50	40.76	636.25	39.30	637.71	38.31	638.70	39.18	637.83
FL-03	674.62	676.60	10 - 50	8.16	668.44	6.24	670.36	6.50	670.10	9.05	667.55
FL-04	675.27	677.33	10 - 50	8.50	668.83	7.68	669.65	7.45	669.88	8.95	668.38
FL-05	679.16	681.24	10 - 50	42.30	638.94	41.47	639.77	39.95	641.29	41.10	640.14
FL-06	675.87	677.91	15 - 35	11.01	666.90	9.65	668.26	9.60	668.31	11.70	666.21
Site 3 - Supplyside Landfill											
SSL-01	680.02	682.38	10 - 50	31.90	650.48	30.10	652.28	28.95	653.43	30.40	651.98
SSL-02	678.01	680.02	10 - 50	46.83	633.19	46.13	633.89	44.68	635.34	45.35	634.67
SSL-03	676.43	678.47	10 - 50	25.85	652.62	24.17	654.30	22.90	655.57	24.70	653.77
SSL-04	672.44	674.63	10 - 50	21.84	652.79	20.10	654.53	18.58	656.05	20.50	654.13
SSL-05	673.97	676.32	10 - 50	12.26	664.06	11.20	665.12	10.80	665.52	12.05	664.27
SSL-06	676.70	678.71	10 - 50	23.21	655.50	14.60	664.11	14.50	664.21	21.50	657.21

TABLE 2-1

GROUNDWATER ELEVATION SUMMARY
LONG-TERM MONITORING
NAVAL STATION GREAT LAKES
GREAT LAKES, ILLINOIS

Location	Ground Elevation[1] (feet MSL)	TPVC Elevation[1] (feet MSL)	Screen Interval (feet BGS)	November 2008 (Round 9) TtNUS		May 2009 (Round 10) TtNUS		November 2009 (Round 11) TtNUS		May 2010 (Round 12) TtNUS	
				Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)	Depth To Water (feet TPVC)	Groundwater Elevation (feet MSL)
Site 2 - Forrestal Landfill											
FL-01	680.61	682.86	10 - 50	16.35	666.51	15.42	667.44	15.49	667.37	15.35	667.51
FL-02	674.82	677.01	10 - 50	39.40	637.61	36.38	640.63	36.31	640.70	34.40	642.61
FL-03	674.62	676.60	10 - 50	6.85	669.75	6.39	670.21	6.63	669.97	7.25	669.35
FL-04	675.27	677.33	10 - 50	8.30	669.03	7.45	669.88	8.10	669.23	8.17	669.16
FL-05	679.16	681.24	10 - 50	41.20	640.04	38.19	643.05	38.10	643.14	35.85	645.39
FL-06	675.87	677.91	15 - 35	10.60	667.31	21.00	656.91	10.10	667.81	10.40	667.51
Site 3 - Supplyside Landfill											
SSL-01	680.02	682.38	10 - 50	30.32	652.06	27.20	655.18	28.50	653.88	26.70	655.68
SSL-02	678.01	680.02	10 - 50	46.15	633.87	43.18	636.84	43.31	636.71	41.00	639.02
SSL-03	676.43	678.47	10 - 50	24.46	654.01	21.72	656.75	22.95	655.52	21.10	657.37
SSL-04	672.44	674.63	10 - 50	20.00	654.63	17.56	657.07	18.95	655.68	17.13	657.50
SSL-05	673.97	676.32	10 - 50	11.47	664.85	10.53	665.79	11.00	665.32	11.10	665.22
SSL-06	676.70	678.71	10 - 50	16.25	662.46	12.75	665.96	15.11	663.60	12.03	666.68

				November 2010 (Round 13) TtNUS	
Site 2 - Forrestal Landfill					
FL-01	680.61	682.86	10 - 50	16.64	666.22
FL-02	674.82	677.01	10 - 50	35.14	641.87
FL-03	674.62	676.60	10 - 50	8.75	667.85
FL-04	675.27	677.33	10 - 50	8.61	668.72
FL-05	679.16	681.24	10 - 50	37.65	643.59
FL-06	675.87	677.91	15 - 35	11.50	666.41
Site 3 - Supplyside Landfill					
SSL-01	680.02	682.38	10 - 50	29.30	653.08
SSL-02	678.01	680.02	10 - 50	43.32	636.70
SSL-03	676.43	678.47	10 - 50	23.90	654.57
SSL-04	672.44	674.63	10 - 50	19.98	654.65
SSL-05	673.97	676.32	10 - 50	11.90	664.42
SSL-06	676.70	678.71	10 - 50	16.26	662.45

[1] Elevations from July 2008 survey by Graef, Anhalt, Schloemer & Associates, Inc.
[2] Water levels, collected by Toltest, Inc., were over the course of each sampling round and not within a 24-hour time period.

MSL - Mean sea level
BGS - Below ground surface
TPVC - Top of PVC riser
NM - No measurement

3.0 SITE 2 – FORRESTAL LANDFILL RESULTS

3.1 HYDROGEOLOGY

Figure 3-1 illustrates the groundwater potentiometric surface of shallow groundwater at the Forrestal Landfill, as measured during Round 13 (November 2010). Based on Figure 3-1, groundwater flow at the site during Round 13 was radial from the western portion of the landfill, and flow was generally north and south. Groundwater flow was similar to previous rounds.

Advective groundwater flow at the Forrestal Landfill is estimated to be 0.0031 foot per day or 2.83 feet per year, assuming a site-specific bulk hydraulic conductivity of 0.031 foot per day (Tetra Tech, 2009a), a mean hydraulic gradient of 0.030 (based on Round 13 data), and an effective aquifer porosity of 0.3. This advective groundwater flow rate is less than previous monitoring rounds.

3.2 ANALYTICAL RESULTS

Groundwater samples were collected from monitoring wells FL-01 through FL-06 at the Forrestal Landfill (Site 2) during Round 13 (November 2010). A field duplicate sample was also collected from monitoring well FL-04. The groundwater samples were analyzed for the L1/L2 parameters listed in Table 2-2. Samples from wells FL-02, FL-05, and FL-06 were sampled for dissolved metals, based on turbidity readings greater than 10 NTUs.

Table 3-1 summarizes analytical results from Site 2 groundwater samples and compares the results to Illinois EPA TACO Groundwater Remediation Objectives (GROs) for Class I groundwater or to USEPA primary or secondary MCLs or USEPA RSLs for parameters for which no TACO GROs are available. Parameters exceeding either the TACO GROs or USEPA criteria are noted by dark shading. The table includes parameters detected at concentrations greater than laboratory detection limits in at least one sample during Round 13.

Table 3-2 summarizes statistics for the analytical results, including frequencies of detections, numbers of exceedances, ranges of detections, locations of maximum concentrations, and averages of detected concentrations for Round 13 and Rounds 1 through 13.

Complete laboratory results from Round 13 are provided in Appendix C.1. Appendix C.2 summarizes detected concentrations from all rounds of sampling (Rounds 1 through 13). Data validation letters and laboratory data sheets are included as Appendix D. Trend graphs for parameters with concentrations detected in excess of criteria are provided in Appendix E.

Comparisons of Round 13 data to criteria are summarized as follows:

- Several VOCs and semivolatile organic compounds (SVOCs) were detected in at least one sample during Round 13 but at concentrations less than the TACO GROs. VOCs were detected in wells FL-03 and FL-04. SVOCs, primarily phthalates, were detected at least once in all samples collected. Several polynuclear aromatic hydrocarbon (PAH) SVOCs were detected in wells FL-01, FL-02 and FL-05.

- The concentration of aluminum in the unfiltered sample from FL-02 [6,500 micrograms per liter (µg/L)] was greater than the TACO GRO of 3,500 µg/L. However, aluminum was not detected in the filtered sample from FL-02. This was similar to previous rounds in which aluminum concentrations in unfiltered samples were greater than the TACO GRO, but concentrations in filtered samples were less than the TACO GRO or not detected. The concentration of total aluminum in the sample from FL-06 (850 µg/L) was less than the TACO GRO and continues a decreasing trend from a maximum of 10,000 µg/L during Round 5.

- Arsenic was detected in unfiltered samples from Site 2 wells at concentrations from 2.1 to 47 µg/L, less than the TACO GRO of 50 µg/L. The maximum concentration during Round 13 was detected in FL-03. Arsenic concentrations in FL-03 have generally increased since Round 6 but remain less than the TACO GRO. Concentrations in the remaining wells were similar to results during previous rounds. Arsenic was detected in groundwater at Site 2 at a concentration of 70.3 µg/L, greater than the TACO GRO, in one well (FL-02) during one round (Round 4).

- Concentrations of iron in unfiltered samples from FL-02 (7,400 µg/L), FL-03 (16,000 µg/L), and FL-04 and its duplicate (both 12,000 µg/L) were greater than the TACO GRO of 5,000 µg/L. The concentration in the filtered sample from FL-02 was less than the TACO GRO; filtered samples were not collected for FL-03 and FL-04 during Round 13. The iron concentrations in FL-02, FL-03 and FL-04 decreased from the previous round; however, total iron concentrations, although fluctuating, have generally increased since Round 1. The concentration of iron in the unfiltered sample from FL-06 (2,000 µg/L) was less than the TACO GRO. Iron concentrations in FL-06 have steadily decreased from the maximum concentration of 11,000 µg/L detected during Round 5.

- Lead was detected in samples from wells FL-02, FL-04 and its duplicate, FL-05 and FL-06. The concentration of lead in the unfiltered sample from FL-02 (3.6 µg/L) was less than the TACO GRO of 7.5 µg/L. Total lead concentrations in FL-02 were greater than the TACO GRO the previous two rounds (Rounds 11 and 12). Lead was not detected in filtered samples from FL-02 during Rounds 11

through 13. Concentrations of total lead in the remaining samples (FL-05 and FL-06) were less than 2 µg/L, less than the TACO GRO of 7.5 µg/L, or not detected (FL-01, FL-03, and FL-04) during Round 13. These results were similar to those from previous rounds. Total lead was detected at a concentration greater than the TACO GRO in well FL-05 (16 µg/L) during Round 5; however, lead was not detected in the filtered sample from FL-05 during Round 5 and has not been detected at a concentration greater than the TACO GRO since then.

- The concentration of manganese in the unfiltered sample from FL-06 (190 µg/L) was greater than the TACO GRO of 150 µg/L during Round 13; however, the dissolved manganese result from FL-06 (75 µg/L) was less than the TACO GRO. Total manganese was detected in the remaining samples but at concentrations at or less than the TACO GRO, similar to previous rounds. The concentration in FL-02 was less than the previous two rounds, when concentrations exceeded the TACO GRO. Concentrations in FL-04 have varied slightly (100 - 177 µg/L) around the TACO GRO during previous rounds, whereas concentrations in FL-05 have fluctuated more (16 - 580 µg/L) with time.

- Vanadium was detected in unfiltered samples from Site 2 wells at concentrations from 0.45 to 16 µg/L, less than the TACO GRO of 49 µg/L. The maximum concentration (31 µg/L) during Round 13 was detected in FL-02. Concentrations in the remaining wells were similar to or have decreased from previous rounds, except for FL-02. Although vanadium concentrations in FL-02 have generally increased, decreases have been noted over the previous two rounds . Total vanadium was detected at a concentration greater than the TACO GRO in well FL-05 (56 µg/L) during Round 5 but was not detected in the filtered sample from FL-05 during Round 5 and has not been detected at a concentration greater than the TACO GRO since then.

- Sodium was detected in unfiltered samples from Site 2 wells at concentrations from 27,000 to 320,000 µg/L. No TACO GRO, MCL, or RSL has been established for sodium. However, the sodium concentrations were greater than the USEPA Drinking Water Equivalency Level (DWEL) of 20,000 µg/L. Filtered results (ranging from 32,000 to 70,000 µg/L) were also greater than the USEPA DWEL. Sodium results continue to be similar to those detected during previous rounds.

- Ammonia was detected in the sample from well FL-04 and its duplicate at a concentration of 43 milligrams per liter (mg/L), which was greater than the secondary MCL of 30 mg/L. Ammonia concentrations in the remaining samples (FL-01, FL-02, FL-03, FL-05, and FL-06) were less than 1 mg/L. Ammonia concentrations continue to be similar to concentrations detected since Round 1.

- Chloride was detected in the sample from FL-04 and its duplicate at a concentration of 440 mg/L. This is greater than the TACO GRO of 200 mg/L, which is based on the USEPA secondary MCL.

Chloride results in the remaining samples were less than the GRO. Chloride concentrations have been decreasing in well FL-04 since Round 1 and appear to be stabilizing. Chloride concentrations in the remaining wells are similar and remain less than the TACO GRO.

- Sulfate was detected in the sample from FL-01 (590 mg/L) at a concentration greater than the TACO GRO of 400 mg/L, which is based on the USEPA secondary MCL. Sulfate concentrations in samples from the remaining wells were less than the TACO GRO and similar to previous rounds. Sulfate concentrations in FL-01 have increased since Round 1, although they appear to be stabilizing. Concentrations in FL-02 have increased slightly over time but remain less than the TACO GRO.

- Total dissolved solids (TDS) in Site 2 wells were greater than the USEPA secondary MCL of 500 mg/L. The TDS concentrations ranged from 540 to 1,900 mg/L and were generally similar to results during previous rounds. TDS have increased in wells FL-01 and FL-02 but decreased in well FL-04 since Round 1.

- Phenolics was detected in the samples from FL-04 (0.0029 µg/L) but was less than TACO GRO of 0.1 µg/L.

3.3 CONCLUSIONS AND RECOMMENDATIONS

As discussed in Section 1.2, this report for the Round 13 groundwater monitoring at the Forrestal Landfill provides an evaluation of current analytical results and any data trends (Appendix E) that may be evident by comparison to data from previous sampling rounds. The following conclusions are based on 13 rounds of groundwater monitoring data at Site 2:

- No VOCs were detected at concentrations greater than regulatory monitoring criteria during the 13 rounds of monitoring. Chloromethane was detected at a concentration slightly greater than the previous regulatory criterion (1.8 µg/L) in FL-01 during Round 4; however, concentrations are currently less than the updated criterion (190 µg/L) or not detected greater than the laboratory reporting limit.

- No SVOCs were detected at concentrations in excess of regulatory monitoring criteria except for three exceedances of bis(2-ethylhexyl) phthalate in FL-01 during Rounds 2 and 3 and FL-04 during Round 8. Two additional SVOCs [benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene] had been detected at concentrations greater than the previous criteria; however, concentrations from all rounds are less than the updated criteria or not detected greater than laboratory reporting limits.

- Exceedances of regulatory monitoring criteria have included mainly inorganics. Inorganics detected at concentrations greater than regulatory criteria have included aluminum, arsenic, iron, lead, manganese, and vanadium. As illustrated on graphs provided in Appendix E, aluminum, iron, and manganese concentrations in FL-06 increased during Rounds 1 through 5 but have generally decreased during Rounds 6 through 13. Concentrations of aluminum and manganese in other wells were relatively consistent during Rounds 1 through 10, except for FL-02. Aluminum and iron concentrations in FL-02 generally increased through Round 11 but have decreased since then. Concentrations of dissolved inorganics have not exceeded regulatory criteria, with the exception of iron (FL-03 in Rounds 7, 10, and 11 and FL-04 and its duplicate in Round 6) and manganese (FL-06 in Round 5). Concentrations of inorganics did not exceed regulatory criteria by more than one order of magnitude. Arsenic, lead, and vanadium were detected at concentrations greater than regulatory criteria in one well during one round, arsenic in FL-02 during Round 4 and lead and vanadium in FL-05 during Round 5.

- Total and dissolved concentrations of sodium were greater than the USEPA DWEL of 20,000 µg/L during Rounds 1 through 13. The consistency and frequency of detection of sodium concentrations suggest that natural levels of sodium (total and dissolved in the six wells) may be elevated in the area and that the concentrations are not site related.

- Water chemistry parameters that exceeded regulatory criteria included ammonia, chloride, sulfate and TDS. These parameters have also been graphed for trend analyses. As shown on graphs in Appendix E, concentrations appear to be stable although slightly greater than regulatory criteria in some of the monitoring wells. Ammonia and chloride have been detected at concentrations greater than criteria in FL-04 only. Similarly, sulfate has been detected at concentrations greater than criteria in FL-01 only (based on the updated criterion of 400 mg/L). TDS exceeded the criterion in all Site 2 wells, with maximum values detected in FL-04.

For the initial eight rounds of long-term monitoring, groundwater samples were collected quarterly and analyzed for the L1 and L2 parameters listed in Table 2-2. The first eight rounds of data were evaluated for concentration trends and seasonality. A letter requesting reductions in the frequency of monitoring and parameters analyzed was submitted to Illinois EPA on January 29, 2009. In February 2009, Illinois EPA approved a reduction in monitoring frequency to semi-annual and removal of chlorinated pesticides, herbicides, organophosphate pesticides, carbamate pesticides, polychlorinated biphenyls, oil and grease, and fecal coliform from the analyte list for Site 2. The remaining L1 and L2 parameters will continue to be monitored.

An evaluation of the data for Rounds 1 through 13 will be prepared and provided prior to Round 14. The evaluation will consider trends and seasonality and provide recommendations for removal of parameters from the analyte list, if supported by the evaluation results. Round 14 monitoring will occur in May 2011.

TABLE 3-1

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING - ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0113 20101118	FL-02 NTC02GW0213 20101117	FL-03 NTC02GW0313 20101117	FL-04 NTC02GW0413 20101117	FL-04 NTC02GW0413-D 20101117 NTC02GW0413	FL-05 NTC02GW0513 20101118	FL-06 NTC02GW0613 20101117
Volatile Organics (ug/L)									
BENZENE	5	TACO	1 U	1 U	0.19 J	1	1	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	0.72 J	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	9.1 J	8.2 J	5 UR	5 UR
Semivolatile Organics (ug/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.54	0.33 J	0.55	0.45 J	0.46 J	0.32 J
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	0.074 J	1 U	1.1 U	1 U	0.061 J	1 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1.1 U	1 U	0.69 J	1 U
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U	0.68	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
FLUORANTHENE	280	TACO	0.041 J	0.053 J	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U	0.27 J	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.031 J	0.50 U	0.50 U	0.53 U	0.50 U	0.082 J	0.50 U
PHENANTHRENE	210	NON-TACO	0.031 J	0.11 J	0.50 U	0.53 U	0.50 U	0.031 J	0.50 U
Inorganics (ug/L)									
ALUMINUM	3500	NON-TACO	100 U	**6500 / 2500**	100 U	100 U	100 U	1200 / 100 U	850 / 100 U
ANTIMONY	6	TACO	1 U	1 U / 1 U	1 U	0.74 J	0.97 J	1 U / 1 U	1 U / 1 U
ARSENIC	50	TACO	3 U	2.9 J / 2.1 J	47	4.4	3.5	4.3 / 5.2	3 U / 3 U
BARIUM	2000	TACO	20	85 / 58	280	1200	1200	51 / 48	56 / 52
BERYLLIUM	4	TACO	1 U	0.36 J / 1 U	1 U	1 U	1 U	1 U / 1 U	1 U / 1 U
CADMIUM	5	TACO	0.20 U	0.19 J / 0.18 J	0.20 U	0.20 U	0.20 U	0.067 J / 0.20 U	0.13 J / 0.20 U
CALCIUM	NC	NA	130000	58000 / 49000	150000	170000	170000	80000 / 76000	120000 / 130000
CHROMIUM	100	TACO	1 U	12 / 4.8	1 U	2	2.1 U	2.1 U / 1 U	2.1 U / 1 U
COBALT	1000	TACO	0.38 J	4 / 1.3	3.2	6.5	6.6	2.2 J / 1.6	1 / 0.23 J
COPPER	650	TACO	1.6 J	7.6 / 3	0.99 J	1.7	2	1.4 J / 1 U	3.4 / 1.9
IRON	5000	TACO	120	**7400 / 2400**	**16000**	**12000**	**12000**	3300 / 1300	1200 / 12 J
LEAD	7.5	TACO	1 U	3.6 / 1.1	1 U	1 U	0.24 J	0.49 J / 1 U	1.3 / 1 U
MAGNESIUM	NC	NA	150000	39000 / 38000	82000	130000	130000	49000 / 52000	69000 / 76000
MANGANESE	150	TACO	51 J	140 / 36	59	100	100	91 J / 53	**190 / 75**
NICKEL	100	TACO	9.2	12 / 4.7	16	17	17	7.8 / 3.2	11 / 4.6
POTASSIUM	NC	NA	3800	4000 / 2700	2200	39000	41000	1900 / 1600	2000 / 1900
SELENIUM	50	TACO	1.1 J	1 UJ / 1 U	1.6 J	2.3 J	4.9 J	1 UJ / 1 U	1 UJ / 0.92 J
SILVER	50	TACO	0.20 U	0.077 J / 0.20 U	0.20 U	0.20 U	0.079 J	0.20 U / 0.20 U	0.20 U / 0.20 U
SODIUM	NC	NA	64000	63000 / 70000	65000	320000	320000	41000 / 44000	27000 / 32000
THALLIUM	2	TACO	1 U	0.14 J / 0.08 J	1 U	1 U	1 U	1 U / 1 U	0.11 J / 0.10 J
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	347800	164000 / 159700	299200	659000	661000	171900 / 173600	218000 / 239900
VANADIUM	49	TACO	0.45 J	16 / 6.5	3 U	1.9 J	2.1 J	3.2 / 3 U	2.4 J / 0.33 J
ZINC	5000	TACO	6.2 J	18 J / 7.5 J	5.2 J	4.1 J	7 J	4.4 J / 3 J	6.6 J / 3 J

TABLE 3-1

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING - ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0113 20101118	FL-02 NTC02GW0213 20101117	FL-03 NTC02GW0313 20101117	FL-04 NTC02GW0413 20101117	FL-04 NTC02GW0413-D 20101117 NTC02GW0413	FL-05 NTC02GW0513 20101118	FL-06 NTC02GW0613 20101117
Miscellaneous Parameters									
AMMONIA-N MG/L	30	SMCL	0.11	0.35	0.12	**43**	**43**	0.67	0.049
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	2 U	18	18	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.4	15	27	130	130	14	7.8
CHLORIDE MG/L	200	TACO	42	85	110	**440**	**440**	29	29
FLUORIDE MG/L	4	TACO	0.53	0.73	0.28	0.16	0.16	0.51	0.33
NITRITE-N MG/L	1	MCL	0.01 U	0.01 U	0.01 U	0.0033 J	0.0054 J	0.0035 J	0.0043 J
PH S.U.	6.5 - 8.5	SMCL	7.7 J	8.1 J	7.4 J	7.2 J	7.2 J	8 J	7.6 J
SULFATE MG/L	400	TACO	**590**	190	21	2.4	2.5	170	260
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1300	560	950	1900	1900	540	870
TOTAL ORGANIC CARBON MG/L	NC	NA	2.3	1.4	11	41	43	4.4	2
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.05 U	0.05 U	0.0029 J	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.02 U	0.08	0.027	0.23	0.29	0.026	0.011
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	3.9	160	23	32	32	52	35
Field Parameters									
CONDUCTIVITY MS/CM	NC	NA	1.77	0.765	1.6	3.3		0.9	1.149
DISSOLVED OXYGEN MG/L	NC	NA	0.29	0.26	0.15	0.22		0.06	0.25
OXIDATION REDUCTION POTENTIAL MV	NC	NA	20	-151	3	-160		-138	111
PH S.U.	6.5 - 8.5	SMCL	7.12	**8.67**	**6.03**	6.62		7.44	6.69
TEMPERATURE C	NC	NA	11.6	10.7	11.09	11.98		11.29	10.51
TURBIDITY NTU	NC	NA	2.5	190	9	2.3		28	24

Notes:
TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GRO), (35 Illinois Administrative Code Part 742)
Non-TACO = GRO not promulgated under 35 IAC 742
USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)
MCL = USEPA Maximum Contaminant Level
SMCL = USEPA Secondary Maximum Contaminant Level
NC = No criterion
NA = Not available
IL-EPA = criterion as per Illinois EPA (personal communication)
Blank cell indicates parameter not analyzed.
Light gray shading indicates positive result.
Dark shading indicates exceedance of criteria.
Data Qualifiers:
U = Indicates that parameter was not detected at the numerical detection limit.
UR = Indicates the parameter was not detected, but the result is considered unreliable and unusable.
J = Indicates that result was detected but concentration is considered an estimate due to precision.

TABLE 3-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
Volatiles (ug/L)										
1,1-DICHLOROETHANE	0/7	0	4/91	0	0.15 J - 0.18 J	FL-03	NTC02GW0312	0.16	700	TACO
4-ISOPROPYLTOLUENE	0/7	0	1/91	0	0.13 J	FL-04	NTC02GW0409	0.13	NC	NA
ACETONE	0/7	0	2/91	0	3.77 - 4.82	FL-04	FL-04_20070430	4.30	6300	TACO
BENZENE	3/7	0	32/91	0	0.138 - 1.4	FL-04	NTC02GW0408, NTC02GW0408-D	0.70	5	TACO
CHLOROBENZENE	0/7	0	3/91	0	0.11 J - 0.13 J	FL-04	NTC02GW0409-D	0.12	100	TACO
CHLOROETHANE	0/7	0	2/91	0	0.2 J - 0.32 J	FL-03	NTC02GW0311	0.26	21000	USEPA TAPWATER
CHLOROMETHANE	0/7	0	8/91	0	0.311 J - 1.88	FL-01	FL-01_20070808	0.90	190	USEPA TAPWATER
CIS-1,2-DICHLOROETHENE	1/7	0	29/91	0	0.24 J - 0.8 J	FL-03	NTC02GW0309	0.55	70	TACO
DICHLORODIFLUOROMETHANE	0/7	0	12/91	0	0.23 J - 0.493	FL-04	FL-04_20060822	0.37	390	USEPA TAPWATER
METHYLENE CHLORIDE	0/7	0	1/91	0	1.09	FL-01	FL-01_20060816	1.09	5	TACO
TETRAHYDROFURAN	2/2	0	22/64	0	3.8 J - 19 J	FL-04	NTC02GW0406	10.50	NC	NA
TOLUENE	0/7	0	6/91	0	0.34 - 1.79	FL-06	FL-06_20060821	0.72	1000	TACO
VINYL CHLORIDE	0/7	0	1/91	0	0.2 J	FL-03	NTC02GW0312	0.20	2	TACO
Semivolatles (ug/L)										
1,1-BIPHENYL	0/7	0	3/84	0	0.087 J - 0.14 J	FL-04	NTC02GW0405	0.11	350	NON-TACO
1-METHYLNAPHTHALENE	0/7	0	2/91	0	0.04 J - 0.25 J	FL-01	NTC02GW0107	0.15	490	NON-TACO
2,4,5-TRICHLOROPHENOL	0/7	0	2/91	0	0.071 J - 0.14 J	FL-01	NTC02GW0106	0.11	700	TACO
2,4,6-TRICHLOROPHENOL	0/7	0	2/91	0	0.04 J - 0.047 J	FL-01	NTC02GW0106	0.04	10	TACO
2,4-DICHLOROPHENOL	0/7	0	1/91	0	0.026 J	FL-01	NTC02GW0106	0.03	21	TACO
2,4-DIMETHYLPHENOL	0/7	0	5/91	0	0.063 J - 0.2 J	FL-04	NTC02GW0409, NTC02GW0408-D	0.17	140	TACO
2-CHLOROPHENOL	0/7	0	1/91	0	0.06 J	FL-04	NTC02GW0409	0.06	35	TACO
2-METHYLNAPHTHALENE	0/7	0	4/91	0	0.02 J - 0.32 J	FL-01	NTC02GW0107	0.11	150	USEPA TAPWATER
4-CHLORO-3-METHYLPHENOL	0/7	0	1/91	0	0.22 J	FL-04	NTC02GW0406-D	0.22	3700	USEPA TAPWATER
4-CHLOROANILINE	0/7	0	1/91	0	0.45 J	FL-04	NTC02GW0407	0.45	28	TACO
4-METHYLPHENOL	0/7	0	1/63	0	0.23 J	FL-04	NTC02GW0407	0.23	35	NON-TACO
ACENAPHTHENE	0/7	0	7/91	0	0.013 J - 0.088 J	FL-01	NTC02GW0107	0.04	420	TACO
ACETOPHENONE	0/7	0	3/91	0	0.061 J - 0.073 J	FL-03, FL-04	NTC02GW0311-D, NTC02GW0408-D	0.07	3700	USEPA TAPWATER
ANILINE	0/7	0	2/91	0	0.1 J - 0.12 J	FL-04	NTC02GW0408	0.11	23	NON-TACO
ANTHRACENE	0/7	0	5/91	0	0.016 J - 0.041 J	FL-04	NTC02GW0406-D	0.02	2100	TACO
BENZALDEHYDE	0/7	0	12/91	0	0.19 J - 2.5	FL-04	NTC02GW0405, NTC02GW0405-D	1.12	700	NON-TACO
BENZO(A)ANTHRACENE	0/7	0	10/91	0	0.03 J - 0.11 J	FL-04	NTC02GW0408	0.05	0.13	TACO
BENZO(A)PYRENE	0/7	0	3/91	0	0.029 J - 0.11 J	FL-04	NTC02GW0408	0.07	0.2	TACO
BENZO(B)FLUORANTHENE	0/7	0	1/91	0	0.091 J	FL-04	NTC02GW0408	0.09	0.18	TACO
BENZO(K)FLUORANTHENE	0/7	0	1/91	0	0.11 J	FL-04	NTC02GW0408	0.11	0.17	TACO
BIS(2-ETHYLHEXYL)PHTHALATE	6/7	0	25/91	3	0.32 J - 15.7	FL-01	FL-01_20070419	2.56	6	TACO
BUTYL BENZYL PHTHALATE	2/7	0	24/91	0	0.048 J - 0.35 J	FL-04	NTC02GW0408	0.12	1400	TACO

TABLE 3-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
CAPROLACTAM	0/7	0	13/91	0	0.21 J - 5.48	FL-04	FL-04_20070430	1.01	3500	NON-TACO
CARBAZOLE	0/7	0	1/91	0	0.031 J	FL-01	NTC02GW0105	0.03	4.3	TACO
CHRYSENE	0/7	0	3/91	0	0.029 J - 0.031 J	FL-06	NTC02GW0609	0.03	1.5	TACO
DI-N-BUTYL PHTHALATE	1/7	0	14/91	0	0.31 J - 3.4	FL-03, FL-06	NTC02GW0307, NTC02GW0608	1.17	700	TACO
DI-N-OCTYL PHTHALATE	1/7	0	10/91	0	0.054 J - 7.56	FL-02	FL-02_20070129	2.07	140	TACO
DIBENZOFURAN	0/7	0	3/91	0	0.018 J - 0.029 J	FL-02	NTC02GW0207	0.02	37	USEPA TAPWATER
DIETHYL PHTHALATE	0/7	0	10/91	0	0.041 J - 0.58	FL-02	NTC02GW0211	0.12	5600	TACO
DIMETHYL PHTHALATE	0/7	0	1/91	0	0.13 J	FL-04	NTC02GW0406-D	0.13	NC	NA
FLUORANTHENE	2/7	0	13/91	0	0.021 J - 0.12 J	FL-02	NTC02GW0211	0.05	280	TACO
FLUORENE	0/7	0	4/91	0	0.02 J - 0.081 J	FL-04	NTC02GW0408	0.04	280	TACO
INDENO(1,2,3-CD)PYRENE	1/7	0	2/91	0	0.051 J - 0.27 J	FL-02	NTC02GW0213	0.16	0.43	TACO
ISOPHORONE	0/7	0	6/91	0	0.11 J - 0.14 J	FL-04	NTC02GW0409-D	0.12	1400	TACO
NAPHTHALENE	2/7	0	16/91	0	0.01 J - 9.3	FL-01	NTC02GW0107	0.69	140	TACO
PENTACHLOROPHENOL	0/7	0	5/91	0	0.29 J - 0.48 J	FL-04	NTC02GW0408	0.41	1	TACO
PHENANTHRENE	3/7	0	19/91	0	0.019 J - 0.17 J	FL-02	NTC02GW0207	0.06	210	NON-TACO
PHENOL	0/7	0	1/91	0	8.52	FL-01	FL-01_20060816	8.52	100	TACO
PYRENE	0/7	0	11/91	0	0.03 J - 0.45 J	FL-02	NTC02GW0211	0.12	210	TACO
Herbicides (ug/L)										
2,4-DB	NA	NA	2/63	0	0.83 J - 1.2 J	FL-04	NTC02GW0407	1.02	290	USEPA TAPWATER
DINOSEB	NA	NA	1/63	0	2.55 - 2.55	FL-04	FL-04_20070130	2.55	7	TACO
Pesticides/PCBs (ug/L)										
4,4'-DDT	NA	NA	2/62	0	0.0033 J - 0.0044 J	FL-04	NTC02GW0409-D	0.00	6	TACO
ALPHA-CHLORDANE	NA	NA	2/62	0	0.0029 J - 0.0047 J	FL-04	NTC02GW0409	0.00	2	TACO
AROCLOR-1254	NA	NA	1/62	0	0.391	FL-05	FL-05_20060817	0.39	0.5	TACO
BETA-BHC	NA	NA	2/61	0	0.0043 J - 0.0078 J	FL-04	NTC02GW0409	0.01	0.037	USEPA TAPWATER
DELTA-BHC	NA	NA	1/62	0	0.0029 J	FL-03	NTC02GW0309	0.00	0.011	USEPA TAPWATER
ENDOSULFAN I	NA	NA	1/62	0	0.0036 J	FL-04	NTC02GW0405-D	0.00	42	TACO
ENDRIN KETONE	NA	NA	1/62	0	0.0061 J	FL-05	NTC02GW0509	0.01	2	TACO
GAMMA-BHC (LINDANE)	NA	NA	2/62	0	0.0033 J - 0.0035 J	FL-04	NTC02GW0406-D	0.00	0.2	TACO
GAMMA-CHLORDANE	NA	NA	3/61	0	0.0027 J - 0.0051 J	FL-06	NTC02GW0605	0.00	2	TACO
Petroleum Hydrocarbons (mg/L)										
OIL & GREASE - HEM	NA	NA	1/63	0	1.1 J	FL-02	NTC02GW0207	1.10	NC	NA
Carbamate/Ureas Pesticides (ug/L)										
ALDICARB SULFONE	NA	NA	1/60	0	0.835 J	FL-04	NTC02GW0405-D	0.84	37	USEPA TAPWATER
Inorganics (ug/L)										
ALUMINUM	3/7	1	45/91	18	33 - 21000	FL-02	NTC02GW0211	3993.99	3500	NON-TACO
ALUMINUM - Dissolved	1/3	0	8/31	0	31 - 2500	FL-02	NTC02GW0213	547.25	3500	NON-TACO
ANTIMONY	2/7	0	34/91	0	0.277 - 2.42	FL-04	FL-04_20070816	0.96	6	TACO
ANTIMONY - Dissolved	0/3	0	2/31	0	1.1 - 1.3	FL-04	NTC02GW0406-D	1.20	6	TACO
ARSENIC	5/7	0	72/91	1	0.26 - 70.3	FL-02	FL-02_20070815	10.29	50	TACO

TABLE 3-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
ARSENIC Dissolved	2/3	0	27/31	0	0.35 - 27	FL-03	NTC02GW0310	4.68	50	TACO
BARIUM	7/7	0	91/91	0	20 - 1500	FL-04	NTC02GW0406, NTC02GW0406-D	386.48	2000	TACO
BARIUM - Dissolved	3/3	0	31/31	0	34 - 1600	FL-04	NTC02GW0406-D	176.68	2000	TACO
BERYLLIUM	1/7	0	12/91	0	0.33 - 1.7	FL-05	NTC02GW0505	0.62	4	TACO
CADMIUM	3/7	0	22/91	0	0.056 J - 0.37	FL-05	NTC02GW0505	0.17	5	TACO
CADMIUM - Dissolved	1/3	0	2/31	0	0.07 - 0.18 J	FL-02	NTC02GW0213	0.13	5	TACO
CALCIUM	7/7	0	91/91	0	25900 - 270000 J	FL-04	NTC02GW0409-D	140561.54	NC	NA
CALCIUM - Dissloved	3/3	0	31/31	0	28000 J - 240000 J	FL-04	NTC02GW0406-D	97967.74	NC	NA
CHROMIUM	2/7	0	47/91	0	0.34 J - 51 J	FL-05	NTC02GW0505	6.54	100	TACO
CHROMIUM - Dissolved	1/3	0	10/31	0	0.57 - 4.8	FL-02	NTC02GW0213	1.83	100	TACO
COBALT	7/7	0	77/91	0	0.24 J - 21	FL-05	NTC02GW0505	4.60	1000	TACO
COBALT - Dissolved	3/3	0	28/31	0	0.1 J - 10	FL-04	NTC02GW0406, NTC02GW0406-D	1.68	1000	TACO
COPPER	7/7	0	66/91	0	0.63 J - 38	FL-05	NTC02GW0505	4.50	650	TACO
COPPER - Dissolved	2/3	0	28/31	0	0.6 - 3	FL-02	NTC02GW0213	1.32	650	TACO
IRON	7/7	4	87/91	51	23 - 24000	FL-02	NTC02GW0211	7874.51	5000	TACO
IRON - Dissolved	3/3	0	24/31	4	4.3 J - 18000	FL-03	NTC02GW0310	3032.53	5000	TACO
LEAD	4/7	0	33/91	3	0.24 J - 16	FL-05	NTC02GW0505	3.14	7.5	TACO
LEAD - Dissolved	1/3	0	2/31	0	0.56 - 1.1	FL-02	NTC02GW0213	0.83	7.5	TACO
MAGNESIUM	7/7	0	91/91	0	16000 - 180000 J	FL-04	NTC02GW0409-D	95404.40	NC	NA
MAGNESIUM - Dissolved	3/3	0	31/31	0	19000 J - 170000 J	FL-04	NTC02GW0406, NTC02GW0406-D	61225.81	NC	NA
MANGANESE	7/7	1	91/91	21	8.9 - 580	FL-05	NTC02GW0505	121.97	150	TACO
MANGANESE - Dissolved	3/3	0	31/31	1	5.2 - 220	FL-06	NTC02GW0605	55.98	150	TACO
MERCURY	0/7	0	1/91	0	0.131	FL-05	FL-05_20060817	0.13	2	TACO
NICKEL	7/7	0	79/91	0	4.3 - 58	FL-05	NTC02GW0505	14.72	100	TACO
NICKEL - Dissolved	3/3	0	31/31	0	0.9 - 22	FL-03, FL-04	NTC02GW0307, NTC02GW0406	6.21	100	TACO
POTASSIUM	7/7	0	91/91	0	1400 - 55200	FL-04	FL-04_20070816	10166.48	NC	NA
POTASSIUM - Dissolved	3/3	0	31/31	0	1200 - 37000	FL-04	NTC02GW0406-D	4029.03	NC	NA
SELENIUM	4/7	0	56/91	0	0.37 - 24.7	FL-04	FL-04_20070816	4.43	50	TACO
SELENIUM - Dissolved	1/3	0	9/31	0	0.62 - 8.4 J	FL-04	NTC02GW0406-D	2.44	50	TACO
SILVER	2/7	0	10/91	0	0.077 J - 0.33	FL-01	NTC02GW0109	0.15	50	TACO
SILVER - Dissolved	0/3	0	3/31	0	0.081 - 0.68	FL-06	NTC02GW0609	0.30	50	TACO
SODIUM	7/7	0	91/91	0	27000 - 440000	FL-04	NTC02GW0406	125547.25	NC	NA
SODIUM - Dissolved	3/3	0	31/31	0	32000 - 440000 J	FL-04	NTC02GW0406-D	78000.00	NC	NA
THALLIUM	2/7	0	41/91	0	0.054 J - 1.77	FL-03	FL-03_20060831	0.31	2	TACO
THALLIUM - Dissolved	2/3	0	10/31	0	0.053 - 0.19	FL-06	NTC02GW0605	0.10	2	TACO
TOTAL ESSENTIAL NUTRIENTS	7/7	0	91/91	0	97200 - 896000	FL-04	NTC02GW0406	371679.67	1200000	TACO
TOTAL ESSENTIAL NUTRIENTS - Diss	3/3	0	31/31	0	106200 - 887000	FL-04	NTC02GW0406-D	241222.58	1200000	TACO

TABLE 3-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
VANADIUM	6/7	0	59/91	1	0.3 J - 56	FL-05	NTC02GW0505	7.23	49	TACO
VANADIUM - Dissolved	2/3	0	16/31	0	0.28 J - 6.5	FL-02	NTC02GW0213	1.93	49	TACO
ZINC	7/7	0	43/91	0	3.4 - 90 J	FL-05	NTC02GW0505	16.40	5000	TACO
ZINC - Dissolved	3/3	0	13/31	0	2.1 - 14 J	FL-05	NTC02GW0505	5.99	5000	TACO
Miscellaneous Parameters					-					
AMMONIA-N	7/7	2	84/91	12	0.017 J - 48	FL-04	FL-04_20070816	8.57	30	SMCL
BIOCHEMICAL OXYGEN DEMAND	2/7	0	33/91	0	1.02 - 18	FL-04	NTC02GW0413, NTC02GW0413-D	7.53	NC	NA
CHEMICAL OXYGEN DEMAND	7/7	0	80/89	0	2.9 - 250	FL-04	FL-04_20060822, FL-04_20060822-D	51.85	NC	NA
CHLORIDE	7/7	2	91/91	21	7.53 - 697	FL-04	FL-04_20070130	162.78	200	TACO
CYANIDE	0/7	0	2/91	0	0.0015	FL-04	NTC02GW0405, NTC02GW0405-D	0.00	0.2	TACO
FLUORIDE	7/7	0	91/91	0	0.11 - 0.893	FL-02	FL-02_20070129	0.41	4	TACO
HEXAVALENT CHROMIUM	0/7	0	15/90	0	0.0026 - 0.0091 J	FL-04	NTC02GW0409	0.01	0.1	IL - EPA
NITRATE	NA	NA	16/28	0	0.031 - 0.611	FL-01	FL-01_20060816	0.13	10	TACO
NITRATE-N	0/7	0	31/63	0	0.017 - 0.28	FL-01	NTC02GW0107	0.09	10	MCL
NITRATE-N	0/7	0	31/63	0	0.017 - 0.28	FL-04	NTC02GW0410	0.09	10	MCL
NITRITE-N	4/7	0	29/63	0	0.0028 - 0.034	FL-04	NTC02GW0409	0.01	1	MCL
NITRITE/NITRATE-N	0/7	0	30/63	0	0.013 J - 0.28	FL-04	NTC02GW0410	0.09	10	MCL
PH	7/7	0	55/55	1	6.47 - 8.4 J	FL-02	NTC02GW0210, NTC02GW0211	7.31	6.5 - 8.5	SMCL
SULFATE	7/7	1	91/91	13	2.4 - 650	FL-01	NTC02GW0110	170.60	400	TACO
TOTAL DISSOLVED SOLIDS	7/7	7	91/91	78	264 - 2310	FL-04	FL-04_20070130	1119.69	500	SMCL
TOTAL ORGANIC CARBON	7/7	0	83/91	0	1.13 - 73.4	FL-04	FL-04_20070130	17.10	NC	NA
TOTAL PHENOLICS	1/7	0	10/91	0	0.0029 J - 0.00575	FL-04, FL-05	FL-04_20070430, FL-05_20070110	0.00	0.1	IL - EPA
TOTAL PHOSPHORUS	6/7	0	56/90	0	0.011 - 0.34	FL-04	NTC02GW0406	0.13	NC	NA
TOTAL SUSPENDED SOLIDS	7/7	0	80/91	0	3 - 990 J	FL-02	NTC02GW0211	82.18	NC	NA
Field Parameters										
CONDUCTIVITY	6/6	0	56/56	0	0.471 - 3.94	FL-04	NTC02GW0406	1.70	NC	NA
DISSOLVED OXYGEN	6/6	0	56/56	0	0.008 - 3.54	FL-05	NTC02GW0507	0.48	NC	NA
OXIDATION REDUCTION POTENTIAL	6/6	0	56/56	0	-182 - 200	FL-06	NTC02GW0609	-33.75	NC	NA
PH	6/6	2	56/56	11	6.03 - 9.23	FL-02	NTC02GW0212	7.27	6.5 - 8.5	SMCL
SALINITY	NA	NA	29/4	0	0 - 1.67	FL-04	NTC02GW0411	0.13	NC	NA
SALINITY	NA	NA	29/25	0	0 - 1.67	FL-04	NTC02GW0411	0.13	NC	NA
TEMPERATURE	6/6	0	56/56	0	6.74 - 17.79	FL-02	NTC02GW0210	11.77	NC	NA
TURBIDITY	6/6	0	56/56	0	0.36 - 2262	FL-02	NTC02GW0211	91.12	NC	NA

TABLE 3-2

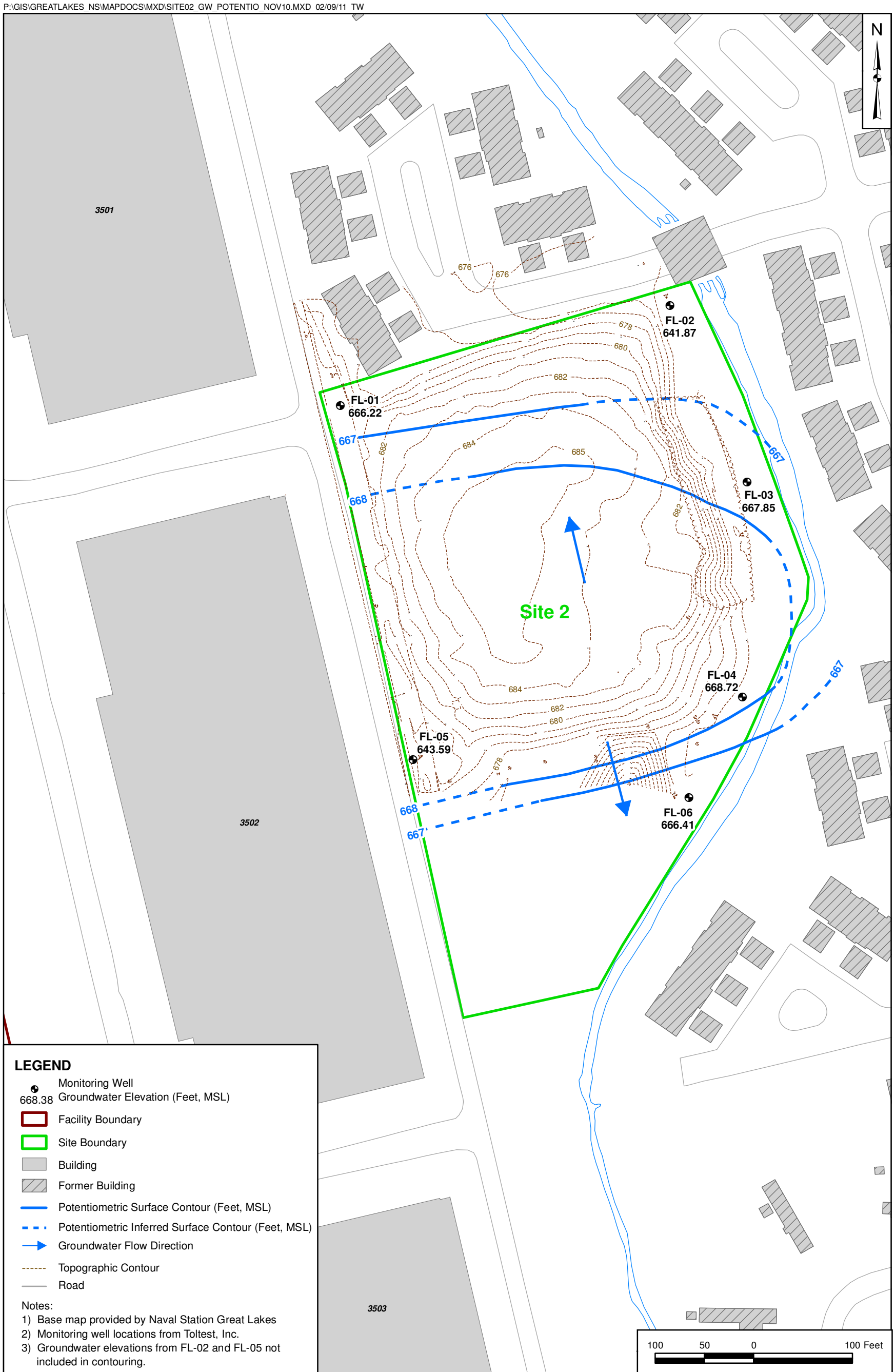
SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Notes:
The average concentrations were calculated by using one-half the detection limit for non-detects.
TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GROs), (35 Illinois Administrative Code Part 742)
Non-TACO = GRO not promulgated under 35 IAC 742
USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)
MCL = USEPA Maximum Contaminant Level
SMCL = USEPA Secondary Maximum Contaminant Level
NC = No criterion
NA = Not available
IL-EPA = criterion as per Illinois EPA (personal communication)
Dark shading indicates exceedance of criteria.
Data Qualifiers:
J = Indicates that the result was detected but concentration is considered an estimate due to precision.

Associated Samples:

FL-01_20060816	FL-02_20070418	NTC02GW0305	NTC02GW0407	NTC02GW0409-D	NTC02GW0511
FL-02_20060830	FL-03_20070424	NTC02GW0405	NTC02GW0407-D	NTC02GW0509	NTC02GW0611
FL-03_20060831	FL-03_20070424-D	NTC02GW0405-D	NTC02GW0507	NTC02GW0609	NTC02GW0112
FL-04_20060822	FL-04_20070430	NTC02GW0505	NTC02GW0607	NTC02GW0110	NTC02GW0212
FL-04_20060822-D	FL-05_20070425	NTC02GW0605	NTC02GW0108	NTC02GW0110-D	NTC02GW0312
FL-05_20060817	FL-06_20070417	NTC02GW0106	NTC02GW0208	NTC02GW0210	NTC02GW0412
FL-06_20060821	FL-01_20070808	NTC02GW0206	NTC02GW0308	NTC02GW0310	NTC02GW0412-D
FL-01_20070111	FL-02_20070815	NTC02GW0306	NTC02GW0408	NTC02GW0410	NTC02GW0512
FL-02_20070129	FL-03_20070813	NTC02GW0406	NTC02GW0408-D	NTC02GW0510	NTC02GW0612
FL-03_20070118	FL-03_20070813-D	NTC02GW0406-D	NTC02GW0508	NTC02GW0610	NTC02GW0113
FL-03_20070118-D	FL-04_20070816	NTC02GW0506	NTC02GW0608	NTC02GW0111	NTC02GW0213
FL-04_20070130	FL-05_20070809	NTC02GW0606	NTC02GW0109	NTC02GW0211	NTC02GW0313
FL-05_20070110	FL-06_20070814	NTC02GW0107	NTC02GW0209	NTC02GW0311	NTC02GW0413
FL-06_20070119	NTC02GW0105	NTC02GW0207	NTC02GW0309	NTC02GW0311-D	NTC02GW0413-D
FL-01_20070419	NTC02GW0205	NTC02GW0307	NTC02GW0409	NTC02GW0411	NTC02GW0513
					NTC02GW0613

P:\GIS\GREATLAKES_NS\MAPDOCS\MXD\SITE02_GW_POTENTIO_NOV10.MXD 02/09/11 TW



LEGEND

- Monitoring Well
- 668.38 Groundwater Elevation (Feet, MSL)
- Facility Boundary
- Site Boundary
- Building
- Former Building
- Potentiometric Surface Contour (Feet, MSL)
- Potentiometric Inferred Surface Contour (Feet, MSL)
- Groundwater Flow Direction
- Topographic Contour
- Road

Notes:
1) Base map provided by Naval Station Great Lakes
2) Monitoring well locations from Toltest, Inc.
3) Groundwater elevations from FL-02 and FL-05 not included in contouring.

DRAWN BY T. WHEATON	DATE 12/13/10	GROUNDWATER POTENTIOMETRIC SURFACE MAP NOVEMBER 2010, ROUND 13 SITE 2 - FORRESTAL LANDFILL NAVAL STATION GREAT LAKES GREAT LAKES, ILLINOIS	CONTRACT NUMBER 01050
CHECKED BY M. MENGEL	DATE 02/09/11		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 3-1 REV 0

4.0 SITE 3 – SUPPLYSIDE LANDFILL RESULTS

4.1 HYDROGEOLOGY

Figure 4-1 illustrates the groundwater potentiometric surface of shallow groundwater at the Supplyside Landfill, as measured during Round 13 (November 2010). Based on Figure 4-1, groundwater flow at the site during Round 13 is generally northeasterly across the landfill, similar to previous rounds.

The advective groundwater flow at the Forrestal Landfill is estimated to be 0.092 foot per day or 34 feet per year, assuming a site-specific bulk hydraulic conductivity of 2.31 feet per day (Tetra Tech, 2008), a mean hydraulic gradient of 0.012 (based on Round 13 data), and an effective aquifer porosity of 0.3. The advective groundwater flow rate is similar to previous rounds.

4.2 ANALYTICAL RESULTS

Groundwater samples were collected from monitoring wells SSL-01 through SSL-06 at the Supplyside Landfill (Site 2) during Round 13 (November 2010). A field duplicate groundwater sample was also collected from monitoring well SSL-05. The groundwater samples were analyzed for the L1/L2 parameters listed in Table 2-1. Samples from wells SSL-02, SSL-03, SSL-05, and SSL-06 were also sampled for dissolved metals based on turbidity readings greater than 10 NTUs. A table of laboratory results from Round 13 is provided in Appendix C, and data validation letters and laboratory data sheets are included as Appendix D.

Table 4-1 summarizes analytical results from Site 3 groundwater samples and compares the results to Illinois EPA TACO Groundwater Remediation Objectives (GROs) for Class I groundwater or to USEPA primary or secondary MCLs or USEPA RSLs for parameters for which no TACO GROs are available. Parameters exceeding either the TACO GROs or USEPA criteria are noted by dark shading. The table includes parameters detected at concentrations greater than laboratory detection limits in at least one sample during Round 13.

Complete laboratory results from Round 13 are provided in Appendix C.3. Appendix C.4 summarizes detected concentrations from all rounds of sampling (Rounds 1 through 13). Data validation letters and laboratory data sheets are included as Appendix D. Trend graphs for parameters with concentrations detected in excess of criteria are provided in Appendix E.

Comparisons of Round 13 data to criteria are summarized as follows:

- Two VOCs (carbon disulfide and toluene) and SVOCs, specifically several PAHs were detected in Site 3 wells during Round 13. The VOCs were detected in samples from SSL-01 and SSL-05, and SVOCs were detected in samples from SSL-01, SSL-02, SSL-03, SSL-05, and SSL-06. No VOC or SVOC concentrations were greater than regulatory criteria.

- The herbicide MCPP was detected in the sample from SSL-03 at a concentration of 160 µg/L, which is greater than the TACO GRO (37 µg/L). Three additional herbicides (2,4-D, 2,4-DB, and MCPA) were detected in the samples from SSL-03, SSL-04, and SSL-05 during Round 13, but the concentrations were less than the respective regulatory criteria.

- Pesticides were not detected during the Round 13 event.

- Aluminum was detected in unfiltered samples from monitoring wells SSL-02, SSL-03, SSL-05 and its duplicate, and SSL-06 during Round 13 but at concentrations less than the TACO GRO of 3,500 µg/L. Concentrations in the remaining wells (SSL-01 and SSL-04) did not exceed the laboratory reporting limit. Dissolved aluminum was not detected in excess of the laboratory reporting limit in any of the samples.

- Arsenic was detected in the unfiltered sample from SSL-06 at a concentration of 200 µg/L, greater than the TACO GRO of 50 µg/L. Total arsenic concentrations have increased in well SSL-06 since the inception of monitoring, and the detection during Round 13 was the maximum concentration detected in this well and at the site to date. Arsenic was detected in unfiltered samples from wells SSL-01 through SSL-05 but at concentrations less than the TACO GRO.

- Iron was detected in unfiltered samples from SSL-05 and its duplicate (both 14,000 µg/L) and SSL-06 (84,000 µg/L) at concentrations greater than the TACO GRO of 5,000 µg/L. The dissolved iron concentrations in these samples (12,000 and 5,800 µg/L, respectively) were also greater than the TACO GRO. Total iron concentrations in samples from SSL-05 and SSL-06 exceeded the TACO GRO in Rounds 1 through 13, with the exception of SSL-06 concentrations during Rounds 1 and 4. Similar to previous rounds, total iron was detected in the remaining samples during Round 13 but at concentrations less than the TACO GRO.

- Lead was detected in unfiltered samples from monitoring wells SSL-03 (0.61 µg/L), SSL-05 and its duplicate (both 2.7 µg/L), and SSL-06 (3.7 µg/L) but at concentrations less than the TACO GRO of 7.5 µg/L. Dissolved lead was not detected in excess of the laboratory reporting limit in samples from SSL-03, SSL-05 or SSL-06, and lead was not detected in the samples from SSL-01, SSL-02, and SSL-04. These results were similar to results from previous rounds. Total lead was detected at a

concentration greater than the TACO GRO in well SSL-02 (14 µg/L) during Round 5; however, well SSL-02 was sampled using a bailer during Round 5, and lead was not detected in the filtered sample. Lead concentrations from SSL-02 were less than the TACO GRO during Rounds 6 through 11.

- Concentrations of manganese in unfiltered samples from SSL-05 (420 µg/L) and its duplicate (400 µg/L) and SSL-06 (540 µg/L) were greater than the TACO GRO of 150 µg/L. Dissolved manganese concentrations from SSL-05 (340 µg/L) and its duplicate (350 µg/L) and SSL-06 (430 µg/L) were also greater than the TACO GRO. Total manganese concentrations in the samples from SSL-05 and SSL-06 exceeded the TACO GRO in Rounds 1 through 13. A slightly increasing trend is occurring in manganese concentrations in SSL-05, but no trend is apparent for SSL-06. Total manganese was detected in the remaining samples during Round 13 but at concentrations less than the TACO GRO.

- Chloride was detected in the sample from SSL-02 (500 mg/L) at an estimated concentration greater than the USEPA secondary MCL of 200 mg/L. Chloride was detected in the remaining samples during Round 13 but at concentrations less than the USEPA secondary MCL. The chloride results are similar to results from during previous rounds, except for SSL-02. Chloride concentrations in SSL-02 have decreased since Round 10 (May 2009).

- Sulfate was detected in all Site 3 wells but at concentrations less than the USEPA secondary MCL. The results are similar to results from previous rounds.

- TDS were detected in the samples collected from SSL-02, SSL-03, SSL-05, and SSL-06 at concentrations (762 to 1,090 mg/L) greater than the USEPA secondary MCL of 500 mg/L. Samples collected from SSL-01 (478 mg/L) and SSL-04 (462 mg/L) were less than the USEPA secondary MCL of 500 mg/L. The TDS results were similar to results from previous rounds.

4.3 CONCLUSIONS AND RECOMMENDATIONS

As discussed in Section 1.2, this report for Round 13 groundwater monitoring at the Supplyside Landfill provides an evaluation of current analytical results and data trends (Appendix E) that may be evident by comparison to data from previous sampling rounds. The following conclusions are based on 13 rounds of groundwater monitoring data at Site 3:

- Analytical results from the 13 rounds of groundwater monitoring indicate that no VOC, SVOCs, pesticides, PCBs, or herbicides were detected at concentrations greater than monitoring criteria, except one detection of benzo(a)anthracene in the sample from SSL-01 (0.14 µg/L) during Round 12

and three detections of the herbicide MCPP in the samples from SSL-02 (85 µg/L) and SSL-5 (140 µg/L) during Round 11 and SSL-03 (160 µg/L) during Round 13.

- Inorganics detected at concentrations greater than regulatory criteria have included aluminum, arsenic, iron, lead, and manganese. As illustrated on the trend graphs provided in Appendix E, aluminum was detected at concentrations greater than the regulatory criterion in two wells (SSL-02 and SSL-06) during at least one round. However, during Round 12, aluminum concentrations from SSL-06 were less than the regulatory criterion. Iron and manganese concentrations have been relatively consistent over the first 13 rounds. Notably, iron and manganese concentrations in SSL-05 and SSL-06 exceeded the TACO GROs during Rounds 1 through 13, with the exception of iron concentrations in SSL-06 during Rounds 1 and 4. Arsenic concentrations have increased since May 2009 after generally being less than the TACO GRO for the first 11 rounds. Lead was detected at a concentration greater than the regulatory criterion in well SSL-02 during Round 5.

- Total and dissolved concentrations of sodium were greater than the USEPA DWEL of 20,000 µg/L during Rounds 1 through 13. The consistency and frequency of detection of sodium concentrations suggest that natural levels of sodium may be elevated in the area and that the concentrations are not site related.

For the initial nine rounds of long-term monitoring, groundwater samples were collected quarterly and analyzed for the L1 and L2 parameters listed in Table 2-2. The first eight rounds of data were evaluated for concentration trends and seasonality. A letter requesting reductions in the frequency of monitoring and parameters analyzed was submitted to Illinois EPA on January 29, 2009. In February 2009, Illinois EPA approved a reduction in monitoring frequency to semi-annual and removal of organophosphate pesticides, carbamate pesticides, PCBs, total phenolics, oil and grease, and fecal coliform from the analyte list for Site 3. The remaining L1 and L2 parameters will continue to be monitored.

An evaluation of the data for Rounds 1 through 13 will be prepared and provided prior to Round 14. The evaluation will consider trends and seasonality and provide recommendations for removal of parameters from the analyte list, if supported by the evaluation results. Round 14 monitoring will occur in May 2011.

TABLE 4-1

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING - ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0113 20101115	SL-02 NTC03GW0213 20101115	SL-03 NTC03GW0313 20101116	SL-04 NTC03GW0413 20101116	SL-05 NTC03GW0513 20101116	SL-05 NTC03GW0513-D 20101116 NTC03GW0513	SL-06 NTC03GW0613 20101116
Volatile Organics (ug/L)									
CARBON DISULFIDE	18	USEPA TAPWATER	0.26 J	1 UJ	1.1 J	1 UJ	1 UJ	1 UJ	1 UJ
TOLUENE	1000	TACO	0.50 J	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)									
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.021 J	0.50 U	0.50 U	0.50 U	0.54 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.33 J	0.27 J	0.50 U	0.28 J	0.27 J	0.28 J
FLUORANTHENE	280	TACO	0.50 U	0.042 J	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
NAPHTHALENE	140	TACO	0.051 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.032 J	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
PYRENE	210	TACO	0.50 U	0.042 J	0.50 U	0.50 U	0.50 U	0.50 U	0.032 J
Herbicides (ug/L)									
2,4-D	70	TACO	0.18 J	2 U	2 U	0.14 J	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	1.7 J	2 U	2 U
MCPA	700	TACO	200 U	200 U	88 J	200 U	41 J	38 J	200 U
MCPP	37	USEPA TAPWATER	200 U	200 U	**160 NJ**	200 U	200 U	200 U	200 U
Inorganics (ug/L)									
ALUMINUM	3500	NON-TACO	100 U	49 J / 100 U	780 / 100 U	100 U	1400 / 100 U	1500 / 100 U	1500 / 100 U
ANTIMONY	6	TACO	1 U	1 U / 1 U	1 U / 1 U	1 U	1 U / 1 U	1 U / 1 U	1 / 1 U
ARSENIC	50	TACO	3 U	1.2 J / 1 J	3 U / 3 U	3 U	0.56 J / 3 U	0.79 J / 3 U	**200 / 6.3**
BARIUM	2000	TACO	70	43 / 43	24 / 18	59	330 / 320	340 / 330	260 / 49
BERYLLIUM	4	TACO	1 U	1 U / 1 U	1 U / 1 U	1 U	1 U / 1 U	1 U / 1 U	0.59 J / 1 U
CADMIUM	5	TACO	0.20 U	0.20 U / 0.20 U	0.059 J / 0.20 U	0.20 U	0.09 J / 0.20 U	0.17 J / 0.20 U	0.06 J / 0.20 U
CALCIUM	NC	NA	52000	50000 / 52000 J	77000 / 88000 J	69000	180000 / 200000 J	180000 / 200000 J	140000 / 130000 J
CHROMIUM	100	TACO	1 U	1 U / 1 U	1.9 U / 1 U	1 U	3.6 U / 1 U	3.4 U / 1 U	4.3 / 1 U
COBALT	1000	TACO	0.15 J	0.13 J / 0.089 J	0.73 J / 0.14 J	0.44 J	3.1 / 1.6	2.9 / 1.7	2.3 / 0.86 J
COPPER	650	TACO	0.76 J	0.72 J / 1 U	1.7 / 0.73 J	1.7	4.1 / 1 U	4.2 / 0.75 J	5.9 / 0.97 J
IRON	5000	TACO	730	240 / 150	1300 / 220	250	**14000 / 12000**	**14000 / 12000**	**84000 / 5800**
LEAD	7.5	TACO	1 U	1 U / 1 U	0.61 J / 1 U	1 U	2.7 / 1 U	2.7 / 1 U	3.7 / 1 U
MAGNESIUM	NC	NA	51000	77000 / 82000	75000 / 87000	50000	84000 / 90000	85000 / 91000	49000 / 47000
MANGANESE	150	TACO	15	20 / 18	70 / 45	18	**420 / 340**	**400 / 350**	**540 / 430**
NICKEL	100	TACO	0.69 J	1.3 / 2	4 / 1.9	2.1	18 / 9.4	16 / 9.5	9.1 / 3.3
POTASSIUM	NC	NA	1800	2900 / 3100	2500 / 2500	1800	8300 / 8800	8300 / 8800	1700 / 1200
SELENIUM	50	TACO	1 U	1 U / 0.90 J	1 U / 1 U	0.86 J	1 U / 1.7	2 / 2.5	1 / 1 U
SILVER	50	TACO	0.20 U	0.12 J / 0.11 J	0.20 U / 0.20 U	0.20 U	0.20 U / 0.20 U	0.20 U / 0.081 J	0.16 J / 0.20 U
SODIUM	NC	NA	45000	240000 / 250000	50000 / 58000	33000	110000 / 120000	110000 / 120000	54000 / 56000
THALLIUM	2	TACO	1 U	1 U / 1 U	1 U / 0.094 J	0.057 J	0.11 J / 0.079 J	0.12 J / 1 U	0.084 J / 0.071 J
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	149800	369900 / 387100	204500 / 235500	153800	382300 / 418800	383300 / 419800	244700 / 234200
VANADIUM	49	TACO	3 U	3 U / 3 U	2.5 J / 0.29 J	3 U	5.3 / 0.77 J	5.2 / 0.69 J	8.7 / 3 U
ZINC	5000	TACO	3.6 J	3.7 J / 11 J	4.8 J / 20 U	3.4 J	26 / 4.1 J	25 / 3.3 J	9.7 J / 20 U

TABLE 4-1

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING - ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0113 20101115	SL-02 NTC03GW0213 20101115	SL-03 NTC03GW0313 20101116	SL-04 NTC03GW0413 20101116	SL-05 NTC03GW0513 20101116	SL-05 NTC03GW0513-D 20101116 NTC03GW0513	SL-06 NTC03GW0613 20101116
Miscellaneous Parameters									
AMMONIA-N MG/L	30	SMCL	0.4	0.3	0.34	0.16	14	14	0.19
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.1	2 U	17	2 U	2.4	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	4.7 J	7.6	11	6	35	33	5 U
CHLORIDE MG/L	200	TACO	17 J	**500 J**	23 J	17 J	180 J	180 J	140 J
FLUORIDE MG/L	4	TACO	0.72	0.47	0.7	0.68	0.27	0.27	0.34
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 J	0.0046 J	0.005 UJ	0.0026 J	0.0026 J	0.0023 J	0.002 U
NITRATE-N MG/L	10	MCL	0.05 U	0.05 U	0.05 U	0.13	0.05 U	0.05 U	0.05 U
NITRITE/NITRATE-N MG/L	10	MCL	0.05 U	0.05 U	0.05 U	0.14	0.05 U	0.05 U	0.05 U
NITRITE-N MG/L	1	MCL	0.0032 J	0.0022 J	0.0028 J	0.0078 J	0.0032 J	0.01 U	0.0051 J
PH S.U.	6.5 - 8.5	SMCL	7.6 J	8.1 J	7.8 J	7.7 J	7 J	7 J	6.8 J
SULFATE MG/L	400	TACO	110	120	270	83	110	110	75
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	478	**1080**	**764**	462	**1090**	**1130**	**762**
TOTAL ORGANIC CARBON MG/L	NC	NA	0.98	1.7	1.3	1.7	13	13	31
TOTAL PHOSPHORUS MG/L	NC	NA	0.013	0.013	0.027	0.026	0.21	0.22	0.71
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	6.8	4.9	45	3.3 U	150	140	630
Field Parameters									
CONDUCTIVITY MS/CM	NC	NA	0.769	2.01	1.13	0.828	2.01		1.205
DISSOLVED OXYGEN MG/L	NC	NA	0.09	0.2	0.23	0.19	0.35		0.2
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-144	-208	-232	-4	-59		-56
PH S.U.	6.5 - 8.5	SMCL	**6.25**	8.19	7.18	7.13	**6.43**		6.77
TEMPERATURE C	NC	NA	11.19	11.4	11.01	10.8	12.45		13
TURBIDITY NTU	NC	NA	11	17	63	2.5	10		120

Notes:

1 - TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GRO) (35 Illinois Administrative Code Part 742)

Non-TACO = GRO not promulgated under 35 IAC 742

USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)

MCL = USEPA Maximum Contaminant Level

SMCL = USEPA Secondary Maximum Contaminant Level

NC = No criterion

NA = Not available

IL-EPA = criterion as per Illinois EPA (personal communication)

Light Gray shading indicates positive result.

Dark shading indicates exceedance of criteria.

Data Qualifiers:

U = Indicates that parameter was not detected.

UR = Indicates the parameter was not detected, but the result is considered unreliable and unusable.

J = Indicates that result was detected but concentration is considered an estiamte due to precision.

NJ – Indicates that the chemical is presumptively present.

TABLE 4-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
Volatiles (ug/L)										
2-BUTANONE	0/7	0	3/87	0	4.38 - 4.7 J	SL-04	NTC03GW0406	4.49	7100	USEPA TAPWATER
ACETONE	0/7	0	8/87	0	2.6 - 23.3	SL-01	SL-01_20070426	6.85	6300	TACO
BENZENE	0/7	0	1/87	0	0.822	SL-04	SL-04_20070503	0.82	5	TACO
CARBON DISULFIDE	2/7	0	2/87	0	0.26 J - 1.1 J	SL-03	NTC03GW0313	0.68	18	USEPA TAPWATER
CHLOROFORM	0/7	0	1/87	0	0.199	SL-03	SL-03_20070124	0.20	0.2	TACO
CHLOROMETHANE	0/7	0	4/87	0	0.634 J - 16.1	SL-05	SL-05_20070802	4.75	190	USEPA TAPWATER
TETRAHYDROFURAN	NA	NA	3/41	0	3 J - 6.1 J	SL-05	NTC03GW0511	4.17	NC	NA
TOLUENE	1/7	0	5/87	0	0.15 J - 0.5 J	SL-01	NTC03GW0113	0.36	1000	TACO
VINYL CHLORIDE	0/7	0	3/87	0	0.19 J - 0.25 J	SL-05	NTC03GW0511	0.21	2	TACO
Semivolatles (ug/L)										
1-METHYLNAPHTHALENE	0/7	0	1/87	0	0.022 J	SL-05	NTC03GW0505	0.02	490	NON-TACO
2-METHYLNAPHTHALENE	0/7	0	1/87	0	0.022 J	SL-05	NTC03GW0505	0.02	150	USEPA TAPWATER
ACENAPHTHENE	1/7	0	7/87	0	0.019 J - 0.03 J	SL-05	NTC03GW0507	0.02	420	TACO
BENZALDEHYDE	0/7	0	2/87	0	0.12 J - 0.13 J	SL-05	NTC03GW0508-D	0.13	700	NON-TACO
BENZO(A)ANTHRACENE	0/7	0	7/87	1	0.031 J - 0.14 J	SL-01	NTC03GW0112	0.06	0.13	TACO
BENZO(A)PYRENE	0/7	0	1/87	0	0.05 J	SL-03	NTC03GW0311	0.05	0.2	TACO
BENZO(K)FLUORANTHENE	0/7	0	1/87	0	0.061 J	SL-03	NTC03GW0308	0.06	0.17	TACO
BIS(2-ETHYLHEXYL)PHTHALATE	5/7	0	7/87	0	0.27 J - 2.5	SL-03	NTC03GW0307	0.86	6	TACO
BUTYL BENZYL PHTHALATE	0/7	0	14/87	0	0.062 J - 0.33 J	SL-01	NTC03GW0109	0.11	1400	TACO
CAPROLACTAM	0/7	0	6/83	0	0.15 J - 31	SL-02	NTC03GW0205	5.51	3500	NON-TACO
CHRYSENE	0/7	0	3/87	0	0.029 J - 0.052 J	SL-01	NTC03GW0108	0.04	1.5	TACO
DI-N-BUTYL PHTHALATE	0/7	0	3/87	0	0.41 J - 0.68 J	SL-06	NTC03GW0609	0.53	700	TACO
DIETHYL PHTHALATE	0/7	0	6/87	0	0.04 J - 0.054 J	SL-01	NTC03GW0109	0.05	5600	TACO
FLUORANTHENE	1/7	0	8/87	0	0.019 J - 0.042 J	SL-02	NTC03GW0213	0.03	280	TACO
FLUORANTHENE	1/7	0	8/87	0	0.019 J - 0.042 J	SL-01	NTC03GW0108	0.03	280	TACO
ISOPHORONE	0/7	0	3/87	0	0.12 J - 0.13 J	SL-02	NTC03GW0209	0.13	1400	TACO
ISOPHORONE	0/7	0	3/87	0	0.12 J - 0.13 J	SL-06	NTC03GW0609	0.13	1400	TACO
NAPHTHALENE	1/7	0	12/87	0	0.029 J - 0.0859	SL-06	SL-06_20070116	0.05	140	TACO
PHENANTHRENE	1/7	0	5/87	0	0.02 J - 0.032 J	SL-02	NTC03GW0213	0.02	210	NON-TACO
PYRENE	2/7	0	7/87	0	0.03 J - 0.052 J	SL-01	NTC03GW0108	0.04	210	TACO
Herbicides (ug/L)										
2,4,5-T	0/7	0	1/87	0	0.168	SL-05	SL-05_20070123	0.17	280	NON-TACO
2,4,5-TP (SILVEX)	0/7	0	4/87	0	0.045 NJ - 0.11 J	SL-06	NTC03GW0611	0.07	50	TACO
2,4-D	2/7	0	3/87	0	0.14 J - 0.86 J	SL-02	NTC03GW0212	0.39	70	TACO
2,4-DB	1/7	0	1/87	0	1.7 J	SL-05	NTC03GW0513	1.70	290	USEPA TAPWATER
DICAMBA	0/7	0	2/87	0	0.087 J - 0.18 J	SL-02	NTC03GW0212	0.13	1100	USEPA TAPWATER
MCPA	3/7	0	3/87	0	38 J - 88 J	SL-03	NTC03GW0313	55.67	700	TACO
MCPP	1/7	1	4/86	3	31 J - 160 NJ	SL-03	NTC03GW0313	104.00	37	USEPA TAPWATER
PENTACHLOROPHENOL	NA	NA	4/24	0	0.251 - 0.408	SL-05	SL-05_20070123	0.33	1	TACO
Pesticides/PCBs (ug/L)										
4,4'-DDD	0/7	0	3/86	0	0.00082 NJ - 0.0035 J	SL-02	NTC03GW0205	0.00	14	TACO
4,4'-DDE	0/7	0	1/86	0	0.0059 J	SL-02	NTC03GW0205	0.01	10	TACO
4,4'-DDT	0/7	0	2/86	0	0.0027 J - 0.0057 J	SL-05	NTC03GW0510	0.00	6	TACO
ALPHA-CHLORDANE	0/7	0	2/86	0	0.0014 J - 0.013 J	SL-04	NTC03GW0409	0.01	2	TACO

TABLE 4-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
BETA-BHC	0/7	0	2/85	0	0.0029 J - 0.0067 J	SL-03	NTC03GW0311	0.00	0.037	USEPA TAPWATER
ENDOSULFAN I	0/7	0	1/86	0	0.0029 J	SL-03	NTC03GW0309	0.00	42	TACO
ENDRIN KETONE	0/7	0	1/86	0	0.0067 J	SL-06	NTC03GW0605	0.01	2	TACO
GAMMA-CHLORDANE	0/7	0	3/86	0	0.0014 J - 0.0033 J	SL-06	NTC03GW0609	0.00	2	TACO
HEPTACHLOR	0/7	0	1/86	0	0.00062 J	SL-06	NTC03GW0610	0.00	0.4	TACO
HEPTACHLOR EPOXIDE	0/7	0	2/85	0	0.0029 J - 0.0036 J	SL-03	NTC03GW0309-D	0.00	0.2	TACO
Petroleum Hydrocarbons (mg/L)										
OIL & GREASE - HEM	NA	NA	2/59	0	1.1 J - 1.3 J	SL-02	NTC03GW0205	1.20	NC	NA
Inorganics (ug/L)										
ALUMINUM	5/7	0	53/87	3	25 - 12000 J	SL-02	NTC03GW0205	929.80	3500	NON-TACO
ALUMINUM - Dissloved	0/5	0	7/32	0	26 - 2200	SL-02	NTC03GW0206	350.57	3500	NON-TACO
ANTIMONY	1/7	0	18/87	0	0.277 J - 3.91	SL-03	SL-03_20070124	0.96	6	TACO
ANTIMONY - Dissolved	0/5	0	5/32	0	0.41 - 0.58 J	SL-03, SL-06	NTC03GW0310, NTC03GW0612	0.51	6	TACO
ARSENIC	4/7	1	59/87	4	0.3 - 200	SL-06	NTC03GW0613	12.27	50	TACO
ARSENIC - Dissolved	2/5	0	28/32	0	0.43 - 7	SL-06	NTC03GW0612	2.93	50	TACO
BARIUM	7/7	0	87/87	0	18 - 430	SL-05	NTC03GW0505	128.67	2000	TACO
BARIUM - Dissolved	5/5	0	32/32	0	16 - 360	SL-05	NTC03GW0508, NTC03GW0508-D	78.94	2000	TACO
BERYLLIUM	1/7	0	4/87	0	0.36 J - 0.8	SL-02	NTC03GW0205	0.58	4	TACO
CADMIUM	4/7	0	16/87	0	0.059 J - 0.44	SL-03	NTC03GW0305	0.11	5	TACO
CADMIUM - Dissolved	0/5	0	2/32	0	0.061 - 0.068	SL-03	NTC03GW0309	0.06	5	TACO
CALCIUM	7/7	0	87/87	0	41000 - 240000 J	SL-05	NTC03GW0509	122539.08	NC	NA
CALCIUM - Dissolved	5/5	0	32/32	0	52000 J - 210000	SL-05	NTC03GW0508	123625.00	NC	NA
CHROMIUM	1/7	0	26/87	0	0.35 J - 15	SL-02	NTC03GW0205	2.27	100	TACO
CHROMIUM - Dissolved	0/5	0	9/32	0	0.48 - 5.9	SL-06	NTC03GW0605	1.61	100	TACO
COBALT	7/7	0	64/87	0	0.13 J - 5.9	SL-02	NTC03GW0205	1.27	1000	TACO
COBALT - Dissolved	5/5	0	32/32	0	0.056 J - 1.7	SL-05	NTC03GW0513-D	0.71	1000	TACO
COPPER	7/7	0	64/87	0	0.63 J - 18	SL-02	NTC03GW0205	2.42	650	TACO
COPPER - Dissolved	3/5	0	25/32	0	0.48 J - 2.3 J	SL-02	NTC03GW0206	1.04	650	TACO
IRON	7/7	3	87/87	32	74 - 84000	SL-06	NTC03GW0613	8262.89	5000	TACO
IRON - Dissolved	5/5	3	31/32	9	38 - 12000	SL-05	NTC03GW0513, NTC03GW0513-D	3380.26	5000	TACO
LEAD	4/7	0	38/87	1	0.25 J - 14	SL-02	NTC03GW0205	1.30	7.5	TACO
LEAD - Dissolved	0/5	0	1/32	0	1.9	SL-02	NTC03GW0206	1.90	7.5	TACO
MAGNESIUM	7/7	0	87/87	0	39900 - 100000 J	SL-01, SL-02, SL-05	NTC03GW0109, NTC03GW0205, NTC03GW0209, NTC03GW0509	70285.06	NC	NA
MAGNESIUM - Dissolved	5/5	0	32/32	0	47000 - 91000	SL-05	NTC03GW0513-D	69781.25	NC	NA
MANGANESE	7/7	3	87/87	40	15 J - 930 J	SL-06	NTC03GW0612	245.60	150	TACO
MANGANESE - Dissolved	5/5	3	32/32	16	18 - 760	SL-06	NTC03GW0606, NTC03GW0607, NTC03GW0612	297.59	150	TACO
NICKEL	7/7	0	71/87	0	0.66 J - 19	SL-02	NTC03GW0205	5.91	100	TACO

TABLE 4-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
NICKEL - Dissolved	5/5	0	32/32	0	0.71 - 11	SL-05	NTC03GW0508, NTC03GW0508-D	3.36	100	TACO
POTASSIUM	7/7	0	87/87	0	732 - 8300	SL-05	NTC03GW0513, NTC03GW0513-D	3233.71	NC	NA
POTASSIUM - Dissloved	5/5	0	32/32	0	920 - 8800	SL-05	NTC03GW0513, NTC03GW0513-D	2688.13	NC	NA
SELENIUM	3/7	0	36/87	0	0.49 J - 10.1	SL-05	SL-05_20060809-D	1.94	50	TACO
SELENIUM - Dissolved	3/5	0	5/32	0	0.88 J - 2.5	SL-05	NTC03GW0513-D	1.40	50	TACO
SILVER	2/7	0	8/87	0	0.1 J - 0.33	SL-01	NTC03GW0109	0.18	50	TACO
SILVER - Dissolved	2/5	0	8/32	0	0.073 J - 0.67	SL-03	NTC03GW0309	0.25	50	TACO
SODIUM	7/7	0	87/87	0	31000 J - 300000	SL-02	NTC03GW0207	80481.61	NC	NA
SODIUM - Dissolved	5/5	0	32/32	0	33000 J - 270000	SL-02	NTC03GW0206	77093.75	NC	NA
THALLIUM	4/7	0	29/87	0	0.055 J - 1.19	SL-01	SL-01_20070731	0.25	2	TACO
THALLIUM - Dissolved	3/5	0	5/32	0	0.071 J - 0.35	SL-02	NTC03GW0205	0.13	2	TACO
TOTAL ESSENTIAL NUTRIENTS	7/7	0	87/87	0	122740 - 477800	SL-05	NTC03GW0509	276539.46	1200000	TACO
TOTAL ESSENTIAL NUTRIENTS - Diss	5/5	0	32/32	0	186100 - 421900	SL-02	NTC03GW0206	273188.13	1200000	TACO
VANADIUM	4/7	0	48/87	0	0.29 J - 20	SL-02	NTC03GW0205	3.42	49	TACO
VANADIUM - Dissolved	3/5	0	17/32	0	0.29 J - 4.1	SL-04	NTC03GW0409	1.60	49	TACO
ZINC	7/7	0	38/87	0	2.5 - 48	SL-02	NTC03GW0205	11.09	5000	TACO
ZINC - Dissolved	3/5	0	16/32	0	1.9 - 220	SL-03	NTC03GW0310	19.73	5000	TACO
Miscellaneous Parameters										
AMMONIA-N MG/L	7/7	0	87/87	0	0.081 J - 22.5	SL-05	SL-05_20070502	3.45	30	SMCL
BIOCHEMICAL OXYGEN DEMAND MG/L	3/7	0	36/87	0	1.51 - 21	SL-01	NTC03GW0110	7.35	NC	NA
CHEMICAL OXYGEN DEMAND MG/L	6/7	0	67/83	0	2.2 - 76	SL-05	NTC03GW0508-D	17.74	NC	NA
CHLORIDE MG/L	7/7	1	87/87	9	1.82 J - 590	SL-02	NTC03GW0207, NTC03GW0210	118.03	200	TACO
CYANIDE MG/L	0/7	0	1/87	0	0.00221 J	SL-02	NTC03GW0212	0.00	0.2	TACO
FECAL COLIFORM COL/1	NA	NA	1/59	0	887	SL-02	NTC03GW0205	887.00	NC	NA
FLUORIDE MG/L	7/7	0	87/87	0	0.21 - 0.79	SL-03	NTC03GW0305	0.48	4	TACO
HEXAVALENT CHROMIUM MG/L	5/7	0	18/86	0	0.0014 - 0.015 J	SL-02	NTC03GW0209	0.00	0.1	IL - EPA
NITRATE MG/L	NA	NA	11/24	0	0.036 - 0.497	SL-04	SL-04_20070821	0.16	10	TACO
NITRATE-N MG/L	1/7	0	21/63	0	0.02 - 0.95	SL-04	NTC03GW0411	0.25	10	MCL
NITRITE-N MG/L	6/7	0	36/63	0	0.0022 J - 0.013	SL-03	NTC03GW0309	0.01	1	MCL
NITRITE/NITRATE-N MG/L	1/7	0	22/63	0	0.0135 J - 0.96	SL-04	NTC03GW0411	0.21	10	MCL
PH S.U.	7/7	0	52/52	0	6.51 - 8.2 J	SL-02	NTC03GW0210, NTC03GW0211, NTC03GW0212	7.25	6.5 - 8.5	SMCL
SULFATE MG/L	7/7	0	87/87	1	24.1 - 460	SL-01	NTC03GW0109	160.69	400	TACO
TOTAL DISSOLVED SOLIDS MG/L	7/7	5	87/87	78	372 - 1300	SL-02, SL-05	NTC03GW0206, NTC03GW0207, NTC03GW0210, NTC03GW0508, NTC03GW0510	839.10	500	SMCL
TOTAL ORGANIC CARBON MG/L	7/7	0	79/87	0	0.777 J - 31	SL-06	NTC03GW0613	7.15	NC	NA
TOTAL PHENOLICS MG/L	NA	NA	4/59	0	0.0037 - 0.00842	SL-01	SL-01_20060801	0.01	0.1	IL - EPA

TABLE 4-2

SUMMARY OF DESCRIPTIVE STATISTICS AND CRITERIA COMPARISON FOR GROUNDWATER DATA - QUARTERLY MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

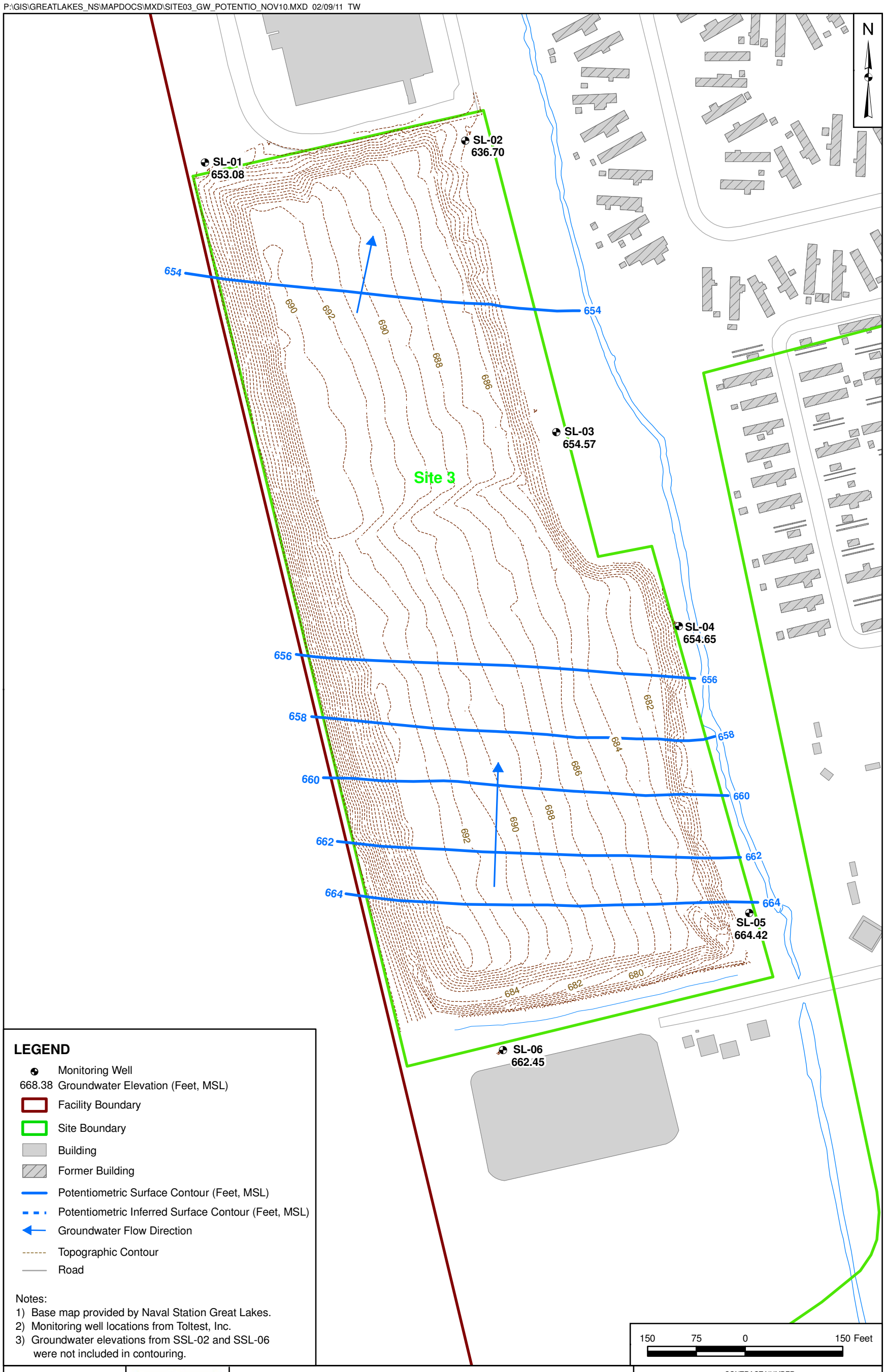
Parameter	Round 13		Rounds 1 - 13						Groundwater Criteria	
	Frequency of Detection	Criteria Exceedance	Frequency of Detection	Criteria Exceedance	Range of Detects	Location of Maximum Detection	Sample of Maximum Detection	Average Positive Result		
TOTAL PHOSPHORUS MG/L	7/7	0	65/87	0	0.013 - 3.6 J	SL-06	NTC03GW0606	0.37	NC	NA
TOTAL SUSPENDED SOLIDS MG/L	6/7	0	76/87	0	3.9 - 750	SL-02	NTC03GW0205	65.42	NC	NA
Field Parameters										
CONDUCTIVITY MS/CM	6/6	0	55/55	0	0.686 - 2.51	SL-02	NTC03GW0207	1.48	NC	NA
DISSOLVED OXYGEN MG/L	6/6	0	55/55	0	0.06 - 3.39	SL-05	NTC03GW0511	0.42	NC	NA
OXIDATION REDUCTION POTENTIAL MV	6/6	0	55/55	0	-281 - 199	SL-04	NTC03GW0409	-72.50	NC	NA
PH S.U.	6/6	2	55/55	6	6.25 - 8.62	SL-02	NTC03GW0212	7.25	6.5 - 8.5	SMCL
SALINITY PPT	NA	NA	26/24	0	0 - 1.02	SL-02	NTC03GW0211	0.06	NC	NA
SALINITY %	NA	NA	26/2	0	0 - 1.02	SL-02	NTC03GW0211	0.06	NC	NA
TEMPERATURE C	6/6	0	55/55	0	8.22 - 15.9	SL-02	NTC03GW0208	11.71	NC	NA
TURBIDITY NTU	6/6	0	55/55	0	0.88 - 450	SL-06	NTC03GW0606	44.12	NC	NA

Notes:
The average concentrations were calculated by using one-half the detection limit for non-detects.
TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GROs), (35 Illinois Administrative Code Part 742)
Non-TACO = GRO not promulgated under 35 IAC 742
USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)
MCL = USEPA Maximum Contaminant Level
SMCL = USEPA Secondary Maximum Contaminant Level
NC = No criterion
NA = Not available
IL-EPA = criterion as per Illinois EPA (personal communication)
Dark shading indicates exceedance of criteria.
Data Qualifiers:
J = Indicates that the result was detected but concentration is considered an estimate due to precision.

Associated Samples:

SL-01_20060801	SL-01_20070731	NTC03GW0606	NTC03GW0309	NTC03GW0611-D	NTC03GW0113
SL-03_20060802	SL-05_20070502	NTC03GW0206	NTC03GW0408	NTC03GW0510	NTC03GW0213
SL-04_20060814	SL-06_20070507	NTC03GW0306	NTC03GW0508	NTC03GW0610	NTC03GW0313
SL-05_20060809	SL-03_20070801	NTC03GW0406	NTC03GW0508-D	NTC03GW0111	NTC03GW0413
SL-05_20060809-D	SL-04_20070821	NTC03GW0506	NTC03GW0608	NTC03GW0211	NTC03GW0513
SL-06_20060808	SL-04_20070821-D	NTC03GW0606-D	NTC03GW0109	NTC03GW0311	NTC03GW0513-D
SL-01_20070115	SL-05_20070802	NTC03GW0107	NTC03GW0209	NTC03GW0411	NTC03GW0613
SL-03_20070124	SL-06_20070806	NTC03GW0207	NTC03GW0309-D	NTC03GW0511	
SL-04_20070125	NTC03GW0105	NTC03GW0307	NTC03GW0409	NTC03GW0611	
SL-04_20070125-D	NTC03GW0205	NTC03GW0407	NTC03GW0509	NTC03GW0112	
SL-05_20070123	NTC03GW0305	NTC03GW0407-D	NTC03GW0609	NTC03GW0212	
SL-06_20070116	NTC03GW0405	NTC03GW0507	NTC03GW0110	NTC03GW0312	
SL-01_20070426	NTC03GW0405-D	NTC03GW0607	NTC03GW0210	NTC03GW0412	
SL-03_20070501	NTC03GW0505	NTC03GW0108	NTC03GW0310	NTC03GW0512	
SL-04_20070503	NTC03GW0605	NTC03GW0208	NTC03GW0410	NTC03GW0512-D	
SL-04_20070503-D	NTC03GW0106	NTC03GW0308	NTC03GW0410-D	NTC03GW0612	

P:\GIS\GREATLAKES_NS\MAPDOCS\MXD\SITE03_GW_POTENTIO_NOV10.MXD 02/09/11 TW



LEGEND

- Monitoring Well
- 668.38 Groundwater Elevation (Feet, MSL)
- Facility Boundary
- Site Boundary
- Building
- Former Building
- Potentiometric Surface Contour (Feet, MSL)
- Potentiometric Inferred Surface Contour (Feet, MSL)
- Groundwater Flow Direction
- Topographic Contour
- Road

Notes:
1) Base map provided by Naval Station Great Lakes.
2) Monitoring well locations from Toltest, Inc.
3) Groundwater elevations from SSL-02 and SSL-06 were not included in contouring.

DRAWN BY T. WHEATON	DATE 12/13/10	GROUNDWATER POTENTIOMETRIC SURFACE MAP NOVEMBER 2010, ROUND 13 SITE 3 - SUPPLYSIDE LANDFILL NAVAL STATION GREAT LAKES GREAT LAKES, ILLINOIS	CONTRACT NUMBER 01050
CHECKED BY M. MENGEL	DATE 02/09/11		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 4-1 REV 0

REFERENCES

Clayton Group Services (Clayton), 2004. Project Plan and Report Final Cover Study, Forrestal Landfill, Naval Station Great Lakes, Great Lakes, Illinois.

Graef, Anhalt, Schloemer & Associates, Inc. (GASA), 2004. Engineering Evaluation/Cost Analysis (EE/CA), Supply Side Landfill, Great Lakes, Illinois. Milwaukee, Wisconsin. February.

Rogers, Golden & Halpern, 1986. Initial Assessment Study, Naval Complex (NC) Great Lakes, Illinois. March.

Tetra Tech NUS, Inc. (Tetra Tech), 2007. Sampling and Analysis Plan for Site 2 - Forrestal Landfill and Site 3 - Supplyside Landfill, Long-Term Groundwater Monitoring. December.

Tetra Tech, 2008. Final Groundwater Monitoring Report - Round 8 (August 2008), Site 2 - Forrestal Landfill and Site 3 - Supplyside Landfill, Naval Station Great Lakes, Great Lakes, Illinois. December.

Tetra Tech, 2009a. Final Groundwater Monitoring Report – Round 10 (May 2009), Site 2 – Forrestal Landfill and Site 3 – Supplyside Landfill, September.

Tetra Tech, 2009b. Remedial Action Completion Report for Site 2 – Forrestal Landfill, Naval Station Great Lakes, Great Lakes, Illinois. October.

Tetra Tech, 2009c. Remedial Action Completion Report for Site 3 – Supplyside Landfill, Naval Station Great Lakes, Great Lakes, Illinois. December.

TolTest, Inc. (TolTest), 2004a. Final Cover Work Plan, Forrestal Landfill Cap, Naval Station Great Lakes, Great Lakes, Illinois. Waukegan, Illinois. May.

TolTest, Inc. (TolTest), 2004b. Work Plan – Supply Side Landfill Cap, Naval Station Great Lakes, Great Lakes, Illinois. Waukegan, Illinois. June.

Toltest, 2006. Delivery Order Closure Report, Relocate Stockpiled ACM Soils from Camp Moffett Area to Supplyside Landfill, Naval Station Great Lakes, Great Lakes, Illinois. Waukegan, Illinois. June.

TolTest, 2007. Draft Well Installation and Development Closure Report, Supplyside and Forrestal Landfills, Naval Station Great Lakes, Great Lakes, Illinois. January.

Versar, 2003. Supplyside Landfill Cover Study, Naval Station Great Lakes, Great Lakes, Illinois.

APPENDIX A

FIELD FORMS

A.1

GROUNDWATER SAMPLE LOGS

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0113**	Sampler:	Keith Simpson
Well ID:	FL-01	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	16.64
Top of Screen (ft-BTOR)	12.76	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.76	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	bladder pump

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/18/10	7:35	16.64	120.0	Clear	None	7.31	1.80	5.45	6.7	11.6	31	na	na
11/18/10	7:45	17.18	125.0	Clear	None	7.14	1.78	2.41	6.7	11.8	45	na	na
11/18/10	7:55	17.55	125.0	Clear	None	7.11	1.78	0.94	1.8	11.8	58	na	na
11/18/10	8:05	18.10	125.0	Clear	None	7.24	1.77	1.33	3.0	11.7	25	na	na
11/18/10	8:25	18.86	125.0	Clear	None	7.21	1.77	1.05	3.0	11.5	17	na	na
11/18/10	8:35	19.18	125.0	Clear	None	7.24	1.77	0.60	3.0	11.6	15	na	na
11/18/10	8:45	19.80	125.0	Clear	None	7.23	1.77	0.48	3.0	11.7	12	na	na
11/18/10	8:55	19.94	125.0	Clear	None	7.15	1.77	0.32	3.0	11.6	16	na	na
11/18/10	8:56	19.54	125.0	Clear	None	7.12	1.77	0.29	2.5	11.6	20	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
7:35	8:56	81	10.125	Clear	None	7.12	1.77	0.29	2.5	11.6	20	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/18/10	9:00	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-7
✓	11/18/10	9:00	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-7
✓	11/18/10	9:00	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-7
✓	11/18/10	9:00	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-7
✓	11/18/10	9:00	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-7
✓	11/18/10	9:00	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-7
✓	11/18/10	9:00	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-7
✓	11/18/10	9:00	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-6
✓	11/18/10	9:00	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-6
✓	11/18/10	9:00	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-6
✓	11/18/10	9:00	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-7
✗	N/A	N/A	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0213**	Sampler:	Keith Simpson
Well ID:	FL-02	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	35.14
Top of Screen (ft-BTOR)	12.83	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.83	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	bladder pump

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/17/10	14:20	35.14	100.0	Clear	None	na	na	na	na	na	na	na	na
11/17/10	14:30	35.25	100.0	Cloudy	None	8.24	0.873	3.22	750	11.24	-106	na	na
11/17/10	14:40	35.30	100.0	Cloudy	None	8.40	7.99	0.66	780	11.0	-140	na	na
11/17/10	14:50	35.35	100.0	Cloudy	None	8.69	0.765	0.88	180	10.8	-148	na	na
11/17/10	15:00	35.45	100.0	Slightly Turbid	None	8.69	0.760	0.23	150	10.9	-152	na	na
11/17/10	15:10	35.39	100.0	Slightly Turbid	None	8.70	0.766	0.57	170	10.72	-150	na	na
11/17/10	15:20	35.38	100.0	Slightly Turbid	None	8.69	0.767	0.44	145	10.7	-150	na	na
11/17/10	15:30	35.35	100.0	Slightly Turbid	None	8.68	0.762	0.36	190	10.7	-150	na	na
11/17/10	15:40	35.37	100.0	Slightly Turbid	None	8.70	0.767	0.31	190	10.7	-150	na	na
11/17/10	15:50	35.37	100.0	Slightly Turbid	None	8.69	0.764	0.30	195	10.7	-150	na	na
11/17/10	16:00	35.37	100.0	Slightly Turbid	None	8.67	0.765	0.26	190	10.7	-151	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:20	16:00	100	10.0	Slightly Turbid	None	8.67	0.765	0.26	190	10.7	-151	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/17/10	16:00	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-5
✓	11/17/10	16:00	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-5
✓	11/17/10	16:00	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-5
✓	11/17/10	16:00	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-5
✓	11/17/10	16:00	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-6
✓	11/17/10	16:00	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-6
✓	11/17/10	16:00	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-6
✓	11/17/10	16:00	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-5
✓	11/17/10	16:00	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	N/A
✓	11/17/10	16:00	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	N/A
✓	11/17/10	16:00	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A
✓	11/17/10	16:00	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	N/A
✗	N/A	N/A	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0313**	Sampler:	Mark Mengel
Well ID:	FL-03	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	8.75
Top of Screen (ft-BTOR)	12.76	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.76	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/17/10	14:25	8.75	120.0	Slightly Turbid	None	na	na	na	na	na	na	na	na
11/17/10	14:35	9.80	120.0	Clear	None	6.97	1.69	4.72	11.4	10.78	37	na	na
11/17/10	14:45	10.65	180.0	Clear	None	6.13	1.64	1.07	8.60	11.12	22	na	na
11/17/10	14:55	12.40	160.0	Clear	None	6.06	1.62	0.47	12.5	11.06	14	na	na
11/17/10	15:05	12.60	160.0	Clear	None	6.04	1.60	0.31	13.8	11.10	10	na	na
11/17/10	15:15	12.60	160.0	Clear	None	6.04	1.60	0.26	11	11.00	8	na	na
11/17/10	15:25	12.60	160.0	Clear	None	6.03	1.60	0.20	8.5	11.07	6	na	na
11/17/10	15:35	12.60	160.0	Clear	None	6.03	1.60	0.16	10	11.10	4	na	na
11/17/10	15:45	12.60	160.0	Clear	None	6.03	1.60	0.15	9	11.09	3	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:25	15:45	80	12.6	Clear	None	6.03	1.60	0.15	9	11.09	3	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/17/10	15:45	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-5
✓	11/17/10	15:45	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-5
✓	11/17/10	15:45	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-5
✓	11/17/10	15:45	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-5
✓	11/17/10	15:45	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-5
✓	11/17/10	15:45	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-5
✓	11/17/10	15:45	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-5
✓	11/17/10	15:45	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-6
✓	11/17/10	15:45	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-6
✓	11/17/10	15:45	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-6
✓	11/17/10	15:45	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-5
✗	N/A	N/A	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0413**	Sampler:	Keith Simpson
Well ID:	FL-04	Well Type:	Monitoring Well
QC Duplicate ID:	NTCFD111710-01	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	8.61
Top of Screen (ft-BTOR)	12.74	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.74	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	bladder pump

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/17/10	7:44	8.61	120.0	Clear	None	na	na	na	na	na	na	na	na
11/17/10	7:50	9.00	125.0	Clear	None	6.95	3.34	10.10	3.5	11.41	-123	na	na
11/17/10	8:24	9.11	125.0	Clear	None	6.65	3.30	0.51	2.6	11.75	-151	na	na
11/17/10	8:35	9.18	125.0	Clear	None	6.64	3.30	0.33	2.2	11.75	-153	na	na
11/17/10	8:45	9.18	125.0	Clear	None	6.63	3.30	0.26	1.9	11.83	-157	na	na
11/17/10	8:55	9.18	125.0	Clear	None	6.63	3.30	0.22	2.2	11.95	-159	na	na
11/17/10	9:05	9.18	125.0	Clear	None	6.62	3.30	0.22	2.3	11.98	-160	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
7:44	9:05	81	10.125	Clear	None	6.62	3.30	0.22	2.3	11.98	-160	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/17/10	9:05	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-5
✓	11/17/10	9:05	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-5
✓	11/17/10	9:05	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-5
✓	11/17/10	9:05	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-5
✓	11/17/10	9:05	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-5
✓	11/17/10	9:05	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-5
✓	11/17/10	9:05	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-5
✓	11/17/10	9:05	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-4
✓	11/17/10	9:05	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-4
✓	11/17/10	9:05	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-4
✓	11/17/10	9:05	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-5
✗	N/A	N/A	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0513**	Sampler:	Mark Mengel
Well ID:	FL-05	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	37.65
Top of Screen (ft-BTOR)	12.73	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.73	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/18/10	7:35	37.65	120.0	Clear	None	na	na	na	na	na	na	na	na
11/18/10	7:40	37.70	120.0	Clear	None	6.92	0.961	2.22	375	10.48	-72	na	na
11/18/10	7:50	37.93	120.0	Cloudy	None	6.95	0.968	0.31	311	10.80	-118	na	na
11/18/10	8:00	38.10	140.0	Cloudy	None	7.10	0.969	0.19	116	11.04	-129	na	na
11/18/10	8:10	38.20	140.0	Slightly Turbid	None	7.23	0.966	0.14	46	11.20	-133	na	na
11/18/10	8:20	38.60	140.0	Slightly Turbid	None	7.30	0.949	0.11	44	11.09	-135	na	na
11/18/10	8:30	38.75	120.0	Slightly Turbid	None	7.33	0.937	0.10	44	11.06	-135	na	na
11/18/10	8:40	38.95	140.0	Slightly Turbid	None	7.39	0.923	0.10	33	11.11	-136	na	na
11/18/10	8:50	39.20	120.0	Slightly Turbid	None	7.41	0.909	0.07	29	11.25	-137	na	na
11/18/10	9:00	39.30	120.0	Slightly Turbid	None	7.45	0.901	0.07	29	11.33	-138	na	na
11/18/10	9:10	39.35	120.0	Slightly Turbid	None	7.44	0.900	0.06	28	11.29	-138	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
7:35	9:10	95	12.2	Slightly Turbid	None	7.44	0.900	0.06	28	11.29	-138	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/18/10	9:10	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-7
✓	11/18/10	9:10	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-7
✓	11/18/10	9:10	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-7
✓	11/18/10	9:10	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-7
✓	11/18/10	9:10	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-7
✓	11/18/10	9:10	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-7
✓	11/18/10	9:10	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-7
✓	11/18/10	9:10	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-6
✓	11/18/10	9:10	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-6
✓	11/18/10	9:10	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-6
✓	11/18/10	9:10	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-7
✓	11/18/10	9:10	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-7

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC02GW0613**	Sampler:	Mark Mengel
Well ID:	FL-06	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	11.50
Top of Screen (ft-BTOR)	17.83	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	37.83	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	35	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/17/10	7:55	11.50	150.0	Clear	None	na	na	na	na	na	na	na	na
11/17/10	8:00	13.45	100.0	Clear	None	6.86	1.163	4.91	90	10.06	123	na	na
11/17/10	8:10	15.05	100.0	Clear	None	6.71	1.158	0.50	35	10.51	125	na	na
11/17/10	8:20	17.20	100.0	Clear	None	6.66	1.156	0.33	16	10.40	123	na	na
11/17/10	8:30	18.45	100.0	Clear	None	6.65	1.155	0.31	13	10.35	121	na	na
11/17/10	8:40	19.15	100.0	Clear	None	6.65	1.153	0.29	12	10.36	118	na	na
11/17/10	8:50	19.70	100.0	Clear	None	6.66	1.150	0.27	15	10.57	115	na	na
11/17/10	9:00	20.02	100.0	Clear	None	6.68	1.151	0.26	20	10.50	112	na	na
11/17/10	9:10	20.20	100.0	Clear	None	6.69	1.149	0.25	24	10.51	111	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
7:55	9:10	75	7.5	Clear	None	6.69	1.149	0.25	24	10.51	111	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/17/10	9:10	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-5
✓	11/17/10	9:10	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-5
✓	11/17/10	9:10	Phenols	EPA 420.1	4°C/H2SO4	1	Glass - Amber	500ml	None	ED00000144-5
✓	11/17/10	9:10	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-5
✓	11/17/10	9:10	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-5
✓	11/17/10	9:10	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-5
✓	11/17/10	9:10	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-5
✓	11/17/10	9:10	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-4
✓	11/17/10	9:10	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-4
✓	11/17/10	9:10	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-4
✓	11/17/10	9:10	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-5
✓	11/17/10	9:10	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-5

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0113**	Sampler:	Mark Mengel
Well ID:	SL-01	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	MS/MSD

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	29.30
Top of Screen (ft-BTOR)	12.69	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.69	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/15/10	14:35	29.30	220.0	Slightly Turbid	None	na	na	na	na	na	na	na	na
11/15/10	14:45	29.90	150.0	Slightly Turbid	None	6.62	0.772	0.66	21	11.61	-136	na	na
11/15/10	14:55	29.90	150.0	Slightly Turbid	None	6.13	0.718	0.19	20	11.48	-133	na	na
11/15/10	15:05	29.93	160.0	Slightly Turbid	None	6.11	0.719	0.16	20	11.51	-133	na	na
11/15/10	15:15	29.95	160.0	Slightly Turbid	None	6.10	0.724	0.13	9.1	11.48	-135	na	na
11/15/10	15:25	29.80	160.0	Clear	None	6.14	0.738	0.12	3.6	11.41	-138	na	na
11/15/10	15:35	29.80	160.0	Clear	None	6.17	0.747	0.11	2.0	11.38	-142	na	na
11/15/10	15:45	29.80	160.0	Clear	None	6.23	0.767	0.09	2.7	11.23	-143	na	na
11/15/10	15:55	29.80	160.0	Clear	None	6.25	0.769	0.09	11	11.19	-144	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:35	15:55	80	12.6	Clear	None	6.25	0.769	0.09	11	11.19	-144	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/15/10	16:00	VOCs	SW-846 8260B	4°C/HCL	6	Glass - Clear	40ml vials	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	4	Glass - Amber	1L	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	Herbicides	SW-846 8151A	4°C	3	Glass - Amber	1L	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	TOC	5310C	4°C/H2SO4	6	Glass - Amber	40ml vials	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	2	Plastic - PE	1L	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	Run MS/MSD	ED00000144-2
✓	11/15/10	16:00	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	Run MS/MSD	ED00000144-2
✓	11/15/10	16:00	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	Run MS/MSD	ED00000144-2
✓	11/15/10	16:00	Chlorinated Pesticides	SW-846 8081A	4°C	4	Glass - Amber	1L	Run MS/MSD	ED00000144-1
✓	11/15/10	16:00	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	2	Plastic - PE	250ml	Run MS/MSD	ED00000144-1
✗	N/A	N/A	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	N/A

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0213**	Sampler:	Keith Simpson
Well ID:	SL-02	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	43.32
Top of Screen (ft-BTOR)	12.77	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.77	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	bladder pump

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/15/10	14:36	43.32	150.0	Clear	None	6.83	1.96	3.60	35	12.6	-179	na	na
11/15/10	14:45	43.78	188.0	Slightly Turbid	Hydrogen sulfide - slight	8.07	2.00	10.1	125	11.7	-199	na	na
11/15/10	14:55	43.99	80.0	Clear	Hydrogen sulfide - slight	8.12	2.00	0.72	49	11.8	-206	na	na
11/15/10	15:05	44.08	80.0	Clear	None	8.21	2.00	0.46	40	11.8	-206	na	na
11/15/10	15:15	44.48	80.0	Clear	None	8.24	2.00	3.80	29	11.9	-210	na	na
11/15/10	15:25	44.56	80.0	Clear	None	8.17	2.00	2.40	23	11.9	-211	na	na
11/15/10	15:35	44.82	80.0	Clear	None	8.29	2.00	0.75	22	11.7	-213	na	na
11/15/10	15:45	45.14	80.0	Clear	None	8.21	2.00	0.25	21	11.5	-207	na	na
11/15/10	15:55	45.21	80.0	Clear	None	8.20	2.00	0.24	19	11.5	-208	na	na
11/15/10	15:57	44.22	80.0	Clear	None	8.19	2.01	0.20	17	11.4	-208	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:36	15:57	81	7.452	Clear	None	8.19	2.01	0.20	17	11.4	-208	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/15/10	16:00	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-1
✓	11/15/10	16:00	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	2	Glass - Amber	1L	None	ED00000144-1
✓	11/15/10	16:00	Herbicides	SW-846 8151A	4°C	1	Glass - Amber	1L	None	ED00000144-1
✓	11/15/10	16:00	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-1
✓	11/15/10	16:00	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-1
✓	11/15/10	16:00	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-1
✓	11/15/10	16:00	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-1
✓	11/15/10	16:00	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-2
✓	11/15/10	16:00	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-2
✓	11/15/10	16:00	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-2
✓	11/15/10	16:00	Chlorinated Pesticides	SW-846 8081A	4°C	1	Glass - Amber	1L	None	ED00000144-1
✓	11/15/10	16:00	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-1

TETRA TECH NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0213**	Sampler:	Keith Simpson
Well ID:	SL-02	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

✓	11/15/10	16:00	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-1

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0313**	Sampler:	Mark Mengel
Well ID:	SL-03	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	23.90
Top of Screen (ft-BTOR)	12.85	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.85	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/16/10	14:10	23.90	150.0	Clear	None	na	na	na	na	na	na	na	na
11/16/10	14:20	24.35	180.0	Slightly Turbid	None	6.87	1.272	0.85	160	11.28	-131	na	na
11/16/10	14:30	24.30	180.0	Slightly Turbid	None	6.91	1.270	0.30	200	11.21	-166	na	na
11/16/10	14:40	24.35	180.0	Slightly Turbid	None	7.00	1.236	0.18	200	11.22	-215	na	na
11/16/10	14:50	24.35	180.0	Slightly Turbid	None	7.14	1.192	0.16	150	11.20	-228	na	na
11/16/10	15:00	24.35	180.0	Slightly Turbid	None	7.17	1.180	0.20	130	11.16	-228	na	na
11/16/10	15:10	24.35	180.0	Slightly Turbid	None	7.19	1.165	0.18	95	11.13	-233	na	na
11/16/10	15:20	24.35	180.0	Slightly Turbid	None	7.19	1.157	0.13	80	11.09	-239	na	na
11/16/10	15:30	24.35	180.0	Slightly Turbid	None	7.19	1.150	0.16	70	11.02	-232	na	na
11/16/10	15:40	24.35	180.0	Slightly Turbid	None	7.18	1.134	0.13	65	11.02	-236	na	na
11/16/10	15:50	24.35	180.0	Slightly Turbid	None	7.18	1.130	0.23	63	11.01	-232	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:10	15:50	100	18.0	Slightly Turbid	None	7.18	1.130	0.23	63	11.01	-232	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/16/10	15:50	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-3
✓	11/16/10	15:50	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	15:50	Herbicides	SW-846 8151A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	15:50	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-3
✓	11/16/10	15:50	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-3
✓	11/16/10	15:50	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-3
✓	11/16/10	15:50	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-3
✓	11/16/10	15:50	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-4
✓	11/16/10	15:50	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-4
✓	11/16/10	15:50	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-4
✓	11/16/10	15:50	Chlorinated Pesticides	SW-846 8081A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	15:50	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3
✓	11/16/10	15:50	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0413**	Sampler:	Keith Simpson
Well ID:	SL-04	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	19.98
Top of Screen (ft-BTOR)	12.87	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.87	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low-flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/16/10	8:00	19.98	130.0	Clear	None	na	na	na	na	na	na	na	na
11/16/10	8:10	19.98	180.0	Clear	None	6.98	0.850	1.31	2.1	10.7	61	na	na
11/16/10	8:20	20.00	180.0	Clear	None	6.98	0.842	0.85	1.5	10.7	36	na	na
11/16/10	8:30	20.00	180.0	Clear	None	7.06	0.838	0.52	1.6	10.8	-7	na	na
11/16/10	8:40	20.00	180.0	Clear	None	7.13	0.813	0.30	2.6	10.9	-37	na	na
11/16/10	8:50	20.00	180.0	Clear	None	7.13	0.834	0.24	2.9	10.9	-40	na	na
11/16/10	9:00	20.00	180.0	Clear	None	7.13	0.828	0.19	2.5	10.8	-4	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
8:00	9:00	60	10.8	Clear	None	7.13	0.828	0.19	2.5	10.8	-4	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/16/10	9:00	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-3
✓	11/16/10	9:00	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:00	Herbicides	SW-846 8151A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:00	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-3
✓	11/16/10	9:00	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-3
✓	11/16/10	9:00	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-3
✓	11/16/10	9:00	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-3
✓	11/16/10	9:00	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-2
✓	11/16/10	9:00	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-2
✓	11/16/10	9:00	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-2
✓	11/16/10	9:00	Chlorinated Pesticides	SW-846 8081A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:00	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0513**	Sampler:	Mark Mengel
Well ID:	SL-05	Well Type:	Monitoring Well
QC Duplicate ID:	NTCFD111610-01	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	11.90
Top of Screen (ft-BTOR)	12.81	H&S PID Monitor Reading (ppm)	na
Bottom of Screen (ft-BTOR)	52.81	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/16/10	8:00	11.90	180.0	Clear	None	na	na	na	na	na	na	na	na
11/16/10	8:10	12.05	180.0	Clear	None	6.27	2.02	2.73	5.1	11.96	-31	na	na
11/16/10	8:20	12.10	180.0	Clear	None	6.30	1.98	1.66	7.5	12.01	-46	na	na
11/16/10	8:30	12.15	180.0	Clear	None	6.34	1.99	1.16	45	12.15	-54	na	na
11/16/10	8:40	12.15	180.0	Clear	None	6.36	2.00	0.94	50	12.24	-58	na	na
11/16/10	8:50	12.10	180.0	Clear	None	6.39	2.01	0.76	45	12.26	-59	na	na
11/16/10	9:00	12.10	180.0	Clear	None	6.39	2.01	0.60	28	12.34	-60	na	na
11/16/10	9:10	12.10	180.0	Clear	None	6.40	2.02	-50	20	12.39	-58	NA	NA
11/16/10	9:20	12.10	180.0	Clear	None	6.43	2.01	0.36	9.5	12.44	-60	NA	NA
11/16/10	9:30	12.10	180.0	Clear	None	6.43	2.01	0.35	10.0	12.45	-59	NA	NA

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
8:00	9:30	90	16.2	Clear	None	6.43	2.01	0.35	10.0	12.45	-59	NA	NA

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/16/10	9:30	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-3
✓	11/16/10	9:30	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:30	Herbicides	SW-846 8151A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:30	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-3
✓	11/16/10	9:30	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-3
✓	11/16/10	9:30	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-3
✓	11/16/10	9:30	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-3
✓	11/16/10	9:30	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-2
✓	11/16/10	9:30	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-2
✓	11/16/10	9:30	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-2
✓	11/16/10	9:30	Chlorinated Pesticides	SW-846 8081A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	9:30	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3
✓	11/16/10	9:30	TAL Metals (Dissolved)	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0613**	Sampler:	Keith Simpson
Well ID:	SL-06	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

Well Information

Well Diameter (in.)	2	Static Water Level (ft-BTOR)	16.26
Top of Screen (ft-BTOR)	12.83	H&S PID Monitor Reading (ppm)	NR
Bottom of Screen (ft-BTOR)	52.83	Purge Method	Low flow - bladder
Total Depth of Well (ft-BTOR)	50	Sample Method	Low flow - bladder

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
11/16/10	14:20	16.26	180.0	Cloudy	None	na	na	na	na	na	na	na	na
11/16/10	14:20	16.26	180.0	Slightly Turbid	None	na	na	na	na	na	na	na	na
11/16/10	14:30	17.14	180.0	Cloudy	None	6.90	1.222	3.81	2000	13.3	-114	na	na
11/16/10	14:50	18.44	180.0	Highly Turbid	None	6.82	1.206	0.61	2000	13.3	-107	na	na
11/16/10	15:00	18.55	180.0	Highly Turbid	None	6.72	1.201	0.41	2000	13.4	-105	na	na
11/16/10	15:10	20.51	180.0	Cloudy	None	6.89	1.201	0.40	1000	13.3	-95	na	na
11/16/10	15:20	20.88	180.0	Cloudy	None	6.74	1.203	0.26	1000	13.3	-95	na	na
11/16/10	15:30	21.58	180.0	Cloudy	None	6.87	1.200	0.40	1000	13.3	-57	na	na
11/16/10	15:40	22.15	180.0	Cloudy	None	6.67	1.192	0.17	280	13.2	-54	na	na
11/16/10	15:50	22.68	180.0	Cloudy	None	6.65	1.199	0.13	180	13.16	-53	na	na
11/16/10	16:00	23.02	180.0	Slightly Turbid	None	6.64	1.203	0.13	150	13.1	-54	na	na
11/16/10	16:10	23.55	180.0	Cloudy	None	6.99	1.192	0.20	120	13.0	-56	na	na
11/16/10	16:20	23.75	180.0	Cloudy	None	6.77	1.205	0.20	120	13.0	-56	na	na

Final Purge / Sample Data

Start Purge	End Purge	Duration (min.)	Total Vol. (L)	Color	Odor	pH (S.U.)	S.C. (mS/cm)	DO (mg/L)	Turbidity (NTUs)	Temp (°C)	ORP (mV)	Salinity (%)	Other
14:20	16:20	120	21.6	Cloudy	None	6.77	1.205	0.20	120	13.0	-56	na	na

Laboratory Analysis

Coll.	Date	Time	Description	Analysis	Preservative	No.	Type	Vol.	COC Notes	Chain No.
✓	11/16/10	16:20	VOCs	SW-846 8260B	4°C/HCL	3	Glass - Clear	40ml vials	None	ED00000144-3
✓	11/16/10	16:20	SVOCs (PAHs via SIM)	SW-846 8270C/8270C SIM	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	16:20	Herbicides	SW-846 8151A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	16:20	TOC	5310C	4°C/H2SO4	3	Glass - Amber	40ml vials	None	ED00000144-3
✓	11/16/10	16:20	Cyanides	SW-846 9014	4°C/NAOH	1	Plastic - PE (Amber)	500ml	None	ED00000144-3
✓	11/16/10	16:20	Nutrients (Ammonia, P, COD)	4500-NH3-G/4500-P-F/5220 D	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-3
✓	11/16/10	16:20	General (Cl-, F-, SO4, TDS, TSS, pH)	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	4°C	1	Plastic - PE	1L	None	ED00000144-3
✓	11/16/10	16:20	BOD / Nitrite	SM 5210B / 354.1	4°C	1	Plastic - PE	1L	None	ED00000144-4
✓	11/16/10	16:20	Nitrate-Nitrite	EPA 353.2	4°C/H2SO4	1	Plastic - PE	500ml	None	ED00000144-4
✓	11/16/10	16:20	Hexavalent Chromium	SM 3500 CR B	4°C	1	Plastic - PE	250ml	None	ED00000144-4
✓	11/16/10	16:20	Chlorinated Pesticides	SW-846 8081A	4°C	1	Glass - Amber	1L	None	ED00000144-3
✓	11/16/10	16:20	TAL Metals	SW-846 6010B / 7841 / 7470A	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3
✓	11/16/10	16:20	TAL Metals	SW-846 6010B / 7841 /	4°C/HNO3	1	Plastic - PE	250ml	None	ED00000144-3

GROUNDWATER SAMPLE LOG SHEET

TETRA TECH NUS, Inc.

Event: Long-Term Groundwater Monitoring-Round 13
Site Name: GREAT LAKES NTC - Site 2/Site 3
Project No: 112G01620.0000.0310 (ED00000144)

Sample ID:	**NTC03GW0613**	Sampler:	Keith Simpson
Well ID:	SL-06	Well Type:	Monitoring Well
QC Duplicate ID:	N/A	MS/MSD:	N/A

			(Dissolved)	7470A						

A.2

CHAIN OF CUSTODY RECORDS

Cart: 7
VOA: 576-G
Log 21-13

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-1

E-1011352

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	GREAT LAKES NTC	Tim Evans	Federal Express	Trimatrix Labs 5560 Corporate Exchange Court SE Grand Rapids, MI 49512-5503
Task No:	**Turn Around Time:**	**Field Ops Leader:**	**Carrier/Waybill No.**	**Point of Contact:**
F273	Standard	Mark Mengel	873560122265	Gary Wood 616-940-4206

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments	Cooler
13	11/15/2010	NTC03GW0113	16:00	5310C	SL-01	GW	TOC	4° C/H2SO4	6	Glass - Amber 11	40ml vials	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	SW-846 8151A	SL-01	GW	Herbicides	4°C	3	Glass - Amber 2	1L	Run MS/MSD	2329
-01	11/15/2010	NTC03GW0113	16:00	SW-846 9014	SL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	SW-846 8270C/8270C SIM	SL-01	GW	SVOCs (PAHs via SIM)	4°C	4	Glass - Amber 3	1L	Run MS/MSD	2329
	11/15/2010	NTC03GW0113	16:00	SW-846 8081A	SL-01	GW	Chlorinated Pesticides	4°C	4	Glass - Amber 2	1L	Run MS/MSD	2329
	11/15/2010	NTC03GW0113	16:00	4500-NH3-G/4500-P-F/5220 D	SL-01	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	SW-846 6010B / 7841 / 7470A	SL-01	GW	TAL Metals	4°C/HNO3	2	Plastic - PE 6	250ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	SW-846 8260B	SL-01	GW	VOCs	4°C/HCL	6	Glass - Clear 1	40ml vials	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	2	Plastic - PE 3	1L	Run MS/MSD	LMP
10	11/15/2010	NTC03GW0213	16:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-02	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE 3	1L		LMP
-02	11/15/2010	NTC03GW0213	16:00	SW-846 8270C/8270C SIM	SL-02	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber 2	1L		LMP
	11/15/2010	NTC03GW0213	16:00	4500-NH3-G/4500-P-F/5220 D	SL-02	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml		LMP
	11/15/2010	NTC03GW0213	16:00	5310C	SL-02	GW	TOC	4° C/H2SO4	3	Glass - Amber 11	40ml vials		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 8260B	SL-02	GW	VOCs	4°C/HCL	3	Glass - Clear 1	40ml vials		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 8151A	SL-02	GW	Herbicides	4°C	1	Glass - Amber 2	1L		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 8081A	SL-02	GW	Chlorinated Pesticides	4°C	1	Glass - Amber 2	1L		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 6010B / 7841 / 7470A	SL-02	GW	TAL Metals	4°C/HNO3	1	Plastic - PE 6	250ml		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 9014	SL-02	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml		LMP
	11/15/2010	NTC03GW0213	16:00	SW-846 6010B / 7841 / 7470A	SL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE 15	250ml		LMP

04-03	11/15/2010	TB111510	15:00	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	1	40ml vials	Cooler - LAP

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/15/2010	18:33	**Federal Express**	11/15/2010	18:33
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
FedEx	11-16-10	0900	CF	11-16-10	0900
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Comments:

Log 21-13

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-2

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
1	11/15/2010	NTC03GW0113	16:00	EPA 353.2	SL-01	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	Run MS/MSD
1	11/15/2010	NTC03GW0113	16:00	SM 3500 CR B	SL-01	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	Run MS/MSD
1	11/15/2010	NTC03GW0113	16:00	SM 5210B / 354.1	SL-01	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	Run MS/MSD
2	11/15/2010	NTC03GW0213	16:00	SM 5210B / 354.1	SL-02	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
1	11/15/2010	NTC03GW0213	16:00	SM 3500 CR B	SL-02	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
1	11/15/2010	NTC03GW0213	16:00	EPA 353.2	SL-02	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
3	11/16/2010	NTC03GW0413	09:00	SM 3500 CR B	SL-04	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
1	11/16/2010	NTC03GW0413	09:00	EPA 353.2	SL-04	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
1	11/16/2010	NTC03GW0413	09:00	SM 5210B / 354.1	SL-04	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
4	11/16/2010	NTC03GW0513	09:30	SM 5210B / 354.1	SL-05	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
1	11/16/2010	NTC03GW0513	09:30	EPA 353.2	SL-05	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
1	11/16/2010	NTC03GW0513	09:30	SM 3500 CR B	SL-05	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
5	11/16/2010	NTCFD111610-01	00:00	SM 3500 CR B	QC	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
1	11/16/2010	NTCFD111610-01	00:00	EPA 353.2	QC	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
1	11/16/2010	NTCFD111610-01	00:00	SM 5210B / 354.1	QC	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	

1. Relinquished By: **Keith Simpson**	Date: 11/16/2010	Time: 12:10	Received By: **Lab Pick-Up**	Date: 11/16/2010	Time: 12:10
2. Relinquished By:	Date:	Time:	Received By:	Date: T/A 11/16/10	Time: 12:00
3. Relinquished By:	Date: T/A 11/16/10	Time: 1320	Received By:	Date: 11/16/10	Time: 1320

Comments:

12/08/2010

TM2696
TM2309

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-3

E 1011356

Cart 12, 23-17 317 Green

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122210**	**Gary Wood** **616-940-4206**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Recs	Comments
01	11/16/2010	NTC03GW0313	15:50	SW-846 8270C/8270C SIM	SL-03	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	SW-846 8260B	SL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0313	15:50	SW-846 9014	SL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0313	15:50	SW-846 6010B / 7841 / 7470A	SL-03	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0313	15:50	SW-846 6010B / 7841 / 7470A	SL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0313	15:50	SW-846 8081A	SL-03	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0313	15:50	SW-846 8151A	SL-03	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	5310C	SL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0313	15:50	4500-NH3-G/4500-P-F/5220 D	SL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
02	11/16/2010	NTC03GW0413	09:00	SW-846 8260B	SL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0413	09:00	SW-846 8081A	SL-04	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	5310C	SL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0413	09:00	SW-846 8151A	SL-04	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	4500-NH3-G/4500-P-F/5220 D	SL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0413	09:00	SW-846 9014	SL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0413	09:00	SW-846 8270C/8270C SIM	SL-04	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0413	09:00	SW-846 6010B / 7841 / 7470A	SL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
03	11/16/2010	NTC03GW0513	09:30	SW-846 6010B / 7841 / 7470A	SL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0513	09:30	SW-846 8081A	SL-05	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	5310C	SL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0513	09:30	SW-846 8270C/8270C SIM	SL-05	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	SW-846 8260B	SL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0513	09:30	SW-846 8151A	SL-05	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	SW-846 9014	SL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0513	09:30	4500-NH3-G/4500-P-F/5220 D	SL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0513	09:30	SW-846 6010B / 7841 / 7470A	SL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0513	09:30	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	[illegible]	[illegible]	[illegible]	

	11/16/2010	NTC03GW0613	16:20	SW-846 6010B / 7841 / 7470A	SL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml
	11/16/2010	NTC03GW0613	16:20	SW-846 9014	SL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml
	11/16/2010	NTC03GW0613	16:20	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L
	11/16/2010	NTC03GW0613	16:20	6310C	SL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials
a	11/16/2010	NTC03GW0613	16:20	4500-NH3-G/4500-P-F/5220 D	SL-06	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml
	11/16/2010	NTC03GW0613	16:20	SW-846 8260B	SL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials
	11/16/2010	NTC03GW0613	16:20	SW-846 8270C/8270C SIM	SL-06	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L
	11/16/2010	NTC03GW0613	16:20	SW-846 8151A	SL-06	GW	Herbicides	4°C	1	Glass - Amber	1L
	11/16/2010	NTC03GW0613	16:20	SW-846 8081A	SL-06	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	SW-846 9014	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml
	11/16/2010	NTCFD111610-01	00:00	SW-846 8081A	QC	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	SW-846 8270C/8270C SIM	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	SW-846 6010B / 7841 / 7470A	QC	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml
05	11/16/2010	NTCFD111610-01	00:00	SW-846 8260B	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials
	11/16/2010	NTCFD111610-01	00:00	SW-846 6010B / 7841 / 7470A	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml
	11/16/2010	NTCFD111610-01	00:00	6310C	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials
	11/16/2010	NTCFD111610-01	00:00	4500-NH3-G/4500-P-F/5220 D	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml
	11/16/2010	NTCFD111610-01	00:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L
	11/16/2010	NTCFD111610-01	00:00	SW-846 8151A	QC	GW	Herbicides	4°C	1	Glass - Amber	1L
a6	11/16/2010	TB111610	07:50	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/16/2010	18:14	**Federal Express**	11/16/2010	18:14

2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/17/10	0845

Comments:

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-4

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
6	11/16/2010	NTC03GW0313	15:50	**EPA 353.2**	SL-03	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0313	15:50	**SM 5210B / 354.1**	SL-03	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0313	15:50	**SM 3500 CR B**	SL-03	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
7	11/16/2010	NTC03GW0613	16:20	**EPA 353.2**	SL-06	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0613	16:20	**SM 5210B / 354.1**	SL-06	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0613	16:20	**SM 3500 CR B**	SL-06	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
8	11/17/2010	NTC02GW0413	09:05	**SM 5210B / 354.1**	FL-04	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTC02GW0413	09:05	**EPA 353.2**	FL-04	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0413	09:05	**SM 3500 CR B**	FL-04	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
9	11/17/2010	NTC02GW0613	09:10	**EPA 353.2**	FL-06	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0613	09:10	**SM 3500 CR B**	FL-06	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0613	09:10	**SM 5210B / 354.1**	FL-06	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
10	11/17/2010	NTCFD111710-01	00:00	**SM 5210B / 354.1**	QC	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTCFD111710-01	00:00	**EPA 353.2**	QC	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTCFD111710-01	00:00	**SM 3500 CR B**	QC	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/17/2010	11:53	**Lab Pick-Up**	11/17/2010	11:53
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/17/10	1325
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Comments:

TM2660, 2665

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-5

E 1011375

25-3 551 W Cert 3

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122221**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments	
11/17/2010	NTC02GW0213	16:00	4500-NH3-G/4500-P-F/5220 D	FL-02	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml		
11/17/2010	NTC02GW0213	16:00	EPA 420.1	FL-02	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml		
11/17/2010	NTC02GW0213	16:00	5310C	FL-02	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials		-01
11/17/2010	NTC02GW0213	16:00	SW-846 8260B	FL-02	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials		
11/17/2010	NTC02GW0213	16:00	SW-846 6010B / 7841 / 7470A	FL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml		
11/17/2010	NTC02GW0313	15:45	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 160.1	FL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L		
11/17/2010	NTC02GW0313	15:45	EPA 420.1	FL-03	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml		
11/17/2010	NTC02GW0313	15:45	SW-846 8260B	FL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials		-02
11/17/2010	NTC02GW0313	15:45	SW-846 9014	FL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml		
11/17/2010	NTC02GW0313	15:45	5310C	FL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials		
11/17/2010	NTC02GW0313	15:45	SW-846 6010B / 7841 / 7470A	FL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml		
11/17/2010	NTC02GW0313	15:45	SW-846 8270C/8270C SIM	FL-03	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L		
11/17/2010	NTC02GW0313	15:45	4500-NH3-G/4500-P-F/5220 D	FL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml		
11/17/2010	NTC02GW0413	09:05	SW-846 8260B	FL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials		
11/17/2010	NTC02GW0413	09:05	SW-846 6010B / 7841 / 7470A	FL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml		-03
11/17/2010	NTC02GW0413	09:05	SW-846 8270C/8270C SIM	FL-04	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L		
11/17/2010	NTC02GW0413	09:05	4500-NH3-G/4500-P-F/5220 D	FL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml		
11/17/2010	NTC02GW0413	09:05	EPA 420.1	FL-04	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml		
11/17/2010	NTC02GW0413	09:05	5310C	FL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials		
11/17/2010	NTC02GW0413	09:05	SW-846 9014	FL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml		
11/17/2010	NTC02GW0413	09:05	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 160.1	FL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L		
11/17/2010	NTC02GW0613	09:10	SW-846 8270C/8270C SIM	FL-06	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L		
11/17/2010	NTC02GW0613	09:10	SW-846 9014	FL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml		-04
11/17/2010	NTC02GW0613	09:10	SW-846 8260B	FL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials		
11/17/2010	NTC02GW0613	09:10	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 160.1	FL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L		
11/17/2010	NTC02GW0613	09:10	EPA 420.1	FL-06	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml		
11/17/2010	NTC02GW0613	09:10	SW-846 6010B / 7841 / 7470A	FL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml		
11/17/2010	NTC02GW0613	09:10	SW-846 6010B / 7841 / 7470A	FL-06	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml		
11/17/2010	NTC02GW0613	09:10	5310C	FL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials		

	11/17/2010	NTCFD111710-01	00:00	SW-846 8260B	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	SW-846 6010B / 7841 / 7470A	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/17/2010	NTCFD111710-01	00:00	SW-846 8270C/8270C SIM	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	-05
	11/17/2010	NTCFD111710-01	00:00	4500-NH3-G/4500-P-F/5220 D	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTCFD111710-01	00:00	EPA 420.1	QC	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
	11/17/2010	NTCFD111710-01	00:00	5310C	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	SW-846 9014	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/17/2010	NTCFD111710-01	00:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/17/2010	TB111710	07:18	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	-06

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/17/2010	17:17	**Federal Express**	11/17/2010	17:17

2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/18/10	0820

Comments:

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-6

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11	11/17/2010	NTC02GW0213	16:00	EPA 353.2	FL-02	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0213	16:00	SM 3500 CR B	FL-02	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0213	16:00	SM 5210B / 354.1	FL-02	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
12	11/17/2010	NTC02GW0313	15:45	SM 3500 CR B	FL-03	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0313	15:45	SM 5210B / 354.1	FL-03	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTC02GW0313	15:45	EPA 353.2	FL-03	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
13	11/18/2010	NTC02GW0113	09:00	SM 3500 CR B	FL-01	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/18/2010	NTC02GW0113	09:00	EPA 353.2	FL-01	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/18/2010	NTC02GW0113	09:00	SM 5210B / 354.1	FL-01	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
14	11/18/2010	NTC02GW0513	09:10	EPA 353.2	FL-05	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/18/2010	NTC02GW0513	09:10	SM 3500 CR B	FL-05	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/18/2010	NTC02GW0513	09:10	SM 5210B / 354.1	FL-05	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/18/2010	11:56	**Lab Pick-Up**	11/18/2010	11:56
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	11/18/10	1300	[signature]	11/18/10	1140
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[signature]	11/18/10	1300

Comments:

TETRA TECH NUS, INC

E-1011407

CHAIN OF CUSTODY
NUMBER: ED00000144-7

477W
Cart 8 27-14

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122254**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/18/2010	NTC02GW0113	09:00	**4500-NH3-G/4500-P-F/5220 D**	FL-01	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8270C/8270C SIM**	FL-01	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 6010B / 7841 / 7470A**	FL-01	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8260B**	FL-01	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0113	09:00	**EPA 420.1**	FL-01	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0113	09:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 9014**	FL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	NTC02GW0113	09:00	**5310C**	FL-01	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**5310C**	FL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**EPA 420.1**	FL-05	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0513	09:10	**4500-NH3-G/4500-P-F/5220 D**	FL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8260B**	FL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8270C/8270C SIM**	FL-05	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 9014**	FL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	TB111801	07:18	**SW-846 8260B**	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	

08 -01 07 -02 04 -03

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/18/2010	16:33	**Federal Express**	11/18/2010	16:33
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/19/10	0900

APPENDIX B

INVESTIGATION-DERIVED WASTE DISPOSAL MANIFEST

000411867WAS 92132

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: IL7170024577
2. Page 1 of: 1
3. Emergency Response Phone: 847-688-4820
4. Manifest Tracking Number: 000411867WAS

5. Generator's Name and Mailing Address
Naval Station Great Lakes
201 Decatur Avenue
Great Lakes, IL 60088
Generator's Phone: 847-688-6934

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: HazChem Environmental Corporation
U.S. EPA ID Number: ILD984785238

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Tradebe
4343 Kennedy Avenue
East Chicago, IN 46312
Facility's Phone: 800-388-7242
U.S. EPA ID Number: IND000646943

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. Non Hazardous, Non Regulated Material (Solids)	014	DM	5000	P	None		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1) 338578 14x55 #12889
COD RECEIVED within 45 days

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Norman Lucas
Signature
Month Day Year: 03 16 11

16. International Shipments - ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Boyd Sroka
Signature
Month Day Year: 03 16 11
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. NA 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year: 3 2 11

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

APPENDIX C

ANALYTICAL RESULTS

C.1 SITE 2 - SUMMARY OF ANALYTICAL RESULTS – ROUND 13

C.2 SITE 2 – SUMMARY OF POSITIVE DETECTIONS – ROUNDS 1 – 13

C.3 SITE 3 - SUMMARY OF ANALYTICAL RESULTS – ROUND 13

C.4 SITE 2 – SUMMARY OF POSITIVE DETECTIONS – ROUNDS 1 – 13

APPENDIX C.1

SITE 2 - SUMMARY OF ANALYTICAL RESULTS – ROUND 13

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
Volatiles (ug/L)							
1,1,1,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRIMETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-TRIMETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-BUTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROETHYL VINYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
4-CHLOROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACROLEIN	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
ACRYLONITRILE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BENZENE	1 U	1 U	0.19 J	1	1	1 U	1 U
BROMOBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLORODIBROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CIS-1,2-DICHLOROETHENE	1 U	1 U	0.72 J	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYL ACETATE	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
METHYL CYCLOHEXANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
METHYL IODIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL METHACRYLATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
METHYL TERT-BUTYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-PROPYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SEC-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	5 UR	5 UR	5 UR	9.1 J	8.2 J	5 UR	5 UR
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOTAL XYLENES	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,4-DICHLORO-2-BUTENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL ACETATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatiles (ug/L)							
1,1-BIPHENYL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
1-METHYLNAPHTHALENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,2'-OXYBIS(1-CHLOROPROPANE)	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,4,5-TRICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,4,6-TRICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,4-DICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,4-DIMETHYLPHENOL	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2,4-DINITROPHENOL	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U
2,4-DINITROTOLUENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2,6-DINITROTOLUENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2-CHLORONAPHTHALENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2-CHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
2-NITROANILINE	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2-NITROPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
3,3'-DICHLOROBENZIDINE	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
3-METHYLCHOLANTHRENE	2 UJ	2 UJ	2 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ
3-NITROANILINE	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
4,6-DINITRO-2-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
4-BROMOPHENYL PHENYL ETHER	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
4-CHLORO-3-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
4-CHLOROANILINE	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
4-CHLOROPHENYL PHENYL ETHER	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
4-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
4-NITROANILINE	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
4-NITROPHENOL	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U
ACENAPHTHENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
ACENAPHTHYLENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
ACETOPHENONE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
ANILINE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
ANTHRACENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
ATRAZINE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZO(A)PYRENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZO(B)FLUORANTHENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZO(G,H,I)PERYLENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BIS(2-CHLOROETHOXY)METHANE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
BIS(2-CHLOROETHYL)ETHER	0.50 UJ	0.50 UJ	0.50 UJ	0.53 UJ	0.50 UJ	0.50 UJ	0.50 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	0.50 U	0.54	0.33 J	0.55	0.45 J	0.46 J	0.32 J
BUTYL BENZYL PHTHALATE	1 U	0.074 J	1 U	1.1 U	1 U	0.061 J	1 U
CAPROLACTAM	1 UJ	1 UJ	1 UJ	1.1 UJ	1 UJ	1 UJ	1 UJ
CARBAZOLE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
CHRYSENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
DIBENZO(A,H)ANTHRACENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
DIBENZOFURAN	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
DIMETHYL PHTHALATE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	1 U	1 U	1 U	1.1 U	1 U	0.69 J	1 U
DI-N-OCTYL PHTHALATE	0.50 U	0.68	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
FLUORANTHENE	0.041 J	0.053 J	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
FLUORENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
HEXACHLOROBENZENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
HEXACHLOROBUTADIENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
HEXACHLOROCYCLOPENTADIENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
HEXACHLOROETHANE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.50 U	0.27 J	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
ISOPHORONE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	0.031 J	0.50 U	0.50 U	0.53 U	0.50 U	0.082 J	0.50 U
NITROBENZENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
N-NITROSO-DI-N-PROPYLAMINE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
N-NITROSODIPHENYLAMINE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
PENTACHLOROPHENOL	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
PHENANTHRENE	0.031 J	0.11 J	0.50 U	0.53 U	0.50 U	0.031 J	0.50 U
PHENOL	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
PYRENE	0.50 U	0.50 U	0.50 U	0.53 U	0.50 U	0.50 U	0.50 U
Inorganics (ug/L)							
ALUMINUM	28 U	6500 / 2500	28 U	28 U	28 U	1200 / 28 U	850 / 28 U
ANTIMONY	0.36 U	0.36 U / 0.36 U	0.36 U	0.74 J	0.97 J	0.36 U / 0.36 U	0.5 U / 0.36 U
ARSENIC	0.38 U	2.9 J / 2.1 J	47	4.4	3.5	4.3 / 5.2	0.38 U / 0.38 U
BARIUM	20	85 / 58	280	1200	1200	51 / 48	56 / 52
BERYLLIUM	0.3 U	0.36 J / 0.3 U	0.3 U	0.3 U	0.3 U	0.3 U / 0.3 U	0.3 U / 0.3 U
CADMIUM	0.055 U	0.19 J / 0.18 J	0.055 U	0.055 U	0.055 U	0.067 J / 0.055 U	0.13 J / 0.055 U
CALCIUM	130000	58000 / 49000	150000	170000	170000	80000 / 76000	120000 / 130000
CHROMIUM	0.73 U	12 / 4.8	0.46 U	2	2.1 U	2.1 U / 0.65 U	2.1 U / 0.65 U
COBALT	0.38 J	4 / 1.3	3.2	6.5	6.6	2.2 J / 1.6	1 / 0.23 J
COPPER	1.6 J	7.6 / 3	0.99 J	1.7	2	1.4 J / 0.71 U	3.4 / 1.9
IRON	120	7400 / 2400	16000	12000	12000	3300 / 1300	1200 / 12 J
LEAD	0.22 U	3.6 / 1.1	0.22 U	0.22 U	0.24 J	0.49 J / 0.22 U	1.3 / 0.22 U
MAGNESIUM	150000	39000 / 38000	82000	130000	130000	49000 / 52000	69000 / 76000
MANGANESE	51 J	140 / 36	59	100	100	91 J / 53	190 / 75
MERCURY	0.061 U	0.061 U / 0.061 U	0.061 U	0.061 U	0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U
NICKEL	9.2	12 / 4.7	16	17	17	7.8 / 3.2	11 / 4.6
POTASSIUM	3800	4000 / 2700	2200	39000	41000	1900 / 1600	2000 / 1900
SELENIUM	1.1 J	0.82 UJ / 0.82 U	1.6 J	2.3 J	4.9 J	0.82 UJ / 0.82 U	0.82 UJ / 0.92 J
SILVER	0.061 U	0.077 J / 0.061 U	0.061 U	0.061 U	0.079 J	0.061 U / 0.061 U	0.066 U / 0.061 U
SODIUM	64000	63000 / 70000	65000	320000	320000	41000 / 44000	27000 / 32000
THALLIUM	0.056 U	0.14 J / 0.08 J	0.056 U	0.056 U	0.056 U	0.056 U / 0.056 U	0.11 J / 0.10 J
TOTAL ESSENTIAL NUTRIENTS	347800	164000 / 159700	299200	659000	661000	171900 / 173600	218000 / 239900
VANADIUM	0.45 J	16 / 6.5	0.28 U	1.9 J	2.1 J	3.2 / 0.28 U	2.4 J / 0.33 J
ZINC	6.2 J	18 J / 7.5 J	5.2 J	4.1 J	7 J	4.4 J / 3 J	6.6 J / 3 J
Miscellaneous Parameters							
AMMONIA-N MG/L	0.11	0.35	0.12	43	43	0.67	0.049
BIOCHEMICAL OXYGEN DEMAND MG/L	2 U	2 U	2 U	18	18	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	6.4	15	27	130	130	14	7.8
CHLORIDE MG/L	42	85	110	440	440	29	29

APPENDIX C.1

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	FL-01 NTC02GW0113 20101118 QTR13	FL-02 NTC02GW0213 20101117 QTR13	FL-03 NTC02GW0313 20101117 QTR13	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 NTC02GW0513 20101118 QTR13	FL-06 NTC02GW0613 20101117 QTR13
CYANIDE MG/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	0.53	0.73	0.28	0.16	0.16	0.51	0.33
HEXAVALENT CHROMIUM MG/L	0.005 U	0.0043 U	0.005 U	0.0061 U	0.0083 U	0.005 U	0.005 U
NITRATE-N MG/L	0.058 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
NITRITE/NITRATE-N MG/L	0.058 U	0.05 U	0.05 U	0.05 U	0.05 U	0.053 U	0.05 U
NITRITE-N MG/L	0.01 U	0.01 U	0.01 U	0.0033 J	0.0054 J	0.0035 J	0.0043 J
PH S.U.	7.7 J	8.1 J	7.4 J	7.2 J	7.2 J	8 J	7.6 J
SULFATE MG/L	590	190	21	2.4	2.5	170	260
TOTAL DISSOLVED SOLIDS MG/L	1300	560	950	1900	1900	540	870
TOTAL ORGANIC CARBON MG/L	2.3	1.4	11	41	43	4.4	2
TOTAL PHENOLICS MG/L	0.05 U	0.05 U	0.05 U	0.0029 J	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	0.02 U	0.08	0.027	0.23	0.29	0.026	0.011
TOTAL SUSPENDED SOLIDS MG/L	3.9	160	23	32	32	52	35
Field Parameters							
CONDUCTIVITY MS/CM	1.77	0.765	1.6	3.3		0.90	1.149
DISSOLVED OXYGEN MG/L	0.29	0.26	0.15	0.22		0.06	0.25
OXIDATION REDUCTION POTENTIAL MV	20	-151.00	3	-160.00		-138.00	111
PH S.U.	7.12	8.67	6.03	6.62		7.44	6.69
TEMPERATURE C	11.6	10.7	11.09	11.98		11.29	10.51
TURBIDITY NTU	2.5	190	9	2.3		28	24

Notes:
Light Gray shading indicates positive result.
Dark shading indicates exceedance of criteria.
Data Qualifiers:
U = Indicates that parameter was not detected.
UJ = Indicates the parameter was not detected, however the detection limit is estimated.
UR = Indicates the parameter was not detected, however the result is unreliable.
J = Indicates that result is estimated.
R = Indicates that result is rejected.

APPENDIX C.2

SITE 2 – SUMMARY OF POSITIVE DETECTIONS – ROUNDS 1 – 13

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 FL-01_20060816 20060816 QTR01	FL-01 FL-01_20070111 20070111 QTR02	FL-01 FL-01_20070419 20070419 QTR03	FL-01 FL-01_20070808 20070808 QTR04	FL-01 NTC02GW0105 20071113 QTR05	FL-01 NTC02GW0106 20080227 QTR06
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	2.5 U	5 U	5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
CHLOROBENZENE	100	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	1.88	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1.09	0.25 U	0.25 U	0.25 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	5 U	5 UR
TOLUENE	1000	TACO	0.861	0.25 U	0.25 U	0.25 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
2,4,5-TRICHLOROPHENOL	700	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.14 J
2,4,6-TRICHLOROPHENOL	10	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.047 J
2,4-DICHLOROPHENOL	21	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.026 J
2,4-DIMETHYLPHENOL	140	TACO	2.5 U	2.5 U	2.5 U	2.72 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
4-CHLOROANILINE	28	TACO	2.5 U	2.5 U	2.5 U	2.72 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO					0.50 U	0.5 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
ACETOPHENONE	3700	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
ANILINE	23	NON-TACO	-99 U	-99 U	5.26 U	5.43 U	0.50 U	0.5 U
ANTHRACENE	2100	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	13.9	15.7	3.15 J	0.49 J	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.5 U	2.72 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.25 J	1 U
CARBAZOLE	4.3	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.031 J	0.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 FL-01_20060816 20060816 QTR01	FL-01 FL-01_20070111 20070111 QTR02	FL-01 FL-01_20070419 20070419 QTR03	FL-01 FL-01_20070808 20070808 QTR04	FL-01 NTC02GW0105 20071113 QTR05	FL-01 NTC02GW0106 20080227 QTR06
DIMETHYL PHTHALATE	NC	NA	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.5 U	2.72 U	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
FLUORENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.5 U	2.72 U	0.50 U	0.032 U
NAPHTHALENE	140	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.062 J	0.5 U
PENTACHLOROPHENOL	1	TACO	12.5 U	12.5 U	12.5 U	13.6 U	0.47 J	1 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
PHENOL	100	TACO	8.52	2.5 U	2.5 U	2.72 U	0.50 U	0.5 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.50 U	0.5 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	1 U	1 U	1 U	0.524 U	2 U	2 UJ
DINOSEB	7	TACO	0.5 U	0.5 U	0.5 U	0.262 U	1 U	1 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
AROCLOR-1254	0.5	TACO	0.255 U	0.255 U	0.255 U	0.255 U	0.20 U	0.2 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
DELTA-BHC	0.011	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
GAMMA-BHC (LINDANE)	0.2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0109 U	0.05 U	0.05 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.55 U	2.69 U	5 U	5 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	0.7 U	0.7 U	0.7 U		1 U	2.5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	50 U	136	50 U	50 U	44 U	44 U
ANTIMONY	6	TACO	1.25	0.627	0.469	0.338 J	0.72 U	0.44 U
ARSENIC	50	TACO	5 U	5 U	5 U	5 U	0.83	0.74 U
BARIUM	2000	TACO	58.5	44.8	40.1	33.8	33	31
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.31 U	0.31 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.068	0.062 U
CALCIUM	NC	NA	95400	107000	129000	150000	120000 J	130000
CHROMIUM	NC	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.37 U	0.31 U
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.57	0.36
COPPER	650	TACO	5 U	5 U	5 U	5 U	1.7	0.70 J
IRON	5000	TACO	29.1	253	25 U	25 U	28 U	5.7 U
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.33 U	0.33 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 FL-01_20060816 20060816 QTR01	FL-01 FL-01_20070111 20070111 QTR02	FL-01 FL-01_20070419 20070419 QTR03	FL-01 FL-01_20070808 20070808 QTR04	FL-01 NTC02GW0105 20071113 QTR05	FL-01 NTC02GW0106 20080227 QTR06
MAGNESIUM	NC	NA	92600	108000	140000	155000	120000 J	140000
MANGANESE	150	TACO	43.1	99.1	40.7	58.2	73	34
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.055 U	0.046 U
NICKEL	100	TACO	5 U	5 U	5 U	5 U	5.5	4.3
POTASSIUM	NC	NA	4240	4300	4010	4250	4300	4200
SELENIUM	50	TACO	1.38	1.99	2.23	1.95	0.92 U	1.5
SILVER	50	TACO	5 U	5 U	5 U	5 U	0.12 U	0.12 U
SODIUM	NC	NA	52400	63300	59800	67800	64000 J	65000
THALLIUM	2	TACO	0.318	0.05 U	0.05 U	0.05 U	0.17 U	0.17 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	244640	282600	332810	377050	308300	339200
VANADIUM	49	TACO	9.89	5 U	5 U	100 U	0.83 U	0.83 U
ZINC	5000	TACO	5 U	5 U	5 U	5 U	13	0.84 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.157	0.434	0.186	0.241	0.14	0.049
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	1 U	1.4	2.15	1 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	17	10 U	10 U	13.7 J	4.9 R	3.7
CHLORIDE MG/L	200	TACO	22.4	29.6	33.4	38.6	26	36
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001900 U
FLUORIDE MG/L	4	TACO	0.529	0.571	0.498	0.513	0.53	0.54
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U	0.0041 U	0.0041 U
NITRATE MG/L	10	TACO	0.611	0.162	0.377	0.11		
NITRATE-N MG/L	10	MCL					0.082	0.27
NITRITE/NITRATE-N MG/L	10	MCL					0.086	0.27
NITRITE-N MG/L	1	MCL					0.0043	0.0029 U
PH S.U.	6.5 - 8.5	SMCL	7.12	7.04	7.13			
SULFATE MG/L	400	TACO	327	406	526	511	420 J	470
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	958	958	1240	1200	1100	1200
TOTAL ORGANIC CARBON MG/L	NC	NA	7.68	2.94	1.17	0.5 U	3.4	1.5
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00467	0.00333 U	0.00333 U	0.05 U	0.004800 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.05 U	0.095	0.05 U	0.1 U	0.01 UR	0.012
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	2.5 U	5.5	3	2.5 U	3.3 UJ	3.300000 U
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA					1.65	1.72
DISSOLVED OXYGEN MG/L	NC	NA					0.78	0.87
OXIDATION REDUCTION POTENTIAL MV	NC	NA					68	83
PH S.U.	6.5 - 8.5	SMCL					6.89	6.93
SALINITY %	NC	NA						
SALINITY PPT	NC	NA					0	0
TEMPERATURE C	NC	NA					13.2	10.12
TURBIDITY NTU	NC	NA					0.8	1.3

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0107 20080507 QTR07	FL-01 NTC02GW0108 20080820 QTR08	FL-01 NTC02GW0109 20081118 QTR09	FL-01 NTC02GW0110 20090519 QTR10	FL-01 NTC02GW0110-D 20090519 QTR10 NTC02GW0110	FL-01 NTC02GW0111 20091116 QTR11
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	5 UJ	5 UJ	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1.0 U
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	1 UJ	1 UJ	1 UJ	1.0 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UJ	5 UR	5 U	5 U	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.5 U	0.50 U		0.50 U	0.55 U	0.53 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.25 J	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
2,4-DICHLOROPHENOL	21	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	1 U	1 U	1.1 U	1.1 U
2-CHLOROPHENOL	35	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.32 J	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	1 U	1.1 U	1.1 U
4-METHYLPHENOL	35	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
ACENAPHTHENE	420	TACO	0.088 J	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
ACETOPHENONE	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
ANILINE	23	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
ANTHRACENE	2100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
BENZALDEHYDE	700	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 UJ
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5 U	0.50 U	1.4	0.50 U	0.55 U	0.86 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	0.11 J	0.084 J	1 U	1.1 U	0.12 J
CAPROLACTAM	3500	NON-TACO	1 U	1 UJ	1 U	1 U	1.1 U	1.1 UJ
CARBAZOLE	4.3	TACO	0.5 U	0.50 U	0.50 U	0.50 UJ	0.55 UJ	0.53 U
CHRYSENE	1.5	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	0.02 J	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.50 U	0.042 J	0.50 U	0.55 U	0.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0107 20080507 QTR07	FL-01 NTC02GW0108 20080820 QTR08	FL-01 NTC02GW0109 20081118 QTR09	FL-01 NTC02GW0110 20090519 QTR10	FL-01 NTC02GW0110-D 20090519 QTR10 NTC02GW0110	FL-01 NTC02GW0111 20091116 QTR11
DIMETHYL PHTHALATE	NC	NA	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1 U	1.1 U	0.4 J
DI-N-OCTYL PHTHALATE	140	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
FLUORANTHENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.074 J
FLUORENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
NAPHTHALENE	140	TACO	9.3	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
PHENOL	100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.53 U
PYRENE	210	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.55 U	0.2 J
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U			
DINOSEB	7	TACO	1 U	1 U	1 U			
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 UJ	0.055 U	0.05 U			
ALPHA-CHLORDANE	2	TACO	0.05 UJ	0.055 U	0.05 U			
AROCLOR-1254	0.5	TACO	0.2 UJ	0.22 U	0.20 U			
BETA-BHC	0.037	USEPA TAPWATER	0.05 UJ	0.055 U	0.0039 R			
DELTA-BHC	0.011	USEPA TAPWATER	0.05 UJ	0.055 U	0.05 U			
ENDOSULFAN I	42	TACO	0.05 UJ	0.055 U	0.05 U			
ENDRIN KETONE	2	TACO	0.05 UJ	0.055 U	0.05 U			
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 UJ	0.055 U	0.05 U			
GAMMA-CHLORDANE	2	TACO	0.05 UJ	0.055 U	0.05 U			
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	0.830000 U	5 U	4 U			
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U			
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	20 U	100 U	20 U	24 U	24 U	33
ANTIMONY	6	TACO	0.36 U	1 U	1.6	0.40 U	0.40 U	0.46
ARSENIC	50	TACO	0.26	0.39 J	0.64	0.39 U	0.39 U	0.39 U
BARIUM	2000	TACO	29	27	25	24	24	23
BERYLLIUM	4	TACO	0.23 U	1 U	0.23 U	0.31 U	0.31 U	0.31 U
CADMIUM	5	TACO	0.056 U	0.20 U	0.056 U	0.06 U	0.06 U	0.06 U
CALCIUM	NC	NA	140000	140000	150000 J	140000	150000	120000
CHROMIUM	NC	TACO	0.61	1 UJ	0.95	0.56 U	0.90 U	0.93
COBALT	1000	TACO	0.25	0.24 J	0.35	0.42	0.41	0.41
COPPER	650	TACO	1.3	1.4	1.6	1.9	1.8	1.4
IRON	5000	TACO	23	27	47	49	52	69
LEAD	7.5	TACO	0.29 U	1 U	0.29 U	0.26 U	0.26 U	0.26 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0107 20080507 QTR07	FL-01 NTC02GW0108 20080820 QTR08	FL-01 NTC02GW0109 20081118 QTR09	FL-01 NTC02GW0110 20090519 QTR10	FL-01 NTC02GW0110-D 20090519 QTR10 NTC02GW0110	FL-01 NTC02GW0111 20091116 QTR11
MAGNESIUM	NC	NA	160000	150000	170000 J	160000	170000	140000
MANGANESE	150	TACO	15	30	30	9	8.9	24
MERCURY	2	TACO	0.046 U	0.20 U	0.043 U	0.043 U	0.043 U	0.048 U
NICKEL	100	TACO	5.8	6.2	5.2	8.2	7.9	5.4
POTASSIUM	NC	NA	4000	3900	4000	3800	3900	3900
SELENIUM	50	TACO	0.37	0.57 UJ	0.75 J	0.40 U	0.40 U	1.2
SILVER	50	TACO	0.061 U	0.20 U	0.33	0.053 U	0.053 U	0.13
SODIUM	NC	NA	67000	61000	72000 J	61000	64000	57000
THALLIUM	2	TACO	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.081
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	371000	354900	396000	364800	387900	320900
VANADIUM	49	TACO	0.43	0.35 J	0.92	1.2	1	0.49
ZINC	5000	TACO	5.4 U	5.2 UJ	19	4.4	3.4	14 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.004 U	0.056	0.036	0.0097 U	0.05 UJ	0.033 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.0 U	2 U	2 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	3.4	5.1 J	3.5	2.9	3.2	3.9
CHLORIDE MG/L	200	TACO	47	50 J	40	55	55	50
CYANIDE MG/L	0.2	TACO	0.0028 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.48	0.46	0.52	0.54	0.51	0.49
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 UJ	0.01 U	0.0081	0.0012 U	0.0012 U	0.0032
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.28	0.13	0.15	0.19	0.21	0.18
NITRITE/NITRATE-N MG/L	10	MCL	0.28 U	0.13	0.15	0.19	0.21	0.18
NITRITE-N MG/L	1	MCL	0.0029 U	0.0042 U	0.0042 U	0.002 U	0.002 U	0.002 U
PH S.U.	6.5 - 8.5	SMCL				7.4 J	7.5 J	7.2 J
SULFATE MG/L	400	TACO	580	590 J	540	650	560	580
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1400	1400	1200	1400	1500	1400 J
TOTAL ORGANIC CARBON MG/L	NC	NA	2.3	1.9 U	1.9	2.2	2.1	1.6
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.0048 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.012	0.022 J	0.011	0.022	0.025	0.014 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	3.3 U	3.3 U	3.7	3.3 U	3.3 U	11
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.89	1.8	1.68	2.02		1.89
DISSOLVED OXYGEN MG/L	NC	NA	0.57	0.24	0.24	0.9		0.22
OXIDATION REDUCTION POTENTIAL MV	NC	NA	198	82	49	84		86
PH S.U.	6.5 - 8.5	SMCL	6.95	7.03	7.7	6.89		6.78
SALINITY %	NC	NA						0.95
SALINITY PPT	NC	NA	0			0		
TEMPERATURE C	NC	NA	12.23	14.94	11.63	14.41		11.75
TURBIDITY NTU	NC	NA	1.53	0.36	2.66	3.45		2.09

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0112 20100506 QTR12	FL-01 NTC02GW0113 20101118 QTR13	FL-02 FL-02_20060830 20060830 QTR01	FL-02 FL-02_20070129 20070129 QTR02	FL-02 FL-02_20070418 20070418 QTR03	FL-02 FL-02_20070815 20070815 QTR04
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	0.125 U	0.125 U	0.125 U	0.125 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
ACETONE	6300	TACO	5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	5	TACO	1 U	1 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROBENZENE	100	TACO	1 U	1 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 UJ	0.25 U	0.25 U	0.25 U	0.491 J
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	1 U	1 U	0.34	0.25 U	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DICHLOROPHENOL	21	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U
2-CHLOROPHENOL	35	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
4-CHLOROANILINE	28	TACO	1 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U
4-METHYLPHENOL	35	NON-TACO	0.50 U	0.50 U				
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
ACETOPHENONE	3700	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
ANILINE	23	NON-TACO	0.50 U	0.50 U	-99 U	-99 U	5.26 U	5 U
ANTHRACENE	2100	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.80 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	2.5 U	2.5 U	2.5 U	2.5 U
CARBAZOLE	4.3	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
DIBENZOFURAN	37	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0112 20100506 QTR12	FL-01 NTC02GW0113 20101118 QTR13	FL-02 FL-02_20060830 20060830 QTR01	FL-02 FL-02_20070129 20070129 QTR02	FL-02 FL-02_20070418 20070418 QTR03	FL-02 FL-02_20070815 20070815 QTR04
DIMETHYL PHTHALATE	NC	NA	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	2.5 U	2.5 U	2.5 U	2.5 U
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U	0.50 U	3.05	7.56	2.5 U	2.5 U
FLUORANTHENE	280	TACO	0.50 U	0.041 J	0.0526 U	0.0526 U	0.0526 U	0.0549 U
FLUORENE	280	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
ISOPHORONE	1400	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
NAPHTHALENE	140	TACO	0.50 U	0.031 J	0.0526 U	0.0526 U	0.0526 U	0.0549 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	12.5 U	12.5 U	12.5 U	12.5 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.031 J	0.0526 U	0.0526 U	0.0526 U	0.0549 U
PHENOL	100	TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
PYRENE	210	TACO	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0526 U	0.0549 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER			1 U	1 U	1 U	0.549 U
DINOSEB	7	TACO			0.5 U	0.5 U	0.5 U	0.275 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
ALPHA-CHLORDANE	2	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
AROCLOR-1254	0.5	TACO			0.255 U	0.255 U	0.255 U	0.266 U
BETA-BHC	0.037	USEPA TAPWATER			0.0102 U	0.0102 U	0.0102 U	0.0106 U
DELTA-BHC	0.011	USEPA TAPWATER			0.0102 U	0.0102 U	0.0102 U	0.0106 U
ENDOSULFAN I	42	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
ENDRIN KETONE	2	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
GAMMA-BHC (LINDANE)	0.2	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
GAMMA-CHLORDANE	2	TACO			0.0102 U	0.0102 U	0.0102 U	0.0106 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA			2.55 U	2.55 U	2.55 U	2.62 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER			0.7 U	0.7 U	0.7 U	0.7 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	23 U	28 U	2000	368	5150	5580
ANTIMONY	6	TACO	0.36 U	0.36 U	0.829	0.25 U	1.65	1.68
ARSENIC	50	TACO	0.85 J	0.38 U	21.1	5.05	30	70.3
BARIUM	2000	TACO	24	20	80.2	41.8	88.7	89.8
BERYLLIUM	4	TACO	0.30 U	0.3 U	0.50 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	0.056 J	0.055 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	150000	130000	32700	25900	35800	38400
CHROMIUM	NC	TACO	0.46 U	0.73 U	3.89	2.5 U	7.38	7.72 J
COBALT	1000	TACO	0.58 J	0.38 J	2.5 U	2.5 U	2.92	2.5 U
COPPER	650	TACO	2.1	1.6 J	5 U	5 U	8.37	7.47 J
IRON	5000	TACO	69	120	1800	387	4750	4550
LEAD	7.5	TACO	0.22 U	0.22 U	3.16	2.5 U	2.5 U	4.25 J

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-01 NTC02GW0112 20100506 QTR12	FL-01 NTC02GW0113 20101118 QTR13	FL-02 FL-02_20060830 20060830 QTR01	FL-02 FL-02_20070129 20070129 QTR02	FL-02 FL-02_20070418 20070418 QTR03	FL-02 FL-02_20070815 20070815 QTR04
MAGNESIUM	NC	NA	170000	150000	16500	16000	18700	18500
MANGANESE	150	TACO	15 J	51 J	56.3	19.8	87.7	80.8
MERCURY	2	TACO	0.061 U	0.061 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	4.6	9.2	5 U	5 U	7.47	5.78 J
POTASSIUM	NC	NA	4000 J	3800	2320	1400	3550	3760
SELENIUM	50	TACO	1.4	1.1 J	0.50 U	0.50 U	0.563	0.50 U
SILVER	50	TACO	0.061 U	0.061 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	68000	64000	52100	53900	52300	51800
THALLIUM	2	TACO	0.056 U	0.056 U	0.196	0.05 U	0.05 U	0.064 J
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	392000	347800	103620	97200	110350	112460
VANADIUM	49	TACO	0.3 J	0.45 J	10.2	5 U	9.69	5 U
ZINC	5000	TACO	23	6.2 J	8.09	5 U	16.4	14.3 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.05 U	0.11	0.345	0.313	0.235	0.337
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	1 U	1 U	1 U	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.7	6.4	12.3	10 U	10 U	16.4 J
CHLORIDE MG/L	200	TACO	51	42	7.53	15.1	15.5	22.6
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.45	0.53	0.883	0.893	0.807	0.855
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0084 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
NITRATE MG/L	10	TACO			0.071	0.025 U	0.025 U	0.025 U
NITRATE-N MG/L	10	MCL	0.2	0.058 U				
NITRITE/NITRATE-N MG/L	10	MCL	0.2 J	0.058 U				
NITRITE-N MG/L	1	MCL	0.01 U	0.01 U				
PH S.U.	6.5 - 8.5	SMCL	7.5 J	7.7 J	8.04	8.39	7.25	7.64
SULFATE MG/L	400	TACO	620	590	94.5	106	90.2	95.5
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1400	1300	330	264	346	344
TOTAL ORGANIC CARBON MG/L	NC	NA	2.1 U	2.3	5.59	1.13	1.77	0.5 U
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.050 U	0.05 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.0143 U	0.02 U	0.052	0.05 U	0.05 U	0.116 J
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	4.9	3.9	12.5	2.5 U	91.5	85
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	2.05	1.77				
DISSOLVED OXYGEN MG/L	NC	NA	3.47	0.29				
OXIDATION REDUCTION POTENTIAL MV	NC	NA	69	20				
PH S.U.	6.5 - 8.5	SMCL	7.95	7.12				
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	12.51	11.6				
TURBIDITY NTU	NC	NA	3.5	2.5				

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0205 20071114 QTR05	FL-02 NTC02GW0206 20080226 QTR06	FL-02 NTC02GW0207 20080508 QTR07	FL-02 NTC02GW0208 20080820 QTR08	FL-02 NTC02GW0209 20081120 QTR09	FL-02 NTC02GW0210 20090519 QTR10
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 UJ	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	1 U	1 U	1 UJ	1 UJ
TETRAHYDROFURAN	NC	NA	5 U	5 UR	5 UR	5 UJ	5 UR	5 U
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.50 U	0.5 U	0.5 U	0.50 U		0.50 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
2,4-DICHLOROPHENOL	21	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	1 U	1 U	1.1 U	1 U
2-CHLOROPHENOL	35	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	1 U	1.1 U	1 U
4-METHYLPHENOL	35	NON-TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
ACENAPHTHENE	420	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
ACETOPHENONE	3700	USEPA TAPWATER	0.50 U	0.069 U	0.5 U	0.50 U	0.075 U	0.50 U
ANILINE	23	NON-TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
ANTHRACENE	2100	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.032 J	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.44 J	0.5 U	0.91	0.50 U	0.54 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	0.048 J	1 U	1 U	0.14 J	0.14 J	1 U
CAPROLACTAM	3500	NON-TACO	1 U	0.24 J	1 U	1 UJ	0.57 J	1 U
CARBAZOLE	4.3	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 UJ
CHRYSENE	1.5	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
DIBENZOFURAN	37	USEPA TAPWATER	0.50 U	0.018 J	0.029 J	0.50 U	0.54 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.075 J	0.50 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0205 20071114 QTR05	FL-02 NTC02GW0206 20080226 QTR06	FL-02 NTC02GW0207 20080508 QTR07	FL-02 NTC02GW0208 20080820 QTR08	FL-02 NTC02GW0209 20081120 QTR09	FL-02 NTC02GW0210 20090519 QTR10
DIMETHYL PHTHALATE	NC	NA	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	0.80 J	0.54 J	1.7	1 U	0.58 J	1 U
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U	0.5 U	0.59	0.50 U	0.054 J	0.50 U
FLUORANTHENE	280	TACO	0.50 U	0.046 J	0.5 U	0.50 U	0.022 J	0.50 U
FLUORENE	280	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
ISOPHORONE	1400	TACO	0.50 U	0.048 U	0.5 U	0.50 U	0.13 J	0.50 U
NAPHTHALENE	140	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.011 J	0.50 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	1 U	1 U	1.1 U	1 U
PHENANTHRENE	210	NON-TACO	0.038 J	0.14 J	0.17 J	0.051 J	0.065 J	0.052 J
PHENOL	100	TACO	0.50 U	0.5 U	0.5 U	0.50 U	0.54 U	0.50 U
PYRENE	210	TACO	0.50 U	0.5 U	0.049 J	0.50 U	0.032 J	0.50 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	2 U	2 UJ	2 U	2 U	2.2 U	
DINOSEB	7	TACO	1 U	1 UJ	1 U	1 U	1.1 U	
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
AROCLOR-1254	0.5	TACO	0.20 U	0.2 U	0.2 U	0.20 U	0.20 U	
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
DELTA-BHC	0.011	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
GAMMA-CHLORDANE	2	TACO	0.0032 R	0.05 U	0.05 U	0.05 U	0.05 U	
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	5 U	5 U	1.1 J	5 U	4 U	
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	1 U	2.5 U	2.5 U	2.5 U	2.5 U	
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	8800 J / 44 U	6800 J / 52	6900 / 20 U	8600 / 100 U	13000 J / 20 U	6800 / 100
ANTIMONY	6	TACO	0.44 U / 0.44 U	0.44 U / 0.44 U	0.32 U / 0.32 U	1 U / 1 U	0.32 U / 0.32 U	0.40 U / 0.40 U
ARSENIC	50	TACO	3.8 / 3.1	3.6 / 2.7	3.5 / 2.9	3.5 / 2.9 J	4.2 / 2.8	3.2 / 2.3
BARIUM	2000	TACO	89 / 46	80 / 44	84 / 53	82 / 47	110 / 54	82 / 54
BERYLLIUM	4	TACO	0.55 / 0.31 U	0.47 / 0.31 U	0.33 / 0.23 U	0.44 J / 1 U	0.59 / 0.23 U	0.34 / 0.31 U
CADMIUM	5	TACO	0.24 / 0.062 U	0.15 / 0.062 U	0.13 / 0.056 U	0.12 J / 0.20 U	0.35 / 0.056 U	0.11 / 0.06 U
CALCIUM	NC	NA	44000 J / 29000 J	41000 / 28000 J	44000 / 33000	46000 / 30000	69000 J / 36000 J	52000 / 42000
CHROMIUM	NC	TACO	12 / 2	11 / 0.31 U	9.3 / 1.2	11 / 1 UJ	16 / 0.80 U	9.9 / 0.78 U
COBALT	1000	TACO	5.4 / 0.096 U	4.2 / 0.096 U	3.9 / 0.17	4.4 / 1 UJ	7 / 0.19	3.5 / 0.28
COPPER	650	TACO	9.8 / 0.73	8.8 J / 0.61	7.5 / 0.84	8.3 / 0.96 UJ	12 / 0.92	7.3 / 1
IRON	5000	TACO	8400 J / 8 U	7300 / 64	7300 / 9.6 U	8500 / 12 J	14000 J / 24	6700 / 250
LEAD	7.5	TACO	4.7 / 0.33 U	3.5 / 0.33 U	3.5 / 0.29 U	4.1 / 1 U	6.2 / 0.29 U	3.2 / 0.26 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0205 20071114 QTR05	FL-02 NTC02GW0206 20080226 QTR06	FL-02 NTC02GW0207 20080508 QTR07	FL-02 NTC02GW0208 20080820 QTR08	FL-02 NTC02GW0209 20081120 QTR09	FL-02 NTC02GW0210 20090519 QTR10
MAGNESIUM	NC	NA	26000 J / 19000 J	26000 / 20000 J	29000 / 24000	28000 / 22000	41000 J / 27000 J	36000 / 32000
MANGANESE	150	TACO	160 / 9.1	130 / 8.4	120 / 7.5	130 / 5.8	220 / 6.9	100 / 8.5
MERCURY	2	TACO	0.087 U / 0.046 U	0.046 U / 0.046 U	0.046 U / 0.046 U	0.20 U / 0.20 U	0.043 U / 0.043 U	0.043 U / 0.043 U
NICKEL	100	TACO	16 / 0.90	13 / 0.90	12 / 1.4	14 / 1	21 / 1.7	11 / 2
POTASSIUM	NC	NA	4900 / 1300	4000 / 1200	4300 / 1300	4900 / 1300	5700 / 1400	4300 / 1600
SELENIUM	50	TACO	0.92 U / 0.92 U	0.92 U / 0.92 U	0.30 U / 0.62	0.83 UJ / 0.55 UJ	0.30 UJ / 0.30 U	0.40 U / 0.40 U
SILVER	50	TACO	0.12 U / 0.12 U	0.12 U / 0.12 U	0.061 U / 0.061 UJ	0.20 U / 0.20 U	0.072 U / 0.16 U	0.053 U / 0.053 U
SODIUM	NC	NA	57000 J / 57000 J	59000 / 57000 J	60000 / 62000	57000 / 57000	71000 J / 64000 J	63000 / 66000
THALLIUM	2	TACO	0.17 U / 0.17 U	0.17 U / 0.17 U	0.099 / 0.05 U	0.096 J / 1 U	0.13 / 0.05 U	0.08 U / 0.05 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	131900 / 106300	130000 / 106200	137300 / 120300	135900 / 110300	186700 / 128400	155300 / 141600
VANADIUM	49	TACO	16 / 0.83 U	13 / 0.83 U	11 / 0.56	14 / 3 U	22 / 1.4	11 / 1.3 U
ZINC	5000	TACO	24 J / 5.2	20 / 0.84 U	16 U / 2.1	19 J / 5.6 UJ	46 / 1.8 U	14 / 2 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.33	0.33	0.35	0.33	0.33	0.37 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	2.0 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	10 R	8.4	11	30	21	10
CHLORIDE MG/L	200	TACO	40	45	61	61 J	70	84
CYANIDE MG/L	0.2	TACO	0.005 U	0.001900 U	0.0024 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.75	0.78	0.74	0.72	0.81	0.74
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0064	0.0041	0.0041 UJ	0.01 UJ	0.0019 U	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.029 U	0.021	0.018 J	0.02 U	0.02 U	0.028
NITRITE/NITRATE-N MG/L	10	MCL	0.029 U	0.026	0.022 U	0.02 U	0.02 U	0.028
NITRITE-N MG/L	1	MCL	0.0029 U	0.0048	0.0037 J	0.0055 J	0.0042 U	0.002 U
PH S.U.	6.5 - 8.5	SMCL						8.4 J
SULFATE MG/L	400	TACO	110 J	110	140	130 J	140	170
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	380	400	470	470	500	490
TOTAL ORGANIC CARBON MG/L	NC	NA	2.2	1.4	1.4	1.4 U	1.7	1.6
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.004800 U	0.0048 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.10 J	0.078	0.1	0.32 J	0.17 U	0.1
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	91	220	80	530	330	260
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	0.568	0.589	0.664	0.598	0.471	0.763
DISSOLVED OXYGEN MG/L	NC	NA	0.19	0.46	0.35	0.22	0.49	0.29
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-116	-108	-110	-128	122	48
PH S.U.	6.5 - 8.5	SMCL	8.36	8.78	8.38	8.47	8.62	8.6
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0	0	0			0
TEMPERATURE C	NC	NA	12.6	8.75	11.16	14.34	9.71	17.79
TURBIDITY NTU	NC	NA	120	100	47.4	154	360	202

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0211 20091118 QTR11	FL-02 NTC02GW0212 20100505 QTR12	FL-02 NTC02GW0213 20101117 QTR13	FL-03 FL-03_20060831 20060831 QTR01	FL-03 FL-03_20070118 20070118 QTR02	FL-03 FL-03_20070118-D 20070118 QTR02 FL-03_20070118
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	0.125 U	0.125 U	0.125 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	0.25 U	0.25 U	0.25 U
ACETONE	6300	TACO	5 U	5 U	5 U	2.5 U	2.5 U	2.5 U
BENZENE	5	TACO	1 U	1 U	1 U	0.125 U	0.125 U	0.176 J
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	0.125 U	0.125 U	0.125 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	190	USEPA TAPWATER	1.0 U	1 U	1 UJ	0.25 U	0.25 U	0.25 U
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	1 U	0.372	0.514	0.574 J
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	0.25 U	0.25 U	0.25 U
METHYLENE CHLORIDE	5	TACO	1.0 U	1 U	1 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	25 U	25 U	25 U
TOLUENE	1000	TACO	1 U	1 U	1 U	0.413	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
2,4-DICHLOROPHENOL	21	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	1 U	2.5 U	2.5 U	2.86 U
2-CHLOROPHENOL	35	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.031 J	0.50 U	0.0526 U	0.0526 U	0.0562 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	2.5 U	2.5 U	2.86 U
4-METHYLPHENOL	35	NON-TACO	0.5 U	0.50 U	0.50 U			
ACENAPHTHENE	420	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
ACETOPHENONE	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
ANILINE	23	NON-TACO	0.5 U	0.50 U	0.50 U	-99 U	-99 U	5.71 U
ANTHRACENE	2100	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
BENZALDEHYDE	700	NON-TACO	0.5 UJ	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	1.4 U	0.89 U	0.54	2.86	2.5 U	2.86 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	0.074 J	2.5 U	2.5 U	2.86 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1 UJ	2.5 U	2.5 U	2.86 U
CARBAZOLE	4.3	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
CHRYSENE	1.5	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
DIBENZOFURAN	37	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
DIETHYL PHTHALATE	5600	TACO	0.58	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0211 20091118 QTR11	FL-02 NTC02GW0212 20100505 QTR12	FL-02 NTC02GW0213 20101117 QTR13	FL-03 FL-03_20060831 20060831 QTR01	FL-03 FL-03_20070118 20070118 QTR02	FL-03 FL-03_20070118-D 20070118 QTR02 FL-03_20070118
DIMETHYL PHTHALATE	NC	NA	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
DI-N-BUTYL PHTHALATE	700	TACO	0.41 J	1 U	1 U	2.5 U	2.5 U	2.86 U
DI-N-OCTYL PHTHALATE	140	TACO	0.5 U	0.50 U	0.68	2.5 U	2.5 U	2.86 U
FLUORANTHENE	280	TACO	0.12 J	0.50 U	0.053 J	0.0526 U	0.0526 U	0.0562 U
FLUORENE	280	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.5 U	0.50 U	0.27 J	0.0526 U	0.0526 U	0.0562 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
NAPHTHALENE	140	TACO	0.5 U	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	1 U	12.5 U	12.5 U	14.3 U
PHENANTHRENE	210	NON-TACO	0.13 J	0.062 J	0.11 J	0.0526 U	0.0526 U	0.0562 U
PHENOL	100	TACO	0.5 U	0.50 U	0.50 U	2.5 U	2.5 U	2.86 U
PYRENE	210	TACO	0.45 J	0.50 U	0.50 U	0.0526 U	0.0526 U	0.0562 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER				1 U	1 U	0.526 U
DINOSEB	7	TACO				0.5 U	0.5 U	0.263 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO				0.0102 U	0.0102 U	0.01 U
ALPHA-CHLORDANE	2	TACO				0.0102 U	0.0102 U	0.01 U
AROCLOR-1254	0.5	TACO				0.255 U	0.255 U	0.25 U
BETA-BHC	0.037	USEPA TAPWATER				0.0102 U	0.0102 U	0.01 U
DELTA-BHC	0.011	USEPA TAPWATER				0.0102 U	0.0102 U	0.01 U
ENDOSULFAN I	42	TACO				0.0102 U	0.0102 U	0.01 U
ENDRIN KETONE	2	TACO				0.0102 U	0.0102 U	0.01 U
GAMMA-BHC (LINDANE)	0.2	TACO				0.0102 U	0.0102 U	0.01 U
GAMMA-CHLORDANE	2	TACO				0.0102 U	0.0102 U	0.01 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA				2.55 U	2.55 U	2.53 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER				0.7 U	0.7 U	
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	21000 / 870	12000 / 23 U	6500 / 2500	50 U	50 U	50 U
ANTIMONY	6	TACO	0.40 U / 0.40 U	0.36 U / 0.36 U	0.36 U / 0.36 U	0.897	0.545	0.25 U
ARSENIC	50	TACO	5.2 / 2.5	5.3 / 3.2	2.9 J / 2.1 J	11.7	13.1	13
BARIUM	2000	TACO	160 / 59	150 / 57	85 / 58	349	347	335
BERYLLIUM	4	TACO	1.1 / 0.31 U	0.76 J / 0.30 U	0.36 J / 0.3 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	0.24 / 0.06 U	0.23 / 0.055 U	0.19 J / 0.18 J	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	86000 / 36000	84000 / 50000 J	58000 / 49000	182000	177000	173000
CHROMIUM	NC	TACO	30 / 1.9	23 / 0.66 U	12 / 4.8	2.5 U	2.5 U	2.5 U
COBALT	1000	TACO	13 / 0.65	8.2 / 0.12 J	4 / 1.3	4.47	3.84	3.83 J
COPPER	650	TACO	24 / 2.1	15 / 0.81 J	7.6 / 3	5 U	5 U	5 U
IRON	5000	TACO	24000 / 950	13000 / 4.3 J	7400 / 2400	11500	15200	14600
LEAD	7.5	TACO	12 / 0.56	7.7 / 0.22 U	3.6 / 1.1	2.5 U	2.5 U	5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-02 NTC02GW0211 20091118 QTR11	FL-02 NTC02GW0212 20100505 QTR12	FL-02 NTC02GW0213 20101117 QTR13	FL-03 FL-03_20060831 20060831 QTR01	FL-03 FL-03_20070118 20070118 QTR02	FL-03 FL-03_20070118-D 20070118 QTR02 FL-03_20070118
MAGNESIUM	NC	NA	49000 / 29000	51000 / 37000 J	39000 / 38000	89500	95500	90400
MANGANESE	150	TACO	390 / 22	250 J / 5.2	140 / 36	236	150	144
MERCURY	2	TACO	0.048 U / 0.048 U	0.061 U / 0.061 U	0.061 U / 0.061 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	38 / 3.3	25 / 2.1	12 / 4.7	13.8	14.9	14 J
POTASSIUM	NC	NA	9000 / 1800	6100 / 1600	4000 / 2700	3220	2930	2820
SELENIUM	50	TACO	0.71 U / 0.40 U	0.82 U / 0.82 U	0.82 UJ / 0.82 U	2.53	5.34	7.62
SILVER	50	TACO	0.11 / 0.053 U	0.11 J / 0.061 U	0.077 J / 0.061 U	5 U	5 U	5 U
SODIUM	NC	NA	59000 / 56000	70000 / 69000 J	63000 / 70000	64600	73900	70500
THALLIUM	2	TACO	0.26 / 0.05 U	0.21 J / 0.056 U	0.14 J / 0.08 J	1.77	0.06	0.054 J
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	203000 / 122800	211100 / 157600	164000 / 159700	339320	349330	336720
VANADIUM	49	TACO	34 / 2	31 / 0.28 U	16 / 6.5	11.7	5 U	10 U
ZINC	5000	TACO	47 / 10 U	40 / 5.8 J	18 J / 7.5 J	5 U	5 U	11.1 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.32 J	0.37	0.35	0.325	0.255	0.236
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	2 U	1.3	2.3	2.6 J
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	31	26	15	35.5	37	40
CHLORIDE MG/L	200	TACO	88	110	85	110	132	129
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.72	0.64	0.73	0.269	0.271	0.288
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0012 U	0.0064 U	0.0043 U	0.005 U	0.005 U	0.005 U
NITRATE MG/L	10	TACO				0.025 U	0.054	0.05
NITRATE-N MG/L	10	MCL	0.017	0.05 U	0.05 U			
NITRITE/NITRATE-N MG/L	10	MCL	0.022	0.05 U	0.05 U			
NITRITE-N MG/L	1	MCL	0.0053	0.01 U	0.01 U			
PH S.U.	6.5 - 8.5	SMCL	8.4 J	8.1 J	8.1 J	6.73	6.67	6.7
SULFATE MG/L	400	TACO	160	200	190	28.6	21.4	19.3
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	460	540	560	1010	890	840
TOTAL ORGANIC CARBON MG/L	NC	NA	1.3	1.8 U	1.4	25	26.1	28.3
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.050 U	0.05 U	0.00333 U	0.00333 U	0.003 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.28	0.0166 U	0.08	0.05 U	0.05 U	0.05 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	990 J	410	160	23.5	19	16
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	0.756	0.945	0.765			
DISSOLVED OXYGEN MG/L	NC	NA	0.07	0.1	0.26			
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-78	-182	-151			
PH S.U.	6.5 - 8.5	SMCL	8.03	9.23	8.67			
SALINITY %	NC	NA	0.37					
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	11.15	13.25	10.7			
TURBIDITY NTU	NC	NA	2262	303	190			

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 FL-03_20070424 20070424 QTR03	FL-03 FL-03_20070424-D 20070424 QTR03 FL-03_20070424	FL-03 FL-03_20070813 20070813 QTR04	FL-03 FL-03_20070813-D 20070813 QTR04 FL-03_20070813	FL-03 NTC02GW0305 20071114 QTR05	FL-03 NTC02GW0306 20080227 QTR06
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.125 U	0.125 U	0.125 U	0.152 J	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	2.5 U	5 U	5 U
BENZENE	5	TACO	0.138	0.125 U	0.19 J	0.125 U	0.17 J	1 U
CHLOROBENZENE	100	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	1.04	0.984 J	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.569	0.632 J	0.631 J	0.77 J	0.73 J	0.74 J
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 UJ	1 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	5 U	5 UR
TOLUENE	1000	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
2,4,5-TRICHLOROPHENOL	700	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4-DICHLOROPHENOL	21	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4-DIMETHYLPHENOL	140	TACO	2.5 U	2.55 U	2.5 U	2.55 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
4-CHLOROANILINE	28	TACO	2.5 U	2.55 U	2.5 U	2.55 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO					0.50 U	0.5 U
ACENAPHTHENE	420	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.013 J
ACETOPHENONE	3700	USEPA TAPWATER	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
ANILINE	23	NON-TACO	5.26 U	5.1 U	5 U	5.1 U	0.50 U	0.5 U
ANTHRACENE	2100	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.017 J
BENZALDEHYDE	700	NON-TACO	2.5 U	2.55 U	2.5 U	2.55 U	1.8	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.55 U	2.5 U	3.61 J	0.44 J	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.55 U	2.5 U	2.55 U	1 U	0.049 J
CAPROLACTAM	3500	NON-TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.44 J	0.43 J
CARBAZOLE	4.3	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.048 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 FL-03_20070424 20070424 QTR03	FL-03 FL-03_20070424-D 20070424 QTR03 FL-03_20070424	FL-03 FL-03_20070813 20070813 QTR04	FL-03 FL-03_20070813-D 20070813 QTR04 FL-03_20070813	FL-03 NTC02GW0305 20071114 QTR05	FL-03 NTC02GW0306 20080227 QTR06
DIMETHYL PHTHALATE	NC	NA	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.55 U	2.5 U	2.55 U	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
FLUORENE	280	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
ISOPHORONE	1400	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.055 U
NAPHTHALENE	140	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.097 J	0.5 U
PENTACHLOROPHENOL	1	TACO	12.5 U	12.8 U	12.5 U	12.8 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.019 J
PHENOL	100	TACO	2.5 U	2.55 U	2.5 U	2.55 U	0.50 U	0.5 U
PYRENE	210	TACO	0.0526 U	0.051 U	0.0532 U	0.0543 U	0.50 U	0.5 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	1 U	0.5 U	0.521 U	0.543 U	2 U	2 UJ
DINOSEB	7	TACO	0.5 U	0.25 U	0.26 U	0.272 U	1 U	1 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
AROCLOR-1254	0.5	TACO	0.255 U	0.266 U	0.269 U	0.263 U	0.20 U	0.2 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
DELTA-BHC	0.011	USEPA TAPWATER	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
GAMMA-BHC (LINDANE)	0.2	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0106 U	0.0108 U	0.0105 U	0.05 U	0.05 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	2.55 U	2.72 U	2.69 U	2.72 U	5 U	5 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	0.7 U	0.7 U	0.7 U	0.7 U	1 U	2.5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	50 U	50 U	50 U	50 U	44 U	44 U / 44 U
ANTIMONY	6	TACO	0.312	0.25 U	0.25 U	0.25 U	0.44 U	0.44 U / 0.44 U
ARSENIC	50	TACO	5 U	5 U	8.07 J	6.14 J	20	6 / 2.1
BARIUM	2000	TACO	303	283	344	347	340	290 / 260
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.31 U	0.31 U / 0.31 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.062 U	0.062 U / 0.062 U
CALCIUM	NC	NA	189000	183000	171000	168000	170000	180000 / 170000
CHROMIUM	NC	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.31 U	0.31 U / 0.31 U
COBALT	1000	TACO	3.05	2.99 J	3.39 J	3.32 J	3.7	3.2 / 3.1
COPPER	650	TACO	5 U	5 U	5 U	5 U	0.8	2.3 J / 2.4 J
IRON	5000	TACO	2740	2730	15000	14700	12000 J	3800 / 310
LEAD	7.5	TACO	2.5 U	2.5 U	25 U	25 U	0.33 U	0.33 U / 0.33 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 FL-03_20070424 20070424 QTR03	FL-03 FL-03_20070424-D 20070424 QTR03 FL-03_20070424	FL-03 FL-03_20070813 20070813 QTR04	FL-03 FL-03_20070813-D 20070813 QTR04 FL-03_20070813	FL-03 NTC02GW0305 20071114 QTR05	FL-03 NTC02GW0306 20080227 QTR06
MAGNESIUM	NC	NA	93600	89900	90100	91300	86000 J	89000 / 88000
MANGANESE	150	TACO	96.3	90	106	107	96	76 / 73
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.059 U	0.046 U / 0.046 U
NICKEL	100	TACO	14.8	14.3 J	13.9 J	13.7 J	17	16 / 16
POTASSIUM	NC	NA	2260	2230	2600	2630	2600	2100 / 2000
SELENIUM	50	TACO	6.02	7.41	8.97	9.75	0.92 U	2.1 / 1.6
SILVER	50	TACO	5 U	5 U	5 U	5 U	0.12 U	0.12 U / 0.12 U
SODIUM	NC	NA	68200	66100	66500	65700	62000 J	78000 / 75000
THALLIUM	2	TACO	0.061	0.064 J	0.665	0.818	0.17 U	0.17 U / 0.17 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	353060	341230	330200	327630	320600	349100 / 335000
VANADIUM	49	TACO	5 U	5 U	50 U	50 U	0.83 U	0.83 U / 0.83 U
ZINC	5000	TACO	5 U	5 U	5 U	5 U	7.4 J	0.84 U / 0.84 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.157	0.179	0.229	0.222	0.17 J	0.13
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	1.6	1.66 J	1 U	1 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	42.5	42.9	44.8	36	24 J	35
CHLORIDE MG/L	200	TACO	145	133	123	125	110 J	140
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001900 U
FLUORIDE MG/L	4	TACO	0.217	0.187	0.319	0.28	0.3	0.25
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U	0.0041 U	0.0041 U
NITRATE MG/L	10	TACO	0.025 U	0.025 U	0.025 U	0.025 U		
NITRATE-N MG/L	10	MCL					0.029 U	0.016 U
NITRITE/NITRATE-N MG/L	10	MCL					0.029 U	0.016 U
NITRITE-N MG/L	1	MCL					0.0029 U	0.0055
PH S.U.	6.5 - 8.5	SMCL	6.72	6.77	6.77	6.77		
SULFATE MG/L	400	TACO	26.3	21.5	23.1	23	17	21
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1080	1090	1010	976	970	1000
TOTAL ORGANIC CARBON MG/L	NC	NA	18.9	20.8	8.6	7.05	15	9.2
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.05 U	0.004800 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.05 U	0.05 U	0.1 U	0.1 U	0.018 R	0.026
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	7	6.5	15	20	50	9.6
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA					1.6	1.78
DISSOLVED OXYGEN MG/L	NC	NA					0.3	0.25
OXIDATION REDUCTION POTENTIAL MV	NC	NA					43	41
PH S.U.	6.5 - 8.5	SMCL					6.65	6.6
SALINITY %	NC	NA						
SALINITY PPT	NC	NA					0	0
TEMPERATURE C	NC	NA					12.5	9.03
TURBIDITY NTU	NC	NA					7.5	15

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0307 20080508 QTR07	FL-03 NTC02GW0308 20080820 QTR08	FL-03 NTC02GW0309 20081120 QTR09	FL-03 NTC02GW0310 20090519 QTR10	FL-03 NTC02GW0311 20091117 QTR11	FL-03 NTC02GW0311-D 20091117 QTR11 NTC02GW0311
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	0.15 J	0.16 J
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	5 U	5 UJ	5 U	5 U	5 U	5 U
BENZENE	5	TACO	0.18 J	0.18 J	0.22 J	0.19 J	0.19 J	0.21 J
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	0.32 J	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1.0 U	1.0 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.74 J	0.73 J	0.80 J	0.72 J	0.77 J	0.79 J
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	1 UJ	1 UJ	1.0 U	1.0 U
TETRAHYDROFURAN	NC	NA	4 J	3.8 J	5 UR	5.2	6.2 J	6.4 J
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.5 U	0.50 U		0.50 U	0.5 U	0.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
2,4-DICHLOROPHENOL	21	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	0.063 J	1 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
ACENAPHTHENE	420	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
ACETOPHENONE	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.073 J
ANILINE	23	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
ANTHRACENE	2100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
BENZALDEHYDE	700	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 UJ	0.5 UJ
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.50 U	0.032 J	0.032 J	0.5 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5	0.50 U	0.50 U	0.50 U	0.62 U	0.82 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	0.17 J	0.11 J	1 U	0.063 J	1 U
CAPROLACTAM	3500	NON-TACO	1 U	0.34 J	0.51 J	1 U	1 UJ	1 UJ
CARBAZOLE	4.3	TACO	0.5 U	0.50 U	0.50 U	0.50 UJ	0.5 U	0.5 U
CHRYSENE	1.5	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.50 U	0.053 J	0.50 U	0.5 U	0.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0307 20080508 QTR07	FL-03 NTC02GW0308 20080820 QTR08	FL-03 NTC02GW0309 20081120 QTR09	FL-03 NTC02GW0310 20090519 QTR10	FL-03 NTC02GW0311 20091117 QTR11	FL-03 NTC02GW0311-D 20091117 QTR11 NTC02GW0311
DIMETHYL PHTHALATE	NC	NA	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	3.4	1 U	0.40 J	1 U	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	0.59	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
FLUORANTHENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
FLUORENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.12 J	0.50 U	0.5 U	0.5 U
NAPHTHALENE	140	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
PENTACHLOROPHENOL	1	TACO	0.79 J	1 U	1 U	1 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
PHENOL	100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
PYRENE	210	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.5 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U			
DINOSEB	7	TACO	1 U	1 U	1 U			
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 UR	0.05 U	0.05 UJ			
ALPHA-CHLORDANE	2	TACO	0.05 UR	0.05 U	0.05 UJ			
AROCLOR-1254	0.5	TACO	0.2 UR	0.20 U	0.20 UJ			
BETA-BHC	0.037	USEPA TAPWATER	0.05 UR	0.05 U	0.0043 J			
DELTA-BHC	0.011	USEPA TAPWATER	0.05 UR	0.05 U	0.0029 J			
ENDOSULFAN I	42	TACO	0.05 UR	0.05 U	0.05 UJ			
ENDRIN KETONE	2	TACO	0.05 UR	0.05 U	0.05 UJ			
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 UR	0.05 U	0.0033 J			
GAMMA-CHLORDANE	2	TACO	0.05 UR	0.05 U	0.05 UJ			
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	0.830000 U	5 U	4 U			
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U			
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	20 U / 20 U	100 U	20 U	24 U / 24 U	36	46
ANTIMONY	6	TACO	0.32 U / 0.32 U	1 U	0.32 U	0.40 U / 0.40 U	0.40 U	0.40 U
ARSENIC	50	TACO	14 / 11	21	19	32 / 27	24	30
BARIUM	2000	TACO	340 / 320	320	330	340 / 340	250	310
BERYLLIUM	4	TACO	0.23 U / 0.23 U	1 U	0.23 U	0.31 U / 0.31 U	0.31 U	0.31 U
CADMIUM	5	TACO	0.056 U / 0.056 U	0.20 U	0.056 U	0.06 U / 0.06 U	0.06 U	0.06 U
CALCIUM	NC	NA	170000 / 190000	160000	190000 J	170000 / 190000	160000	160000
CHROMIUM	NC	TACO	0.33 U / 2.7	1 UJ	0.81 U	0.95 U / 1 U	0.44	0.45
COBALT	1000	TACO	4.3 / 4.3	3.5	3.4	4.2 / 4.2	2.5	3.2
COPPER	650	TACO	0.63 / 0.6	0.63 J	1.7	1.1 / 1.1	0.79	0.89
IRON	5000	TACO	16000 / 16000	14000	13000 J	19000 / 18000	13000	13000
LEAD	7.5	TACO	0.29 U / 0.29 U	1 U	0.29 U	0.26 U / 0.26 U	0.26 U	0.26 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0307 20080508 QTR07	FL-03 NTC02GW0308 20080820 QTR08	FL-03 NTC02GW0309 20081120 QTR09	FL-03 NTC02GW0310 20090519 QTR10	FL-03 NTC02GW0311 20091117 QTR11	FL-03 NTC02GW0311-D 20091117 QTR11 NTC02GW0311
MAGNESIUM	NC	NA	89000 / 97000	80000	97000 J	89000 / 96000	84000	84000
MANGANESE	150	TACO	83 / 85	80	77	75 / 76	49	60
MERCURY	2	TACO	0.046 U / 0.046 U	0.20 U	0.043 U	0.043 U / 0.043 U	0.048 U	0.048 U
NICKEL	100	TACO	22 / 22	18	20	26 / 20	17	15
POTASSIUM	NC	NA	2100 / 2100	2200	2500	1900 / 2000	2100	2200
SELENIUM	50	TACO	1.8 / 1.1	0.84 UJ	1.9 J	1.4 / 2.3	1.1	2.2
SILVER	50	TACO	0.061 U / 0.061 UJ	0.20 U	0.061 U	0.053 U / 0.053 U	0.053 U	0.053 U
SODIUM	NC	NA	76000 / 85000	63000	77000 J	80000 / 85000	72000	72000
THALLIUM	2	TACO	0.05 U / 0.086	1 U	0.05 U	0.05 U / 0.05 U	0.1	0.058
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	337100 / 374100	305200	366500	340900 / 373000	318100	318200
VANADIUM	49	TACO	0.27 U / 3.9	3 U	0.51 U	0.53 U / 0.44 U	0.30 U	0.30 U
ZINC	5000	TACO	7 U / 8.8	9.2 UJ	9.5	6 / 5.6	10 U	4 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.17	0.15	0.11	0.10 U	0.11 J	0.12 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.7	2 U	2 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	53 U	33	33	37	34	33
CHLORIDE MG/L	200	TACO	150	130 J	130	170	140	140
CYANIDE MG/L	0.2	TACO	0.0032 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.25	0.24	0.3	0.27	0.26	0.26
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 UJ	0.01 UJ	0.0026	0.006 U	0.0042	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.022 J	0.02 U	0.024	0.018	0.022	0.029
NITRITE/NITRATE-N MG/L	10	MCL	0.022 U	0.02 U	0.024	0.018	0.026	0.033
NITRITE-N MG/L	1	MCL	0.0029 U	0.0046 J	0.0042 U	0.002 U	0.0042	0.0042
PH S.U.	6.5 - 8.5	SMCL				6.8 J	6.7 J	6.7 J
SULFATE MG/L	400	TACO	20	22 J	17	16	22	22
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1100	980	1000	1100	1000	1000
TOTAL ORGANIC CARBON MG/L	NC	NA	0.16 U	14	14	19	14	14
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.0048 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.039	0.056 J	0.023 U	0.062	0.036 U	0.033 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	37	31	24	44	31	30
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.78	1.64	1.183	1.92	1.73	
DISSOLVED OXYGEN MG/L	NC	NA	0.35	0.3	0.12	0.19	0.12	
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-50	-39	-43	-37	-46	
PH S.U.	6.5 - 8.5	SMCL	6.5	6.6	6.53	6.29	6.22	
SALINITY %	NC	NA					0.86	
SALINITY PPT	NC	NA	0			0		
TEMPERATURE C	NC	NA	9.92	13.4	10.34	12	10.9	
TURBIDITY NTU	NC	NA	9.32	6.14	5.2	12.7	6.04	

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0312 20100505 QTR12	FL-03 NTC02GW0313 20101117 QTR13	FL-04 FL-04_20060822 20060822 QTR01	FL-04 FL-04_20060822-D 20060822 QTR01 FL-04_20060822	FL-04 FL-04_20070130 20070130 QTR02	FL-04 FL-04_20070430 20070430 QTR03
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.18 J	1 U	0.125 U	0.125 U	0.125 U	0.125 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
ACETONE	6300	TACO	5 U	5 U	2.5 U	2.5 U	3.77	4.82
BENZENE	5	TACO	1 U	0.19 J	0.765	0.641 J	0.702	0.822
CHLOROBENZENE	100	TACO	1 U	1 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROETHANE	21000	USEPA TAPWATER	0.20 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 UJ	0.25 U	0.25 U	0.25 U	0.25 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.75 J	0.72 J	0.25 U	0.25 U	0.25 U	0.25 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	0.493	0.25 U	0.25 U	0.25 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	5.6 J	5 UR	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	1 U	1 U	0.495	0.414 J	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	0.20 J	1 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.50 U	0.50 U	2.5 U	2.5 U	2.5 U	2.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
2,4-DICHLOROPHENOL	21	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	2.5 U	2.6 U	2.5 U	2.5 U
2-CHLOROPHENOL	35	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
4-CHLOROANILINE	28	TACO	1 U	1 U	2.5 U	2.6 U	2.5 U	2.5 U
4-METHYLPHENOL	35	NON-TACO	0.50 U	0.50 U				
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
ACETOPHENONE	3700	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
ANILINE	23	NON-TACO	0.50 U	0.50 U	-99 U	5.21 U	-99 U	5.26 U
ANTHRACENE	2100	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.72 U	0.33 J	2.5 U	2.6 U	2.5 U	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	2.5 U	2.6 U	2.5 U	2.5 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	2.5 U	2.6 U	2.5 U	5.48
CARBAZOLE	4.3	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
DIBENZOFURAN	37	USEPA TAPWATER	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0312 20100505 QTR12	FL-03 NTC02GW0313 20101117 QTR13	FL-04 FL-04_20060822 20060822 QTR01	FL-04 FL-04_20060822-D 20060822 QTR01 FL-04_20060822	FL-04 FL-04_20070130 20070130 QTR02	FL-04 FL-04_20070430 20070430 QTR03
DIMETHYL PHTHALATE	NC	NA	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	2.5 U	2.6 U	2.5 U	2.5 U
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
FLUORENE	280	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
ISOPHORONE	1400	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
NAPHTHALENE	140	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	12.5 U	13 U	0.413	12.5 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
PHENOL	100	TACO	0.50 U	0.50 U	2.5 U	2.6 U	2.5 U	2.5 U
PYRENE	210	TACO	0.50 U	0.50 U	0.0526 U	0.0538 U	0.0526 U	0.0526 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER			1 U	1.05 U	1 U	1 U
DINOSEB	7	TACO			0.5 U	0.526 U	2.55	0.5 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
ALPHA-CHLORDANE	2	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
AROCLOR-1254	0.5	TACO			0.255 U	0.263 U	0.255 U	0.255 U
BETA-BHC	0.037	USEPA TAPWATER			0.0102 U	0.0105 U	0.0102 U	0.0102 U
DELTA-BHC	0.011	USEPA TAPWATER			0.0102 U	0.0105 U	0.0102 U	0.0102 U
ENDOSULFAN I	42	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
ENDRIN KETONE	2	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
GAMMA-BHC (LINDANE)	0.2	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
GAMMA-CHLORDANE	2	TACO			0.0102 U	0.0105 U	0.0102 U	0.0102 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA			2.55 U	2.63 U	2.55 U	2.55 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER			0.7 U		0.7 U	0.7 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	23 U	28 U	305	331	50 U	50 U
ANTIMONY	6	TACO	0.36 U	0.36 U	1.18	1.19	1.87	1.06
ARSENIC	50	TACO	42	47	7.63	8 J	11.2	5 U
BARIUM	2000	TACO	380	280	1150	1160	1330	1200
BERYLLIUM	4	TACO	0.30 U	0.3 U	0.50 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	0.17 J	0.055 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	190000	150000	234000	243000	251000	231000
CHROMIUM	NC	TACO	0.46 U	0.46 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	1000	TACO	4.6	3.2	10.5	10.6 J	10.3	8.21
COPPER	650	TACO	1.3	0.99 J	5 U	5 U	5 U	5 U
IRON	5000	TACO	22000	16000	8590	8730	13200	13000
LEAD	7.5	TACO	0.40 J	0.22 U	2.5 U	2.5 U	2.5 U	2.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-03 NTC02GW0312 20100505 QTR12	FL-03 NTC02GW0313 20101117 QTR13	FL-04 FL-04_20060822 20060822 QTR01	FL-04 FL-04_20060822-D 20060822 QTR01 FL-04_20060822	FL-04 FL-04_20070130 20070130 QTR02	FL-04 FL-04_20070430 20070430 QTR03
MAGNESIUM	NC	NA	99000	82000	141000	143000	173000	153000
MANGANESE	150	TACO	78 J	59	174	177 B	151	147
MERCURY	2	TACO	0.061 U	0.061 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	30	16	24.9	24.7 J	24.6	17.8
POTASSIUM	NC	NA	2100	2200	25900	26100	29900	26900
SELENIUM	50	TACO	1.4	1.6 J	16.8	17.7	22.8	23.5
SILVER	50	TACO	0.061 U	0.061 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	86000	65000	316000	327000	415000	379000
THALLIUM	2	TACO	0.056 U	0.056 U	0.592	0.61	0.05 U	0.744
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	377100	299200	716900	739100	868900	789900
VANADIUM	49	TACO	0.28 U	0.28 U	8.37	12	5 U	5 U
ZINC	5000	TACO	23	5.2 J	5 U	5 U	5 U	5 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.15	0.12	21.8	23.1	28.8	40.1
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	8.6	8.4	7.1	6.99
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	59	27	250	250	214	171
CHLORIDE MG/L	200	TACO	160	110	501	499	697	485
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.24	0.28	0.194	0.185	0.238	0.121
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 U	0.005 U	0.005 U		0.005 U	0.005 U
NITRATE MG/L	10	TACO			0.069	0.062	0.025 U	0.025 U
NITRATE-N MG/L	10	MCL	0.05 U	0.05 U				
NITRITE/NITRATE-N MG/L	10	MCL	0.043 J	0.05 U				
NITRITE-N MG/L	1	MCL	0.01 U	0.01 U				
PH S.U.	6.5 - 8.5	SMCL	7.1 J	7.4 J	6.86	6.97	6.47	6.78
SULFATE MG/L	400	TACO	10	21	27.7	28	32.4	24.4
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1000	950	2210	2190	2310	2250
TOTAL ORGANIC CARBON MG/L	NC	NA	17	11	64.5	67.4	73.4	70.3
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.050 U	0.05 U	0.00406	0.0037 J	0.00333 U	0.00575
TOTAL PHOSPHORUS MG/L	NC	NA	0.0101 U	0.027	0.107	0.127	0.05 U	0.128
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	42	23	39	39	36	33
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.91	1.6				
DISSOLVED OXYGEN MG/L	NC	NA	0.85	0.15				
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-34	3				
PH S.U.	6.5 - 8.5	SMCL	7.04	6.03				
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	11.86	11.09				
TURBIDITY NTU	NC	NA	3.9	9				

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 FL-04_20070816 20070816 QTR04	FL-04 NTC02GW0405 20071113 QTR05	FL-04 NTC02GW0405-D 20071113 QTR05 NTC02GW0405	FL-04 NTC02GW0406 20080226 QTR06	FL-04 NTC02GW0406-D 20080226 QTR06 NTC02GW0406	FL-04 NTC02GW0407 20080507 QTR07
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.125 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	0.25 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	2.5 U	5 U	5 U	5 U	5 U	5 UJ
BENZENE	5	TACO	1.23	1.2	1.2	0.91 J	0.88 J	0.73 J
CHLOROBENZENE	100	TACO	0.125 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	0.5 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1.57	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.312 J	0.40 J	0.41 J	1 U	1 U	0.31 J
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.457 J	1 U	0.35 J	0.35 J	0.35 J	0.26 J
METHYLENE CHLORIDE	5	TACO	0.25 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	25 U	14	13	19 J	18 J	11 J
TOLUENE	1000	TACO	0.25 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.25 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	2.81 U	0.14 J	0.50 U	0.087 J	0.11 J	0.54 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
2,4,5-TRICHLOROPHENOL	700	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
2,4,6-TRICHLOROPHENOL	10	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
2,4-DICHLOROPHENOL	21	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
2,4-DIMETHYLPHENOL	140	TACO	2.81 U	1 U	1 U	1 U	1 U	1.1 U
2-CHLOROPHENOL	35	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	2.81 U	0.50 U	0.50 U	0.5 U	0.22 J	0.54 U
4-CHLOROANILINE	28	TACO	2.81 U	1 U	1 U	1 U	1 U	0.45 J
4-METHYLPHENOL	35	NON-TACO		0.50 U	0.50 U	0.5 U	0.5 U	0.23 J
ACENAPHTHENE	420	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
ACETOPHENONE	3700	USEPA TAPWATER	2.81 U	0.50 U	0.50 U	0.079 U	0.085 U	0.5 U
ANILINE	23	NON-TACO	5.62 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
ANTHRACENE	2100	TACO	0.0526 U	0.50 U	0.50 U	0.016 J	0.041 J	0.54 U
BENZALDEHYDE	700	NON-TACO	2.81 U	2.5	2.5	0.5 U	0.5 U	0.58 J
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.81 U	0.83	0.50 U	0.57	0.5 U	0.54 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.81 U	1 U	1 U	0.11 J	1 U	1.1 U
CAPROLACTAM	3500	NON-TACO	2.81 U	1 U	1 U	1.2 J	1.5	1.1 U
CARBAZOLE	4.3	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
CHRYSENE	1.5	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
DIBENZOFURAN	37	USEPA TAPWATER	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
DIETHYL PHTHALATE	5600	TACO	2.81 U	0.50 U	0.50 U	0.15 U	0.14 U	0.075 J

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 FL-04_20070816 20070816 QTR04	FL-04 NTC02GW0405 20071113 QTR05	FL-04 NTC02GW0405-D 20071113 QTR05 NTC02GW0405	FL-04 NTC02GW0406 20080226 QTR06	FL-04 NTC02GW0406-D 20080226 QTR06 NTC02GW0406	FL-04 NTC02GW0407 20080507 QTR07
DIMETHYL PHTHALATE	NC	NA	2.81 U	0.50 U	0.50 U	0.5 U	0.13 J	0.54 U
DI-N-BUTYL PHTHALATE	700	TACO	2.81 U	1 U	1 U	1 U	1 U	1.1 U
DI-N-OCTYL PHTHALATE	140	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
FLUORANTHENE	280	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
FLUORENE	280	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.032 J
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
ISOPHORONE	1400	TACO	2.81 U	0.50 U	0.50 U	0.12 U	0.11 U	0.11 J
NAPHTHALENE	140	TACO	0.0526 U	0.059 J	0.095 J	0.5 U	0.5 U	0.054 J
PENTACHLOROPHENOL	1	TACO	14 U	1 U	1 U	1 U	1 U	1.1 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.047 J	0.022 J
PHENOL	100	TACO	2.81 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
PYRENE	210	TACO	0.0526 U	0.50 U	0.50 U	0.5 U	0.5 U	0.54 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	0.532 U	2 U	2.2 U	20 UJ	20 UJ	1.2 J
DINOSEB	7	TACO	0.266 U	1 U	1.1 U	10 U	10 UJ	1 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
ALPHA-CHLORDANE	2	TACO	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
AROCLOR-1254	0.5	TACO	0.281 U	0.20 U	0.21 U	0.2 U	0.2 U	0.2 UJ
BETA-BHC	0.037	USEPA TAPWATER	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
DELTA-BHC	0.011	USEPA TAPWATER	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
ENDOSULFAN I	42	TACO	0.0112 U	0.05 U	0.0036 J	0.05 U	0.05 U	0.05 UJ
ENDRIN KETONE	2	TACO	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
GAMMA-BHC (LINDANE)	0.2	TACO	0.0112 U	0.05 U	0.053 U	0.05 U	0.0035 J	0.05 UJ
GAMMA-CHLORDANE	2	TACO	0.0112 U	0.05 U	0.053 U	0.05 U	0.05 U	0.05 UJ
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	2.75 U	5 U	5 U	5 U	5 U	0.830000 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	0.7 U	1 U	0.835 J	2.5 U	2.5 U	2.5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	50 U	44 U	44 U	44 U / 44 U	44 U / 44 U	20 U
ANTIMONY	6	TACO	2.42	1 U	1.2 U	1.3 / 1.1	1.3 / 1.3	0.93 U
ARSENIC	50	TACO	5 U	6.4	5.5	7 / 7.2	7.2 / 6.8	8
BARIUM	2000	TACO	1300	1200	1200	1500 / 1500	1500 / 1600	1100
BERYLLIUM	4	TACO	0.50 U	0.31 U	0.31 U	0.31 U / 0.31 U	0.31 U / 0.31 U	0.23 U
CADMIUM	5	TACO	2.5 U	0.062 U	0.062 U	0.062 U / 0.062 U	0.062 U / 0.062 U	0.056 U
CALCIUM	NC	NA	206000	230000 J	240000 J	250000 / 230000 J	240000 / 240000 J	200000
CHROMIUM	NC	TACO	2.5 U	1.5	1.4	0.31 U / 0.31 U	3.4 / 0.31 U	2.2
COBALT	1000	TACO	6.83 J	7.4	7.3	10-Oct	10-Oct	7.4
COPPER	650	TACO	5 U	1.1	1.2	11 J / 0.93 J	1.2 J / 0.70 J	0.91
IRON	5000	TACO	10600	12000 J	12000 J	14000 / 14000	14000 / 14000	13000
LEAD	7.5	TACO	50 U	0.33 U	0.61	0.33 U / 0.33 U	0.33 U / 0.33 U	0.29 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 FL-04_20070816 20070816 QTR04	FL-04 NTC02GW0405 20071113 QTR05	FL-04 NTC02GW0405-D 20071113 QTR05 NTC02GW0405	FL-04 NTC02GW0406 20080226 QTR06	FL-04 NTC02GW0406-D 20080226 QTR06 NTC02GW0406	FL-04 NTC02GW0407 20080507 QTR07
MAGNESIUM	NC	NA	143000	150000 J	150000 J	170000 / 170000 J	170000 / 170000 J	130000
MANGANESE	150	TACO	117	130	140	150 / 150	150 / 150	140
MERCURY	2	TACO	0.10 U	0.084 U	0.092 U	0.046 U / 0.046 U	0.046 U / 0.046 U	0.046 U
NICKEL	100	TACO	12.8 J	20	23	20 / 22	20 / 20	19
POTASSIUM	NC	NA	55200	32000 J	33000 J	36000 / 36000	37000 / 37000	28000
SELENIUM	50	TACO	24.7	0.92 U	0.92 U	2.7 / 4.6 J	0.92 U / 8.4 J	3.9
SILVER	50	TACO	5 U	0.12 U	0.12 U	0.12 U / 0.12 U	0.12 U / 0.12 U	0.061 U
SODIUM	NC	NA	340000	350000	350000	440000 / 420000 J	430000 / 440000 J	330000
THALLIUM	2	TACO	0.727	0.17 U	0.17 U	0.17 U / 0.17 U	0.17 U / 0.17 U	0.05 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	744200	762000	773000	896000 / 856000	877000 / 887000	688000
VANADIUM	49	TACO	100 U	1.6	1.6	2.7 / 2.6	2.7 / 2.5	1.8
ZINC	5000	TACO	5 U	10	11	0.84 U / 0.84 U	0.84 U / 0.84 U	4.1 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	48	29 J	29 J	34	34	27
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	10.9	7	9.8	7.1	9.5	8.8 J
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	168	38 J	38 J	37	37	150
CHLORIDE MG/L	200	TACO	463	500	490	580	580	450
CYANIDE MG/L	0.2	TACO	0.005 U	0.0015	0.0015	0.001900 U	0.001900 U	0.0033 U
FLUORIDE MG/L	4	TACO	0.226	0.17	0.18	0.17	0.17	0.16
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.0041 U	0.0041 U	0.0041 U	0.0074	0.0047 J
NITRATE MG/L	10	TACO	0.036 J					
NITRATE-N MG/L	10	MCL		0.029 U	0.029 U	0.016 U	0.028	0.024 J
NITRITE/NITRATE-N MG/L	10	MCL		0.029 U	0.029 U	0.016 U	0.032	0.028 U
NITRITE-N MG/L	1	MCL		0.0029 U	0.0029 U	0.0034	0.0042	0.0037 J
PH S.U.	6.5 - 8.5	SMCL	6.84					
SULFATE MG/L	400	TACO	14	3.9	3.1	13	12	46
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	2090	2100	2100	2300	2300	1900
TOTAL ORGANIC CARBON MG/L	NC	NA	34	48	49	51	48 J	43
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00491 J	0.0038	0.05 U	0.004800 U	0.004800 U	0.0048 UJ
TOTAL PHOSPHORUS MG/L	NC	NA	0.263	0.22 J	0.25 J	0.34	0.3	0.21
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	24.5	51 J	190 J	40	39	31
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA		3.7		3.94		3.49
DISSOLVED OXYGEN MG/L	NC	NA		0.1		0.14		0.13
OXIDATION REDUCTION POTENTIAL MV	NC	NA		-79		-88		-90
PH S.U.	6.5 - 8.5	SMCL		6.5		6.75		6.72
SALINITY %	NC	NA						
SALINITY PPT	NC	NA		0		0		0
TEMPERATURE C	NC	NA		13.1		8.38		11.41
TURBIDITY NTU	NC	NA		1.7		2.8		1.42

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0407-D 20080507 QTR07 NTC02GW0407	FL-04 NTC02GW0408 20080821 QTR08	FL-04 NTC02GW0408-D 20080821 QTR08 NTC02GW0408	FL-04 NTC02GW0409 20081119 QTR09	FL-04 NTC02GW0409-D 20081119 QTR09 NTC02GW0409	FL-04 NTC02GW0410 20090518 QTR10
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	0.13 J	1 U	1 U
ACETONE	6300	TACO	5 U	5 UJ	5 UJ	2.9 U	2.2 U	5 U
BENZENE	5	TACO	1	1.4	1.4	1	1.3	0.66 J
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	0.11 J	0.13 J	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.34 J	0.44 J	0.46 J	0.41 J	0.42 J	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.37 J	0.43 J	0.49 J	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
TETRAHYDROFURAN	NC	NA	13 J	14 J	13 J	13 J	12 J	11
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.5 U	0.50 U	0.50 U			0.50 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.5 U	0.071 J	0.50 U	0.50 U	0.50 U	0.50 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.5 U	0.04 J	0.50 U	0.50 U	0.50 U	0.50 U
2,4-DICHLOROPHENOL	21	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	0.19 J	0.20 J	0.20 J	0.18 J	1 U
2-CHLOROPHENOL	35	TACO	0.5 U	0.50 U	0.50 U	0.06 J	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.02 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACETOPHENONE	3700	USEPA TAPWATER	0.5 U	0.061 J	0.073 J	0.06 U	0.061 U	0.50 U
ANILINE	23	NON-TACO	0.5 U	0.12 J	0.10 J	0.50 U	0.50 U	0.50 U
ANTHRACENE	2100	TACO	0.5 U	0.03 J	0.50 U	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	1.2 J	0.34 J	0.40 J	0.19 J	0.26 J	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.11 J	0.042 J	0.04 J	0.091 J	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.11 J	0.50 U	0.50 U	0.50 U	0.071 J
BENZO(B)FLUORANTHENE	0.18	TACO	0.5 U	0.091 J	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.11 J	0.50 U	0.50 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5 U	11 J	0.50 UJ	0.50 U	0.50 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	0.35 J	1 U	0.15 J	0.25 J	1 U
CAPROLACTAM	3500	NON-TACO	1.7	1 U	1 U	1 U	1 U	1 U
CARBAZOLE	4.3	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
CHRYSENE	1.5	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIBENZOFURAN	37	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.071 J	0.50 U	0.50 U	0.11 J	0.14 J	0.50 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0407-D 20080507 QTR07 NTC02GW0407	FL-04 NTC02GW0408 20080821 QTR08	FL-04 NTC02GW0408-D 20080821 QTR08 NTC02GW0408	FL-04 NTC02GW0409 20081119 QTR09	FL-04 NTC02GW0409-D 20081119 QTR09 NTC02GW0409	FL-04 NTC02GW0410 20090518 QTR10
DIMETHYL PHTHALATE	NC	NA	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	2.4	1.8 U	1 U	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
FLUORANTHENE	280	TACO	0.041 J	0.04 J	0.021 J	0.50 U	0.50 U	0.50 U
FLUORENE	280	TACO	0.041 J	0.081 J	0.50 U	0.02 J	0.50 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.5 U	0.051 J	0.50 U	0.50 U	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.50 U	0.12 J	0.14 J	0.50 U
NAPHTHALENE	140	TACO	0.031 J	0.02 J	0.50 U	0.50 U	0.50 U	0.50 U
PENTACHLOROPHENOL	1	TACO	1 U	0.48 J	1 U	1 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.04 J	0.50 U	0.50 U	0.50 U	0.50 U
PHENOL	100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PYRENE	210	TACO	0.5 U	0.081 J	0.50 U	0.03 J	0.50 U	0.061 J
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	0.83 J	2 U	2 U	2 U	2 U	
DINOSEB	7	TACO	1 U	1 U	1 U	1 U	1 U	
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 UJ	0.05 U	0.05 U	0.0033 J	0.0044 J	
ALPHA-CHLORDANE	2	TACO	0.05 UJ	0.05 U	0.05 U	0.0047 J	0.0029 J	
AROCLOR-1254	0.5	TACO	0.2 UJ	0.20 U	0.20 U	0.20 U	0.20 U	
BETA-BHC	0.037	USEPA TAPWATER	0.05 UJ	0.05 U	0.05 U	0.0078 J	0.05 U	
DELTA-BHC	0.011	USEPA TAPWATER	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	
ENDOSULFAN I	42	TACO	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	
ENDRIN KETONE	2	TACO	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	
GAMMA-CHLORDANE	2	TACO	0.05 UJ	0.05 U	0.05 U	0.0031 J	0.0027 J	
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	0.830000 U	5 U	5 U	4 U	4 U	
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	20 U	100 U	100 U	20 U	20 U	24 U
ANTIMONY	6	TACO	0.95 U	0.78 J	0.76 J	0.91	0.88	0.87 U
ARSENIC	50	TACO	6.3	9.3	8.9	16 J	9.9 J	8.5
BARIUM	2000	TACO	1300	1300	1100	1300	1400	920
BERYLLIUM	4	TACO	0.23 U	1 U	1 U	0.23 U	0.23 U	0.31 U
CADMIUM	5	TACO	0.11 U	0.20 U	0.20 U	0.056 U	0.056 U	0.06 U
CALCIUM	NC	NA	210000	210000	210000	250000 J	270000 J	190000
CHROMIUM	NC	TACO	2.4	2.1	2	2.9	2.5	3.1 U
COBALT	1000	TACO	8.1	7.3	7	8.3	8.2	6.1
COPPER	650	TACO	0.92	1.3	1.2	1.4	1.4	1.4
IRON	5000	TACO	13000	12000	12000	15000 J	16000 J	13000
LEAD	7.5	TACO	0.29 U	1 U	1 U	0.37	0.29 U	0.67

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0407-D 20080507 QTR07 NTC02GW0407	FL-04 NTC02GW0408 20080821 QTR08	FL-04 NTC02GW0408-D 20080821 QTR08 NTC02GW0408	FL-04 NTC02GW0409 20081119 QTR09	FL-04 NTC02GW0409-D 20081119 QTR09 NTC02GW0409	FL-04 NTC02GW0410 20090518 QTR10
MAGNESIUM	NC	NA	150000	140000	140000	170000 J	180000 J	130000
MANGANESE	150	TACO	140	120	110	120	130	130
MERCURY	2	TACO	0.046 U	0.20 U	0.20 U	0.043 U	0.043 U	0.043 U
NICKEL	100	TACO	20	20	20	18	15	13
POTASSIUM	NC	NA	37000	32000	32000	31000 J	37000 J	22000
SELENIUM	50	TACO	4.6	1.6 U	2.1	7.4 J	3.8 J	2.1
SILVER	50	TACO	0.061 U	0.20 U	0.20 U	0.079	0.061 U	0.085
SODIUM	NC	NA	380000	330000	330000	370000 J	380000 J	270000
THALLIUM	2	TACO	0.05 U	1 U	1 U	0.05 U	0.05 U	0.05 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	777000	712000	712000	821000	867000	612000
VANADIUM	49	TACO	2.1	1.9 J	1.9 J	2.4	2.5	2
ZINC	5000	TACO	12 U	6.1 UJ	4 UJ	12	13	3.6
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	37	38	39	35 J	37 J	23
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	16.0 J	12	12	7.3	8.1	10
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	160	150	160	160	170	90
CHLORIDE MG/L	200	TACO	480	520 J	520 J	530	550	440
CYANIDE MG/L	0.2	TACO	0.0036 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.15	0.14	0.13	0.11	0.16	0.19
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0059 J	0.01 U	0.01 U	0.0091 J	0.0027 J	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.025 J	0.02 U	0.02 U	0.066	0.094	0.28
NITRITE/NITRATE-N MG/L	10	MCL	0.025 U	0.02 U	0.02 U	0.1	0.12	0.28
NITRITE-N MG/L	1	MCL	0.0029 U	0.0042 U	0.0042 U	0.034	0.026	0.002 U
PH S.U.	6.5 - 8.5	SMCL						6.9 J
SULFATE MG/L	400	TACO	39	9.4 J	6.6 J	13	9.7	20
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	2000	2100	2200	2100	2200	1800
TOTAL ORGANIC CARBON MG/L	NC	NA	46	46	45	42	46	35
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.0048 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0038
TOTAL PHOSPHORUS MG/L	NC	NA	0.26	0.29 J	0.29 J	0.27	0.27 U	0.24
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	33	31	31	37	32	33
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	3.49	3.64	3.64	3.56		3.35
DISSOLVED OXYGEN MG/L	NC	NA	0.13	0.91	0.91	0.09		0.23
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-90	-92	-92	-101		-67
PH S.U.	6.5 - 8.5	SMCL	6.72	6.69	6.69	7.22		6.48
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0					0
TEMPERATURE C	NC	NA	11.41	13.58	13.58	11.49		11.08
TURBIDITY NTU	NC	NA	1.42	1.06	1.06	5.92		3.96

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0411 20091117 QTR11	FL-04 NTC02GW0412 20100505 QTR12	FL-04 NTC02GW0412-D 20100505 QTR12 NTC02GW0412	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 FL-05_20060817 20060817 QTR01
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	0.125 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	0.25 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	2.5 U
BENZENE	5	TACO	1	0.71 J	0.68 J	1	1	0.125 U
CHLOROBENZENE	100	TACO	0.12 J	1 U	1 U	1 U	1 U	0.125 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	0.5 U
CHLOROMETHANE	190	USEPA TAPWATER	1.0 U	1 U	1 U	1 UJ	1 UJ	0.25 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.3 J	0.24 J	0.28 J	1 U	1 U	0.25 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.35 J	0.25 J	0.23 J	1 U	1 U	0.25 U
METHYLENE CHLORIDE	5	TACO	1.0 U	1 U	1 U	1 U	1 U	0.25 U
TETRAHYDROFURAN	NC	NA	12 J	10 J	9.6 J	9.1 J	8.2 J	25 U
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	-99 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	0.25 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
2,4-DICHLOROPHENOL	21	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
2,4-DIMETHYLPHENOL	140	TACO	1.1 U	1 U	1 U	1.1 U	1 U	2.5 U
2-CHLOROPHENOL	35	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
4-CHLOROANILINE	28	TACO	1.1 U	1 U	1 U	1.1 U	1 U	2.5 U
4-METHYLPHENOL	35	NON-TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	
ACENAPHTHENE	420	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
ACETOPHENONE	3700	USEPA TAPWATER	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
ANILINE	23	NON-TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	-99 U
ANTHRACENE	2100	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	0.32 J	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	1.2 U	1.0 U	1.0 U	0.55	0.45 J	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	0.096 J	1 U	1 U	1.1 U	1 U	2.5 U
CAPROLACTAM	3500	NON-TACO	1.1 UJ	1 UJ	1 UJ	1.1 UJ	1 UJ	2.5 U
CARBAZOLE	4.3	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
CHRYSENE	1.5	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
DIBENZOFURAN	37	USEPA TAPWATER	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0411 20091117 QTR11	FL-04 NTC02GW0412 20100505 QTR12	FL-04 NTC02GW0412-D 20100505 QTR12 NTC02GW0412	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 FL-05_20060817 20060817 QTR01
DIMETHYL PHTHALATE	NC	NA	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	1.1 U	1 U	1 U	1.1 U	1 U	2.5 U
DI-N-OCTYL PHTHALATE	140	TACO	0.12 J	0.50 U	0.50 U	0.53 U	0.50 U	3.22
FLUORANTHENE	280	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
FLUORENE	280	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
ISOPHORONE	1400	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
NAPHTHALENE	140	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
PENTACHLOROPHENOL	1	TACO	1.1 U	1 U	1 U	1.1 U	1 U	12.5 U
PHENANTHRENE	210	NON-TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
PHENOL	100	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	2.5 U
PYRENE	210	TACO	0.53 U	0.50 U	0.50 U	0.53 U	0.50 U	0.0526 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER						1 U
DINOSEB	7	TACO						0.5 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO						0.0102 U
ALPHA-CHLORDANE	2	TACO						0.0102 U
AROCLOR-1254	0.5	TACO						0.391
BETA-BHC	0.037	USEPA TAPWATER						0.0102 U
DELTA-BHC	0.011	USEPA TAPWATER						0.0102 U
ENDOSULFAN I	42	TACO						0.0102 U
ENDRIN KETONE	2	TACO						0.0102 U
GAMMA-BHC (LINDANE)	0.2	TACO						0.0102 U
GAMMA-CHLORDANE	2	TACO						0.0102 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA						2.55 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER						0.7 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	96	23 U	23 U	28 U	28 U	301
ANTIMONY	6	TACO	0.72	0.74 J	0.69 J	0.74 J	0.97 J	0.25 U
ARSENIC	50	TACO	7.8	7.9	7.5	4.4	3.5	7.65
BARIUM	2000	TACO	1200	1200	1300	1200	1200	31.9
BERYLLIUM	4	TACO	0.31 U	0.30 U	0.30 U	0.3 U	0.3 U	0.50 U
CADMIUM	5	TACO	0.06 U	0.055 U	0.055 U	0.055 U	0.055 U	2.5 U
CALCIUM	NC	NA	170000	200000	200000	170000	170000	45300
CHROMIUM	NC	TACO	2.1	1.9	1.7	2	2.1 U	2.5 U
COBALT	1000	TACO	6.3	7.3	7.3	6.5	6.6	2.5 U
COPPER	650	TACO	1	1.1	1	1.7	2	5 U
IRON	5000	TACO	11000	14000	14000	12000	12000	267
LEAD	7.5	TACO	0.26 U	0.61 J	0.22 U	0.22 U	0.24 J	2.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-04 NTC02GW0411 20091117 QTR11	FL-04 NTC02GW0412 20100505 QTR12	FL-04 NTC02GW0412-D 20100505 QTR12 NTC02GW0412	FL-04 NTC02GW0413 20101117 QTR13	FL-04 NTC02GW0413-D 20101117 QTR13 NTC02GW0413	FL-05 FL-05_20060817 20060817 QTR01
MAGNESIUM	NC	NA	120000	140000	140000	130000	130000	37200
MANGANESE	150	TACO	120	160 J	160 J	100	100	42.7
MERCURY	2	TACO	0.048 U	0.061 U	0.061 U	0.061 U	0.061 U	0.131
NICKEL	100	TACO	12	14	15	17	17	5 U
POTASSIUM	NC	NA	33000	28000	27000	39000	41000	1720
SELENIUM	50	TACO	4.7	4.2 J	7.2 J	2.3 J	4.9 J	1.51
SILVER	50	TACO	0.053 U	0.061 U	0.061 U	0.061 U	0.079 J	5 U
SODIUM	NC	NA	260000	330000	330000	320000	320000	40800
THALLIUM	2	TACO	0.18	0.056 U	0.056 U	0.056 U	0.056 U	0.762
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	583000	698000	697000	659000	661000	125020
VANADIUM	49	TACO	1.8	1.7 J	1.7 J	1.9 J	2.1 J	6.18
ZINC	5000	TACO	3.6 U	17 J	7 J	4.1 J	7 J	5 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	36 J	28	30	43	43	0.308
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	14	13	13	18	18	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	130	140	140	130	130	10 U
CHLORIDE MG/L	200	TACO	390	430	440	440	440	20.6
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.16	0.15	0.14	0.16	0.16	0.691
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0088	0.004 U	0.0052 U	0.0061 U	0.0083 U	0.005 U
NITRATE MG/L	10	TACO						0.032
NITRATE-N MG/L	10	MCL	0.016 U	0.05 U	0.05 U	0.05 U	0.05 U	
NITRITE/NITRATE-N MG/L	10	MCL	0.017	0.023 J	0.021 J	0.05 U	0.05 U	
NITRITE-N MG/L	1	MCL	0.0031	0.01 U	0.01 U	0.0033 J	0.0054 J	
PH S.U.	6.5 - 8.5	SMCL	6.8 J	7.3 J	7.4 J	7.2 J	7.2 J	7.29
SULFATE MG/L	400	TACO	9.8	15	15	2.4	2.5	137
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1700	1900	1900	1900	1900	432
TOTAL ORGANIC CARBON MG/L	NC	NA	34	35	35	41	43	5.63
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.050 U	0.050 U	0.0029 J	0.05 U	0.00333 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.24	0.0435 J	0.0896 J	0.23	0.29	0.05 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	49	37	37	32	32	5
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	3.23	3.47		3.3		
DISSOLVED OXYGEN MG/L	NC	NA	0.16	1.16		0.22		
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-94	-152		-160		
PH S.U.	6.5 - 8.5	SMCL	6.42	7.29		6.62		
SALINITY %	NC	NA	1.67					
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	11.3	10.17		11.98		
TURBIDITY NTU	NC	NA	9.1	2.74		2.3		

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 FL-05_20070110 20070110 QTR02	FL-05 FL-05_20070425 20070425 QTR03	FL-05 FL-05_20070809 20070809 QTR04	FL-05 NTC02GW0505 20071113 QTR05	FL-05 NTC02GW0506 20080225 QTR06	FL-05 NTC02GW0507 20080507 QTR07
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.125 U	0.125 U	0.125 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	5 U	5 U	5 UJ
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	1 U	1 U	1 U
CHLOROBENZENE	100	TACO	0.125 U	0.125 U	0.125 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.518 J	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	5 U	5 UR	5 UR
TOLUENE	1000	TACO	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.04 J
2,4,5-TRICHLOROPHENOL	700	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
2,4-DICHLOROPHENOL	21	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
2,4-DIMETHYLPHENOL	140	TACO	2.5 U	2.5 U	2.75 U	1 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.051 U	0.02 J	0.5 U	0.05 J
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
4-CHLOROANILINE	28	TACO	2.5 U	2.5 U	2.75 U	1 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO				0.50 U	0.5 U	0.5 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.02 J
ACETOPHENONE	3700	USEPA TAPWATER	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
ANILINE	23	NON-TACO	-99 U	5.26 U	5.49 U	0.50 U	0.5 U	0.5 U
ANTHRACENE	2100	TACO	0.0526 U	0.0526 U	0.051 U	0.02 J	0.5 U	0.5 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.75 U	1.9	0.5 U	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.051 U	0.039 J	0.5 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.051 U	0.029 J	0.5 U	0.5 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.5 U	2.75 U	1.6	0.43 J	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.75 U	1 U	0.092 J	1 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.75 U	1 U	1 U	1 U
CARBAZOLE	4.3	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.051 U	0.029 J	0.5 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.058 U	0.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 FL-05_20070110 20070110 QTR02	FL-05 FL-05_20070425 20070425 QTR03	FL-05 FL-05_20070809 20070809 QTR04	FL-05 NTC02GW0505 20071113 QTR05	FL-05 NTC02GW0506 20080225 QTR06	FL-05 NTC02GW0507 20080507 QTR07
DIMETHYL PHTHALATE	NC	NA	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.75 U	0.79 J	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.051 U	0.039 J	0.5 U	0.5 U
FLUORENE	280	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.5 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.5 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.046 U	0.5 U
NAPHTHALENE	140	TACO	0.0526 U	0.0526 U	0.051 U	0.059 J	0.5 U	1.1
PENTACHLOROPHENOL	1	TACO	12.5 U	12.5 U	13.7 U	0.42 J	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.051 U	0.069 J	0.5 U	0.5 U
PHENOL	100	TACO	2.5 U	2.5 U	2.75 U	0.50 U	0.5 U	0.5 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.051 U	0.50 U	0.5 U	0.5 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	1 U	1 U	0.543 U	2 U	2 UJ	2 U
DINOSEB	7	TACO	0.5 U	0.5 U	0.272 U	1 U	1 UJ	1 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
AROCLOR-1254	0.5	TACO	0.255 U	0.255 U	0.269 U	0.20 U	0.2 U	0.2 UJ
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
DELTA-BHC	0.011	USEPA TAPWATER	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
GAMMA-BHC (LINDANE)	0.2	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0108 U	0.05 U	0.05 U	0.05 UJ
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.78 U	5 U	5 U	0.830000 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	0.7 U	0.7 U	0.7 U	1 U	2.5 U	2.5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	71.4	5250	934	20000 J / 44 U	1100 J / 44 U	1200 / 20 U
ANTIMONY	6	TACO	0.25 U	0.619	1.15	0.91 J / 0.91 U	0.44 U / 0.44 U	0.32 U / 0.32 U
ARSENIC	50	TACO	5.29	33.5	5 U	10 / 4.3	4.6 / 4.9	5.2 / 4.7
BARIUM	2000	TACO	46.7	84	37	190 / 34	47 / 40	42 / 35
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	1.7 / 0.31 U	0.31 U / 0.31 U	0.23 U / 0.23 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	0.37 / 0.07	0.062 U / 0.062 U	0.056 U / 0.056 U
CALCIUM	NC	NA	71400	74800	75400	120000 J / 57000 J	77000 / 78000 J	74000 / 68000
CHROMIUM	NC	TACO	2.5 U	6.62	2.5 U	51 J / 0.54 U	2.3 / 0.31 U	1.7 / 0.87
COBALT	1000	TACO	2.5 U	2.73	2.5 U	21 / 0.64	1.7 / 0.85	1.2 / 0.71
COPPER	650	TACO	5 U	8.26	5 U	38 / 1	2.3 J / 0.88 J	2.5 / 0.74
IRON	5000	TACO	280	5110	1090	23000 / 290 J	1800 / 420	1500 / 330
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	16 / 0.33 U	0.58 / 0.33 U	1.2 / 0.29 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 FL-05_20070110 20070110 QTR02	FL-05 FL-05_20070425 20070425 QTR03	FL-05 FL-05_20070809 20070809 QTR04	FL-05 NTC02GW0505 20071113 QTR05	FL-05 NTC02GW0506 20080225 QTR06	FL-05 NTC02GW0507 20080507 QTR07
MAGNESIUM	NC	NA	64200	57300	56300	71000 J / 43000 J	55000 / 59000 J	56000 / 54000
MANGANESE	150	TACO	25.9	90.3	36.1	580 / 24	45 / 17	33 / 11
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.046 U / 0.053 U	0.046 U / 0.046 U	0.046 U / 0.046 U
NICKEL	100	TACO	5 U	7.39	5 U	58 / 3.5	5.4 / 5.9	8.5 / 4.6
POTASSIUM	NC	NA	1800	3880	2150	9000 / 1600	2000 / 1600	2200 / 1600
SELENIUM	50	TACO	1.45	1.57	2.28	1 / 0.92 U	0.92 U / 0.92 U	0.58 / 0.30 U
SILVER	50	TACO	5 U	5 U	5 U	0.28 / 0.12 U	0.12 U / 0.12 U	0.061 U / 0.061 UJ
SODIUM	NC	NA	47300	46100	48500	50000 J / 45000 J	45000 / 50000 J	47000 / 45000
THALLIUM	2	TACO	0.05 U	0.05 U	0.283	0.46 / 0.17 U	0.17 U / 0.17 U	0.05 U / 0.05 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	184700	182080	182350	250000 / 146600	179000 / 188600	179200 / 168600
VANADIUM	49	TACO	5 U	5 U	25 U	56 / 0.83 U	2.4 / 0.83 U	1.9 / 0.3
ZINC	5000	TACO	5 U	12.5	5 U	90 J / 14 J	0.84 U / 0.84 U	15 U / 7.4 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.318	0.35	0.41	0.25	0.38	0.41
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	1 U	1 U	1 U	2 U	2 U	2.0 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	17.4	15	26.2	14 J	18	15
CHLORIDE MG/L	200	TACO	47.6	34.6	33.2	30	41	36
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.001900 U	0.0026 U
FLUORIDE MG/L	4	TACO	0.613	0.514	0.622	0.65	0.48	0.51
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.0041 U	0.0041 U	0.0082 J
NITRATE MG/L	10	TACO	0.031	0.025 U	0.025 U			
NITRATE-N MG/L	10	MCL				0.029 U	0.027	0.022 J
NITRITE/NITRATE-N MG/L	10	MCL				0.029 U	0.031	0.022 U
NITRITE-N MG/L	1	MCL				0.0029 U	0.0044	0.0029 U
PH S.U.	6.5 - 8.5	SMCL	7.88	7.14	7.79			
SULFATE MG/L	400	TACO	204	153	184	140	170	180
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	608	562	544	500	590	580
TOTAL ORGANIC CARBON MG/L	NC	NA	8.04	4.92	2.03	5.7	5.7	6
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00575	0.00333 U	0.00333 U	0.05 U	0.004800 U	0.0048 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.089	0.06	0.1 U	0.042 J	0.027	0.026
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	2.5 U	51.5	27.5	140 J	28	33
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA				0.776	0.968	0.917
DISSOLVED OXYGEN MG/L	NC	NA				0.11	0.15	3.54
OXIDATION REDUCTION POTENTIAL MV	NC	NA				-167	-139	-173
PH S.U.	6.5 - 8.5	SMCL				7.95	7.49	7.93
SALINITY %	NC	NA						
SALINITY PPT	NC	NA				0	0	0
TEMPERATURE C	NC	NA				11.4	9.5	12.48
TURBIDITY NTU	NC	NA				48	39	23.4

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 NTC02GW0508 20080820 QTR08	FL-05 NTC02GW0509 20081118 QTR09	FL-05 NTC02GW0510 20090519 QTR10	FL-05 NTC02GW0511 20091116 QTR11	FL-05 NTC02GW0512 20100506 QTR12	FL-05 NTC02GW0513 20101118 QTR13
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	5 UJ	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 UJ
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 UJ	1 UJ	1.0 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UJ	5 UR	5 U	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.50 U		0.56 U	0.5 U	0.50 U	0.50 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
2,4-DICHLOROPHENOL	21	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	1.1 U	1 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1.1 U	1 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
ACETOPHENONE	3700	USEPA TAPWATER	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
ANILINE	23	NON-TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
ANTHRACENE	2100	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	0.56 U	0.5 UJ	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.79	2	1.3 U	0.92 U	0.46 J
BUTYL BENZYL PHTHALATE	1400	TACO	0.30 J	0.074 J	1.1 U	0.062 J	1 U	0.061 J
CAPROLACTAM	3500	NON-TACO	0.29 J	0.21 J	1.1 U	1 UJ	1 UJ	1 UJ
CARBAZOLE	4.3	TACO	0.50 U	0.50 U	0.56 UJ	0.5 U	0.50 U	0.50 U
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
DIBENZOFURAN	37	USEPA TAPWATER	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.042 J	0.56 U	0.5 U	0.50 U	0.50 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 NTC02GW0508 20080820 QTR08	FL-05 NTC02GW0509 20081118 QTR09	FL-05 NTC02GW0510 20090519 QTR10	FL-05 NTC02GW0511 20091116 QTR11	FL-05 NTC02GW0512 20100506 QTR12	FL-05 NTC02GW0513 20101118 QTR13
DIMETHYL PHTHALATE	NC	NA	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	0.31 J	1 U	1 U	0.69 J
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.56 U	0.042 J	0.50 U	0.50 U
FLUORENE	280	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.50 U	0.12 J	0.56 U	0.5 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.50 U	0.011 J	0.56 U	0.5 U	0.50 U	0.082 J
PENTACHLOROPHENOL	1	TACO	1 U	1 U	1.1 U	1 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.021 J	0.56 U	0.5 U	0.50 U	0.031 J
PHENOL	100	TACO	0.50 U	0.50 U	0.56 U	0.5 U	0.50 U	0.50 U
PYRENE	210	TACO	0.50 U	0.50 U	0.56 U	0.073 J	0.50 U	0.50 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	2 U	2 U				
DINOSEB	7	TACO	1 U	1 U				
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 U	0.054 U				
ALPHA-CHLORDANE	2	TACO	0.05 U	0.054 U				
AROCLOR-1254	0.5	TACO	0.20 U	0.22 U				
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.054 U				
DELTA-BHC	0.011	USEPA TAPWATER	0.05 U	0.054 U				
ENDOSULFAN I	42	TACO	0.05 U	0.054 U				
ENDRIN KETONE	2	TACO	0.05 U	0.0061 J				
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 U	0.054 U				
GAMMA-CHLORDANE	2	TACO	0.05 U	0.054 U				
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	5 U	4 U				
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	2.5 U	2.5 U				
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	380	20 U / 20 U	4000 / 55	690 / 24 U	2000 / 23 U	1200 / 28 U
ANTIMONY	6	TACO	1 U	0.41 U / 0.32 U	0.40 U / 0.40 U	0.40 U / 0.40 U	0.36 U / 0.36 U	0.36 U / 0.36 U
ARSENIC	50	TACO	5	6.4 / 6.5	6.4 / 6	7.2 / 6.9	7.3 / 7.1	4.3 / 5.2
BARIUM	2000	TACO	35	41 / 39	68 / 48	55 / 50	71 / 61	51 / 48
BERYLLIUM	4	TACO	1 U	0.23 U / 0.23 U	0.31 U / 0.31 U	0.31 U / 0.31 U	0.30 U / 0.30 U	0.3 U / 0.3 U
CADMIUM	5	TACO	0.20 U	0.056 U / 0.056 U	0.06 U / 0.06 U	0.16 / 0.06 U	0.10 J / 0.055 U	0.067 J / 0.055 U
CALCIUM	NC	NA	59000	73000 J / 65000 J	100000 / 79000	68000 / 63000	100000 / 88000 J	80000 / 76000
CHROMIUM	NC	TACO	0.34 J	1.1 / 0.35 U	6 / 0.80 U	1.7 / 0.57	2.6 / 0.46 U	2.1 U / 0.65 U
COBALT	1000	TACO	0.84 J	0.84 / 0.68	4.6 / 1.4	2.1 / 1.1	4.3 / 2.4	2.2 J / 1.6
COPPER	650	TACO	1.2	1.4 / 0.78	5.1 / 1.2	2.3 / 0.96	2.9 / 1.1	1.4 J / 0.71 U
IRON	5000	TACO	840	640 / 380	6500 / 910	1900 / 630	4600 / 1500	3300 / 1300
LEAD	7.5	TACO	1 U	0.29 U / 0.29 U	1.7 / 0.26 U	0.61 / 0.26 U	0.96 J / 0.22 U	0.49 J / 0.22 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-05 NTC02GW0508 20080820 QTR08	FL-05 NTC02GW0509 20081118 QTR09	FL-05 NTC02GW0510 20090519 QTR10	FL-05 NTC02GW0511 20091116 QTR11	FL-05 NTC02GW0512 20100506 QTR12	FL-05 NTC02GW0513 20101118 QTR13
MAGNESIUM	NC	NA	45000	59000 J / 52000 J	58000 / 54000	45000 / 46000	58000 / 57000 J	49000 / 52000
MANGANESE	150	TACO	23	16 / 11	250 / 40	90 / 25	210 J / 78	91 J / 53
MERCURY	2	TACO	0.20 U	0.043 U / 0.043 U	0.043 U / 0.043 U	0.048 U / 0.048 U	0.061 U / 0.061 U	0.061 U / 0.061 U
NICKEL	100	TACO	4.7	4.4 / 3.3	13 / 4	5.2 / 4.1	7.9 / 5.1	7.8 / 3.2
POTASSIUM	NC	NA	1600	1700 / 1700	3100 / 1400	1900 / 1600	2300 J / 1400 J	1900 / 1600
SELENIUM	50	TACO	0.45 UJ	0.30 UJ / 0.99	0.40 U / 0.40 U	1.4 / 1.5 U	0.82 U / 1.4	0.82 UJ / 0.82 U
SILVER	50	TACO	0.20 U	0.061 U / 0.23 U	0.053 U / 0.053 U	0.17 / 0.13	0.061 U / 0.061 U	0.061 U / 0.061 U
SODIUM	NC	NA	41000	52000 J / 48000 J	41000 / 41000	38000 / 39000	39000 / 40000 J	41000 / 44000
THALLIUM	2	TACO	1 U	0.05 U / 0.05 U	0.052 U / 0.05 U	0.20 / 0.05 U	0.056 U / 0.056 U	0.056 U / 0.056 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	146600	185700 / 166700	202100 / 175400	152900 / 149600	199300 / 186400	171900 / 173600
VANADIUM	49	TACO	0.81 J	0.88 / 2.5	6.3 / 0.89 U	1.8 / 0.30 U	3 / 0.28 U	3.2 / 0.28 U
ZINC	5000	TACO	4.7 UJ	11 / 1.8 U	11 / 2 U	14 U / 2 U	12 U / 8.4 U	4.4 J / 3 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.42	0.46	0.61	0.63 J	0.81	0.67
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	2 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	15 J	20	110	18	18	14
CHLORIDE MG/L	200	TACO	32 J	41	37	44	37	29
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.53	0.54	0.47	0.48	0.35	0.51
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.01 U	0.0054	0.005 U	0.0048	0.0039 U	0.005 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.02 U	0.02 U	0.016 U	0.016 U	0.05 U	0.05 U
NITRITE/NITRATE-N MG/L	10	MCL	0.02 U	0.02 U	0.016 U	0.016 U	0.013 J	0.053 U
NITRITE-N MG/L	1	MCL	0.011 J	0.0042 U	0.002 U	0.0028	0.01 U	0.0035 J
PH S.U.	6.5 - 8.5	SMCL			7.8 J	7.8 J	8 J	8 J
SULFATE MG/L	400	TACO	170 J	140	170	140	170	170
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	540	560	590	560 J	580	540
TOTAL ORGANIC CARBON MG/L	NC	NA	5.2	6.7	5.6	6	5.5	4.4
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.05 U	0.05 U	0.05 U	0.050 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.039 J	0.024 U	0.068	0.039 U	0.0103 U	0.026
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	15	44	330	58	81	52
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	0.811	0.617	0.97	0.9	1.03	0.9
DISSOLVED OXYGEN MG/L	NC	NA	0.16	0.48	0.05	0.008	0.11	0.06
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-179	-131	-155	-169	-181	-138
PH S.U.	6.5 - 8.5	SMCL	7.92	7.81	7.52	7.06	8.76	7.44
SALINITY %	NC	NA						
SALINITY PPT	NC	NA			0			
TEMPERATURE C	NC	NA	15.08	10.49	14.81	11.68	12.82	11.29
TURBIDITY NTU	NC	NA	7.37	28.8	622	46.3	100	28

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 FL-06_20060821 20060821 QTR01	FL-06 FL-06_20070119 20070119 QTR02	FL-06 FL-06_20070417 20070417 QTR03	FL-06 FL-06_20070814 20070814 QTR04	FL-06 NTC02GW0605 20071113 QTR05	FL-06 NTC02GW0606 20080227 QTR06
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	2.5 U	5 U	5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
CHLOROBENZENE	100	TACO	0.125 U	0.125 U	0.125 U	0.125 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.311 J	1 U	0.38 J
CIS-1,2-DICHLOROETHENE	70	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	5 U	5 UR
TOLUENE	1000	TACO	1.79	0.25 U	0.25 U	0.25 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
2,4,5-TRICHLOROPHENOL	700	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4,6-TRICHLOROPHENOL	10	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4-DICHLOROPHENOL	21	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
2,4-DIMETHYLPHENOL	140	TACO	2.5 U	2.5 U	2.5 U	2.55 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
4-CHLOROANILINE	28	TACO	2.5 U	2.5 U	2.5 U	2.55 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO					0.50 U	0.5 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
ACETOPHENONE	3700	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
ANILINE	23	NON-TACO	-99 U	-99 U	5.26 U	5.1 U	0.50 U	0.5 U
ANTHRACENE	2100	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.5 U	2.55 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.5 U	2.55 U	1 U	1 U
CARBAZOLE	4.3	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
DIBENZOFURAN	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 FL-06_20060821 20060821 QTR01	FL-06 FL-06_20070119 20070119 QTR02	FL-06 FL-06_20070417 20070417 QTR03	FL-06 FL-06_20070814 20070814 QTR04	FL-06 NTC02GW0605 20071113 QTR05	FL-06 NTC02GW0606 20080227 QTR06
DIMETHYL PHTHALATE	NC	NA	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.5 U	2.55 U	1 U	1 U
DI-N-OCTYL PHTHALATE	140	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
FLUORENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.042 U
NAPHTHALENE	140	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.057 J	0.5 U
PENTACHLOROPHENOL	1	TACO	12.5 U	12.5 U	12.5 U	12.8 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
PHENOL	100	TACO	2.5 U	2.5 U	2.5 U	2.55 U	0.50 U	0.5 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.0526 U	0.0568 U	0.50 U	0.5 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	1 U	1 U	1 U	0.526 U	2 U	2 UJ
DINOSEB	7	TACO	0.5 U	0.5 U	0.5 U	0.263 U	1 U	1 U
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
AROCLOR-1254	0.5	TACO	0.255 U	0.255 U	0.255 U	0.284 U	0.20 U	0.2 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
DELTA-BHC	0.011	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
GAMMA-BHC (LINDANE)	0.2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0114 U	0.0051 J	0.05 U
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.55 U	2.63 U	5 U	5 U
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	0.7 U	0.7 U	0.7 U	0.7 U	1 U	2.5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	445	670	904	453	10000 J / 44 U	7800 / 660
ANTIMONY	6	TACO	0.472	0.25 U	0.277	0.926 J	0.85 U / 0.44 U	0.44 U / 0.44 U
ARSENIC	50	TACO	5 U	5 U	5 U	5 U	3.9 / 0.74 U	2.5 / 0.74 U
BARIUM	2000	TACO	107	88.1	77.8	84.1	130 / 80	130 / 79
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.36 / 0.31 U	0.38 / 0.31 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	0.14 / 0.062 U	0.12 / 0.062 U
CALCIUM	NC	NA	126000	116000	123000	152000	140000 J / 120000 J	140000 / 120000
CHROMIUM	NC	TACO	2.5 U	2.5 U	2.5 U	2.5 U	12 / 1.7	12 / 0.31 U
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	6.5 / 0.67	5.8 / 0.79
COPPER	650	TACO	5 U	5 U	5 U	5 U	15 / 1.2	12 / 2 J
IRON	5000	TACO	382	654	845	559	11000 J / 5.7 U	9600 / 720
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	6.3 / 0.33 U	5.2 / 0.33 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 FL-06_20060821 20060821 QTR01	FL-06 FL-06_20070119 20070119 QTR02	FL-06 FL-06_20070417 20070417 QTR03	FL-06 FL-06_20070814 20070814 QTR04	FL-06 NTC02GW0605 20071113 QTR05	FL-06 NTC02GW0606 20080227 QTR06
MAGNESIUM	NC	NA	64300	65000	66400	79500	79000 J / 62000 J	73000 / 66000
MANGANESE	150	TACO	231	115	112	224	480 / 220	360 / 130
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.073 U / 0.046 U	0.046 U / 0.046 U
NICKEL	100	TACO	5 U	5 U	5 U	6.13 J	22 / 4.6	24 / 5.2
POTASSIUM	NC	NA	3500	3080	2850	2850	6700 / 2500	5200 / 2400
SELENIUM	50	TACO	1.29	0.859	0.83	1.59	1.1 / 0.92 U	0.92 U / 0.92 U
SILVER	50	TACO	5 U	5 U	5 U	5 U	0.12 U / 0.12 U	0.12 U / 0.12 U
SODIUM	NC	NA	90700	77200	66500	66800	62000 J / 64000 J	58000 / 59000
THALLIUM	2	TACO	0.814	0.095	0.082	0.151 J	0.29 / 0.19	0.27 / 0.17 U
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	284500	261280	258750	301150	287700 / 248500	276200 / 247400
VANADIUM	49	TACO	12	5 U	5 U	100 U	15 / 2	15 / 1.4
ZINC	5000	TACO	5 U	9.79	5 U	5 U	38 / 10 J	0.84 U / 0.84 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.194	0.125	0.05 U	0.142	0.19	0.088
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	1 U	1.3	1.02	1 U	2.4	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	10 U	10 U	10 U	14.2 J	12 J	8.3
CHLORIDE MG/L	200	TACO	26.6	28.2	27.6	29	25	27
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001900 U
FLUORIDE MG/L	4	TACO	0.46	0.43	0.459	0.493	0.44	0.44
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U	0.0041 U	0.0041 U
NITRATE MG/L	10	TACO	0.049	0.223	0.12	0.064		
NITRATE-N MG/L	10	MCL					0.029 U	0.16
NITRITE/NITRATE-N MG/L	10	MCL					0.034	0.16
NITRITE-N MG/L	1	MCL					0.018	0.0039
PH S.U.	6.5 - 8.5	SMCL	7.27	7.16	7.2	7.31		
SULFATE MG/L	400	TACO	313	326	284	279	250	250
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	904	872	862	902	780	800
TOTAL ORGANIC CARBON MG/L	NC	NA	10.5	4.52	2.87	2.24 J	4	2
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.05 U	0.004800 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.05 U	0.05 U	0.05 U	0.172 J	0.20 J	0.091
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	2.5 U	13	40.5	9	140 J	160
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA					1.23	1.287
DISSOLVED OXYGEN MG/L	NC	NA					0.2	1.59
OXIDATION REDUCTION POTENTIAL MV	NC	NA					62	51
PH S.U.	6.5 - 8.5	SMCL					7.19	6.95
SALINITY %	NC	NA						
SALINITY PPT	NC	NA					0	0
TEMPERATURE C	NC	NA					12.4	6.74
TURBIDITY NTU	NC	NA					12.8	37

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0607 20080507 QTR07	FL-06 NTC02GW0608 20080821 QTR08	FL-06 NTC02GW0609 20081119 QTR09	FL-06 NTC02GW0610 20090518 QTR10	FL-06 NTC02GW0611 20091117 QTR11	FL-06 NTC02GW0612 20100505 QTR12
Volatile Organics (ug/L)								
1,1-DICHLOROETHANE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U	1 U	1 U	1 U	1 U	1 U
ACETONE	6300	TACO	5 UJ	5 UJ	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	100	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	TACO	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	5	TACO	1 U	1 U	1 UJ	1 UJ	1.0 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UJ	5 UR	5 U	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1,1-BIPHENYL	350	NON-TACO	0.5 U	0.50 U		0.50 U	0.5 U	0.50 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
2,4-DICHLOROPHENOL	21	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
2,4-DIMETHYLPHENOL	140	TACO	1 U	1 U	1 U	1 U	1 U	1 U
2-CHLOROPHENOL	35	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
4-CHLOROANILINE	28	TACO	1 U	1 U	1 U	1 U	1 U	1 U
4-METHYLPHENOL	35	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
ACENAPHTHENE	420	TACO	0.019 J	0.50 U	0.072 J	0.50 U	0.062 J	0.50 U
ACETOPHENONE	3700	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
ANILINE	23	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
ANTHRACENE	2100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	1.4 J	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.03 J	0.041 J	0.50 U	0.5 U	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5 U	0.8	0.50 U	0.50 U	1.4 U	0.73 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	0.12 J	0.10 J	1 U	0.073 J	1 U
CAPROLACTAM	3500	NON-TACO	1 U	1 U	1 U	1 U	1 UJ	1 UJ
CARBAZOLE	4.3	TACO	0.5 U	0.50 U	0.50 U	0.50 UJ	0.5 U	0.50 U
CHRYSENE	1.5	TACO	0.5 U	0.03 J	0.031 J	0.50 U	0.5 U	0.50 U
DIBENZOFURAN	37	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.50 U	0.041 J	0.50 U	0.5 U	0.50 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0607 20080507 QTR07	FL-06 NTC02GW0608 20080821 QTR08	FL-06 NTC02GW0609 20081119 QTR09	FL-06 NTC02GW0610 20090518 QTR10	FL-06 NTC02GW0611 20091117 QTR11	FL-06 NTC02GW0612 20100505 QTR12
DIMETHYL PHTHALATE	NC	NA	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	3.4	1 U	1 U	0.51 J	1 U
DI-N-OCTYL PHTHALATE	140	TACO	4.8	0.071 J	0.50 U	0.50 U	0.5 U	0.50 U
FLUORANTHENE	280	TACO	0.5 U	0.50 U	0.031 J	0.50 U	0.062 J	0.50 U
FLUORENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
NAPHTHALENE	140	TACO	0.5 U	0.01 J	0.50 U	0.50 U	0.5 U	0.50 U
PENTACHLOROPHENOL	1	TACO	1 U	1 U	1 U	1 U	1 U	1 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.02 J	0.021 J	0.50 U	0.5 U	0.50 U
PHENOL	100	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.5 U	0.50 U
PYRENE	210	TACO	0.5 U	0.03 J	0.031 J	0.50 U	0.3 J	0.50 U
Herbicides (ug/L)								
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U			
DINOSEB	7	TACO	1 U	1 U	1 U			
Pesticides/PCBs (ug/L)								
4,4'-DDT	6	TACO	0.05 UJ	0.05 U	0.053 U			
ALPHA-CHLORDANE	2	TACO	0.05 UJ	0.05 U	0.053 U			
AROCLOR-1254	0.5	TACO	0.2 UJ	0.20 U	0.21 U			
BETA-BHC	0.037	USEPA TAPWATER	0.05 UJ	0.05 U	0.053 U			
DELTA-BHC	0.011	USEPA TAPWATER	0.05 UJ	0.05 U	0.053 U			
ENDOSULFAN I	42	TACO	0.05 UJ	0.05 U	0.053 U			
ENDRIN KETONE	2	TACO	0.05 UJ	0.05 U	0.053 U			
GAMMA-BHC (LINDANE)	0.2	TACO	0.05 UJ	0.05 U	0.053 U			
GAMMA-CHLORDANE	2	TACO	0.05 UJ	0.05 U	0.053 U			
Petroleum Hydrocarbons								
OIL & GREASE - HEM	NC	NA	0.830000 U	5 U	4 U			
Carbamate/Ureas Pesticides (ug/L)								
ALDICARB SULFONE	37	USEPA TAPWATER	2.5 U	2.5 U	2.5 U			
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	5000 / 31	1900 / 100 U	5400 J / 20 U	1800 / 110	1300 / 24 U	1600 / 23 U
ANTIMONY	6	TACO	0.32 U / 0.32 U	1 U / 1 U	0.32 U / 0.32 U	0.40 U / 0.40 U	0.40 U / 0.40 U	0.36 U / 0.36 U
ARSENIC	50	TACO	1.7 / 0.35	1.5 J / 0.45 J	1.9 / 0.36	1 / 0.46	1.3 / 0.56	1.4 J / 0.38 U
BARIUM	2000	TACO	99 / 76	72 / 61	100 / 72	74 / 69	62 / 67	82 / 74
BERYLLIUM	4	TACO	0.23 U / 0.23 U	1 U / 1 U	0.23 U / 0.23 U	0.31 U / 0.31 U	0.31 U / 0.31 U	0.30 U / 0.30 U
CADMIUM	5	TACO	0.16 / 0.056 U	0.20 U / 0.20 U	0.20 / 0.056 U	0.06 U / 0.06 U	0.06 U / 0.06 U	0.15 J / 0.055 U
CALCIUM	NC	NA	140000 / 120000	140000 / 130000	150000 J / 120000 J	130000 / 130000	130000 / 110000	140000 / 130000 J
CHROMIUM	NC	TACO	6.4 / 0.97	2.5 / 1 UJ	6.2 / 0.46 U	4.5 / 0.71 U	2.5 / 1.6	3.1 / 0.63 U
COBALT	1000	TACO	2.8 / 0.29	1.3 / 0.10 J	2.7 / 0.24	1.5 / 0.44	1.2 / 0.29	1.4 / 0.26 J
COPPER	650	TACO	6.6 / 1.5	3.9 / 1.6 U	7.1 / 1.7	4.2 / 1.8	3.4 / 2.7	3.9 / 1.7
IRON	5000	TACO	5400 / 9.6 U	2300 / 20 U	6300 J / 9.6 U	2200 / 270	1600 / 12 U	2000 / 4.4 J
LEAD	7.5	TACO	2.6 / 0.29 U	1.2 / 1 U	3 / 0.29 U	1.2 / 0.26 U	1 / 0.26 U	1.6 / 0.22 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0607 20080507 QTR07	FL-06 NTC02GW0608 20080821 QTR08	FL-06 NTC02GW0609 20081119 QTR09	FL-06 NTC02GW0610 20090518 QTR10	FL-06 NTC02GW0611 20091117 QTR11	FL-06 NTC02GW0612 20100505 QTR12
MAGNESIUM	NC	NA	73000 / 67000	75000 / 72000	81000 J / 66000 J	70000 / 71000	68000 / 62000	75000 / 70000 J
MANGANESE	150	TACO	170 / 51	120 / 41	180 / 86	130 / 57	160 / 81	150 J / 92
MERCURY	2	TACO	0.046 U / 0.046 U	0.20 U / 0.20 U	0.043 U / 0.043 U	0.043 U / 0.043 U	0.048 U / 0.048 U	0.061 U / 0.061 U
NICKEL	100	TACO	14 / 4.7	6.9 / 3.7	14 / 3.6	6.4 / 3.7	7.4 / 7.1	7.1 / 3.5
POTASSIUM	NC	NA	4500 / 2400	2800 / 2000	4400 / 2300	2600 / 1900	2400 / 1800	2500 J / 1900
SELENIUM	50	TACO	0.30 U / 0.30 U	0.45 UJ / 0.61 UJ	0.30 UJ / 0.30 U	0.40 U / 0.40 U	1.5 / 0.82 U	0.82 U / 0.82 U
SILVER	50	TACO	0.061 U / 0.061 UJ	0.20 U / 0.20 U	0.061 U / 0.68	0.053 U / 0.081	0.053 U / 0.053 U	0.061 U / 0.061 U
SODIUM	NC	NA	52000 / 51000	38000 / 37000	53000 J / 49000 J	34000 / 40000	28000 / 33000	36000 / 38000 J
THALLIUM	2	TACO	0.21 / 0.092	0.13 J / 0.071 J	0.21 / 0.13	0.12 / 0.12	0.097 / 0.053	0.14 J / 0.10 J
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	269500 / 240400	255800 / 241000	288400 / 237300	236600 / 242900	228400 / 206800	253500 / 239900
VANADIUM	49	TACO	8.2 / 0.51	4.2 / 0.28 J	8.5 / 3.7	3.9 / 1.2 U	3.1 / 0.30 U	4.7 / 0.35 J
ZINC	5000	TACO	17 U / 6.1 U	9.3 UJ / 8 UJ	20 / 3	8.2 / 4.6	8 U / 2 U	11 J / 5.3 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.14	0.21	0.22	0.15 U	0.055 J	0.017 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.0 U	2.4	2 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	7	12 J	9.6	5	6.5	8
CHLORIDE MG/L	200	TACO	29	29 J	27	30	32	28
CYANIDE MG/L	0.2	TACO	0.0028 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	4	TACO	0.35	0.37	0.32	0.36	0.33	0.31
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 UJ	0.01 U	0.0019 U	0.0012 U	0.0012 U	0.0047 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.048 J	0.02 U	0.02 U	0.057	0.072	0.058 J
NITRITE/NITRATE-N MG/L	10	MCL	0.053 U	0.02 U	0.02 U	0.061	0.077	0.058 J
NITRITE-N MG/L	1	MCL	0.005 J	0.0099 J	0.0058	0.004	0.0053	0.01 U
PH S.U.	6.5 - 8.5	SMCL				7.6 J	7.3 J	7.7 J
SULFATE MG/L	400	TACO	260	270 J	260	300	260	280
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	850	910	780	870	830	820
TOTAL ORGANIC CARBON MG/L	NC	NA	2.6	2.7	2.7	2.4	2.2	2.3 U
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.0048 U	0.05 U	0.05 U	0.0053	0.05 U	0.050 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.052	0.18 J	0.071	0.1	0.032 U	0.0152 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	43	270	230	53	54	35
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.295	1.368	0.866	1.31	1.206	1.295
DISSOLVED OXYGEN MG/L	NC	NA	0.6	0.37	0.97	0.5	0.46	0.7
OXIDATION REDUCTION POTENTIAL MV	NC	NA	60	114	200	96	117	130
PH S.U.	6.5 - 8.5	SMCL	7.12	7.19	6.98	6.78	7.23	7.41
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0			0		
TEMPERATURE C	NC	NA	13.58	14.53	10.5	10.86	10.17	9.89
TURBIDITY NTU	NC	NA	30.3	44.4	60	16.2	48.3	22

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0613 20101117 QTR13
Volatile Organics (ug/L)			
1,1-DICHLOROETHANE	700	TACO	1 U
4-ISOPROPYLTOLUENE	NC	NA	1 U
ACETONE	6300	TACO	5 U
BENZENE	5	TACO	1 U
CHLOROBENZENE	100	TACO	1 U
CHLOROETHANE	21000	USEPA TAPWATER	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 UJ
CIS-1,2-DICHLOROETHENE	70	TACO	1 U
DICHLORODIFLUOROMETHANE	390	USEPA TAPWATER	1 U
METHYLENE CHLORIDE	5	TACO	1 U
TETRAHYDROFURAN	NC	NA	5 UR
TOLUENE	1000	TACO	1 U
VINYL CHLORIDE	2	TACO	1 U
Semivolatile Organics (ug/L)			
1,1-BIPHENYL	350	NON-TACO	0.50 U
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U
2,4,5-TRICHLOROPHENOL	700	TACO	0.50 U
2,4,6-TRICHLOROPHENOL	10	TACO	0.50 U
2,4-DICHLOROPHENOL	21	TACO	0.50 U
2,4-DIMETHYLPHENOL	140	TACO	1 U
2-CHLOROPHENOL	35	TACO	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U
4-CHLORO-3-METHYLPHENOL	3700	USEPA TAPWATER	0.50 U
4-CHLOROANILINE	28	TACO	1 U
4-METHYLPHENOL	35	NON-TACO	0.50 U
ACENAPHTHENE	420	TACO	0.50 U
ACETOPHENONE	3700	USEPA TAPWATER	0.50 U
ANILINE	23	NON-TACO	0.50 U
ANTHRACENE	2100	TACO	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U
BENZO(B)FLUORANTHENE	0.18	TACO	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	
BUTYL BENZYL PHTHALATE	1400	TACO	1 U
CAPROLACTAM	3500	NON-TACO	1 UJ
CARBAZOLE	4.3	TACO	0.50 U
CHRYSENE	1.5	TACO	0.50 U
DIBENZOFURAN	37	USEPA TAPWATER	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.50 U

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0613 20101117 QTR13
DIMETHYL PHTHALATE	NC	NA	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U
DI-N-OCTYL PHTHALATE	140	TACO	0.50 U
FLUORANTHENE	280	TACO	0.50 U
FLUORENE	280	TACO	0.50 U
INDENO(1,2,3-CD)PYRENE	0.43	TACO	0.50 U
ISOPHORONE	1400	TACO	0.50 U
NAPHTHALENE	140	TACO	0.50 U
PENTACHLOROPHENOL	1	TACO	1 U
PHENANTHRENE	210	NON-TACO	0.50 U
PHENOL	100	TACO	0.50 U
PYRENE	210	TACO	0.50 U
Herbicides (ug/L)			
2,4-DB	290	USEPA TAPWATER	
DINOSEB	7	TACO	
Pesticides/PCBs (ug/L)			
4,4'-DDT	6	TACO	
ALPHA-CHLORDANE	2	TACO	
AROCLOR-1254	0.5	TACO	
BETA-BHC	0.037	USEPA TAPWATER	
DELTA-BHC	0.011	USEPA TAPWATER	
ENDOSULFAN I	42	TACO	
ENDRIN KETONE	2	TACO	
GAMMA-BHC (LINDANE)	0.2	TACO	
GAMMA-CHLORDANE	2	TACO	
Petroleum Hydrocarbons			
OIL & GREASE - HEM	NC	NA	
Carbamate/Ureas Pesticides (ug/L)			
ALDICARB SULFONE	37	USEPA TAPWATER	
Inorganics (ug/L)			
ALUMINUM	3500	NON-TACO	250 / 250 U
ANTIMONY	6	TACO	0.5 U / 0.36 U
ARSENIC	50	TACO	0.38 U / 0.38 U
BARIUM	2000	TACO	200
BERYLLIUM	4	TACO	0.3 U / 0.3 U
CADMIUM	5	TACO	0.5 U / 0.5 U
CALCIUM	NC	NA	17000
CHROMIUM	NC	TACO	2.1 U / 0.65 U
COBALT	1000	TACO	0.5 U / 0.5 U
COPPER	650	TACO	2.5 U / 2.5 U
IRON	5000	TACO	1200
LEAD	7.5	TACO	1.5 U / 1.5 U

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		FL-06 NTC02GW0613 20101117 QTR13
MAGNESIUM	NC	NA	69000 / 76000
MANGANESE	150	TACO	190 / 75
MERCURY	2	TACO	0.061 U / 0.061 U
NICKEL	100	TACO	11 / 4.6
POTASSIUM	NC	NA	2000 / 1900
SELENIUM	50	TACO	0.82 UJ / 0.92 J
SILVER	50	TACO	0.066 U / 0.061 U
SODIUM	NC	NA	27000 / 32000
THALLIUM	2	TACO	0.11 J / 0.10 J
TOTAL ESSENTIAL NUTRIENTS	NC	TACO	218000 / 239900
VANADIUM	49	TACO	2.4 J / 0.33 J
ZINC	5000	TACO	6.6 J / 3 J
Miscellaneous Parameters			
AMMONIA-N MG/L	30	SMCL	0.049
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	7.8
CHLORIDE MG/L	200	TACO	29
CYANIDE MG/L	0.2	TACO	0.005 U
FLUORIDE MG/L	4	TACO	0.33
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U
NITRATE MG/L	10	TACO	
NITRATE-N MG/L	10	MCL	0.05 U
NITRITE/NITRATE-N MG/L	10	MCL	0.05 U
NITRITE-N MG/L	1	MCL	0.0043 J
PH S.U.	6.5 - 8.5	SMCL	7.6 J
SULFATE MG/L	400	TACO	260
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	570
TOTAL ORGANIC CARBON MG/L	NC	NA	2
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.011
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	35
Field Parameters			
CONDUCTIVITY MS/CM	NC	NA	1.189
DISSOLVED OXYGEN MG/L	NC	NA	0.25
OXIDATION REDUCTION POTENTIAL MV	NC	NA	114
PH S.U.	6.5 - 8.5	SMCL	6.60
SALINITY %	NC	NA	
SALINITY PPT	NC	NA	
TEMPERATURE C	NC	NA	10.61
TURBIDITY NTU	NC	NA	24

APPENDIX C.2

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 2 - FORRESTAL LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Notes:
TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GRO), (35 Illinois Administrative Code Part 742)
Non-TACO = GRO not promulgated under 35 IAC 742
USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)
MCL = USEPA Maximum Contaminant Level
SMCL = USEPA Secondary Maximum Contaminant Level
NC = No criterion
NA = Not available
IL-EPA = criterion as per Illinois EPA (personal communication)
Blank cell indicates parameter not analyzed.
Light gray shading indicates positive result.
Dark shading indicates exceedance of criteria.
Data Qualifiers:
U = Indicates that parameter was not detected.
UJ = Indicates the parameter was not detected, however the detection limit is estimated.
UR = Indicates the parameter was not detected, however the result is unreliable.
J = Indicates that result is estimated.
R = Indicates that result is rejected.

APPENDIX C.3

SITE 3 - SUMMARY OF ANALYTICAL RESULTS – ROUND 13

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
Volatile Organics (ug/L)							
1,1,1,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-TRICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRIMETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-TRIMETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-BUTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROETHYL VINYL ETHER	5 UR	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-HEXANONE	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
4-CHLOROTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-ISOPROPYLTOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACROLEIN	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
ACRYLONITRILE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	0.26 J	1 UJ	1.1 J	1 UJ	1 UJ	1 UJ	1 UJ
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLORODIBROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CYCLOHEXANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DICHLORODIFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYL ACETATE	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ISOPROPYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL ACETATE	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
METHYL CYCLOHEXANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
METHYL IODIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYL METHACRYLATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
METHYL TERT-BUTYL ETHER	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
N-PROPYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SEC-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TERT-BUTYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	0.50 J	1 U	1 U	1 U	1 U	1 U	1 U
TOTAL XYLENES	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,4-DICHLORO-2-BUTENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROFLUOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VINYL ACETATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)							
1,1-BIPHENYL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
1-METHYLNAPHTHALENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,2'-OXYBIS(1-CHLOROPROPANE)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,4,5-TRICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,4,6-TRICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,4-DICHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,4-DIMETHYLPHENOL	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
2,4-DINITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U
2,4-DINITROTOLUENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2,6-DINITROTOLUENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2-CHLORONAPHTHALENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2-CHLOROPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2-METHYLNAPHTHALENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
2-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
2-NITROPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
3,3'-DICHLOROBENZIDINE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
3-METHYLCHOLANTHRENE	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2.2 UJ
3-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
4,6-DINITRO-2-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
4-BROMOPHENYL PHENYL ETHER	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
4-CHLORO-3-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
4-CHLOROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
4-CHLOROPHENYL PHENYL ETHER	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
4-METHYLPHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
4-NITROANILINE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
4-NITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U
ACENAPHTHENE	0.50 U	0.50 U	0.021 J	0.50 U	0.50 U	0.50 U	0.54 U

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
ACENAPHTHYLENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
ACETOPHENONE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
ANILINE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
ANTHRACENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
ATRAZINE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZALDEHYDE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(A)ANTHRACENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(A)PYRENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(B)FLUORANTHENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(G,H,I)PERYLENE	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.54 UJ
BENZO(K)FLUORANTHENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BIS(2-CHLOROETHOXY)METHANE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BIS(2-CHLOROETHYL)ETHER	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
BIS(2-ETHYLHEXYL)PHTHALATE	0.50 U	0.33 J	0.27 J	0.50 U	0.28 J	0.27 J	0.28 J
BUTYL BENZYL PHTHALATE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
CAPROLACTAM	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
CARBAZOLE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
CHRYSENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
DIBENZO(A,H)ANTHRACENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
DIBENZOFURAN	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
DIETHYL PHTHALATE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
DIMETHYL PHTHALATE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
DI-N-BUTYL PHTHALATE	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
DI-N-OCTYL PHTHALATE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
FLUORANTHENE	0.50 U	0.042 J	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
FLUORENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
HEXACHLOROBENZENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
HEXACHLOROBUTADIENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
HEXACHLOROCYCLOPENTADIENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
HEXACHLOROETHANE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
INDENO(1,2,3-CD)PYRENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
ISOPHORONE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
NAPHTHALENE	0.051 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
NITROBENZENE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
N-NITROSO-DI-N-PROPYLAMINE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
N-NITROSODIPHENYLAMINE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
PENTACHLOROPHENOL	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
PHENANTHRENE	0.50 U	0.032 J	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
PHENOL	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U
PYRENE	0.50 U	0.042 J	0.50 U	0.50 U	0.50 U	0.50 U	0.032 J
Pesticides/PCBs (ug/L)							
4,4'-DDD	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALDRIN	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
DELTA-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
DIELDRIN	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN II	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN SULFATE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN ALDEHYDE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-BHC (LINDANE)	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Herbicides (ug/L)							
2,4,5-T	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4-D	0.18 J	2 U	2 U	0.14 J	2 U	2 U	2 U
2,4-DB	2 U	2 U	2 U	2 U	1.7 J	2 U	2 U
DALAPON	2 U	2 U	2 U	2 U	2 U	2 U	2 U
DICAMBA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
DICHLOROPROP	2 U	2 U	2 U	2 U	2 U	2 U	2 U

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
DINOSEB	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MCPA	200 U	200 U	88 J	200 U	41 J	38 J	200 U
MCPP	200 U	200 U	160 NJ	200 U	200 U	200 U	200 U
Inorganics (ug/L)							
ALUMINUM	28 U	49 J / 28 U	780 / 28 U	28 U	1400 / 28 U	1500 / 28 U	1500 / 28 U
ANTIMONY	0.36 U	0.46 U / 0.36 U	0.36 U / 0.36 U	0.36 U	0.36 U / 0.36 U	0.36 U / 0.55 U	1 / 0.64 U
ARSENIC	0.38 U	1.2 J / 1 J	0.38 U / 0.38 U	0.38 U	0.56 J / 0.38 U	0.79 J / 0.38 U	200 / 6.3
BARIUM	70	43 / 43	24 / 18	59	330 / 320	340 / 330	260 / 49
BERYLLIUM	0.3 U	0.3 U / 0.3 U	0.3 U / 0.3 U	0.3 U	0.3 U / 0.3 U	0.3 U / 0.3 U	0.59 J / 0.3 U
CADMIUM	0.055 U	0.055 U / 0.055 U	0.059 J / 0.055 U	0.055 U	0.09 J / 0.055 U	0.17 J / 0.055 U	0.06 J / 0.055 U
CALCIUM	52000	50000 / 52000 J	77000 / 88000 J	69000	180000 / 200000 J	180000 / 200000 J	140000 / 130000 J
CHROMIUM	0.55 U	0.63 U / 0.87 U	1.9 U / 0.81 U	0.56 U	3.6 U / 0.94 U	3.4 U / 0.68 U	4.3 / 0.47 U
COBALT	0.15 J	0.13 J / 0.089 J	0.73 J / 0.14 J	0.44 J	3.1 / 1.6	2.9 / 1.7	2.3 / 0.86 J
COPPER	0.76 J	0.72 J / 0.71 U	1.7 / 0.73 J	1.7	4.1 / 0.71 U	4.2 / 0.75 J	5.9 / 0.97 J
IRON	730	240 / 150	1300 / 220	250	14000 / 12000	14000 / 12000	84000 / 5800
LEAD	0.22 U	0.22 U / 0.22 U	0.61 J / 0.22 U	0.22 U	2.7 / 0.22 U	2.7 / 0.22 U	3.7 / 0.22 U
MAGNESIUM	51000	77000 / 82000	75000 / 87000	50000	84000 / 90000	85000 / 91000	49000 / 47000
MANGANESE	15	20 / 18	70 / 45	18	420 / 340	400 / 350	540 / 430
MERCURY	0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U	0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U
NICKEL	0.69 J	1.3 / 2	4 / 1.9	2.1	18 / 9.4	16 / 9.5	9.1 / 3.3
POTASSIUM	1800	2900 / 3100	2500 / 2500	1800	8300 / 8800	8300 / 8800	1700 / 1200
SELENIUM	0.82 U	0.82 U / 0.90 J	0.82 U / 0.82 U	0.86 J	0.82 U / 1.7	2 / 2.5	1 / 0.82 U
SILVER	0.061 U	0.12 J / 0.11 J	0.061 U / 0.069 U	0.061 U	0.061 U / 0.061 U	0.061 U / 0.081 J	0.16 J / 0.061 U
SODIUM	45000	240000 / 250000	50000 / 58000	33000	110000 / 120000	110000 / 120000	54000 / 56000
THALLIUM	0.056 U	0.056 U / 0.056 U	0.056 U / 0.094 J	0.057 J	0.11 J / 0.079 J	0.12 J / 0.056 U	0.084 J / 0.071 J
TOTAL ESSENTIAL NUTRIENTS	149800	369900 / 387100	204500 / 235500	153800	382300 / 418800	383300 / 419800	244700 / 234200
VANADIUM	0.28 U	0.28 U / 0.28 U	2.5 J / 0.29 J	0.28 U	5.3 / 0.77 J	5.2 / 0.69 J	8.7 / 0.28 U
ZINC	3.6 J	3.7 J / 11 J	4.8 J / 2.9 U	3.4 J	26 / 4.1 J	25 / 3.3 J	9.7 J / 2.9 U
Miscellaneous Parameters							
AMMONIA-N MG/L	0.40	0.30	0.34	0.16	14	14	0.19
BIOCHEMICAL OXYGEN DEMAND MG/L	6.1	2 U	17	2 U	2.4	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	4.7 J	7.6	11	6	35	33	5 U
CHLORIDE MG/L	17 J	500 J	23 J	17 J	180 J	180 J	140 J
CYANIDE MG/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FLUORIDE MG/L	0.72	0.47	0.70	0.68	0.27	0.27	0.34

APPENDIX C.3

SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER ROUND 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13	SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
HEXAVALENT CHROMIUM MG/L	0.0041 J	0.0046 J	0.005 UJ	0.0026 J	0.0026 J	0.0023 J	0.002 U
NITRATE-N MG/L	0.05 U	0.05 U	0.05 U	0.13	0.05 U	0.05 U	0.05 U
NITRITE/NITRATE-N MG/L	0.05 U	0.05 U	0.05 U	0.14	0.05 U	0.05 U	0.05 U
NITRITE-N MG/L	0.0032 J	0.0022 J	0.0028 J	0.0078 J	0.0032 J	0.01 U	0.0051 J
PH S.U.	7.6 J	8.1 J	7.8 J	7.7 J	7 J	7 J	6.8 J
SULFATE MG/L	110	120	270	83	110	110	75
TOTAL DISSOLVED SOLIDS MG/L	478	1080	764	462	1090	1130	762
TOTAL ORGANIC CARBON MG/L	0.98	1.7	1.3	1.7	13	13	31
TOTAL PHOSPHORUS MG/L	0.013	0.013	0.027	0.026	0.21	0.22	0.71
TOTAL SUSPENDED SOLIDS MG/L	6.8	4.9	45	3.3 U	150	140	630
Field Parameters							
CONDUCTIVITY MS/CM	0.769	2.01	1.13	0.828	2.01		1.205
DISSOLVED OXYGEN MG/L	0.09	0.20	0.23	0.19	0.35		0.20
OXIDATION REDUCTION POTENTIAL MV	-144.00	-208.00	-232.00	-4.00	-59.00		-56.00
PH S.U.	6.25	8.19	7.18	7.13	6.43		6.77
TEMPERATURE C	11.19	11.4	11.01	10.8	12.45		13
TURBIDITY NTU	11	17	63	2.5	10		120

Notes:
Light Gray shading indicates positive result.
Dark shading indicates exceedance of criteria.
Data Qualifiers:
U = Indicates that parameter was not detected.
UJ = Indicates the parameter was not detected, however the detection limit is estimated.
UR = Indicates the parameter was not detected, however the result is unreliable.
J = Indicates that result is estimated.
R = Indicates that result is rejected.
NJ = Indicates that the chemical is presumptively present.

APPENDIX C.4

SITE 3 – SUMMARY OF POSITIVE DETECTIONS – ROUNDS 1 – 13

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20060801 20060801 QTR01	SL-03 SL-03_20060802 20060802 QTR01	SL-04 SL-04_20060814 20060814 QTR01	SL-05 SL-05_20060809 20060809 QTR01	SL-05 SL-05_20060809-D 20060809 QTR01 SL-05_20060809	SL-06 SL-06_20060808 20060808 QTR01
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	2.6	2.5 U	2.5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CARBON DISULFIDE	18	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.2	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	0.25 U	0.292	0.25 U	0.48	0.361 J	0.25 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.75 U	2.5 U
NAPHTHALENE	140	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
4,4'-DDE	10	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
HEPTACHLOR	0.4	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20060801 20060801 QTR01	SL-03 SL-03_20060802 20060802 QTR01	SL-04 SL-04_20060814 20060814 QTR01	SL-05 SL-05_20060809 20060809 QTR01	SL-05 SL-05_20060809-D 20060809 QTR01 SL-05_20060809	SL-06 SL-06_20060808 20060808 QTR01
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.1 U	0.1 U	0.1 U	0.1 U	0.104 U	0.1 U
2,4,5-TP (SILVEX)	50	TACO	0.1 U	0.1 U	0.1 U	0.1 U	0.104 U	0.1 U
2,4-D	70	TACO	1 U	1 U	1 U	1 U	1.04 U	1 U
2,4-DB	290	USEPA TAPWATER	1 U	1 U	1 U	1 U	1.04 U	1 U
DICAMBA	1100	USEPA TAPWATER	0.1 U	0.1 U	0.1 U	0.1 U	0.104 U	0.1 U
MCPA	700	TACO	100 U	100 U	100 U	100 U	104 U	100 U
MCPP	37	USEPA TAPWATER	100 U	100 U	100 U	100 U	104 U	100 U
PENTACHLOROPHENOL	1	TACO	0.1 U	0.1 U	0.1 U	0.1 U	0.104 U	0.1 U
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.55 U	2.55 U	2.63 U	2.55 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	150	1920	623	142	54.1 J	73.9
ANTIMONY	6	TACO	0.414	0.286	0.685	0.296	0.277 J	0.289
ARSENIC	50	TACO	5 U	5.75	7.25	12.2	5.46 J	5 U
BARIUM	2000	TACO	60	50.6	86.1	412	418	50
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	41900	77500	71900	200000	213000	129000
CHROMIUM	100	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COPPER	650	TACO	5 U	5 U	5 U	5 U	5 U	5 U
IRON	5000	TACO	470	1700	985	13700	14000	3690
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MAGNESIUM	NC	NA	39900	72500	50100	89400	91600	44000
MANGANESE	150	TACO	16.3	59.7	77.2	318	318	553
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	5 U	5 U	5 U	11.5	11.8 J	5 U
POTASSIUM	NC	NA	1840	3910	2260	6730	6850	732
SELENIUM	50	TACO	0.50 U	0.661	0.50 U	8.51	10.1	0.911
SILVER	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	39100	43400	31400	102000	105000	60400
THALLIUM	2	TACO	0.05 U	0.05 U	0.102	0.777	0.638	0.924
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	122740	197310	155660	398130	416450	234132
VANADIUM	49	TACO	5 U	13.1	13.6	15.1	15.6	5 U
ZINC	5000	TACO	5 U	6.34	6.01	5 U	5 U	5 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.437	0.544	0.326	16.7	19.5	0.33
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	7.4	4	1 U	2.9	2.2 J	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	10 U	10 U	10 U	67.2	39.3	11.4

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20060801 20060801 QTR01	SL-03 SL-03_20060802 20060802 QTR01	SL-04 SL-04_20060814 20060814 QTR01	SL-05 SL-05_20060809 20060809 QTR01	SL-05 SL-05_20060809-D 20060809 QTR01 SL-05_20060809	SL-06 SL-06_20060808 20060808 QTR01
CHLORIDE MG/L	200	TACO	3	38	12.5	146	151	127
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	1 U
FLUORIDE MG/L	4	TACO	0.738	0.625	0.628	0.3	0.29	0.422
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U
NITRATE MG/L	10	TACO	0.025 U	0.025 U	0.036	0.025 U	0.025 U	0.04
NITRATE-N MG/L	10	MCL						
NITRITE/NITRATE-N MG/L	10	MCL						
NITRITE-N MG/L	1	MCL						
PH S.U.	6.5 - 8.5	SMCL	7.26	7.4	7.12	6.81	6.82	6.72
SULFATE MG/L	400	TACO	24.1	220	83.9	136	131	132
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	874	838	488	1110	1110	816
TOTAL ORGANIC CARBON MG/L	NC	NA	2.33	2.14	7.37	26.9	30.2	5.86
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00842	0.00588	0.00333 U	0.00333 U	0.00333 U	0.0037
TOTAL PHOSPHORUS MG/L	NC	NA	0.05 U	0.05 U	0.05 U	0.134	0.141	0.072
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	5	22.5	17.5	32	29.5	2.5 U
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA						
DISSOLVED OXYGEN MG/L	NC	NA						
OXIDATION REDUCTION POTENTIAL MV	NC	NA						
PH S.U.	6.5 - 8.5	SMCL						
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA						
TURBIDITY NTU	NC	NA						

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070115 20070115 QTR02	SL-03 SL-03_20070124 20070124 QTR02	SL-04 SL-04_20070125 20070125 QTR02	SL-04 SL-04_20070125-D 20070125 QTR02 SL-04_20070125	SL-05 SL-05_20070123 20070123 QTR02	SL-06 SL-06_20070116 20070116 QTR02
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	4.38	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	6300	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CARBON DISULFIDE	18	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.2	TACO	0.125 U	0.199	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.5 U	2.66 U	2.5 U	2.5 U
NAPHTHALENE	140	TACO	0.0583	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0859
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U	0.0526 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
4,4'-DDE	10	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
HEPTACHLOR	0.4	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0106 U	0.0102 U	0.0102 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070115 20070115 QTR02	SL-03 SL-03_20070124 20070124 QTR02	SL-04 SL-04_20070125 20070125 QTR02	SL-04 SL-04_20070125-D 20070125 QTR02 SL-04_20070125	SL-05 SL-05_20070123 20070123 QTR02	SL-06 SL-06_20070116 20070116 QTR02
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.1 U	0.1 U	0.1 U	0.0521 U	0.168	0.1 U
2,4,5-TP (SILVEX)	50	TACO	0.1 U	0.1 U	0.1 U	0.0521 U	0.1 U	0.1 U
2,4-D	70	TACO	1 U	1 U	1 U	0.521 U	1 U	1 U
2,4-DB	290	USEPA TAPWATER	1 U	1 U	1 U	0.521 U	1 U	1 U
DICAMBA	1100	USEPA TAPWATER	0.1 U	0.1 U	0.1 U	0.104 U	0.1 U	0.1 U
MCPA	700	TACO	100 U	100 U	100 U	52.1 U	100 U	100 U
MCPP	37	USEPA TAPWATER	100 U	100 U	100 U	52.1 U	100 U	100 U
PENTACHLOROPHENOL	1	TACO	0.1 U	0.251	0.361	0.306 B	0.408	0.1 U
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.55 U	2.63 U	2.55 U	2.55 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	84.7	873	287	267	50 U	4820
ANTIMONY	6	TACO	0.38	3.91	2.15	0.25 U	0.622	3.71
ARSENIC	50	TACO	5 U	6.59	5 U	5 U	5 U	28.8
BARIUM	2000	TACO	55.4	26.3	78.3	75.8	378	101
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.571
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	137000	73600	76400	74400	203000	178000
CHROMIUM	100	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	8.24
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.27
COPPER	650	TACO	5 U	5 U	5 U	5 U	5 U	9.92
IRON	5000	TACO	592	2290	583	556	13300	12900
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MAGNESIUM	NC	NA	79000	67700	54900	55200	87300	63400
MANGANESE	150	TACO	386	69.9	56.9	55.5	358	844
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	5 U	5 U	5 U	5 U	8.73	10.1
POTASSIUM	NC	NA	1720	2620	2240	2190	7070	3370
SELENIUM	50	TACO	0.50 U	0.535	0.50 U	0.598 J	5.45	0.876
SILVER	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	35800	43200	36500	35800	95200	59300
THALLIUM	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.129
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	253520	187120	170040	167590	392570	304070
VANADIUM	49	TACO	5 U	5 U	5 U	5 U	5 U	5 U
ZINC	5000	TACO	5 U	5 U	5 U	5 U	5 U	32.6
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.229	0.341	0.333	0.273	13.9	0.397
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	7.6	4.1	1 U	1 U	1.6	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	19.6	10 U	10 U	10 U	45.5	21.3

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070115 20070115 QTR02	SL-03 SL-03_20070124 20070124 QTR02	SL-04 SL-04_20070125 20070125 QTR02	SL-04 SL-04_20070125-D 20070125 QTR02 SL-04_20070125	SL-05 SL-05_20070123 20070123 QTR02	SL-06 SL-06_20070116 20070116 QTR02
CHLORIDE MG/L	200	TACO	10.3	34.5	14.9	34.8	149	94.7
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.587	0.745	0.637	0.671	0.287	0.373
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
NITRATE MG/L	10	TACO	0.059	0.025 U	0.0853	0.098	0.025 U	0.053
NITRATE-N MG/L	10	MCL						
NITRITE/NITRATE-N MG/L	10	MCL						
NITRITE-N MG/L	1	MCL						
PH S.U.	6.5 - 8.5	SMCL	6.75	6.92	7.14	7.07	6.51	6.73
SULFATE MG/L	400	TACO	278	211	96.7	88.6	163	205
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	788	648	454	372	1100	824
TOTAL ORGANIC CARBON MG/L	NC	NA	11.5	1.85	1.34	1.31	15.9	12.6
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.077	0.05 U	0.05 U	0.05 U	0.05 U	0.195
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	7.5	36.5	11.5	11	32	89
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA						
DISSOLVED OXYGEN MG/L	NC	NA						
OXIDATION REDUCTION POTENTIAL MV	NC	NA						
PH S.U.	6.5 - 8.5	SMCL						
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA						
TURBIDITY NTU	NC	NA						

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070426 20070426 QTR03	SL-03 SL-03_20070501 20070501 QTR03	SL-04 SL-04_20070503 20070503 QTR03	SL-04 SL-04_20070503-D 20070503 QTR03 SL-04_20070503	SL-05 SL-05_20070502 20070502 QTR03	SL-06 SL-06_20070507 20070507 QTR03
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	4.38	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	6300	TACO	23.3	2.67	4.82	2.5 U	2.5 U	2.5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.822	0.125 U	0.125 U	0.125 U
CARBON DISULFIDE	18	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.2	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
ACENAPHTHENE	420	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
CAPROLACTAM	3500	NON-TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
CHRYSENE	1.5	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
DIETHYL PHTHALATE	5600	TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
DI-N-BUTYL PHTHALATE	700	TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
FLUORANTHENE	280	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
ISOPHORONE	1400	TACO	2.5 U	2.5 U	2.5 U	2.63 U	2.5 U	2.5 U
NAPHTHALENE	140	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
PHENANTHRENE	210	NON-TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
PYRENE	210	TACO	0.0526 U	0.0526 U	0.0526 U	0.0535 U	0.0526 U	0.0526 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
4,4'-DDE	10	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
4,4'-DDT	6	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
ALPHA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
BETA-BHC	0.037	USEPA TAPWATER	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
ENDOSULFAN I	42	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
ENDRIN KETONE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
GAMMA-CHLORDANE	2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
HEPTACHLOR	0.4	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.0102 U	0.0102 U	0.0102 U	0.0108 U	0.0102 U	0.0102 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070426 20070426 QTR03	SL-03 SL-03_20070501 20070501 QTR03	SL-04 SL-04_20070503 20070503 QTR03	SL-04 SL-04_20070503-D 20070503 QTR03 SL-04_20070503	SL-05 SL-05_20070502 20070502 QTR03	SL-06 SL-06_20070507 20070507 QTR03
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.1 U	0.1 U	0.1 U	0.0543 U	0.1 U	0.1 U
2,4,5-TP (SILVEX)	50	TACO	0.1 U	0.1 U	0.1 U	0.0543 U	0.1 U	0.1 U
2,4-D	70	TACO	1 U	1 U	1 U	0.543 U	1 U	1 U
2,4-DB	290	USEPA TAPWATER	1 U	1 U	1 U	0.543 U	1 U	1 U
DICAMBA	1100	USEPA TAPWATER	0.1 U	0.1 U	0.1 U	0.109 U	0.1 U	0.1 U
MCPA	700	TACO	100 U	100 U	100 U	54.3 U	100 U	100 U
MCPP	37	USEPA TAPWATER	100 U	100 U	100 U	54.3 U	100 U	100 U
PENTACHLOROPHENOL	1	TACO	0.1 U	0.1 U	0.1 U	0.109 U	0.1 U	0.1 U
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	2.55 U	2.55 U	2.55 U	2.69 U	2.55 U	2.55 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	84.7	379	138	138	50 U	50 U
ANTIMONY	6	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.368	0.25 U
ARSENIC	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BARIUM	2000	TACO	49.3	23.4	80.2	82.2	415	56.1
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	151000	78400	86400	87600	230000	170000
CHROMIUM	100	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COPPER	650	TACO	5 U	5 U	5 U	5 U	5 U	5 U
IRON	5000	TACO	949	1930	321	323	15900	7340
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MAGNESIUM	NC	NA	76100	71200	57500	58300	98700	61200
MANGANESE	150	TACO	95.7	62.6	51.8	53.3	423	823
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	5 U	5 U	5.33	5.71 J	9.71	5 U
POTASSIUM	NC	NA	1380	2390	2100	2180	7110	931
SELENIUM	50	TACO	0.571	0.703	1.14	1	4.24	0.869
SILVER	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	31500	44600	39600	41000	106000	51900
THALLIUM	2	TACO	0.05 U	0.099	0.128	0.115 J	0.307	0.05 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	259980	196590	185600	189080	441810	284031
VANADIUM	49	TACO	5 U	5 U	5 U	5 U	5 U	5 U
ZINC	5000	TACO	5 U	5 U	5.47	5.45 J	5 U	5 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.24	0.538	0.277	0.271	22.5	0.381
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	7.65	7.3	1 U	1 U	1.51	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	14.5	10 U	10 U	10 U	41.1	13

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070426 20070426 QTR03	SL-03 SL-03_20070501 20070501 QTR03	SL-04 SL-04_20070503 20070503 QTR03	SL-04 SL-04_20070503-D 20070503 QTR03 SL-04_20070503	SL-05 SL-05_20070502 20070502 QTR03	SL-06 SL-06_20070507 20070507 QTR03
CHLORIDE MG/L	200	TACO	10.7	30	22.4	21.8	159	91.9
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.423	0.663	0.583	0.544	0.21	0.329
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
NITRATE MG/L	10	TACO	0.025 U	0.025 U	0.175	0.181	0.048	0.025 U
NITRATE-N MG/L	10	MCL						
NITRITE/NITRATE-N MG/L	10	MCL						
NITRITE-N MG/L	1	MCL						
PH S.U.	6.5 - 8.5	SMCL	7.37	7.19	7.03	7	7.13	7.05
SULFATE MG/L	400	TACO	254	227	82.9	78.3	161	199
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	802	708	554	558	1210	862
TOTAL ORGANIC CARBON MG/L	NC	NA	5.41	1.93	2.46	2.47	21.7	4.38
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.05 U	0.091	0.05 U	0.05 U	0.108	0.05 U
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	7.5	28	4.5	5.5	35.5	17
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA						
DISSOLVED OXYGEN MG/L	NC	NA						
OXIDATION REDUCTION POTENTIAL MV	NC	NA						
PH S.U.	6.5 - 8.5	SMCL						
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA						
TURBIDITY NTU	NC	NA						

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070731 20070731 QTR04	SL-03 SL-03_20070801 20070801 QTR04	SL-04 SL-04_20070821 20070821 QTR04	SL-04 SL-04_20070821-D 20070821 QTR04 SL-04_20070821	SL-05 SL-05_20070802 20070802 QTR04	SL-06 SL-06_20070806 20070806 QTR04
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
ACETONE	6300	TACO	2.66 J	2.5 U	2.5 U	2.5 U	2.86 J	2.5 U
BENZENE	5	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CARBON DISULFIDE	18	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.2	TACO	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U
CHLOROMETHANE	190	USEPA TAPWATER	0.25 U	0.25 U	1.58	0.634 J	16.1	0.7 J
TETRAHYDROFURAN	NC	NA	25 U	25 U	25 U	25 U	25 U	25 U
TOLUENE	1000	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
VINYL CHLORIDE	2	TACO	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
ACENAPHTHENE	420	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
BENZALDEHYDE	700	NON-TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
BENZO(A)ANTHRACENE	0.13	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
BENZO(A)PYRENE	0.2	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
BUTYL BENZYL PHTHALATE	1400	TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
CAPROLACTAM	3500	NON-TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
CHRYSENE	1.5	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
DIETHYL PHTHALATE	5600	TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
DI-N-BUTYL PHTHALATE	700	TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
FLUORANTHENE	280	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
ISOPHORONE	1400	TACO	2.58 U	2.58 U	2.72 U	2.84 U	2.55 U	2.55 U
NAPHTHALENE	140	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
PHENANTHRENE	210	NON-TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
PYRENE	210	TACO	0.0532 U	0.051 U	0.051 U	0.0532 U	0.0482 U	0.0526 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
4,4'-DDE	10	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
4,4'-DDT	6	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
ALPHA-CHLORDANE	2	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
BETA-BHC	0.037	USEPA TAPWATER	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
ENDOSULFAN I	42	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
ENDRIN KETONE	2	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
GAMMA-CHLORDANE	2	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
HEPTACHLOR	0.4	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.0105 U	0.0103 U	0.0105 U	0.011 U	0.0102 U	0.0102 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070731 20070731 QTR04	SL-03 SL-03_20070801 20070801 QTR04	SL-04 SL-04_20070821 20070821 QTR04	SL-04 SL-04_20070821-D 20070821 QTR04 SL-04_20070821	SL-05 SL-05_20070802 20070802 QTR04	SL-06 SL-06_20070806 20070806 QTR04
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.05 U	0.0524 U	0.0549 U	0.0538 U	0.0526 U	0.05 U
2,4,5-TP (SILVEX)	50	TACO	0.05 U	0.0524 U	0.0549 U	0.0538 U	0.0526 U	0.05 U
2,4-D	70	TACO	0.5 U	0.524 U	0.549 U	0.538 U	0.526 U	0.5 U
2,4-DB	290	USEPA TAPWATER	0.5 U	0.524 U	0.549 U	0.538 U	0.526 U	0.5 U
DICAMBA	1100	USEPA TAPWATER	0.1 U	0.105 U	0.11 U	0.108 U	0.105 U	0.1 U
MCPA	700	TACO	50 U	52.4 U	54.9 U	53.8 U	52.6 U	50 U
MCPP	37	USEPA TAPWATER	50 U	52.4 U	54.9 U	53.8 U	52.6 U	50 U
PENTACHLOROPHENOL	1	TACO	0.1 U	0.105 U	0.11 U	0.108 U	0.105 U	0.1 U
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	2.63 U	2.63 U	2.63 U	2.69 U	2.58 U	2.58 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	50 U	918	50 U	50 U	50 U	50 U
ANTIMONY	6	TACO	0.416 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
ARSENIC	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BARIUM	2000	TACO	69.7	25.3	79.9	81.8	406	60.1
BERYLLIUM	4	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CADMIUM	5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	NC	NA	49300	74400	88400	88700	209000	169000
CHROMIUM	100	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COBALT	1000	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
COPPER	650	TACO	5 U	5 U	5 U	5 U	5 U	5 U
IRON	5000	TACO	529	2010	93.1 J	92.1 J	13200	3910
LEAD	7.5	TACO	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	50 U
MAGNESIUM	NC	NA	46300	76600	58200	58000	89300	55400
MANGANESE	150	TACO	22.8	55.7	48	48.8	395	660
MERCURY	2	TACO	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
NICKEL	100	TACO	5 U	5 U	5 U	5 U	8.11 J	5 U
POTASSIUM	NC	NA	1880	2940	2280	2330	7670	1380
SELENIUM	50	TACO	0.50 U	0.675 J	2.59	2.1	0.791 J	3.93
SILVER	50	TACO	5 U	5 U	5 U	5 U	5 U	5 U
SODIUM	NC	NA	42100	49800	45100	44600	107000	63600
THALLIUM	2	TACO	1.19	0.808	0.173 J	0.083 J	0.05 U	0.407
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	139580	203740	193980	193630	412970	289380
VANADIUM	49	TACO	25 U	50 U	100 U	100 U	50 U	100 U
ZINC	5000	TACO	5 U	12.3 J	5 U	5 U	5 U	5 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.4	0.48	0.289	0.273	16.3	0.459
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.71	5.88	1 U	1 U	1.97 J	1 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	10 U	10 U	11.9 J	11.9 J	40.8	23.5

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 SL-01_20070731 20070731 QTR04	SL-03 SL-03_20070801 20070801 QTR04	SL-04 SL-04_20070821 20070821 QTR04	SL-04 SL-04_20070821-D 20070821 QTR04 SL-04_20070821	SL-05 SL-05_20070802 20070802 QTR04	SL-06 SL-06_20070806 20070806 QTR04
CHLORIDE MG/L	200	TACO	1.82 J	26.6	25.8	25.5	169	145
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.748	0.701	0.633	0.625	0.255	0.417
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.005 U	0.00511 J	0.005 U	0.005 U	0.005 U	0.005 U
NITRATE MG/L	10	TACO	0.025 U	0.025 U	0.497	0.479	0.025 U	0.025 U
NITRATE-N MG/L	10	MCL						
NITRITE/NITRATE-N MG/L	10	MCL						
NITRITE-N MG/L	1	MCL						
PH S.U.	6.5 - 8.5	SMCL	7.21	7.72	7.29	7.26	6.94	6.85
SULFATE MG/L	400	TACO	60.8	251	98.7	90.3	135	121
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	402	756	652	672	1230	798
TOTAL ORGANIC CARBON MG/L	NC	NA	2.42	0.777 J	3.08	2.99	4.94	4.17
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U	0.00333 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.355	0.281
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	2.5 U	31.5	2.5 U	2.5 U	32	7.5
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA						
DISSOLVED OXYGEN MG/L	NC	NA						
OXIDATION REDUCTION POTENTIAL MV	NC	NA						
PH S.U.	6.5 - 8.5	SMCL						
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA						
TURBIDITY NTU	NC	NA						

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0105 20071115 QTR05	SL-02 NTC03GW0205 20071116 QTR05	SL-03 NTC03GW0305 20071115 QTR05	SL-04 NTC03GW0405 20071115 QTR05	SL-04 NTC03GW0405-D 20071115 QTR05 NTC03GW0405	SL-05 NTC03GW0505 20071115 QTR05
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 U	5 U	5 U	5 U	5 U	5 U
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.022 J
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.022 J
ACENAPHTHENE	420	TACO	0.54 U	5 U	0.50 U	0.50 U	0.019 J	0.54 U
BENZALDEHYDE	700	NON-TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(A)ANTHRACENE	0.13	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(A)PYRENE	0.2	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
BUTYL BENZYL PHTHALATE	1400	TACO	1.1 U	5 U	1 U	1 U	1 U	1.1 U
CAPROLACTAM	3500	NON-TACO	1.1 U	31	1 U	1 U	1 U	1.1 U
CHRYSENE	1.5	TACO	0.54 U	5 U	0.50 U	0.029 J	0.50 U	0.54 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	5 U	0.50 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1.1 U	10 U	1 U	1 U	1 U	1.1 U
FLUORANTHENE	280	TACO	0.54 U	5 U	0.50 U	0.019 J	0.50 U	0.54 U
ISOPHORONE	1400	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
NAPHTHALENE	140	TACO	0.065 J	5 U	0.049 J	0.058 J	0.049 J	0.043 J
PHENANTHRENE	210	NON-TACO	0.54 U	10 U	0.50 U	0.50 U	0.50 U	0.54 U
PYRENE	210	TACO	0.54 U	5 U	0.50 U	0.50 U	0.50 U	0.54 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.0035 J	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.0059 J	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.0027 J	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0105 20071115 QTR05	SL-02 NTC03GW0205 20071116 QTR05	SL-03 NTC03GW0305 20071115 QTR05	SL-04 NTC03GW0405 20071115 QTR05	SL-04 NTC03GW0405-D 20071115 QTR05 NTC03GW0405	SL-05 NTC03GW0505 20071115 QTR05
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 U	2 U	2 U	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	200 U	200 U	200 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	200 U	200 U	200 U	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	5 U	1.3 J	5 U	5 U	5 U	5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	0.44 U	**12000 J / 44 U**	2100 / 44 U	44 U	44 U	45
ANTIMONY	6	TACO	1 U	0.76 U / 0.86 U	0.44 U / 0.44 U	0.59 U	1.1 U	0.68 U
ARSENIC	50	TACO	1.1	12 / 5.4	3.8 / 2.8	0.74 U	0.74 U	0.78
BARIUM	2000	TACO	77	120 / 54	31 / 19	81	81	430
BERYLLIUM	4	TACO	0.31 U	0.80 / 0.31 U	0.31 U / 0.31 U	0.31 U	0.31 U	0.31 U
CADMIUM	5	TACO	0.062 U	0.062 U / 0.062 U	0.44 / 0.062 U	0.077	0.062 U	0.064
CALCIUM	NC	NA	57000 J	82000 J / 62000 J	81000 J / 76000 J	89000 J	89000 J	200000 J
CHROMIUM	100	TACO	0.31 U	15 / 2.5	3.1 U / 1.4	0.31 U	0.31 U	0.31 U
COBALT	1000	TACO	0.22	5.9 / 0.42	1.5 / 0.14	1.4	1.4	1.9
COPPER	650	TACO	0.71	18 / 0.68	3.8 / 0.68	3.2	2.9	2.7
IRON	5000	TACO	620 J	**11000 J / 5.7 U**	3000 J / 620	130 J	94 J	**12000 J**
LEAD	7.5	TACO	0.33 U	**14 / 0.33 U**	1.5 / 0.33 U	0.33 U	0.33 U	0.94
MAGNESIUM	NC	NA	50000 J	100000 J / 87000 J	82000 J / 77000 J	54000 J	54000 J	87000 J
MANGANESE	150	TACO	21	**170 / 29**	69 / 20	47	46	**390**
MERCURY	2	TACO	0.078 U	0.046 U / 0.074 U	0.11 U / 0.046 U	0.074 U	0.10 U	0.06 U
NICKEL	100	TACO	0.77	19 / 2.8	5.5 / 1.9	8.8	8.2	17
POTASSIUM	NC	NA	2000	5700 / 3400	3400 / 2400	2400	2400	8000
SELENIUM	50	TACO	0.92 U	0.92 U / 1	0.92 U / 0.92 U	0.92 U	0.92 U	0.92 U
SILVER	50	TACO	0.12 U	0.12 U / 0.12 U	0.12 U / 0.12 U	0.12 U	0.12 U	0.12 U
SODIUM	NC	NA	44000 J	280000 J / 260000 J	57000 J / 56000 J	48000 J	49000 J	110000 J
THALLIUM	2	TACO	0.17 U	0.28 / 0.35	0.17 U / 0.17 U	0.17 U	0.17 U	0.17 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	153000	467700 / 412400	223400 / 211400	193400	194400	405000
VANADIUM	49	TACO	0.83 U	20 / 0.83 U	4.3 / 1.6	0.83 U	0.83 U	0.83 U
ZINC	5000	TACO	7.6	48 / 5.6	17 / 15	4.8 U	4.9 U	8
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.28	0.3	0.38	0.17	0.15	16 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.1	20 U	8	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	4.7 R	7 U	4.6 R	5.8 R	6.8 R	33 J

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0105 20071115 QTR05	SL-02 NTC03GW0205 20071116 QTR05	SL-03 NTC03GW0305 20071115 QTR05	SL-04 NTC03GW0405 20071115 QTR05	SL-04 NTC03GW0405-D 20071115 QTR05 NTC03GW0405	SL-05 NTC03GW0505 20071115 QTR05
CHLORIDE MG/L	200	TACO	4.7	580	10	26	24	180
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	887	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.75	0.54	0.79	0.65	0.64	0.27
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 U	0.0041 U	0.0041 U	0.0076	0.0076	0.0041 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.029 U	0.17	0.029 U	0.41	0.35	0.029 U
NITRITE/NITRATE-N MG/L	10	MCL	0.029 U	0.17	0.029 U	0.41	0.36	0.029 U
NITRITE-N MG/L	1	MCL	0.003	0.0048	0.0029 U	0.004	0.0055	0.0034
PH S.U.	6.5 - 8.5	SMCL						
SULFATE MG/L	400	TACO	89	64	320	81	81	120
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	450	1200	730	550	540	1100
TOTAL ORGANIC CARBON MG/L	NC	NA	2.8	6.9	2.5	4.9	4.9	18
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.01 UR	2.3 J	0.024 J	0.01 UR	0.01 UR	0.18 J
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	6.7	750	78	5.1	4.5	35
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	0.761		1.08	0.947		2.09
DISSOLVED OXYGEN MG/L	NC	NA	0.08		0.77	0.43		0.26
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-55		-100	81		-74
PH S.U.	6.5 - 8.5	SMCL	6.95		7.59	7.05		6.77
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0		0	0		0
TEMPERATURE C	NC	NA	11.19		10	10.1		11.53
TURBIDITY NTU	NC	NA	3.9		112	5.17		5.7

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0605 20071116 QTR05	SL-01 NTC03GW0106 20080227 QTR06	SL-02 NTC03GW0206 20080228 QTR06	SL-03 NTC03GW0306 20080304 QTR06	SL-04 NTC03GW0406 20080304 QTR06	SL-05 NTC03GW0506 20080303 QTR06
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 UJ	5 U	5 U	5 U	4.7 J	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	12	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 U	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	0.15 J	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
ACENAPHTHENE	420	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	1.1 U	1 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	1 U	1 U	1.2 J	1 UR	1 UR	0.15 J
CHRYSENE	1.5	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.5 U	0.04 U	0.087 U	0.067 U	0.063 U
DI-N-BUTYL PHTHALATE	700	TACO	0.49 J	1 U	1.1 U	1 U	1 U	1 U
FLUORANTHENE	280	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
ISOPHORONE	1400	TACO	0.50 U	0.035 U	0.12 U	0.12 U	0.11 U	0.11 U
NAPHTHALENE	140	TACO	0.061 J	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
PYRENE	210	TACO	0.50 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
ENDRIN KETONE	2	TACO	0.0067 J	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0605 20071116 QTR05	SL-01 NTC03GW0106 20080227 QTR06	SL-02 NTC03GW0206 20080228 QTR06	SL-03 NTC03GW0306 20080304 QTR06	SL-04 NTC03GW0406 20080304 QTR06	SL-05 NTC03GW0506 20080303 QTR06
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
2,4-D	70	TACO	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ
2,4-DB	290	USEPA TAPWATER	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MCPA	700	TACO	200 U	200 U	200 UJ	200 UJ	200 UJ	200 UJ
MCPP	37	USEPA TAPWATER	200 U	200 U	200 UJ	200 UJ	200 UJ	200 UJ
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	5 U	5 U	5 U	5 U	5 U	5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	100 J / 44 U	84	1500 / 2200	2000 / 82	62	44 U
ANTIMONY	6	TACO	0.57 U / 0.44 U	0.44 U	0.44 U / 0.44 U	0.44 U / 0.44 U	0.44 U	0.44 U
ARSENIC	50	TACO	**56 / 4.7**	0.74 U	4.5 / 4.7	3.2 / 1.8	0.74 U	1
BARIUM	2000	TACO	130 / 52	50	62 / 64	28 / 18	73	380
BERYLLIUM	4	TACO	0.31 U / 0.31 U	0.31 U	0.31 U / 0.31 U	0.31 U / 0.31 U	0.31 U	0.31 U
CADMIUM	5	TACO	0.091 / 0.062 U	0.062 U	0.062 U / 0.062 U	0.09 / 0.062 U	0.062 U	0.062 U
CALCIUM	NC	NA	140000 J / 140000 J	170000	60000 / 58000	91000 / 82000	86000	210000
CHROMIUM	100	TACO	0.31 U / 5.9	0.31 U	0.31 U / 0.31 U	0.31 U / 0.31 U	0.31 U	0.31 U
COBALT	1000	TACO	0.88 / 0.54	1.2	0.75 / 0.93	1.6 / 0.15	0.98	2.3
COPPER	650	TACO	2 / 0.71	0.67 J	1.9 J / 2.3 J	2.9 J / 0.48 J	1.8 J	0.82 J
IRON	5000	TACO	**54000 J / 5600 J**	1300	1600 / 2100	3600 / 890	160	14000
LEAD	7.5	TACO	0.67 / 0.33 U	0.33 U	1.4 / 1.9	1.3 / 0.33 U	0.33 U	0.33 U
MAGNESIUM	NC	NA	48000 J / 49000 J	87000	93000 / 90000	83000 / 77000	55000	88000
MANGANESE	150	TACO	**670 / 650**	**180**	41 / 49	88 / 28	32	420
MERCURY	2	TACO	0.046 U / 0.046 U	0.046 U	0.046 U / 0.046 U	0.046 U / 0.046 U	0.046 U	0.046 U
NICKEL	100	TACO	3.2 / 2.1	1.8	2.5 / 4.4 J	6.5 / 0.71	4.4	10
POTASSIUM	NC	NA	1300 / 1300	1300 J	3900 / 3900	3400 / 2600	2200	7700
SELENIUM	50	TACO	0.92 U / 0.92 U	0.92 U	1.2 / 0.92 U	0.92 U / 0.92 U	0.92 U	1.2
SILVER	50	TACO	0.12 U / 0.12 U	0.12 U	0.12 U / 0.12 U	0.12 U / 0.12 U	0.12 U	0.12 U
SODIUM	NC	NA	50000 J / 52000 J	35000	280000 / 270000	54000 / 52000	40000	110000
THALLIUM	2	TACO	0.17 U / 0.17 U	0.17 U	0.17 U / 0.17 U	0.17 U / 0.17 U	0.17 U	0.17 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	239300 / 242300	293300	436900 / 421900	231400 / 213600	183200	415700
VANADIUM	49	TACO	1.2 / 3	0.83 U	2 / 2.7	4.2 / 0.83 U	0.83 U	0.83 U
ZINC	5000	TACO	6.8 / 5.9	0.84 U	0.84 U / 0.84 U	0.84 U / 8.7 J	0.84 U	0.84 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.23	0.19	0.36	0.6	0.17	15
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	7.8	2 U	8.8	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	37	13	7	12	6.7	33

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0605 20071116 QTR05	SL-01 NTC03GW0106 20080227 QTR06	SL-02 NTC03GW0206 20080228 QTR06	SL-03 NTC03GW0306 20080304 QTR06	SL-04 NTC03GW0406 20080304 QTR06	SL-05 NTC03GW0506 20080303 QTR06
CHLORIDE MG/L	200	TACO	110	21	580	28	25	160
CYANIDE MG/L	0.2	TACO	0.005 U	0.001900 U	0.001900 U	0.001900 U	0.001900 U	0.001900 U
FECAL COLIFORM COL/1	NC	NA	10 U	2 U	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.38	0.44	0.49	0.69	0.61	0.24
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 U	0.0051	0.0041 U	0.0041 U	0.0041 UJ	0.0041 UJ
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.029 U	0.016 U	0.049	0.016 U	0.51	0.016 U
NITRITE/NITRATE-N MG/L	10	MCL	0.029 U	0.016 U	0.053	0.016 U	0.51	0.016 U
NITRITE-N MG/L	1	MCL	0.0039	0.0075	0.0038	0.0053	0.0041	0.0041
PH S.U.	6.5 - 8.5	SMCL						
SULFATE MG/L	400	TACO	130	370	100	280	86	150
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	750	1000	1300	770	570	1200
TOTAL ORGANIC CARBON MG/L	NC	NA	9.3	3.5 J	1.6	1.3	2.4	14 J
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.004800 U	0.004800 U	0.004800 U	0.0064	0.004800 U
TOTAL PHOSPHORUS MG/L	NC	NA	1.2 J	0.018	0.11 J	0.052	0.023	0.27
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	36	7.4	310	63	3.9	33
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.24	1.57	2.46	1.068	0.912	2
DISSOLVED OXYGEN MG/L	NC	NA	0.42	0.11	0.4	0.06	0.11	0.1
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-45	-73	-174	-134	127	-74
PH S.U.	6.5 - 8.5	SMCL	6.75	7.07	8.55	7.46	6.94	6.78
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0	0	0	0	0	0
TEMPERATURE C	NC	NA	12.6	9.91	9.11	9.95	8.9	8.22
TURBIDITY NTU	NC	NA	47	10	9.75	73	1.7	1.3

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0606 20080228 QTR06	SL-06 NTC03GW0606-D 20080228 QTR06 NTC03GW0606	SL-01 NTC03GW0107 20080506 QTR07	SL-02 NTC03GW0207 20080506 QTR07	SL-03 NTC03GW0307 20080506 QTR07	SL-04 NTC03GW0407 20080505 QTR07
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 UJ	1 UJ	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ACENAPHTHENE	420	TACO	0.5 U	0.5 U	0.5 U	0.021 J	0.019 J	0.5 U
BENZALDEHYDE	700	NON-TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.5 U	0.05 J	0.5 U	0.5 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5 U	0.5 U	0.5 U	2.1	2.5	0.5 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	1 UR	1 UR	1 U	1 U	1 U	1 U
CHRYSENE	1.5	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	3.3 U	2.4 U	3.2 U	1.8 U
FLUORANTHENE	280	TACO	0.5 U	0.5 U	0.02 J	0.5 U	0.5 U	0.5 U
ISOPHORONE	1400	TACO	0.12 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U
NAPHTHALENE	140	TACO	0.5 U	0.5 U	0.03 J	0.5 U	0.5 U	0.029 J
PHENANTHRENE	210	NON-TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
PYRENE	210	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0606 20080228 QTR06	SL-06 NTC03GW0606-D 20080228 QTR06 NTC03GW0606	SL-01 NTC03GW0107 20080506 QTR07	SL-02 NTC03GW0207 20080506 QTR07	SL-03 NTC03GW0307 20080506 QTR07	SL-04 NTC03GW0407 20080505 QTR07
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
2,4,5-TP (SILVEX)	50	TACO	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
2,4-D	70	TACO	2 UJ	2 UJ	2 U	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 UJ	2 UJ	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
MCPA	700	TACO	200 UJ	200 UJ	200 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	200 UJ	200 UJ	200 U	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	5 U	5 U	0.830000 U	0.830000 U	0.830000 U	0.830000 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	52 / 47	44 U / 44 U	41 / 26	890	1000 / 46	20 U
ANTIMONY	6	TACO	0.44 U / 0.44 U	0.44 U / 0.44 U	0.32 U / 0.41	0.42 U	0.32 U / 0.55	0.54 U
ARSENIC	50	TACO	21 / 3.5	20 / 3.2	0.93 / 0.64	3.9	2.2 / 1.6	0.3
BARIUM	2000	TACO	79 / 52	77 / 50	53 / 47	62	22 / 18	75
BERYLLIUM	4	TACO	0.31 U / 0.31 U	0.31 U / 0.31 U	0.23 U / 0.23 U	0.23 U	0.23 U / 0.23 U	0.23 U
CADMIUM	5	TACO	0.062 U / 0.062 U	0.062 U / 0.062 U	0.056 U / 0.056 U	0.11 U	0.056 U / 0.056 U	0.056 U
CALCIUM	NC	NA	160000 / 150000	150000 / 150000	170000 / 170000	58000	85000 / 80000	88000
CHROMIUM	100	TACO	0.31 U / 0.31 U	0.31 U / 0.31 U	0.76 / 0.33 U	2.2	1.9 / 0.99	0.51
COBALT	1000	TACO	0.97 / 0.84	0.92 / 0.85	1.1 / 1.1	0.56	0.64 / 0.21	0.93
COPPER	650	TACO	1 J / 0.33 U	2.1 J / 1.2 J	1.6 / 0.83	1.5	4 / 0.76	2.5
IRON	5000	TACO	21000 / 3000	18000 / 2900	2300 / 740	1000	1900 / 710	110 J
LEAD	7.5	TACO	0.33 U / 0.33 U	0.33 U / 0.33 U	0.4 / 0.29 U	0.57	0.55 / 0.29 U	0.29 U
MAGNESIUM	NC	NA	55000 / 54000	53000 / 51000	83000 / 83000	93000	79000 / 75000	57000
MANGANESE	150	TACO	770 / 760	780 / 730	170 / 150	43	47 / 27	35
MERCURY	2	TACO	0.046 U / 0.046 U	0.046 U / 0.046 U	0.046 U / 0.046 U	0.046 U	0.046 U / 0.046 U	0.046 U
NICKEL	100	TACO	2.2 / 1.6 J	1.9 / 4.1 J	3 / 2.9	2.7	3.4 / 2.2	6.2 J
POTASSIUM	NC	NA	1200 J / 1100 J	1000 J / 1100 J	1400 / 1400	3500	2800 / 2500	2100
SELENIUM	50	TACO	0.92 U / 0.92 U	0.92 U / 0.92 U	0.30 U / 0.30 U	0.30 U	0.30 U / 0.30 U	0.30 U
SILVER	50	TACO	0.12 U / 0.12 U	0.12 U / 0.12 U	0.061 U / 0.061 UJ	0.061 U	0.061 U / 0.061 UJ	0.061 U
SODIUM	NC	NA	50000 / 50000	49000 / 47000	33000 / 33000	300000	53000 / 51000	41000
THALLIUM	2	TACO	0.17 U / 0.17 U	0.17 U / 0.17 U	0.05 U / 0.05 U	0.05 U	0.055 / 0.05 U	0.074
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	266200 / 255100	253000 / 249100	287400 / 287400	454500	219800 / 208500	188100
VANADIUM	49	TACO	0.83 U / 0.83 U	0.83 U / 0.83 U	0.54 / 0.35	1.7	2 / 0.35	0.27 U
ZINC	5000	TACO	0.84 U / 7.3 J	0.84 U / 0.84 U	5.4 U / 11 U	8.3 U	8.5 U / 5.1 U	6.4 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.26	0.26	0.17	0.35	0.56	0.18
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	8.4	2.0 U	8.3	2.0 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.200000 U	2.2	11	6.1	4.1	5.1

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0606 20080228 QTR06	SL-06 NTC03GW0606-D 20080228 QTR06 NTC03GW0606	SL-01 NTC03GW0107 20080506 QTR07	SL-02 NTC03GW0207 20080506 QTR07	SL-03 NTC03GW0307 20080506 QTR07	SL-04 NTC03GW0407 20080505 QTR07
CHLORIDE MG/L	200	TACO	99	99	18	590	28	23
CYANIDE MG/L	0.2	TACO	0.001900 U	0.001900 U	0.0032 U	0.0032 U	0.003 U	0.0034 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U
FLUORIDE MG/L	4	TACO	0.33	0.33	0.4	0.44	0.67	0.58
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 U	0.0041 U	0.0041 UJ	0.0041 UJ	0.0041 UJ	0.0041 UJ
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.016 U	0.016 U	0.034 J	0.039 J	0.054 J	0.26
NITRITE/NITRATE-N MG/L	10	MCL	0.022	0.016 U	0.034 U	0.039 U	0.054 U	0.26 U
NITRITE-N MG/L	1	MCL	0.0075	0.0057	0.0029 U	0.0029 U	0.0029 U	0.0029 U
PH S.U.	6.5 - 8.5	SMCL						
SULFATE MG/L	400	TACO	160	150	340	120	280	87
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	790	800	950	1300	730	570
TOTAL ORGANIC CARBON MG/L	NC	NA	12 J	9.7	4.3	2.1	1.9	2.6
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.004800 U	0.004800 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U
TOTAL PHOSPHORUS MG/L	NC	NA	3.6 J	2 J	0.035	0.02	0.024	0.026
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	82	75	6.5	52	38	3.3 U
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.302		1.436	2.51	1.208	1.049
DISSOLVED OXYGEN MG/L	NC	NA	0.22		0.44	0.1	0.14	0.16
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-69		-14	-161	-145	55
PH S.U.	6.5 - 8.5	SMCL	6.72		6.98	8.57	7.54	6.81
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0		0	0	0	0
TEMPERATURE C	NC	NA	8.84		12.7	13.72	13.37	11.99
TURBIDITY NTU	NC	NA	450		7.72	2.56	36.7	1.61

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0407-D 20080505 QTR07 NTC03GW0407	SL-05 NTC03GW0507 20080505 QTR07	SL-06 NTC03GW0607 20080506 QTR07	SL-01 NTC03GW0108 20080818 QTR08	SL-02 NTC03GW0208 20080818 QTR08	SL-03 NTC03GW0308 20080819 QTR08
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UJ	5 UJ	5 UJ
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.02 J	0.03 J	0.019 J	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.5 U	0.5 U	0.052 J	0.50 U	0.051 J
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.061 J
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	1 U	1 U	1 U	0.10 J
CAPROLACTAM	3500	NON-TACO	1 U	1 UJ	1 U	1 UJ	0.18 J	1 UJ
CHRYSENE	1.5	TACO	0.5 U	0.5 U	0.5 U	0.052 J	0.50 U	0.051 J
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	3.1 U	3.9 U	2.4 U	1 U	1 U	1 U
FLUORANTHENE	280	TACO	0.5 U	0.5 U	0.5 U	0.042 J	0.50 U	0.03 J
ISOPHORONE	1400	TACO	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.03 J	0.5 U	0.5 U	0.50 U	0.50 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.02 J	0.5 U	0.021 J	0.50 U	0.02 J
PYRENE	210	TACO	0.5 U	0.5 U	0.5 U	0.052 J	0.50 U	0.03 J
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0407-D 20080505 QTR07 NTC03GW0407	SL-05 NTC03GW0507 20080505 QTR07	SL-06 NTC03GW0607 20080506 QTR07	SL-01 NTC03GW0108 20080818 QTR08	SL-02 NTC03GW0208 20080818 QTR08	SL-03 NTC03GW0308 20080819 QTR08
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.2 UJ	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.2 UJ	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 UJ	2 U	2 U	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 UJ	2 U	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.2 UJ	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	200 UJ	200 U	200 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	200 UJ	200 U	200 U	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	0.830000 U	1.1 J	0.830000 U	5 U	5 U	5 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	20 U	20 U	230 / 27	100 U	6600	530 / 100 U
ANTIMONY	6	TACO	0.58 U	0.43 U	0.32 U / 0.32 U	1 U	1 U	1 U / 1 U
ARSENIC	50	TACO	0.44	0.7	25 / 5.5	0.69 J	4.9	2.3 J / 1.5 J
BARIUM	2000	TACO	72	380	99 / 51	71	83	19 / 16
BERYLLIUM	4	TACO	0.23 U	0.23 U	0.23 U / 0.23 U	1 U	0.36 J	1 U / 1 U
CADMIUM	5	TACO	0.056 U	0.056 U	0.056 U / 0.056 U	0.20 U	0.20 U	0.20 U / 0.20 U
CALCIUM	NC	NA	82000	220000	150000 / 160000	52000	64000	74000 / 72000
CHROMIUM	100	TACO	0.37	0.72	0.56 / 0.66	1 UJ	9	0.90 J / 1 UJ
COBALT	1000	TACO	0.77	2.1	0.96 / 0.85	0.16 J	3.4	0.42 J / 0.056 J
COPPER	650	TACO	1.6	0.89	1.4 / 0.88	0.63 J	8.2	1.6 / 0.79 UJ
IRON	5000	TACO	250 J	16000	29000 / 6400	910	7300	1500 / 670
LEAD	7.5	TACO	0.29 U	0.29 U	0.43 / 0.29 U	1 U	5.1	0.47 J / 1 U
MAGNESIUM	NC	NA	57000	93000	53000 / 55000	46000	88000	70000 / 69000
MANGANESE	150	TACO	31	460	780 / 760	19	130	36 / 22
MERCURY	2	TACO	0.046 U	0.046 U	0.046 U / 0.046 U	0.20 U	0.20 U	0.20 U / 0.20 U
NICKEL	100	TACO	3.4 J	10	2.7 / 2.1	0.66 J	12	2.2 / 0.98 J
POTASSIUM	NC	NA	2000	7100	1000 / 1100	1800	4800	2300 / 2100
SELENIUM	50	TACO	0.30 U	1.3	0.30 U / 0.30 U	0.56 UJ	1 U	1 U / 1 U
SILVER	50	TACO	0.061 U	0.061 U	0.061 U / 0.061 UJ	0.20 U	0.20 U	0.20 U / 0.20 U
SODIUM	NC	NA	35000	100000	48000 / 50000	42000	260000	47000 / 47000
THALLIUM	2	TACO	0.06	0.05 U	0.05 U / 0.05 U	1 U	0.14 J	1 U / 1 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	176000	420100	252000 / 266100	141800	416800	193300 / 190100
VANADIUM	49	TACO	0.27 U	0.84	1.1 / 0.3	0.38 J	11	1.2 J / 3 U
ZINC	5000	TACO	6.2 U	4.9 U	7.3 U / 7.9 U	9.1 UJ	22	9 UJ / 3.6 UJ
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.17	16	0.24	0.42	0.36	0.49
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.0 U	2.0 U	2.0 U	6.1	2 U	12
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	4	54 U	7.4	4.7 J	13 J	5.2 J

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0407-D 20080505 QTR07 NTC03GW0407	SL-05 NTC03GW0507 20080505 QTR07	SL-06 NTC03GW0607 20080506 QTR07	SL-01 NTC03GW0108 20080818 QTR08	SL-02 NTC03GW0208 20080818 QTR08	SL-03 NTC03GW0308 20080819 QTR08
CHLORIDE MG/L	200	TACO	19	140	78	14 J	580 J	34 J
CYANIDE MG/L	0.2	TACO	0.0034 U	0.0039 U	0.003 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.59	0.24	0.32	0.72	0.44	0.67
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0041 UJ	0.0041 UJ	0.0073 J	0.01 U	0.01 U	0.01 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.31	0.064 J	0.024 J	0.02 U	0.02 U	0.02 U
NITRITE/NITRATE-N MG/L	10	MCL	0.31 U	0.064 U	0.027 U	0.02 U	0.02 U	0.02 U
NITRITE-N MG/L	1	MCL	0.0029 U	0.0029 U	0.003 J	0.0042 U	0.0042 U	0.0042 U
PH S.U.	6.5 - 8.5	SMCL						
SULFATE MG/L	400	TACO	88	180	180	92 J	110 J	270 J
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	550	1200	790	440	1200	710
TOTAL ORGANIC CARBON MG/L	NC	NA	2.2	17	7	1.4 U	1.9 U	1.6 U
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.0048 U	0.0048 U	0.0048 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.019	0.22	1.3	0.039 J	0.098 J	0.027 J
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	3.3 U	31	72	5.4	40	29
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.049	2.48	1.301	0.72	2.26	1.095
DISSOLVED OXYGEN MG/L	NC	NA	0.16	0.13	0.11	0.31	0.15	0.11
OXIDATION REDUCTION POTENTIAL MV	NC	NA	55	-136	-57	-82	-156	-105
PH S.U.	6.5 - 8.5	SMCL	6.81	6.99	6.93	6.92	8.08	7.48
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0	0	0			
TEMPERATURE C	NC	NA	11.99	10.84	11.82	13.8	15.9	14.07
TURBIDITY NTU	NC	NA	1.61	0.88	180	4.11	7.01	43.2

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0408 20080819 QTR08	SL-05 NTC03GW0508 20080819 QTR08	SL-05 NTC03GW0508-D 20080819 QTR08 NTC03GW0508	SL-06 NTC03GW0608 20080819 QTR08	SL-01 NTC03GW0109 20081117 QTR09	SL-02 NTC03GW0209 20081118 QTR09
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UJ	5 UJ	5 UJ	5 UJ	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.12 J	0.13 J	0.50 U	0.54 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.033 J	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	0.13 J	0.071 J	0.33 J	0.074 J
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1 UJ	1 UJ	0.32 J	0.23 J
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.054 J	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1 U	1.1 U	1 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.022 J	0.50 U
ISOPHORONE	1400	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.13 J
NAPHTHALENE	140	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.50 U	0.03 J	0.50 U	0.54 U	0.50 U
PYRENE	210	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.54 U	0.50 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0408 20080819 QTR08	SL-05 NTC03GW0508 20080819 QTR08	SL-05 NTC03GW0508-D 20080819 QTR08 NTC03GW0508	SL-06 NTC03GW0608 20080819 QTR08	SL-01 NTC03GW0109 20081117 QTR09	SL-02 NTC03GW0209 20081118 QTR09
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U
2,4-D	70	TACO	2 U	2 U	2 U	2 U	2 U	2.1 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	2 U	2.1 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U
MCPA	700	TACO	200 U	200 U	200 U	200 U	200 U	210 U
MCPP	37	USEPA TAPWATER	200 U	200 U	200 U	200 U	200 UJ	210 UJ
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	5 U	5 U	5 U	5 U	4 U	4 U
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	100 U	140 UJ / 100 U	140 UJ / 100 U	280 / 100 U	20 U	230
ANTIMONY	6	TACO	1 U	0.42 UJ / 0.47 UJ	0.33 UJ / 1 U	0.54 J / 0.52 UJ	1	0.32 U
ARSENIC	50	TACO	0.46 J	1.2 J / 0.99 J	1 J / 0.97 J	20 / 6.1	1.6	3.5
BARIUM	2000	TACO	65	350 / 360	350 / 360	79 / 56	58	56
BERYLLIUM	4	TACO	1 U	1 U / 1 U	1 U / 1 U	1 U / 1 U	0.23 U	0.23 U
CADMIUM	5	TACO	0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.056 U	0.056 U
CALCIUM	NC	NA	79000	210000 / 210000	200000 / 200000	140000 / 140000	200000 J	63000 J
CHROMIUM	100	TACO	1 UJ	0.47 J / 1 UJ	1 UJ / 1 UJ	0.35 J / 1 UJ	0.36 U	1.3
COBALT	1000	TACO	0.58 J	1.8 / 1.6	1.7 / 1.6	1.1 / 0.89 J	1.2	0.28
COPPER	650	TACO	1.5	1.2 / 0.73 UJ	1.2 / 0.97 UJ	1.6 / 0.94 UJ	0.96	1.3
IRON	5000	TACO	230	13000 / 11000	12000 / 11000	11000 / 1300	1300 J	600
LEAD	7.5	TACO	1 U	0.39 J / 1 U	0.40 J / 1 U	0.63 J / 1 U	0.29 U	0.36
MAGNESIUM	NC	NA	55000	87000 / 88000	84000 / 85000	49000 / 50000	100000 J	100000 J
MANGANESE	150	TACO	22	390 / 360	390 / 350	510 / 490	180	32
MERCURY	2	TACO	0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.043 U	0.043 U
NICKEL	100	TACO	2.9	11-Nov	11-Nov	3.7 / 3.3	3.5	3
POTASSIUM	NC	NA	1900	7500 / 7700	7300 / 7500	1400 / 1300	1500	3100
SELENIUM	50	TACO	0.89 UJ	1.4 U / 0.62 UJ	1.1 U / 0.73 UJ	1 U / 0.40 UJ	0.49 J	0.30 UJ
SILVER	50	TACO	0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.20 U / 0.20 U	0.33	0.061 U
SODIUM	NC	NA	34000	110000 / 110000	110000 / 110000	52000 / 54000	39000 J	290000 J
THALLIUM	2	TACO	1 U	1 U / 1 U	1 U / 1 U	0.055 J / 1 U	0.05 U	0.05 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	169900	414500 / 415700	401300 / 402500	242400 / 245300	340500	456100
VANADIUM	49	TACO	3 U	1.3 J / 0.83 J	1.2 J / 0.85 J	1.1 J / 3 U	0.78	0.91
ZINC	5000	TACO	3.5 UJ	5.8 UJ / 4.3 UJ	7.1 UJ / 7.4 UJ	4 UJ / 10 UJ	9.2	7.4
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.2	16	17	0.27	0.22	0.33
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	3.7	4.4	2 U	7.6	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	6.1 J	60	76	14 J	11	7

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-04 NTC03GW0408 20080819 QTR08	SL-05 NTC03GW0508 20080819 QTR08	SL-05 NTC03GW0508-D 20080819 QTR08 NTC03GW0508	SL-06 NTC03GW0608 20080819 QTR08	SL-01 NTC03GW0109 20081117 QTR09	SL-02 NTC03GW0209 20081118 QTR09
CHLORIDE MG/L	200	TACO	22 J	180 J	180 J	130 J	24	560
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	2 U
FLUORIDE MG/L	4	TACO	0.62	0.22	0.23	0.31	0.44	0.49
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.01 UJ	0.01 UJ	0.01 UJ	0.01 U	0.0072 J	0.015 J
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.19	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
NITRITE/NITRATE-N MG/L	10	MCL	0.2	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
NITRITE-N MG/L	1	MCL	0.0066 J	0.0044 J	0.0042 U	0.0042 U	0.0042 U	0.0049
PH S.U.	6.5 - 8.5	SMCL						
SULFATE MG/L	400	TACO	96 J	150 J	140 J	130 J	460	110
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	540	1300	1200	790	1100	1100
TOTAL ORGANIC CARBON MG/L	NC	NA	2.2 U	15	15	5.8	3.8	2
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
TOTAL PHOSPHORUS MG/L	NC	NA	0.021 J	0.26 J	0.36 J	1.2 J	0.017	0.042
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	3.3 U	340	310	87	7.9	160
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	0.887	2.06	2.06	1.242	1.477	1.694
DISSOLVED OXYGEN MG/L	NC	NA	0.18	0.42	0.42	0.49	0.1	0.3
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-12	-82	-82	-33	-50	12.7
PH S.U.	6.5 - 8.5	SMCL	7.17	6.69	6.69	6.83	7.19	8.03
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	12.28	13.9	13.9	14.64	10.7	11.24
TURBIDITY NTU	NC	NA	1.41	42.6	42.6	96.6	3.8	5.3

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-03 NTC03GW0309 20081118 QTR09	SL-03 NTC03GW0309-D 20081118 QTR09 NTC03GW0309	SL-04 NTC03GW0409 20081119 QTR09	SL-05 NTC03GW0509 20081119 QTR09	SL-06 NTC03GW0609 20081120 QTR09	SL-01 NTC03GW0110 20090520 QTR10
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.031 J	0.50 U	0.042 J	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	0.093 J	1 U	0.10 J	1 U	0.15 J	1 U
CAPROLACTAM	3500	NON-TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.041 J	0.041 J	0.042 J	0.04 J	0.053 J	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1 U	0.68 J	1 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.021 J	0.50 U	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.12 J	0.50 U	0.50 U	0.50 U	0.13 J	0.50 U
NAPHTHALENE	140	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PYRENE	210	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.013 J	0.05 U	0.05 UJ	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.019 R	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
ENDOSULFAN I	42	TACO	0.0029 J	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.054 U	0.0023 J	0.0033 J	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.054 U	0.05 U	0.05 UJ	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.0029 J	0.0036 J	0.054 U	0.05 U	0.05 UJ	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-03 NTC03GW0309 20081118 QTR09	SL-03 NTC03GW0309-D 20081118 QTR09 NTC03GW0309	SL-04 NTC03GW0409 20081119 QTR09	SL-05 NTC03GW0509 20081119 QTR09	SL-06 NTC03GW0609 20081120 QTR09	SL-01 NTC03GW0110 20090520 QTR10
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.22 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.20 U	0.22 U	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 U	2 U	2.2 U	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2.2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.22 U	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	200 U	200 U	220 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	200 UJ	200 UJ	220 UJ	200 UJ	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA	4 U	4 U	4 U	4 U	4 U	
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	770 J / 20 U	100 J / 20 U	400 / 26	20 U	20 U / 20 U	180 / 24 U
ANTIMONY	6	TACO	0.32 U / 0.50 U	0.32 U / 0.32 U	0.32 U / 0.32 U	0.32 U	0.32 U / 0.32 U	0.40 U / 0.40 U
ARSENIC	50	TACO	2.3 / 2.1	1.8 / 1.8	0.37 / 0.43	1.4	52 / 4.1	0.60 / 0.39 U
BARIUM	2000	TACO	20 / 17	18 / 16	70 / 67	390	110 / 50	49 / 47
BERYLLIUM	4	TACO	0.23 U / 0.23 U	0.23 U / 0.23 U	0.23 U / 0.23 U	0.23 U	0.23 U / 0.23 U	0.31 U / 0.31 U
CADMIUM	5	TACO	0.093 / 0.068	0.056 U / 0.061	0.056 U / 0.056 U	0.06	0.056 U / 0.056 U	0.06 U / 0.06 U
CALCIUM	NC	NA	91000 J / 79000 J	85000 J / 78000 J	100000 J / 88000 J	240000 J	160000 J / 140000 J	140000 J / 140000 J
CHROMIUM	100	TACO	1.4 / 0.75 U	0.96 / 0.78 U	1.1 / 0.65 U	1.1	0.72 U / 0.92	0.34 U / 0.75 U
COBALT	1000	TACO	0.68 / 0.14	0.30 / 0.13	1.1 / 0.78	2.1	1 / 0.78	0.88 / 0.74
COPPER	650	TACO	2 / 0.98	1.2 / 0.85	2.6 / 2.1	3.3	1.8 / 0.93	1.7 / 1.1
IRON	5000	TACO	2000 J / 610	1100 J / 610	690 / 38	16000 J	40000 J / 3000 J	1200 J / 920
LEAD	7.5	TACO	0.83 / 0.29 U	0.41 / 0.29 U	0.37 / 0.29 U	0.85	0.67 / 0.29 U	0.35 / 0.26 U
MAGNESIUM	NC	NA	87000 J / 74000 J	78000 J / 74000 J	63000 J / 56000 J	100000 J	54000 J / 49000 J	71000 J / 74000 J
MANGANESE	150	TACO	44 J / 23	32 J / 23	41 / 31	450	670 / 590	99 / 100
MERCURY	2	TACO	0.043 U / 0.043 U	0.043 U / 0.043 U	0.043 U / 0.043 U	0.043 U	0.043 U / 0.043 U	0.043 U / 0.043 U
NICKEL	100	TACO	2.9 / 1.6	1.3 / 1.3	5 / 3.6	11	3.2 / 2.6	2.3 / 1.4
POTASSIUM	NC	NA	2800 / 2500	2500 / 2400	2500 / 2100	7800	1200 / 1200	1300 / 1100
SELENIUM	50	TACO	0.30 UJ / 0.30 U	0.30 UJ / 0.30 U	0.30 UJ / 0.30 U	2.1 J	0.30 UJ / 0.30 U	0.40 U / 0.40 U
SILVER	50	TACO	0.29 / 0.67	0.061 U / 0.48	0.061 U / 0.36	0.061 U	0.061 U / 0.14 U	0.053 U / 0.053 U
SODIUM	NC	NA	58000 J / 52000 J	51000 J / 52000 J	46000 J / 40000 J	130000 J	66000 J / 61000 J	31000 J / 33000 J
THALLIUM	2	TACO	0.05 U / 0.05 U	0.05 U / 0.05 U	0.074 / 0.079	0.05 U	0.05 U / 0.05 U	0.05 U / 0.05 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	238800 / 207500	216500 / 206400	211500 / 186100	477800	281200 / 251200	243300 / 248100
VANADIUM	49	TACO	2 / 3.6	1 / 3.2	1.3 / 4.1	1.2	1.7 / 3.8	1.3 / 0.87 U
ZINC	5000	TACO	16 / 2.7	9.6 / 1.9	13 / 2.9	15	6.1 / 1.8 U	2.5 / 2 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.52	0.51	0.16	16 J	0.29	0.2
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	9.8	9.5	2 U	2.5	2 U	21
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	4.9	4.1	7.7	36	4.7	8.1

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-03 NTC03GW0309 20081118 QTR09	SL-03 NTC03GW0309-D 20081118 QTR09 NTC03GW0309	SL-04 NTC03GW0409 20081119 QTR09	SL-05 NTC03GW0509 20081119 QTR09	SL-06 NTC03GW0609 20081120 QTR09	SL-01 NTC03GW0110 20090520 QTR10
CHLORIDE MG/L	200	TACO	30	40	23	170	130	17
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA	2 U	2 U	2 U	2 U	2 U	
FLUORIDE MG/L	4	TACO	0.49	0.53	0.49	0.22	0.41	0.44
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0031 J	0.0019 UJ	0.002	0.0033	0.0019 U	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.02 U	0.02 U	0.43	0.024	0.02 U	0.016 U
NITRITE/NITRATE-N MG/L	10	MCL	0.02 U	0.02 U	0.44	0.024	0.02 U	0.016 U
NITRITE-N MG/L	1	MCL	0.013	0.01	0.0088	0.0042 U	0.0042 U	0.002 U
PH S.U.	6.5 - 8.5	SMCL						7.4 J
SULFATE MG/L	400	TACO	260	210	92	150	97	280
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	740	680	550	1200	760	850
TOTAL ORGANIC CARBON MG/L	NC	NA	1.6 U	1.5 U	3	14	8.4	3.5
TOTAL PHENOLICS MG/L	0.1	IL - EPA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
TOTAL PHOSPHORUS MG/L	NC	NA	0.027	0.018	0.013	0.29	1.7	0.04
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	41 J	17 J	21	33	83	8.7
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.048		0.686	2.02	1.201	1.348
DISSOLVED OXYGEN MG/L	NC	NA	2.88		0.72	1.07	0.27	0.13
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-128		199	-113	-53	-32
PH S.U.	6.5 - 8.5	SMCL	8.34		6.84	7.25	7.38	6.97
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						0
TEMPERATURE C	NC	NA	10.34		10.46	11.76	12.62	12.5
TURBIDITY NTU	NC	NA	41.1		45	1.1	123	4.07

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-02 NTC03GW0210 20090520 QTR10	SL-03 NTC03GW0310 20090520 QTR10	SL-04 NTC03GW0410 20090520 QTR10	SL-04 NTC03GW0410-D 20090520 QTR10 NTC03GW0410	SL-05 NTC03GW0510 20090520 QTR10	SL-06 NTC03GW0610 20090521 QTR10
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	1.1 U	1 U	1 U	1 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	1.1 U	1 U	1 U	1 U	1 U	1 U
CHRYSENE	1.5	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1.1 U	1 U	1 U	1 U	1 U	1 U
FLUORANTHENE	280	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PYRENE	210	TACO	0.54 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.0057 J	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0014 J
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0014 J
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.00052 J
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0012 R

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-02 NTC03GW0210 20090520 QTR10	SL-03 NTC03GW0310 20090520 QTR10	SL-04 NTC03GW0410 20090520 QTR10	SL-04 NTC03GW0410-D 20090520 QTR10 NTC03GW0410	SL-05 NTC03GW0510 20090520 QTR10	SL-06 NTC03GW0610 20090521 QTR10
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 U	2 U	2 U	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	200 U	200 U	200 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	200 U	200 U	200 U	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA						
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	24 U	500 / 24 U	24 U	24 U	24 U	24 U / 24 U
ANTIMONY	6	TACO	0.40 U	0.40 U / 0.58	0.40 U	0.40 U	0.40 U	0.40 U / 0.42
ARSENIC	50	TACO	2.7	2.2 / 1.3	0.39 U	0.39 U	0.62	29 / 3.3
BARIUM	2000	TACO	55	22 / 20	72	71	340	100 / 52
BERYLLIUM	4	TACO	0.31 U	0.31 U / 0.31 U	0.31 U	0.31 U	0.31 U	0.31 U / 0.31 U
CADMIUM	5	TACO	0.30 U	0.06 U / 0.06 U	0.06 U	0.06 U	0.06 U	0.06 U / 0.06 U
CALCIUM	NC	NA	49000 J	86000 J / 92000 J	80000 J	83000 J	210000 J	160000 J / 160000 J
CHROMIUM	100	TACO	1.6 U	0.71 U / 0.90 U	0.84 U	0.61 U	0.80 U	0.75 U / 0.66 U
COBALT	1000	TACO	0.19	0.60 / 0.31	0.79	0.78	2.4	0.90 / 0.89
COPPER	650	TACO	0.73	2.3 / 1.6	2.1	1.9	2.3	2 / 1.5
IRON	5000	TACO	210	1800 J / 890	200	210	14000 J	28000 J / 7100 J
LEAD	7.5	TACO	0.27	0.54 / 0.26 U	0.26 U	0.26 U	0.26 U	0.33 / 0.26 U
MAGNESIUM	NC	NA	86000 J	71000 J / 77000 J	52000 J	55000 J	87000 J	54000 J / 56000 J
MANGANESE	150	TACO	21	63 / 50	28	28	490	780 / 740
MERCURY	2	TACO	0.043 U	0.043 U / 0.043 U	0.043 U	0.043 U	0.043 U	0.043 U / 0.043 U
NICKEL	100	TACO	2.6	2.7 / 3	2.9	3	9.6	5.8 / 2.6
POTASSIUM	NC	NA	2800	2900 / 2700	1900	2000	7000	930 / 920
SELENIUM	50	TACO	0.40 U	0.40 U / 0.40 U	0.40 U	0.40 U	0.40 U	0.40 U / 0.40 U
SILVER	50	TACO	0.12	0.053 U / 0.087	0.053 U	0.053 U	0.053 U	0.053 U / 0.059 U
SODIUM	NC	NA	270000 J	51000 J / 56000 J	34000 J	35000 J	96000 J	47000 J / 49000 J
THALLIUM	2	TACO	0.058	0.05 U / 0.05 U	0.05 U	0.05 U	0.05 U	0.05 U / 0.05 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	407800	210900 / 227700	167900	175000	400000	261930 / 265920
VANADIUM	49	TACO	0.30 U	1.9 / 1.1 U	0.98	0.96	1.3	1.2 / 0.84 U
ZINC	5000	TACO	2 U	9.7 / 220	2.7	5.1	7.9	2 U / 3.4
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.32	0.5	0.15	0.14	16 J	0.24
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	8.9	2 U	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	5	4.8	4.2	4.4	33	5 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-02 NTC03GW0210 20090520 QTR10	SL-03 NTC03GW0310 20090520 QTR10	SL-04 NTC03GW0410 20090520 QTR10	SL-04 NTC03GW0410-D 20090520 QTR10 NTC03GW0410	SL-05 NTC03GW0510 20090520 QTR10	SL-06 NTC03GW0610 20090521 QTR10
CHLORIDE MG/L	200	TACO	590	26	22	23	150	77
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA						
FLUORIDE MG/L	4	TACO	0.46	0.66	0.64	0.63	0.26	0.33
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0012 U	0.006 U	0.005 U	0.004 U	0.007 U	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.016 U	0.016 U	0.48	0.35	0.016 U	0.016 U
NITRITE/NITRATE-N MG/L	10	MCL	0.016 U	0.016 U	0.48	0.35	0.016 U	0.016 U
NITRITE-N MG/L	1	MCL	0.002 U	0.002 U	0.004	0.004	0.002 U	0.002 U
PH S.U.	6.5 - 8.5	SMCL	8.2 J	7.6 J	7.5 J	7.5 J	7.2 J	6.8 J
SULFATE MG/L	400	TACO	120	300	100	110	170	170
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1300	900	590	600 J	1300	850
TOTAL ORGANIC CARBON MG/L	NC	NA	2.1	2.4	2.6	2.7	16	7.3
TOTAL PHENOLICS MG/L	0.1	IL - EPA						
TOTAL PHOSPHORUS MG/L	NC	NA	0.032	0.044	0.02	0.025	0.29	1.7 J
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	8.3	50	6.3	4.3 J	35	56
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	2.39	1.271	1.047		2.19	1.374
DISSOLVED OXYGEN MG/L	NC	NA	0.08	0.39	0.13		0.48	0.31
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-195	-76	85		-73	-44
PH S.U.	6.5 - 8.5	SMCL	8.34	7.31	7.07		6.66	6.82
SALINITY %	NC	NA						
SALINITY PPT	NC	NA	0	0	0		0	0
TEMPERATURE C	NC	NA	15.25	13.57	11.77		10.14	11.68
TURBIDITY NTU	NC	NA	2.54	41.2	2.54		1.58	120

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0111 20091119 QTR11	SL-02 NTC03GW0211 20091119 QTR11	SL-03 NTC03GW0311 20091118 QTR11	SL-04 NTC03GW0411 20091117 QTR11	SL-05 NTC03GW0511 20091118 QTR11	SL-06 NTC03GW0611 20091118 QTR11
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1.0 U	1.2 U	1.0 U	1 U	1.0 U	1.0 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UR	6.1 J	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 UJ	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	0.25 J	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
ACENAPHTHENE	420	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
BENZALDEHYDE	700	NON-TACO	0.5 UJ	0.5 UJ	0.5 UJ	0.54 UJ	0.53 UJ	0.5 UJ
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.5 U	0.05 J	0.54 U	0.53 U	0.5 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	1.5 U	0.77 U	0.79 U	0.9 U	1.3 U	1.6 U
BUTYL BENZYL PHTHALATE	1400	TACO	0.15 J	0.062 J	0.08 J	0.087 J	0.074 J	1 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1 UJ	1.1 UJ	1.1 UJ	1 UJ
CHRYSENE	1.5	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DI-N-BUTYL PHTHALATE	700	TACO	0.41 J	1 U	1 U	1.1 U	1.1 U	1 U
FLUORANTHENE	280	TACO	0.5 U	0.5 U	0.04 J	0.54 U	0.53 U	0.5 U
ISOPHORONE	1400	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
NAPHTHALENE	140	TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	0.5 U
PYRENE	210	TACO	0.5 U	0.5 U	0.04 J	0.54 U	0.53 U	0.5 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.0029 J	0.0067 J	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0111 20091119 QTR11	SL-02 NTC03GW0211 20091119 QTR11	SL-03 NTC03GW0311 20091118 QTR11	SL-04 NTC03GW0411 20091117 QTR11	SL-05 NTC03GW0511 20091118 QTR11	SL-06 NTC03GW0611 20091118 QTR11
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.2 U	0.24 U	0.24 U	0.2 U	0.2 U	0.22 U
2,4,5-TP (SILVEX)	50	TACO	0.2 U	0.24 U	0.24 U	0.2 U	0.2 U	0.11 J
2,4-D	70	TACO	2 U	2.4 U	2.4 U	2 U	2 U	2.2 U
2,4-DB	290	USEPA TAPWATER	2 U	2.4 U	2.4 U	2 U	2 U	2.2 U
DICAMBA	1100	USEPA TAPWATER	0.2 U	0.24 U	0.24 U	0.2 U	0.2 U	0.22 U
MCPA	700	TACO	200 U	240 U	240 U	200 U	200 U	220 U
MCPP	37	USEPA TAPWATER	31 J	85 J	240 U	200 U	140 J	220 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA						
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	25	240	1200 / 24 U	25	42	81 J / 24 U
ANTIMONY	6	TACO	0.40 U	0.40 U	0.40 U / 0.40 U	0.40 U	0.46	0.40 U / 0.40 U
ARSENIC	50	TACO	0.8	2.6	1.4 / 0.98	0.39 U	1.2	37 / 4.3
BARIUM	2000	TACO	49	49	28 / 20	80	370	92 / 56
BERYLLIUM	4	TACO	0.31 U	0.31 U	0.31 U / 0.31 U	0.31 U	0.31 U	0.31 U / 0.31 U
CADMIUM	5	TACO	0.06 U	0.06 U	0.06 U / 0.06 U	0.06 U	0.06 U	0.06 U / 0.06 U
CALCIUM	NC	NA	180000	41000	86000 / 77000	86000	190000	160000 / 140000
CHROMIUM	100	TACO	0.39	1.1	2.3 / 0.73	0.38	0.76	0.34 U / 0.91
COBALT	1000	TACO	1.1	0.28	1 / 0.14	0.83	2	0.74 / 0.77
COPPER	650	TACO	1.6	0.84	2.4 / 0.92	2.9	1	1.5 / 0.87
IRON	5000	TACO	520	390	2200 / 670	74	12000	26000 J / 5100
LEAD	7.5	TACO	0.26 U	0.3	0.87 / 0.26 U	0.26 U	0.26 U	0.37 / 0.26 U
MAGNESIUM	NC	NA	85000	63000	73000 / 71000	50000	81000	55000 / 52000
MANGANESE	150	TACO	160	15	81 / 48	24	410	690 / 620
MERCURY	2	TACO	0.048 U	0.048 U	0.048 U / 0.048 U	0.048 U	0.048 U	0.048 U / 0.048 U
NICKEL	100	TACO	3.3	2.6	4 / 1.4	4.9	11	2.1 / 2.5
POTASSIUM	NC	NA	1100	3200	3000 / 2400	2300	7400	1100 / 1100
SELENIUM	50	TACO	0.76 U	1.5	1.1 / 1.1 U	0.98	2.8	0.94 / 0.56 U
SILVER	50	TACO	0.053 U	0.053 U	0.13 / 0.053 U	0.053 U	0.15	0.053 U / 0.13
SODIUM	NC	NA	31000	230000	47000 / 42000	42000	100000	56000 / 51000
THALLIUM	2	TACO	0.05 U	0.068	0.05 U / 0.05 U	0.05 U	0.077	0.05 U / 0.05 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	297100	337200	209000 / 192400	180300	378400	272100 / 244100
VANADIUM	49	TACO	0.30 U	0.57	2.6 / 0.30 U	0.30 U	0.88	0.91 / 0.30 U
ZINC	5000	TACO	4.3 U	6.6 U	5.1 U / 3.8 U	2 U	2.1 U	2.3 U / 2.1 U
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.16 J	0.33 J	0.48 J	0.081 J	17 J	0.3 J
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	12	2 U	12	2 U	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	13	8.1	4.5	7.2	36	10

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-01 NTC03GW0111 20091119 QTR11	SL-02 NTC03GW0211 20091119 QTR11	SL-03 NTC03GW0311 20091118 QTR11	SL-04 NTC03GW0411 20091117 QTR11	SL-05 NTC03GW0511 20091118 QTR11	SL-06 NTC03GW0611 20091118 QTR11
CHLORIDE MG/L	200	TACO	24	420	32	31	160	110
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA						
FLUORIDE MG/L	4	TACO	0.36	0.44	0.67	0.63	0.27	0.35
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0031	0.0014	0.0012 U	0.0012 U	0.0025	0.0012 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.016 U	0.016 U	0.016 U	0.95	0.016 U	0.02
NITRITE/NITRATE-N MG/L	10	MCL	0.016 U	0.016 U	0.017	0.96	0.016 U	0.023
NITRITE-N MG/L	1	MCL	0.002 U	0.0086	0.0029	0.0089	0.0054	0.0034
PH S.U.	6.5 - 8.5	SMCL	7 J	8.2 J	7.5 J	7.1 J	7.1 J	6.8 J
SULFATE MG/L	400	TACO	390	130	280	110	140	130
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1100	1100	750	570	1100	810
TOTAL ORGANIC CARBON MG/L	NC	NA	4.6	2.8	1.5	3	14	8.8
TOTAL PHENOLICS MG/L	0.1	IL - EPA						
TOTAL PHOSPHORUS MG/L	NC	NA	0.038	0.039	0.065	0.028	0.32	1.3
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	9.9 UJ	17 J	70 J	3.3 U	48 J	42 J
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA	1.53	2.04	1.159	1.007	2.13	1.329
DISSOLVED OXYGEN MG/L	NC	NA	1.06	0.06	0.13	0.21	3.39	0.08
OXIDATION REDUCTION POTENTIAL MV	NC	NA	-99	-151	-281	51	-177	-55
PH S.U.	6.5 - 8.5	SMCL	6.81	7.89	7.59	7.06	7	6.45
SALINITY %	NC	NA		1.02				0.66
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA	11.12	10.85	10.65	9.76	11.18	12.7
TURBIDITY NTU	NC	NA	4	9.61	76.7	3.37	4.9	195

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0611-D 20091118 QTR11 NTC03GW0611	SL-01 NTC03GW0112 20100503 QTR12	SL-02 NTC03GW0212 20100503 QTR12	SL-03 NTC03GW0312 20100504 QTR12	SL-04 NTC03GW0412 20100504 QTR12	SL-05 NTC03GW0512 20100504 QTR12
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	3.9 J	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 U	1 U	1 U	1 U
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR	5 UR	5 UR	3.0 J
TOLUENE	1000	TACO	1 U	1 U	1 U	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U	1 U	1 U	0.19 J
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZALDEHYDE	700	NON-TACO	0.5 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.5 U	0.14 J	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.86 U	2.7 U	1.5 U	3.6 U	9.8 U	8.1 U
BUTYL BENZYL PHTHALATE	1400	TACO	0.1 J	1 U	1 U	1 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHRYSENE	1.5	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
FLUORANTHENE	280	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.5 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
PYRENE	210	TACO	0.5 U	0.041 J	0.030 J	0.50 U	0.50 U	0.50 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.00082 NJ
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0611-D 20091118 QTR11 NTC03GW0611	SL-01 NTC03GW0112 20100503 QTR12	SL-02 NTC03GW0212 20100503 QTR12	SL-03 NTC03GW0312 20100504 QTR12	SL-04 NTC03GW0412 20100504 QTR12	SL-05 NTC03GW0512 20100504 QTR12
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.093 J	0.20 U	0.20 U	0.20 U	0.20 U	0.046 NJ
2,4-D	70	TACO	2 U	2 U	0.86 J	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.2 U	0.20 U	0.18 J	0.20 U	0.20 U	0.087 J
MCPA	700	TACO	200 U	200 U	200 U	200 U	200 U	200 U
MCPP	37	USEPA TAPWATER	110 R	200 U	200 U	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA						
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	31 J / 24 U	320 / 23 U	140	1300 / 23 U	23 U	23 U
ANTIMONY	6	TACO	0.40 U / 0.40 U	0.36 U / 0.36 U	0.36 U	0.36 U / 0.36 U	0.36 U	0.36 U
ARSENIC	50	TACO	29 / 4.2	1 J / 0.77 J	2.8 J	2.4 J / 1 J	0.45 J	1.3 J
BARIUM	2000	TACO	84 / 56	58 / 59	45	31 / 23	72	390
BERYLLIUM	4	TACO	0.31 U / 0.31 U	0.30 U / 0.30 U	0.30 U	0.30 U / 0.30 U	0.30 U	0.30 U
CADMIUM	5	TACO	0.06 U / 0.06 U	0.079 J / 0.055 U	0.055 U	0.065 J / 0.055 U	0.055 U	0.074 J
CALCIUM	NC	NA	140000 / 140000	150000 / 150000 J	43000	99000 / 92000 J	86000	210000
CHROMIUM	100	TACO	0.34 U / 0.48	0.46 U / 0.82 U	0.51 J	2.4 / 0.47 U	0.46 U	0.46 U
COBALT	1000	TACO	0.69 / 0.81	1.2 / 0.95 J	0.42 J	1.3 / 0.16 J	0.59 J	2.4
COPPER	650	TACO	0.89 / 0.88	2.5 / 1.1	2.7	3.2 / 0.90 J	1.7	0.91 J
IRON	5000	TACO	18000 J / 4800	3400 / 730	330	2600 / 520	160	14000
LEAD	7.5	TACO	0.26 U / 0.26 U	0.69 J / 0.22 U	0.64 J	1.3 / 0.22 U	0.22 U	0.25 J
MAGNESIUM	NC	NA	49000 / 48000	85000 / 82000 J	68000	79000 / 75000 J	59000	94000
MANGANESE	150	TACO	690 / 620	190 J / 200	15 J	160 J / 110	22 J	430 J
MERCURY	2	TACO	0.048 U / 0.048 U	0.061 U / 0.061 U	0.061 U	0.061 U / 0.061 U	0.061 U	0.061 U
NICKEL	100	TACO	2.1 / 2.4	3.3 / 2.6	3.2	4.1 / 1.5	2.8	12
POTASSIUM	NC	NA	1000 / 1100	1500 J / 1300 J	3300	2800 / 2300	2000	7400
SELENIUM	50	TACO	0.94 / 0.62 U	0.82 U / 0.88 J	0.82 U	0.82 U / 0.82 U	0.82 U	1.3
SILVER	50	TACO	0.053 U / 0.053 U	0.061 U / 0.061 U	0.10 J	0.061 U / 0.073 J	0.061 U	0.061 U
SODIUM	NC	NA	50000 / 49000	35000 / 35000 J	290000	46000 / 46000 J	36000	110000
THALLIUM	2	TACO	0.05 U / 0.05 U	0.064 J / 0.056 U	0.056 U	0.056 U / 0.056 U	0.056 U	0.056 U
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	240000 / 238100	271500 / 268300	404300	226800 / 215300	183000	421400
VANADIUM	49	TACO	0.61 / 0.30 U	0.78 J / 0.37 J	0.29 J	3.5 / 0.28 U	0.28 U	1.1 J
ZINC	5000	TACO	2 U / 2 U	9 J / 7.2 J	9.9 J	10 J / 9.1 J	7.8 J	6.2 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	0.33 J	0.2	0.25	0.38	0.16	16
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	14	2 U	7.5	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	10	17	14	10	7.2	41

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-06 NTC03GW0611-D 20091118 QTR11 NTC03GW0611	SL-01 NTC03GW0112 20100503 QTR12	SL-02 NTC03GW0212 20100503 QTR12	SL-03 NTC03GW0312 20100504 QTR12	SL-04 NTC03GW0412 20100504 QTR12	SL-05 NTC03GW0512 20100504 QTR12
CHLORIDE MG/L	200	TACO	110	20	420	27	18	160
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.00221 J	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA						
FLUORIDE MG/L	4	TACO	0.35	0.39	0.38	0.6	0.58	0.22
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0012 U	0.005 U	0.005 U	0.0048 U	0.0042 U	0.0092 U
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.016 U	0.05 U	0.05 U	0.05 U	0.31	0.05 U
NITRITE/NITRATE-N MG/L	10	MCL	0.017	0.05 U	0.0164 J	0.0135 J	0.31 J	0.029 J
NITRITE-N MG/L	1	MCL	0.0024	0.01 U	0.007 J	0.01 U	0.0074 J	0.01 U
PH S.U.	6.5 - 8.5	SMCL	6.8 J	7.3 J	8.2 J	7.8 J	7.6 J	7.4 J
SULFATE MG/L	400	TACO	130	320	110	270	91	120
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	790	860	970	620	440	1100
TOTAL ORGANIC CARBON MG/L	NC	NA	8.5	3.8	4	2.1 U	2.2 U	15
TOTAL PHENOLICS MG/L	0.1	IL - EPA						
TOTAL PHOSPHORUS MG/L	NC	NA	1.3	0.0239 U	0.0200 U	0.0188 U	0.00934 U	0.0736
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	42 J	21 J	10 J	79 J	3.3 UJ	36 J
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA		1.407	2.06	1.207	0.97	2.3
DISSOLVED OXYGEN MG/L	NC	NA		0.88	0.11	0.14	1.02	0.37
OXIDATION REDUCTION POTENTIAL MV	NC	NA		-128	-115	-146	45	-138
PH S.U.	6.5 - 8.5	SMCL		6.53	8.62	7.92	7.63	7.53
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA		11.36	13.63	13.42	11.28	9.25
TURBIDITY NTU	NC	NA		11.9	8.9	90	0.9	2.47

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0512-D 20100504 QTR12 NTC03GW0512	SL-06 NTC03GW0612 20100504 QTR12	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13
Volatile Organics (ug/L)								
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 U	1 U	0.26 J	1 UJ	1.1 J	1 UJ
CHLOROFORM	0.2	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
TETRAHYDROFURAN	NC	NA	3.4 J	5 UR	5 UR	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	0.50 J	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	0.19 J	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)								
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.021 J	0.50 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	1.6 U	2.0 U	0.50 U	0.33 J	0.27 J	0.50 U
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	1 U	1 U	1 U	1 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1 U	1 U	1 U	1 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.50 U	0.042 J	0.50 U	0.50 U
ISOPHORONE	1400	TACO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
NAPHTHALENE	140	TACO	0.50 U	0.50 U	0.051 J	0.50 U	0.50 U	0.50 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.50 U	0.50 U	0.032 J	0.50 U	0.50 U
PYRENE	210	TACO	0.50 U	0.50 U	0.50 U	0.042 J	0.50 U	0.50 U
Pesticides/PCBs (ug/L)								
4,4'-DDD	14	TACO	0.00082 NJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0512-D 20100504 QTR12 NTC03GW0512	SL-06 NTC03GW0612 20100504 QTR12	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13
Herbicides (ug/L)								
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.045 NJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 U	2 U	0.18 J	2 U	2 U	0.14 J
2,4-DB	290	USEPA TAPWATER	2 U	2 U	2 U	2 U	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	200 U	200 U	200 U	200 U	88 J	200 U
MCPP	37	USEPA TAPWATER	200 U	200 U	200 U	200 U	160 NJ	200 U
PENTACHLOROPHENOL	1	TACO						
Petroleum Hydrocarbons (mg/L)								
OIL & GREASE - HEM	NC	NA						
Inorganics (ug/L)								
ALUMINUM	3500	NON-TACO	23 U	23 U / 23 U	28 U	49 J / 28 U	780 / 28 U	28 U
ANTIMONY	6	TACO	0.36 U	0.50 J / 0.58 J	0.36 U	0.46 U / 0.36 U	0.36 U / 0.36 U	0.36 U
ARSENIC	50	TACO	1.6 J	88 / 7	0.38 U	1.2 J / 1 J	0.38 U / 0.38 U	0.38 U
BARIUM	2000	TACO	400	190 / 66	70	43 / 43	24 / 18	59
BERYLLIUM	4	TACO	0.30 U	0.30 U / 0.30 U	0.3 U	0.3 U / 0.3 U	0.3 U / 0.3 U	0.3 U
CADMIUM	5	TACO	0.079 J	0.13 J / 0.055 U	0.055 U	0.055 U / 0.055 U	0.059 J / 0.055 U	0.055 U
CALCIUM	NC	NA	220000	180000 / 160000 J	52000	50000 / 52000 J	77000 / 88000 J	69000
CHROMIUM	100	TACO	0.46 U	0.46 U / 0.58 U	0.55 U	0.63 U / 0.87 U	1.9 U / 0.81 U	0.56 U
COBALT	1000	TACO	2.5	1.6 / 1.4	0.15 J	0.13 J / 0.089 J	0.73 J / 0.14 J	0.44 J
COPPER	650	TACO	1.2	2.2 / 1.2	0.76 J	0.72 J / 0.71 U	1.7 / 0.73 J	1.7
IRON	5000	TACO	14000	55000 / 2700	730	240 / 150	1300 / 220	250
LEAD	7.5	TACO	0.41 J	1.1 / 0.22 U	0.22 U	0.22 U / 0.22 U	0.61 J / 0.22 U	0.22 U
MAGNESIUM	NC	NA	98000	62000 / 58000 J	51000	77000 / 82000	75000 / 87000	50000
MANGANESE	150	TACO	470 J	930 J / 760	15	20 / 18	70 / 45	18
MERCURY	2	TACO	0.061 U	0.061 U / 0.061 U	0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U	0.061 U
NICKEL	100	TACO	13	3.9 / 3.8	0.69 J	1.3 / 2	4 / 1.9	2.1
POTASSIUM	NC	NA	7700	1100 J / 1100 J	1800	2900 / 3100	2500 / 2500	1800
SELENIUM	50	TACO	2.9	0.84 J / 0.82 U	0.82 U	0.82 U / 0.90 J	0.82 U / 0.82 U	0.86 J
SILVER	50	TACO	0.061 U	0.2 U / 0.061 U	0.061 U	0.12 J / 0.11 J	0.061 U / 0.069 U	0.061 U
SODIUM	NC	NA	110000	58000 / 55000 J	45000	240000 / 250000	50000 / 58000	33000
THALLIUM	2	TACO	0.056 U	0.056 U / 0.056 U	0.056 U	0.056 U / 0.056 U	0.056 U / 0.094 J	0.057 J
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	435700	301100 / 274100	149800	369900 / 387100	204500 / 235500	153800
VANADIUM	49	TACO	1.0 J	2.4 J / 0.48 J	0.28 U	0.28 U / 0.28 U	2.5 J / 0.29 J	0.28 U
ZINC	5000	TACO	6.7 J	14 J / 7.5 J	3.6 J	3.7 J / 11 J	4.8 J / 2.9 U	3.4 J
Miscellaneous Parameters								
AMMONIA-N MG/L	30	SMCL	17	0.26	0.4	0.3	0.34	0.16
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2 U	2 U	6.1	2 U	17	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	42	15	4.7 J	7.6	11	6

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0512-D 20100504 QTR12 NTC03GW0512	SL-06 NTC03GW0612 20100504 QTR12	SL-01 NTC03GW0113 20101115 QTR13	SL-02 NTC03GW0213 20101115 QTR13	SL-03 NTC03GW0313 20101116 QTR13	SL-04 NTC03GW0413 20101116 QTR13
CHLORIDE MG/L	200	TACO	160	110	17 J	500 J	23 J	17 J
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA						
FLUORIDE MG/L	4	TACO	0.22	0.28	0.72	0.47	0.7	0.68
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0081 U	0.0077 U	0.0041 J	0.0046 J	0.005 UJ	0.0026 J
NITRATE MG/L	10	TACO						
NITRATE-N MG/L	10	MCL	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.13
NITRITE/NITRATE-N MG/L	10	MCL	0.024 J	0.014 J	0.05 U	0.05 U	0.05 U	0.14
NITRITE-N MG/L	1	MCL	0.01 U	0.01 U	0.0032 J	0.0022 J	0.0028 J	0.0078 J
PH S.U.	6.5 - 8.5	SMCL	7.4 J	7.4 J	7.6 J	8.1 J	7.8 J	7.7 J
SULFATE MG/L	400	TACO	120	160	110	120	270	83
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1100	760	478	1080	764	462
TOTAL ORGANIC CARBON MG/L	NC	NA	15	11	0.98	1.7	1.3	1.7
TOTAL PHENOLICS MG/L	0.1	IL - EPA						
TOTAL PHOSPHORUS MG/L	NC	NA	0.0665	0.171	0.013	0.013	0.027	0.026
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	35 J	100 J	6.8	4.9	45	3.3 U
Field Parameters								
CONDUCTIVITY MS/CM	NC	NA		1.51	0.769	2.01	1.13	0.828
DISSOLVED OXYGEN MG/L	NC	NA		1.5	0.09	0.2	0.23	0.19
OXIDATION REDUCTION POTENTIAL MV	NC	NA		-53	-144	-208	-232	-4
PH S.U.	6.5 - 8.5	SMCL		8.33	6.25	8.19	7.18	7.13
SALINITY %	NC	NA						
SALINITY PPT	NC	NA						
TEMPERATURE C	NC	NA		11.95	11.19	11.4	11.01	10.8
TURBIDITY NTU	NC	NA		216	11	17	63	2.5

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
Volatile Organics (ug/L)					
2-BUTANONE	7100	USEPA TAPWATER	5 U	5 U	5 U
ACETONE	6300	TACO	5 U	5 U	5 U
BENZENE	5	TACO	1 U	1 U	1 U
CARBON DISULFIDE	18	USEPA TAPWATER	1 UJ	1 UJ	1 UJ
CHLOROFORM	0.2	TACO	1 U	1 U	1 U
CHLOROMETHANE	190	USEPA TAPWATER	1 UJ	1 UJ	1 UJ
TETRAHYDROFURAN	NC	NA	5 UR	5 UR	5 UR
TOLUENE	1000	TACO	1 U	1 U	1 U
VINYL CHLORIDE	2	TACO	1 U	1 U	1 U
Semivolatile Organics (ug/L)					
1-METHYLNAPHTHALENE	490	NON-TACO	0.50 U	0.50 U	0.54 U
2-METHYLNAPHTHALENE	150	USEPA TAPWATER	0.50 U	0.50 U	0.54 U
ACENAPHTHENE	420	TACO	0.50 U	0.50 U	0.54 U
BENZALDEHYDE	700	NON-TACO	0.50 U	0.50 U	0.54 U
BENZO(A)ANTHRACENE	0.13	TACO	0.50 U	0.50 U	0.54 U
BENZO(A)PYRENE	0.2	TACO	0.50 U	0.50 U	0.54 U
BENZO(K)FLUORANTHENE	0.17	TACO	0.50 U	0.50 U	0.54 U
BIS(2-ETHYLHEXYL)PHTHALATE	6	TACO	0.28 J	0.27 J	0.28 J
BUTYL BENZYL PHTHALATE	1400	TACO	1 U	1 U	1.1 U
CAPROLACTAM	3500	NON-TACO	1 UJ	1 UJ	1.1 UJ
CHRYSENE	1.5	TACO	0.50 U	0.50 U	0.54 U
DIETHYL PHTHALATE	5600	TACO	0.50 U	0.50 U	0.54 U
DI-N-BUTYL PHTHALATE	700	TACO	1 U	1 U	1.1 U
FLUORANTHENE	280	TACO	0.50 U	0.50 U	0.54 U
ISOPHORONE	1400	TACO	0.50 U	0.50 U	0.54 U
NAPHTHALENE	140	TACO	0.50 U	0.50 U	0.54 U
PHENANTHRENE	210	NON-TACO	0.50 U	0.50 U	0.54 U
PYRENE	210	TACO	0.50 U	0.50 U	0.054 J
Pesticides/PCBs (ug/L)					
4,4'-DDD	14	TACO	0.05 U	0.05 U	0.05 U
4,4'-DDE	10	TACO	0.05 U	0.05 U	0.05 U
4,4'-DDT	6	TACO	0.05 U	0.05 U	0.05 U
ALPHA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U
BETA-BHC	0.037	USEPA TAPWATER	0.05 U	0.05 U	0.05 U
ENDOSULFAN I	42	TACO	0.05 U	0.05 U	0.05 U
ENDRIN KETONE	2	TACO	0.05 U	0.05 U	0.05 U
GAMMA-CHLORDANE	2	TACO	0.05 U	0.05 U	0.05 U
HEPTACHLOR	0.4	TACO	0.05 U	0.05 U	0.05 U
HEPTACHLOR EPOXIDE	0.2	TACO	0.05 U	0.05 U	0.05 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
Herbicides (ug/L)					
2,4,5-T	280	NON-TACO	0.20 U	0.20 U	0.20 U
2,4,5-TP (SILVEX)	50	TACO	0.20 U	0.20 U	0.20 U
2,4-D	70	TACO	2 U	2 U	2 U
2,4-DB	290	USEPA TAPWATER	1.7 J	2 U	2 U
DICAMBA	1100	USEPA TAPWATER	0.20 U	0.20 U	0.20 U
MCPA	700	TACO	41 J	38 J	200 U
MCPP	37	USEPA TAPWATER	200 U	200 U	200 U
PENTACHLOROPHENOL	1	TACO			
Petroleum Hydrocarbons (mg/L)					
OIL & GREASE - HEM	NC	NA			
Inorganics (ug/L)					
ALUMINUM	3500	NON-TACO	1400 / 28 U	1500 / 28 U	1500 / 28 U
ANTIMONY	6	TACO	0.36 U / 0.36 U	0.36 U / 0.55 U	1 / 0.64 U
ARSENIC	50	TACO	0.56 J / 0.38 U	0.79 J / 0.38 U	200 / 6.3
BARIUM	2000	TACO	330 / 320	340 / 330	260 / 49
BERYLLIUM	4	TACO	0.3 U / 0.3 U	0.3 U / 0.3 U	0.59 J / 0.3 U
CADMIUM	5	TACO	0.09 J / 0.055 U	0.17 J / 0.055 U	0.06 J / 0.055 U
CALCIUM	NC	NA	180000 / 200000 J	180000 / 200000 J	140000 / 130000 J
CHROMIUM	100	TACO	3.6 U / 0.94 U	3.4 U / 0.68 U	4.3 / 0.47 U
COBALT	1000	TACO	3.1 / 1.6	2.9 / 1.7	2.3 / 0.86 J
COPPER	650	TACO	4.1 / 0.71 U	4.2 / 0.75 J	5.9 / 0.57 J
IRON	5000	TACO	14000 / 12000	14000 / 12000	84000 / 5800
LEAD	7.5	TACO	2.7 / 0.22 U	2.7 / 0.22 U	3.7 / 0.22 U
MAGNESIUM	NC	NA	84000 / 90000	85000 / 91000	49000 / 47000
MANGANESE	150	TACO	420 / 340	400 / 350	540 / 430
MERCURY	2	TACO	0.061 U / 0.061 U	0.061 U / 0.061 U	0.061 U / 0.061 U
NICKEL	100	TACO	18 / 9.4	16 / 9.5	9.1 / 3.3
POTASSIUM	NC	NA	8300 / 8800	8300 / 8800	1700 / 1200
SELENIUM	50	TACO	0.82 U / 1.7	2 / 2.5	1 / 0.82 U
SILVER	50	TACO	0.061 U / 0.061 U	0.061 U / 0.081 J	0.16 J / 0.061 U
SODIUM	NC	NA	110000 / 120000	110000 / 120000	54000 / 56000
THALLIUM	2	TACO	0.11 J / 0.079 J	0.12 J / 0.056 U	0.084 J / 0.074 J
TOTAL ESSENTIAL NUTRIENTS	1200000	TACO	382300 / 418800	383300 / 419800	244700 / 2[illegible]
VANADIUM	49	TACO	5.3 / 0.77 J	5.2 / 0.69 J	6.7 / 1.26 U
ZINC	5000	TACO	26 / 4.1 J	25 / 3.3 J	9.7 J / 2.5 U
Miscellaneous Parameters					
AMMONIA-N MG/L	30	SMCL	14	14	0.15
BIOCHEMICAL OXYGEN DEMAND MG/L	NC	NA	2.4	2 U	2 U
CHEMICAL OXYGEN DEMAND MG/L	NC	NA	35	33	5 U

APPENDIX C.4

SUMMARY OF POSITIVE DETECTIONS AND CRITERIA FOR GROUNDWATER MONITORING ROUNDS 1 - 13
SITE 3 - SUPPLYSIDE LANDFILL
NAVAL STATION GREAT LAKES, ILLINOIS

Parameter	Groundwater Criteria		SL-05 NTC03GW0513 20101116 QTR13	SL-05 NTC03GW0513-D 20101116 QTR13 NTC03GW0513	SL-06 NTC03GW0613 20101116 QTR13
CHLORIDE MG/L	200	TACO	180 J	180 J	140 J
CYANIDE MG/L	0.2	TACO	0.005 U	0.005 U	0.005 U
FECAL COLIFORM COL/1	NC	NA			
FLUORIDE MG/L	4	TACO	0.27	0.27	0.34
HEXAVALENT CHROMIUM MG/L	0.1	IL - EPA	0.0026 J	0.0023 J	0.002 U
NITRATE MG/L	10	TACO			
NITRATE-N MG/L	10	MCL	0.05 U	0.05 U	0.05 U
NITRITE/NITRATE-N MG/L	10	MCL	0.05 U	0.05 U	0.05 U
NITRITE-N MG/L	1	MCL	0.0032 J	0.01 U	0.0051 J
PH S.U.	6.5 - 8.5	SMCL	7 J	7 J	6.8 J
SULFATE MG/L	400	TACO	110	110	75
TOTAL DISSOLVED SOLIDS MG/L	500	SMCL	1090	1130	762
TOTAL ORGANIC CARBON MG/L	NC	NA	13	13	31
TOTAL PHENOLICS MG/L	0.1	IL - EPA			
TOTAL PHOSPHORUS MG/L	NC	NA	0.21	0.22	0.71
TOTAL SUSPENDED SOLIDS MG/L	NC	NA	150	140	630
Field Parameters					
CONDUCTIVITY MS/CM	NC	NA	2.01		1.205
DISSOLVED OXYGEN MG/L	NC	NA	0.35		0.7
OXIDATION REDUCTION POTENTIAL MV	NC	NA	59		56
PH S.U.	6.5 - 8.5	SMCL	6.43		6.77
SALINITY %	NC	NA			
SALINITY PPT	NC	NA			
TEMPERATURE C	NC	NA	12.45		11
TURBIDITY NTU	NC	NA	10		170

Notes:
TACO = Illinois EPA Tiered Approach to Corrective Action Objectives (TACO) Groundwater Remediation Objectives (GRO), (35 Illinois Administrative Code Part 742)
Non-TACO = GRO not promulgated under 35 IAC 742
USEPA Tapwater = Oak Ridge National Laboratory Regional Screening Value (May 2010)
MCL = USEPA Maximum Contaminant Level
SMCL = USEPA Secondary Maximum Contaminant Level
NC = No criterion
NA = Not available
IL-EPA = criterion as per Illinois EPA (personal communication)
Blank cell indicates parameter not analyzed.
Light gray shading indicates positive result.
Dark shading indicates exceedance of criteria.
Data Qualifiers:
U = Indicates that parameter was not detected.
UJ = Indicates the parameter was not detected, however the detection limit is estimated.
UR = Indicates the parameter was not detected, however the result is unreliable.
J = Indicates that result is estimated.
R = Indicates that result is rejected.
NJ = Indicates that the chemical is presumptively present.

APPENDIX D

DATA VALIDATION REPORTS

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**T. EVANS**	**DATE:**	**JANUARY 18, 2011**
FROM:	**TERRI L. SOLOMON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – TOTAL AND DISSOLVED TAL METALS, CYANIDE, TOTAL PHOSPHOROUS, CHLORIDE, CHEMICAL OXYGEN DEMAND, FLUORIDE, AMMONIA, PH, TOTAL DISSOLVED SOLIDS, TOTAL SUSPENDED SOLIDS, SULFATE, TOTAL ORGANIC CARBON**
NTC GREAT LAKES CTO F273
SAMPLE DELIVERY GROUP (SDG) – 1011352

SAMPLES: 7/Aqueous/

NTC03GW0113	NTC03GW0213	NTC03GW0313
NTC03GW0413	NTC03GW0513	NTC03GW0613
NTCFD111610-01		

Overview

The sample set for NTC Great Lakes CTO F273, SDG 1011352, consists of seven (7) aqueous environmental samples. One (1) field duplicate pair (NTC03GW0513 / NTCFD111610-01) was included within this SDG.

All samples were analyzed for total target analyte list (TAL) metals, cyanide, total phosphorous, chloride, chemical oxygen demand (COD), fluoride, ammonia, pH, total dissolved solids (TDS), total suspended solids (TSS), sulfate and total organic carbon (TOC). Samples NTC03GW0213, NTC03GW0313, NTC03GW0513, NTC03GW0613 and NTCFD111610-01 were also analyzed for dissolved TAL metals. The samples were collected by Tetra Tech on November 15 and 16, 2010 and analyzed by TriMatrix Laboratories, Inc. Metals analyses were conducted using SW-846 methods 6020A and 6010B. Mercury analyses were conducted using SW-846 methods 7470A. Cyanide analyses were conducted using EPA method 9014. Total phosphorous, fluoride and ammonia analyses were conducted using Standard Methods 4500-P, 4500-F and 4500-NH_3. Chloride and sulfate analyses were conducted using EPA method 300.0. COD analyses were conducted using Standard Method 5220-D. pH analyses were conducted using EPA method 150.1. TSS and TDS analyses were conducted using Standard Methods 2540-D and 2540-C. TOC analyses were conducted using Standard Method 5310-C.

These data were evaluated based on the following parameters:

* • Data Completeness
• Holding Times
* • ICP/MS Tune Analyses
* • Initial and Continuing Calibrations
• Laboratory Method / Preparation Blanks
• ICP Interference Analysis
* • Laboratory Control Sample Recoveries
• Matrix Spike / Matrix Spike Duplicate Recoveries
* • Laboratory Duplicate Results
* • Internal Standard Recoveries

* • Field Duplicate Results
* • ICP Serial Dilution Results
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains the documentation to support the findings as discussed in this validation report.

Holding Times

The pH analyses were conducted 14-15 days after the sampling date. The results reported for pH were qualified as estimated, "J".

Laboratory Preparation / Method Blanks

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony	0.13 ug/L	0.65 ug/L
Antimony(2)	0.49 ug/L	2.45 ug/L
Chromium(1)	0.81 ug/L	4.05 ug/L
Chromium(2)	0.89 ug/L	4.45 ug/L
Iron(1)	4.3 ug/L	21.5 ug/L
Silver	0.015 ug/L	0.075 ug/L
Chloride	0.19 mg/L	0.95 mg/L
Sulfate	0.13 mg/L	0.65 mg/L

(1) Maximum concentration present in a preparation blank affecting the total metals analyses.
(2) Maximum concentration present in a prpearation blank affecting the dissolved metals analyses.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level reported for antimony, chromium and silver were qualified "U" as a result of laboratory blank contamination.

Matrix Spike / Matrix Spike Duplicate Recoveries

The matrix spike duplicate percent recovery for dissolved calcium was < 75% quality control limit. The positive results reported for dissolved calcium were qualified as estimated, "J".

The matrix spike duplicate percent recovery for chloride was greater than the quality control limit. The positive results reported for chloride were qualified as estriamted, "J".

Notes

The positive results greater than the method detection limit but below the method reporting limit were qualified as estimated, "J".

Nondetected metals results were reported to the method detection limit (MDL).

The interfering analytes calcium, magnesium and iron were present in several of the total and dissolved metals samples. However, no validation actions were warranted as there were no interfents found in the ICS solution.

Executive Summary

Laboratory Performance: The pH analyses were conducted 14-15 days after the sampling date. Several contaminants were present in the laboratory preparation / method blanks.

Other Factors Affecting Data Quality: The matrix spike duplicate percent recovery for dissolved calcium was < 75% quality control limit. The matrix spike duplicate percent recovery for chloride was greater than the quality control limit.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004, and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (Jan 2006).

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

Terri L. Solomon

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Edward Siedlmyer /for

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O - Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: M	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		28	U		49	J	P	780			28	U	
ANTIMONY		0.36	U		0.46	U	A	0.36	U		0.36	U	
ARSENIC		0.38	U		1.2	J	P	0.38	U		0.38	U	
BARIUM		70			43			24			59		
BERYLLIUM		0.3	U		0.3	U		0.3	U		0.3	U	
CADMIUM		0.055	U		0.055	U		0.059	J	P	0.055	U	
CALCIUM		52000			50000			77000			69000		
CHROMIUM		0.55	U	A	0.63	U	A	1.9	U	A	0.56	U	A
COBALT		0.15	J	P	0.13	J	P	0.73	J	P	0.44	J	P
COPPER		0.76	J	P	0.72	J	P	1.7			1.7		
IRON		730			240			1300			250		
LEAD		0.22	U		0.22	U		0.61	J	P	0.22	U	
MAGNESIUM		51000			77000			75000			50000		
MANGANESE		15			20			70			18		
MERCURY		0.061	U		0.061	U		0.061	U		0.061	U	
NICKEL		0.69	J	P	1.3			4			2.1		
POTASSIUM		1800			2900			2500			1800		
SELENIUM		0.82	U		0.82	U		0.82	U		0.86	J	P
SILVER		0.061	U		0.12	J	P	0.061	U		0.061	U	
SODIUM		45000			240000			50000			33000		
THALLIUM		0.056	U		0.056	U		0.056	U		0.057	J	P
VANADIUM		0.28	U		0.28	U		2.5	J	P	0.28	U	
ZINC		3.6	J	P	3.7	J	P	4.8	J	P	3.4	J	P

PROJ_NO: 01620	NSAMPLE	NTC03GW0513			NTC03GW0513-D			NTC03GW0613		
SDG: 1011352	LAB_ID	1011356-03			1011356-05			1011356-04		
FRACTION: M	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			FD			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF				NTC03GW0513					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		1400			1500			1500		
ANTIMONY		0.36	U		0.36	U		1		
ARSENIC		0.56	J	P	0.79	J	P	200		
BARIUM		330			340			260		
BERYLLIUM		0.3	U		0.3	U		0.59	J	P
CADMIUM		0.09	J	P	0.17	J	P	0.06	J	P
CALCIUM		180000			180000			140000		
CHROMIUM		3.6	U	A	3.4	U	A	4.3		
COBALT		3.1			2.9			2.3		
COPPER		4.1			4.2			5.9		
IRON		14000			14000			84000		
LEAD		2.7			2.7			3.7		
MAGNESIUM		84000			85000			49000		
MANGANESE		420			400			540		
MERCURY		0.061	U		0.061	U		0.061	U	
NICKEL		18			16			9.1		
POTASSIUM		8300			8300			1700		
SELENIUM		0.82	U		2			1		
SILVER		0.061	U		0.061	U		0.16	J	P
SODIUM		110000			110000			54000		
THALLIUM		0.11	J	P	0.12	J	P	0.084	J	P
VANADIUM		5.3			5.2			8.7		
ZINC		26			25			9.7	J	P

PROJ_NO: 01620	NSAMPLE	NTC03GW0213			NTC03GW0313			NTC03GW0513			NTC03GW0513-D		
SDG: 1011352	LAB_ID	1011352-02			1011356-01			1011356-03			1011356-05		
FRACTION: MF	SAMP_DATE	11/15/2010			11/16/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			FD		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF										NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		28	U		28	U		28	U		28	U	
ANTIMONY		0.36	U		0.36	U		0.36	U		0.55	U	A
ARSENIC		1	J	P	0.38	U		0.38	U		0.38	U	
BARIUM		43			18			320			330		
BERYLLIUM		0.3	U		0.3	U		0.3	U		0.3	U	
CADMIUM		0.055	U		0.055	U		0.055	U		0.055	U	
CALCIUM		52000	J	D	88000	J	D	200000	J	D	200000	J	D
CHROMIUM		0.87	U	A	0.81	U	A	0.94	U	A	0.68	U	A
COBALT		0.089	J	P	0.14	J	P	1.6			1.7		
COPPER		0.71	U		0.73	J	P	0.71	U		0.75	J	P
IRON		150			220			12000			12000		
LEAD		0.22	U		0.22	U		0.22	U		0.22	U	
MAGNESIUM		82000			87000			90000			91000		
MANGANESE		18			45			340			350		
MERCURY		0.061	U		0.061	U		0.061	U		0.061	U	
NICKEL		2			1.9			9.4			9.5		
POTASSIUM		3100			2500			8800			8800		
SELENIUM		0.9	J	P	0.82	U		1.7			2.5		
SILVER		0.11	J	P	0.069	U	A	0.061	U		0.081	J	P
SODIUM		250000			58000			120000			120000		
THALLIUM		0.056	U		0.094	J	P	0.079	J	P	0.056	U	
VANADIUM		0.28	U		0.29	J	P	0.77	J	P	0.69	J	P
ZINC		11	J	P	2.9	U		4.1	J	P	3.3	J	P

PROJ_NO: 01620	NSAMPLE	NTC03GW0613		
SDG: 1011352	LAB_ID	1011356-04		
FRACTION: MF	SAMP_DATE	11/16/2010		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS			
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
ALUMINUM		28	U	
ANTIMONY		0.64	U	A
ARSENIC		6.3		
BARIUM		49		
BERYLLIUM		0.3	U	
CADMIUM		0.055	U	
CALCIUM		130000	J	D
CHROMIUM		0.47	U	A
COBALT		0.86	J	P
COPPER		0.97	J	P
IRON		5800		
LEAD		0.22	U	
MAGNESIUM		47000		
MANGANESE		430		
MERCURY		0.061	U	
NICKEL		3.3		
POTASSIUM		1200		
SELENIUM		0.82	U	
SILVER		0.061	U	
SODIUM		56000		
THALLIUM		0.071	J	P
VANADIUM		0.28	U	
ZINC		2.9	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113						NTC03GW0213					
SDG: 1011352	LAB_ID	1011352-01						1011352-02					
FRACTION: MISC	SAMP_DATE	11/15/2010						11/15/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		0.4						0.3					
CHEMICAL OXYGEN DEMAND		4.7	J	P				7.6					
CHLORIDE		17	J	D				500	J	D			
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.72						0.47					
PH					7.6	J	H				8.1	J	H
SULFATE		110						120					
TOTAL DISSOLVED RESIDUE		478						1080					
TOTAL ORGANIC CARBON		0.98						1.7					
TOTAL PHOSPHORUS		0.013						0.013					
TOTAL RESIDUE		6.8						4.9					

PROJ_NO: 01620	NSAMPLE	NTC03GW0313						NTC03GW0413					
SDG: 1011352	LAB_ID	1011356-01						1011356-02					
FRACTION: MISC	SAMP_DATE	11/16/2010						11/16/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		0.34						0.16					
CHEMICAL OXYGEN DEMAND		11						6					
CHLORIDE		23	J	D				17	J	D			
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.7						0.68					
PH					7.8	J	H				7.7	J	H
SULFATE		270						83					
TOTAL DISSOLVED RESIDUE		764						462					
TOTAL ORGANIC CARBON		1.3						1.7					
TOTAL PHOSPHORUS		0.027						0.026					
TOTAL RESIDUE		45						3.3	U				

PROJ_NO: 01620	NSAMPLE	NTC03GW0513						NTC03GW0613					
SDG: 1011352	LAB_ID	1011356-03						1011356-04					
FRACTION: MISC	SAMP_DATE	11/16/2010						11/16/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		14						0.19					
CHEMICAL OXYGEN DEMAND		35						5	U				
CHLORIDE		180	J	D				140	J	D			
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.27						0.34					
PH					7	J	H				6.8	J	H
SULFATE		110						75					
TOTAL DISSOLVED RESIDUE		1090						762					
TOTAL ORGANIC CARBON		13						31					
TOTAL PHOSPHORUS		0.21						0.71					
TOTAL RESIDUE		150						630					

PROJ_NO: 01620	NSAMPLE	NTCFD111610-01					
SDG: 1011352	LAB_ID	1011356-05					
FRACTION: MISC	SAMP_DATE	11/16/2010					
MEDIA: WATER	QC_TYPE	NM					
	UNITS	MG/L			S.U.		
	PCT_SOLIDS						
	DUP_OF	NTC03GW0513			NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		14					
CHEMICAL OXYGEN DEMAND		33					
CHLORIDE		180	J	D			
CYANIDE		0.005	U				
FLUORIDE		0.27					
PH					7	J	H
SULFATE		110					
TOTAL DISSOLVED RESIDUE		1130					
TOTAL ORGANIC CARBON		13					
TOTAL PHOSPHORUS		0.22					
TOTAL RESIDUE		140					

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 12:35
7440-70-2	Calcium, Total	10	52000	ug/L	670	5000		11/29/10 15:06
7439-89-6	Iron, Total	1	730	ug/L	4.2	20		11/29/10 12:35
7439-95-4	Magnesium, Total	1	51000	ug/L	48	500		11/29/10 12:35
7440-09-7	Potassium, Total	1	1800	ug/L	82	200		11/29/10 12:35
7440-23-5	Sodium, Total	1	45000	ug/L	140	500		11/29/10 12:35

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	49	ug/L	28	100	J	11/29/10 12:53
7440-70-2	Calcium, Total	1	50000	ug/L	67	500		11/29/10 12:53
7439-89-6	Iron, Total	1	240	ug/L	4.2	20		11/29/10 12:53
7439-95-4	Magnesium, Total	1	77000	ug/L	48	500		11/29/10 12:53
7440-09-7	Potassium, Total	1	2900	ug/L	82	200		11/29/10 12:53
7440-23-5	Sodium, Total	1	240000	ug/L	140	500		11/29/10 12:53

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:09
7440-70-2	Calcium, Dissolved	1	52000	ug/L	67	500		11/29/10 14:09
7439-89-6	Iron, Dissolved	1	150	ug/L	4.2	20		11/29/10 14:09
7439-95-4	Magnesium, Dissolved	1	82000	ug/L	48	500		11/29/10 14:09
7440-09-7	Potassium, Dissolved	1	3100	ug/L	82	200		11/29/10 14:09
7440-23-5	Sodium, Dissolved	10	250000	ug/L	1400	5000		11/29/10 15:17

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	780	ug/L	28	100		11/29/10 12:57
7440-70-2	Calcium, Total	1	77000	ug/L	67	500		11/29/10 12:57
7439-89-6	Iron, Total	1	1300	ug/L	4.2	20		11/29/10 12:57
7439-95-4	Magnesium, Total	1	75000	ug/L	48	500		11/29/10 12:57
7440-09-7	Potassium, Total	1	2500	ug/L	82	200		11/29/10 12:57
7440-23-5	Sodium, Total	1	50000	ug/L	140	500		11/29/10 12:57

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:31
7440-70-2	Calcium, Dissolved	1	88000	ug/L	67	500		11/29/10 14:31
7439-89-6	Iron, Dissolved	1	220	ug/L	4.2	20		11/29/10 14:31
7439-95-4	Magnesium, Dissolved	1	87000	ug/L	48	500		11/29/10 14:31
7440-09-7	Potassium, Dissolved	1	2500	ug/L	82	200		11/29/10 14:31
7440-23-5	Sodium, Dissolved	1	58000	ug/L	140	500		11/29/10 14:31

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 13:02
7440-70-2	Calcium, Total	1	69000	ug/L	67	500		11/29/10 13:02
7439-89-6	Iron, Total	1	250	ug/L	4.2	20		11/29/10 13:02
7439-95-4	Magnesium, Total	1	50000	ug/L	48	500		11/29/10 13:02
7440-09-7	Potassium, Total	1	1800	ug/L	82	200		11/29/10 13:02
7440-23-5	Sodium, Total	1	33000	ug/L	140	500		11/29/10 13:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	1400	ug/L	28	100		11/29/10 13:14
7440-70-2	Calcium, Total	1	180000	ug/L	67	500		11/29/10 13:14
7439-89-6	Iron, Total	1	14000	ug/L	4.2	20		11/29/10 13:14
7439-95-4	Magnesium, Total	1	84000	ug/L	48	500		11/29/10 13:14
7440-09-7	Potassium, Total	1	8300	ug/L	82	200		11/29/10 13:14
7440-23-5	Sodium, Total	1	110000	ug/L	140	500		11/29/10 13:14

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:35
7440-70-2	Calcium, Dissolved	1	200000	ug/L	67	500		11/29/10 14:35
7439-89-6	Iron, Dissolved	1	12000	ug/L	4.2	20		11/29/10 14:35
7439-95-4	Magnesium, Dissolved	1	90000	ug/L	48	500		11/29/10 14:35
7440-09-7	Potassium, Dissolved	1	8800	ug/L	82	200		11/29/10 14:35
7440-23-5	Sodium, Dissolved	1	120000	ug/L	140	500		11/29/10 14:35

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	1500	ug/L	28	100		11/29/10 13:17
7440-70-2	Calcium, Total	1	140000	ug/L	67	500		11/29/10 13:17
7439-89-6	Iron, Total	1	84000	ug/L	4.2	20		11/29/10 13:17
7439-95-4	Magnesium, Total	1	49000	ug/L	48	500		11/29/10 13:17
7440-09-7	Potassium, Total	1	1700	ug/L	82	200		11/29/10 13:17
7440-23-5	Sodium, Total	1	54000	ug/L	140	500		11/29/10 13:17

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:39
7440-70-2	Calcium, Dissolved	1	130000	ug/L	67	500		11/29/10 14:39
7439-89-6	Iron, Dissolved	1	5800	ug/L	4.2	20		11/29/10 14:39
7439-95-4	Magnesium, Dissolved	1	47000	ug/L	48	500		11/29/10 14:39
7440-09-7	Potassium, Dissolved	1	1200	ug/L	82	200		11/29/10 14:39
7440-23-5	Sodium, Dissolved	1	56000	ug/L	140	500		11/29/10 14:39

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	1500	ug/L	28	100		11/29/10 13:22
7440-70-2	Calcium, Total	1	180000	ug/L	67	500		11/29/10 13:22
7439-89-6	Iron, Total	1	14000	ug/L	4.2	20		11/29/10 13:22
7439-95-4	Magnesium, Total	1	85000	ug/L	48	500		11/29/10 13:22
7440-09-7	Potassium, Total	1	8300	ug/L	82	200		11/29/10 13:22
7440-23-5	Sodium, Total	1	110000	ug/L	140	500		11/29/10 13:22

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:50
7440-70-2	Calcium, Dissolved	1	200000	ug/L	67	500		11/29/10 14:50
7439-89-6	Iron, Dissolved	1	12000	ug/L	4.2	20		11/29/10 14:50
7439-95-4	Magnesium, Dissolved	1	91000	ug/L	48	500		11/29/10 14:50
7440-09-7	Potassium, Dissolved	1	8800	ug/L	82	200		11/29/10 14:50
7440-23-5	Sodium, Dissolved	1	120000	ug/L	140	500		11/29/10 14:50

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 20:38
7440-38-2	Arsenic, Total	1	3.0	ug/L	0.38	3.0	U	11/29/10 20:38
7440-39-3	Barium, Total	1	70	ug/L	0.59	2.0		11/29/10 20:38
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:23
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 20:38
7440-47-3	Chromium, Total	1	0.55	ug/L	0.46	1.0	J	11/29/10 20:38
7440-48-4	Cobalt, Total	1	0.15	ug/L	0.042	1.0	J	11/29/10 20:38
7440-50-8	Copper, Total	1	0.76	ug/L	0.71	1.0	J	11/29/10 20:38
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 20:38
7439-96-5	Manganese, Total	1	15	ug/L	0.42	2.0		11/29/10 20:38
7440-02-0	Nickel, Total	1	0.69	ug/L	0.37	1.0	J	11/29/10 20:38
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 20:38
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 20:38
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 20:38
7440-62-2	Vanadium, Total	1	3.0	ug/L	0.28	3.0	U	11/29/10 20:38
7440-66-6	Zinc, Total	1	3.6	ug/L	2.9	20	J	11/29/10 20:38

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	0.46	ug/L	0.36	1.0	J	11/29/10 21:31
7440-38-2	Arsenic, Total	1	1.2	ug/L	0.38	3.0	J	11/29/10 21:31
7440-39-3	Barium, Total	1	43	ug/L	0.59	2.0		11/29/10 21:31
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:41
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 21:31
7440-47-3	Chromium, Total	1	0.63	ug/L	0.46	1.0	J	11/29/10 21:31
7440-48-4	Cobalt, Total	1	0.13	ug/L	0.042	1.0	J	11/29/10 21:31
7440-50-8	Copper, Total	1	0.72	ug/L	0.71	1.0	J	11/29/10 21:31
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 21:31
7439-96-5	Manganese, Total	1	20	ug/L	0.42	2.0		11/29/10 21:31
7440-02-0	Nickel, Total	1	1.3	ug/L	0.37	1.0		11/29/10 21:31
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 21:31
7440-22-4	Silver, Total	1	0.12	ug/L	0.061	0.20	J	11/29/10 21:31
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 21:31
7440-62-2	Vanadium, Total	1	3.0	ug/L	0.28	3.0	U	11/29/10 21:31
7440-66-6	Zinc, Total	1	3.7	ug/L	2.9	20	J	11/29/10 21:31

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 19:16
7440-38-2	Arsenic, Dissolved	1	1.0	ug/L	0.38	3.0	J	11/29/10 19:16
7440-39-3	Barium, Dissolved	1	43	ug/L	0.59	2.0		11/29/10 19:16
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/29/10 19:16
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 19:16
7440-47-3	Chromium, Dissolved	1	0.87	ug/L	0.46	1.0	J	11/29/10 19:16
7440-48-4	Cobalt, Dissolved	1	0.089	ug/L	0.042	1.0	J	11/29/10 19:16
7440-50-8	Copper, Dissolved	1	1.0	ug/L	0.71	1.0	U	11/29/10 19:16
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 19:16
7439-96-5	Manganese, Dissolved	1	18	ug/L	0.42	2.0		11/29/10 19:16
7440-02-0	Nickel, Dissolved	1	2.0	ug/L	0.37	1.0		11/29/10 19:16
7782-49-2	Selenium, Dissolved	1	0.90	ug/L	0.82	1.0	J	11/29/10 19:16
7440-22-4	Silver, Dissolved	1	0.11	ug/L	0.061	0.20	J	11/29/10 19:16
7440-28-0	Thallium, Dissolved	1	1.0	ug/L	0.056	1.0	U	11/29/10 19:16
7440-62-2	Vanadium, Dissolved	1	3.0	ug/L	0.28	3.0	U	11/29/10 19:16
7440-66-6	Zinc, Dissolved	1	11	ug/L	2.9	20	J	11/29/10 19:16

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:34
7440-38-2	Arsenic, Total	1	3.0	ug/L	0.38	3.0	U	11/29/10 21:34
7440-39-3	Barium, Total	1	24	ug/L	0.59	2.0		11/29/10 21:34
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:43
7440-43-9	Cadmium, Total	1	0.059	ug/L	0.055	0.20	J	11/29/10 21:34
7440-47-3	Chromium, Total	1	1.9	ug/L	0.46	1.0		11/29/10 21:34
7440-48-4	Cobalt, Total	1	0.73	ug/L	0.042	1.0	J	11/29/10 21:34
7440-50-8	Copper, Total	1	1.7	ug/L	0.71	1.0		11/29/10 21:34
7439-92-1	Lead, Total	1	0.61	ug/L	0.22	1.0	J	11/29/10 21:34
7439-96-5	Manganese, Total	1	70	ug/L	0.42	2.0		11/29/10 21:34
7440-02-0	Nickel, Total	1	4.0	ug/L	0.37	1.0		11/29/10 21:34
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 21:34
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 21:34
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 21:34
7440-62-2	Vanadium, Total	1	2.5	ug/L	0.28	3.0	J	11/29/10 21:34
7440-66-6	Zinc, Total	1	4.8	ug/L	2.9	20	J	11/29/10 21:34

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 19:47
7440-38-2	Arsenic, Dissolved	1	3.0	ug/L	0.38	3.0	U	11/29/10 19:47
7440-39-3	Barium, Dissolved	1	18	ug/L	0.59	2.0		11/29/10 19:47
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/29/10 19:47
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 19:47
7440-47-3	Chromium, Dissolved	1	0.81	ug/L	0.46	1.0	J	11/29/10 19:47
7440-48-4	Cobalt, Dissolved	1	0.14	ug/L	0.042	1.0	J	11/29/10 19:47
7440-50-8	Copper, Dissolved	1	0.73	ug/L	0.71	1.0	J	11/29/10 19:47
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 19:47
7439-96-5	Manganese, Dissolved	1	45	ug/L	0.42	2.0		11/29/10 19:47
7440-02-0	Nickel, Dissolved	1	1.9	ug/L	0.37	1.0		11/29/10 19:47
7782-49-2	Selenium, Dissolved	1	1.0	ug/L	0.82	1.0	U	11/29/10 19:47
7440-22-4	Silver, Dissolved	1	0.069	ug/L	0.061	0.20	J	11/29/10 19:47
7440-28-0	Thallium, Dissolved	1	0.094	ug/L	0.056	1.0	J	11/29/10 19:47
7440-62-2	Vanadium, Dissolved	1	0.29	ug/L	0.28	3.0	J	11/29/10 19:47
7440-66-6	Zinc, Dissolved	1	20	ug/L	2.9	20	U	11/29/10 19:47

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:38
7440-38-2	Arsenic, Total	1	3.0	ug/L	0.38	3.0	U	11/29/10 21:38
7440-39-3	Barium, Total	1	59	ug/L	0.59	2.0		11/29/10 21:38
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:46
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 21:38
7440-47-3	Chromium, Total	1	0.56	ug/L	0.46	1.0	J	11/29/10 21:38
7440-48-4	Cobalt, Total	1	0.44	ug/L	0.042	1.0	J	11/29/10 21:38
7440-50-8	Copper, Total	1	1.7	ug/L	0.71	1.0		11/29/10 21:38
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 21:38
7439-96-5	Manganese, Total	1	18	ug/L	0.42	2.0		11/29/10 21:38
7440-02-0	Nickel, Total	1	2.1	ug/L	0.37	1.0		11/29/10 21:38
7782-49-2	Selenium, Total	1	0.86	ug/L	0.82	1.0	J	11/29/10 21:38
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 21:38
7440-28-0	Thallium, Total	1	0.057	ug/L	0.056	1.0	J	11/29/10 21:38
7440-62-2	Vanadium, Total	1	3.0	ug/L	0.28	3.0	U	11/29/10 21:38
7440-66-6	Zinc, Total	1	3.4	ug/L	2.9	20	J	11/29/10 21:38

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:42
7440-38-2	Arsenic, Total	1	0.56	ug/L	0.38	3.0	J	11/29/10 21:42
7440-39-3	Barium, Total	1	330	ug/L	0.59	2.0		11/29/10 21:42
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:48
7440-43-9	Cadmium, Total	1	0.090	ug/L	0.055	0.20	J	11/29/10 21:42
7440-47-3	Chromium, Total	1	3.6	ug/L	0.46	1.0		11/29/10 21:42
7440-48-4	Cobalt, Total	1	3.1	ug/L	0.042	1.0		11/29/10 21:42
7440-50-8	Copper, Total	1	4.1	ug/L	0.71	1.0		11/29/10 21:42
7439-92-1	Lead, Total	1	2.7	ug/L	0.22	1.0		11/29/10 21:42
7439-96-5	Manganese, Total	1	420	ug/L	0.42	2.0		11/29/10 21:42
7440-02-0	Nickel, Total	1	18	ug/L	0.37	1.0		11/29/10 21:42
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 21:42
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 21:42
7440-28-0	Thallium, Total	1	0.11	ug/L	0.056	1.0	J	11/29/10 21:42
7440-62-2	Vanadium, Total	1	5.3	ug/L	0.28	3.0		11/29/10 21:42
7440-66-6	Zinc, Total	1	26	ug/L	2.9	20		11/29/10 21:42

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 19:51
7440-38-2	Arsenic, Dissolved	1	3.0	ug/L	0.38	3.0	U	11/29/10 19:51
7440-39-3	Barium, Dissolved	1	320	ug/L	0.59	2.0		11/29/10 19:51
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/29/10 19:51
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 19:51
7440-47-3	Chromium, Dissolved	1	0.94	ug/L	0.46	1.0	J	11/29/10 19:51
7440-48-4	Cobalt, Dissolved	1	1.6	ug/L	0.042	1.0		11/29/10 19:51
7440-50-8	Copper, Dissolved	1	1.0	ug/L	0.71	1.0	U	11/29/10 19:51
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 19:51
7439-96-5	Manganese, Dissolved	1	340	ug/L	0.42	2.0		11/29/10 19:51
7440-02-0	Nickel, Dissolved	1	9.4	ug/L	0.37	1.0		11/29/10 19:51
7782-49-2	Selenium, Dissolved	1	1.7	ug/L	0.82	1.0		11/29/10 19:51
7440-22-4	Silver, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/29/10 19:51
7440-28-0	Thallium, Dissolved	1	0.079	ug/L	0.056	1.0	J	11/29/10 19:51
7440-62-2	Vanadium, Dissolved	1	0.77	ug/L	0.28	3.0	J	11/29/10 19:51
7440-66-6	Zinc, Dissolved	1	4.1	ug/L	2.9	20	J	11/29/10 19:51

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0		11/29/10 21:46
7440-38-2	Arsenic, Total	1	200	ug/L	0.38	3.0		11/29/10 21:46
7440-39-3	Barium, Total	1	260	ug/L	0.59	2.0		11/29/10 21:46
7440-41-7	Beryllium, Total	1	0.59	ug/L	0.30	1.0	J	11/30/10 08:51
7440-43-9	Cadmium, Total	1	0.060	ug/L	0.055	0.20	J	11/29/10 21:46
7440-47-3	Chromium, Total	1	4.3	ug/L	0.46	1.0		11/29/10 21:46
7440-48-4	Cobalt, Total	1	2.3	ug/L	0.042	1.0		11/29/10 21:46
7440-50-8	Copper, Total	1	5.9	ug/L	0.71	1.0		11/29/10 21:46
7439-92-1	Lead, Total	1	3.7	ug/L	0.22	1.0		11/29/10 21:46
7439-96-5	Manganese, Total	2	540	ug/L	0.84	4.0		11/29/10 22:33
7440-02-0	Nickel, Total	1	9.1	ug/L	0.37	1.0		11/29/10 21:46
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0		11/29/10 21:46
7440-22-4	Silver, Total	1	0.16	ug/L	0.061	0.20	J	11/29/10 21:46
7440-28-0	Thallium, Total	1	0.084	ug/L	0.056	1.0	J	11/29/10 21:46
7440-62-2	Vanadium, Total	1	8.7	ug/L	0.28	3.0		11/29/10 21:46
7440-66-6	Zinc, Total	1	9.7	ug/L	2.9	20	J	11/29/10 21:46

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	0.64	ug/L	0.36	1.0	J	11/29/10 19:55
7440-38-2	Arsenic, Dissolved	1	6.3	ug/L	0.38	3.0		11/29/10 19:55
7440-39-3	Barium, Dissolved	1	49	ug/L	0.59	2.0		11/29/10 19:55
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/29/10 19:55
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 19:55
7440-47-3	Chromium, Dissolved	1	0.47	ug/L	0.46	1.0	J	11/29/10 19:55
7440-48-4	Cobalt, Dissolved	1	0.86	ug/L	0.042	1.0	J	11/29/10 19:55
7440-50-8	Copper, Dissolved	1	0.97	ug/L	0.71	1.0	J	11/29/10 19:55
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 19:55
7439-96-5	Manganese, Dissolved	1	430	ug/L	0.42	2.0		11/29/10 19:55
7440-02-0	Nickel, Dissolved	1	3.3	ug/L	0.37	1.0		11/29/10 19:55
7782-49-2	Selenium, Dissolved	1	1.0	ug/L	0.82	1.0	U	11/29/10 19:55
7440-22-4	Silver, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/29/10 19:55
7440-28-0	Thallium, Dissolved	1	0.071	ug/L	0.056	1.0	J	11/29/10 19:55
7440-62-2	Vanadium, Dissolved	1	3.0	ug/L	0.28	3.0	U	11/29/10 19:55
7440-66-6	Zinc, Dissolved	1	20	ug/L	2.9	20	U	11/29/10 19:55

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:50
7440-38-2	Arsenic, Total	1	0.79	ug/L	0.38	3.0	J	11/29/10 21:50
7440-39-3	Barium, Total	1	340	ug/L	0.59	2.0		11/29/10 21:50
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:53
7440-43-9	Cadmium, Total	1	0.17	ug/L	0.055	0.20	J	11/29/10 21:50
7440-47-3	Chromium, Total	1	3.4	ug/L	0.46	1.0		11/29/10 21:50
7440-48-4	Cobalt, Total	1	2.9	ug/L	0.042	1.0		11/29/10 21:50
7440-50-8	Copper, Total	1	4.2	ug/L	0.71	1.0		11/29/10 21:50
7439-92-1	Lead, Total	1	2.7	ug/L	0.22	1.0		11/29/10 21:50
7439-96-5	Manganese, Total	1	400	ug/L	0.42	2.0		11/29/10 21:50
7440-02-0	Nickel, Total	1	16	ug/L	0.37	1.0		11/29/10 21:50
7782-49-2	Selenium, Total	1	2.0	ug/L	0.82	1.0		11/29/10 21:50
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 21:50
7440-28-0	Thallium, Total	1	0.12	ug/L	0.056	1.0	J	11/29/10 21:50
7440-62-2	Vanadium, Total	1	5.2	ug/L	0.28	3.0		11/29/10 21:50
7440-66-6	Zinc, Total	1	25	ug/L	2.9	20		11/29/10 21:50

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	0.55	ug/L	0.36	1.0	J	11/29/10 20:11
7440-38-2	Arsenic, Dissolved	1	3.0	ug/L	0.38	3.0	U	11/29/10 20:11
7440-39-3	Barium, Dissolved	1	330	ug/L	0.59	2.0		11/29/10 20:11
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:09
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 20:11
7440-47-3	Chromium, Dissolved	1	0.68	ug/L	0.46	1.0	J	11/29/10 20:11
7440-48-4	Cobalt, Dissolved	1	1.7	ug/L	0.042	1.0		11/29/10 20:11
7440-50-8	Copper, Dissolved	1	0.75	ug/L	0.71	1.0	J	11/29/10 20:11
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 20:11
7439-96-5	Manganese, Dissolved	1	350	ug/L	0.42	2.0		11/29/10 20:11
7440-02-0	Nickel, Dissolved	1	9.5	ug/L	0.37	1.0		11/29/10 20:11
7782-49-2	Selenium, Dissolved	1	2.5	ug/L	0.82	1.0		11/29/10 20:11
7440-22-4	Silver, Dissolved	1	0.081	ug/L	0.061	0.20	J	11/29/10 20:11
7440-28-0	Thallium, Dissolved	1	1.0	ug/L	0.056	1.0	U	11/29/10 20:11
7440-62-2	Vanadium, Dissolved	1	0.69	ug/L	0.28	3.0	J	11/29/10 20:11
7440-66-6	Zinc, Dissolved	1	3.3	ug/L	2.9	20	J	11/29/10 20:11

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:12

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012974

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 08:38

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:37

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012974

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 08:52

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:42

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:47

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012974

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 08:57

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:52

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012974

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 09:02

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 11:57

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012974

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 09:07

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:02

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.40	mg/L	0.0089	0.010		11/22/10 10:15

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.30	mg/L	0.0089	0.010		11/22/10 10:16

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.34	mg/L	0.0089	0.010		11/22/10 11:16

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.16	mg/L	0.0089	0.010		11/22/10 11:16

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	10	14	mg/L	0.089	0.10		11/22/10 11:25

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.19	mg/L	0.0089	0.010		11/22/10 11:16

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	10	14	mg/L	0.089	0.10		11/22/10 11:25

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	4.7	mg/L	3.7	5.0	J	11/23/10 12:36

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	7.6	mg/L	3.7	5.0		11/23/10 12:37

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	11	mg/L	3.7	5.0		11/23/10 12:38

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	6.0	mg/L	3.7	5.0		11/23/10 12:38

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	35	mg/L	3.7	5.0		11/23/10 12:41

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	5.0	mg/L	3.7	5.0	U	11/23/10 12:42

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	33	mg/L	3.7	5.0		11/23/10 12:42

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	17	mg/L	0.098	1.0		11/30/10 12:24
14808-79-8	Sulfate	2	110	mg/L	0.12	4.0		11/30/10 19:27

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	10	500	mg/L	0.98	10		11/30/10 20:22
14808-79-8	Sulfate	2	120	mg/L	0.12	4.0		11/30/10 20:41

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	23	mg/L	0.098	1.0		11/30/10 13:00
14808-79-8	Sulfate	5	270	mg/L	0.31	10		11/30/10 20:59

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	17	mg/L	0.098	1.0		11/30/10 13:19
14808-79-8	Sulfate	1	83	mg/L	0.061	2.0		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	2	180	mg/L	0.20	2.0		11/30/10 21:17
14808-79-8	Sulfate	2	110	mg/L	0.12	4.0		11/30/10 21:17

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	2	140	mg/L	0.20	2.0		11/30/10 21:36
14808-79-8	Sulfate	1	75	mg/L	0.061	2.0		11/30/10 13:56

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	4	180	mg/L	0.39	4.0		11/30/10 21:54
14808-79-8	Sulfate	4	110	mg/L	0.24	8.0		11/30/10 21:54

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:14

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.72	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET

SM 4500-F C 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.47	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.70	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.68	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.27	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.34	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.27	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.6	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	8.1	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.8	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.7	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.0	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	6.8	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.0	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	478	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1080	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	764	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	462	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1090	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	762	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1130	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012830

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	0.98	mg/L	0.25	0.50		11/22/10 14:41

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012830

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1.7	mg/L	0.25	0.50		11/22/10 15:04

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012830

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1.3	mg/L	0.25	0.50		11/22/10 15:11

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012830

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1.7	mg/L	0.25	0.50		11/22/10 15:19

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012922

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	13	mg/L	0.25	1.0		11/23/10 14:44

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012922

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	31	mg/L	0.25	1.0		11/23/10 14:52

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012922

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	13	mg/L	0.25	1.0		11/23/10 14:59

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0132	mg/L	0.00170	0.0100		11/23/10 09:37

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0126	mg/L	0.00170	0.0100		11/23/10 09:37

INORGANIC ANALYSIS DATA SHEET

SM 4500-P E 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0266	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0264	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.214	mg/L	0.00170	0.0100		11/23/10 09:37

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.708	mg/L	0.00170	0.0100		11/23/10 09:37

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.224	mg/L	0.00170	0.0100		11/23/10 09:37

INORGANIC ANALYSIS DATA SHEET

SM 2540 D 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	6.8	mg/L	3.3	3.3		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/15/10 16:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011352-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	4.9	mg/L	3.3	3.3		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 550 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	45.3	mg/L	4.5	4.5		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	3.3	mg/L	3.3	3.3	U	11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 09:30
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-03
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 300 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	152	mg/L	8.2	8.2		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC03GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 16:20
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-04
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	632	mg/L	49.5	49.5		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 00:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1011356-05
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 300 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	144	mg/L	8.2	8.2		11/19/10 13:43

APPENDIX C
SUPPORT DOCUMENTATION

TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

TETRA TECH NUS - Pittsburgh
Naval Station Great Lakes

SDG Executive Summary

This case narrative applies to samples received on November 16, 2010 through November 17, 2010. All samples were scheduled for analysis in accordance with parameters outlined on the field chain of custody record, the TriMatrix bid form, and/or oral and written correspondence between TETRA TECH NUS - Pittsburgh and TriMatrix Laboratories, Inc.

Each sample receipt event was assigned a unique TriMatrix work order number. Sample receipt documentation is included in section A of this data package.

Project Technical Issues/Problems

Project-related data qualification designations and reporting conventions are included in Attachment 1 - *Project Technical Narrative.*

QA/QC Data Qualifications/Narrations

Quality assurance issues and/or quality control data qualifications and narrations related to the analysis and reporting of this SDG are presented in Attachment 2 - *Statement of Data Qualifications.* The absence of a statement page for a particular analyte group (*e.g.* Percent Solids) implies that no qualifying statements were generated for that analyte.

Data Review and Approval

All data was peer-reviewed by a second analyst, and then by appropriate data management staff against laboratory quality control requirements and project specifications. It was then reviewed and approved by the group supervisor/manager prior to further review by the project chemist.

Data Deliverables

The data deliverables, both hardcopy and/or electronic (EDD), that comprise this data package are intended to comply with the documents referenced in the introductory section of this narrative. The EDD, if requested, will be issued separately from this hardcopy report. Hold time reports for each test procedure are presented following the CLP-like forms section of this report.

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Conference (NELAC). Estimates of analytical uncertainties for the test results contained within the report are available upon request.

Gary L. Wood, Project Chemist

12/30/10
Date

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Individual sample results relate only to the sample tested.

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1011352

TriMatrix Laboratories received the cooler(s) for this work order on November 16, 2010, at 09:00am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
NTC03GW0113	1011352-01	Water	11/15/2010
NTC03GW0213	1011352-02	Water	11/15/2010
TB111510	1011352-03	Water	11/15/2010

No administrative issues were encountered during the receipt and analysis of this work order.

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1011356

TriMatrix Laboratories received the cooler(s) for this work order on November 17, 2010, at 08:45am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
NTC03GW0313	1011356-01	Water	11/16/2010
NTC03GW0413	1011356-02	Water	11/16/2010
NTC03GW0513	1011356-03	Water	11/16/2010
NTC03GW0613	1011356-04	Water	11/16/2010
NTCFD111610-01	1011356-05	Water	11/16/2010
TB111610	1011356-06	Water	11/16/2010

No administrative issues were encountered during the receipt and analysis of this work order.

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Individual sample results relate only to the sample tested.

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SDG CASE NARRATIVE

Attachment 1
Project Technical Narrative

Sample Result Reporting Convention

Sample results are reported as RL "U" (e.g. 0.001 U) if the target analyte was not detected above the MDL.

If a sample for an organic analyte is reanalyzed and also reported, the second analysis includes the suffix "RE*n*" where *n* = the first, second, etc. reanalysis.

Data Qualifier Designation

If applicable, sample results are qualified with:

- a "J" flag if the analyte was detected, but the concentration is greater than the MDL and less than the RL;
- a "B" flag if the analyte was also detected at or above the RL in the associated method blank, and the sample concentration was less than five times the method blank result;
- a "E" flag if the analyte exceeded the instrument calibration range;
- an asterisk (*) if a report-generated statement of qualification applies; qualifying statements, if any, will be found in Attachment 2 to this narrative.

QC Batch and Analytical Batch Designation

A Quality Control (QC) Batch is a seven-digit number that associates all samples that have been prepared together (or analyzed together if there is no preparation). Quality Control batches are limited to no more than twenty samples, excluding batch QC (method blanks, control spikes, etc.). Some batches may contain multiple sets of method blanks (BLK) and laboratory control samples (BS), where a set of method quality control analyses were prepared in concert with each set of samples on a given day.

An Analytical Batch (or Sequence) is a seven-digit number that associates all samples analyzed as a set under one analytical run.

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Attachment 2
Statement of Data Qualifications

Dissolved Metals by EPA 6000/7000 Series Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-6020A

Sample/Analyte:		
	1011352-02 NTC03GW0213	Chromium
	1011356-01 NTC03GW0313	Chromium
	1011356-03 NTC03GW0513	Chromium
	1011356-04 NTC03GW0613	Antimony
	1011356-04 NTC03GW0613	Chromium
	1011356-05 NTCFD111610-01	Antimony
	1011356-05 NTCFD111610-01	Chromium

Qualification: The % difference in results between the sample and a serial dilution of the sample exceeded the control limit. Sample matrix interference is suspected and the reported result is considered estimated.

Analysis: USEPA-6010C

Sample/Analyte:		
	1011352-02 NTC03GW0213	Calcium
	1011352-02 NTC03GW0213	Magnesium

Qualification: The % difference between the values of the isotopes monitored for this analyte exceeded 25%; the lower of the two results has been reported.

Analysis: USEPA-6020A

Sample/Analyte:		
	1011352-02 NTC03GW0213	Copper
	1011356-01 NTC03GW0313	Nickel
	1011356-03 NTC03GW0513	Copper
	1011356-03 NTC03GW0513	Nickel
	1011356-04 NTC03GW0613	Nickel
	1011356-05 NTCFD111610-01	Copper
	1011356-05 NTCFD111610-01	Nickel

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample concentration for the same analyte was greater than or equal to 4 times the spiked amount; the non-spiked sample result is not qualified.

Analysis: USEPA-6010C

Sample/Analyte:		
	1011352-02 NTC03GW0213	Sodium

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Attachment 2
Statement of Data Qualifications

Dissolved Metals by EPA 6000/7000 Series Methods

Qualification: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit. The unspiked sample result is not qualified.

Analysis: USEPA-6010C

Sample/Analyte:		
	1011352-02 NTC03GW0213	Calcium
	1011352-02 NTC03GW0213	Magnesium

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Attachment 2
Statement of Data Qualifications

Total Metals by EPA 6000/7000 Series Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-6020A

Sample/Analyte:		
	1011352-01 NTC03GW0113	Chromium
	1011352-02 NTC03GW0213	Chromium
	1011356-01 NTC03GW0313	Chromium
	1011356-02 NTC03GW0413	Chromium
	1011356-03 NTC03GW0513	Chromium
	1011356-05 NTCFD111610-01	Chromium

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: USEPA-6010C

Sample/Analyte:		
	1011352-01 NTC03GW0113	Iron
	1011352-02 NTC03GW0213	Iron
	1011356-01 NTC03GW0313	Iron
	1011356-02 NTC03GW0413	Iron
	1011356-03 NTC03GW0513	Iron
	1011356-04 NTC03GW0613	Iron
	1011356-05 NTCFD111610-01	Iron

Analysis: USEPA-6020A

Sample/Analyte:		
	1011356-04 NTC03GW0613	Chromium

Qualification: The % difference between the values of the isotopes monitored for this analyte exceeded 25%; the lower of the two results has been reported.

Analysis: USEPA-6020A

Sample/Analyte:		
	1011352-01 NTC03GW0113	Nickel
	1011352-02 NTC03GW0213	Copper
	1011352-02 NTC03GW0213	Nickel
	1011356-02 NTC03GW0413	Nickel
	1011356-03 NTC03GW0513	Selenium
	1011356-04 NTC03GW0613	Cadmium

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Attachment 2
Statement of Data Qualifications

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The laboratory duplicate RPD for this sample exceeded the control limit. Since the initial and/or the duplicate sample result was less than 5 times the reporting limit, the initial reported sample result is not qualified.

Analysis: SM 2540 D 20th

Sample/Analyte: 1011352-01 NTC03GW0113 Residue, Suspended

Qualification: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit. The unspiked sample result is not qualified.

Analysis: USEPA-300.0

Sample/Analyte: 1011352-01 NTC03GW0113 Chloride

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 20.9 C

Analysis: USEPA-150.1

Sample/Analyte: 1011356-01 NTC03GW0313 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 20.8 C

Analysis: USEPA-150.1

Sample/Analyte: 1011352-01 NTC03GW0113 pH
1011352-02 NTC03GW0213 pH
1011356-02 NTC03GW0413 pH
1011356-03 NTC03GW0513 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 21.7 C

Analysis: USEPA-150.1

Sample/Analyte: 1011356-05 NTCFD111610-01 pH

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Attachment 2
Statement of Data Qualifications

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 21.2 C

Analysis: USEPA-150.1

Sample/Analyte: 1011356-04 NTC03GW0613 pH

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Cart: 7
VOA: 576-G
Log 21-13

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-1

E-1011352

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122265**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments	Cooler
11/15/2010	NTC03GW0113	16:00	**5310C**	SL-01	GW	TOC	4° C/H2SO4	6	Glass - Amber 11	40ml vials	Run MS/MSD	LMP
11/15/2010	NTC03GW0113	16:00	**SW-846 8151A**	SL-01	GW	Herbicides	4°C	3	Glass - Amber 2	1L	Run MS/MSD	2329
11/15/2010	NTC03GW0113	16:00	**SW-846 9014**	SL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml	Run MS/MSD	LMP
11/15/2010	NTC03GW0113	16:00	**SW-846 8270C/8270C SIM**	SL-01	GW	SVOCs (PAHs via SIM)	4°C	4	Glass - Amber 2	1L	Run MS/MSD	2329
11/15/2010	NTC03GW0113	16:00	**SW-846 8081A**	SL-01	GW	Chlorinated Pesticides	4°C	4	Glass - Amber 2	1L	Run MS/MSD	2329
11/15/2010	NTC03GW0113	16:00	**4500-NH3-G/4500-P-F/5220 D**	SL-01	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml	Run MS/MSD	LMP
11/15/2010	NTC03GW0113	16:00	**SW-846 6010B / 7841 / 7470A**	SL-01	GW	TAL Metals	4°C/HNO3	2	Plastic - PE 6	250ml	Run MS/MSD	LMP
11/15/2010	NTC03GW0113	16:00	**SW-846 8260B**	SL-01	GW	VOCs	4°C/HCL	6	Glass - Clear 1	40ml vials	Run MS/MSD	LMP
11/15/2010	NTC03GW0113	16:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	2	Plastic - PE 3	1L	Run MS/MSD	LMP
11/15/2010	NTC03GW0213	16:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-02	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE 3	1L		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 8270C/8270C SIM**	SL-02	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber 2	1L		LMP
11/15/2010	NTC03GW0213	16:00	**4500-NH3-G/4500-P-F/5220 D**	SL-02	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml		LMP
11/15/2010	NTC03GW0213	16:00	**5310C**	SL-02	GW	TOC	4° C/H2SO4	3	Glass - Amber 11	40ml vials		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 8260B**	SL-02	GW	VOCs	4°C/HCL	3	Glass - Clear 1	40ml vials		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 8151A**	SL-02	GW	Herbicides	4°C	1	Glass - Amber 2	1L		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 8081A**	SL-02	GW	Chlorinated Pesticides	4°C	1	Glass - Amber 2	1L		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 6010B / 7841 / 7470A**	SL-02	GW	TAL Metals	4°C/HNO3	1	Plastic - PE 6	250ml		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 9014**	SL-02	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml		LMP
11/15/2010	NTC03GW0213	16:00	**SW-846 6010B / 7841 / 7470A**	SL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE 15	250ml		LMP

13

01

10.

12

04-03

11/15/2010	TB111510	15:00	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	1	40ml vials	

Cooler LMP

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/15/2010	18:33	**Federal Express**	11/15/2010	18:33

2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Fed Ex	11-16-10	0900	CF	11-16-10	0900

3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Comments:

Log 21-13

00027

TM2696
TM2309

TETRA TECH NUS, INC

E. 1011356

CHAIN OF CUSTODY
NUMBER: ED00000144-3

Cart 12, 23-17 317 Green

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122210**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/16/2010	NTC03GW0313	15:50	SW-846 8270C/8270C SIM	SL-03	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0313	15:50	SW-846 8260B	SL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/16/2010	NTC03GW0313	15:50	SW-846 9014	SL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/16/2010	NTC03GW0313	15:50	SW-846 6010B / 7841 / 7470A	SL-03	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/16/2010	NTC03GW0313	15:50	SW-846 6010B / 7841 / 7470A	SL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/16/2010	NTC03GW0313	15:50	SW-846 8081A	SL-03	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0313	15:50	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/16/2010	NTC03GW0313	15:50	SW-846 8151A	SL-03	GW	Herbicides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0313	15:50	5310C	SL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/16/2010	NTC03GW0313	15:50	4500-NH3-G/4500-P-F/5220 D	SL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/16/2010	NTC03GW0413	09:00	SW-846 8260B	SL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/16/2010	NTC03GW0413	09:00	SW-846 8081A	SL-04	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0413	09:00	5310C	SL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/16/2010	NTC03GW0413	09:00	SW-846 8151A	SL-04	GW	Herbicides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0413	09:00	4500-NH3-G/4500-P-F/5220 D	SL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/16/2010	NTC03GW0413	09:00	SW-846 9014	SL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/16/2010	NTC03GW0413	09:00	SW-846 8270C/8270C SIM	SL-04	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0413	09:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/16/2010	NTC03GW0413	09:00	SW-846 6010B / 7841 / 7470A	SL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/16/2010	NTC03GW0513	09:30	SW-846 6010B / 7841 / 7470A	SL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/16/2010	NTC03GW0513	09:30	SW-846 8081A	SL-05	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0513	09:30	5310C	SL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/16/2010	NTC03GW0513	09:30	SW-846 8270C/8270C SIM	SL-05	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0513	09:30	SW-846 8260B	SL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/16/2010	NTC03GW0513	09:30	SW-846 8151A	SL-05	GW	Herbicides	4°C	1	Glass - Amber	1L	
11/16/2010	NTC03GW0513	09:30	SW-846 9014	SL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/16/2010	NTC03GW0513	09:30	4500-NH3-G/4500-P-F/5220 D	SL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/16/2010	NTC03GW0513	09:30	SW-846 6010B / 7841 / 7470A	SL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/16/2010	NTC03GW0513	09:30	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	

	11/16/2010	NTC03GW0613	16:20	SW-846 6010B / 7841 / 7470A	SL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0613	16:20	SW-846 9014	SL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0613	16:20	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	SL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0613	16:20	5310C	SL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
a	11/16/2010	NTC03GW0613	16:20	4500-NH3-G/4500-P-F/5220 D	SL-06	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0613	16:20	SW-846 8260B	SL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0613	16:20	SW-846 8270C/8270C SIM	SL-06	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0613	16:20	SW-846 8151A	SL-06	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0613	16:20	SW-846 8081A	SL-06	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTCFD111610-01	00:00	SW-846 9014	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTCFD111610-01	00:00	SW-846 8081A	QC	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTCFD111610-01	00:00	SW-846 8270C/8270C SIM	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
	11/16/2010	NTCFD111610-01	00:00	SW-846 6010B / 7841 / 7470A	QC	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTCFD111610-01	00:00	SW-846 8260B	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTCFD111610-01	00:00	SW-846 6010B / 7841 / 7470A	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTCFD111610-01	00:00	5310C	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTCFD111610-01	00:00	4500-NH3-G/4500-P-F/5220 D	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTCFD111610-01	00:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTCFD111610-01	00:00	SW-846 8151A	QC	GW	Herbicides	4°C	1	Glass - Amber	1L	
b	11/16/2010	TB111610	07:50	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	

1. Relinquished By: **Keith Simpson**	Date: 11/16/2010	Time: 18:14	Received By: **Federal Express**	Date: 11/16/2010	Time: 18:14
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By: [signature]	Date: 11/17/10	Time: 0845

Comments:

23005

SAMPLE ID SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Client Sample Id:	Lab Sample Id:
NTC03GW0113	1011352-01
NTC03GW0213	1011352-02
NTC03GW0313	1011356-01
NTC03GW0413	1011356-02
NTC03GW0513	1011356-03
NTC03GW0613	1011356-04
NTCFD111610-01	1011356-05

HOLDTIME

SDG 1011352

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/30/2010	7	8	15
HERB	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/30/2010	7	8	15
HERB	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HG	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
HG	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
HG	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/23/2010	11/29/2010	8	6	14
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/23/2010	11/29/2010	8	6	14
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
HGF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/24/2010	11/29/2010	9	5	14
MF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14
MF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CL	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
CL	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
CN	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/24/2010	7	2	9
CN	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/24/2010	7	2	9
CN	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
COD	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
COD	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
COD	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
COD	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
FL	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
FL	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
FL	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
MISC	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4
MISC	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4
NH3	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NH3	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
NH3	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
PH	S.U.	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
PH	S.U.	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
PH	S.U.	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
SO4	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
TOC	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TOC	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TOC	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
TOC	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
TOC	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
TOC	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
TOC	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TPHO	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/23/2010	7	1	8
TPHO	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/23/2010	7	1	8
TPHO	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TR	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
TR	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4

NTC GREAT LAKES
WATER DATA
1011352

FRACTION	CHEMICAL	NTC03GW0513	UNITS	NTCFD111610-01	RPD	D
M	ALUMINUM	1400	UG/L	1500	6.90	100.00
M	ARSENIC	0.56 J	UG/L	0.79 J	34.07	0.23
M	BARIUM	330	UG/L	340	2.99	10.00
M	CADMIUM	0.09 J	UG/L	0.17 J	61.54	0.08
M	CALCIUM	180000	UG/L	180000	0.00	0.00
M	CHROMIUM	3.6	UG/L	3.4	5.71	0.20
M	COBALT	3.1	UG/L	2.9	6.67	0.20
M	COPPER	4.1	UG/L	4.2	2.41	0.10
M	IRON	14000	UG/L	14000	0.00	0.00
M	LEAD	2.7	UG/L	2.7	0.00	0.00
M	MAGNESIUM	84000	UG/L	85000	1.18	1000.00
M	MANGANESE	420	UG/L	400	4.88	20.00
M	NICKEL	18	UG/L	16	11.76	2.00
M	POTASSIUM	8300	UG/L	8300	0.00	0.00
M	SELENIUM	ND	UG/L	2	200.00	2.00
M	SODIUM	110000	UG/L	110000	0.00	0.00
M	THALLIUM	0.11 J	UG/L	0.12 J	8.70	0.01
M	VANADIUM	5.3	UG/L	5.2	1.90	0.10
M	ZINC	26	UG/L	25	3.92	1.00
MF	ANTIMONY	ND	UG/L	0.55 J	200.00	0.55
MF	BARIUM	320	UG/L	330	3.08	10.00
MF	CALCIUM	200000	UG/L	200000	0.00	0.00
MF	CHROMIUM	0.94 J	UG/L	0.68 J	32.10	0.26
MF	COBALT	1.6	UG/L	1.7	6.06	0.10
MF	COPPER	ND	UG/L	0.75 J	200.00	0.75
MF	IRON	12000	UG/L	12000	0.00	0.00
MF	MAGNESIUM	90000	UG/L	91000	1.10	1000.00
MF	MANGANESE	340	UG/L	350	2.90	10.00
MF	NICKEL	9.4	UG/L	9.5	1.06	0.10
MF	POTASSIUM	8800	UG/L	8800	0.00	0.00

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NTC GREAT LAKES
WATER DATA
1011352

FRACTION	CHEMICAL	NTC03GW0513	UNITS	NTCFD111610-01	RPD	D
MF	SELENIUM	1.7	UG/L	2.5	38.10	0.80
MF	SILVER	ND	UG/L	0.081 J	200.00	0.08
MF	SODIUM	120000	UG/L	120000	0.00	0.00
MF	THALLIUM	0.079 J	UG/L	ND	200.00	0.08
MF	VANADIUM	0.77 J	UG/L	0.69 J	10.96	0.08
MF	ZINC	4.1 J	UG/L	3.3 J	21.62	0.80
MISC	AMMONIA-N	14 D	MG/L	14 D	0.00	0.00
MISC	BIOCHEMICAL OXYGEN DEMAND	2.4	MG/L	ND	200.00	2.40
MISC	CHEMICAL OXYGEN DEMAND	35	MG/L	33	5.88	2.00
MISC	CHLORIDE	180 D	MG/L	180 D	0.00	0.00
MISC	FLUORIDE	0.27	MG/L	0.27	0.00	0.00
MISC	HEXAVALENT CHROMIUM	0.0026 J	MG/L	0.0023 J	12.24	0.00
MISC	NITRITE-N	0.0032 J	MG/L	ND	200.00	0.00
MISC	PH	7	S.U.	7	0.00	0.00
MISC	SULFATE	110 D	MG/L	110 D	0.00	0.00
MISC	TOTAL DISSOLVED RESIDUE	1090	MG/L	1130	3.60	40.00
MISC	TOTAL ORGANIC CARBON	13	MG/L	13	0.00	0.00
MISC	TOTAL PHOSPHORUS	0.21	MG/L	0.22	4.65	0.01
MISC	TOTAL RESIDUE	150 D	MG/L	140 D	6.90	10.00

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/24/10	9	NA	11/29/10	14	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	13	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/24/10	8	NA	11/29/10	14	180	

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/29/10	14	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/29/10	14	180	

INITIAL AND CONTINUING CALIBRATION CHECK
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Control Limt: +/- 10.00%
Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29031-CCV1	Aluminum	2500	2470	99	ug/L	11/29/10 11:44
	Aluminum	2500	2470	99	ug/L	11/29/10 11:44
	Calcium	5.00	4.83	97	mg/L	11/29/10 11:44
	Calcium	5.00	4.83	97	mg/L	11/29/10 11:44
	Iron	500	489	98	ug/L	11/29/10 11:44
	Iron	500	489	98	ug/L	11/29/10 11:44
	Magnesium	5.00	4.89	98	mg/L	11/29/10 11:44
	Magnesium	5.00	4.89	98	mg/L	11/29/10 11:44
	Potassium	5.00	5.04	101	mg/L	11/29/10 11:44
	Potassium	5.00	5.04	101	mg/L	11/29/10 11:44
	Sodium	5.00	4.97	99	mg/L	11/29/10 11:44
	Sodium	5.00	4.97	99	mg/L	11/29/10 11:44
0K29031-CCV2	Aluminum	2500	2510	100	ug/L	11/29/10 12:19
	Aluminum	2500	2510	100	ug/L	11/29/10 12:19
	Calcium	5.00	4.84	97	mg/L	11/29/10 12:19
	Calcium	5.00	4.84	97	mg/L	11/29/10 12:19
	Iron	500	486	97	ug/L	11/29/10 12:19
	Iron	500	486	97	ug/L	11/29/10 12:19
	Magnesium	5.00	4.92	98	mg/L	11/29/10 12:19
	Magnesium	5.00	4.92	98	mg/L	11/29/10 12:19
	Potassium	5.00	5.01	100	mg/L	11/29/10 12:19
	Potassium	5.00	5.01	100	mg/L	11/29/10 12:19
	Sodium	5.00	5.06	101	mg/L	11/29/10 12:19
	Sodium	5.00	5.06	101	mg/L	11/29/10 12:19
0K29031-CCV3	Aluminum	2500	2550	102	ug/L	11/29/10 13:06
	Aluminum	2500	2550	102	ug/L	11/29/10 13:06
	Calcium	5.00	4.88	98	mg/L	11/29/10 13:06
	Calcium	5.00	4.88	98	mg/L	11/29/10 13:06
	Iron	500	490	98	ug/L	11/29/10 13:06
	Iron	500	490	98	ug/L	11/29/10 13:06
	Magnesium	5.00	5.00	100	mg/L	11/29/10 13:06
	Magnesium	5.00	5.00	100	mg/L	11/29/10 13:06
	Potassium	5.00	4.96	99	mg/L	11/29/10 13:06
	Potassium	5.00	4.96	99	mg/L	11/29/10 13:06
	Sodium	5.00	5.18	104	mg/L	11/29/10 13:06
	Sodium	5.00	5.18	104	mg/L	11/29/10 13:06
0K29031-CCV4	Aluminum	2500	2510	100	ug/L	11/29/10 13:53
	Aluminum	2500	2510	100	ug/L	11/29/10 13:53

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Control Limt: +/- 10.00%
Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29031-CCV4	Calcium	5.00	4.82	96	mg/L	11/29/10 13:53
	Calcium	5.00	4.82	96	mg/L	11/29/10 13:53
	Iron	500	485	97	ug/L	11/29/10 13:53
	Iron	500	485	97	ug/L	11/29/10 13:53
	Magnesium	5.00	4.96	99	mg/L	11/29/10 13:53
	Magnesium	5.00	4.96	99	mg/L	11/29/10 13:53
	Potassium	5.00	5.00	100	mg/L	11/29/10 13:53
	Potassium	5.00	5.00	100	mg/L	11/29/10 13:53
	Sodium	5.00	5.16	103	mg/L	11/29/10 13:53
	Sodium	5.00	5.16	103	mg/L	11/29/10 13:53
0K29031-CCV5	Aluminum	2500	2630	105	ug/L	11/29/10 14:43
	Aluminum	2500	2630	105	ug/L	11/29/10 14:43
	Calcium	5.00	5.07	101	mg/L	11/29/10 14:43
	Calcium	5.00	5.07	101	mg/L	11/29/10 14:43
	Iron	500	510	102	ug/L	11/29/10 14:43
	Iron	500	510	102	ug/L	11/29/10 14:43
	Magnesium	5.00	5.18	104	mg/L	11/29/10 14:43
	Magnesium	5.00	5.18	104	mg/L	11/29/10 14:43
	Potassium	5.00	5.10	102	mg/L	11/29/10 14:43
	Potassium	5.00	5.10	102	mg/L	11/29/10 14:43
	Sodium	5.00	5.37	107	mg/L	11/29/10 14:43
	Sodium	5.00	5.37	107	mg/L	11/29/10 14:43
0K29031-CCV6	Aluminum	2500	2560	103	ug/L	11/29/10 15:29
	Aluminum	2500	2560	103	ug/L	11/29/10 15:29
	Calcium	5.00	4.92	98	mg/L	11/29/10 15:29
	Calcium	5.00	4.92	98	mg/L	11/29/10 15:29
	Iron	500	496	99	ug/L	11/29/10 15:29
	Iron	500	496	99	ug/L	11/29/10 15:29
	Magnesium	5.00	5.05	101	mg/L	11/29/10 15:29
	Magnesium	5.00	5.05	101	mg/L	11/29/10 15:29
	Potassium	5.00	5.07	101	mg/L	11/29/10 15:29
	Potassium	5.00	5.07	101	mg/L	11/29/10 15:29
	Sodium	5.00	5.20	104	mg/L	11/29/10 15:29
	Sodium	5.00	5.20	104	mg/L	11/29/10 15:29

* Values outside of QC limits

CRDL STANDARD

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29031

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29031-CRL1	Aluminum	100	118	118	ug/L	50 - 150
	Aluminum	100	118	118	ug/L	50 - 150
	Calcium	1.00	0.998	100	mg/L	50 - 150
	Calcium	1.00	0.998	100	mg/L	50 - 150
	Iron	20.0	22.1	111	ug/L	50 - 150
	Iron	20.0	22.1	111	ug/L	50 - 150
	Magnesium	1.00	0.993	99	mg/L	50 - 150
	Magnesium	1.00	0.993	99	mg/L	50 - 150
	Potassium	0.200	0.245	122	mg/L	50 - 150
	Potassium	0.200	0.245	122	mg/L	50 - 150
	Sodium	1.00	0.993	99	mg/L	50 - 150
	Sodium	1.00	0.993	99	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB1	Aluminum	3.1	ug/L	28	100	U	11/29/10 11:48
	Aluminum	3.1	ug/L	28	100	U	11/29/10 11:48
	Calcium	0.040	mg/L	0.067	0.50	U	11/29/10 11:48
	Calcium	0.040	mg/L	0.067	0.50	U	11/29/10 11:48
	Iron	2.6	ug/L	4.2	20	U	11/29/10 11:48
	Iron	2.6	ug/L	4.2	20	U	11/29/10 11:48
	Magnesium	0.027	mg/L	0.048	0.50	U	11/29/10 11:48
	Magnesium	0.027	mg/L	0.048	0.50	U	11/29/10 11:48
	Potassium	-0.062	mg/L	0.082	0.20	U	11/29/10 11:48
	Potassium	-0.062	mg/L	0.082	0.20	U	11/29/10 11:48
	Sodium	-0.012	mg/L	0.14	0.50	U	11/29/10 11:48
	Sodium	-0.012	mg/L	0.14	0.50	U	11/29/10 11:48
0K29031-CCB2	Aluminum	-6.8	ug/L	28	100	U	11/29/10 12:23
	Aluminum	-6.8	ug/L	28	100	U	11/29/10 12:23
	Calcium	0.038	mg/L	0.067	0.50	U	11/29/10 12:23
	Calcium	0.038	mg/L	0.067	0.50	U	11/29/10 12:23
	Iron	3.6	ug/L	4.2	20	U	11/29/10 12:23
	Iron	3.6	ug/L	4.2	20	U	11/29/10 12:23
	Magnesium	0.039	mg/L	0.048	0.50	U	11/29/10 12:23
	Magnesium	0.039	mg/L	0.048	0.50	U	11/29/10 12:23
	Potassium	0.0086	mg/L	0.082	0.20	U	11/29/10 12:23
	Potassium	0.0086	mg/L	0.082	0.20	U	11/29/10 12:23
	Sodium	-0.0093	mg/L	0.14	0.50	U	11/29/10 12:23
	Sodium	-0.0093	mg/L	0.14	0.50	U	11/29/10 12:23
0K29031-CCB3	Aluminum	2.4	ug/L	28	100	U	11/29/10 13:10
	Aluminum	2.4	ug/L	28	100	U	11/29/10 13:10
	Calcium	0.042	mg/L	0.067	0.50	U	11/29/10 13:10
	Calcium	0.042	mg/L	0.067	0.50	U	11/29/10 13:10
	Iron	2.5	ug/L	4.2	20	U	11/29/10 13:10
	Iron	2.5	ug/L	4.2	20	U	11/29/10 13:10
	Magnesium	0.035	mg/L	0.048	0.50	U	11/29/10 13:10
	Magnesium	0.035	mg/L	0.048	0.50	U	11/29/10 13:10
	Potassium	-0.012	mg/L	0.082	0.20	U	11/29/10 13:10

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB3	Potassium	-0.012	mg/L	0.082	0.20	U	11/29/10 13:10
	Sodium	0.032	mg/L	0.14	0.50	U	11/29/10 13:10
	Sodium	0.032	mg/L	0.14	0.50	U	11/29/10 13:10
0K29031-CCB4	Aluminum	4.9	ug/L	28	100	U	11/29/10 13:57
	Aluminum	4.9	ug/L	28	100	U	11/29/10 13:57
	Calcium	0.037	mg/L	0.067	0.50	U	11/29/10 13:57
	Calcium	0.037	mg/L	0.067	0.50	U	11/29/10 13:57
	Iron	2.7	ug/L	4.2	20	U	11/29/10 13:57
	Iron	2.7	ug/L	4.2	20	U	11/29/10 13:57
	Magnesium	0.025	mg/L	0.048	0.50	U	11/29/10 13:57
	Magnesium	0.025	mg/L	0.048	0.50	U	11/29/10 13:57
	Potassium	-0.030	mg/L	0.082	0.20	U	11/29/10 13:57
	Potassium	-0.030	mg/L	0.082	0.20	U	11/29/10 13:57
	Sodium	0.034	mg/L	0.14	0.50	U	11/29/10 13:57
	Sodium	0.034	mg/L	0.14	0.50	U	11/29/10 13:57
0K29031-CCB5	Aluminum	-13	ug/L	28	100	U	11/29/10 14:47
	Aluminum	-13	ug/L	28	100	U	11/29/10 14:47
	Calcium	0.036	mg/L	0.067	0.50	U	11/29/10 14:47
	Calcium	0.036	mg/L	0.067	0.50	U	11/29/10 14:47
	Iron	3.9	ug/L	4.2	20	U	11/29/10 14:47
	Iron	3.9	ug/L	4.2	20	U	11/29/10 14:47
	Magnesium	0.023	mg/L	0.048	0.50	U	11/29/10 14:47
	Magnesium	0.023	mg/L	0.048	0.50	U	11/29/10 14:47
	Potassium	0.0075	mg/L	0.082	0.20	U	11/29/10 14:47
	Potassium	0.0075	mg/L	0.082	0.20	U	11/29/10 14:47
	Sodium	0.052	mg/L	0.14	0.50	U	11/29/10 14:47
	Sodium	0.052	mg/L	0.14	0.50	U	11/29/10 14:47
0K29031-CCB6	Aluminum	8.2	ug/L	28	100	U	11/29/10 15:33
	Aluminum	8.2	ug/L	28	100	U	11/29/10 15:33
	Calcium	0.034	mg/L	0.067	0.50	U	11/29/10 15:33
	Calcium	0.034	mg/L	0.067	0.50	U	11/29/10 15:33
	Iron	3.5	ug/L	4.2	20	U	11/29/10 15:33
	Iron	3.5	ug/L	4.2	20	U	11/29/10 15:33

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB6	Magnesium	0.032	mg/L	0.048	0.50	U	11/29/10 15:33
	Magnesium	0.032	mg/L	0.048	0.50	U	11/29/10 15:33
	Potassium	-0.033	mg/L	0.082	0.20	U	11/29/10 15:33
	Potassium	-0.033	mg/L	0.082	0.20	U	11/29/10 15:33
	Sodium	0.020	mg/L	0.14	0.50	U	11/29/10 15:33
	Sodium	0.020	mg/L	0.14	0.50	U	11/29/10 15:33

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012888-BLK1 File ID: 0K29031-015

Prepared: 11/23/10 18:00 Analyzed: 11/29/10 12:27

Preparation: 3010A Digestion Initial/Final: 25 mL / 25 mL

QC Batch: 1012888 Sequence: 0K29031 Calibration: 0K30006 Instrument: 311

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7429-90-5	Aluminum, Total	100	ug/L	28	100	U
7440-70-2	Calcium, Total	500	ug/L	67	500	U
7439-89-6	Iron, Total	4.3	ug/L	4.2	20	J
7439-95-4	Magnesium, Total	500	ug/L	48	500	U
7440-09-7	Potassium, Total	200	ug/L	82	200	U
7440-23-5	Sodium, Total	500	ug/L	140	500	U

METHOD BLANK DATA SHEET
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012910-BLK1 File ID: 0K29031-039

Prepared: 11/24/10 07:00 Analyzed: 11/29/10 14:01

Preparation: General Metals Prep Initial/Final: 25 mL / 25 mL

QC Batch: 1012910 Sequence: 0K29031 Calibration: 0K30006 Instrument: 311

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7429-90-5	Aluminum, Dissolved	100	ug/L	28	100	U
7440-70-2	Calcium, Dissolved	500	ug/L	67	500	U
7439-89-6	Iron, Dissolved	20	ug/L	4.2	20	U
7439-95-4	Magnesium, Dissolved	500	ug/L	48	500	U
7440-09-7	Potassium, Dissolved	200	ug/L	82	200	U
7440-23-5	Sodium, Dissolved	500	ug/L	140	500	U

ICP INTERFERENCE CHECK SAMPLE

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29031

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units
0K29031-IFA1	Aluminum	100000	98400	98	ug/L
	Aluminum	100000	98400	98	ug/L
	Calcium	100	93.4	93	mg/L
	Calcium	100	93.4	93	mg/L
	Iron	40000	37500	94	ug/L
	Iron	40000	37500	94	ug/L
	Magnesium	100	95.5	96	mg/L
	Magnesium	100	95.5	96	mg/L
	Potassium	0.00	0.00219		mg/L
	Potassium	0.00	0.00219		mg/L
	Sodium	0.00	0.00366		mg/L
	Sodium	0.00	0.00366		mg/L
0K29031-IFA2	Aluminum	0.00	54.3		ug/L
	Aluminum	0.00	54.3		ug/L
	Calcium	0.00	0.0325		mg/L
	Calcium	0.00	0.0325		mg/L
	Iron	0.00	8.66		ug/L
	Iron	0.00	8.66		ug/L
	Magnesium	0.00	-0.0813		mg/L
	Magnesium	0.00	-0.0813		mg/L
	Potassium	0.00	-0.00161		mg/L
	Potassium	0.00	-0.00161		mg/L
	Sodium	0.00	0.0323		mg/L
	Sodium	0.00	0.0323		mg/L
0K29031-IFB1	Aluminum	100000	99500	100	ug/L
	Aluminum	100000	99500	100	ug/L
	Calcium	100	94.1	94	mg/L
	Calcium	100	94.1	94	mg/L
	Iron	40000	37800	94	ug/L
	Iron	40000	37800	94	ug/L
	Magnesium	100	96.6	97	mg/L
	Magnesium	100	96.6	97	mg/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29031

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units
0K29031-IFB2	Aluminum	1000	1080	108	ug/L
	Aluminum	1000	1080	108	ug/L
	Calcium	5.00	4.66	93	mg/L
	Calcium	5.00	4.66	93	mg/L
	Magnesium	5.00	4.87	97	mg/L
	Magnesium	5.00	4.87	97	mg/L
	Sodium	5.00	5.11	102	mg/L
	Sodium	5.00	5.11	102	mg/L

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012888

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012888-MS1

Preparation: 3010A Digestion

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Aluminum, Total	2000	ND	2090	105	75 - 125	ug/L
Calcium, Total	20000	52100	73700	108	75 - 125	ug/L
Iron, Total	400	725	1120	98	75 - 125	ug/L
Magnesium, Total	20000	51400	72400	105	75 - 125	ug/L
Potassium, Total	20000	1840	21900	100	75 - 125	ug/L
Sodium, Total	20000	44700	67400	113	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012888

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012888-MSD1

Preparation: 3010A Digestion

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Aluminum, Total	2000	2020	101	4	20	75 - 125	ug/L
Calcium, Total	20000	70800	93	4	20	75 - 125	ug/L
Iron, Total	400	1090	92	2	20	75 - 125	ug/L
Magnesium, Total	20000	70400	95	3	20	75 - 125	ug/L
Potassium, Total	20000	21400	98	2	20	75 - 125	ug/L
Sodium, Total	20000	64400	99	4	20	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012910

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012910-MS1

Preparation: General Metals Prep

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Aluminum, Dissolved	2000	ND	2010	101	75 - 125	ug/L
Calcium, Dissolved	20000	52300	70500	91	75 - 125	ug/L
Iron, Dissolved	400	147	532	96	75 - 125	ug/L
Magnesium, Dissolved	20000	82100	101000	95	75 - 125	ug/L
Potassium, Dissolved	20000	3060	22500	97	75 - 125	ug/L
Sodium, Dissolved	20000	254000	279000	122	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012910

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012910-MSD1

Preparation: General Metals Prep

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Aluminum, Dissolved	2000	1900	95	6	20	75 - 125	ug/L
Calcium, Dissolved	20000	66000	69 *	7	20	75 - 125	ug/L
Iron, Dissolved	400	504	89	5	20	75 - 125	ug/L
Magnesium, Dissolved	20000	95500	67 *	6	20	75 - 125	ug/L
Potassium, Dissolved	20000	21300	91	6	20	75 - 125	ug/L
Sodium, Dissolved	20000	264000	49 *	5	20	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY
USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: 3010A Digestion
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012888-PS1
Lab Source ID: 1011352-01
Initial/Final: 4 mL / 4 mL
Sequence: 0K29031

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Aluminum, Total	1300	-3.16	ug/L	1250	104	80 - 120
Iron, Total	931	725	ug/L	250	82	80 - 120
Magnesium, Total	61.7	51.4	mg/L	12.5	82	80 - 120
Potassium, Total	15.0	1.84	mg/L	12.5	105	80 - 120
Sodium, Total	55.6	44.7	mg/L	12.5	87	80 - 120

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: 3010A Digestion
QC Batch: 1012888

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012888-PS2
Lab Source ID: 1011352-01
Initial/Final: 1 mL / 1 mL
Sequence: 0K29031

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Calcium, Total	174	52.1	mg/L	125	97	80 - 120

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: General Metals Prep
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012910-PS1
Lab Source ID: 1011352-02
Initial/Final: 4 mL / 4 mL
Sequence: 0K29031

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Aluminum, Dissolved	1330	-31.1	ug/L	1250	109	80 - 120
Calcium, Dissolved	63.1	52.3	mg/L	12.5	86	80 - 120
Iron, Dissolved	400	147	ug/L	250	101	80 - 120
Magnesium, Dissolved	92.8	82.1	mg/L	12.5	85	80 - 120
Potassium, Dissolved	16.1	3.06	mg/L	12.5	104	80 - 120

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY
USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: General Metals Prep
QC Batch: 1012910

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012910-PS2
Lab Source ID: 1011352-02
Initial/Final: 1 mL / 1 mL
Sequence: 0K29031

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Sodium, Dissolved	386	254	mg/L	125	105	80 - 120

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012888-BS1
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

QC Batch: 1012888
Sequence: 0K29031

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Aluminum, Total	2000	1960	98	80 - 120	ug/L
Calcium, Total	20000	18300	92	80 - 120	ug/L
Iron, Total	400	384	96	80 - 120	ug/L
Magnesium, Total	20000	19600	98	80 - 120	ug/L
Potassium, Total	20000	19600	98	80 - 120	ug/L
Sodium, Total	20000	20200	101	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012910-BS1
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL
Sequence: 0K29031

QC Batch: 1012910

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Aluminum, Dissolved	2000	2010	101	80 - 120	ug/L
Calcium, Dissolved	20000	18700	93	80 - 120	ug/L
Iron, Dissolved	400	391	98	80 - 120	ug/L
Magnesium, Dissolved	20000	20100	100	80 - 120	ug/L
Potassium, Dissolved	20000	19700	98	80 - 120	ug/L
Sodium, Dissolved	20000	20600	103	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

SERIAL DILUTION
USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K29031-SRD1
Lab Source ID: 1011352-01
Sequence: 0K29031

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Aluminum, Total	-3.16	U	-42.0	U	1,229.0 #		ug/L	10
Iron, Total	725		714		1.0		ug/L	10
Magnesium, Total	51.4		50.1		2.0		mg/L	10
Potassium, Total	1.84		1.93		5.0 #		mg/L	10
Sodium, Total	44.7		42.9		4.0		mg/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

SERIAL DILUTION
USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K29031-SRD2
Lab Source ID: 1011352-02
Sequence: 0K29031

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Aluminum, Dissolved	-31.1	U	-52.4	U	68.0 #		ug/L	10
Calcium, Dissolved	52.3		45.1		14.0	*	mg/L	10
Iron, Dissolved	147		144		3.0 #		ug/L	10
Magnesium, Dissolved	82.1		71.5		13.0	*	mg/L	10
Potassium, Dissolved	3.06		2.88		6.0 #		mg/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

SERIAL DILUTION
USEPA-6010C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K29031-SRD3
Lab Source ID: 1011352-01
Sequence: 0K29031

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Calcium, Total	5.21		5.33		2.0		mg/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

SERIAL DILUTION
USEPA-6010C

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K29031-SRD4
Lab Source ID: 1011352-02
Sequence: 0K29031

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Sodium, Dissolved	25.4		25.6		1.0		mg/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012910

Printed: 12/8/2010 12:24:59PM

Metals, Water, General Metals Prep

Batch comments:

MAS 11/24/10 7:00AM-4;00PM
INST#219@93.4C#235
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-02	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011356-01	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011356-03	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011356-04	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011356-05	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011375-01	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011375-04	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1011407-02	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*		*Fe Diss 6010B*		*K Diss 6010B*		*Mg Diss 6010B*		*Na Diss 6010B*
1012910-BLK1		Nov-24-10 07:00	MAS	25	25				
1012910-BS1		Nov-24-10 07:00	MAS	25	25		0060826	200	
1012910-MS1		Nov-24-10 07:00	MAS	25	25	1011352-02	0060826	200	
1012910-MSD1		Nov-24-10 07:00	MAS	25	25	1011352-02	0060826	200	
1012910-PS1		Nov-29-10 11:30	JMF	4	4	1011352-02	0020878	20	
1012910-PS2		Nov-29-10 11:30	JMF	1	1	1011352-02	0020878	50	

Comments:

Analyst Initials:

bch_TM_byAnalysis.rpt

61219

Metals, Water, 3010A Digestion

01238

Batch comments:

DWJ 11-23-10 6:00PM-2:00AM
INST#217 @94.2C #234
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011407-01	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011407-02	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1012888-BLK1		Nov-23-10 18:00	DWJ	25	25				
1012888-BS1		Nov-23-10 18:00	DWJ	25	25		0060826	200	
1012888-MS1		Nov-23-10 18:00	DWJ	25	25	1011352-01	0060826	200	
1012888-MSD1		Nov-23-10 18:00	DWJ	25	25	1011352-01	0060826	200	
1012888-PS1		Nov-29-10 11:30	JMF	4	4	1011352-01	0020878	20	
1012888-PS2		Nov-29-10 11:30	JMF	1	1	1011352-01	0020878	50	

Comments:	Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012888**

Printed: 12/8/2010 12:24:37PM

Metals, Water, 3010A Digestion

Batch comments:

DWJ 11-23-10 6:00PM-2:00AM
INST#217 @94.2C #234
HOTBLOCK VESSEL LOT#1008257

01237

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-01	V	Nov-23-10 18:00		25	25	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29031 Added for SequenceQC in: 0K29031
Al Diss 6010B	*Al Total 6010B*	*Ca Diss 6010B*	*Ca Total 6010B*	*Fe Diss 6010B*	*Fe Total 6010B*	*K Diss 6010B*	*K Total 6010B*	*Mg Diss 6010B*	*Mg Total 6010B*
Na Diss 6010B	*Na Total 6010B*								
1011352-02	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-01	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-02	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-03	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-04	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-05	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-01	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-02	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-03	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-04	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-05	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				

Comments:

Analyst Initials:

QC BATCH SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

QC Batch: 1012888 QC Batch Matrix: Water Preparation: 3010A Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/23/10 18:00	
NTC03GW0213	1011352-02	11/23/10 18:00	
NTC03GW0313	1011356-01	11/23/10 18:00	
NTC03GW0413	1011356-02	11/23/10 18:00	
NTC03GW0513	1011356-03	11/23/10 18:00	
NTC03GW0613	1011356-04	11/23/10 18:00	
NTCFD111610-01	1011356-05	11/23/10 18:00	
Blank	1012888-BLK1	11/23/10 18:00	
LCS	1012888-BS1	11/23/10 18:00	
NTC03GW0113	1012888-MS1	11/23/10 18:00	
NTC03GW0113	1012888-MSD1	11/23/10 18:00	
NTC03GW0113	1012888-PS1	11/29/10 11:30	
NTC03GW0113	1012888-PS2	11/29/10 11:30	

TOTAL

QC BATCH SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

QC Batch: 1012910 QC Batch Matrix: Water Preparation: General Metals Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0213	1011352-02	11/24/10 07:00	
NTC03GW0313	1011356-01	11/24/10 07:00	
NTC03GW0513	1011356-03	11/24/10 07:00	
NTC03GW0613	1011356-04	11/24/10 07:00	
NTCFD111610-01	1011356-05	11/24/10 07:00	
Blank	1012910-BLK1	11/24/10 07:00	
LCS	1012910-BS1	11/24/10 07:00	
NTC03GW0213	1012910-MS1	11/24/10 07:00	
NTC03GW0213	1012910-MSD1	11/24/10 07:00	
NTC03GW0213	1012910-PS1	11/29/10 11:30	
NTC03GW0213	1012910-PS2	11/29/10 11:30	

Dissolved

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K29031-CAL1	0K29031-001	11/29/10 11:25
Cal Standard	0K29031-CAL2	0K29031-002	11/29/10 11:29
Cal Standard	0K29031-CAL3	0K29031-003	11/29/10 11:33
Cal Standard	0K29031-CAL4	0K29031-004	11/29/10 11:37
Cal Standard	0K29031-CAL5	0K29031-005	11/29/10 11:41
Secondary Cal Check	0K29031-SCV1	0K29031-006	11/29/10 11:44
Calibration Check	0K29031-CCV1	0K29031-006	11/29/10 11:44
Calibration Blank	0K29031-CCB1	0K29031-007	11/29/10 11:48
Instrument RL Check	0K29031-CRL1	0K29031-008	11/29/10 11:52
Interference Check A	0K29031-IFA1	0K29031-009	11/29/10 11:56
Interference Check A	0K29031-IFA2	0K29031-010	11/29/10 12:02
Interference Check B	0K29031-IFB1	0K29031-011	11/29/10 12:08
Interference Check B	0K29031-IFB2	0K29031-012	11/29/10 12:13
Calibration Check	0K29031-CCV2	0K29031-013	11/29/10 12:19
Calibration Blank	0K29031-CCB2	0K29031-014	11/29/10 12:23
Blank	1012888-BLK1	0K29031-015	11/29/10 12:27
LCS	1012888-BS1	0K29031-016	11/29/10 12:31
NTC03GW0113	1011352-01	0K29031-017	11/29/10 12:35
NTC03GW0113	1011352-01	0K29031-017	11/29/10 12:35
NTC03GW0113	1011352-01	0K29031-017	11/29/10 12:35
NTC03GW0113	1011352-01	0K29031-017	11/29/10 12:35
NTC03GW0113	1011352-01	0K29031-017	11/29/10 12:35
NTC03GW0113	1012888-MS1	0K29031-018	11/29/10 12:39
NTC03GW0113	1012888-MSD1	0K29031-019	11/29/10 12:42
NTC03GW0113	0K29031-SRD1	0K29031-020	11/29/10 12:46
NTC03GW0113	1012888-PS1	0K29031-021	11/29/10 12:50
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53
NTC03GW0213	1011352-02	0K29031-022	11/29/10 12:53

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0313	1011356-01	0K29031-023	11/29/10 12:57
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
NTC03GW0413	1011356-02	0K29031-024	11/29/10 13:02
Calibration Check	0K29031-CCV3	0K29031-025	11/29/10 13:06
Calibration Blank	0K29031-CCB3	0K29031-026	11/29/10 13:10
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0513	1011356-03	0K29031-027	11/29/10 13:14
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTC03GW0613	1011356-04	0K29031-028	11/29/10 13:17
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22
NTCFD111610-01	1011356-05	0K29031-029	11/29/10 13:22

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29031-CCV4	0K29031-037	11/29/10 13:53
Calibration Blank	0K29031-CCB4	0K29031-038	11/29/10 13:57
Blank	1012910-BLK1	0K29031-039	11/29/10 14:01
LCS	1012910-BS1	0K29031-040	11/29/10 14:05
NTC03GW0213	1011352-02	0K29031-041	11/29/10 14:09
NTC03GW0213	1011352-02	0K29031-041	11/29/10 14:09
NTC03GW0213	1011352-02	0K29031-041	11/29/10 14:09
NTC03GW0213	1011352-02	0K29031-041	11/29/10 14:09
NTC03GW0213	1011352-02	0K29031-041	11/29/10 14:09
NTC03GW0213	1012910-MS1	0K29031-042	11/29/10 14:13
NTC03GW0213	1012910-MSD1	0K29031-043	11/29/10 14:17
NTC03GW0213	0K29031-SRD2	0K29031-044	11/29/10 14:23
NTC03GW0213	1012910-PS1	0K29031-045	11/29/10 14:27
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0313	1011356-01	0K29031-046	11/29/10 14:31
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0513	1011356-03	0K29031-047	11/29/10 14:35
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
NTC03GW0613	1011356-04	0K29031-048	11/29/10 14:39
Calibration Check	0K29031-CCV5	0K29031-049	11/29/10 14:43

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	0K29031-CCB5	0K29031-050	11/29/10 14:47
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTCFD111610-01	1011356-05	0K29031-051	11/29/10 14:50
NTC03GW0113	1011352-01	0K29031-055	11/29/10 15:06
NTC03GW0113	0K29031-SRD3	0K29031-056	11/29/10 15:10
NTC03GW0113	1012888-PS2	0K29031-057	11/29/10 15:13
NTC03GW0213	1011352-02	0K29031-058	11/29/10 15:17
NTC03GW0213	0K29031-SRD4	0K29031-059	11/29/10 15:21
NTC03GW0213	1012910-PS2	0K29031-060	11/29/10 15:25
Calibration Check	0K29031-CCV6	0K29031-061	11/29/10 15:29
Calibration Blank	0K29031-CCB6	0K29031-062	11/29/10 15:33

Cr 205.557†	7322.2	393.451 ug/L	0.3964	393.451 ug/L	0.3964	0.10%
Cu 327.397†	12355.0	403.104 ug/L	0.5322	403.104 ug/L	0.5322	0.13%
Fe 238.204†	1733.4	383.915 ug/L	6.0928	383.915 ug/L	6.0928	1.59%
K 766.490	25324.7	19.5620 mg/L	0.02010	19.5620 mg/L	0.02010	0.10%
Li 670.784†	21923.8	397.583 ug/L	4.2890	397.583 ug/L	4.2890	1.08%
Mg 279.071†	15025.9	19.5920 mg/L	0.30977	19.5920 mg/L	0.30977	1.58%
Mn 257.610†	105008.5	384.479 ug/L	0.5737	384.479 ug/L	0.5737	0.15%
Mo 202.031†	5377.9	387.837 ug/L	0.1803	387.837 ug/L	0.1803	0.05%
Na 589.592†	159457.6	20.1597 mg/L	0.21495	20.1597 mg/L	0.21495	1.07%
Ni 231.604†	8976.8	383.317 ug/L	0.4150	383.317 ug/L	0.4150	0.11%
Pb 220.353†	1424.2	385.767 ug/L	0.3069	385.767 ug/L	0.3069	0.08%
Sb 217.584†	4368.2	1946.96 ug/L	0.572	1946.96 ug/L	0.572	0.03%
Se 196.026†	1237.6	1922.12 ug/L	11.027	1922.12 ug/L	11.027	0.57%
Si 251.611†	31571.6	1815.96 ug/L	3.857	1815.96 ug/L	3.857	0.21%
Sn 189.927†	6485.0	1887.03 ug/L	1.117	1887.03 ug/L	1.117	0.06%
Sr 407.771†	421933.8	391.346 ug/L	3.6745	391.346 ug/L	3.6745	0.94%
Ti 334.940†	16565.0	384.918 ug/L	5.5384	384.918 ug/L	5.5384	1.44%
Tl 190.801†	2962.5	1927.93 ug/L	5.756	1927.93 ug/L	5.756	0.30%
V 292.395†	28615.6	399.360 ug/L	0.0964	399.360 ug/L	0.0964	0.02%
Zn 206.200†	6109.3	380.408 ug/L	0.6765	380.408 ug/L	0.6765	0.18%

Sequence No.: 17
Sample ID: 1011352-01 Sample NTC036W0113
Analyst:
Initial Sample Wt:
Dilution:
reported result total iron 730 ug/L

Autosampler Location: 19
Date Collected: 11/29/2010 12:35:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1011352-01

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 357.234	598862.4	598862.4	93.4780	%			12:36:27
1	Al 396.153†	509.3	21.4	-1.01163	ug/L	-1.01163	ug/L	12:36:47
1	Ba 455.398†	24673.3	26022.3	78.4049	ug/L	78.4049	ug/L	12:36:27
1	Ca 315.887†	188456.2	201604.0	52.8689	mg/L	52.8689	mg/L	12:36:27
1	Fe 238.204†	3115.6	3313.1	731.008	ug/L	731.008	ug/L	12:36:47
1	K 766.490	3082.3	2387.7	1.85492	mg/L	1.85492	mg/L	12:36:47
1	Li 670.784†	1472.6	1880.6	32.9792	ug/L	32.9792	ug/L	12:36:47
1	Mg 279.071†	37257.0	39740.1	51.7816	mg/L	51.7816	mg/L	12:36:47
1	Na 589.592†	328470.9	350496.6	44.3308	mg/L	44.3308	mg/L	12:36:27
1	Sr 407.771†	2902876.9	3103113.0	2866.36	ug/L	2866.36	ug/L	12:36:27
1	Ti 334.940†	47.9	7.5	4.39250	ug/L	4.39250	ug/L	12:36:47
1	Y 360.076	472479.1	472479.1	96.8743	%			12:37:19
1	Ag 328.068†	419.1	-6.0	-0.852239	ug/L	-0.852239	ug/L	12:37:19
1	As 188.979†	-23.8	5.6	-5.06697	ug/L	-5.06697	ug/L	12:37:39
1	B 249.677†	13466.0	13897.4	505.017	ug/L	505.017	ug/L	12:37:19
1	Be 234.861†	-325.7	26.6	-0.221122	ug/L	-0.221122	ug/L	12:37:39
1	Cd 214.437†	546.5	66.2	-0.249609	ug/L	-0.249609	ug/L	12:37:39
1	Ce 413.764†	-594.9	-47.8	-1.48873	ug/L	-1.48873	ug/L	12:37:19
1	Co 228.616†	-134.3	1.0	-0.693561	ug/L	-0.693561	ug/L	12:37:39
1	Cr 205.557†	-36.6	-0.5	-1.00118	ug/L	-1.00118	ug/L	12:37:39
1	Cu 327.397†	-661.6	16.4	1.11150	ug/L	1.11150	ug/L	12:37:19
1	Mn 257.610†	4539.2	4067.2	14.9538	ug/L	14.9538	ug/L	12:37:39
1	Mo 202.031†	528.6	400.9	28.8402	ug/L	28.8402	ug/L	12:37:39
1	Ni 231.604†	320.7	23.3	-0.324982	ug/L	-0.324982	ug/L	12:37:39
1	Pb 220.353†	52.2	6.5	1.47273	ug/L	1.47273	ug/L	12:37:39
1	Sb 217.584†	-57.9	-19.1	-2.57943	ug/L	-2.57943	ug/L	12:37:39
1	Se 196.026†	-43.3	0.3	-21.0383	ug/L	-21.0383	ug/L	12:37:39
1	Si 251.611†	116927.8	120062.4	6947.34	ug/L	6947.34	ug/L	12:37:19
1	Sn 189.927†	-46.6	-48.2	-11.4304	ug/L	-11.4304	ug/L	12:37:39
1	Tl 190.801†	-58.3	-5.9	-5.99706	ug/L	-5.99706	ug/L	12:37:39
1	V 292.395†	-2125.2	-87.2	0.205208	ug/L	0.205208	ug/L	12:37:19
1	Zn 206.200†	-96.8	17.9	-2.55957	ug/L	-2.55957	ug/L	12:37:39
2	Sc 357.234	597710.3	597710.3	93.2982	%			12:36:52
2	Al 396.153†	488.8	0.5	-5.31109	ug/L	-5.31109	ug/L	12:37:12
2	Ba 455.398†	25008.4	26432.3	79.6193	ug/L	79.6193	ug/L	12:36:52
2	Ca 315.887†	190796.1	204500.6	53.6279	mg/L	53.6279	mg/L	12:36:52
2	Fe 238.204†	3058.8	3258.6	719.036	ug/L	719.036	ug/L	12:37:12
2	K 766.490	3043.4	2348.8	1.82488	mg/L	1.82488	mg/L	12:37:12
2	Li 670.784†	1441.2	1849.9	32.4213	ug/L	32.4213	ug/L	12:37:12

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/30/10	15	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/29/10	14	180	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/30/10	15	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	13	180	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/29/10	14	180	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	180	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV1	Antimony	40.0	37.4	94	ug/L	11/29/10 18:23
	Antimony	40.0	37.4	94	ug/L	11/29/10 18:23
	Arsenic	40.0	37.6	94	ug/L	11/29/10 18:23
	Arsenic	40.0	37.6	94	ug/L	11/29/10 18:23
	Barium	40.0	37.0	93	ug/L	11/29/10 18:23
	Barium	40.0	37.0	93	ug/L	11/29/10 18:23
	Beryllium	40.0	37.1	93	ug/L	11/29/10 18:23
	Beryllium	40.0	37.1	93	ug/L	11/29/10 18:23
	Cadmium	40.0	37.0	93	ug/L	11/29/10 18:23
	Cadmium	40.0	37.0	93	ug/L	11/29/10 18:23
	Chromium	40.0	37.5	94	ug/L	11/29/10 18:23
	Chromium	40.0	37.5	94	ug/L	11/29/10 18:23
	Cobalt	40.0	38.4	96	ug/L	11/29/10 18:23
	Cobalt	40.0	38.4	96	ug/L	11/29/10 18:23
	Copper	40.0	37.9	95	ug/L	11/29/10 18:23
	Copper	40.0	37.9	95	ug/L	11/29/10 18:23
	Lead	40.0	36.3	91	ug/L	11/29/10 18:23
	Lead	40.0	36.3	91	ug/L	11/29/10 18:23
	Manganese	40.0	37.0	92	ug/L	11/29/10 18:23
	Manganese	40.0	37.0	92	ug/L	11/29/10 18:23
	Nickel	40.0	37.1	93	ug/L	11/29/10 18:23
	Nickel	40.0	37.1	93	ug/L	11/29/10 18:23
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:23
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:23
	Silver	40.0	37.8	95	ug/L	11/29/10 18:23
	Silver	40.0	37.8	95	ug/L	11/29/10 18:23
	Thallium	40.0	36.4	91	ug/L	11/29/10 18:23
	Thallium	40.0	36.4	91	ug/L	11/29/10 18:23
	Vanadium	40.0	36.9	92	ug/L	11/29/10 18:23
	Vanadium	40.0	36.9	92	ug/L	11/29/10 18:23
	Zinc	40.0	38.3	96	ug/L	11/29/10 18:23
	Zinc	40.0	38.3	96	ug/L	11/29/10 18:23
0K29093-CCV2	Antimony	40.0	36.7	92	ug/L	11/29/10 18:52
	Antimony	40.0	36.7	92	ug/L	11/29/10 18:52
	Arsenic	40.0	38.1	95	ug/L	11/29/10 18:52
	Arsenic	40.0	38.1	95	ug/L	11/29/10 18:52
	Barium	40.0	37.1	93	ug/L	11/29/10 18:52
	Barium	40.0	37.1	93	ug/L	11/29/10 18:52

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV2	Beryllium	40.0	36.5	91	ug/L	11/29/10 18:52
	Beryllium	40.0	36.5	91	ug/L	11/29/10 18:52
	Cadmium	40.0	37.0	92	ug/L	11/29/10 18:52
	Cadmium	40.0	37.0	92	ug/L	11/29/10 18:52
	Chromium	40.0	36.9	92	ug/L	11/29/10 18:52
	Chromium	40.0	36.9	92	ug/L	11/29/10 18:52
	Cobalt	40.0	38.8	97	ug/L	11/29/10 18:52
	Cobalt	40.0	38.8	97	ug/L	11/29/10 18:52
	Copper	40.0	38.1	95	ug/L	11/29/10 18:52
	Copper	40.0	38.1	95	ug/L	11/29/10 18:52
	Lead	40.0	36.7	92	ug/L	11/29/10 18:52
	Lead	40.0	36.7	92	ug/L	11/29/10 18:52
	Manganese	40.0	37.8	94	ug/L	11/29/10 18:52
	Manganese	40.0	37.8	94	ug/L	11/29/10 18:52
	Nickel	40.0	36.8	92	ug/L	11/29/10 18:52
	Nickel	40.0	36.8	92	ug/L	11/29/10 18:52
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:52
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:52
	Silver	40.0	38.1	95	ug/L	11/29/10 18:52
	Silver	40.0	38.1	95	ug/L	11/29/10 18:52
	Thallium	40.0	36.8	92	ug/L	11/29/10 18:52
	Thallium	40.0	36.8	92	ug/L	11/29/10 18:52
	Vanadium	40.0	36.5	91	ug/L	11/29/10 18:52
	Vanadium	40.0	36.5	91	ug/L	11/29/10 18:52
	Zinc	40.0	38.5	96	ug/L	11/29/10 18:52
	Zinc	40.0	38.5	96	ug/L	11/29/10 18:52
0K29093-CCV3	Antimony	40.0	37.4	93	ug/L	11/29/10 19:59
	Antimony	40.0	37.4	93	ug/L	11/29/10 19:59
	Arsenic	40.0	37.1	93	ug/L	11/29/10 19:59
	Arsenic	40.0	37.1	93	ug/L	11/29/10 19:59
	Barium	40.0	37.5	94	ug/L	11/29/10 19:59
	Barium	40.0	37.5	94	ug/L	11/29/10 19:59
	Beryllium	40.0	37.1	93	ug/L	11/29/10 19:59
	Beryllium	40.0	37.1	93	ug/L	11/29/10 19:59
	Cadmium	40.0	37.6	94	ug/L	11/29/10 19:59
	Cadmium	40.0	37.6	94	ug/L	11/29/10 19:59
	Chromium	40.0	37.6	94	ug/L	11/29/10 19:59
	Chromium	40.0	37.6	94	ug/L	11/29/10 19:59

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV3	Cobalt	40.0	38.2	96	ug/L	11/29/10 19:59
	Cobalt	40.0	38.2	96	ug/L	11/29/10 19:59
	Copper	40.0	38.2	95	ug/L	11/29/10 19:59
	Copper	40.0	38.2	95	ug/L	11/29/10 19:59
	Lead	40.0	37.6	94	ug/L	11/29/10 19:59
	Lead	40.0	37.6	94	ug/L	11/29/10 19:59
	Manganese	40.0	37.6	94	ug/L	11/29/10 19:59
	Manganese	40.0	37.6	94	ug/L	11/29/10 19:59
	Nickel	40.0	36.9	92	ug/L	11/29/10 19:59
	Nickel	40.0	36.9	92	ug/L	11/29/10 19:59
	Selenium	40.0	38.1	95	ug/L	11/29/10 19:59
	Selenium	40.0	38.1	95	ug/L	11/29/10 19:59
	Silver	40.0	38.1	95	ug/L	11/29/10 19:59
	Silver	40.0	38.1	95	ug/L	11/29/10 19:59
	Thallium	40.0	37.3	93	ug/L	11/29/10 19:59
	Thallium	40.0	37.3	93	ug/L	11/29/10 19:59
	Vanadium	40.0	36.9	92	ug/L	11/29/10 19:59
	Vanadium	40.0	36.9	92	ug/L	11/29/10 19:59
	Zinc	40.0	38.7	97	ug/L	11/29/10 19:59
	Zinc	40.0	38.7	97	ug/L	11/29/10 19:59
0K29093-CCV4	Antimony	40.0	36.9	92	ug/L	11/29/10 21:02
	Antimony	40.0	36.9	92	ug/L	11/29/10 21:02
	Arsenic	40.0	37.3	93	ug/L	11/29/10 21:02
	Arsenic	40.0	37.3	93	ug/L	11/29/10 21:02
	Barium	40.0	36.7	92	ug/L	11/29/10 21:02
	Barium	40.0	36.7	92	ug/L	11/29/10 21:02
	Cadmium	40.0	37.0	93	ug/L	11/29/10 21:02
	Cadmium	40.0	37.0	93	ug/L	11/29/10 21:02
	Chromium	40.0	38.1	95	ug/L	11/29/10 21:02
	Chromium	40.0	38.1	95	ug/L	11/29/10 21:02
	Cobalt	40.0	39.5	99	ug/L	11/29/10 21:02
	Cobalt	40.0	39.5	99	ug/L	11/29/10 21:02
	Copper	40.0	37.6	94	ug/L	11/29/10 21:02
	Copper	40.0	37.6	94	ug/L	11/29/10 21:02
	Lead	40.0	36.3	91	ug/L	11/29/10 21:02
	Lead	40.0	36.3	91	ug/L	11/29/10 21:02
	Manganese	40.0	38.3	96	ug/L	11/29/10 21:02
	Manganese	40.0	38.3	96	ug/L	11/29/10 21:02

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV4	Nickel	40.0	37.7	94	ug/L	11/29/10 21:02
	Nickel	40.0	37.7	94	ug/L	11/29/10 21:02
	Selenium	40.0	37.7	94	ug/L	11/29/10 21:02
	Selenium	40.0	37.7	94	ug/L	11/29/10 21:02
	Silver	40.0	37.8	95	ug/L	11/29/10 21:02
	Silver	40.0	37.8	95	ug/L	11/29/10 21:02
	Thallium	40.0	36.4	91	ug/L	11/29/10 21:02
	Thallium	40.0	36.4	91	ug/L	11/29/10 21:02
	Vanadium	40.0	37.6	94	ug/L	11/29/10 21:02
	Vanadium	40.0	37.6	94	ug/L	11/29/10 21:02
	Zinc	40.0	38.3	96	ug/L	11/29/10 21:02
	Zinc	40.0	38.3	96	ug/L	11/29/10 21:02
0K29093-CCV5	Antimony	40.0	36.6	91	ug/L	11/29/10 22:06
	Antimony	40.0	36.6	91	ug/L	11/29/10 22:06
	Arsenic	40.0	36.5	91	ug/L	11/29/10 22:06
	Arsenic	40.0	36.5	91	ug/L	11/29/10 22:06
	Barium	40.0	36.8	92	ug/L	11/29/10 22:06
	Barium	40.0	36.8	92	ug/L	11/29/10 22:06
	Cadmium	40.0	36.9	92	ug/L	11/29/10 22:06
	Cadmium	40.0	36.9	92	ug/L	11/29/10 22:06
	Chromium	40.0	37.6	94	ug/L	11/29/10 22:06
	Chromium	40.0	37.6	94	ug/L	11/29/10 22:06
	Cobalt	40.0	37.8	95	ug/L	11/29/10 22:06
	Cobalt	40.0	37.8	95	ug/L	11/29/10 22:06
	Copper	40.0	36.9	92	ug/L	11/29/10 22:06
	Copper	40.0	36.9	92	ug/L	11/29/10 22:06
	Lead	40.0	36.6	91	ug/L	11/29/10 22:06
	Lead	40.0	36.6	91	ug/L	11/29/10 22:06
	Manganese	40.0	36.9	92	ug/L	11/29/10 22:06
	Manganese	40.0	36.9	92	ug/L	11/29/10 22:06
	Nickel	40.0	36.1	90	ug/L	11/29/10 22:06
	Nickel	40.0	36.1	90	ug/L	11/29/10 22:06
	Selenium	40.0	38.0	95	ug/L	11/29/10 22:06
	Selenium	40.0	38.0	95	ug/L	11/29/10 22:06
	Silver	40.0	37.6	94	ug/L	11/29/10 22:06
	Silver	40.0	37.6	94	ug/L	11/29/10 22:06
	Thallium	40.0	36.9	92	ug/L	11/29/10 22:06
	Thallium	40.0	36.9	92	ug/L	11/29/10 22:06

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV5	Vanadium	40.0	36.6	92	ug/L	11/29/10 22:06
	Vanadium	40.0	36.6	92	ug/L	11/29/10 22:06
	Zinc	40.0	37.9	95	ug/L	11/29/10 22:06
	Zinc	40.0	37.9	95	ug/L	11/29/10 22:06
0K29093-CCV6	Antimony	40.0	38.2	95	ug/L	11/29/10 22:56
	Antimony	40.0	38.2	95	ug/L	11/29/10 22:56
	Arsenic	40.0	38.1	95	ug/L	11/29/10 22:56
	Arsenic	40.0	38.1	95	ug/L	11/29/10 22:56
	Barium	40.0	38.0	95	ug/L	11/29/10 22:56
	Barium	40.0	38.0	95	ug/L	11/29/10 22:56
	Cadmium	40.0	37.3	93	ug/L	11/29/10 22:56
	Cadmium	40.0	37.3	93	ug/L	11/29/10 22:56
	Chromium	40.0	36.8	92	ug/L	11/29/10 22:56
	Chromium	40.0	36.8	92	ug/L	11/29/10 22:56
	Cobalt	40.0	36.1	90	ug/L	11/29/10 22:56
	Cobalt	40.0	36.1	90	ug/L	11/29/10 22:56
	Copper	40.0	36.8	92	ug/L	11/29/10 22:56
	Copper	40.0	36.8	92	ug/L	11/29/10 22:56
	Lead	40.0	37.9	95	ug/L	11/29/10 22:56
	Lead	40.0	37.9	95	ug/L	11/29/10 22:56
	Manganese	40.0	37.1	93	ug/L	11/29/10 22:56
	Manganese	40.0	37.1	93	ug/L	11/29/10 22:56
	Selenium	40.0	39.7	99	ug/L	11/29/10 22:56
	Selenium	40.0	39.7	99	ug/L	11/29/10 22:56
	Silver	40.0	38.6	97	ug/L	11/29/10 22:56
	Silver	40.0	38.6	97	ug/L	11/29/10 22:56
	Thallium	40.0	37.7	94	ug/L	11/29/10 22:56
	Thallium	40.0	37.7	94	ug/L	11/29/10 22:56
	Zinc	40.0	36.6	92	ug/L	11/29/10 22:56
	Zinc	40.0	36.6	92	ug/L	11/29/10 22:56

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30007
Calibration: 0K30034
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30007-CCV1	Barium	40.0	40.5	101	ug/L	11/30/10 07:49
	Beryllium	40.0	39.9	100	ug/L	11/30/10 07:49
	Beryllium	40.0	39.9	100	ug/L	11/30/10 07:49
	Nickel	40.0	38.7	97	ug/L	11/30/10 07:49
	Vanadium	40.0	39.6	99	ug/L	11/30/10 07:49
0K30007-CCV2	Barium	40.0	40.0	100	ug/L	11/30/10 08:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 08:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 08:03
	Nickel	40.0	38.8	97	ug/L	11/30/10 08:03
	Vanadium	40.0	39.9	100	ug/L	11/30/10 08:03
0K30007-CCV3	Barium	40.0	39.7	99	ug/L	11/30/10 08:33
	Beryllium	40.0	38.8	97	ug/L	11/30/10 08:33
	Beryllium	40.0	38.8	97	ug/L	11/30/10 08:33
	Nickel	40.0	38.4	96	ug/L	11/30/10 08:33
	Vanadium	40.0	40.4	101	ug/L	11/30/10 08:33
0K30007-CCV4	Barium	40.0	39.5	99	ug/L	11/30/10 09:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 09:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 09:03
	Nickel	40.0	38.1	95	ug/L	11/30/10 09:03
	Vanadium	40.0	38.3	96	ug/L	11/30/10 09:03
0K30007-CCV5	Barium	40.0	39.2	98	ug/L	11/30/10 09:20
	Beryllium	40.0	37.1	93	ug/L	11/30/10 09:20
	Beryllium	40.0	37.1	93	ug/L	11/30/10 09:20
	Nickel	40.0	37.8	94	ug/L	11/30/10 09:20
	Vanadium	40.0	37.9	95	ug/L	11/30/10 09:20

* Values outside of QC limits

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29093-CRL1	Cadmium	0.200	0.192	96	ug/L	50 - 150
	Cadmium	0.200	0.192	96	ug/L	50 - 150
	Silver	0.200	0.208	104	ug/L	50 - 150
	Silver	0.200	0.208	104	ug/L	50 - 150
	Thallium	0.200	0.200	100	ug/L	50 - 150
	Thallium	0.200	0.200	100	ug/L	50 - 150
0K29093-CRL2	Antimony	1.00	1.02	102	ug/L	50 - 150
	Antimony	1.00	1.02	102	ug/L	50 - 150
	Arsenic	1.00	0.950	95	ug/L	50 - 150
	Arsenic	1.00	0.950	95	ug/L	50 - 150
	Barium	1.00	0.975	97	ug/L	50 - 150
	Barium	1.00	0.975	97	ug/L	50 - 150
	Beryllium	1.00	1.00	100	ug/L	50 - 150
	Beryllium	1.00	1.00	100	ug/L	50 - 150
	Chromium	1.00	1.05	105	ug/L	50 - 150
	Chromium	1.00	1.05	105	ug/L	50 - 150
	Cobalt	1.00	0.982	98	ug/L	50 - 150
	Cobalt	1.00	0.982	98	ug/L	50 - 150
	Copper	1.00	1.02	102	ug/L	50 - 150
	Copper	1.00	1.02	102	ug/L	50 - 150
	Lead	1.00	0.984	98	ug/L	50 - 150
	Lead	1.00	0.984	98	ug/L	50 - 150
	Manganese	1.00	0.980	98	ug/L	50 - 150
	Manganese	1.00	0.980	98	ug/L	50 - 150
	Nickel	1.00	0.992	99	ug/L	50 - 150
	Nickel	1.00	0.992	99	ug/L	50 - 150
	Selenium	1.00	1.08	108	ug/L	50 - 150
	Selenium	1.00	1.08	108	ug/L	50 - 150

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29093-CRL2	Vanadium	1.00	0.972	97	ug/L	50 - 150
	Vanadium	1.00	0.972	97	ug/L	50 - 150
	Zinc	1.00	0.964	96	ug/L	50 - 150
	Zinc	1.00	0.964	96	ug/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30007

Calibration: 0K30034

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30007-CRL1	Barium	1.00	1.01	101	ug/L	50 - 150
	Beryllium	1.00	1.02	102	ug/L	50 - 150
	Beryllium	1.00	1.02	102	ug/L	50 - 150
	Nickel	1.00	0.979	98	ug/L	50 - 150
	Vanadium	1.00	1.02	102	ug/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB1	Antimony	0.14	ug/L	0.071	0.20	J	11/29/10 18:31
no samples affected	Antimony	0.14	ug/L	0.071	0.20	J	11/29/10 18:31
	Arsenic	-0.031	ug/L	0.076	0.60	U	11/29/10 18:31
	Arsenic	-0.031	ug/L	0.076	0.60	U	11/29/10 18:31
	Barium	0.0012	ug/L	0.12	0.40	U	11/29/10 18:31
	Barium	0.0012	ug/L	0.12	0.40	U	11/29/10 18:31
	Beryllium	0.0027	ug/L	0.060	0.20	U	11/29/10 18:31
	Beryllium	0.0027	ug/L	0.060	0.20	U	11/29/10 18:31
	Cadmium	0.0012	ug/L	0.011	0.040	U	11/29/10 18:31
	Cadmium	0.0012	ug/L	0.011	0.040	U	11/29/10 18:31
	Chromium	-0.0060	ug/L	0.091	0.20	U	11/29/10 18:31
	Chromium	-0.0060	ug/L	0.091	0.20	U	11/29/10 18:31
	Cobalt	0.00093	ug/L	0.0084	0.20	U	11/29/10 18:31
	Cobalt	0.00093	ug/L	0.0084	0.20	U	11/29/10 18:31
	Copper	0.019	ug/L	0.14	0.20	U	11/29/10 18:31
	Copper	0.019	ug/L	0.14	0.20	U	11/29/10 18:31
	Lead	0.0051	ug/L	0.043	0.20	U	11/29/10 18:31
	Lead	0.0051	ug/L	0.043	0.20	U	11/29/10 18:31
	Manganese	0.0041	ug/L	0.084	0.40	U	11/29/10 18:31
	Manganese	0.0041	ug/L	0.084	0.40	U	11/29/10 18:31
	Nickel	0.0013	ug/L	0.075	0.20	U	11/29/10 18:31
	Nickel	0.0013	ug/L	0.075	0.20	U	11/29/10 18:31
	Selenium	0.027	ug/L	0.16	0.20	U	11/29/10 18:31
	Selenium	0.027	ug/L	0.16	0.20	U	11/29/10 18:31
	Silver	0.020	ug/L	0.012	0.040	J	11/29/10 18:31
	Silver	0.020	ug/L	0.012	0.040	J	11/29/10 18:31
	Thallium	0.0017	ug/L	0.011	0.20	U	11/29/10 18:31
	Thallium	0.0017	ug/L	0.011	0.20	U	11/29/10 18:31
	Vanadium	-0.0034	ug/L	0.056	0.60	U	11/29/10 18:31
	Vanadium	-0.0034	ug/L	0.056	0.60	U	11/29/10 18:31
	Zinc	-0.0077	ug/L	0.58	4.0	U	11/29/10 18:31
	Zinc	-0.0077	ug/L	0.58	4.0	U	11/29/10 18:31
0K29093-CCB2	Antimony	0.13	ug/L	0.071	0.20	J	11/29/10 19:00

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB2	Antimony	0.13	ug/L	0.071	0.20	J	11/29/10 19:00
	Arsenic	-0.093	ug/L	0.076	0.60	J	11/29/10 19:00
	Arsenic	-0.093	ug/L	0.076	0.60	J	11/29/10 19:00
	Barium	0.0027	ug/L	0.12	0.40	U	11/29/10 19:00
	Barium	0.0027	ug/L	0.12	0.40	U	11/29/10 19:00
	Beryllium	-0.00020	ug/L	0.060	0.20	U	11/29/10 19:00
	Beryllium	-0.00020	ug/L	0.060	0.20	U	11/29/10 19:00
	Cadmium	-0.00061	ug/L	0.011	0.040	U	11/29/10 19:00
	Cadmium	-0.00061	ug/L	0.011	0.040	U	11/29/10 19:00
	Chromium	-0.050	ug/L	0.091	0.20	U	11/29/10 19:00
	Chromium	-0.050	ug/L	0.091	0.20	U	11/29/10 19:00
	Cobalt	-0.00098	ug/L	0.0084	0.20	U	11/29/10 19:00
	Cobalt	-0.00098	ug/L	0.0084	0.20	U	11/29/10 19:00
	Copper	0.013	ug/L	0.14	0.20	U	11/29/10 19:00
	Copper	0.013	ug/L	0.14	0.20	U	11/29/10 19:00
	Lead	0.0028	ug/L	0.043	0.20	U	11/29/10 19:00
	Lead	0.0028	ug/L	0.043	0.20	U	11/29/10 19:00
	Manganese	-0.0012	ug/L	0.084	0.40	U	11/29/10 19:00
	Manganese	-0.0012	ug/L	0.084	0.40	U	11/29/10 19:00
	Nickel	-0.0014	ug/L	0.075	0.20	U	11/29/10 19:00
	Nickel	-0.0014	ug/L	0.075	0.20	U	11/29/10 19:00
	Selenium	-0.043	ug/L	0.16	0.20	U	11/29/10 19:00
	Selenium	-0.043	ug/L	0.16	0.20	U	11/29/10 19:00
	Silver	0.015	ug/L	0.012	0.040	J	11/29/10 19:00
	Silver	0.015	ug/L	0.012	0.040	J	11/29/10 19:00
	Thallium	0.0022	ug/L	0.011	0.20	U	11/29/10 19:00
	Thallium	0.0022	ug/L	0.011	0.20	U	11/29/10 19:00
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/29/10 19:00
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/29/10 19:00
	Zinc	-0.00016	ug/L	0.58	4.0	U	11/29/10 19:00
	Zinc	-0.00016	ug/L	0.58	4.0	U	11/29/10 19:00
0K29093-CCB3	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 20:07
	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 20:07

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB3	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 20:07
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 20:07
	Barium	0.0025	ug/L	0.12	0.40	U	11/29/10 20:07
	Barium	0.0025	ug/L	0.12	0.40	U	11/29/10 20:07
	Beryllium	0.0018	ug/L	0.060	0.20	U	11/29/10 20:07
	Beryllium	0.0018	ug/L	0.060	0.20	U	11/29/10 20:07
	Cadmium	-0.0016	ug/L	0.011	0.040	U	11/29/10 20:07
	Cadmium	-0.0016	ug/L	0.011	0.040	U	11/29/10 20:07
	Chromium	0.074	ug/L	0.091	0.20	U	11/29/10 20:07
	Chromium	0.074	ug/L	0.091	0.20	U	11/29/10 20:07
	Cobalt	-0.00021	ug/L	0.0084	0.20	U	11/29/10 20:07
	Cobalt	-0.00021	ug/L	0.0084	0.20	U	11/29/10 20:07
	Copper	-0.00034	ug/L	0.14	0.20	U	11/29/10 20:07
	Copper	-0.00034	ug/L	0.14	0.20	U	11/29/10 20:07
	Lead	0.0022	ug/L	0.043	0.20	U	11/29/10 20:07
	Lead	0.0022	ug/L	0.043	0.20	U	11/29/10 20:07
	Manganese	0.0026	ug/L	0.084	0.40	U	11/29/10 20:07
	Manganese	0.0026	ug/L	0.084	0.40	U	11/29/10 20:07
	Nickel	-0.0021	ug/L	0.075	0.20	U	11/29/10 20:07
	Nickel	-0.0021	ug/L	0.075	0.20	U	11/29/10 20:07
	Selenium	-0.0021	ug/L	0.16	0.20	U	11/29/10 20:07
	Selenium	-0.0021	ug/L	0.16	0.20	U	11/29/10 20:07
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 20:07
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 20:07
	Thallium	0.0073	ug/L	0.011	0.20	U	11/29/10 20:07
	Thallium	0.0073	ug/L	0.011	0.20	U	11/29/10 20:07
	Vanadium	0.020	ug/L	0.056	0.60	U	11/29/10 20:07
	Vanadium	0.020	ug/L	0.056	0.60	U	11/29/10 20:07
	Zinc	0.018	ug/L	0.58	4.0	U	11/29/10 20:07
	Zinc	0.018	ug/L	0.58	4.0	U	11/29/10 20:07
0K29093-CCB4	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 21:09
	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 21:09
	Arsenic	-0.24	ug/L	0.076	0.60	J	11/29/10 21:09

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB4	Arsenic	-0.24	ug/L	0.076	0.60	J	11/29/10 21:09
	Barium	-0.000043	ug/L	0.12	0.40	U	11/29/10 21:09
	Barium	-0.000043	ug/L	0.12	0.40	U	11/29/10 21:09
	Beryllium	0.00043	ug/L	0.060	0.20	U	11/29/10 21:09
	Beryllium	0.00043	ug/L	0.060	0.20	U	11/29/10 21:09
	Cadmium	-0.0019	ug/L	0.011	0.040	U	11/29/10 21:09
	Cadmium	-0.0019	ug/L	0.011	0.040	U	11/29/10 21:09
	Chromium	0.048	ug/L	0.091	0.20	U	11/29/10 21:09
	Chromium	0.048	ug/L	0.091	0.20	U	11/29/10 21:09
	Cobalt	-0.00067	ug/L	0.0084	0.20	U	11/29/10 21:09
	Cobalt	-0.00067	ug/L	0.0084	0.20	U	11/29/10 21:09
	Copper	-0.0028	ug/L	0.14	0.20	U	11/29/10 21:09
	Copper	-0.0028	ug/L	0.14	0.20	U	11/29/10 21:09
	Lead	0.0027	ug/L	0.043	0.20	U	11/29/10 21:09
	Lead	0.0027	ug/L	0.043	0.20	U	11/29/10 21:09
	Manganese	0.0046	ug/L	0.084	0.40	U	11/29/10 21:09
	Manganese	0.0046	ug/L	0.084	0.40	U	11/29/10 21:09
	Nickel	-0.0058	ug/L	0.075	0.20	U	11/29/10 21:09
	Nickel	-0.0058	ug/L	0.075	0.20	U	11/29/10 21:09
	Selenium	0.090	ug/L	0.16	0.20	U	11/29/10 21:09
	Selenium	0.090	ug/L	0.16	0.20	U	11/29/10 21:09
	Silver	0.012	ug/L	0.012	0.040	J	11/29/10 21:09
	Silver	0.012	ug/L	0.012	0.040	J	11/29/10 21:09
	Thallium	0.0040	ug/L	0.011	0.20	U	11/29/10 21:09
	Thallium	0.0040	ug/L	0.011	0.20	U	11/29/10 21:09
	Vanadium	0.0081	ug/L	0.056	0.60	U	11/29/10 21:09
	Vanadium	0.0081	ug/L	0.056	0.60	U	11/29/10 21:09
	Zinc	-0.0072	ug/L	0.58	4.0	U	11/29/10 21:09
	Zinc	-0.0072	ug/L	0.58	4.0	U	11/29/10 21:09
0K29093-CCB5	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:13
	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:13
	Arsenic	-0.26	ug/L	0.076	0.60	J	11/29/10 22:13
	Arsenic	-0.26	ug/L	0.076	0.60	J	11/29/10 22:13

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB5	Barium	0.0015	ug/L	0.12	0.40	U	11/29/10 22:13
	Barium	0.0015	ug/L	0.12	0.40	U	11/29/10 22:13
	Cadmium	-0.00091	ug/L	0.011	0.040	U	11/29/10 22:13
	Cadmium	-0.00091	ug/L	0.011	0.040	U	11/29/10 22:13
	Chromium	0.030	ug/L	0.091	0.20	U	11/29/10 22:13
	Chromium	0.030	ug/L	0.091	0.20	U	11/29/10 22:13
	Cobalt	0.00013	ug/L	0.0084	0.20	U	11/29/10 22:13
	Cobalt	0.00013	ug/L	0.0084	0.20	U	11/29/10 22:13
	Copper	-0.000035	ug/L	0.14	0.20	U	11/29/10 22:13
	Copper	-0.000035	ug/L	0.14	0.20	U	11/29/10 22:13
	Lead	0.0024	ug/L	0.043	0.20	U	11/29/10 22:13
	Lead	0.0024	ug/L	0.043	0.20	U	11/29/10 22:13
	Manganese	0.0038	ug/L	0.084	0.40	U	11/29/10 22:13
	Manganese	0.0038	ug/L	0.084	0.40	U	11/29/10 22:13
	Nickel	-0.0059	ug/L	0.075	0.20	U	11/29/10 22:13
	Nickel	-0.0059	ug/L	0.075	0.20	U	11/29/10 22:13
	Selenium	-0.021	ug/L	0.16	0.20	U	11/29/10 22:13
	Selenium	-0.021	ug/L	0.16	0.20	U	11/29/10 22:13
	Silver	0.010	ug/L	0.012	0.040	U	11/29/10 22:13
	Silver	0.010	ug/L	0.012	0.040	U	11/29/10 22:13
	Thallium	0.0015	ug/L	0.011	0.20	U	11/29/10 22:13
	Thallium	0.0015	ug/L	0.011	0.20	U	11/29/10 22:13
	Vanadium	0.013	ug/L	0.056	0.60	U	11/29/10 22:13
	Vanadium	0.013	ug/L	0.056	0.60	U	11/29/10 22:13
	Zinc	-0.0053	ug/L	0.58	4.0	U	11/29/10 22:13
0K29093-CCB6	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:49
	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:49
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 22:49
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 22:49
	Barium	0.0013	ug/L	0.12	0.40	U	11/29/10 22:49
	Barium	0.0013	ug/L	0.12	0.40	U	11/29/10 22:49
	Cadmium	-0.00088	ug/L	0.011	0.040	U	11/29/10 22:49
	Cadmium	-0.00088	ug/L	0.011	0.040	U	11/29/10 22:49

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB6	Chromium	0.018	ug/L	0.091	0.20	U	11/29/10 22:49
	Chromium	0.018	ug/L	0.091	0.20	U	11/29/10 22:49
	Cobalt	-0.00037	ug/L	0.0084	0.20	U	11/29/10 22:49
	Cobalt	-0.00037	ug/L	0.0084	0.20	U	11/29/10 22:49
	Copper	-0.0020	ug/L	0.14	0.20	U	11/29/10 22:49
	Copper	-0.0020	ug/L	0.14	0.20	U	11/29/10 22:49
	Lead	0.0018	ug/L	0.043	0.20	U	11/29/10 22:49
	Lead	0.0018	ug/L	0.043	0.20	U	11/29/10 22:49
	Manganese	0.0030	ug/L	0.084	0.40	U	11/29/10 22:49
	Manganese	0.0030	ug/L	0.084	0.40	U	11/29/10 22:49
	Selenium	0.013	ug/L	0.16	0.20	U	11/29/10 22:49
	Selenium	0.013	ug/L	0.16	0.20	U	11/29/10 22:49
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 22:49
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 22:49
	Thallium	0.00023	ug/L	0.011	0.20	U	11/29/10 22:49
	Thallium	0.00023	ug/L	0.011	0.20	U	11/29/10 22:49
	Zinc	0.013	ug/L	0.58	4.0	U	11/29/10 22:49
	Zinc	0.013	ug/L	0.58	4.0	U	11/29/10 22:49

* Values outside of QC limits

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30007
Calibration: 0K30034
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30007-CCB1	Barium	0.0033	ug/L	0.12	0.40	U	11/30/10 07:52
	Beryllium	0.010	ug/L	0.060	0.20	U	11/30/10 07:52
	Beryllium	0.010	ug/L	0.060	0.20	U	11/30/10 07:52
	Nickel	0.0044	ug/L	0.075	0.20	U	11/30/10 07:52
	Vanadium	0.0035	ug/L	0.056	0.60	U	11/30/10 07:52
0K30007-CCB2	Barium	0.00026	ug/L	0.12	0.40	U	11/30/10 08:06
	Beryllium	0.0051	ug/L	0.060	0.20	U	11/30/10 08:06
	Beryllium	0.0051	ug/L	0.060	0.20	U	11/30/10 08:06
	Nickel	-0.0030	ug/L	0.075	0.20	U	11/30/10 08:06
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/30/10 08:06
0K30007-CCB3	Barium	0.00025	ug/L	0.12	0.40	U	11/30/10 08:36
	Beryllium	0.0035	ug/L	0.060	0.20	U	11/30/10 08:36
	Beryllium	0.0035	ug/L	0.060	0.20	U	11/30/10 08:36
	Nickel	-0.0078	ug/L	0.075	0.20	U	11/30/10 08:36
	Vanadium	0.025	ug/L	0.056	0.60	U	11/30/10 08:36
0K30007-CCB4	Barium	0.00065	ug/L	0.12	0.40	U	11/30/10 09:05
	Beryllium	0.0037	ug/L	0.060	0.20	U	11/30/10 09:05
	Beryllium	0.0037	ug/L	0.060	0.20	U	11/30/10 09:05
	Nickel	-0.0077	ug/L	0.075	0.20	U	11/30/10 09:05
	Vanadium	0.026	ug/L	0.056	0.60	U	11/30/10 09:05
0K30007-CCB5	Barium	0.0023	ug/L	0.12	0.40	U	11/30/10 09:23
	Beryllium	0.0010	ug/L	0.060	0.20	U	11/30/10 09:23
	Beryllium	0.0010	ug/L	0.060	0.20	U	11/30/10 09:23
	Nickel	-0.0055	ug/L	0.075	0.20	U	11/30/10 09:23
	Vanadium	0.025	ug/L	0.056	0.60	U	11/30/10 09:23

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012934-BLK1 File ID: 0k29093-033

Prepared: 11/29/10 08:00 Analyzed: 11/29/10 20:26

Preparation: 3020A Digestion Initial/Final: 25 mL / 125 mL

QC Batch: 1012934 Sequence: 0K29093 Calibration: 0K29031 Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-36-0	Antimony, Total	1.0	ug/L	0.36	1.0	U
7440-38-2	Arsenic, Total	3.0	ug/L	0.38	3.0	U
7440-39-3	Barium, Total	2.0	ug/L	0.59	2.0	U
7440-43-9	Cadmium, Total	0.20	ug/L	0.055	0.20	U
7440-47-3	Chromium, Total	0.81	ug/L	0.46	1.0	J
7440-48-4	Cobalt, Total	1.0	ug/L	0.042	1.0	U
7440-50-8	Copper, Total	1.0	ug/L	0.71	1.0	U
7439-92-1	Lead, Total	1.0	ug/L	0.22	1.0	U
7439-96-5	Manganese, Total	2.0	ug/L	0.42	2.0	U
7440-02-0	Nickel, Total	1.0	ug/L	0.37	1.0	U
7782-49-2	Selenium, Total	1.0	ug/L	0.82	1.0	U
7440-22-4	Silver, Total	0.20	ug/L	0.061	0.20	U
7440-28-0	Thallium, Total	1.0	ug/L	0.056	1.0	U
7440-62-2	Vanadium, Total	3.0	ug/L	0.28	3.0	U
7440-66-6	Zinc, Total	20	ug/L	2.9	20	U

TOTAL

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012934-BLK2 File ID: 0k30007-019

Prepared: 11/29/10 08:00 Analyzed: 11/30/10 08:18

Preparation: 3020A Digestion Initial/Final: 25 mL / 125 mL

QC Batch: 1012934 Sequence: 0K30007 Calibration: 0K30034 Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-41-7	Beryllium, Total	1.0	ug/L	0.30	1.0	U

TOTAL

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012940-BLK1 File ID: 0k29093-018

Prepared: 11/29/10 08:00 Analyzed: 11/29/10 19:04

Preparation: General Metals Prep Initial/Final: 25 mL / 125 mL

QC Batch: 1012940 Sequence: 0K29093 Calibration: 0K29031 Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-36-0	Antimony, Dissolved	0.49	ug/L	0.36	1.0	J
7440-38-2	Arsenic, Dissolved	3.0	ug/L	0.38	3.0	U
7440-39-3	Barium, Dissolved	2.0	ug/L	0.59	2.0	U
7440-41-7	Beryllium, Dissolved	1.0	ug/L	0.30	1.0	U
7440-43-9	Cadmium, Dissolved	0.20	ug/L	0.055	0.20	U
7440-47-3	Chromium, Dissolved	0.89	ug/L	0.46	1.0	J
7440-48-4	Cobalt, Dissolved	1.0	ug/L	0.042	1.0	U
7440-50-8	Copper, Dissolved	1.0	ug/L	0.71	1.0	U
7439-92-1	Lead, Dissolved	1.0	ug/L	0.22	1.0	U
7439-96-5	Manganese, Dissolved	2.0	ug/L	0.42	2.0	U
7440-02-0	Nickel, Dissolved	1.0	ug/L	0.37	1.0	U
7782-49-2	Selenium, Dissolved	1.0	ug/L	0.82	1.0	U
7440-22-4	Silver, Dissolved	0.20	ug/L	0.061	0.20	U
7440-28-0	Thallium, Dissolved	1.0	ug/L	0.056	1.0	U
7440-62-2	Vanadium, Dissolved	3.0	ug/L	0.28	3.0	U
7440-66-6	Zinc, Dissolved	20	ug/L	2.9	20	U

Dissolved

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K29093-IFA1	Antimony	0.00	0.0731		ug/L
	Antimony	0.00	0.0731		ug/L
	Arsenic	0.00	-0.0505		ug/L
	Arsenic	0.00	-0.0505		ug/L
	Barium	0.00	0.0164		ug/L
	Barium	0.00	0.0164		ug/L
	Beryllium	0.00	0.00592		ug/L
	Beryllium	0.00	0.00592		ug/L
	Cadmium	0.00	0.0526		ug/L
	Cadmium	0.00	0.0526		ug/L
	Chromium	0.00	0.165		ug/L
	Chromium	0.00	0.165		ug/L
	Cobalt	0.00	0.0173		ug/L
	Cobalt	0.00	0.0173		ug/L
	Copper	0.00	0.233		ug/L
	Copper	0.00	0.233		ug/L
	Lead	0.00	0.0157		ug/L
	Lead	0.00	0.0157		ug/L
	Manganese	0.00	0.0128		ug/L
	Manganese	0.00	0.0128		ug/L
	Nickel	0.00	0.343		ug/L
	Nickel	0.00	0.343		ug/L
	Selenium	0.00	0.0519		ug/L
	Selenium	0.00	0.0519		ug/L
	Silver	0.00	0.0430		ug/L
	Silver	0.00	0.0430		ug/L
	Thallium	0.00	0.00246		ug/L
	Thallium	0.00	0.00246		ug/L
	Vanadium	0.00	-0.0267		ug/L
	Vanadium	0.00	-0.0267		ug/L
	Zinc	0.00	0.516		ug/L
	Zinc	0.00	0.516		ug/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K29093-IFB1	Antimony	20.0	20.2	101	ug/L
	Antimony	20.0	20.2	101	ug/L
	Arsenic	20.0	20.7	104	ug/L
	Arsenic	20.0	20.7	104	ug/L
	Barium	20.0	20.3	102	ug/L
	Barium	20.0	20.3	102	ug/L
	Beryllium	20.0	19.7	99	ug/L
	Beryllium	20.0	19.7	99	ug/L
	Cadmium	20.0	20.9	104	ug/L
	Cadmium	20.0	20.9	104	ug/L
	Chromium	20.0	20.0	100	ug/L
	Chromium	20.0	20.0	100	ug/L
	Cobalt	20.0	20.5	103	ug/L
	Cobalt	20.0	20.5	103	ug/L
	Copper	20.0	20.5	102	ug/L
	Copper	20.0	20.5	102	ug/L
	Lead	20.0	20.1	101	ug/L
	Lead	20.0	20.1	101	ug/L
	Manganese	20.0	20.4	102	ug/L
	Manganese	20.0	20.4	102	ug/L
	Nickel	20.0	20.4	102	ug/L
	Nickel	20.0	20.4	102	ug/L
	Selenium	20.0	20.8	104	ug/L
	Selenium	20.0	20.8	104	ug/L
	Silver	20.0	20.6	103	ug/L
	Silver	20.0	20.6	103	ug/L
	Thallium	20.0	20.0	100	ug/L
	Thallium	20.0	20.0	100	ug/L
	Vanadium	20.0	19.3	97	ug/L
	Vanadium	20.0	19.3	97	ug/L
	Zinc	20.0	20.7	103	ug/L
	Zinc	20.0	20.7	103	ug/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30007

Calibration: 0K30034

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K30007-IFA1	Barium	0.00	0.0171		ug/L
	Beryllium	0.00	0.00965		ug/L
	Beryllium	0.00	0.00965		ug/L
	Nickel	0.00	0.307		ug/L
	Vanadium	0.00	0.00441		ug/L
0K30007-IFB1	Barium	20.0	19.6	98	ug/L
	Beryllium	20.0	19.0	95	ug/L
	Beryllium	20.0	19.0	95	ug/L
	Nickel	20.0	18.2	91	ug/L
	Vanadium	20.0	18.9	95	ug/L

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012934

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012934-MS1

Preparation: 3020A Digestion

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Antimony, Total	50.0	ND	50.5	101	75 - 125	ug/L
Arsenic, Total	50.0	ND	49.7	99	75 - 125	ug/L
Barium, Total	50.0	70.4	123	104	75 - 125	ug/L
Cadmium, Total	50.0	ND	48.7	97	75 - 125	ug/L
Chromium, Total	50.0	0.555	50.7	100	75 - 125	ug/L
Cobalt, Total	50.0	0.145	50.3	100	75 - 125	ug/L
Copper, Total	50.0	0.765	49.2	97	75 - 125	ug/L
Lead, Total	50.0	ND	48.7	97	75 - 125	ug/L
Manganese, Total	50.0	14.6	65.5	102	75 - 125	ug/L
Nickel, Total	50.0	0.690	49.3	97	75 - 125	ug/L
Selenium, Total	50.0	ND	47.9	96	75 - 125	ug/L
Silver, Total	50.0	ND	49.5	99	75 - 125	ug/L
Thallium, Total	50.0	ND	48.5	97	75 - 125	ug/L
Vanadium, Total	50.0	ND	49.4	99	75 - 125	ug/L
Zinc, Total	50.0	3.56	50.2	93	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012934

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012934-MSD1

Preparation: 3020A Digestion

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Antimony, Total	50.0	48.5	97	4	20	75 - 125	ug/L
Arsenic, Total	50.0	48.6	97	2	20	75 - 125	ug/L
Barium, Total	50.0	119	96	3	20	75 - 125	ug/L
Cadmium, Total	50.0	47.4	95	3	20	75 - 125	ug/L
Chromium, Total	50.0	50.6	100	0.2	20	75 - 125	ug/L
Cobalt, Total	50.0	49.9	100	0.7	20	75 - 125	ug/L
Copper, Total	50.0	48.2	95	2	20	75 - 125	ug/L
Lead, Total	50.0	47.6	95	2	20	75 - 125	ug/L
Manganese, Total	50.0	65.2	101	0.4	20	75 - 125	ug/L
Nickel, Total	50.0	48.6	96	2	20	75 - 125	ug/L
Selenium, Total	50.0	48.7	97	2	20	75 - 125	ug/L
Silver, Total	50.0	48.4	97	2	20	75 - 125	ug/L
Thallium, Total	50.0	46.8	94	4	20	75 - 125	ug/L
Vanadium, Total	50.0	49.6	99	0.5	20	75 - 125	ug/L
Zinc, Total	50.0	48.3	90	4	20	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012934

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012934-MS2

Preparation: 3020A Digestion

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Beryllium, Total	50.0	ND	49.1	98	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012934

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012934-MSD2

Preparation: 3020A Digestion

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Beryllium, Total	50.0	48.4	97	1	20	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-6020A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012940

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012940-MS1

Preparation: General Metals Prep

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Antimony, Dissolved	50.0	ND	42.7	85	75 - 125	ug/L
Arsenic, Dissolved	50.0	1.03	48.7	95	75 - 125	ug/L
Barium, Dissolved	50.0	43.2	92.7	99	75 - 125	ug/L
Beryllium, Dissolved	50.0	ND	46.4	93	75 - 125	ug/L
Cadmium, Dissolved	50.0	ND	47.8	96	75 - 125	ug/L
Chromium, Dissolved	50.0	0.866	49.2	97	75 - 125	ug/L
Cobalt, Dissolved	50.0	0.0890	49.9	100	75 - 125	ug/L
Copper, Dissolved	50.0	ND	48.9	98	75 - 125	ug/L
Lead, Dissolved	50.0	ND	48.6	97	75 - 125	ug/L
Manganese, Dissolved	50.0	17.6	66.0	97	75 - 125	ug/L
Nickel, Dissolved	50.0	1.99	49.3	95	75 - 125	ug/L
Selenium, Dissolved	50.0	0.896	45.9	90	75 - 125	ug/L
Silver, Dissolved	50.0	0.108	42.5	85	75 - 125	ug/L
Thallium, Dissolved	50.0	ND	45.8	92	75 - 125	ug/L
Vanadium, Dissolved	50.0	ND	48.5	97	75 - 125	ug/L
Zinc, Dissolved	50.0	10.6	52.0	83	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0213

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012940

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012940-MSD1

Preparation: General Metals Prep

Initial/Final: 25 mL / 125 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Antimony, Dissolved	50.0	42.8	86	0.1	20	75 - 125	ug/L
Arsenic, Dissolved	50.0	51.7	101	6	20	75 - 125	ug/L
Barium, Dissolved	50.0	93.7	101	1	20	75 - 125	ug/L
Beryllium, Dissolved	50.0	49.1	98	6	20	75 - 125	ug/L
Cadmium, Dissolved	50.0	49.0	98	2	20	75 - 125	ug/L
Chromium, Dissolved	50.0	51.6	101	5	20	75 - 125	ug/L
Cobalt, Dissolved	50.0	51.6	103	3	20	75 - 125	ug/L
Copper, Dissolved	50.0	49.9	100	2	20	75 - 125	ug/L
Lead, Dissolved	50.0	48.3	97	0.6	20	75 - 125	ug/L
Manganese, Dissolved	50.0	67.4	100	2	20	75 - 125	ug/L
Nickel, Dissolved	50.0	51.1	98	4	20	75 - 125	ug/L
Selenium, Dissolved	50.0	50.0	98	9	20	75 - 125	ug/L
Silver, Dissolved	50.0	50.5	101	17	20	75 - 125	ug/L
Thallium, Dissolved	50.0	45.4	91	0.8	20	75 - 125	ug/L
Vanadium, Dissolved	50.0	50.5	101	4	20	75 - 125	ug/L
Zinc, Dissolved	50.0	52.9	85	2	20	75 - 125	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

USEPA-6020A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: 3020A Digestion
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012934-PS1
Lab Source ID: 1011352-01
Initial/Final: 2 mL / 10 mL
Sequence: 0K29093

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Antimony, Total	19.5	0.0283	ug/L	20.0	97	80 - 120
Arsenic, Total	19.5	-0.110	ug/L	20.0	98	80 - 120
Barium, Total	33.4	14.1	ug/L	20.0	96	80 - 120
Cadmium, Total	19.2	0.00212	ug/L	20.0	96	80 - 120
Chromium, Total	19.9	0.111	ug/L	20.0	99	80 - 120
Cobalt, Total	20.0	0.0290	ug/L	20.0	100	80 - 120
Copper, Total	19.0	0.153	ug/L	20.0	94	80 - 120
Lead, Total	18.8	0.0152	ug/L	20.0	94	80 - 120
Manganese, Total	22.8	2.91	ug/L	20.0	99	80 - 120
Nickel, Total	18.9	0.138	ug/L	20.0	94	80 - 120
Selenium, Total	19.3	0.0359	ug/L	20.0	97	80 - 120
Silver, Total	19.0	0.0115	ug/L	20.0	95	80 - 120
Thallium, Total	18.9	0.00477	ug/L	20.0	94	80 - 120
Vanadium, Total	19.5	0.0367	ug/L	20.0	97	80 - 120
Zinc, Total	19.0	0.712	ug/L	20.0	92	80 - 120

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

USEPA-6020A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: 3020A Digestion
QC Batch: 1012934

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012934-PS2
Lab Source ID: 1011352-01
Initial/Final: 1 mL / 5 mL
Sequence: 0K30007

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Beryllium, Total	19.9	0.0142	ug/L	20.0	99	80 - 120

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

USEPA-6020A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
Preparation: General Metals Prep
QC Batch: 1012940

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012940-PS1
Lab Source ID: 1011352-02
Initial/Final: 2 mL / 10 mL
Sequence: 0K29093

Analyte	Spike Sample Result (SSR)	Sample Result (SR)	Units	Spike Added (SA)	%R	Control Limit %R
Antimony, Dissolved	19.4	0.0493	ug/L	20.0	97	80 - 120
Arsenic, Dissolved	20.8	0.205	ug/L	20.0	103	80 - 120
Barium, Dissolved	27.3	8.65	ug/L	20.0	93	80 - 120
Beryllium, Dissolved	18.9	0.00310	ug/L	20.0	95	80 - 120
Cadmium, Dissolved	19.3	-0.0508	ug/L	20.0	97	80 - 120
Chromium, Dissolved	20.0	0.173	ug/L	20.0	99	80 - 120
Cobalt, Dissolved	20.4	0.0178	ug/L	20.0	102	80 - 120
Copper, Dissolved	19.7	0.122	ug/L	20.0	98	80 - 120
Lead, Dissolved	19.4	0.00664	ug/L	20.0	97	80 - 120
Manganese, Dissolved	23.4	3.52	ug/L	20.0	99	80 - 120
Nickel, Dissolved	19.9	0.398	ug/L	20.0	98	80 - 120
Selenium, Dissolved	20.2	0.179	ug/L	20.0	100	80 - 120
Silver, Dissolved	19.2	0.0216	ug/L	20.0	96	80 - 120
Thallium, Dissolved	19.5	0.00155	ug/L	20.0	97	80 - 120
Vanadium, Dissolved	19.8	0.0157	ug/L	20.0	99	80 - 120
Zinc, Dissolved	20.8	2.11	ug/L	20.0	94	80 - 120

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012934-BS1
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL
Sequence: 0K29093

QC Batch: 1012934

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Antimony, Total	50.0	48.1	96	80 - 120	ug/L
Arsenic, Total	50.0	48.5	97	80 - 120	ug/L
Barium, Total	50.0	48.2	96	80 - 120	ug/L
Cadmium, Total	50.0	49.4	99	80 - 120	ug/L
Chromium, Total	50.0	51.4	103	80 - 120	ug/L
Cobalt, Total	50.0	49.9	100	80 - 120	ug/L
Copper, Total	50.0	50.8	102	80 - 120	ug/L
Lead, Total	50.0	48.3	97	80 - 120	ug/L
Manganese, Total	50.0	50.6	101	80 - 120	ug/L
Nickel, Total	50.0	50.6	101	80 - 120	ug/L
Selenium, Total	50.0	48.5	97	80 - 120	ug/L
Silver, Total	50.0	50.8	102	80 - 120	ug/L
Thallium, Total	50.0	48.8	98	80 - 120	ug/L
Vanadium, Total	50.0	49.0	98	80 - 120	ug/L
Zinc, Total	50.0	49.2	98	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012934-BS2
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL
Sequence: 0K30007

QC Batch: 1012934

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Beryllium, Total	50.0	48.0	96	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012940-BS1
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL
Sequence: 0K29093

QC Batch: 1012940

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Antimony, Dissolved	50.0	49.8	100	80 - 120	ug/L
Arsenic, Dissolved	50.0	49.1	98	80 - 120	ug/L
Barium, Dissolved	50.0	49.4	99	80 - 120	ug/L
Beryllium, Dissolved	50.0	49.0	98	80 - 120	ug/L
Cadmium, Dissolved	50.0	49.9	100	80 - 120	ug/L
Chromium, Dissolved	50.0	50.9	102	80 - 120	ug/L
Cobalt, Dissolved	50.0	49.8	100	80 - 120	ug/L
Copper, Dissolved	50.0	50.1	100	80 - 120	ug/L
Lead, Dissolved	50.0	48.0	96	80 - 120	ug/L
Manganese, Dissolved	50.0	49.5	99	80 - 120	ug/L
Nickel, Dissolved	50.0	49.2	98	80 - 120	ug/L
Selenium, Dissolved	50.0	47.9	96	80 - 120	ug/L
Silver, Dissolved	50.0	50.7	101	80 - 120	ug/L
Thallium, Dissolved	50.0	48.3	97	80 - 120	ug/L
Vanadium, Dissolved	50.0	49.8	100	80 - 120	ug/L
Zinc, Dissolved	50.0	50.9	102	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

SERIAL DILUTION
USEPA-6020A

NTC03GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K29093-SRD1
Lab Source ID: 1011352-02
Sequence: 0K29093

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Antimony, Dissolved	0.0493	U	0.0731	U	48.0 OK #		ug/L	10
Arsenic, Dissolved	0.205	J	-0.983	U	579.0 OK #		ug/L	10
Barium, Dissolved	8.65		8.43		2.0 #		ug/L	10
Beryllium, Dissolved	0.00310	U	0.0268	U	763.0 OK #		ug/L	10
Cadmium, Dissolved	-0.0508	U	-0.0744	U	47.0 OK #		ug/L	10
Chromium, Dissolved	0.173	J	0.410	U	137.0 OK #		ug/L	10
Cobalt, Dissolved	0.0178	J	0.0147	U	18.0 OK #		ug/L	10
Copper, Dissolved	0.122	U	0.124	U	2.0 #		ug/L	10
Lead, Dissolved	0.00664	U	0.0546	U	722.0 OK #		ug/L	10
Manganese, Dissolved	3.52		3.29		6.0 #		ug/L	10
Nickel, Dissolved	0.398		0.434	J	9.0 #		ug/L	10
Selenium, Dissolved	0.179	J	0.101	U	44.0 OK #		ug/L	10
Silver, Dissolved	0.0216	J	0.0545	U	152.0 OK #		ug/L	10
Thallium, Dissolved	0.00155	U	0.184	J	11,753.0 OK #		ug/L	10
Vanadium, Dissolved	0.0157	U	0.0667	U	325.0 OK #		ug/L	10
Zinc, Dissolved	2.11	J	1.91	U	9.0 #		ug/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

SERIAL DILUTION

USEPA-6020A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

% Solids:

QC Batch: 0K29093

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 0K29093-SRD2

Lab Source ID: 1011352-01

Sequence: 0K29093

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Antimony, Total	0.0283	U	0.0507	U	79.0 ok#		ug/L	10
Arsenic, Total	-0.110	U	-1.05	U	849.0 ok#		ug/L	10
Barium, Total	14.1		13.8		2.0		ug/L	10
Cadmium, Total	0.00212	U	-0.0127	U	699.0 ok#		ug/L	10
Chromium, Total	0.111	J	0.463	J	317.0 ok#		ug/L	10
Cobalt, Total	0.0290	J	0.0213	U	27.0 ok#		ug/L	10
Copper, Total	0.153	J	0.137	U	11.0 ok#		ug/L	10
Lead, Total	0.0152	U	0.0145	U	5.0 #		ug/L	10
Manganese, Total	2.91		2.80		4.0 #		ug/L	10
Nickel, Total	0.138	J	1.18		755.0 ok#		ug/L	10
Selenium, Total	0.0359	U	0.425	U	1,085.0 ok#		ug/L	10
Silver, Total	0.0115	U	0.0507	U	339.0 ok#		ug/L	10
Thallium, Total	0.00477	U	0.0561	J	1,074.0 ok#		ug/L	10
Vanadium, Total	0.0367	U	0.105	U	187.0 ok#		ug/L	10
Zinc, Total	0.712	J	0.563	U	21.0 ok#		ug/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

SERIAL DILUTION
USEPA-6020A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
% Solids:
QC Batch: 0K30007

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 0K30007-SRD1
Lab Source ID: 1011352-01
Sequence: 0K30007

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Units	QC Limits % Difference
Beryllium, Total	0.0142	U	-0.0121	U	185.0 * #		ug/L	10

* Values outside of QC limits

Initial Sample Result (I) was less than 50xMDL (for 6010) or 100xMDL (for 6020), therefore serial dilution is not required.

Sample Information

Sample ID: 1011352-01
Autosampler Position: 33
Sample Date/Time: Monday, November 29, 2010 20:38:28
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011352-01.036
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

internal std recoveries

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	460149.005	460149.005				ug/L
Be	9	3.667	0.000	0.006041	0.005	89.849	ug/L
V	51	2797.506	0.001	0.036748	0.002	6.538	ug/L
Cr	52	8344.593	0.003	0.110950	0.022	19.865	ug/L
Cr	53	335.343	0.000	0.097813	0.004	3.609	ug/L
Mn	55	38836.346	0.115	2.912221	0.004	0.139	ug/L
Co	59	390.346	0.001	0.029021	0.002	5.797	ug/L
Ni	60	1005.738	0.003	0.397073	0.020	5.068	ug/L
Ni	62	69.334	0.000	0.138100	0.027	19.650	ug/L
Cu	63	1121.087	0.002	0.152953	0.008	5.215	ug/L
Cu	65	490.019	0.001	0.137343	0.006	4.669	ug/L
Zn	66	1189.097	0.003	0.711559	0.042	5.848	ug/L
Zn	68	1668.517	0.003	1.016963	0.011	1.103	ug/L
Ge	72	331451.902	331451.902				ug/L
As	75	298.803	-0.001	-0.110477	0.043	38.603	ug/L
Se	77	131.002	0.000	0.102023	0.066	64.850	ug/L
Se	82	-0.368	0.000	0.035851	0.005	15.133	ug/L
Rh	103	417593.424	417593.424				ug/L
Ag	107	138.336	0.000	0.011548	0.002	20.151	ug/L
Cd	111	14.595	0.000	0.002117	0.006	268.047	ug/L
Cd	114	70.920	0.000	0.009958	0.001	12.054	ug/L
In	115	372352.597	372352.597				ug/L
Sb	121	305.675	0.001	0.025005	0.002	9.902	ug/L
Sb	123	249.668	0.001	0.028270	0.003	12.351	ug/L
Ba	135	33638.761	0.069	13.966111	0.309	2.213	ug/L
Ba	137	58342.799	0.119	14.088546	0.364	2.582	ug/L
Tb	159	490037.726	490037.726				ug/L
Tl	203	138.003	0.000	0.004774	0.002	36.727	ug/L
Tl	205	349.011	0.000	0.005134	0.001	10.538	ug/L
Pb	208	1256.382	0.001	0.015218	0.001	4.984	ug/L
Bi	209	524599.735	524599.735				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	116.352
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	101.985
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	96.371
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	101.132
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.482
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	103.642

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	458733.402		ug/L
[illegible]	[illegible]	[illegible]	0.000	0.007202	ug/L
[illegible]	[illegible]	[illegible]426	[illegible]	[illegible]	ug/L
	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Mn	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	60	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	62	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	65	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	[illegible]	ug/L
Zn	68	[illegible]	0.003	[illegible]	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
[illegible]	75	440.398	-0.000	-0.084530	ug/L
Se	77	137.002	0.000	0.133383	ug/L
[illegible]	82	[illegible]	0.000	[illegible]	ug/L
Rh	103	[illegible]	[illegible]		ug/L
Ag	107	[illegible]	0.000	0.013944	ug/L
[illegible]	111	[illegible]	-0.000	-0.004321	ug/L
[illegible]	114	[illegible]	0.000	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.001	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	205	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Bi	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
Be	9	[illegible]	0.000	0.000127	ug/L
V	51	2763.937	0.001	0.037206	ug/L
[illegible]	52	8493.411	0.003	0.135377	ug/L
[illegible]	53	134.010	0.000	0.098816	ug/L
Mn	55	38510.625	0.115	2.913961	ug/L
[illegible]	59	[illegible]	0.001	0.028746	ug/L
[illegible]	60	1042.076	0.003	0.415113	ug/L
[illegible]	62	[illegible]	0.000	0.163574	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.156230	ug/L
[illegible]	65	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
[illegible]	75	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	77	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	82	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample Information

Sample ID: 1011352-02
Autosampler Position: 38
Sample Date/Time: Monday, November 29, 2010 21 31:02
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011352-02.043
Tuning File: C:\Elandata\Tuning\29NOV2010_3020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	468631.856	468631.856				ug/L
Be	9	2.667	0.000	0.002330	0.005	222.117	ug/L
V	51	2935.007	0.002	0.053116	0.017	32.939	ug/L
Cr	52	8410.663	0.003	0.126626	0.030	23.395	ug/L
Cr	53	674.367	0.001	0.445754	0.053	11.838	ug/L
Mn	55	51446.891	0.154	3.904525	0.071	1.806	ug/L
Co	59	354.011	0.001	0.025888	0.002	7.530	ug/L
Ni	60	920.393	0.003	0.364330	0.015	4.187	ug/L
Ni	62	110.335	0.000	0.255355	0.043	16.802	ug/L
Cu	63	3121.282	0.009	0.533967	0.008	1.553	ug/L
Cu	65	502.687	0.001	0.143876	0.005	3.741	ug/L
Zn	66	1227.769	0.003	0.746266	0.019	2.516	ug/L
Zn	68	1484.147	0.003	0.842780	0.035	4.159	ug/L
Ge	72	328889.086	328889.086				ug/L
As	75	889.784	0.001	0.232413	0.026	11.391	ug/L
Se	77	174.670	0.000	0.437978	0.048	10.916	ug/L
Se	82	9.616	0.000	0.090168	0.120	132.914	ug/L
Rh	103	411681.957	411681.957				ug/L
Ag	107	263.007	0.001	0.023791	0.005	18.993	ug/L
Cd	111	-138.633	-0.000	-0.058751	0.018	30.309	ug/L
Cd	114	70.820	0.000	0.010120	0.002	23.547	ug/L
In	115	360609.624	360609.624				ug/L
Sb	121	863.053	0.002	0.089793	0.003	3.796	ug/L
Sb	123	665.446	0.002	0.092013	0.008	8.447	ug/L
Ba	135	20958.199	0.043	8.682840	0.054	0.622	ug/L
Ba	137	35604.589	0.072	8.580126	0.028	0.330	ug/L
Tb	159	490734.786	490734.786				ug/L
Tl	203	159.003	0.000	0.006697	0.001	19.090	ug/L
Tl	205	317.009	0.000	0.004107	0.000	1.726	ug/L
Pb	208	1712.086	0.002	0.027530	0.001	4.954	ug/L
Bi	209	520152.828	520152.828				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	118.497
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	101.197
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	95.007
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	97.943
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.627
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	102.763

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible]	[illegible]		ug/L
[illegible]	9	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
Co	59	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	0.000	[illegible]	ug/L
Cu	63	[illegible]	[illegible]	[illegible]	ug/L
Cu	65	512.021	0.001	0.147147	ug/L
Zn	66	1204.089	0.003	0.727264	ug/L
Zn	68	1457.142	0.002	0.812804	ug/L
Ge	72	329642.801	329642.801		ug/L
As	75	928.565	0.001	0.253597	ug/L
Se	77	181.004	0.000	0.492649	ug/L
Se	82	115.569	-0.000	-0.046186	ug/L
Rh	103	[illegible]	[illegible]		ug/L
Ag	107	317.009	0.001	0.028804	ug/L
Cd	111	120.857	-0.000	-0.051428	ug/L
Cd	114	56.738	0.000	[illegible]	ug/L
[illegible]	115	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	159	[illegible]	[illegible]		ug/L
[illegible]	203	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	205	127.909	[illegible]	[illegible]	ug/L
[illegible]	208	[illegible]	[illegible]	[illegible]	ug/L
Bi	209	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	475719.340	475719.340		ug/L
Be	9	3.000	0.000	0.003344	ug/L
V	51	3983.973	0.002	0.072652	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
Co	59	[illegible]	[illegible]	0.025514	ug/L
Ni	60	[illegible]	[illegible]	0.361224	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	65	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	[illegible]	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Rh	103	[illegible]	[illegible]		ug/L

Sample Information

Sample ID: 1011352-02
Autosampler Position: 19
Sample Date/Time: Monday, November 29, 2010 19:16:13
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011352-02.020
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Dw6

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	434694.712	434694.712				ug/L
Be	9	2.667	0.000	0.003100	0.004	141.006	ug/L
V	51	2593.657	0.000	0.015691	0.014	87.002	ug/L
Cr	52	8876.481	0.004	0.173108	0.017	9.846	ug/L
Cr	53	1080.414	0.003	0.849500	0.063	7.396	ug/L
Mn	55	46839.066	0.139	3.516499	0.032	0.905	ug/L
Co	59	270.007	0.001	0.017810	0.001	3.019	ug/L
Ni	60	1009.071	0.003	0.397748	0.002	0.545	ug/L
Ni	62	127.002	0.000	0.298346	0.067	22.573	ug/L
Cu	63	3526.782	0.010	0.604555	0.016	2.661	ug/L
Cu	65	451.350	0.001	0.121712	0.007	5.351	ug/L
Zn	66	3123.617	0.009	2.111508	0.050	2.379	ug/L
Zn	68	2894.532	0.007	2.247196	0.097	4.297	ug/L
Ge	72	332032.701	332032.701				ug/L
As	75	851.602	0.001	0.205430	0.039	19.043	ug/L
Se	77	270.007	0.000	1.134727	0.033	2.922	ug/L
Se	82	26.310	0.000	0.179255	0.111	61.689	ug/L
Rh	103	424204.495	424204.495				ug/L
Ag	107	247.340	0.001	0.021615	0.006	25.804	ug/L
Cd	111	-122.241	-0.000	-0.050797	0.010	18.771	ug/L
Cd	114	79.474	0.000	0.011183	0.001	7.320	ug/L
In	115	363404.559	363404.559				ug/L
Sb	121	508.687	0.001	0.048920	0.005	10.140	ug/L
Sb	123	384.257	0.001	0.049297	0.006	11.664	ug/L
Ba	135	20402.816	0.043	8.732230	0.074	0.844	ug/L
Ba	137	34730.575	0.073	8.646608	0.160	1.855	ug/L
Tb	159	475058.087	475058.087				ug/L
Tl	203	96.335	0.000	0.001554	0.001	91.505	ug/L
Tl	205	228.339	0.000	0.001226	0.001	62.824	ug/L
Pb	208	892.361	0.000	0.006635	0.001	8.575	ug/L
Bi	209	504289.197	504289.197				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	109.916
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

	Ni	59.933	
	Ni	61.928	
	Cu	62.930	
	Cu	64.928	
	Zn	65.926	
	Zn	67.925	
>	Ge	71.922	102.164
	As	74.922	
	Se	76.920	
	Se	81.917	
	Rh	102.905	97.897
	Ag	106.905	
	Cd	110.904	
	Cd	113.904	
>	In	114.904	98.702
	Sb	120.904	
	Sb	122.904	
	Ba	134.906	
	Ba	136.905	
	Tb	158.925	98.380
	Tl	202.972	
	Tl	204.975	
	Pb	207.977	
	Bi	208.980	99.629

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	431186.188	431186.188		ug/L
Be	9	2.000	0.000	0.003876	ug/L
V	51	2497.753	0.000	0.007476	ug/L
Cr	52	8723.651	0.004	0.166914	ug/L
[illegible]	[illegible]	1343.078	0.002	0.012095	ug/L
Mn	55	[illegible]	0.140	3.548526	ug/L
Co	59	[illegible]	0.001	0.018421	ug/L
Ni	60	[illegible]	[illegible]	0.309652	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.265810	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.017471	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.134716	ug/L
Zn	66	[illegible]	[illegible]	2.182756	ug/L
[illegible]	[illegible]	2887.522	0.007	2.236777	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	0.001	0.166280	ug/L
Se	77	275.067	0.000	1.180812	ug/L
Se	82	[illegible]	0.000	0.305845	ug/L
Rh	103	419175.953	419175.953		ug/L
Ag	107	[illegible]	[illegible]	[illegible]	ug/L
Cd	111	[illegible]	[illegible]	[illegible]	ug/L
Cd	114	[illegible]	0.000	[illegible]	ug/L
In	115	364317.665	364317.665		ug/L
Sb	121	546.023	0.001	0.052061	ug/L
Sb	123	[illegible]	0.001	0.052874	ug/L
Ba	135	20392.124	0.143	8.794724	ug/L
Ba	137	14715.799	0.074	8.726513	ug/L
Tb	159	471416.836	471416.836		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
Be	9	2.000	0.000	0.006475	ug/L
V	51	2742.306	0.001	0.031456	ug/L
Cr	52	[illegible]	0.006	0.192586	ug/L
[illegible]	53	[illegible]	0.003	0.921853	ug/L
Mn	55	46709.004	0.138	3.516664	ug/L
Co	59	[illegible]	0.001	0.017507	ug/L
Ni	60	1400.071	0.000	0.097644	ug/L
Ni	62	114.002	0.000	0.263227	ug/L
Cu	63	3544.780	0.010	0.609662	ug/L
Cu	65	466.018	0.001	0.127804	ug/L
Zn	66	3947.588	0.006	2.072344	ug/L
Zn	68	2947.565	0.007	2.346555	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	0.224064	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample ID: 1011352-02
Report Date/Time: Monday, November 29, 2010 19:18:24

01494

Sample Information

Sample ID: 1011356-01
Autosampler Position: 24
Sample Date/Time: Monday, November 29, 2010 19:47:43
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-01.025
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

DW5

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	453389.499	453389.499				ug/L
Be	9	3.000	0.000	0.003775	0.007	182.071	ug/L
V	51	3005.698	0.002	0.058908	0.006	9.530	ug/L
Cr	52	8734.663	0.004	0.161865	0.024	14.863	ug/L
Cr	53	459.684	0.001	0.225289	0.040	17.852	ug/L
Mn	55	117685.112	0.354	8.960753	0.251	2.801	ug/L
Co	59	386.680	0.001	0.028797	0.002	6.015	ug/L
Ni	60	1434.471	0.004	0.578924	0.037	6.395	ug/L
Ni	62	157.670	0.000	0.386998	0.027	6.987	ug/L
Cu	63	1075.747	0.002	0.145118	0.005	3.163	ug/L
Cu	65	601.694	0.001	0.182201	0.012	6.589	ug/L
Zn	66	1007.738	0.002	0.562344	0.033	5.697	ug/L
Zn	68	1218.101	0.002	0.567751	0.022	3.802	ug/L
Ge	72	330277.484	330277.484				ug/L
As	75	211.193	-0.001	-0.159934	0.014	8.551	ug/L
Se	77	167.337	0.000	0.376777	0.122	32.270	ug/L
Se	82	11.525	0.000	0.099559	0.037	37.437	ug/L
Rh	103	427303.759	427303.759				ug/L
Ag	107	166.670	0.000	0.013883	0.001	5.235	ug/L
Cd	111	-0.696	-0.000	-0.003835	0.005	138.610	ug/L
Cd	114	56.673	0.000	0.007370	0.001	7.601	ug/L
In	115	368500.617	368500.617				ug/L
Sb	121	428.682	0.001	0.039102	0.005	12.763	ug/L
Sb	123	347.172	0.001	0.043045	0.004	8.408	ug/L
Ba	135	8387.637	0.017	3.523998	0.039	1.113	ug/L
Ba	137	14503.091	0.030	3.546173	0.103	2.917	ug/L
Tb	159	483092.246	483092.246				ug/L
Tl	203	292.675	0.000	0.018833	0.001	6.819	ug/L
Tl	205	702.703	0.001	0.018389	0.002	9.039	ug/L
Pb	208	840.359	0.000	0.005087	0.000	8.516	ug/L
Bi	209	507125.605	507125.605				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	114.643
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	101.624
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.612
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.086
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	100.044
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	100.189

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible]	[illegible]		ug/L
[illegible]	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	0.349	8.612362	ug/L
[illegible]	59	[illegible]	0.001	0.028811	ug/L
[illegible]	63	[illegible]	[illegible]	0.551519	ug/L
[illegible]	65	[illegible]	[illegible]	0.984070	ug/L
[illegible]	63	[illegible]	0.002	0.147008	ug/L
[illegible]	65	[illegible]	0.001	0.169485	ug/L
[illegible]	66	[illegible]	0.002	0.544108	ug/L
[illegible]	68	[illegible]	0.002	[illegible]	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
[illegible]	75	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Rh	103	[illegible]	[illegible]		ug/L
Ag	107	[illegible]	0.001	0.013801	ug/L
[illegible]	111	[illegible]	0.000	[illegible]	ug/L
[illegible]	114	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	115	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	0.001	[illegible]	ug/L
Sn	120	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	125	[illegible]	0.017	1.481520	ug/L
[illegible]	127	[illegible]	0.026	3.481404	ug/L
[illegible]	131	[illegible]			ug/L
[illegible]	[illegible]	[illegible]	0.000	0.018019	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L

Repeat 2

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	0.001	[illegible]	ug/L
V	51	[illegible]	0.002	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	0.001	0.216112	ug/L
Mn	55	[illegible]	0.006	[illegible]	ug/L
[illegible]	59	[illegible]	0.001	0.021652	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	65	[illegible]	0.001	0.415381	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	65	[illegible]	0.001	0.187303	ug/L
[illegible]	66	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	68	[illegible]	0.002	0.554405	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
[illegible]	75	[illegible]	0.001	0.144311	ug/L
[illegible]	77	[illegible]	0.001	0.356269	ug/L
[illegible]	82	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L

Sample ID: 1011356-01
Report Date/Time: Monday, November 29, 2010 19:49:56

01509

Sample Information

Sample ID: 1011356-01
Autosampler Position: 39
Sample Date/Time: Monday, November 29, 2010 21:34:55
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-01.044
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	469054.660	469054.660				ug/L
Be	9	4.000	0.000	0.006899	0.003	49.675	ug/L
V	51	7341.778	0.015	0.496390	0.039	7.776	ug/L
Cr	52	10619.202	0.010	0.384306	0.050	13.001	ug/L
Cr	53	654.032	0.001	0.419354	0.018	4.372	ug/L
Mn	55	183704.495	0.552	13.951309	0.552	3.954	ug/L
Co	59	1649.513	0.005	0.145589	0.001	0.382	ug/L
Ni	60	1955.583	0.006	0.793017	0.025	3.192	ug/L
Ni	62	269.007	0.001	0.695701	0.006	0.824	ug/L
Cu	63	2137.296	0.006	0.343739	0.012	3.379	ug/L
Cu	65	1159.426	0.003	0.400948	0.014	3.566	ug/L
Zn	66	1536.824	0.004	0.962512	0.013	1.384	ug/L
Zn	68	1534.490	0.003	0.881220	0.071	8.069	ug/L
Ge	72	331868.439	331868.439				ug/L
As	75	427.711	-0.000	-0.036634	0.008	20.755	ug/L
Se	77	163.337	0.000	0.343490	0.110	32.153	ug/L
Se	82	10.559	0.000	0.094234	0.080	84.920	ug/L
Rh	103	418155.360	418155.360				ug/L
Ag	107	131.669	0.000	0.010891	0.000	2.263	ug/L
Cd	111	39.209	0.000	0.011777	0.008	69.115	ug/L
Cd	114	76.231	0.000	0.010826	0.002	18.250	ug/L
In	115	366996.920	366996.920				ug/L
Sb	121	618.696	0.001	0.060657	0.003	4.310	ug/L
Sb	123	449.261	0.001	0.058344	0.001	2.003	ug/L
Ba	135	11425.611	0.023	4.780920	0.223	4.662	ug/L
Ba	137	19735.551	0.041	4.803254	0.198	4.114	ug/L
Tb	159	485783.329	485783.329				ug/L
Tl	203	166.337	0.000	0.007459	0.001	7.899	ug/L
Tl	205	432.349	0.000	0.008347	0.002	21.695	ug/L
Pb	208	5264.702	0.009	0.122626	0.005	4.430	ug/L
Bi	209	515488.376	515488.376				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	118.604
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.114
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	96.501
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.678
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	100.601
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.842

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	51	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	59	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	65	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	[illegible]	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Rh	103	[illegible]	[illegible]		ug/L

Sample ID: 1011356-01
Report Date/Time: Monday, November 29, 2010 21:37:07

Sample Information

Sample ID: 1011356-03
Autosampler Position: 41
Sample Date/Time: Monday, November 29, 2010 21:42:42
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-03.046
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	473139.032	473139.032				ug/L
Be	9	7.667	0.000	0.019193	0.007	37.600	ug/L
V	51	12995.758	0.031	1.054995	0.002	0.216	ug/L
Cr	52	13479.364	0.018	0.712807	0.033	4.638	ug/L
Cr	53	948.397	0.002	0.707744	0.043	6.071	ug/L
Mn	55	1103449.077	3.292	83.229523	1.335	1.604	ug/L
Co	59	6775.823	0.020	0.614565	0.019	3.152	ug/L
Ni	60	8629.222	0.026	3.548481	0.147	4.142	ug/L
Ni	62	1040.409	0.003	2.825619	0.170	6.010	ug/L
Cu	63	4762.075	0.013	0.828563	0.013	1.573	ug/L
Cu	65	2028.267	0.006	0.735802	0.013	1.766	ug/L
Zn	66	7399.359	0.021	5.162648	0.157	3.047	ug/L
Zn	68	7209.191	0.020	6.522299	0.260	3.989	ug/L
Ge	72	335003.871	335003.871				ug/L
As	75	694.281	0.001	0.111954	0.021	18.991	ug/L
Se	77	139.336	0.000	0.153669	0.066	42.809	ug/L
Se	82	60.629	0.000	0.359128	0.141	39.241	ug/L
Rh	103	414010.492	414010.492				ug/L
Ag	107	142.336	0.000	0.012036	0.002	14.822	ug/L
Cd	111	54.425	0.000	0.017924	0.007	41.184	ug/L
Cd	114	66.965	0.000	0.009397	0.000	1.716	ug/L
In	115	368021.323	368021.323				ug/L
Sb	121	682.701	0.002	0.067648	0.002	3.182	ug/L
Sb	123	546.935	0.001	0.072562	0.000	0.443	ug/L
Ba	135	162189.467	0.327	66.594841	1.276	1.916	ug/L
Ba	137	280494.060	0.566	66.977381	2.287	3.415	ug/L
Tb	159	495752.055	495752.055				ug/L
Tl	203	331.677	0.000	0.021835	0.001	5.680	ug/L
Tl	205	740.707	0.001	0.019354	0.001	3.683	ug/L
Pb	208	20821.354	0.039	0.537811	0.004	0.737	ug/L
Bi	209	514701.564	514701.564				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	119.637
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933		
Ni	61.928		
Cu	62.930		
Cu	64.928		
Zn	65.926		
Zn	67.925		
Ge	71.922		103.078
As	74.922		
Se	76.920		
Se	81.917		
Rh	102.905		95.544
Ag	106.905		
Cd	110.904		
Cd	113.904		
In	114.904		99.956
Sb	120.904		
Sb	122.904		
Ba	134.906		
Ba	136.905		
Tb	158.925		102.666
Tl	202.972		
Tl	204.975		
Pb	207.977		
Bi	208.980		101.686

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].200	[illegible]	[illegible]	[illegible]
Zn	66	7457.414	0.022	5.196405	ug/L
Zn	68	7021.288	[illegible]	[illegible]	ug/L
[illegible]	72	335550.615	335550.615		ug/L
As	75	700.568	0.001	0.114085	ug/L
Se	77	137.002	0.000	0.134464	ug/L
Se	82	74.577	0.000	0.433203	ug/L
[illegible]	[illegible]	419291.557	419291.557		ug/L
[illegible]	[illegible]	[illegible].303	[illegible]	0.013075	ug/L
[illegible]	[illegible]	51.926	0.000	0.016673	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].451	[illegible]		[illegible]
[illegible]	[illegible]	[illegible].037	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].116	[illegible]	0.07228[illegible]	[illegible]
[illegible]	[illegible]	[illegible].575	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].546	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].435	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
Be	9	[illegible]	0.000	0.027324	ug/L
V	51	[illegible].345	0.031	1.053394	ug/L
[illegible]	[illegible]	13341.806	0.018	0.710497	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.720759	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].143	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible].470	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Sample Information

Sample ID: 1011356-03
Autosampler Position: 25
Sample Date/Time: Monday, November 29, 2010 19:51:38
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-03.026
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	447237.032	447237.032				ug/L
Be	9	5.000	0.000	0.011135	0.006	55.626	ug/L
V	51	3994.210	0.005	0.154708	0.013	8.381	ug/L
Cr	52	9062.015	0.005	0.188639	0.019	9.963	ug/L
Cr	53	746.041	0.002	0.506961	0.014	2.850	ug/L
Mn	55	895117.014	2.677	67.680949	1.156	1.708	ug/L
Co	59	3517.111	0.010	0.316462	0.013	4.019	ug/L
Ni	60	6484.921	0.019	2.668024	0.090	3.366	ug/L
Ni	62	696.369	0.002	1.876083	0.065	3.444	ug/L
Cu	63	1651.847	0.004	0.250251	0.016	6.501	ug/L
Cu	65	486.686	0.001	0.134443	0.012	9.046	ug/L
Zn	66	1356.124	0.003	0.824323	0.015	1.792	ug/L
Zn	68	3073.265	0.007	2.406540	0.130	5.397	ug/L
Ge	72	334182.029	334182.029				ug/L
As	75	322.958	-0.001	-0.097887	0.014	14.604	ug/L
Se	77	176.337	0.000	0.430143	0.148	34.442	ug/L
Se	82	54.923	0.000	0.332209	0.156	47.053	ug/L
Rh	103	423179.246	423179.246				ug/L
Ag	107	138.669	0.000	0.011402	0.002	15.657	ug/L
Cd	111	4.758	-0.000	-0.001754	0.007	415.227	ug/L
Cd	114	27.097	0.000	0.002588	0.001	21.493	ug/L
In	115	371722.233	371722.233				ug/L
Sb	121	519.355	0.001	0.048777	0.003	5.750	ug/L
Sb	123	391.381	0.001	0.049050	0.002	3.661	ug/L
Ba	135	153181.603	0.311	63.346590	0.329	0.519	ug/L
Ba	137	267276.484	0.543	64.278704	0.477	0.743	ug/L
Tb	159	492131.515	492131.515				ug/L
Tl	203	254.006	0.000	0.015708	0.001	6.891	ug/L
Tl	205	616.362	0.001	0.015519	0.002	11.314	ug/L
Pb	208	846.692	0.000	0.005556	0.000	8.326	ug/L
Bi	209	500632.076	500632.076				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	113.088
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.825
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.660
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.961
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.916
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	98.907

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Metals Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	457126.742	457126.742		ug/L
[illegible]	1	[illegible]	[illegible]	0.014245	ug/L
[illegible]	1	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	2	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	1	[illegible]	[illegible]	[illegible]	ug/L
As	75	[illegible]	2.624	[illegible]	ug/L
[illegible]	3	[illegible]	[illegible]	[illegible]	ug/L
Ni	3	[illegible]	[illegible]	2.564581	ug/L
[illegible]	2	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	1	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	5	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	1	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	4	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	141161.548	141161.548		ug/L
As	75	324.982	-0.000	-0.100727	ug/L
Se	77	164.003	0.000	0.213563	ug/L
Se	82	24.379	0.000	0.105002	ug/L
Rh	103	423234.612	423234.612		ug/L
Ag	107	155.003	0.000	0.012938	ug/L
Cd	111	16.146	-0.000	-0.010039	ug/L
Cd	114	27.037	0.000	0.002577	ug/L
In	115	370893.051	370893.051		ug/L
Sb	121	517.021	0.001	0.048644	ug/L
Sb	123	996.102	0.001	0.048705	ug/L
Ba	135	[illegible]	0.312	61.473329	ug/L
[illegible]	137	[illegible]	[illegible]	64.154964	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Metals Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible]	[illegible]		ug/L
[illegible]	9	[illegible]	0.007	0.034012	ug/L
V	51	4011.342	0.005	0.166451	ug/L
Cr	52	9020.970	0.005	0.188046	ug/L
Cr	53	726.708	0.001	0.490581	ug/L
As	75	[illegible]	2.703	88.337824	ug/L
Cu	63	3564.772	0.010	0.316700	ug/L
Se	80	8563.849	0.020	2.713335	ug/L
Ni	2	[illegible]	0.002	1.877318	ug/L
[illegible]	1	[illegible]	0.004	0.268745	ug/L
[illegible]	15	[illegible]	0.031	0.148485	ug/L
[illegible]	4	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	4	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	2	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	0.000	0.590165	ug/L
[illegible]	2	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample ID: 1011356-03
Report Date/Time: Monday, November 29, 2010 19:53:51

01512

Sample Information

Sample ID: 1011356-04
Autosampler Position: 42
Sample Date/Time: Monday, November 29, 2010 21:46:35
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-04.047
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	454700.113	454700.113				ug/L
Be	9	30.667	0.000	0.101258	0.013	13.113	ug/L
V	51	19893.916	0.052	1.733122	0.050	2.893	ug/L
Cr	52	14860.054	0.022	0.866668	0.034	3.960	ug/L
Cr	53	1305.449	0.003	1.057245	0.086	8.110	ug/L
Mn	55	1466846.413	4.349	109.986624	1.023	0.931	ug/L
Co	59	5224.357	0.015	0.469315	0.017	3.690	ug/L
Ni	60	4482.917	0.013	1.820709	0.060	3.289	ug/L
Ni	62	546.023	0.002	1.446239	0.045	3.084	ug/L
Cu	63	6659.393	0.019	1.174250	0.012	0.980	ug/L
Cu	65	3075.932	0.009	1.137513	0.022	1.890	ug/L
Zn	66	2940.215	0.008	1.946597	0.044	2.244	ug/L
Zn	68	3728.538	0.009	3.029220	0.056	1.840	ug/L
Ge	72	337102.809	337102.809				ug/L
As	75	69852.997	0.206	39.069885	0.318	0.813	ug/L
Se	77	168.337	0.000	0.360262	0.100	27.645	ug/L
Se	82	31.938	0.000	0.206830	0.113	54.781	ug/L
Rh	103	426092.431	426092.431				ug/L
Ag	107	353.344	0.001	0.031406	0.002	7.217	ug/L
Cd	111	201.738	0.000	0.073899	0.002	2.469	ug/L
Cd	114	84.437	0.000	0.011948	0.002	18.630	ug/L
In	115	367347.143	367347.143				ug/L
Sb	121	1882.898	0.005	0.202583	0.009	4.670	ug/L
Sb	123	1455.552	0.004	0.206940	0.002	0.811	ug/L
Ba	135	121104.847	0.246	50.167482	1.113	2.219	ug/L
Ba	137	213688.373	0.435	51.482235	1.338	2.598	ug/L
Tb	159	491398.891	491398.891				ug/L
Tl	203	276.674	0.000	0.016714	0.002	10.893	ug/L
Tl	205	628.363	0.001	0.015030	0.001	4.640	ug/L
Pb	208	28772.701	0.054	0.739198	0.019	2.628	ug/L
Bi	209	522196.798	522196.798				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	114.975
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	6[illegible].928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	103.724
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.333
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.773
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.764
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	103.167

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Measured Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	51	20451.376	0.053	1.784830	ug/L
[illegible]	52	18464.755	0.022	0.887143	ug/L
[illegible]	53	1227.103	0.033	0.076402	ug/L
Mn	55	1454567.158	4.304	108.821583	ug/L
Co	59	5148.841	0.015	0.481331	ug/L
Ni	60	4498.259	0.013	1.822818	ug/L
Ni	62	565.025	0.002	1.495582	ug/L
[illegible]	63	[illegible]	[illegible]	1.181015	ug/L
[illegible]	65	[illegible]	0.001	1.154642	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	1.894261	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	115	[illegible]	[illegible]		ug/L
[illegible]	121	1333.230	0.005	0.106941	ug/L
Sb	123	1449.511	0.004	0.205077	ug/L
Ba	135	120602.827	0.240	48.915023	ug/L
Ba	137	211779.356	0.422	49.054048	ug/L
Tb	159	501751.701	501751.701		ug/L
[illegible]	203	[illegible]	0.000	0.018585	ug/L
[illegible]	205	[illegible]	0.000	0.014851	ug/L
Pb	208	26753.983	0.053	0.727081	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Measured Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	55	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	60	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	62	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	63	[illegible]	[illegible]	[illegible]	ug/L
Cu	65	3340.588	0.009	1.113384	ug/L
Zn	66	3006.572	0.008	1.669800	ug/L
Zn	68	3716.867	0.009	2.077503	ug/L
Ge	72	341078.432	341078.432		ug/L
As	75	70765.450	0.204	38.117861	ug/L
Se	77	159.003	0.000	0.277442	ug/L
[illegible]	82	[illegible]	0.000	0.234101	ug/L
[illegible]	[illegible]	125371.413	125371.413		ug/L

Sample ID: 1011356-04
Report Date/Time: Monday, November 29, 2010 21:48:47

Sample Information

Sample ID: 1011356-05
Autosampler Position: 43
Sample Date/Time: Monday, November 29, 2010 21:50:29
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-05.048
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	467565.522	467565.522				ug/L
Be	9	7.667	0.000	0.019287	0.015	78.506	ug/L
V	51	12819.332	0.031	1.043972	0.011	1.092	ug/L
Cr	52	13058.359	0.017	0.670519	0.037	5.585	ug/L
Cr	53	1173.094	0.003	0.938561	0.020	2.153	ug/L
Mn	55	1064202.971	3.191	80.684009	2.015	2.498	ug/L
Co	59	6442.220	0.019	0.586980	0.004	0.626	ug/L
Ni	60	7861.452	0.023	3.246930	0.051	1.563	ug/L
Ni	62	894.057	0.003	2.432793	0.139	5.709	ug/L
Cu	63	4803.433	0.013	0.841047	0.030	3.560	ug/L
Cu	65	2024.266	0.006	0.738421	0.016	2.167	ug/L
Zn	66	7152.473	0.021	5.011365	0.078	1.557	ug/L
Zn	68	6922.276	0.019	6.271046	0.029	0.462	ug/L
Ge	72	333271.217	333271.217				ug/L
As	75	771.859	0.001	0.158475	0.053	33.644	ug/L
Se	77	192.337	0.000	0.551000	0.163	29.643	ug/L
Se	82	66.811	0.000	0.394921	0.133	33.553	ug/L
Rh	103	423792.284	423792.284				ug/L
Ag	107	148.003	0.000	0.012259	0.000	2.979	ug/L
Cd	111	98.559	0.000	0.034484	0.002	5.203	ug/L
Cd	114	66.137	0.000	0.009021	0.002	17.492	ug/L
In	115	369454.820	369454.820				ug/L
Sb	121	691.369	0.002	0.068316	0.001	1.015	ug/L
Sb	123	515.431	0.001	0.067625	0.005	7.652	ug/L
Ba	135	160421.265	0.331	67.374722	2.526	3.750	ug/L
Ba	137	278904.204	0.575	68.113796	2.010	2.951	ug/L
Tb	159	484824.699	484824.699				ug/L
Tl	203	364.345	0.001	0.024825	0.002	6.577	ug/L
Tl	205	806.047	0.001	0.021810	0.001	3.571	ug/L
Pb	208	21027.789	0.040	0.545720	0.016	3.003	ug/L
Bi	209	512536.723	512536.723				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	118.228
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.545
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.802
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.345
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	100.403
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.259

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	8	458030.464	458030.464		ug/L
[illegible]	9	5.000	0.000	0.010711	ug/L
V	51	12052.504	0.031	1.053262	ug/L
[illegible]	52	13105.747	0.017	0.696247	ug/L
[illegible]	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible]	[illegible]	0.276705	ug/L
[illegible]	72	134.924.942	134.924.942		ug/L
As	75	[illegible]	0.001	0.121307	ug/L
Se	77	206.305	0.000	0.840542	ug/L
Se	82	40.427	0.000	0.270603	ug/L
Rh	103	415607.692	415607.692		ug/L
Ag	107	14.303	0.000	0.012436	ug/L
Cd	111	97.100	0.000	0.034875	ug/L
Cd	114	71.373	0.000	0.031762	ug/L
In	115	999.984.711	999.984.711		ug/L
Sb	121	867.335	0.002	0.067851	ug/L
Sb	123	554.017	0.001	0.073300	ug/L
Ba	135	163.219.562	0.145	70.181158	ug/L
Ba	137	240.941.227	0.194	70.270876	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	8	[illegible]	[illegible]		ug/L
[illegible]	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	12076.210	0.031	1.047320	ug/L
[illegible]	52	13244.633	0.017	0.668870	ug/L
[illegible]	53	1152.091	0.000	0.915308	ug/L
Mn	55	1043.861.203	3.123	70.055750	ug/L
Cu	59	6426.541	0.018	0.584444	ug/L
Ni	60	7753.583	0.023	3.118242	ug/L
Se	82	467.054	0.003	2.362834	ug/L
[illegible]	53	[illegible]	0.014	0.622401	ug/L
[illegible]	65	1097.259	0.001	0.720350	ug/L
Zn	66	[illegible]	0.001	4.021572	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample ID: 1011356-05
Report Date/Time: Monday, November 29, 2010 21:52:40

Sample Information

Sample ID: 1011356-04
Autosampler Position: 26
Sample Date/Time: Monday, November 29, 2010 19:55:32
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-04.027
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	447787.789	447787.789				ug/L
Be	9	2.333	0.000	0.001577	0.004	259.220	ug/L
V	51	2786.947	0.001	0.034070	0.002	7.240	ug/L
Cr	52	8248.497	0.002	0.093606	0.016	17.138	ug/L
Cr	53	603.695	0.001	0.365576	0.035	9.499	ug/L
Mn	55	1136402.876	3.407	86.138981	0.716	0.832	ug/L
Co	59	1943.579	0.006	0.172004	0.003	1.741	ug/L
Ni	60	3002.572	0.009	1.225250	0.066	5.366	ug/L
Ni	62	257.340	0.001	0.659589	0.046	7.029	ug/L
Cu	63	1350.456	0.003	0.194581	0.011	5.612	ug/L
Cu	65	526.355	0.001	0.150541	0.011	7.471	ug/L
Zn	66	885.723	0.002	0.487673	0.039	7.952	ug/L
Zn	68	1387.130	0.002	0.725419	0.066	9.104	ug/L
Ge	72	333359.592	333359.592				ug/L
As	75	2708.728	0.007	1.261942	0.056	4.436	ug/L
Se	77	171.337	0.000	0.394878	0.073	18.542	ug/L
Se	82	4.257	0.000	0.060272	0.078	129.856	ug/L
Rh	103	429523.018	429523.018				ug/L
Ag	107	82.668	0.000	0.006018	0.001	19.682	ug/L
Cd	111	11.595	0.000	0.000808	0.005	579.434	ug/L
Cd	114	37.986	0.000	0.004286	0.001	31.366	ug/L
In	115	371324.045	371324.045				ug/L
Sb	121	1264.442	0.003	0.131560	0.006	4.879	ug/L
Sb	123	929.390	0.002	0.127746	0.003	2.429	ug/L
Ba	135	23564.842	0.048	9.789352	0.139	1.423	ug/L
Ba	137	40257.754	0.082	9.727548	0.150	1.545	ug/L
Tb	159	489486.182	489486.182				ug/L
Tl	203	245.006	0.000	0.014233	0.002	15.479	ug/L
Tl	205	592.027	0.001	0.013968	0.002	12.536	ug/L
Pb	208	1028.369	0.001	0.009662	0.000	3.296	ug/L
Bi	209	516622.262	516622.262				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	113.227
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.572
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	99.124
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.853
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.368
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	102.066

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ni	59	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	1,307,129	0.001	0.203485	ug/L
[illegible]	65	542,023	0.001	0.158247	ug/L
Zn	66	964,053	0.002	0.476655	ug/L
Zn	68	1,903,115	0.002	0.651606	ug/L
Ge	72	330785.628	330785.628		ug/L
As	75	2,790,580	0.007	1.320534	ug/L
Se	77	102,103	0.001	0.335872	ug/L
Se	82	[illegible]	0.000	0.111102	ug/L
[illegible]	[illegible]	[illegible]	4,121,37.624		ug/L
Ag	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Pb	208	1,116,034	0.001	0.000302	ug/L
Bi	209	515637.253	515637.253		ug/L

Repeat 2

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	0	444589.109	444589.109		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.003141	ug/L
[illegible]	[illegible]	[illegible]	0.001	0.001222	ug/L
[illegible]	[illegible]	[illegible]	0.002	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	86.474007	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	1.204403	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	427418.278	427418.278		ug/L

Sample ID: 1011356-04
Report Date/Time: Monday, November 29, 2010 19:57:44

Sample Information

Sample ID: 1011356-05

Autosampler Position: 27

Sample Date/Time: Monday, November 29, 2010 20:11:10

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

Number of Replicates: 3

Sample File: C:\Elandata\Sample\0K29093.sam

Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth

Dataset File: C:\Elandata\DataSet\0K29093\1011356-05.030

Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun

Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	430867.689	430867.689				ug/L
Be	9	2.667	0.000	0.003251	0.012	354.968	ug/L
V	51	3775.241	0.004	0.137797	0.028	20.593	ug/L
Cr	52	8503.757	0.003	0.135751	0.025	18.266	ug/L
Cr	53	658.366	0.001	0.428132	0.031	7.171	ug/L
Mn	55	916976.533	2.780	70.286317	0.812	1.155	ug/L
Co	59	3764.221	0.011	0.343832	0.007	1.937	ug/L
Ni	60	6909.601	0.021	2.883197	0.102	3.545	ug/L
Ni	62	698.370	0.002	1.909507	0.062	3.221	ug/L
Cu	63	1815.549	0.005	0.285527	0.008	2.966	ug/L
Cu	65	517.688	0.001	0.149352	0.004	2.713	ug/L
Zn	66	1100.084	0.003	0.651212	0.012	1.872	ug/L
Zn	68	2956.221	0.007	2.330903	0.065	2.790	ug/L
Ge	72	329600.404	329600.404				ug/L
As	75	428.261	-0.000	-0.034738	0.006	16.686	ug/L
Se	77	188.671	0.000	0.540221	0.144	26.596	ug/L
Se	82	85.656	0.000	0.500215	0.056	11.269	ug/L
Rh	103	423265.565	423265.565				ug/L
Ag	107	189.671	0.000	0.016218	0.002	10.255	ug/L
Cd	111	17.190	0.000	0.003115	0.005	154.945	ug/L
Cd	114	20.941	0.000	0.001552	0.002	101.932	ug/L
In	115	371998.198	371998.198				ug/L
Sb	121	1048.744	0.003	0.107421	0.012	11.384	ug/L
Sb	123	811.125	0.002	0.110264	0.009	7.914	ug/L
Ba	135	159981.671	0.325	66.079747	1.357	2.054	ug/L
Ba	137	277773.064	0.564	66.706248	0.508	0.762	ug/L
Tb	159	492861.917	492861.917				ug/L
Tl	203	174.670	0.000	0.008208	0.002	19.739	ug/L
Tl	205	411.681	0.000	0.007593	0.000	5.072	ug/L
Pb	208	830.691	0.000	0.004479	0.001	18.195	ug/L
Bi	209	515385.354	515385.354				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	108.948
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	101.416
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.680
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	101.036
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	102.067
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.821

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	2.791	70.563789	ug/L
[illegible]	[illegible]	[illegible]	0.011	0.338241	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.092	1.084398	ug/L
[illegible]	[illegible]	[illegible]	0.005	0.206182	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.107	2.365088	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	80.784151	ug/L
[illegible]	[illegible]	[illegible]	0.598	87.203171	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	0.000	0.007860	ug/L
[illegible]	[illegible]	[illegible]	0.000	0.007151	ug/L
[illegible]	[illegible]	[illegible]	0.000	0.003584	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	423862.242	423862.242		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.015885	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	2.869	70.923252	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.021	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.002	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.005	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.003	0.628675	ug/L
[illegible]	[illegible]	[illegible]	0.107	2.258160	ug/L
[illegible]	[illegible]	[illegible]			ug/L
[illegible]	[illegible]	[illegible]	-0.000	-0.040793	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	0.000	0.585183	ug/L
[illegible]	[illegible]	[illegible]			ug/L

Sample ID: 1011356-05
Report Date/Time: Monday, November 29, 2010 20:13:22

Sample Information

Sample ID: 1011352-02
Autosampler Position: 28
Sample Date/Time: Tuesday, November 30, 2010 08:41:31
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011352-02.028
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	442190.446	442190.446				ug/L
Be	9	5.333	0.000	0.015662	0.006	37.622	ug/L
V	51	3100.952	0.002	0.071446	0.003	3.542	ug/L
Ni	60	1010.071	0.003	0.388116	0.018	4.676	ug/L
Ni	62	124.002	0.000	0.280120	0.028	9.844	ug/L
Ge	72	330062.562	330062.562				ug/L
Ba	135	19917.310	0.044	9.109641	0.214	2.349	ug/L
Ba	137	34096.623	0.075	9.050595	0.140	1.547	ug/L
Tb	159	453033.746	453033.746				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	100.331
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	97.893
Ba	134.906	
Ba	136.905	
Tb	158.925	97.777

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	451934.505	451934.505		ug/L
Be	9	4.000	0.000	0.010475	ug/L
V	51	3144.367	[illegible]	[illegible]	ug/L
Ni	60	1077.080	[illegible]	[illegible]	ug/L
Ni	62	134.002	[illegible]	[illegible]	ug/L
Ge	72	335297.733	335297.733		ug/L
Ba	135	19713.487	[illegible]	8.860624	ug/L
Ba	137	34218.782	[illegible]	8.907644	ug/L
Tb	159	459476.857	459476.857		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	443603.423	443603.423		ug/L
Be	9	1.000	[illegible]	[illegible]	ug/L
V	51	3097.228	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	327446.579	327446.579		ug/L
Ba	135	19761.663	[illegible]	[illegible]	ug/L
Ba	137	33724.439	[illegible]	[illegible]	ug/L
Tb	159	451490.939	451490.939		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	440807.950	440807.950		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	3106.231	[illegible]	[illegible]	ug/L

R

01682

Sample Information

Sample ID: 1011356-01
Autosampler Position: 29
Sample Date/Time: Tuesday, November 30, 2010 08:43:54
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011356-01.029
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	447181.820	447181.820				ug/L
Be	9	5.000	0.000	0.014153	0.007	49.510	ug/L
V	51	6508.609	0.012	0.409492	0.009	2.307	ug/L
Ni	60	3003.905	0.009	1.205073	0.034	2.812	ug/L
Ni	62	377.012	0.001	0.982315	0.099	10.083	ug/L
Ge	72	330771.991	330771.991				ug/L
Ba	135	10059.502	0.022	4.640355	0.063	1.362	ug/L
Ba	137	17189.554	0.038	4.600311	0.071	1.540	ug/L
Tb	159	448730.134	448730.134				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	101.464
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.104
Ba	134.906	
Ba	136.905	
Tb	158.925	96.848

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	443745.526	443745.525		ug/L
Be	9	7.000	0.000	0.007148	ug/L
V	51	6481.434	0.012	0.399647	ug/L
Ni	60	3000.910	0.009	1.201667	ug/L
Ni	62	377.010	0.001	0.972026	ug/L
Ge	72	330769.985	330769.985		ug/L
Ba	135	10056.771	0.022	4.636605	ug/L
Ba	137	17185.980	0.038	4.597121	ug/L
Tb	159	452254.800	452254.800		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	448104.797	448104.797		ug/L
Be	9	7.000	0.000	0.021165	ug/L
V	51	6587.927	0.013	0.418474	ug/L
Ni	60	3022.579	0.009	1.216386	ug/L
Ni	62	379.013	0.001	1.000406	ug/L
Ge	72	330769.712	330769.712		ug/L
Ba	135	10182.319	0.023	4.713203	ug/L
Ba	137	17356.815	0.038	4.607735	ug/L
Tb	159	447181.099	447181.099		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	448104.797	448104.797		ug/L
Be	9	7.000	0.000	0.014147	ug/L
V	51	6447.406	0.012	0.41036[illegible]	ug/L

01684

Sample Information

Sample ID: 1011356-03
Autosampler Position: 31
Sample Date/Time: Tuesday, November 30, 2010 08:48:40
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011356-03.031
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	436968.834	436968.834				ug/L
Be	9	9.000	0.000	0.029145	0.011	37.474	ug/L
V	51	13934.718	0.035	1.149056	0.101	8.765	ug/L
Ni	60	9487.493	0.029	3.868904	0.043	1.120	ug/L
Ni	62	1151.091	0.003	3.131366	0.047	1.500	ug/L
Ge	72	330505.571	330505.571				ug/L
Ba	135	160525.201	0.355	73.703292	2.028	2.751	ug/L
Ba	137	276148.719	0.611	73.595062	0.463	0.630	ug/L
Tb	159	451677.565	451677.565				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	99.146
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.025
Ba	134.906	
Ba	136.905	
Tb	158.925	97.484

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	446[illegible]	[illegible]		ug/l
Be	9	[illegible]	[illegible]	[illegible]	ug/l
V	51	[illegible]	[illegible]	[illegible]	ug/l
Ni	60	[illegible]	[illegible]	[illegible]	ug/l
Ni	62	[illegible]	[illegible]	[illegible]	ug/l
Ge	72	[illegible]	[illegible]		ug/l
Ba	135	159461.583	0.451	72.485724	ug/l
Ba	137	277321.641	0.608	73.188422	ug/l
Tb	159	[illegible]	[illegible]		ug/l

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	4[illegible]	4[illegible]		ug/l
Be	9	[illegible]	0.000	[illegible]	ug/l
V	51	[illegible]	[illegible]	[illegible]	ug/l
Ni	60	[illegible]	[illegible]	[illegible]	ug/l
Ni	62	[illegible]	[illegible]	[illegible]	ug/l
Ge	72	[illegible]	[illegible]		ug/l
Ba	135	[illegible]	0.607	[illegible]	ug/l
Ba	137	274485.088	0.616	[illegible]	ug/l
Tb	159	445711.403	445711.403		ug/l

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	4[illegible]	4[illegible]		ug/l
Be	9	[illegible]	[illegible]	[illegible]	ug/l
V	51	[illegible]	[illegible]	[illegible]	ug/l

01688

Sample Information

Sample ID: 1011356-04
Autosampler Position: 32
Sample Date/Time: Tuesday, November 30, 2010 08:51:04
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011356-04.032
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	438385.894	438385.894				ug/L
Be	9	33.667	0.000	0.118770	0.008	6.934	ug/L
V	51	18681.579	0.049	~~1.604139~~	0.083	5.161	ug/L
Ni	60	4829.114	0.014	1.937323	0.042	2.172	ug/L
Ni	62	563.025	0.002	1.484577	0.115	7.776	ug/L
Ge	72	333607.406	333607.406				ug/L
Ba	135	117140.888	0.253	52.543823	1.137	2.165	ug/L
Ba	137	206012.753	0.446	53.643239	0.389	0.724	ug/L
Tb	159	462254.240	462254.240				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	99.468
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.945
Ba	134.906	
Ba	136.905	
Tb	158.925	99.767

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	450581.573	450581.573		ug/L
Be	9	37.000	0.000	0.100417	ug/L
V	51	18621.286	0.047	1.539351	ug/L
Ni	60	4449.457	0.014	1.912744	ug/L
Ni	62	540.024	0.002	1.421869	ug/L
Ge	72	338565.531	338565.531		ug/L
Ba	135	118492.842	0.247	51.958723	ug/L
Ba	137	208421.783	0.441	53.918652	ug/L
Tb	159	464[illegible].731	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	34.000	0.000	0.124436	ug/L
V	51	18621.062	0.046	1.574069	ug/L
Ni	60	4324.508	0.015	[illegible]	ug/L
Ni	62	606.028	0.002	1.617788	ug/L
Ge	72	332238.770	332238.770		ug/L
Ba	135	118503.817	0.258	53.548373	ug/L
Ba	137	205182.542	0.449	54.086081	ug/L
Tb	159	458428.344	458428.344		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	443[illegible].672	443[illegible].672		ug/L
Be	9	37.000	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L

01690

Sample Information

Sample ID: 1011356-05
Autosampler Position: 33
Sample Date/Time: Tuesday, November 30, 2010 08:53:28
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011356-05.033
Tuning File: C.\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	437165.810	437165.810				ug/L
Be	9	6.000	0.000	0.018277	0.019	103.751	ug/L
V	51	12127.804	0.029	0.969014	0.051	5.282	ug/L
Ni	60	8494.749	0.025	3.458715	0.076	2.206	ug/L
Ni	62	994.403	0.003	2.694828	0.074	2.764	ug/L
Ge	72	330642.926	330642.926				ug/L
Ba	135	156205.160	0.341	70.649192	1.366	1.934	ug/L
Ba	137	269961.850	0.589	70.892069	1.293	1.824	ug/L
Tb	159	458403.105	458403.105				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	99.191
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.065
Ba	134.906	
Ba	136.905	
Tb	158.925	98.936

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	438749.084	438749.084		ug/L
Be	9	0.000	0.000	0.000611	ug/L
V	51	12436.257	0.031	1.028673	ug/L
Ni	60	8175.080	0.025	3.400210	ug/L
Ni	62	[illegible]	[illegible]	2.626703	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	443,112.203	443212.2[illegible]		ug/L
Be	9	0.000	0.000	0.028707	ug/L
V	51	11881.203	0.028	0.928104	ug/L
Ni	60	8354.474	0.025	3.436922	ug/L
Ni	62	1006.071	0.003	2.694129	ug/L
Ge	72	335685.904	335685.904		ug/L
Ba	135	157383.457	0.345	71.502551	ug/L
Ba	137	273382.848	0.600	72.272515	ug/L
Tb	159	458311.732	458311.732		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	429536.133	429536.133		ug/L
Be	9	0.000	0.000	0.029730	ug/L
V	51	[illegible]	[illegible]	0.958262	ug/L

01692

Sample Information

Sample ID: 1011356-02
Autosampler Position: 40
Sample Date/Time: Monday, November 29, 2010 21:38:48
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sarn
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011356-02.045
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	482732.391	482732.391				ug/L
Be	9	3.000	0.000	0.003248	0.006	179.239	ug/L
V	51	2826.126	0.001	0.043944	0.012	26.378	ug/L
Cr	52	8230.146	0.003	0.111865	0.030	26.691	ug/L
Cr	53	332.010	0.000	0.099492	0.024	24.003	ug/L
Mn	55	48213.575	0.146	3.682325	0.082	2.221	ug/L
Co	59	1010.405	0.003	0.087904	0.003	3.406	ug/L
Ni	60	1778.541	0.005	0.731532	0.039	5.303	ug/L
Ni	62	166.337	0.000	0.416215	0.038	9.186	ug/L
Cu	63	2047.605	0.005	0.333022	0.012	3.674	ug/L
Cu	65	966.732	0.003	0.331048	0.006	1.858	ug/L
Zn	66	1135.089	0.003	0.684460	0.040	5.853	ug/L
Zn	68	1649.513	0.003	1.022529	0.021	2.053	ug/L
Ge	72	326607.029	326607.029				ug/L
As	75	188.068	-0.001	-0.172187	0.021	11.987	ug/L
Se	77	137.669	0.000	0.166846	0.065	39.178	ug/L
Se	82	24.633	0.000	0.172079	0.163	94.436	ug/L
Rh	103	417131.272	417131.272				ug/L
Ag	107	87.668	0.000	0.006706	0.001	13.701	ug/L
Cd	111	26.081	0.000	0.006700	0.004	55.535	ug/L
Cd	114	98.644	0.000	0.014596	0.001	6.926	ug/L
In	115	362217.032	362217.032				ug/L
Sb	121	487.019	0.001	0.046593	0.002	4.167	ug/L
Sb	123	375.297	0.001	0.048140	0.000	0.195	ug/L
Ba	135	28629.388	0.058	11.859627	0.067	0.567	ug/L
Ba	137	49201.311	0.100	11.857131	0.246	2.074	ug/L
Tb	159	490960.662	490960.662				ug/L
Tl	203	215.005	0.000	0.011495	0.001	10.051	ug/L
Tl	205	526.689	0.001	0.011504	0.001	10.308	ug/L
Pb	208	1888.436	0.002	0.032141	0.001	3.751	ug/L
Bi	209	520684.512	520684.512				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	122.063
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	100.495
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	96.265
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	98.379
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.673
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	102.868

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	479763.530	479763.612		ug/L
Be	9	4.000	0.000	[illegible]	ug/L
V	51	2882.109	0.002	0.052836	ug/L
Cr	52	40074.284	0.000	0.137710	ug/L
Cr	54	[illegible]	[illegible]	0.121806	ug/L
Mn	55	46671.373	0.140	3.781344	ug/L
Co	59	1002.070	0.003	[illegible]	ug/L
Ni	60	1924.210	0.025	0.758821	ug/L
Ni	62	186.383	0.000	[illegible]	ug/L
Cu	63	2182.266	[illegible]	[illegible]	ug/L
Cu	65	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	[illegible]	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Rh	103	428708.712	428708.712		ug/L
Ag	107	[illegible]	[illegible]	[illegible]	ug/L
Cd	111	[illegible]	[illegible]	[illegible]	ug/L
Cd	114	[illegible]	0.000	[illegible]	ug/L
In	115	375706.725	375706.725		ug/L
Sb	121	[illegible]	0.001	[illegible]	ug/L
Sb	123	[illegible]	0.001	[illegible]	ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L
Tl	203	[illegible]	[illegible]	0.011795	ug/L
Tl	205	[illegible]	[illegible]	[illegible]	ug/L
Pb	208	[illegible]	0.002	0.033426	ug/L
Bi	209	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	4.000	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Cr	52	[illegible]	[illegible]	[illegible]	ug/L
Cr	53	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	0.148	[illegible]	ug/L
Co	59	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	0.751123	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Cu	63	[illegible]	[illegible]	[illegible]	ug/L
Cu	65	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	0.705181	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
As	75	224.372	-0.001	-0.140013	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L

Sample ID: 1011356-02
Report Date/Time: Monday, November 29, 2010 21:41:00
Page 2

Sample Information

Sample ID: 1011356-02
Autosampler Position: 30
Sample Date/Time: Tuesday, November 30, 2010 08:46:17
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011356-02.030
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens Mean	Conc. Mean	Conc SD	Conc. RSD	Report Unit
Li	6	455797.376	455797.376				ug/L
Be	9	4.000	0.000	0.010343	0.003	32.567	ug/L
V	51	2921.527	0.002	0.052741	0.011	20.762	ug/L
Ni	60	1988.257	0.006	0.787583	0.017	2.173	ug/L
Ni	62	185.004	0.000	0.448092	0.040	8.930	ug/L
Ge	72	331114.528	331114.528				ug/L
Ba	135	28236.378	0.062	12.797887	0.369	2.882	ug/L
Ba	137	48615.578	0.106	12.787579	0.278	2.171	ug/L
Tb	159	457447.119	457447.119				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	103.419
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.205
Ba	134.906	
Ba	136.905	
Tb	158.925	98.729

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Sample ID 1011356-02
Report Date/Time: Tuesday, November 30, 2010 08:46:59
Page 1

01686

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012934

Printed: 12/8/2010 12:25:49PM

Metals, Water, 3020A Digestion

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-01	V	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29093 Added for SequenceQC in: 0K29093
Ag Diss 6020	Ag Total 6020	As Diss 6020	As Total 6020	Ba Diss 6020	Ba Total 6020	Be Diss 6020	Be Total 6020		
Cd Diss 6020	Cd Total 6020	Co Diss 6020	Co Total 6020	Cr Diss 6020	Cr Total 6020	Cu Diss 6020	Cu Total 6020		
Mn Diss 6020	Mn Total 6020	Ni Diss 6020	Ni Total 6020	Pb Diss 6020	Pb Total 6020	Sb Diss 6020	Sb Total 6020		
Se Diss 6020	Se Total 6020	Tl Diss 6020	Tl Total 6020	V Diss 6020	V Total 6020	Zn Diss 6020	Zn Total 6020		
1011352-01RE1	V	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K30007 Added for SequenceQC in: 0K30007
Ba Total 6020	Be Diss 6020	Be Total 6020	Ni Total 6020	V Total 6020					
1011352-02	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-01	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-02	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-03	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-04	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-05	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		

Comments:

Analyst Initials:

bch_TM_byAnalysis.rpt

01427

Metals, Water, 3020A Digestion

Batch comments:
RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011375-01	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011375-02	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011375-03	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011375-04	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011375-05	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011407-01	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011407-02	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1012934-BLK1		Nov-29-10 08:00	RDB	25	125				
1012934-BLK2		Nov-29-10 08:00	RDB	25	125				
1012934-BS1		Nov-29-10 08:00	RDB	25	125		0110693	25	
1012934-BS2		Nov-29-10 08:00	RDB	25	125		0110693	25	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012934

Printed: 12/8/2010 12:25:49PM

Metals, Water, 3020A Digestion

Batch comments:
RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1012934-MS1		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MS2		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MSD1		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MSD2		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-PS1		Nov-29-10 17:45	DWJ	2	10	1011352-01	0070820	50	[Spk] 25mL->125mL; 10mL->10mL; Spike
1012934-PS2		Nov-30-10 07:00	DSC	1	5	1011352-01	0070820	25	

Comments:

Analyst Initials:

bch_TM_byAnalysis.rpt

62116

PREPARATION BATCH 1012940

Metals, Water, General Metals Prep

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-02	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011352-02RE1	N	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29093 Added for SequenceQC in: 0K29093
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-01	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-03	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-04	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-05	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011375-01	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011375-04	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		

Comments:

Analyst Initials:

PREPARATION BATCH 1012940

Printed: 12/8/2010 12:26:23PM

Metals, Water, General Metals Prep

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011407-02	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1012940-BLK1		Nov-29-10 08:00	RDB	25	125				
1012940-BS1		Nov-29-10 08:00	RDB	25	125		0110693	25	
1012940-MS1		Nov-29-10 08:00	RDB	25	125	1011352-02	0110693	25	
1012940-MSD1		Nov-29-10 08:00	RDB	25	125	1011352-02	0110693	25	
1012940-PS1		Nov-29-10 17:45	DWJ	2	10	1011352-02	0070820	50	[Spk] 25mL->125mL; 10mL->10mL; Spike

Comments:

Analyst Initials:

bch_TM_byAnalysis.rpt

1311 6

QC BATCH SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012934 QC Batch Matrix: Water

Preparation: 3020A Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/29/10 08:00	
NTC03GW0213	1011352-02	11/29/10 08:00	
NTC03GW0313	1011356-01	11/29/10 08:00	
NTC03GW0413	1011356-02	11/29/10 08:00	
NTC03GW0513	1011356-03	11/29/10 08:00	
NTC03GW0613	1011356-04	11/29/10 08:00	
NTCFD111610-01	1011356-05	11/29/10 08:00	
Blank	1012934-BLK1	11/29/10 08:00	
Blank	1012934-BLK2	11/29/10 08:00	
LCS	1012934-BS1	11/29/10 08:00	
LCS	1012934-BS2	11/29/10 08:00	
NTC03GW0113	1012934-MS1	11/29/10 08:00	
NTC03GW0113	1012934-MS2	11/29/10 08:00	
NTC03GW0113	1012934-MSD1	11/29/10 08:00	
NTC03GW0113	1012934-MSD2	11/29/10 08:00	
NTC03GW0113	1012934-PS1	11/29/10 17:45	[Spk] 25mL->125mL; 10mL->10mL; Spiked 10mL
NTC03GW0113	1012934-PS2	11/30/10 07:00	

QC BATCH SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012940 QC Batch Matrix: Water

Preparation: General Metals Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0213	1011352-02	11/29/10 08:00	
NTC03GW0313	1011356-01	11/29/10 08:00	
NTC03GW0513	1011356-03	11/29/10 08:00	
NTC03GW0613	1011356-04	11/29/10 08:00	
NTCFD111610-01	1011356-05	11/29/10 08:00	
Blank	1012940-BLK1	11/29/10 08:00	
LCS	1012940-BS1	11/29/10 08:00	
NTC03GW0213	1012940-MS1	11/29/10 08:00	
NTC03GW0213	1012940-MSD1	11/29/10 08:00	
NTC03GW0213	1012940-PS1	11/29/10 17:45	[Spk] 25mL->125mL; 10mL->10mL; Spiked 10mL

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K29093-CAL1	0k29093-002	11/29/10 17:48
Cal Standard	0K29093-CAL2	0k29093-003	11/29/10 17:52
Cal Standard	0K29093-CAL3	0k29093-004	11/29/10 17:56
Cal Standard	0K29093-CAL4	0k29093-005	11/29/10 17:59
Cal Standard	0K29093-CAL5	0k29093-006	11/29/10 18:03
Cal Standard	0K29093-CAL6	0k29093-007	11/29/10 18:07
Cal Standard	0K29093-CAL7	0k29093-008	11/29/10 18:11
Cal Standard	0K29093-CAL8	0k29093-009	11/29/10 18:15
Secondary Cal Check	0K29093-SCV1	0k29093-010	11/29/10 18:23
Calibration Check	0K29093-CCV1	0k29093-010	11/29/10 18:23
Calibration Blank	0K29093-CCB1	0k29093-011	11/29/10 18:31
Instrument RL Check	0K29093-CRL1	0k29093-012	11/29/10 18:35
Instrument RL Check	0K29093-CRL2	0k29093-013	11/29/10 18:39
Interference Check A	0K29093-IFA1	0k29093-014	11/29/10 18:42
Interference Check B	0K29093-IFB1	0k29093-015	11/29/10 18:47
Calibration Check	0K29093-CCV2	0k29093-016	11/29/10 18:52
Calibration Blank	0K29093-CCB2	0k29093-017	11/29/10 19:00
Blank	1012940-BLK1	0k29093-018	11/29/10 19:04
LCS	1012940-BS1	0k29093-019	11/29/10 19:08
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1011352-02	0k29093-019	11/29/10 19:16
NTC03GW0213	1012940-MS1	0k29093-021	11/29/10 19:20
NTC03GW0213	1012940-MSD1	0k29093-022	11/29/10 19:27
NTC03GW0213	0K29093-SRD1	0k29093-023	11/29/10 19:35
NTC03GW0213	1012940-PS1	0k29093-024	11/29/10 19:39
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0313	1011356-01	0k29093-024	11/29/10 19:47
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0513	1011356-03	0k29093-025	11/29/10 19:51
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
NTC03GW0613	1011356-04	0k29093-026	11/29/10 19:55
Calibration Check	0K29093-CCV3	0k29093-028	11/29/10 19:59
Calibration Blank	0K29093-CCB3	0k29093-029	11/29/10 20:07
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
NTCFD111610-01	1011356-05	0k29093-029	11/29/10 20:11
Blank	1012934-BLK1	0k29093-033	11/29/10 20:26
LCS	1012934-BS1	0k29093-034	11/29/10 20:30
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1011352-01	0k29093-035	11/29/10 20:38
NTC03GW0113	1012934-MS1	0k29093-036	11/29/10 20:42
NTC03GW0113	1012934-MSD1	0k29093-037	11/29/10 20:50
NTC03GW0113	0K29093-SRD2	0k29093-038	11/29/10 20:58
Calibration Check	0K29093-CCV4	0k29093-039	11/29/10 21:02
Calibration Blank	0K29093-CCB4	0k29093-040	11/29/10 21:09
NTC03GW0113	1012934-PS1	0k29093-041	11/29/10 21:23
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0213	1011352-02	0k29093-042	11/29/10 21:31
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0313	1011356-01	0k29093-043	11/29/10 21:34
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0413	1011356-02	0k29093-044	11/29/10 21:38
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0513	1011356-03	0k29093-045	11/29/10 21:42
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTC03GW0613	1011356-04	0k29093-046	11/29/10 21:46
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
NTCFD111610-01	1011356-05	0k29093-047	11/29/10 21:50
Calibration Check	0K29093-CCV5	0k29093-051	11/29/10 22:06
Calibration Blank	0K29093-CCB5	0k29093-052	11/29/10 22:13
NTC03GW0613	1011356-04	0k29093-057	11/29/10 22:33
Calibration Blank	0K29093-CCB6	0k29093-060	11/29/10 22:49
Calibration Check	0K29093-CCV6	0k29093-061	11/29/10 22:56

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30007

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30034
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30007-CAL1	0k30007-001	11/30/10 07:28
Cal Standard	0K30007-CAL2	0k30007-002	11/30/10 07:31
Cal Standard	0K30007-CAL3	0k30007-003	11/30/10 07:34
Cal Standard	0K30007-CAL4	0k30007-004	11/30/10 07:37
Cal Standard	0K30007-CAL5	0k30007-005	11/30/10 07:40
Cal Standard	0K30007-CAL6	0k30007-006	11/30/10 07:43
Cal Standard	0K30007-CAL7	0k30007-007	11/30/10 07:46
Secondary Cal Check	0K30007-SCV1	0k30007-008	11/30/10 07:49
Calibration Check	0K30007-CCV1	0k30007-008	11/30/10 07:49
Calibration Blank	0K30007-CCB1	0k30007-009	11/30/10 07:52
Instrument RL Check	0K30007-CRL1	0k30007-010	11/30/10 07:54
Interference Check A	0K30007-IFA1	0k30007-011	11/30/10 07:57
Interference Check B	0K30007-IFB1	0k30007-012	11/30/10 08:00
Calibration Check	0K30007-CCV2	0k30007-013	11/30/10 08:03
Calibration Blank	0K30007-CCB2	0k30007-014	11/30/10 08:06
NTCFD111610-01	1011356-05	0k30007-015	11/30/10 08:09
Blank	1012934-BLK2	0k30007-019	11/30/10 08:18
LCS	1012934-BS2	0k30007-020	11/30/10 08:21
NTC03GW0113	1011352-01	0k30007-021	11/30/10 08:23
NTC03GW0113	1012934-MS2	0k30007-022	11/30/10 08:26
NTC03GW0113	1012934-MSD2	0k30007-023	11/30/10 08:28
NTC03GW0113	0K30007-SRD1	0k30007-024	11/30/10 08:31
Calibration Check	0K30007-CCV3	0k30007-025	11/30/10 08:33
Calibration Blank	0K30007-CCB3	0k30007-026	11/30/10 08:36
NTC03GW0113	1012934-PS2	0k30007-027	11/30/10 08:39
NTC03GW0213	1011352-02	0k30007-028	11/30/10 08:41
NTC03GW0313	1011356-01	0k30007-029	11/30/10 08:43
NTC03GW0413	1011356-02	0k30007-030	11/30/10 08:46
NTC03GW0513	1011356-03	0k30007-031	11/30/10 08:48
NTC03GW0613	1011356-04	0k30007-032	11/30/10 08:51
NTCFD111610-01	1011356-05	0k30007-033	11/30/10 08:53
Calibration Check	0K30007-CCV4	0k30007-037	11/30/10 09:03

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30007

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30034
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Blank	0K30007-CCB4	0k30007-038	11/30/10 09:05
Calibration Check	0K30007-CCV5	0k30007-044	11/30/10 09:20
Calibration Blank	0K30007-CCB5	0k30007-045	11/30/10 09:23

Sample Information

Sample NTC036W0113
rep result
Manganese 15ug/L

$\left(\frac{2.912221\ ug}{L}\right)\left(\frac{125\ ml}{25\ ml}\right) = 14.56\ ug/L$

Sample ID: 1011352-01
Autosampler Position: 33
Sample Date/Time: Monday, November 29, 2010 20:38:28
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011352-01.036
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	460149.005	460149.005				ug/L
Be	9	3.667	0.000	0.006041	0.005	89.849	ug/L
V	51	2797.506	0.001	0.036748	0.002	6.538	ug/L
Cr	52	8344.593	0.003	0.110950	0.022	19.865	ug/L
Cr	53	335.343	0.000	0.097813	0.004	3.609	ug/L
Mn	55	38836.346	0.115	2.912221	0.004	0.139	ug/L
Co	59	390.346	0.001	0.029021	0.002	5.797	ug/L
Ni	60	1005.738	0.003	0.397073	0.020	5.068	ug/L
Ni	62	69.334	0.000	0.138100	0.027	19.650	ug/L
Cu	63	1121.087	0.002	0.152953	0.008	5.215	ug/L
Cu	65	490.069	0.001	0.137343	0.006	4.669	ug/L
Zn	66	1189.097	0.003	0.711559	0.042	5.848	ug/L
Zn	68	1668.517	0.003	1.016963	0.011	1.103	ug/L
Ge	72	331451.902	331451.902				ug/L
As	75	298.803	-0.001	-0.110477	0.043	38.603	ug/L
Se	77	131.002	0.000	0.102023	0.066	64.850	ug/L
Se	82	-0.368	0.000	0.035851	0.005	15.133	ug/L
Rh	103	417593.424	417593.424				ug/L
Ag	107	138.336	0.000	0.011548	0.002	20.151	ug/L
Cd	111	14.595	0.000	0.002117	0.006	268.047	ug/L
Cd	114	70.920	0.000	0.009958	0.001	12.054	ug/L
In	115	372352.597	372352.597				ug/L
Sb	121	305.675	0.001	0.025005	0.002	9.902	ug/L
Sb	123	249.668	0.001	0.028270	0.003	12.351	ug/L
Ba	135	33638.761	0.069	13.966111	0.309	2.213	ug/L
Ba	137	58342.799	0.119	14.088546	0.364	2.582	ug/L
Tb	159	490037.726	490037.726				ug/L
Tl	203	138.003	0.000	0.004774	0.002	36.727	ug/L
Tl	205	349.011	0.000	0.005134	0.001	10.538	ug/L
Pb	208	1256.382	0.001	0.015218	0.001	4.984	ug/L
Bi	209	524599.735	524599.735				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	116.352
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

HOLDING TIME SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Mercury

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/29/10	14	NA	11/30/10	15	28	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/30/10	15	28	
NTC03GW0213	11/15/10	11/16/10		11/29/10	14	NA	11/30/10	15	28	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0313	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0413	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0513	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTC03GW0613	11/16/10	11/17/10		11/29/10	13	NA	11/30/10	14	28	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	14	NA	11/30/10	14	28	
NTCFD111610-01	11/16/10	11/17/10		11/29/10	14	NA	11/30/10	15	28	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30080
Control Limt: +/- 10.00%

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L01008
Instrument ID: 216

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30080-CCV1	Mercury	2.00	1.98	99	ug/L	11/30/10 07:59
	Mercury	2.00	1.98	99	ug/L	11/30/10 07:59
0K30080-CCV2	Mercury	2.00	2.00	100	ug/L	11/30/10 08:18
	Mercury	2.00	2.00	100	ug/L	11/30/10 08:18
0K30080-CCV3	Mercury	2.00	1.97	98	ug/L	11/30/10 09:17
	Mercury	2.00	1.97	98	ug/L	11/30/10 09:17
0K30080-CCV4	Mercury	2.00	1.90	95	ug/L	11/30/10 10:16
	Mercury	2.00	1.90	95	ug/L	11/30/10 10:16
0K30080-CCV5	Mercury	2.00	1.95	98	ug/L	11/30/10 11:17
	Mercury	2.00	1.95	98	ug/L	11/30/10 11:17
0K30080-CCV6	Mercury	2.00	1.80	90	ug/L	11/30/10 12:17
	Mercury	2.00	1.80	90	ug/L	11/30/10 12:17
0K30080-CCV7	Mercury	2.00	1.94	97	ug/L	11/30/10 13:28
	Mercury	2.00	1.94	97	ug/L	11/30/10 13:28

* Values outside of QC limits

CRDL STANDARD

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30080

Calibration: 0L01008

Instrument ID: 216

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30080-CRL1	Mercury	0.200	0.207	104	ug/L	60 - 140
	Mercury	0.200	0.207	104	ug/L	60 - 140

* Values outside of QC limits

BLANKS
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30080
Calibration: 0L01008
Instrument ID: 216

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30080-CCB1	Mercury	-0.022	ug/L	0.061	0.20	U	11/30/10 08:09
	Mercury	-0.022	ug/L	0.061	0.20	U	11/30/10 08:09
0K30080-CCB2	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 08:23
	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 08:23
0K30080-CCB3	Mercury	-0.024	ug/L	0.061	0.20	U	11/30/10 09:22
	Mercury	-0.024	ug/L	0.061	0.20	U	11/30/10 09:22
0K30080-CCB4	Mercury	-0.017	ug/L	0.061	0.20	U	11/30/10 10:20
	Mercury	-0.017	ug/L	0.061	0.20	U	11/30/10 10:20
0K30080-CCB5	Mercury	-0.0025	ug/L	0.061	0.20	U	11/30/10 11:22
	Mercury	-0.0025	ug/L	0.061	0.20	U	11/30/10 11:22
0K30080-CCB6	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 12:22
	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 12:22
0K30080-CCB7	Mercury	-0.0082	ug/L	0.061	0.20	U	11/30/10 13:33
	Mercury	-0.0082	ug/L	0.061	0.20	U	11/30/10 13:33

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012974-BLK1 File ID: v30wt-a2-037

Prepared: 11/29/10 14:00 Analyzed: 11/30/10 08:28

Preparation: 7470A Digestion - Dissol Initial/Final: 30 mL / 30 mL

QC Batch: 1012974 Sequence: 0K30080 Calibration: 0L01008 Instrument: 216

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7439-97-6	Mercury, Dissolved	0.20	ug/L	0.061	0.20	U

METHOD BLANK DATA SHEET
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012976-BLK1
File ID: v30wt-a2-130
Prepared: 11/29/10 14:00
Analyzed: 11/30/10 11:02
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL
QC Batch: 1012976
Sequence: 0K30080
Calibration: 0L01008
Instrument: 216

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7439-97-6	Mercury, Total	0.20	ug/L	0.061	0.20	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0213

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012974

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012974-MS1

Preparation: 7470A Digestion - Dissolved

Initial/Final: 30 mL / 30 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Mercury, Dissolved	2.00	ND	2.10	105	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0213

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012974

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012974-MSD1

Preparation: 7470A Digestion - Dissolved

Initial/Final: 30 mL / 30 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Mercury, Dissolved	2.00	2.09	104	0.6	20	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-7470A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012976

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012976-MS1

Preparation: 7470A Digestion - Total

Initial/Final: 30 mL / 30 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Mercury, Total	2.00	ND	2.03	102	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012976

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012976-MSD1

Preparation: 7470A Digestion - Total

Initial/Final: 30 mL / 30 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Mercury, Total	2.00	2.01	101	1	20	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012974-BS1
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

QC Batch: 1012974
Sequence: 0K30080

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Mercury, Dissolved	2.00	2.10	105	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012976-BS1
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL
Sequence: 0K30080

QC Batch: 1012976

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Mercury, Total	2.00	2.06	103	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012974 QC Batch Matrix: Water

Preparation: 7470A Digestion - Dissolved

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0213	1011352-02	11/29/10 14:00	
NTC03GW0313	1011356-01	11/29/10 14:00	
NTC03GW0513	1011356-03	11/29/10 14:00	
NTC03GW0613	1011356-04	11/29/10 14:00	
NTCFD111610-01	1011356-05	11/29/10 14:00	
Blank	1012974-BLK1	11/29/10 14:00	
LCS	1012974-BS1	11/29/10 14:00	
NTC03GW0213	1012974-MS1	11/29/10 14:00	
NTC03GW0213	1012974-MSD1	11/29/10 14:00	

QC BATCH SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012976 QC Batch Matrix: Water

Preparation: 7470A Digestion - Total

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/29/10 14:00	
NTC03GW0213	1011352-02	11/29/10 14:00	
NTC03GW0313	1011356-01	11/29/10 14:00	
NTC03GW0413	1011356-02	11/29/10 14:00	
NTC03GW0513	1011356-03	11/29/10 14:00	
NTC03GW0613	1011356-04	11/29/10 14:00	
NTCFD111610-01	1011356-05	11/29/10 14:00	
Blank	1012976-BLK1	11/29/10 14:00	
LCS	1012976-BS1	11/29/10 14:00	
NTC03GW0113	1012976-MS1	11/29/10 14:00	
NTC03GW0113	1012976-MSD1	11/29/10 14:00	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30080

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L01008
Instrument: 216

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30080-CAL1	v30wt-a2-001	11/30/10 07:29
Cal Standard	0K30080-CAL2	v30wt-a2-004	11/30/10 07:34
Cal Standard	0K30080-CAL3	v30wt-a2-007	11/30/10 07:39
Cal Standard	0K30080-CAL4	v30wt-a2-010	11/30/10 07:43
Cal Standard	0K30080-CAL5	v30wt-a2-013	11/30/10 07:48
Cal Standard	0K30080-CAL6	v30wt-a2-016	11/30/10 07:53
Calibration Check	0K30080-CCV1	v30wt-a2-019	11/30/10 07:59
Secondary Cal Check	0K30080-SCV1	v30wt-a2-022	11/30/10 08:04
Calibration Blank	0K30080-CCB1	v30wt-a2-025	11/30/10 08:09
Instrument RL Check	0K30080-CRL1	v30wt-a2-028	11/30/10 08:14
Calibration Check	0K30080-CCV2	v30wt-a2-031	11/30/10 08:18
Calibration Blank	0K30080-CCB2	v30wt-a2-034	11/30/10 08:23
Blank	1012974-BLK1	v30wt-a2-037	11/30/10 08:28
LCS	1012974-BS1	v30wt-a2-040	11/30/10 08:33
NTC03GW0213	1011352-02	v30wt-a2-043	11/30/10 08:38
NTC03GW0213	1012974-MS1	v30wt-a2-046	11/30/10 08:43
NTC03GW0213	1012974-MSD1	v30wt-a2-049	11/30/10 08:48
NTC03GW0313	1011356-01	v30wt-a2-052	11/30/10 08:52
NTC03GW0513	1011356-03	v30wt-a2-055	11/30/10 08:57
NTC03GW0613	1011356-04	v30wt-a2-058	11/30/10 09:02
NTCFD111610-01	1011356-05	v30wt-a2-061	11/30/10 09:07
Calibration Check	0K30080-CCV3	v30wt-a2-067	11/30/10 09:17
Calibration Blank	0K30080-CCB3	v30wt-a2-070	11/30/10 09:22
Calibration Check	0K30080-CCV4	v30wt-a2-103	11/30/10 10:16
Calibration Blank	0K30080-CCB4	v30wt-a2-106	11/30/10 10:20
Blank	1012976-BLK1	v30wt-a2-130	11/30/10 11:02
LCS	1012976-BS1	v30wt-a2-133	11/30/10 11:07
NTC03GW0113	1011352-01	v30wt-a2-136	11/30/10 11:12
Calibration Check	0K30080-CCV5	v30wt-a2-139	11/30/10 11:17
Calibration Blank	0K30080-CCB5	v30wt-a2-142	11/30/10 11:22
NTC03GW0113	1012976-MS1	v30wt-a2-145	11/30/10 11:27
NTC03GW0113	1012976-MSD1	v30wt-a2-148	11/30/10 11:32

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30080
Calibration: 0L01008
Instrument: 216

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC03GW0213	1011352-02	v30wt-a2-151	11/30/10 11:37
NTC03GW0313	1011356-01	v30wt-a2-154	11/30/10 11:42
NTC03GW0413	1011356-02	v30wt-a2-157	11/30/10 11:47
NTC03GW0513	1011356-03	v30wt-a2-160	11/30/10 11:52
NTC03GW0613	1011356-04	v30wt-a2-163	11/30/10 11:57
NTCFD111610-01	1011356-05	v30wt-a2-166	11/30/10 12:02
Calibration Check	0K30080-CCV6	v30wt-a2-175	11/30/10 12:17
Calibration Blank	0K30080-CCB6	v30wt-a2-178	11/30/10 12:22
Calibration Check	0K30080-CCV7	v30wt-a2-211	11/30/10 13:28
Calibration Blank	0K30080-CCB7	v30wt-a2-214	11/30/10 13:33

HOLDING TIME SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Analyte: Nitrogen, Ammonia

SDG: 1011352

Project: Naval Station Great Lakes

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	NA	11/22/10	7	28	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	NA	11/22/10	7	28	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTC03GW0513	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTC03GW0613	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTCFD111610-01	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K23065
Calibration: 0K23030
Control Limt: +/- 10.00%
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K23065-CCV1	Nitrogen, Ammonia	1.00	0.935	93	mg/L	11/22/10 09:12
0K23065-CCV2	Nitrogen, Ammonia	1.00	0.983	98	mg/L	11/22/10 09:47
0K23065-CCV3	Nitrogen, Ammonia	1.00	0.957	96	mg/L	11/22/10 10:25
0K23065-CCV4	Nitrogen, Ammonia	1.00	0.987	99	mg/L	11/22/10 11:31
0K23065-CCV5	Nitrogen, Ammonia	1.00	0.948	95	mg/L	11/22/10 12:44

* Values outside of QC limits

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K23065

Calibration: 0K23030

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K23065-CRL1	Nitrogen, Ammonia	0.0100	0.00788	79	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23065

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K23030
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K23065-CCB1	Nitrogen, Ammonia	-0.015	mg/L	0.0089	0.050	J	11/22/10 09:12
0K23065-CCB2	Nitrogen, Ammonia	-0.013	mg/L	0.0089	0.050	J	11/22/10 09:47
0K23065-CCB3	Nitrogen, Ammonia	-0.018	mg/L	0.0089	0.050	J	11/22/10 10:25
0K23065-CCB4	Nitrogen, Ammonia	-0.014	mg/L	0.0089	0.050	J	11/22/10 11:31
0K23065-CCB5	Nitrogen, Ammonia	-0.019	mg/L	0.0089	0.050	J	11/22/10 12:44

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012790-BLK1
File ID: 112210nh4m-010
Prepared: 11/22/10 08:51
Analyzed: 11/22/10 09:12
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1012790
Sequence: 0K23065
Calibration: 0K23030
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.050	mg/L	0.0089	0.050	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-NH3 G 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012790

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012790-MS1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.402	0.877	95	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012790

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012790-MSD1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.890	98	1	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012790-BS1
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

QC Batch: 1012790
Sequence: 0K23065

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.483	97	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012790-BSD1
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL
Sequence: 0K23065

QC Batch: 1012790

Analyte	Spike Added mg/L	LCSD Conc.	LCSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.486	97	0.6	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012790 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/22/10 08:51	
NTC03GW0213	1011352-02	11/22/10 08:51	
NTC03GW0313	1011356-01	11/22/10 08:51	
NTC03GW0413	1011356-02	11/22/10 08:51	
NTC03GW0513	1011356-03	11/22/10 08:51	
NTC03GW0613	1011356-04	11/22/10 08:51	
NTCFD111610-01	1011356-05	11/22/10 08:51	
Blank	1012790-BLK1	11/22/10 08:51	
LCS	1012790-BS1	11/22/10 08:51	
LCS Dup	1012790-BSD1	11/22/10 08:51	
NTC03GW0113	1012790-MS1	11/22/10 08:51	
NTC03GW0113	1012790-MSD1	11/22/10 08:51	

TriMatrix Laboratories, Inc.

HLB 11-27-10

PREPARATION BATCH 1012790

due 12-1

Printed: 11/23/2010 3:06:47PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

LV4

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Nitrogen, Ammonia 4500-NH3 G	1011356	Nitrogen, Ammonia 4500-NH3 G	1011375	Nitrogen, Ammonia 4500-NH3 G
1011407	Nitrogen, Ammonia 4500-NH3 G				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012790-BLK1		Nov-22-10 08:51	GEH	10	10					BLANK	
1012790-BS1		Nov-22-10 08:51	GEH	20	20			0110761	100	LCS	
1012790-BSD1		Nov-22-10 08:51	GEH	20	20			0110761	100	LCS DUP	
1012790-MS1		Nov-22-10 08:51	GEH	20	20		1011352-01	0110761	100	MATRIX SPIKE	
1012790-MS2		Nov-22-10 08:51	GEH	20	20		1011375-01	0110761	100	MATRIX SPIKE	
1012790-MSD1		Nov-22-10 08:51	GEH	20	20		1011352-01	0110761	100	MATRIX SPIKE DUP	
1012790-MSD2		Nov-22-10 08:51	GEH	20	20		1011375-01	0110761	100	MATRIX SPIKE DUP	
1011352-01	T	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-03	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	

Comments: All pH < 2

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23065

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K23030
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K23065-CAL1	112210nh4m-001	11/22/10 08:51
Cal Standard	0K23065-CAL2	112210nh4m-002	11/22/10 08:51
Cal Standard	0K23065-CAL3	112210nh4m-006	11/22/10 08:51
Cal Standard	0K23065-CAL4	112210nh4m-005	11/22/10 08:51
Cal Standard	0K23065-CAL5	112210nh4m-007	11/22/10 08:51
Cal Standard	0K23065-CAL6	112210nh4m-003	11/22/10 08:51
Cal Standard	0K23065-CAL7	112210nh4m-004	11/22/10 08:51
Calibration Check	0K23065-CCV1	112210nh4m-008	11/22/10 09:12
Calibration Blank	0K23065-CCB1	112210nh4m-009	11/22/10 09:12
Blank	1012790-BLK1	112210nh4m-010	11/22/10 09:12
Instrument RL Check	0K23065-CRL1	112210nh4m-011	11/22/10 09:12
LCS	1012790-BS1	112210nh4m-012	11/22/10 09:12
LCS Dup	1012790-BSD1	112210nh4m-013	11/22/10 09:12
Secondary Cal Check	0K23065-SCV1	112210nh4m-029	11/22/10 09:41
Calibration Check	0K23065-CCV2	112210nh4m-030	11/22/10 09:47
Calibration Blank	0K23065-CCB2	112210nh4m-031	11/22/10 09:47
NTC03GW0113	1011352-01	112210nh4m-034	11/22/10 10:15
NTC03GW0113	1012790-MS1	112210nh4m-035	11/22/10 10:15
NTC03GW0113	1012790-MSD1	112210nh4m-036	11/22/10 10:15
NTC03GW0213	1011352-02	112210nh4m-037	11/22/10 10:16
Calibration Check	0K23065-CCV3	112210nh4m-043	11/22/10 10:25
Calibration Blank	0K23065-CCB3	112210nh4m-044	11/22/10 10:25
NTC03GW0313	1011356-01	112210nh4m-075	11/22/10 11:16
NTC03GW0413	1011356-02	112210nh4m-076	11/22/10 11:16
NTC03GW0613	1011356-04	112210nh4m-077	11/22/10 11:16
NTC03GW0513	1011356-03	112210nh4m-088	11/22/10 11:25
NTCFD111610-01	1011356-05	112210nh4m-089	11/22/10 11:25
Calibration Check	0K23065-CCV4	112210nh4m-092	11/22/10 11:31
Calibration Blank	0K23065-CCB4	112210nh4m-093	11/22/10 11:31
Calibration Check	0K23065-CCV5	112210nh4m-122	11/22/10 12:44
Calibration Blank	0K23065-CCB5	112210nh4m-123	11/22/10 12:44

Result Report AquaKem 6.5 Page: 1

Laboratory inst#303
Konelab User

Date : 2010-11-22
Time : 14.00

Test	Ammonia				
Unit	mg/l				
Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
NH3 CCV (1)	0.9346	0.376	2010-11-22 09.12		
NH3 CCB	-0.0154	0.083	2010-11-22 09.12		
blk	-0.0151	0.083	2010-11-22 09.12		
0.01ppm crdl	0.0079	0.090	2010-11-22 09.12		
0.5ppm bs	0.4833	0.237	2010-11-22 09.12		
0.5ppm bsd	0.4862	0.238	2010-11-22 09.12		
1012106-blk3	0.0057	0.089	2010-11-22 09.12		
1012106-bs3	0.9031	0.367	2010-11-22 09.12		
1012181-blk3	-0.0013	0.087	2010-11-22 09.12		
1012532-blk2	-0.0028	0.087	2010-11-22 09.12		
NH3 CCV	1.0025	0.397	2010-11-22 09.17		
NH3 CCB	-0.0130	0.083	2010-11-22 09.17		
1012532-bs2	0.9249	0.373	2010-11-22 09.17		
25ppm 1+49	23.3615	0.232	2010-11-22 09.26	1+49.0	
25ppm 1+24	24.1469	0.386	2010-11-22 09.26	1+24.0	
10ppm 1+9	9.6211	0.385	2010-11-22 09.26	1+9.0	
2ppm 1+4	1.8736	0.203	2010-11-22 09.26	1+4.0	
2ppm 1+1	1.9426	0.388	2010-11-22 09.26	1+1.0	
NH3 CCV	0.9756	0.389	2010-11-22 09.27		
NH3 CCB	-0.0155	0.083	2010-11-22 09.27		
1012181-bs3	0.9118	0.369	2010-11-22 09.40		
1.57ppm scv	1.5323	0.561	2010-11-22 09.41		
NH3 CCV (2)	0.9831	0.391	2010-11-22 09.47		
NH3 CCB	-0.0133	0.083	2010-11-22 09.47		
NH3 CCV	0.9584	0.384	2010-11-22 10.15		
NH3 CCB	-0.0130	0.083	2010-11-22 10.15		
1011352-01	0.4020	0.212	2010-11-22 10.15		
1011352-01 spk1	0.8770	0.359	2010-11-22 10.15		
1011352-01 spk2	0.8897	0.363	2010-11-22 10.15		
1011352-02	0.2995	0.180	2010-11-22 10.16		
1011344-03 spk1	0.6482	0.288	2010-11-22 10.16		
1011344-03 spk2	0.6481	0.288	2010-11-22 10.16		
1011344-02	0.6618	0.292	2010-11-22 10.16		
1011344-03	0.1680	0.139	2010-11-22 10.16		
1011351-01	-0.0121	0.084	2010-11-22 10.16		
NH3 CCV (3)	0.9574	0.384	2010-11-22 10.25		
NH3 CCB	-0.0183	0.082	2010-11-22 10.25		
1011351-02	-0.0312	0.078	2010-11-22 10.25		
1011351-05	-0.0203	0.081	2010-11-22 10.25		
1011351-06	-0.0144	0.083	2010-11-22 10.25		
1011351-07	-0.0084	0.085	2010-11-22 10.25		
1011351-10	-0.0179	0.082	2010-11-22 10.25		
1011351-11	-0.0249	0.080	2010-11-22 10.25		
1011351-12	-0.0251	0.080	2010-11-22 10.25		
1011351-13	-0.0240	0.080	2010-11-22 10.25		
1011351-14	-0.0203	0.081	2010-11-22 10.25		
1011351-16	-0.0137	0.083	2010-11-22 10.25		
NH3 CCV	0.9483	0.381	2010-11-22 10.33		
NH3 CCB	-0.0122	0.084	2010-11-22 10.33		
1011351-17	-0.0097	0.084	2010-11-22 10.33		
1011351-18	-0.0052	0.086	2010-11-22 10.33		
1011351-19	-0.0095	0.085	2010-11-22 10.33		

Sample NTC036W0113
Ammonia
rep result
0.40 mg/L

HOLDING TIME SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Chemical Oxygen Demand

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	28	11/23/10	0	28	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	28	11/23/10	0	28	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	28	11/23/10	0	28	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	28	11/23/10	0	28	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	28	11/23/10	0	28	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	28	11/23/10	0	28	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	7	28	11/23/10	0	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29044
Calibration: 0J21020
Control Limt: +/- 15.00%
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29044-CCV1	Chemical Oxygen Demand	20.0	20.5	102	mg/L	11/23/10 12:31
0K29044-CCV2	Chemical Oxygen Demand	20.0	20.8	104	mg/L	11/23/10 12:39
0K29044-CCV3	Chemical Oxygen Demand	20.0	20.7	104	mg/L	11/23/10 12:46

* Values outside of QC limits

CRDL STANDARD

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29044

Calibration: 0J21020

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29044-CRL1	Chemical Oxygen Demand	5.00	5.30	106	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29044
Calibration: 0J21020
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29044-CCB1	Chemical Oxygen Demand	0.18	mg/L	3.7	5.0	U	11/23/10 12:32
0K29044-CCB2	Chemical Oxygen Demand	-0.15	mg/L	3.7	5.0	U	11/23/10 12:39
0K29044-CCB3	Chemical Oxygen Demand	0.58	mg/L	3.7	5.0	U	11/23/10 12:46

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012893-BLK1 File ID:

Prepared: 11/23/10 08:20 Analyzed: 11/23/10 12:32

Preparation: 410.4 COD Digestion Initial/Final: 2 mL / 2 mL

QC Batch: 1012893 Sequence: 0K29044 Calibration: 0J21020 Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Chemical Oxygen Demand	5.0	mg/L	3.7	5.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012893

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012893-MS1

Preparation: 410.4 COD Digestion

Initial/Final: 2 mL / 2 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chemical Oxygen Demand	20.0	4.70	24.9	101	64 - 148	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012893

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012893-MSD1

Preparation: 410.4 COD Digestion

Initial/Final: 2 mL / 2 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chemical Oxygen Demand	20.0	24.7	100	1	20	64 - 148	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012893-BS1
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

QC Batch: 1012893
Sequence: 0K29044

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chemical Oxygen Demand	20.0	21.5	107	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
QC Batch: 1012893
QC Batch Matrix: Water
Preparation: 410.4 COD Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/23/10 08:20	
NTC03GW0213	1011352-02	11/23/10 08:20	
NTC03GW0313	1011356-01	11/23/10 08:20	
NTC03GW0413	1011356-02	11/23/10 08:20	
NTC03GW0513	1011356-03	11/23/10 08:20	
NTC03GW0613	1011356-04	11/23/10 08:20	
NTCFD111610-01	1011356-05	11/23/10 08:20	
Blank	1012893-BLK1	11/23/10 08:20	
LCS	1012893-BS1	11/23/10 08:20	
NTC03GW0113	1012893-MS1	11/23/10 08:20	
NTC03GW0113	1012893-MSD1	11/23/10 08:20	

TriMatrix Laboratories, Inc.

NLB 12-1-10

PREPARATION BATCH 1012893

Printed: 11/29/2010 11:59:23AM

Inorganic - Wet Chemistry, Water, 410.4 COD Digestion

(No Surrogate)

Batch Comments: (none)

due: 12/10 LVY

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	COD 5220 D	1011356	COD 5220 D	1011375	COD 5220 D
1011407	COD 5220 D				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012893-BLK1		Nov-23-10 08:20	CKD	2	2					BLANK	
1012893-BS1		Nov-23-10 08:20	CKD	2	2			0080031	20	LCS	
1012893-MS1		Nov-23-10 08:20	CKD	2	2		1011352-01	0080031	20	MATRIX SPIKE	
1012893-MSD1		Nov-23-10 08:20	CKD	2	2		1011352-01	0080031	20	MATRIX SPIKE DUP	
1011352-01	T	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011407-01	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011407-02	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	

Comments: digestion temp in/out: 150.1°C/150.3°C

Analyst Initials: CKD

bch_TriMatrix.rpt

1881

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29044

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0J21020
Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29044-CCV1		11/23/10 12:31
Calibration Blank	0K29044-CCB1		11/23/10 12:32
Blank	1012893-BLK1		11/23/10 12:32
LCS	1012893-BS1		11/23/10 12:32
Secondary Cal Check	0K29044-SCV1		11/23/10 12:33
Instrument RL Check	0K29044-CRL1		11/23/10 12:33
NTC03GW0113	1011352-01		11/23/10 12:36
NTC03GW0113	1012893-MS1		11/23/10 12:36
NTC03GW0113	1012893-MSD1		11/23/10 12:37
NTC03GW0213	1011352-02		11/23/10 12:37
NTC03GW0313	1011356-01		11/23/10 12:38
NTC03GW0413	1011356-02		11/23/10 12:38
Calibration Check	0K29044-CCV2		11/23/10 12:39
Calibration Blank	0K29044-CCB2		11/23/10 12:39
NTC03GW0513	1011356-03		11/23/10 12:41
NTC03GW0613	1011356-04		11/23/10 12:42
NTCFD111610-01	1011356-05		11/23/10 12:42
Calibration Check	0K29044-CCV3		11/23/10 12:46
Calibration Blank	0K29044-CCB3		11/23/10 12:46

HOLDING TIME SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Chloride

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0213	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0313	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0413	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0513	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0613	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTCFD111610-01	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	15	28	

HOLDING TIME SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Sulfate

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0213	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0313	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0413	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0513	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0613	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTCFD111610-01	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	15	28	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L01017
Calibration: 0L01012
Control Limt: +/- 10.00%
Instrument ID: 306

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L01017-CCV1	Chloride	60.0	59.1	99	mg/L	11/30/10 11:28
	Sulfate	60.0	59.7	99	mg/L	11/30/10 11:28
0L01017-CCV2	Chloride	60.0	63.4	106	mg/L	11/30/10 15:09
	Sulfate	60.0	63.8	106	mg/L	11/30/10 15:09
0L01017-CCV3	Chloride	60.0	60.1	100	mg/L	11/30/10 18:50
	Sulfate	60.0	61.1	102	mg/L	11/30/10 18:50
0L01017-CCV4	Chloride	60.0	59.6	99	mg/L	11/30/10 22:31
	Sulfate	60.0	60.2	100	mg/L	11/30/10 22:31
0L01017-CCV5	Chloride	60.0	63.7	106	mg/L	12/01/10 01:17
	Sulfate	60.0	64.4	107	mg/L	12/01/10 01:17

* Values outside of QC limits

CRDL STANDARD

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0L01017

Calibration: 0L01012

Instrument ID: 306

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L01017-CRL1	Chloride	1.00	1.17	117	mg/L	50 - 150
	Sulfate	1.00	0.971	97	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01017

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L01012
Instrument ID: 306

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L01017-CCB1	Chloride	0.16	mg/L	0.098	1.0	J	11/30/10 11:47
	Sulfate	-0.043	mg/L	0.061	2.0	U	11/30/10 11:47
0L01017-CCB2	Chloride	0.19	mg/L	0.098	1.0	J	11/30/10 15:28
	Sulfate	-0.038	mg/L	0.061	2.0	U	11/30/10 15:28
0L01017-CCB3	Chloride	0.17	mg/L	0.098	1.0	J	11/30/10 19:08
	Sulfate	0.041	mg/L	0.061	2.0	U	11/30/10 19:08
0L01017-CCB4	Chloride	0.18	mg/L	0.098	1.0	J	11/30/10 22:49
	Sulfate	0.12	mg/L	0.061	2.0	J	11/30/10 22:49
0L01017-CCB5	Chloride	0.18	mg/L	0.098	1.0	J	12/01/10 01:35
	Sulfate	0.13	mg/L	0.061	2.0	J	12/01/10 01:35

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1013122-BLK1
File ID: 113010.seq-12
Prepared: 11/30/10 08:43
Analyzed: 11/30/10 11:47
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL
QC Batch: 1013122
Sequence: 0L01017
Calibration: 0L01012
Instrument: 306

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	1.0	mg/L	0.098	1.0	U
14808-79-8	Sulfate	2.0	mg/L	0.061	2.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013122

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1013122-MS1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Chloride	20.0	17.2	36.8	98	90 - 110	mg/L
Sulfate	40.0	109	152	106	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013122

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1013122-MSD1

Preparation: General Inorganic Prep

Initial/Final: 10 mL / 10 mL

Analyte	Spike Added	MSD Conc.	MSD % ~~Rec. #~~	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Chloride	20.0	41.5	122 *	12	20	90 - 110	mg/L
Sulfate	40.0	152	107	0.1	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1013122-BS1
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

QC Batch: 1013122
Sequence: 0L01017

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	20.0	20.9	105	90 - 110	mg/L
Sulfate	20.0	21.1	106	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

HLB 12-1-10

PREPARATION BATCH 1013122

Printed: 12/1/2010 11:12:13AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

due: 12/01 LV4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Sulfate 300.0	1011352	Chloride 300.0	1011356	Sulfate 300.0
1011356	Chloride 300.0	1011375	Sulfate 300.0	1011375	Chloride 300.0
1011407	Sulfate 300.0	1011407	Chloride 300.0		

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013122-BLK1		Nov-30-10 08:43	CKD	10	10					BLANK	
1013122-BS1		Nov-30-10 08:43	CKD	10	10			0120038	10000	LCS	
1013122-MS1		Nov-30-10 08:43	CKD	10	10		1011352-01	0120037	10000	MATRIX SPIKE	
1013122-MSD1		Nov-30-10 08:43	CKD	10	10		1011352-01	0120037	10000	MATRIX SPIKE DUP	
1011352-01	R	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-01	R	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

PREPARATION BATCH 1013122

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1011375-03	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

QC BATCH SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013122 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/30/10 08:43	
NTC03GW0213	1011352-02	11/30/10 08:43	
NTC03GW0313	1011356-01	11/30/10 08:43	
NTC03GW0413	1011356-02	11/30/10 08:43	
NTC03GW0513	1011356-03	11/30/10 08:43	
NTC03GW0613	1011356-04	11/30/10 08:43	
NTCFD111610-01	1011356-05	11/30/10 08:43	
Blank	1013122-BLK1	11/30/10 08:43	
LCS	1013122-BS1	11/30/10 08:43	
NTC03GW0113	1013122-MS1	11/30/10 08:43	
NTC03GW0113	1013122-MSD1	11/30/10 08:43	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01017

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L01012
Instrument: 306

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0L01017-CAL1	113010.seq-02	11/30/10 08:43
Cal Standard	0L01017-CAL2	113010.seq-03	11/30/10 09:01
Cal Standard	0L01017-CAL3	113010.seq-04	11/30/10 09:19
Cal Standard	0L01017-CAL4	113010.seq-05	11/30/10 09:38
Cal Standard	0L01017-CAL5	113010.seq-06	11/30/10 09:56
Cal Standard	0L01017-CAL6	113010.seq-07	11/30/10 10:15
Secondary Cal Check	0L01017-SCV1	113010.seq-09	11/30/10 10:51
Instrument RL Check	0L01017-CRL1	113010.seq-10	11/30/10 11:10
Calibration Check	0L01017-CCV1	113010.seq-11	11/30/10 11:28
Calibration Blank	0L01017-CCB1	113010.seq-12	11/30/10 11:47
Blank	1013122-BLK1	113010.seq-12	11/30/10 11:47
LCS	1013122-BS1	113010.seq-13	11/30/10 12:05
NTC03GW0113	1011352-01	113010.seq-14	11/30/10 12:24
NTC03GW0313	1011356-01	113010.seq-16	11/30/10 13:00
NTC03GW0413	1011356-02	113010.seq-17	11/30/10 13:19
NTC03GW0413	1011356-02	113010.seq-17	11/30/10 13:19
NTC03GW0613	1011356-04	113010.seq-19	11/30/10 13:56
Calibration Check	0L01017-CCV2	113010.seq-23	11/30/10 15:09
Calibration Blank	0L01017-CCB2	113010.seq-24	11/30/10 15:28
NTC03GW0113	1013122-MS1	113010.seq-33	11/30/10 18:13
NTC03GW0113	1013122-MSD1	113010.seq-34	11/30/10 18:32
Calibration Check	0L01017-CCV3	113010.seq-35	11/30/10 18:50
Calibration Blank	0L01017-CCB3	113010.seq-36	11/30/10 19:08
NTC03GW0113	1011352-01	113010.seq-37	11/30/10 19:27
NTC03GW0113	1013122-MS1	113010.seq-38	11/30/10 19:45
NTC03GW0113	1013122-MSD1	113010.seq-39	11/30/10 20:04
NTC03GW0213	1011352-02	113010.seq-40	11/30/10 20:22
NTC03GW0213	1011352-02	113010.seq-41	11/30/10 20:41
NTC03GW0313	1011356-01	113010.seq-42	11/30/10 20:59
NTC03GW0513	1011356-03	113010.seq-43	11/30/10 21:17
NTC03GW0513	1011356-03	113010.seq-43	11/30/10 21:17
NTC03GW0613	1011356-04	113010.seq-44	11/30/10 21:36

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01017

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L01012
Instrument: 306

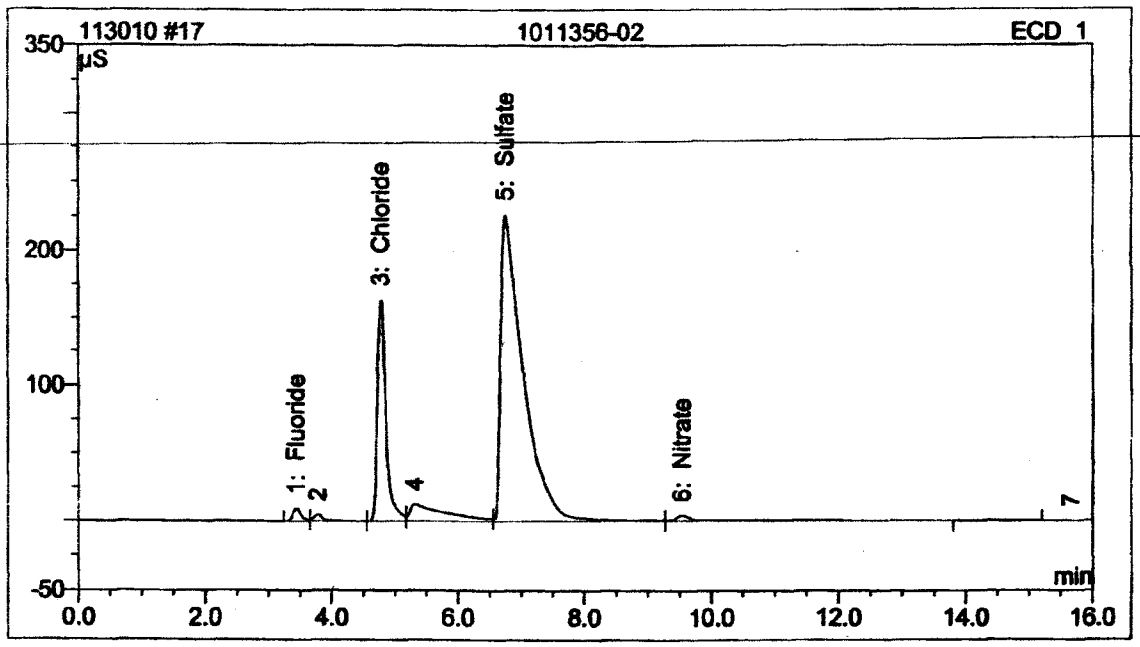
Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTCFD111610-01	1011356-05	113010.seq-45	11/30/10 21:54
NTCFD111610-01	1011356-05	113010.seq-45	11/30/10 21:54
Calibration Check	0L01017-CCV4	113010.seq-47	11/30/10 22:31
Calibration Blank	0L01017-CCB4	113010.seq-48	11/30/10 22:49
Calibration Check	0L01017-CCV5	113010.seq-56	12/01/10 01:17
Calibration Blank	0L01017-CCB5	113010.seq-57	12/01/10 01:35

Sample NTC036W0413 Cloride 17 mg/L
rep result
rep result sulfate 83 mg/L

Sample Analysis Report

Sample Name:	1011356-02	Sample No.:	17
Sequence Name:	113010		
Program Method:	NEW	Injection vol.:	25.0
Quantitation Method:	AS18 113010	Dilution Factor:	1.0000
Date Time Collected:	11/30/2010 1:19 PM	Sample Wt.:	1.0000
System Operator:	CKD		

Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Relative Amount %
1	Fluoride	3.44	1.403	9.580	0.5425	0.54
2	n.a.	3.78	0.792	4.531	n.a.	n.a.
3	Chloride	4.78	25.233	163.814	16.5317	16.36
4	n.a.	5.31	8.049	12.193	n.a.	n.a.
5	Sulfate	6.75	93.347	226.598	83.4773	82.62
6	Nitrate	9.53	1.821	4.625	0.4858	0.48
7	n.a.	15.66	0.015	0.040	n.a.	n.a.



HOLDING TIME SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Cyanide, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	NA	11/24/10	9	14	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	NA	11/24/10	9	14	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	NA	11/24/10	8	14	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	NA	11/24/10	8	14	
NTC03GW0513	11/16/10	11/17/10		11/22/10	6	NA	11/24/10	8	14	
NTC03GW0613	11/16/10	11/17/10		11/22/10	6	NA	11/24/10	8	14	
NTCFD111610-01	11/16/10	11/17/10		11/22/10	6	NA	11/24/10	8	14	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30025
Control Limt: +/- 10.00%

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30014
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30025-CCV1	Cyanide, Total	0.100	0.0995	99	mg/L	11/24/10 09:14
0K30025-CCV2	Cyanide, Total	0.100	0.0978	98	mg/L	11/24/10 09:22
0K30025-CCV3	Cyanide, Total	0.100	0.100	100	mg/L	11/24/10 09:29
0K30025-CCV4	Cyanide, Total	0.100	0.106	106	mg/L	11/24/10 10:48

* Values outside of QC limits

CRDL STANDARD

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30025

Calibration: 0K30014

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30025-CRL1	Cyanide, Total	0.00500	0.00415	83	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30025

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30014
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30025-CCB1	Cyanide, Total	-0.000790	mg/L	0.00170	0.00500	U	11/24/10 09:14
0K30025-CCB2	Cyanide, Total	-0.000770	mg/L	0.00170	0.00500	U	11/24/10 09:22
0K30025-CCB3	Cyanide, Total	-0.000580	mg/L	0.00170	0.00500	U	11/24/10 09:29
0K30025-CCB4	Cyanide, Total	-0.000570	mg/L	0.00170	0.00500	U	11/24/10 10:48

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012747-BLK1 File ID: 112410cn-014

Prepared: 11/22/10 08:30 Analyzed: 11/24/10 09:14

Preparation: 9010B Cyanide Distillatic Initial/Final: 50 mL / 50 mL

QC Batch: 1012747 Sequence: 0K30025 Calibration: 0K30014 Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
57-12-5	Cyanide, Total	0.00500	mg/L	0.00170	0.00500	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-9014

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012747

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012747-MS1

Preparation: 9010B Cyanide Distillation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.100	ND	0.0970	97	59 - 128	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012747

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012747-MSD1

Preparation: 9010B Cyanide Distillation

Initial/Final: 50 mL / 50 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Cyanide, Total	0.100	0.0918	92	5	20	59 - 128	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012747-BS1

Preparation: 9010B Cyanide Distillation

Initial/Final: 50 mL / 50 mL

QC Batch: 1012747

Sequence: 0K30025

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.100	0.0966	97	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012747-BS2
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL
Sequence: 0K30025

QC Batch: 1012747

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.0400	0.0377	94	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

due 12/01/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012747** Page 1 of 1

Printed: 11/22/2010 9:54:00AM

NB 12-1-10

Inorganic - Wet Chemistry, Water, 9010B Cyanide Distillation

4MD

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Cyanide, Total 9014	1011356	Cyanide, Total 9014	1011375	Cyanide, Total 9014

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012747-BLK1		Nov-22-10 08:30	LMA	50	50					BLANK	
1012747-BS1		Nov-22-10 08:30	LMA	50	50			0110775	50	LCS	
1012747-BS2		Nov-22-10 08:30	LMA	50	50			0110775	20	LCS	
1012747-MS1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE	
1012747-MSD1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE DUP	
1011352-01	U	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011352-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-01	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-03	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-04	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-05	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-01	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-02	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-03	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-04	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-05	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	

Comments:
pH>12 w/NaOH checked for interferences Reagents INR1097-9, INR1086-6, INR1106-14, INR1116-4

Analyst Initials:

bch_TriMatrix.rpt

QC BATCH SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012747 QC Batch Matrix: Water

Preparation: 9010B Cyanide Distillation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/22/10 08:30	
NTC03GW0213	1011352-02	11/22/10 08:30	
NTC03GW0313	1011356-01	11/22/10 08:30	
NTC03GW0413	1011356-02	11/22/10 08:30	
NTC03GW0513	1011356-03	11/22/10 08:30	
NTC03GW0613	1011356-04	11/22/10 08:30	
NTCFD111610-01	1011356-05	11/22/10 08:30	
Blank	1012747-BLK1	11/22/10 08:30	
Blank	1012747-BLK2	12/01/10 06:15	
LCS	1012747-BS1	11/22/10 08:30	
LCS	1012747-BS2	11/22/10 08:30	
LCS	1012747-BS3	12/01/10 06:15	
LCS	1012747-BS4	12/01/10 06:15	
NTC03GW0113	1012747-MS1	11/22/10 08:30	
NTC03GW0113	1012747-MSD1	11/22/10 08:30	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30025

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K30014
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30025-CAL1	112410cn-001	11/24/10 08:47
Cal Standard	0K30025-CAL2	112410cn-002	11/24/10 08:47
Cal Standard	0K30025-CAL3	112410cn-003	11/24/10 08:47
Cal Standard	0K30025-CAL4	112410cn-004	11/24/10 08:47
Cal Standard	0K30025-CAL5	112410cn-005	11/24/10 08:47
Cal Standard	0K30025-CAL6	112410cn-006	11/24/10 08:47
Cal Standard	0K30025-CAL7	112410cn-007	11/24/10 08:47
Calibration Blank	0K30025-CCB1	112410cn-009	11/24/10 09:14
Calibration Check	0K30025-CCV1	112410cn-011	11/24/10 09:14
High Cal Check	0K30025-HCV1	112410cn-011	11/24/10 09:14
Low Cal Check	0K30025-LCV1	112410cn-012	11/24/10 09:14
Instrument RL Check	0K30025-CRL1	112410cn-013	11/24/10 09:14
Blank	1012747-BLK1	112410cn-014	11/24/10 09:14
LCS	1012747-BS1	112410cn-015	11/24/10 09:14
NTC03GW0113	1011352-01	112410cn-016	11/24/10 09:14
NTC03GW0113	1012747-MS1	112410cn-017	11/24/10 09:14
NTC03GW0113	1012747-MSD1	112410cn-018	11/24/10 09:22
Calibration Check	0K30025-CCV2	112410cn-019	11/24/10 09:22
Calibration Blank	0K30025-CCB2	112410cn-020	11/24/10 09:22
NTC03GW0213	1011352-02	112410cn-021	11/24/10 09:22
NTC03GW0313	1011356-01	112410cn-022	11/24/10 09:22
NTC03GW0413	1011356-02	112410cn-023	11/24/10 09:22
NTC03GW0513	1011356-03	112410cn-024	11/24/10 09:22
NTC03GW0613	1011356-04	112410cn-025	11/24/10 09:22
NTCFD111610-01	1011356-05	112410cn-026	11/24/10 09:22
Calibration Check	0K30025-CCV3	112410cn-031	11/24/10 09:29
Calibration Blank	0K30025-CCB3	112410cn-032	11/24/10 09:29
LCS	1012747-BS2	112410cn-080	11/24/10 10:45
Calibration Check	0K30025-CCV4	112410cn-081	11/24/10 10:48
Calibration Blank	0K30025-CCB4	112410cn-082	11/24/10 10:48

HOLDING TIME SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Fluoride

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0213	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	28	
NTC03GW0313	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0413	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0513	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTC03GW0613	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	28	
NTCFD111610-01	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	15	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30013
Control Limt: +/- 15.00%

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument ID: 100

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30013-CCV1	Fluoride	0.500	0.502	100	mg/L	11/30/10 13:19
0K30013-CCV2	Fluoride	0.500	0.508	102	mg/L	11/30/10 13:19
0K30013-CCV3	Fluoride	0.500	0.512	102	mg/L	11/30/10 13:19

* Values outside of QC limits

CRDL STANDARD

SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30013

Calibration: UNASSIGNED

Instrument ID: 100

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30013-CRL1	Fluoride	0.100	0.0910	91	mg/L	81 - 119

* Values outside of QC limits

BLANKS
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30013
Calibration: UNASSIGNED
Instrument ID: 100

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30013-CCB1	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19
0K30013-CCB2	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19
0K30013-CCB3	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1013058-BLK1 File ID:

Prepared: 11/30/10 08:30 Analyzed: 11/30/10 13:19

Preparation: General Inorganic Prep Initial/Final: 30 mL / 30 mL

QC Batch: 1013058 Sequence: 0K30013 Calibration: UNASSIGNE Instrument: 100

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16984-48-8	Fluoride	0.10	mg/L	0.0040	0.10	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-F C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013058

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1013058-MS1

Preparation: General Inorganic Prep

Initial/Final: 30 mL / 30 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Fluoride	0.200	0.723	0.954	116	75 - 135	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

DUPLICATES
SM 4500-F C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Lab Source ID: 1011352-01
% Solids:
QC Batch: 1013058

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1013058-DUP1
Source Sample Name: NTC03GW0113
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Fluoride	20	0.723		0.729		0.8		SM 4500-F C 20th	mg/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1013058-BS1
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL
Sequence: 0K30013

QC Batch: 1013058

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Fluoride	0.200	0.197	98	89 - 116	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

HLB 12-1-10

PREPARATION BATCH 1013058

Printed: 11/30/2010 2:24:29PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

dcl: 12/01 EVA

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Fluoride 4500-F C	1011356	Fluoride 4500-F C	1011375	Fluoride 4500-F C
1011407	Fluoride 4500-F C				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1013058-BLK1		Nov-30-10 08:30	CKD	30	30					BLANK	
1013058-DUP1		Nov-30-10 08:30	CKD	30	30		1011352-01			DUPLICATE	
1013058-BS1		Nov-30-10 08:30	CKD	30	30			0081057	60	LCS	
1013058-MS1		Nov-30-10 08:30	CKD	30	30		1011352-01	0081057	60	MATRIX SPIKE	
1011352-01	S	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

QC BATCH SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013058 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/30/10 08:30	
NTC03GW0213	1011352-02	11/30/10 08:30	
NTC03GW0313	1011356-01	11/30/10 08:30	
NTC03GW0413	1011356-02	11/30/10 08:30	
NTC03GW0513	1011356-03	11/30/10 08:30	
NTC03GW0613	1011356-04	11/30/10 08:30	
NTCFD111610-01	1011356-05	11/30/10 08:30	
Blank	1013058-BLK1	11/30/10 08:30	
LCS	1013058-BS1	11/30/10 08:30	
NTC03GW0113	1013058-DUP1	11/30/10 08:30	
NTC03GW0113	1013058-MS1	11/30/10 08:30	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30013

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 100

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K30013-CCV1		11/30/10 13:19
Calibration Blank	0K30013-CCB1		11/30/10 13:19
Blank	1013058-BLK1		11/30/10 13:19
LCS	1013058-BS1		11/30/10 13:19
Secondary Cal Check	0K30013-SCV1		11/30/10 13:19
Instrument RL Check	0K30013-CRL1		11/30/10 13:19
NTC03GW0113	1011352-01		11/30/10 13:19
NTC03GW0113	1013058-DUP1		11/30/10 13:19
NTC03GW0113	1013058-MS1		11/30/10 13:19
NTC03GW0213	1011352-02		11/30/10 13:19
NTC03GW0313	1011356-01		11/30/10 13:19
NTC03GW0413	1011356-02		11/30/10 13:19
Calibration Check	0K30013-CCV2		11/30/10 13:19
Calibration Blank	0K30013-CCB2		11/30/10 13:19
NTC03GW0513	1011356-03		11/30/10 13:19
NTC03GW0613	1011356-04		11/30/10 13:19
NTCFD111610-01	1011356-05		11/30/10 13:19
Calibration Check	0K30013-CCV3		11/30/10 13:19
Calibration Blank	0K30013-CCB3		11/30/10 13:19

HOLDING TIME SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: pH

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	1	*
NTC03GW0213	11/15/10	11/16/10		11/30/10	15	NA	11/30/10	15	1	*
NTC03GW0313	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	1	*
NTC03GW0413	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	1	*
NTC03GW0513	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	1	*
NTC03GW0613	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	14	1	*
NTCFD111610-01	11/16/10	11/17/10		11/30/10	14	NA	11/30/10	15	1	*

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30046
Calibration: UNASSIGNED
Control Limt: +/- 5.00%
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30046-CCV1	pH	7.00	7.03	100	pH Units	11/30/10 12:47
0K30046-CCV2	pH	4.00	4.03	101	pH Units	11/30/10 12:47
0K30046-CCV3	pH	10.0	10.03	100	pH Units	11/30/10 12:47
0K30046-CCV4	pH	7.00	7.03	100	pH Units	11/30/10 12:47
0K30046-CCV5	pH	4.00	4.04	101	pH Units	11/30/10 12:47
0K30046-CCV6	pH	10.0	10.03	100	pH Units	11/30/10 12:47
0K30046-CCV7	pH	7.00	7.04	101	pH Units	11/30/10 12:47
0K30046-CCV8	pH	4.00	4.02	100	pH Units	11/30/10 12:47
0K30046-CCV9	pH	10.0	10.01	100	pH Units	11/30/10 12:47

* Values outside of QC limits

DUPLICATES
USEPA-150.1

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Lab Source ID: 1011352-01
% Solids:
QC Batch: 1013083

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1013083-DUP1
Source Sample Name: NTC03GW0113
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
pH	20	7.60		7.60		0		USEPA-150.1	pH Units

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013083

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1013083-SRM1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	6.00	6.04	101	98.6 - 101.4

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013083

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1013083-SRM2

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	8.00	7.96	100	99 - 101

* Values outside of QC limits

TriMatrix Laboratories, Inc.

NLB 12-1-10

LVL4

PREPARATION BATCH 1013083

Printed: 11/30/2010 10:30:06AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Due: 12-1-2010

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	pH 150.1	1011356	pH 150.1	1011407	pH 150.1

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013083-DUP1		Nov-30-10 10:28	KRK	20	20		1011352-01			DUPLICATE	
1013083-SRM1		Nov-30-10 10:28	KRK	20	20			0101007	20000	REFERENCE	
1013083-SRM2		Nov-30-10 10:28	KRK	20	20			0010811	20000	REFERENCE	
1011352-01	S	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials: YCL

bch_TriMatrix.rpt

QC BATCH SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

QC Batch: 1013083 QC Batch Matrix: Water Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/30/10 10:28	
NTC03GW0213	1011352-02	11/30/10 10:28	
NTC03GW0313	1011356-01	11/30/10 10:28	
NTC03GW0413	1011356-02	11/30/10 10:28	
NTC03GW0513	1011356-03	11/30/10 10:28	
NTC03GW0613	1011356-04	11/30/10 10:28	
NTCFD111610-01	1011356-05	11/30/10 10:28	
NTC03GW0113	1013083-DUP1	11/30/10 10:28	
Reference	1013083-SRM1	11/30/10 10:28	
Reference	1013083-SRM2	11/30/10 10:28	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30046

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K30046-CCV1		11/30/10 12:47
Calibration Check	0K30046-CCV2		11/30/10 12:47
Calibration Check	0K30046-CCV3		11/30/10 12:47
Reference	1013083-SRM1		11/30/10 12:47
Reference	1013083-SRM2		11/30/10 12:47
NTC03GW0113	1011352-01		11/30/10 12:47
NTC03GW0113	1013083-DUP1		11/30/10 12:47
NTC03GW0213	1011352-02		11/30/10 12:47
NTC03GW0313	1011356-01		11/30/10 12:47
NTC03GW0413	1011356-02		11/30/10 12:47
NTC03GW0513	1011356-03		11/30/10 12:47
NTC03GW0613	1011356-04		11/30/10 12:47
NTCFD111610-01	1011356-05		11/30/10 12:47
Calibration Check	0K30046-CCV4		11/30/10 12:47
Calibration Check	0K30046-CCV5		11/30/10 12:47
Calibration Check	0K30046-CCV6		11/30/10 12:47
Calibration Check	0K30046-CCV7		11/30/10 12:47
Calibration Check	0K30046-CCV8		11/30/10 12:47
Calibration Check	0K30046-CCV9		11/30/10 12:47

HOLDING TIME SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Residue, Dissolved @ 180° C

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/19/10	4	NA	11/19/10	4	7	
NTC03GW0213	11/15/10	11/16/10		11/19/10	4	NA	11/19/10	4	7	
NTC03GW0313	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0413	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0513	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0613	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTCFD111610-01	11/16/10	11/17/10		11/19/10	4	NA	11/19/10	4	7	

METHOD BLANK DATA SHEET
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012654-BLK1 File ID:

Prepared: 11/19/10 13:43 Analyzed: 11/19/10 13:43

Preparation: General Inorganic Prep Initial/Final: 50 mL / 1000 mL

QC Batch: 1012654 Sequence: 0K19018 Calibration: UNASSIGNE Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Dissolved @ 180° C	50.0	mg/L	50.0	50.0	U

DUPLICATES
SM 2540 C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Lab Source ID: 1011352-01
% Solids:
QC Batch: 1012654

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012654-DUP1
Source Sample Name: NTC03GW0113
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Residue, Dissolved @ 180° C	20	478		506		6		SM 2540 C 20th	mg/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012654-BS1

Preparation: General Inorganic Prep

Initial/Final: 50 mL / 1000 mL

QC Batch: 1012654

Sequence: 0K19018

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Dissolved @ 180° C	200	190	95	87 - 115	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012654 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/19/10 13:43	
NTC03GW0213	1011352-02	11/19/10 13:43	
NTC03GW0313	1011356-01	11/19/10 13:43	
NTC03GW0413	1011356-02	11/19/10 13:43	
NTC03GW0513	1011356-03	11/19/10 13:43	
NTC03GW0613	1011356-04	11/19/10 13:43	
NTCFD111610-01	1011356-05	11/19/10 13:43	
Blank	1012654-BLK1	11/19/10 13:43	
LCS	1012654-BS1	11/19/10 13:43	
NTC03GW0113	1012654-DUP1	11/19/10 13:43	

01774

TriMatrix Laboratories, Inc.

NLB 11-27-10

Due 12.1.10

PREPARATION BATCH 1012654

Printed: 11/23/2010 5:31:14PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Level 4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Solids, TDS 2540 C	1011356	Solids, TDS 2540 C	1011375	Solids, TDS 2540 C

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012654-BLK1		Nov-19-10 13:43	KAR	50	1000					BLANK	
1012654-DUP1		Nov-19-10 13:43	KAR	50	1000		1011352-01			DUPLICATE	
1012654-BS1		Nov-19-10 13:43	KAR	50	1000			0110185	50000	LCS	
1011352-01	R	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19018

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012654-BLK1		11/19/10 13:43
LCS	1012654-BS1		11/19/10 13:43
NTC03GW0113	1011352-01		11/19/10 13:43
NTC03GW0113	1012654-DUP1		11/19/10 13:43
NTC03GW0213	1011352-02		11/19/10 13:43
NTC03GW0313	1011356-01		11/19/10 13:43
NTC03GW0413	1011356-02		11/19/10 13:43
NTC03GW0513	1011356-03		11/19/10 13:43
NTC03GW0613	1011356-04		11/19/10 13:43
NTCFD111610-01	1011356-05		11/19/10 13:43

HOLDING TIME SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Carbon, Total Organic

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	NA	11/22/10	7	28	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	NA	11/22/10	7	28	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	NA	11/22/10	6	28	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	28	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	28	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	8	NA	11/23/10	8	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K23070
Calibration: 0H11001
Control Limt: +/- 15.00%
Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K23070-CCV1	Carbon, Total Organic	5.00	5.07	101	mg/L	11/22/10 12:32
0K23070-CCV2	Carbon, Total Organic	5.00	5.03	101	mg/L	11/22/10 14:15
0K23070-CCV3	Carbon, Total Organic	5.00	4.97	99	mg/L	11/22/10 16:11
0K23070-CCV4	Carbon, Total Organic	5.00	4.92	98	mg/L	11/22/10 17:55
0K23070-CCV5	Carbon, Total Organic	5.00	4.82	96	mg/L	11/22/10 19:38

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039
Control Limt: +/- 15.00%

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29039-CCV1	Carbon, Total Organic	50.0	50.2	100	mg/L	11/23/10 13:26
0K29039-CCV2	Carbon, Total Organic	50.0	49.2	98	mg/L	11/23/10 15:22
0K29039-CCV3	Carbon, Total Organic	50.0	49.7	99	mg/L	11/23/10 16:56

* Values outside of QC limits

CRDL STANDARD

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K23070

Calibration: 0H11001

Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K23070-CRL1	Carbon, Total Organic	0.500	0.538	108	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29039

Calibration: 0I01016

Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29039-CRL1	Carbon, Total Organic	1.00	1.13	113	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K23070
Calibration: 0H11001
Instrument ID: 324

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K23070-CCB1	Carbon, Total Organic	0.044	mg/L	0.25	1.0	U	11/22/10 12:45
0K23070-CCB2	Carbon, Total Organic	0.039	mg/L	0.25	1.0	U	11/22/10 14:28
0K23070-CCB3	Carbon, Total Organic	0.052	mg/L	0.25	1.0	U	11/22/10 16:24
0K23070-CCB4	Carbon, Total Organic	0.073	mg/L	0.25	1.0	U	11/22/10 18:08
0K23070-CCB5	Carbon, Total Organic	0.037	mg/L	0.25	1.0	U	11/22/10 19:51

* Values outside of QC limits

BLANKS
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument ID: 324

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29039-CCB1	Carbon, Total Organic	0.0	mg/L	0.25	1.0	U	11/23/10 13:39
0K29039-CCB2	Carbon, Total Organic	0.033	mg/L	0.25	1.0	U	11/23/10 15:35
0K29039-CCB3	Carbon, Total Organic	0.087	mg/L	0.25	1.0	U	11/23/10 17:09

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012830-BLK1 File ID: 112210-036

Prepared: 11/22/10 12:32 Analyzed: 11/22/10 13:37

Preparation: General Inorganic Prep Initial/Final: 40 mL / 40 mL

QC Batch: 1012830 Sequence: 0K23070 Calibration: 0H11001 Instrument: 324

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-44-0	Carbon, Total Organic	1.0	mg/L	0.25	1.0	U

METHOD BLANK DATA SHEET
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012922-BLK1 File ID: 112310-020

Prepared: 11/23/10 13:26 Analyzed: 11/23/10 14:30

Preparation: General Inorganic Prep Initial/Final: 40 mL / 40 mL

QC Batch: 1012922 Sequence: 0K29039 Calibration: 0I01016 Instrument: 324

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-44-0	Carbon, Total Organic	1.0	mg/L	0.25	1.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 5310 C 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012830

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012830-MS1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	2.00	0.976	3.11	107	75 - 124	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012830

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012830-MSD1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Carbon, Total Organic	2.00	3.05	104	2	20	75 - 124	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012830-BS1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

QC Batch: 1012830

Sequence: 0K23070

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.13	106	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012830-BSD1
Preparation: General Inorganic Prep
Initial/Final: 25 mL / 25 mL
Sequence: 0K23070

QC Batch: 1012830

Analyte	Spike Added mg/L	LCSD Conc.	LCSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.07	103	3	20	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012922-BS1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

QC Batch: 1012922

Sequence: 0K29039

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	40.0	38.8	97	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012830 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/22/10 12:32	
NTC03GW0213	1011352-02	11/22/10 12:32	
NTC03GW0313	1011356-01	11/22/10 12:32	
NTC03GW0413	1011356-02	11/22/10 12:32	
Blank	1012830-BLK1	11/22/10 12:32	
LCS	1012830-BS1	11/22/10 12:32	
LCS Dup	1012830-BSD1	11/22/10 12:32	
NTC03GW0113	1012830-MS1	11/22/10 12:32	
NTC03GW0113	1012830-MSD1	11/22/10 12:32	

QC BATCH SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012922 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0513	1011356-03	11/23/10 13:26	
NTC03GW0613	1011356-04	11/23/10 13:26	
NTCFD111610-01	1011356-05	11/23/10 13:26	
Blank	1012922-BLK1	11/23/10 13:26	
LCS	1012922-BS1	11/23/10 13:26	

TriMatrix Laboratories, Inc.

NLB 11-27-10

PREPARATION BATCH 1012830

Printed: 11/23/2010 4:27:05PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

due 12-1

LVY

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	TOC 5310 C	1011356	TOC 5310 C	1011375	TOC 5310 C

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012830-BLK1		Nov-22-10 12:32	GEH	40	40					BLANK	
1012830-BS1		Nov-22-10 12:32	GEH	25	25			0080358	50	LCS	
1012830-BSD1		Nov-22-10 12:32	GEH	25	25			0080358	50	LCS DUP	
1012830-MS1		Nov-22-10 12:32	GEH	25	25		1011352-01	0080358	50	MATRIX SPIKE	
1012830-MSD1		Nov-22-10 12:32	GEH	25	25		1011352-01	0080358	50	MATRIX SPIKE DUP	
1011352-01	AA	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011352-02	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-01	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-02	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-01	J	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-04	J	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	

Comments:
All pH <2

Analyst Initials:

bch_TriMatrix.rpt

13915

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument: 324

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29039-CCV1	112310-026	11/23/10 13:26
Calibration Blank	0K29039-CCB1	112310-022	11/23/10 13:39
Secondary Cal Check	0K29039-SCV1	112310-039	11/23/10 13:52
Instrument RL Check	0K29039-CRL1	112310-033	11/23/10 14:04
Blank	1012922-BLK1	112310-020	11/23/10 14:30
LCS	1012922-BS1	112310-021	11/23/10 14:36
NTC03GW0513	1011356-03	112310-001	11/23/10 14:44
NTC03GW0613	1011356-04	112310-002	11/23/10 14:52
NTCFD111610-01	1011356-05	112310-003	11/23/10 14:59
Calibration Check	0K29039-CCV2	112310-027	11/23/10 15:22
Calibration Blank	0K29039-CCB2	112310-023	11/23/10 15:35
Calibration Check	0K29039-CCV3	112310-028	11/23/10 16:56
Calibration Blank	0K29039-CCB3	112310-024	11/23/10 17:09

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23070

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0H11001
Instrument: 324

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K23070-CCV1	112210-047	11/22/10 12:32
Calibration Blank	0K23070-CCB1	112210-041	11/22/10 12:45
Secondary Cal Check	0K23070-SCV1	112210-063	11/22/10 12:58
Instrument RL Check	0K23070-CRL1	112210-057	11/22/10 13:11
Blank	1012830-BLK1	112210-036	11/22/10 13:37
LCS	1012830-BS1	112210-038	11/22/10 13:44
LCS Dup	1012830-BSD1	112210-040	11/22/10 13:51
Calibration Check	0K23070-CCV2	112210-048	11/22/10 14:15
Calibration Blank	0K23070-CCB2	112210-042	11/22/10 14:28
NTC03GW0113	1011352-01	112210-001	11/22/10 14:41
NTC03GW0113	1012830-MS1	112210-002	11/22/10 14:48
NTC03GW0113	1012830-MSD1	112210-003	11/22/10 14:56
NTC03GW0213	1011352-02	112210-004	11/22/10 15:04
NTC03GW0313	1011356-01	112210-005	11/22/10 15:11
NTC03GW0413	1011356-02	112210-006	11/22/10 15:19
Calibration Check	0K23070-CCV3	112210-049	11/22/10 16:11
Calibration Blank	0K23070-CCB3	112210-043	11/22/10 16:24
Calibration Check	0K23070-CCV4	112210-050	11/22/10 17:55
Calibration Blank	0K23070-CCB4	112210-044	11/22/10 18:08
Calibration Check	0K23070-CCV5	112210-051	11/22/10 19:38
Calibration Blank	0K23070-CCB5	112210-045	11/22/10 19:51

Spl #:	18	Sample ID :	1011352-01	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	17	Method :	061010low - Aug 10, 2010; 06	Dilution	1 : 1	Customer ID:	00000000		

Sample NTC036W0113 TOC rep. result 0.98mg/L

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:41 pm	-	-	-	17,860	4.879	0.976
Avg.		-	-	-	17,860	4.879	0.976
Std.Dev.					0		
% RSD.					0.00		

Spl #:	19	Sample ID :	1011352-01 spk1	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	18	Method :	061010low - Aug 10, 2010; 06	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:48 pm	-	-	-	55,859	15.550	3.110
Avg.		-	-	-	55,859	15.550	3.110
Std.Dev.					0		
% RSD.					0.00		

Spl #:	20	Sample ID :	1011352-01 spk2	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	19	Method :	061010low - Aug 10, 2010; 06	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:56 pm	-	-	-	54,761	15.242	3.048
Avg.		-	-	-	54,761	15.242	3.048
Std.Dev.					0		
% RSD.					0.00		

Spl #:	21	Sample ID :	1011352-02	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	20	Method :	061010low - Aug 10, 2010; 06	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:04 pm	-	-	-	31,460	8.698	1.740
Avg.		-	-	-	31,460	8.698	1.740
Std.Dev.					0		
% RSD.					0.00		

HOLDING TIME SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Phosphorus, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	NA	11/23/10	8	28	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	NA	11/23/10	8	28	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	NA	11/23/10	7	28	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	NA	11/23/10	7	28	
NTC03GW0513	11/16/10	11/17/10		11/22/10	6	NA	11/23/10	7	28	
NTC03GW0613	11/16/10	11/17/10		11/22/10	6	NA	11/23/10	7	28	
NTCFD111610-01	11/16/10	11/17/10		11/22/10	6	NA	11/23/10	7	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K24019
Control Limt: +/- 10.00%

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K24004
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K24019-CCV1	Phosphorus, Total	0.500	0.504	101	mg/L	11/23/10 07:52
0K24019-CCV2	Phosphorus, Total	0.500	0.502	100	mg/L	11/23/10 09:37
0K24019-CCV3	Phosphorus, Total	0.500	0.506	101	mg/L	11/23/10 09:40
0K24019-CCV4	Phosphorus, Total	0.500	0.504	101	mg/L	11/23/10 09:41

* Values outside of QC limits

CRDL STANDARD

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K24019

Calibration: 0K24004

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K24019-CRL1	Phosphorus, Total	0.0100	0.0123	123	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K24019
Calibration: 0K24004
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K24019-CCB1	Phosphorus, Total	0.000556	mg/L	0.00170	0.0100	U	11/23/10 07:52
0K24019-CCB2	Phosphorus, Total	-0.00174	mg/L	0.00170	0.0100	J	11/23/10 09:37
0K24019-CCB3	Phosphorus, Total	-0.00182	mg/L	0.00170	0.0100	J	11/23/10 09:40
0K24019-CCB4	Phosphorus, Total	-0.00220	mg/L	0.00170	0.0100	J	11/23/10 09:41

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012732-BLK1 File ID: 112310TPO4M-010

Prepared: 11/22/10 06:55 Analyzed: 11/23/10 07:52

Preparation: Method-Specific Preparat Initial/Final: 25 mL / 50 mL

QC Batch: 1012732 Sequence: 0K24019 Calibration: 0K24004 Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7723-14-0	Phosphorus, Total	0.0100	mg/L	0.00170	0.0100	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-P E 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012732

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012732-MS1

Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.0132	0.774	95	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC03GW0113

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012732

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012732-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 50 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.790	97	2	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012732-BS1
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

QC Batch: 1012732
Sequence: 0K24019

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.814	102	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

QC Batch: 1012732 QC Batch Matrix: Water Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/22/10 06:55	
NTC03GW0213	1011352-02	11/22/10 06:55	
NTC03GW0313	1011356-01	11/22/10 06:55	
NTC03GW0413	1011356-02	11/22/10 06:55	
NTC03GW0513	1011356-03	11/22/10 06:55	
NTC03GW0613	1011356-04	11/22/10 06:55	
NTCFD111610-01	1011356-05	11/22/10 06:55	
Blank	1012732-BLK1	11/22/10 06:55	
LCS	1012732-BS1	11/22/10 06:55	
NTC03GW0113	1012732-MS1	11/22/10 06:55	
NTC03GW0113	1012732-MSD1	11/22/10 06:55	

DUE 12/1/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012732** Page 1 of 1

Printed: 11/22/2010 6:57:17AM

LV4

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Phosphorus, Total 4500-P E	1011356	Phosphorus, Total 4500-P E	1011375	Phosphorus, Total 4500-P E

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012732-BLK1		Nov-22-10 06:55	CLD	25	50					BLANK	
1012732-BS1		Nov-22-10 06:55	CLD	25	50			0110894	200	LCS	
1012732-MS1		Nov-22-10 06:55	CLD	25	50		1011352-01	0110894	200	MATRIX SPIKE	
1012732-MSD1		Nov-22-10 06:55	CLD	25	50		1011352-01	0110894	200	MATRIX SPIKE DUP	
1011352-01	T	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-03	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-05	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

bch_TriMatrix.rpt

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K24019

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K24004
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K24019-CAL1	112310TPO4M-006	11/23/10 07:23
Cal Standard	0K24019-CAL2	112310TPO4M-002	11/23/10 07:23
Cal Standard	0K24019-CAL3	112310TPO4M-003	11/23/10 07:23
Cal Standard	0K24019-CAL4	112310TPO4M-004	11/23/10 07:23
Cal Standard	0K24019-CAL5	112310TPO4M-005	11/23/10 07:23
Cal Standard	0K24019-CAL6	112310TPO4M-001	11/23/10 07:23
Calibration Check	0K24019-CCV1	112310TPO4M-007	11/23/10 07:52
Calibration Blank	0K24019-CCB1	112310TPO4M-008	11/23/10 07:52
Blank	1012732-BLK1	112310TPO4M-010	11/23/10 07:52
LCS	1012732-BS1	112310TPO4M-013	11/23/10 07:52
Secondary Cal Check	0K24019-SCV1	112310TPO4M-016	11/23/10 07:52
Instrument RL Check	0K24019-CRL1	112310TPO4M-017	11/23/10 07:52
Calibration Check	0K24019-CCV2	112310TPO4M-070	11/23/10 09:37
Calibration Blank	0K24019-CCB2	112310TPO4M-071	11/23/10 09:37
NTC03GW0113	1011352-01	112310TPO4M-075	11/23/10 09:37
NTC03GW0113	1012732-MS1	112310TPO4M-076	11/23/10 09:37
NTC03GW0113	1012732-MSD1	112310TPO4M-077	11/23/10 09:37
NTC03GW0213	1011352-02	112310TPO4M-078	11/23/10 09:37
NTC03GW0513	1011356-03	112310TPO4M-079	11/23/10 09:37
NTC03GW0613	1011356-04	112310TPO4M-080	11/23/10 09:37
NTCFD111610-01	1011356-05	112310TPO4M-081	11/23/10 09:37
Calibration Check	0K24019-CCV3	112310TPO4M-082	11/23/10 09:40
Calibration Blank	0K24019-CCB3	112310TPO4M-083	11/23/10 09:40
NTC03GW0313	1011356-01	112310TPO4M-089	11/23/10 09:40
NTC03GW0413	1011356-02	112310TPO4M-090	11/23/10 09:40
Calibration Check	0K24019-CCV4	112310TPO4M-091	11/23/10 09:41
Calibration Blank	0K24019-CCB4	112310TPO4M-092	11/23/10 09:41

HOLDING TIME SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Residue, Suspended

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/19/10	4	NA	11/19/10	4	7	
NTC03GW0213	11/15/10	11/16/10		11/19/10	4	NA	11/19/10	4	7	
NTC03GW0313	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0413	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0513	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTC03GW0613	11/16/10	11/17/10		11/19/10	3	NA	11/19/10	3	7	
NTCFD111610-01	11/16/10	11/17/10		11/19/10	4	NA	11/19/10	4	7	

METHOD BLANK DATA SHEET
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012644-BLK1
File ID:
Prepared: 11/19/10 13:43
Analyzed: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL
QC Batch: 1012644
Sequence: 0K19007
Calibration: UNASSIGNE
Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Suspended	3.3	mg/L	3.3	3.3	U

DUPLICATES
SM 2540 D 20th

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Lab Source ID: 1011352-01
% Solids:
QC Batch: 1012644

SDG: 1011352
Project: Naval Station Great Lakes
Laboratory ID: 1012644-DUP1
Source Sample Name: NTC03GW0113
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
Residue, Suspended	20	6.8		4.4		43 QC	*	SM 2540 D 20th	mg/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011352

Project: Naval Station Great Lakes

Laboratory ID: 1012644-BS1

Preparation: General Inorganic Prep

Initial/Final: 100 mL / 1000 mL

QC Batch: 1012644

Sequence: 0K19007

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Suspended	200	193	96	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
QC Batch: 1012644
QC Batch Matrix: Water
Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/19/10 13:43	
NTC03GW0213	1011352-02	11/19/10 13:43	
NTC03GW0313	1011356-01	11/19/10 13:43	
NTC03GW0413	1011356-02	11/19/10 13:43	
NTC03GW0513	1011356-03	11/19/10 13:43	
NTC03GW0613	1011356-04	11/19/10 13:43	
NTCFD111610-01	1011356-05	11/19/10 13:43	
Blank	1012644-BLK1	11/19/10 13:43	
LCS	1012644-BS1	11/19/10 13:43	
NTC03GW0113	1012644-DUP1	11/19/10 13:43	

Due 12·1·10

TriMatrix Laboratories, Inc.

MLB 12-1-10

PREPARATION BATCH **1012644** Page 1 of 1

Printed: 11/29/2010 7:28:47AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Level 4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Solids, TSS 2540 D	1011356	Solids, TSS 2540 D	1011375	Solids, TSS 2540 D

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012644-BLK1		Nov-19-10 13:43	KAR	750	1000					BLANK	
1012644-DUP1		Nov-19-10 13:43	KAR	750	1000		1011352-01			DUPLICATE	
1012644-BS1		Nov-19-10 13:43	KAR	100	1000			0110185	100000	LCS	
1011352-01	R	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-19-10 13:43	KAR	550	1000					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-19-10 13:43	KAR	500	1000					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-19-10 13:43	KAR	500	1000					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19007

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012644-BLK1		11/19/10 13:43
LCS	1012644-BS1		11/19/10 13:43
NTC03GW0113	1011352-01		11/19/10 13:43
NTC03GW0113	1012644-DUP1		11/19/10 13:43
NTC03GW0213	1011352-02		11/19/10 13:43
NTC03GW0313	1011356-01		11/19/10 13:43
NTC03GW0413	1011356-02		11/19/10 13:43
NTC03GW0513	1011356-03		11/19/10 13:43
NTC03GW0613	1011356-04		11/19/10 13:43
NTCFD111610-01	1011356-05		11/19/10 13:43

Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO: T. EVANS

DATE: JANUARY 18, 2011

FROM: TERRI L. SOLOMON

COPIES: DV FILE

SUBJECT: INORGANIC DATA VALIDATION – NITRATE, NITRITE, NITRATE / NITRITE, HEXAVALENT CHROMIUM, BIOCHEMICAL OXYGEN DEMAND
NTC GREAT LAKES CTO F273
SAMPLE DELIVERY GROUP (SDG) – 500-29331

SAMPLES: 14/Aqueous/

NTC02GW0113	NTC02GW0213	NTC02GW0313
NTC02GW0413	NTC02GW0513	NTC02GW0613
NTC03GW0113	NTC03GW0213	NTC03GW0313
NTC03GW0413	NTC03GW0513	NTC03GW0613
NTCFD111610-01	NTCFD111710-01	

Overview

The sample set for NTC Great Lakes CTO F273, SDG 500-29331, consists of fourteen (14) aqueous environmental samples. Two (2) field duplicate pairs (NTC03GW0513 / NTCFD111610-01 and NTC02GW0413 / NTCFD111710-01) were included within this SDG.

All samples were analyzed for nitrate, nitrite, nitrate / nitrite, hexavalent chromium and biological oxygen demand. The samples were collected by Tetra Tech on November 15, 16, 17 and 18, 2010 and analyzed by Test America. Nitrate / Nitrite analyses were conducted using EPA method 353.2. Nitrite analyses were conducted using EPA method 354.1. Nitrate results were determined by calculation. Hexavalent chromium analyses were conducted using Standard Method 3500 CR B. Biological oxygen demand analyses were conducted using Standard method 5210B.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
• Initial and Continuing Calibrations
• Laboratory Method / Preparation Blanks
* • Laboratory Control Sample Results
• Matrix Spike / Matrix Spike Duplicate Results
* • Laboratory Duplicate Results
* • Field Duplicate Results
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains the documentation to support the findings as discussed in this validation report.

Laboratory Method / Preparation Blanks

The following contaminants were detected in the laboratory method blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Nitrate/nitrite[1]	0.0357 mg/L	0.1785 mg/L
Nitrate/nitrite[2]	0.0187 mg/L	0.0935 mg/L
Hexavalent chromium[3]	0.00370 mg/L	0.0185 mg/L
Hexavalent chromium[4]	0.00680 mg/L	0.034 mg/L

(1) Maximum concentration present in a method blank affecting all samples except NTC03GW0413.
(2) Maximum concentration present in a method blank affecting sample NTC03GW0413.
(3) Maximum concentration present in a method blank affecting samples NTC03GW0313, NTC03GW0613, NTC02GW0413, NTC02GW0613 and NTCFD111710-01.
(4) Maximum concentration present in a method blank affecting samples NTC02GW0213, NTC02GW0313, NTC02GW0113 and NTC02GW0513.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results below the action level for nitrate/nitrite and hexavalent chromium were qualified as nondetected, "U".

Nitrate results were determined by subtracting the nitrate/nitrite result from the nitrite result. The positive results less than the action level reported for nitrate in the affected samples were qualified, "U", as a result of nitrate/nitrite blank contamination.

Matrix Spike Results

The matrix spike duplicate percent recovery for hexavalent chromium was < 75% quality control limit affecting samples NTC03GW0313, NTC03GW0613, NTC02GW0413, NTC02GW0613 and NTCFD111710-01. The nondetected results reported for hexavalent chromium, not previously qualified as nondetected due to blank contamination, were qualified as estimated, "UJ".

Notes

Positive results reported above the detection limit but below the limit of quantitation were qualified as estimated, "J".

The continuing calibration percent recovery for nitrate / nitrite was > 110% quality control limit affecting all samples except NTC03GW0413. No validation actions were warranted as all positive sample results were qualified as a result of blank contamination.

Samples NTC03gw0113, NTC03GW0213 and NTC03GW0413 had hexavalent chromium detections greater than the total chromium results. No action was taken on this basis but is noted for comparison of results only.

Executive Summary

Laboratory Performance: Several contaminants were present in the laboratory method blanks.

Other Factors Affecting Data Quality: The matrix spike duplicate percent recovery for hexavalent chromium was < 75% quality control limit affecting samples NTC03GW0313, NTC03GW0613, NTC02GW0413, NTC02GW0613 and NTCFD111710-01. Positive results reported above the detection limit but below the limit of quantitation were qualified as estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004, and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (Jan 2006).

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

Terri L Solomon

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Edward Lidlmyer /Ufer

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O - Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 500-29331	LAB_ID	500-29331-13			500-29331-11			500-29331-12			500-29331-8		
FRACTION: MISC	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/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
BIOCHEMICAL OXYGEN DEMAND		2	U		2	U		2	U		18		
HEXAVALENT CHROMIUM		0.005	U		0.0043	U	A	0.005	U		0.0061	U	A
NITRATE-N		0.058	U	A	0.05	U		0.05	U		0.05	U	
NITRITE/NITRATE-N		0.058	U	A	0.05	U		0.05	U		0.05	U	
NITRITE-N		0.01	U		0.01	U		0.01	U		0.0033	J	P

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTC03GW0113			NTC03GW0213		
SDG: 500-29331	LAB_ID	500-29331-14			500-29331-9			500-29331-1			500-29331-2		
FRACTION: MISC	SAMP_DATE	11/18/2010			11/17/2010			11/15/2010			11/15/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/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
BIOCHEMICAL OXYGEN DEMAND		2	U		2	U		6.1			2	U	
HEXAVALENT CHROMIUM		0.005	U		0.005	U	A	0.0041	J	P	0.0046	J	P
NITRATE-N		0.05	U	A	0.05	U		0.05	U		0.05	U	
NITRITE/NITRATE-N		0.053	U	A	0.05	U		0.05	U		0.05	U	
NITRITE-N		0.0035	J	P	0.0043	J	P	0.0032	J	P	0.0022	J	P

PROJ_NO: 01620	NSAMPLE	NTC03GW0313			NTC03GW0413			NTC03GW0513			NTC03GW0613		
SDG: 500-29331	LAB_ID	500-29331-6			500-29331-3			500-29331-4			500-29331-7		
FRACTION: MISC	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/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
BIOCHEMICAL OXYGEN DEMAND		17			2	U		2.4			2	U	
HEXAVALENT CHROMIUM		0.005	UJ	D	0.0026	J	P	0.0026	J	P	0.002	U	A
NITRATE-N		0.05	U		0.13			0.05	U		0.05	U	
NITRITE/NITRATE-N		0.05	U		0.14			0.05	U		0.05	U	
NITRITE-N		0.0028	J	P	0.0078	J	P	0.0032	J	P	0.0051	J	P

PROJ_NO: 01620	NSAMPLE	NTCFD111610-01			NTCFD111710-01		
SDG: 500-29331	LAB_ID	500-29331-5			500-29331-10		
FRACTION: MISC	SAMP_DATE	11/16/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF	NTC03GW0513			NTC02GW0413		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BIOCHEMICAL OXYGEN DEMAND		2	U		18		
HEXAVALENT CHROMIUM		0.0023	J	P	0.0083	U	A
NITRATE-N		0.05	U		0.05	U	
NITRITE/NITRATE-N		0.05	U		0.05	U	
NITRITE-N		0.01	U		0.0054	J	P

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0113

Lab Sample ID: 500-29331-13

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/18/2010 09:00

Reporting Basis: WET

Date Received: 11/18/2010 13:00

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.058	0.10	0.013	mg/L	J	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.010	0.020	0.0020	mg/L	U		1	354.1
18540-29-9	Chromium, hexavalent	0.0050	0.010	0.0014	mg/L	U		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.058	0.10	0.013	mg/L	J		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0213

Lab Sample ID: 500-29331-11

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/17/2010 16:00

Reporting Basis: WET

Date Received: 11/18/2010 13:00

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.010	0.020	0.0020	mg/L	U		1	354.1
18540-29-9	Chromium, hexavalent	0.0043	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0313

Lab Sample ID: 500-29331-12

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/17/2010 15:45

Reporting Basis: WET

Date Received: 11/18/2010 13:00

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.010	0.020	0.0020	mg/L	U		1	354.1
18540-29-9	Chromium, hexavalent	0.0050	0.010	0.0014	mg/L	U		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0413

Lab Sample ID: 500-29331-8

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/17/2010 09:05

Reporting Basis: WET

Date Received: 11/17/2010 13:25

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0033	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0061	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	18	2.0	2.0	mg/L			1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0513

Lab Sample ID: 500-29331-14

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/18/2010 09:10

Reporting Basis: WET

Date Received: 11/18/2010 13:00

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.053	0.10	0.013	mg/L	J	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0035	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0050	0.010	0.0014	mg/L	U		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	J		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC02GW0613

Lab Sample ID: 500-29331-9

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/17/2010 09:10

Reporting Basis: WET

Date Received: 11/17/2010 13:25

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0043	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0050	0.010	0.0014	mg/L	U		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0113

Lab Sample ID: 500-29331-1

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/15/2010 16:00

Reporting Basis: WET

Date Received: 11/16/2010 13:20

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q J	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0032	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0041	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	6.1	2.0	2.0	mg/L			1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0213

Lab Sample ID: 500-29331-2

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/15/2010 16:00

Reporting Basis: WET

Date Received: 11/16/2010 13:20

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0022	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0046	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0313

Lab Sample ID: 500-29331-6

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/16/2010 15:50

Reporting Basis: WET

Date Received: 11/17/2010 13:25

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0028	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0050	0.010	0.0014	mg/L	U	J	1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	17	2.0	2.0	mg/L			1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0413

Lab Sample ID: 500-29331-3

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/16/2010 09:00

Reporting Basis: WET

Date Received: 11/16/2010 13:20

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.14	0.10	0.013	mg/L			1	353.2
14797-65-0	Nitrogen, Nitrite	0.0078	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0026	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.13	0.10	0.013	mg/L			1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0513

Lab Sample ID: 500-29331-4

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/16/2010 09:30

Reporting Basis: WET

Date Received: 11/16/2010 13:20

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0032	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0026	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.4	2.0	2.0	mg/L			1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTC03GW0613

Lab Sample ID: 500-29331-7

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/16/2010 16:20

Reporting Basis: WET

Date Received: 11/17/2010 13:25

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0051	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0020	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTCFD111610-01

Lab Sample ID: 500-29331-5

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/16/2010 00:00

Reporting Basis: WET

Date Received: 11/16/2010 13:20

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.010	0.020	0.0020	mg/L	U		1	354.1
18540-29-9	Chromium, hexavalent	0.0023	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	2.0	2.0	2.0	mg/L	U		1	SM 5210B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NTCFD111710-01

Lab Sample ID: 500-29331-10

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG ID.:

Matrix: Water

Date Sampled: 11/17/2010 00:00

Reporting Basis: WET

Date Received: 11/17/2010 13:25

CAS No.	Analyte	Result	LOQ	DL	Units	C	Q	DIL	Method
	Nitrogen, Nitrate Nitrite	0.050	0.10	0.013	mg/L	U	Q	1	353.2
14797-65-0	Nitrogen, Nitrite	0.0054	0.020	0.0020	mg/L	J		1	354.1
18540-29-9	Chromium, hexavalent	0.0083	0.010	0.0014	mg/L	J		1	SM 3500 CR B
14797-55-8	Nitrogen, Nitrate	0.050	0.10	0.013	mg/L	U		1	Nitrate by calc
	Biochemical Oxygen Demand	18	2.0	2.0	mg/L			1	SM 5210B

APPENDIX C
SUPPORT DOCUMENTATION

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

General Chemistry
Method(s) SM 3500 CR B: The Cr+6 matrix spike duplicate (MSD) on the following sample in batch 100262 was biased low at 74%recovery: (500-29331-6 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria, as did the MS, although it was also biased low, at 75% recovery. The RPD between the MS and MSD was in control.

Method(s) 353.2, SM 4500 NO3 F: Two of the nitrate continuing calibration verification standards (CCVs) in batch 100764 recovered above the upper control limit. The samples associated with these CCVs were less than the RL for the affected analytes; therefore, the data have been reported.

No other analytical or quality issues were noted.

SAMPLE SUMMARY

Client: Tetra Tech NUS Inc

Job Number: 500-29331-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
500-29331-1	NTC03GW0113	Water	11/15/2010 1600	11/16/2010 1320
500-29331-1MS	NTC03GW0113	Water	11/15/2010 1600	11/16/2010 1320
500-29331-1MSD	NTC03GW0113	Water	11/15/2010 1600	11/16/2010 1320
500-29331-2	NTC03GW0213	Water	11/15/2010 1600	11/16/2010 1320
500-29331-3	NTC03GW0413	Water	11/16/2010 0900	11/16/2010 1320
500-29331-4	NTC03GW0513	Water	11/16/2010 0930	11/16/2010 1320
500-29331-5	NTCFD111610-01	Water	11/16/2010 0000	11/16/2010 1320
500-29331-6	NTC03GW0313	Water	11/16/2010 1550	11/17/2010 1325
500-29331-7	NTC03GW0613	Water	11/16/2010 1620	11/17/2010 1325
500-29331-8	NTC02GW0413	Water	11/17/2010 0905	11/17/2010 1325
500-29331-9	NTC02GW0613	Water	11/17/2010 0910	11/17/2010 1325
500-29331-10	NTCFD111710-01	Water	11/17/2010 0000	11/17/2010 1325
500-29331-11	NTC02GW0213	Water	11/17/2010 1600	11/18/2010 1300
500-29331-12	NTC02GW0313	Water	11/17/2010 1545	11/18/2010 1300
500-29331-13	NTC02GW0113	Water	11/18/2010 0900	11/18/2010 1300
500-29331-14	NTC02GW0513	Water	11/18/2010 0910	11/18/2010 1300

METHOD SUMMARY

Client: Tetra Tech NUS Inc

Job Number: 500-29331-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Nitrate-Nitrite	TAL CHI	EPA 353.2	
Nitrogen, Nitrite	TAL CHI	MCAWW 354.1	
Nitrogen, Nitrate-Nitrite	TAL CHI	SM Nitrate by calc	
Chromium, Hexavalent	TAL CHI	SM SM 3500 CR B	
BOD, 5-Day	TAL CHI	SM SM 5210B	

Lab References:

TAL CHI = TestAmerica Chicago

Method References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-2

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
1	11/15/2010	NTC03GW0113	16:00	**EPA 353.2**	SL-01	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	Run MS/MSD
	11/15/2010	NTC03GW0113	16:00	**SM 3500 CR B**	SL-01	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	Run MS/MSD
	11/15/2010	NTC03GW0113	16:00	**SM 5210B / 354.1**	SL-01	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	Run MS/MSD
2	11/15/2010	NTC03GW0213	16:00	**SM 5210B / 354.1**	SL-02	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/15/2010	NTC03GW0213	16:00	**SM 3500 CR B**	SL-02	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/15/2010	NTC03GW0213	16:00	**EPA 353.2**	SL-02	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
3	11/16/2010	NTC03GW0413	09:00	**SM 3500 CR B**	SL-04	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0413	09:00	**EPA 353.2**	SL-04	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0413	09:00	**SM 5210B / 354.1**	SL-04	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
4	11/16/2010	NTC03GW0513	09:30	**SM 5210B / 354.1**	SL-05	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0513	09:30	**EPA 353.2**	SL-05	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0513	09:30	**SM 3500 CR B**	SL-05	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
5	11/16/2010	NTCFD111610-01	00:00	**SM 3500 CR B**	QC	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/16/2010	NTCFD111610-01	00:00	**EPA 353.2**	QC	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTCFD111610-01	00:00	**SM 5210B / 354.1**	QC	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	

1. Relinquished By: **Keith Simpson**	Date: 11/16/2010	Time: 12:10	Received By: **Lab Pick-Up**	Date: 11/16/2010	Time: 12:10
2. Relinquished By:	Date:	Time:	Received By:	Date: T/A 11/16/10	Time: 12:00
3. Relinquished By:	Date: T/A 11/16/10	Time: 1320	Received By:	Date: 11/16/10	Time: 1320

Comments:

12/08/2010

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-4

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
6	11/16/2010	NTC03GW0313	15:50	**EPA 353.2**	SL-03	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0313	15:50	**SM 5210B / 354.1**	SL-03	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0313	15:50	**SM 3500 CR B**	SL-03	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
7	11/16/2010	NTC03GW0613	16:20	**EPA 353.2**	SL-06	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0613	16:20	**SM 5210B / 354.1**	SL-06	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0613	16:20	**SM 3500 CR B**	SL-06	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
8	11/17/2010	NTC02GW0413	09:05	**SM 5210B / 354.1**	FL-04	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTC02GW0413	09:05	**EPA 353.2**	FL-04	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0413	09:05	**SM 3500 CR B**	FL-04	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
9	11/17/2010	NTC02GW0613	09:10	**EPA 353.2**	FL-06	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0613	09:10	**SM 3500 CR B**	FL-06	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0613	09:10	**SM 5210B / 354.1**	FL-06	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
10	11/17/2010	NTCFD111710-01	00:00	**SM 5210B / 354.1**	QC	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTCFD111710-01	00:00	**EPA 353.2**	QC	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTCFD111710-01	00:00	**SM 3500 CR B**	QC	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	

	Date:	Time:	Received By:	Date:	Time:
1. Relinquished By: **Keith Simpson**	11/17/2010	11:53	**Lab Pick-Up**	11/17/2010	11:53
2. Relinquished By:			Received By:	Date: 11/17/10	Time: 1325
3. Relinquished By:			Received By:		

Comments:

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-6

500-29331

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Lab Pick-Up**	**Test America** **2417 Bond Street** **University Park, IL 60466**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**na**	**Marilyn Krueding** **708-534-5200**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11	11/17/2010	NTC02GW0213	16:00	**EPA 353.2**	FL-02	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTC02GW0213	16:00	**SM 3500 CR B**	FL-02	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0213	16:00	**SM 5210B / 354.1**	FL-02	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
12	11/17/2010	NTC02GW0313	15:45	**SM 3500 CR B**	FL-03	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/17/2010	NTC02GW0313	15:45	**SM 5210B / 354.1**	FL-03	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
	11/17/2010	NTC02GW0313	15:45	**EPA 353.2**	FL-03	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
13	11/18/2010	NTC02GW0113	09:00	**SM 3500 CR B**	FL-01	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/18/2010	NTC02GW0113	09:00	**EPA 353.2**	FL-01	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/18/2010	NTC02GW0113	09:00	**SM 5210B / 354.1**	FL-01	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	
14	11/18/2010	NTC02GW0513	09:10	**EPA 353.2**	FL-05	GW	Nitrate-Nitrite	4°C/H2SO4	1	Plastic - PE	500ml	
	11/18/2010	NTC02GW0513	09:10	**SM 3500 CR B**	FL-05	GW	Hexavalent Chromium	4°C	1	Plastic - PE	250ml	
	11/18/2010	NTC02GW0513	09:10	**SM 5210B / 354.1**	FL-05	GW	BOD / Nitrite	4°C	1	Plastic - PE	1L	

1. Relinquished By: **Keith Simpson**	Date: 11/18/2010	Time: 11:56	Received By: **Lab Pick-Up**	Date: 11/18/2010	Time: 11:56
2. Relinquished By:	Date: 11/18/10	Time: 1300	Received By:	Date: 11/18/10	Time: 1140
3. Relinquished By:	Date:	Time:	Received By:	Date: 11/18/10	Time: 1300

Comments:

HOLDTIME

SDG 500-29331

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
BOD	MG/L	NTC03GW0413	500-29331-3	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
BOD	MG/L	NTC02GW0113	500-29331-13	NM	11/18/2010	11/19/2010	11/19/2010	1	0	1
BOD	MG/L	NTCFD111710-01	500-29331-10	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
BOD	MG/L	NTCFD111610-01	500-29331-5	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
BOD	MG/L	NTC03GW0513	500-29331-4	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
BOD	MG/L	NTC03GW0313	500-29331-6	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
BOD	MG/L	NTC03GW0213	500-29331-2	NM	11/15/2010	11/17/2010	11/17/2010	2	0	2
BOD	MG/L	NTC03GW0113	500-29331-1	NM	11/15/2010	11/17/2010	11/17/2010	2	0	2
BOD	MG/L	NTC02GW0613	500-29331-9	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
BOD	MG/L	NTC02GW0513	500-29331-14	NM	11/18/2010	11/19/2010	11/19/2010	1	0	1
BOD	MG/L	NTC02GW0413	500-29331-8	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
BOD	MG/L	NTC02GW0313	500-29331-12	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1
BOD	MG/L	NTC02GW0213	500-29331-11	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1
BOD	MG/L	NTC03GW0613	500-29331-7	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
CR6	MG/L	NTC02GW0313	500-29331-12	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	MG/L	NTC03GW0313	500-29331-6	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
CR6	MG/L	NTCFD111710-01	500-29331-10	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
CR6	MG/L	NTCFD111610-01	500-29331-5	NM	11/16/2010	11/16/2010	11/16/2010	0	0	0
CR6	MG/L	NTC03GW0613	500-29331-7	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
CR6	MG/L	NTC03GW0513	500-29331-4	NM	11/16/2010	11/16/2010	11/16/2010	0	0	0
CR6	MG/L	NTC03GW0413	500-29331-3	NM	11/16/2010	11/16/2010	11/16/2010	0	0	0
CR6	MG/L	NTC03GW0213	500-29331-2	NM	11/15/2010	11/16/2010	11/16/2010	1	0	1
CR6	MG/L	NTC03GW0113	500-29331-1	NM	11/15/2010	11/16/2010	11/16/2010	1	0	1
CR6	MG/L	NTC02GW0613	500-29331-9	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
CR6	MG/L	NTC02GW0413	500-29331-8	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
CR6	MG/L	NTC02GW0213	500-29331-11	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1
CR6	MG/L	NTC02GW0113	500-29331-13	NM	11/18/2010	11/18/2010	11/18/2010	0	0	0
CR6	MG/L	NTC02GW0513	500-29331-14	NM	11/18/2010	11/18/2010	11/18/2010	0	0	0
NTA	MG/L	NTC03GW0113	500-29331-1	NM	11/15/2010	11/24/2010	11/24/2010	9	0	9
NTA	MG/L	NTC03GW0213	500-29331-2	NM	11/15/2010	11/24/2010	11/24/2010	9	0	9
NTA	MG/L	NTC02GW0113	500-29331-13	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
NTA	MG/L	NTC02GW0213	500-29331-11	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTA	MG/L	NTC02GW0313	500-29331-12	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NTA	MG/L	NTC02GW0413	500-29331-8	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTA	MG/L	NTC02GW0513	500-29331-14	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
NTA	MG/L	NTC03GW0313	500-29331-6	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTA	MG/L	NTC03GW0413	500-29331-3	NM	11/16/2010	12/01/2010	12/01/2010	15	0	15
NTA	MG/L	NTC03GW0513	500-29331-4	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTA	MG/L	NTC03GW0613	500-29331-7	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTA	MG/L	NTCFD111610-01	500-29331-5	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTA	MG/L	NTCFD111710-01	500-29331-10	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTA	MG/L	NTC02GW0613	500-29331-9	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTI	MG/L	NTC03GW0413	500-29331-3	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
NTI	MG/L	NTCFD111710-01	500-29331-10	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
NTI	MG/L	NTCFD111610-01	500-29331-5	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
NTI	MG/L	NTC03GW0513	500-29331-4	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
NTI	MG/L	NTC03GW0313	500-29331-6	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
NTI	MG/L	NTC03GW0213	500-29331-2	NM	11/15/2010	11/17/2010	11/17/2010	2	0	2
NTI	MG/L	NTC02GW0613	500-29331-9	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0
NTI	MG/L	NTC02GW0513	500-29331-14	NM	11/18/2010	11/18/2010	11/18/2010	0	0	0
NTI	MG/L	NTC02GW0413	500-29331-8	NM	11/17/2010	11/17/2010	11/17/2010	0	0	0

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NTI	MG/L	NTC02GW0313	500-29331-12	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1
NTI	MG/L	NTC02GW0213	500-29331-11	NM	11/17/2010	11/18/2010	11/18/2010	1	0	1
NTI	MG/L	NTC02GW0113	500-29331-13	NM	11/18/2010	11/18/2010	11/18/2010	0	0	0
NTI	MG/L	NTC03GW0113	500-29331-1	NM	11/15/2010	11/17/2010	11/17/2010	2	0	2
NTI	MG/L	NTC03GW0613	500-29331-7	NM	11/16/2010	11/17/2010	11/17/2010	1	0	1
NTIA	MG/L	NTC02GW0313	500-29331-12	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTIA	MG/L	NTCFD111610-01	500-29331-5	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTIA	MG/L	NTC03GW0613	500-29331-7	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTIA	MG/L	NTC03GW0513	500-29331-4	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTIA	MG/L	NTC03GW0413	500-29331-3	NM	11/16/2010	12/01/2010	12/01/2010	15	0	15
NTIA	MG/L	NTC03GW0313	500-29331-6	NM	11/16/2010	11/24/2010	11/24/2010	8	0	8
NTIA	MG/L	NTC03GW0213	500-29331-2	NM	11/15/2010	11/24/2010	11/24/2010	9	0	9
NTIA	MG/L	NTC03GW0113	500-29331-1	NM	11/15/2010	11/24/2010	11/24/2010	9	0	9
NTIA	MG/L	NTC02GW0613	500-29331-9	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTIA	MG/L	NTC02GW0413	500-29331-8	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTIA	MG/L	NTC02GW0213	500-29331-11	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7
NTIA	MG/L	NTC02GW0113	500-29331-13	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
NTIA	MG/L	NTCFD111710-01	500-29331-10	NM	11/17/2010	11/24/2010	11/24/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NTIA	MG/L	NTC02GW0513	500-29331-14	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6

NTC GREAT LAKES
WATER DATA
500-29331

FRACTION	CHEMICAL	NTC02GW0413	UNITS	NTCFD111710-01	RPD	D
MISC	AMMONIA-N	43 D	MG/L	43 D	0.00	0.00
MISC	BIOCHEMICAL OXYGEN DEMAND	18	MG/L	18	0.00	0.00
MISC	CHEMICAL OXYGEN DEMAND	130	MG/L	130	0.00	0.00
MISC	CHLORIDE	440 D	MG/L	440 D	0.00	0.00
MISC	FLUORIDE	0.16	MG/L	0.16	0.00	0.00
MISC	HEXAVALENT CHROMIUM	0.0061 J	MG/L	0.0083 J	30.56	0.00
MISC	NITRITE-N	0.0033 J	MG/L	0.0054 J	48.28	0.00
MISC	PH	7.2	S.U.	7.2	0.00	0.00
MISC	SULFATE	2.4	MG/L	2.5	4.08	0.10
MISC	TOTAL DISSOLVED RESIDUE	1900	MG/L	1900	0.00	0.00
MISC	TOTAL ORGANIC CARBON	41	MG/L	43	4.76	2.00
MISC	TOTAL PHENOLICS	0.0029 J	MG/L	ND	200.00	0.00
MISC	TOTAL PHOSPHORUS	0.23	MG/L	0.29	23.08	0.06
MISC	TOTAL RESIDUE	32 D	MG/L	32 D	0.00	0.00

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NTC GREAT LAKES
WATER DATA
500-29331

FRACTION	CHEMICAL	NTC03GW0513	UNITS	NTCFD111610-01	RPD	D
MISC	AMMONIA-N	14 D	MG/L	14 D	0.00	0.00
MISC	BIOCHEMICAL OXYGEN DEMAND ✓	2.4	MG/L	ND	200.00	2.40
MISC	CHEMICAL OXYGEN DEMAND	35	MG/L	33	5.88	2.00
MISC	CHLORIDE	180 D	MG/L	180 D	0.00	0.00
MISC	FLUORIDE	0.27	MG/L	0.27	0.00	0.00
MISC	HEXAVALENT CHROMIUM ✓	0.0026 J	MG/L	0.0023 J	12.24	0.00
MISC	NITRITE-N ✓	0.0032 J	MG/L	ND	200.00	0.00
MISC	PH	7	S.U.	7	0.00	0.00
MISC	SULFATE	110 D	MG/L	110 D	0.00	0.00
MISC	TOTAL DISSOLVED RESIDUE	1090	MG/L	1130	3.60	40.00
MISC	TOTAL ORGANIC CARBON	13	MG/L	13	0.00	0.00
MISC	TOTAL PHOSPHORUS	0.21	MG/L	0.22	4.65	0.01
MISC	TOTAL RESIDUE	150 D	MG/L	140 D	6.90	10.00

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: PMF Batch Start Date: 11/24/2010

Reporting Units: mg/L Analytical Batch No.: 100764

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	12:18	Nitrogen, Nitrate Nitrite	0.996	1.00	100	90-110		WSTICNO32_00006
2	ICB	12:20	Nitrogen, Nitrate Nitrite	0.050				U	
13	CCV	12:44	Nitrogen, Nitrate Nitrite	0.559	0.500	112	90-110		WSTICNO32_00006
14	CCB	12:46	Nitrogen, Nitrate Nitrite	0.050				U	
25	CCV	13:07	Nitrogen, Nitrate Nitrite	0.546	0.500	109	90-110		WSTICNO32_00006
26	CCB	13:08	Nitrogen, Nitrate Nitrite	0.050				U	
31	CCV	13:12	Nitrogen, Nitrate Nitrite	0.633	0.500	127	90-110		WSTICNO32_00006
32	CCB	13:13	Nitrogen, Nitrate Nitrite	0.0357				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago

Job No.: 500-29331-1

SDG No.:

Analyst: PMF

Batch Start Date: 12/01/2010

Reporting Units: mg/L

Analytical Batch No.: 101032

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
22	ICV	09:09	Nitrogen, Nitrate Nitrite	0.942	1.00	94	90-110		WSTICNO32_00006
23	ICB	09:11	Nitrogen, Nitrate Nitrite	0.0168				J	
34	CCV	09:34	Nitrogen, Nitrate Nitrite	0.482	0.500	96	90-110		WSTICNO32_00006
35	CCB	09:36	Nitrogen, Nitrate Nitrite	0.0187				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: CLM Batch Start Date: 11/17/2010

Reporting Units: mg/L Analytical Batch No.: 100152

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	12:25	Nitrogen, Nitrite	0.102	0.100	102	90-110		WSTICNI2_00014
2	ICB	12:25	Nitrogen, Nitrite	0.010				U	
12	CCV	12:29	Nitrogen, Nitrite	0.0503	0.0500	101	90-110		WSTNI1_00008
13	CCB	12:29	Nitrogen, Nitrite	0.010				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: CLM Batch Start Date: 11/17/2010

Reporting Units: mg/L Analytical Batch No.: 100186

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:20	Nitrogen, Nitrite	0.0536	0.0500	107	90-110		WSTNI1_00008
2	ICB	18:20	Nitrogen, Nitrite	0.010				U	
12	CCV	18:24	Nitrogen, Nitrite	0.0985	0.100	98	90-110		WSTICNI2_00014
13	CCB	18:24	Nitrogen, Nitrite	0.010				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: CLM Batch Start Date: 11/18/2010

Reporting Units: mg/L Analytical Batch No.: 100289

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:50	Nitrogen, Nitrite	0.0516	0.0500	103	90-110		WSTNI1_00008
2	ICB	15:50	Nitrogen, Nitrite	0.010				U	
11	CCV	15:54	Nitrogen, Nitrite	0.0979	0.100	98	90-110		WSTICNI2_00014
12	CCB	15:54	Nitrogen, Nitrite	0.010				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago
Job No.: 500-29331-1

SDG No.:

Analyst: KD
Batch Start Date: 11/16/2010

Reporting Units: mg/L
Analytical Batch No.: 100146

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:35	Chromium, hexavalent	0.266	0.250	106	90-110		WSTCR2_00007
2	ICB	14:35	Chromium, hexavalent	0.0050				U	
12	CCV	14:39	Chromium, hexavalent	0.266	0.250	106	90-110		WSTCR2_00007
13	CCB	14:39	Chromium, hexavalent	0.0050				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: KD Batch Start Date: 11/17/2010

Reporting Units: mg/L Analytical Batch No.: 100262

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:15	Chromium, hexavalent	0.496	0.500	99	90-110		WSTCR2_00007
2	ICB	14:15	Chromium, hexavalent	0.00370				J	
12	CCV	14:19	Chromium, hexavalent	0.265	0.250	106	90-110		WSTCR2_00007
13	CCB	14:19	Chromium, hexavalent	0.00200				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Analyst: CLM Batch Start Date: 11/18/2010

Reporting Units: mg/L Analytical Batch No.: 100291

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:39	Chromium, hexavalent	0.261	0.250	104	90-110		WSTCR2_00007
2	ICB	15:39	Chromium, hexavalent	0.00240				J	
12	CCV	15:43	Chromium, hexavalent	0.486	0.500	97	90-110		WSTCR2_00007
13	CCB	15:44	Chromium, hexavalent	0.00680				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 100764 Date: 11/24/2010 12:23							
353.2	MB 500-100764/3	Nitrogen, Nitrate Nitrite	0.050	U Q	mg/L	0.10	1
Batch ID: 101032 Date: 12/01/2010 09:13							
353.2	MB 500-101032/24	Nitrogen, Nitrate Nitrite	0.0165	J	mg/L	0.10	1
Batch ID: 100152 Date: 11/17/2010 12:25							
354.1	MB 500-100152/3	Nitrogen, Nitrite	0.010	U	mg/L	0.020	1
Batch ID: 100186 Date: 11/17/2010 18:20							
354.1	MB 500-100186/3	Nitrogen, Nitrite	0.010	U	mg/L	0.020	1
Batch ID: 100289 Date: 11/18/2010 15:50							
354.1	MB 500-100289/3	Nitrogen, Nitrite	0.010	U	mg/L	0.020	1
Batch ID: 100146 Date: 11/16/2010 14:35							
SM 3500 CR B	MB 500-100146/3	Chromium, hexavalent	0.0050	U	mg/L	0.010	1
Batch ID: 100262 Date: 11/17/2010 14:15							
SM 3500 CR B	MB 500-100262/3	Chromium, hexavalent	0.0050	U	mg/L	0.010	1
Batch ID: 100291 Date: 11/18/2010 15:39							
SM 3500 CR B	MB 500-100291/3	Chromium, hexavalent	0.0050	U	mg/L	0.010	1

Affects 29331-3

FORM III-IN

3-IN
UNSEEDED CONTROL BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 100090 Date: 11/17/2010 06:15							
SM 5210B	USB 500-100090/1	Biochemical Oxygen Demand	2.0	U	mg/L	2.0	1
Batch ID: 100177 Date: 11/17/2010 16:20							
SM 5210B	USB 500-100177/1	Biochemical Oxygen Demand	2.0	U	mg/L	2.0	1
Batch ID: 100247 Date: 11/18/2010 12:25							
SM 5210B	USB 500-100247/1	Biochemical Oxygen Demand	2.0	U	mg/L	2.0	1
Batch ID: 100334 Date: 11/19/2010 10:37							
SM 5210B	USB 500-100334/1	Biochemical Oxygen Demand	2.0	U	mg/L	2.0	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 101032	Date: 12/01/2010 09:19										
353.2	500-29331-1	Nitrogen, Nitrate Nitrite	0.050	U	mg/L						Q J
353.2	500-29331-1 MS	Nitrogen, Nitrate Nitrite	1.12		mg/L	1.00	112	75-125			
Batch ID: 100152	Date: 11/17/2010 12:26										
354.1	500-29331-1	Nitrogen, Nitrite	0.0032	J	mg/L						
354.1	500-29331-1 MS	Nitrogen, Nitrite	0.0966		mg/L	0.100	93	75-125			
Batch ID: 100186	Date: 11/17/2010 18:23										
354.1	500-29331-9	Nitrogen, Nitrite	0.0043	J	mg/L						
354.1	500-29331-9 MS	Nitrogen, Nitrite	0.0986		mg/L	0.100	94	75-125			
Batch ID: 100289	Date: 11/18/2010 15:52										
354.1	500-29331-13	Nitrogen, Nitrite	0.010	U	mg/L						
354.1	500-29331-13 MS	Nitrogen, Nitrite	0.0940		mg/L	0.100	94	75-125			
Batch ID: 100146	Date: 11/16/2010 14:37										
SM 3500 CR B	500-29331-3	Chromium, hexavalent	0.0026	J	mg/L						
SM 3500 CR B	500-29331-3 MS	Chromium, hexavalent	0.521		mg/L	0.500	104	75-125			
Batch ID: 100262	Date: 11/17/2010 14:16										
SM 3500 CR B	500-29331-6	Chromium, hexavalent	0.0050	U	mg/L						J
SM 3500 CR B	500-29331-6 MS	Chromium, hexavalent	0.375		mg/L	0.500	75	75-125			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 101032		Date: 12/01/2010 09:22									
353.2	500-29331-1 MSD	Nitrogen, Nitrate Nitrite	1.17		mg/L	1.00	117	75-125	4	20	
Batch ID: 100152		Date: 11/17/2010 12:27									
354.1	500-29331-1 MSD	Nitrogen, Nitrite	0.0979		mg/L	0.100	95	75-125	1	20	
Batch ID: 100186		Date: 11/17/2010 18:23									
354.1	500-29331-9 MSD	Nitrogen, Nitrite	0.0995		mg/L	0.100	95	75-125	1	20	
Batch ID: 100289		Date: 11/18/2010 15:53									
354.1	500-29331-13 MSD	Nitrogen, Nitrite	0.0966		mg/L	0.100	97	75-125	3	20	
Batch ID: 100146		Date: 11/16/2010 14:38									
SM 3500 CR B	500-29331-3 MSD	Chromium, hexavalent	0.496		mg/L	0.500	99	75-125	5	20	
Batch ID: 100262		Date: 11/17/2010 14:17									
SM 3500 CR B	500-29331-6 MSD	Chromium, hexavalent	0.370		mg/L	0.500	74	75-125	1	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 100764		Date: 11/24/2010 12:25									
						LCS Source: WSTICNO32_00006					
353.2	LCS 500-100764/4	Nitrogen, Nitrate Nitrite	1.12		mg/L	1.00	112	80-120			Q
Batch ID: 101032		Date: 12/01/2010 09:15									
						LCS Source: WSTICNO32_00006					
353.2	LCS 500-101032/25	Nitrogen, Nitrate Nitrite	0.962		mg/L	1.00	96	80-120			
Batch ID: 100152		Date: 11/17/2010 12:26									
						LCS Source: WSTICNI2_00014					
354.1	LCS 500-100152/4	Nitrogen, Nitrite	0.0996		mg/L	0.100	100	80-120			
Batch ID: 100186		Date: 11/17/2010 18:21									
						LCS Source: WSTICNI2_00014					
354.1	LCS 500-100186/4	Nitrogen, Nitrite	0.0981		mg/L	0.100	98	80-120			
Batch ID: 100289		Date: 11/18/2010 15:51									
						LCS Source: WSTICNI2_00014					
354.1	LCS 500-100289/4	Nitrogen, Nitrite	0.0975		mg/L	0.100	98	80-120			
Batch ID: 100146		Date: 11/16/2010 14:36									
						LCS Source: WSTCR2_00007					
SM 3500 CR B	LCS 500-100146/4	Chromium, hexavalent	0.266		mg/L	0.250	107	80-120			
Batch ID: 100262		Date: 11/17/2010 14:16									
						LCS Source: WSTCR2_00007					
SM 3500 CR B	LCS 500-100262/4	Chromium, hexavalent	0.285		mg/L	0.250	114	80-120			
Batch ID: 100291		Date: 11/18/2010 15:40									
						LCS Source: WSTCR2_00007					
SM 3500 CR B	LCS 500-100291/4	Chromium, hexavalent	0.255		mg/L	0.250	102	80-120			
Batch ID: 100090		Date: 11/17/2010 06:18									
						LCS Source: WSTBD_00976					
SM 5210B	LCS 500-100090/2	Biochemical Oxygen Demand	197		mg/L	198	100	85-115			
Batch ID: 100177		Date: 11/17/2010 16:22									
						LCS Source: WSTBD_00976					
SM 5210B	LCS 500-100177/2	Biochemical Oxygen Demand	194		mg/L	198	98	85-115			
Batch ID: 100247		Date: 11/18/2010 12:27									
						LCS Source: WSTBD_00977					
SM 5210B	LCS 500-100247/2	Biochemical Oxygen Demand	193		mg/L	198	97	85-115			
Batch ID: 100334		Date: 11/19/2010 10:39									
						LCS Source: WSTBD_00978					
SM 5210B	LCS 500-100334/2	Biochemical Oxygen Demand	170		mg/L	198	86	85-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago

Job Number: 500-29331-1

SDG Number:

Matrix: Water

Instrument ID: AQ2

Analysis Method: 353.2

DL Date: 03/19/2010 09:18

Prep Method:

Leach Method:

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Nitrate Nitrite		0.1	0.013

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-29331-1

SDG Number:

Matrix: Water Instrument ID: AQ2

Analysis Method: 353.2 XMDL Date: 03/19/2010 09:20

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Nitrate Nitrite		0.1	0.013

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago
Job Number: 500-29331-1
SDG Number:
Matrix: Water
Instrument ID: SPEC5
Analysis Method: 354.1
DL Date: 08/06/2010 14:57
Prep Method:
Leach Method:

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Nitrite		0.02	0.002

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-29331-1

SDG Number:

Matrix: Water Instrument ID: SPEC5

Analysis Method: 354.1 XMDL Date: 08/06/2010 14:57

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Nitrite		0.02	0.002

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago
Job Number: 500-29331-1
SDG Number:
Matrix: Water
Instrument ID: SPEC5
Analysis Method: SM 3500 CR B
DL Date: 08/06/2010 14:51
Prep Method:
Leach Method:

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Chromium, hexavalent		0.01	0.0014

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-29331-1

SDG Number:

Matrix: Water Instrument ID: SPEC5

Analysis Method: SM 3500 CR B XMDL Date: 08/06/2010 14:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chromium, hexavalent		0.01	0.0014

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago
Job Number: 500-29331-1
SDG Number:
Matrix: Water
Instrument ID: NOEQUIP
Analysis Method: Nitrate by calc
DL Date: 03/19/2010 09:18
Prep Method:
Leach Method:

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Nitrate		0.1	0.013

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job Number: 500-29331-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Analysis Method: Nitrate by calc XMDL Date: 03/19/2010 09:20

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Nitrate		0.1	0.013

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago
Job Number: 500-29331-1
SDG Number:
Matrix: Water
Instrument ID: NOEQUIP
Analysis Method: SM 5210B
DL Date: 11/01/2005 11:28
Prep Method:
Leach Method:

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Biochemical Oxygen Demand		2	2

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: AQ2 Method: 353.2

Start Date: 11/24/2010 12:18 End Date: 11/24/2010 13:39

Lab Sample ID	D/F	Type	Time	Analytes: NNO32
ICV 500-100764/1	1		12:18	X
ICB 500-100764/2	1		12:20	X
MB 500-100764/3	1	T	12:23	X
LCS 500-100764/4	1	T	12:25	X
ZZZZZZ			12:27	
ZZZZZZ			12:29	
ZZZZZZ			12:31	
500-29331-1	1	T	12:33	X
ZZZZZZ			12:35	
ZZZZZZ			12:37	
500-29331-2	1	T	12:40	X
ZZZZZZ			12:42	
CCV 500-100764/13	1		12:44	X
CCB 500-100764/14	1		12:46	X
500-29331-4	1	T	12:48	X
500-29331-5	1	T	12:50	X
500-29331-6	1	T	12:52	X
500-29331-7	1	T	12:54	X
500-29331-8	1	T	12:56	X
500-29331-9	1	T	12:59	X
500-29331-10	1	T	13:01	X
500-29331-11	1	T	13:03	X
500-29331-12	1	T	13:05	X
500-29331-13	1	T	13:06	X
CCV 500-100764/25	1		13:07	X
CCB 500-100764/26	1		13:08	X
500-29331-14	1	T	13:09	X
ZZZZZZ			13:09	
ZZZZZZ			13:10	
ZZZZZZ			13:11	
CCV 500-100764/31	1		13:12	X
CCB 500-100764/32	1		13:13	X
CCV 500-100764/33			13:36	
CCB 500-100764/34			13:37	
ZZZZZZ			13:37	
CCV 500-100764/36			13:38	
CCB 500-100764/37			13:39	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago   Job No.: 500-29331-1

SDG No.:

Instrument ID: AQ2   Method: 353.2

Start Date: 12/01/2010 07:39   End Date: 12/01/2010 11:00

Lab Sample ID	D/F	Type	Time	Analytes: NNO32
ZZZZZZ			07:39	
ZZZZZZ			07:41	
ZZZZZZ			07:43	
ZZZZZZ			07:45	
ZZZZZZ			07:47	
ZZZZZZ			07:49	
ZZZZZZ			07:52	
ZZZZZZ			07:54	
ZZZZZZ			07:56	
ICV 500-101032/10			07:58	
ZZZZZZ			08:23	
ZZZZZZ			08:25	
ZZZZZZ			08:27	
ZZZZZZ			08:29	
ZZZZZZ			08:31	
ZZZZZZ			08:33	
ZZZZZZ			08:35	
ZZZZZZ			08:38	
ZZZZZZ			08:40	
ICV 500-101032/20			08:42	
ZZZZZZ			09:07	
ICV 500-101032/22	1		09:09	X
ICB 500-101032/23	1		09:11	X
MB 500-101032/24	1	T	09:13	X
LCS 500-101032/25	1	T	09:15	X
ZZZZZZ			09:17	
500-29331-1 MS	1	T	09:19	X
500-29331-1 MSD	1	T	09:22	X
500-29331-3	1	T	09:24	X
ZZZZZZ			09:26	
ZZZZZZ			09:28	
ZZZZZZ			09:30	
ZZZZZZ			09:32	
CCV 500-101032/34	1		09:34	X
CCB 500-101032/35	1		09:36	X
ZZZZZZ			09:38	
ZZZZZZ			09:41	
ZZZZZZ			09:43	
ZZZZZZ			09:45	
ZZZZZZ			09:47	
ZZZZZZ			09:49	
ZZZZZZ			09:51	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: AQ2 Method: 353.2

Start Date: 12/01/2010 07:39 End Date: 12/01/2010 11:00

Lab Sample ID	D/F	Type	Time	Analytes																				
				NNO32																				
ZZZZZZ			09:53																					
ZZZZZZ			09:55																					
ZZZZZZ			09:56																					
CCV 500-101032/46			09:57																					
CCB 500-101032/47			09:58																					
ZZZZZZ			09:59																					
ZZZZZZ			10:00																					
ZZZZZZ			10:01																					
ZZZZZZ			10:02																					
CCV 500-101032/52			10:03																					
CCB 500-101032/53			10:04																					
ZZZZZZ			10:21																					
ZZZZZZ			10:22																					
CCV 500-101032/56			10:23																					
CCB 500-101032/57			10:24																					
CCV 500-101032/58			10:56																					
CCB 500-101032/59			10:57																					
ZZZZZZ			10:58																					
ZZZZZZ			10:59																					
CCV 500-101032/62			11:00																					
CCB 500-101032/63			11:00																					

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: 354.1

Start Date: 11/17/2010 12:25 End Date: 11/17/2010 12:29

Lab Sample ID	D/F	Type	Time	Analytes																	
				N-No2																	
ICV 500-100152/1	1		12:25	X																	
ICB 500-100152/2	1		12:25	X																	
MB 500-100152/3	1	T	12:25	X																	
LCS 500-100152/4	1	T	12:26	X																	
500-29331-1	1	T	12:26	X																	
500-29331-1 MS	1	T	12:26	X																	
500-29331-1 MSD	1	T	12:27	X																	
500-29331-2	1	T	12:27	X																	
500-29331-3	1	T	12:28	X																	
500-29331-4	1	T	12:28	X																	
500-29331-5	1	T	12:28	X																	
CCV 500-100152/12	1		12:29	X																	
CCB 500-100152/13	1		12:29	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: 354.1

Start Date: 11/17/2010 18:20 End Date: 11/17/2010 18:24

Lab Sample ID	D/F	Type	Time	Analytes																			
				N-No2																			
ICV 500-100186/1	1		18:20	X																			
ICB 500-100186/2	1		18:20	X																			
MB 500-100186/3	1	T	18:20	X																			
LCS 500-100186/4	1	T	18:21	X																			
500-29331-6	1	T	18:21	X																			
500-29331-7	1	T	18:21	X																			
500-29331-8	1	T	18:22	X																			
500-29331-9	1	T	18:22	X																			
500-29331-9 MS	1	T	18:23	X																			
500-29331-9 MSD	1	T	18:23	X																			
500-29331-10	1	T	18:23	X																			
CCV 500-100186/12	1		18:24	X																			
CCB 500-100186/13	1		18:24	X																			

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: 354.1

Start Date: 11/18/2010 15:50 End Date: 11/18/2010 15:54

Lab Sample ID	D/F	Type	Time	Analytes																	
				N-No2																	
ICV 500-100289/1	1		15:50	X																	
ICB 500-100289/2	1		15:50	X																	
MB 500-100289/3	1	T	15:50	X																	
LCS 500-100289/4	1	T	15:51	X																	
500-29331-11	1	T	15:51	X																	
500-29331-12	1	T	15:52	X																	
500-29331-13	1	T	15:52	X																	
500-29331-13 MS	1	T	15:52	X																	
500-29331-13 MSD	1	T	15:53	X																	
500-29331-14	1	T	15:53	X																	
CCV 500-100289/11	1		15:54	X																	
CCB 500-100289/12	1		15:54	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: SM 3500 CR B

Start Date: 11/16/2010 14:35 End Date: 11/16/2010 14:39

Lab Sample ID	D/F	Type	Time	Analytes																	
				Cr6																	
ICV 500-100146/1	1		14:35	X																	
ICB 500-100146/2	1		14:35	X																	
MB 500-100146/3	1	T	14:35	X																	
LCS 500-100146/4	1	T	14:36	X																	
500-29331-1	1	T	14:36	X																	
500-29331-2	1	T	14:36	X																	
500-29331-3	1	T	14:37	X																	
500-29331-3 MS	2	T	14:37	X																	
500-29331-3 MSD	2	T	14:38	X																	
500-29331-4	1	T	14:38	X																	
500-29331-5	1	T	14:38	X																	
CCV 500-100146/12	1		14:39	X																	
CCB 500-100146/13	1		14:39	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: SM 3500 CR B

Start Date: 11/17/2010 14:15 End Date: 11/17/2010 14:19

Lab Sample ID	D/F	Type	Time	Analytes																	
				Cr6																	
ICV 500-100262/1	1		14:15	X																	
ICB 500-100262/2	1		14:15	X																	
MB 500-100262/3	1	T	14:15	X																	
LCS 500-100262/4	1	T	14:16	X																	
500-29331-6	1	T	14:16	X																	
500-29331-6 MS	2	T	14:16	X																	
500-29331-6 MSD	2	T	14:17	X																	
500-29331-7	1	T	14:17	X																	
500-29331-8	1	T	14:18	X																	
500-29331-9	1	T	14:18	X																	
500-29331-10	1	T	14:18	X																	
CCV 500-100262/12	1		14:19	X																	
CCB 500-100262/13	1		14:19	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: SPEC5 Method: SM 3500 CR B

Start Date: 11/18/2010 15:39 End Date: 11/18/2010 15:46

Lab Sample ID	D/F	Type	Time	Analytes																	
				Cr6																	
ICV 500-100291/1	1		15:39	X																	
ICB 500-100291/2	1		15:39	X																	
MB 500-100291/3	1	T	15:39	X																	
LCS 500-100291/4	1	T	15:40	X																	
500-29331-11	1	T	15:40	X																	
500-29331-12	1	T	15:41	X																	
500-29331-13	1	T	15:41	X																	
500-29331-14	1	T	15:42	X																	
ZZZZZZ			15:42																		
ZZZZZZ			15:42																		
ZZZZZZ			15:43																		
CCV 500-100291/12	1		15:43	X																	
CCB 500-100291/13	1		15:44	X																	
ZZZZZZ			15:44																		
ZZZZZZ			15:45																		
ZZZZZZ			15:45																		
CCV 500-100291/17			15:46																		
CCB 500-100291/18			15:46																		

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: Nitrate by calc

Start Date: 11/24/2010 15:03 End Date: 11/24/2010 15:05

Lab Sample ID	D/F	Type	Time	Analytes																	
				NO3																	
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
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ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:03																		
ZZZZZZ			15:04																		
500-29331-1	1	T	15:04	X																	
500-29331-2	1	T	15:04	X																	
500-29331-4	1	T	15:04	X																	
500-29331-5	1	T	15:04	X																	
500-29331-6	1	T	15:04	X																	
500-29331-7	1	T	15:04	X																	
500-29331-8	1	T	15:04	X																	
500-29331-9	1	T	15:04	X																	
500-29331-10	1	T	15:04	X																	
500-29331-11	1	T	15:05	X																	
500-29331-12	1	T	15:05	X																	
500-29331-13	1	T	15:05	X																	
500-29331-14	1	T	15:05	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: Nitrate by calc

Start Date: 12/01/2010 13:50 End Date: 12/01/2010 13:50

Lab Sample ID	D/F	Type	Time	Analytes																	
				NO3																	
ZZZZZZ			13:50																		
ZZZZZZ			13:50																		
ZZZZZZ			13:50																		
ZZZZZZ			13:50																		
ZZZZZZ			13:50																		
500-29331-3	1	T	13:50	X																	
ZZZZZZ			13:50																		
ZZZZZZ			13:50																		

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 5210B

Start Date: 11/17/2010 06:15 End Date: 11/17/2010 14:29

Lab Sample ID	D/F	Type	Time	Analytes																	
				BOD																	
USB 500-100090/1	1	T	06:15	X																	
LCS 500-100090/2	1	T	06:18	X																	
ZZZZZZ			06:21																		
ZZZZZZ			06:40																		
ZZZZZZ			06:42																		
ZZZZZZ			06:44																		
ZZZZZZ			06:46																		
ZZZZZZ			06:48																		
ZZZZZZ			06:50																		
ZZZZZZ			06:52																		
ZZZZZZ			06:54																		
ZZZZZZ			06:56																		
500-29331-1	1	T	06:58	X																	
500-29331-2	1	T	07:00	X																	
500-29331-3	1	T	07:25	X																	
500-29331-4	1	T	07:27	X																	
500-29331-5	1	T	07:29	X																	
ZZZZZZ			07:31																		
ZZZZZZ			14:23																		
ZZZZZZ			14:25																		
ZZZZZZ			14:27																		
ZZZZZZ			14:29																		

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 5210B

Start Date: 11/17/2010 16:20 End Date: 11/17/2010 18:38

Lab Sample ID	D/F	Type	Time	Analytes																			
				BOD																			
USB 500-100177/1	1	T	16:20	X																			
LCS 500-100177/2	1	T	16:22	X																			
ZZZZZZ			18:07																				
ZZZZZZ			18:09																				
ZZZZZZ			18:11																				
ZZZZZZ			18:13																				
ZZZZZZ			18:15																				
500-29331-6	1	T	18:18	X																			
500-29331-7	1	T	18:20	X																			
500-29331-8	1	T	18:22	X																			
500-29331-9	1	T	18:24	X																			
500-29331-10	1	T	18:26	X																			
ZZZZZZ			18:28																				
ZZZZZZ			18:30																				
ZZZZZZ			18:32																				
ZZZZZZ			18:34																				
ZZZZZZ			18:36																				
ZZZZZZ			18:38																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 5210B

Start Date: 11/18/2010 12:25 End Date: 11/18/2010 16:31

Lab Sample ID	D/F	Type	Time	Analytes																	
				BOD																	
USB 500-100247/1	1	T	12:25	X																	
LCS 500-100247/2	1	T	12:27	X																	
ZZZZZZ			12:30																		
ZZZZZZ			16:24																		
ZZZZZZ			16:27																		
500-29331-11	1	T	16:29	X																	
500-29331-12	1	T	16:31	X																	

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Chicago Job No.: 500-29331-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 5210B

Start Date: 11/19/2010 10:37 End Date: 11/19/2010 15:53

Lab Sample ID	D/F	Type	Time	Analytes																	
				BOD																	
USB 500-100334/1	1	T	10:37	X																	
LCS 500-100334/2	1	T	10:39	X																	
500-29331-13	1	T	10:41	X																	
500-29331-14	1	T	10:43	X																	
ZZZZZZ			10:45																		
ZZZZZZ			15:50																		
ZZZZZZ			15:53																		

Prep Types
T = Total/NA

Circle Method:
(a) Standard Methods: 3500 CrB
b. SW846 7196A
c. SW846 3060A

TestAmerica Chicago
Hexavalent Chromium
(Page 1 of 2)

Page #: 0103
Book #: 4478
NCM #:
Batch #: 100146

Instrument: SPECS
wavelength: 540 nm
pathlength: 1.0 cm

Balance # / KD 11/17/10

Standards (mg/L)	Absorbance	
0.00	0.000	
0.01	0.009	(Water Only)
0.02	0.032	
0.04	—	(Water Only)
0.10	0.083	
0.25	0.210	
0.50	0.403	
1.00	—	(Soil Only)

c.c. = 0.9996
slope = 0.809
y-int.= 0.0017

Calculations:
mg/L = Result(curve) mg/L x Dilution
mg/kg = mg/L(curve)/(g) x Final Vol.(mls) x Dil.
Note: Dry wt. corrections made at final reporting.

Sample ID	Test Matrix	Dil.	Curve Conc. mg/L	Color Corrected Curve Result mg/L	% Recovery/Comments
ICV (0.25 mg/L)			0.2660		106%
ICB (<0.01 mg/L)			0.0013		<0.01
1 MB	W		-0.0013		<0.01
2 LCS			0.2663		107%
3 500-29331-A-1			0.0041		
4 2			0.0046		
5 3			0.0026		
6 3MS		1/2	0.2605		104%
7 3MSD		1/2	0.2482		99%
8 4			0.0026		
9 5			0.0023		
10					
CCV (0.25 mg/L)			0.2662		106%
CCB (<0.01 mg/L)			0.0009		<0.01
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
CCV (____ mg/L)					
CCB (< ____ mg/L)					

KD 11/17/10

14:35

No.	ABS	Conc. mg/L	
1	0.217	0.2660	IW
2	0.003	0.0013	ICB
3	0.001	-0.0013	MB
4	~~0.217~~	~~0.2663~~	~~LCS~~
5	0.005	0.0041	500-29331-A-1
6	0.005	0.0046	2
7	0.004	0.0026	3
8	0.212	0.2605	3MS Y2
9	0.202	0.2482	3MSD Y2
10	0.004	0.0026	4
11	0.004	0.0023	5
12	0.217	0.2662	CCV
13	0.002	0.0009	CCB

14:40

Hex Chromium

BATCH 100146

ANALYST SIGNATURE:

DATE 11/16/10 TEST Cr6+

TestAmerica Chicago

Nitrite-Nitrogen by Colorimetry

Method:

_____ Standard Methods 4500 NO_2^- B

_X_ EPA 354.1

Analytical Batch #: 100152
Prep Batch #: _____

NCM # _____

Instrument ID SPECS

Calculations:

mg/L = mg/L curve X dilution

mg/Kg = $\frac{\text{mg/L curve X final vol. in mL}}{\text{grams sample}}$

Calibration Range: 0.02 – 0.20 mg/L
Reporting Limit: 0.02 mg/L

All calculations, including dry weight correction of solids is done automatically in ADII.

Standards Traceability:

Stock I: Calibration Curve, CCV: WSTN11-00008

Stock II: LCS, ICV, Matrix spikes: WST ICN12-00014

Spiking Levels:

LCS	0.10	mg/L	1.0	mg/Kg
ICV	0.10	mg/L		
CCV	0.05	mg/L		
MS/MSD	0.10	mg/L	~1.0	mg/Kg

Comments:

Analyst: Colleen Moore **Date of analysis:** 11-17-10

Reviewer: Cade Bm **Date:** 11/17/10

CHI-22-12-125/B-11/10

12:25

No.	ABS	Conc. mg/L	
1	0.291	0.1017ICW	
2	0.004	-0.0008ICB	
3	0.001	-0.0020MB	
4	0.285	0.0996LCS	
5	0.015	0.0032500-29331-C-1	
6	0.276	0.0966	-1MS
7	0.280	0.0979	-1MSD
8	0.012	0.0022	-2
9	0.028	0.0078	-3
10	0.015	0.0032	-4
11	0.010	0.0015	-5
12	0.147	0.0503CCV	
13	0.003	-0.0013CCB	

12:30

Sample NTC036W 0413
rep result nitrite
0.0078 mg/L

100152
Colleen Moore
11-17-10 NO2

AQ2 Tray Report

Report Requested By: pete
Date & Time: Wed Dec 01 11:06:12 2010
Tray Number: 18
Tray Name: 10.11.30 (14-30)

101032

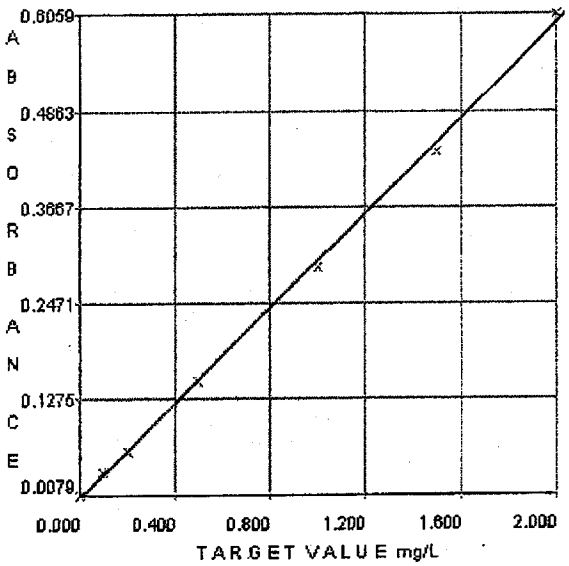
Nitrate 2

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0079	0.0140	0.0000	
S90	0.0370	0.1126	0.1000	12.6268
S91	0.0632	0.2013	0.2000	0.6313
S92	0.1488	0.4909	0.5000	-1.8139
S93	0.2920	0.9758	1.0000	-2.4173
S94	0.4372	1.4672	1.5000	-2.1866
S95	0.6059	2.0382	2.0000	1.9098
S0	0.0092	0.0184	0.0000	

Polynomial Order: 1
Correlation Coefficient: 0.9995
Carryover: 0.2
Date & Time: Wed Dec 01 08:38:02 2010

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
NOx buffer		pete	
NOx color		pete	

Test Results

Cup Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
S1	STANDARD 1	0.0079		0.007881			pf	Wed Dec 01 08:23:13 2010
S1	STANDARD 1	0.0190		0.019026			pf	Wed Dec 01 07:39:21 2010
S90	STANDARD 90	0.0370		0.037029			pf	Wed Dec 01 08:25:20 2010
S90	STANDARD 90	0.0420		0.042004			pf	Wed Dec 01 07:41:27 2010
S91	STANDARD 91	0.0632		0.063212			pf	Wed Dec 01 08:27:28 2010
S91	STANDARD 91	0.0694		0.069357			pf	Wed Dec 01 07:43:34 2010
S92	STANDARD 92	0.1488		0.148782			pf	Wed Dec 01 08:29:35 2010
S92	STANDARD 92	0.1405		0.140466			pf	Wed Dec 01 07:45:41 2010
S93	STANDARD 93	0.2920		0.292023			pf	Wed Dec 01 08:31:41 2010
S93	STANDARD 93	0.2595		0.259462			pf	Wed Dec 01 07:47:47 2010
S94	STANDARD 94	0.4372		0.437178			pf	Wed Dec 01 08:33:48 2010
S94	STANDARD 94	0.4119		0.411892			pf	Wed Dec 01 07:49:53 2010
S95	STANDARD 95	0.6059		0.605854			pf	Wed Dec 01 08:35:55 2010
S95	STANDARD 95	0.5398		0.539818			pf	Wed Dec 01 07:52:00 2010
S0	STANDARD 0	0.0092		0.009181			pf	Wed Dec 01 08:38:02 2010
S0	STANDARD 0	0.0156		0.015577			pf	Wed Dec 01 07:54:06 2010

2	U1	reduction	0.9764	mg/L	0.292180		pf	Wed Dec 01 09:07:12 2010
2	U1	reduction	0.9055	mg/L	0.271236		pf	Wed Dec 01 08:40:08 2010
2	U1	reduction	0.9724	mg/L	0.267886		pf	Wed Dec 01 07:56:13 2010
3	ICV	ICV	0.9424	mg/L	0.282146		pf	Wed Dec 01 09:09:19 2010
3	ICV	ICV	0.8002	mg/L	0.240143		pf	Wed Dec 01 08:42:15 2010
3	ICV	ICV	0.8468	mg/L	0.235130		pf	Wed Dec 01 07:58:20 2010
4	ICB	ICB	0.0168	mg/L	0.008725		pf	Wed Dec 01 09:11:26 2010
5	MB	MB	0.0165	mg/L	0.008628		pf	Wed Dec 01 09:13:33 2010
6	LCS	LCS	0.9624	mg/L	0.288045		pf	Wed Dec 01 09:15:40 2010
7	U2	500-29242-s-1	2.7651ALT	mg/L	0.167124	x5.0000	pf	Wed Dec 01 09:17:47 2010
8	U3	500-29331-a-1 ms	1.1195	mg/L	0.334463		pf	Wed Dec 01 09:19:54 2010
9	U4	500-29331-a-1 msd	1.1695	mg/L	0.349240		pf	Wed Dec 01 09:22:00 2010
10	U5	500-29331-b-3	0.1404	mg/L	0.045246		pf	Wed Dec 01 09:24:07 2010
11	U6	500-29335-h-1	0.0182	mg/L	0.009148		pf	Wed Dec 01 09:26:13 2010
12	U7	500-29335-h-2	0.0035ELL	mg/L	0.004792		pf	Wed Dec 01 09:28:20 2010
13	U8	500-29335-h-3	0.0270	mg/L	0.011728		pf	Wed Dec 01 09:30:26 2010
14	U9	500-29335-h-4	0.0105ELL	mg/L	0.006859		pf	Wed Dec 01 09:32:33 2010
15	CCV	CCV	0.4824	mg/L	0.146275		pf	Wed Dec 01 09:34:39 2010
16	CCB	CCB	0.0187	mg/L	0.009279		pf	Wed Dec 01 09:36:46 2010
17	U10	500-29335-h-5	0.0184	mg/L	0.009181		pf	Wed Dec 01 09:38:53 2010
18	U11	500-29335-h-6	0.0194	mg/L	0.009474		pf	Wed Dec 01 09:41:00 2010
19	U12	500-29335-h-7	0.0187	mg/L	0.009279		pf	Wed Dec 01 09:43:06 2010
20	U13	500-29379-h-1	0.0067ELL	mg/L	0.005744		pf	Wed Dec 01 09:45:13 2010
21	U14	500-29379-h-2	0.0074ELL	mg/L	0.005954		pf	Wed Dec 01 09:47:20 2010
22	U15	500-29379-h-3	0.0081ELL	mg/L	0.006148		pf	Wed Dec 01 09:49:26 2010
23	U16	500-29379-h-4	0.0046ELL	mg/L	0.005130		pf	Wed Dec 01 09:51:33 2010
24	U17	500-29379-h-5	0.0052ELL	mg/L	0.005308		pf	Wed Dec 01 09:53:40 2010
25	U18	500-29435-f-2	0.2737	mg/L	0.084618		pf	Wed Dec 01 09:55:47 2010
26	U19	500-29435-f-5	3.9162ALT	mg/L	0.235130	x5.0000	pf	Wed Dec 01 09:56:42 2010
27	CCV	CCV	0.4764	mg/L	0.144493		pf	Wed Dec 01 10:56:22 2010
27	CCV	CCV	0.5079	mg/L	0.153795		pf	Wed Dec 01 09:57:36 2010
28	CCB	CCB	0.0114	mg/L	0.007119		pf	Wed Dec 01 10:57:18 2010
28	CCB	CCB	0.0093	mg/L	0.006520		pf	Wed Dec 01 09:58:32 2010
29	U20	500-29435-f-6	2.0140ALT	mg/L	0.598710		pf	Wed Dec 01 09:59:27 2010
30	U21	500-29435-f-9	0.4236	mg/L	0.128883		pf	Wed Dec 01 10:00:22 2010
31	U22	500-29460-f-1	3.2976ALT	mg/L	0.198587	x5.0000	pf	Wed Dec 01 10:58:13 2010
31	U22	500-29460-f-1	3.1491	mg/L	0.189813	x5.0000	pf	Wed Dec 01 10:21:24 2010
31	U22	500-29460-f-1	3.6462	mg/L	1.080858		pf	Wed Dec 31 18:00:00 1969
32	U23	500-29460-f-4	3.9907ALT	mg/L	0.239534	x5.0000	pf	Wed Dec 01 10:59:08 2010
32	U23	500-29460-f-4	4.0118	mg/L	0.240781	x5.0000	pf	Wed Dec 01 10:22:19 2010
32	U23	500-29460-f-4	2.3148	mg/L	0.687550		pf	Wed Dec 31 18:00:00 1969
33	CCV	CCV	0.4821	mg/L	0.146163		pf	Wed Dec 01 11:00:03 2010
33	CCV	CCV	0.4396	mg/L	0.133605		pf	Wed Dec 01 10:23:14 2010
33	CCV	CCV	0.5151	mg/L	0.155912		pf	Wed Dec 01 10:03:06 2010
34	CCB	CCB	0.0117	mg/L	0.007200		pf	Wed Dec 01 11:00:58 2010
34	CCB	CCB	-0.0023	mg/L	0.003071		pf	Wed Dec 01 10:24:09 2010
34	CCB	CCB	0.0187	mg/L	0.009279		pf	Wed Dec 01 10:04:02 2010

NTC 03600413
Nitrate/Nitrite result rep 0.14 mg/L

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE _____ OF _____

CLIENT Great Lakes		JOB NUMBER	
SUBJECT Sample calc			
BASED ON		DRAWING NUMBER	
BY	CHECKED BY	APPROVED BY	DATE

Nitrate sample NTC036W0413
rep result 0.13 mg/L

$$\underset{\text{(NITRATE/NITRITE)}}{0.14} - \underset{\text{(nitrite)}}{0.0078} = 0.1322 \text{ mg/L}$$

BOD sample NTC036W0513
rep result 2.4 mg/L

$$\frac{\left(\left(5.82-3.74\right) - 0.5\left(0.146\right)\right)\left(300\right)}{250}$$

$$= 2.4084 \text{ mg/L}$$

TestAmerica Chicago
BOD / DO / BODC

Page #: 13
(Page 1 of 2)
LIMS Batch: 120290
NCM#

Method:
a. BOD: E 405.1
b. DO. E 360.1; SM4500-OG; Winkler- E 360.2; SM4500-OB&C
c. BOD/CBOD: SM 5210 B
Incubator Temp C: Refer to the Electronic Monitoring System (20 °C +/- 1°C)

Instrument: Hach sension 6

Probe In-Service Date: 11-1-10

Winkler Titration:
Initial Calibration: 9.80 mls Na2S2O3 = DO mg/L
Final Calibration: 8.57 mls Na2S2O3 = DO mg/L

Calculation:
BOD mg/L = [(Initial DO - Final DO) - f (average seed depletion / ml)] x 300 / P
Where: f = 0.01 x ml Dil. H2O in bottle
P = ml sample in BOD bottle

Seed started: 5:10

Sample Temperature Limit
17 - 23 deg C

6:15

	Bottle #	Volume (mls)	Initial DO	Final DO	Depletion	Control Limits	depletion/ml
Unseeded Control	199	300	8.62	8.70	-0.08	(<0.2 mg/L)	
Seeded Dilution H2O	2MA	300	8.66	8.30	0.36	(0.6 - 1.0 mg/L)	
Seed Control (A)	215	10	8.65	7.30	1.35		0.135
Seed Control (B)	351	15	8.63	6.27	2.36		~~1.57~~ 0.157

Average depletion / ml 0.146

Sample ID / Temp deg. C	Cl2 Ck	mls Na2SO3/ Sample	pH Adj	Bottle #	Volume (ml)	Initial DO	Final DO (<1 NC)	Depletion (<2 NC)	f Factor	BOD mg/L	BOD Average	COD Estimate Comments
✓ BOD LCS 1		NA		347	6	8.68	4.26	4.42	2.94	199.5		
✓ BOD LCS 2				202A	6	8.62	4.29	4.33	2.94	195.0	197.3	100%
✓ CBOD LCS 1			NA	100	6	8.60	4.84	3.76	2.94	166.5		
✓ CBOD LCS 2				195D	6	8.58	4.46	4.12	2.94	184.5	175.5	89%
500-29330-B-1	✓		Adj↑	Z	03	8.63	8.13	<2				LR = blue
(2.5) CBOD				19A	1	8.64	7.67	<2				HR = brown
				358	3	8.62	6.43	2.19	2.97	175.6		
19.1°C				203C	9	8.73	2.51	6.22	2.91	193.2	184.4	
6:25												
6:40												
680-63187-Q-1	✓		Adj↑	101	30	8.51	8.35	<2				
(1.4)				197A	90	8.70	8.60	<2			<2	
20.3°C				209B	250	8.88	9.14	<2				
-2	✓		Adj↑	CM	30	8.69	8.48	<2				
				337B	90	8.75	8.54	<2			<2	
20.1°C				80	250	9.12	8.88	<2				
-3	✓		Adj↑	410	30	8.56	8.30	<2				
				77	90	8.67	8.26	<2			<2	
20.4°C				213B	250	8.77	8.17	<2				
-4	✓		Adj↑	110	30	8.66	8.38	<2				
				209A1	90	8.64	8.30	<2			<2	
19.9°C				5(illegible)	250	8.74	8.36	<2				
-5	✓		Adj↑	195B	30	8.66	8.30	<2				
				204	90	8.70	8.44	<2			<2	
20.2°C				97	250	8.86	8.61	<2				

12/08/2010

TestAmerica Chicago
BOD / DO / BODC

Sample ID / Temp deg. C	Cl2 Ck	mls Na2SO3/ Sample	pH Adj	Bottle #	Volume (ml)	Initial DO	Final DO (<1 NC)	Depletion (<2 NC)	f Factor	BOD mg/L	BOD Average	COD Estimate Comments
680-63187-Q-6	✓		Adj↑	428	30	8.63	8.41	<2				
				420	90	8.72	8.41	<2			<2	
20.0 °C				205E	250	9.06	8.45	<2				
-7	✓		Adj↑	93	30	8.66	8.46	<2				
				200B	90	8.72	8.38	<2			<2	
20.0 °C				10Z	250	8.81	8.56	<2				
-8	✓		Adj↑	207B	30	8.69	8.43	<2				
				202	90	8.71	8.47	<2			<2	
20.0 °C				8	250	9.08	9.43	<2				
-9	✓		Adj↑	356-2	30	8.66	8.51	<2				
				201	90	8.62	8.30	<2			<2	
19.7 °C				209A	250	8.57	8.33	<2				
						11-17-10						
500-29331-C-1	✓		ok	201D	30	~~8.57~~	8.00	<2				LR = yellow
(T1)				201E	90	8.12	5.99	2.13	2.0	6.078		
19.9°C				412	250	6.54	<1	–			6.078	
-2	✓		ok	202B	30	8.49	8.28	<2				LR = yellow
				205B	90	8.33	8.21	<2			<2	
19.8 °C				343	250	7.75	7.79	<2				
	✓		ok	209	9	8.77	8.29	<2				6762 6725
C-3	✓		ok	~~198~~ 198	30	8.47	8.14	<2				LR yellow
				213	90	7.91	7.72	<2			<2	
19.9 °C				207D	250	5.96	4.66	<2				
	✓		ok	194	9	8.99	8.38	<2				
C-4	✓		ok	216	30	8.44	8.08	<2				LR yellow
				337	90	7.80	7.10	<2			2.384	
19.9 °C				206	250	5.80	3.74	2.06	1.5	2.384		
C-5	✓		ok	104	30	8.12	7.54	<2				LR yellow
				210A	90	7.34	6.35	<2			<2	
19.9 °C				206B	250	8.22	7.55	<2				
												aerated

Standard Traceability: Glucose/Glutamic Acid Stock ID: LWSTBD00896 (LCS Limits = 198 +/- 30.5 mg/L)

Analyst Signature: Common Moon / Mary Berger Date IN: 11-17-10 Time IN: 6:15 – 1431
Analyst Signature: Mary Berger Date OUT: 11-22-10 Time OUT: 0930 - 1030
Reviewer Signature: [illegible] Date: 11/22/10 Point on next DAY

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**T. EVANS**	**DATE:**	**JANUARY 19, 2011**
FROM:	**EDWARD SEDLMYER**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC/SVOC/PEST/HERB**
CTO F273, NTC GREAT LAKES
SDG 1011352

SAMPLES: 9/Aqueous/VOC

NTC03GW0113	NTC03GW0213	NTC03GW0313
NTC03GW0413	NTC03GW0513	NTC03GW0613
NTCFD111610-01	TB111510	TB111610

7/Aqueous/SVOC/PEST/HERB

NTC03GW0113	NTC03GW0213	NTC03GW0313
NTC03GW0413	NTC03GW0513	NTC03GW0613
NTCFD111610-01		

OVERVIEW

The sample set for CTO F273 NTC Great Lakes, SDG 1011352 consists of, seven (7) aqueous environmental samples and two (2) trip blanks. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOC), chlorinated pesticides (PEST), polychlorinated biphenyls (PCB), and herbicides (HERB) as shown above. One (1) field duplicate pair (NTC03GW0513 / NTCFD111610-01) were included within this SDG.

The samples were collected by TetraTech NUS on November 15 and 16, 2010 and analyzed by TriMatrix Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. All analyses were conducted using USEPA SW-846 Methods 8260B, 8270C, 8081A, and 8151A analytical and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

* • Data Completeness
• Holding Times
* • GC/MS Tuning
• Initial and Continuing Calibration
• Laboratory Blank Analyses
* • Surrogate Recoveries
• Blank Spike/Blank Spike Duplicate Results
• Matrix Spike/Matrix Spike Duplicate Results
* • Internal Standard Recoveries
* • Field Duplicate Results
* • Compound Quantitation
* • Compound Identification
* • Detection Limits

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A.

Volatile

The following compound was detected in the trip blanks at the following maximum concentration:

Compound	Maximum Concentration	Blank Action Level
Acetone	3.3 µg/L	33 µg/L

An action level of 10X the maximum contaminant concentration was established to evaluate laboratory contamination for acetone. Dilution factors and sample aliquots were taken into consideration during the application of the action level. The positive result for acetone in sample NTC03GW0613 was qualified (U) as a blank contaminant.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample NTC03GW0113 had percent recoveries for 2-chloroethyl vinyl ether less than 10 percent in the MS/MSD, high recoveries for acrolein and dibromochloromethane, and a low MSD recovery for methylene chloride. The non-detected 2-chloroethyl vinyl ether result for sample NTC03GW0113 has been rejected (UR). No action was taken on the nondetected acrolein and dibromochloromethane results. No action was taken on the methylene chloride result because the MS had an acceptable recovery.

The laboratory control sample (LCS) associated with QC batch 1012925 had percent recoveries greater than the quality control limit for acrolein and carbon disulfide. The positive results for carbon disulfide were qualified as estimated (J). No action was taken on the acrolein results because acrolein was not detected in any associated samples.

Initial calibration and all continuing calibrations relative response factors (RRF) were less than the 0.05 quality control limit for acrolein and tetrahydrofuran on instrument 224. The nondetected acrolein and tetrahydrofuran results were rejected (UR) in the affected samples. The positive tetrahydrofuran results were qualified as estimated (J) in the affected samples.

The continuing calibration performed on 11/23/10 @08:13 on instrument 224 had percent differences (%D) greater than the 20% quality control limit for carbon disulfide, chloromethane, 2-hexanone, and methyl acetate. The nondetected results for the aforementioned compounds have been qualified as estimated (UJ) in all samples.

Semivolatile

The following compounds were detected in the method blank at the following maximum concentrations:

Compound	Maximum Concentration	Blank Action Level
Benzo(a)anthracene	0.060 µg/L	0.30 µg/L
Benzo(a)pyrene	0.040 µg/L	0.20 µg/L
Benzo(b)fluoranthene	0.040 µg/L	0.20 µg/L
Benzo(k)fluoroanthene	0.050 µg/L	0.25 µg/L
Chrysene	0.050 µg/L	0.25 µg/L
Diethyl Phthalate	0.47 µg/L	4.7 µg/L

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for benzo(a)anthracene , benzo(apyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, chrysene; 10X for diethyl phthalate. Dilution factors and sample aliquots were taken into consideration during the application of the action level. Positive results for the aforementioned compounds were qualified (U) as blank contaminants in the affected samples.

The laboratory control sample (LCS) had a percent recovery less than the quality control limit for caprolactam and a high recovery for carbazole. No action was taken on the carbazole results because all results were nondetcted. The nondetected caprolactam results were qualified as estimated (UJ) in all samples.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample NTC03GW0113 had percent recoveries less than quality control limit for caprolactam in the MS/MSD and a high recoveries for carbazole in the MS/MSD. In addition, 2,4-dimethylphenol had a relative percent difference (RPD) outside the quality control limit. The nondetected caprolactam result for sample NTC03GW0113 has been qualified as estimated (UJ). No action was taken on the nondetected carbazole and 2,4-dimethylphenol results.

The continuing calibration performed on 12/14/10 @11:43 and 12:42 on instrument 195 had percent differences (%D) greater than the 20% quality control limit for benzo(g,h,i)perylene and 3-methylcholanthrene. The non-detected results reported for benzo(g,h,i)perylene and 3-methylcholanthrene were qualified as estimated (UJ), in all samples.

PEST

The laboratory control sample (LCS) had percent recoveries greater than the quality control limit for alpha-BHC, gamma-BHC, alpha-chlordane, gamma-chlorodane, 4,4'-DDT, dieldrin, heptachlor, heptachlor epoxide, and methoxychlor on the primary and secondary columns and high recoveries for endosulfan II, endrin, and endrin ketone in either the primary or secondary column. No action was taken on the aforementioned results because all results were nondetcted.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample NTC03GW0113 had percent recoveries greater than quality control limit for 4,4'-DDT, endosulfan sulfate, endrin ketone, and methoxychlor on the primary and secondary column in the MSD and 4,4'-DDD and endrin aldehyde on the primary column in the MSD. In addition, the RPDs for alpha-chlordane, gamma-chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, endrin ketone, heptachlor epoxide, and methoxychlor on either the primary or secondary column exceeded the quality control limits. No action was taken on this basis because all results were nondetected.

The continuing calibration analyzed on 12/12/10 @11:50 had percent differences greater than the 20% quality control limit for 4,4'-DDE and Endosulfan I on the secondary column. No action was taken on this basis because the primary column had acceptable percent differences and all sample results are nondetected.

Herbicide

The following compounds were detected in the method blank at the following maximum concentrations:

Compound	Maximum Concentration	Blank Action Level
2,4,5-T	0.019 µg/L	0.095 µg/L
2,4,5-TP	0.022 µg/L	0.11 µg/L
Dichloroprop	0.42 µg/L	0.2.1 µg/L

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for 2,4,5-T, 2,4,5-TP, and dichloroprop. Dilution factors and sample aliquots were taken into

consideration during the application of the action level. Positive results for the aforementioned compounds were qualified (U) as blank contaminants in the affected samples.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample NTC03GW0113 had percent recoveries greater than the quality control limit for dicamba and MCPP on the primary column for the MS/MSD. In addition, 2,4-D and dinoseb had RPDs outside the quality control limits. No action was taken on this basis because dicamba and MCPP were not detected in the sample and 2,4-D and dinoseb had acceptable MS/MSD recoveries.

The laboratory control sample (LCS) had a high percent recovery for dicamba and a low recovery for MCPP for the primary column. No action was taken on this basis because the secondary column had acceptable recoveries.

The relative percent difference (RPD) between columns exceeded 100% for the following compound. The positive result was qualified as presumptively present (NJ), for the compound below:

Sample	Compound	%RPD
NTC03GW0313	MCPP	200.0%

The laboratory reported the lower results from the columns due to a possible interferent.

The relative percent difference (RPD) between columns exceeded 25% for the following compounds. The positive results were reported as estimated, (J) for the compounds below:

Sample	Compound	%RPD
NTC03GW0113	2,4-D	46.2%
NTC03GW0313	MCPA	56.8%
NTC03GW0413	2,4-D	93.5%
NTC03GW0513	2,4-DB	31.1%
	MCPA	62.8%
NTCFD111610-01	MCPA	75.8%

The laboratory reported the lower results from the columns due to a possible interferent.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated, J, due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several compounds in the VOC and SVOC fractions exceeded the continuing calibration RRF or %D criteria resulting in qualification of the data. Compounds were detected in the VOC, SVOC, and HERB method blanks resulting in qualification of the data. LCS recovery noncompliances resulted in the qualification of compounds in the VOC and SVOC fractions. .

Other factors affecting data quality: MS/MSD non-compliances for the VOC and SVOC fractions resulted in qualification of data. Percent differences between columns noncompliances in the HERB fraction resulted in the qualification of the data.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS

Edward Sedlmyer
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: OV	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMO-3-CHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		5	U		5	U		5	U		5	U	
2-CHLOROETHYL VINYL ETHER		5	UR	D	5	U		5	U		5	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		5	U		5	U		5	U		5	U	
ACETONE		5	U		5	U		5	U		5	U	
ACROLEIN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
ACRYLONITRILE		1	U		1	U		1	U		1	U	
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620 SDG: 1011352 FRACTION: OV MEDIA: WATER	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01			TB111510		
	LAB_ID	1011356-03			1011356-04			1011356-05			1011352-03		
	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010			11/15/2010		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC03GW0513					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMO-3-CHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		5	U		5	U		5	U		5	U	
2-CHLOROETHYL VINYL ETHER		5	U		5	U		5	U		5	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		5	U		5	U		5	U		5	U	
ACETONE		5	U		5	U	B	5	U		3.2	J	P
ACROLEIN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
ACRYLONITRILE		1	U		1	U		1	U		1	U	
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111610
SDG: 1011352	LAB_ID	1011356-06
FRACTION: OV	SAMP_DATE	11/16/2010
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	1	U	
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,1-DICHLOROPROPENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,3-TRICHLOROPROPANE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2,4-TRIMETHYLBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3,5-TRIMETHYLBENZENE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,3-DICHLOROPROPANE	1	U	
1,4-DICHLOROBENZENE	1	U	
2,2-DICHLOROPROPANE	1	U	
2-BUTANONE	5	U	
2-CHLOROETHYL VINYL ETHER	5	U	
2-CHLOROTOLUENE	1	U	
2-HEXANONE	5	UJ	C
4-CHLOROTOLUENE	1	U	
4-ISOPROPYLTOLUENE	1	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	3.3	J	P
ACROLEIN	5	UR	C
ACRYLONITRILE	1	U	
BENZENE	1	U	
BROMOBENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: OV	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		1	U		1	U		1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	
CARBON DISULFIDE		0.26	J	CEP	1	UJ	C	1.1	J	CE	1	UJ	C
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CIS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
CYCLOHEXANE		5	U		5	U		5	U		5	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHYL ACETATE		50	U		50	U		50	U		50	U	
ETHYLBENZENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
METHYL ACETATE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
METHYL CYCLOHEXANE		5	U		5	U		5	U		5	U	
METHYL IODIDE		1	U		1	U		1	U		1	U	
METHYL METHACRYLATE		5	U		5	U		5	U		5	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		1	U		1	U		1	U	
TETRAHYDROFURAN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
TOLUENE		0.5	J	P	1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		5	U		5	U		5	U		5	U	
TRICHLOROETHENE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01			TB111510		
SDG: 1011352	LAB_ID	1011356-03			1011356-04			1011356-05			1011352-03		
FRACTION: OV	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010			11/15/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC03GW0513					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		1	U		1	U		1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	
CARBON DISULFIDE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CIS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
CYCLOHEXANE		5	U		5	U		5	U		5	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHYL ACETATE		50	U		50	U		50	U		50	U	
ETHYLBENZENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
METHYL ACETATE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
METHYL CYCLOHEXANE		5	U		5	U		5	U		5	U	
METHYL IODIDE		1	U		1	U		1	U		1	U	
METHYL METHACRYLATE		5	U		5	U		5	U		5	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		1	U		1	U		1	U	
TETRAHYDROFURAN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		5	U		5	U		5	U		5	U	
TRICHLOROETHENE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111610
SDG: 1011352	LAB_ID	1011356-06
FRACTION: OV	SAMP_DATE	11/16/2010
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	UJ	C
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	UJ	C
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	5	U	
DIBROMOMETHANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYL ACETATE	50	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	5	UJ	C
METHYL CYCLOHEXANE	5	U	
METHYL IODIDE	1	U	
METHYL METHACRYLATE	5	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	U	
N-BUTYLBENZENE	1	U	
N-PROPYLBENZENE	1	U	
SEC-BUTYLBENZENE	1	U	
STYRENE	1	U	
TERT-BUTYLBENZENE	1	U	
TETRACHLOROETHENE	1	U	
TETRAHYDROFURAN	5	UR	C
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRANS-1,4-DICHLORO-2-BUTENE	5	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: OV	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL ACETATE		5	U		5	U		5	U		5	U	
VINYL CHLORIDE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01			TB111510		
SDG: 1011352	LAB_ID	1011356-03			1011356-04			1011356-05			1011352-03		
FRACTION: OV	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010			11/15/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC03GW0513					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL ACETATE		5	U		5	U		5	U		5	U	
VINYL CHLORIDE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111610		
SDG: 1011352	LAB_ID	1011356-06		
FRACTION: OV	SAMP_DATE	11/16/2010		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS			
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U	
VINYL ACETATE		5	U	
VINYL CHLORIDE		1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: OS	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.5	U		0.5	U		0.5	U		0.5	U	
1-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U		0.5	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.5	U		0.5	U		0.5	U		0.5	U	
2,4,5-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
2,4,6-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
2,4-DICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
2,4-DIMETHYLPHENOL		1	U		1	U		1	U		1	U	
2,4-DINITROPHENOL		5	U		5	U		5	U		5	U	
2,4-DINITROTOLUENE		0.5	U		0.5	U		0.5	U		0.5	U	
2,6-DINITROTOLUENE		0.5	U		0.5	U		0.5	U		0.5	U	
2-CHLORONAPHTHALENE		0.5	U		0.5	U		0.5	U		0.5	U	
2-CHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
2-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U		0.5	U	
2-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
2-NITROANILINE		1	U		1	U		1	U		1	U	
2-NITROPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
3,3'-DICHLOROBENZIDINE		1	U		1	U		1	U		1	U	
3-METHYLCHOLANTHRENE		2	UJ	C	2	UJ	C	2	UJ	C	2	UJ	C
3-NITROANILINE		1	U		1	U		1	U		1	U	
4,6-DINITRO-2-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
4-BROMOPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
4-CHLORO-3-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
4-CHLOROANILINE		1	U		1	U		1	U		1	U	
4-CHLOROPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
4-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
4-NITROANILINE		1	U		1	U		1	U		1	U	
4-NITROPHENOL		5	U		5	U		5	U		5	U	
ACENAPHTHENE		0.5	U		0.5	U		0.021	J	P	0.5	U	
ACENAPHTHYLENE		0.5	U		0.5	U		0.5	U		0.5	U	
ACETOPHENONE		0.5	U		0.5	U		0.5	U		0.5	U	
ANILINE		0.5	U		0.5	U		0.5	U		0.5	U	
ANTHRACENE		0.5	U		0.5	U		0.5	U		0.5	U	
ATRAZINE		0.5	U		0.5	U		0.5	U		0.5	U	
BENZALDEHYDE		0.5	U		0.5	U		0.5	U		0.5	U	
BENZO(A)ANTHRACENE		0.5	U	B	0.5	U	B	0.5	U	B	0.5	U	B
BENZO(A)PYRENE		0.5	U	B	0.5	U	B	0.5	U		0.5	U	B

PROJ_NO: 01620	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01		
SDG: 1011352	LAB_ID	1011356-03			1011356-04			1011356-05		
FRACTION: OS	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.5	U		0.54	U		0.5	U	
1-METHYLNAPHTHALENE		0.5	U		0.54	U		0.5	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.5	U		0.54	U		0.5	U	
2,4,5-TRICHLOROPHENOL		0.5	U		0.54	U		0.5	U	
2,4,6-TRICHLOROPHENOL		0.5	U		0.54	U		0.5	U	
2,4-DICHLOROPHENOL		0.5	U		0.54	U		0.5	U	
2,4-DIMETHYLPHENOL		1	U		1.1	U		1	U	
2,4-DINITROPHENOL		5	U		5.4	U		5	U	
2,4-DINITROTOLUENE		0.5	U		0.54	U		0.5	U	
2,6-DINITROTOLUENE		0.5	U		0.54	U		0.5	U	
2-CHLORONAPHTHALENE		0.5	U		0.54	U		0.5	U	
2-CHLOROPHENOL		0.5	U		0.54	U		0.5	U	
2-METHYLNAPHTHALENE		0.5	U		0.54	U		0.5	U	
2-METHYLPHENOL		0.5	U		0.54	U		0.5	U	
2-NITROANILINE		1	U		1.1	U		1	U	
2-NITROPHENOL		0.5	U		0.54	U		0.5	U	
3,3'-DICHLOROBENZIDINE		1	U		1.1	U		1	U	
3-METHYLCHOLANTHRENE		2	UJ	C	2.2	UJ	C	2	UJ	C
3-NITROANILINE		1	U		1.1	U		1	U	
4,6-DINITRO-2-METHYLPHENOL		0.5	U		0.54	U		0.5	U	
4-BROMOPHENYL PHENYL ETHER		0.5	U		0.54	U		0.5	U	
4-CHLORO-3-METHYLPHENOL		0.5	U		0.54	U		0.5	U	
4-CHLOROANILINE		1	U		1.1	U		1	U	
4-CHLOROPHENYL PHENYL ETHER		0.5	U		0.54	U		0.5	U	
4-METHYLPHENOL		0.5	U		0.54	U		0.5	U	
4-NITROANILINE		1	U		1.1	U		1	U	
4-NITROPHENOL		5	U		5.4	U		5	U	
ACENAPHTHENE		0.5	U		0.54	U		0.5	U	
ACENAPHTHYLENE		0.5	U		0.54	U		0.5	U	
ACETOPHENONE		0.5	U		0.54	U		0.5	U	
ANILINE		0.5	U		0.54	U		0.5	U	
ANTHRACENE		0.5	U		0.54	U		0.5	U	
ATRAZINE		0.5	U		0.54	U		0.5	U	
BENZALDEHYDE		0.5	U		0.54	U		0.5	U	
BENZO(A)ANTHRACENE		0.5	U	B	0.54	U	B	0.5	U	B
BENZO(A)PYRENE		0.5	U	B	0.54	U	B	0.5	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: OS	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(B)FLUORANTHENE		0.5	U	B	0.5	U	B	0.5	U	B	0.5	U	
BENZO(G,H,I)PERYLENE		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
BENZO(K)FLUORANTHENE		0.5	U		0.5	U	B	0.5	U		0.5	U	
BIS(2-CHLOROETHOXY)METHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BIS(2-CHLOROETHYL)ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.5	U		0.33	J	P	0.27	J	P	0.5	U	
BUTYL BENZYL PHTHALATE		1	U		1	U		1	U		1	U	
CAPROLACTAM		1	UJ	DE	1	UJ	E	1	UJ	E	1	UJ	E
CARBAZOLE		0.5	U		0.5	U		0.5	U		0.5	U	
CHRYSENE		0.5	U	B	0.5	U	B	0.5	U	B	0.5	U	B
DIBENZO(A,H)ANTHRACENE		0.5	U		0.5	U		0.5	U		0.5	U	
DIBENZOFURAN		0.5	U		0.5	U		0.5	U		0.5	U	
DIETHYL PHTHALATE		0.5	U	B	0.5	U	B	0.5	U	B	0.5	U	B
DIMETHYL PHTHALATE		0.5	U		0.5	U		0.5	U		0.5	U	
DI-N-BUTYL PHTHALATE		1	U		1	U		1	U		1	U	
DI-N-OCTYL PHTHALATE		0.5	U		0.5	U		0.5	U		0.5	U	
FLUORANTHENE		0.5	U		0.042	J	P	0.5	U		0.5	U	
FLUORENE		0.5	U		0.5	U		0.5	U		0.5	U	
HEXACHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
HEXACHLOROBUTADIENE		0.5	U		0.5	U		0.5	U		0.5	U	
HEXACHLOROCYCLOPENTADIENE		0.5	U		0.5	U		0.5	U		0.5	U	
HEXACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
INDENO(1,2,3-CD)PYRENE		0.5	U		0.5	U		0.5	U		0.5	U	
ISOPHORONE		0.5	U		0.5	U		0.5	U		0.5	U	
NAPHTHALENE		0.051	J		0.5	U		0.5	U		0.5	U	
NITROBENZENE		0.5	U		0.5	U		0.5	U		0.5	U	
N-NITROSO-DI-N-PROPYLAMINE		0.5	U		0.5	U		0.5	U		0.5	U	
N-NITROSODIPHENYLAMINE		0.5	U		0.5	U		0.5	U		0.5	U	
PENTACHLOROPHENOL		1	U		1	U		1	U		1	U	
PHENANTHRENE		0.5	U		0.032	J	P	0.5	U		0.5	U	
PHENOL		0.5	U		0.5	U		0.5	U		0.5	U	
PYRENE		0.5	U		0.042	J	P	0.5	U		0.5	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01		
SDG: 1011352	LAB_ID	1011356-03			1011356-04			1011356-05		
FRACTION: OS	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(B)FLUORANTHENE		0.5	U		0.54	U	B	0.5	U	
BENZO(G,H,I)PERYLENE		0.5	UJ	C	0.54	UJ	C	0.5	UJ	C
BENZO(K)FLUORANTHENE		0.5	U		0.54	U		0.5	U	
BIS(2-CHLOROETHOXY)METHANE		0.5	U		0.54	U		0.5	U	
BIS(2-CHLOROETHYL)ETHER		0.5	U		0.54	U		0.5	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.28	J	P	0.28	J	P	0.27	J	P
BUTYL BENZYL PHTHALATE		1	U		1.1	U		1	U	
CAPROLACTAM		1	UJ	E	1.1	UJ	E	1	UJ	E
CARBAZOLE		0.5	U		0.54	U		0.5	U	
CHRYSENE		0.5	U	B	0.54	U	B	0.5	U	
DIBENZO(A,H)ANTHRACENE		0.5	U		0.54	U		0.5	U	
DIBENZOFURAN		0.5	U		0.54	U		0.5	U	
DIETHYL PHTHALATE		0.5	U	B	0.54	U	B	0.5	U	B
DIMETHYL PHTHALATE		0.5	U		0.54	U		0.5	U	
DI-N-BUTYL PHTHALATE		1	U		1.1	U		1	U	
DI-N-OCTYL PHTHALATE		0.5	U		0.54	U		0.5	U	
FLUORANTHENE		0.5	U		0.54	U		0.5	U	
FLUORENE		0.5	U		0.54	U		0.5	U	
HEXACHLOROBENZENE		0.5	U		0.54	U		0.5	U	
HEXACHLOROBUTADIENE		0.5	U		0.54	U		0.5	U	
HEXACHLOROCYCLOPENTADIENE		0.5	U		0.54	U		0.5	U	
HEXACHLOROETHANE		0.5	U		0.54	U		0.5	U	
INDENO(1,2,3-CD)PYRENE		0.5	U		0.54	U		0.5	U	
ISOPHORONE		0.5	U		0.54	U		0.5	U	
NAPHTHALENE		0.5	U		0.54	U		0.5	U	
NITROBENZENE		0.5	U		0.54	U		0.5	U	
N-NITROSO-DI-N-PROPYLAMINE		0.5	U		0.54	U		0.5	U	
N-NITROSODIPHENYLAMINE		0.5	U		0.54	U		0.5	U	
PENTACHLOROPHENOL		1	U		1.1	U		1	U	
PHENANTHRENE		0.5	U		0.54	U		0.5	U	
PHENOL		0.5	U		0.54	U		0.5	U	
PYRENE		0.5	U		0.032	J	P	0.5	U	

PROJ_NO: 01620 SDG: 1011352 FRACTION: PEST MEDIA: WATER	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		0.05	U		0.05	U		0.05	U		0.05	U	
4,4'-DDE		0.05	U		0.05	U		0.05	U		0.05	U	
4,4'-DDT		0.05	U		0.05	U		0.05	U		0.05	U	
ALDRIN		0.05	U		0.05	U		0.05	U		0.05	U	
ALPHA-BHC		0.05	U		0.05	U		0.05	U		0.05	U	
ALPHA-CHLORDANE		0.05	U		0.05	U		0.05	U		0.05	U	
BETA-BHC		0.05	U		0.05	U		0.05	U		0.05	U	
DELTA-BHC		0.05	U		0.05	U		0.05	U		0.05	U	
DIELDRIN		0.05	U		0.05	U		0.05	U		0.05	U	
ENDOSULFAN I		0.05	U		0.05	U		0.05	U		0.05	U	
ENDOSULFAN II		0.05	U		0.05	U		0.05	U		0.05	U	
ENDOSULFAN SULFATE		0.05	U		0.05	U		0.05	U		0.05	U	
ENDRIN		0.05	U		0.05	U		0.05	U		0.05	U	
ENDRIN ALDEHYDE		0.05	U		0.05	U		0.05	U		0.05	U	
ENDRIN KETONE		0.05	U		0.05	U		0.05	U		0.05	U	
GAMMA-BHC (LINDANE)		0.05	U		0.05	U		0.05	U		0.05	U	
GAMMA-CHLORDANE		0.05	U		0.05	U		0.05	U		0.05	U	
HEPTACHLOR		0.05	U		0.05	U		0.05	U		0.05	U	
HEPTACHLOR EPOXIDE		0.05	U		0.05	U		0.05	U		0.05	U	
METHOXYCHLOR		0.5	U		0.5	U		0.5	U		0.5	U	
TOXAPHENE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620 SDG: 1011352 FRACTION: PEST MEDIA: WATER	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01		
	LAB_ID	1011356-03			1011356-04			1011356-05		
	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		0.05	U		0.05	U		0.05	U	
4,4'-DDE		0.05	U		0.05	U		0.05	U	
4,4'-DDT		0.05	U		0.05	U		0.05	U	
ALDRIN		0.05	U		0.05	U		0.05	U	
ALPHA-BHC		0.05	U		0.05	U		0.05	U	
ALPHA-CHLORDANE		0.05	U		0.05	U		0.05	U	
BETA-BHC		0.05	U		0.05	U		0.05	U	
DELTA-BHC		0.05	U		0.05	U		0.05	U	
DIELDRIN		0.05	U		0.05	U		0.05	U	
ENDOSULFAN I		0.05	U		0.05	U		0.05	U	
ENDOSULFAN II		0.05	U		0.05	U		0.05	U	
ENDOSULFAN SULFATE		0.05	U		0.05	U		0.05	U	
ENDRIN		0.05	U		0.05	U		0.05	U	
ENDRIN ALDEHYDE		0.05	U		0.05	U		0.05	U	
ENDRIN KETONE		0.05	U		0.05	U		0.05	U	
GAMMA-BHC (LINDANE)		0.05	U		0.05	U		0.05	U	
GAMMA-CHLORDANE		0.05	U		0.05	U		0.05	U	
HEPTACHLOR		0.05	U		0.05	U		0.05	U	
HEPTACHLOR EPOXIDE		0.05	U		0.05	U		0.05	U	
METHOXYCHLOR		0.5	U		0.5	U		0.5	U	
TOXAPHENE		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC03GW0113			NTC03GW0213			NTC03GW0313			NTC03GW0413		
SDG: 1011352	LAB_ID	1011352-01			1011352-02			1011356-01			1011356-02		
FRACTION: HERB	SAMP_DATE	11/15/2010			11/15/2010			11/16/2010			11/16/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
2,4,5-T		0.2	U		0.2	U		0.2	U		0.2	U	A
2,4,5-TP (SILVEX)		0.2	U		0.2	U		0.2	U		0.2	U	A
2,4-D		0.18	J	PU	2	U		2	U		0.14	J	PU
2,4-DB		2	U		2	U		2	U		2	U	
DALAPON		2	U		2	U		2	U		2	U	
DICAMBA		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLOROPROP		2	U		2	U	A	2	U		2	U	
DINOSEB		1	U		1	U		1	U		1	U	
MCPA		200	U		200	U		88	J	PU	200	U	
MCPP		200	U		200	U		160	NJ	PU	200	U	

PROJ_NO: 01620 SDG: 1011352 FRACTION: HERB MEDIA: WATER	NSAMPLE	NTC03GW0513			NTC03GW0613			NTCFD111610-01		
	LAB_ID	1011356-03			1011356-04			1011356-05		
	SAMP_DATE	11/16/2010			11/16/2010			11/16/2010		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC03GW0513		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
2,4,5-T		0.2	U	A	0.2	U		0.2	U	A
2,4,5-TP (SILVEX)		0.2	U		0.2	U		0.2	U	
2,4-D		2	U		2	U		2	U	
2,4-DB		1.7	J	PU	2	U		2	U	
DALAPON		2	U		2	U		2	U	
DICAMBA		0.2	U		0.2	U		0.2	U	
DICHLOROPROP		2	U		2	U		2	U	
DINOSEB		1	U		1	U		1	U	
MCPA		41	J	PU	200	U		38	J	PU
MCPP		200	U		200	U		200	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14044

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
*1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
*53494-70-5	Endrin Ketone	0.050U	0.050	0.016
76-44-8	Heptachlor	0.050U	0.050	0.0018
1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	85	*29-137*
Decachlorobiphenyl	107	*30-134*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	**0.18J**	2.0	0.053
93-76-5	2,4,5-T	0.20U	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	200U	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	100	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	**0.26J**	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
*110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
*124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
*75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	**0.50J**	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	102	*81-116*
Toluene-d8	98	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.040J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.030J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.030J**	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.040J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3'-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.32J**	0.50	0.12
*105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	0.50U	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	**0.051J**	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0113**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	39	*20-70*
Phenol-d6	26	*18-45*
Nitrobenzene-d5	71	*31-123*
2-Fluorobiphenyl	59	*25-113*
2,4,6-Tribromophenol	73	*30-121*
o-Terphenyl	77	*42-125*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14044

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
76-44-8	Heptachlor	0.050U	0.050	0.0018
1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	99	*29-137*
Decachlorobiphenyl	98	*30-134*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/22/10 By: ACM
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	2.0U	2.0	0.053
93-76-5	2,4,5-T	0.20U	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
*120-36-5	Dichloroprop	**0.39J**	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	200U	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	97	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	105	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	99	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.084J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.042J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.042J**	0.50	0.029
*207-08-9	Benzo(k)fluoranthene	**0.074J**	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.095J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.29J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.33J**	0.50	0.22
206-44-0	Fluoranthene	**0.042J**	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0213**	Sampled:	11/15/10 16:00
Lab Sample ID:	**1011352-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	**0.032J**	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	**0.042J**	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	31	*20-70*
Phenol-d6	23	*18-45*
Nitrobenzene-d5	67	*31-123*
2-Fluorobiphenyl	57	*25-113*
2,4,6-Tribromophenol	55	*30-121*
o-Terphenyl	74	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14010

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
*319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
*58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
*5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
*5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
*60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
*72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
*76-44-8	Heptachlor	0.050U	0.050	0.0018
*1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	87	*29-137*
Decachlorobiphenyl	101	*30-134*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	2.0U	2.0	0.053
93-76-5	2,4,5-T	0.20U	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	**88J**	200	11
93-65-2	MCPP	**160J**	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	100	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	**1.1**	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	103	*81-116*
Toluene-d8	99	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	**0.021J**	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.041J**	0.50	0.025
50-32-8	Benzo(a)pyrene	0.50U	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.031J**	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.052J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.29J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.27J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0313**	Sampled:	11/16/10 15:50
Lab Sample ID:	**1011356-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	44	*20-70*
Phenol-d6	29	*18-45*
Nitrobenzene-d5	68	*31-123*
2-Fluorobiphenyl	57	*25-113*
2,4,6-Tribromophenol	77	*30-121*
o-Terphenyl	69	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14010

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
*319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
*58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
*5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
*5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
*60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
*72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
*76-44-8	Heptachlor	0.050U	0.050	0.0018
*1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	74	*29-137*
Decachlorobiphenyl	84	*30-134*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	**0.14J**	2.0	0.053
*93-76-5	2,4,5-T	**0.030J**	0.20	0.0088
*93-72-1	2,4,5-TP (Silvex)	**0.019J**	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	200U	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	96	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	105	*81-116*
Toluene-d8	98	*87-113*
4-Bromofluorobenzene	93	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.030J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.030J**	0.50	0.028
205-99-2	Benzo(b)fluoranthene	0.50U	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.030J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.22J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	0.50U	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0413**	Sampled:	11/16/10 09:00
Lab Sample ID:	**1011356-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	41	*20-70*
Phenol-d6	27	*18-45*
Nitrobenzene-d5	67	*31-123*
2-Fluorobiphenyl	55	*25-113*
2,4,6-Tribromophenol	70	*30-121*
o-Terphenyl	70	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14010

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
*319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
*58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
*5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
*5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
*60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
*72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
*76-44-8	Heptachlor	0.050U	0.050	0.0018
*1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	104	*29-137*
Decachlorobiphenyl	100	*30-134*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	2.0U	2.0	0.053
*93-76-5	2,4,5-T	**0.027J**	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	**1.7J**	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	**41J**	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	95	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	107	*88-115*
1,2-Dichloroethane-d4	103	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.041J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.031J**	0.50	0.028
205-99-2	Benzo(b)fluoranthene	0.50U	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.031J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.26J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.28J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0513**	Sampled:	11/16/10 09:30
Lab Sample ID:	**1011356-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	44	*20-70*
Phenol-d6	30	*18-45*
Nitrobenzene-d5	70	*31-123*
2-Fluorobiphenyl	56	*25-113*
2,4,6-Tribromophenol	81	*30-121*
o-Terphenyl	73	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14010

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
*319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
*58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
*5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
*5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
*60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
*72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
*76-44-8	Heptachlor	0.050U	0.050	0.0018
*1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	77	*29-137*
Decachlorobiphenyl	90	*30-134*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	2.0U	2.0	0.053
93-76-5	2,4,5-T	0.20U	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	200U	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	98	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.2J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	99	*87-113*
4-Bromofluorobenzene	91	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.54U	0.54	0.021
208-96-8	Acenaphthylene	0.54U	0.54	0.036
98-86-2	Acetophenone	0.54U	0.54	0.094
62-53-3	Aniline	0.54U	0.54	0.038
120-12-7	Anthracene	0.54U	0.54	0.037
1912-24-9	Atrazine	0.54U	0.54	0.19
100-52-7	Benzaldehyde	0.54U	0.54	0.18
*56-55-3	Benzo(a)anthracene	**0.043J**	0.54	0.027
*50-32-8	Benzo(a)pyrene	**0.032J**	0.54	0.030
*205-99-2	Benzo(b)fluoranthene	**0.032J**	0.54	0.031
207-08-9	Benzo(k)fluoranthene	0.54U	0.54	0.053
191-24-2	Benzo(g,h,i)perylene	0.54U	0.54	0.059
92-52-4	1,1'-Biphenyl	0.54U	0.54	0.11
101-55-3	4-Bromophenyl Phenyl Ether	0.54U	0.54	0.050
85-68-7	Butyl Benzyl Phthalate	1.1U	1.1	0.061
*105-60-2	Caprolactam	1.1U	1.1	0.23
*86-74-8	Carbazole	0.54U	0.54	0.13
59-50-7	4-Chloro-3-methylphenol	0.54U	0.54	0.18
106-47-8	4-Chloroaniline	1.1U	1.1	0.15
111-91-1	Bis(2-chloroethoxy)methane	0.54U	0.54	0.042
111-44-4	Bis(2-chloroethyl) Ether	0.54U	0.54	0.037
108-60-1	Bis(2-chloroisopropyl) Ether	0.54U	0.54	0.047
91-58-7	2-Chloronaphthalene	0.54U	0.54	0.035
95-57-8	2-Chlorophenol	0.54U	0.54	0.076
7005-72-3	4-Chlorophenyl Phenyl Ether	0.54U	0.54	0.13
*218-01-9	Chrysene	**0.032J**	0.54	0.024
53-70-3	Dibenz(a,h)anthracene	0.54U	0.54	0.057
132-64-9	Dibenzofuran	0.54U	0.54	0.12
84-74-2	Di-n-butyl Phthalate	1.1U	1.1	0.66

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.1U	1.1	1.1
120-83-2	2,4-Dichlorophenol	0.54U	0.54	0.25
*84-66-2	Diethyl Phthalate	**0.24J**	0.54	0.13
105-67-9	2,4-Dimethylphenol	1.1U	1.1	0.33
131-11-3	Dimethyl Phthalate	0.54U	0.54	0.11
534-52-1	4,6-Dinitro-2-methylphenol	0.54U	0.54	0.16
51-28-5	2,4-Dinitrophenol	5.4U	5.4	1.9
121-14-2	2,4-Dinitrotoluene	0.54U	0.54	0.16
606-20-2	2,6-Dinitrotoluene	0.54U	0.54	0.27
117-84-0	Di-n-octyl Phthalate	0.54U	0.54	0.060
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.28J**	0.54	0.24
206-44-0	Fluoranthene	0.54U	0.54	0.043
86-73-7	Fluorene	0.54U	0.54	0.021
118-74-1	Hexachlorobenzene	0.54U	0.54	0.070
87-68-3	Hexachlorobutadiene	0.54U	0.54	0.14
77-47-4	Hexachlorocyclopentadiene	0.54U	0.54	0.16
67-72-1	Hexachloroethane	0.54U	0.54	0.14
193-39-5	Indeno(1,2,3-cd)pyrene	0.54U	0.54	0.045
78-59-1	Isophorone	0.54U	0.54	0.051
*56-49-5	3-Methylcholanthrene	2.2U	2.2	0.27
91-57-6	2-Methylnaphthalene	0.54U	0.54	0.022
90-12-0	1-Methylnaphthalene	0.54U	0.54	0.042
95-48-7	2-Methylphenol	0.54U	0.54	0.14
106-44-5	4-Methylphenol	0.54U	0.54	0.12
91-20-3	Naphthalene	0.54U	0.54	0.023
88-74-4	2-Nitroaniline	1.1U	1.1	0.15
99-09-2	3-Nitroaniline	1.1U	1.1	0.43
100-01-6	4-Nitroaniline	1.1U	1.1	0.17
98-95-3	Nitrobenzene	0.54U	0.54	0.19
100-02-7	4-Nitrophenol	5.4U	5.4	0.76
88-75-5	2-Nitrophenol	0.54U	0.54	0.073

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTC03GW0613**	Sampled:	11/16/10 16:20
Lab Sample ID:	**1011356-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.54U	0.54	0.17
621-64-7	N-Nitroso-di-n-propylamine	0.54U	0.54	0.098
87-86-5	Pentachlorophenol	1.1U	1.1	0.10
85-01-8	Phenanthrene	0.54U	0.54	0.027
108-95-2	Phenol	0.54U	0.54	0.16
129-00-0	Pyrene	**0.032J**	0.54	0.027
88-06-2	2,4,6-Trichlorophenol	0.54U	0.54	0.069
95-95-4	2,4,5-Trichlorophenol	0.54U	0.54	0.032

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	43	*20-70*
Phenol-d6	29	*18-45*
Nitrobenzene-d5	69	*31-123*
2-Fluorobiphenyl	60	*25-113*
2,4,6-Tribromophenol	81	*30-121*
o-Terphenyl	74	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: JTS
Dilution Factor:	1	Analyzed:	12/12/10 By: DJM
QC Batch:	1012717	Analytical Batch:	0L14010

Organochlorine Pesticides by EPA Method 8081A

CAS Number	Analyte	Analytical Result	RL	MDL
*319-84-6	alpha-BHC	0.050U	0.050	0.0014
319-85-7	beta-BHC	0.050U	0.050	0.0062
*58-89-9	gamma-BHC (Lindane)	0.050U	0.050	0.0027
319-86-8	delta-BHC	0.050U	0.050	0.0021
*5103-71-9	alpha-Chlordane	0.050U	0.050	0.0015
*5103-74-2	gamma-Chlordane	0.050U	0.050	0.0020
72-54-8	4,4'-DDD	0.050U	0.050	0.00040
72-55-9	4,4'-DDE	0.050U	0.050	0.0016
*50-29-3	4,4'-DDT	0.050U	0.050	0.00057
309-00-2	Aldrin	0.050U	0.050	0.0015
*60-57-1	Dieldrin	0.050U	0.050	0.00056
959-98-8	Endosulfan I	0.050U	0.050	0.00035
33213-65-9	Endosulfan II	0.050U	0.050	0.0018
1031-07-8	Endosulfan Sulfate	0.050U	0.050	0.0036
*72-20-8	Endrin	0.050U	0.050	0.0021
7421-93-4	Endrin Aldehyde	0.050U	0.050	0.0044
53494-70-5	Endrin Ketone	0.050U	0.050	0.016
*76-44-8	Heptachlor	0.050U	0.050	0.0018
*1024-57-3	Heptachlor Epoxide	0.050U	0.050	0.0016
*72-43-5	Methoxychlor	0.50U	0.50	0.0025
8001-35-2	Toxaphene	1.0U	1.0	0.00014

Surrogates:	***% Recovery***	***Control Limits***
Tetrachloro-m-xylene	91	*29-137*
Decachlorobiphenyl	93	*30-134*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/22/10 By: BJH
Dilution Factor:	1	Analyzed:	11/30/10 By: DJM
QC Batch:	1012718	Analytical Batch:	0L02041

Chlorinated Herbicides by EPA Method 8151A

CAS Number	Analyte	Analytical Result	RL	MDL
94-75-7	2,4-D	2.0U	2.0	0.053
*93-76-5	2,4,5-T	**0.023J**	0.20	0.0088
93-72-1	2,4,5-TP (Silvex)	0.20U	0.20	0.0073
94-82-6	2,4-DB	2.0U	2.0	0.24
75-99-0	Dalapon	2.0U	2.0	0.12
1918-00-9	Dicamba	0.20U	0.20	0.057
120-36-5	Dichloroprop	2.0U	2.0	0.35
88-85-7	Dinoseb	1.0U	1.0	0.084
94-74-6	MCPA	**38J**	200	11
93-65-2	MCPP	200U	200	63

Surrogates:	***% Recovery***	***Control Limits***
2,4-Dichlorophenylacetic Acid	94	*33-153*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	104	*88-115*
1,2-Dichloroethane-d4	102	*81-116*
Toluene-d8	98	*87-113*
4-Bromofluorobenzene	91	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.031J**	0.50	0.025
50-32-8	Benzo(a)pyrene	0.50U	0.50	0.028
205-99-2	Benzo(b)fluoranthene	0.50U	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
218-01-9	Chrysene	0.50U	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3′-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.23J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.27J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**NTCFD111610-01**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/14/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L17046

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	42	*20-70*
Phenol-d6	28	*18-45*
Nitrobenzene-d5	69	*31-123*
2-Fluorobiphenyl	67	*25-113*
2,4,6-Tribromophenol	81	*30-121*
o-Terphenyl	76	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111510**	Sampled:	11/15/10 00:00
Lab Sample ID:	**1011352-03**	Sampled By:	TML
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.2J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111510**	Sampled:	11/15/10 00:00
Lab Sample ID:	**1011352-03**	Sampled By:	TML
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011352**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111510**	Sampled:	11/15/10 00:00
Lab Sample ID:	**1011352-03**	Sampled By:	TML
Matrix:	Water	Received:	11/16/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	99	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111610**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-06**	Sampled By:	TML
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.3J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111610**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-06**	Sampled By:	TML
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011356**
Project:	Naval Station Great Lakes	Description:	Supplyside Landfill
Client Sample ID:	**TB111610**	Sampled:	11/16/10 00:00
Lab Sample ID:	**1011356-06**	Sampled By:	TML
Matrix:	Water	Received:	11/17/10 08:45
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	107	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	98	*87-113*
4-Bromofluorobenzene	92	*78-116*

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APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 1011352

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/30/2010	7	8	15
HERB	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/30/2010	7	8	15
HERB	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HERB	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/30/2010	6	8	14
HG	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HG	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
HG	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
HG	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14
M	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/23/2010	11/29/2010	7	6	13
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
M	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/23/2010	11/29/2010	8	6	14
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/23/2010	11/29/2010	8	6	14
M	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
HGF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
HGF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/30/2010	14	1	15
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/30/2010	13	1	14
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/24/2010	11/29/2010	9	5	14
MF	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/29/2010	11/29/2010	14	0	14
MF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13
MF	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/29/2010	11/29/2010	13	0	13
MF	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/24/2010	11/29/2010	8	5	13

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CL	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
CL	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
CL	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
CN	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
CN	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/24/2010	7	2	9
CN	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/24/2010	7	2	9
CN	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/24/2010	6	2	8
COD	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
COD	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
COD	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
COD	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
COD	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
FL	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
FL	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
FL	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
FL	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
MISC	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4
MISC	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
MISC	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4
NH3	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
NH3	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
NH3	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
NH3	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
PH	S.U.	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
PH	S.U.	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
PH	S.U.	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
PH	S.U.	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
SO4	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SO4	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/30/2010	11/30/2010	14	0	14
SO4	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/30/2010	11/30/2010	15	0	15
TOC	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TOC	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TOC	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
TOC	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/22/2010	6	0	6
TOC	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
TOC	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/22/2010	7	0	7
TOC	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
TPHO	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	11/23/2010	7	1	8
TPHO	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	11/23/2010	7	1	8
TPHO	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TPHO	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	11/23/2010	6	1	7
TR	MG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
TR	MG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TR	MG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
TR	MG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
TR	MG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
TR	MG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/19/2010	11/19/2010	4	0	4
TR	MG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/19/2010	11/19/2010	3	0	3
OV	UG/L	TB111610	1011356-06	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
OV	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
OV	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
OV	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
OV	UG/L	TB111510	1011352-03	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
OV	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
OV	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
OV	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/23/2010	11/23/2010	8	0	8
OV	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/23/2010	11/23/2010	7	0	7
SIM	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	12/14/2010	4	25	29
SIM	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/19/2010	12/14/2010	4	25	29
SIM	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTC03GW0413	1011356-02	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTC03GW0113	1011352-01	NM	11/15/2010	11/19/2010	12/14/2010	4	25	29
SIM	UG/ML	NTC03GW0313	1011356-01	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTC03GW0513	1011356-03	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTC03GW0613	1011356-04	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTCFD111610-01	1011356-05	NM	11/16/2010	11/19/2010	12/14/2010	3	25	28
SIM	UG/ML	NTC03GW0213	1011352-02	NM	11/15/2010	11/19/2010	12/14/2010	4	25	29
PEST	UG/L	NTC03GW0613	1011356-04	NM	11/16/2010	11/22/2010	12/12/2010	6	20	26
PEST	UG/L	NTCFD111610-01	1011356-05	NM	11/16/2010	11/22/2010	12/12/2010	6	20	26
PEST	UG/L	NTC03GW0513	1011356-03	NM	11/16/2010	11/22/2010	12/12/2010	6	20	26
PEST	UG/L	NTC03GW0113	1011352-01	NM	11/15/2010	11/22/2010	12/12/2010	7	20	27
PEST	UG/L	NTC03GW0213	1011352-02	NM	11/15/2010	11/22/2010	12/12/2010	7	20	27
PEST	UG/L	NTC03GW0313	1011356-01	NM	11/16/2010	11/22/2010	12/12/2010	6	20	26
PEST	UG/L	NTC03GW0413	1011356-02	NM	11/16/2010	11/22/2010	12/12/2010	6	20	26

NTC GREAT LAKES
WATER DATA
1011352

FRACTION	CHEMICAL	NTC03GW0513	UNITS	NTCFD111610-01	RPD	D
HERB	2,4-DB	1.7 J	UG/L	ND	200.00	1.70
HERB	MCPA	41 J	UG/L	38 J	7.59	3.00
OS	BIS(2-ETHYLHEXYL)PHTHALATE	0.28 J	UG/L	0.27 J	3.64	0.01

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

Cart: 7
VOA: 576-G
Log 21-13

TETRA TECH NUS, INC

E-1011352

CHAIN OF CUSTODY
NUMBER: ED00000144-1

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122265**	**Gary Wood** **616-940-4206**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments	Cooler
13	11/15/2010	NTC03GW0113	16:00	**5310C**	SL-01	GW	TOC	4° C/H2SO4	6	Glass - Amber 11	40ml vials	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	**SW-846 8151A**	SL-01	GW	Herbicides	4°C	3	Glass - Amber 2	1L	Run MS/MSD	2329
-01	11/15/2010	NTC03GW0113	16:00	**SW-846 9014**	SL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	**SW-846 8270C/8270C SIM**	SL-01	GW	SVOCs (PAHs via SIM)	4°C	4	Glass - Amber 2	1L	Run MS/MSD	2329
	11/15/2010	NTC03GW0113	16:00	**SW-846 8081A**	SL-01	GW	Chlorinated Pesticides	4°C	4	Glass - Amber 2	1L	Run MS/MSD	2329
	11/15/2010	NTC03GW0113	16:00	**4500-NH3-G/4500-P-F/5220 D**	SL-01	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	**SW-846 6010B / 7841 / 7470A**	SL-01	GW	TAL Metals	4°C/HNO3	2	Plastic - PE 6	250ml	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	**SW-846 8260B**	SL-01	GW	VOCs	4°C/HCL	6	Glass - Clear 1	40ml vials	Run MS/MSD	LMP
	11/15/2010	NTC03GW0113	16:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	2	Plastic - PE 3	1L	Run MS/MSD	LMP
10	11/15/2010	NTC03GW0213	16:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-02	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE 3	1L		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 8270C/8270C SIM**	SL-02	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber 2	1L		LMP
-02	11/15/2010	NTC03GW0213	16:00	**4500-NH3-G/4500-P-F/5220 D**	SL-02	GW	Nutrients (Ammonia, P, COD)	4° C/H2SO4	1	Plastic - PE 4	500ml		LMP
	11/15/2010	NTC03GW0213	16:00	**5310C**	SL-02	GW	TOC	4° C/H2SO4	3	Glass - Amber 11	40ml vials		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 8260B**	SL-02	GW	VOCs	4°C/HCL	3	Glass - Clear 1	40ml vials		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 8151A**	SL-02	GW	Herbicides	4°C	1	Glass - Amber 2	1L		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 8081A**	SL-02	GW	Chlorinated Pesticides	4°C	1	Glass - Amber 2	1L		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 6010B / 7841 / 7470A**	SL-02	GW	TAL Metals	4°C/HNO3	1	Plastic - PE 6	250ml		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 9014**	SL-02	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber) 5	500ml		LMP
	11/15/2010	NTC03GW0213	16:00	**SW-846 6010B / 7841 / 7470A**	SL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE 15	250ml		LMP

04-03

11/15/2010	TB111510	15:00	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	1	40ml vials		Cooler LMP

1. Relinquished By: **Keith Simpson**	Date: 11/15/2010	Time: 18:33	Received By: **Federal Express**	Date: 11/15/2010	Time: 18:33
2. Relinquished By: FedEx	Date: 11-16-10	Time: 0900	Received By: CF	Date: 11-16-10	Time: 0900
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Comments:

Log 21-13

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: Tetratech NUS
Receipt Record Page/Line #: 21-13
Work Order #: 1011352
New / Add To
Project Chemist
Sample #s

Recorded by (Initials/date): CF 11-16-10

☒ Cooler ☐ Box ☐ Other ____ — Qty Received: 2

Thermometer Used: ☒ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#____) ☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Cooler ID on COC?	VOC Trip Blank received?
LMP	1531	☐ None ☒ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☒ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☒ Temperature Blank (TB) ☐ 1 Container	Temp Blank: 0		3.3	☒	☒
TB location: Representative / Not Representative						1: 2.6	0	2.6		
						2: 2.1	0	2.1		
						3: 3.4	0	3.4		
						Average °C		2.7		
2329	1548	☒ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☒ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☒ Temperature Blank (TB) ☐ 1 Container	Temp Blank: 0		3.4	☒	☐
TB location: Representative / Not Representative						1: 5.2	0	5.2		
						2: 5.6	0	5.6		
						3: 5.7	0	5.7		
						Average °C		5.5		
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☐
TB location: Representative / Not Representative						1:				
						2:				
						3:				
						Average °C				
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☐
TB location: Representative / Not Representative						1:				
						2:				
						3:				
						Average °C				

If any shaded areas checked, complete Sample Receiving Non-Conformance Form

Paperwork Received

☐ No COC Received

N/A	Yes	No	
	☒	☐	Chain of Custody record(s)?
	☐		If No, COC Initiated By ____
	☒		Rec'd for Lab Signed/Date/Time?
☐	☒		Shipping document?
☒	☐		Other ____

COC ID #s

☐ TriMatrix

☒ Other (Name or ID#) ED000000 144-1

Check COC for Accuracy

☐ No analysis requested

Yes	No	
☒	■	Sample ID matches COC?
☒	■	Sample Date and Time matches COC?
☒		Container type completed on COC?
☐	■	All container types indicated are received?

Sample Condition Summary

☐ Non-TriMatrix containers, see Notes

N/A	Yes	No	
	■	☒	Broken containers/lids?
	■	☒	Missing or incomplete labels?
	■	☒	Illegible information on labels?
	■	☒	Low volume received?
	■	☒	Inappropriate containers received?
☐	■	☒	VOC vials / TOX containers have headspace?
☒	■	☐	Extra sample locations / containers not listed on COC?

Check Sample Preservation

N/A	Yes	No	
	☒	■	Average sample temperature ≤6° C?
☐	☒		Completed Sample Preservation Verification Form?
☐	☐	■	Samples preserved correctly?
☐	☐		If "No", added orange tag?
☐	☐		Received pre-preserved VOC soils? ☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

- ☐ Bacteriological
- ☐ Air Bags
- ☐ EnCores / Methanol Pre-Preserved
- ☐ Formaldehyde/Aldehyde
- ☐ Green-tagged containers
- ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☐ NONE RECEIVED
☐ RECEIVED, COCs TO LAB(S)

Notes

☐ Trip Blank received ☐ Trip Blank not listed on COC
☐ No COC received. Proj. Chemist reviewed (Init/Date) ____
☐ No analysis requested, Proj. Chemist completed (Init/Date) ____

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
		Yes / No

TRIMATRIX LABORATORIES — SAMPLE PRESERVATION VERIFICATION FORM

Client: Tetra Tech	Work Order #: 1011352
Receipt Log #: 21-13	Completed By (initials/date): CF 11-16-10
	Project Chemist:

COC ID #: ED00000144-1

Adjusted by: ____ Date: ____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1								
COC Line #2								
COC Line #3	✓							
COC Line #4								
COC Line #5								
COC Line #6		✓						
COC Line #7						✓✓		
COC Line #8								
COC Line #9					✓✓			
COC Line #10					✓			

Comments

Ph Strip Lot #: HC075211

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #: ED00000144-1 continued

Adjusted by: ____ Date: ____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		~7	<2	<2	
COC Line #1								
COC Line #2		✓						
COC Line #3								
COC Line #4								
COC Line #5								
COC Line #6								
COC Line #7						✓		
COC Line #8	✓							
COC Line #9							✓	
COC Line #10								

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

TM2696
TM2309

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-3

E 1011356

Cart 12, 23-17 317 Green

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122210**	**Gary Wood** **616-940-4206**

	Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
01	11/16/2010	NTC03GW0313	15:50	**SW-846 8270C/8270C SIM**	SL-03	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	**SW-846 8260B**	SL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0313	15:50	**SW-846 9014**	SL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0313	15:50	**SW-846 6010B / 7841 / 7470A**	SL-03	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0313	15:50	**SW-846 6010B / 7841 / 7470A**	SL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0313	15:50	**SW-846 8081A**	SL-03	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0313	15:50	**SW-846 8151A**	SL-03	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0313	15:50	**5310C**	SL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0313	15:50	**4500-NH3-G/4500-P-F/5220 D**	SL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
02	11/16/2010	NTC03GW0413	09:00	**SW-846 8260B**	SL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0413	09:00	**SW-846 8081A**	SL-04	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	**5310C**	SL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0413	09:00	**SW-846 8151A**	SL-04	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	**4500-NH3-G/4500-P-F/5220 D**	SL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0413	09:00	**SW-846 9014**	SL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0413	09:00	**SW-846 8270C/8270C SIM**	SL-04	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0413	09:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/16/2010	NTC03GW0413	09:00	**SW-846 6010B / 7841 / 7470A**	SL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
03	11/16/2010	NTC03GW0513	09:30	**SW-846 6010B / 7841 / 7470A**	SL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0513	09:30	**SW-846 8081A**	SL-05	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	**5310C**	SL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/16/2010	NTC03GW0513	09:30	**SW-846 8270C/8270C SIM**	SL-05	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	**SW-846 8260B**	SL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/16/2010	NTC03GW0513	09:30	**SW-846 8151A**	SL-05	GW	Herbicides	4°C	1	Glass - Amber	1L	
	11/16/2010	NTC03GW0513	09:30	**SW-846 9014**	SL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/16/2010	NTC03GW0513	09:30	**4500-NH3-G/4500-P-F/5220 D**	SL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/16/2010	NTC03GW0513	09:30	**SW-846 6010B / 7841 / 7470A**	SL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
	11/16/2010	NTC03GW0513	09:30	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	[illegible]	[illegible]	[illegible]	

	11/16/2010	NTC03GW0613	16:20	**SW-846 6010B / 7841 / 7470A**	SL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml
	11/16/2010	NTC03GW0613	16:20	**SW-846 9014**	SL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml
	11/16/2010	NTC03GW0613	16:20	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	SL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L
	11/16/2010	NTC03GW0613	16:20	**5310C**	SL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials
9	11/16/2010	NTC03GW0613	16:20	**4500-NH3-G/4500-P-F/5220 D**	SL-06	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml
	11/16/2010	NTC03GW0613	16:20	**SW-846 8260B**	SL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials
	11/16/2010	NTC03GW0613	16:20	**SW-846 8270C/8270C SIM**	SL-06	GW	SVOCs (PAHs via SIM)	4°C	1	Glass - Amber	1L
	11/16/2010	NTC03GW0613	16:20	**SW-846 8151A**	SL-06	GW	Herbicides	4°C	1	Glass - Amber	1L
	11/16/2010	NTC03GW0613	16:20	**SW-846 8081A**	SL-06	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	**SW-846 9014**	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml
	11/16/2010	NTCFD111610-01	00:00	**SW-846 8081A**	QC	GW	Chlorinated Pesticides	4°C	1	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	**SW-846 8270C/8270C SIM**	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L
	11/16/2010	NTCFD111610-01	00:00	**SW-846 6010B / 7841 / 7470A**	QC	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml
5	11/16/2010	NTCFD111610-01	00:00	**SW-846 8260B**	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials
	11/16/2010	NTCFD111610-01	00:00	**SW-846 6010B / 7841 / 7470A**	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml
	11/16/2010	NTCFD111610-01	00:00	**5310C**	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials
	11/16/2010	NTCFD111610-01	00:00	**4500-NH3-G/4500-P-F/5220 D**	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml
	11/16/2010	NTCFD111610-01	00:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L
	11/16/2010	NTCFD111610-01	00:00	**SW-846 8151A**	QC	GW	Herbicides	4°C	1	Glass - Amber	1L
96	11/16/2010	TB111610	07:50	**SW-846 8260B**	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/16/2010	18:14	**Federal Express**	11/16/2010	18:14
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/17/10	0845

Comments:

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: Tetra Tech Nus, Inc
Receipt Record Page/Line #: 23-17
Work Order #: 1011356
New / Add To
Project Chemist | Sample #s

Recorded by (initials/date): LR 11/17/10

☑ Cooler ☐ Box ☐ Other ____ — Qty Received: 2

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#____)

☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via
2686	1414	☐ None ☑ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container
2309	1440	☐ None ☑ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container

Cooler #	Recorded °C	Correction Factor °C	Actual °C
2686	Temp Blank: —		3.7
	TB location: (Representative) / Not Representative		
	1 3.7	—	3.7
	2 3.5	—	3.5
	3 4.3	—	4.3
	Average °C		3.8
	☐ Cooler ID on COC?		
	☑ VOC Trip Blank received?		
2309	Temp Blank: —		4.6
	TB location: (Representative) / Not Representative		
	1 4.8	—	4.9
	2 4.8	—	4.8
	3 3.1	—	3.1
	Average °C		4.2
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		
Cooler #	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		
Cooler #	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance Form

Paperwork Received

☐ No COC Received

N/A	Yes	No	
	☑	☐	Chain of Custody record(s)?
	☐		If No, COC Initiated By ____
	☑		Rec'd for Lab Signed/Date/Time?
☐	☑		Shipping document?
☑	☐		Other ____

COC ID #s

☐ TriMatrix

☑ Other (Name or ID#) ____

Check COC for Accuracy

☐ No analysis requested

Yes	No	
☑	■	Sample ID matches COC?
☑	■	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	■	All container types indicated are received?

Sample Condition Summary

☐ Non-TriMatrix containers, see Notes

N/A	Yes	No	
	■	☑	Broken containers/lids?
	■	☑	Missing or incomplete labels?
	■	☑	Illegible information on labels?
	■	☑	Low volume received?
	■	☑	Inappropriate containers received?
☐	■	☑	VOC vials / TOX containers have headspace?
☐	■	☑	Extra sample locations / containers not listed on COC?

Check Sample Preservation

N/A	Yes	No	
	☑	■	Average sample temperature ≤6° C?
☐	☑		Completed Sample Preservation Verification Form?
☐	☑	■	Samples preserved correctly?
☑	☐		If "No", added orange tag?
☑	☐		Received pre-preserved VOC soils?

☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

- ☐ Bacteriological
- ☐ Air Bags
- ☐ EnCores / Methanol Pre-Preserved
- ☐ Formaldehyde/Aldehyde
- ☑ Green-tagged containers
- ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY: COPIES OF COC TO LAB AREA(S)

- ☐ NONE RECEIVED
- ☑ RECEIVED, COCs TO LAB(S)

Notes

☑ Trip Blank received ☐ Trip Blank not listed on COC

☐ No COC received, Proj. Chemist reviewed (Init/Date) ____

☐ No analysis requested, Proj. Chemist completed (Init/Date) ____

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
11/17/10 0845	11/17/10 1459	Yes / (No)

TRIMATRIX LABORATORIES

SAMPLE PRESERVATION VERIFICATION FORM

page ____ of ____

Client: Tetra Tech Nus Inc	Work Order #: 1011356
Receipt Log #: 23-17 / Completed By (initials/date): LC 11/17/10	Project Chemist:

COC ID #			Adjusted by: ____ Date: ____		DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
ED00000144-3								
Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1	✓	✓			✓	✓	✓	
COC Line #2	✓	✓			✓	✓		
COC Line #3	✓	✓			✓	✓	✓	
COC Line #4	✓	✓			✓	✓	✓	
COC Line #5	✓	✓			✓	✓	✓	
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Ph Strip Lot #	
☑	HC075211
☐	

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #			Adjusted by: ____ Date: ____		DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		~7	<2	<2	
COC Line #1								
COC Line #2								
COC Line #3								
COC Line #4								
COC Line #5								
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

TRIMATRIX LABORATORIES

STATEMENT OF DATA QUALIFICATIONS

Volatile Organic Compounds by EPA Method 8260B

Qualification: The LCS and/or LCSD recovery exceeded the upper control limit. A positive result for this analyte in any sample from the associated QC batch is considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8260B

Sample/Analyte:		
1011352-01	NTC03GW0113	Acrolein
1011352-01	NTC03GW0113	Carbon Disulfide
1011352-02	NTC03GW0213	Acrolein
1011352-02	NTC03GW0213	Carbon Disulfide
1011352-03	TB111510	Acrolein
1011352-03	TB111510	Carbon Disulfide
1011356-01	NTC03GW0313	Acrolein
1011356-01	NTC03GW0313	Carbon Disulfide
1011356-02	NTC03GW0413	Acrolein
1011356-02	NTC03GW0413	Carbon Disulfide
1011356-03	NTC03GW0513	Acrolein
1011356-03	NTC03GW0513	Carbon Disulfide
1011356-04	NTC03GW0613	Acrolein
1011356-04	NTC03GW0613	Carbon Disulfide
1011356-05	NTCFD111610-01	Acrolein
1011356-05	NTCFD111610-01	Carbon Disulfide
1011356-06	TB111610	Acrolein
1011356-06	TB111610	Carbon Disulfide

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample result is considered estimated.

Analysis: USEPA-8260B

Sample/Analyte:		
1011352-01	NTC03GW0113	2-Chloroethyl Vinyl Ether

Qualification: The MS and/or MSD recovery exceeded the upper control limit. The non-spiked sample result for the same analyte was non-detect and is not qualified.

Analysis: USEPA-8260B

Sample/Analyte:		
1011352-01	NTC03GW0113	Acrolein
1011352-01	NTC03GW0113	Carbon Disulfide
1011352-01	NTC03GW0113	Dibromochloromethane

Qualification: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit. The unspiked sample result is not qualified.

Analysis: USEPA-8260B

Sample/Analyte:		
1011352-01	NTC03GW0113	Methylene Chloride

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HOLDING TIME SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Method: Volatile Organic Compounds by EPA Method 8260B

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/23/10	8	NA	11/23/10	8	14	
NTC03GW0213	11/15/10	11/16/10		11/23/10	8	NA	11/23/10	8	14	
TB111510	11/15/10	11/16/10		11/23/10	8	NA	11/23/10	8	14	
NTC03GW0313	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	14	
NTC03GW0413	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	14	
NTC03GW0513	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	14	
NTC03GW0613	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	7	14	
NTCFD111610-01	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	8	14	
TB111610	11/16/10	11/17/10		11/23/10	7	NA	11/23/10	8	14	

QC BATCH SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012925 QC Batch Matrix: Water

Preparation: 5030B Aqueous Purge & Trap

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC03GW0113	1011352-01	11/23/10 07:00	
NTC03GW0213	1011352-02	11/23/10 07:00	
TB111510	1011352-03	11/23/10 07:00	
NTC03GW0313	1011356-01	11/23/10 07:00	
NTC03GW0413	1011356-02	11/23/10 07:00	
NTC03GW0513	1011356-03	11/23/10 07:00	
NTC03GW0613	1011356-04	11/23/10 07:00	
NTCFD111610-01	1011356-05	11/23/10 07:00	
TB111610	1011356-06	11/23/10 07:00	
Blank	1012925-BLK1	11/23/10 07:00	
LCS	1012925-BS1	11/23/10 07:00	
NTC03GW0113	1012925-MS1	11/23/10 07:00	
NTC03GW0113	1012925-MSD1	11/23/10 07:00	

TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012925 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 11/23/2010 By: DLV

Unit: ug/L Analytical Batch: 0K23033

Acetone			5.0 U					5.0	2.1
Acrolein			5.0 U					5.0	0.44
Acrylonitrile			1.0 U					1.0	0.25
Benzene			1.0 U					1.0	0.18
Bromobenzene			1.0 U					1.0	0.19
Bromochloromethane			1.0 U					1.0	0.18
Bromodichloromethane			1.0 U					1.0	0.13
Bromoform			1.0 U					1.0	0.15
Bromomethane			1.0 U					1.0	0.18
n-Butylbenzene			1.0 U					1.0	0.18
sec-Butylbenzene			1.0 U					1.0	0.18
tert-Butylbenzene			1.0 U					1.0	0.15
Carbon Disulfide			1.0 U					1.0	0.18
Carbon Tetrachloride			1.0 U					1.0	0.13
Chlorobenzene			1.0 U					1.0	0.19
Chloroethane			1.0 U					1.0	0.15
2-Chloroethyl Vinyl Ether			5.0 U					5.0	0.28
Chloroform			1.0 U					1.0	0.17
Chloromethane			1.0 U					1.0	0.16
2-Chlorotoluene			1.0 U					1.0	0.16
4-Chlorotoluene			1.0 U					1.0	0.12
Cyclohexane			5.0 U					5.0	0.25
1,2-Dibromo-3-chloropropane			1.0 U					1.0	0.40
Dibromochloromethane			1.0 U					1.0	0.14
1,2-Dibromoethane			1.0 U					1.0	0.22
Dibromomethane			1.0 U					1.0	0.23
trans-1,4-Dichloro-2-butene			5.0 U					5.0	0.21
1,2-Dichlorobenzene			1.0 U					1.0	0.12
1,3-Dichlorobenzene			1.0 U					1.0	0.13
1,4-Dichlorobenzene			1.0 U					1.0	0.12
Dichlorodifluoromethane			1.0 U					1.0	0.21
1,1-Dichloroethane			1.0 U					1.0	0.13
1,2-Dichloroethane			1.0 U					1.0	0.13
1,1-Dichloroethene			1.0 U					1.0	0.13
cis-1,2-Dichloroethene			1.0 U					1.0	0.23
trans-1,2-Dichloroethene			1.0 U					1.0	0.20

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 11/23/2010 By: DLV

Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
1,2-Dichloropropane			1.0 U					1.0	0.15
1,3-Dichloropropane			1.0 U					1.0	0.14
2,2-Dichloropropane			1.0 U					1.0	0.18
1,1-Dichloropropene			1.0 U					1.0	0.25
cis-1,3-Dichloropropene			1.0 U					1.0	0.25
trans-1,3-Dichloropropene			1.0 U					1.0	0.23
Ethyl Acetate			50 U					50	0.27
Ethylbenzene			1.0 U					1.0	0.14
2-Hexanone			5.0 U					5.0	0.29
Iodomethane			1.0 U					1.0	0.21
Isopropylbenzene			1.0 U					1.0	0.15
4-Isopropyltoluene			1.0 U					1.0	0.29
Methyl Acetate			5.0 U					5.0	0.30
Methyl tert-Butyl Ether			1.0 U					1.0	0.28
Methylcyclohexane			5.0 U					5.0	0.20
Methylene Chloride			1.0 U					1.0	0.26
2-Butanone (MEK)			5.0 U					5.0	0.55
Methyl Methacrylate			5.0 U					5.0	0.094
4-Methyl-2-pentanone (MIBK)			5.0 U					5.0	0.28
n-Propylbenzene			1.0 U					1.0	0.15
Styrene			1.0 U					1.0	0.11
1,1,1,2-Tetrachloroethane			1.0 U					1.0	0.16
1,1,2,2-Tetrachloroethane			1.0 U					1.0	0.070
Tetrachloroethene			1.0 U					1.0	0.16
Tetrahydrofuran			5.0 U					5.0	1.0
Toluene			1.0 U					1.0	0.16
1,2,3-Trichlorobenzene			1.0 U					1.0	0.18
1,2,4-Trichlorobenzene			1.0 U					1.0	0.16
1,1,1-Trichloroethane			1.0 U					1.0	0.19
1,1,2-Trichloroethane			1.0 U					1.0	0.18
Trichloroethene			1.0 U					1.0	0.092
Trichlorofluoromethane			1.0 U					1.0	0.20
1,2,3-Trichloropropane			1.0 U					1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0 U					1.0	0.13
1,2,4-Trimethylbenzene			1.0 U					1.0	0.16
1,3,5-Trimethylbenzene			1.0 U					1.0	0.18

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B									
Method Blank (Continued)					Analyzed:		11/23/2010	By: DLV	
Unit: ug/L					Analytical Batch:		0K23033		
Vinyl Acetate			5.0 U					5.0	0.23
Vinyl Chloride			1.0 U					1.0	0.10
Xylene (Total)			1.0 U					1.0	0.42
Surrogates:									
Dibromofluoromethane				*104*	*88-115*				
1,2-Dichloroethane-d4				*100*	*81-116*				
Toluene-d8				*99*	*87-113*				
4-Bromofluorobenzene				*94*	*78-116*				
Laboratory Control Sample					Analyzed:		11/23/2010	By: DLV	
Unit: ug/L					Analytical Batch:		0K23033		
Acetone		40.0	**32.3**	81	52-134		20	5.0	2.1
Acrolein		40.0	**70.4**	**176**	61-151		20	5.0	0.44
Acrylonitrile		40.0	**34.3**	86	70-126		20	1.0	0.25
Benzene		40.0	**40.7**	102	86-122		20	1.0	0.18
Bromobenzene		40.0	**36.6**	92	85-118		20	1.0	0.19
Bromochloromethane		40.0	**36.8**	92	79-122		20	1.0	0.18
Bromodichloromethane		40.0	**43.3**	108	81-126		20	1.0	0.13
Bromoform		40.0	**41.6**	104	55-126		20	1.0	0.15
Bromomethane		40.0	**32.3**	81	56-140		20	1.0	0.18
n-Butylbenzene		40.0	**40.8**	102	79-122		20	1.0	0.18
sec-Butylbenzene		40.0	**41.0**	102	85-118		20	1.0	0.18
tert-Butylbenzene		40.0	**42.5**	106	85-115		20	1.0	0.15
Carbon Disulfide		40.0	**56.7**	**142**	74-133		20	1.0	0.18
Carbon Tetrachloride		40.0	**46.2**	116	80-126		20	1.0	0.13
Chlorobenzene		40.0	**40.2**	101	88-114		20	1.0	0.19
Chloroethane		40.0	**35.6**	89	71-136		20	1.0	0.15
2-Chloroethyl Vinyl Ether		40.0	**34.3**	86	60-148		20	5.0	0.28
Chloroform		40.0	**41.5**	104	86-120		20	1.0	0.17
Chloromethane		40.0	**30.3**	76	68-130		20	1.0	0.16
2-Chlorotoluene		40.0	**41.5**	104	91-116		20	1.0	0.16
4-Chlorotoluene		40.0	**40.8**	102	89-115		20	1.0	0.12
Cyclohexane		40.0	**38.0**	95	70-129		20	5.0	0.25
1,2-Dibromo-3-chloropropane		40.0	**37.6**	94	61-123		20	1.0	0.40
Dibromochloromethane		40.0	**45.3**	113	73-114		20	1.0	0.14
1,2-Dibromoethane		40.0	**41.7**	104	81-118		20	1.0	0.22

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued)
Unit: ug/L

Analyzed: 11/23/2010 By: DLV
Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Dibromomethane		40.0	**41.8**	105	83-120		20	1.0	0.23
trans-1,4-Dichloro-2-butene		40.0	**32.8**	82	64-125		20	5.0	0.21
1,2-Dichlorobenzene		40.0	**42.6**	106	87-119		20	1.0	0.12
1,3-Dichlorobenzene		40.0	**42.4**	106	88-116		20	1.0	0.13
1,4-Dichlorobenzene		40.0	**40.8**	102	86-117		20	1.0	0.12
Dichlorodifluoromethane		40.0	**39.3**	98	67-133		20	1.0	0.21
1,1-Dichloroethane		40.0	**39.5**	99	80-122		20	1.0	0.13
1,2-Dichloroethane		40.0	**41.5**	104	78-121		20	1.0	0.13
1,1-Dichloroethene		40.0	**41.8**	104	81-125		20	1.0	0.13
cis-1,2-Dichloroethene		40.0	**43.4**	109	84-121		20	1.0	0.23
trans-1,2-Dichloroethene		40.0	**42.0**	105	85-121		20	1.0	0.20
1,2-Dichloropropane		40.0	**38.0**	95	74-125		20	1.0	0.15
1,3-Dichloropropane		40.0	**38.3**	96	82-117		20	1.0	0.14
2,2-Dichloropropane		40.0	**46.6**	116	48-136		20	1.0	0.18
1,1-Dichloropropene		40.0	**42.5**	106	83-123		20	1.0	0.25
cis-1,3-Dichloropropene		40.0	**44.6**	112	78-119		20	1.0	0.25
trans-1,3-Dichloropropene		40.0	**39.8**	99	70-125		20	1.0	0.23
Ethyl Acetate		100	**83.5**	83	13-184		20	50	0.27
Ethylbenzene		40.0	**41.1**	103	86-116		20	1.0	0.14
2-Hexanone		40.0	**29.5**	74	53-137		20	5.0	0.29
Iodomethane		40.0	**42.0**	105	67-136		20	1.0	0.21
Isopropylbenzene		40.0	**41.7**	104	90-118		20	1.0	0.15
4-Isopropyltoluene		40.0	**42.4**	106	84-119		20	1.0	0.29
Methyl Acetate		40.0	**30.4**	76	65-136		20	5.0	0.30
Methyl tert-Butyl Ether		40.0	**40.1**	100	82-117		20	1.0	0.28
Methylcyclohexane		40.0	**42.1**	105	75-126		20	5.0	0.20
Methylene Chloride		40.0	**34.0**	85	74-135		20	1.0	0.26
2-Butanone (MEK)		40.0	**34.0**	85	60-134		20	5.0	0.55
Methyl Methacrylate		100	**89.2**	89	70-130		20	5.0	0.094
4-Methyl-2-pentanone (MIBK)		40.0	**32.2**	80	53-142		20	5.0	0.28
n-Propylbenzene		40.0	**42.3**	106	88-119		20	1.0	0.15
Styrene		40.0	**43.6**	109	81-115		20	1.0	0.11
1,1,1,2-Tetrachloroethane		40.0	**44.8**	112	85-120		20	1.0	0.16
1,1,2,2-Tetrachloroethane		40.0	**36.2**	90	81-127		20	1.0	0.070
Tetrachloroethene		40.0	**45.2**	113	85-115		20	1.0	0.16
Tetrahydrofuran		40.0	**38.4**	96	58-122		20	5.0	1.0

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Toluene		40.0	**42.2**	105	87-123		20	1.0	0.16
1,2,3-Trichlorobenzene		40.0	**45.7**	114	74-125		20	1.0	0.18
1,2,4-Trichlorobenzene		40.0	**46.6**	117	75-127		20	1.0	0.16
1,1,1-Trichloroethane		40.0	**44.4**	111	81-123		20	1.0	0.19
1,1,2-Trichloroethane		40.0	**41.2**	103	86-123		20	1.0	0.18
Trichloroethene		40.0	**45.3**	113	80-122		20	1.0	0.092
Trichlorofluoromethane		40.0	**40.6**	101	78-130		20	1.0	0.20
1,2,3-Trichloropropane		40.0	**36.8**	92	72-125		20	1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane		40.0	**39.4**	99	76-129		20	1.0	0.13
1,2,4-Trimethylbenzene		40.0	**41.8**	105	86-116		20	1.0	0.16
1,3,5-Trimethylbenzene		40.0	**41.4**	103	85-117		20	1.0	0.18
Vinyl Acetate		40.0	**44.4**	111	67-143		20	5.0	0.23
Vinyl Chloride		40.0	**33.1**	83	73-130		20	1.0	0.10
Xylene (Total)		120	**128**	107	88-115		20	1.0	0.42
Surrogates:									
Dibromofluoromethane				*104*	*88-115*				
1,2-Dichloroethane-d4				*100*	*81-116*				
Toluene-d8				*104*	*87-113*				
4-Bromofluorobenzene				*99*	*78-116*				

Matrix Spike 1011352-01 NTC03GW0113 Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acetone	5.0 U	40.0	**29.1**	73	54-146		27	5.0	2.1
Acrolein	5.0 U	40.0	**63.5**	**159**	54-148		12	5.0	0.44
Acrylonitrile	1.0 U	40.0	**32.6**	81	67-127		15	1.0	0.25
Benzene	1.0 U	40.0	**40.8**	102	84-127		8	1.0	0.18
Bromobenzene	1.0 U	40.0	**36.0**	90	85-117		8	1.0	0.19
Bromochloromethane	1.0 U	40.0	**36.2**	90	80-123		10	1.0	0.18
Bromodichloromethane	1.0 U	40.0	**44.9**	112	77-130		8	1.0	0.13
Bromoform	1.0 U	40.0	**39.8**	100	52-123		10	1.0	0.15
Bromomethane	1.0 U	40.0	**26.0**	65	52-127		32	1.0	0.18
n-Butylbenzene	1.0 U	40.0	**39.5**	99	75-121		8	1.0	0.18
sec-Butylbenzene	1.0 U	40.0	**40.3**	101	84-118		9	1.0	0.18
tert-Butylbenzene	1.0 U	40.0	**41.9**	105	86-116		9	1.0	0.15
Carbon Disulfide	0.260 J	40.0	**58.3**	145	63-160		16	1.0	0.18
Carbon Tetrachloride	1.0 U	40.0	**47.5**	119	83-126		10	1.0	0.13

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike (Continued) 1011352-01 NTC03GW0113 — Analyzed: 11/23/2010 By: DLV

Unit: ug/L — Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Chlorobenzene	1.0 U	40.0	**39.9**	100	82-120		8	1.0	0.19
Chloroethane	1.0 U	40.0	**37.2**	93	77-141		13	1.0	0.15
2-Chloroethyl Vinyl Ether	5.0 U	40.0	5.0 U		70-130		40	5.0	0.28
Chloroform	1.0 U	40.0	**42.2**	106	87-123		8	1.0	0.17
Chloromethane	1.0 U	40.0	**30.5**	76	66-132		13	1.0	0.16
2-Chlorotoluene	1.0 U	40.0	**40.4**	101	91-117		8	1.0	0.16
4-Chlorotoluene	1.0 U	40.0	**40.0**	100	86-116		8	1.0	0.12
Cyclohexane	5.0 U	40.0	**38.2**	96	65-131		11	5.0	0.25
1,2-Dibromo-3-chloropropane	1.0 U	40.0	**34.8**	87	56-121		14	1.0	0.40
Dibromochloromethane	1.0 U	40.0	**44.6**	**112**	74-110		9	1.0	0.14
1,2-Dibromoethane	1.0 U	40.0	**40.3**	101	80-117		8	1.0	0.22
Dibromomethane	1.0 U	40.0	**42.5**	106	79-124		8	1.0	0.23
trans-1,4-Dichloro-2-butene	5.0 U	40.0	**28.4**	71	57-117		10	5.0	0.21
1,2-Dichlorobenzene	1.0 U	40.0	**41.4**	104	89-115		7	1.0	0.12
1,3-Dichlorobenzene	1.0 U	40.0	**41.5**	104	89-114		8	1.0	0.13
1,4-Dichlorobenzene	1.0 U	40.0	**39.7**	99	87-114		8	1.0	0.12
Dichlorodifluoromethane	1.0 U	40.0	**39.6**	99	62-126		14	1.0	0.21
1,1-Dichloroethane	1.0 U	40.0	**38.8**	97	82-125		10	1.0	0.13
1,2-Dichloroethane	1.0 U	40.0	**41.4**	104	78-120		8	1.0	0.13
1,1-Dichloroethene	1.0 U	40.0	**41.9**	105	85-130		10	1.0	0.13
cis-1,2-Dichloroethene	1.0 U	40.0	**43.0**	108	84-127		9	1.0	0.23
trans-1,2-Dichloroethene	1.0 U	40.0	**42.0**	105	87-125		9	1.0	0.20
1,2-Dichloropropane	1.0 U	40.0	**37.7**	94	75-125		10	1.0	0.15
1,3-Dichloropropane	1.0 U	40.0	**37.3**	93	76-119		9	1.0	0.14
2,2-Dichloropropane	1.0 U	40.0	**41.9**	105	41-120		10	1.0	0.18
1,1-Dichloropropene	1.0 U	40.0	**42.5**	106	83-124		9	1.0	0.25
cis-1,3-Dichloropropene	1.0 U	40.0	**42.7**	107	68-122		9	1.0	0.25
trans-1,3-Dichloropropene	1.0 U	40.0	**38.5**	96	66-121		9	1.0	0.23
Ethylbenzene	1.0 U	40.0	**40.6**	102	87-118		7	1.0	0.14
2-Hexanone	5.0 U	40.0	**26.1**	65	46-149		10	5.0	0.29
Iodomethane	1.0 U	40.0	**39.0**	98	72-148		30	1.0	0.21
Isopropylbenzene	1.0 U	40.0	**41.2**	103	89-121		9	1.0	0.15
4-Isopropyltoluene	1.0 U	40.0	**41.5**	104	83-116		8	1.0	0.29
Methyl Acetate	5.0 U	40.0	**24.9**	62	46-151		15	5.0	0.30
Methyl tert-Butyl Ether	1.0 U	40.0	**38.0**	95	83-113		16	1.0	0.28
Methylcyclohexane	5.0 U	40.0	**42.5**	106	69-127		9	5.0	0.20

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike (Continued) 1011352-01 NTC03GW0113 — Analyzed: 11/23/2010 By: DLV
Unit: ug/L — Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Methylene Chloride	1.0 U	40.0	**34.7**	87	87-119		11	1.0	0.26
2-Butanone (MEK)	5.0 U	40.0	**31.3**	78	62-140		20	5.0	0.55
Methyl Methacrylate	5.0 U	100	**97.9**	98	70-130		30	5.0	0.094
4-Methyl-2-pentanone (MIBK)	5.0 U	40.0	**29.5**	74	54-152		9	5.0	0.28
n-Propylbenzene	1.0 U	40.0	**40.8**	102	89-119		9	1.0	0.15
Styrene	1.0 U	40.0	**42.6**	107	79-114		8	1.0	0.11
1,1,1,2-Tetrachloroethane	1.0 U	40.0	**44.1**	110	85-120		7	1.0	0.16
1,1,2,2-Tetrachloroethane	1.0 U	40.0	**34.2**	86	82-126		9	1.0	0.070
Tetrachloroethene	1.0 U	40.0	**44.7**	112	83-117		8	1.0	0.16
Tetrahydrofuran	5.0 U	40.0	**32.2**	80	56-119		14	5.0	1.0
Toluene	0.500 J	40.0	**43.2**	107	88-125		8	1.0	0.16
1,2,3-Trichlorobenzene	1.0 U	40.0	**43.2**	108	71-126		9	1.0	0.18
1,2,4-Trichlorobenzene	1.0 U	40.0	**44.0**	110	70-125		8	1.0	0.16
1,1,1-Trichloroethane	1.0 U	40.0	**44.9**	112	82-126		9	1.0	0.19
1,1,2-Trichloroethane	1.0 U	40.0	**40.4**	101	84-124		10	1.0	0.18
Trichloroethene	1.0 U	40.0	**46.0**	115	81-124		8	1.0	0.092
Trichlorofluoromethane	1.0 U	40.0	**41.7**	104	79-135		9	1.0	0.20
1,2,3-Trichloropropane	1.0 U	40.0	**33.6**	84	70-120		9	1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	40.0	**40.1**	100	76-127		11	1.0	0.13
1,2,4-Trimethylbenzene	1.0 U	40.0	**40.9**	102	86-115		7	1.0	0.16
1,3,5-Trimethylbenzene	1.0 U	40.0	**40.4**	101	86-114		7	1.0	0.18
Vinyl Acetate	5.0 U	40.0	**35.7**	89	51-154		10	5.0	0.23
Vinyl Chloride	1.0 U	40.0	**33.3**	83	71-136		10	1.0	0.10
Xylene (Total)	1.0 U	120	**126**	105	88-115		7	1.0	0.42
Surrogates:									
Dibromofluoromethane				*104*	*88-115*				
1,2-Dichloroethane-d4				*99*	*81-116*				
Toluene-d8				*104*	*87-113*				
4-Bromofluorobenzene				*98*	*78-116*				

Matrix Spike Duplicate 1011352-01 NTC03GW0113 — Analyzed: 11/23/2010 By: DLV
Unit: ug/L — Analytical Batch: 0K23033

Acetone	5.0 U	40.0	**30.5**	76	54-146	5	27	5.0	2.1
Acrolein	5.0 U	40.0	**64.7**	**162**	54-148	2	12	5.0	0.44
Acrylonitrile	1.0 U	40.0	**33.0**	82	67-127	1	15	1.0	0.25
Benzene	1.0 U	40.0	**40.0**	100	84-127	2	8	1.0	0.18

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Bromobenzene	1.0 U	40.0	**35.7**	89	85-117	0.8	8	1.0	0.19
Bromochloromethane	1.0 U	40.0	**35.6**	89	80-123	2	10	1.0	0.18
Bromodichloromethane	1.0 U	40.0	**43.6**	109	77-130	3	8	1.0	0.13
Bromoform	1.0 U	40.0	**40.8**	102	52-123	2	10	1.0	0.15
Bromomethane	1.0 U	40.0	**29.3**	73	52-127	12	32	1.0	0.18
n-Butylbenzene	1.0 U	40.0	**39.0**	98	75-121	1	8	1.0	0.18
sec-Butylbenzene	1.0 U	40.0	**39.5**	99	84-118	2	9	1.0	0.18
tert-Butylbenzene	1.0 U	40.0	**41.5**	104	86-116	0.9	9	1.0	0.15
Carbon Disulfide	0.260 J	40.0	**56.2**	140	63-160	4	16	1.0	0.18
Carbon Tetrachloride	1.0 U	40.0	**45.9**	115	83-126	3	10	1.0	0.13
Chlorobenzene	1.0 U	40.0	**39.1**	98	82-120	2	8	1.0	0.19
Chloroethane	1.0 U	40.0	**34.9**	87	77-141	6	13	1.0	0.15
2-Chloroethyl Vinyl Ether	5.0 U	40.0	5.0 U		70-130		40	5.0	0.28
Chloroform	1.0 U	40.0	**41.2**	103	87-123	2	8	1.0	0.17
Chloromethane	1.0 U	40.0	**30.6**	76	66-132	0.4	13	1.0	0.16
2-Chlorotoluene	1.0 U	40.0	**39.7**	99	91-117	2	8	1.0	0.16
4-Chlorotoluene	1.0 U	40.0	**39.4**	99	86-116	1	8	1.0	0.12
Cyclohexane	5.0 U	40.0	**37.6**	94	65-131	2	11	5.0	0.25
1,2-Dibromo-3-chloropropane	1.0 U	40.0	**36.2**	91	56-121	4	14	1.0	0.40
Dibromochloromethane	1.0 U	40.0	**44.5**	**111**	74-110	0.3	9	1.0	0.14
1,2-Dibromoethane	1.0 U	40.0	**40.3**	101	80-117	0.2	8	1.0	0.22
Dibromomethane	1.0 U	40.0	**42.0**	105	79-124	1	8	1.0	0.23
trans-1,4-Dichloro-2-butene	5.0 U	40.0	**29.9**	75	57-117	5	10	5.0	0.21
1,2-Dichlorobenzene	1.0 U	40.0	**41.5**	104	89-115	0.2	7	1.0	0.12
1,3-Dichlorobenzene	1.0 U	40.0	**40.9**	102	89-114	1	8	1.0	0.13
1,4-Dichlorobenzene	1.0 U	40.0	**39.3**	98	87-114	1	8	1.0	0.12
Dichlorodifluoromethane	1.0 U	40.0	**38.5**	96	62-126	3	14	1.0	0.21
1,1-Dichloroethane	1.0 U	40.0	**38.2**	96	82-125	1	10	1.0	0.13
1,2-Dichloroethane	1.0 U	40.0	**40.9**	102	78-120	1	8	1.0	0.13
1,1-Dichloroethene	1.0 U	40.0	**40.8**	102	85-130	3	10	1.0	0.13
cis-1,2-Dichloroethene	1.0 U	40.0	**42.5**	106	84-127	1	9	1.0	0.23
trans-1,2-Dichloroethene	1.0 U	40.0	**40.8**	102	87-125	3	9	1.0	0.20
1,2-Dichloropropane	1.0 U	40.0	**37.5**	94	75-125	0.5	10	1.0	0.15
1,3-Dichloropropane	1.0 U	40.0	**37.3**	93	76-119	0.08	9	1.0	0.14
2,2-Dichloropropane	1.0 U	40.0	**42.0**	105	41-120	0.07	10	1.0	0.18
1,1-Dichloropropene	1.0 U	40.0	**41.6**	104	83-124	2	9	1.0	0.25

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 11/23/2010 By: DLV

Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
cis-1,3-Dichloropropene	1.0 U	40.0	**41.8**	104	68-122	2	9	1.0	0.25
trans-1,3-Dichloropropene	1.0 U	40.0	**39.0**	98	66-121	1	9	1.0	0.23
Ethylbenzene	1.0 U	40.0	**40.2**	100	87-118	1	7	1.0	0.14
2-Hexanone	5.0 U	40.0	**27.4**	68	46-149	5	10	5.0	0.29
Iodomethane	1.0 U	40.0	**44.0**	110	72-148	12	30	1.0	0.21
Isopropylbenzene	1.0 U	40.0	**40.8**	102	89-121	1	9	1.0	0.15
4-Isopropyltoluene	1.0 U	40.0	**41.2**	103	83-116	0.7	8	1.0	0.29
Methyl Acetate	5.0 U	40.0	**25.6**	64	46-151	3	15	5.0	0.30
Methyl tert-Butyl Ether	1.0 U	40.0	**38.5**	96	83-113	1	16	1.0	0.28
Methylcyclohexane	5.0 U	40.0	**40.4**	101	69-127	5	9	5.0	0.20
Methylene Chloride	1.0 U	40.0	**33.8**	**85**	87-119	3	11	1.0	0.26
2-Butanone (MEK)	5.0 U	40.0	**31.7**	79	62-140	1	20	5.0	0.55
Methyl Methacrylate	5.0 U	100	**101**	101	70-130	3	30	5.0	0.094
4-Methyl-2-pentanone (MIBK)	5.0 U	40.0	**31.0**	78	54-152	5	9	5.0	0.28
n-Propylbenzene	1.0 U	40.0	**40.2**	101	89-119	2	9	1.0	0.15
Styrene	1.0 U	40.0	**41.6**	104	79-114	2	8	1.0	0.11
1,1,1,2-Tetrachloroethane	1.0 U	40.0	**43.8**	109	85-120	0.7	7	1.0	0.16
1,1,2,2-Tetrachloroethane	1.0 U	40.0	**34.8**	87	82-126	2	9	1.0	0.070
Tetrachloroethene	1.0 U	40.0	**43.1**	108	83-117	4	8	1.0	0.16
Tetrahydrofuran	5.0 U	40.0	**33.1**	83	56-119	3	14	5.0	1.0
Toluene	0.500 J	40.0	**42.0**	104	88-125	3	8	1.0	0.16
1,2,3-Trichlorobenzene	1.0 U	40.0	**45.1**	113	71-126	4	9	1.0	0.18
1,2,4-Trichlorobenzene	1.0 U	40.0	**45.6**	114	70-125	4	8	1.0	0.16
1,1,1-Trichloroethane	1.0 U	40.0	**44.0**	110	82-126	2	9	1.0	0.19
1,1,2-Trichloroethane	1.0 U	40.0	**41.2**	103	84-124	2	10	1.0	0.18
Trichloroethene	1.0 U	40.0	**44.6**	112	81-124	3	8	1.0	0.092
Trichlorofluoromethane	1.0 U	40.0	**40.4**	101	79-135	3	9	1.0	0.20
1,2,3-Trichloropropane	1.0 U	40.0	**34.2**	85	70-120	2	9	1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0 U	40.0	**38.8**	97	76-127	3	11	1.0	0.13
1,2,4-Trimethylbenzene	1.0 U	40.0	**40.4**	101	86-115	1	7	1.0	0.16
1,3,5-Trimethylbenzene	1.0 U	40.0	**39.9**	100	86-114	1	7	1.0	0.18
Vinyl Acetate	5.0 U	40.0	**36.9**	92	51-154	3	10	5.0	0.23
Vinyl Chloride	1.0 U	40.0	**32.7**	82	71-136	2	10	1.0	0.10
Xylene (Total)	1.0 U	120	**124**	103	88-115	2	7	1.0	0.42
Surrogates:									
Dibromofluoromethane				*105*	*88-115*				

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 11/23/2010 By: DLV

Unit: ug/L Analytical Batch: 0K23033

Surrogates (Continued):		
1,2-Dichloroethane-d4	*99*	*81-116*
Toluene-d8	*104*	*87-113*
4-Bromofluorobenzene	*98*	*78-116*

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Individual sample results relate only to the sample tested.

5560 Corporate Exchange Court SE ♦ Grand Rapids, MI 49512 ♦ 616.975.4500 ♦ Fax 616.942.7463 ♦ www.trimatrixlabs.com

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0K23033-CCV1)		**Lab File ID: CCV1123B.D**		**Analyzed: 11/23/10 08:13**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	75 - 125	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	75 - 125	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	75 - 125	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	99	75 - 125	
LCS (1012925-BS1)		**Lab File ID: CCV1123B.D**		**Analyzed: 11/23/10 08:13**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	99	78 - 116	
Calibration Check (0K23033-CCV2)		**Lab File ID: CCV2.D**		**Analyzed: 11/23/10 08:42**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	75 - 125	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	75 - 125	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	75 - 125	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	97	75 - 125	
Blank (1012925-BLK1)		**Lab File ID: BLK1123B.D**		**Analyzed: 11/23/10 09:10**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	94	78 - 116	
NTC03GW0113 (1011352-01)		**Lab File ID: 35201.D**		**Analyzed: 11/23/10 10:07**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	102	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	98	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC03GW0213 (1011352-02)		**Lab File ID: 35202.D**		**Analyzed: 11/23/10 10:36**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	105	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
TB111510 (1011352-03)		**Lab File ID: 35203.D**		**Analyzed: 11/23/10 11:05**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC03GW0313 (1011356-01)		**Lab File ID: 35601.D**		**Analyzed: 11/23/10 11:34**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	103	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC03GW0413 (1011356-02)		**Lab File ID: 35602.D**		**Analyzed: 11/23/10 12:03**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	105	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	98	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	93	78 - 116	
NTC03GW0513 (1011356-03)		**Lab File ID: 35603.D**		**Analyzed: 11/23/10 12:31**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	107	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	103	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC03GW0613 (1011356-04)		**Lab File ID: 35604.D**		**Analyzed: 11/23/10 13:00**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	91	78 - 116	
NTCFD111610-01 (1011356-05)		**Lab File ID: 35605.D**		**Analyzed: 11/23/10 13:28**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	102	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	98	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	91	78 - 116	
TB111610 (1011356-06)		**Lab File ID: 35606.D**		**Analyzed: 11/23/10 13:57**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	107	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	98	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
Matrix Spike (1012925-MS1)		**Lab File ID: 35201MS.D**		**Analyzed: 11/23/10 18:42**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	99	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	87 - 113	
4-Bromofluorobenzene	9.23	9.24	-0.01	+/-1.0	98	78 - 116	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0K19003
Sequence: 0K23033
Instrument: 224

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Matrix Spike Dup (1012925-MSD1)		**Lab File ID: 35201MSD.D**		**Analyzed: 11/23/10 19:10**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	105	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	99	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	104	87 - 113	
4-Bromofluorobenzene	9.23	9.24	-0.01	+/-1.0	98	78 - 116	

INITIAL CALIBRATION STANDARDS
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19023

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0100068	8260 Tune Working Standard 10-04-10	0K19023-TUN1	BFB1116B.D	11/16/10 11:57
0100677	1 UG/L B	0K19023-CAL1	1P1116B.D	11/16/10 13:59
0100678	5 UG/L B	0K19023-CAL2	5P1116B.D	11/16/10 14:27
0100679	10 UG/L B	0K19023-CAL3	10P1116B.D	11/16/10 14:54
0100680	20 UG/L B	0K19023-CAL4	20P1116B.D	11/16/10 15:22
0100681	40 UG/L B	0K19023-CAL5	40P1116B.D	11/16/10 15:50
0100682	100 UG/L B	0K19023-CAL6	100P1116B.D	11/16/10 16:17
0050439	AIX 5 UG/L	0K19023-CAL8	5A1116B.D	11/16/10 16:45
0100683	200 UG/L B	0K19023-CAL7	200P1116B.D	11/16/10 17:14
0050440	AIX 25 UG/L	0K19023-CAL9	25A1116B.D	11/16/10 17:42
0101191	40.0 UG/L A	0K19023-SCV1	SCV1116B.D	11/16/10 18:11
0050441	AIX 50 UG/L	0K19023-CALA	50A1116B.D	11/16/10 18:40
0050442	AIX 100 UG/L	0K19023-CALB	100A1116B.D	11/16/10 19:09
0050443	AIX 200 UG/L	0K19023-CALC	200A1116B.D	11/16/10 19:37
0050444	AIX 400 UG/L	0K19023-CALD	400A1116B.D	11/16/10 20:06
0050445	AIX SCV	0K19023-SCV2	SCVA1116B.D	11/16/10 20:35

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K19023-TUN1
Injection Date: 11/16/10
Sequence: 0K19023

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: BFB1116B.D
Injection Time: 11:57
Calibration: 0K19003
Instrument ID: 224

m/z	Ion Abundance Criteria	% Relative Abundance	
50	15 - 40% of 95	16.3	PASS
75	30 - 60% of 95	46.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	8.1	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	78.8	PASS
175	5 - 9% of 174	8	PASS
176	95 - 101% of 174	99.2	PASS
177	5 - 9% of 176	6.4	PASS

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol												
Acetone	1	~~0.2322198~~	5	0.1026222	10	9.197245E-02	20	0.0839506	40	7.754201E-02	100	7.511326E-02
Acetonitrile												
Acrolein	1	1.700746E-02	5	2.126288E-02	10	0.0233362	20	2.181637E-02	40	2.085012E-02	100	2.222385E-02
Acrylonitrile	1	0.1202809	5	0.1215021	10	0.1243058	20	0.126	40	0.1203142	100	0.1223683
Allyl Chloride												
Benzene	1	1.334148	5	1.401582	10	1.326688	20	1.374942	40	1.318952	100	1.300655
Bromobenzene	1	1.274802	5	1.270463	10	1.220227	20	1.266779	40	1.253524	100	1.271966
Bromochloromethane	1	0.2578926	5	0.2435804	10	0.2315407	20	0.2369207	40	0.23052	100	0.2244781
Bromodichloromethane	1	0.3625888	5	0.353312	10	0.3473881	20	0.3757607	40	0.372664	100	0.3869448
Bromoform	1	0.1781281	5	0.1866312	10	0.1986096	20	0.216237	40	0.229758	100	0.257149
Bromomethane	1	0.257828	5	0.2339964	10	0.2119304	20	0.2002142	40	0.180181	100	0.1904435
n-Butanol												
2-Butyl Alcohol												
n-Butylbenzene	1	1.453586	5	1.632778	10	1.76523	20	1.930901	40	1.994445	100	2.066002
sec-Butylbenzene	1	2.429687	5	2.746075	10	2.851849	20	3.078227	40	3.08719	100	3.139566
tert-Butylbenzene	1	1.787841	5	1.951917	10	2.071415	20	2.249472	40	2.272335	100	2.31204
Carbon Disulfide	1	0.5891178	5	0.4868465	10	0.4729893	20	0.4919296	40	0.4793109	100	0.492791
Carbon Tetrachloride	1	0.4096664	5	0.3949867	10	0.386301	20	0.4142934	40	0.4064345	100	0.4122192
Chlorobenzene	1	1.423682	5	1.368206	10	1.303046	20	1.328596	40	1.24983	100	1.242889
Chloroethane	1	0.4986485	5	0.3460716	10	0.2856392	20	0.2577908	40	0.2403668	100	0.2347976
2-Chloroethyl Vinyl Ether	1	0.1132322	5	0.1224579	10	0.1297952	20	0.1516454	40	0.1683794	100	0.1844066
Chloroform	1	0.5986239	5	0.5520099	10	0.5427221	20	0.548292	40	0.520999	100	0.5228924
1-Chlorohexane	1	0.7016837	5	0.4463701	10	0.4052302	20	0.4101905	40	0.3982984	100	0.3906887
Chloromethane	1	0.3864509	5	0.3603298	10	0.3346009	20	0.3337018	40	0.3215494	100	0.3137009
2-Chlorotoluene	1	0.7652602	5	0.7965036	10	0.7916804	20	0.8335197	40	0.8232174	100	0.8261136
4-Chlorotoluene	1	0.7871165	5	0.8595647	10	0.8432173	20	0.8657278	40	0.834567	100	0.8440689
Cyclohexane	1	0.398673	5	0.4737667	10	0.4944209	20	0.543214	40	0.5337803	100	0.5321547
1,2-Dibromo-3-chloropropane	1	0.0890278	5	0.1133897	10	0.1245545	20	0.1336451	40	0.1427175	100	0.1605183
Dibromochloromethane	1	0.2943059	5	0.3140431	10	0.3176056	20	0.3428201	40	0.3637496	100	0.3899522
1,2-Dibromoethane	1	0.3215875	5	0.3119539	10	0.3225652	20	0.3314982	40	0.3279411	100	0.3404272

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane	1	0.1830727	5	0.1839029	10	0.1752748	20	0.1792052	40	0.1741985	100	0.1765403
trans-1,4-Dichloro-2-butene	1	0.1116126	5	0.1410576	10	0.1531627	20	0.1696364	40	0.1788045	100	0.197274
1,2-Dichlorobenzene	1	1.392098	5	1.437615	10	1.429889	20	1.473838	40	1.449724	100	1.454349
1,3-Dichlorobenzene	1	1.471363	5	1.508573	10	1.510653	20	1.555991	40	1.522084	100	1.536735
1,4-Dichlorobenzene	1	1.849767	5	1.665453	10	1.579298	20	1.603448	40	1.561025	100	1.578642
Dichlorodifluoromethane	1	0.4466561	5	0.4378529	10	0.4179033	20	0.4358638	40	0.4091891	100	0.3906221
1,1-Dichloroethane	1	0.5633803	5	0.538354	10	0.5082469	20	0.5353195	40	0.5067739	100	0.5140601
1,2-Dichloroethane	1	0.4048164	5	0.3906792	10	0.3864164	20	0.3883421	40	0.3692336	100	0.3696493
1,1-Dichloroethene	1	0.3197144	5	0.2911862	10	0.2780849	20	0.2824458	40	0.271106	100	0.2711279
cis-1,2-Dichloroethene	1	0.3176451	5	0.3453253	10	0.3297015	20	0.3522412	40	0.3430798	100	0.3441321
trans-1,2-Dichloroethene	1	0.3849636	5	0.3531549	10	0.3242635	20	0.3330868	40	0.3176503	100	0.3142262
1,2-Dichloroethene (Total)	2	0.3513043	10	0.3492401	20	0.3269825	40	0.342664	80	0.330365	200	0.3291792
Dichlorofluoromethane	1	0.6673651	5	0.6149606	10	0.5677898	20	0.5792803	40	0.5436105	100	0.5375082
1,2-Dichloropropane	1	0.300961	5	0.3166781	10	0.3061088	20	0.3212466	40	0.3026752	100	0.3064434
1,3-Dichloropropane	1	0.5752648	5	0.6283603	10	0.6208117	20	0.6322563	40	0.6230335	100	0.6264133
2,2-Dichloropropane	1	0.3213958	5	0.3073297	10	0.2923854	20	0.3151183	40	0.3163107	100	0.3374435
1,1-Dichloropropene	1	0.390913	5	0.4238173	10	0.4159217	20	0.4475336	40	0.4266149	100	0.4305761
cis-1,3-Dichloropropene	1	0.3146704	5	0.3266549	10	0.353275	20	0.3956468	40	0.4127737	100	0.4422551
trans-1,3-Dichloropropene	1	0.2527193	5	0.2701459	10	0.2918211	20	0.3381364	40	0.3591676	100	0.4051347
1,3-Dichloropropene (Total)	2	0.2836948	10	0.2984004	20	0.3225481	40	0.3668916	80	0.3859707	200	0.4236949
1,4-Dioxane												
Ethanol												
Ethyl Acetate												
Ethylbenzene	1	1.818552	5	2.059056	10	2.061902	20	2.171989	40	2.124234	100	2.134471
Ethyl Ether	1	0.1724026	5	0.1729965	10	0.1702151	20	0.1706578	40	0.1702117	100	0.1721385
Hexachlorobutadiene	1	0.3839415	5	0.3652621	10	0.3535606	20	0.3642827	40	0.3576654	100	0.3704746
Hexachloroethane	1	0.2420216	5	0.2472085	10	0.2535374	20	0.2676787	40	0.2904832	100	0.3299505
Hexane												
2-Hexanone	1	0.1234809	5	0.1470204	10	0.1692053	20	0.18783	40	0.2037585	100	0.2217821
Iodomethane	1	7.346189E-02	5	9.100878E-02	10	0.1293783	20	0.2205828	40	0.2877531	100	0.3433396
Isobutanol												

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene	1	2.378834	5	2.754258	10	2.842121	20	3.151947	40	3.16649	100	3.237297
Isopropyl Ether												
4-Isopropyltoluene	1	1.991396	5	2.332573	10	2.408893	20	2.588792	40	2.618247	100	2.687831
Methyl Acetate	1	0.3142177	5	0.229152	10	0.2161692	20	0.2162713	40	0.2139847	100	0.2152255
Methyl tert-Butyl Ether	1	0.6934259	5	0.723671	10	0.7466685	20	0.7623303	40	0.7484923	100	0.7740028
Methylcyclohexane	1	0.4158745	5	0.4641042	10	0.5042132	20	0.5532344	40	0.545969	100	0.5473947
Methylene Chloride	1	0.434822	5	0.3539143	10	0.3308687	20	0.3318031	40	0.3210293	100	0.31525
2-Butanone (MEK)	1	0.1005574	5	0.1154139	10	0.1199195	20	0.1237954	40	0.1251612	100	0.1247207
Methyl Methacrylate												
2-Methylnaphthalene	1	~~0.4409134~~	5	0.4137023	10	0.5070888	20	0.670468	40	0.8305131	100	0.99218
4-Methyl-2-pentanone (MIBK)	1	0.1464711	5	0.1685842	10	0.1868435	20	0.2125495	40	0.2274071	100	0.2461128
Naphthalene	1	1.159401	5	1.311922	10	1.574265	20	1.937042	40	2.128928	100	2.277843
2-Nitropropane												
n-Propylbenzene	1	0.7804139	5	0.8853156	10	0.8783485	20	0.9628158	40	0.9471505	100	0.9532762
Styrene	1	1.012443	5	1.303301	10	1.330147	20	1.41893	40	1.40757	100	1.427885
t-Butanol												
1,1,1,2-Tetrachloroethane	1	0.3434128	5	0.379376	10	0.3771709	20	0.3958028	40	0.3984169	100	0.414004
1,1,2,2-Tetrachloroethane	1	0.8149468	5	0.796618	10	0.8027301	20	0.8044403	40	0.7854498	100	0.7904899
Tetrachloroethene	1	0.5766079	5	0.5531633	10	0.5124914	20	0.5374489	40	0.5202617	100	0.5198751
Tetrahydrofuran	1	~~6.014046E-03~~	5	2.610725E-02	10	2.585643E-02	20	3.006414E-02	40	3.161308E-02	100	3.362318E-02
Toluene	1	1.490772	5	1.525232	10	1.442387	20	1.502642	40	1.422986	100	1.433036
1,2,3-Trichlorobenzene	1	0.5257157	5	0.5729001	10	0.6139864	20	0.6650216	40	0.6812591	100	0.7088993
1,2,4-Trichlorobenzene	1	0.606001	5	0.5921846	10	0.6155468	20	0.6862006	40	0.7147209	100	0.7719331
1,1,1-Trichloroethane	1	0.4550628	5	0.4527002	10	0.4146007	20	0.4421876	40	0.4318837	100	0.4415867
1,1,2-Trichloroethane	1	0.2086163	5	0.2232733	10	0.2208121	20	0.2254274	40	0.2172882	100	0.2208598
Trichloroethene	1	0.3805016	5	0.3684343	10	0.3457592	20	0.369705	40	0.3527452	100	0.3607776
Trichlorofluoromethane	1	0.6072246	5	0.5703138	10	0.5426836	20	0.5580001	40	0.5296907	100	0.5156821
1,2,3-Trichloropropane	1	0.7332044	5	0.7544438	10	0.7355184	20	0.7660086	40	0.7986987	100	0.8514229
1,1,2-Trichloro-1,2,2-trifluoro	1	0.3394379	5	0.3105637	10	0.3039477	20	0.3057698	40	0.2846992	100	0.2762966
1,2,4-Trimethylbenzene	1	1.861861	5	2.398381	10	2.497079	20	2.663133	40	2.668126	100	2.719056
1,3,5-Trimethylbenzene	1	1.998099	5	2.445104	10	2.468485	20	2.640107	40	2.64673	100	2.683499

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate	1	0.3331005	5	0.3488473	10	0.3595275	20	0.3695946	40	0.3978713	100	0.4328957
Vinyl Chloride	1	0.4436814	5	0.3879297	10	0.366992	20	0.374559	40	0.3579248	100	0.3530628
Xylene, Meta + Para	2	0.705713	10	0.8644064	20	0.8467578	40	0.8894358	80	0.8568766	200	0.8417228
Xylene, Ortho	1	0.6189154	5	0.7268306	10	0.7536692	20	0.8200085	40	0.801529	100	0.8091852
Xylene (Total)	3	0.6767805	15	0.8185478	30	0.8157283	60	0.8662934	120	0.8384274	300	0.8308769
Dibromofluoromethane	40	0.2485191	40	0.2433545	40	0.2420096	40	0.2449161	40	0.2417154	40	0.2394281
1,2-Dichloroethane-d4	40	0.2600153	40	0.2549123	40	0.2531743	40	0.2518991	40	0.249887	40	0.2481698
Toluene-d8	40	0.9560813	40	0.9732103	40	0.979152	40	0.9803899	40	0.9838336	40	0.9878461
4-Bromofluorobenzene	40	0.472115	40	0.4920988	40	0.4910202	40	0.4845092	40	0.4882896	40	0.4922357

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol			5	0.0152752	25	1.246822E-02	50	1.209628E-02	100	1.193818E-02	200	0.0122522
Acetone	200	7.367677E-02										
Acetonitrile			5	6.935336E-02	25	6.002347E-02	50	5.746147E-02	100	5.751616E-02	200	5.920463E-02
Acrolein	200	0.0220554										
Acrylonitrile	200	0.1072618										
Allyl Chloride			5	0.1543263	25	0.1600036	50	0.1624425	100	0.1651553	200	0.1697944
Benzene	200	1.280621										
Bromobenzene	200	1.301416										
Bromochloromethane	200	0.2158942										
Bromodichloromethane	200	0.3884063										
Bromoform	200	0.2752466										
Bromomethane	200	0.1995832										
n-Butanol			5	0	25	2.693115E-03	50	2.994083E-03	100	3.478595E-03	200	3.773522E-03
2-Butyl Alcohol			5	~~7.145646E-03~~	25	1.022714E-02	50	1.038286E-02	100	9.842624E-03	200	1.084254E-02
n-Butylbenzene	200	2.114968										
sec-Butylbenzene	200	3.200463										
tert-Butylbenzene	200	2.36175										
Carbon Disulfide	200	0.501311										
Carbon Tetrachloride	200	0.4179596										
Chlorobenzene	200	1.209369										
Chloroethane	200	0.2299615										
2-Chloroethyl Vinyl Ether	200	0.1878725										
Chloroform	200	0.5166345										
1-Chlorohexane	200	0.3815921										
Chloromethane	200	0.305115										
2-Chlorotoluene	200	0.8333662										
4-Chlorotoluene	200	0.8418465										
Cyclohexane	200	0.5270511										
1,2-Dibromo-3-chloropropane	200	0.172273										
Dibromochloromethane	200	0.397028										
1,2-Dibromoethane	200	0.3361641										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0K19003
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane	200	0.1734429										
trans-1,4-Dichloro-2-butene	200	0.2049124										
1,2-Dichlorobenzene	200	1.450638										
1,3-Dichlorobenzene	200	1.563912										
1,4-Dichlorobenzene	200	1.592021										
Dichlorodifluoromethane	200	0.3792744										
1,1-Dichloroethane	200	0.5106395										
1,2-Dichloroethane	200	0.3677503										
1,1-Dichloroethene	200	0.268254										
cis-1,2-Dichloroethene	200	0.3365782										
trans-1,2-Dichloroethene	200	0.2947827										
1,2-Dichloroethene (Total)	400	0.3156804										
Dichlorofluoromethane	200	0.5317396										
1,2-Dichloropropane	200	0.2991576										
1,3-Dichloropropane	200	0.6180861										
2,2-Dichloropropane	200	0.3497912										
1,1-Dichloropropene	200	0.427619										
cis-1,3-Dichloropropene	200	0.4531507										
trans-1,3-Dichloropropene	200	0.4207765										
1,3-Dichloropropene (Total)	400	0.4369636										
1,4-Dioxane			5	0	25	3.374765E-03	50	3.094043E-03	100	3.475596E-03	200	3.578287E-03
Ethanol			5	0	25	2.867714E-03	50	3.008195E-03	100	2.646731E-03	200	2.811075E-03
Ethyl Acetate			5	0.2159928	25	0.2253942	50	0.2261768	100	0.2338767	200	0.2437021
Ethylbenzene	200	2.119123										
Ethyl Ether	200	0.1687705										
Hexachlorobutadiene	200	0.3858292										
Hexachloroethane	200	0.3680433										
Hexane			5	0.2639831	25	0.2801247	50	0.2766246	100	0.2734457	200	0.2749158
2-Hexanone	200	0.2259052										
Iodomethane	200	0.3554301										
Isobutanol			5	~~1.906326E-03~~	25	4.611303E-03	50	5.221418E-03	100	5.340842E-03	200	5.736241E-03

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene	200	3.308907										
Isopropyl Ether			5	0.8360529	25	0.909998	50	0.91211	100	0.9177396	200	0.9194907
4-Isopropyltoluene	200	2.752973										
Methyl Acetate	200	0.2075695										
Methyl tert-Butyl Ether	200	0.762795										
Methylcyclohexane	200	0.5390542										
Methylene Chloride	200	0.3063278										
2-Butanone (MEK)	200	0.1217655										
Methyl Methacrylate			5	0.1699213	25	0.2077645	50	0.210115	100	0.2210137	200	0.2316045
2-Methylnaphthalene	200	1.025397										
4-Methyl-2-pentanone (MIBK)	200	0.2483472										
Naphthalene	200	2.315641										
2-Nitropropane			5	3.634318E-02	25	4.052589E-02	50	4.346713E-02	100	4.869553E-02	200	5.525052E-02
n-Propylbenzene	200	0.967064										
Styrene	200	1.401896										
t-Butanol			5	1.841142E-02	25	1.562055E-02	50	1.689552E-02	100	1.672304E-02	200	1.809124E-02
1,1,1,2-Tetrachloroethane	200	0.4170962										
1,1,2,2-Tetrachloroethane	200	0.7852543										
Tetrachloroethene	200	0.5147246										
Tetrahydrofuran	200	3.408807E-02										
Toluene	200	1.409471										
1,2,3-Trichlorobenzene	200	0.7245122										
1,2,4-Trichlorobenzene	200	0.8017223										
1,1,1-Trichloroethane	200	0.4467793										
1,1,2-Trichloroethane	200	0.215799										
Trichloroethene	200	0.3568519										
Trichlorofluoromethane	200	0.5140192										
1,2,3-Trichloropropane	200	0.8876806										
1,1,2-Trichloro-1,2,2-trifluoroe	200	0.2741491										
1,2,4-Trimethylbenzene	200	2.762061										
1,3,5-Trimethylbenzene	200	2.721012										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate	200	0.4305781										
Vinyl Chloride	200	0.3432224										
Xylene, Meta + Para	400	0.8176249										
Xylene, Ortho	200	0.7957624										
Xylene (Total)	600	0.8103374										
Dibromofluoromethane	40	0.2375575	40	~~0.2413024~~	40	~~0.2375775~~	40	~~0.2356562~~	40	~~0.2359867~~	40	~~0.2327885~~
1,2-Dichloroethane-d4	40	0.2444739	40	~~0.2510723~~	40	~~0.2494136~~	40	~~0.2484128~~	40	~~0.2504453~~	40	~~0.2477132~~
Toluene-d8	40	0.9839767	40	~~0.948869~~	40	~~0.9566569~~	40	~~0.9478549~~	40	~~0.9589421~~	40	~~0.9518319~~
4-Bromofluorobenzene	40	0.49212	40	~~0.460239~~	40	~~0.4667165~~	40	~~0.462511~~	40	~~0.4600681~~	40	~~0.4642995~~

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol	400	1.175167E-02										
Acetone												
Acetonitrile	400	5.776769E-02										
Acrolein												
Acrylonitrile												
Allyl Chloride	400	0.165169										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butanol	400	4.272588E-03										
2-Butyl Alcohol	400	1.207414E-02										
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon Disulfide												
Carbon Tetrachloride												
Chlorobenzene												
Chloroethane												
2-Chloroethyl Vinyl Ether												
Chloroform												
1-Chlorohexane												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Cyclohexane												
1,2-Dibromo-3-chloropropane												
Dibromochloromethane												
1,2-Dibromoethane												

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
1,2-Dichloroethene (Total)												
Dichlorofluoromethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
1,3-Dichloropropene (Total)												
1,4-Dioxane	400	3.483719E-03										
Ethanol	400	2.640193E-03										
Ethyl Acetate	400	0.2475903										
Ethylbenzene												
Ethyl Ether												
Hexachlorobutadiene												
Hexachloroethane												
Hexane	400	0.2675642										
2-Hexanone												
Iodomethane												
Isobutanol	400	6.09461E-03										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene												
Isopropyl Ether	400	0.8872495										
4-Isopropyltoluene												
Methyl Acetate												
Methyl tert-Butyl Ether												
Methylcyclohexane												
Methylene Chloride												
2-Butanone (MEK)												
Methyl Methacrylate	400	0.2311364										
2-Methylnaphthalene												
4-Methyl-2-pentanone (MIBK)												
Naphthalene												
2-Nitropropane	400	5.849917E-02										
n-Propylbenzene												
Styrene												
t-Butanol	400	1.845463E-02										
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Tetrahydrofuran												
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoro												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate												
Vinyl Chloride												
Xylene, Meta + Para												
Xylene, Ortho												
Xylene (Total)												
Dibromofluoromethane	40	~~0.2309098~~										
1,2-Dichloroethane-d4	40	~~0.2479337~~										
Toluene-d8	40	~~0.9547235~~										
4-Bromofluorobenzene	40	~~0.4621282~~										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Isopropanol	1.263029E-02	10.44442	2.431667	0.169152			15	
Acetone	8.414622E-02	13.41868	2.32	1.710456E-02			15	
Acetonitrile	6.022113E-02	7.624849	2.58	0.0147416			15	
Acrolein	2.122175E-02	9.50711	2.194286	0.2431594			15	
Acrylonitrile	0.1202904	5.082343	2.935714	0.183084			15	
Allyl Chloride	0.1628152	3.248024	2.58	0.0147416			15	
Benzene	1.333941	3.133763	4.86	2.114986E-02			15	
Bromobenzene	1.265597	1.945571	9.38	2.114114E-02			15	
Bromochloromethane	0.2344038	5.79388	4.22	2.476443E-02			15	
Bromodichloromethane	0.3695807	4.29198	5.981429	5.977752E-02			15	
Bromoform	0.2202514	16.4387	8.91	1.873922E-02	0.99862		SPCC (0.1)	
Bromomethane	0.2105967	12.7715	1.642857	0.4600203			15	
n-Butanol	3.442381E-03	18.1565	5.462	8.084128E-02	0.99753		0.99	
2-Butyl Alcohol	1.067386E-02	8.065275	4.212	0.1049928			15	
n-Butylbenzene	1.85113	13.15462	10.77	0.0156409			15	
sec-Butylbenzene	2.933294	9.3769	10.21	1.378964E-02			15	
tert-Butylbenzene	2.143824	9.93637	9.99	9.805333E-03			15	
Carbon Disulfide	0.5020423	7.868182	2.47	7.804583E-03			15	
Carbon Tetrachloride	0.4059801	2.796656	4.65	1.619965E-02			15	
Chlorobenzene	1.30366	5.831359	8.101429	4.997638E-02			SPCC (0.3)	
Chloroethane	0.2990394	32.38662	1.71	1.096531E-02	0.99993		0.99	
2-Chloroethyl Vinyl Ether	0.1511127	19.97853	6.29	9.079095E-02	0.99963		0.99	
Chloroform	0.5431677	5.200017	4.31	8.349735E-03			CCC (30)	
1-Chlorohexane	0.447722	25.4304	8.094286	9.903296E-02	0.99989		0.99	
Chloromethane	0.3364927	8.408006	1.37	0.4211754			SPCC (0.1)	
2-Chlorotoluene	0.8099516	3.208848	9.571428	3.658437E-02			15	
4-Chlorotoluene	0.8394441	3.036759	9.681429	4.231177E-02			15	
Cyclohexane	0.5004372	10.24105	4.54	0.0196925			15	
1,2-Dibromo-3-chloropropane	0.1337323	21.10617	11.54857	4.031895E-02	0.99853		0.99	
Dibromochloromethane	0.3456435	11.42686	7.52	3.721705E-03			15	
1,2-Dibromoethane	0.3274482	2.948599	7.621428	5.155239E-02			15	
Dibromomethane	0.1779482	2.370775	5.82	8.153718E-03			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
trans-1,4-Dichloro-2-butene	0.1652086	19.78421	9.441428	4.303467E-02	0.99942		0.99	
1,2-Dichlorobenzene	1.441164	1.780703	10.77	0.0156409			15	
1,3-Dichlorobenzene	1.524187	2.069334	10.31	0.0193405			15	
1,4-Dichlorobenzene	1.632808	6.206173	10.4	1.987494E-02			15	
Dichlorodifluoromethane	0.416766	6.078515	1.22	1.580108E-02			15	
1,1-Dichloroethane	0.5252534	4.035802	3.397143	0.1430632			SPCC (0.1)	
1,2-Dichloroethane	0.3824125	3.656315	4.88	1.580108E-02			15	
1,1-Dichloroethene	0.2831313	6.349562	2.281429	0.1663432			CCC (30)	
cis-1,2-Dichloroethene	0.3383862	3.420985	3.99	9.982982E-03			15	
trans-1,2-Dichloroethene	0.3317326	8.891568	2.96	1.891028E-02			15	
1,2-Dichloroethene (Total)	0.3350594	3.891762	3.99	9.982982E-03			15	
Dichlorofluoromethane	0.5774649	8.488992	1.845714	0.2896717			15	
1,2-Dichloropropane	0.3076101	2.693215	5.71	2.039071E-02			CCC (30)	
1,3-Dichloropropane	0.6177466	3.128136	7.3	0.0202292			15	
2,2-Dichloropropane	0.3199678	5.921999	3.985714	0.1338412			15	
1,1-Dichloropropene	0.4232851	4.061663	4.651429	8.285187E-02			15	
cis-1,3-Dichloropropene	0.3854895	14.27252	6.42	1.535659E-02			15	
trans-1,3-Dichloropropene	0.3339859	19.59723	6.961429	5.517898E-02	0.99928		0.99	
1,3-Dichloropropene (Total)	0.3597377	16.72569	6.961429	5.517898E-02	0.99954		0.99	
1,4-Dioxane	3.401282E-03	5.475726	5.85	1.875685E-02			15	
Ethanol	2.794782E-03	5.570405	2.016	0.2722229			15	
Ethyl Acetate	0.2321222	5.159657	4.08	2.450681E-02			15	
Ethylbenzene	2.069904	5.693245	8.22	0.011466			CCC (30)	
Ethyl Ether	0.1710561	0.8787387	2.1	2.460706E-02			15	
Hexachlorobutadiene	0.3687166	3.342195	12.55	1.318248E-02			15	
Hexachloroethane	0.2855605	16.61697	11.02	1.777773E-02	0.99697		0.99	
Hexane	0.2727764	2.189308	3.246667	0.1585048			15	
2-Hexanone	0.1827118	20.99122	7.391428	5.252802E-02	0.99971		0.99	
Iodomethane	0.2144221	55.26415	2.41	1.954425E-02	0.99873		0.99	
Isobutanol	5.400883E-03	10.36278	4.802	9.062081E-02			15	
Isopropylbenzene	2.977122	11.22477	9.09	1.836815E-02			15	
Isopropyl Ether	0.8971068	3.574945	3.47	5.634228E-03			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
4-Isopropyltoluene	2.482958	10.58078	10.36	1.818596E-02			15	
Methyl Acetate	0.23037	16.29027	2.6	1.987494E-02	0.99972		0.99	
Methyl tert-Butyl Ether	0.7444837	3.713596	2.964286	0.1805595			15	
Methylcyclohexane	0.5099777	10.25325	5.678571	0.0651891			15	
Methylene Chloride	0.3420022	12.75284	2.691429	0.1400348			15	
2-Butanone (MEK)	0.1187619	7.330655	4.01	0.1426873			15	
Methyl Methacrylate	0.2119259	10.8094	5.843333	8.964018E-02			15	
2-Methylnaphthalene	0.7398915	34.12716	13.76167	2.470957E-02	0.99939		0.99	
4-Methyl-2-pentanone (MIBK)	0.2051879	19.09369	6.58	1.498318E-02	0.99979		0.99	
Naphthalene	1.815006	25.83421	12.61	2.163637E-02	0.99978		0.99	
2-Nitropropane	4.713024E-02	18.27783	6.21	2.299345E-02	0.99843		0.99	
n-Propylbenzene	0.9106264	7.46144	9.495714	5.682405E-02			15	
Styrene	1.328882	11.08616	8.74	4.476836E-03			15	
t-Butanol	1.736607E-02	6.558127	2.801667	0.1453685			15	
1,1,1,2-Tetrachloroethane	0.3893257	6.514489	8.19	2.066142E-02			15	
1,1,2,2-Tetrachloroethane	0.7971327	1.37806	9.382857	5.409705E-02			SPCC (0.3)	
Tetrachloroethene	0.5335104	4.471928	7.27	1.957593E-02			15	
Tetrahydrofuran	3.022536E-02	11.87959	4.28	1.734563E-02			15	
Toluene	1.460932	3.057955	6.74	5.805274E-03			CCC (30)	
1,2,3-Trichlorobenzene	0.6417563	11.45697	12.85286	4.034755E-02			15	
1,2,4-Trichlorobenzene	0.6840442	12.19304	12.37	0.0208272			15	
1,1,1-Trichloroethane	0.4406859	3.140398	4.49	2.181632E-02			15	
1,1,2-Trichloroethane	0.218868	2.55202	7.14	1.439612E-02			15	
Trichloroethene	0.3621107	3.229214	5.49	1.784249E-02			15	
Trichlorofluoromethane	0.5482306	6.080631	1.89	8.445578E-03			15	
1,2,3-Trichloropropane	0.7895682	7.567799	9.42	1.979907E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2992663	7.688226	2.28	1.841265E-02			15	
1,2,4-Trimethylbenzene	2.509957	12.47658	10.04	1.377215E-02			15	
1,3,5-Trimethylbenzene	2.514719	9.982107	9.67	1.590631E-02			15	
Vinyl Acetate	0.3817736	10.34058	3.458571	0.1101943			15	
Vinyl Chloride	0.3753389	8.923252	1.42	1.013075E-02			CCC (30)	
Xylene, Meta + Para	0.8317911	7.185742	8.331429	4.859944E-02			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Xylene, Ortho	0.7608429	9.303627	8.72	1.622184E-02			15	
Xylene (Total)	0.8081417	7.533982	8.72	1.622184E-02			15	
Dibromofluoromethane	0.2425	1.482264	4.47	1.135626E-02			15	
1,2-Dichloroethane-d4	0.2517902	1.983002	4.8	2.153118E-02			15	
Toluene-d8	0.9777843	1.086192	6.671429	5.322749E-02			15	
4-Bromofluorobenzene	0.4874841	1.506465	9.235714	5.790937E-02			15	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

Analyte	Expected (ug/L)	Found (ug/L)	% Rec.	QC Limit
Acetone	40.0	36.4	91	75-125
Acrylonitrile	40.0	35.9	90	75-125
Benzene	40.0	40.9	102	75-125
Bromobenzene	40.0	42.6	107	75-125
Bromochloromethane	40.0	39.7	99	75-125
Bromodichloromethane	40.0	39.6	99	75-125
Bromoform	40.0	38.6	97	75-125
Bromomethane	40.0	40.4	101	75-125
n-Butylbenzene	40.0	48.1	120	75-125
sec-Butylbenzene	40.0	46.1	115	75-125
tert-Butylbenzene	40.0	46.2	116	75-125
Carbon Disulfide	40.0	63.6	159 *	75-125
Carbon Tetrachloride	40.0	40.9	102	75-125
Chlorobenzene	40.0	39.2	98	75-125
Chloroethane	40.0	39.8	100	75-125
2-Chloroethyl Vinyl Ether	40.0	37.8	95	75-125
Chloroform	40.0	40.3	101	75-125
1-Chlorohexane	40.0	40.0	100	75-125
Chloromethane	40.0	38.8	97	75-125
2-Chlorotoluene	40.0	43.6	109	75-125
4-Chlorotoluene	40.0	42.9	107	75-125
Cyclohexane	40.0	46.8	117	75-125
1,2-Dibromo-3-chloropropane	40.0	38.3	96	75-125
Dibromochloromethane	40.0	41.8	105	75-125
1,2-Dibromoethane	40.0	40.8	102	75-125
Dibromomethane	40.0	39.0	98	75-125
trans-1,4-Dichloro-2-butene	40.0	36.5	91	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

1,2-Dichlorobenzene	40.0	43.4	109	75-125
1,3-Dichlorobenzene	40.0	43.3	108	75-125
1,4-Dichlorobenzene	40.0	42.6	107	75-125
Dichlorodifluoromethane	40.0	33.6	84	75-125
1,1-Dichloroethane	40.0	41.4	104	75-125
1,2-Dichloroethane	40.0	39.2	98	75-125
1,1-Dichloroethene	40.0	39.1	98	75-125
cis-1,2-Dichloroethene	40.0	42.3	106	75-125
trans-1,2-Dichloroethene	40.0	37.2	93	75-125
1,2-Dichloroethene (Total)	80.0	79.5	99	75-125
Dichlorofluoromethane	40.0	38.5	96	75-125
1,2-Dichloropropane	40.0	40.9	102	75-125
1,3-Dichloropropane	40.0	41.6	104	75-125
2,2-Dichloropropane	40.0	43.6	109	75-125
1,1-Dichloropropene	40.0	42.2	106	75-125
cis-1,3-Dichloropropene	40.0	46.3	116	75-125
trans-1,3-Dichloropropene	40.0	35.7	89	75-125
1,3-Dichloropropene (Total)	80.0	82.0	103	75-125
Ethylbenzene	40.0	42.5	106	75-125
Ethyl Ether	40.0	46.8	117	75-125
Hexachlorobutadiene	40.0	43.3	108	75-125
Hexachloroethane	40.0	37.6	94	75-125
2-Hexanone	40.0	36.5	91	75-125
Iodomethane	40.0	37.4	94	75-125
Isopropylbenzene	40.0	43.1	108	75-125
4-Isopropyltoluene	40.0	45.0	113	75-125
Methyl Acetate	40.0	37.6	94	75-125
Methyl tert-Butyl Ether	40.0	41.7	104	75-125
Methylcyclohexane	40.0	45.6	114	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

Methylene Chloride	40.0	38.6	97	75-125
2-Butanone (MEK)	40.0	39.9	100	75-125
2-Methylnaphthalene	40.0	38.0	95	75-125
4-Methyl-2-pentanone (MIBK)	40.0	36.2	91	75-125
Naphthalene	40.0	41.2	103	75-125
n-Propylbenzene	40.0	44.3	111	75-125
Styrene	40.0	43.3	108	75-125
1,1,1,2-Tetrachloroethane	40.0	42.7	107	75-125
1,1,2,2-Tetrachloroethane	40.0	41.5	104	75-125
Tetrachloroethene	40.0	40.3	101	75-125
Tetrahydrofuran	40.0	41.4	104	75-125
Toluene	40.0	40.9	102	75-125
1,2,3-Trichlorobenzene	40.0	46.4	116	75-125
1,2,4-Trichlorobenzene	40.0	47.8	120	75-125
1,1,1-Trichloroethane	40.0	41.7	104	75-125
1,1,2-Trichloroethane	40.0	42.0	105	75-125
Trichloroethene	40.0	40.7	102	75-125
Trichlorofluoromethane	40.0	37.1	93	75-125
1,2,3-Trichloropropane	40.0	42.2	106	75-125
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	42.2	106	75-125
1,2,4-Trimethylbenzene	40.0	45.6	114	75-125
1,3,5-Trimethylbenzene	40.0	45.4	114	75-125
Vinyl Acetate	40.0	49.1	123	75-125
Vinyl Chloride	40.0	36.7	92	75-125
Xylene, Meta + Para	80.0	84.5	106	75-125
Xylene, Ortho	40.0	43.8	110	75-125
Xylene (Total)	120	128	107	75-125
Dibromofluoromethane	40.0	39.2	98	75-125
1,2-Dichloroethane-d4	40.0	39.6	99	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 0K19023-SCV1

Sequence: 0K19023

SDG: 1011352

Project: Naval Station Great Lakes

Standard ID: 0101191

Calibration: 0K19003

Toluene-d8	40.0	40.2	101	75-125
4-Bromofluorobenzene	40.0	39.6	99	75-125

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 0K19023-SCV2

Sequence: 0K19023

SDG: 1011352

Project: Naval Station Great Lakes

Standard ID: 0050445

Calibration: 0K19003

Analyte	Expected (ug/L)	Found (ug/L)	% Rec.	QC Limit
Isopropanol	250	239	96	75-125
2-Butyl Alcohol	100	98.0	98	75-125
Ethyl Acetate	100	89.4	89	75-125
Isopropyl Ether	100	101	101	75-125
Methyl Methacrylate	100	99.8	100	75-125
Dibromofluoromethane	40.0	39.1	98	75-125
1,2-Dichloroethane-d4	40.0	39.6	99	75-125
Toluene-d8	40.0	39.2	98	75-125
4-Bromofluorobenzene	40.0	40.7	102	75-125

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0K23033-TUN1	BFB1123B.D	11/23/10 07:45
Calibration Check	0K23033-CCV1	CCV1123B.D	11/23/10 08:13
LCS	1012925-BS1	CCV1123B.D	11/23/10 08:13
Calibration Check	0K23033-CCV2	CCV2.D	11/23/10 08:42
Blank	1012925-BLK1	BLK1123B.D	11/23/10 09:10
NTC03GW0113	1011352-01	35201.D	11/23/10 10:07
NTC03GW0213	1011352-02	35202.D	11/23/10 10:36
TB111510	1011352-03	35203.D	11/23/10 11:05
NTC03GW0313	1011356-01	35601.D	11/23/10 11:34
NTC03GW0413	1011356-02	35602.D	11/23/10 12:03
NTC03GW0513	1011356-03	35603.D	11/23/10 12:31
NTC03GW0613	1011356-04	35604.D	11/23/10 13:00
NTCFD111610-01	1011356-05	35605.D	11/23/10 13:28
TB111610	1011356-06	35606.D	11/23/10 13:57
NTC03GW0113	1012925-MS1	35201MS.D	11/23/10 18:42
NTC03GW0113	1012925-MSD1	35201MSD.D	11/23/10 19:10

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-TUN1
Lab File ID: BFB1123B.D
Injection Date: 11/23/10
Injection Time: 07:45
Sequence: 0K23033
Instrument ID: 224

m/z	Ion Abundance Criteria	% Relative Abundance	
50	15 - 40% of 95	15.7	PASS
75	30 - 60% of 95	44.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.89	PASS
173	Less than 2% of 174	0.794	PASS
174	50 - 100% of 95	98	PASS
175	5 - 9% of 174	7.54	PASS
176	95 - 101% of 174	98.3	PASS
177	5 - 9% of 176	6.43	PASS

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-CCV1
Lab File ID: CCV1123B.D
Injection Date: 11/23/10
Injection Time: 08:13
Calibration Date: 11/16/10 00:00
Calibration: 0K19003
Sequence: 0K23033
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	40.0	32.3	8.414622E-02	0.0679681		-19.2	40
Acrolein	A	40.0	70.4	2.122175E-02	3.734448E-02		76.0	25 *
Acrylonitrile	A	40.0	34.3	0.1202904	0.1030795		-14.3	25
Benzene	A	40.0	40.7	1.333941	1.356835		1.7	25
Bromobenzene	A	40.0	36.6	1.265597	1.159505		-8.4	25
Bromochloromethane	A	40.0	36.8	0.2344038	0.2156219		-8.0	25
Bromodichloromethane	A	40.0	43.3	0.3695807	0.4001428		8.3	25
Bromoform	L	40.0	41.6	0.2202514	0.2643744	0.1	4.1	25
Bromomethane	A	40.0	32.3	0.2105967	0.1700238		-19.3	25
n-Butylbenzene	A	40.0	40.8	1.85113	1.887225		1.9	25
sec-Butylbenzene	A	40.0	41.0	2.933294	3.003875		2.4	25
tert-Butylbenzene	A	40.0	42.5	2.143824	2.275864		6.2	25
Carbon Disulfide	A	40.0	56.7	0.5020423	0.7119893		41.8	25 *
Carbon Tetrachloride	A	40.0	46.2	0.4059801	0.4690696		15.5	25
Chlorobenzene	A	40.0	40.2	1.30366	1.310587	0.3	0.5	25
Chloroethane	L	40.0	35.6	0.2990394	0.215975		-11.0	25
2-Chloroethyl Vinyl Ether	L	40.0	34.3	0.1511127	0.149875		-14.3	40
Chloroform	A	40.0	41.5	0.5431677	0.5636568		3.8	20
1-Chlorohexane	L	40.0	35.2	0.447722	0.3470215		-12.0	25
Chloromethane	A	40.0	30.3	0.3364927	0.2550377	0.1	-24.2	25
2-Chlorotoluene	A	40.0	41.5	0.8099516	0.8396335		3.7	25
4-Chlorotoluene	A	40.0	40.8	0.8394441	0.8554002		1.9	25
Cyclohexane	A	40.0	38.0	0.5004372	0.4758043		-4.9	25
1,2-Dibromo-3-chloropropane	L	40.0	37.6	0.1337323	0.1475862		-5.9	25
Dibromochloromethane	A	40.0	45.3	0.3456435	0.3917837		13.3	25
1,2-Dibromoethane	A	40.0	41.7	0.3274482	0.3412425		4.2	25
Dibromomethane	A	40.0	41.8	0.1779482	0.1861089		4.6	25
trans-1,4-Dichloro-2-butene	L	40.0	32.8	0.1652086	0.1547574		-18.1	25
1,2-Dichlorobenzene	A	40.0	42.6	1.441164	1.533002		6.4	25

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K23033-CCV1
Injection Date: 11/23/10
Calibration Date: 11/16/10 00:00
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: CCV1123B.D
Injection Time: 08:13
Calibration: 0K19003
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,3-Dichlorobenzene	A	40.0	42.4	1.524187	1.616204		6.0	25
1,4-Dichlorobenzene	A	40.0	40.8	1.632808	1.665836		2.0	25
Dichlorodifluoromethane	A	40.0	39.3	0.416766	0.409655		-1.7	25
1,1-Dichloroethane	A	40.0	39.5	0.5252534	0.5190451	0.1	-1.2	25
1,2-Dichloroethane	A	40.0	41.5	0.3824125	0.3970043		3.8	25
1,1-Dichloroethene	A	40.0	41.8	0.2831313	0.2957949		4.5	20
cis-1,2-Dichloroethene	A	40.0	43.4	0.3383862	0.3674045		8.6	25
trans-1,2-Dichloroethene	A	40.0	42.0	0.3317326	0.347887		4.9	25
1,2-Dichloropropane	A	40.0	38.0	0.3076101	0.2922066		-5.0	20
1,3-Dichloropropane	A	40.0	38.3	0.6177466	0.590872		-4.4	25
2,2-Dichloropropane	A	40.0	46.6	0.3199678	0.3727504		16.5	25
1,1-Dichloropropene	A	40.0	42.5	0.4232851	0.4498204		6.3	25
cis-1,3-Dichloropropene	A	40.0	44.6	0.3854895	0.43008		11.6	25
trans-1,3-Dichloropropene	L	40.0	39.8	0.3339859	0.3891216		-0.5	25
1,3-Dichloropropene (Total)	L	80.0	84.4	0.3597377	0.4096008		5.5	25
Ethylbenzene	A	40.0	41.1	2.069904	2.128395		2.8	20
Ethyl Ether	A	40.0	36.2	0.1710561	0.1546469		-9.6	25
Hexachlorobutadiene	A	40.0	46.9	0.3687166	0.4326507		17.3	25
Hexachloroethane	L	40.0	38.8	0.2855605	0.3177198		-3.1	25
2-Hexanone	L	40.0	29.5	0.1827118	0.1539113		-26.4	40
Iodomethane	L	40.0	42.0	0.2144221	0.3339324		5.1	40
Isopropylbenzene	A	40.0	41.7	2.977122	3.101519		4.2	25
4-Isopropyltoluene	A	40.0	42.4	2.482958	2.631913		6.0	25
Methyl Acetate	L	40.0	30.4	0.23037	0.163013		-24.0	25
Methyl tert-Butyl Ether	A	40.0	40.1	0.7444837	0.7457297		0.2	25
Methylcyclohexane	A	40.0	42.1	0.5099777	0.5364952		5.2	25
Methylene Chloride	A	40.0	34.0	0.3420022	0.2907843		-15.0	25
2-Butanone (MEK)	A	40.0	34.0	0.1187619	0.100884		-15.1	40
2-Methylnaphthalene	L	40.0	31.8	0.7398915	0.6843248		-20.4	40

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K23033-CCV1
Injection Date: 11/23/10
Calibration Date: 11/16/10 00:00
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: CCV1123B.D
Injection Time: 08:13
Calibration: 0K19003
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
4-Methyl-2-pentanone (MIBK)	L	40.0	32.2	0.2051879	0.1879928		-19.6	40
Naphthalene	L	40.0	38.0	1.815006	2.074549		-5.0	25
n-Propylbenzene	A	40.0	42.3	0.9106264	0.9635734		5.8	25
Styrene	A	40.0	43.6	1.328882	1.448895		9.0	25
1,1,1,2-Tetrachloroethane	A	40.0	44.8	0.3893257	0.4363205		12.1	25
1,1,2,2-Tetrachloroethane	A	40.0	36.2	0.7971327	0.7205255	0.3	-9.6	25
Tetrachloroethene	A	40.0	45.2	0.5335104	0.6023605		12.9	25
Tetrahydrofuran	A	40.0	38.4	3.022536E-02	2.902576E-02		-4.0	25
Toluene	A	40.0	42.2	1.460932	1.539902		5.4	20
1,2,3-Trichlorobenzene	A	40.0	45.7	0.6417563	0.73321		14.3	25
1,2,4-Trichlorobenzene	A	40.0	46.6	0.6840442	0.7974447		16.6	25
1,1,1-Trichloroethane	A	40.0	44.4	0.4406859	0.4891079		11.0	25
1,1,2-Trichloroethane	A	40.0	41.2	0.218868	0.2251341		2.9	25
Trichloroethene	A	40.0	45.3	0.3621107	0.4101146		13.3	25
Trichlorofluoromethane	A	40.0	40.6	0.5482306	0.5562455		1.5	25
1,2,3-Trichloropropane	A	40.0	36.8	0.7895682	0.7259163		-8.1	25
1,1,2-Trichloro-1,2,2-trifluoroeth	A	40.0	39.4	0.2992663	0.2948855		-1.5	25
1,2,4-Trimethylbenzene	A	40.0	41.8	2.509957	2.62367		4.5	25
1,3,5-Trimethylbenzene	A	40.0	41.4	2.514719	2.600414		3.4	25
Vinyl Acetate	A	40.0	44.4	0.3817736	0.4241067		11.1	40
Vinyl Chloride	A	40.0	33.1	0.3753389	0.3107043		-17.2	20
Xylene, Meta + Para	A	80.0	84.1	0.8317911	0.8745018		5.1	25
Xylene, Ortho	A	40.0	43.8	0.7608429	0.8340487		9.6	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K23033-CCV2
Injection Date: 11/23/10
Calibration Date: 11/16/10 00:00
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: CCV2.D
Injection Time: 08:42
Calibration: 0K19003
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Isopropanol	A	100	73.8	1.263029E-02	9.314565E-03		-26.3	40
2-Butyl Alcohol	A	100	81.8	1.067386E-02	8.73285E-03		-18.2	40
Ethyl Acetate	A	100	83.5	0.2321222	0.1937808		-16.5	25
Isopropyl Ether	A	100	86.5	0.8971068	0.7759399		-13.5	25
Methyl Methacrylate	A	100	89.2	0.2119259	0.1889989		-10.8	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0K23033-CCV1)			**Lab File ID: CCV1123B.D**			**Analyzed: 11/23/10 08:13**			
Fluorobenzene	506929	5.13	661435	5.13	77	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417026	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	261183	10.38	301687	10.38	87	50 - 200	0.0000	+/-0.50	
LCS (1012925-BS1)			**Lab File ID: CCV1123B.D**			**Analyzed: 11/23/10 08:13**			
Fluorobenzene	506929	5.13	661435	5.13	77	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417026	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	261183	10.38	301687	10.38	87	50 - 200	0.0000	+/-0.50	
Calibration Check (0K23033-CCV2)			**Lab File ID: CCV2.D**			**Analyzed: 11/23/10 08:42**			
Fluorobenzene	505402	5.13	661435	5.13	76	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417436	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	237414	10.38	301687	10.38	79	50 - 200	0.0000	+/-0.50	
Blank (1012925-BLK1)			**Lab File ID: BLK1123B.D**			**Analyzed: 11/23/10 09:10**			
Fluorobenzene	487254	5.13	661435	5.13	74	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	393181	8.08	506472	8.08	78	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	227534	10.38	301687	10.38	75	50 - 200	0.0000	+/-0.50	
NTC03GW0113 (1011352-01)			**Lab File ID: 35201.D**			**Analyzed: 11/23/10 10:07**			
Fluorobenzene	472530	5.13	661435	5.13	71	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	383639	8.08	506472	8.08	76	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	221457	10.38	301687	10.38	73	50 - 200	0.0000	+/-0.50	
NTC03GW0213 (1011352-02)			**Lab File ID: 35202.D**			**Analyzed: 11/23/10 10:36**			
Fluorobenzene	457997	5.13	661435	5.13	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	374609	8.08	506472	8.08	74	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	216261	10.38	301687	10.38	72	50 - 200	0.0000	+/-0.50	
TB111510 (1011352-03)			**Lab File ID: 35203.D**			**Analyzed: 11/23/10 11:05**			
Fluorobenzene	459531	5.13	661435	5.13	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	375773	8.08	506472	8.08	74	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	219082	10.38	301687	10.38	73	50 - 200	0.0000	+/-0.50	
NTC03GW0313 (1011356-01)			**Lab File ID: 35601.D**			**Analyzed: 11/23/10 11:34**			
Fluorobenzene	468827	5.13	661435	5.13	71	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	384516	8.08	506472	8.08	76	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	221215	10.38	301687	10.38	73	50 - 200	0.0000	+/-0.50	
NTC03GW0413 (1011356-02)			**Lab File ID: 35602.D**			**Analyzed: 11/23/10 12:03**			
Fluorobenzene	464114	5.13	661435	5.13	70	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	381775	8.08	506472	8.08	75	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	218569	10.38	301687	10.38	72	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
NTC03GW0513 (1011356-03)			**Lab File ID: 35603.D**			**Analyzed: 11/23/10 12:31**			
Fluorobenzene	454466	5.13	661435	5.13	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	370528	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	215526	10.38	301687	10.38	71	50 - 200	0.0000	+/-0.50	
NTC03GW0613 (1011356-04)			**Lab File ID: 35604.D**			**Analyzed: 11/23/10 13:00**			
Fluorobenzene	451083	5.13	661435	5.13	68	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	372774	8.08	506472	8.08	74	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	211732	10.38	301687	10.38	70	50 - 200	0.0000	+/-0.50	
NTCFD111610-01 (1011356-05)			**Lab File ID: 35605.D**			**Analyzed: 11/23/10 13:28**			
Fluorobenzene	465475	5.13	661435	5.13	70	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	378902	8.08	506472	8.08	75	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	221526	10.38	301687	10.38	73	50 - 200	0.0000	+/-0.50	
TB111610 (1011356-06)			**Lab File ID: 35606.D**			**Analyzed: 11/23/10 13:57**			
Fluorobenzene	451067	5.13	661435	5.13	68	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	370063	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	217558	10.38	301687	10.38	72	50 - 200	0.0000	+/-0.50	
Matrix Spike (1012925-MS1)			**Lab File ID: 35201MS.D**			**Analyzed: 11/23/10 18:42**			
Fluorobenzene	472225	5.13	661435	5.13	71	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	397652	8.08	506472	8.08	79	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	249896	10.38	301687	10.38	83	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (1012925-MSD1)			**Lab File ID: 35201MSD.D**			**Analyzed: 11/23/10 19:10**			
Fluorobenzene	483654	5.13	661435	5.13	73	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	403858	8.08	506472	8.08	80	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	252812	10.38	301687	10.38	84	50 - 200	0.0000	+/-0.50	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012925

Printed: 12/13/2010 2:19:44PM

Volatiles MS, Water, 5030B Aqueous Purge & Trap

Surrogate #1 = 0060114 (Static)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	8260B Standard VOAs plus custom	1011356	8260B Standard VOAs plus custom	1011375	8260B Standard VOAs plus custom
1011407	8260B Standard VOAs plus custom				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012925-BLK1		Nov-23-10 07:00	DLV	5	5	1				BLANK	
1012925-BS1		Nov-23-10 07:00	DLV	5	5	1		0110642	2	LCS	
1012925-MS1		Nov-23-10 07:00	DLV	5	5	1	1011352-01	0110642	2	MATRIX SPIKE	
1012925-MSD1		Nov-23-10 07:00	DLV	5	5	1	1011352-01	0110642	2	MATRIX SPIKE DUP	
1011352-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011352-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011352-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-04	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-05	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-06	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-04	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-05	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-06	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

SDG 1011352

SAMPLE ID NTC03GW0113

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
472530	1	8704	40	5	1.4609	0.50
				Sample Volume (ML)		
				5		

Toluene = 0.50 ug/L

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1011352-01 File ID: 35201.D

Sampled: 11/15/10 16:00 Prepared: 11/23/10 07:00 Analyzed: 11/23/10 10:07

Solids: Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1012925 Sequence: 0K23033 Calibration: 0K19003 Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
75-35-4	1,1-Dichloroethene	1	1.0	0.13	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	0.23	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	0.20	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	0.15	1.0	U
142-28-9	1,3-Dichloropropane	1	1.0	0.14	1.0	U
594-20-7	2,2-Dichloropropane	1	1.0	0.18	1.0	U
563-58-6	1,1-Dichloropropene	1	1.0	0.25	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	0.25	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	0.23	1.0	U
141-78-6	Ethyl Acetate	1	50	0.27	50	U
100-41-4	Ethylbenzene	1	1.0	0.14	1.0	U
591-78-6	2-Hexanone	1	5.0	0.29	5.0	U
74-88-4	Iodomethane	1	1.0	0.21	1.0	U
98-82-8	Isopropylbenzene	1	1.0	0.15	1.0	U
99-87-6	4-Isopropyltoluene	1	1.0	0.29	1.0	U
79-20-9	Methyl Acetate	1	5.0	0.30	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	0.28	1.0	U
108-87-2	Methylcyclohexane	1	5.0	0.20	5.0	U
75-09-2	Methylene Chloride	1	1.0	0.26	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	0.55	5.0	U
80-62-6	Methyl Methacrylate	1	5.0	0.094	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	0.28	5.0	U
103-65-1	n-Propylbenzene	1	1.0	0.15	1.0	U
100-42-5	Styrene	1	1.0	0.11	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1	1.0	0.16	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	0.070	1.0	U
127-18-4	Tetrachloroethene	1	1.0	0.16	1.0	U
109-99-9	Tetrahydrofuran	1	5.0	1.0	5.0	U
108-88-3	Toluene	1	0.50	0.16	1.0	J
87-61-6	1,2,3-Trichlorobenzene	1	1.0	0.18	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	0.16	1.0	U
71-55-6	1,1,1-Trichloroethane	1	1.0	0.19	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	0.18	1.0	U

Quantitation Report (Not Edited)

Data Path : C:\MSDChem\1\DATA\11-23-10\
InstName : 224
Data File : 35201.D
Acq On : 23 Nov 2010 10:07
Operator : DLV
Sample : 1011352-01
Misc : TT
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 10:22:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\8260B-B62.M
Quant Title : VOLATILE GC/MS BY EPA 8260B/624/524.2
QLast Update : Tue Nov 23 07:46:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.13	96	472530	40.00 ug/L	0.00 71.44%
50) Chlorobenzene-d5	8.08	117	383639	40.00 ug/L	0.00 75.75%
65) 1,4-Dichlorobenzene-d4	10.38	152	221457	40.00 ug/L	0.00 73.41%

System Monitoring Compounds					
30) #Dibromofluoromethane	4.47	111	121821	42.52 ug/L	0.00
Spiked Amount 40.000			Recovery =	106.30%	
37) #1,2-Dichloroethane-d4	4.80	65	121493	40.85 ug/L	0.00
Spiked Amount 40.000			Recovery =	102.13%	
46) #Toluene-d8	6.67	98	451275	39.07 ug/L	0.00
Spiked Amount 40.000			Recovery =	97.67%	
64) #4-Bromofluorobenzene	9.24	95	172608	36.92 ug/L	0.00
Spiked Amount 40.000			Recovery =	92.30%	

Target Compounds					Qvalue
2) dichlorodifluoromethane	0.00	85	0	N.D.	
3) chloromethane	0.00	50	0	N.D.	
4) vinyl chloride	0.00	62	0	N.D.	
5) dichlorofluoromethane	0.00	67	0	N.D.	
6) bromomethane	0.00	94	0	N.D.	
7) chloroethane	0.00	64	0	N.D.	
8) trichlorofluoromethane	0.00	101	0	N.D.	
9) acrolein	0.00	56	0	N.D.	
10) ethyl ether	0.00	74	0	N.D.	
11) acrylonitrile	0.00	53	0	N.D.	
12) 1,1,2-trichloro-1,2,2-tr	0.00	101	0	N.D.	
13) 1,1-dichloroethene	0.00	96	0	N.D.	
14) iodomethane	0.00	142	0	N.D.	
15) acetone	0.00	43	0	N.D.	
16) methyl acetate	0.00	43	0	N.D.	
17) carbon disulfide	2.47	76	1526	0.26 ug/L #	75
18) methylene chloride	0.00	49	0	N.D.	
19) trans-1,2-dichloroethene	0.00	96	0	N.D.	
20) methyl (tert) butyl ethe	0.00	73	0	N.D.	
21) 1,1-dichloroethane	0.00	63	0	N.D.	
22) vinyl acetate	0.00	43	0	N.D.	
23) 2,2-dichloropropane	0.00	77	0	N.D.	
24) cis-1,2-dichloroethene	0.00	96	0	N.D.	
25) 2-butanone (MEK)	0.00	43	0	N.D.	
26) bromochloromethane	0.00	49	0	N.D.	
27) chloroform	0.00	83	0	N.D.	
28) tetrahydrofuran	0.00	71	0	N.D.	
29) 1,1,1-trichloroethane	0.00	97	0	N.D.	
31) carbon tetrachloride	0.00	117	0	N.D.	
32) 1,1-dichloropropene	0.00	75	0	N.D.	
33) cyclohexane	0.00	56	0	N.D.	
34) benzene	0.00	78	0	N.D.	
35) 1,2-dichloroethane	0.00	62	0	N.D.	
36) heptane	5.13	57	12745	No Calib #	

Quantitation Report (Not Edited)

Data Path : C:\MSDChem\1\DATA\11-23-10\
InstName : 224
Data File : 35201.D
Acq On : 23 Nov 2010 10:07
Operator : DLV
Sample : 1011352-01
Misc : TT
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 23 10:22:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\8260B-B62.M
Quant Title : VOLATILE GC/MS BY EPA 8260B/624/524.2
QLast Update : Tue Nov 23 07:46:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
38) trichloroethene	0.00	130	0	N.D.	
39) 1,2-dichloropropane	0.00	63	0	N.D.	
40) dibromomethane	0.00	93	0	N.D.	
41) bromodichloromethane	0.00	83	0	N.D.	
42) methylcyclohexane	0.00	83	0	N.D.	
43) 2-chloroethyl vinyl ethe	0.00	63	0	N.D.	
44) cis-1,3-dichloropropene	0.00	75	0	N.D.	
45) 4-methyl-2-pentanone (MI	0.00	43	0	N.D.	
47) toluene	6.74	91	8704	0.50 ug/L	100
48) trans-1,3-dichloropropen	0.00	75	0	N.D.	
49) 1,1,2-trichloroethane	0.00	83	0	N.D.	
51) tetrachloroethene	0.00	166	0	N.D.	
52) 1,3-dichloropropane	0.00	76	0	N.D.	
53) 2-hexanone (MBK)	0.00	43	0	N.D.	
54) dibromochloromethane	0.00	129	0	N.D.	
55) 1,2-dibromoethane	0.00	109	0	N.D.	
56) chlorobenzene	0.00	112	0	N.D.	
57) 1,1,1,2-tetrachloroethan	0.00	131	0	N.D.	
58) 1-chlorohexane	8.08	55	2714	Below Cal #	1
59) ethylbenzene	0.00	91	0	N.D.	
60) m+p-xylene	0.00	106	0	N.D.	
61) o-xylene	0.00	106	0	N.D.	
62) styrene	0.00	104	0	N.D.	
63) bromoform	0.00	173	0	N.D.	
66) isopropylbenzene	0.00	105	0	N.D.	
67) bromobenzene	0.00	77	0	N.D.	
68) 1,1,2,2-tetrachloroethan	0.00	83	0	N.D.	
69) 1,4-dichloro-2-butene	0.00	53	0	N.D.	
70) 1,2,3-trichloropropane	0.00	75	0	N.D.	
71) n-propylbenzene	0.00	120	0	N.D.	
72) 2-chlorotoluene	0.00	126	0	N.D.	
73) 1,3,5-trimethylbenzene	0.00	105	0	N.D.	
74) 4-chlorotoluene	0.00	126	0	N.D.	
75) tert-butylbenzene	0.00	119	0	N.D.	
76) 1,2,4-trimethylbenzene	0.00	105	0	N.D.	
77) sec-butylbenzene	0.00	105	0	N.D.	
78) 4-isopropyltoluene	0.00	119	0	N.D.	
79) 1,3-dichlorobenzene	0.00	146	0	N.D.	
80) 1,4-dichlorobenzene	0.00	146	0	N.D.	
81) 1,2-dichlorobenzene	0.00	146	0	N.D.	
82) n-butylbenzene	0.00	91	0	N.D.	
83) 1,2-dibromo-3-chloroprop	0.00	157	0	N.D.	
84) hexachloroethane	0.00	201	0	N.D.	
85) 1,2,4-trichlorobenzene	0.00	180	0	N.D.	
86) hexachlorobutadiene	0.00	225	0	N.D.	
87) naphthalene	0.00	128	0	N.D.	
88) 1,2,3-trichlorobenzene	0.00	180	0	N.D.	
89) 2-methylnaphthalene	0.00	142	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

TRIMATRIX LABORATORIES

STATEMENT OF DATA QUALIFICATIONS

Semivolatile Organic Compounds by EPA Method 8270C

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample concentration for the same analyte was less than 4 times the spiked amount; the non-spiked sample result is considered estimated.

Analysis: USEPA-8270C

Sample/Analyte:			
	1011352-01	NTC03GW0113	Caprolactam
	1011352-01	NTC03GW0113	Carbazole

Qualification: The RPD between the MS and MSD results exceeded the control limit. The non-spiked sample concentration for the same analyte was less than 4 times the spiked amount; the non-spiked sample result is considered estimated.

Analysis: USEPA-8270C

Sample/Analyte:			
	1011352-01	NTC03GW0113	2,4-Dimethylphenol

Qualification: The LCS recovery was outside of the control limit with no allowed marginal exceedences. The result for this analyte in any sample from the associated QC batch is considered qualified.

Analysis: USEPA-8270C

Sample/Analyte:			
	1011352-01	NTC03GW0113	3,3′-Dichlorobenzidine
	1011352-01	NTC03GW0113	Caprolactam
	1011352-01	NTC03GW0113	Carbazole
	1011352-02	NTC03GW0213	3,3′-Dichlorobenzidine
	1011352-02	NTC03GW0213	Caprolactam
	1011352-02	NTC03GW0213	Carbazole
	1011356-01	NTC03GW0313	3,3′-Dichlorobenzidine
	1011356-01	NTC03GW0313	Caprolactam
	1011356-01	NTC03GW0313	Carbazole
	1011356-02	NTC03GW0413	3,3′-Dichlorobenzidine
	1011356-02	NTC03GW0413	Caprolactam
	1011356-02	NTC03GW0413	Carbazole
	1011356-03	NTC03GW0513	3,3′-Dichlorobenzidine
	1011356-03	NTC03GW0513	Caprolactam
	1011356-03	NTC03GW0513	Carbazole
	1011356-04	NTC03GW0613	3,3′-Dichlorobenzidine
	1011356-04	NTC03GW0613	Caprolactam
	1011356-04	NTC03GW0613	Carbazole
	1011356-05	NTCFD111610-01	3,3′-Dichlorobenzidine
	1011356-05	NTCFD111610-01	Caprolactam
	1011356-05	NTCFD111610-01	Carbazole

Qualification: The SCV for this initial calibration had a recovery outside the control limit. All results for this analyte in the associated calibration should be considered as estimated.

Analysis: USEPA-8270C

Sample/Analyte:			
	1011352-01	NTC03GW0113	3-Methylcholanthrene
	1011352-02	NTC03GW0213	3-Methylcholanthrene
	1011356-01	NTC03GW0313	3-Methylcholanthrene
	1011356-02	NTC03GW0413	3-Methylcholanthrene
	1011356-03	NTC03GW0513	3-Methylcholanthrene
	1011356-04	NTC03GW0613	3-Methylcholanthrene

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STATEMENT OF DATA QUALIFICATIONS

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

Qualification: The SCV for this initial calibration had a recovery outside the control limit. All results for this analyte in the associated calibration should be considered as estimated.

Analysis: USEPA-8270C

Sample/Analyte:		
1011356-05	NTCFD111610-01	3-Methylcholanthrene

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8270C

Sample/Analyte:		
1011352-01	NTC03GW0113	Benzo(a)anthracene
1011352-01	NTC03GW0113	Benzo(a)pyrene
1011352-01	NTC03GW0113	Benzo(b)fluoranthene
1011352-01	NTC03GW0113	Chrysene
1011352-01	NTC03GW0113	Diethyl Phthalate
1011352-02	NTC03GW0213	Benzo(a)anthracene
1011352-02	NTC03GW0213	Benzo(a)pyrene
1011352-02	NTC03GW0213	Benzo(b)fluoranthene
1011352-02	NTC03GW0213	Benzo(k)fluoranthene
1011352-02	NTC03GW0213	Chrysene
1011352-02	NTC03GW0213	Diethyl Phthalate
1011356-01	NTC03GW0313	Benzo(a)anthracene
1011356-01	NTC03GW0313	Benzo(b)fluoranthene
1011356-01	NTC03GW0313	Chrysene
1011356-01	NTC03GW0313	Diethyl Phthalate
1011356-02	NTC03GW0413	Benzo(a)anthracene
1011356-02	NTC03GW0413	Benzo(a)pyrene
1011356-02	NTC03GW0413	Chrysene
1011356-02	NTC03GW0413	Diethyl Phthalate
1011356-03	NTC03GW0513	Benzo(a)anthracene
1011356-03	NTC03GW0513	Benzo(a)pyrene
1011356-03	NTC03GW0513	Chrysene
1011356-03	NTC03GW0513	Diethyl Phthalate
1011356-04	NTC03GW0613	Benzo(a)anthracene
1011356-04	NTC03GW0613	Benzo(a)pyrene
1011356-04	NTC03GW0613	Benzo(b)fluoranthene
1011356-04	NTC03GW0613	Chrysene
1011356-04	NTC03GW0613	Diethyl Phthalate
1011356-05	NTCFD111610-01	Benzo(a)anthracene
1011356-05	NTCFD111610-01	Diethyl Phthalate

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012641 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Acenaphthene	0.50 U	0.50	0.020
Acenaphthylene	0.50 U	0.50	0.033
Acetophenone	0.50 U	0.50	0.087
Aniline	0.50 U	0.50	0.036
Anthracene	0.50 U	0.50	0.035
Atrazine	0.50 U	0.50	0.17
Benzaldehyde	0.50 U	0.50	0.16
Benzo(a)anthracene	**0.060 J**	0.50	0.025
Benzo(a)pyrene	**0.040 J**	0.50	0.028
Benzo(b)fluoranthene	**0.040 J**	0.50	0.029
Benzo(k)fluoranthene	**0.050 J**	0.50	0.049
Benzo(g,h,i)perylene	0.50 U	0.50	0.055
1,1'-Biphenyl	0.50 U	0.50	0.10
4-Bromophenyl Phenyl Ether	0.50 U	0.50	0.047
Butyl Benzyl Phthalate	1.0 U	1.0	0.057
Caprolactam	1.0 U	1.0	0.21
Carbazole	0.50 U	0.50	0.12
4-Chloro-3-methylphenol	0.50 U	0.50	0.17
4-Chloroaniline	1.0 U	1.0	0.14
Bis(2-chloroethoxy)methane	0.50 U	0.50	0.039
Bis(2-chloroethyl) Ether	0.50 U	0.50	0.034
Bis(2-chloroisopropyl) Ether	0.50 U	0.50	0.044
2-Chloronaphthalene	0.50 U	0.50	0.032
2-Chlorophenol	0.50 U	0.50	0.070
4-Chlorophenyl Phenyl Ether	0.50 U	0.50	0.12
Chrysene	**0.050 J**	0.50	0.022
Dibenz(a,h)anthracene	0.50 U	0.50	0.053
Dibenzofuran	0.50 U	0.50	0.11
Di-n-butyl Phthalate	1.0 U	1.0	0.61
3,3´-Dichlorobenzidine	1.0 U	1.0	1.0
2,4-Dichlorophenol	0.50 U	0.50	0.23
Diethyl Phthalate	**0.47 J**	0.50	0.12
2,4-Dimethylphenol	1.0 U	1.0	0.31
Dimethyl Phthalate	0.50 U	0.50	0.10
4,6-Dinitro-2-methylphenol	0.50 U	0.50	0.14
2,4-Dinitrophenol	5.0 U	5.0	1.8

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2,4-Dinitrotoluene			0.50 U					0.50	0.15
2,6-Dinitrotoluene			0.50 U					0.50	0.25
Di-n-octyl Phthalate			0.50 U					0.50	0.056
Bis(2-ethylhexyl) Phthalate			0.50 U					0.50	0.22
Fluoranthene			0.50 U					0.50	0.040
Fluorene			0.50 U					0.50	0.019
Hexachlorobenzene			0.50 U					0.50	0.065
Hexachlorobutadiene			0.50 U					0.50	0.13
Hexachlorocyclopentadiene			0.50 U					0.50	0.15
Hexachloroethane			0.50 U					0.50	0.13
Indeno(1,2,3-cd)pyrene			0.50 U					0.50	0.042
Isophorone			0.50 U					0.50	0.048
3-Methylcholanthrene			2.0 U					2.0	0.25
2-Methylnaphthalene			0.50 U					0.50	0.021
1-Methylnaphthalene			0.50 U					0.50	0.039
2-Methylphenol			0.50 U					0.50	0.13
4-Methylphenol			0.50 U					0.50	0.11
Naphthalene			0.50 U					0.50	0.022
2-Nitroaniline			1.0 U					1.0	0.14
3-Nitroaniline			1.0 U					1.0	0.40
4-Nitroaniline			1.0 U					1.0	0.16
Nitrobenzene			0.50 U					0.50	0.18
4-Nitrophenol			5.0 U					5.0	0.71
2-Nitrophenol			0.50 U					0.50	0.068
N-Nitroso-diphenylamine			0.50 U					0.50	0.16
N-Nitroso-di-n-propylamine			0.50 U					0.50	0.091
Pentachlorophenol			1.0 U					1.0	0.094
Phenanthrene			0.50 U					0.50	0.025
Phenol			0.50 U					0.50	0.15
Pyrene			0.50 U					0.50	0.026
2,4,6-Trichlorophenol			0.50 U					0.50	0.065
2,4,5-Trichlorophenol			0.50 U					0.50	0.030
Surrogates:									
2-Fluorophenol				*44*	*20-70*				
Phenol-d6				*32*	*18-45*				
Nitrobenzene-d5				*81*	*31-123*				

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued)
Unit: ug/L

Analyzed: 12/14/2010 By: DMC
Analytical Batch: 0L17046

Surrogates (Continued):

Analyte	Spike % Rec.	Control Limits
2-Fluorobiphenyl	*80*	*25-113*
2,4,6-Tribromophenol	*74*	*30-121*
o-Terphenyl	*90*	*42-125*

Laboratory Control Sample
Unit: ug/L

Analyzed: 12/14/2010 By: DMC
Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acenaphthene		9.40	**8.13**	86	53-126		20	0.50	0.020
Acenaphthylene		9.40	**8.38**	89	62-133		20	0.50	0.033
Acetophenone		10.0	**8.92**	89	58-115		20	0.50	0.087
Aniline		9.40	**7.83**	83	23-105		20	0.50	0.036
Anthracene		9.40	**8.38**	89	64-130		20	0.50	0.035
Atrazine		10.0	**14.0**	140	60-140		20	0.50	0.17
Benzaldehyde		10.0	**8.93**	89	35-128		20	0.50	0.16
Benzo(a)anthracene		9.40	**8.16**	87	63-129		20	0.50	0.025
Benzo(a)pyrene		9.40	**8.67**	92	59-131		20	0.50	0.028
Benzo(b)fluoranthene		9.40	**8.21**	87	58-133		20	0.50	0.029
Benzo(k)fluoranthene		9.40	**8.01**	85	59-132		20	0.50	0.049
Benzo(g,h,i)perylene		9.40	**8.87**	94	52-129		20	0.50	0.055
1,1'-Biphenyl		10.0	**8.92**	89	58-116		20	0.50	0.10
4-Bromophenyl Phenyl Ether		9.20	**8.32**	90	57-124		20	0.50	0.047
Butyl Benzyl Phthalate		9.20	**8.42**	92	58-141		20	1.0	0.057
Caprolactam		10.0	**1.98**	**20**	23-76		20	1.0	0.21
Carbazole		9.40	**25.4**	**271**	62-146		20	0.50	0.12
4-Chloro-3-methylphenol		9.40	**8.50**	90	53-120		20	0.50	0.17
4-Chloroaniline		9.40	**9.94**	106	44-138		20	1.0	0.14
Bis(2-chloroethoxy)methane		9.20	**7.80**	85	52-124		20	0.50	0.039
Bis(2-chloroethyl) Ether		9.20	**7.05**	77	42-123		20	0.50	0.034
Bis(2-chloroisopropyl) Ether		9.20	**7.59**	82	50-122		20	0.50	0.044
2-Chloronaphthalene		9.70	**8.48**	87	58-126		20	0.50	0.032
2-Chlorophenol		9.40	**7.73**	82	44-121		20	0.50	0.070
4-Chlorophenyl Phenyl Ether		9.20	**8.40**	91	57-122		20	0.50	0.12
Chrysene		9.40	**8.37**	89	66-134		20	0.50	0.022
Dibenz(a,h)anthracene		9.40	**8.10**	86	57-130		20	0.50	0.053
Dibenzofuran		9.40	**8.76**	93	59-123		20	0.50	0.11
Di-n-butyl Phthalate		9.20	**8.83**	96	58-145		20	1.0	0.61

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
3,3´-Dichlorobenzidine		20.0	**25.5**	128	55-135		20	1.0	1.0
2,4-Dichlorophenol		9.40	**8.54**	91	51-122		20	0.50	0.23
Diethyl Phthalate		9.20	**8.63**	94	55-129		20	0.50	0.12
2,4-Dimethylphenol		9.40	**5.31**	56	35-112		20	1.0	0.31
Dimethyl Phthalate		9.20	**8.40**	91	61-126		20	0.50	0.10
4,6-Dinitro-2-methylphenol		9.40	**7.55**	80	25-139		20	0.50	0.14
2,4-Dinitrophenol		9.40	**6.33**	67	10-147		20	5.0	1.8
2,4-Dinitrotoluene		9.70	**9.43**	97	55-131		20	0.50	0.15
2,6-Dinitrotoluene		9.70	**8.69**	90	59-120		20	0.50	0.25
Di-n-octyl Phthalate		9.20	**8.16**	89	55-136		20	0.50	0.056
Bis(2-ethylhexyl) Phthalate		9.20	**8.00**	87	60-136		20	0.50	0.22
Fluoranthene		9.40	**8.89**	95	64-138		20	0.50	0.040
Fluorene		9.40	**8.61**	92	60-128		20	0.50	0.019
Hexachlorobenzene		9.70	**8.36**	86	49-130		20	0.50	0.065
Hexachlorobutadiene		9.70	**7.93**	82	50-128		20	0.50	0.13
Hexachlorocyclopentadiene		9.70	**9.22**	95	21-138		20	0.50	0.15
Hexachloroethane		9.70	**7.56**	78	41-123		20	0.50	0.13
Indeno(1,2,3-cd)pyrene		9.40	**8.02**	85	57-129		20	0.50	0.042
Isophorone		9.70	**7.87**	81	56-129		20	0.50	0.048
2-Methylnaphthalene		9.40	**8.52**	91	59-135		20	0.50	0.021
1-Methylnaphthalene		10.0	**8.11**	81	50-150		20	0.50	0.039
2-Methylphenol		9.60	**7.10**	74	39-107		20	0.50	0.13
4-Methylphenol		9.60	**7.13**	74	33-122		20	0.50	0.11
Naphthalene		9.40	**7.96**	85	50-127		20	0.50	0.022
2-Nitroaniline		9.40	**11.9**	127	57-130		20	1.0	0.14
3-Nitroaniline		9.40	**11.2**	119	49-144		20	1.0	0.40
4-Nitroaniline		9.40	**11.9**	126	52-143		20	1.0	0.16
Nitrobenzene		9.70	**8.39**	86	53-121		20	0.50	0.18
4-Nitrophenol		9.40	**3.72 J**	40	17-70		20	5.0	0.71
2-Nitrophenol		9.40	**6.68**	71	44-128		20	0.50	0.068
N-Nitroso-diphenylamine		9.20	**7.43**	81	45-110		20	0.50	0.16
N-Nitroso-di-n-propylamine		9.20	**7.76**	84	49-125		20	0.50	0.091
Pentachlorophenol		9.40	**7.24**	77	21-124		20	1.0	0.094
Phenanthrene		9.40	**8.15**	87	63-126		20	0.50	0.025
Phenol		9.40	**3.96**	42	22-60		20	0.50	0.15
Pyrene		9.40	**7.93**	84	60-134		20	0.50	0.026

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2,4,6-Trichlorophenol		9.40	**8.69**	92	47-128		20	0.50	0.065
2,4,5-Trichlorophenol		9.60	**8.83**	92	53-129		20	0.50	0.030
Surrogates:									
2-Fluorophenol				*53*	*20-70*				
Phenol-d6				*35*	*18-45*				
Nitrobenzene-d5				*84*	*31-123*				
2-Fluorobiphenyl				*80*	*25-113*				
2,4,6-Tribromophenol				*93*	*30-121*				
o-Terphenyl				*83*	*42-125*				

Matrix Spike 1011352-01 NTC03GW0113 Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acenaphthene	0.50 U	9.79	**7.77**	79	46-120		12	0.50	0.020
Acenaphthylene	0.50 U	9.79	**8.08**	83	50-133		14	0.50	0.033
Acetophenone	0.50 U	10.4	**8.32**	80	51-117		13	0.50	0.087
Aniline	0.50 U	9.79	**7.39**	75	11-106		30	0.50	0.036
Anthracene	0.50 U	9.79	**7.80**	80	56-128		12	0.50	0.035
Atrazine	0.50 U	10.4	**13.1**	126	53-134		40	0.50	0.17
Benzaldehyde	0.50 U	10.4	**8.33**	80	50-150		40	0.50	0.16
Benzo(a)anthracene	0.0404	9.79	**7.62**	77	54-130		12	0.50	0.025
Benzo(a)pyrene	0.0303	9.79	**8.11**	83	51-135		14	0.50	0.028
Benzo(b)fluoranthene	0.0303	9.79	**7.34**	75	47-138		21	0.50	0.029
Benzo(k)fluoranthene	0.50 U	9.79	**7.92**	81	49-136		16	0.50	0.049
Benzo(g,h,i)perylene	0.50 U	9.79	**8.31**	85	47-127		13	0.50	0.055
1,1'-Biphenyl	0.50 U	10.4	**8.46**	81	47-116		40	0.50	0.10
4-Bromophenyl Phenyl Ether	0.50 U	9.58	**7.77**	81	48-130		11	0.50	0.047
Butyl Benzyl Phthalate	1.0 U	9.58	**7.83**	82	44-149		15	1.0	0.057
Caprolactam	1.0 U	10.4	**1.93**	**18**	50-150		40	1.0	0.21
Carbazole	0.50 U	9.79	**24.8**	**253**	57-143		16	0.50	0.12
4-Chloro-3-methylphenol	0.50 U	9.79	**8.02**	82	46-120		13	0.50	0.17
4-Chloroaniline	1.0 U	9.79	**8.83**	90	37-125		16	1.0	0.14
Bis(2-chloroethoxy)methane	0.50 U	9.58	**7.33**	77	45-123		16	0.50	0.039
Bis(2-chloroethyl) Ether	0.50 U	9.58	**6.59**	69	40-117		16	0.50	0.034
Bis(2-chloroisopropyl) Ether	0.50 U	9.58	**7.04**	73	46-121		12	0.50	0.044
2-Chloronaphthalene	0.50 U	10.1	**8.04**	80	48-125		12	0.50	0.032
2-Chlorophenol	0.50 U	9.79	**6.98**	71	36-115		17	0.50	0.070

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Matrix Spike (Continued) 1011352-01 NTC03GW0113 — Analyzed: 12/14/2010 By: DMC

Unit: ug/L — Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
4-Chlorophenyl Phenyl Ether	0.50 U	9.58	**7.83**	82	48-122		13	0.50	0.12
Chrysene	0.0404	9.79	**7.58**	77	55-134		18	0.50	0.022
Dibenz(a,h)anthracene	0.50 U	9.79	**7.84**	80	49-131		10	0.50	0.053
Dibenzofuran	0.50 U	9.79	**8.39**	86	49-126		11	0.50	0.11
Di-n-butyl Phthalate	1.0 U	9.58	**8.23**	86	51-145		16	1.0	0.61
3,3´-Dichlorobenzidine	1.0 U	20.8	**25.4**	122	44-140		23	1.0	1.0
2,4-Dichlorophenol	0.50 U	9.79	**7.92**	81	39-124		15	0.50	0.23
Diethyl Phthalate	0.323 J	9.58	**8.10**	81	51-124		16	0.50	0.12
2,4-Dimethylphenol	1.0 U	9.79	**5.38**	55	30-118		17	1.0	0.31
Dimethyl Phthalate	0.50 U	9.58	**8.04**	84	51-130		12	0.50	0.10
4,6-Dinitro-2-methylphenol	0.50 U	9.79	**4.50**	46	30-132		31	0.50	0.14
2,4-Dinitrophenol	5.0 U	9.79	**3.11 J**	32	24-114		40	5.0	1.8
2,4-Dinitrotoluene	0.50 U	10.1	**8.74**	86	44-129		15	0.50	0.15
2,6-Dinitrotoluene	0.50 U	10.1	**8.28**	82	45-128		11	0.50	0.25
Di-n-octyl Phthalate	0.50 U	9.58	**7.84**	82	51-138		11	0.50	0.056
Bis(2-ethylhexyl) Phthalate	0.50 U	9.58	**7.54**	79	50-144		16	0.50	0.22
Fluoranthene	0.50 U	9.79	**8.32**	85	45-148		22	0.50	0.040
Fluorene	0.50 U	9.79	**8.06**	82	50-128		13	0.50	0.019
Hexachlorobenzene	0.50 U	10.1	**7.94**	79	39-140		14	0.50	0.065
Hexachlorobutadiene	0.50 U	10.1	**7.32**	72	31-129		14	0.50	0.13
Hexachlorocyclopentadiene	0.50 U	10.1	**7.06**	70	16-120		22	0.50	0.15
Hexachloroethane	0.50 U	10.1	**6.88**	68	33-123		15	0.50	0.13
Indeno(1,2,3-cd)pyrene	0.50 U	9.79	**7.71**	79	53-125		14	0.50	0.042
Isophorone	0.50 U	10.1	**7.32**	72	50-126		18	0.50	0.048
2-Methylnaphthalene	0.50 U	9.79	**8.02**	82	50-136		15	0.50	0.021
1-Methylnaphthalene	0.50 U	10.4	**7.83**	75	50-150		40	0.50	0.039
2-Methylphenol	0.50 U	10.0	**6.30**	63	35-97		13	0.50	0.13
4-Methylphenol	0.50 U	10.0	**6.45**	64	25-112		16	0.50	0.11
Naphthalene	0.0505	9.79	**7.38**	75	39-124		15	0.50	0.022
2-Nitroaniline	1.0 U	9.79	**11.3**	116	42-131		21	1.0	0.14
3-Nitroaniline	1.0 U	9.79	**10.2**	104	38-139		27	1.0	0.40
4-Nitroaniline	1.0 U	9.79	**11.0**	112	27-143		21	1.0	0.16
Nitrobenzene	0.50 U	10.1	**7.81**	77	41-129		16	0.50	0.18
4-Nitrophenol	5.0 U	9.79	**2.56 J**	26	18-61		30	5.0	0.71
2-Nitrophenol	0.50 U	9.79	**6.05**	62	35-127		17	0.50	0.068
N-Nitroso-diphenylamine	0.50 U	9.58	**7.03**	73	44-100		13	0.50	0.16

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Matrix Spike (Continued) 1011352-01 NTC03GW0113
Unit: ug/L

Analyzed: 12/14/2010 By: DMC
Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
N-Nitroso-di-n-propylamine	0.50 U	9.58	**7.27**	76	43-124		15	0.50	0.091
Pentachlorophenol	1.0 U	9.79	**4.18**	43	36-120		25	1.0	0.094
Phenanthrene	0.50 U	9.79	**7.74**	79	53-128		13	0.50	0.025
Phenol	0.50 U	9.79	**3.44**	35	22-52		19	0.50	0.15
Pyrene	0.50 U	9.79	**7.34**	75	55-134		16	0.50	0.026
2,4,6-Trichlorophenol	0.50 U	9.79	**6.96**	71	42-124		17	0.50	0.065
2,4,5-Trichlorophenol	0.50 U	10.0	**7.85**	79	50-120		16	0.50	0.030
Surrogates:									
2-Fluorophenol				*43*	*20-70*				
Phenol-d6				*30*	*18-45*				
Nitrobenzene-d5				*75*	*31-123*				
2-Fluorobiphenyl				*73*	*25-113*				
2,4,6-Tribromophenol				*79*	*30-121*				
o-Terphenyl				*74*	*42-125*				

Matrix Spike Duplicate 1011352-01 NTC03GW0113
Unit: ug/L

Analyzed: 12/14/2010 By: DMC
Analytical Batch: 0L17046

Acenaphthene	0.50 U	9.59	**7.50**	78	46-120	4	12	0.50	0.020
Acenaphthylene	0.50 U	9.59	**7.78**	81	50-133	4	14	0.50	0.033
Acetophenone	0.50 U	10.2	**8.42**	83	51-117	1	13	0.50	0.087
Aniline	0.50 U	9.59	**7.06**	74	11-106	4	30	0.50	0.036
Anthracene	0.50 U	9.59	**7.59**	79	56-128	3	12	0.50	0.035
Atrazine	0.50 U	10.2	**13.0**	127	53-134	0.7	40	0.50	0.17
Benzaldehyde	0.50 U	10.2	**8.42**	83	50-150	1	40	0.50	0.16
Benzo(a)anthracene	0.0404	9.59	**7.61**	79	54-130	0.2	12	0.50	0.025
Benzo(a)pyrene	0.0303	9.59	**7.77**	81	51-135	4	14	0.50	0.028
Benzo(b)fluoranthene	0.0303	9.59	**7.45**	77	47-138	1	21	0.50	0.029
Benzo(k)fluoranthene	0.50 U	9.59	**7.40**	77	49-136	7	16	0.50	0.049
Benzo(g,h,i)perylene	0.50 U	9.59	**8.03**	84	47-127	3	13	0.50	0.055
1,1'-Biphenyl	0.50 U	10.2	**8.29**	81	47-116	2	40	0.50	0.10
4-Bromophenyl Phenyl Ether	0.50 U	9.39	**7.51**	80	48-130	3	11	0.50	0.047
Butyl Benzyl Phthalate	1.0 U	9.39	**7.81**	83	44-149	0.3	15	1.0	0.057
Caprolactam	1.0 U	10.2	**1.90**	**19**	50-150	2	40	1.0	0.21
Carbazole	0.50 U	9.59	**24.1**	**251**	57-143	3	16	0.50	0.12
4-Chloro-3-methylphenol	0.50 U	9.59	**7.79**	81	46-120	3	13	0.50	0.17
4-Chloroaniline	1.0 U	9.59	**8.92**	93	37-125	1	16	1.0	0.14

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 12/14/2010 By: DMC

Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Bis(2-chloroethoxy)methane	0.50 U	9.39	**7.16**	76	45-123	2	16	0.50	0.039
Bis(2-chloroethyl) Ether	0.50 U	9.39	**6.74**	72	40-117	2	16	0.50	0.034
Bis(2-chloroisopropyl) Ether	0.50 U	9.39	**7.29**	78	46-121	3	12	0.50	0.044
2-Chloronaphthalene	0.50 U	9.90	**7.90**	80	48-125	2	12	0.50	0.032
2-Chlorophenol	0.50 U	9.59	**6.85**	71	36-115	2	17	0.50	0.070
4-Chlorophenyl Phenyl Ether	0.50 U	9.39	**7.65**	82	48-122	2	13	0.50	0.12
Chrysene	0.0404	9.59	**7.69**	80	55-134	1	18	0.50	0.022
Dibenz(a,h)anthracene	0.50 U	9.59	**7.80**	81	49-131	0.6	10	0.50	0.053
Dibenzofuran	0.50 U	9.59	**8.08**	84	49-126	4	11	0.50	0.11
Di-n-butyl Phthalate	1.0 U	9.39	**8.18**	87	51-145	0.6	16	1.0	0.61
3,3´-Dichlorobenzidine	1.0 U	20.4	**24.0**	118	44-140	6	23	1.0	1.0
2,4-Dichlorophenol	0.50 U	9.59	**7.46**	78	39-124	6	15	0.50	0.23
Diethyl Phthalate	0.323 J	9.39	**8.04**	82	51-124	0.8	16	0.50	0.12
2,4-Dimethylphenol	1.0 U	9.59	**4.49**	47	30-118	**18**	17	1.0	0.31
Dimethyl Phthalate	0.50 U	9.39	**7.70**	82	51-130	4	12	0.50	0.10
4,6-Dinitro-2-methylphenol	0.50 U	9.59	**4.23**	44	30-132	6	31	0.50	0.14
2,4-Dinitrophenol	5.0 U	9.59	**2.67 J**	28	24-114	15	40	5.0	1.8
2,4-Dinitrotoluene	0.50 U	9.90	**8.53**	86	44-129	2	15	0.50	0.15
2,6-Dinitrotoluene	0.50 U	9.90	**7.95**	80	45-128	4	11	0.50	0.25
Di-n-octyl Phthalate	0.50 U	9.39	**7.93**	84	51-138	1	11	0.50	0.056
Bis(2-ethylhexyl) Phthalate	0.50 U	9.39	**7.67**	82	50-144	2	16	0.50	0.22
Fluoranthene	0.50 U	9.59	**8.24**	86	45-148	0.9	22	0.50	0.040
Fluorene	0.50 U	9.59	**7.90**	82	50-128	2	13	0.50	0.019
Hexachlorobenzene	0.50 U	9.90	**7.83**	79	39-140	1	14	0.50	0.065
Hexachlorobutadiene	0.50 U	9.90	**7.46**	75	31-129	2	14	0.50	0.13
Hexachlorocyclopentadiene	0.50 U	9.90	**6.56**	66	16-120	7	22	0.50	0.15
Hexachloroethane	0.50 U	9.90	**7.23**	73	33-123	5	15	0.50	0.13
Indeno(1,2,3-cd)pyrene	0.50 U	9.59	**7.61**	79	53-125	1	14	0.50	0.042
Isophorone	0.50 U	9.90	**7.16**	72	50-126	2	18	0.50	0.048
2-Methylnaphthalene	0.50 U	9.59	**7.86**	82	50-136	2	15	0.50	0.021
1-Methylnaphthalene	0.50 U	10.2	**7.65**	75	50-150	2	40	0.50	0.039
2-Methylphenol	0.50 U	9.80	**6.34**	65	35-97	0.5	13	0.50	0.13
4-Methylphenol	0.50 U	9.80	**6.21**	63	25-112	4	16	0.50	0.11
Naphthalene	0.0505	9.59	**7.29**	75	39-124	1	15	0.50	0.022
2-Nitroaniline	1.0 U	9.59	**11.2**	116	42-131	2	21	1.0	0.14
3-Nitroaniline	1.0 U	9.59	**9.98**	104	38-139	2	27	1.0	0.40

Continued on next page

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Individual sample results relate only to the sample tested.

5560 Corporate Exchange Court SE ♦ Grand Rapids, MI 49512 ♦ 616.975.4500 ♦ Fax 616.942.7463 ♦ www.trimatrixlabs.com

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 12/14/2010 By: DMC

Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
4-Nitroaniline	1.0 U	9.59	**11.5**	119	27-143	4	21	1.0	0.16
Nitrobenzene	0.50 U	9.90	**7.64**	77	41-129	2	16	0.50	0.18
4-Nitrophenol	5.0 U	9.59	**2.33 J**	24	18-61	10	30	5.0	0.71
2-Nitrophenol	0.50 U	9.59	**5.67**	59	35-127	6	17	0.50	0.068
N-Nitroso-diphenylamine	0.50 U	9.39	**6.97**	74	44-100	0.9	13	0.50	0.16
N-Nitroso-di-n-propylamine	0.50 U	9.39	**7.31**	78	43-124	0.5	15	0.50	0.091
Pentachlorophenol	1.0 U	9.59	**3.74**	39	36-120	11	25	1.0	0.094
Phenanthrene	0.50 U	9.59	**7.58**	79	53-128	2	13	0.50	0.025
Phenol	0.50 U	9.59	**3.30**	34	22-52	4	19	0.50	0.15
Pyrene	0.50 U	9.59	**7.24**	76	55-134	1	16	0.50	0.026
2,4,6-Trichlorophenol	0.50 U	9.59	**6.41**	67	42-124	8	17	0.50	0.065
2,4,5-Trichlorophenol	0.50 U	9.80	**7.41**	76	50-120	6	16	0.50	0.030
Surrogates:									
2-Fluorophenol				*41*	*20-70*				
Phenol-d6				*30*	*18-45*				
Nitrobenzene-d5				*75*	*31-123*				
2-Fluorobiphenyl				*75*	*25-113*				
2,4,6-Tribromophenol				*77*	*30-121*				
o-Terphenyl				*76*	*42-125*				

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Individual sample results relate only to the sample tested.

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HOLDING TIME SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Method: Semivolatile Organic Compounds by EPA Method 8270C

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/19/10	4	7	12/14/10	25	40	
NTC03GW0213	11/15/10	11/16/10		11/19/10	4	7	12/14/10	26	40	
NTC03GW0313	11/16/10	11/17/10		11/19/10	3	7	12/14/10	26	40	
NTC03GW0413	11/16/10	11/17/10		11/19/10	3	7	12/14/10	26	40	
NTC03GW0513	11/16/10	11/17/10		11/19/10	3	7	12/14/10	26	40	
NTC03GW0613	11/16/10	11/17/10		11/19/10	3	7	12/14/10	26	40	
NTCFD111610-01	11/16/10	11/17/10		11/19/10	3	7	12/14/10	26	40	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L17046
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L17046-CCV1)		**Lab File ID: 10C1214A.D**		**Analyzed: 12/14/10 11:43**			
2-Fluorophenol	3.40	3.40	0.00	+/-1.0	114	75 - 125	
Phenol-d6	4.47	4.47	0.00	+/-1.0	112	75 - 125	
Nitrobenzene-d5	5.55	5.55	0.00	+/-1.0	111	75 - 125	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	108	75 - 125	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	119	75 - 125	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	104	75 - 125	
Blank (1012641-BLK1)		**Lab File ID: 1012641-BLK1**		**Analyzed: 12/14/10 15:11**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	44	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	32	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	81	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	80	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	74	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	90	42 - 125	
LCS (1012641-BS1)		**Lab File ID: 1012641-BS1.D**		**Analyzed: 12/14/10 15:41**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	53	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	35	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	84	31 - 123	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	80	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	93	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	83	42 - 125	
NTC03GW0113 (1011352-01)		**Lab File ID: 1011352-01.D**		**Analyzed: 12/14/10 18:35**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	39	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	26	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	71	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	59	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	73	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	77	42 - 125	
Matrix Spike (1012641-MS1)		**Lab File ID: 1012641-MS1.D**		**Analyzed: 12/14/10 19:03**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	43	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	30	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	75	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	73	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	79	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	74	42 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Matrix Spike Dup (1012641-MSD1)		**Lab File ID: 1012641-MSD1**		**Analyzed: 12/14/10 19:31**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	41	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	30	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	75	31 - 123	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	75	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	77	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	76	42 - 125	
NTC03GW0213 (1011352-02)		**Lab File ID: 1011352-02.D**		**Analyzed: 12/14/10 20:00**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	31	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	23	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	67	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	57	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	55	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	74	42 - 125	
NTC03GW0313 (1011356-01)		**Lab File ID: 1011356-01.D**		**Analyzed: 12/14/10 20:28**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	44	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	29	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	68	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	57	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	77	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	69	42 - 125	
NTC03GW0413 (1011356-02)		**Lab File ID: 1011356-02.D**		**Analyzed: 12/14/10 20:56**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	41	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	27	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	67	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	55	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	70	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	70	42 - 125	
NTC03GW0513 (1011356-03)		**Lab File ID: 1011356-03.D**		**Analyzed: 12/14/10 21:24**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	44	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	30	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	70	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	56	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	81	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	73	42 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L17046
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC03GW0613 (1011356-04)		**Lab File ID: 1011356-04.D Analyzed: 12/14/10 21:52**					
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	43	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	29	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	69	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	60	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	81	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	74	42 - 125	
NTCFD111610-01 (1011356-05)		**Lab File ID: 1011356-05.D Analyzed: 12/14/10 22:20**					
2-Fluorophenol	3.37	3.40	-0.03	+/-1.0	42	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	28	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	69	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	67	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	81	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	76	42 - 125	

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L16054-TUN1
Injection Date: 12/13/10
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: DFT1213B
Injection Time: 17:03
Calibration: 0L17004
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	38.1	PASS
68	Less than 2% of 69	1.54	PASS
69	Less than 200% of 198	39.3	PASS
70	Less than 2% of 69	0.847	PASS
127	40 - 60% of 198	48.7	PASS
197	Less than 1% of 198	0.611	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.09	PASS
275	10 - 30% of 198	21.9	PASS
365	1.0001 - 200% of 198	2.16	PASS
441	0.0001 - 99.9999% of 443	65.6	PASS
442	40.0001 - 200% of 198	94.9	PASS
443	17 - 23% of 442	20.2	PASS

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0111142	0.5ppm BNA	0L16054-CAL1		
0111141	1ppm BNA	0L16054-CAL2		
0111140	2ppm BNA	0L16054-CAL3		
0111139	5ppm BNA	0L16054-CAL4		
0111138	10ppm BNA	0L16054-CAL5		
0111137	15ppm BNA	0L16054-CAL6		
0111136	20ppm BNA	0L16054-CAL7		
0111135	25ppm BNA	0L16054-CAL8		
0101098	0.5ppm ABE	0L16054-CAL9		
0101097	1ppm ABE	0L16054-CALA		
0101096	2ppm ABE	0L16054-CALB		
0101095	5ppm ABE	0L16054-CALC		
0101094	10ppm ABE	0L16054-CALD		
0101093	15ppm ABE	0L16054-CALE		
0101092	20ppm ABE	0L16054-CALF		
0101091	25ppm ABE	0L16054-CALG		
0091250	DFTPP tune std	0L16054-TUN1	DFT1213B	12/13/10 17:03
0111138	10ppm BNA	0L16054-CAL5	10IC1213.D	12/13/10 17:28
0111142	0.5ppm BNA	0L16054-CAL1	05IC1213.D	12/13/10 17:57
0111141	1ppm BNA	0L16054-CAL2	1IC1213.D	12/13/10 18:25
0111140	2ppm BNA	0L16054-CAL3	2IC1213.D	12/13/10 18:54
0111139	5ppm BNA	0L16054-CAL4	5IC1213.D	12/13/10 19:23
0111137	15ppm BNA	0L16054-CAL6	15IC1213.D	12/13/10 19:51
0111136	20ppm BNA	0L16054-CAL7	20IC1213.D	12/13/10 20:19
0111135	25ppm BNA	0L16054-CAL8	25IC1213.D	12/13/10 20:47
0111144	10ppm SCV BNA	0L16054-SCV1	LCS1213A.D	12/13/10 21:15
0101094	10ppm ABE	0L16054-CALD	10AE1213.D	12/13/10 22:11
0101098	0.5ppm ABE	0L16054-CAL9	05AE1213.D	12/13/10 22:38
0101097	1ppm ABE	0L16054-CALA	1AE1213.D	12/13/10 23:06
0101096	2ppm ABE	0L16054-CALB	2AE1213.D	12/13/10 23:33
0101095	5ppm ABE	0L16054-CALC	5AE1213.D	12/14/10 00:01
0101093	15ppm ABE	0L16054-CALE	15AE1213.D	12/14/10 00:28

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0101092	20ppm ABE	0L16054-CALF	20AE1213.D	12/14/10 00:55
0101091	25ppm ABE	0L16054-CALG	25AE1213.D	12/14/10 01:23
0101099	10ppm SCV ABE	0L16054-SCV2	LCSAE1213B.D	12/14/10 02:17

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17007-TUN1
Lab File ID: DFT1123A
Injection Date: 11/23/10
Injection Time: 10:08
Sequence: 0L17007
Calibration: 0L17004
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	42.1	PASS
68	Less than 2% of 69	0	PASS
69	Less than 200% of 198	47.5	PASS
70	Less than 2% of 69	0.668	PASS
127	40 - 60% of 198	56.6	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.02	PASS
275	10 - 30% of 198	21.1	PASS
365	1.0001 - 200% of 198	1.53	PASS
441	0.0001 - 99.9999% of 443	66.9	PASS
442	40.0001 - 200% of 198	61.9	PASS
443	17 - 23% of 442	19.4	PASS

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L17007

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0110702	0.5ppm Appix	0L17007-CAL1		
0110701	1ppm Appix	0L17007-CAL2		
0110700	2ppm Appix	0L17007-CAL3		
0110699	5ppm Appix	0L17007-CAL4		
0110698	10ppm Appix	0L17007-CAL5		
0110697	15ppm Appix	0L17007-CAL6		
0110696	20ppm Appix	0L17007-CAL7		
0110695	25ppm Appix	0L17007-CAL8		
0091250	DFTPP tune std	0L17007-TUN1	DFT1123A	11/23/10 10:08
0110702	0.5ppm Appix	0L17007-CAL1	05appix1123.D	11/23/10 16:09
0110701	1ppm Appix	0L17007-CAL2	1appix1123.D	11/23/10 16:37
0110700	2ppm Appix	0L17007-CAL3	2appix1123.D	11/23/10 17:06
0110699	5ppm Appix	0L17007-CAL4	5appix1123.D	11/23/10 17:34
0110698	10ppm Appix	0L17007-CAL5	10appix1123c.D	11/23/10 18:02
0110697	15ppm Appix	0L17007-CAL6	15appix1123.D	11/23/10 18:30
0110696	20ppm Appix	0L17007-CAL7	20appix1123.D	11/23/10 18:55
0110695	25ppm Appix	0L17007-CAL8	25appix1123.D	11/23/10 19:23
0110703	10ppm Appix SCV	0L17007-SCV1	scvappix1123.D	11/23/10 19:50

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene												
Acenaphthylene												
Acetophenone												
Aniline												
Anthracene												
Atrazine												
Benzaldehyde												
1,1'-Biphenyl												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Benzo(g,h,i)perylene												
Benzoic Acid												
Benzyl Alcohol												
4-Bromophenyl Phenyl Ether												
Butyl Benzyl Phthalate												
Caprolactam												
Carbazole												
4-Chloro-3-methylphenol												
4-Chloroaniline												
Bis(2-chloroethoxy)methane												
Bis(2-chloroethyl) Ether												
Bis(2-chloroisopropyl) Ether												
2-Chloronaphthalene												
2-Chlorophenol												
4-Chlorophenyl Phenyl Ether												
Chrysene												
Dibenz(a,h)anthracene												
Dibenzofuran												
Di-n-butyl Phthalate												

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
3,3'-Dichlorobenzidine												
2,4-Dichlorophenol												
2,6-Dichlorophenol												
Diethyl Phthalate												
2,4-Dimethylphenol												
Dimethyl Phthalate												
4,6-Dinitro-2-methylphenol												
2,4-Dinitrophenol												
2,6-Dinitrotoluene												
2,4-Dinitrotoluene												
Di-n-octyl Phthalate												
1,2-Diphenylhydrazine												
Bis(2-ethylhexyl) Phthalate												
Fluoranthene												
Fluorene												
Hexachlorobenzene												
Hexachlorobutadiene												
Hexachlorocyclopentadiene												
Hexachloroethane												
Indeno(1,2,3-cd)pyrene												
Isophorone												
2-Methylnaphthalene												
1-Methylnaphthalene												
4-Methylphenol												
2-Methylphenol												
Naphthalene												
4-Nitroaniline												
2-Nitroaniline												

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline												
Nitrobenzene												
2-Nitrophenol												
4-Nitrophenol												
N-Nitroso-dimethylamine												
N-Nitroso-diphenylamine												
N-Nitroso-di-n-propylamine												
Pentachlorophenol												
Phenanthrene												
Phenol												
Pyrene												
Pyridine												
1,2,4,5-Tetrachlorobenzene												
2,3,4,6-Tetrachlorophenol												
1,2,4-Trichlorobenzene												
2,4,5-Trichlorophenol												
2,4,6-Trichlorophenol												
1,3-Dinitrobenzene												
3-Methylcholanthrene	0.495	0.25283	0.99	0.2250615	1.98	0.2361145	4.95	0.2690358	9.9	0.3109483	14.8	0.2991729
2,3,5,6-Tetrachlorophenol												
Bis(2-chloroethoxy)ethane												
2-Fluorophenol												
Phenol-d6												
Nitrobenzene-d5												
2-Fluorobiphenyl												
2,4,6-Tribromophenol												
o-Terphenyl												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene					0.5	1.19766	1	1.373039	2	1.325733	5	1.125615
Acenaphthylene					0.5	1.975819	1	2.232183	2	2.260969	5	1.910024
Acetophenone					0.5	1.796284	1	1.955181	2	1.956584	5	1.720473
Aniline												
Anthracene					0.5	1.227947	1	1.387592	2	1.412784	5	1.197475
Atrazine					0.5	0.1947955	1	0.2255641	2	0.2385731	5	0.189592
Benzaldehyde					0.5	1.796284	1	1.955181	2	1.956584	5	1.720473
1,1'-Biphenyl					0.5	1.635226	1	1.822074	2	1.816339	5	1.476079
Benzo(a)anthracene					0.5	1.17698	1	1.177037	2	1.206557	5	1.108174
Benzo(a)pyrene					0.5	0.9131154	1	1.046302	2	1.142569	5	1.033272
Benzo(b)fluoranthene					0.5	1.091803	1	1.181751	2	1.325088	5	1.142762
Benzo(k)fluoranthene					0.5	1.370231	1	1.469258	2	1.449843	5	1.32221
Benzo(g,h,i)perylene					0.5	0.8021328	1	0.8809011	2	0.9473492	5	0.8580928
Benzoic Acid					1	9.540476E-02	2	0.1117032	4	0.1445258	10	0.1648017
Benzyl Alcohol					0.5	0.9158208	1	1.003272	2	0.950379	5	0.8721481
4-Bromophenyl Phenyl Ether					0.5	0.2400992	1	0.2743545	2	0.2719335	5	0.226218
Butyl Benzyl Phthalate					0.5	0.5972842	1	0.6687113	2	0.7134255	5	0.6692653
Caprolactam					0.5	0.1271768	1	0.1016991	2	0.1196392	5	0.107855
Carbazole					0.5	~~1.091705~~	1	~~1.091684~~	2	1.036933	5	0.4621427
4-Chloro-3-methylphenol					0.5	0.2813314	1	0.3063985	2	0.325174	5	0.288303
4-Chloroaniline												
Bis(2-chloroethoxy)methane					0.5	0.4220266	1	0.4789256	2	0.4712952	5	0.3984756
Bis(2-chloroethyl) Ether					0.5	1.568999	1	1.662968	2	1.5698	5	1.437311
Bis(2-chloroisopropyl) Ether					0.5	2.041847	1	2.173249	2	2.121018	5	1.790064
2-Chloronaphthalene					0.5	1.254116	1	1.37933	2	1.339966	5	1.077831
2-Chlorophenol					0.5	1.460584	1	1.639483	2	1.577087	5	1.405465
4-Chlorophenyl Phenyl Ether					0.5	0.6591356	1	0.7142023	2	0.6983764	5	0.5796361
Chrysene					0.5	1.315947	1	1.293805	2	1.31311	5	1.096658
Dibenz(a,h)anthracene					0.5	0.4694333	1	0.6574034	2	0.6984117	5	0.6883009
Dibenzofuran					0.5	1.773768	1	1.936975	2	1.95217	5	1.6069
Di-n-butyl Phthalate					0.5	1.296078	1	1.526796	2	1.595773	5	1.415213

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene					0.5	1.734022	1	1.892751	2	1.819087	5	1.603095
1,2-Dichlorobenzene					0.5	1.721627	1	1.851075	2	1.81689	5	1.559152
1,3-Dichlorobenzene					0.5	1.744075	1	1.897961	2	1.891532	5	1.656795
3,3'-Dichlorobenzidine												
2,4-Dichlorophenol					0.5	0.2742398	1	0.3251427	2	0.324128	5	0.2861585
2,6-Dichlorophenol					0.5	0.2306409	1	0.2824719	2	0.2817779	5	0.2456227
Diethyl Phthalate					0.5	1.471432	1	1.498592	2	1.475197	5	1.254422
2,4-Dimethylphenol					0.5	0.290979	1	0.3387863	2	0.3432998	5	0.3050926
Dimethyl Phthalate					0.5	1.315552	1	1.511486	2	1.565668	5	1.336039
4,6-Dinitro-2-methylphenol					0.5	6.408563E-02	1	7.455206E-02	2	0.1039494	5	0.1126831
2,4-Dinitrophenol					1	4.711381E-02	2	5.865977E-02	4	8.204926E-02	10	0.1050757
2,6-Dinitrotoluene					0.5	0.262572	1	0.3077345	2	0.3383703	5	0.292652
2,4-Dinitrotoluene					0.5	0.2633796	1	0.3437931	2	0.3738249	5	0.3444464
Di-n-octyl Phthalate					0.5	0.8489201	1	0.999505	2	1.193934	5	1.304083
1,2-Diphenylhydrazine					0.5	0.8872299	1	0.9915661	2	0.9875657	5	0.8248108
Bis(2-ethylhexyl) Phthalate					0.5	0.9437191	1	0.9603862	2	0.9327716	5	0.9865851
Fluoranthene					0.5	1.195171	1	1.335089	2	1.403685	5	1.22844
Fluorene					0.5	1.374296	1	1.568441	2	1.571966	5	1.314559
Hexachlorobenzene					0.5	0.2914709	1	0.3049941	2	0.3124367	5	0.2442822
Hexachlorobutadiene					0.5	0.178148	1	0.1985133	2	0.1883824	5	0.161907
Hexachlorocyclopentadiene					0.5	0.2383151	1	0.2626952	2	0.2722997	5	0.2309829
Hexachloroethane					0.5	0.5950293	1	0.6593583	2	0.6400095	5	0.5314171
Indeno(1,2,3-cd)pyrene					0.5	0.6627124	1	0.80847	2	0.8691199	5	0.8686454
Isophorone					0.5	0.6810046	1	0.7593305	2	0.7627054	5	0.6710729
2-Methylnaphthalene					0.5	0.7550975	1	0.8775953	2	0.8750426	5	0.7442934
1-Methylnaphthalene					0.5	0.757875	1	0.8712307	2	0.8360891	5	0.7189529
4-Methylphenol					0.5	1.352397	1	1.591555	2	1.529381	5	1.366842
2-Methylphenol					0.5	1.24301	1	1.415332	2	1.396822	5	1.260934
Naphthalene					0.5	1.176046	1	1.316839	2	1.259222	5	1.053307
4-Nitroaniline												
2-Nitroaniline												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline												
Nitrobenzene					0.5	0.3598566	1	0.4115773	2	0.3870312	5	0.3252532
2-Nitrophenol					0.5	0.1942815	1	0.2786427	2	0.341749	5	0.327964
4-Nitrophenol					1	0.108981	2	0.1143373	4	0.1382097	10	0.1458218
N-Nitroso-dimethylamine					0.5	0.8338522	1	0.882608	2	0.8714951	5	0.7692185
N-Nitroso-diphenylamine					0.5	0.8090888	1	0.9115173	2	0.8838996	5	0.7231814
N-Nitroso-di-n-propylamine					0.5	0.9166776	1	1.011748	2	1.003115	5	0.8837905
Pentachlorophenol					0.5	6.747051E-02	1	8.806198E-02	2	0.1119149	5	0.119888
Phenanthrene					0.5	1.355726	1	1.487648	2	1.494689	5	1.243384
Phenol					0.5	1.839753	1	2.022792	2	1.97949	5	1.67192
Pyrene					0.5	1.797219	1	1.923001	2	1.833799	5	1.576221
Pyridine					0.5	1.450416	1	1.522226	2	1.524094	5	1.350833
1,2,4,5-Tetrachlorobenzene					0.5	0.5288323	1	0.632425	2	0.6249778	5	0.4756233
2,3,4,6-Tetrachlorophenol					0.5	0.2238579	1	0.2663093	2	0.2989591	5	0.2726651
1,2,4-Trichlorobenzene					0.5	0.3642593	1	0.4164399	2	0.4005165	5	0.3385692
2,4,5-Trichlorophenol					0.5	0.3283967	1	0.3492549	2	0.3729728	5	0.3330754
2,4,6-Trichlorophenol					0.5	0.3312235	1	0.3753003	2	0.3915632	5	0.3408819
1,3-Dinitrobenzene					0.5	8.502585E-02	1	0.1070302	2	0.1131732	5	0.1056745
3-Methylcholanthrene	19.8	0.2942981	24.8	0.2969855								
2,3,5,6-Tetrachlorophenol					0.5	13440	1	17780	2	19306	5	16536.4
Bis(2-chloroethoxy)ethane					0.5	0.3231573	1	0.3738732	2	0.3696121	5	0.309773
2-Fluorophenol					1	1.203739	2	1.391031	4	1.314757	10	1.161477
Phenol-d6					1	1.556975	2	1.816326	4	1.716221	10	1.516721
Nitrobenzene-d5					1.01	0.162056	2.02	0.1905186	4.04	0.183918	10.1	0.1631022
2-Fluorobiphenyl					1	1.421639	2	1.669327	4	1.544684	10	1.228245
2,4,6-Tribromophenol					0.995	0.1200269	1.99	0.1500388	3.98	0.146377	9.95	0.1361834
o-Terphenyl					1	0.7161904	2	0.8505731	4	0.788733	10	0.6230275

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene	10	1.233512	15	1.160355	20	1.086933	25	0.9777764				
Acenaphthylene	10	2.04901	15	1.891845	20	1.759742	25	1.558128				
Acetophenone	10	2.054686	15	1.85246	20	1.852898	25	1.849707				
Aniline									0.5	1.156562	1	1.129931
Anthracene	10	1.343587	15	1.271866	20	1.182006	25	1.074551				
Atrazine	10	0.1905053	15	0.1617511	20	0.1645663	25	0.1497826				
Benzaldehyde	10	2.054686	15	1.85246	20	1.852898	25	1.836381				
1,1'-Biphenyl	10	1.585984	15	1.445666	20	1.388485	25	1.243169				
Benzo(a)anthracene	10	1.348518	15	1.242198	20	1.21422	25	1.159833				
Benzo(a)pyrene	10	1.307923	15	1.223888	20	1.202265	25	1.12102				
Benzo(b)fluoranthene	10	1.497061	15	1.309273	20	1.375994	25	1.244905				
Benzo(k)fluoranthene	10	1.407616	15	1.355284	20	1.21259	25	1.108217				
Benzo(g,h,i)perylene	10	1.096906	15	1.061464	20	1.03253	25	1.00211				
Benzoic Acid	20	0.2556031	30	0.2396394	40	0.2477767	50	0.2384858				
Benzyl Alcohol	10	1.045156	15	0.9423452	20	0.9232851	25	0.8742245				
4-Bromophenyl Phenyl Ether	10	0.2569811	15	0.2435022	20	0.2273149	25	0.2024968				
Butyl Benzyl Phthalate	10	0.850055	15	0.7987186	20	0.794418	25	0.7524164				
Caprolactam	10	0.1238966	15	0.1207804	20	0.1217474	25	0.1157432				
Carbazole	10	0.3942054	15	0.3298379	20	0.3260078	25	0.3604475				
4-Chloro-3-methylphenol	10	0.3388438	15	0.3118173	20	0.3057919	25	0.2479122				
4-Chloroaniline									0.5	0.2710351	1	0.2826917
Bis(2-chloroethoxy)methane	10	0.4589379	15	0.4176013	20	0.4036746	25	0.3760161				
Bis(2-chloroethyl) Ether	10	1.788112	15	1.673184	20	1.498384	25	1.352318				
Bis(2-chloroisopropyl) Ether	10	2.076529	15	1.843335	20	1.768466	25	1.69803				
2-Chloronaphthalene	10	1.188445	15	1.102657	20	1.037768	25	0.9198695				
2-Chlorophenol	10	1.696479	15	1.539143	20	1.489972	25	1.413415				
4-Chlorophenyl Phenyl Ether	10	0.6038274	15	0.5541071	20	0.5231955	25	0.461265				
Chrysene	10	1.27013	15	1.159428	20	1.140891	25	1.05007				
Dibenz(a,h)anthracene	10	0.9129376	15	0.8726694	20	0.8589797	25	0.8181133				
Dibenzofuran	10	1.72888	15	1.560358	20	1.461871	25	1.299569				
Di-n-butyl Phthalate	10	1.674436	15	1.539321	20	1.432748	25	1.316015				

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene	10	1.885822	15	1.734278	20	1.677977	25	1.618557				
1,2-Dichlorobenzene	10	1.821514	15	1.679955	20	1.629248	25	1.566205				
1,3-Dichlorobenzene	10	1.944679	15	1.79978	20	1.724241	25	1.661249				
3,3'-Dichlorobenzidine									0.5	0.1737827	1	0.1500472
2,4-Dichlorophenol	10	0.332896	15	0.3014756	20	0.2916659	25	0.2695543				
2,6-Dichlorophenol	10	0.3070559	15	0.2790802	20	0.27613	25	0.2578639				
Diethyl Phthalate	10	1.404169	15	1.305834	20	1.216306	25	1.100858				
2,4-Dimethylphenol	10	0.3763132	15	0.3528702	20	0.3402549	25	0.3182384				
Dimethyl Phthalate	10	1.424666	15	1.343993	20	1.292339	25	1.17477				
4,6-Dinitro-2-methylphenol	10	0.16074	15	0.1598794	20	0.1534004	25	0.1491688				
2,4-Dinitrophenol	20	0.1555025	30	0.1522951	40	0.1541894	50	0.1458185				
2,6-Dinitrotoluene	10	0.3275012	15	0.3127035	20	0.3027074	25	0.272177				
2,4-Dinitrotoluene	10	0.4003056	15	0.376141	20	0.3594833	25	0.338275				
Di-n-octyl Phthalate	10	1.831915	15	1.731937	20	1.725083	25	1.698132				
1,2-Diphenylhydrazine	10	0.9424343	15	0.8722989	20	0.8519085	25	0.7646994				
Bis(2-ethylhexyl) Phthalate	10	1.162671	15	1.011302	20	0.997273	25	0.9717724				
Fluoranthene	10	1.393565	15	1.30028	20	1.227511	25	1.135539				
Fluorene	10	1.41278	15	1.327381	20	1.223528	25	1.067011				
Hexachlorobenzene	10	0.2685115	15	0.2517438	20	0.2342925	25	0.206977				
Hexachlorobutadiene	10	0.1843523	15	0.1711717	20	0.1658449	25	0.1550617				
Hexachlorocyclopentadiene	10	0.265596	15	0.2655784	20	0.2739212	25	0.2402948				
Hexachloroethane	10	0.6445046	15	0.5920647	20	0.5695411	25	0.5477181				
Indeno(1,2,3-cd)pyrene	10	1.156388	15	1.105537	20	1.088697	25	1.050191				
Isophorone	10	0.7880179	15	0.7302668	20	0.7170748	25	0.675091				
2-Methylnaphthalene	10	0.8278102	15	0.75462	20	0.7262868	25	0.6692851				
1-Methylnaphthalene	10	0.8149896	15	0.736004	20	0.7136508	25	0.6664995				
4-Methylphenol	10	1.582633	15	1.429922	20	1.387459	25	1.311551				
2-Methylphenol	10	1.512595	15	1.374315	20	1.313887	25	1.222385				
Naphthalene	10	1.199406	15	1.092809	20	1.041983	25	0.9538843				
4-Nitroaniline									0.5	0.0488024	1	3.153266E-02
2-Nitroaniline									0.5	0.1522767	1	0.1422917

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline									0.5	8.790494E-02	1	8.667534E-02
Nitrobenzene	10	0.3893638	15	0.3545009	20	0.3366034	25	0.310557				
2-Nitrophenol	10	0.2326446	15	0.2136238	20	0.2127418	25	0.1922003				
4-Nitrophenol	20	0.1705465	30	0.1575171	40	0.1499866	50	0.124198				
N-Nitroso-dimethylamine	10	1.005395	15	0.8964541	20	0.8528816	25	0.7909084				
N-Nitroso-diphenylamine	10	0.6988831	15	0.6122529	20	0.5649569	25	0.4797988				
N-Nitroso-di-n-propylamine	10	1.018447	15	0.9288081	20	0.910878	25	0.7669112				
Pentachlorophenol	10	0.1778886	15	0.1600068	20	0.1500113	25	0.1382588				
Phenanthrene	10	1.391251	15	1.295453	20	1.210066	25	1.097113				
Phenol	10	1.915169	15	1.702151	20	1.624442	25	1.376774				
Pyrene	10	1.769499	15	1.621061	20	1.585706	25	1.496987				
Pyridine	10	1.744485	15	1.572894	20	1.506867	25	1.398071				
1,2,4,5-Tetrachlorobenzene	10	0.5319195	15	0.4865264	20	0.473786	25	0.4190143				
2,3,4,6-Tetrachlorophenol	10	0.3230926	15	0.3114904	20	0.2866421	25	0.2661472				
1,2,4-Trichlorobenzene	10	0.3789378	15	0.3447535	20	0.3284089	25	0.2992213				
2,4,5-Trichlorophenol	10	0.3919789	15	0.3686738	20	0.3481006	25	0.3146261				
2,4,6-Trichlorophenol	10	0.4012406	15	0.3764303	20	0.359177	25	0.327203				
1,3-Dinitrobenzene	10	0.1302143	15	0.1228513	20	0.1197922	25	0.1105226				
3-Methylcholanthrene												
2,3,5,6-Tetrachlorophenol	10	21953.3	15	19629.2	20	17778.25	25	19748.72				
Bis(2-chloroethoxy)ethane	10	0.3712375	15	0.3382673	20	0.3319562	25	0.3071583				
2-Fluorophenol	20	1.553938	30	1.296084	40	1.244988	50	1.107456				
Phenol-d6	20	1.91431	30	1.628043	40	1.546275	50	1.469126				
Nitrobenzene-d5	20.2	0.1998533	30.3	0.1726916	40.4	0.1697594	50.5	0.1585044				
2-Fluorobiphenyl	20	1.337282	30	1.152224	40	1.090109	50	0.9663796				
2,4,6-Tribromophenol	19.9	0.1646159	29.8	0.1491609	39.8	0.1401652	49.8	0.1284341				
o-Terphenyl	20	0.6799966	30	0.5871434	40	0.5523356	50	0.4927491				

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene												
Acenaphthylene												
Acetophenone												
Aniline	2	1.165897	5	1.222847	10	1.268307	15	1.284047	20	1.258669	25	1.270109
Anthracene												
Atrazine												
Benzaldehyde												
1,1'-Biphenyl												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Benzo(g,h,i)perylene												
Benzoic Acid												
Benzyl Alcohol												
4-Bromophenyl Phenyl Ether												
Butyl Benzyl Phthalate												
Caprolactam												
Carbazole												
4-Chloro-3-methylphenol												
4-Chloroaniline	2	0.2937329	5	0.3188218	10	0.3387827	15	0.3457499	20	0.3340772	25	0.3465223
Bis(2-chloroethoxy)methane												
Bis(2-chloroethyl) Ether												
Bis(2-chloroisopropyl) Ether												
2-Chloronaphthalene												
2-Chlorophenol												
4-Chlorophenyl Phenyl Ether												
Chrysene												
Dibenz(a,h)anthracene												
Dibenzofuran												
Di-n-butyl Phthalate												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
3,3'-Dichlorobenzidine	2	0.1549971	5	0.1701208	10	0.2150459	15	0.2116464	20	0.2121472	25	0.2187587
2,4-Dichlorophenol												
2,6-Dichlorophenol												
Diethyl Phthalate												
2,4-Dimethylphenol												
Dimethyl Phthalate												
4,6-Dinitro-2-methylphenol												
2,4-Dinitrophenol												
2,6-Dinitrotoluene												
2,4-Dinitrotoluene												
Di-n-octyl Phthalate												
1,2-Diphenylhydrazine												
Bis(2-ethylhexyl) Phthalate												
Fluoranthene												
Fluorene												
Hexachlorobenzene												
Hexachlorobutadiene												
Hexachlorocyclopentadiene												
Hexachloroethane												
Indeno(1,2,3-cd)pyrene												
Isophorone												
2-Methylnaphthalene												
1-Methylnaphthalene												
4-Methylphenol												
2-Methylphenol												
Naphthalene												
4-Nitroaniline	2	6.797382E-02	5	0.1179709	10	0.1419813	15	0.1563397	20	0.1595631	25	0.1744964
2-Nitroaniline	2	0.1794369	5	0.2171027	10	0.2632627	15	0.2668697	20	0.2722519	25	0.2830827

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011352
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline	2	0.1028577	5	0.1465921	10	0.1894793	15	0.2006823	20	0.200868	25	0.2103911
Nitrobenzene												
2-Nitrophenol												
4-Nitrophenol												
N-Nitroso-dimethylamine												
N-Nitroso-diphenylamine												
N-Nitroso-di-n-propylamine												
Pentachlorophenol												
Phenanthrene												
Phenol												
Pyrene												
Pyridine												
1,2,4,5-Tetrachlorobenzene												
2,3,4,6-Tetrachlorophenol												
1,2,4-Trichlorobenzene												
2,4,5-Trichlorophenol												
2,4,6-Trichlorophenol												
1,3-Dinitrobenzene												
3-Methylcholanthrene												
2,3,5,6-Tetrachlorophenol												
Bis(2-chloroethoxy)ethane												
2-Fluorophenol												
Phenol-d6												
Nitrobenzene-d5												
2-Fluorobiphenyl												
2,4,6-Tribromophenol												
o-Terphenyl												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Acenaphthene	1.185078	10.78603	8.40125	9.762741E-02			CCC (30)	
Acenaphthylene	1.954715	11.94088	8.20375	6.285445E-02			15	
Acetophenone	1.879784	5.575798	5.37375	9.601236E-02			15	
Aniline	1.219546	4.950261	4.5	0			15	
Anthracene	1.262226	9.088561	10.09625	7.484511E-02			15	
Atrazine	0.1893913	16.34378	9.7475	9.005348E-02	0.99064		0.99	
Benzaldehyde	1.878118	5.615366	5.37375	9.601236E-02			15	
1,1'-Biphenyl	1.551628	13.11966	7.72625	9.566535E-02			15	
Benzo(a)anthracene	1.20419	5.875889	12.9325	5.425862E-02			15	
Benzo(a)pyrene	1.123794	11.10522	14.3575	5.191065E-02			CCC (30)	
Benzo(b)fluoranthene	1.27108	10.45922	14.04625	5.360703E-02			15	
Benzo(k)fluoranthene	1.336906	9.147458	14.07	8.458514E-02			15	
Benzo(g,h,i)perylene	0.9601857	10.97926	15.6625	9.484942E-02			15	
Benzoic Acid	0.1872426	35.06616	6.19875	1.297575	0.99590		0.99	
Benzyl Alcohol	0.9408288	6.347333	5.06875	0.1953639			15	
4-Bromophenyl Phenyl Ether	0.2428625	10.07679	9.53	5.357306E-02			15	
Butyl Benzyl Phthalate	0.7305368	11.46652	12.3525	3.558769E-02			15	
Caprolactam	0.1173172	7.300251	6.955	0.5803169			15	
Carbazole	0.484929	56.71969	10.29167	4.271745E-02		0.9928239	0.99	
4-Chloro-3-methylphenol	0.3006965	9.365271	7.0725	0.1805101			CCC (30)	
4-Chloroaniline	0.3164267	9.477944	6.48	2.237972E-02			15	
Bis(2-chloroethoxy)methane	0.4283691	8.704977	6.125	8.691137E-02			15	
Bis(2-chloroethyl) Ether	1.568885	8.916205	4.585	0.1643597			15	
Bis(2-chloroisopropyl) Ether	1.939067	9.468747	5.22	0.1022064			15	
2-Chloronaphthalene	1.162498	13.51365	7.74125	8.271919E-02			15	
2-Chlorophenol	1.527703	6.886725	4.62625	0.1603698			15	
4-Chlorophenyl Phenyl Ether	0.5992182	14.64321	8.98875	7.233031E-02			15	
Chrysene	1.205005	8.7631	12.9725	7.875353E-02			15	
Dibenz(a,h)anthracene	0.7470312	19.71291	15.40375	6.858845E-02	0.99588		0.99	
Dibenzofuran	1.665061	13.64771	8.59375	5.914474E-02			15	
Di-n-butyl Phthalate	1.474547	9.019911	10.6975	6.732079E-02			15	
1,4-Dichlorobenzene	1.745699	6.422713	4.885	0.1091405			CCC (30)	

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
1,2-Dichlorobenzene	1.705708	6.81565	5.0675	9.307164E-02			15	
1,3-Dichlorobenzene	1.790039	6.218656	4.7975	9.457224E-02			15	
3,3'-Dichlorobenzidine	0.1883183	15.37775	12.93	1.135447E-02	0.99862		0.99	
2,4-Dichlorophenol	0.3006576	8.095296	6.2175	0.1139967			CCC (30)	
2,6-Dichlorophenol	0.2700804	8.936849	6.48375	7.854456E-02			15	
Diethyl Phthalate	1.340851	10.76325	8.89375	0.1185813			15	
2,4-Dimethylphenol	0.3332293	8.198919	6.015	0.1243322			15	
Dimethyl Phthalate	1.370564	9.155928	8.11	0.1474489			15	
4,6-Dinitro-2-methylphenol	0.1223074	31.93179	9.0625	0.12828	0.99572		0.99	
2,4-Dinitrophenol	0.112588	40.33701	8.47375	0.1254666	0.99558		SPCC (0.05)	
2,6-Dinitrotoluene	0.3020522	8.535081	8.1725	0.1266571			15	
2,4-Dinitrotoluene	0.3499561	11.62304	8.61875	0.1305878			15	
Di-n-octyl Phthalate	1.416689	26.74358	13.66125	2.554926E-02	0.99712		CCC (30)	
1,2-Diphenylhydrazine	0.8903142	8.935828	9.16375	5.213346E-02			15	
Bis(2-ethylhexyl) Phthalate	0.99581	7.27022	12.98125	3.201105E-02			15	
Fluoranthene	1.27741	7.547398	11.35375	4.583835E-02			CCC (30)	
Fluorene	1.357495	12.4178	8.9775	7.835617E-02			15	
Hexachlorobenzene	0.2643386	13.91728	9.58375	5.277446E-02			15	
Hexachlorobutadiene	0.1754227	8.331738	6.54	1.353011E-02			CCC (30)	
Hexachlorocyclopentadiene	0.2562104	6.59803	7.37125	4.790613E-02			SPCC (0.05)	
Hexachloroethane	0.5974553	7.877489	5.45375	9.381868E-02			15	
Indeno(1,2,3-cd)pyrene	0.9512201	18.28556	15.38625	6.883365E-02	0.99663		0.99	
Isophorone	0.7230705	6.177626	5.86375	8.978501E-02			15	
2-Methylnaphthalene	0.7787539	9.524837	7.1875	6.656222E-02			15	
1-Methylnaphthalene	0.7644115	9.142112	7.29875	8.672835E-02			15	
4-Methylphenol	1.443968	7.566632	5.39875	0.2514421			15	
2-Methylphenol	1.34241	7.449152	5.205	0.1772859			15	
Naphthalene	1.136687	10.73436	6.39	8.629863E-02			15	
4-Nitroaniline	0.1123325	49.30733	9.0325	4.829022E-02	0.99471		0.99	
2-Nitroaniline	0.2220719	25.82464	7.885	6.826099E-02	0.99856		0.99	
3-Nitroaniline	0.1531813	35.22539	8.35125	3.767622E-02	0.99782		0.99	
Nitrobenzene	0.3593429	9.685494	5.56875	0.1496399			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
2-Nitrophenol	0.249231	23.86773	5.94125	5.701427E-02		0.9926893	CCC (30)	
4-Nitrophenol	0.1386997	15.4962	8.57625	0.1859556		0.9954452	SPCC (0.05)	
N-Nitroso-dimethylamine	0.8628516	8.402644	2.34625	0.2209088			15	
N-Nitroso-diphenylamine	0.7104474	21.58077	9.13375	8.114687E-02		0.9989622	CCC (30)	
N-Nitroso-di-n-propylamine	0.9300469	9.007751	5.39	0.1720774			SPCC (0.05)	
Pentachlorophenol	0.1266876	29.34203	9.815	0.0547645		0.9948311	CCC (30)	
Phenanthrene	1.321916	10.43447	10.04	5.123904E-02			15	
Phenol	1.766561	12.17236	4.48875	0.3845301			CCC (30)	
Pyrene	1.700437	8.828018	11.60375	4.920753E-02			15	
Pyridine	1.508736	7.949585	2.39375	1.045818			15	
1,2,4,5-Tetrachlorobenzene	0.5216381	14.36079	7.3825	6.242357E-02			15	
2,3,4,6-Tetrachlorophenol	0.2811455	11.10778	8.745	6.120477E-02			15	
1,2,4-Trichlorobenzene	0.3588883	10.83148	6.305	8.631672E-02			15	
2,4,5-Trichlorophenol	0.3508849	7.338288	7.56625	9.748663E-02			15	
2,4,6-Trichlorophenol	0.3628775	7.657351	7.53	7.298213E-02			CCC (30)	
1,3-Dinitrobenzene	0.1117855	12.21781	8.14	0.1461842			15	
3-Methylcholanthrene	0.2730558	11.774	14.59	8.747303E-03			15	
2,3,5,6-Tetrachlorophenol	18271.48	13.95199	8.6975	7.924477E-02			15	
Bis(2-chloroethoxy)ethane	0.3406294	8.108878	6.96	0.406665			15	
2-Fluorophenol	1.284184	10.99512	3.4025	0.4645015			15	
Phenol-d6	1.6455	9.529496	4.47375	0.3568486			15	
Nitrobenzene-d5	0.1750504	8.506232	5.5475	0.1267051			15	
2-Fluorobiphenyl	1.301236	18.25063	7.6225	9.275874E-02		0.9979418	0.99	
2,4,6-Tribromophenol	0.1418753	9.79006	9.255	9.980613E-02			15	
o-Terphenyl	0.6613436	18.31265	10.4575	6.734596E-02		0.9980303	0.99	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L16054-SCV1
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0111144
Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
Acenaphthene	10.0	8.70	87	70-130
Acenaphthylene	10.0	8.93	89	70-130
Acetophenone	10.0	9.11	91	70-130
Anthracene	10.0	8.81	88	70-130
Atrazine	10.0	11.4	114	70-130
Benzaldehyde	10.0	9.11	91	70-130
1,1'-Biphenyl	10.0	8.90	89	70-130
Benzo(a)anthracene	10.0	9.11	91	70-130
Benzo(a)pyrene	10.0	9.49	95	70-130
Benzo(b)fluoranthene	10.0	8.73	87	70-130
Benzo(k)fluoranthene	10.0	8.77	88	70-130
Benzo(g,h,i)perylene	10.0	9.19	92	70-130
Benzoic Acid	10.0	9.01	90	70-130
Benzyl Alcohol	10.0	9.02	90	70-130
4-Bromophenyl Phenyl Ether	10.0	9.17	92	70-130
Butyl Benzyl Phthalate	10.0	9.41	94	70-130
Caprolactam	10.0	9.80	98	70-130
Carbazole	10.0	8.32	83	70-130
4-Chloro-3-methylphenol	10.0	9.24	92	70-130
Bis(2-chloroethoxy)methane	10.0	8.08	81	70-130
Bis(2-chloroethyl) Ether	10.0	9.93	99	70-130
Bis(2-chloroisopropyl) Ether	10.0	8.30	83	70-130
2-Chloronaphthalene	10.0	8.67	87	70-130
2-Chlorophenol	10.0	9.07	91	70-130
4-Chlorophenyl Phenyl Ether	10.0	8.48	85	70-130
Chrysene	10.0	8.77	88	70-130
Dibenz(a,h)anthracene	10.0	8.65	87	70-130

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L16054-SCV1
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0111144
Calibration: 0L17004

Dibenzofuran	10.0	8.98	90	70-130
Di-n-butyl Phthalate	10.0	9.31	93	70-130
1,4-Dichlorobenzene	10.0	9.00	90	70-130
1,2-Dichlorobenzene	10.0	8.74	87	70-130
1,3-Dichlorobenzene	10.0	8.94	89	70-130
2,4-Dichlorophenol	10.0	9.20	92	70-130
2,6-Dichlorophenol	10.0	9.92	99	70-130
Diethyl Phthalate	10.0	8.81	88	70-130
2,4-Dimethylphenol	10.0	8.84	88	70-130
Dimethyl Phthalate	10.0	8.87	89	70-130
4,6-Dinitro-2-methylphenol	10.0	9.57	96	70-130
2,4-Dinitrophenol	10.0	8.63	86	70-130
2,6-Dinitrotoluene	10.0	9.48	95	70-130
2,4-Dinitrotoluene	10.0	9.89	99	70-130
Di-n-octyl Phthalate	10.0	8.46	85	70-130
1,2-Diphenylhydrazine	10.0	8.56	86	70-130
Bis(2-ethylhexyl) Phthalate	10.0	8.45	85	70-130
Fluoranthene	10.0	9.37	94	70-130
Fluorene	10.0	8.93	89	70-130
Hexachlorobenzene	10.0	8.62	86	70-130
Hexachlorobutadiene	10.0	8.89	89	70-130
Hexachlorocyclopentadiene	10.0	9.23	92	70-130
Hexachloroethane	10.0	8.92	89	70-130
Indeno(1,2,3-cd)pyrene	10.0	8.72	87	70-130
Isophorone	10.0	8.41	84	70-130
2-Methylnaphthalene	10.0	9.14	91	70-130
1-Methylnaphthalene	10.0	8.88	89	70-130
4-Methylphenol	10.0	9.13	91	70-130
2-Methylphenol	10.0	9.24	92	70-130

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L16054-SCV1
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0111144
Calibration: 0L17004

Naphthalene	10.0	8.74	87	70-130
Nitrobenzene	10.0	8.96	90	70-130
2-Nitrophenol	10.0	7.99	80	70-130
4-Nitrophenol	10.0	8.85	89	70-130
N-Nitroso-dimethylamine	10.0	8.00	80	70-130
N-Nitroso-diphenylamine	10.0	9.81	98	70-130
N-Nitroso-di-n-propylamine	10.0	8.44	84	70-130
Pentachlorophenol	10.0	8.31	83	70-130
Phenanthrene	10.0	8.73	87	70-130
Phenol	10.0	9.59	96	70-130
Pyrene	10.0	8.43	84	70-130
Pyridine	10.0	8.97	90	70-130
1,2,4,5-Tetrachlorobenzene	10.0	8.52	85	70-130
2,3,4,6-Tetrachlorophenol	10.0	9.80	98	70-130
1,2,4-Trichlorobenzene	10.0	8.27	83	70-130
2,4,5-Trichlorophenol	10.0	9.42	94	70-130
2,4,6-Trichlorophenol	10.0	9.24	92	70-130
1,3-Dinitrobenzene	10.0	9.63	96	70-130
2,3,5,6-Tetrachlorophenol	10.0	8.52	85	70-130

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L16054-SCV2
Sequence: 0L16054

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0101099
Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
Aniline	10.0	10.7	107	70-130
4-Chloroaniline	9.96	12.0	120	70-130
3,3´-Dichlorobenzidine	10.0	9.46	95	70-130
4-Nitroaniline	9.96	11.5	115	70-130
2-Nitroaniline	9.96	11.7	117	70-130
3-Nitroaniline	9.96	11.6	116	70-130

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Laboratory ID: 0L17007-SCV1

Standard ID: 0110703

Sequence: 0L17007

Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
3-Methylcholanthrene	10.0	18.1	181 *	70-130

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-TUN1
Lab File ID: DFT1214B
Injection Date: 12/14/10
Injection Time: 11:18
Sequence: 0L17046
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	37.5	PASS
68	Less than 2% of 69	1.49	PASS
69	Less than 200% of 198	38.9	PASS
70	Less than 2% of 69	1.09	PASS
127	40 - 60% of 198	50.9	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.72	PASS
275	10 - 30% of 198	21.2	PASS
365	1.0001 - 200% of 198	2.11	PASS
441	0.0001 - 99.9999% of 443	69.9	PASS
442	40.0001 - 200% of 198	63.4	PASS
443	17 - 23% of 442	19.6	PASS

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0L17046-TUN1	DFT1214B	12/14/10 11:18
Calibration Check	0L17046-CCV1	10C1214A.D	12/14/10 11:43
Calibration Check	0L17046-CCV2	10AE1214A.D	12/14/10 12:12
Calibration Check	0L17046-CCV3	10APPIX1214.D	12/14/10 12:42
Blank	1012641-BLK1	1012641-BLK1.D	12/14/10 15:11
LCS	1012641-BS1	1012641-BS1.D	12/14/10 15:41
NTC03GW0113	1011352-01	1011352-01.D	12/14/10 18:35
NTC03GW0113	1012641-MS1	1012641-MS1.D	12/14/10 19:03
NTC03GW0113	1012641-MSD1	1012641-MSD1.D	12/14/10 19:31
NTC03GW0213	1011352-02	1011352-02.D	12/14/10 20:00
NTC03GW0313	1011356-01	1011356-01.D	12/14/10 20:28
NTC03GW0413	1011356-02	1011356-02.D	12/14/10 20:56
NTC03GW0513	1011356-03	1011356-03.D	12/14/10 21:24
NTC03GW0613	1011356-04	1011356-04.D	12/14/10 21:52
NTCFD111610-01	1011356-05	1011356-05.D	12/14/10 22:20

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L17046-CCV1
Injection Date: 12/14/10
Calibration Date: 12/13/10 09:09
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: 10C1214A.D
Injection Time: 11:43
Calibration: 0L17004
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acenaphthene	A	10.0	10.4	1.185078	1.232951		4.0	20
Acenaphthylene	A	10.0	10.6	1.954715	2.063527		5.6	25
Acetophenone	A	10.0	10.5	1.879784	1.96957		4.8	25
Anthracene	A	10.0	10.7	1.262226	1.347321		6.7	25
Atrazine	L	10.0	11.4	0.1893913	0.1887355		14.5	25
1,1'-Biphenyl	A	10.0	10.2	1.551628	1.582847		2.0	25
Benzaldehyde	A	10.0	10.5	1.878118	1.96957		4.9	25
Benzo(a)anthracene	A	10.0	11.0	1.20419	1.324566		10.0	25
Benzo(a)pyrene	A	10.0	11.7	1.123794	1.314445		17.0	20
Benzo(b)fluoranthene	A	10.0	10.9	1.27108	1.381992		8.7	25
Benzo(k)fluoranthene	A	10.0	11.0	1.336906	1.499621		12.2	25
Benzo(g,h,i)perylene	A	10.0	12.0	0.9601857	1.154371		20.2	25
4-Bromophenyl Phenyl Ether	A	10.0	10.8	0.2428625	0.2613665		7.6	25
Butyl Benzyl Phthalate	A	10.0	11.3	0.7305368	0.8275693		13.3	25
Caprolactam	A	10.0	10.7	0.1173172	0.1250624		6.6	25
Carbazole	Q	10.0	8.50	0.484929	0.3231311		-15.0	25
4-Chloro-3-methylphenol	A	10.0	11.2	0.3006965	0.3357992		11.7	20
Bis(2-chloroethoxy)methane	A	10.0	10.5	0.4283691	0.451391		5.4	25
Bis(2-chloroethyl) Ether	A	10.0	11.5	1.568885	1.80144		14.8	25
Bis(2-chloroisopropyl) Ether	A	10.0	10.0	1.939067	1.948921		0.5	25
2-Chloronaphthalene	A	10.0	10.5	1.162498	1.220719		5.0	25
2-Chlorophenol	A	10.0	10.8	1.527703	1.642326		7.5	25
4-Chlorophenyl Phenyl Ether	A	10.0	10.2	0.5992182	0.6081725		1.5	25
Chrysene	A	10.0	10.8	1.205005	1.30304		8.1	25
Dibenz(a,h)anthracene	L	10.0	11.3	0.7470312	0.9430194		12.6	25
Dibenzofuran	A	10.0	10.5	1.665061	1.753076		5.3	25
Di-n-butyl Phthalate	A	10.0	10.9	1.474547	1.609876		9.2	25
2,4-Dichlorophenol	A	10.0	11.0	0.3006576	0.3293176		9.5	20
Diethyl Phthalate	A	10.0	10.3	1.340851	1.381425		3.0	25

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV1
Lab File ID: 10C1214A.D
Injection Date: 12/14/10
Injection Time: 11:43
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-Dimethylphenol	A	10.0	11.0	0.3332293	0.3670405		10.1	25
Dimethyl Phthalate	A	10.0	10.4	1.370564	1.424628		3.9	25
4,6-Dinitro-2-methylphenol	L	10.0	10.9	0.1223074	0.1633657		9.2	25
2,4-Dinitrophenol	L	20.0	21.2	0.112588	0.1541381	0.05	6.2	40
2,6-Dinitrotoluene	A	10.0	11.3	0.3020522	0.3407908		12.8	25
2,4-Dinitrotoluene	A	10.0	11.6	0.3499561	0.4048101		15.7	25
Di-n-octyl Phthalate	L	10.0	10.7	1.416689	1.795456		7.2	20
Bis(2-ethylhexyl) Phthalate	A	10.0	10.8	0.99581	1.079461		8.4	25
Fluoranthene	A	10.0	10.9	1.27741	1.39746		9.4	20
Fluorene	A	10.0	10.4	1.357495	1.411628		4.0	25
Hexachlorobenzene	A	10.0	10.2	0.2643386	0.27029		2.3	25
Hexachlorobutadiene	A	10.0	10.6	0.1754227	0.1855297		5.8	20
Hexachlorocyclopentadiene	A	10.0	9.94	0.2562104	0.2546485	0.05	-0.6	40
Hexachloroethane	A	10.0	10.6	0.5974553	0.6345615		6.2	25
Indeno(1,2,3-cd)pyrene	L	10.0	11.0	0.9512201	1.177237		10.5	25
Isophorone	A	10.0	10.5	0.7230705	0.7585997		4.9	25
2-Methylnaphthalene	A	10.0	10.7	0.7787539	0.8299989		6.6	25
1-Methylnaphthalene	A	10.0	10.5	0.7644115	0.8044907		5.2	25
4-Methylphenol	A	10.0	10.7	1.443968	1.544239		6.9	25
2-Methylphenol	A	10.0	10.9	1.34241	1.467631		9.3	25
Naphthalene	A	10.0	10.5	1.136687	1.195181		5.1	25
Nitrobenzene	A	10.0	10.6	0.3593429	0.3812816		6.1	25
2-Nitrophenol	Q	10.0	9.52	0.249231	0.2329279		-4.8	20
4-Nitrophenol	Q	20.0	19.8	0.1386997	0.1690022	0.05	-1.0	40
N-Nitroso-diphenylamine	Q	10.0	10.1	0.7104474	0.6959699		0.8	20
N-Nitroso-di-n-propylamine	A	10.0	10.5	0.9300469	0.9752359	0.05	4.9	25
Pentachlorophenol	Q	10.0	10.6	0.1266876	0.1751986		5.9	20
Phenanthrene	A	10.0	10.4	1.321916	1.381739		4.5	25
Phenol	A	10.0	10.5	1.766561	1.856977		5.1	20

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV1
Lab File ID: 10C1214A.D
Injection Date: 12/14/10
Injection Time: 11:43
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Pyrene	A	10.0	10.3	1.700437	1.750348		2.9	25
2,4,5-Trichlorophenol	A	10.0	11.3	0.3508849	0.3979807		13.4	25
2,4,6-Trichlorophenol	A	10.0	11.1	0.3628775	0.4013088		10.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L17046-CCV2
Injection Date: 12/14/10
Calibration Date: 12/13/10 09:09
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: 10AE1214A.D
Injection Time: 12:12
Calibration: 0L17004
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Aniline	A	10.0	10.4	1.219546	1.264015		3.6	25
4-Chloroaniline	A	10.0	10.7	0.3164267	0.3376459		6.7	40
3,3'-Dichlorobenzidine	L	10.0	10.3	0.1883183			3.4	25
4-Nitroaniline	L	10.0	9.69	0.1123325	0.1490901		-3.1	40
2-Nitroaniline	L	10.0	10.2	0.2220719	0.2701123		1.6	40
3-Nitroaniline	L	10.0	10.0	0.1531813	0.1946761		0.0	40

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L17046-CCV3
Injection Date: 12/14/10
Calibration Date: 12/13/10 09:09
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: 10APPIX1214.D
Injection Time: 12:42
Calibration: 0L17004
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
3-Methylcholanthrene	A	9.90	11.4	0.2730558	0.3353823		~~22.8~~	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0L17046-CCV1)			**Lab File ID: 10C1214A.D**			**Analyzed: 12/14/10 11:43**			
1,4-Dichlorobenzene-d4	163442	4.87	151054	4.87	108	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	632640	6.36	593418	6.36	107	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	360868	8.36	337411	8.37	107	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	504399	10.01	459310	10.01	110	50 - 200	0.0000	+/-0.50	
Chrysene-d12	411342	12.94	362026	12.94	114	50 - 200	0.0800	+/-0.50	
Perylene-d12	354805	14.4	292945	14.41	120	50 - 200	0.0100	+/-0.50	
Calibration Check (0L17046-CCV2)			**Lab File ID: 10AE1214A.D**			**Analyzed: 12/14/10 12:12**			
1,4-Dichlorobenzene-d4	220508	4.86	218140	4.87	101	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	633809	6.36	618423	6.36	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	376212	8.36	368721	8.36	102	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	534609	10.01	516793	10.01	103	50 - 200	0.0000	+/-0.50	
Chrysene-d12	405914	12.93	379784	12.93	107	50 - 200	0.0000	+/-0.50	
Perylene-d12	242091	14.40	224633	14.40	108	50 - 200	0.0000	+/-0.50	
Calibration Check (0L17046-CCV3)			**Lab File ID: 10APPIX1214.D**			**Analyzed: 12/14/10 12:42**			
1,4-Dichlorobenzene-d4	177383	4.86	235731	4.78	75	50 - 200	0.0800	+/-0.50	
Naphthalene-d8	680254	6.36	923962	6.28	74	50 - 200	0.0800	+/-0.50	
Acenaphthene-d10	371995	8.36	501206	8.28	74	50 - 200	0.0800	+/-0.50	
Phenanthrene-d10	499531	10.01	685655	9.93	73	50 - 200	0.0800	+/-0.50	
Chrysene-d12	446652	12.93	662942	12.86	67	50 - 200	0.0700	+/-0.50	
Perylene-d12	335673	14.4	565083	14.33	59	50 - 200	0.0700	+/-0.50	
Blank (1012641-BLK1)			**Lab File ID: 1012641-BLK1.D**			**Analyzed: 12/14/10 15:11**			
1,4-Dichlorobenzene-d4	131252	4.86	151054	4.87	86	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	518395	6.36	593418	6.36	87	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	288452	8.36	337411	8.37	85	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	396928	10	459310	10.01	86	50 - 200	0.0100	+/-0.50	
Chrysene-d12	340517	12.93	362026	12.94	94	50 - 200	0.0100	+/-0.50	
Perylene-d12	262542	14.4	292945	14.41	90	50 - 200	0.0100	+/-0.50	
LCS (1012641-BS1)			**Lab File ID: 1012641-BS1.D**			**Analyzed: 12/14/10 15:41**			
1,4-Dichlorobenzene-d4	129047	4.86	151054	4.87	85	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	498091	6.36	593418	6.36	84	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	285367	8.36	337411	8.37	85	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	407317	10	459310	10.01	89	50 - 200	0.0100	+/-0.50	
Chrysene-d12	347616	12.93	362026	12.94	96	50 - 200	0.0100	+/-0.50	
Perylene-d12	299714	14.4	292945	14.41	102	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L17046

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
NTC03GW0113 (1011352-01)			**Lab File ID: 1011352-01.D**			**Analyzed: 12/14/10 18:35**			
1,4-Dichlorobenzene-d4	161113	4.86	151054	4.87	107	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	624450	6.36	593418	6.36	105	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	353312	8.36	337411	8.37	105	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	468743	10	459310	10.01	102	50 - 200	0.0100	+/-0.50	
Chrysene-d12	416933	12.93	362026	12.94	115	50 - 200	0.0100	+/-0.50	
Perylene-d12	324338	14.4	292945	14.41	111	50 - 200	0.0100	+/-0.50	
Matrix Spike (1012641-MS1)			**Lab File ID: 1012641-MS1.D**			**Analyzed: 12/14/10 19:03**			
1,4-Dichlorobenzene-d4	141487	4.86	151054	4.87	94	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	538327	6.36	593418	6.36	91	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	309018	8.36	337411	8.37	92	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	446384	10.01	459310	10.01	97	50 - 200	0.0000	+/-0.50	
Chrysene-d12	388788	12.93	362026	12.94	107	50 - 200	0.0100	+/-0.50	
Perylene-d12	336161	14.4	292945	14.41	115	50 - 200	0.0100	+/-0.50	
Matrix Spike Dup (1012641-MSD1)			**Lab File ID: 1012641-MSD1.D**			**Analyzed: 12/14/10 19:31**			
1,4-Dichlorobenzene-d4	145364	4.86	151054	4.87	96	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	576067	6.36	593418	6.36	97	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	330569	8.36	337411	8.37	98	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	473056	10	459310	10.01	103	50 - 200	0.0100	+/-0.50	
Chrysene-d12	408262	12.94	362026	12.94	113	50 - 200	0.0000	+/-0.50	
Perylene-d12	359850	14.4	292945	14.41	123	50 - 200	0.0100	+/-0.50	
NTC03GW0213 (1011352-02)			**Lab File ID: 1011352-02.D**			**Analyzed: 12/14/10 20:00**			
1,4-Dichlorobenzene-d4	148956	4.86	151054	4.87	99	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	571247	6.36	593418	6.36	96	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	327876	8.36	337411	8.37	97	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	434438	10	459310	10.01	95	50 - 200	0.0100	+/-0.50	
Chrysene-d12	378773	12.93	362026	12.94	105	50 - 200	0.0100	+/-0.50	
Perylene-d12	295105	14.4	292945	14.41	101	50 - 200	0.0100	+/-0.50	
NTC03GW0313 (1011356-01)			**Lab File ID: 1011356-01.D**			**Analyzed: 12/14/10 20:28**			
1,4-Dichlorobenzene-d4	152827	4.86	151054	4.87	101	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	587210	6.36	593418	6.36	99	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	332435	8.36	337411	8.37	99	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	443098	10	459310	10.01	96	50 - 200	0.0100	+/-0.50	
Chrysene-d12	398170	12.93	362026	12.94	110	50 - 200	0.0100	+/-0.50	
Perylene-d12	315522	14.4	292945	14.41	108	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L17046
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
NTC03GW0413 (1011356-02)			**Lab File ID: 1011356-02.D**			**Analyzed: 12/14/10 20:56**			
1,4-Dichlorobenzene-d4	157755	4.86	151054	4.87	104	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	611981	6.36	593418	6.36	103	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	343202	8.36	337411	8.37	102	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	453304	10	459310	10.01	99	50 - 200	0.0100	+/-0.50	
Chrysene-d12	394221	12.93	362026	12.94	109	50 - 200	0.0100	+/-0.50	
Perylene-d12	305173	14.4	292945	14.41	104	50 - 200	0.0100	+/-0.50	
NTC03GW0513 (1011356-03)			**Lab File ID: 1011356-03.D**			**Analyzed: 12/14/10 21:24**			
1,4-Dichlorobenzene-d4	144477	4.86	151054	4.87	96	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	581157	6.36	593418	6.36	98	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	327701	8.35	337411	8.37	97	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	436837	10.01	459310	10.01	95	50 - 200	0.0000	+/-0.50	
Chrysene-d12	379522	12.93	362026	12.93	105	50 - 200	0.0000	+/-0.50	
Perylene-d12	310523	14.4	292945	14.41	106	50 - 200	0.0100	+/-0.50	
NTC03GW0613 (1011356-04)			**Lab File ID: 1011356-04.D**			**Analyzed: 12/14/10 21:52**			
1,4-Dichlorobenzene-d4	157958	4.87	151054	4.87	105	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	607069	6.36	593418	6.36	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	350634	8.35	337411	8.37	104	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	477958	10.01	459310	10.01	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12	418700	12.93	362026	12.93	116	50 - 200	0.0000	+/-0.50	
Perylene-d12	345802	14.4	292945	14.41	118	50 - 200	0.0100	+/-0.50	
NTCFD111610-01 (1011356-05)			**Lab File ID: 1011356-05.D**			**Analyzed: 12/14/10 22:20**			
1,4-Dichlorobenzene-d4	146315	4.86	151054	4.87	99	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	586510	6.36	593418	6.36	99	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	325717	8.36	337411	8.37	96	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	437452	10	459310	10.01	95	50 - 200	0.0100	+/-0.50	
Chrysene-d12	382258	12.93	362026	12.93	106	50 - 200	0.0000	+/-0.50	
Perylene-d12	324207	14.4	292945	14.41	111	50 - 200	0.0100	+/-0.50	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012641

Printed: 11/19/2010 4:08:02PM

Semivolatiles MS, Water, 3510C Liquid-Liquid Extraction

Surrogate #1 = 0091102 (Pre-Prep)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	8270C Standard SVOCs plus custom	1011356	8270C Standard SVOCs plus custom	1011375	8270C Standard SVOCs plus custom

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012641-BLK1		Nov-19-10 07:40	KCS	1000	1	100				BLANK	
1012641-BS1		Nov-19-10 07:40	KCS	1000	1	100		0110865	100	LCS	
1012641-MS1		Nov-19-10 07:40	KCS	960	1	100	1011352-01	0110865	100	MATRIX SPIKE	
1012641-MSD1		Nov-19-10 07:40	KCS	980	1	100	1011352-01	0110865	100	MATRIX SPIKE DUP	
1011352-01	G	Nov-19-10 07:40	KCS	990	1	100				TETRA TECH NUS - Pittsburgh	
1011352-02	D	Nov-19-10 07:40	KCS	950	1	100				TETRA TECH NUS - Pittsburgh	
1011356-01	E	Nov-19-10 07:40	KCS	970	1	100				TETRA TECH NUS - Pittsburgh	
1011356-02	D	Nov-19-10 07:40	KCS	1000	1	100				TETRA TECH NUS - Pittsburgh	
1011356-03	F	Nov-19-10 07:40	KCS	970	1	100				TETRA TECH NUS - Pittsburgh	
1011356-04	D	Nov-19-10 07:40	KCS	930	1	100				TETRA TECH NUS - Pittsburgh	
1011356-05	E	Nov-19-10 07:40	KCS	970	1	100				TETRA TECH NUS - Pittsburgh	
1011375-01	E	Nov-19-10 07:40	KCS	950	1	100				TETRA TECH NUS - Pittsburgh	
1011375-02	D	Nov-19-10 07:40	KCS	970	1	100				TETRA TECH NUS - Pittsburgh	
1011375-03	E	Nov-19-10 07:40	KCS	940	1	100				TETRA TECH NUS - Pittsburgh	
1011375-04	E	Nov-19-10 07:40	KCS	980	1	100				TETRA TECH NUS - Pittsburgh	
1011375-05	D	Nov-19-10 07:40	KCS	950	1	100				TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

TRIMATRIX LABORATORIES

STATEMENT OF DATA QUALIFICATIONS

Organochlorine Pesticides by EPA Method 8081A

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample concentration for the same analyte was less than 4 times the spiked amount; the non-spiked sample result is considered estimated.

Analysis: USEPA-8081A

Sample/Analyte:		
1011352-01	NTC03GW0113	4,4'-DDD
1011352-01	NTC03GW0113	4,4'-DDT
1011352-01	NTC03GW0113	4,4'-DDT [2C]
1011352-01	NTC03GW0113	Endosulfan Sulfate
1011352-01	NTC03GW0113	Endosulfan Sulfate [2C]
1011352-01	NTC03GW0113	Endrin Aldehyde
1011352-01	NTC03GW0113	Endrin Ketone
1011352-01	NTC03GW0113	Endrin Ketone [2C]
1011352-01	NTC03GW0113	Methoxychlor
1011352-01	NTC03GW0113	Methoxychlor [2C]

Qualification: The RPD between the MS and MSD results exceeded the control limit. The non-spiked sample concentration for the same analyte was less than 4 times the spiked amount; the non-spiked sample result is considered estimated.

Analysis: USEPA-8081A

Sample/Analyte:		
1011352-01	NTC03GW0113	4,4'-DDD
1011352-01	NTC03GW0113	4,4'-DDE
1011352-01	NTC03GW0113	4,4'-DDT
1011352-01	NTC03GW0113	alpha-Chlordane
1011352-01	NTC03GW0113	Dieldrin
1011352-01	NTC03GW0113	Endosulfan I
1011352-01	NTC03GW0113	Endosulfan II
1011352-01	NTC03GW0113	Endosulfan Sulfate
1011352-01	NTC03GW0113	Endrin
1011352-01	NTC03GW0113	Endrin Aldehyde
1011352-01	NTC03GW0113	Endrin Ketone
1011352-01	NTC03GW0113	gamma-Chlordane
1011352-01	NTC03GW0113	Heptachlor Epoxide
1011352-01	NTC03GW0113	Methoxychlor

Qualification: The LCS and/or LCSD recovery exceeded the upper control limit. A positive result for this analyte in any sample from the associated QC batch is considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8081A

Sample/Analyte:		
1011356-01	NTC03GW0313	4,4'-DDT
1011356-01	NTC03GW0313	4,4'-DDT [2C]
1011356-01	NTC03GW0313	alpha-BHC
1011356-01	NTC03GW0313	alpha-BHC [2C]
1011356-01	NTC03GW0313	alpha-Chlordane
1011356-01	NTC03GW0313	alpha-Chlordane [2C]
1011356-01	NTC03GW0313	Dieldrin
1011356-01	NTC03GW0313	Dieldrin [2C]
1011356-01	NTC03GW0313	Endosulfan II
1011356-01	NTC03GW0313	Endrin

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STATEMENT OF DATA QUALIFICATIONS

Organochlorine Pesticides by EPA Method 8081A (Continued)

Qualification: The LCS and/or LCSD recovery exceeded the upper control limit. A positive result for this analyte in any sample from the associated QC batch is considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8081A

Sample/Analyte:		
1011356-01	NTC03GW0313	Endrin [2C]
1011356-01	NTC03GW0313	Endrin Ketone
1011356-01	NTC03GW0313	gamma-BHC (Lindane)
1011356-01	NTC03GW0313	gamma-BHC (Lindane) [2C]
1011356-01	NTC03GW0313	gamma-Chlordane
1011356-01	NTC03GW0313	gamma-Chlordane [2C]
1011356-01	NTC03GW0313	Heptachlor
1011356-01	NTC03GW0313	Heptachlor [2C]
1011356-01	NTC03GW0313	Heptachlor Epoxide
1011356-01	NTC03GW0313	Heptachlor Epoxide [2C]
1011356-01	NTC03GW0313	Methoxychlor
1011356-01	NTC03GW0313	Methoxychlor [2C]
1011356-02	NTC03GW0413	4,4'-DDT
1011356-02	NTC03GW0413	4,4'-DDT [2C]
1011356-02	NTC03GW0413	alpha-BHC
1011356-02	NTC03GW0413	alpha-BHC [2C]
1011356-02	NTC03GW0413	alpha-Chlordane
1011356-02	NTC03GW0413	alpha-Chlordane [2C]
1011356-02	NTC03GW0413	Dieldrin
1011356-02	NTC03GW0413	Dieldrin [2C]
1011356-02	NTC03GW0413	Endosulfan II
1011356-02	NTC03GW0413	Endrin
1011356-02	NTC03GW0413	Endrin [2C]
1011356-02	NTC03GW0413	Endrin Ketone
1011356-02	NTC03GW0413	gamma-BHC (Lindane)
1011356-02	NTC03GW0413	gamma-BHC (Lindane) [2C]
1011356-02	NTC03GW0413	gamma-Chlordane
1011356-02	NTC03GW0413	gamma-Chlordane [2C]
1011356-02	NTC03GW0413	Heptachlor
1011356-02	NTC03GW0413	Heptachlor [2C]
1011356-02	NTC03GW0413	Heptachlor Epoxide
1011356-02	NTC03GW0413	Heptachlor Epoxide [2C]
1011356-02	NTC03GW0413	Methoxychlor
1011356-02	NTC03GW0413	Methoxychlor [2C]
1011356-03	NTC03GW0513	4,4'-DDT
1011356-03	NTC03GW0513	4,4'-DDT [2C]
1011356-03	NTC03GW0513	alpha-BHC
1011356-03	NTC03GW0513	alpha-BHC [2C]
1011356-03	NTC03GW0513	alpha-Chlordane
1011356-03	NTC03GW0513	alpha-Chlordane [2C]
1011356-03	NTC03GW0513	Dieldrin
1011356-03	NTC03GW0513	Dieldrin [2C]
1011356-03	NTC03GW0513	Endosulfan II
1011356-03	NTC03GW0513	Endrin
1011356-03	NTC03GW0513	Endrin [2C]
1011356-03	NTC03GW0513	Endrin Ketone

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STATEMENT OF DATA QUALIFICATIONS

Organochlorine Pesticides by EPA Method 8081A (Continued)

Qualification: The LCS and/or LCSD recovery exceeded the upper control limit. A positive result for this analyte in any sample from the associated QC batch is considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8081A

1011356-03	NTC03GW0513	gamma-BHC (Lindane)
1011356-03	NTC03GW0513	gamma-BHC (Lindane) [2C]
1011356-03	NTC03GW0513	gamma-Chlordane
1011356-03	NTC03GW0513	gamma-Chlordane [2C]
1011356-03	NTC03GW0513	Heptachlor
1011356-03	NTC03GW0513	Heptachlor [2C]
1011356-03	NTC03GW0513	Heptachlor Epoxide
1011356-03	NTC03GW0513	Heptachlor Epoxide [2C]
1011356-03	NTC03GW0513	Methoxychlor
1011356-03	NTC03GW0513	Methoxychlor [2C]
1011356-04	NTC03GW0613	4,4'-DDT
1011356-04	NTC03GW0613	4,4'-DDT [2C]
1011356-04	NTC03GW0613	alpha-BHC
1011356-04	NTC03GW0613	alpha-BHC [2C]
1011356-04	NTC03GW0613	alpha-Chlordane
1011356-04	NTC03GW0613	alpha-Chlordane [2C]
1011356-04	NTC03GW0613	Dieldrin
1011356-04	NTC03GW0613	Dieldrin [2C]
1011356-04	NTC03GW0613	Endosulfan II
1011356-04	NTC03GW0613	Endrin
1011356-04	NTC03GW0613	Endrin [2C]
1011356-04	NTC03GW0613	Endrin Ketone
1011356-04	NTC03GW0613	gamma-BHC (Lindane)
1011356-04	NTC03GW0613	gamma-BHC (Lindane) [2C]
1011356-04	NTC03GW0613	gamma-Chlordane
1011356-04	NTC03GW0613	gamma-Chlordane [2C]
1011356-04	NTC03GW0613	Heptachlor
1011356-04	NTC03GW0613	Heptachlor [2C]
1011356-04	NTC03GW0613	Heptachlor Epoxide
1011356-04	NTC03GW0613	Heptachlor Epoxide [2C]
1011356-04	NTC03GW0613	Methoxychlor
1011356-04	NTC03GW0613	Methoxychlor [2C]
1011356-05	NTCFD111610-01	4,4'-DDT
1011356-05	NTCFD111610-01	4,4'-DDT [2C]
1011356-05	NTCFD111610-01	alpha-BHC
1011356-05	NTCFD111610-01	alpha-BHC [2C]
1011356-05	NTCFD111610-01	alpha-Chlordane
1011356-05	NTCFD111610-01	alpha-Chlordane [2C]
1011356-05	NTCFD111610-01	Dieldrin
1011356-05	NTCFD111610-01	Dieldrin [2C]
1011356-05	NTCFD111610-01	Endosulfan II
1011356-05	NTCFD111610-01	Endrin
1011356-05	NTCFD111610-01	Endrin [2C]
1011356-05	NTCFD111610-01	Endrin Ketone
1011356-05	NTCFD111610-01	gamma-BHC (Lindane)

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STATEMENT OF DATA QUALIFICATIONS

Organochlorine Pesticides by EPA Method 8081A (Continued)

Qualification: The LCS and/or LCSD recovery exceeded the upper control limit. A positive result for this analyte in any sample from the associated QC batch is considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8081A

Sample/Analyte:		
1011356-05	NTCFD111610-01	gamma-BHC (Lindane) [2C]
1011356-05	NTCFD111610-01	gamma-Chlordane
1011356-05	NTCFD111610-01	gamma-Chlordane [2C]
1011356-05	NTCFD111610-01	Heptachlor
1011356-05	NTCFD111610-01	Heptachlor [2C]
1011356-05	NTCFD111610-01	Heptachlor Epoxide
1011356-05	NTCFD111610-01	Heptachlor Epoxide [2C]
1011356-05	NTCFD111610-01	Methoxychlor
1011356-05	NTCFD111610-01	Methoxychlor [2C]

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012717 3510C Liquid-Liquid Extraction/USEPA-8081A

Method Blank Analyzed: 12/11/2010 By: DJM

Unit: ug/L Analytical Batch: 0L14010

alpha-BHC			0.050 U					0.050	0.0014
alpha-BHC			0.050 U					0.050	0.0014
beta-BHC			0.050 U					0.050	0.0062
beta-BHC			0.050 U					0.050	0.0062
gamma-BHC (Lindane)			0.050 U					0.050	0.0027
gamma-BHC (Lindane)			0.050 U					0.050	0.0027
delta-BHC			0.050 U					0.050	0.0021
delta-BHC			0.050 U					0.050	0.0021
alpha-Chlordane			0.050 U					0.050	0.0015
alpha-Chlordane			0.050 U					0.050	0.0015
gamma-Chlordane			0.050 U					0.050	0.0020
gamma-Chlordane			0.050 U					0.050	0.0020
4,4'-DDD			0.050 U					0.050	0.00040
4,4'-DDD			0.050 U					0.050	0.00040
4,4'-DDE			0.050 U					0.050	0.0016
4,4'-DDE			0.050 U					0.050	0.0016
4,4'-DDT			0.050 U					0.050	0.00057
4,4'-DDT			0.050 U					0.050	0.00057
Aldrin			0.050 U					0.050	0.0015
Aldrin			0.050 U					0.050	0.0015
Dieldrin			0.050 U					0.050	0.00056
Dieldrin			0.050 U					0.050	0.00056
Endosulfan I			0.050 U					0.050	0.00035
Endosulfan I			0.050 U					0.050	0.00035
Endosulfan II			0.050 U					0.050	0.0018
Endosulfan II			0.050 U					0.050	0.0018
Endosulfan Sulfate			0.050 U					0.050	0.0036
Endosulfan Sulfate			0.050 U					0.050	0.0036
Endrin			0.050 U					0.050	0.0021
Endrin			0.050 U					0.050	0.0021
Endrin Aldehyde			0.050 U					0.050	0.0044
Endrin Aldehyde			0.050 U					0.050	0.0044
Endrin Ketone			0.050 U					0.050	0.016
Endrin Ketone			0.050 U					0.050	0.016
Heptachlor			0.050 U					0.050	0.0018
Heptachlor			0.050 U					0.050	0.0018

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QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
QC Batch: 1012717 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8081A									
Method Blank (Continued)					Analyzed:	12/11/2010	By: DJM		
Unit: ug/L					Analytical Batch:	0L14010			
Heptachlor Epoxide			0.050 U					0.050	0.0016
Heptachlor Epoxide			0.050 U					0.050	0.0016
Methoxychlor			0.50 U					0.50	0.0025
Methoxychlor			0.50 U					0.50	0.0025
Toxaphene			1.0 U					1.0	0.00014
Toxaphene			1.0 U					1.0	0.00014
Surrogates:									
Tetrachloro-m-xylene				*83*	*29-137*				
Tetrachloro-m-xylene				*93*	*29-137*				
Decachlorobiphenyl				*86*	*30-134*				
Decachlorobiphenyl				*88*	*30-134*				
Laboratory Control Sample					Analyzed:	12/11/2010	By: DJM		
Unit: ug/L					Analytical Batch:	0L14010			
alpha-BHC		0.0800	**0.102**	**128**	64-120	20		0.050	0.0014
alpha-BHC		0.0800	**0.100**	**125**	64-120	20		0.050	0.0014
beta-BHC		0.0800	**0.104**	130	62-135	20		0.050	0.0062
beta-BHC		0.0800	**0.102**	128	62-135	20		0.050	0.0062
gamma-BHC (Lindane)		0.0800	**0.102**	**128**	67-120	20		0.050	0.0027
gamma-BHC (Lindane)		0.0800	**0.0994**	**124**	67-120	20		0.050	0.0027
delta-BHC		0.0800	**0.0874**	109	59-133	20		0.050	0.0021
delta-BHC		0.0800	**0.106**	133	59-133	20		0.050	0.0021
alpha-Chlordane		0.0800	**0.0976**	**122**	68-115	20		0.050	0.0015
alpha-Chlordane		0.0800	**0.0952**	**119**	68-115	20		0.050	0.0015
gamma-Chlordane		0.0800	**0.0996**	**124**	70-111	20		0.050	0.0020
gamma-Chlordane		0.0800	**0.0968**	**121**	70-111	20		0.050	0.0020
4,4'-DDD		0.0800	**0.111**	139	74-141	20		0.050	0.00040
4,4'-DDD		0.0800	**0.0996**	124	74-141	20		0.050	0.00040
4,4'-DDE		0.0800	**0.0844**	106	54-133	20		0.050	0.0016
4,4'-DDE		0.0800	**0.101**	126	54-133	20		0.050	0.0016
4,4'-DDT		0.0800	**0.112**	**140**	61-130	20		0.050	0.00057
4,4'-DDT		0.0800	**0.105**	**131**	61-130	20		0.050	0.00057
Aldrin		0.0800	**0.0912**	114	49-123	20		0.050	0.0015
Aldrin		0.0800	**0.0914**	114	49-123	20		0.050	0.0015
Dieldrin		0.0800	**0.101**	**126**	66-121	20		0.050	0.00056
Dieldrin		0.0800	**0.0990**	**124**	66-121	20		0.050	0.00056

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
QC Batch: 1012717 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8081A									
Laboratory Control Sample (Continued) Unit: ug/L					Analyzed: 12/11/2010 By: DJM Analytical Batch: 0L14010				
Endosulfan I		0.0800	**0.0844**	106	58-110		20	0.050	0.00035
Endosulfan I		0.0800	**0.0824**	103	58-110		20	0.050	0.00035
Endosulfan II		0.0800	**0.0932**	**116**	62-115		20	0.050	0.0018
Endosulfan II		0.0800	**0.0904**	113	62-115		20	0.050	0.0018
Endosulfan Sulfate		0.0800	**0.0996**	124	65-126		20	0.050	0.0036
Endosulfan Sulfate		0.0800	**0.0972**	122	65-126		20	0.050	0.0036
Endrin		0.0800	**0.103**	129	64-129		20	0.050	0.0021
Endrin		0.0800	**0.109**	**137**	64-129		20	0.050	0.0021
Endrin Aldehyde		0.0800	**0.0946**	118	59-128		20	0.050	0.0044
Endrin Aldehyde		0.0800	**0.0908**	114	59-128		20	0.050	0.0044
Endrin Ketone		0.0800	**0.102**	**127**	69-122		20	0.050	0.016
Endrin Ketone		0.0800	**0.0972**	122	69-122		20	0.050	0.016
Heptachlor		0.0800	**0.0958**	**120**	61-116		20	0.050	0.0018
Heptachlor		0.0800	**0.0954**	**119**	61-116		20	0.050	0.0018
Heptachlor Epoxide		0.0800	**0.0968**	**121**	68-117		20	0.050	0.0016
Heptachlor Epoxide		0.0800	**0.0956**	**120**	68-117		20	0.050	0.0016
Methoxychlor		0.0800	**0.117 J**	**146**	71-131		20	0.50	0.0025
Methoxychlor		0.0800	**0.108 J**	**136**	71-131		20	0.50	0.0025
Surrogates:									
Tetrachloro-m-xylene				*93*	*29-137*				
Tetrachloro-m-xylene				*103*	*29-137*				
Decachlorobiphenyl				*108*	*30-134*				
Decachlorobiphenyl				*107*	*30-134*				
Matrix Spike 1011352-01 NTC03GW0113 Unit: ug/L					Analyzed: 12/12/2010 By: DJM Analytical Batch: 0L14044				
alpha-BHC	0.053 U	0.0851	**0.0817**	96	55-122		10	0.053	0.0014
alpha-BHC	0.053 U	0.0851	**0.0879**	103	55-122		10	0.053	0.0014
beta-BHC	0.053 U	0.0851	**0.0836**	98	75-117		11	0.053	0.0066
beta-BHC	0.053 U	0.0851	**0.0964**	113	75-117		11	0.053	0.0066
gamma-BHC (Lindane)	0.053 U	0.0851	**0.0811**	95	73-113		11	0.053	0.0029
gamma-BHC (Lindane)	0.053 U	0.0851	**0.0872**	102	73-113		11	0.053	0.0029
delta-BHC	0.053 U	0.0851	**0.0755**	89	76-122		10	0.053	0.0022
delta-BHC	0.053 U	0.0851	**0.0934**	110	76-122		10	0.053	0.0022
alpha-Chlordane	0.053 U	0.0851	**0.0766**	90	66-112		10	0.053	0.0016
alpha-Chlordane	0.053 U	0.0851	**0.0819**	96	66-112		10	0.053	0.0016

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QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A (Continued)

QC Batch: 1012717 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8081A

Matrix Spike (Continued) 1011352-01 NTC03GW0113 — Analyzed: 12/12/2010 By: DJM
Unit: ug/L — Analytical Batch: 0L14044

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
gamma-Chlordane	0.053 U	0.0851	**0.0770**	91	68-110		10	0.053	0.0021
gamma-Chlordane	0.053 U	0.0851	**0.0823**	97	68-110		10	0.053	0.0021
4,4'-DDD	0.053 U	0.0851	**0.0983**	116	69-140		12	0.053	0.00042
4,4'-DDD	0.053 U	0.0851	**0.0913**	107	69-140		12	0.053	0.00042
4,4'-DDE	0.053 U	0.0851	**0.0630**	74	70-111		11	0.053	0.0017
4,4'-DDE	0.053 U	0.0851	**0.0879**	103	70-111		11	0.053	0.0017
4,4'-DDT	0.053 U	0.0851	**0.0902**	106	71-119		9	0.053	0.00060
4,4'-DDT	0.053 U	0.0851	**0.0906**	106	71-119		9	0.053	0.00060
Aldrin	0.053 U	0.0851	**0.0723**	85	26-131		18	0.053	0.0016
Aldrin	0.053 U	0.0851	**0.0804**	94	26-131		18	0.053	0.0016
Dieldrin	0.053 U	0.0851	**0.0772**	91	73-112		11	0.053	0.00060
Dieldrin	0.053 U	0.0851	**0.0845**	99	73-112		11	0.053	0.00060
Endosulfan I	0.053 U	0.0851	**0.0630**	74	55-107		12	0.053	0.00037
Endosulfan I	0.053 U	0.0851	**0.0713**	84	55-107		12	0.053	0.00037
Endosulfan II	0.053 U	0.0851	**0.0730**	86	63-109		9	0.053	0.0019
Endosulfan II	0.053 U	0.0851	**0.0791**	93	63-109		9	0.053	0.0019
Endosulfan Sulfate	0.053 U	0.0851	**0.0806**	95	76-116		10	0.053	0.0038
Endosulfan Sulfate	0.053 U	0.0851	**0.0904**	106	76-116		10	0.053	0.0038
Endrin	0.053 U	0.0851	**0.0789**	93	73-117		10	0.053	0.0022
Endrin	0.053 U	0.0851	**0.0943**	111	73-117		10	0.053	0.0022
Endrin Aldehyde	0.053 U	0.0851	**0.0834**	98	62-118		12	0.053	0.0046
Endrin Aldehyde	0.053 U	0.0851	**0.0874**	103	62-118		12	0.053	0.0046
Endrin Ketone	0.053 U	0.0851	**0.0832**	98	75-115		12	0.053	0.017
Endrin Ketone	0.053 U	0.0851	**0.0902**	106	75-115		12	0.053	0.017
Heptachlor	0.053 U	0.0851	**0.0762**	90	43-123		16	0.053	0.0019
Heptachlor	0.053 U	0.0851	**0.0826**	97	43-123		16	0.053	0.0019
Heptachlor Epoxide	0.053 U	0.0851	**0.0762**	90	70-109		10	0.053	0.0017
Heptachlor Epoxide	0.053 U	0.0851	**0.0828**	97	70-109		10	0.053	0.0017
Methoxychlor	0.53 U	0.0851	**0.107 J**	126	67-128		14	0.53	0.0027
Methoxychlor	0.53 U	0.0851	**0.106 J**	124	67-128		14	0.53	0.0027
Surrogates:									
Tetrachloro-m-xylene				*74*	*29-137*				
Tetrachloro-m-xylene				*90*	*29-137*				
Decachlorobiphenyl				*87*	*30-134*				
Decachlorobiphenyl				*97*	*30-134*				

Matrix Spike Duplicate 1011352-01 NTC03GW0113 — Analyzed: 12/12/2010 By: DJM
Unit: ug/L — Analytical Batch: 0L14044

alpha-BHC	0.050 U	0.0833	**0.0892**	107	55-122	9	10	0.050	0.0014

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A (Continued)

QC Batch: 1012717 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8081A

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 12/12/2010 By: DJM
Unit: ug/L Analytical Batch: 0L14044

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
alpha-BHC	0.050 U	0.0833	**0.0877**	105	55-122	0.2	10	0.050	0.0014
beta-BHC	0.050 U	0.0833	**0.0915**	110	75-117	9	11	0.050	0.0062
beta-BHC	0.050 U	0.0833	**0.0900**	108	75-117	7	11	0.050	0.0062
gamma-BHC (Lindane)	0.050 U	0.0833	**0.0888**	106	73-113	9	11	0.050	0.0027
gamma-BHC (Lindane)	0.050 U	0.0833	**0.0869**	104	73-113	0.4	11	0.050	0.0027
delta-BHC	0.050 U	0.0833	**0.0817**	98	76-122	8	10	0.050	0.0021
delta-BHC	0.050 U	0.0833	**0.0950**	114	76-122	2	10	0.050	0.0021
alpha-Chlordane	0.050 U	0.0833	**0.0860**	103	66-112	**12**	10	0.050	0.0015
alpha-Chlordane	0.050 U	0.0833	**0.0842**	101	66-112	3	10	0.050	0.0015
gamma-Chlordane	0.050 U	0.0833	**0.0877**	105	68-110	**13**	10	0.050	0.0020
gamma-Chlordane	0.050 U	0.0833	**0.0850**	102	68-110	3	10	0.050	0.0020
4,4'-DDD	0.050 U	0.0833	**0.120**	**144**	69-140	**20**	12	0.050	0.00040
4,4'-DDD	0.050 U	0.0833	**0.0990**	119	69-140	8	12	0.050	0.00040
4,4'-DDE	0.050 U	0.0833	**0.0742**	89	70-111	**16**	11	0.050	0.0016
4,4'-DDE	0.050 U	0.0833	**0.0923**	111	70-111	5	11	0.050	0.0016
4,4'-DDT	0.050 U	0.0833	**0.112**	**134**	71-119	**21**	9	0.050	0.00057
4,4'-DDT	0.050 U	0.0833	**0.0996**	**120**	71-119	9	9	0.050	0.00057
Aldrin	0.050 U	0.0833	**0.0827**	99	26-131	13	18	0.050	0.0015
Aldrin	0.050 U	0.0833	**0.0827**	99	26-131	3	18	0.050	0.0015
Dieldrin	0.050 U	0.0833	**0.0892**	107	73-112	**14**	11	0.050	0.00056
Dieldrin	0.050 U	0.0833	**0.0871**	104	73-112	3	11	0.050	0.00056
Endosulfan I	0.050 U	0.0833	**0.0742**	89	55-107	**16**	12	0.050	0.00035
Endosulfan I	0.050 U	0.0833	**0.0712**	86	55-107	0.04	12	0.050	0.00035
Endosulfan II	0.050 U	0.0833	**0.0894**	107	63-109	**20**	9	0.050	0.0018
Endosulfan II	0.050 U	0.0833	**0.0862**	104	63-109	9	9	0.050	0.0018
Endosulfan Sulfate	0.050 U	0.0833	**0.103**	**123**	76-116	**24**	10	0.050	0.0036
Endosulfan Sulfate	0.050 U	0.0833	**0.0977**	**117**	76-116	8	10	0.050	0.0036
Endrin	0.050 U	0.0833	**0.0919**	110	73-117	**15**	10	0.050	0.0021
Endrin	0.050 U	0.0833	**0.0969**	116	73-117	3	10	0.050	0.0021
Endrin Aldehyde	0.050 U	0.0833	**0.101**	**121**	62-118	**19**	12	0.050	0.0044
Endrin Aldehyde	0.050 U	0.0833	**0.0938**	112	62-118	7	12	0.050	0.0044
Endrin Ketone	0.050 U	0.0833	**0.104**	**124**	75-115	**22**	12	0.050	0.016
Endrin Ketone	0.050 U	0.0833	**0.0979**	**118**	75-115	8	12	0.050	0.016
Heptachlor	0.050 U	0.0833	**0.0846**	102	43-123	10	16	0.050	0.0018
Heptachlor	0.050 U	0.0833	**0.0840**	101	43-123	2	16	0.050	0.0018
Heptachlor Epoxide	0.050 U	0.0833	**0.0848**	102	70-109	**11**	10	0.050	0.0016

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Organochlorine Pesticides by EPA Method 8081A (Continued)

QC Batch: 1012717 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8081A

Matrix Spike Duplicate (Continued) 1011352-01 NTC03GW0113 Analyzed: 12/12/2010 By: DJM

Unit: ug/L Analytical Batch: 0L14044

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Heptachlor Epoxide	0.050 U	0.0833	**0.0848**	102	70-109	2	10	0.050	0.0016
Methoxychlor	0.50 U	0.0833	**0.132 J**	**159**	67-128	**21**	14	0.50	0.0025
Methoxychlor	0.50 U	0.0833	**0.116 J**	**139**	67-128	9	14	0.50	0.0025
Surrogates:									
Tetrachloro-m-xylene				*85*	*29-137*				
Tetrachloro-m-xylene				*95*	*29-137*				
Decachlorobiphenyl				*114*	*30-134*				
Decachlorobiphenyl				*110*	*30-134*				

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HOLDING TIME SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Method: Organochlorine Pesticides by EPA Method 8081A

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	7	12/12/10	20	40	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	7	12/12/10	20	40	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	7	12/12/10	20	40	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	7	12/12/10	20	40	
NTC03GW0513	11/16/10	11/17/10		11/22/10	6	7	12/12/10	20	40	
NTC03GW0613	11/16/10	11/17/10		11/22/10	6	7	12/12/10	20	40	
NTCFD111610-01	11/16/10	11/17/10		11/22/10	6	7	12/12/10	20	40	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Cal Standard (0L14010-CAL1)		**Lab File ID: A101069-0**		**Analyzed: 12/11/10 05:53**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.28	21.27	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.38	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL2)		**Lab File ID: A101070-0**		**Analyzed: 12/11/10 06:29**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.28	21.27	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.38	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL3)		**Lab File ID: A101071-0**		**Analyzed: 12/11/10 07:05**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL4)		**Lab File ID: A101072-0**		**Analyzed: 12/11/10 07:41**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL5)		**Lab File ID: A101073-0**		**Analyzed: 12/11/10 08:17**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL6)		**Lab File ID: A101074-0**		**Analyzed: 12/11/10 08:53**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Secondary Cal Check (0L14010-SCV1)		**Lab File ID: A101075-0**		**Analyzed: 12/11/10 09:29**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	91	75 - 125	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	85	75 - 125	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	91	75 - 125	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	89	75 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Cal Standard (0L14010-CAL7)		**Lab File ID: A101083-0**		**Analyzed: 12/11/10 14:18**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL8)		**Lab File ID: A101084-0**		**Analyzed: 12/11/10 14:54**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL9)		**Lab File ID: A101085-0**		**Analyzed: 12/11/10 15:27**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALA)		**Lab File ID: A101086-0**		**Analyzed: 12/11/10 16:00**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALB)		**Lab File ID: A101087-0**		**Analyzed: 12/11/10 16:36**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALC)		**Lab File ID: A101088-0**		**Analyzed: 12/11/10 17:12**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Secondary Cal Check (0L14010-SCV2)		**Lab File ID: A101089-0**		**Analyzed: 12/11/10 17:48**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	88	75 - 125	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	98	75 - 125	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	98	75 - 125	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	98	75 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Soil
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Blank (1012717-BLK1)		**Lab File ID: A101098-0**		**Analyzed: 12/11/10 23:13**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	83	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	93	29 - 137	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	86	30 - 134	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	88	30 - 134	
LCS (1012717-BS1)		**Lab File ID: A101099-0**		**Analyzed: 12/11/10 23:49**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	93	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	103	29 - 137	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	108	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	107	30 - 134	
Calibration Check (0L14010-CCV1)		**Lab File ID: A101101-0**		**Analyzed: 12/12/10 01:01**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	108	85 - 115	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	118	85 - 115	*
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	104	85 - 115	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	104	85 - 115	
Calibration Check (0L14010-CCV2)		**Lab File ID: A101102-0**		**Analyzed: 12/12/10 01:37**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	92	85 - 115	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	91	85 - 115	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	97	85 - 115	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	97	85 - 115	
NTC03GW0313 (1011356-01)		**Lab File ID: A101104-0**		**Analyzed: 12/12/10 02:49**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	74	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	87	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	98	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	101	30 - 134	
NTC03GW0413 (1011356-02)		**Lab File ID: A101105-0**		**Analyzed: 12/12/10 03:25**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	67	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	74	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	87	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	84	30 - 134	
NTC03GW0513 (1011356-03)		**Lab File ID: A101106-0**		**Analyzed: 12/12/10 04:01**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	91	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	104	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	106	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	100	30 - 134	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Soil
Calibration: 0L14012
Sequence: 0L14010
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC03GW0613 (1011356-04)		**Lab File ID: A101107-0**		**Analyzed: 12/12/10 04:37**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	68	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	77	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	94	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	90	30 - 134	
NTCFD111610-01 (1011356-05)		**Lab File ID: A101108-0**		**Analyzed: 12/12/10 05:13**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	75	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	91	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	90	30 - 134	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	93	30 - 134	
Calibration Check (0L14010-CCV3)		**Lab File ID: A101114-0**		**Analyzed: 12/12/10 08:50**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	106	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	117	85 - 115	*
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	100	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	105	85 - 115	
Calibration Check (0L14010-CCV4)		**Lab File ID: A101115-0**		**Analyzed: 12/12/10 09:26**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	88	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	84	85 - 115	*
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	85	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	86	85 - 115	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Cal Standard (0L14010-CAL1)		**Lab File ID: A101069-0**		**Analyzed: 12/11/10 05:53**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.28	21.27	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.38	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL2)		**Lab File ID: A101070-0**		**Analyzed: 12/11/10 06:29**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.28	21.27	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.38	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL3)		**Lab File ID: A101071-0**		**Analyzed: 12/11/10 07:05**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL4)		**Lab File ID: A101072-0**		**Analyzed: 12/11/10 07:41**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.62	8.61	0.01	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL5)		**Lab File ID: A101073-0**		**Analyzed: 12/11/10 08:17**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL6)		**Lab File ID: A101074-0**		**Analyzed: 12/11/10 08:53**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.37	24.36	0.02	+/-1.0	NA	NA	
Secondary Cal Check (0L14010-SCV1)		**Lab File ID: A101075-0**		**Analyzed: 12/11/10 09:29**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	91	75 - 125	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	85	75 - 125	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	91	75 - 125	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	89	75 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Cal Standard (0L14010-CAL7)		**Lab File ID: A101083-0**		**Analyzed: 12/11/10 14:18**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL8)		**Lab File ID: A101084-0**		**Analyzed: 12/11/10 14:54**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CAL9)		**Lab File ID: A101085-0**		**Analyzed: 12/11/10 15:27**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALA)		**Lab File ID: A101086-0**		**Analyzed: 12/11/10 16:00**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALB)		**Lab File ID: A101087-0**		**Analyzed: 12/11/10 16:36**			
Tetrachloro-m-xylene	7.43	7.43	0.00	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.27	21.27	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	NA	NA	
Cal Standard (0L14010-CALC)		**Lab File ID: A101088-0**		**Analyzed: 12/11/10 17:12**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	NA	NA	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	NA	NA	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	NA	NA	
Decachlorobiphenyl [2C]	24.36	24.36	0.00	+/-1.0	NA	NA	
Secondary Cal Check (0L14010-SCV2)		**Lab File ID: A101089-0**		**Analyzed: 12/11/10 17:48**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	88	75 - 125	
Tetrachloro-m-xylene [2C]	8.61	8.61	0.00	+/-1.0	98	75 - 125	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	98	75 - 125	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	98	75 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Blank (1012717-BLK1)		**Lab File ID: A101098-0**		**Analyzed: 12/11/10 23:13**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	83	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	93	29 - 137	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	86	30 - 134	
Decachlorobiphenyl [2C]	24.35	24.36	0.00	+/-1.0	88	30 - 134	
LCS (1012717-BS1)		**Lab File ID: A101099-0**		**Analyzed: 12/11/10 23:49**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	93	29 - 137	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	103	29 - 137	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	108	30 - 134	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	107	30 - 134	
Calibration Check (0L14010-CCV1)		**Lab File ID: A101101-0**		**Analyzed: 12/12/10 01:01**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	108	85 - 115	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	118	85 - 115	*
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	104	85 - 115	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	104	85 - 115	
Calibration Check (0L14010-CCV2)		**Lab File ID: A101102-0**		**Analyzed: 12/12/10 01:37**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	92	85 - 115	
Tetrachloro-m-xylene [2C]	8.60	8.61	-0.01	+/-1.0	91	85 - 115	
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	97	85 - 115	
Decachlorobiphenyl [2C]	24.34	24.36	-0.02	+/-1.0	97	85 - 115	
Calibration Check (0L14010-CCV3)		**Lab File ID: A101114-0**		**Analyzed: 12/12/10 08:50**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	106	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	117	85 - 115	*
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	100	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	105	85 - 115	
Calibration Check (0L14010-CCV4)		**Lab File ID: A101115-0**		**Analyzed: 12/12/10 09:26**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	88	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	84	85 - 115	*
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	85	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	86	85 - 115	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Soil
Calibration: 0L14012
Sequence: 0L14044
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L14044-CCV1)		**Lab File ID: A101119-0**		**Analyzed: 12/12/10 11:50**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	111	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	117	85 - 115	*
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	100	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	101	85 - 115	
Calibration Check (0L14044-CCV2)		**Lab File ID: A101120-0**		**Analyzed: 12/12/10 12:26**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	82	85 - 115	*
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	84	85 - 115	*
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	98	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	104	85 - 115	
NTC03GW0113 (1011352-01)		**Lab File ID: A101125-0**		**Analyzed: 12/12/10 15:27**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	73	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	85	29 - 137	
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	106	30 - 134	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	107	30 - 134	
NTC03GW0213 (1011352-02)		**Lab File ID: A101126-0**		**Analyzed: 12/12/10 16:03**			
Tetrachloro-m-xylene	7.40	7.43	-0.03	+/-1.0	89	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	99	29 - 137	
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	104	30 - 134	
Decachlorobiphenyl [2C]	24.32	24.36	-0.04	+/-1.0	98	30 - 134	
Matrix Spike (1012717-MS1)		**Lab File ID: A101127-0**		**Analyzed: 12/12/10 16:39**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	74	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	90	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	87	30 - 134	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	97	30 - 134	
Matrix Spike Dup (1012717-MSD1)		**Lab File ID: A101128-0**		**Analyzed: 12/12/10 17:15**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	85	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	95	29 - 137	
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	114	30 - 134	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	110	30 - 134	
Calibration Check (0L14044-CCV3)		**Lab File ID: A101132-0**		**Analyzed: 12/12/10 19:39**			
Tetrachloro-m-xylene	7.40	7.43	-0.03	+/-1.0	91	85 - 115	
Tetrachloro-m-xylene [2C]	8.58	8.61	-0.03	+/-1.0	107	85 - 115	
Decachlorobiphenyl	21.23	21.27	-0.04	+/-1.0	107	85 - 115	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	114	85 - 115	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Soil
Calibration: 0L14012
Sequence: 0L14044
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L14044-CCV4)		**Lab File ID: A101133-0**		**Analyzed: 12/12/10 20:15**			
Tetrachloro-m-xylene	7.40	7.43	-0.03	+/-1.0	88	85 - 115	
Tetrachloro-m-xylene [2C]	8.58	8.61	-0.03	+/-1.0	87	85 - 115	
Decachlorobiphenyl	21.23	21.27	-0.04	+/-1.0	96	85 - 115	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	102	85 - 115	
Calibration Check (0L14044-CCV5)		**Lab File ID: A101144-0**		**Analyzed: 12/13/10 02:52**			
Tetrachloro-m-xylene	7.39	7.43	-0.04	+/-1.0	87	85 - 115	
Tetrachloro-m-xylene [2C]	8.57	8.61	-0.04	+/-1.0	105	85 - 115	
Decachlorobiphenyl	21.22	21.27	-0.05	+/-1.0	96	85 - 115	
Decachlorobiphenyl [2C]	24.30	24.36	-0.05	+/-1.0	104	85 - 115	
Calibration Check (0L14044-CCV6)		**Lab File ID: A101145-0**		**Analyzed: 12/13/10 03:28**			
Tetrachloro-m-xylene	7.39	7.43	-0.04	+/-1.0	82	85 - 115	*
Tetrachloro-m-xylene [2C]	8.57	8.61	-0.04	+/-1.0	77	85 - 115	*
Decachlorobiphenyl	21.22	21.27	-0.05	+/-1.0	94	85 - 115	
Decachlorobiphenyl [2C]	24.30	24.36	-0.05	+/-1.0	96	85 - 115	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L14012
Sequence: 0L14044
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L14044-CCV1)		**Lab File ID: A101119-0**		**Analyzed: 12/12/10 11:50**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	111	85 - 115	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	117	85 - 115	*
Decachlorobiphenyl	21.26	21.27	-0.01	+/-1.0	100	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	101	85 - 115	
Calibration Check (0L14044-CCV2)		**Lab File ID: A101120-0**		**Analyzed: 12/12/10 12:26**			
Tetrachloro-m-xylene	7.42	7.43	-0.01	+/-1.0	82	85 - 115	*
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	84	85 - 115	*
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	98	85 - 115	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	104	85 - 115	
Matrix Spike (1012717-MS1)		**Lab File ID: A101127-0**		**Analyzed: 12/12/10 16:39**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	74	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	90	29 - 137	
Decachlorobiphenyl	21.25	21.27	-0.02	+/-1.0	87	30 - 134	
Decachlorobiphenyl [2C]	24.33	24.36	-0.03	+/-1.0	97	30 - 134	
Matrix Spike Dup (1012717-MSD1)		**Lab File ID: A101128-0**		**Analyzed: 12/12/10 17:15**			
Tetrachloro-m-xylene	7.41	7.43	-0.02	+/-1.0	85	29 - 137	
Tetrachloro-m-xylene [2C]	8.59	8.61	-0.02	+/-1.0	95	29 - 137	
Decachlorobiphenyl	21.24	21.27	-0.03	+/-1.0	114	30 - 134	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	110	30 - 134	
Calibration Check (0L14044-CCV3)		**Lab File ID: A101132-0**		**Analyzed: 12/12/10 19:39**			
Tetrachloro-m-xylene	7.40	7.43	-0.03	+/-1.0	91	85 - 115	
Tetrachloro-m-xylene [2C]	8.58	8.61	-0.03	+/-1.0	107	85 - 115	
Decachlorobiphenyl	21.23	21.27	-0.04	+/-1.0	107	85 - 115	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	114	85 - 115	
Calibration Check (0L14044-CCV4)		**Lab File ID: A101133-0**		**Analyzed: 12/12/10 20:15**			
Tetrachloro-m-xylene	7.40	7.43	-0.03	+/-1.0	88	85 - 115	
Tetrachloro-m-xylene [2C]	8.58	8.61	-0.03	+/-1.0	87	85 - 115	
Decachlorobiphenyl	21.23	21.27	-0.04	+/-1.0	96	85 - 115	
Decachlorobiphenyl [2C]	24.31	24.36	-0.05	+/-1.0	102	85 - 115	
Calibration Check (0L14044-CCV5)		**Lab File ID: A101144-0**		**Analyzed: 12/13/10 02:52**			
Tetrachloro-m-xylene	7.39	7.43	-0.04	+/-1.0	87	85 - 115	
Tetrachloro-m-xylene [2C]	8.57	8.61	-0.04	+/-1.0	105	85 - 115	
Decachlorobiphenyl	21.22	21.27	-0.05	+/-1.0	96	85 - 115	
Decachlorobiphenyl [2C]	24.30	24.36	-0.05	+/-1.0	104	85 - 115	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L14044

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L14012
Instrument: 199

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L14044-CCV6)		**Lab File ID: A101145-0**		**Analyzed: 12/13/10 03:28**			
Tetrachloro-m-xylene	7.39	7.43	-0.04	+/-1.0	82	85 - 115	*
Tetrachloro-m-xylene [2C]	8.57	8.61	-0.04	+/-1.0	77	85 - 115	*
Decachlorobiphenyl	21.22	21.27	-0.05	+/-1.0	94	85 - 115	
Decachlorobiphenyl [2C]	24.30	24.36	-0.05	+/-1.0	96	85 - 115	

INITIAL CALIBRATION DATA
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L14012

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/11/10 13:10

Instrument: 199

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
alpha-BHC												
alpha-BHC [2C]												
beta-BHC												
beta-BHC [2C]												
gamma-BHC (Lindane)												
gamma-BHC (Lindane) [2C]												
delta-BHC												
delta-BHC [2C]												
alpha-Chlordane												
alpha-Chlordane [2C]												
gamma-Chlordane												
gamma-Chlordane [2C]												
4,4'-DDD												
4,4'-DDD [2C]												
4,4'-DDE												
4,4'-DDE [2C]												
4,4'-DDT												
4,4'-DDT [2C]												
Aldrin												
Aldrin [2C]												
Dieldrin												
Dieldrin [2C]												
Endosulfan I												
Endosulfan I [2C]												
Endosulfan II												
Endosulfan II [2C]												
Endosulfan Sulfate												
Endosulfan Sulfate [2C]												
Endrin												
Endrin [2C]												
Endrin Aldehyde												

INITIAL CALIBRATION DATA
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0L14012

Calibration Date: 12/11/10 13:10

Instrument: 199

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Endrin Aldehyde [2C]												
Endrin Ketone												
Endrin Ketone [2C]												
Heptachlor												
Heptachlor [2C]												
Heptachlor Epoxide												
Heptachlor Epoxide [2C]												
Methoxychlor												
Methoxychlor [2C]												
Toxaphene	0.0625	63816.64	0.125	70924.88	0.25	73682.4	0.5	72454.52	1	71424.08	2	87705.6
Toxaphene [2C]	0.0625	91250.4	0.125	94818.08	0.25	97700.24	0.5	98943.32	1	89566.37	2	113867.5
Tetrachloro-m-xylene	0.005	~~1315296~~	0.01	~~1177781~~	0.02	~~1267320~~	0.04	~~1220386~~	0.08	~~1055936~~	0.16	~~1303629~~
Tetrachloro-m-xylene [2C]	0.005	~~1831502~~	0.01	~~1495140~~	0.02	~~1509736~~	0.04	~~1465861~~	0.08	~~1201978~~	0.16	~~1490268~~
Decachlorobiphenyl	0.005	~~671920~~	0.01	~~721716~~	0.02	~~666170.5~~	0.04	~~604487.8~~	0.08	~~571398.5~~	0.16	~~611130.6~~
Decachlorobiphenyl [2C]	0.005	~~646692~~	0.01	~~677334~~	0.02	~~619102.5~~	0.04	~~604542.3~~	0.08	~~526164.1~~	0.16	~~596353.3~~

INITIAL CALIBRATION DATA (Continued)
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0L14012

Calibration Date: 12/11/10 13:10

Instrument: 199

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
alpha-BHC	0.005	6179000	0.01	6734500	0.02	5589950	0.04	5934000	0.08	5956113	0.16	6653544
alpha-BHC [2C]	0.005	1880786	0.01	2034426	0.02	1622393	0.04	1693353	0.08	1728360	0.16	1907968
beta-BHC	0.005	2372000	0.01	2246800	0.02	1845200	0.04	1932150	0.08	1852863	0.16	2013569
beta-BHC [2C]	0.005	644980	0.01	671371	0.02	526605	0.04	537986.3	0.08	535500.4	0.16	590721.2
gamma-BHC (Lindane)	0.005	5813600	0.01	6212800	0.02	5149400	0.04	5379925	0.08	5320563	0.16	5862688
gamma-BHC (Lindane) [2C]	0.005	1670060	0.01	1786259	0.02	1417996	0.04	1471254	0.08	1484405	0.16	1648358
delta-BHC	0.005	4980400	0.01	5106400	0.02	4417650	0.04	4751450	0.08	4681750	0.16	5236225
delta-BHC [2C]	0.005	1288224	0.01	1342918	0.02	1115209	0.04	1162501	0.08	1199444	0.16	1357199
alpha-Chlordane	0.005	1271656	0.01	1238241	0.02	1034051	0.04	1061530	0.08	1029076	0.16	1121553
alpha-Chlordane [2C]	0.005	1325752	0.01	1333435	0.02	1090339	0.04	1104395	0.08	1108143	0.16	1213246
gamma-Chlordane	0.005	1300148	0.01	1259818	0.02	1060432	0.04	1107571	0.08	1078380	0.16	1172235
gamma-Chlordane [2C]	0.005	1349722	0.01	1377488	0.02	1126308	0.04	1148141	0.08	1164953	0.16	1283570
4,4'-DDD	0.005	461054	0.01	457139	0.02	413680.5	0.04	458266.5	0.08	463225.2	0.16	541031.2
4,4'-DDD [2C]	0.005	743700	0.01	778437	0.02	677206.5	0.04	692306	0.08	709109.9	0.16	792788.8
4,4'-DDE	0.005	1392812	0.01	1360163	0.02	1146528	0.04	1167713	0.08	1120189	0.16	1201003
4,4'-DDE [2C]	0.005	1004798	0.01	1050202	0.02	864993	0.04	906925	0.08	934376	0.16	1050879
4,4'-DDT	0.005	621826	0.01	592102	0.02	520334	0.04	562305.5	0.08	578930.4	0.16	651915
4,4'-DDT [2C]	0.005	774442	0.01	790764	0.02	659944	0.04	681012.8	0.08	713247.1	0.16	798248.1
Aldrin	0.005	6682800	0.01	6563600	0.02	5334700	0.04	5392250	0.08	5320400	0.16	5729825
Aldrin [2C]	0.005	1610066	0.01	1692879	0.02	1361565	0.04	1401014	0.08	1437513	0.16	1562226
Dieldrin	0.005	1179850	0.01	1162494	0.02	993082.5	0.04	1047049	0.08	1023825	0.16	1120435
Dieldrin [2C]	0.005	1228272	0.01	1274850	0.02	1053299	0.04	1082567	0.08	1116812	0.16	1234704
Endosulfan I	0.005	1392812	0.01	1360163	0.02	1146528	0.04	1167713	0.08	1120189	0.16	1201003
Endosulfan I [2C]	0.005	1228286	0.01	1271407	0.02	1033281	0.04	1042805	0.08	1057040	0.16	1159753
Endosulfan II	0.005	844716	0.01	810258	0.02	723568.5	0.04	754752.5	0.08	737587.1	0.16	795905
Endosulfan II [2C]	0.005	905194.1	0.01	937676	0.02	800192	0.04	806530	0.08	816277.4	0.16	904643.8
Endosulfan Sulfate	0.005	681892	0.01	657888	0.02	589224	0.04	612774.3	0.08	596104.3	0.16	632840.6
Endosulfan Sulfate [2C]	0.005	761126	0.01	790473	0.02	689655	0.04	687367.3	0.08	697607.6	0.16	749603.8
Endrin	0.005	1034620	0.01	1012608	0.02	861055.9	0.04	905876.8	0.08	881737.9	0.16	966010.6
Endrin [2C]	0.005	1037268	0.01	1066414	0.02	880174	0.04	897248.3	0.08	914351.2	0.16	1020991
Endrin Aldehyde	0.005	602468	0.01	579899	0.02	523597.5	0.04	532731.3	0.08	519350.4	0.16	552134.2

INITIAL CALIBRATION DATA (Continued)
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L14012
Calibration Date: 12/11/10 13:10
Instrument: 199

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Endrin Aldehyde [2C]	0.005	678038	0.01	690392	0.02	595303	0.04	595815.3	0.08	589690	0.16	639945.6
Endrin Ketone	0.005	780986	0.01	761430	0.02	692297	0.04	717097	0.08	701236	0.16	737228.8
Endrin Ketone [2C]	0.005	838694.1	0.01	889037	0.02	779363	0.04	784041.5	0.08	803890.9	0.16	861124.4
Heptachlor	0.005	6564400	0.01	6730100	0.02	5491400	0.04	5650625	0.08	5535663	0.16	6010569
Heptachlor [2C]	0.005	1750608	0.01	1837271	0.02	1457313	0.04	1490393	0.08	1517264	0.16	1664831
Heptachlor Epoxide	0.005	5597200	0.01	5564800	0.02	4605600	0.04	4666725	0.08	4536650	0.16	4854069
Heptachlor Epoxide [2C]	0.005	1410000	0.01	1438679	0.02	1167724	0.04	1189798	0.08	1206353	0.16	1319275
Methoxychlor	0.005	231690	0.01	232511	0.02	220033	0.04	232481	0.08	233285.8	0.16	251874.8
Methoxychlor [2C]	0.005	328304	0.01	363638	0.02	319621	0.04	322494.8	0.08	331110.9	0.16	358711.6
Toxaphene												
Toxaphene [2C]												
Tetrachloro-m-xylene	0.005	1217864	0.01	1246325	0.02	990959.5	0.04	1011164	0.08	982548.6	0.16	1110957
Tetrachloro-m-xylene [2C]	0.005	1709676	0.01	1628786	0.02	1223778	0.04	1194707	0.08	1174978	0.16	1281308
Decachlorobiphenyl	0.005	683366	0.01	659038	0.02	606104	0.04	596505.5	0.08	564713.5	0.16	563612
Decachlorobiphenyl [2C]	0.005	629056	0.01	653363	0.02	577459	0.04	559673.5	0.08	544809.5	0.16	562867.3

INITIAL CALIBRATION DATA (Continued)
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L14012
Calibration Date: 12/11/10 13:10
Instrument: 199

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
alpha-BHC	6174518	7.207805	8.73	1.475369E-02			20	
alpha-BHC [2C]	1811214	8.568817	10.22667	5.117293E-02			20	
beta-BHC	2043764	10.67967	9.73	1.323738E-02			20	
beta-BHC [2C]	584527.3	10.59013	11.40167	3.566427E-02			20	
gamma-BHC (Lindane)	5623163	7.186387	9.516667	5.357565E-02			20	
gamma-BHC (Lindane) [2C]	1579722	9.065074	11.19	1.769618E-02			20	
delta-BHC	4862313	6.210572	10.17667	0.0522364			20	
delta-BHC [2C]	1244249	8.018377	12.2	8.942264E-03			20	
alpha-Chlordane	1126018	9.385065	13.67	1.896594E-02			20	
alpha-Chlordane [2C]	1195885	9.408349	15.68833	2.600421E-02			20	
gamma-Chlordane	1163097	8.513206	13.33	1.986384E-02			20	
gamma-Chlordane [2C]	1241697	8.808848	15.30667	3.765712E-02			20	
4,4'-DDD	465732.7	8.872227	15.425	3.589648E-02			20	
4,4'-DDD [2C]	732258	6.431582	17.62	3.017875E-02			20	
4,4'-DDE	1231401	9.413511	13.98667	3.552888E-02			20	
4,4'-DDE [2C]	968695.6	8.05584	16.12833	3.065006E-02			20	
4,4'-DDT	587902.1	7.819714	16.12667	3.608325E-02			20	
4,4'-DDT [2C]	736276.3	8.075683	18.43667	3.321726E-02			20	
Aldrin	5837263	10.75812	11.485	4.845297E-02			20	
Aldrin [2C]	1510877	8.647246	13.3	1.963641E-02			20	
Dieldrin	1087789	7.102092	14.6	2.051615E-02			20	
Dieldrin [2C]	1165084	7.915383	16.54333	0.0261139			20	
Endosulfan I	1231401	9.413511	13.98667	3.552888E-02			20	
Endosulfan I [2C]	1132095	9.076779	15.83167	2.653463E-02			20	
Endosulfan II	777797.9	6.016214	15.73167	2.993527E-02			20	
Endosulfan II [2C]	861752.2	7.039191	17.86833	3.052246E-02			20	
Endosulfan Sulfate	628453.9	5.769116	17.88	0.0340427			20	
Endosulfan Sulfate [2C]	729305.4	5.977336	19.45833	1.571113E-02			20	
Endrin	943651.5	7.584535	15.17833	2.258734E-02			20	
Endrin [2C]	969407.7	8.364768	17.325	2.915227E-02		0.9999086	0.99	
Endrin Aldehyde	551696.7	6.049179	16.78833	3.245313E-02			20	
Endrin Aldehyde [2C]	631530.6	7.09454	18.72833	3.052746E-02			20	

INITIAL CALIBRATION DATA (Continued)
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L14012

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 12/11/10 13:10

Instrument: 199

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Endrin Ketone	731712.5	4.748988	18.58667	0.0278112			20	
Endrin Ketone [2C]	826025.1	5.357678	20.83	1.769671E-02			20	
Heptachlor	5997126	8.973386	10.72833	3.593394E-02			20	
Heptachlor [2C]	1619613	9.568953	12.42833	3.922858E-02			20	
Heptachlor Epoxide	4970841	9.744586	13.00667	3.683855E-02			20	
Heptachlor Epoxide [2C]	1288638	9.138525	14.79833	2.927028E-02			20	
Methoxychlor	233645.9	4.382342	17.4	0.033389			20	
Methoxychlor [2C]	337313.4	5.629813	20.18167	2.406727E-02			20	
Toxaphene	73334.69	10.69317	17.65667	2.322413E-02			20	
Toxaphene [2C]	97690.98	8.911993	18.10333	2.605388E-02			20	
Tetrachloro-m-xylene	1093303	10.7238	7.426667	7.053417E-02			20	
Tetrachloro-m-xylene [2C]	1368872	17.29828	8.61	0.0142186		0.9998224	0.99	
Decachlorobiphenyl	612223.2	8.054337	21.26833	2.599647E-02			20	
Decachlorobiphenyl [2C]	587871.4	7.363175	24.355	2.358865E-02			20	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 0L14010-SCV1

Sequence: 0L14010

SDG: 1011352

Project: Naval Station Great Lakes

Standard ID: 0100708

Calibration: 0L14012

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
Toxaphene	1.00	0.831	83	75-125
Toxaphene [2C]	1.00	0.924	92	75-125
Tetrachloro-m-xylene	0.100	0.0913	91	75-125
Tetrachloro-m-xylene [2C]	0.100	0.0853	85	75-125
Decachlorobiphenyl	0.100	0.0910	91	75-125
Decachlorobiphenyl [2C]	0.100	0.0894	89	75-125

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L14010-SCV2
Standard ID: 0120452
Sequence: 0L14010
Calibration: 0L14012

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
alpha-BHC	0.0400	0.0365	91	75-125
alpha-BHC [2C]	0.0400	0.0364	91	75-125
beta-BHC	0.0400	0.0357	89	75-125
beta-BHC [2C]	0.0400	0.0358	90	75-125
gamma-BHC (Lindane)	0.0400	0.0364	91	75-125
gamma-BHC (Lindane) [2C]	0.0400	0.0362	91	75-125
delta-BHC	0.0400	0.0372	93	75-125
delta-BHC [2C]	0.0400	0.0365	91	75-125
alpha-Chlordane	0.0400	0.0360	90	75-125
alpha-Chlordane [2C]	0.0400	0.0362	91	75-125
gamma-Chlordane	0.0400	0.0361	90	75-125
gamma-Chlordane [2C]	0.0400	0.0362	91	75-125
4,4'-DDD	0.0400	0.0353	88	75-125
4,4'-DDD [2C]	0.0400	0.0373	93	75-125
4,4'-DDE	0.0400	0.0370	93	75-125
4,4'-DDE [2C]	0.0400	0.0366	92	75-125
4,4'-DDT	0.0400	0.0368	92	75-125
4,4'-DDT [2C]	0.0400	0.0376	94	75-125
Aldrin	0.0400	0.0353	88	75-125
Aldrin [2C]	0.0400	0.0363	91	75-125
Dieldrin	0.0400	0.0365	91	75-125
Dieldrin [2C]	0.0400	0.0365	91	75-125
Endosulfan I	0.0400	0.0370	93	75-125
Endosulfan I [2C]	0.0400	0.0362	91	75-125
Endosulfan II	0.0400	0.0376	94	75-125
Endosulfan II [2C]	0.0400	0.0376	94	75-125
Endosulfan Sulfate	0.0400	0.0384	96	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L14010-SCV2
Standard ID: 0120452
Sequence: 0L14010
Calibration: 0L14012

Endosulfan Sulfate [2C]	0.0400	0.0391	98	75-125
Endrin	0.0400	0.0368	92	75-125
Endrin [2C]	0.0400	0.0404	101	75-125
Endrin Aldehyde	0.0400	0.0379	95	75-125
Endrin Aldehyde [2C]	0.0400	0.0383	96	75-125
Endrin Ketone	0.0400	0.0390	98	75-125
Endrin Ketone [2C]	0.0400	0.0392	98	75-125
Heptachlor	0.0400	0.0359	90	75-125
Heptachlor [2C]	0.0400	0.0359	90	75-125
Heptachlor Epoxide	0.0400	0.0359	90	75-125
Heptachlor Epoxide [2C]	0.0400	0.0359	90	75-125
Methoxychlor	0.0400	0.0378	95	75-125
Methoxychlor [2C]	0.0400	0.0398	100	75-125
Tetrachloro-m-xylene	0.0400	0.0353	88	75-125
Tetrachloro-m-xylene [2C]	0.0400	0.0394	99	75-125
Decachlorobiphenyl	0.0400	0.0391	98	75-125
Decachlorobiphenyl [2C]	0.0400	0.0393	98	75-125

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L14010-CCV1
Injection Date: 12/12/10
Calibration Date: 12/11/10 13:10
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: A101101-0
Injection Time: 01:01
Calibration: 0L14012
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC	A	0.0400	0.0454	6174518	7002050		13.4	20
beta-BHC	A	0.0400	0.0436	2043764	2229775		9.1	20
gamma-BHC (Lindane)	A	0.0400	0.0450	5623163	6321200		12.4	20
delta-BHC	A	0.0400	0.0456	4862313	5540400		13.9	20
alpha-Chlordane	A	0.0400	0.0437	1126018	1230604		9.3	20
gamma-Chlordane	A	0.0400	0.0445	1163097	1292555		11.1	20
4,4'-DDD	A	0.0400	0.0379	465732.7	441035.3		-5.3	20
4,4'-DDE	A	0.0400	0.0470	1231401	1447264		17.5	20
4,4'-DDT	A	0.0400	0.0422	587902.1	620168.5		5.5	20
Aldrin	A	0.0400	0.0433	5837263	6316425		8.2	20
Dieldrin	A	0.0400	0.0441	1087789	1198691		10.2	20
Endosulfan II	A	0.0400	0.0445	777797.9	865046.5		11.2	20
Endosulfan Sulfate	A	0.0400	0.0432	628453.9	679469.3		8.1	20
Endrin	A	0.0400	0.0453	943651.5	1068550		13.2	20
Endrin Aldehyde	A	0.0400	0.0427	551696.7	589009		6.8	20
Endrin Ketone	A	0.0400	0.0436	731712.5	798407		9.1	20
Heptachlor	A	0.0400	0.0453	5997126	6785800		13.2	20
Heptachlor Epoxide	A	0.0400	0.0438	4970841	5440250		9.4	20
Methoxychlor	A	0.0400	0.0396	233645.9	231078.5		-1.1	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L14010-CCV1
Injection Date: 12/12/10
Calibration Date: 12/11/10 13:10
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: B101101-0
Injection Time: 01:01
Calibration: 0L14012
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC [2C]	A	0.0400	0.0436	1811214	1972438		8.9	20
beta-BHC [2C]	A	0.0400	0.0416	584527.3	607451.3		3.9	20
gamma-BHC (Lindane) [2C]	A	0.0400	0.0428	1579722	1688949		6.9	20
delta-BHC [2C]	A	0.0400	0.0423	1244249	1316034		5.8	20
alpha-Chlordane [2C]	A	0.0400	0.0417	1195885	1246571		4.2	20
gamma-Chlordane [2C]	A	0.0400	0.0423	1241697	1311586		5.6	20
4,4'-DDD [2C]	A	0.0400	0.0399	732258	731003.3		-0.2	20
4,4'-DDE [2C]	A	0.0400	0.0421	968695.6	1018373		5.1	20
4,4'-DDT [2C]	A	0.0400	0.0418	736276.3	769959.8		4.6	20
Aldrin [2C]	A	0.0400	0.0427	1510877	1613364		6.8	20
Dieldrin [2C]	A	0.0400	0.0426	1165084	1241775		6.6	20
Endosulfan I	A	0.0400	0.0470	1231401	1447264		17.5	20
Endosulfan I [2C]	A	0.0400	0.0420	1132095	1187468		4.9	20
Endosulfan II [2C]	A	0.0400	0.0421	861752.2	906079.8		5.1	20
Endosulfan Sulfate [2C]	A	0.0400	0.0416	729305.4	758148.5		4.0	20
Endrin [2C]	Q	0.0400	0.0467	969407.7	1036442		16.8	20
Endrin Aldehyde [2C]	A	0.0400	0.0419	631530.6	661411.5		4.7	20
Endrin Ketone [2C]	A	0.0400	0.0422	826025.1	872044.8		5.6	20
Heptachlor [2C]	A	0.0400	0.0436	1619613	1765274		9.0	20
Heptachlor Epoxide [2C]	A	0.0400	0.0423	1288638	1361664		5.7	20
Methoxychlor [2C]	A	0.0400	0.0416	337313.4	350862.5		4.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14010-CCV2
Lab File ID: A101102-0
Injection Date: 12/12/10
Injection Time: 01:37
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14010
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.503	73334.69	77996.74		6.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14010-CCV2
Lab File ID: B101102-0
Injection Date: 12/12/10
Injection Time: 01:37
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14010
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene [2C]	A	0.500	0.501	97690.98	97947.18		0.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L14010-CCV3
Injection Date: 12/12/10
Calibration Date: 12/11/10 13:10
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: A101114-0
Injection Time: 08:50
Calibration: 0L14012
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC	A	0.0400	0.0446	6174518	6889550		11.6	20
beta-BHC	A	0.0400	0.0434	2043764	2216500		8.5	20
gamma-BHC (Lindane)	A	0.0400	0.0445	5623163	6262075		11.4	20
delta-BHC	A	0.0400	0.0452	4862313	5495450		13.0	20
alpha-Chlordane	A	0.0400	0.0440	1126018	1239274		10.1	20
gamma-Chlordane	A	0.0400	0.0441	1163097	1281581		10.2	20
4,4'-DDD	A	0.0400	0.0349	465732.7	406261.5		-12.8	20
4,4'-DDE	A	0.0400	0.0477	1231401	1467972		19.2	20
4,4'-DDT	A	0.0400	0.0400	587902.1	588575.3		0.1	20
Aldrin	A	0.0400	0.0428	5837263	6249775		7.1	20
Dieldrin	A	0.0400	0.0445	1087789	1210812		11.3	20
Endosulfan II	A	0.0400	0.0445	777797.9	864952.8		11.2	20
Endosulfan Sulfate	A	0.0400	0.0426	628453.9	669268.8		6.5	20
Endrin	A	0.0400	0.0446	943651.5	1051975		11.5	20
Endrin Aldehyde	A	0.0400	0.0426	551696.7	587185.3		6.4	20
Endrin Ketone	A	0.0400	0.0429	731712.5	784374.5		7.2	20
Heptachlor	A	0.0400	0.0446	5997126	6686275		11.5	20
Heptachlor Epoxide	A	0.0400	0.0436	4970841	5422175		9.1	20
Methoxychlor	A	0.0400	0.0364	233645.9	212837.3		-8.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14010-CCV3
Lab File ID: B101114-0
Injection Date: 12/12/10
Injection Time: 08:50
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14010
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC [2C]	A	0.0400	0.0432	1811214	1955492		8.0	20
beta-BHC [2C]	A	0.0400	0.0420	584527.3	614105.3		5.1	20
gamma-BHC (Lindane) [2C]	A	0.0400	0.0431	1579722	1700533		7.6	20
delta-BHC [2C]	A	0.0400	0.0433	1244249	1345375		8.1	20
alpha-Chlordane [2C]	A	0.0400	0.0425	1195885	1270723		6.3	20
gamma-Chlordane [2C]	A	0.0400	0.0432	1241697	1339986		7.9	20
4,4'-DDD [2C]	A	0.0400	0.0401	732258	733336.5		0.1	20
4,4'-DDE [2C]	A	0.0400	0.0413	968695.6	1000943		3.3	20
4,4'-DDT [2C]	A	0.0400	0.0424	736276.3	780375.8		6.0	20
Aldrin [2C]	A	0.0400	0.0426	1510877	1610869		6.6	20
Dieldrin [2C]	A	0.0400	0.0434	1165084	1263696		8.5	20
Endosulfan I	A	0.0400	0.0477	1231401	1467972		19.2	20
Endosulfan I [2C]	A	0.0400	0.0424	1132095	1200936		6.1	20
Endosulfan II [2C]	A	0.0400	0.0426	861752.2	917927.5		6.5	20
Endosulfan Sulfate [2C]	A	0.0400	0.0428	729305.4	780938.3		7.1	20
Endrin [2C]	Q	0.0400	0.0470	969407.7	1042728		17.5	20
Endrin Aldehyde [2C]	A	0.0400	0.0426	631530.6	671847.5		6.4	20
Endrin Ketone [2C]	A	0.0400	0.0426	826025.1	879046.3		6.4	20
Heptachlor [2C]	A	0.0400	0.0433	1619613	1751318		8.1	20
Heptachlor Epoxide [2C]	A	0.0400	0.0427	1288638	1375296		6.7	20
Methoxychlor [2C]	A	0.0400	0.0410	337313.4	346058.8		2.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14010-CCV4
Lab File ID: A101115-0
Injection Date: 12/12/10
Injection Time: 09:26
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14010
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.473	73334.69	72757.04		-0.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L14010-CCV4
Injection Date: 12/12/10
Calibration Date: 12/11/10 13:10
Sequence: 0L14010

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: B101115-0
Injection Time: 09:26
Calibration: 0L14012
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene [2C]	A	0.500	0.472	97690.98	92130.5		-5.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV1
Lab File ID: A101119-0
Injection Date: 12/12/10
Injection Time: 11:50
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC	A	0.0400	0.0464	6174518	7156550		15.9	20
beta-BHC	A	0.0400	0.0428	2043764	2188750		7.1	20
gamma-BHC (Lindane)	A	0.0400	0.0457	5623163	6424925		14.3	20
delta-BHC	A	0.0400	0.0449	4862313	5461975		12.3	20
alpha-Chlordane	A	0.0400	0.0440	1126018	1239188		10.1	20
gamma-Chlordane	A	0.0400	0.0440	1163097	1280579		10.1	20
4,4'-DDD	A	0.0400	0.0327	465732.7	381110.3		-18.2	20
4,4'-DDE	A	0.0400	0.0482	1231401	1485962		20.7	20 *
4,4'-DDT	A	0.0400	0.0395	587902.1	580890.8		-1.2	20
Aldrin	A	0.0400	0.0442	5837263	6447250		10.4	20
Dieldrin	A	0.0400	0.0449	1087789	1222319		12.4	20
Endosulfan I	A	0.0400	0.0482	1231401	1485962		20.7	20 *
Endosulfan II	A	0.0400	0.0445	777797.9	865054.5		11.2	20
Endosulfan Sulfate	A	0.0400	0.0428	628453.9	671888.8		6.9	20
Endrin	A	0.0400	0.0444	943651.5	1047911		11.0	20
Endrin Aldehyde	A	0.0400	0.0438	551696.7	603783		9.4	20
Endrin Ketone	A	0.0400	0.0430	731712.5	786274		7.5	20
Heptachlor	A	0.0400	0.0459	5997126	6881500		14.7	20
Heptachlor Epoxide	A	0.0400	0.0437	4970841	5431875		9.3	20
Methoxychlor	A	0.0400	0.0350	233645.9	204174.8		-12.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV1
Lab File ID: B101119-0
Injection Date: 12/12/10
Injection Time: 11:50
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC [2C]	A	0.0400	0.0435	1811214	1970795		8.8	20
beta-BHC [2C]	A	0.0400	0.0408	584527.3	596154		2.0	20
gamma-BHC (Lindane) [2C]	A	0.0400	0.0432	1579722	1704939		7.9	20
delta-BHC [2C]	A	0.0400	0.0413	1244249	1285252		3.3	20
alpha-Chlordane [2C]	A	0.0400	0.0414	1195885	1238709		3.6	20
gamma-Chlordane [2C]	A	0.0400	0.0422	1241697	1310339		5.5	20
4,4'-DDD [2C]	A	0.0400	0.0383	732258	702015.5		-4.1	20
4,4'-DDE [2C]	A	0.0400	0.0396	968695.6	957965.5		-1.1	20
4,4'-DDT [2C]	A	0.0400	0.0404	736276.3	744004.8		1.0	20
Aldrin [2C]	A	0.0400	0.0428	1510877	1615887		7.0	20
Dieldrin [2C]	A	0.0400	0.0426	1165084	1239877		6.4	20
Endosulfan I [2C]	A	0.0400	0.0414	1132095	1172808		3.6	20
Endosulfan II [2C]	A	0.0400	0.0417	861752.2	898893		4.3	20
Endosulfan Sulfate [2C]	A	0.0400	0.0412	729305.4	751996		3.1	20
Endrin [2C]	Q	0.0400	0.0455	969407.7	1008493		13.8	20
Endrin Aldehyde [2C]	A	0.0400	0.0416	631530.6	657319.5		4.1	20
Endrin Ketone [2C]	A	0.0400	0.0417	826025.1	862079.8		4.4	20
Heptachlor [2C]	A	0.0400	0.0435	1619613	1761719		8.8	20
Heptachlor Epoxide [2C]	A	0.0400	0.0416	1288638	1340435		4.0	20
Methoxychlor [2C]	A	0.0400	0.0392	337313.4	330712		-2.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L14044-CCV2
Injection Date: 12/12/10
Calibration Date: 12/11/10 13:10
Sequence: 0L14044

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: A101120-0
Injection Time: 12:26
Calibration: 0L14012
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.490	73334.69	75772.74		3.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV2
Lab File ID: B101120-0
Injection Date: 12/12/10
Injection Time: 12:26
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene [2C]	A	0.500	0.520	97690.98	101628		4.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV3
Lab File ID: A101132-0
Injection Date: 12/12/10
Injection Time: 19:39
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC	A	0.0400	0.0374	6174518	5780850		-6.4	20
beta-BHC	A	0.0400	0.0368	2043764	1878950		-8.1	20
gamma-BHC (Lindane)	A	0.0400	0.0371	5623163	5212400		-7.3	20
delta-BHC	A	0.0400	0.0379	4862313	4602825		-5.3	20
alpha-Chlordane	A	0.0400	0.0367	1126018	1033993		-8.2	20
gamma-Chlordane	A	0.0400	0.0369	1163097	1071895		-7.8	20
4,4'-DDD	A	0.0400	0.0360	465732.7	419180.3		-10.0	20
4,4'-DDE	A	0.0400	0.0370	1231401	1138156		-7.6	20
4,4'-DDT	A	0.0400	0.0394	587902.1	579515		-1.4	20
Aldrin	A	0.0400	0.0359	5837263	5243625		-10.2	20
Dieldrin	A	0.0400	0.0372	1087789	1012772		-6.9	20
Endosulfan II	A	0.0400	0.0400	777797.9	778304.5		0.07	20
Endosulfan Sulfate	A	0.0400	0.0414	628453.9	650652.8		3.5	20
Endrin	A	0.0400	0.0367	943651.5	866594.8		-8.2	20
Endrin Aldehyde	A	0.0400	0.0406	551696.7	560070.3		1.5	20
Endrin Ketone	A	0.0400	0.0423	731712.5	773917.8		5.8	20
Heptachlor	A	0.0400	0.0367	5997126	5503150		-8.2	20
Heptachlor Epoxide	A	0.0400	0.0364	4970841	4517350		-9.1	20
Methoxychlor	A	0.0400	0.0411	233645.9	239968		2.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV3
Lab File ID: B101132-0
Injection Date: 12/12/10
Injection Time: 19:39
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC [2C]	A	0.0400	0.0396	1811214	1791321		-1.1	20
beta-BHC [2C]	A	0.0400	0.0383	584527.3	559181.5		-4.3	20
gamma-BHC (Lindane) [2C]	A	0.0400	0.0389	1579722	1535468		-2.8	20
delta-BHC [2C]	A	0.0400	0.0395	1244249	1228345		-1.3	20
alpha-Chlordane [2C]	A	0.0400	0.0394	1195885	1177563		-1.5	20
gamma-Chlordane [2C]	A	0.0400	0.0393	1241697	1221428		-1.6	20
4,4'-DDD [2C]	A	0.0400	0.0416	732258	761688.8		4.0	20
4,4'-DDE [2C]	A	0.0400	0.0394	968695.6	955167.3		-1.4	20
4,4'-DDT [2C]	A	0.0400	0.0419	736276.3	771639.8		4.8	20
Aldrin [2C]	A	0.0400	0.0397	1510877	1498227		-0.8	20
Dieldrin [2C]	A	0.0400	0.0404	1165084	1175527		0.9	20
Endosulfan I	A	0.0400	0.0370	1231401	1138156		-7.6	20
Endosulfan I [2C]	A	0.0400	0.0399	1132095	1129665		-0.2	20
Endosulfan II [2C]	A	0.0400	0.0430	861752.2	925848.3		7.4	20
Endosulfan Sulfate [2C]	A	0.0400	0.0449	729305.4	818011.8		12.2	20
Endrin [2C]	Q	0.0400	0.0430	969407.7	952122		7.5	20
Endrin Aldehyde [2C]	A	0.0400	0.0438	631530.6	690898.3		9.4	20
Endrin Ketone [2C]	A	0.0400	0.0453	826025.1	934564		13.1	20
Heptachlor [2C]	A	0.0400	0.0394	1619613	1594029		-1.6	20
Heptachlor Epoxide [2C]	A	0.0400	0.0393	1288638	1267626		-1.6	20
Methoxychlor [2C]	A	0.0400	0.0449	337313.4	378436.5		12.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV4
Lab File ID: A101133-0
Injection Date: 12/12/10
Injection Time: 20:15
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.434	73334.69	66019.22		-10.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV4
Lab File ID: B101133-0
Injection Date: 12/12/10
Injection Time: 20:15
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene [2C]	A	0.500	0.493	97690.98	96340.06		-1.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV5
Lab File ID: A101144-0
Injection Date: 12/13/10
Injection Time: 02:52
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC	A	0.0400	0.0360	6174518	5560700		-9.9	20
beta-BHC	A	0.0400	0.0365	2043764	1864425		-8.8	20
gamma-BHC (Lindane)	A	0.0400	0.0356	5623163	5008500		-10.9	20
delta-BHC	A	0.0400	0.0364	4862313	4427525		-8.9	20
alpha-Chlordane	A	0.0400	0.0344	1126018	967551.8		-14.1	20
gamma-Chlordane	A	0.0400	0.0348	1163097	1011977		-13.0	20
4,4'-DDD	A	0.0400	0.0444	465732.7	516702.3		10.9	20
4,4'-DDE	A	0.0400	0.0322	1231401	991508.5		-19.5	20
4,4'-DDT	A	0.0400	0.0388	587902.1	570102.3		-3.0	20
Aldrin	A	0.0400	0.0339	5837263	4949575		-15.2	20
Dieldrin	A	0.0400	0.0351	1087789	955034.8		-12.2	20
Endosulfan II	A	0.0400	0.0369	777797.9	718421.5		-7.6	20
Endosulfan Sulfate	A	0.0400	0.0386	628453.9	605853.3		-3.6	20
Endrin	A	0.0400	0.0344	943651.5	811862.3		-14.0	20
Endrin Aldehyde	A	0.0400	0.0378	551696.7	521186		-5.5	20
Endrin Ketone	A	0.0400	0.0379	731712.5	693009		-5.3	20
Heptachlor	A	0.0400	0.0340	5997126	5094025		-15.1	20
Heptachlor Epoxide	A	0.0400	0.0343	4970841	4260125		-14.3	20
Methoxychlor	A	0.0400	0.0462	233645.9	269901		15.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV5
Lab File ID: B101144-0
Injection Date: 12/13/10
Injection Time: 02:52
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
alpha-BHC [2C]	A	0.0400	0.0385	1811214	1745217		-3.6	20
beta-BHC [2C]	A	0.0400	0.0381	584527.3	556162		-4.9	20
gamma-BHC (Lindane) [2C]	A	0.0400	0.0379	1579722	1495989		-5.3	20
delta-BHC [2C]	A	0.0400	0.0392	1244249	1218048		-2.1	20
alpha-Chlordane [2C]	A	0.0400	0.0379	1195885	1134198		-5.2	20
gamma-Chlordane [2C]	A	0.0400	0.0382	1241697	1185456		-4.5	20
4,4'-DDD [2C]	A	0.0400	0.0417	732258	763392.8		4.3	20
4,4'-DDE [2C]	A	0.0400	0.0389	968695.6	942212.3		-2.7	20
4,4'-DDT [2C]	A	0.0400	0.0382	736276.3	702228.5		-4.6	20
Aldrin [2C]	A	0.0400	0.0382	1510877	1443192		-4.5	20
Dieldrin [2C]	A	0.0400	0.0388	1165084	1129118		-3.1	20
Endosulfan I	A	0.0400	0.0322	1231401	991508.5		-19.5	20
Endosulfan I [2C]	A	0.0400	0.0376	1132095	1064101		-6.0	20
Endosulfan II [2C]	A	0.0400	0.0400	861752.2	860694.8		-0.1	20
Endosulfan Sulfate [2C]	A	0.0400	0.0419	729305.4	763290.3		4.7	20
Endrin [2C]	Q	0.0400	0.0415	969407.7	917570.5		3.8	20
Endrin Aldehyde [2C]	A	0.0400	0.0410	631530.6	647730.8		2.6	20
Endrin Ketone [2C]	A	0.0400	0.0421	826025.1	868610.8		5.2	20
Heptachlor [2C]	A	0.0400	0.0369	1619613	1492744		-7.8	20
Heptachlor Epoxide [2C]	A	0.0400	0.0381	1288638	1228427		-4.7	20
Methoxychlor [2C]	A	0.0400	0.0421	337313.4	354989		5.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV6
Lab File ID: A101145-0
Injection Date: 12/13/10
Injection Time: 03:28
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.428	73334.69	64816.94		-11.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV6
Lab File ID: A101145-0
Injection Date: 12/13/10
Injection Time: 03:28
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene	A	0.500	0.428	73334.69	64816.94		-11.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8081A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L14044-CCV6
Lab File ID: B101145-0
Injection Date: 12/13/10
Injection Time: 03:28
Calibration Date: 12/11/10 13:10
Calibration: 0L14012
Sequence: 0L14044
Instrument ID: 199

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toxaphene [2C]	A	0.500	0.439	97690.98	85687.66		-12.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

STATEMENT OF DATA QUALIFICATIONS

Chlorinated Herbicides by EPA Method 8151A

Qualification: The MS/MSD recoveries are above the control windows on the confirmational column. The primary column is within control limits. The RPD is also within control limits. No qualification is necessary.

Analysis: USEPA-8151A

Sample/Analyte:		
1011352-01	NTC03GW0113	Dicamba
1011352-01	NTC03GW0113	MCPP

Qualification: The RPD between the MS and MSD results exceeded the control limit on the confirmation column. The RPD on the primary column was within the control limit.

Analysis: USEPA-8151A

Sample/Analyte:		
1011352-01	NTC03GW0113	2,4-D

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-8151A

Sample/Analyte:		
1011352-02	NTC03GW0213	Dichloroprop [2C]
1011356-02	NTC03GW0413	2,4,5-T [2C]
1011356-02	NTC03GW0413	2,4,5-TP (Silvex) [2C]
1011356-03	NTC03GW0513	2,4,5-T [2C]
1011356-05	NTCFD111610-01	2,4,5-T [2C]

Qualification: The RPD between the MS and MSD results exceeded the control limit. The non-spiked sample result is considered estimated.

Analysis: USEPA-8151A

Sample/Analyte:		
1011352-01	NTC03GW0113	Dinoseb

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.067ug/L..

Analysis: USEPA-8151A

Sample/Analyte:		
1011356-02	NTC03GW0413	2,4,5-TP (Silvex)

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.099ug/L..

Analysis: USEPA-8151A

Sample/Analyte:		
1011356-05	NTCFD111610-01	2,4,5-T

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.1ug/L..

Analysis: USEPA-8151A

Sample/Analyte:		
1011356-03	NTC03GW0513	2,4,5-T

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.29ug/L..

Analysis: USEPA-8151A

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STATEMENT OF DATA QUALIFICATIONS

Chlorinated Herbicides by EPA Method 8151A (Continued)

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.29ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011352-01 NTC03GW0113 2,4-D

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.39ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011356-02 NTC03GW0413 2,4-D

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 0.73ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011352-02 NTC03GW0213 Dichloroprop

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 160ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011356-01 NTC03GW0313 MCPA

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 79ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011356-03 NTC03GW0513 MCPA

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: 84ug/L..

Analysis: USEPA-8151A

Sample/Analyte: 1011356-05 NTCFD111610-01 MCPA

Qualification: The RPD between the detected values from the primary and confirmation analyses exceeded 40%. The lower concentration result has been reported. The higher concentration result was: above calibration range..

Analysis: USEPA-8151A

Sample/Analyte: 1011356-01 NTC03GW0313 MCPP

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Chlorinated Herbicides by EPA Method 8151A

QC Batch: 1012718 8151A Extraction/USEPA-8151A

Method Blank
Unit: ug/L

Analyzed: 11/30/2010 By: DJM
Analytical Batch: 0L02041

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2,4-D			2.0 U					2.0	0.053
2,4-D			2.0 U					2.0	0.053
2,4,5-T			**0.019 J**					0.20	0.0088
2,4,5-T			**0.029 J**					0.20	0.0088
2,4,5-TP (Silvex)			**0.044 J**					0.20	0.0073
2,4,5-TP (Silvex)			**0.022 J**					0.20	0.0073
2,4-DB			2.0 U					2.0	0.24
2,4-DB			2.0 U					2.0	0.24
Dalapon			2.0 U					2.0	0.12
Dalapon			2.0 U					2.0	0.12
Dicamba			0.20 U					0.20	0.057
Dicamba			0.20 U					0.20	0.057
Dichloroprop			**0.63 J**					2.0	0.35
Dichloroprop			**0.42 J**					2.0	0.35
Dinoseb			1.0 U					1.0	0.084
Dinoseb			1.0 U					1.0	0.084
MCPA			200 U					200	11
MCPA			200 U					200	11
MCPP			200 U					200	63
MCPP			200 U					200	63
Surrogates:									
2,4-Dichlorophenylacetic Acid				*119*	*33-153*				
2,4-Dichlorophenylacetic Acid				*93*	*33-153*				

Laboratory Control Sample
Unit: ug/L

Analyzed: 11/30/2010 By: DJM
Analytical Batch: 0L02041

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2,4-D		2.50	**3.20**	128	66-148		20	2.0	0.053
2,4-D		2.50	**2.13**	85	66-148		20	2.0	0.053
2,4,5-T		0.250	**0.282**	113	55-155		20	0.20	0.0088
2,4,5-T		0.250	**0.202**	81	55-155		20	0.20	0.0088
2,4,5-TP (Silvex)		0.250	**0.310**	124	50-152		20	0.20	0.0073
2,4,5-TP (Silvex)		0.250	**0.218**	87	50-152		20	0.20	0.0073
2,4-DB		2.50	**2.70**	108	47-160		20	2.0	0.24
2,4-DB		2.50	**2.05**	82	47-160		20	2.0	0.24
Dalapon		6.30	**7.44**	118	40-158		20	2.0	0.12
Dalapon		6.30	**5.64**	89	40-158		20	2.0	0.12

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Chlorinated Herbicides by EPA Method 8151A (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
QC Batch: 1012718 (Continued) 8151A Extraction/USEPA-8151A									
Laboratory Control Sample (Continued)					Analyzed:		11/30/2010	By: DJM	
Unit: ug/L					Analytical Batch:		0L02041		
Dicamba		0.250	**0.928**	**371**	47-148		20	0.20	0.057
Dicamba		0.250	**0.242**	97	47-148		20	0.20	0.057
Dichloroprop		2.50	**2.85**	114	69-152		20	2.0	0.35
Dichloroprop		2.50	**2.43**	97	69-152		20	2.0	0.35
Dinoseb		1.26	**0.316 J**	25	10-149		20	1.0	0.084
Dinoseb		1.26	**0.230 J**	18	10-149		20	1.0	0.084
MCPA		250	**323**	129	60-137		20	200	11
MCPA		250	**199 J**	80	60-137		20	200	11
MCPP		250	**5000000000**	**0**	59-133		20	200	63
MCPP		250	**203**	81	59-133		20	200	63
Surrogates:									
2,4-Dichlorophenylacetic Acid				*117*	*33-153*				
2,4-Dichlorophenylacetic Acid				*88*	*33-153*				
Matrix Spike 1011352-01 NTC03GW0113					Analyzed:		11/30/2010	By: DJM	
Unit: ug/L					Analytical Batch:		0L02041		
2,4-D	0.288 J	2.53	**3.82**	140	29-173		20	2.0	0.053
2,4-D	0.180 J	2.53	**2.55**	94	29-173		20	2.0	0.053
2,4,5-T	0.20 U	0.253	**0.325**	129	36-164		20	0.20	0.0088
2,4,5-T	0.20 U	0.253	**0.223**	88	36-164		20	0.20	0.0088
2,4,5-TP (Silvex)	0.20 U	0.253	**0.363**	144	25-152		20	0.20	0.0073
2,4,5-TP (Silvex)	0.20 U	0.253	**0.263**	104	25-152		20	0.20	0.0073
2,4-DB	2.0 U	2.53	**3.14**	124	45-130		20	2.0	0.24
2,4-DB	2.0 U	2.53	**2.60**	103	45-130		20	2.0	0.24
Dalapon	2.0 U	6.36	**8.15**	128	44-161		20	2.0	0.12
Dalapon	2.0 U	6.36	**6.27**	99	44-161		20	2.0	0.12
Dicamba	0.20 U	0.253	**1.20**	**475**	52-145		20	0.20	0.057
Dicamba	0.20 U	0.253	**0.301**	119	52-145		20	0.20	0.057
Dichloroprop	2.0 U	2.53	**3.29**	130	59-160		20	2.0	0.35
Dichloroprop	2.0 U	2.53	**2.92**	116	59-160		20	2.0	0.35
Dinoseb	1.0 U	1.27	**0.598 J**	47	9-163		20	1.0	0.084
Dinoseb	1.0 U	1.27	**0.513 J**	40	9-163		20	1.0	0.084
MCPA	200 U	253	**386**	153	53-155		20	200	11
MCPA	200 U	253	**246**	98	53-155		20	200	11
MCPP	200 U	253	**5050000000**	**0**	64-127		20	200	63
MCPP	200 U	253	**258**	102	64-127		20	200	63

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Chlorinated Herbicides by EPA Method 8151A (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
QC Batch: 1012718 (Continued) 8151A Extraction/USEPA-8151A									
Matrix Spike (Continued) 1011352-01 NTC03GW0113					Analyzed:	11/30/2010	By: DJM		
Unit: ug/L					Analytical Batch:	0L02041			
Surrogates:									
2,4-Dichlorophenylacetic Acid				*136*	*33-153*				
2,4-Dichlorophenylacetic Acid				*106*	*33-153*				
Matrix Spike Duplicate 1011352-01 NTC03GW0113					Analyzed:	11/30/2010	By: DJM		
Unit: ug/L					Analytical Batch:	0L02041			
2,4-D	0.288 J	2.55	**3.06**	109	29-173	**22**	20	2.0	0.053
2,4-D	0.180 J	2.55	**2.32**	84	29-173	9	20	2.0	0.053
2,4,5-T	0.20 U	0.255	**0.291**	114	36-164	11	20	0.20	0.0088
2,4,5-T	0.20 U	0.255	**0.202**	79	36-164	10	20	0.20	0.0088
2,4,5-TP (Silvex)	0.20 U	0.255	**0.308**	121	25-152	16	20	0.20	0.0073
2,4,5-TP (Silvex)	0.20 U	0.255	**0.228**	89	25-152	14	20	0.20	0.0073
2,4-DB	2.0 U	2.55	**2.70**	106	45-130	15	20	2.0	0.24
2,4-DB	2.0 U	2.55	**2.38**	93	45-130	9	20	2.0	0.24
Dalapon	2.0 U	6.43	**7.42**	115	44-161	9	20	2.0	0.12
Dalapon	2.0 U	6.43	**5.55**	86	44-161	12	20	2.0	0.12
Dicamba	0.20 U	0.255	**1.03**	**404**	52-145	15	20	0.20	0.057
Dicamba	0.20 U	0.255	**0.286**	112	52-145	5	20	0.20	0.057
Dichloroprop	2.0 U	2.55	**2.86**	112	59-160	14	20	2.0	0.35
Dichloroprop	2.0 U	2.55	**2.62**	103	59-160	11	20	2.0	0.35
Dinoseb	1.0 U	1.28	**1.10**	86	9-163	**59**	20	1.0	0.084
Dinoseb	1.0 U	1.28	**0.986 J**	77	9-163	**63**	20	1.0	0.084
MCPA	200 U	255	**327**	128	53-155	17	20	200	11
MCPA	200 U	255	**214**	84	53-155	14	20	200	11
MCPP	200 U	255	**5100000000**	**0**	64-127	1	20	200	63
MCPP	200 U	255	**233**	91	64-127	10	20	200	63
Surrogates:									
2,4-Dichlorophenylacetic Acid				*115*	*33-153*				
2,4-Dichlorophenylacetic Acid				*96*	*33-153*				

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HOLDING TIME SUMMARY
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Method: Chlorinated Herbicides by EPA Method 8151A

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC03GW0113	11/15/10	11/16/10		11/22/10	7	7	11/30/10	8	40	
NTC03GW0213	11/15/10	11/16/10		11/22/10	7	7	11/30/10	8	40	
NTC03GW0313	11/16/10	11/17/10		11/22/10	6	7	11/30/10	8	40	
NTC03GW0413	11/16/10	11/17/10		11/22/10	6	7	11/30/10	8	40	
NTC03GW0513	11/16/10	11/17/10		11/22/10	6	7	11/30/10	8	40	
NTC03GW0613	11/16/10	11/17/10		11/22/10	6	7	11/30/10	8	40	
NTCFD111610-01	11/16/10	11/17/10		11/22/10	6	7	11/30/10	8	40	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L02041

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L03010
Instrument: 222

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Cal Standard (0L02041-CAL1)		**Lab File ID: nov30a015-0**		**Analyzed: 11/30/10 14:00**			
2,4-Dichlorophenylacetic Acid	11.80	11.80	0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	NA	NA	
Cal Standard (0L02041-CAL2)		**Lab File ID: nov30a016-0**		**Analyzed: 11/30/10 14:24**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	NA	NA	
Cal Standard (0L02041-CAL3)		**Lab File ID: nov30a017-0**		**Analyzed: 11/30/10 14:49**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	NA	NA	
Cal Standard (0L02041-CAL4)		**Lab File ID: nov30a018-0**		**Analyzed: 11/30/10 15:13**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	NA	NA	
Cal Standard (0L02041-CAL5)		**Lab File ID: nov30a019-0**		**Analyzed: 11/30/10 15:37**			
2,4-Dichlorophenylacetic Acid	11.80	11.80	0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	NA	NA	
Cal Standard (0L02041-CAL6)		**Lab File ID: nov30a020-0**		**Analyzed: 11/30/10 16:02**			
2,4-Dichlorophenylacetic Acid	11.80	11.80	0.01	+/-1.0	NA	NA	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	NA	NA	
Secondary Cal Check (0L02041-SCV1)		**Lab File ID: nov30a021-0**		**Analyzed: 11/30/10 16:26**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	101	75 - 125	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	101	75 - 125	
Matrix Spike (1012718-MS1)		**Lab File ID: nov30a022-0**		**Analyzed: 11/30/10 16:51**			
2,4-Dichlorophenylacetic Acid	11.80	11.80	0.01	+/-1.0	136	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	106	33 - 153	
NTCFD111610-01 (1011356-05)		**Lab File ID: nov30a023-0**		**Analyzed: 11/30/10 17:15**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	128	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	94	33 - 153	
NTC03GW0613 (1011356-04)		**Lab File ID: nov30a024-0**		**Analyzed: 11/30/10 17:39**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	135	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	98	33 - 153	
NTC03GW0513 (1011356-03)		**Lab File ID: nov30a025-0**		**Analyzed: 11/30/10 18:04**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	118	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	95	33 - 153	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L02041

SDG: 1011352
Project: Naval Station Great Lakes
Calibration: 0L03010
Instrument: 222

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC03GW0413 (1011356-02)		**Lab File ID: nov30a026-0**		**Analyzed: 11/30/10 18:28**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	121	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	96	33 - 153	
NTC03GW0313 (1011356-01)		**Lab File ID: nov30a027-0**		**Analyzed: 11/30/10 18:53**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	122	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	100	33 - 153	
NTC03GW0213 (1011352-02)		**Lab File ID: nov30a028-0**		**Analyzed: 11/30/10 19:17**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	135	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.06	11.06	0.00	+/-1.0	97	33 - 153	
NTC03GW0113 (1011352-01)		**Lab File ID: nov30a029-0**		**Analyzed: 11/30/10 19:42**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	125	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	100	33 - 153	
LCS (1012718-BS1)		**Lab File ID: nov30a030-0**		**Analyzed: 11/30/10 20:06**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	117	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	88	33 - 153	
Blank (1012718-BLK1)		**Lab File ID: nov30a031-0**		**Analyzed: 11/30/10 20:30**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	119	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	93	33 - 153	
Calibration Check (0L02041-CCV1)		**Lab File ID: nov30a032-0**		**Analyzed: 11/30/10 20:55**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	110	85 - 115	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	102	85 - 115	
Matrix Spike Dup (1012718-MSD1)		**Lab File ID: nov30a033-0**		**Analyzed: 11/30/10 21:19**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	115	33 - 153	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	96	33 - 153	
Calibration Check (0L02041-CCV2)		**Lab File ID: nov30a034-0**		**Analyzed: 11/30/10 21:44**			
2,4-Dichlorophenylacetic Acid	11.79	11.80	-0.01	+/-1.0	105	85 - 115	
2,4-Dichlorophenylacetic Acid [2C]	11.05	11.06	-0.01	+/-1.0	96	85 - 115	

INITIAL CALIBRATION DATA
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L03010

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/30/10 12:06

Instrument: 222

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
2,4-D	0.0625	2697312	0.125	2662568	0.25	2618020	0.5	3195198	1	3779535	2	3691145
2,4,5-T	0.00625	1.13352E+07	0.0125	1.065992E+07	0.025	1.04394E+07	0.05	1.211958E+07	0.1	1.416495E+07	0.2	1.316138E+07
2,4,5-TP (Silvex)	0.00625	1.269376E+07	0.0125	1.292536E+07	0.025	1.22762E+07	0.05	1.376246E+07	0.1	1.576165E+07	0.2	1.474485E+07
2,4-DB	0.0625	1905824	0.125	1656496	0.25	1372100	0.5	1584696	1	1975299	2	1925235
Dalapon	0.156	2900346	0.312	2914327	0.625	2874408	1.25	3406165	2.5	3922785	5	4112136
Dicamba	0.00625	1.056576E+07	0.0125	1.035816E+07	0.025	9621840	0.05	1.078578E+07	0.1	1.218735E+07	0.2	1.164558E+07
Dichloroprop	0.0625	3070080	0.125	2980152	0.25	2903740	0.5	3428064	1	4011685	2	3981274
Dinoseb	0.0312	9302885	0.0625	8937872	0.125	8478224	0.25	9628724	0.5	1.112019E+07	1	1.007758E+07
MCPA	6.25	18447.52	12.5	17573.6	25	16286.28	50	18984.7	100	22560.48	200	23375.88
MCPP	6.25	16619.04	12.5	14306.88	25	12592.6	50	13683	100	15486.28	200	15539.16
2,4-D [2C]	0.0625	790768	0.125	715448	0.25	592008	0.5	660240	1	568673	2	520798
2,4,5-T [2C]	0.00625	2499200	0.0125	2445440	0.025	2043240	0.05	2268320	0.1	2079810	0.2	1708895
2,4,5-TP (Silvex) [2C]	0.00625	3040320	0.0125	2976800	0.025	2513160	0.05	2656700	0.1	2409140	0.2	1993580
2,4-DB [2C]	0.0625	297920	0.125	299296	0.25	256120	0.5	294890	1	279540	2	236865.5
Dalapon [2C]	0.156	910128.2	0.312	879717.9	0.625	714360	1.25	850886.4	2.5	883991.6	5	998610.4
Dicamba [2C]	0.00625	3644800	0.0125	3241760	0.025	2643160	0.05	2726880	0.1	2426970	0.2	2063835
Dichloroprop [2C]	0.0625	942432	0.125	808848	0.25	648808	0.5	673354	1	578617	2	534286.5
Dinoseb [2C]	0.0312	1479872	0.0625	1349456	0.125	1057960	0.25	1128820	0.5	972624	1	817469
MCPA [2C]	6.25	5834.72	12.5	5195.52	25	4241.48	50	5025.36	100	5480.27	200	~~13922.15~~
MCPP [2C]	6.25	4259.52	12.5	3633.04	25	3026.04	50	3398.72	100	3761.43	200	~~6871.74~~
2,4-Dichlorophenylacetic Acid	0.125	2808272	0.25	2780268	0.5	2741350	1	3276031	2	3848958	4	4026265
2,4-Dichlorophenylacetic Acid	0.125	866688	0.25	656080	0.5	559952	1	582917	2	542811.5	4	543845.8

INITIAL CALIBRATION DATA (Continued)
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L03010

SDG: 1011352

Project: Naval Station Great Lakes

Calibration Date: 11/30/10 12:06

Instrument: 222

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
2,4-D	3107296	17.06435	12.88	2.123135E-02			20	
2,4,5-T	1.198007E+07	12.22286	13.92	8.156386E-03			20	
2,4,5-TP (Silvex)	1.369405E+07	9.789409	13.54	1.815745E-02			20	
2,4-DB	1736608	13.71283	14.305	5.830711E-02			20	
Dalapon	3355028	16.48854	6.696667	7.428091E-02			20	
Dicamba	1.086075E+07	8.494815	12.02	1.652991E-02			20	
Dichloroprop	3395832	14.68923	12.55	1.336948E-02		0.9986463	0.99	
Dinoseb	9590913	9.696643	14.17333	3.024873E-02			20	
MCPA	19538.08	14.4389	12.25167	3.257787E-02			20	
MCPP	14704.49	9.91821	11.98	1.658511E-02			20	
2,4-D [2C]	641322.5	15.65851	12.14	3.845082E-03			20	
2,4,5-T [2C]	2174151	13.49815	13.13	0.0215033		0.9993497	0.99	
2,4,5-TP (Silvex) [2C]	2598283	14.91359	12.7	1.179275E-02			20	
2,4-DB [2C]	277438.6	9.269494	13.48	5.887622E-03			20	
Dalapon [2C]	872949.1	10.62061	6.106667	8.251954E-02			20	
Dicamba [2C]	2791234	20.38908	11.3	0.0132538		0.9996264	0.99	
Dichloroprop [2C]	697724.3	21.84119	11.77	1.451504E-02		0.9991674	0.99	
Dinoseb [2C]	1134367	21.52463	13.21	1.574801E-02		0.9991764	0.99	
MCPA [2C]	5155.47	11.56022	11.52	2.586837E-02			20	
MCPP [2C]	3615.75	12.60449	11.2	9.551524E-03			20	
2,4-Dichlorophenylacetic Acid	3246857	17.6199	11.795	4.936648E-02			20	
2,4-Dichlorophenylacetic Acid [2C]	625382.4	20.06391	11.05667	0.0448959		0.9997154	0.99	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L02041-SCV1
Sequence: 0L02041

SDG: 1011352
Project: Naval Station Great Lakes
Standard ID: 0050516
Calibration: 0L03010

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
2,4-D	0.500	0.505	101	75-125
2,4,5-T	0.0500	0.0503	101	75-125
2,4,5-TP (Silvex)	0.0500	0.0507	101	75-125
2,4-DB	0.500	0.443	89	75-125
Dalapon	1.26	1.28	102	75-125
Dicamba	0.0500	0.0501	100	75-125
Dichloroprop	0.500	0.471	94	75-125
Dinoseb	0.250	0.246	98	75-125
MCPA	50.0	48.6	97	75-125
MCPP	50.0	46.6	93	75-125
2,4-D [2C]	0.500	0.494	99	75-125
2,4,5-T [2C]	0.0500	0.0481	96	75-125
2,4,5-TP (Silvex) [2C]	0.0500	0.0502	100	75-125
2,4-DB [2C]	0.500	0.503	101	75-125
Dalapon [2C]	1.26	1.19	94	75-125
Dicamba [2C]	0.0500	0.0509	102	75-125
Dichloroprop [2C]	0.500	0.516	103	75-125
Dinoseb [2C]	0.250	0.251	100	75-125
MCPA [2C]	50.0	47.4	95	75-125
MCPP [2C]	50.0	46.0	92	75-125
2,4-Dichlorophenylacetic Acid	1.00	1.01	101	75-125
2,4-Dichlorophenylacetic Acid [2C]	1.00	1.01	101	75-125

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L02041-CCV1
Lab File ID: nov30b032-0
Injection Date: 11/30/10
Injection Time: 20:55
Calibration Date: 11/30/10 12:06
Calibration: 0L03010
Sequence: 0L02041
Instrument ID: 222

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-D [2C]	A	0.500	0.513	641322.5	657626		2.5	15
2,4,5-T [2C]	Q	0.0500	0.0518	2174151	2313000		3.6	15
2,4,5-TP (Silvex) [2C]	A	0.0500	0.0515	2598283	2675240		3.0	15
2,4-DB [2C]	A	0.500	0.548	277438.6	304078		9.6	15
Dalapon [2C]	A	1.25	1.17	872949.1	819986.4		-6.1	15
Dicamba [2C]	Q	0.0500	0.0522	2791234	2764820		4.4	15
Dichloroprop [2C]	Q	0.500	0.528	697724.3	665398		5.5	15
Dinoseb [2C]	Q	0.250	0.261	1134367	1121616		4.3	15
MCPA [2C]	A	50.0	47.7	5155.47	4918.28		-4.6	15
MCPP [2C]	A	50.0	45.8	3615.75	3314.52		-8.3	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L02041-CCV1
Injection Date: 11/30/10
Calibration Date: 11/30/10 12:06
Sequence: 0L02041

SDG: 1011352
Project: Naval Station Great Lakes
Lab File ID: nov30a032-0
Injection Time: 20:55
Calibration: 0L03010
Instrument ID: 222

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-D	A	0.500	0.564	3107296	3502054		12.7	15
2,4,5-T	A	0.0500	0.0572	1.198007E+07	1.37061E+07		14.4	15
2,4,5-TP (Silvex)	A	0.0500	0.0557	1.369405E+07	1.5268E+07		11.5	15
2,4-DB	A	0.500	0.539	1736608	1873426		7.9	15
Dalapon	A	1.25	1.34	3355028	3606384		7.5	15
Dicamba	A	0.0500	0.0528	1.086075E+07	1.147574E+07		5.7	15
Dichloroprop	Q	0.500	0.508	3395832	3761684		1.5	15
Dinoseb	A	0.250	0.280	9590913	1.075247E+07		12.1	15
MCPA	A	50.0	52.2	19538.08	20407.42		4.4	15
MCPP	A	50.0	49.4	14704.49	14537.04		-1.1	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L02041-CCV2
Lab File ID: nov30b034-0
Injection Date: 11/30/10
Injection Time: 21:44
Calibration Date: 11/30/10 12:06
Calibration: 0L03010
Sequence: 0L02041
Instrument ID: 222

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-D [2C]	A	0.500	0.478	641322.5	612502		-4.5	15
2,4,5-T [2C]	Q	0.0500	0.0478	2174151	2144800		-4.4	15
2,4,5-TP (Silvex) [2C]	A	0.0500	0.0484	2598283	2513060		-3.3	15
2,4-DB [2C]	A	0.500	0.497	277438.6	275850		-0.6	15
Dalapon [2C]	A	1.25	1.10	872949.1	766075.2		-12.2	15
Dicamba [2C]	Q	0.0500	0.0492	2791234	2620800		-1.6	15
Dichloroprop [2C]	Q	0.500	0.494	697724.3	626974		-1.3	15
Dinoseb [2C]	Q	0.250	0.241	1134367	1045808		-3.6	15
MCPA [2C]	A	50.0	43.7	5155.47	4509.68		-12.5	15
MCPP [2C]	A	50.0	42.6	3615.75	3081.2		-14.8	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8151A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L02041-CCV2
Lab File ID: nov30a034-0
Injection Date: 11/30/10
Injection Time: 21:44
Calibration Date: 11/30/10 12:06
Calibration: 0L03010
Sequence: 0L02041
Instrument ID: 222

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-D	A	0.500	0.533	3107296	3315128		6.7	15
2,4,5-T	A	0.0500	0.0533	1.198007E+07	1.277242E+07		6.6	15
2,4,5-TP (Silvex)	A	0.0500	0.0525	1.369405E+07	1.436756E+07		4.9	15
2,4-DB	A	0.500	0.496	1736608	1723044		-0.8	15
Dalapon	A	1.25	1.31	3355028	3527258		5.1	15
Dicamba	A	0.0500	0.0514	1.086075E+07	1.116354E+07		2.8	15
Dichloroprop	Q	0.500	0.482	3395832	3553456		-3.6	15
Dinoseb	A	0.250	0.263	9590913	1.009108E+07		5.2	15
MCPA	A	50.0	50.4	19538.08	19707.8		0.9	15
MCPP	A	50.0	47.5	14704.49	13971.68		-5.0	15

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

DUAL COLUMN CONFIRMATION CHECK
USEPA-8151A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1011352-01
File ID: nov30a029-0
Sampled: 11/15/10 16:00
Prepared: 11/22/10 07:45
Analyzed: 11/30/10 19:42
Solids: 0.00
Preparation: 8151A Extraction
QC Batch: 1012718
Sequence: 0L02041
Instrument: 222
GC Column(1):
GC Column(2): RTX CLP Pest2

Analyte	Col.	RT	EXP RT	Diff.	Area	Conc.	RPD
2,4-D	1	12.9	12.88	0.02	175387	0.288	
	* 2	12.15	12.14	0.01	22625	0.180	46.2

* Column used for quantitation

DUAL COLUMN CONFIRMATION CHECK
USEPA-8151A

NTC03GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/16/10 15:50
Solids: 0.00
QC Batch: 1012718
GC Column(1):

Laboratory ID: 1011356-01
Prepared: 11/22/10 07:45
Preparation: 8151A Extraction
Sequence: 0L02041
GC Column(2): RTX CLP Pest2

SDG: 1011352
Project: Naval Station Great Lakes
File ID: nov30a027-0
Analyzed: 11/30/10 18:53
Instrument: 222

Analyte	Col.	RT	EXP RT	Diff.	Area	Conc.	RPD
MCPA	1	12.25	12.25167	0.00167	604470	158	
	* 2	11.52	11.52	0	89006	88.1	56.8
MCPP	1	11.96	11.98	0.02	83797860	10000000	
	* 2	11.2	11.2	0	112198	158	200.0

* Column used for quantitation

DUAL COLUMN CONFIRMATION CHECK
USEPA-8151A

NTC03GW0413

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1011356-02
File ID: nov30a026-0
Sampled: 11/16/10 09:00
Prepared: 11/22/10 07:45
Analyzed: 11/30/10 18:28
Solids: 0.00
Preparation: 8151A Extraction
QC Batch: 1012718
Sequence: 0L02041
Instrument: 222
GC Column(1):
GC Column(2): RTX CLP Pest2

Analyte	Col.	RT	EXP RT	Diff.	Area	Conc.	RPD
2,4,5-T	1	13.94	13.92	0.02	64086	0.0268	
	* 2	13.13	13.13	0	12773	0.0298	10.6
2,4,5-TP (Silvex)	1	13.52	13.54	0.02	182172	0.0672	
	* 2	12.72	12.7	0.02	9632	0.0187	112.9
2,4-D	1	12.89	12.88	0.01	237696	0.386	
	* 2	12.14	12.14	0	17747	0.140	93.5

* Column used for quantitation

DUAL COLUMN CONFIRMATION CHECK
USEPA-8151A

NTC03GW0513

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1011356-03
File ID: nov30a025-0
Sampled: 11/16/10 09:30
Prepared: 11/22/10 07:45
Analyzed: 11/30/10 18:04
Solids: 0.00
Preparation: 8151A Extraction
QC Batch: 1012718
Sequence: 0L02041
Instrument: 222
GC Column(1):
GC Column(2): RTX CLP Pest2

Analyte	Col.	RT	EXP RT	Diff.	Area	Conc.	RPD
2,4,5-T	1	13.9	13.92	0.02	244617	0.104	
	* 2	13.15	13.13	0.02	11273	0.0270	117.6
2,4-DB	* 1	14.32	14.305	0.015	567546	1.67	31.1
	2	13.46	13.48	0.02	66501	1.22	
MCPA	1	12.25	12.25167	0.00167	302757	79.1	
	* 2	11.51	11.52	0.01	41708	41.3	62.8

* Column used for quantitation

DUAL COLUMN CONFIRMATION CHECK
USEPA-8151A

NTCFD111610-01

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011352
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1011356-05
File ID: nov30a023-0
Sampled: 11/16/10 00:00
Prepared: 11/22/10 07:45
Analyzed: 11/30/10 17:15
Solids: 0.00
Preparation: 8151A Extraction
QC Batch: 1012718
Sequence: 0L02041
Instrument: 222
GC Column(1):
GC Column(2): RTX CLP Pest2

Analyte	Col.	RT	EXP RT	Diff.	Area	Conc.	RPD
2,4,5-T	1	13.9	13.92	0.02	235613	0.0995	
	* 2	13.15	13.13	0.02	9216	0.0227	125.7
MCPA	1	12.25	12.25167	0.00167	324387	83.9	
	* 2	11.51	11.52	0.01	38612	37.8	75.8

* Column used for quantitation

SAMPLE ID NTC03GW0113

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
624450	1	7203	5	1000	1.1137	0.05
				Sample Volume (mL)		
				990		

Naphthalene = 0.051 ug/L

ORGANIC ANALYSIS DATA SHEET
USEPA-8270C

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1011352-01 File ID: 1011352-01.D

Sampled: 11/15/10 16:00 Prepared: 11/19/10 07:40 Analyzed: 12/14/10 18:35

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 990 mL / 1 mL

QC Batch: 1012641 Sequence: 0L17046 Calibration: 0L17004 Instrument: 195

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
131-11-3	Dimethyl Phthalate	1	0.50	0.10	0.50	U
534-52-1	4,6-Dinitro-2-methylphenol	1	0.50	0.14	0.50	U
51-28-5	2,4-Dinitrophenol	1	5.0	1.8	5.0	U
606-20-2	2,6-Dinitrotoluene	1	0.50	0.25	0.50	U
121-14-2	2,4-Dinitrotoluene	1	0.50	0.15	0.50	U
117-84-0	Di-n-octyl Phthalate	1	0.50	0.056	0.50	U
117-81-7	Bis(2-ethylhexyl) Phthalate	1	0.50	0.22	0.50	U
206-44-0	Fluoranthene	1	0.50	0.040	0.50	U
86-73-7	Fluorene	1	0.50	0.019	0.50	U
118-74-1	Hexachlorobenzene	1	0.50	0.065	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	0.13	0.50	U
77-47-4	Hexachlorocyclopentadiene	1	0.50	0.15	0.50	U
67-72-1	Hexachloroethane	1	0.50	0.13	0.50	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.50	0.042	0.50	U
78-59-1	Isophorone	1	0.50	0.048	0.50	U
91-57-6	2-Methylnaphthalene	1	0.50	0.021	0.50	U
90-12-0	1-Methylnaphthalene	1	0.50	0.039	0.50	U
106-44-5	4-Methylphenol	1	0.50	0.11	0.50	U
95-48-7	2-Methylphenol	1	0.50	0.13	0.50	U
91-20-3	Naphthalene	1	0.051	0.022	0.50	J
100-01-6	4-Nitroaniline	1	1.0	0.16	1.0	U
88-74-4	2-Nitroaniline	1	1.0	0.14	1.0	U
99-09-2	3-Nitroaniline	1	1.0	0.40	1.0	U
98-95-3	Nitrobenzene	1	0.50	0.18	0.50	U
88-75-5	2-Nitrophenol	1	0.50	0.068	0.50	U
100-02-7	4-Nitrophenol	1	5.0	0.71	5.0	U
86-30-6	N-Nitroso-diphenylamine	1	0.50	0.16	0.50	U
621-64-7	N-Nitroso-di-n-propylamine	1	0.50	0.091	0.50	U
87-86-5	Pentachlorophenol	1	1.0	0.094	1.0	U
85-01-8	Phenanthrene	1	0.50	0.025	0.50	U
108-95-2	Phenol	1	0.50	0.15	0.50	U
129-00-0	Pyrene	1	0.50	0.026	0.50	U
95-95-4	2,4,5-Trichlorophenol	1	0.50	0.030	0.50	U

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\12-14-10_195\
Data File : 1011352-01.D
Acq On : 14 Dec 2010 18:35
Operator : DMC
Sample : 1011352-01
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 15 12:05:06 2010
Quant Method : C:\MSDCHEM\1\METHODS\VF121410.M
Quant Title : 8270C/625 BNA
QLast Update : Wed Dec 15 10:07:00 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorbenzene-d4	4.86	152	161113	5.00	ug/l	0.00 106.66%
21) Naphthalene-d8	6.36	136	624450	5.00	ug/l	0.00 105.23%
41) Acenaphthene-d10	8.36	164	353312	5.00	ug/l	0.00 104.71%
64) Phenanthrene-d10	10.00	188	468743	5.00	ug/l	0.00 102.05%
78) Chrysene-d12	12.93	240	416933	5.00	ug/l	0.00 115.17%
89) Perylene-d12	14.40	264	324338	5.00	ug/l	0.00 110.72%
System Monitoring Compounds						
4) 2-Fluorophenol-surr	3.38	112	326266	7.88	ug/l	-0.02
5) d5-Phenol-surr	4.45	99	278242	5.25	ug/l	-0.02
19) Decafluorobiphenyl	5.62	334	145558	4.23	ug/l	0.00
22) D5-Nitrobenzene-surr	5.54	128	159197	7.21	ug/l	0.00
46) 2-Fluorobiphenyl-surr	7.61	172	593768	5.90	ug/l	0.00
63) 2,4,6-Tribromophenol	9.24	330	144654	14.50	ug/l	0.00
75) o-Terphenyl-surr	10.45	230	513068	7.66	ug/l	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	2.22	74	1410	0.05	ug/l #	1
3) Pyridine	0.00	79	0	N.D.		
6) Phenol	0.00	94	0	N.D.		
7) Bis (2-chloroethyl)ether	0.00	93	0	N.D.		
8) 2-Chlorophenol	0.00	128	0	N.D.		
9) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
10) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
11) Benzaldehyde	0.00	105	0	N.D.		
12) Benzyl Alcohol	0.00	108	0	N.D.		
13) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
14) 2-Methylphenol	0.00	108	0	N.D.		
15) Bis-(2-chloroisopropyl)-	0.00	45	0	N.D.		
16) Acetophenone	0.00	105	0	N.D.		
17) 4-Methylphenol	0.00	107	0	N.D.		
18) N-Nitrosodi-n-propylamine	5.54	70	36197	1.21	ug/l #	62
20) Hexachloroethane	5.62	117	11745	0.61	ug/l #	20
23) Nitrobenzene	5.54	77	1058	~~0.02~~	ug/l #	18
24) Isophorone	5.88	82	1230	0.01	ug/l #	64
25) 2-Nitrophenol	0.00	139	0	N.D.		
26) 2,4-Dimethylphenol	6.36	107	3146	0.08	ug/l #	5
27) Benzoic Acid	0.00	105	0	N.D.		
28) Bis(2-chloroethoxy)metha	0.00	93	0	N.D.		
29) 2,4-Dichlorophenol	0.00	162	0	N.D.		
30) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.		
31) Naphthalene	6.38	128	7203	0.05	ug/l #	58
32) 4-Chloroaniline	5.62	127	1573	0.05	ug/l #	1
33) 2,6-Dichlorophenol	0.00	162	0	N.D.		
34) Hexachlorobutadiene	0.00	225	0	N.D.		

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ORGANIC ANALYSIS DATA SHEET
USEPA-8151A

NTC03GW0113

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011352

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1011352-01 File ID: nov30b029-0

Sampled: 11/15/10 16:00 Prepared: 11/22/10 07:45 Analyzed: 11/30/10 19:42

Solids: Preparation: 8151A Extraction Initial/Final: 980 mL / 5 mL

QC Batch: 1012718 Sequence: 0L02041 Calibration: 0L03010 Instrument: 222

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
94-75-7	2,4-D	1	0.18	0.053	2.0	J
93-76-5	2,4,5-T	1	0.20	0.0088	0.20	U
93-72-1	2,4,5-TP (Silvex)	1	0.20	0.0073	0.20	U
94-82-6	2,4-DB	1	2.0	0.24	2.0	U
75-99-0	Dalapon	1	2.0	0.12	2.0	U
1918-00-9	Dicamba	1	0.20	0.057	0.20	U
120-36-5	Dichloroprop	1	2.0	0.35	2.0	U
88-85-7	Dinoseb	1	1.0	0.084	1.0	U
94-74-6	MCPA	1	200	11	200	U
93-65-2	MCPP	1	200	63	200	U

System Monitoring Compound	ADDED (ug/L)	CONC (ug/L)	% Rec.	QC Limits	Q
2,4-Dichlorophenylacetic Acid	10.2	10.2	100	33 - 153	

* Values outside of QC limits

12/2/2010 8:53:53 Result: C:\Data\GC 222\11302010_8151\nov30b029.rst

Time [min]	Component Name	Amount	Height [µV]	Area [µV·s]	Initial (ml)	Final (mL)	Conc. (ug/l)	
12.15	2,4-D (2C)	0.0353	22625	48967	980	5.0	0.1800	
12.65	SILVEX (2C)	0.0044	11485	41902	980	5.0	0.0226	RT
13.16	2,4,5-T (2C)	0.0014	1891	2435	980	5.0	0.0074	<MDL
13.20	DINOSEB (2C)	-0.0030	7959	13107	980	5.0	-0.0156	<MDL
13.51	2,4-DB (2C)	0.0226	6281	16516	980	5.0	0.1155	↓

Timed Event Table

Time	Event	Value
13.064	Valley Baselines On	

Report stored in ASCII file: C:\Data\GC 222\11302010_8151\nov30b029.TX0

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**T. EVANS**	**DATE:**	**JANUARY 6, 2011**
FROM:	**EDWARD SEDLMYER**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC/SVOC**
CTO F273, NTC GREAT LAKES
SDG 1011375

SAMPLES: 9/Aqueous/VOC

NTC02GW0113	NTC02GW0213	NTC02GW0313
NTC02GW0413	NTC02GW0513	NTC02GW0613
NTCFD111710-01	TB111710	TB111801

7/Aqueous/SVOC

NTC02GW0113	NTC02GW0213	NTC02GW0313
NTC02GW0413	NTC02GW0513	NTC02GW0613
NTCFD111710-01		

OVERVIEW

The sample set for CTO F273 NTC Great Lakes, SDG 1011375 consists of seven (7) aqueous environmental samples and two (2) trip blanks. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOC) as shown above. One (1) field duplicate pair (NTC02GW0413 / NTCFD111710-01) were included within this SDG.

The samples were collected by TetraTech NUS on November 17 and 18, 2010 and analyzed by TriMatrix Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. All analyses were conducted using USEPA SW-846 Methods 8260B and 8270C analytical and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- * Data Completeness
- * Holding Times
- * GC/MS Tuning
- Initial and Continuing Calibration
- Laboratory Blank Analyses
- * Surrogate Recoveries
- Blank Spike/Blank Spike Duplicate Results
- * Matrix Spike/Matrix Spike Duplicate Results
- * Internal Standard Recoveries
- * Field Duplicate Results
- * Compound Quantitation
- * Compound Identification
- * Detection Limits

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical

results are presented in Appendix A.

Volatile

The following compound was detected in the trip blanks at the following maximum concentration:

Compound	Maximum Concentration	Blank Action Level
Acetone	3.5 µg/L	35 µg/L

An action level of 10X the maximum contaminant concentration was established to evaluate laboratory contamination for acetone. Dilution factors and sample aliquots were taken into consideration during the application of the action level. The positive result for acetone in sample NTC02GW0313, NTC02GW0413, and NTCFD111710-01 were qualified (U) as a blank contaminant.

The laboratory control sample (LCS) associated with QC batch 1012925 had percent recoveries greater than the quality control limit for acrolein and carbon disulfide. No action was taken on this basis because acrolein and carbon disulfide were not detected in any of the associated samples.

Initial calibration and all continuing calibrations relative response factors (RRF) were less than the 0.05 quality control limit for acrolein and tetrahydrofuran on instrument 224. The nondetected acrolein and tetrahydrofuran results were rejected (UR) in all samples. The positive tetrahydrofuran results have been qualified as estimated (J).

The continuing calibration performed on 11/23/10 @08:13 on instrument 224 had percent differences (%D) greater than the 20% quality control limit for carbon disulfide, chloromethane, 2-hexanone, and methyl acetate. The nondetected results for the aforementioned compounds have been qualified as estimated (UJ) in all samples.

Semivolatile

The following compounds were detected in the method blanks at the following maximum concentrations:

Compound	Maximum Concentration	Blank Action Level
Benzo(a)anthracene	0.070 µg/L	0.35 µg/L
Benzo(a)pyrene	0.040 µg/L	0.20 µg/L
Benzo(b)fluoranthene	0.040 µg/L	0.20 µg/L
Benzo(k)fluoroanthene	0.050 µg/L	0.25 µg/L
Chrysene	0.090 µg/L	0.45 µg/L
Diethyl Phthalate	0.47 µg/L	4.7 µg/L
Pyrene	0.040 µg/L	0.20 µg/L

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for benzo(a)anthracene , benzo(apyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, chrysene, pyrene; 10X for diethyl phthalate. Dilution factors and sample aliquots were taken into consideration during the application of the action level. Positive results for the aforementioned compounds were qualified (U) as blank contaminants in the affected samples.

The laboratory control sample (LCS) had a percent recovery less than the quality control limit for caprolactam and a high recovery for carbazole. No action was taken on the carbazole results because all results were

nondetcted. The nondetected caprolactam results were qualified as estimated (UJ) in all samples.

The continuing calibration performed on 12/14/10 @11:43 and 12:42 on instrument 195 had percent differences (%D) greater than the 20% quality control limit for benzo(g,h,i)perylene and 3-methylcholanthrene. No action was taken on this basis because only the QC samples were associated with this continuing calibration and they do not required data qualification.

The continuing calibration performed on 12/15/10 @11:08 and 10:39 on instrument 195 had percent differences (%D) greater than the 20% quality control limit for bis(2-chloroethyl)ether and 3-methylcholanthrene. The non-detected results reported for bis(2-chloroethyl)ether and 3-methylcholanthrene were qualified as estimated (UJ), in all samples.

Additional Comments:

Positive results less than the reporting limit (RL) were qualified as estimated, J, due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several compounds in the VOC and SVOC fractions exceeded the continuing calibration RRF or %D criteria resulting in rejection or qualification of the data. Compounds were detected in the VOC and SVOC method or trip blanks resulting in qualification of the data. One SVOC compound had an LCS noncompliance resulting in qualification of the data.

Other factors affecting data quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech NUS

Edward Sedlmyer
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMO-3-CHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		5	U		5	U		5	U		5	U	
2-CHLOROETHYL VINYL ETHER		5	U		5	U		5	U		5	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		5	U		5	U		5	U		5	U	
ACETONE		5	U		5	U		5	U	B	5	U	B
ACROLEIN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
ACRYLONITRILE		1	U		1	U		1	U		1	U	
BENZENE		1	U		1	U		0.19	J	P	1		
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTCFD111710-01			TB111710		
SDG: 1011375	LAB_ID	1011407-02			1011375-04			1011375-05			1011375-06		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC02GW0413					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMO-3-CHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		5	U		5	U		5	U		5	U	
2-CHLOROETHYL VINYL ETHER		5	U		5	U		5	U		5	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		5	U		5	U		5	U		5	U	
ACETONE		5	U		5	U		5	U	B	3.2	J	P
ACROLEIN		5	UR	C	5	UR	C	5	UR	C	5	UR	C
ACRYLONITRILE		1	U		1	U		1	U		1	U	
BENZENE		1	U		1	U		1			1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111801		
SDG: 1011375	LAB_ID	1011407-03		
FRACTION: OV	SAMP_DATE	11/18/2010		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS			
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U	
1,1,1-TRICHLOROETHANE		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U	
1,1,2-TRICHLOROETHANE		1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1	U	
1,1-DICHLOROETHANE		1	U	
1,1-DICHLOROETHENE		1	U	
1,1-DICHLOROPROPENE		1	U	
1,2,3-TRICHLOROBENZENE		1	U	
1,2,3-TRICHLOROPROPANE		1	U	
1,2,4-TRICHLOROBENZENE		1	U	
1,2,4-TRIMETHYLBENZENE		1	U	
1,2-DIBROMO-3-CHLOROPROPANE		1	U	
1,2-DIBROMOETHANE		1	U	
1,2-DICHLOROBENZENE		1	U	
1,2-DICHLOROETHANE		1	U	
1,2-DICHLOROPROPANE		1	U	
1,3,5-TRIMETHYLBENZENE		1	U	
1,3-DICHLOROBENZENE		1	U	
1,3-DICHLOROPROPANE		1	U	
1,4-DICHLOROBENZENE		1	U	
2,2-DICHLOROPROPANE		1	U	
2-BUTANONE		5	U	
2-CHLOROETHYL VINYL ETHER		5	U	
2-CHLOROTOLUENE		1	U	
2-HEXANONE		5	UJ	C
4-CHLOROTOLUENE		1	U	
4-ISOPROPYLTOLUENE		1	U	
4-METHYL-2-PENTANONE		5	U	
ACETONE		3.5	J	P
ACROLEIN		5	UR	C
ACRYLONITRILE		1	U	
BENZENE		1	U	
BROMOBENZENE		1	U	
BROMOCHLOROMETHANE		1	U	
BROMODICHLOROMETHANE		1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		1	U		1	U		1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	
CARBON DISULFIDE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CIS-1,2-DICHLOROETHENE		1	U		1	U		0.72	J	P	1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
CYCLOHEXANE		5	U		5	U		5	U		5	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHYL ACETATE		50	U		50	U		50	U		50	U	
ETHYLBENZENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
METHYL ACETATE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
METHYL CYCLOHEXANE		5	U		5	U		5	U		5	U	
METHYL IODIDE		1	U		1	U		1	U		1	U	
METHYL METHACRYLATE		5	U		5	U		5	U		5	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		1	U		1	U		1	U	
TETRAHYDROFURAN		5	UR	C	5	UR	C	5	UR	C	9.1	J	C
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		5	U		5	U		5	U		5	U	
TRICHLOROETHENE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTCFD111710-01			TB111710		
SDG: 1011375	LAB_ID	1011407-02			1011375-04			1011375-05			1011375-06		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC02GW0413					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOFORM		1	U		1	U		1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	
CARBON DISULFIDE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	UJ	C	1	UJ	C	1	UJ	C	1	UJ	C
CIS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
CYCLOHEXANE		5	U		5	U		5	U		5	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHYL ACETATE		50	U		50	U		50	U		50	U	
ETHYLBENZENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
METHYL ACETATE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
METHYL CYCLOHEXANE		5	U		5	U		5	U		5	U	
METHYL IODIDE		1	U		1	U		1	U		1	U	
METHYL METHACRYLATE		5	U		5	U		5	U		5	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		1	U		1	U		1	U	
TETRAHYDROFURAN		5	UR	C	5	UR	C	8.2	J	C	5	UR	C
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		5	U		5	U		5	U		5	U	
TRICHLOROETHENE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111801
SDG: 1011375	LAB_ID	1011407-03
FRACTION: OV	SAMP_DATE	11/18/2010
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	UJ	C
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	UJ	C
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	5	U	
DIBROMOMETHANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYL ACETATE	50	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	5	UJ	C
METHYL CYCLOHEXANE	5	U	
METHYL IODIDE	1	U	
METHYL METHACRYLATE	5	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	U	
N-BUTYLBENZENE	1	U	
N-PROPYLBENZENE	1	U	
SEC-BUTYLBENZENE	1	U	
STYRENE	1	U	
TERT-BUTYLBENZENE	1	U	
TETRACHLOROETHENE	1	U	
TETRAHYDROFURAN	5	UR	C
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRANS-1,4-DICHLORO-2-BUTENE	5	U	
TRICHLOROETHENE	1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL ACETATE		5	U		5	U		5	U		5	U	
VINYL CHLORIDE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTCFD111710-01			TB111710		
SDG: 1011375	LAB_ID	1011407-02			1011375-04			1011375-05			1011375-06		
FRACTION: OV	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF							NTC02GW0413					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL ACETATE		5	U		5	U		5	U		5	U	
VINYL CHLORIDE		1	U		1	U		1	U		1	U	

PROJ_NO: 01620	NSAMPLE	TB111801		
SDG: 1011375	LAB_ID	1011407-03		
FRACTION: OV	SAMP_DATE	11/18/2010		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS			
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		1	U	
VINYL ACETATE		5	U	
VINYL CHLORIDE		1	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: OS	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.5	U		0.5	U		0.5	U		0.53	U	
1-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U		0.53	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.5	U		0.5	U		0.5	U		0.53	U	
2,4,5-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
2,4,6-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
2,4-DICHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
2,4-DIMETHYLPHENOL		1	U		1	U		1	U		1.1	U	
2,4-DINITROPHENOL		5	U		5	U		5	U		5.3	U	
2,4-DINITROTOLUENE		0.5	U		0.5	U		0.5	U		0.53	U	
2,6-DINITROTOLUENE		0.5	U		0.5	U		0.5	U		0.53	U	
2-CHLORONAPHTHALENE		0.5	U		0.5	U		0.5	U		0.53	U	
2-CHLOROPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
2-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U		0.53	U	
2-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
2-NITROANILINE		1	U		1	U		1	U		1.1	U	
2-NITROPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
3,3'-DICHLOROBENZIDINE		1	U		1	U		1	U		1.1	U	
3-METHYLCHOLANTHRENE		2	UJ	C	2	UJ	C	2	UJ	C	2.1	UJ	C
3-NITROANILINE		1	U		1	U		1	U		1.1	U	
4,6-DINITRO-2-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
4-BROMOPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U		0.53	U	
4-CHLORO-3-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
4-CHLOROANILINE		1	U		1	U		1	U		1.1	U	
4-CHLOROPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U		0.53	U	
4-METHYLPHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
4-NITROANILINE		1	U		1	U		1	U		1.1	U	
4-NITROPHENOL		5	U		5	U		5	U		5.3	U	
ACENAPHTHENE		0.5	U		0.5	U		0.5	U		0.53	U	
ACENAPHTHYLENE		0.5	U		0.5	U		0.5	U		0.53	U	
ACETOPHENONE		0.5	U		0.5	U		0.5	U		0.53	U	
ANILINE		0.5	U		0.5	U		0.5	U		0.53	U	
ANTHRACENE		0.5	U		0.5	U		0.5	U		0.53	U	
ATRAZINE		0.5	U		0.5	U		0.5	U		0.53	U	
BENZALDEHYDE		0.5	U		0.5	U		0.5	U		0.53	U	
BENZO(A)ANTHRACENE		0.5	U	B	0.5	U	B	0.5	U	B	0.53	U	B
BENZO(A)PYRENE		0.5	U	B	0.5	U	B	0.5	U	B	0.53	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTCFD111710-01		
SDG: 1011375	LAB_ID	1011407-02			1011375-04			1011375-05		
FRACTION: OS	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC02GW0413		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.5	U		0.5	U		0.5	U	
1-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.5	U		0.5	U		0.5	U	
2,4,5-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U	
2,4,6-TRICHLOROPHENOL		0.5	U		0.5	U		0.5	U	
2,4-DICHLOROPHENOL		0.5	U		0.5	U		0.5	U	
2,4-DIMETHYLPHENOL		1	U		1	U		1	U	
2,4-DINITROPHENOL		5	U		5	U		5	U	
2,4-DINITROTOLUENE		0.5	U		0.5	U		0.5	U	
2,6-DINITROTOLUENE		0.5	U		0.5	U		0.5	U	
2-CHLORONAPHTHALENE		0.5	U		0.5	U		0.5	U	
2-CHLOROPHENOL		0.5	U		0.5	U		0.5	U	
2-METHYLNAPHTHALENE		0.5	U		0.5	U		0.5	U	
2-METHYLPHENOL		0.5	U		0.5	U		0.5	U	
2-NITROANILINE		1	U		1	U		1	U	
2-NITROPHENOL		0.5	U		0.5	U		0.5	U	
3,3'-DICHLOROBENZIDINE		1	U		1	U		1	U	
3-METHYLCHOLANTHRENE		2	UJ	C	2	UJ	C	2	UJ	C
3-NITROANILINE		1	U		1	U		1	U	
4,6-DINITRO-2-METHYLPHENOL		0.5	U		0.5	U		0.5	U	
4-BROMOPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U	
4-CHLORO-3-METHYLPHENOL		0.5	U		0.5	U		0.5	U	
4-CHLOROANILINE		1	U		1	U		1	U	
4-CHLOROPHENYL PHENYL ETHER		0.5	U		0.5	U		0.5	U	
4-METHYLPHENOL		0.5	U		0.5	U		0.5	U	
4-NITROANILINE		1	U		1	U		1	U	
4-NITROPHENOL		5	U		5	U		5	U	
ACENAPHTHENE		0.5	U		0.5	U		0.5	U	
ACENAPHTHYLENE		0.5	U		0.5	U		0.5	U	
ACETOPHENONE		0.5	U		0.5	U		0.5	U	
ANILINE		0.5	U		0.5	U		0.5	U	
ANTHRACENE		0.5	U		0.5	U		0.5	U	
ATRAZINE		0.5	U		0.5	U		0.5	U	
BENZALDEHYDE		0.5	U		0.5	U		0.5	U	
BENZO(A)ANTHRACENE		0.5	U	B	0.5	U	B	0.5	U	
BENZO(A)PYRENE		0.5	U	B	0.5	U		0.5	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: OS	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(B)FLUORANTHENE		0.5	U	B	0.5	U	B	0.5	U	B	0.53	U	B
BENZO(G,H,I)PERYLENE		0.5	U		0.5	U		0.5	U		0.53	U	
BENZO(K)FLUORANTHENE		0.5	U	B	0.5	U	B	0.5	U	B	0.53	U	
BIS(2-CHLOROETHOXY)METHANE		0.5	U		0.5	U		0.5	U		0.53	U	
BIS(2-CHLOROETHYL)ETHER		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C	0.53	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE		0.5	U		0.54			0.33	J	P	0.55		
BUTYL BENZYL PHTHALATE		1	U		0.074	J	P	1	U		1.1	U	
CAPROLACTAM		1	UJ	E	1	UJ	E	1	UJ	E	1.1	UJ	E
CARBAZOLE		0.5	U		0.5	U		0.5	U		0.53	U	
CHRYSENE		0.5	U	B	0.5	U	B	0.5	U	B	0.53	U	B
DIBENZO(A,H)ANTHRACENE		0.5	U		0.5	U		0.5	U		0.53	U	
DIBENZOFURAN		0.5	U		0.5	U		0.5	U		0.53	U	
DIETHYL PHTHALATE		0.5	U		0.5	U	B	0.5	U	B	0.53	U	B
DIMETHYL PHTHALATE		0.5	U		0.5	U		0.5	U		0.53	U	
DI-N-BUTYL PHTHALATE		1	U		1	U		1	U		1.1	U	
DI-N-OCTYL PHTHALATE		0.5	U		0.68			0.5	U		0.53	U	
FLUORANTHENE		0.041	J	P	0.053	J	P	0.5	U		0.53	U	
FLUORENE		0.5	U		0.5	U		0.5	U		0.53	U	
HEXACHLOROBENZENE		0.5	U		0.5	U		0.5	U		0.53	U	
HEXACHLOROBUTADIENE		0.5	U		0.5	U		0.5	U		0.53	U	
HEXACHLOROCYCLOPENTADIENE		0.5	U		0.5	U		0.5	U		0.53	U	
HEXACHLOROETHANE		0.5	U		0.5	U		0.5	U		0.53	U	
INDENO(1,2,3-CD)PYRENE		0.5	U		0.27	J	P	0.5	U		0.53	U	
ISOPHORONE		0.5	U		0.5	U		0.5	U		0.53	U	
NAPHTHALENE		0.031	J	P	0.5	U		0.5	U		0.53	U	
NITROBENZENE		0.5	U		0.5	U		0.5	U		0.53	U	
N-NITROSO-DI-N-PROPYLAMINE		0.5	U		0.5	U		0.5	U		0.53	U	
N-NITROSODIPHENYLAMINE		0.5	U		0.5	U		0.5	U		0.53	U	
PENTACHLOROPHENOL		1	U		1	U		1	U		1.1	U	
PHENANTHRENE		0.031	J	P	0.11	J	P	0.5	U		0.53	U	
PHENOL		0.5	U		0.5	U		0.5	U		0.53	U	
PYRENE		0.5	U	B	0.5	U	B	0.5	U		0.53	U	

PROJ_NO: 01620	NSAMPLE	NTC02GW0513			NTC02GW0613			NTCFD111710-01		
SDG: 1011375	LAB_ID	1011407-02			1011375-04			1011375-05		
FRACTION: OS	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF							NTC02GW0413		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(B)FLUORANTHENE		0.5	U	B	0.5	U		0.5	U	
BENZO(G,H,I)PERYLENE		0.5	U		0.5	U		0.5	U	
BENZO(K)FLUORANTHENE		0.5	U		0.5	U		0.5	U	
BIS(2-CHLOROETHOXY)METHANE		0.5	U		0.5	U		0.5	U	
BIS(2-CHLOROETHYL)ETHER		0.5	UJ	C	0.5	UJ	C	0.5	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE		0.46	J	P	0.32	J	P	0.45	J	P
BUTYL BENZYL PHTHALATE		0.061	J	P	1	U		1	U	
CAPROLACTAM		1	UJ	E	1	UJ	E	1	UJ	E
CARBAZOLE		0.5	U		0.5	U		0.5	U	
CHRYSENE		0.5	U	B	0.5	U		0.5	U	
DIBENZO(A,H)ANTHRACENE		0.5	U		0.5	U		0.5	U	
DIBENZOFURAN		0.5	U		0.5	U		0.5	U	
DIETHYL PHTHALATE		0.5	U	B	0.5	U	B	0.5	U	B
DIMETHYL PHTHALATE		0.5	U		0.5	U		0.5	U	
DI-N-BUTYL PHTHALATE		0.69	J	P	1	U		1	U	
DI-N-OCTYL PHTHALATE		0.5	U		0.5	U		0.5	U	
FLUORANTHENE		0.5	U		0.5	U		0.5	U	
FLUORENE		0.5	U		0.5	U		0.5	U	
HEXACHLOROBENZENE		0.5	U		0.5	U		0.5	U	
HEXACHLOROBUTADIENE		0.5	U		0.5	U		0.5	U	
HEXACHLOROCYCLOPENTADIENE		0.5	U		0.5	U		0.5	U	
HEXACHLOROETHANE		0.5	U		0.5	U		0.5	U	
INDENO(1,2,3-CD)PYRENE		0.5	U		0.5	U		0.5	U	
ISOPHORONE		0.5	U		0.5	U		0.5	U	
NAPHTHALENE		0.082	J	P	0.5	U		0.5	U	
NITROBENZENE		0.5	U		0.5	U		0.5	U	
N-NITROSO-DI-N-PROPYLAMINE		0.5	U		0.5	U		0.5	U	
N-NITROSODIPHENYLAMINE		0.5	U		0.5	U		0.5	U	
PENTACHLOROPHENOL		1	U		1	U		1	U	
PHENANTHRENE		0.031	J	P	0.5	U		0.5	U	
PHENOL		0.5	U		0.5	U		0.5	U	
PYRENE		0.5	U		0.5	U		0.5	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	105	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.12J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.063J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.063J**	0.50	0.029
*207-08-9	Benzo(k)fluoranthene	**0.084J**	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	**0.074J**	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.14J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3′-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.18J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	**0.68**	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.54**	0.50	0.22
206-44-0	Fluoranthene	**0.053J**	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	**0.27J**	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	**0.11J**	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	**0.063J**	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	34	*20-70*
Phenol-d6	23	*18-45*
Nitrobenzene-d5	55	*31-123*
2-Fluorobiphenyl	52	*25-113*
2,4,6-Tribromophenol	55	*30-121*
o-Terphenyl	64	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Dissolved Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	**2500**		100	28	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Arsenic	**2.1**	**J**	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Barium	**58**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 08:11	DSC	1012940
Cadmium	**0.18**	**J**	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Calcium	**49000**		500	67	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
***Chromium**	**4.8**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Cobalt	**1.3**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Copper	**3.0**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Iron	**2400**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
Lead	**1.1**		1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Magnesium	**38000**		500	48	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
Manganese	**36**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 09:12	KLV	1012974
Nickel	**4.7**		1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Potassium	**2700**		200	82	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
Selenium	1.0	U	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Sodium	**70000**		500	140	ug/L	1	USEPA-6010C	11/29/10 14:54	JMF	1012910
Thallium	**0.080**	**J**	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Vanadium	**6.5**		3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940
Zinc	**7.5**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 20:15	DWJ	1012940

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	**6500**		100	28	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Arsenic	**2.9**	**J**	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Barium	**85**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Beryllium	**0.36**	**J**	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 08:55	DSC	1012934
***Cadmium**	**0.19**	**J**	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Calcium	**58000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
***Chromium**	**12**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Cobalt	**4.0**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Copper	**7.6**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
***Iron**	**7400**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
Lead	**3.6**		1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Magnesium	**39000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
Manganese	**140**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:07	KLV	1012976
Nickel	**12**		1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Potassium	**4000**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
Selenium	1.0	U	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Silver	**0.077**	**J**	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Sodium	**63000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:26	JMF	1012888
Thallium	**0.14**	**J**	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Vanadium	**16**		3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934
Zinc	**18**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 21:54	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0213**	Sampled:	11/17/10 16:00
Lab Sample ID:	**1011375-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**85**		1.0	0.098	mg/L	1	USEPA-300.0	11/30/10 14:32	CKD	1013122
Chemical Oxygen Demand	**15**		5.0	3.7	mg/L	1	SM 5220 D 20th	11/23/10 12:42	CKD	1012893
Fluoride	**0.73**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**0.35**		0.010	0.0089	mg/L	1	SM 4500-NH3 G 20th	11/22/10 10:52	GEH	1012790
***pH**	**8.1**		1.0	1.0	pH Units	1	USEPA-150.1	12/01/10 15:40	KRK	1013154
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/24/10 14:13	CLD	1012750
Residue, Dissolved @ 180° C	**560**		50	50	mg/L	1	SM 2540 C 20th	11/19/10 13:43	KAR	1012654
Residue, Suspended	**160**		8.2	8.2	mg/L	1	SM 2540 D 20th	11/19/10 13:43	KAR	1012644
Sulfate	**190**		8.0	0.24	mg/L	4	USEPA-300.0	11/30/10 23:08	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	11/24/10 09:22	LMA	1012747
Phosphorus, Total	**0.080**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/23/10 09:40	CLD	1012732
Carbon, Total Organic	**1.4**		0.50	0.25	mg/L	1	SM 5310 C 20th	11/22/10 18:39	GEH	1012830

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**2.6J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	**0.19J**	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	**0.72J**	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	108	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	99	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.041J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.041J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.031J**	0.50	0.029
*207-08-9	Benzo(k)fluoranthene	**0.052J**	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.052J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.20J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.33J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	37	*20-70*
Phenol-d6	24	*18-45*
Nitrobenzene-d5	66	*31-123*
2-Fluorobiphenyl	61	*25-113*
2,4,6-Tribromophenol	79	*30-121*
o-Terphenyl	72	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100 U	100	28	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Antimony	1.0 U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Arsenic	**47**	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Barium	**280**	2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Beryllium	1.0 U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 08:58	DSC	1012934
Cadmium	0.20 U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Calcium	**150000**	500	67	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Chromium	1.0 U	1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Cobalt	**3.2**	1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Copper	**0.99 J**	1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
***Iron**	**16000**	20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Lead	1.0 U	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Magnesium	**82000**	500	48	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Manganese	**59**	2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Mercury	0.20 U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:12	KLV	1012976
Nickel	**16**	1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Potassium	**2200**	200	82	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Selenium	**1.6**	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Silver	0.20 U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Sodium	**65000**	500	140	ug/L	1	USEPA-6010C	11/29/10 13:29	JMF	1012888
Thallium	1.0 U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Vanadium	3.0 U	3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934
Zinc	**5.2 J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 21:58	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0313**	Sampled:	11/17/10 15:45
Lab Sample ID:	**1011375-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**110**		2.0	0.20	mg/L	2	USEPA-300.0	11/30/10 23:26	CKD	1013122
Chemical Oxygen Demand	**27**		5.0	3.7	mg/L	1	SM 5220 D 20th	11/23/10 12:43	CKD	1012893
Fluoride	**0.28**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**0.12**		0.010	0.0089	mg/L	1	SM 4500-NH3 G 20th	11/22/10 12:03	GEH	1012790
***pH**	**7.4**		1.0	1.0	pH Units	1	USEPA-150.1	12/01/10 15:40	KRK	1013154
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/24/10 14:19	CLD	1012750
Residue, Dissolved @ 180° C	**950**		50	50	mg/L	1	SM 2540 C 20th	11/19/10 13:43	KAR	1012654
Residue, Suspended	**23**		3.3	3.3	mg/L	1	SM 2540 D 20th	11/19/10 13:43	KAR	1012644
Sulfate	**21**		2.0	0.061	mg/L	1	USEPA-300.0	11/30/10 14:51	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	11/24/10 09:22	LMA	1012747
Phosphorus, Total	**0.027**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/23/10 09:40	CLD	1012732
Carbon, Total Organic	**11**		1.0	0.25	mg/L	1	SM 5310 C 20th	11/23/10 15:07	GEH	1012922

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.9J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	**1.0**	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	**9.1**	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	105	*88-115*
1,2-Dichloroethane-d4	102	*81-116*
Toluene-d8	96	*87-113*
4-Bromofluorobenzene	91	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.53U	0.53	0.021
208-96-8	Acenaphthylene	0.53U	0.53	0.035
98-86-2	Acetophenone	0.53U	0.53	0.093
62-53-3	Aniline	0.53U	0.53	0.038
120-12-7	Anthracene	0.53U	0.53	0.037
1912-24-9	Atrazine	0.53U	0.53	0.19
100-52-7	Benzaldehyde	0.53U	0.53	0.18
*56-55-3	Benzo(a)anthracene	**0.043J**	0.53	0.027
50-32-8	Benzo(a)pyrene	0.53U	0.53	0.030
*205-99-2	Benzo(b)fluoranthene	**0.032J**	0.53	0.031
207-08-9	Benzo(k)fluoranthene	0.53U	0.53	0.052
191-24-2	Benzo(g,h,i)perylene	0.53U	0.53	0.059
92-52-4	1,1'-Biphenyl	0.53U	0.53	0.11
101-55-3	4-Bromophenyl Phenyl Ether	0.53U	0.53	0.050
85-68-7	Butyl Benzyl Phthalate	1.1U	1.1	0.061
*105-60-2	Caprolactam	1.1U	1.1	0.22
*86-74-8	Carbazole	0.53U	0.53	0.13
59-50-7	4-Chloro-3-methylphenol	0.53U	0.53	0.18
106-47-8	4-Chloroaniline	1.1U	1.1	0.15
111-91-1	Bis(2-chloroethoxy)methane	0.53U	0.53	0.041
111-44-4	Bis(2-chloroethyl) Ether	0.53U	0.53	0.037
108-60-1	Bis(2-chloroisopropyl) Ether	0.53U	0.53	0.046
91-58-7	2-Chloronaphthalene	0.53U	0.53	0.034
95-57-8	2-Chlorophenol	0.53U	0.53	0.075
7005-72-3	4-Chlorophenyl Phenyl Ether	0.53U	0.53	0.12
*218-01-9	Chrysene	**0.032J**	0.53	0.024
53-70-3	Dibenz(a,h)anthracene	0.53U	0.53	0.057
132-64-9	Dibenzofuran	0.53U	0.53	0.12
84-74-2	Di-n-butyl Phthalate	1.1U	1.1	0.65

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	QL21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.1U	1.1	1.1
120-83-2	2,4-Dichlorophenol	0.53U	0.53	0.25
*84-66-2	Diethyl Phthalate	**0.23J**	0.53	0.13
105-67-9	2,4-Dimethylphenol	1.1U	1.1	0.33
131-11-3	Dimethyl Phthalate	0.53U	0.53	0.11
534-52-1	4,6-Dinitro-2-methylphenol	0.53U	0.53	0.15
51-28-5	2,4-Dinitrophenol	5.3U	5.3	1.9
121-14-2	2,4-Dinitrotoluene	0.53U	0.53	0.16
606-20-2	2,6-Dinitrotoluene	0.53U	0.53	0.26
117-84-0	Di-n-octyl Phthalate	0.53U	0.53	0.059
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.55**	0.53	0.24
206-44-0	Fluoranthene	0.53U	0.53	0.043
86-73-7	Fluorene	0.53U	0.53	0.021
118-74-1	Hexachlorobenzene	0.53U	0.53	0.070
87-68-3	Hexachlorobutadiene	0.53U	0.53	0.14
77-47-4	Hexachlorocyclopentadiene	0.53U	0.53	0.16
67-72-1	Hexachloroethane	0.53U	0.53	0.14
193-39-5	Indeno(1,2,3-cd)pyrene	0.53U	0.53	0.044
78-59-1	Isophorone	0.53U	0.53	0.051
*56-49-5	3-Methylcholanthrene	2.1U	2.1	0.26
91-57-6	2-Methylnaphthalene	0.53U	0.53	0.022
90-12-0	1-Methylnaphthalene	0.53U	0.53	0.042
95-48-7	2-Methylphenol	0.53U	0.53	0.13
106-44-5	4-Methylphenol	0.53U	0.53	0.12
91-20-3	Naphthalene	0.53U	0.53	0.023
88-74-4	2-Nitroaniline	1.1U	1.1	0.14
99-09-2	3-Nitroaniline	1.1U	1.1	0.42
100-01-6	4-Nitroaniline	1.1U	1.1	0.17
98-95-3	Nitrobenzene	0.53U	0.53	0.19
100-02-7	4-Nitrophenol	5.3U	5.3	0.76
88-75-5	2-Nitrophenol	0.53U	0.53	0.072

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.53U	0.53	0.17
621-64-7	N-Nitroso-di-n-propylamine	0.53U	0.53	0.097
87-86-5	Pentachlorophenol	1.1U	1.1	0.10
85-01-8	Phenanthrene	0.53U	0.53	0.027
108-95-2	Phenol	0.53U	0.53	0.16
129-00-0	Pyrene	0.53U	0.53	0.027
88-06-2	2,4,6-Trichlorophenol	0.53U	0.53	0.069
95-95-4	2,4,5-Trichlorophenol	0.53U	0.53	0.032

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	39	*20-70*
Phenol-d6	25	*18-45*
Nitrobenzene-d5	65	*31-123*
2-Fluorobiphenyl	49	*25-113*
2,4,6-Tribromophenol	80	*30-121*
o-Terphenyl	62	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100	U	100	28	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
Antimony	**0.74**	**J**	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Arsenic	**4.4**		3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Barium	**1200**		10	2.9	ug/L	5	USEPA-6020A	11/30/10 09:18	DSC	1012934
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 09:00	DSC	1012934
Cadmium	0.20	U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Calcium	**170000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
***Chromium**	**2.0**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Cobalt	**6.5**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
***Copper**	**1.7**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
***Iron**	**12000**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
Lead	1.0	U	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Magnesium	**130000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
Manganese	**100**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:37	KLV	1012976
Nickel	**17**		1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Potassium	**39000**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
***Selenium**	**2.3**		1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Sodium	**320000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:33	JMF	1012888
Thallium	1.0	U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Vanadium	**1.9**	**J**	3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934
Zinc	**4.1**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 22:02	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0413**	Sampled:	11/17/10 09:05
Lab Sample ID:	**1011375-03**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**440**		10	0.98	mg/L	10	USEPA-300.0	11/30/10 23:45	CKD	1013122
Chemical Oxygen Demand	**130**		50	20	mg/L	1	SM 5220 D 20th	12/02/10 15:26	CKD	1013211
Fluoride	**0.16**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**43**		0.25	0.22	mg/L	25	SM 4500-NH3 G 20th	11/22/10 11:39	GEH	1012790
***pH**	**7.2**		1.0	1.0	pH Units	1	USEPA-150.1	12/01/10 15:40	KRK	1013154
Phenolics, Total	**0.0029**	J	0.050	0.0028	mg/L	1	USEPA-420.1	11/24/10 14:19	CLD	1012750
Residue, Dissolved @ 180° C	**1900**		50	50	mg/L	1	SM 2540 C 20th	11/19/10 13:43	KAR	1012654
Residue, Suspended	**32**		5.0	5.0	mg/L	1	SM 2540 D 20th	11/19/10 13:43	KAR	1012644
Sulfate	**2.4**		2.0	0.061	mg/L	1	USEPA-300.0	11/30/10 15:46	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	11/24/10 09:29	LMA	1012747
Phosphorus, Total	**0.23**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/23/10 09:40	CLD	1012732
Carbon, Total Organic	**41**		1.0	0.25	mg/L	1	SM 5310 C 20th	11/23/10 15:14	GEH	1012922

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	108	*88-115*
1,2-Dichloroethane-d4	105	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.031J**	0.50	0.025
50-32-8	Benzo(a)pyrene	0.50U	0.50	0.028
205-99-2	Benzo(b)fluoranthene	0.50U	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
218-01-9	Chrysene	0.50U	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.19J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.32J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	44	*20-70*
Phenol-d6	27	*18-45*
Nitrobenzene-d5	68	*31-123*
2-Fluorobiphenyl	58	*25-113*
2,4,6-Tribromophenol	78	*30-121*
o-Terphenyl	73	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Dissolved Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100	U	100	28	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Arsenic	3.0	U	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Barium	**52**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 08:14	DSC	1012940
Cadmium	0.20	U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Calcium	**130000**		500	67	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
***Chromium**	**0.65**	**J**	1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Cobalt	**0.23**	**J**	1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Copper	**1.9**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Iron	**12**	**J**	20	4.2	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
Lead	1.0	U	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Magnesium	**76000**		500	48	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
Manganese	**75**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 09:27	KLV	1012974
***Nickel**	**4.6**		1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Potassium	**1900**		200	82	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
Selenium	**0.92**	**J**	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Sodium	**32000**		500	140	ug/L	1	USEPA-6010C	11/29/10 14:57	JMF	1012910
Thallium	**0.10**	**J**	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Vanadium	**0.33**	**J**	3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940
Zinc	**3.0**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 20:18	DWJ	1012940

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	**850**		100	28	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
Antimony	**0.50**	**J**	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Arsenic	3.0	U	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Barium	**56**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 09:08	DSC	1012934
Cadmium	**0.13**	**J**	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Calcium	**120000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
***Chromium**	**2.1**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Cobalt	**1.0**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Copper	**3.4**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
***Iron**	**1200**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
Lead	**1.3**		1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Magnesium	**69000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
Manganese	**190**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:42	KLV	1012976
Nickel	**11**		1.0	0.37	ug/L	1	USEPA-6020A	11/30/10 09:08	DSC	1012934
Potassium	**2000**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
Selenium	1.0	U	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Silver	**0.066**	**J**	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Sodium	**27000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:36	JMF	1012888
Thallium	**0.11**	**J**	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934
Vanadium	**2.4**	**J**	3.0	0.28	ug/L	1	USEPA-6020A	11/30/10 09:08	DSC	1012934
Zinc	**6.6**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 22:17	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0613**	Sampled:	11/17/10 09:10
Lab Sample ID:	**1011375-04**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**29**		1.0	0.098	mg/L	1	USEPA-300.0	11/30/10 16:04	CKD	1013122
Chemical Oxygen Demand	**7.8**		5.0	3.7	mg/L	1	SM 5220 D 20th	11/23/10 12:44	CKD	1012893
Fluoride	**0.33**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**0.049**		0.010	0.0089	mg/L	1	SM 4500-NH3 G 20th	11/22/10 11:31	GEH	1012790
***pH**	**7.6**		1.0	1.0	pH Units	1	USEPA-150.1	12/01/10 15:40	KRK	1013154
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/24/10 14:19	CLD	1012750
Residue, Dissolved @ 180° C	**870**		50	50	mg/L	1	SM 2540 C 20th	11/19/10 13:43	KAR	1012654
Residue, Suspended	**35**		3.3	3.3	mg/L	1	SM 2540 D 20th	11/19/10 13:43	KAR	1012644
Sulfate	**260**		10	0.31	mg/L	5	USEPA-300.0	12/01/10 00:03	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	11/24/10 09:29	LMA	1012747
Phosphorus, Total	**0.011**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/23/10 09:40	CLD	1012732
Carbon, Total Organic	**2.0**		0.50	0.25	mg/L	1	SM 5310 C 20th	11/22/10 19:03	GEH	1012830

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**4.2J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	**1.0**	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	**8.2**	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

Continued on next page

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	104	*88-115*
1,2-Dichloroethane-d4	102	*81-116*
Toluene-d8	97	*87-113*
4-Bromofluorobenzene	94	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
56-55-3	Benzo(a)anthracene	0.50U	0.50	0.025
50-32-8	Benzo(a)pyrene	0.50U	0.50	0.028
205-99-2	Benzo(b)fluoranthene	0.50U	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
218-01-9	Chrysene	0.50U	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
*91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
*84-66-2	Diethyl Phthalate	**0.25J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.45J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	0.50U	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/19/10 By: KCS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	0.50U	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	42	*20-70*
Phenol-d6	28	*18-45*
Nitrobenzene-d5	68	*31-123*
2-Fluorobiphenyl	52	*25-113*
2,4,6-Tribromophenol	92	*30-121*
o-Terphenyl	65	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100	U	100	28	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
Antimony	**0.97**	**J**	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Arsenic	**3.5**		3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Barium	**1200**		10	2.9	ug/L	5	USEPA-6020A	11/29/10 22:37	DWJ	1012934
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 09:11	DSC	1012934
Cadmium	0.20	U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Calcium	**170000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
***Chromium**	**2.1**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Cobalt	**6.6**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
***Copper**	**2.0**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
***Iron**	**12000**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
Lead	**0.24**	**J**	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Magnesium	**130000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
Manganese	**100**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:47	KLV	1012976
Nickel	**17**		1.0	0.37	ug/L	1	USEPA-6020A	11/30/10 09:11	DSC	1012934
Potassium	**41000**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
Selenium	**4.9**		1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Silver	**0.079**	**J**	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Sodium	**320000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:40	JMF	1012888
Thallium	1.0	U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934
Vanadium	**2.1**	**J**	3.0	0.28	ug/L	1	USEPA-6020A	11/30/10 09:11	DSC	1012934
Zinc	**7.0**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 22:21	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTCFD111710-01**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-05**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/18/10 08:20

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**440**		10	0.98	mg/L	10	USEPA-300.0	12/01/10 00:21	CKD	1013122
Chemical Oxygen Demand	**130**		50	20	mg/L	1	SM 5220 D 20th	12/02/10 15:26	CKD	1013211
Fluoride	**0.16**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**43**		0.25	0.22	mg/L	25	SM 4500-NH3 G 20th	11/22/10 11:39	GEH	1012790
***pH**	**7.2**		1.0	1.0	pH Units	1	USEPA-150.1	12/01/10 15:40	KRK	1013154
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/24/10 14:19	CLD	1012750
Residue, Dissolved @ 180° C	**1900**		50	50	mg/L	1	SM 2540 C 20th	11/19/10 13:43	KAR	1012654
Residue, Suspended	**32**		5.0	5.0	mg/L	1	SM 2540 D 20th	11/19/10 13:43	KAR	1012644
Sulfate	**2.5**		2.0	0.061	mg/L	1	USEPA-300.0	11/30/10 16:23	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	11/24/10 09:29	LMA	1012747
Phosphorus, Total	**0.29**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/23/10 09:40	CLD	1012732
Carbon, Total Organic	**43**		1.0	0.25	mg/L	1	SM 5310 C 20th	11/23/10 15:48	GEH	1012922

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111710**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-06**	Sampled By:	TML
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.2J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111710**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-06**	Sampled By:	TML
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011375**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111710**	Sampled:	11/17/10 00:00
Lab Sample ID:	**1011375-06**	Sampled By:	TML
Matrix:	Water	Received:	11/18/10 08:20
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	105	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	93	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	108	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.072J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.041J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.031J**	0.50	0.029
207-08-9	Benzo(k)fluoranthene	**0.052J**	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	1.0U	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.082J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	1.0U	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
84-66-2	Diethyl Phthalate	0.50U	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	0.50U	0.50	0.22
206-44-0	Fluoranthene	**0.041J**	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	**0.031J**	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	**0.031J**	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
*129-00-0	Pyrene	**0.041J**	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	48	*20-70*
Phenol-d6	32	*18-45*
Nitrobenzene-d5	78	*31-123*
2-Fluorobiphenyl	78	*25-113*
2,4,6-Tribromophenol	81	*30-121*
o-Terphenyl	88	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100	U	100	28	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Arsenic	3.0	U	3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Barium	**20**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 09:13	DSC	1012934
Cadmium	0.20	U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Calcium	**130000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
***Chromium**	**0.73**	**J**	1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Cobalt	**0.38**	**J**	1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Copper	**1.6**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
***Iron**	**120**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
Lead	1.0	U	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Magnesium	**150000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
Manganese	**51**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:53	KLV	1012976
Nickel	**9.2**		1.0	0.37	ug/L	1	USEPA-6020A	11/30/10 09:13	DSC	1012934
Potassium	**3800**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
Selenium	**1.1**		1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Sodium	**64000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:43	JMF	1012888
Thallium	1.0	U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934
Vanadium	**0.45**	**J**	3.0	0.28	ug/L	1	USEPA-6020A	11/30/10 09:13	DSC	1012934
Zinc	**6.2**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 22:25	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0113**	Sampled:	11/18/10 09:00
Lab Sample ID:	**1011407-01**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**42**		1.0	0.098	mg/L	1	USEPA-300.0	11/30/10 16:41	CKD	1013122
Chemical Oxygen Demand	**6.4**		5.0	3.7	mg/L	1	SM 5220 D 20th	11/23/10 12:45	CKD	1012893
Fluoride	**0.53**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**0.11**		0.010	0.0089	mg/L	1	SM 4500-NH3 G 20th	11/22/10 12:42	GEH	1012790
***pH**	**7.7**		1.0	1.0	pH Units	1	USEPA-150.1	11/30/10 12:47	KRK	1013083
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/30/10 11:32	CLD	1013010
Residue, Dissolved @ 180° C	**1300**		50	50	mg/L	1	SM 2540 C 20th	11/23/10 15:55	KAR	1012844
Residue, Suspended	**3.9**		3.3	3.3	mg/L	1	SM 2540 D 20th	11/23/10 15:55	KAR	1012838
Sulfate	**590**		20	0.61	mg/L	10	USEPA-300.0	12/01/10 00:40	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	12/01/10 14:01	LMA	1012747
***Phosphorus, Total**	**0.020**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/30/10 13:02	CLD	1012990
Carbon, Total Organic	**2.3**		0.50	0.25	mg/L	1	SM 5310 C 20th	11/24/10 13:39	GEH	1012992

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	5.0U	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	106	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C

CAS Number	Analyte	Analytical Result	RL	MDL
83-32-9	Acenaphthene	0.50U	0.50	0.020
208-96-8	Acenaphthylene	0.50U	0.50	0.033
98-86-2	Acetophenone	0.50U	0.50	0.087
62-53-3	Aniline	0.50U	0.50	0.036
120-12-7	Anthracene	0.50U	0.50	0.035
1912-24-9	Atrazine	0.50U	0.50	0.17
100-52-7	Benzaldehyde	0.50U	0.50	0.16
*56-55-3	Benzo(a)anthracene	**0.041J**	0.50	0.025
*50-32-8	Benzo(a)pyrene	**0.031J**	0.50	0.028
*205-99-2	Benzo(b)fluoranthene	**0.031J**	0.50	0.029
207-08-9	Benzo(k)fluoranthene	0.50U	0.50	0.049
191-24-2	Benzo(g,h,i)perylene	0.50U	0.50	0.055
92-52-4	1,1'-Biphenyl	0.50U	0.50	0.10
101-55-3	4-Bromophenyl Phenyl Ether	0.50U	0.50	0.047
85-68-7	Butyl Benzyl Phthalate	**0.061J**	1.0	0.057
*105-60-2	Caprolactam	1.0U	1.0	0.21
*86-74-8	Carbazole	0.50U	0.50	0.12
59-50-7	4-Chloro-3-methylphenol	0.50U	0.50	0.17
106-47-8	4-Chloroaniline	1.0U	1.0	0.14
111-91-1	Bis(2-chloroethoxy)methane	0.50U	0.50	0.039
111-44-4	Bis(2-chloroethyl) Ether	0.50U	0.50	0.034
108-60-1	Bis(2-chloroisopropyl) Ether	0.50U	0.50	0.044
91-58-7	2-Chloronaphthalene	0.50U	0.50	0.032
95-57-8	2-Chlorophenol	0.50U	0.50	0.070
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50U	0.50	0.12
*218-01-9	Chrysene	**0.041J**	0.50	0.022
53-70-3	Dibenz(a,h)anthracene	0.50U	0.50	0.053
132-64-9	Dibenzofuran	0.50U	0.50	0.11
84-74-2	Di-n-butyl Phthalate	**0.69J**	1.0	0.61

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
91-94-1	3,3´-Dichlorobenzidine	1.0U	1.0	1.0
120-83-2	2,4-Dichlorophenol	0.50U	0.50	0.23
84-66-2	Diethyl Phthalate	**0.22J**	0.50	0.12
105-67-9	2,4-Dimethylphenol	1.0U	1.0	0.31
131-11-3	Dimethyl Phthalate	0.50U	0.50	0.10
534-52-1	4,6-Dinitro-2-methylphenol	0.50U	0.50	0.14
51-28-5	2,4-Dinitrophenol	5.0U	5.0	1.8
121-14-2	2,4-Dinitrotoluene	0.50U	0.50	0.15
606-20-2	2,6-Dinitrotoluene	0.50U	0.50	0.25
117-84-0	Di-n-octyl Phthalate	0.50U	0.50	0.056
117-81-7	Bis(2-ethylhexyl) Phthalate	**0.46J**	0.50	0.22
206-44-0	Fluoranthene	0.50U	0.50	0.040
86-73-7	Fluorene	0.50U	0.50	0.019
118-74-1	Hexachlorobenzene	0.50U	0.50	0.065
87-68-3	Hexachlorobutadiene	0.50U	0.50	0.13
77-47-4	Hexachlorocyclopentadiene	0.50U	0.50	0.15
67-72-1	Hexachloroethane	0.50U	0.50	0.13
193-39-5	Indeno(1,2,3-cd)pyrene	0.50U	0.50	0.042
78-59-1	Isophorone	0.50U	0.50	0.048
*56-49-5	3-Methylcholanthrene	2.0U	2.0	0.25
91-57-6	2-Methylnaphthalene	0.50U	0.50	0.021
90-12-0	1-Methylnaphthalene	0.50U	0.50	0.039
95-48-7	2-Methylphenol	0.50U	0.50	0.13
106-44-5	4-Methylphenol	0.50U	0.50	0.11
91-20-3	Naphthalene	**0.082J**	0.50	0.022
88-74-4	2-Nitroaniline	1.0U	1.0	0.14
99-09-2	3-Nitroaniline	1.0U	1.0	0.40
100-01-6	4-Nitroaniline	1.0U	1.0	0.16
98-95-3	Nitrobenzene	0.50U	0.50	0.18
100-02-7	4-Nitrophenol	5.0U	5.0	0.71
88-75-5	2-Nitrophenol	0.50U	0.50	0.068

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/24/10 By: JTS
Dilution Factor:	1	Analyzed:	12/15/10 By: DMC
QC Batch:	1012641	Analytical Batch:	0L21016

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
86-30-6	N-Nitroso-diphenylamine	0.50U	0.50	0.16
621-64-7	N-Nitroso-di-n-propylamine	0.50U	0.50	0.091
87-86-5	Pentachlorophenol	1.0U	1.0	0.094
85-01-8	Phenanthrene	**0.031J**	0.50	0.025
108-95-2	Phenol	0.50U	0.50	0.15
129-00-0	Pyrene	0.50U	0.50	0.026
88-06-2	2,4,6-Trichlorophenol	0.50U	0.50	0.065
95-95-4	2,4,5-Trichlorophenol	0.50U	0.50	0.030

Surrogates:	***% Recovery***	***Control Limits***
2-Fluorophenol	49	*20-70*
Phenol-d6	33	*18-45*
Nitrobenzene-d5	78	*31-123*
2-Fluorobiphenyl	78	*25-113*
2,4,6-Tribromophenol	88	*30-121*
o-Terphenyl	87	*42-125*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00

Dissolved Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	100	U	100	28	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Arsenic	**5.2**		3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Barium	**48**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 08:16	DSC	1012940
Cadmium	0.20	U	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Calcium	**76000**		500	67	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
***Chromium**	**0.65**	**J**	1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Cobalt	**1.6**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Copper	1.0	U	1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Iron	**1300**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
Lead	1.0	U	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Magnesium	**52000**		500	48	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
Manganese	**53**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 09:31	KLV	1012974
***Nickel**	**3.2**		1.0	0.37	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Potassium	**1600**		200	82	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
Selenium	1.0	U	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Sodium	**44000**		500	140	ug/L	1	USEPA-6010C	11/29/10 15:02	JMF	1012910
Thallium	1.0	U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Vanadium	3.0	U	3.0	0.28	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940
Zinc	**3.0**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 20:22	DWJ	1012940

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Aluminum	**1200**		100	28	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
Antimony	1.0	U	1.0	0.36	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Arsenic	**4.3**		3.0	0.38	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Barium	**51**		2.0	0.59	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Beryllium	1.0	U	1.0	0.30	ug/L	1	USEPA-6020A	11/30/10 09:16	DSC	1012934
***Cadmium**	**0.067**	**J**	0.20	0.055	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Calcium	**80000**		500	67	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
***Chromium**	**2.1**		1.0	0.46	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Cobalt	**2.2**		1.0	0.042	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Copper	**1.4**		1.0	0.71	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
***Iron**	**3300**		20	4.2	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
Lead	**0.49**	**J**	1.0	0.22	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Magnesium	**49000**		500	48	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
Manganese	**91**		2.0	0.42	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Mercury	0.20	U	0.20	0.061	ug/L	1	USEPA-7470A	11/30/10 12:58	KLV	1012976
Nickel	**7.8**		1.0	0.37	ug/L	1	USEPA-6020A	11/30/10 09:16	DSC	1012934
Potassium	**1900**		200	82	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
Selenium	1.0	U	1.0	0.82	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Silver	0.20	U	0.20	0.061	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Sodium	**41000**		500	140	ug/L	1	USEPA-6010C	11/29/10 13:48	JMF	1012888
Thallium	1.0	U	1.0	0.056	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934
Vanadium	**3.2**		3.0	0.28	ug/L	1	USEPA-6020A	11/30/10 09:16	DSC	1012934
Zinc	**4.4**	**J**	20	2.9	ug/L	1	USEPA-6020A	11/29/10 22:29	DWJ	1012934

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**NTC02GW0513**	Sampled:	11/18/10 09:10
Lab Sample ID:	**1011407-02**	Sampled By:	Tetra Tech
Matrix:	Water	Received:	11/19/10 09:00

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Chloride	**29**		1.0	0.098	mg/L	1	USEPA-300.0	11/30/10 17:00	CKD	1013122
Chemical Oxygen Demand	**14**		5.0	3.7	mg/L	1	SM 5220 D 20th	11/23/10 12:45	CKD	1012893
Fluoride	**0.51**		0.10	0.0040	mg/L	1	SM 4500-F C 20th	11/30/10 13:19	CKD	1013058
Nitrogen, Ammonia	**0.67**		0.010	0.0089	mg/L	1	SM 4500-NH3 G 20th	11/22/10 12:42	GEH	1012790
***pH**	**8.0**		1.0	1.0	pH Units	1	USEPA-150.1	11/30/10 12:47	KRK	1013083
Phenolics, Total	0.050	U	0.050	0.0028	mg/L	1	USEPA-420.1	11/30/10 11:33	CLD	1013010
Residue, Dissolved @ 180° C	**540**		50	50	mg/L	1	SM 2540 C 20th	11/23/10 15:55	KAR	1012844
Residue, Suspended	**52**		3.3	3.3	mg/L	1	SM 2540 D 20th	11/23/10 15:55	KAR	1012838
Sulfate	**170**		8.0	0.24	mg/L	4	USEPA-300.0	12/01/10 00:58	CKD	1013122
Cyanide, Total	0.0050	U	0.0050	0.0017	mg/L	1	USEPA-9014	12/01/10 14:01	LMA	1012747
***Phosphorus, Total**	**0.026**		0.010	0.0017	mg/L	1	SM 4500-P E 20th	11/30/10 11:22	CLD	1012990
Carbon, Total Organic	**4.4**		0.50	0.25	mg/L	1	SM 5310 C 20th	11/24/10 14:03	GEH	1012992

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111801**	Sampled:	11/18/10 00:00
Lab Sample ID:	**1011407-03**	Sampled By:	TML
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL	MDL
67-64-1	Acetone	**3.5J**	5.0	2.1
*107-02-8	Acrolein	5.0U	5.0	0.44
107-13-1	Acrylonitrile	1.0U	1.0	0.25
71-43-2	Benzene	1.0U	1.0	0.18
108-86-1	Bromobenzene	1.0U	1.0	0.19
74-97-5	Bromochloromethane	1.0U	1.0	0.18
75-27-4	Bromodichloromethane	1.0U	1.0	0.13
75-25-2	Bromoform	1.0U	1.0	0.15
74-83-9	Bromomethane	1.0U	1.0	0.18
104-51-8	n-Butylbenzene	1.0U	1.0	0.18
135-98-8	sec-Butylbenzene	1.0U	1.0	0.18
98-06-6	tert-Butylbenzene	1.0U	1.0	0.15
*75-15-0	Carbon Disulfide	1.0U	1.0	0.18
56-23-5	Carbon Tetrachloride	1.0U	1.0	0.13
108-90-7	Chlorobenzene	1.0U	1.0	0.19
75-00-3	Chloroethane	1.0U	1.0	0.15
110-75-8	2-Chloroethyl Vinyl Ether	5.0U	5.0	0.28
67-66-3	Chloroform	1.0U	1.0	0.17
74-87-3	Chloromethane	1.0U	1.0	0.16
95-49-8	2-Chlorotoluene	1.0U	1.0	0.16
106-43-4	4-Chlorotoluene	1.0U	1.0	0.12
110-82-7	Cyclohexane	5.0U	5.0	0.25
96-12-8	1,2-Dibromo-3-chloropropane	1.0U	1.0	0.40
124-48-1	Dibromochloromethane	1.0U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0U	1.0	0.22
74-95-3	Dibromomethane	1.0U	1.0	0.23
110-57-6	trans-1,4-Dichloro-2-butene	5.0U	5.0	0.21
95-50-1	1,2-Dichlorobenzene	1.0U	1.0	0.12
541-73-1	1,3-Dichlorobenzene	1.0U	1.0	0.13
106-46-7	1,4-Dichlorobenzene	1.0U	1.0	0.12
75-71-8	Dichlorodifluoromethane	1.0U	1.0	0.21

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111801**	Sampled:	11/18/10 00:00
Lab Sample ID:	**1011407-03**	Sampled By:	TML
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
75-34-3	1,1-Dichloroethane	1.0U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0U	1.0	0.13
75-35-4	1,1-Dichloroethene	1.0U	1.0	0.13
156-59-2	cis-1,2-Dichloroethene	1.0U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0U	1.0	0.20
78-87-5	1,2-Dichloropropane	1.0U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0U	1.0	0.14
594-20-7	2,2-Dichloropropane	1.0U	1.0	0.18
563-58-6	1,1-Dichloropropene	1.0U	1.0	0.25
10061-01-5	cis-1,3-Dichloropropene	1.0U	1.0	0.25
10061-02-6	trans-1,3-Dichloropropene	1.0U	1.0	0.23
141-78-6	Ethyl Acetate	50U	50	0.27
100-41-4	Ethylbenzene	1.0U	1.0	0.14
591-78-6	2-Hexanone	5.0U	5.0	0.29
74-88-4	Iodomethane	1.0U	1.0	0.21
98-82-8	Isopropylbenzene	1.0U	1.0	0.15
99-87-6	4-Isopropyltoluene	1.0U	1.0	0.29
79-20-9	Methyl Acetate	5.0U	5.0	0.30
1634-04-4	Methyl tert-Butyl Ether	1.0U	1.0	0.28
108-87-2	Methylcyclohexane	5.0U	5.0	0.20
75-09-2	Methylene Chloride	1.0U	1.0	0.26
78-93-3	2-Butanone (MEK)	5.0U	5.0	0.55
80-62-6	Methyl Methacrylate	5.0U	5.0	0.094
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0U	5.0	0.28
103-65-1	n-Propylbenzene	1.0U	1.0	0.15
100-42-5	Styrene	1.0U	1.0	0.11
630-20-6	1,1,1,2-Tetrachloroethane	1.0U	1.0	0.16
79-34-5	1,1,2,2-Tetrachloroethane	1.0U	1.0	0.070
127-18-4	Tetrachloroethene	1.0U	1.0	0.16
109-99-9	Tetrahydrofuran	5.0U	5.0	1.0
108-88-3	Toluene	1.0U	1.0	0.16

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**TETRA TECH NUS - Pittsburgh**	Work Order:	**1011407**
Project:	Naval Station Great Lakes	Description:	Forrestal Landfill
Client Sample ID:	**TB111801**	Sampled:	11/18/10 00:00
Lab Sample ID:	**1011407-03**	Sampled By:	TML
Matrix:	Water	Received:	11/19/10 09:00
Unit:	ug/L	Prepared:	11/23/10 By: DLV
Dilution Factor:	1	Analyzed:	11/23/10 By: DLV
QC Batch:	1012925	Analytical Batch:	0K23033

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL	MDL
87-61-6	1,2,3-Trichlorobenzene	1.0U	1.0	0.18
120-82-1	1,2,4-Trichlorobenzene	1.0U	1.0	0.16
71-55-6	1,1,1-Trichloroethane	1.0U	1.0	0.19
79-00-5	1,1,2-Trichloroethane	1.0U	1.0	0.18
79-01-6	Trichloroethene	1.0U	1.0	0.092
75-69-4	Trichlorofluoromethane	1.0U	1.0	0.20
96-18-4	1,2,3-Trichloropropane	1.0U	1.0	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	1.0	0.13
95-63-6	1,2,4-Trimethylbenzene	1.0U	1.0	0.16
108-67-8	1,3,5-Trimethylbenzene	1.0U	1.0	0.18
108-05-4	Vinyl Acetate	5.0U	5.0	0.23
75-01-4	Vinyl Chloride	1.0U	1.0	0.10
1330-20-7	Xylene (Total)	1.0U	1.0	0.42

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	108	*88-115*
1,2-Dichloroethane-d4	104	*81-116*
Toluene-d8	100	*87-113*
4-Bromofluorobenzene	92	*78-116*

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012925 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 11/23/2010 By: DLV

Unit: ug/L Analytical Batch: 0K23033

Acetone			5.0 U					5.0	2.1
Acrolein			5.0 U					5.0	0.44
Acrylonitrile			1.0 U					1.0	0.25
Benzene			1.0 U					1.0	0.18
Bromobenzene			1.0 U					1.0	0.19
Bromochloromethane			1.0 U					1.0	0.18
Bromodichloromethane			1.0 U					1.0	0.13
Bromoform			1.0 U					1.0	0.15
Bromomethane			1.0 U					1.0	0.18
n-Butylbenzene			1.0 U					1.0	0.18
sec-Butylbenzene			1.0 U					1.0	0.18
tert-Butylbenzene			1.0 U					1.0	0.15
Carbon Disulfide			1.0 U					1.0	0.18
Carbon Tetrachloride			1.0 U					1.0	0.13
Chlorobenzene			1.0 U					1.0	0.19
Chloroethane			1.0 U					1.0	0.15
2-Chloroethyl Vinyl Ether			5.0 U					5.0	0.28
Chloroform			1.0 U					1.0	0.17
Chloromethane			1.0 U					1.0	0.16
2-Chlorotoluene			1.0 U					1.0	0.16
4-Chlorotoluene			1.0 U					1.0	0.12
Cyclohexane			5.0 U					5.0	0.25
1,2-Dibromo-3-chloropropane			1.0 U					1.0	0.40
Dibromochloromethane			1.0 U					1.0	0.14
1,2-Dibromoethane			1.0 U					1.0	0.22
Dibromomethane			1.0 U					1.0	0.23
trans-1,4-Dichloro-2-butene			5.0 U					5.0	0.21
1,2-Dichlorobenzene			1.0 U					1.0	0.12
1,3-Dichlorobenzene			1.0 U					1.0	0.13
1,4-Dichlorobenzene			1.0 U					1.0	0.12
Dichlorodifluoromethane			1.0 U					1.0	0.21
1,1-Dichloroethane			1.0 U					1.0	0.13
1,2-Dichloroethane			1.0 U					1.0	0.13
1,1-Dichloroethene			1.0 U					1.0	0.13
cis-1,2-Dichloroethene			1.0 U					1.0	0.23
trans-1,2-Dichloroethene			1.0 U					1.0	0.20

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
1,2-Dichloropropane			1.0 U					1.0	0.15
1,3-Dichloropropane			1.0 U					1.0	0.14
2,2-Dichloropropane			1.0 U					1.0	0.18
1,1-Dichloropropene			1.0 U					1.0	0.25
cis-1,3-Dichloropropene			1.0 U					1.0	0.25
trans-1,3-Dichloropropene			1.0 U					1.0	0.23
Ethyl Acetate			50 U					50	0.27
Ethylbenzene			1.0 U					1.0	0.14
2-Hexanone			5.0 U					5.0	0.29
Iodomethane			1.0 U					1.0	0.21
Isopropylbenzene			1.0 U					1.0	0.15
4-Isopropyltoluene			1.0 U					1.0	0.29
Methyl Acetate			5.0 U					5.0	0.30
Methyl tert-Butyl Ether			1.0 U					1.0	0.28
Methylcyclohexane			5.0 U					5.0	0.20
Methylene Chloride			1.0 U					1.0	0.26
2-Butanone (MEK)			5.0 U					5.0	0.55
Methyl Methacrylate			5.0 U					5.0	0.094
4-Methyl-2-pentanone (MIBK)			5.0 U					5.0	0.28
n-Propylbenzene			1.0 U					1.0	0.15
Styrene			1.0 U					1.0	0.11
1,1,1,2-Tetrachloroethane			1.0 U					1.0	0.16
1,1,2,2-Tetrachloroethane			1.0 U					1.0	0.070
Tetrachloroethene			1.0 U					1.0	0.16
Tetrahydrofuran			5.0 U					5.0	1.0
Toluene			1.0 U					1.0	0.16
1,2,3-Trichlorobenzene			1.0 U					1.0	0.18
1,2,4-Trichlorobenzene			1.0 U					1.0	0.16
1,1,1-Trichloroethane			1.0 U					1.0	0.19
1,1,2-Trichloroethane			1.0 U					1.0	0.18
Trichloroethene			1.0 U					1.0	0.092
Trichlorofluoromethane			1.0 U					1.0	0.20
1,2,3-Trichloropropane			1.0 U					1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0 U					1.0	0.13
1,2,4-Trimethylbenzene			1.0 U					1.0	0.16
1,3,5-Trimethylbenzene			1.0 U					1.0	0.18

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Vinyl Acetate			5.0 U					5.0	0.23
Vinyl Chloride			1.0 U					1.0	0.10
Xylene (Total)			1.0 U					1.0	0.42
Surrogates:									
Dibromofluoromethane				*104*	*88-115*				
1,2-Dichloroethane-d4				*100*	*81-116*				
Toluene-d8				*99*	*87-113*				
4-Bromofluorobenzene				*94*	*78-116*				

Laboratory Control Sample Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acetone		40.0	**32.3**	81	52-134		20	5.0	2.1
Acrolein		40.0	**70.4**	**176**	61-151		20	5.0	0.44
Acrylonitrile		40.0	**34.3**	86	70-126		20	1.0	0.25
Benzene		40.0	**40.7**	102	86-122		20	1.0	0.18
Bromobenzene		40.0	**36.6**	92	85-118		20	1.0	0.19
Bromochloromethane		40.0	**36.8**	92	79-122		20	1.0	0.18
Bromodichloromethane		40.0	**43.3**	108	81-126		20	1.0	0.13
Bromoform		40.0	**41.6**	104	55-126		20	1.0	0.15
Bromomethane		40.0	**32.3**	81	56-140		20	1.0	0.18
n-Butylbenzene		40.0	**40.8**	102	79-122		20	1.0	0.18
sec-Butylbenzene		40.0	**41.0**	102	85-118		20	1.0	0.18
tert-Butylbenzene		40.0	**42.5**	106	85-115		20	1.0	0.15
Carbon Disulfide		40.0	**56.7**	**142**	74-133		20	1.0	0.18
Carbon Tetrachloride		40.0	**46.2**	116	80-126		20	1.0	0.13
Chlorobenzene		40.0	**40.2**	101	88-114		20	1.0	0.19
Chloroethane		40.0	**35.6**	89	71-136		20	1.0	0.15
2-Chloroethyl Vinyl Ether		40.0	**34.3**	86	60-148		20	5.0	0.28
Chloroform		40.0	**41.5**	104	86-120		20	1.0	0.17
Chloromethane		40.0	**30.3**	76	68-130		20	1.0	0.16
2-Chlorotoluene		40.0	**41.5**	104	91-116		20	1.0	0.16
4-Chlorotoluene		40.0	**40.8**	102	89-115		20	1.0	0.12
Cyclohexane		40.0	**38.0**	95	70-129		20	5.0	0.25
1,2-Dibromo-3-chloropropane		40.0	**37.6**	94	61-123		20	1.0	0.40
Dibromochloromethane		40.0	**45.3**	113	73-114		20	1.0	0.14
1,2-Dibromoethane		40.0	**41.7**	104	81-118		20	1.0	0.22

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Dibromomethane		40.0	**41.8**	105	83-120		20	1.0	0.23
trans-1,4-Dichloro-2-butene		40.0	**32.8**	82	64-125		20	5.0	0.21
1,2-Dichlorobenzene		40.0	**42.6**	106	87-119		20	1.0	0.12
1,3-Dichlorobenzene		40.0	**42.4**	106	88-116		20	1.0	0.13
1,4-Dichlorobenzene		40.0	**40.8**	102	86-117		20	1.0	0.12
Dichlorodifluoromethane		40.0	**39.3**	98	67-133		20	1.0	0.21
1,1-Dichloroethane		40.0	**39.5**	99	80-122		20	1.0	0.13
1,2-Dichloroethane		40.0	**41.5**	104	78-121		20	1.0	0.13
1,1-Dichloroethene		40.0	**41.8**	104	81-125		20	1.0	0.13
cis-1,2-Dichloroethene		40.0	**43.4**	109	84-121		20	1.0	0.23
trans-1,2-Dichloroethene		40.0	**42.0**	105	85-121		20	1.0	0.20
1,2-Dichloropropane		40.0	**38.0**	95	74-125		20	1.0	0.15
1,3-Dichloropropane		40.0	**38.3**	96	82-117		20	1.0	0.14
2,2-Dichloropropane		40.0	**46.6**	116	48-136		20	1.0	0.18
1,1-Dichloropropene		40.0	**42.5**	106	83-123		20	1.0	0.25
cis-1,3-Dichloropropene		40.0	**44.6**	112	78-119		20	1.0	0.25
trans-1,3-Dichloropropene		40.0	**39.8**	99	70-125		20	1.0	0.23
Ethyl Acetate		100	**83.5**	83	13-184		20	50	0.27
Ethylbenzene		40.0	**41.1**	103	86-116		20	1.0	0.14
2-Hexanone		40.0	**29.5**	74	53-137		20	5.0	0.29
Iodomethane		40.0	**42.0**	105	67-136		20	1.0	0.21
Isopropylbenzene		40.0	**41.7**	104	90-118		20	1.0	0.15
4-Isopropyltoluene		40.0	**42.4**	106	84-119		20	1.0	0.29
Methyl Acetate		40.0	**30.4**	76	65-136		20	5.0	0.30
Methyl tert-Butyl Ether		40.0	**40.1**	100	82-117		20	1.0	0.28
Methylcyclohexane		40.0	**42.1**	105	75-126		20	5.0	0.20
Methylene Chloride		40.0	**34.0**	85	74-135		20	1.0	0.26
2-Butanone (MEK)		40.0	**34.0**	85	60-134		20	5.0	0.55
Methyl Methacrylate		100	**89.2**	89	70-130		20	5.0	0.094
4-Methyl-2-pentanone (MIBK)		40.0	**32.2**	80	53-142		20	5.0	0.28
n-Propylbenzene		40.0	**42.3**	106	88-119		20	1.0	0.15
Styrene		40.0	**43.6**	109	81-115		20	1.0	0.11
1,1,1,2-Tetrachloroethane		40.0	**44.8**	112	85-120		20	1.0	0.16
1,1,2,2-Tetrachloroethane		40.0	**36.2**	90	81-127		20	1.0	0.070
Tetrachloroethene		40.0	**45.2**	113	85-115		20	1.0	0.16
Tetrahydrofuran		40.0	**38.4**	96	58-122		20	5.0	1.0

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1012925 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 11/23/2010 By: DLV
Unit: ug/L Analytical Batch: 0K23033

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Toluene		40.0	**42.2**	105	87-123		20	1.0	0.16
1,2,3-Trichlorobenzene		40.0	**45.7**	114	74-125		20	1.0	0.18
1,2,4-Trichlorobenzene		40.0	**46.6**	117	75-127		20	1.0	0.16
1,1,1-Trichloroethane		40.0	**44.4**	111	81-123		20	1.0	0.19
1,1,2-Trichloroethane		40.0	**41.2**	103	86-123		20	1.0	0.18
Trichloroethene		40.0	**45.3**	113	80-122		20	1.0	0.092
Trichlorofluoromethane		40.0	**40.6**	101	78-130		20	1.0	0.20
1,2,3-Trichloropropane		40.0	**36.8**	92	72-125		20	1.0	0.28
1,1,2-Trichloro-1,2,2-trifluoroethane		40.0	**39.4**	99	76-129		20	1.0	0.13
1,2,4-Trimethylbenzene		40.0	**41.8**	105	86-116		20	1.0	0.16
1,3,5-Trimethylbenzene		40.0	**41.4**	103	85-117		20	1.0	0.18
Vinyl Acetate		40.0	**44.4**	111	67-143		20	5.0	0.23
Vinyl Chloride		40.0	**33.1**	83	73-130		20	1.0	0.10
Xylene (Total)		120	**128**	107	88-115		20	1.0	0.42
Surrogates:									
Dibromofluoromethane				*104*	*88-115*				
1,2-Dichloroethane-d4				*100*	*81-116*				
Toluene-d8				*104*	*87-113*				
4-Bromofluorobenzene				*99*	*78-116*				

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL

QC Batch: 1012641 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank Analyzed: 12/14/2010 By: DMC

Unit: ug/L Analytical Batch: 0L17046

Acenaphthene			0.50 U					0.50	0.020
Acenaphthylene			0.50 U					0.50	0.033
Acetophenone			0.50 U					0.50	0.087
Aniline			0.50 U					0.50	0.036
Anthracene			0.50 U					0.50	0.035
Atrazine			0.50 U					0.50	0.17
Benzaldehyde			0.50 U					0.50	0.16
Benzo(a)anthracene			**0.060 J**					0.50	0.025
Benzo(a)pyrene			**0.040 J**					0.50	0.028
Benzo(b)fluoranthene			**0.040 J**					0.50	0.029
Benzo(k)fluoranthene			**0.050 J**					0.50	0.049
Benzo(g,h,i)perylene			0.50 U					0.50	0.055
1,1'-Biphenyl			0.50 U					0.50	0.10
4-Bromophenyl Phenyl Ether			0.50 U					0.50	0.047
Butyl Benzyl Phthalate			1.0 U					1.0	0.057
Caprolactam			1.0 U					1.0	0.21
Carbazole			0.50 U					0.50	0.12
4-Chloro-3-methylphenol			0.50 U					0.50	0.17
4-Chloroaniline			1.0 U					1.0	0.14
Bis(2-chloroethoxy)methane			0.50 U					0.50	0.039
Bis(2-chloroethyl) Ether			0.50 U					0.50	0.034
Bis(2-chloroisopropyl) Ether			0.50 U					0.50	0.044
2-Chloronaphthalene			0.50 U					0.50	0.032
2-Chlorophenol			0.50 U					0.50	0.070
4-Chlorophenyl Phenyl Ether			0.50 U					0.50	0.12
Chrysene			**0.050 J**					0.50	0.022
Dibenz(a,h)anthracene			0.50 U					0.50	0.053
Dibenzofuran			0.50 U					0.50	0.11
Di-n-butyl Phthalate			1.0 U					1.0	0.61
3,3'-Dichlorobenzidine			1.0 U					1.0	1.0
2,4-Dichlorophenol			0.50 U					0.50	0.23
Diethyl Phthalate			**0.47 J**					0.50	0.12
2,4-Dimethylphenol			1.0 U					1.0	0.31
Dimethyl Phthalate			0.50 U					0.50	0.10
4,6-Dinitro-2-methylphenol			0.50 U					0.50	0.14
2,4-Dinitrophenol			5.0 U					5.0	1.8

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2,4-Dinitrotoluene			0.50 U					0.50	0.15
2,6-Dinitrotoluene			0.50 U					0.50	0.25
Di-n-octyl Phthalate			0.50 U					0.50	0.056
Bis(2-ethylhexyl) Phthalate			0.50 U					0.50	0.22
Fluoranthene			0.50 U					0.50	0.040
Fluorene			0.50 U					0.50	0.019
Hexachlorobenzene			0.50 U					0.50	0.065
Hexachlorobutadiene			0.50 U					0.50	0.13
Hexachlorocyclopentadiene			0.50 U					0.50	0.15
Hexachloroethane			0.50 U					0.50	0.13
Indeno(1,2,3-cd)pyrene			0.50 U					0.50	0.042
Isophorone			0.50 U					0.50	0.048
3-Methylcholanthrene			2.0 U					2.0	0.25
2-Methylnaphthalene			0.50 U					0.50	0.021
1-Methylnaphthalene			0.50 U					0.50	0.039
2-Methylphenol			0.50 U					0.50	0.13
4-Methylphenol			0.50 U					0.50	0.11
Naphthalene			0.50 U					0.50	0.022
2-Nitroaniline			1.0 U					1.0	0.14
3-Nitroaniline			1.0 U					1.0	0.40
4-Nitroaniline			1.0 U					1.0	0.16
Nitrobenzene			0.50 U					0.50	0.18
4-Nitrophenol			5.0 U					5.0	0.71
2-Nitrophenol			0.50 U					0.50	0.068
N-Nitroso-diphenylamine			0.50 U					0.50	0.16
N-Nitroso-di-n-propylamine			0.50 U					0.50	0.091
Pentachlorophenol			1.0 U					1.0	0.094
Phenanthrene			0.50 U					0.50	0.025
Phenol			0.50 U					0.50	0.15
Pyrene			0.50 U					0.50	0.026
2,4,6-Trichlorophenol			0.50 U					0.50	0.065
2,4,5-Trichlorophenol			0.50 U					0.50	0.030
Surrogates:									
2-Fluorophenol				*44*	*20-70*				
Phenol-d6				*32*	*18-45*				
Nitrobenzene-d5				*81*	*31-123*				

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Surrogates (Continued):									
2-Fluorobiphenyl				*80*	*25-113*				
2,4,6-Tribromophenol				*74*	*30-121*				
o-Terphenyl				*90*	*42-125*				

Method Blank Analyzed: 12/15/2010 By: DMC
Unit: ug/L Analytical Batch: 0L21016

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acenaphthene			0.50 U					0.50	0.020
Acenaphthylene			0.50 U					0.50	0.033
Acetophenone			0.50 U					0.50	0.087
Aniline			0.50 U					0.50	0.036
Anthracene			0.50 U					0.50	0.035
Atrazine			0.50 U					0.50	0.17
Benzaldehyde			0.50 U					0.50	0.16
Benzo(a)anthracene			**0.070 J**					0.50	0.025
Benzo(a)pyrene			**0.030 J**					0.50	0.028
Benzo(b)fluoranthene			**0.030 J**					0.50	0.029
Benzo(k)fluoranthene			0.50 U					0.50	0.049
Benzo(g,h,i)perylene			0.50 U					0.50	0.055
1,1'-Biphenyl			0.50 U					0.50	0.10
4-Bromophenyl Phenyl Ether			0.50 U					0.50	0.047
Butyl Benzyl Phthalate			1.0 U					1.0	0.057
Caprolactam			1.0 U					1.0	0.21
Carbazole			0.50 U					0.50	0.12
4-Chloro-3-methylphenol			0.50 U					0.50	0.17
4-Chloroaniline			1.0 U					1.0	0.14
Bis(2-chloroethoxy)methane			0.50 U					0.50	0.039
Bis(2-chloroethyl) Ether			0.50 U					0.50	0.034
Bis(2-chloroisopropyl) Ether			0.50 U					0.50	0.044
2-Chloronaphthalene			0.50 U					0.50	0.032
2-Chlorophenol			0.50 U					0.50	0.070
4-Chlorophenyl Phenyl Ether			0.50 U					0.50	0.12
Chrysene			**0.090 J**					0.50	0.022
Dibenz(a,h)anthracene			0.50 U					0.50	0.053
Dibenzofuran			0.50 U					0.50	0.11
Di-n-butyl Phthalate			1.0 U					1.0	0.61

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued) Analyzed: 12/15/2010 By: DMC

Unit: ug/L Analytical Batch: 0L21016

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
3,3´-Dichlorobenzidine			1.0 U					1.0	1.0
2,4-Dichlorophenol			0.50 U					0.50	0.23
Diethyl Phthalate			0.50 U					0.50	0.12
2,4-Dimethylphenol			1.0 U					1.0	0.31
Dimethyl Phthalate			0.50 U					0.50	0.10
4,6-Dinitro-2-methylphenol			0.50 U					0.50	0.14
2,4-Dinitrophenol			5.0 U					5.0	1.8
2,4-Dinitrotoluene			0.50 U					0.50	0.15
2,6-Dinitrotoluene			0.50 U					0.50	0.25
Di-n-octyl Phthalate			0.50 U					0.50	0.056
Bis(2-ethylhexyl) Phthalate			0.50 U					0.50	0.22
Fluoranthene			0.50 U					0.50	0.040
Fluorene			0.50 U					0.50	0.019
Hexachlorobenzene			0.50 U					0.50	0.065
Hexachlorobutadiene			0.50 U					0.50	0.13
Hexachlorocyclopentadiene			0.50 U					0.50	0.15
Hexachloroethane			0.50 U					0.50	0.13
Indeno(1,2,3-cd)pyrene			0.50 U					0.50	0.042
Isophorone			0.50 U					0.50	0.048
3-Methylcholanthrene			2.0 U					2.0	0.25
2-Methylnaphthalene			0.50 U					0.50	0.021
1-Methylnaphthalene			0.50 U					0.50	0.039
2-Methylphenol			0.50 U					0.50	0.13
4-Methylphenol			0.50 U					0.50	0.11
Naphthalene			0.50 U					0.50	0.022
2-Nitroaniline			1.0 U					1.0	0.14
3-Nitroaniline			1.0 U					1.0	0.40
4-Nitroaniline			1.0 U					1.0	0.16
Nitrobenzene			0.50 U					0.50	0.18
4-Nitrophenol			5.0 U					5.0	0.71
2-Nitrophenol			0.50 U					0.50	0.068
N-Nitroso-diphenylamine			0.50 U					0.50	0.16
N-Nitroso-di-n-propylamine			0.50 U					0.50	0.091
Pentachlorophenol			1.0 U					1.0	0.094
Phenanthrene			0.50 U					0.50	0.025
Phenol			0.50 U					0.50	0.15

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Method Blank (Continued)

Analyzed: 12/15/2010 By: DMC
Analytical Batch: 0L21016
Unit: ug/L

Analyte	Result	RL	MDL
Pyrene	**0.040 J**	0.50	0.026
2,4,6-Trichlorophenol	0.50 U	0.50	0.065
2,4,5-Trichlorophenol	0.50 U	0.50	0.030

Surrogates:

2-Fluorophenol	*47*	*20-70*
Phenol-d6	*32*	*18-45*
Nitrobenzene-d5	*77*	*31-123*
2-Fluorobiphenyl	*80*	*25-113*
2,4,6-Tribromophenol	*79*	*30-121*
o-Terphenyl	*82*	*42-125*

Laboratory Control Sample

Analyzed: 12/14/2010 By: DMC
Analytical Batch: 0L17046
Unit: ug/L

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acenaphthene		9.40	**8.13**	86	53-126		20	0.50	0.020
Acenaphthylene		9.40	**8.38**	89	62-133		20	0.50	0.033
Acetophenone		10.0	**8.92**	89	58-115		20	0.50	0.087
Aniline		9.40	**7.83**	83	23-105		20	0.50	0.036
Anthracene		9.40	**8.38**	89	64-130		20	0.50	0.035
Atrazine		10.0	**14.0**	140	60-140		20	0.50	0.17
Benzaldehyde		10.0	**8.93**	89	35-128		20	0.50	0.16
Benzo(a)anthracene		9.40	**8.16**	87	63-129		20	0.50	0.025
Benzo(a)pyrene		9.40	**8.67**	92	59-131		20	0.50	0.028
Benzo(b)fluoranthene		9.40	**8.21**	87	58-133		20	0.50	0.029
Benzo(k)fluoranthene		9.40	**8.01**	85	59-132		20	0.50	0.049
Benzo(g,h,i)perylene		9.40	**8.87**	94	52-129		20	0.50	0.055
1,1'-Biphenyl		10.0	**8.92**	89	58-116		20	0.50	0.10
4-Bromophenyl Phenyl Ether		9.20	**8.32**	90	57-124		20	0.50	0.047
Butyl Benzyl Phthalate		9.20	**8.42**	92	58-141		20	1.0	0.057
Caprolactam		10.0	**1.98**	**20**	23-76		20	1.0	0.21
Carbazole		9.40	**25.4**	**271**	62-146		20	0.50	0.12
4-Chloro-3-methylphenol		9.40	**8.50**	90	53-120		20	0.50	0.17
4-Chloroaniline		9.40	**9.94**	106	44-138		20	1.0	0.14
Bis(2-chloroethoxy)methane		9.20	**7.80**	85	52-124		20	0.50	0.039
Bis(2-chloroethyl) Ether		9.20	**7.05**	77	42-123		20	0.50	0.034
Bis(2-chloroisopropyl) Ether		9.20	**7.59**	82	50-122		20	0.50	0.044
2-Chloronaphthalene		9.70	**8.48**	87	58-126		20	0.50	0.032

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/14/2010 By: DMC

Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
2-Chlorophenol		9.40	**7.73**	82	44-121		20	0.50	0.070
4-Chlorophenyl Phenyl Ether		9.20	**8.40**	91	57-122		20	0.50	0.12
Chrysene		9.40	**8.37**	89	66-134		20	0.50	0.022
Dibenz(a,h)anthracene		9.40	**8.10**	86	57-130		20	0.50	0.053
Dibenzofuran		9.40	**8.76**	93	59-123		20	0.50	0.11
Di-n-butyl Phthalate		9.20	**8.83**	96	58-145		20	1.0	0.61
3,3´-Dichlorobenzidine		20.0	**25.5**	128	55-135		20	1.0	1.0
2,4-Dichlorophenol		9.40	**8.54**	91	51-122		20	0.50	0.23
Diethyl Phthalate		9.20	**8.63**	94	55-129		20	0.50	0.12
2,4-Dimethylphenol		9.40	**5.31**	56	35-112		20	1.0	0.31
Dimethyl Phthalate		9.20	**8.40**	91	61-126		20	0.50	0.10
4,6-Dinitro-2-methylphenol		9.40	**7.55**	80	25-139		20	0.50	0.14
2,4-Dinitrophenol		9.40	**6.33**	67	10-147		20	5.0	1.8
2,4-Dinitrotoluene		9.70	**9.43**	97	55-131		20	0.50	0.15
2,6-Dinitrotoluene		9.70	**8.69**	90	59-120		20	0.50	0.25
Di-n-octyl Phthalate		9.20	**8.16**	89	55-136		20	0.50	0.056
Bis(2-ethylhexyl) Phthalate		9.20	**8.00**	87	60-136		20	0.50	0.22
Fluoranthene		9.40	**8.89**	95	64-138		20	0.50	0.040
Fluorene		9.40	**8.61**	92	60-128		20	0.50	0.019
Hexachlorobenzene		9.70	**8.36**	86	49-130		20	0.50	0.065
Hexachlorobutadiene		9.70	**7.93**	82	50-128		20	0.50	0.13
Hexachlorocyclopentadiene		9.70	**9.22**	95	21-138		20	0.50	0.15
Hexachloroethane		9.70	**7.56**	78	41-123		20	0.50	0.13
Indeno(1,2,3-cd)pyrene		9.40	**8.02**	85	57-129		20	0.50	0.042
Isophorone		9.70	**7.87**	81	56-129		20	0.50	0.048
2-Methylnaphthalene		9.40	**8.52**	91	59-135		20	0.50	0.021
1-Methylnaphthalene		10.0	**8.11**	81	50-150		20	0.50	0.039
2-Methylphenol		9.60	**7.10**	74	39-107		20	0.50	0.13
4-Methylphenol		9.60	**7.13**	74	33-122		20	0.50	0.11
Naphthalene		9.40	**7.96**	85	50-127		20	0.50	0.022
2-Nitroaniline		9.40	**11.9**	127	57-130		20	1.0	0.14
3-Nitroaniline		9.40	**11.2**	119	49-144		20	1.0	0.40
4-Nitroaniline		9.40	**11.9**	126	52-143		20	1.0	0.16
Nitrobenzene		9.70	**8.39**	86	53-121		20	0.50	0.18
4-Nitrophenol		9.40	**3.72 J**	40	17-70		20	5.0	0.71
2-Nitrophenol		9.40	**6.68**	71	44-128		20	0.50	0.068

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/14/2010 By: DMC
Unit: ug/L Analytical Batch: 0L17046

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
N-Nitroso-diphenylamine		9.20	**7.43**	81	45-110		20	0.50	0.16
N-Nitroso-di-n-propylamine		9.20	**7.76**	84	49-125		20	0.50	0.091
Pentachlorophenol		9.40	**7.24**	77	21-124		20	1.0	0.094
Phenanthrene		9.40	**8.15**	87	63-126		20	0.50	0.025
Phenol		9.40	**3.96**	42	22-60		20	0.50	0.15
Pyrene		9.40	**7.93**	84	60-134		20	0.50	0.026
2,4,6-Trichlorophenol		9.40	**8.69**	92	47-128		20	0.50	0.065
2,4,5-Trichlorophenol		9.60	**8.83**	92	53-129		20	0.50	0.030
Surrogates:									
2-Fluorophenol				*53*	*20-70*				
Phenol-d6				*35*	*18-45*				
Nitrobenzene-d5				*84*	*31-123*				
2-Fluorobiphenyl				*80*	*25-113*				
2,4,6-Tribromophenol				*93*	*30-121*				
o-Terphenyl				*83*	*42-125*				

Laboratory Control Sample Analyzed: 12/15/2010 By: DMC
Unit: ug/L Analytical Batch: 0L21016

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Acenaphthene		9.40	**7.48**	80	53-126		20	0.50	0.020
Acenaphthylene		9.40	**7.71**	82	62-133		20	0.50	0.033
Acetophenone		9.80	**7.39**	75	58-115		20	0.50	0.087
Aniline		9.40	**7.19**	76	23-105		20	0.50	0.036
Anthracene		9.40	**7.68**	82	64-130		20	0.50	0.035
Atrazine		9.80	**11.0**	112	60-140		20	0.50	0.17
Benzaldehyde		9.80	**7.39**	75	35-128		20	0.50	0.16
Benzo(a)anthracene		9.40	**7.60**	81	63-129		20	0.50	0.025
Benzo(a)pyrene		9.40	**8.12**	86	59-131		20	0.50	0.028
Benzo(b)fluoranthene		9.40	**7.23**	77	58-133		20	0.50	0.029
Benzo(k)fluoranthene		9.40	**8.00**	85	59-132		20	0.50	0.049
Benzo(g,h,i)perylene		9.40	**8.24**	88	52-129		20	0.50	0.055
1,1'-Biphenyl		9.80	**7.48**	76	58-116		20	0.50	0.10
4-Bromophenyl Phenyl Ether		9.20	**7.63**	83	57-124		20	0.50	0.047
Butyl Benzyl Phthalate		9.20	**7.65**	83	58-141		20	1.0	0.057
Caprolactam		9.80	**1.43**	**15**	23-76		20	1.0	0.21
Carbazole		9.40	**23.9**	**255**	62-146		20	0.50	0.12
4-Chloro-3-methylphenol		9.40	**7.67**	82	53-120		20	0.50	0.17

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/15/2010 By: DMC

Unit: ug/L Analytical Batch: 0L21016

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
4-Chloroaniline		9.40	**8.80**	94	44-138		20	1.0	0.14
Bis(2-chloroethoxy)methane		9.20	**6.93**	75	52-124		20	0.50	0.039
Bis(2-chloroethyl) Ether		9.20	**6.61**	72	42-123		20	0.50	0.034
Bis(2-chloroisopropyl) Ether		9.20	**6.99**	76	50-122		20	0.50	0.044
2-Chloronaphthalene		9.70	**7.94**	82	58-126		20	0.50	0.032
2-Chlorophenol		9.40	**7.15**	76	44-121		20	0.50	0.070
4-Chlorophenyl Phenyl Ether		9.20	**7.61**	83	57-122		20	0.50	0.12
Chrysene		9.40	**7.49**	80	66-134		20	0.50	0.022
Dibenz(a,h)anthracene		9.40	**7.69**	82	57-130		20	0.50	0.053
Dibenzofuran		9.40	**8.11**	86	59-123		20	0.50	0.11
Di-n-butyl Phthalate		9.20	**8.05**	88	58-145		20	1.0	0.61
3,3´-Dichlorobenzidine		20.0	**23.8**	119	55-135		20	1.0	1.0
2,4-Dichlorophenol		9.40	**7.62**	81	51-122		20	0.50	0.23
Diethyl Phthalate		9.20	**7.59**	82	55-129		20	0.50	0.12
2,4-Dimethylphenol		9.40	**6.12**	65	35-112		20	1.0	0.31
Dimethyl Phthalate		9.20	**7.77**	84	61-126		20	0.50	0.10
4,6-Dinitro-2-methylphenol		9.40	**6.71**	71	25-139		20	0.50	0.14
2,4-Dinitrophenol		9.40	**5.22**	56	10-147		20	5.0	1.8
2,4-Dinitrotoluene		9.70	**8.43**	87	55-131		20	0.50	0.15
2,6-Dinitrotoluene		9.70	**7.94**	82	59-120		20	0.50	0.25
Di-n-octyl Phthalate		9.20	**7.47**	81	55-136		20	0.50	0.056
Bis(2-ethylhexyl) Phthalate		9.20	**7.06**	77	60-136		20	0.50	0.22
Fluoranthene		9.40	**8.16**	87	64-138		20	0.50	0.040
Fluorene		9.40	**7.86**	84	60-128		20	0.50	0.019
Hexachlorobenzene		9.70	**7.61**	78	49-130		20	0.50	0.065
Hexachlorobutadiene		9.70	**7.52**	78	50-128		20	0.50	0.13
Hexachlorocyclopentadiene		9.70	**8.11**	84	21-138		20	0.50	0.15
Hexachloroethane		9.70	**7.39**	76	41-123		20	0.50	0.13
Indeno(1,2,3-cd)pyrene		9.40	**7.54**	80	57-129		20	0.50	0.042
Isophorone		9.70	**7.02**	72	56-129		20	0.50	0.048
2-Methylnaphthalene		9.40	**7.85**	84	59-135		20	0.50	0.021
1-Methylnaphthalene		10.0	**7.29**	73	50-150		20	0.50	0.039
2-Methylphenol		9.60	**6.60**	69	39-107		20	0.50	0.13
4-Methylphenol		9.60	**6.76**	70	33-122		20	0.50	0.11
Naphthalene		9.40	**7.26**	77	50-127		20	0.50	0.022
2-Nitroaniline		9.40	**11.0**	117	57-130		20	1.0	0.14

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QUALITY CONTROL REPORT

Semivolatile Organic Compounds by EPA Method 8270C (Continued)

QC Batch: 1012641 (Continued) 3510C Liquid-Liquid Extraction/USEPA-8270C

Laboratory Control Sample (Continued) Analyzed: 12/15/2010 By: DMC

Unit: ug/L Analytical Batch: 0L21016

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
3-Nitroaniline		9.40	**9.80**	104	49-144		20	1.0	0.40
4-Nitroaniline		9.40	**10.2**	109	52-143		20	1.0	0.16
Nitrobenzene		9.70	**7.61**	78	53-121		20	0.50	0.18
4-Nitrophenol		9.40	**3.17 J**	34	17-70		20	5.0	0.71
2-Nitrophenol		9.40	**6.12**	65	44-128		20	0.50	0.068
N-Nitroso-diphenylamine		9.20	**6.87**	75	45-110		20	0.50	0.16
N-Nitroso-di-n-propylamine		9.20	**7.14**	78	49-125		20	0.50	0.091
Pentachlorophenol		9.40	**6.55**	70	21-124		20	1.0	0.094
Phenanthrene		9.40	**7.45**	79	63-126		20	0.50	0.025
Phenol		9.40	**3.66**	39	22-60		20	0.50	0.15
Pyrene		9.40	**7.18**	76	60-134		20	0.50	0.026
2,4,6-Trichlorophenol		9.40	**7.74**	82	47-128		20	0.50	0.065
2,4,5-Trichlorophenol		9.60	**8.07**	84	53-129		20	0.50	0.030
Surrogates:									
2-Fluorophenol				*49*	*20-70*				
Phenol-d6				*33*	*18-45*				
Nitrobenzene-d5				*79*	*31-123*				
2-Fluorobiphenyl				*73*	*25-113*				
2,4,6-Tribromophenol				*85*	*30-121*				
o-Terphenyl				*76*	*42-125*				

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APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 1011375

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HG	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HG	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/29/2010	5	6	11
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/29/2010	5	6	11
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HGF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HGF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HGF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	11/29/2010	6	5	11
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/24/2010	11/29/2010	7	5	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/24/2010	11/29/2010	7	5	12
CL	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
CL	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
CL	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	12/01/2010	13	1	14
CN	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	12/01/2010	12/01/2010	13	0	13
CN	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CN	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	12/01/2010	12/01/2010	13	0	13
COD	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	12/02/2010	12/02/2010	15	0	15
COD	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
COD	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
COD	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
COD	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	12/02/2010	12/02/2010	15	0	15
COD	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
COD	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
FL	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
FL	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
FL	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
MISC	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MISC	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
MISC	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
MISC	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
NH3	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/22/2010	11/22/2010	4	0	4
NH3	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/22/2010	11/22/2010	4	0	4
NH3	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
PH	S.U.	NTC02GW0413	1011375-03	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTCFD111710-01	1011375-05	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
PH	S.U.	NTC02GW0313	1011375-02	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTC02GW0213	1011375-01	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PH	S.U.	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
PH	S.U.	NTC02GW0613	1011375-04	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
SO4	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	12/01/2010	12	1	13
SO4	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	12/01/2010	12	1	13
SO4	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	12/01/2010	13	1	14
TOC	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
TOC	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
TOC	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
TOC	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
TPHE	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
TPHE	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPHE	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
TPHE	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
TPHE	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
TPHE	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
TPHE	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
TPHO	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/23/2010	5	1	6
TPHO	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
TPHO	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/23/2010	5	1	6
TPHO	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/23/2010	5	1	6
TPHO	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/23/2010	5	1	6
TPHO	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/23/2010	5	1	6
TPHO	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
TR	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
TR	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
TR	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
TR	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
TR	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
TR	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TR	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
OV	UG/L	TB111801	1011407-03	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
OV	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
OV	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
OV	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
OV	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
OV	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
OV	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
OV	UG/L	TB111710	1011375-06	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
OV	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
SIM	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	12/15/2010	6	21	27
SIM	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/24/2010	12/15/2010	6	21	27
SIM	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	12/15/2010	6	21	27

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
SIM	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28
SIM	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/24/2010	12/15/2010	6	21	27
SIM	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/19/2010	12/15/2010	2	26	28

TM2660, 2665

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-5

E 1011379

25-3 551 W Cart 3

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122221**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/17/2010	NTC02GW0213	16:00	**4500-NH3-G/4500-P-F/5220 D**	FL-02	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0213	16:00	**EPA 420.1**	FL-02	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0213	16:00	**5310C**	FL-02	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	-01
11/17/2010	NTC02GW0213	16:00	**SW-846 8260B**	FL-02	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/17/2010	NTC02GW0213	16:00	**SW-846 6010B / 7841 / 7470A**	FL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0313	15:45	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0313	15:45	**EPA 420.1**	FL-03	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0313	15:45	**SW-846 8260B**	FL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	-02
11/17/2010	NTC02GW0313	15:45	**SW-846 9014**	FL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/17/2010	NTC02GW0313	15:45	**5310C**	FL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/17/2010	NTC02GW0313	15:45	**SW-846 6010B / 7841 / 7470A**	FL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0313	15:45	**SW-846 8270C/8270C SIM**	FL-03	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/17/2010	NTC02GW0313	15:45	**4500-NH3-G/4500-P-F/5220 D**	FL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0413	09:05	**SW-846 8260B**	FL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/17/2010	NTC02GW0413	09:05	**SW-846 6010B / 7841 / 7470A**	FL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	-03
11/17/2010	NTC02GW0413	09:05	**SW-846 8270C/8270C SIM**	FL-04	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/17/2010	NTC02GW0413	09:05	**4500-NH3-G/4500-P-F/5220 D**	FL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0413	09:05	**EPA 420.1**	FL-04	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0413	09:05	**5310C**	FL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/17/2010	NTC02GW0413	09:05	**SW-846 9014**	FL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/17/2010	NTC02GW0413	09:05	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0613	09:10	**SW-846 8270C/8270C SIM**	FL-06	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/17/2010	NTC02GW0613	09:10	**SW-846 9014**	FL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	-04
11/17/2010	NTC02GW0613	09:10	**SW-846 8260B**	FL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/17/2010	NTC02GW0613	09:10	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0613	09:10	**EPA 420.1**	FL-06	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0613	09:10	**SW-846 6010B / 7841 / 7470A**	FL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0613	09:10	**SW-846 6010B / 7841 / 7470A**	FL-06	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0613	09:10	**5310C**	FL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	

	11/17/2010	NTCFD111710-01	00:00	**SW-846 8260B**	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	**SW-846 6010B / 7841 / 7470A**	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/17/2010	NTCFD111710-01	00:00	**SW-846 8270C/8270C SIM**	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	-05
04	11/17/2010	NTCFD111710-01	00:00	**4500-NH3-G/4500-P-F/5220 D**	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTCFD111710-01	00:00	**EPA 420.1**	QC	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
	11/17/2010	NTCFD111710-01	00:00	**5310C**	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	**SW-846 9014**	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/17/2010	NTCFD111710-01	00:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
04	11/17/2010	TB111710	07:18	**SW-846 8260B**	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	-06

1. Relinquished By: **Keith Simpson**	Date: 11/17/2010	Time: 17:17	Received By: **Federal Express**	Date: 11/17/2010	Time: 17:17
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By: [signature]	Date: 11/18/10	Time: 0820

Comments:

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: Tetra Tech Nus Inc
Receipt Record Page/Line #: 25-3
Work Order #: 1011375
New / Add To
Project Chemist | Sample #s

Recorded by (initials/date): AR 11/18/10

☑ Cooler ☐ Box ☐ Other ____ | Qty Received: 2

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (# ____) ☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via
2660	0914	☐ None ☑ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container
2665	0925	☐ None ☑ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container

Cooler #	Recorded °C	Correction Factor °C	Actual °C
2660	Temp Blank:	—	3.6
	TB location: Representative / Not Representative		
	1 3.4	—	3.4
	2 3.8	—	3.8
	3 1.9	—	1.9
	Average °C		3.0
	☐ Cooler ID on COC?		
	☑ VOC Trip Blank received?		
2665	Temp Blank:	—	3.9
	TB location: Representative / Not Representative		
	1 4.4	—	4.4
	2 4.9	—	4.9
	3 4.4	—	4.4
	Average °C		4.5
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		
	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		
	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance Form

Paperwork Received

☐ No COC Received

N/A	Yes	No	
	☑	☐	Chain of Custody record(s)?
	☐		If No, COC Initiated By ____
	☑		Rec'd for Lab Signed/Date/Time?
☐	☑		Shipping document?
☑	☐		Other ____

COC ID #s

☐ TriMatrix

☑ Other (Name or ID#) ____

Check COC for Accuracy

☐ No analysis requested

Yes	No	
☑	■	Sample ID matches COC?
☑	■	Sample Date and Time matches COC?
☐		Container type completed on COC?
☑	■	All container types indicated are received?

Sample Condition Summary

☐ Non-TriMatrix containers, see Notes

N/A	Yes	No	
	■	☑	Broken containers/lids?
	■	☑	Missing or incomplete labels?
	■	☑	Illegible information on labels?
	■	☑	Low volume received?
	■	☑	Inappropriate containers received?
☐	■	☐	VOC vials / TOX containers have headspace?
☐	■	☑	Extra sample locations / containers not listed on COC?

Check Sample Preservation

N/A	Yes	No	
	☑	■	Average sample temperature ≤6° C?
☐	☑		Completed Sample Preservation Verification Form?
☐		■	Samples preserved correctly?
☐	☑		If "No", added orange tag?
☑		☐	Received pre-preserved VOC soils?

☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

- ☐ Bacteriological
- ☐ Air Bags
- ☐ EnCores / Methanol Pre-Preserved
- ☐ Formaldehyde/Aldehyde
- ☑ Green-tagged containers
- ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☐ NONE RECEIVED
☑ RECEIVED, COCs TO LAB(S)

Notes

☑ Trip Blank received ☐ Trip Blank not listed on COC
☐ No COC received, Proj. Chemist reviewed (Init/Date) ____
☐ No analysis requested, Proj. Chemist completed (Init/Date) ____

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
11/18/10 0820	11/18/10 10:15	Yes / No

TRIMATRIX LABORATORIES — SAMPLE PRESERVATION VERIFICATION FORM

page ____ of ____

Client: Tetra Tech NUS Inc	Work Order #: 1011375
Receipt Log #: 25-3	Completed By (initials/date): LR 11/18/10
	Project Chemist:

COC ID #	Adjusted by: ____ Date: ____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
ED00000144-5								
Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1	✓	✓	✓		✓	✓	✓	
COC Line #2	10	✓	✓		✓	✓		
COC Line #3	10	✓	✓		✓			
COC Line #4	✓	✓	✓		✓	✓	✓	
COC Line #5	✓	✓	✓		✓	✓	✓	
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Ph Strip Lot #: HC075211

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #	Adjusted by: ____ Date: ____				DO NOT ADJUST pH FOR THESE CONTAINER TYPES			
Container Type	5	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		~7	<2	<2	
COC Line #1								
COC Line #2								
COC Line #3								
COC Line #4								
COC Line #5								
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

TETRA TECH NUS, INC

E-1011407

CHAIN OF CUSTODY
NUMBER: ED00000144-7

477W

Cart 8 27-14

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122254**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/18/2010	NTC02GW0113	09:00	**4500-NH3-G/4500-P-F/5220 D**	FL-01	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8270C/8270C SIM**	FL-01	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 6010B / 7841 / 7470A**	FL-01	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8260B**	FL-01	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0113	09:00	**EPA 420.1**	FL-01	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0113	09:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 9014**	FL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	NTC02GW0113	09:00	**5310C**	FL-01	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**5310C**	FL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**EPA 420.1**	FL-05	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0513	09:10	**4500-NH3-G/4500-P-F/5220 D**	FL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8260B**	FL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8270C/8270C SIM**	FL-05	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 9014**	FL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	TB111801	07:18	**SW-846 8260B**	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	

08 -01 07 -02 04 -03

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/18/2010	16:33	**Federal Express**	11/18/2010	16:33
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/19/10	0900

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: Tetra Tech
Receipt Record Page/Line #: 27-14
Work Order #: 1011407
New / Add To
Project Chemist | Sample #s

Recorded by (initials/date): WC 11/19/10

☑ Cooler ☐ Box ☐ Other ____ | Qty Received: 1

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (# ____) ☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Cooler ID on COC?	VOC Trip Blank received?
Tm 2079	1230	☐ None ☑ Present / Intact ☐ Present / Not Intact	(Dispersed) / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☑
						1 3.8	-	3.8		
						2 4.2	-	4.2		
						3 4.8	-	4.8		
						Average °C		4.3		
Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Cooler ID on COC?	VOC Trip Blank received?
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☐
						1				
						2				
						3				
						Average °C				
Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Cooler ID on COC?	VOC Trip Blank received?
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☐
						1				
						2				
						3				
						Average °C				
Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Cooler ID on COC?	VOC Trip Blank received?
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ■ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container	Temp Blank:			☐	☐
						1				
						2				
						3				
						Average °C				

If any shaded areas checked, complete Sample Receiving Non-Conformance Form

Paperwork Received

☐ No COC Received

N/A	Yes	No	
	☑	☐	Chain of Custody record(s)?
	☐		If No, COC Initiated By ____
	☑		Rec'd for Lab Signed/Date/Time?
☐	☑		Shipping document?
☑	☐		Other ____

COC ID #s

☐ TriMatrix TT

☑ Other (Name or ID#) ED00000144.7

Check COC for Accuracy

☐ No analysis requested

Yes	No	
☑	■	Sample ID matches COC?
☑	■	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	■	All container types indicated are received?

Sample Condition Summary

☐ Non-TriMatrix containers, see Notes

N/A	Yes	No	
	■	☑	Broken containers/lids?
	■	☑	Missing or incomplete labels?
	■	☑	Illegible information on labels?
	■	☑	Low volume received?
	■	☑	Inappropriate containers received?
☐	■	☑	VOC vials / TOX containers have headspace?
☐	■	☑	Extra sample locations / containers not listed on COC?

Check Sample Preservation

N/A	Yes	No	
	☐	■	Average sample temperature ≤6° C?
☐	☐	☑	Completed Sample Preservation Verification Form?
☐	☑	■	Samples preserved correctly?
☑	☐		If "No", added orange tag?
☑	☐		Received pre-preserved VOC soils? ☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological
☐ Air Bags
☐ EnCores / Methanol Pre-Preserved
☐ Formaldehyde/Aldehyde
☑ Green-tagged containers
☐ Yellow/White-tagged 1L ambers (SV Prep Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☐ NONE RECEIVED
☑ RECEIVED, COCs TO LAB(S)

Notes

☑ Trip Blank received ☐ Trip Blank not listed on COC
☑ No COC received, Proj. Chemist reviewed (Init/Date) ____
☐ No analysis requested, Proj. Chemist completed (Init/Date) ____

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
11/19/10 0900	11/19/10 1250	Yes / (No)

TRIMATRIX LABORATORIES — SAMPLE PRESERVATION VERIFICATION FORM

page ____ of ____

Client: Tetra Tech	Work Order #: 1011407
Receipt Log #: 27 14	Completed By (initials/date): WC 11/19/10
	Project Chemist:

COC ID #	Adjusted by: ____ Date:	DO NOT ADJUST pH FOR THESE CONTAINER TYPES					
ED00001447							
Container Type	5	4	13		3	6	15
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3
Expected pH	>12	<2	<2		6-8	<2	<2
COC Line #1	✓	✓	✓		✓	✓	
COC Line #2	✓	✓	✓		✓	✓	✓
COC Line #3							
COC Line #4							
COC Line #5							
COC Line #6							
COC Line #7							
COC Line #8							
COC Line #9							
COC Line #10							

Comments

Ph Strip Lot #: HC075211

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #	Adjusted by: ____ Date:	DO NOT ADJUST pH FOR THESE CONTAINER TYPES					
Container Type	5	4	13		3	6	15
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3
Expected pH	>12	<2	<2		~7	<2	<2
COC Line #1							
COC Line #2							
COC Line #3							
COC Line #4							
COC Line #5							
COC Line #6							
COC Line #7							
COC Line #8							
COC Line #9							
COC Line #10							

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

NTC GREAT LAKES
WATER DATA
1011375

FRACTION	CHEMICAL	NTC02GW0413	UNITS	NTCFD111710-01	RPD	D
OS	BENZO(A)ANTHRACENE	0.043 J	UG/L	ND	200.00	0.04
OS	BENZO(B)FLUORANTHENE	0.032 J	UG/L	ND	200.00	0.03
OS	BIS(2-ETHYLHEXYL)PHTHALATE	0.55	UG/L	0.45 J	20.00	0.10
OS	CHRYSENE	0.032 J	UG/L	ND	200.00	0.03
OS	DIETHYL PHTHALATE	0.23 J	UG/L	0.25 J	8.33	0.02
OV	BENZENE	1	UG/L	1	0.00	0.00
OV	TETRAHYDROFURAN	9.1 J	UG/L	8.2 J	10.40	0.90

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

HOLDING TIME SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Method: Volatile Organic Compounds by EPA Method 8260B

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	14	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	14	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	14	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	14	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	7	14	
TB111710	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	7	14	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	14	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	14	
TB111801	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	6	14	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0K19003
Sequence: 0K23033
Instrument: 224

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0K23033-CCV1)		**Lab File ID: CCV1123B.D**		**Analyzed: 11/23/10 08:13**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	75 - 125	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	75 - 125	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	75 - 125	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	99	75 - 125	
LCS (1012925-BS1)		**Lab File ID: CCV1123B.D**		**Analyzed: 11/23/10 08:13**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	99	78 - 116	
Calibration Check (0K23033-CCV2)		**Lab File ID: CCV2.D**		**Analyzed: 11/23/10 08:42**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	75 - 125	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	75 - 125	
Toluene-d8	6.67	6.67	0.00	+/-1.0	104	75 - 125	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	97	75 - 125	
Blank (1012925-BLK1)		**Lab File ID: BLK1123B.D**		**Analyzed: 11/23/10 09:10**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	100	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	94	78 - 116	
NTC02GW0213 (1011375-01)		**Lab File ID: 37501.D**		**Analyzed: 11/23/10 14:26**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	105	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC02GW0313 (1011375-02)		**Lab File ID: 37502.D**		**Analyzed: 11/23/10 14:54**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	99	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC02GW0413 (1011375-03)		**Lab File ID: 37503.D**		**Analyzed: 11/23/10 15:22**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	105	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	102	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	96	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	91	78 - 116	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0K19003
Sequence: 0K23033
Instrument: 224

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC02GW0613 (1011375-04)		**Lab File ID: 37504.D**		**Analyzed: 11/23/10 15:51**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	105	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTCFD111710-01 (1011375-05)		**Lab File ID: 37505.D**		**Analyzed: 11/23/10 16:19**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	104	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	102	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	97	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	94	78 - 116	
TB111710 (1011375-06)		**Lab File ID: 37506.D**		**Analyzed: 11/23/10 16:47**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	105	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	93	78 - 116	
NTC02GW0113 (1011407-01)		**Lab File ID: 40701.D**		**Analyzed: 11/23/10 17:16**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.68	6.67	0.01	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
NTC02GW0513 (1011407-02)		**Lab File ID: 40702.D**		**Analyzed: 11/23/10 17:45**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	106	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	
TB111801 (1011407-03)		**Lab File ID: 40703.D**		**Analyzed: 11/23/10 18:13**			
Dibromofluoromethane	4.47	4.47	0.00	+/-1.0	108	88 - 115	
1,2-Dichloroethane-d4	4.80	4.80	0.00	+/-1.0	104	81 - 116	
Toluene-d8	6.67	6.67	0.00	+/-1.0	100	87 - 113	
4-Bromofluorobenzene	9.24	9.24	0.00	+/-1.0	92	78 - 116	

QC BATCH SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012925 QC Batch Matrix: Water

Preparation: 5030B Aqueous Purge & Trap

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/23/10 07:00	
NTC02GW0313	1011375-02	11/23/10 07:00	
NTC02GW0413	1011375-03	11/23/10 07:00	
NTC02GW0613	1011375-04	11/23/10 07:00	
NTCFD111710-01	1011375-05	11/23/10 07:00	
TB111710	1011375-06	11/23/10 07:00	
NTC02GW0113	1011407-01	11/23/10 07:00	
NTC02GW0513	1011407-02	11/23/10 07:00	
TB111801	1011407-03	11/23/10 07:00	
Blank	1012925-BLK1	11/23/10 07:00	
LCS	1012925-BS1	11/23/10 07:00	

METHOD BLANK DATA SHEET
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012925-BLK1 File ID: BLK1123B.D

Prepared: 11/23/10 07:00 Analyzed: 11/23/10 09:10

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1012925 Sequence: 0K23033 Calibration: 0K19003 Instrument: 224

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
67-64-1	Acetone	5.0	ug/L	2.1	5.0	U
107-02-8	Acrolein	5.0	ug/L	0.44	5.0	U
107-13-1	Acrylonitrile	1.0	ug/L	0.25	1.0	U
71-43-2	Benzene	1.0	ug/L	0.18	1.0	U
108-86-1	Bromobenzene	1.0	ug/L	0.19	1.0	U
74-97-5	Bromochloromethane	1.0	ug/L	0.18	1.0	U
75-27-4	Bromodichloromethane	1.0	ug/L	0.13	1.0	U
75-25-2	Bromoform	1.0	ug/L	0.15	1.0	U
74-83-9	Bromomethane	1.0	ug/L	0.18	1.0	U
104-51-8	n-Butylbenzene	1.0	ug/L	0.18	1.0	U
135-98-8	sec-Butylbenzene	1.0	ug/L	0.18	1.0	U
98-06-6	tert-Butylbenzene	1.0	ug/L	0.15	1.0	U
75-15-0	Carbon Disulfide	1.0	ug/L	0.18	1.0	U
56-23-5	Carbon Tetrachloride	1.0	ug/L	0.13	1.0	U
108-90-7	Chlorobenzene	1.0	ug/L	0.19	1.0	U
75-00-3	Chloroethane	1.0	ug/L	0.15	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	5.0	ug/L	0.28	5.0	U
67-66-3	Chloroform	1.0	ug/L	0.17	1.0	U
74-87-3	Chloromethane	1.0	ug/L	0.16	1.0	U
95-49-8	2-Chlorotoluene	1.0	ug/L	0.16	1.0	U
106-43-4	4-Chlorotoluene	1.0	ug/L	0.12	1.0	U
110-82-7	Cyclohexane	5.0	ug/L	0.25	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	ug/L	0.40	1.0	U
124-48-1	Dibromochloromethane	1.0	ug/L	0.14	1.0	U
106-93-4	1,2-Dibromoethane	1.0	ug/L	0.22	1.0	U
74-95-3	Dibromomethane	1.0	ug/L	0.23	1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	ug/L	0.21	5.0	U
95-50-1	1,2-Dichlorobenzene	1.0	ug/L	0.12	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	ug/L	0.13	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	ug/L	0.12	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	ug/L	0.21	1.0	U
75-34-3	1,1-Dichloroethane	1.0	ug/L	0.13	1.0	U
107-06-2	1,2-Dichloroethane	1.0	ug/L	0.13	1.0	U
75-35-4	1,1-Dichloroethene	1.0	ug/L	0.13	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	ug/L	0.23	1.0	U

METHOD BLANK DATA SHEET
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012925-BLK1 File ID: BLK1123B.D

Prepared: 11/23/10 07:00 Analyzed: 11/23/10 09:10

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1012925 Sequence: 0K23033 Calibration: 0K19003 Instrument: 224

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
156-60-5	trans-1,2-Dichloroethene	1.0	ug/L	0.20	1.0	U
78-87-5	1,2-Dichloropropane	1.0	ug/L	0.15	1.0	U
142-28-9	1,3-Dichloropropane	1.0	ug/L	0.14	1.0	U
594-20-7	2,2-Dichloropropane	1.0	ug/L	0.18	1.0	U
563-58-6	1,1-Dichloropropene	1.0	ug/L	0.25	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	ug/L	0.25	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	ug/L	0.23	1.0	U
141-78-6	Ethyl Acetate	50	ug/L	0.27	50	U
100-41-4	Ethylbenzene	1.0	ug/L	0.14	1.0	U
591-78-6	2-Hexanone	5.0	ug/L	0.29	5.0	U
74-88-4	Iodomethane	1.0	ug/L	0.21	1.0	U
98-82-8	Isopropylbenzene	1.0	ug/L	0.15	1.0	U
99-87-6	4-Isopropyltoluene	1.0	ug/L	0.29	1.0	U
79-20-9	Methyl Acetate	5.0	ug/L	0.30	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	ug/L	0.28	1.0	U
108-87-2	Methylcyclohexane	5.0	ug/L	0.20	5.0	U
75-09-2	Methylene Chloride	1.0	ug/L	0.26	1.0	U
78-93-3	2-Butanone (MEK)	5.0	ug/L	0.55	5.0	U
80-62-6	Methyl Methacrylate	5.0	ug/L	0.094	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	0.28	5.0	U
103-65-1	n-Propylbenzene	1.0	ug/L	0.15	1.0	U
100-42-5	Styrene	1.0	ug/L	0.11	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	ug/L	0.16	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	ug/L	0.070	1.0	U
127-18-4	Tetrachloroethene	1.0	ug/L	0.16	1.0	U
109-99-9	Tetrahydrofuran	5.0	ug/L	1.0	5.0	U
108-88-3	Toluene	1.0	ug/L	0.16	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	ug/L	0.18	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	ug/L	0.16	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	ug/L	0.19	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	ug/L	0.18	1.0	U
79-01-6	Trichloroethene	1.0	ug/L	0.092	1.0	U
75-69-4	Trichlorofluoromethane	1.0	ug/L	0.20	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	ug/L	0.28	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	ug/L	0.13	1.0	U

METHOD BLANK DATA SHEET
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012925-BLK1 File ID: BLK1123B.D

Prepared: 11/23/10 07:00 Analyzed: 11/23/10 09:10

Preparation: 5030B Aqueous Purge & Initial/Final: 5 mL / 5 mL

QC Batch: 1012925 Sequence: 0K23033 Calibration: 0K19003 Instrument: 224

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	ug/L	0.16	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	ug/L	0.18	1.0	U
108-05-4	Vinyl Acetate	5.0	ug/L	0.23	5.0	U
75-01-4	Vinyl Chloride	1.0	ug/L	0.10	1.0	U
1330-20-7	Xylene (Total)	1.0	ug/L	0.42	1.0	U

System Monitoring Compound	Added (ug/L)	Conc. (ug/L)	% REC	QC Limits	Q
Dibromofluoromethane	40.0	41.7	104	88 - 115	
1,2-Dichloroethane-d4	40.0	39.8	100	81 - 116	
Toluene-d8	40.0	39.6	99	87 - 113	
4-Bromofluorobenzene	40.0	37.6	94	78 - 116	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
Fluorobenzene	487254	5.13	661435	5.13	
Chlorobenzene-d5	393181	8.08	506472	8.08	
1,4-Dichlorobenzene-d4	227534	10.38	301687	10.38	

LCS / LCS DUPLICATE RECOVERY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012925-BS1
Preparation: 5030B Aqueous Purge & Trap
Initial/Final: 5 mL / 5 mL

QC Batch: 1012925
Sequence: 0K23033

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Acetone	40.0	32.3	81	52 - 134	ug/L
Acrolein	40.0	70.4	176 *	61 - 151	ug/L
Acrylonitrile	40.0	34.3	86	70 - 126	ug/L
Benzene	40.0	40.7	102	86 - 122	ug/L
Bromobenzene	40.0	36.6	92	85 - 118	ug/L
Bromochloromethane	40.0	36.8	92	79 - 122	ug/L
Bromodichloromethane	40.0	43.3	108	81 - 126	ug/L
Bromoform	40.0	41.6	104	55 - 126	ug/L
Bromomethane	40.0	32.3	81	56 - 140	ug/L
n-Butylbenzene	40.0	40.8	102	79 - 122	ug/L
sec-Butylbenzene	40.0	41.0	102	85 - 118	ug/L
tert-Butylbenzene	40.0	42.5	106	85 - 115	ug/L
Carbon Disulfide	40.0	56.7	142 *	74 - 133	ug/L
Carbon Tetrachloride	40.0	46.2	116	80 - 126	ug/L
Chlorobenzene	40.0	40.2	101	88 - 114	ug/L
Chloroethane	40.0	35.6	89	71 - 136	ug/L
2-Chloroethyl Vinyl Ether	40.0	34.3	86	60 - 148	ug/L
Chloroform	40.0	41.5	104	86 - 120	ug/L
Chloromethane	40.0	30.3	76	68 - 130	ug/L
2-Chlorotoluene	40.0	41.5	104	91 - 116	ug/L
4-Chlorotoluene	40.0	40.8	102	89 - 115	ug/L
Cyclohexane	40.0	38.0	95	70 - 129	ug/L
1,2-Dibromo-3-chloropropane	40.0	37.6	94	61 - 123	ug/L
Dibromochloromethane	40.0	45.3	113	73 - 114	ug/L
1,2-Dibromoethane	40.0	41.7	104	81 - 118	ug/L
Dibromomethane	40.0	41.8	105	83 - 120	ug/L
trans-1,4-Dichloro-2-butene	40.0	32.8	82	64 - 125	ug/L
1,2-Dichlorobenzene	40.0	42.6	106	87 - 119	ug/L
1,3-Dichlorobenzene	40.0	42.4	106	88 - 116	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012925-BS1
Preparation: 5030B Aqueous Purge & Trap
Initial/Final: 5 mL / 5 mL

QC Batch: 1012925
Sequence: 0K23033

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
1,4-Dichlorobenzene	40.0	40.8	102	86 - 117	ug/L
Dichlorodifluoromethane	40.0	39.3	98	67 - 133	ug/L
1,1-Dichloroethane	40.0	39.5	99	80 - 122	ug/L
1,2-Dichloroethane	40.0	41.5	104	78 - 121	ug/L
1,1-Dichloroethene	40.0	41.8	104	81 - 125	ug/L
cis-1,2-Dichloroethene	40.0	43.4	109	84 - 121	ug/L
trans-1,2-Dichloroethene	40.0	42.0	105	85 - 121	ug/L
1,2-Dichloropropane	40.0	38.0	95	74 - 125	ug/L
1,3-Dichloropropane	40.0	38.3	96	82 - 117	ug/L
2,2-Dichloropropane	40.0	46.6	116	48 - 136	ug/L
1,1-Dichloropropene	40.0	42.5	106	83 - 123	ug/L
cis-1,3-Dichloropropene	40.0	44.6	112	78 - 119	ug/L
trans-1,3-Dichloropropene	40.0	39.8	99	70 - 125	ug/L
Ethyl Acetate	100	83.5	83	13 - 184	ug/L
Ethylbenzene	40.0	41.1	103	86 - 116	ug/L
2-Hexanone	40.0	29.5	74	53 - 137	ug/L
Iodomethane	40.0	42.0	105	67 - 136	ug/L
Isopropylbenzene	40.0	41.7	104	90 - 118	ug/L
4-Isopropyltoluene	40.0	42.4	106	84 - 119	ug/L
Methyl Acetate	40.0	30.4	76	65 - 136	ug/L
Methyl tert-Butyl Ether	40.0	40.1	100	82 - 117	ug/L
Methylcyclohexane	40.0	42.1	105	75 - 126	ug/L
Methylene Chloride	40.0	34.0	85	74 - 135	ug/L
2-Butanone (MEK)	40.0	34.0	85	60 - 134	ug/L
Methyl Methacrylate	100	89.2	89	70 - 130	ug/L
4-Methyl-2-pentanone (MIBK)	40.0	32.2	80	53 - 142	ug/L
n-Propylbenzene	40.0	42.3	106	88 - 119	ug/L
Styrene	40.0	43.6	109	81 - 115	ug/L
1,1,1,2-Tetrachloroethane	40.0	44.8	112	85 - 120	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012925-BS1
Preparation: 5030B Aqueous Purge & Trap
Initial/Final: 5 mL / 5 mL

QC Batch: 1012925
Sequence: 0K23033

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
1,1,2,2-Tetrachloroethane	40.0	36.2	90	81 - 127	ug/L
Tetrachloroethene	40.0	45.2	113	85 - 115	ug/L
Tetrahydrofuran	40.0	38.4	96	58 - 122	ug/L
Toluene	40.0	42.2	105	87 - 123	ug/L
1,2,3-Trichlorobenzene	40.0	45.7	114	74 - 125	ug/L
1,2,4-Trichlorobenzene	40.0	46.6	117	75 - 127	ug/L
1,1,1-Trichloroethane	40.0	44.4	111	81 - 123	ug/L
1,1,2-Trichloroethane	40.0	41.2	103	86 - 123	ug/L
Trichloroethene	40.0	45.3	113	80 - 122	ug/L
Trichlorofluoromethane	40.0	40.6	101	78 - 130	ug/L
1,2,3-Trichloropropane	40.0	36.8	92	72 - 125	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	39.4	99	76 - 129	ug/L
1,2,4-Trimethylbenzene	40.0	41.8	105	86 - 116	ug/L
1,3,5-Trimethylbenzene	40.0	41.4	103	85 - 117	ug/L
Vinyl Acetate	40.0	44.4	111	67 - 143	ug/L
Vinyl Chloride	40.0	33.1	83	73 - 130	ug/L
Xylene (Total)	120	128	107	88 - 115	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K19023-TUN1
Injection Date: 11/16/10
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Lab File ID: BFB1116B.D
Injection Time: 11:57
Calibration: 0K19003
Instrument ID: 224

m/z	Ion Abundance Criteria	% Relative Abundance	
50	15 - 40% of 95	16.3	PASS
75	30 - 60% of 95	46.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	8.1	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	78.8	PASS
175	5 - 9% of 174	8	PASS
176	95 - 101% of 174	99.2	PASS
177	5 - 9% of 176	6.4	PASS

INITIAL CALIBRATION STANDARDS
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0100068	8260 Tune Working Standard 10-04-10	0K19023-TUN1	BFB1116B.D	11/16/10 11:57
0100677	1 UG/L B	0K19023-CAL1	1P1116B.D	11/16/10 13:59
0100678	5 UG/L B	0K19023-CAL2	5P1116B.D	11/16/10 14:27
0100679	10 UG/L B	0K19023-CAL3	10P1116B.D	11/16/10 14:54
0100680	20 UG/L B	0K19023-CAL4	20P1116B.D	11/16/10 15:22
0100681	40 UG/L B	0K19023-CAL5	40P1116B.D	11/16/10 15:50
0100682	100 UG/L B	0K19023-CAL6	100P1116B.D	11/16/10 16:17
0050439	AIX 5 UG/L	0K19023-CAL8	5A1116B.D	11/16/10 16:45
0100683	200 UG/L B	0K19023-CAL7	200P1116B.D	11/16/10 17:14
0050440	AIX 25 UG/L	0K19023-CAL9	25A1116B.D	11/16/10 17:42
0101191	40.0 UG/L A	0K19023-SCV1	SCV1116B.D	11/16/10 18:11
0050441	AIX 50 UG/L	0K19023-CALA	50A1116B.D	11/16/10 18:40
0050442	AIX 100 UG/L	0K19023-CALB	100A1116B.D	11/16/10 19:09
0050443	AIX 200 UG/L	0K19023-CALC	200A1116B.D	11/16/10 19:37
0050444	AIX 400 UG/L	0K19023-CALD	400A1116B.D	11/16/10 20:06
0050445	AIX SCV	0K19023-SCV2	SCVA1116B.D	11/16/10 20:35

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol												
Acetone	1	~~0.2322198~~	5	0.1026222	10	9.197245E-02	20	0.0839506	40	OK 7.754201E-02	100	7.511326E-02
Acetonitrile												
Acrolein	1	1.700746E-02	5	2.126288E-02	10	0.0233362	20	2.181637E-02	40	2.085012E-02	100	2.222385E-02
Acrylonitrile	1	0.1202809	5	0.1215021	10	0.1243058	20	0.126	40	0.1203142	100	0.1223683
Allyl Chloride												
Benzene	1	1.334148	5	1.401582	10	1.326688	20	1.374942	40	1.318952	100	1.300655
Bromobenzene	1	1.274802	5	1.270463	10	1.220227	20	1.266779	40	1.253524	100	1.271966
Bromochloromethane	1	0.2578926	5	0.2435804	10	0.2315407	20	0.2369207	40	0.23052	100	0.2244781
Bromodichloromethane	1	0.3625888	5	0.353312	10	0.3473881	20	0.3757607	40	0.372664	100	0.3869448
Bromoform	1	0.1781281	5	0.1866312	10	0.1986096	20	0.216237	40	0.229758	100	0.257149
Bromomethane	1	0.257828	5	0.2339964	10	0.2119304	20	0.2002142	40	0.180181	100	0.1904435
n-Butanol												
2-Butyl Alcohol												
n-Butylbenzene	1	1.453586	5	1.632778	10	1.76523	20	1.930901	40	1.994445	100	2.066002
sec-Butylbenzene	1	2.429687	5	2.746075	10	2.851849	20	3.078227	40	3.08719	100	3.139566
tert-Butylbenzene	1	1.787841	5	1.951917	10	2.071415	20	2.249472	40	2.272335	100	2.31204
Carbon Disulfide	1	0.5891178	5	0.4868465	10	0.4729893	20	0.4919296	40	0.4793109	100	0.492791
Carbon Tetrachloride	1	0.4096664	5	0.3949867	10	0.386301	20	0.4142934	40	0.4064345	100	0.4122192
Chlorobenzene	1	1.423682	5	1.368206	10	1.303046	20	1.328596	40	1.24983	100	1.242889
Chloroethane	1	0.4986485	5	0.3460716	10	0.2856392	20	0.2577908	40	0.2403668	100	0.2347976
2-Chloroethyl Vinyl Ether	1	0.1132322	5	0.1224579	10	0.1297952	20	0.1516454	40	0.1683794	100	0.1844066
Chloroform	1	0.5986239	5	0.5520099	10	0.5427221	20	0.548292	40	0.520999	100	0.5228924
1-Chlorohexane	1	0.7016837	5	0.4463701	10	0.4052302	20	0.4101905	40	0.3982984	100	0.3906887
Chloromethane	1	0.3864509	5	0.3603298	10	0.3346009	20	0.3337018	40	0.3215494	100	0.3137009
2-Chlorotoluene	1	0.7652602	5	0.7965036	10	0.7916804	20	0.8335197	40	0.8232174	100	0.8261136
4-Chlorotoluene	1	0.7871165	5	0.8595647	10	0.8432173	20	0.8657278	40	0.834567	100	0.8440689
Cyclohexane	1	0.398673	5	0.4737667	10	0.4944209	20	0.543214	40	0.5337803	100	0.5321547
1,2-Dibromo-3-chloropropane	1	0.0890278	5	0.1133897	10	0.1245545	20	0.1336451	40	0.1427175	100	0.1605183
Dibromochloromethane	1	0.2943059	5	0.3140431	10	0.3176056	20	0.3428201	40	0.3637496	100	0.3899522
1,2-Dibromoethane	1	0.3215875	5	0.3119539	10	0.3225652	20	0.3314982	40	0.3279411	100	0.3404272

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane	1	0.1830727	5	0.1839029	10	0.1752748	20	0.1792052	40	0.1741985	100	0.1765403
trans-1,4-Dichloro-2-butene	1	0.1116126	5	0.1410576	10	0.1531627	20	0.1696364	40	0.1788045	100	0.197274
1,2-Dichlorobenzene	1	1.392098	5	1.437615	10	1.429889	20	1.473838	40	1.449724	100	1.454349
1,3-Dichlorobenzene	1	1.471363	5	1.508573	10	1.510653	20	1.555991	40	1.522084	100	1.536735
1,4-Dichlorobenzene	1	1.849767	5	1.665453	10	1.579298	20	1.603448	40	1.561025	100	1.578642
Dichlorodifluoromethane	1	0.4466561	5	0.4378529	10	0.4179033	20	0.4358638	40	0.4091891	100	0.3906221
1,1-Dichloroethane	1	0.5633803	5	0.538354	10	0.5082469	20	0.5353195	40	0.5067739	100	0.5140601
1,2-Dichloroethane	1	0.4048164	5	0.3906792	10	0.3864164	20	0.3883421	40	0.3692336	100	0.3696493
1,1-Dichloroethene	1	0.3197144	5	0.2911862	10	0.2780849	20	0.2824458	40	0.271106	100	0.2711279
cis-1,2-Dichloroethene	1	0.3176451	5	0.3453253	10	0.3297015	20	0.3522412	40	0.3430798	100	0.3441321
trans-1,2-Dichloroethene	1	0.3849636	5	0.3531549	10	0.3242635	20	0.3330868	40	0.3176503	100	0.3142262
1,2-Dichloroethene (Total)	2	0.3513043	10	0.3492401	20	0.3269825	40	0.342664	80	0.330365	200	0.3291792
Dichlorofluoromethane	1	0.6673651	5	0.6149606	10	0.5677898	20	0.5792803	40	0.5436105	100	0.5375082
1,2-Dichloropropane	1	0.300961	5	0.3166781	10	0.3061088	20	0.3212466	40	0.3026752	100	0.3064434
1,3-Dichloropropane	1	0.5752648	5	0.6283603	10	0.6208117	20	0.6322563	40	0.6230335	100	0.6264133
2,2-Dichloropropane	1	0.3213958	5	0.3073297	10	0.2923854	20	0.3151183	40	0.3163107	100	0.3374435
1,1-Dichloropropene	1	0.390913	5	0.4238173	10	0.4159217	20	0.4475336	40	0.4266149	100	0.4305761
cis-1,3-Dichloropropene	1	0.3146704	5	0.3266549	10	0.353275	20	0.3956468	40	0.4127737	100	0.4422551
trans-1,3-Dichloropropene	1	0.2527193	5	0.2701459	10	0.2918211	20	0.3381364	40	0.3591676	100	0.4051347
1,3-Dichloropropene (Total)	2	0.2836948	10	0.2984004	20	0.3225481	40	0.3668916	80	0.3859707	200	0.4236949
1,4-Dioxane												
Ethanol												
Ethyl Acetate												
Ethylbenzene	1	1.818552	5	2.059056	10	2.061902	20	2.171989	40	2.124234	100	2.134471
Ethyl Ether	1	0.1724026	5	0.1729965	10	0.1702151	20	0.1706578	40	0.1702117	100	0.1721385
Hexachlorobutadiene	1	0.3839415	5	0.3652621	10	0.3535606	20	0.3642827	40	0.3576654	100	0.3704746
Hexachloroethane	1	0.2420216	5	0.2472085	10	0.2535374	20	0.2676787	40	0.2904832	100	0.3299505
Hexane												
2-Hexanone	1	0.1234809	5	0.1470204	10	0.1692053	20	0.18783	40	0.2037585	100	0.2217821
Iodomethane	1	7.346189E-02	5	9.100878E-02	10	0.1293783	20	0.2205828	40	0.2877531	100	0.3433396
Isobutanol												

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene	1	2.378834	5	2.754258	10	2.842121	20	3.151947	40	3.16649	100	3.237297
Isopropyl Ether												
4-Isopropyltoluene	1	1.991396	5	2.332573	10	2.408893	20	2.588792	40	2.618247	100	2.687831
Methyl Acetate	1	0.3142177	5	0.229152	10	0.2161692	20	0.2162713	40	0.2139847	100	0.2152255
Methyl tert-Butyl Ether	1	0.6934259	5	0.723671	10	0.7466685	20	0.7623303	40	0.7484923	100	0.7740028
Methylcyclohexane	1	0.4158745	5	0.4641042	10	0.5042132	20	0.5532344	40	0.545969	100	0.5473947
Methylene Chloride	1	0.434822	5	0.3539143	10	0.3308687	20	0.3318031	40	0.3210293	100	0.31525
2-Butanone (MEK)	1	0.1005574	5	0.1154139	10	0.1199195	20	0.1237954	40	0.1251612	100	0.1247207
Methyl Methacrylate												
2-Methylnaphthalene	1	~~0.4409134~~	5	0.4137023	10	0.5070888	20	0.670468	40	0.8305131	100	0.99218
4-Methyl-2-pentanone (MIBK)	1	0.1464711	5	0.1685842	10	0.1868435	20	0.2125495	40	0.2274071	100	0.2461128
Naphthalene	1	1.159401	5	1.311922	10	1.574265	20	1.937042	40	2.128928	100	2.277843
2-Nitropropane												
n-Propylbenzene	1	0.7804139	5	0.8853156	10	0.8783485	20	0.9628158	40	0.9471505	100	0.9532762
Styrene	1	1.012443	5	1.303301	10	1.330147	20	1.41893	40	1.40757	100	1.427885
t-Butanol												
1,1,1,2-Tetrachloroethane	1	0.3434128	5	0.379376	10	0.3771709	20	0.3958028	40	0.3984169	100	0.414004
1,1,2,2-Tetrachloroethane	1	0.8149468	5	0.796618	10	0.8027301	20	0.8044403	40	0.7854498	100	0.7904899
Tetrachloroethene	1	0.5766079	5	0.5531633	10	0.5124914	20	0.5374489	40	0.5202617	100	0.5198751
Tetrahydrofuran	1	~~6.014046E-03~~	5	2.610725E-02	10	2.585643E-02	20	3.006414E-02	40	3.161308E-02	100	3.362318E-02
Toluene	1	1.490772	5	1.525232	10	1.442387	20	1.502642	40	1.422986	100	1.433036
1,2,3-Trichlorobenzene	1	0.5257157	5	0.5729001	10	0.6139864	20	0.6650216	40	0.6812591	100	0.7088993
1,2,4-Trichlorobenzene	1	0.606001	5	0.5921846	10	0.6155468	20	0.6862006	40	0.7147209	100	0.7719331
1,1,1-Trichloroethane	1	0.4550628	5	0.4527002	10	0.4146007	20	0.4421876	40	0.4318837	100	0.4415867
1,1,2-Trichloroethane	1	0.2086163	5	0.2232733	10	0.2208121	20	0.2254274	40	0.2172882	100	0.2208598
Trichloroethene	1	0.3805016	5	0.3684343	10	0.3457592	20	0.369705	40	0.3527452	100	0.3607776
Trichlorofluoromethane	1	0.6072246	5	0.5703138	10	0.5426836	20	0.5580001	40	0.5296907	100	0.5156821
1,2,3-Trichloropropane	1	0.7332044	5	0.7544438	10	0.7355184	20	0.7660086	40	0.7986987	100	0.8514229
1,1,2-Trichloro-1,2,2-trifluoro	1	0.3394379	5	0.3105637	10	0.3039477	20	0.3057698	40	0.2846992	100	0.2762966
1,2,4-Trimethylbenzene	1	1.861861	5	2.398381	10	2.497079	20	2.663133	40	2.668126	100	2.719056
1,3,5-Trimethylbenzene	1	1.998099	5	2.445104	10	2.468485	20	2.640107	40	2.64673	100	2.683499

INITIAL CALIBRATION DATA
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate	1	0.3331005	5	0.3488473	10	0.3595275	20	0.3695946	40	0.3978713	100	0.4328957
Vinyl Chloride	1	0.4436814	5	0.3879297	10	0.366992	20	0.374559	40	0.3579248	100	0.3530628
Xylene, Meta + Para	2	0.705713	10	0.8644064	20	0.8467578	40	0.8894358	80	0.8568766	200	0.8417228
Xylene, Ortho	1	0.6189154	5	0.7268306	10	0.7536692	20	0.8200085	40	0.801529	100	0.8091852
Xylene (Total)	3	0.6767805	15	0.8185478	30	0.8157283	60	0.8662934	120	0.8384274	300	0.8308769
Dibromofluoromethane	40	0.2485191	40	0.2433545	40	0.2420096	40	0.2449161	40	0.2417154	40	0.2394281
1,2-Dichloroethane-d4	40	0.2600153	40	0.2549123	40	0.2531743	40	0.2518991	40	0.249887	40	0.2481698
Toluene-d8	40	0.9560813	40	0.9732103	40	0.979152	40	0.9803899	40	0.9838336	40	0.9878461
4-Bromofluorobenzene	40	0.472115	40	0.4920988	40	0.4910202	40	0.4845092	40	0.4882896	40	0.4922357

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol			5	0.0152752	25	1.246822E-02	50	1.209628E-02	100	1.193818E-02	200	0.0122522
Acetone	200	7.367677E-02										
Acetonitrile			5	6.935336E-02	25	6.002347E-02	50	5.746147E-02	100	5.751616E-02	200	5.920463E-02
Acrolein	200	0.0220554										
Acrylonitrile	200	0.1072618										
Allyl Chloride			5	0.1543263	25	0.1600036	50	0.1624425	100	0.1651553	200	0.1697944
Benzene	200	1.280621										
Bromobenzene	200	1.301416										
Bromochloromethane	200	0.2158942										
Bromodichloromethane	200	0.3884063										
Bromoform	200	0.2752466										
Bromomethane	200	0.1995832										
n-Butanol			5	0	25	2.693115E-03	50	2.994083E-03	100	3.478595E-03	200	3.773522E-03
2-Butyl Alcohol			5	~~7.145646E-03~~	25	1.022714E-02	50	1.038286E-02	100	9.842624E-03	200	1.084254E-02
n-Butylbenzene	200	2.114968										
sec-Butylbenzene	200	3.200463										
tert-Butylbenzene	200	2.36175										
Carbon Disulfide	200	0.501311										
Carbon Tetrachloride	200	0.4179596										
Chlorobenzene	200	1.209369										
Chloroethane	200	0.2299615										
2-Chloroethyl Vinyl Ether	200	0.1878725										
Chloroform	200	0.5166345										
1-Chlorohexane	200	0.3815921										
Chloromethane	200	0.305115										
2-Chlorotoluene	200	0.8333662										
4-Chlorotoluene	200	0.8418465										
Cyclohexane	200	0.5270511										
1,2-Dibromo-3-chloropropane	200	0.172273										
Dibromochloromethane	200	0.397028										
1,2-Dibromoethane	200	0.3361641										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane	200	0.1734429										
trans-1,4-Dichloro-2-butene	200	0.2049124										
1,2-Dichlorobenzene	200	1.450638										
1,3-Dichlorobenzene	200	1.563912										
1,4-Dichlorobenzene	200	1.592021										
Dichlorodifluoromethane	200	0.3792744										
1,1-Dichloroethane	200	0.5106395										
1,2-Dichloroethane	200	0.3677503										
1,1-Dichloroethene	200	0.268254										
cis-1,2-Dichloroethene	200	0.3365782										
trans-1,2-Dichloroethene	200	0.2947827										
1,2-Dichloroethene (Total)	400	0.3156804										
Dichlorofluoromethane	200	0.5317396										
1,2-Dichloropropane	200	0.2991576										
1,3-Dichloropropane	200	0.6180861										
2,2-Dichloropropane	200	0.3497912										
1,1-Dichloropropene	200	0.427619										
cis-1,3-Dichloropropene	200	0.4531507										
trans-1,3-Dichloropropene	200	0.4207765										
1,3-Dichloropropene (Total)	400	0.4369636										
1,4-Dioxane			5	0	25	3.374765E-03	50	3.094043E-03	100	3.475596E-03	200	3.578287E-03
Ethanol			5	0	25	2.867714E-03	50	3.008195E-03	100	2.646731E-03	200	2.811075E-03
Ethyl Acetate			5	0.2159928	25	0.2253942	50	0.2261768	100	0.2338767	200	0.2437021
Ethylbenzene	200	2.119123										
Ethyl Ether	200	0.1687705										
Hexachlorobutadiene	200	0.3858292										
Hexachloroethane	200	0.3680433										
Hexane			5	0.2639831	25	0.2801247	50	0.2766246	100	0.2734457	200	0.2749158
2-Hexanone	200	0.2259052										
Iodomethane	200	0.3554301										
Isobutanol			5	~~1.906326E-03~~	25	4.611303E-03	50	5.221418E-03	100	5.340842E-03	200	5.736241E-03

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene	200	3.308907										
Isopropyl Ether			5	0.8360529	25	0.909998	50	0.91211	100	0.9177396	200	0.9194907
4-Isopropyltoluene	200	2.752973										
Methyl Acetate	200	0.2075695										
Methyl tert-Butyl Ether	200	0.762795										
Methylcyclohexane	200	0.5390542										
Methylene Chloride	200	0.3063278										
2-Butanone (MEK)	200	0.1217655										
Methyl Methacrylate			5	0.1699213	25	0.2077645	50	0.210115	100	0.2210137	200	0.2316045
2-Methylnaphthalene	200	1.025397										
4-Methyl-2-pentanone (MIBK)	200	0.2483472										
Naphthalene	200	2.315641										
2-Nitropropane			5	3.634318E-02	25	4.052589E-02	50	4.346713E-02	100	4.869553E-02	200	5.525052E-02
n-Propylbenzene	200	0.967064										
Styrene	200	1.401896										
t-Butanol			5	1.841142E-02	25	1.562055E-02	50	1.689552E-02	100	1.672304E-02	200	1.809124E-02
1,1,1,2-Tetrachloroethane	200	0.4170962										
1,1,2,2-Tetrachloroethane	200	0.7852543										
Tetrachloroethene	200	0.5147246										
Tetrahydrofuran	200	3.408807E-02										
Toluene	200	1.409471										
1,2,3-Trichlorobenzene	200	0.7245122										
1,2,4-Trichlorobenzene	200	0.8017223										
1,1,1-Trichloroethane	200	0.4467793										
1,1,2-Trichloroethane	200	0.215799										
Trichloroethene	200	0.3568519										
Trichlorofluoromethane	200	0.5140192										
1,2,3-Trichloropropane	200	0.8876806										
1,1,2-Trichloro-1,2,2-trifluoro	200	0.2741491										
1,2,4-Trimethylbenzene	200	2.762061										
1,3,5-Trimethylbenzene	200	2.721012										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate	200	0.4305781										
Vinyl Chloride	200	0.3432224										
Xylene, Meta + Para	400	0.8176249										
Xylene, Ortho	200	0.7957624										
Xylene (Total)	600	0.8103374										
Dibromofluoromethane	40	0.2375575	40	~~0.2413024~~	40	~~0.2375775~~	40	~~0.2356562~~	40	~~0.2359867~~	40	~~0.2327885~~
1,2-Dichloroethane-d4	40	0.2444739	40	~~0.2510723~~	40	~~0.2494136~~	40	~~0.2484128~~	40	~~0.2504453~~	40	~~0.2477132~~
Toluene-d8	40	0.9839767	40	~~0.948869~~	40	~~0.9566569~~	40	~~0.9478549~~	40	~~0.9589421~~	40	~~0.9518319~~
4-Bromofluorobenzene	40	0.49212	40	~~0.460239~~	40	~~0.4667165~~	40	~~0.462511~~	40	~~0.4600681~~	40	~~0.4642995~~

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropanol	400	1.175167E-02										
Acetone												
Acetonitrile	400	5.776769E-02										
Acrolein												
Acrylonitrile												
Allyl Chloride	400	0.165169										
Benzene												
Bromobenzene												
Bromochloromethane												
Bromodichloromethane												
Bromoform												
Bromomethane												
n-Butanol	400	4.272588E-03										
2-Butyl Alcohol	400	1.207414E-02										
n-Butylbenzene												
sec-Butylbenzene												
tert-Butylbenzene												
Carbon Disulfide												
Carbon Tetrachloride												
Chlorobenzene												
Chloroethane												
2-Chloroethyl Vinyl Ether												
Chloroform												
1-Chlorohexane												
Chloromethane												
2-Chlorotoluene												
4-Chlorotoluene												
Cyclohexane												
1,2-Dibromo-3-chloropropane												
Dibromochloromethane												
1,2-Dibromoethane												

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Dibromomethane												
trans-1,4-Dichloro-2-butene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Dichlorodifluoromethane												
1,1-Dichloroethane												
1,2-Dichloroethane												
1,1-Dichloroethene												
cis-1,2-Dichloroethene												
trans-1,2-Dichloroethene												
1,2-Dichloroethene (Total)												
Dichlorofluoromethane												
1,2-Dichloropropane												
1,3-Dichloropropane												
2,2-Dichloropropane												
1,1-Dichloropropene												
cis-1,3-Dichloropropene												
trans-1,3-Dichloropropene												
1,3-Dichloropropene (Total)												
1,4-Dioxane	400	3.483719E-03										
Ethanol	400	2.640193E-03										
Ethyl Acetate	400	0.2475903										
Ethylbenzene												
Ethyl Ether												
Hexachlorobutadiene												
Hexachloroethane												
Hexane	400	0.2675642										
2-Hexanone												
Iodomethane												
Isobutanol	400	6.09461E-03										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Isopropylbenzene												
Isopropyl Ether	400	0.8872495										
4-Isopropyltoluene												
Methyl Acetate												
Methyl tert-Butyl Ether												
Methylcyclohexane												
Methylene Chloride												
2-Butanone (MEK)												
Methyl Methacrylate	400	0.2311364										
2-Methylnaphthalene												
4-Methyl-2-pentanone (MIBK)												
Naphthalene												
2-Nitropropane	400	5.849917E-02										
n-Propylbenzene												
Styrene												
t-Butanol	400	1.845463E-02										
1,1,1,2-Tetrachloroethane												
1,1,2,2-Tetrachloroethane												
Tetrachloroethene												
Tetrahydrofuran												
Toluene												
1,2,3-Trichlorobenzene												
1,2,4-Trichlorobenzene												
1,1,1-Trichloroethane												
1,1,2-Trichloroethane												
Trichloroethene												
Trichlorofluoromethane												
1,2,3-Trichloropropane												
1,1,2-Trichloro-1,2,2-trifluoro												
1,2,4-Trimethylbenzene												
1,3,5-Trimethylbenzene												

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0K19003

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Vinyl Acetate												
Vinyl Chloride												
Xylene, Meta + Para												
Xylene, Ortho												
Xylene (Total)												
Dibromofluoromethane	40	~~0.2309098~~										
1,2-Dichloroethane-d4	40	~~0.2479337~~										
Toluene-d8	40	~~0.9547235~~										
4-Bromofluorobenzene	40	~~0.4621282~~										

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Isopropanol	1.263029E-02	10.44442	2.431667	0.169152			15	
Acetone	8.414622E-02	13.41868	2.32	1.710456E-02			15	
Acetonitrile	6.022113E-02	7.624849	2.58	0.0147416			15	
Acrolein	2.122175E-02	9.50711	2.194286	0.2431594			15	
Acrylonitrile	0.1202904	5.082343	2.935714	0.183084			15	
Allyl Chloride	0.1628152	3.248024	2.58	0.0147416			15	
Benzene	1.333941	3.133763	4.86	2.114986E-02			15	
Bromobenzene	1.265597	1.945571	9.38	2.114114E-02			15	
Bromochloromethane	0.2344038	5.79388	4.22	2.476443E-02			15	
Bromodichloromethane	0.3695807	4.29198	5.981429	5.977752E-02			15	
Bromoform	0.2202514	16.4387	8.91	1.873922E-02	0.99862		SPCC (0.1)	
Bromomethane	0.2105967	12.7715	1.642857	0.4600203			15	
n-Butanol	3.442381E-03	18.1565	5.462	8.084128E-02	0.99753		0.99	
2-Butyl Alcohol	1.067386E-02	8.065275	4.212	0.1049928			15	
n-Butylbenzene	1.85113	13.15462	10.77	0.0156409			15	
sec-Butylbenzene	2.933294	9.3769	10.21	1.378964E-02			15	
tert-Butylbenzene	2.143824	9.93637	9.99	9.805333E-03			15	
Carbon Disulfide	0.5020423	7.868182	2.47	7.804583E-03			15	
Carbon Tetrachloride	0.4059801	2.796656	4.65	1.619965E-02			15	
Chlorobenzene	1.30366	5.831359	8.101429	4.997638E-02			SPCC (0.3)	
Chloroethane	0.2990394	32.38662	1.71	1.096531E-02	0.99993		0.99	
2-Chloroethyl Vinyl Ether	0.1511127	19.97853	6.29	9.079095E-02	0.99963		0.99	
Chloroform	0.5431677	5.200017	4.31	8.349735E-03			CCC (30)	
1-Chlorohexane	0.447722	25.4304	8.094286	9.903296E-02	0.99989		0.99	
Chloromethane	0.3364927	8.408006	1.37	0.4211754			SPCC (0.1)	
2-Chlorotoluene	0.8099516	3.208848	9.571428	3.658437E-02			15	
4-Chlorotoluene	0.8394441	3.036759	9.681429	4.231177E-02			15	
Cyclohexane	0.5004372	10.24105	4.54	0.0196925			15	
1,2-Dibromo-3-chloropropane	0.1337323	21.10617	11.54857	4.031895E-02	0.99853		0.99	
Dibromochloromethane	0.3456435	11.42686	7.52	3.721705E-03			15	
1,2-Dibromoethane	0.3274482	2.948599	7.621428	5.155239E-02			15	
Dibromomethane	0.1779482	2.370775	5.82	8.153718E-03			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0K19003

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
trans-1,4-Dichloro-2-butene	0.1652086	19.78421	9.441428	4.303467E-02	0.99942		0.99	
1,2-Dichlorobenzene	1.441164	1.780703	10.77	0.0156409			15	
1,3-Dichlorobenzene	1.524187	2.069334	10.31	0.0193405			15	
1,4-Dichlorobenzene	1.632808	6.206173	10.4	1.987494E-02			15	
Dichlorodifluoromethane	0.416766	6.078515	1.22	1.580108E-02			15	
1,1-Dichloroethane	0.5252534	4.035802	3.397143	0.1430632			SPCC (0.1)	
1,2-Dichloroethane	0.3824125	3.656315	4.88	1.580108E-02			15	
1,1-Dichloroethene	0.2831313	6.349562	2.281429	0.1663432			CCC (30)	
cis-1,2-Dichloroethene	0.3383862	3.420985	3.99	9.982982E-03			15	
trans-1,2-Dichloroethene	0.3317326	8.891568	2.96	1.891028E-02			15	
1,2-Dichloroethene (Total)	0.3350594	3.891762	3.99	9.982982E-03			15	
Dichlorofluoromethane	0.5774649	8.488992	1.845714	0.2896717			15	
1,2-Dichloropropane	0.3076101	2.693215	5.71	2.039071E-02			CCC (30)	
1,3-Dichloropropane	0.6177466	3.128136	7.3	0.0202292			15	
2,2-Dichloropropane	0.3199678	5.921999	3.985714	0.1338412			15	
1,1-Dichloropropene	0.4232851	4.061663	4.651429	8.285187E-02			15	
cis-1,3-Dichloropropene	0.3854895	14.27252	6.42	1.535659E-02			15	
trans-1,3-Dichloropropene	0.3339859	19.59723	6.961429	5.517898E-02	0.99928		0.99	
1,3-Dichloropropene (Total)	0.3597377	16.72569	6.961429	5.517898E-02	0.99954		0.99	
1,4-Dioxane	3.401282E-03	5.475726	5.85	1.875685E-02			15	
Ethanol	2.794782E-03	5.570405	2.016	0.2722229			15	
Ethyl Acetate	0.2321222	5.159657	4.08	2.450681E-02			15	
Ethylbenzene	2.069904	5.693245	8.22	0.011466			CCC (30)	
Ethyl Ether	0.1710561	0.8787387	2.1	2.460706E-02			15	
Hexachlorobutadiene	0.3687166	3.342195	12.55	1.318248E-02			15	
Hexachloroethane	0.2855605	16.61697	11.02	1.777773E-02	0.99697		0.99	
Hexane	0.2727764	2.189308	3.246667	0.1585048			15	
2-Hexanone	0.1827118	20.99122	7.391428	5.252802E-02	0.99971		0.99	
Iodomethane	0.2144221	55.26415	2.41	1.954425E-02	0.99873		0.99	
Isobutanol	5.400883E-03	10.36278	4.802	9.062081E-02			15	
Isopropylbenzene	2.977122	11.22477	9.09	1.836815E-02			15	
Isopropyl Ether	0.8971068	3.574945	3.47	5.634228E-03			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0K19003
Calibration Date: 11/16/10 00:00
Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
4-Isopropyltoluene	2.482958	10.58078	10.36	1.818596E-02			15	
Methyl Acetate	0.23037	16.29027	2.6	1.987494E-02	0.99972		0.99	
Methyl tert-Butyl Ether	0.7444837	3.713596	2.964286	0.1805595			15	
Methylcyclohexane	0.5099777	10.25325	5.678571	0.0651891			15	
Methylene Chloride	0.3420022	12.75284	2.691429	0.1400348			15	
2-Butanone (MEK)	0.1187619	7.330655	4.01	0.1426873			15	
Methyl Methacrylate	0.2119259	10.8094	5.843333	8.964018E-02			15	
2-Methylnaphthalene	0.7398915	34.12716	13.76167	2.470957E-02	0.99939		0.99	
4-Methyl-2-pentanone (MIBK)	0.2051879	19.09369	6.58	1.498318E-02	0.99979		0.99	
Naphthalene	1.815006	25.83421	12.61	2.163637E-02	0.99978		0.99	
2-Nitropropane	4.713024E-02	18.27783	6.21	2.299345E-02	0.99843		0.99	
n-Propylbenzene	0.9106264	7.46144	9.495714	5.682405E-02			15	
Styrene	1.328882	11.08616	8.74	4.476836E-03			15	
t-Butanol	1.736607E-02	6.558127	2.801667	0.1453685			15	
1,1,1,2-Tetrachloroethane	0.3893257	6.514489	8.19	2.066142E-02			15	
1,1,2,2-Tetrachloroethane	0.7971327	1.37806	9.382857	5.409705E-02			SPCC (0.3)	
Tetrachloroethene	0.5335104	4.471928	7.27	1.957593E-02			15	
Tetrahydrofuran	3.022536E-02	11.87959	4.28	1.734563E-02			15	
Toluene	1.460932	3.057955	6.74	5.805274E-03			CCC (30)	
1,2,3-Trichlorobenzene	0.6417563	11.45697	12.85286	4.034755E-02			15	
1,2,4-Trichlorobenzene	0.6840442	12.19304	12.37	0.0208272			15	
1,1,1-Trichloroethane	0.4406859	3.140398	4.49	2.181632E-02			15	
1,1,2-Trichloroethane	0.218868	2.55202	7.14	1.439612E-02			15	
Trichloroethene	0.3621107	3.229214	5.49	1.784249E-02			15	
Trichlorofluoromethane	0.5482306	6.080631	1.89	8.445578E-03			15	
1,2,3-Trichloropropane	0.7895682	7.567799	9.42	1.979907E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2992663	7.688226	2.28	1.841265E-02			15	
1,2,4-Trimethylbenzene	2.509957	12.47658	10.04	1.377215E-02			15	
1,3,5-Trimethylbenzene	2.514719	9.982107	9.67	1.590631E-02			15	
Vinyl Acetate	0.3817736	10.34058	3.458571	0.1101943			15	
Vinyl Chloride	0.3753389	8.923252	1.42	1.013075E-02			CCC (30)	
Xylene, Meta + Para	0.8317911	7.185742	8.331429	4.859944E-02			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0K19003

Calibration Date: 11/16/10 00:00

Instrument: 224

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Xylene, Ortho	0.7608429	9.303627	8.72	1.622184E-02			15	
Xylene (Total)	0.8081417	7.533982	8.72	1.622184E-02			15	
Dibromofluoromethane	0.2425	1.482264	4.47	1.135626E-02			15	
1,2-Dichloroethane-d4	0.2517902	1.983002	4.8	2.153118E-02			15	
Toluene-d8	0.9777843	1.086192	6.671429	5.322749E-02			15	
4-Bromofluorobenzene	0.4874841	1.506465	9.235714	5.790937E-02			15	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

Analyte	Expected (ug/L)	Found (ug/L)	% Rec.	QC Limit
Acetone	40.0	36.4	91	75-125
Acrylonitrile	40.0	35.9	90	75-125
Benzene	40.0	40.9	102	75-125
Bromobenzene	40.0	42.6	107	75-125
Bromochloromethane	40.0	39.7	99	75-125
Bromodichloromethane	40.0	39.6	99	75-125
Bromoform	40.0	38.6	97	75-125
Bromomethane	40.0	40.4	101	75-125
n-Butylbenzene	40.0	48.1	120	75-125
sec-Butylbenzene	40.0	46.1	115	75-125
tert-Butylbenzene	40.0	46.2	116	75-125
Carbon Disulfide	40.0	63.6	159 *	75-125
Carbon Tetrachloride	40.0	40.9	102	75-125
Chlorobenzene	40.0	39.2	98	75-125
Chloroethane	40.0	39.8	100	75-125
2-Chloroethyl Vinyl Ether	40.0	37.8	95	75-125
Chloroform	40.0	40.3	101	75-125
1-Chlorohexane	40.0	40.0	100	75-125
Chloromethane	40.0	38.8	97	75-125
2-Chlorotoluene	40.0	43.6	109	75-125
4-Chlorotoluene	40.0	42.9	107	75-125
Cyclohexane	40.0	46.8	117	75-125
1,2-Dibromo-3-chloropropane	40.0	38.3	96	75-125
Dibromochloromethane	40.0	41.8	105	75-125
1,2-Dibromoethane	40.0	40.8	102	75-125
Dibromomethane	40.0	39.0	98	75-125
trans-1,4-Dichloro-2-butene	40.0	36.5	91	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0K19023-SCV1
Standard ID: 0101191
Sequence: 0K19023
Calibration: 0K19003

1,2-Dichlorobenzene	40.0	43.4	109	75-125
1,3-Dichlorobenzene	40.0	43.3	108	75-125
1,4-Dichlorobenzene	40.0	42.6	107	75-125
Dichlorodifluoromethane	40.0	33.6	84	75-125
1,1-Dichloroethane	40.0	41.4	104	75-125
1,2-Dichloroethane	40.0	39.2	98	75-125
1,1-Dichloroethene	40.0	39.1	98	75-125
cis-1,2-Dichloroethene	40.0	42.3	106	75-125
trans-1,2-Dichloroethene	40.0	37.2	93	75-125
1,2-Dichloroethene (Total)	80.0	79.5	99	75-125
Dichlorofluoromethane	40.0	38.5	96	75-125
1,2-Dichloropropane	40.0	40.9	102	75-125
1,3-Dichloropropane	40.0	41.6	104	75-125
2,2-Dichloropropane	40.0	43.6	109	75-125
1,1-Dichloropropene	40.0	42.2	106	75-125
cis-1,3-Dichloropropene	40.0	46.3	116	75-125
trans-1,3-Dichloropropene	40.0	35.7	89	75-125
1,3-Dichloropropene (Total)	80.0	82.0	103	75-125
Ethylbenzene	40.0	42.5	106	75-125
Ethyl Ether	40.0	46.8	117	75-125
Hexachlorobutadiene	40.0	43.3	108	75-125
Hexachloroethane	40.0	37.6	94	75-125
2-Hexanone	40.0	36.5	91	75-125
Iodomethane	40.0	37.4	94	75-125
Isopropylbenzene	40.0	43.1	108	75-125
4-Isopropyltoluene	40.0	45.0	113	75-125
Methyl Acetate	40.0	37.6	94	75-125
Methyl tert-Butyl Ether	40.0	41.7	104	75-125
Methylcyclohexane	40.0	45.6	114	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

Methylene Chloride	40.0	38.6	97	75-125
2-Butanone (MEK)	40.0	39.9	100	75-125
2-Methylnaphthalene	40.0	38.0	95	75-125
4-Methyl-2-pentanone (MIBK)	40.0	36.2	91	75-125
Naphthalene	40.0	41.2	103	75-125
n-Propylbenzene	40.0	44.3	111	75-125
Styrene	40.0	43.3	108	75-125
1,1,1,2-Tetrachloroethane	40.0	42.7	107	75-125
1,1,2,2-Tetrachloroethane	40.0	41.5	104	75-125
Tetrachloroethene	40.0	40.3	101	75-125
Tetrahydrofuran	40.0	41.4	104	75-125
Toluene	40.0	40.9	102	75-125
1,2,3-Trichlorobenzene	40.0	46.4	116	75-125
1,2,4-Trichlorobenzene	40.0	47.8	120	75-125
1,1,1-Trichloroethane	40.0	41.7	104	75-125
1,1,2-Trichloroethane	40.0	42.0	105	75-125
Trichloroethene	40.0	40.7	102	75-125
Trichlorofluoromethane	40.0	37.1	93	75-125
1,2,3-Trichloropropane	40.0	42.2	106	75-125
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	42.2	106	75-125
1,2,4-Trimethylbenzene	40.0	45.6	114	75-125
1,3,5-Trimethylbenzene	40.0	45.4	114	75-125
Vinyl Acetate	40.0	49.1	123	75-125
Vinyl Chloride	40.0	36.7	92	75-125
Xylene, Meta + Para	80.0	84.5	106	75-125
Xylene, Ortho	40.0	43.8	110	75-125
Xylene (Total)	120	128	107	75-125
Dibromofluoromethane	40.0	39.2	98	75-125
1,2-Dichloroethane-d4	40.0	39.6	99	75-125

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV1
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Standard ID: 0101191
Calibration: 0K19003

Toluene-d8	40.0	40.2	101	75-125
4-Bromofluorobenzene	40.0	39.6	99	75-125

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0K19023-SCV2
Sequence: 0K19023

SDG: 1011375
Project: Naval Station Great Lakes
Standard ID: 0050445
Calibration: 0K19003

Analyte	Expected (ug/L)	Found (ug/L)	% Rec.	QC Limit
Isopropanol	250	239	96	75-125
2-Butyl Alcohol	100	98.0	98	75-125
Ethyl Acetate	100	89.4	89	75-125
Isopropyl Ether	100	101	101	75-125
Methyl Methacrylate	100	99.8	100	75-125
Dibromofluoromethane	40.0	39.1	98	75-125
1,2-Dichloroethane-d4	40.0	39.6	99	75-125
Toluene-d8	40.0	39.2	98	75-125
4-Bromofluorobenzene	40.0	40.7	102	75-125

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-TUN1
Lab File ID: BFB1123B.D
Injection Date: 11/23/10
Injection Time: 07:45
Sequence: 0K23033
Instrument ID: 224

m/z	Ion Abundance Criteria	% Relative Abundance	
50	15 - 40% of 95	15.7	PASS
75	30 - 60% of 95	44.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.89	PASS
173	Less than 2% of 174	0.794	PASS
174	50 - 100% of 95	98	PASS
175	5 - 9% of 174	7.54	PASS
176	95 - 101% of 174	98.3	PASS
177	5 - 9% of 176	6.43	PASS

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23033

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0K23033-TUN1	BFB1123B.D	11/23/10 07:45
Calibration Check	0K23033-CCV1	CCV1123B.D	11/23/10 08:13
LCS	1012925-BS1	CCV1123B.D	11/23/10 08:13
Calibration Check	0K23033-CCV2	CCV2.D	11/23/10 08:42
Blank	1012925-BLK1	BLK1123B.D	11/23/10 09:10
NTC02GW0213	1011375-01	37501.D	11/23/10 14:26
NTC02GW0313	1011375-02	37502.D	11/23/10 14:54
NTC02GW0413	1011375-03	37503.D	11/23/10 15:22
NTC02GW0613	1011375-04	37504.D	11/23/10 15:51
NTCFD111710-01	1011375-05	37505.D	11/23/10 16:19
TB111710	1011375-06	37506.D	11/23/10 16:47
NTC02GW0113	1011407-01	40701.D	11/23/10 17:16
NTC02GW0513	1011407-02	40702.D	11/23/10 17:45
TB111801	1011407-03	40703.D	11/23/10 18:13

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0K23033-CCV1
Injection Date: 11/23/10
Calibration Date: 11/16/10 00:00
Sequence: 0K23033

SDG: 1011375
Project: Naval Station Great Lakes
Lab File ID: CCV1123B.D
Injection Time: 08:13
Calibration: 0K19003
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	40.0	32.3	8.414622E-02	0.0679681		-19.2	40
Acrolein	A	40.0	70.4	2.122175E-02	3.734448E-02		76.0	25 *
Acrylonitrile	A	40.0	34.3	0.1202904	0.1030795		-14.3	25
Benzene	A	40.0	40.7	1.333941	1.356835		1.7	25
Bromobenzene	A	40.0	36.6	1.265597	1.159505		-8.4	25
Bromochloromethane	A	40.0	36.8	0.2344038	0.2156219		-8.0	25
Bromodichloromethane	A	40.0	43.3	0.3695807	0.4001428		8.3	25
Bromoform	L	40.0	41.6	0.2202514	0.2643744	0.1	4.1	25
Bromomethane	A	40.0	32.3	0.2105967	0.1700238		-19.3	25
n-Butylbenzene	A	40.0	40.8	1.85113	1.887225		1.9	25
sec-Butylbenzene	A	40.0	41.0	2.933294	3.003875		2.4	25
tert-Butylbenzene	A	40.0	42.5	2.143824	2.275864		6.2	25
Carbon Disulfide	A	40.0	56.7	0.5020423	0.7119893		41.8	25 *
Carbon Tetrachloride	A	40.0	46.2	0.4059801	0.4690696		15.5	25
Chlorobenzene	A	40.0	40.2	1.30366	1.310587	0.3	0.5	25
Chloroethane	L	40.0	35.6	0.2990394	0.215975		-11.0	25
2-Chloroethyl Vinyl Ether	L	40.0	34.3	0.1511127	0.149875		-14.3	40
Chloroform	A	40.0	41.5	0.5431677	0.5636568		3.8	20
1-Chlorohexane	L	40.0	35.2	0.447722	0.3470215		-12.0	25
Chloromethane	A	40.0	30.3	0.3364927	0.2550377	0.1	-24.2	25
2-Chlorotoluene	A	40.0	41.5	0.8099516	0.8396335		3.7	25
4-Chlorotoluene	A	40.0	40.8	0.8394441	0.8554002		1.9	25
Cyclohexane	A	40.0	38.0	0.5004372	0.4758043		-4.9	25
1,2-Dibromo-3-chloropropane	L	40.0	37.6	0.1337323	0.1475862		-5.9	25
Dibromochloromethane	A	40.0	45.3	0.3456435	0.3917837		13.3	25
1,2-Dibromoethane	A	40.0	41.7	0.3274482	0.3412425		4.2	25
Dibromomethane	A	40.0	41.8	0.1779482	0.1861089		4.6	25
trans-1,4-Dichloro-2-butene	L	40.0	32.8	0.1652086	0.1547574		-18.1	25
1,2-Dichlorobenzene	A	40.0	42.6	1.441164	1.533002		6.4	25

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-CCV1
Lab File ID: CCV1123B.D
Injection Date: 11/23/10
Injection Time: 08:13
Calibration Date: 11/16/10 00:00
Calibration: 0K19003
Sequence: 0K23033
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,3-Dichlorobenzene	A	40.0	42.4	1.524187	1.616204		6.0	25
1,4-Dichlorobenzene	A	40.0	40.8	1.632808	1.665836		2.0	25
Dichlorodifluoromethane	A	40.0	39.3	0.416766	0.409655		-1.7	25
1,1-Dichloroethane	A	40.0	39.5	0.5252534	0.5190451	0.1	-1.2	25
1,2-Dichloroethane	A	40.0	41.5	0.3824125	0.3970043		3.8	25
1,1-Dichloroethene	A	40.0	41.8	0.2831313	0.2957949		4.5	20
cis-1,2-Dichloroethene	A	40.0	43.4	0.3383862	0.3674045		8.6	25
trans-1,2-Dichloroethene	A	40.0	42.0	0.3317326	0.347887		4.9	25
1,2-Dichloropropane	A	40.0	38.0	0.3076101	0.2922066		-5.0	20
1,3-Dichloropropane	A	40.0	38.3	0.6177466	0.590872		-4.4	25
2,2-Dichloropropane	A	40.0	46.6	0.3199678	0.3727504		16.5	25
1,1-Dichloropropene	A	40.0	42.5	0.4232851	0.4498204		6.3	25
cis-1,3-Dichloropropene	A	40.0	44.6	0.3854895	0.43008		11.6	25
trans-1,3-Dichloropropene	L	40.0	39.8	0.3339859	0.3891216		-0.5	25
1,3-Dichloropropene (Total)	L	80.0	84.4	0.3597377	0.4096008		5.5	25
Ethylbenzene	A	40.0	41.1	2.069904	2.128395		2.8	20
Ethyl Ether	A	40.0	36.2	0.1710561	0.1546469		-9.6	25
Hexachlorobutadiene	A	40.0	46.9	0.3687166	0.4326507		17.3	25
Hexachloroethane	L	40.0	38.8	0.2855605	0.3177198		-3.1	25
2-Hexanone	L	40.0	29.5	0.1827118	0.1539113		-26.4	40
Iodomethane	L	40.0	42.0	0.2144221	0.3339324		5.1	40
Isopropylbenzene	A	40.0	41.7	2.977122	3.101519		4.2	25
4-Isopropyltoluene	A	40.0	42.4	2.482958	2.631913		6.0	25
Methyl Acetate	L	40.0	30.4	0.23037	0.163013		-24.0	25
Methyl tert-Butyl Ether	A	40.0	40.1	0.7444837	0.7457297		0.2	25
Methylcyclohexane	A	40.0	42.1	0.5099777	0.5364952		5.2	25
Methylene Chloride	A	40.0	34.0	0.3420022	0.2907843		-15.0	25
2-Butanone (MEK)	A	40.0	34.0	0.1187619	0.100884		-15.1	40
2-Methylnaphthalene	L	40.0	31.8	0.7398915	0.6843248		-20.4	40

C.K.

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-CCV1
Lab File ID: CCV1123B.D
Injection Date: 11/23/10
Injection Time: 08:13
Calibration Date: 11/16/10 00:00
Calibration: 0K19003
Sequence: 0K23033
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
4-Methyl-2-pentanone (MIBK)	L	40.0	32.2	0.2051879	0.1879928		-19.6	40
Naphthalene	L	40.0	38.0	1.815006	2.074549		-5.0	25
n-Propylbenzene	A	40.0	42.3	0.9106264	0.9635734		5.8	25
Styrene	A	40.0	43.6	1.328882	1.448895		9.0	25
1,1,1,2-Tetrachloroethane	A	40.0	44.8	0.3893257	0.4363205		12.1	25
1,1,2,2-Tetrachloroethane	A	40.0	36.2	0.7971327	0.7205255	0.3	-9.6	25
Tetrachloroethene	A	40.0	45.2	0.5335104	0.6023605		12.9	25
Tetrahydrofuran	A	40.0	38.4	3.022536E-02	2.902576E-02		-4.0	25
Toluene	A	40.0	42.2	1.460932	1.539902		5.4	20
1,2,3-Trichlorobenzene	A	40.0	45.7	0.6417563	0.73321		14.3	25
1,2,4-Trichlorobenzene	A	40.0	46.6	0.6840442	0.7974447		16.6	25
1,1,1-Trichloroethane	A	40.0	44.4	0.4406859	0.4891079		11.0	25
1,1,2-Trichloroethane	A	40.0	41.2	0.218868	0.2251341		2.9	25
Trichloroethene	A	40.0	45.3	0.3621107	0.4101146		13.3	25
Trichlorofluoromethane	A	40.0	40.6	0.5482306	0.5562455		1.5	25
1,2,3-Trichloropropane	A	40.0	36.8	0.7895682	0.7259163		-8.1	25
1,1,2-Trichloro-1,2,2-trifluoroethane	A	40.0	39.4	0.2992663	0.2948855		-1.5	25
1,2,4-Trimethylbenzene	A	40.0	41.8	2.509957	2.62367		4.5	25
1,3,5-Trimethylbenzene	A	40.0	41.4	2.514719	2.600414		3.4	25
Vinyl Acetate	A	40.0	44.4	0.3817736	0.4241067		11.1	40
Vinyl Chloride	A	40.0	33.1	0.3753389	0.3107043		-17.2	20
Xylene, Meta + Para	A	80.0	84.1	0.8317911	0.8745018		5.1	25
Xylene, Ortho	A	40.0	43.8	0.7608429	0.8340487		9.6	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0K23033-CCV2
Lab File ID: CCV2.D
Injection Date: 11/23/10
Injection Time: 08:42
Calibration Date: 11/16/10 00:00
Calibration: 0K19003
Sequence: 0K23033
Instrument ID: 224

Analyte	Type	CONC. (ug/L)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Isopropanol	A	100	73.8	1.263029E-02	9.314565E-03		-26.3	40
2-Butyl Alcohol	A	100	81.8	1.067386E-02	8.73285E-03		-18.2	40
Ethyl Acetate	A	100	83.5	0.2321222	0.1937808		-16.5	25
Isopropyl Ether	A	100	86.5	0.8971068	0.7759399		-13.5	25
Methyl Methacrylate	A	100	89.2	0.2119259	0.1889989		-10.8	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0K23033-CCV1)			**Lab File ID: CCV1123B.D**			**Analyzed: 11/23/10 08:13**			
Fluorobenzene	506929	5.13	661435	5.13	77	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417026	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	261183	10.38	301687	10.38	87	50 - 200	0.0000	+/-0.50	
LCS (1012925-BS1)			**Lab File ID: CCV1123B.D**			**Analyzed: 11/23/10 08:13**			
Fluorobenzene	506929	5.13	661435	5.13	77	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417026	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	261183	10.38	301687	10.38	87	50 - 200	0.0000	+/-0.50	
Calibration Check (0K23033-CCV2)			**Lab File ID: CCV2.D**			**Analyzed: 11/23/10 08:42**			
Fluorobenzene	505402	5.13	661435	5.13	76	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	417436	8.08	506472	8.08	82	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	237414	10.38	301687	10.38	79	50 - 200	0.0000	+/-0.50	
Blank (1012925-BLK1)			**Lab File ID: BLK1123B.D**			**Analyzed: 11/23/10 09:10**			
Fluorobenzene	487254	5.13	661435	5.13	74	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	393181	8.08	506472	8.08	78	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	227534	10.38	301687	10.38	75	50 - 200	0.0000	+/-0.50	
NTC02GW0213 (1011375-01)			**Lab File ID: 37501.D**			**Analyzed: 11/23/10 14:26**			
Fluorobenzene	447019	5.13	661435	5.13	68	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	369898	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	216151	10.38	301687	10.38	72	50 - 200	0.0000	+/-0.50	
NTC02GW0313 (1011375-02)			**Lab File ID: 37502.D**			**Analyzed: 11/23/10 14:54**			
Fluorobenzene	440991	5.13	661435	5.13	67	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	365457	8.08	506472	8.08	72	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	211075	10.38	301687	10.38	70	50 - 200	0.0000	+/-0.50	
NTC02GW0413 (1011375-03)			**Lab File ID: 37503.D**			**Analyzed: 11/23/10 15:22**			
Fluorobenzene	457721	5.13	661435	5.13	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	370951	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	217121	10.38	301687	10.38	72	50 - 200	0.0000	+/-0.50	
NTC02GW0613 (1011375-04)			**Lab File ID: 37504.D**			**Analyzed: 11/23/10 15:51**			
Fluorobenzene	438525	5.13	661435	5.13	66	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	366885	8.08	506472	8.08	72	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	212072	10.38	301687	10.38	70	50 - 200	0.0000	+/-0.50	
NTCFD111710-01 (1011375-05)			**Lab File ID: 37505.D**			**Analyzed: 11/23/10 16:19**			
Fluorobenzene	458296	5.13	661435	5.13	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	371787	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	219646	10.38	301687	10.38	73	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8260B

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0K23033

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K19003
Instrument: 224

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TB111710 (1011375-06)			**Lab File ID: 37506.D**			**Analyzed: 11/23/10 16:47**			
Fluorobenzene	428816	5.13	661435	5.13	65	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	355247	8.08	506472	8.08	70	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	210311	10.38	301687	10.38	70	50 - 200	0.0000	+/-0.50	
NTC02GW0113 (1011407-01)			**Lab File ID: 40701.D**			**Analyzed: 11/23/10 17:16**			
Fluorobenzene	443188	5.13	661435	5.13	67	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	363357	8.08	506472	8.08	72	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	212876	10.38	301687	10.38	71	50 - 200	0.0000	+/-0.50	
NTC02GW0513 (1011407-02)			**Lab File ID: 40702.D**			**Analyzed: 11/23/10 17:45**			
Fluorobenzene	444811	5.13	661435	5.13	67	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	368524	8.08	506472	8.08	73	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	213461	10.38	301687	10.38	71	50 - 200	0.0000	+/-0.50	
TB111801 (1011407-03)			**Lab File ID: 40703.D**			**Analyzed: 11/23/10 18:13**			
Fluorobenzene	445188	5.13	661435	5.13	67	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	373794	8.08	506472	8.08	74	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	214484	10.38	301687	10.38	71	50 - 200	0.0000	+/-0.50	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012925

Printed: 12/13/2010 2:19:44PM

Volatiles MS, Water, 5030B Aqueous Purge & Trap

Surrogate #1 = 0060114 (Static)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	8260B Standard VOAs plus custom	1011356	8260B Standard VOAs plus custom	1011375	8260B Standard VOAs plus custom
1011407	8260B Standard VOAs plus custom				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012925-BLK1		Nov-23-10 07:00	DLV	5	5	1				BLANK	
1012925-BS1		Nov-23-10 07:00	DLV	5	5	1		0110642	2	LCS	
1012925-MS1		Nov-23-10 07:00	DLV	5	5	1	1011352-01	0110642	2	MATRIX SPIKE	
1012925-MSD1		Nov-23-10 07:00	DLV	5	5	1	1011352-01	0110642	2	MATRIX SPIKE DUP	
1011352-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011352-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011352-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-04	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-05	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011356-06	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-04	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-05	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011375-06	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-01	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-02	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	
1011407-03	A	Nov-23-10 07:00	DLV	5	5	1				TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

SDG 1011375

SAMPLE ID NTC02GW0313

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
440991	1	2692	40	5	0.3384	0.72
				Sample Volume (ML)		
				5		

cis-1,2-dichloroethene = 0.72 ug/L

ORGANIC ANALYSIS DATA SHEET
USEPA-8260B

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1011375-02
File ID: 37502.D
Sampled: 11/17/10 15:45
Prepared: 11/23/10 07:00
Analyzed: 11/23/10 14:54
Solids:
Preparation: 5030B Aqueous Purge &
Initial/Final: 5 mL / 5 mL
QC Batch: 1012925
Sequence: 0K23033
Calibration: 0K19003
Instrument: 224

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
75-35-4	1,1-Dichloroethene	1	1.0	0.13	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.72	0.23	1.0	J
156-60-5	trans-1,2-Dichloroethene	1	1.0	0.20	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	0.15	1.0	U
142-28-9	1,3-Dichloropropane	1	1.0	0.14	1.0	U
594-20-7	2,2-Dichloropropane	1	1.0	0.18	1.0	U
563-58-6	1,1-Dichloropropene	1	1.0	0.25	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	0.25	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	0.23	1.0	U
141-78-6	Ethyl Acetate	1	50	0.27	50	U
100-41-4	Ethylbenzene	1	1.0	0.14	1.0	U
591-78-6	2-Hexanone	1	5.0	0.29	5.0	U
74-88-4	Iodomethane	1	1.0	0.21	1.0	U
98-82-8	Isopropylbenzene	1	1.0	0.15	1.0	U
99-87-6	4-Isopropyltoluene	1	1.0	0.29	1.0	U
79-20-9	Methyl Acetate	1	5.0	0.30	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	0.28	1.0	U
108-87-2	Methylcyclohexane	1	5.0	0.20	5.0	U
75-09-2	Methylene Chloride	1	1.0	0.26	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	0.55	5.0	U
80-62-6	Methyl Methacrylate	1	5.0	0.094	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	0.28	5.0	U
103-65-1	n-Propylbenzene	1	1.0	0.15	1.0	U
100-42-5	Styrene	1	1.0	0.11	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1	1.0	0.16	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	0.070	1.0	U
127-18-4	Tetrachloroethene	1	1.0	0.16	1.0	U
109-99-9	Tetrahydrofuran	1	5.0	1.0	5.0	U
108-88-3	Toluene	1	1.0	0.16	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1	1.0	0.18	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	0.16	1.0	U
71-55-6	1,1,1-Trichloroethane	1	1.0	0.19	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	0.18	1.0	U

Quantitation Report (Not Edited)

Data Path : C:\MSDCHEM\1\DATA\11-23-10\
InstName : 224
Data File : 37502.D
Acq On : 23 Nov 2010 14:54
Operator : DLV
Sample : 1011375-02 NTC026W0313
Misc : TT
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 23 15:08:31 2010
Quant Method : C:\MSDCHEM\1\METHODS\8260B-B62.M
Quant Title : VOLATILE GC/MS BY EPA 8260B/624/524.2
QLast Update : Tue Nov 23 07:46:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.13	96	440991	40.00 ug/L	0.00 66.67%
50) Chlorobenzene-d5	8.08	117	365457	40.00 ug/L	0.00 72.16%
65) 1,4-Dichlorobenzene-d4	10.38	152	211075	40.00 ug/L	0.00 69.96%
System Monitoring Compounds					
30) #Dibromofluoromethane	4.47	111	115536	43.22 ug/L	0.00
Spiked Amount 40.000			Recovery =	108.05%	
37) #1,2-Dichloroethane-d4	4.80	65	115634	41.66 ug/L	0.00
Spiked Amount 40.000			Recovery =	104.15%	
46) #Toluene-d8	6.67	98	427493	39.66 ug/L	0.00
Spiked Amount 40.000			Recovery =	99.15%	
64) #4-Bromofluorobenzene	9.24	95	163442	36.70 ug/L	0.00
Spiked Amount 40.000			Recovery =	91.75%	

Target Compounds					Qvalue
2) dichlorodifluoromethane	0.00	85	0	N.D.	
3) chloromethane	0.00	50	0	N.D.	
4) vinyl chloride	0.00	62	0	N.D.	
5) dichlorofluoromethane	0.00	67	0	N.D.	
6) bromomethane	0.00	94	0	N.D.	
7) chloroethane	0.00	64	0	N.D.	
8) trichlorofluoromethane	0.00	101	0	N.D.	
9) acrolein	0.00	56	0	N.D.	
10) ethyl ether	2.10	74	55360	29.36 ug/L	97
11) acrylonitrile	0.00	53	0	N.D.	
12) 1,1,2-trichloro-1,2,2-tr	0.00	101	0	N.D.	
13) 1,1-dichloroethene	0.00	96	0	N.D.	
14) iodomethane	0.00	142	0	N.D.	
15) acetone	2.32	43	2376	2.56 ug/L #	41
16) methyl acetate	0.00	43	0	N.D.	
17) carbon disulfide	0.00	76	0	N.D.	
18) methylene chloride	0.00	49	0	N.D.	
19) trans-1,2-dichloroethene	0.00	96	0	N.D.	
20) methyl (tert) butyl ethe	0.00	73	0	N.D.	
21) 1,1-dichloroethane	0.00	63	0	N.D.	
22) vinyl acetate	0.00	43	0	N.D.	
23) 2,2-dichloropropane	0.00	77	0	N.D.	
24) cis-1,2-dichloroethene	3.99	96	2692	0.72 ug/L	86
25) 2-butanone (MEK)	0.00	43	0	N.D.	
26) bromochloromethane	0.00	49	0	N.D.	
27) chloroform	0.00	83	0	N.D.	
28) tetrahydrofuran	0.00	71	0	N.D.	
29) 1,1,1-trichloroethane	0.00	97	0	N.D.	
31) carbon tetrachloride	0.00	117	0	N.D.	
32) 1,1-dichloropropene	0.00	75	0	N.D.	
33) cyclohexane	0.00	56	0	N.D.	
34) benzene	4.86	78	2735	0.19 ug/L #	64
35) 1,2-dichloroethane	0.00	62	0	N.D.	
36) heptane	5.13	57	11901	No Calib #	

HOLDING TIME SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Method: Semivolatile Organic Compounds by EPA Method 8270C

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/19/10	2	7	12/15/10	26	40	
NTC02GW0313	11/17/10	11/18/10		11/19/10	2	7	12/15/10	26	40	
NTC02GW0413	11/17/10	11/18/10		11/19/10	2	7	12/15/10	26	40	
NTC02GW0613	11/17/10	11/18/10		11/19/10	2	7	12/15/10	26	40	
NTCFD111710-01	11/17/10	11/18/10		11/19/10	2	7	12/15/10	26	40	
NTC02GW0113	11/18/10	11/19/10		11/24/10	6	7	12/15/10	21	40	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	7	12/15/10	21	40	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L17046

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L17046-CCV1)		**Lab File ID: 10C1214A.D**		**Analyzed: 12/14/10 11:43**			
2-Fluorophenol	3.40	3.40	0.00	+/-1.0	114	75 - 125	
Phenol-d6	4.47	4.47	0.00	+/-1.0	112	75 - 125	
Nitrobenzene-d5	5.55	5.55	0.00	+/-1.0	111	75 - 125	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	108	75 - 125	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	119	75 - 125	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	104	75 - 125	
Blank (1012641-BLK1)		**Lab File ID: 1012641-BLK1**		**Analyzed: 12/14/10 15:11**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	44	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	32	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	81	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	80	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	74	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	90	42 - 125	
LCS (1012641-BS1)		**Lab File ID: 1012641-BS1.D**		**Analyzed: 12/14/10 15:41**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	53	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	35	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	84	31 - 123	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	80	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	93	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	83	42 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L21016
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
Calibration Check (0L21016-CCV1)		**Lab File ID: 10C1215B.D**		**Analyzed: 12/15/10 11:08**			
2-Fluorophenol	3.40	3.40	0.00	+/-1.0	112	75 - 125	
Phenol-d6	4.47	4.47	0.00	+/-1.0	109	75 - 125	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	112	75 - 125	
2-Fluorobiphenyl	7.62	7.62	0.00	+/-1.0	107	75 - 125	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	123	75 - 125	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	106	75 - 125	
Blank (1012641-BLK2)		**Lab File ID: 1012641-BLK2**		**Analyzed: 12/15/10 11:37**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	47	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	32	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	77	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	80	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	79	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	82	42 - 125	
LCS (1012641-BS2)		**Lab File ID: 1012641-BS2.L**		**Analyzed: 12/15/10 12:07**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	49	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	33	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	79	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	73	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	85	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	76	42 - 125	
NTC02GW0113 (1011407-01)		**Lab File ID: 1011407-01.D**		**Analyzed: 12/15/10 12:36**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	48	20 - 70	
Phenol-d6	4.45	4.47	-0.02	+/-1.0	32	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	78	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	78	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	81	30 - 121	
o-Terphenyl	10.44	10.46	-0.02	+/-1.0	88	42 - 125	
NTC02GW0513 (1011407-02)		**Lab File ID: 1011407-02.D**		**Analyzed: 12/15/10 13:05**			
2-Fluorophenol	3.38	3.40	-0.02	+/-1.0	49	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	33	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	78	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	78	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	88	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	87	42 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L21016
Instrument: 195

Lab Sample Id Surrogate Compound Name	RT	Calibration Mean RT	RT Diff	RT Diff Limit	% Recovery	Recovery Limits	Q
NTC02GW0213 (1011375-01)		**Lab File ID: 1011375-01.D**		**Analyzed: 12/15/10 15:08**			
2-Fluorophenol	3.40	3.40	0.00	+/-1.0	34	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	23	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	55	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	52	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	55	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	64	42 - 125	
NTC02GW0313 (1011375-02)		**Lab File ID: 1011375-02.D**		**Analyzed: 12/15/10 15:39**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	37	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	24	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	66	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	61	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	79	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	72	42 - 125	
NTC02GW0413 (1011375-03)		**Lab File ID: 1011375-03.D**		**Analyzed: 12/15/10 16:09**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	39	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	25	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	65	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	49	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	80	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	62	42 - 125	
NTC02GW0613 (1011375-04)		**Lab File ID: 1011375-04.D**		**Analyzed: 12/15/10 16:39**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	44	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	27	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	68	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	58	25 - 113	
2,4,6-Tribromophenol	9.24	9.26	-0.02	+/-1.0	78	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	73	42 - 125	
NTCFD111710-01 (1011375-05)		**Lab File ID: 1011375-05.D**		**Analyzed: 12/15/10 17:09**			
2-Fluorophenol	3.39	3.40	-0.01	+/-1.0	42	20 - 70	
Phenol-d6	4.46	4.47	-0.01	+/-1.0	28	18 - 45	
Nitrobenzene-d5	5.54	5.55	-0.01	+/-1.0	68	31 - 123	
2-Fluorobiphenyl	7.61	7.62	-0.01	+/-1.0	52	25 - 113	
2,4,6-Tribromophenol	9.25	9.26	-0.01	+/-1.0	92	30 - 121	
o-Terphenyl	10.45	10.46	-0.01	+/-1.0	65	42 - 125	

QC BATCH SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
QC Batch: 1012641
QC Batch Matrix: Water
Preparation: 3510C Liquid-Liquid Extraction

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/19/10 07:40	
NTC02GW0313	1011375-02	11/19/10 07:40	
NTC02GW0413	1011375-03	11/19/10 07:40	
NTC02GW0613	1011375-04	11/19/10 07:40	
NTCFD111710-01	1011375-05	11/19/10 07:40	
NTC02GW0113	1011407-01	11/24/10 07:40	
NTC02GW0513	1011407-02	11/24/10 07:40	
Blank	1012641-BLK1	11/19/10 07:40	
Blank	1012641-BLK2	11/24/10 07:40	Same as 1012912
LCS	1012641-BS1	11/19/10 07:40	
LCS	1012641-BS2	11/24/10 07:40	Same as 1012912

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012641-BLK1
File ID: 1012641-BLK1.D
Prepared: 11/19/10 07:40
Analyzed: 12/14/10 15:11
Preparation: 3510C Liquid-Liquid Ext
Initial/Final: 1000 mL / 1 mL
QC Batch: 1012641
Sequence: 0L17046
Calibration: 0L17004
Instrument: 195

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
83-32-9	Acenaphthene	0.50	ug/L	0.020	0.50	U
208-96-8	Acenaphthylene	0.50	ug/L	0.033	0.50	U
98-86-2	Acetophenone	0.50	ug/L	0.087	0.50	U
62-53-3	Aniline	0.50	ug/L	0.036	0.50	U
120-12-7	Anthracene	0.50	ug/L	0.035	0.50	U
1912-24-9	Atrazine	0.50	ug/L	0.17	0.50	U
92-52-4	1,1'-Biphenyl	0.50	ug/L	0.10	0.50	U
100-52-7	Benzaldehyde	0.50	ug/L	0.16	0.50	U
56-55-3	Benzo(a)anthracene	0.060	ug/L	0.025	0.50	J
50-32-8	Benzo(a)pyrene	0.040	ug/L	0.028	0.50	J
205-99-2	Benzo(b)fluoranthene	0.040	ug/L	0.029	0.50	J
207-08-9	Benzo(k)fluoranthene	0.050	ug/L	0.049	0.50	J
191-24-2	Benzo(g,h,i)perylene	0.50	ug/L	0.055	0.50	U
101-55-3	4-Bromophenyl Phenyl Ether	0.50	ug/L	0.047	0.50	U
85-68-7	Butyl Benzyl Phthalate	1.0	ug/L	0.057	1.0	U
105-60-2	Caprolactam	1.0	ug/L	0.21	1.0	U
86-74-8	Carbazole	0.50	ug/L	0.12	0.50	U
59-50-7	4-Chloro-3-methylphenol	0.50	ug/L	0.17	0.50	U
106-47-8	4-Chloroaniline	1.0	ug/L	0.14	1.0	U
111-91-1	Bis(2-chloroethoxy)methane	0.50	ug/L	0.039	0.50	U
111-44-4	Bis(2-chloroethyl) Ether	0.50	ug/L	0.034	0.50	U
108-60-1	Bis(2-chloroisopropyl) Ether	0.50	ug/L	0.044	0.50	U
91-58-7	2-Chloronaphthalene	0.50	ug/L	0.032	0.50	U
95-57-8	2-Chlorophenol	0.50	ug/L	0.070	0.50	U
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50	ug/L	0.12	0.50	U
218-01-9	Chrysene	0.050	ug/L	0.022	0.50	J
53-70-3	Dibenz(a,h)anthracene	0.50	ug/L	0.053	0.50	U
132-64-9	Dibenzofuran	0.50	ug/L	0.11	0.50	U
84-74-2	Di-n-butyl Phthalate	1.0	ug/L	0.61	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	ug/L	1.0	1.0	U
120-83-2	2,4-Dichlorophenol	0.50	ug/L	0.23	0.50	U
84-66-2	Diethyl Phthalate	0.47	ug/L	0.12	0.50	J
105-67-9	2,4-Dimethylphenol	1.0	ug/L	0.31	1.0	U
131-11-3	Dimethyl Phthalate	0.50	ug/L	0.10	0.50	U
534-52-1	4,6-Dinitro-2-methylphenol	0.50	ug/L	0.14	0.50	U

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012641-BLK1 File ID: 1012641-BLK1.D

Prepared: 11/19/10 07:40 Analyzed: 12/14/10 15:11

Preparation: 3510C Liquid-Liquid Ext Initial/Final: 1000 mL / 1 mL

QC Batch: 1012641 Sequence: 0L17046 Calibration: 0L17004 Instrument: 195

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
51-28-5	2,4-Dinitrophenol	5.0	ug/L	1.8	5.0	U
606-20-2	2,6-Dinitrotoluene	0.50	ug/L	0.25	0.50	U
121-14-2	2,4-Dinitrotoluene	0.50	ug/L	0.15	0.50	U
117-84-0	Di-n-octyl Phthalate	0.50	ug/L	0.056	0.50	U
117-81-7	Bis(2-ethylhexyl) Phthalate	0.50	ug/L	0.22	0.50	U
206-44-0	Fluoranthene	0.50	ug/L	0.040	0.50	U
86-73-7	Fluorene	0.50	ug/L	0.019	0.50	U
118-74-1	Hexachlorobenzene	0.50	ug/L	0.065	0.50	U
87-68-3	Hexachlorobutadiene	0.50	ug/L	0.13	0.50	U
77-47-4	Hexachlorocyclopentadiene	0.50	ug/L	0.15	0.50	U
67-72-1	Hexachloroethane	0.50	ug/L	0.13	0.50	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.50	ug/L	0.042	0.50	U
78-59-1	Isophorone	0.50	ug/L	0.048	0.50	U
91-57-6	2-Methylnaphthalene	0.50	ug/L	0.021	0.50	U
90-12-0	1-Methylnaphthalene	0.50	ug/L	0.039	0.50	U
106-44-5	4-Methylphenol	0.50	ug/L	0.11	0.50	U
95-48-7	2-Methylphenol	0.50	ug/L	0.13	0.50	U
91-20-3	Naphthalene	0.50	ug/L	0.022	0.50	U
100-01-6	4-Nitroaniline	1.0	ug/L	0.16	1.0	U
88-74-4	2-Nitroaniline	1.0	ug/L	0.14	1.0	U
99-09-2	3-Nitroaniline	1.0	ug/L	0.40	1.0	U
98-95-3	Nitrobenzene	0.50	ug/L	0.18	0.50	U
88-75-5	2-Nitrophenol	0.50	ug/L	0.068	0.50	U
100-02-7	4-Nitrophenol	5.0	ug/L	0.71	5.0	U
86-30-6	N-Nitroso-diphenylamine	0.50	ug/L	0.16	0.50	U
621-64-7	N-Nitroso-di-n-propylamine	0.50	ug/L	0.091	0.50	U
87-86-5	Pentachlorophenol	1.0	ug/L	0.094	1.0	U
85-01-8	Phenanthrene	0.50	ug/L	0.025	0.50	U
108-95-2	Phenol	0.50	ug/L	0.15	0.50	U
129-00-0	Pyrene	0.50	ug/L	0.026	0.50	U
95-95-4	2,4,5-Trichlorophenol	0.50	ug/L	0.030	0.50	U
88-06-2	2,4,6-Trichlorophenol	0.50	ug/L	0.065	0.50	U
56-49-5	3-Methylcholanthrene	2.0	ug/L	0.25	2.0	U

System Monitoring Compound	Added (ug/L)	Conc. (ug/L)	% REC	QC Limits	Q

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012641-BLK1
File ID: 1012641-BLK1.D
Prepared: 11/19/10 07:40
Analyzed: 12/14/10 15:11
Preparation: 3510C Liquid-Liquid Ext
Initial/Final: 1000 mL / 1 mL
QC Batch: 1012641
Sequence: 0L17046
Calibration: 0L17004
Instrument: 195

System Monitoring Compound	Added (ug/L)	Conc. (ug/L)	% REC	QC Limits	Q
2-Fluorophenol	20.0	8.72	44	20 - 70	
Phenol-d6	20.0	6.37	32	18 - 45	
Nitrobenzene-d5	10.1	8.21	81	31 - 123	
2-Fluorobiphenyl	10.0	8.05	80	25 - 113	
2,4,6-Tribromophenol	19.9	14.7	74	30 - 121	
o-Terphenyl	10.0	8.99	90	42 - 125	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
1,4-Dichlorobenzene-d4	131252	4.86	235731	4.78	
Naphthalene-d8	518395	6.36	923962	6.28	
Acenaphthene-d10	288452	8.36	501206	8.28	
Phenanthrene-d10	396928	10	685655	9.93	
Chrysene-d12	340517	12.93	662942	12.86	
Perylene-d12	262542	14.4	565083	14.33	*

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012641-BS1
Preparation: 3510C Liquid-Liquid Extraction
Initial/Final: 1000 mL / 1 mL
Sequence: 0L17046

QC Batch: 1012641

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Acenaphthene	9.40	8.13	86	53 - 126	ug/L
Acenaphthylene	9.40	8.38	89	62 - 133	ug/L
Acetophenone	10.0	8.92	89	58 - 115	ug/L
Aniline	9.40	7.83	83	23 - 105	ug/L
Anthracene	9.40	8.38	89	64 - 130	ug/L
Atrazine	10.0	14.0	140	60 - 140	ug/L
1,1'-Biphenyl	10.0	8.92	89	58 - 116	ug/L
Benzaldehyde	10.0	8.93	89	35 - 128	ug/L
Benzo(a)anthracene	9.40	8.16	87	63 - 129	ug/L
Benzo(a)pyrene	9.40	8.67	92	59 - 131	ug/L
Benzo(b)fluoranthene	9.40	8.21	87	58 - 133	ug/L
Benzo(k)fluoranthene	9.40	8.01	85	59 - 132	ug/L
Benzo(g,h,i)perylene	9.40	8.87	94	52 - 129	ug/L
4-Bromophenyl Phenyl Ether	9.20	8.32	90	57 - 124	ug/L
Butyl Benzyl Phthalate	9.20	8.42	92	58 - 141	ug/L
Caprolactam	10.0	1.98	20 *	23 - 76	ug/L
Carbazole	9.40	25.4	271 *	62 - 146	ug/L
4-Chloro-3-methylphenol	9.40	8.50	90	53 - 120	ug/L
4-Chloroaniline	9.40	9.94	106	44 - 138	ug/L
Bis(2-chloroethoxy)methane	9.20	7.80	85	52 - 124	ug/L
Bis(2-chloroethyl) Ether	9.20	7.05	77	42 - 123	ug/L
Bis(2-chloroisopropyl) Ether	9.20	7.59	82	50 - 122	ug/L
2-Chloronaphthalene	9.70	8.48	87	58 - 126	ug/L
2-Chlorophenol	9.40	7.73	82	44 - 121	ug/L
4-Chlorophenyl Phenyl Ether	9.20	8.40	91	57 - 122	ug/L
Chrysene	9.40	8.37	89	66 - 134	ug/L
Dibenz(a,h)anthracene	9.40	8.10	86	57 - 130	ug/L
Dibenzofuran	9.40	8.76	93	59 - 123	ug/L
Di-n-butyl Phthalate	9.20	8.83	96	58 - 145	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012641-BS1
Preparation: 3510C Liquid-Liquid Extraction
Initial/Final: 1000 mL / 1 mL
Sequence: 0L17046

QC Batch: 1012641

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
3,3'-Dichlorobenzidine	20.0	25.5	128	55 - 135	ug/L
2,4-Dichlorophenol	9.40	8.54	91	51 - 122	ug/L
Diethyl Phthalate	9.20	8.63	94	55 - 129	ug/L
2,4-Dimethylphenol	9.40	5.31	56	35 - 112	ug/L
Dimethyl Phthalate	9.20	8.40	91	61 - 126	ug/L
4,6-Dinitro-2-methylphenol	9.40	7.55	80	25 - 139	ug/L
2,4-Dinitrophenol	9.40	6.33	67	10 - 147	ug/L
2,6-Dinitrotoluene	9.70	8.69	90	59 - 120	ug/L
2,4-Dinitrotoluene	9.70	9.43	97	55 - 131	ug/L
Di-n-octyl Phthalate	9.20	8.16	89	55 - 136	ug/L
Bis(2-ethylhexyl) Phthalate	9.20	8.00	87	60 - 136	ug/L
Fluoranthene	9.40	8.89	95	64 - 138	ug/L
Fluorene	9.40	8.61	92	60 - 128	ug/L
Hexachlorobenzene	9.70	8.36	86	49 - 130	ug/L
Hexachlorobutadiene	9.70	7.93	82	50 - 128	ug/L
Hexachlorocyclopentadiene	9.70	9.22	95	21 - 138	ug/L
Hexachloroethane	9.70	7.56	78	41 - 123	ug/L
Indeno(1,2,3-cd)pyrene	9.40	8.02	85	57 - 129	ug/L
Isophorone	9.70	7.87	81	56 - 129	ug/L
2-Methylnaphthalene	9.40	8.52	91	59 - 135	ug/L
1-Methylnaphthalene	10.0	8.11	81	50 - 150	ug/L
4-Methylphenol	9.60	7.13	74	33 - 122	ug/L
2-Methylphenol	9.60	7.10	74	39 - 107	ug/L
Naphthalene	9.40	7.96	85	50 - 127	ug/L
4-Nitroaniline	9.40	11.9	126	52 - 143	ug/L
2-Nitroaniline	9.40	11.9	127	57 - 130	ug/L
3-Nitroaniline	9.40	11.2	119	49 - 144	ug/L
Nitrobenzene	9.70	8.39	86	53 - 121	ug/L
2-Nitrophenol	9.40	6.68	71	44 - 128	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012641-BS1

Preparation: 3510C Liquid-Liquid Extraction

Initial/Final: 1000 mL / 1 mL

QC Batch: 1012641

Sequence: 0L17046

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
4-Nitrophenol	9.40	3.72	40	17 - 70	ug/L
N-Nitroso-diphenylamine	9.20	7.43	81	45 - 110	ug/L
N-Nitroso-di-n-propylamine	9.20	7.76	84	49 - 125	ug/L
Pentachlorophenol	9.40	7.24	77	21 - 124	ug/L
Phenanthrene	9.40	8.15	87	63 - 126	ug/L
Phenol	9.40	3.96	42	22 - 60	ug/L
Pyrene	9.40	7.93	84	60 - 134	ug/L
2,4,5-Trichlorophenol	9.60	8.83	92	53 - 129	ug/L
2,4,6-Trichlorophenol	9.40	8.69	92	47 - 128	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes

Laboratory ID: 1012641-BLK2
Prepared: 11/24/10 07:40
Preparation: 3510C Liquid-Liquid Ext

File ID: 1012641-BLK2.D
Analyzed: 12/15/10 11:37
Initial/Final: 1000 mL / 1 mL

QC Batch: 1012641
Sequence: 0L21016
Calibration: 0L17004
Instrument: 195

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
83-32-9	Acenaphthene	0.50	ug/L	0.020	0.50	U
208-96-8	Acenaphthylene	0.50	ug/L	0.033	0.50	U
98-86-2	Acetophenone	0.50	ug/L	0.087	0.50	U
62-53-3	Aniline	0.50	ug/L	0.036	0.50	U
120-12-7	Anthracene	0.50	ug/L	0.035	0.50	U
1912-24-9	Atrazine	0.50	ug/L	0.17	0.50	U
92-52-4	1,1'-Biphenyl	0.50	ug/L	0.10	0.50	U
100-52-7	Benzaldehyde	0.50	ug/L	0.16	0.50	U
56-55-3	Benzo(a)anthracene	0.070	ug/L	0.025	0.50	J
50-32-8	Benzo(a)pyrene	0.030	ug/L	0.028	0.50	J
205-99-2	Benzo(b)fluoranthene	0.030	ug/L	0.029	0.50	J
207-08-9	Benzo(k)fluoranthene	0.50	ug/L	0.049	0.50	U
191-24-2	Benzo(g,h,i)perylene	0.50	ug/L	0.055	0.50	U
101-55-3	4-Bromophenyl Phenyl Ether	0.50	ug/L	0.047	0.50	U
85-68-7	Butyl Benzyl Phthalate	1.0	ug/L	0.057	1.0	U
105-60-2	Caprolactam	1.0	ug/L	0.21	1.0	U
86-74-8	Carbazole	0.50	ug/L	0.12	0.50	U
59-50-7	4-Chloro-3-methylphenol	0.50	ug/L	0.17	0.50	U
106-47-8	4-Chloroaniline	1.0	ug/L	0.14	1.0	U
111-91-1	Bis(2-chloroethoxy)methane	0.50	ug/L	0.039	0.50	U
111-44-4	Bis(2-chloroethyl) Ether	0.50	ug/L	0.034	0.50	U
108-60-1	Bis(2-chloroisopropyl) Ether	0.50	ug/L	0.044	0.50	U
91-58-7	2-Chloronaphthalene	0.50	ug/L	0.032	0.50	U
95-57-8	2-Chlorophenol	0.50	ug/L	0.070	0.50	U
7005-72-3	4-Chlorophenyl Phenyl Ether	0.50	ug/L	0.12	0.50	U
218-01-9	Chrysene	0.090	ug/L	0.022	0.50	J
53-70-3	Dibenz(a,h)anthracene	0.50	ug/L	0.053	0.50	U
132-64-9	Dibenzofuran	0.50	ug/L	0.11	0.50	U
84-74-2	Di-n-butyl Phthalate	1.0	ug/L	0.61	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1.0	ug/L	1.0	1.0	U
120-83-2	2,4-Dichlorophenol	0.50	ug/L	0.23	0.50	U
84-66-2	Diethyl Phthalate	0.50	ug/L	0.12	0.50	U
105-67-9	2,4-Dimethylphenol	1.0	ug/L	0.31	1.0	U
131-11-3	Dimethyl Phthalate	0.50	ug/L	0.10	0.50	U
534-52-1	4,6-Dinitro-2-methylphenol	0.50	ug/L	0.14	0.50	U

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012641-BLK2 File ID: 1012641-BLK2.D

Prepared: 11/24/10 07:40 Analyzed: 12/15/10 11:37

Preparation: 3510C Liquid-Liquid Ext Initial/Final: 1000 mL / 1 mL

QC Batch: 1012641 Sequence: 0L21016 Calibration: 0L17004 Instrument: 195

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
51-28-5	2,4-Dinitrophenol	5.0	ug/L	1.8	5.0	U
606-20-2	2,6-Dinitrotoluene	0.50	ug/L	0.25	0.50	U
121-14-2	2,4-Dinitrotoluene	0.50	ug/L	0.15	0.50	U
117-84-0	Di-n-octyl Phthalate	0.50	ug/L	0.056	0.50	U
117-81-7	Bis(2-ethylhexyl) Phthalate	0.50	ug/L	0.22	0.50	U
206-44-0	Fluoranthene	0.50	ug/L	0.040	0.50	U
86-73-7	Fluorene	0.50	ug/L	0.019	0.50	U
118-74-1	Hexachlorobenzene	0.50	ug/L	0.065	0.50	U
87-68-3	Hexachlorobutadiene	0.50	ug/L	0.13	0.50	U
77-47-4	Hexachlorocyclopentadiene	0.50	ug/L	0.15	0.50	U
67-72-1	Hexachloroethane	0.50	ug/L	0.13	0.50	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.50	ug/L	0.042	0.50	U
78-59-1	Isophorone	0.50	ug/L	0.048	0.50	U
91-57-6	2-Methylnaphthalene	0.50	ug/L	0.021	0.50	U
90-12-0	1-Methylnaphthalene	0.50	ug/L	0.039	0.50	U
106-44-5	4-Methylphenol	0.50	ug/L	0.11	0.50	U
95-48-7	2-Methylphenol	0.50	ug/L	0.13	0.50	U
91-20-3	Naphthalene	0.50	ug/L	0.022	0.50	U
100-01-6	4-Nitroaniline	1.0	ug/L	0.16	1.0	U
88-74-4	2-Nitroaniline	1.0	ug/L	0.14	1.0	U
99-09-2	3-Nitroaniline	1.0	ug/L	0.40	1.0	U
98-95-3	Nitrobenzene	0.50	ug/L	0.18	0.50	U
88-75-5	2-Nitrophenol	0.50	ug/L	0.068	0.50	U
100-02-7	4-Nitrophenol	5.0	ug/L	0.71	5.0	U
86-30-6	N-Nitroso-diphenylamine	0.50	ug/L	0.16	0.50	U
621-64-7	N-Nitroso-di-n-propylamine	0.50	ug/L	0.091	0.50	U
87-86-5	Pentachlorophenol	1.0	ug/L	0.094	1.0	U
85-01-8	Phenanthrene	0.50	ug/L	0.025	0.50	U
108-95-2	Phenol	0.50	ug/L	0.15	0.50	U
129-00-0	Pyrene	0.040	ug/L	0.026	0.50	J
95-95-4	2,4,5-Trichlorophenol	0.50	ug/L	0.030	0.50	U
88-06-2	2,4,6-Trichlorophenol	0.50	ug/L	0.065	0.50	U
56-49-5	3-Methylcholanthrene	2.0	ug/L	0.25	2.0	U

System Monitoring Compound	Added (ug/L)	Conc. (ug/L)	% REC	QC Limits	Q

METHOD BLANK DATA SHEET
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012641-BLK2 File ID: 1012641-BLK2.D

Prepared: 11/24/10 07:40 Analyzed: 12/15/10 11:37

Preparation: 3510C Liquid-Liquid Ext Initial/Final: 1000 mL / 1 mL

QC Batch: 1012641 Sequence: 0L21016 Calibration: 0L17004 Instrument: 195

System Monitoring Compound	Added (ug/L)	Conc. (ug/L)	% REC	QC Limits	Q
2-Fluorophenol	20.0	9.41	47	20 - 70	
Phenol-d6	20.0	6.37	32	18 - 45	
Nitrobenzene-d5	10.1	7.73	77	31 - 123	
2-Fluorobiphenyl	10.0	7.95	80	25 - 113	
2,4,6-Tribromophenol	19.9	15.8	79	30 - 121	
o-Terphenyl	10.0	8.20	82	42 - 125	

Internal Standard	Area	RT	Ref. Area	Ref. RT	Q
1,4-Dichlorobenzene-d4	170038	4.87	235731	4.78	
Naphthalene-d8	661158	6.36	923962	6.28	
Acenaphthene-d10	371069	8.35	501206	8.28	
Phenanthrene-d10	514461	10	685655	9.93	
Chrysene-d12	460052	12.93	662942	12.86	
Perylene-d12	349083	14.4	565083	14.33	

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012641-BS2
Preparation: 3510C Liquid-Liquid Extraction
Initial/Final: 1000 mL / 1 mL
Sequence: 0L21016

QC Batch: 1012641

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Acenaphthene	9.40	7.48	80	53 - 126	ug/L
Acenaphthylene	9.40	7.71	82	62 - 133	ug/L
Acetophenone	9.80	7.39	75	58 - 115	ug/L
Aniline	9.40	7.19	76	23 - 105	ug/L
Anthracene	9.40	7.68	82	64 - 130	ug/L
Atrazine	9.80	11.0	112	60 - 140	ug/L
1,1'-Biphenyl	9.80	7.48	76	58 - 116	ug/L
Benzaldehyde	9.80	7.39	75	35 - 128	ug/L
Benzo(a)anthracene	9.40	7.60	81	63 - 129	ug/L
Benzo(a)pyrene	9.40	8.12	86	59 - 131	ug/L
Benzo(b)fluoranthene	9.40	7.23	77	58 - 133	ug/L
Benzo(k)fluoranthene	9.40	8.00	85	59 - 132	ug/L
Benzo(g,h,i)perylene	9.40	8.24	88	52 - 129	ug/L
4-Bromophenyl Phenyl Ether	9.20	7.63	83	57 - 124	ug/L
Butyl Benzyl Phthalate	9.20	7.65	83	58 - 141	ug/L
Caprolactam	9.80	1.43	15 *	23 - 76	ug/L
Carbazole	9.40	23.9	255 *	62 - 146	ug/L
4-Chloro-3-methylphenol	9.40	7.67	82	53 - 120	ug/L
4-Chloroaniline	9.40	8.80	94	44 - 138	ug/L
Bis(2-chloroethoxy)methane	9.20	6.93	75	52 - 124	ug/L
Bis(2-chloroethyl) Ether	9.20	6.61	72	42 - 123	ug/L
Bis(2-chloroisopropyl) Ether	9.20	6.99	76	50 - 122	ug/L
2-Chloronaphthalene	9.70	7.94	82	58 - 126	ug/L
2-Chlorophenol	9.40	7.15	76	44 - 121	ug/L
4-Chlorophenyl Phenyl Ether	9.20	7.61	83	57 - 122	ug/L
Chrysene	9.40	7.49	80	66 - 134	ug/L
Dibenz(a,h)anthracene	9.40	7.69	82	57 - 130	ug/L
Dibenzofuran	9.40	8.11	86	59 - 123	ug/L
Di-n-butyl Phthalate	9.20	8.05	88	58 - 145	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
QC Batch: 1012641

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012641-BS2
Preparation: 3510C Liquid-Liquid Extraction
Initial/Final: 1000 mL / 1 mL
Sequence: 0L21016

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
3,3'-Dichlorobenzidine	20.0	23.8	119	55 - 135	ug/L
2,4-Dichlorophenol	9.40	7.62	81	51 - 122	ug/L
Diethyl Phthalate	9.20	7.59	82	55 - 129	ug/L
2,4-Dimethylphenol	9.40	6.12	65	35 - 112	ug/L
Dimethyl Phthalate	9.20	7.77	84	61 - 126	ug/L
4,6-Dinitro-2-methylphenol	9.40	6.71	71	25 - 139	ug/L
2,4-Dinitrophenol	9.40	5.22	56	10 - 147	ug/L
2,6-Dinitrotoluene	9.70	7.94	82	59 - 120	ug/L
2,4-Dinitrotoluene	9.70	8.43	87	55 - 131	ug/L
Di-n-octyl Phthalate	9.20	7.47	81	55 - 136	ug/L
Bis(2-ethylhexyl) Phthalate	9.20	7.06	77	60 - 136	ug/L
Fluoranthene	9.40	8.16	87	64 - 138	ug/L
Fluorene	9.40	7.86	84	60 - 128	ug/L
Hexachlorobenzene	9.70	7.61	78	49 - 130	ug/L
Hexachlorobutadiene	9.70	7.52	78	50 - 128	ug/L
Hexachlorocyclopentadiene	9.70	8.11	84	21 - 138	ug/L
Hexachloroethane	9.70	7.39	76	41 - 123	ug/L
Indeno(1,2,3-cd)pyrene	9.40	7.54	80	57 - 129	ug/L
Isophorone	9.70	7.02	72	56 - 129	ug/L
2-Methylnaphthalene	9.40	7.85	84	59 - 135	ug/L
1-Methylnaphthalene	10.0	7.29	73	50 - 150	ug/L
4-Methylphenol	9.60	6.76	70	33 - 122	ug/L
2-Methylphenol	9.60	6.60	69	39 - 107	ug/L
Naphthalene	9.40	7.26	77	50 - 127	ug/L
4-Nitroaniline	9.40	10.2	109	52 - 143	ug/L
2-Nitroaniline	9.40	11.0	117	57 - 130	ug/L
3-Nitroaniline	9.40	9.80	104	49 - 144	ug/L
Nitrobenzene	9.70	7.61	78	53 - 121	ug/L
2-Nitrophenol	9.40	6.12	65	44 - 128	ug/L

LCS / LCS DUPLICATE RECOVERY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012641-BS2
Preparation: 3510C Liquid-Liquid Extraction
Initial/Final: 1000 mL / 1 mL
Sequence: 0L21016

QC Batch: 1012641

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
4-Nitrophenol	9.40	3.17	34	17 - 70	ug/L
N-Nitroso-diphenylamine	9.20	6.87	75	45 - 110	ug/L
N-Nitroso-di-n-propylamine	9.20	7.14	78	49 - 125	ug/L
Pentachlorophenol	9.40	6.55	70	21 - 124	ug/L
Phenanthrene	9.40	7.45	79	63 - 126	ug/L
Phenol	9.40	3.66	39	22 - 60	ug/L
Pyrene	9.40	7.18	76	60 - 134	ug/L
2,4,5-Trichlorophenol	9.60	8.07	84	53 - 129	ug/L
2,4,6-Trichlorophenol	9.40	7.74	82	47 - 128	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L16054-TUN1
Lab File ID: DFT1213B
Injection Date: 12/13/10
Injection Time: 17:03
Sequence: 0L16054
Calibration: 0L17004
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	38.1	PASS
68	Less than 2% of 69	1.54	PASS
69	Less than 200% of 198	39.3	PASS
70	Less than 2% of 69	0.847	PASS
127	40 - 60% of 198	48.7	PASS
197	Less than 1% of 198	0.611	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.09	PASS
275	10 - 30% of 198	21.9	PASS
365	1.0001 - 200% of 198	2.16	PASS
441	0.0001 - 99.9999% of 443	65.6	PASS
442	40.0001 - 200% of 198	94.9	PASS
443	17 - 23% of 442	20.2	PASS

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L16054

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0111142	0.5ppm BNA	0L16054-CAL1		
0111141	1ppm BNA	0L16054-CAL2		
0111140	2ppm BNA	0L16054-CAL3		
0111139	5ppm BNA	0L16054-CAL4		
0111138	10ppm BNA	0L16054-CAL5		
0111137	15ppm BNA	0L16054-CAL6		
0111136	20ppm BNA	0L16054-CAL7		
0111135	25ppm BNA	0L16054-CAL8		
0101098	0.5ppm ABE	0L16054-CAL9		
0101097	1ppm ABE	0L16054-CALA		
0101096	2ppm ABE	0L16054-CALB		
0101095	5ppm ABE	0L16054-CALC		
0101094	10ppm ABE	0L16054-CALD		
0101093	15ppm ABE	0L16054-CALE		
0101092	20ppm ABE	0L16054-CALF		
0101091	25ppm ABE	0L16054-CALG		
0091250	DFTPP tune std	0L16054-TUN1	DFT1213B	12/13/10 17:03
0111138	10ppm BNA	0L16054-CAL5	10IC1213.D	12/13/10 17:28
0111142	0.5ppm BNA	0L16054-CAL1	05IC1213.D	12/13/10 17:57
0111141	1ppm BNA	0L16054-CAL2	1IC1213.D	12/13/10 18:25
0111140	2ppm BNA	0L16054-CAL3	2IC1213.D	12/13/10 18:54
0111139	5ppm BNA	0L16054-CAL4	5IC1213.D	12/13/10 19:23
0111137	15ppm BNA	0L16054-CAL6	15IC1213.D	12/13/10 19:51
0111136	20ppm BNA	0L16054-CAL7	20IC1213.D	12/13/10 20:19
0111135	25ppm BNA	0L16054-CAL8	25IC1213.D	12/13/10 20:47
0111144	10ppm SCV BNA	0L16054-SCV1	LCS1213A.D	12/13/10 21:15
0101094	10ppm ABE	0L16054-CALD	10AE1213.D	12/13/10 22:11
0101098	0.5ppm ABE	0L16054-CAL9	05AE1213.D	12/13/10 22:38
0101097	1ppm ABE	0L16054-CALA	1AE1213.D	12/13/10 23:06
0101096	2ppm ABE	0L16054-CALB	2AE1213.D	12/13/10 23:33
0101095	5ppm ABE	0L16054-CALC	5AE1213.D	12/14/10 00:01
0101093	15ppm ABE	0L16054-CALE	15AE1213.D	12/14/10 00:28

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L16054

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0101092	20ppm ABE	0L16054-CALF	20AE1213.D	12/14/10 00:55
0101091	25ppm ABE	0L16054-CALG	25AE1213.D	12/14/10 01:23
0101099	10ppm SCV ABE	0L16054-SCV2	LCSAE1213B.D	12/14/10 02:17

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L17007-TUN1
Injection Date: 11/23/10
Sequence: 0L17007

SDG: 1011375
Project: Naval Station Great Lakes
Lab File ID: DFT1123A
Injection Time: 10:08
Calibration: 0L17004
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	42.1	PASS
68	Less than 2% of 69	0	PASS
69	Less than 200% of 198	47.5	PASS
70	Less than 2% of 69	0.668	PASS
127	40 - 60% of 198	56.6	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.02	PASS
275	10 - 30% of 198	21.1	PASS
365	1.0001 - 200% of 198	1.53	PASS
441	0.0001 - 99.9999% of 443	66.9	PASS
442	40.0001 - 200% of 198	61.9	PASS
443	17 - 23% of 442	19.4	PASS

INITIAL CALIBRATION STANDARDS
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L17007
Calibration: 0L17004
Instrument: 195

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
0110702	0.5ppm Appix	0L17007-CAL1		
0110701	1ppm Appix	0L17007-CAL2		
0110700	2ppm Appix	0L17007-CAL3		
0110699	5ppm Appix	0L17007-CAL4		
0110698	10ppm Appix	0L17007-CAL5		
0110697	15ppm Appix	0L17007-CAL6		
0110696	20ppm Appix	0L17007-CAL7		
0110695	25ppm Appix	0L17007-CAL8		
0091250	DFTPP tune std	0L17007-TUN1	DFT1123A	11/23/10 10:08
0110702	0.5ppm Appix	0L17007-CAL1	05appix1123.D	11/23/10 16:09
0110701	1ppm Appix	0L17007-CAL2	1appix1123.D	11/23/10 16:37
0110700	2ppm Appix	0L17007-CAL3	2appix1123.D	11/23/10 17:06
0110699	5ppm Appix	0L17007-CAL4	5appix1123.D	11/23/10 17:34
0110698	10ppm Appix	0L17007-CAL5	10appix1123c.D	11/23/10 18:02
0110697	15ppm Appix	0L17007-CAL6	15appix1123.D	11/23/10 18:30
0110696	20ppm Appix	0L17007-CAL7	20appix1123.D	11/23/10 18:55
0110695	25ppm Appix	0L17007-CAL8	25appix1123.D	11/23/10 19:23
0110703	10ppm Appix SCV	0L17007-SCV1	scvappix1123.D	11/23/10 19:50

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Calibration: 0L17004

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene												
Acenaphthylene												
Acetophenone												
Aniline												
Anthracene												
Atrazine												
Benzaldehyde												
1,1'-Biphenyl												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Benzo(g,h,i)perylene												
Benzoic Acid												
Benzyl Alcohol												
4-Bromophenyl Phenyl Ether												
Butyl Benzyl Phthalate												
Caprolactam												
Carbazole												
4-Chloro-3-methylphenol												
4-Chloroaniline												
Bis(2-chloroethoxy)methane												
Bis(2-chloroethyl) Ether												
Bis(2-chloroisopropyl) Ether												
2-Chloronaphthalene												
2-Chlorophenol												
4-Chlorophenyl Phenyl Ether												
Chrysene												
Dibenz(a,h)anthracene												
Dibenzofuran												
Di-n-butyl Phthalate												

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
3,3'-Dichlorobenzidine												
2,4-Dichlorophenol												
2,6-Dichlorophenol												
Diethyl Phthalate												
2,4-Dimethylphenol												
Dimethyl Phthalate												
4,6-Dinitro-2-methylphenol												
2,4-Dinitrophenol												
2,6-Dinitrotoluene												
2,4-Dinitrotoluene												
Di-n-octyl Phthalate												
1,2-Diphenylhydrazine												
Bis(2-ethylhexyl) Phthalate												
Fluoranthene												
Fluorene												
Hexachlorobenzene												
Hexachlorobutadiene												
Hexachlorocyclopentadiene												
Hexachloroethane												
Indeno(1,2,3-cd)pyrene												
Isophorone												
2-Methylnaphthalene												
1-Methylnaphthalene												
4-Methylphenol												
2-Methylphenol												
Naphthalene												
4-Nitroaniline												
2-Nitroaniline												

INITIAL CALIBRATION DATA
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline												
Nitrobenzene												
2-Nitrophenol												
4-Nitrophenol												
N-Nitroso-dimethylamine												
N-Nitroso-diphenylamine												
N-Nitroso-di-n-propylamine												
Pentachlorophenol												
Phenanthrene												
Phenol												
Pyrene												
Pyridine												
1,2,4,5-Tetrachlorobenzene												
2,3,4,6-Tetrachlorophenol												
1,2,4-Trichlorobenzene												
2,4,5-Trichlorophenol												
2,4,6-Trichlorophenol												
1,3-Dinitrobenzene												
3-Methylcholanthrene	0.495	0.25283	0.99	0.2250615	1.98	0.2361145	4.95	0.2690358	9.9	0.3109483	14.8	0.2991729
2,3,5,6-Tetrachlorophenol												
Bis(2-chloroethoxy)ethane												
2-Fluorophenol												
Phenol-d6												
Nitrobenzene-d5												
2-Fluorobiphenyl												
2,4,6-Tribromophenol												
o-Terphenyl												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene					0.5	1.19766	1	1.373039	2	1.325733	5	1.125615
Acenaphthylene					0.5	1.975819	1	2.232183	2	2.260969	5	1.910024
Acetophenone					0.5	1.796284	1	1.955181	2	1.956584	5	1.720473
Aniline												
Anthracene					0.5	1.227947	1	1.387592	2	1.412784	5	1.197475
Atrazine					0.5	0.1947955	1	0.2255641	2	0.2385731	5	0.189592
Benzaldehyde					0.5	1.796284	1	1.955181	2	1.956584	5	1.720473
1,1'-Biphenyl					0.5	1.635226	1	1.822074	2	1.816339	5	1.476079
Benzo(a)anthracene					0.5	1.17698	1	1.177037	2	1.206557	5	1.108174
Benzo(a)pyrene					0.5	0.9131154	1	1.046302	2	1.142569	5	1.033272
Benzo(b)fluoranthene					0.5	1.091803	1	1.181751	2	1.325088	5	1.142762
Benzo(k)fluoranthene					0.5	1.370231	1	1.469258	2	1.449843	5	1.32221
Benzo(g,h,i)perylene					0.5	0.8021328	1	0.8809011	2	0.9473492	5	0.8580928
Benzoic Acid					1	9.540476E-02	2	0.1117032	4	0.1445258	10	0.1648017
Benzyl Alcohol					0.5	0.9158208	1	1.003272	2	0.950379	5	0.8721481
4-Bromophenyl Phenyl Ether					0.5	0.2400992	1	0.2743545	2	0.2719335	5	0.226218
Butyl Benzyl Phthalate					0.5	0.5972842	1	0.6687113	2	0.7134255	5	0.6692653
Caprolactam					0.5	0.1271768	1	0.1016991	2	0.1196392	5	0.107855
Carbazole					0.5	~~1.091705~~	1	~~1.091684~~	2	1.036933	5	0.4621427
4-Chloro-3-methylphenol					0.5	0.2813314	1	0.3063985	2	0.325174	5	0.288303
4-Chloroaniline												
Bis(2-chloroethoxy)methane					0.5	0.4220266	1	0.4789256	2	0.4712952	5	0.3984756
Bis(2-chloroethyl) Ether					0.5	1.568999	1	1.662968	2	1.5698	5	1.437311
Bis(2-chloroisopropyl) Ether					0.5	2.041847	1	2.173249	2	2.121018	5	1.790064
2-Chloronaphthalene					0.5	1.254116	1	1.37933	2	1.339966	5	1.077831
2-Chlorophenol					0.5	1.460584	1	1.639483	2	1.577087	5	1.405465
4-Chlorophenyl Phenyl Ether					0.5	0.6591356	1	0.7142023	2	0.6983764	5	0.5796361
Chrysene					0.5	1.315947	1	1.293805	2	1.31311	5	1.096658
Dibenz(a,h)anthracene					0.5	0.4694333	1	0.6574034	2	0.6984117	5	0.6883009
Dibenzofuran					0.5	1.773768	1	1.936975	2	1.95217	5	1.6069
Di-n-butyl Phthalate					0.5	1.296078	1	1.526796	2	1.595773	5	1.415213

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene					0.5	1.734022	1	1.892751	2	1.819087	5	1.603095
1,2-Dichlorobenzene					0.5	1.721627	1	1.851075	2	1.81689	5	1.559152
1,3-Dichlorobenzene					0.5	1.744075	1	1.897961	2	1.891532	5	1.656795
3,3´-Dichlorobenzidine												
2,4-Dichlorophenol					0.5	0.2742398	1	0.3251427	2	0.324128	5	0.2861585
2,6-Dichlorophenol					0.5	0.2306409	1	0.2824719	2	0.2817779	5	0.2456227
Diethyl Phthalate					0.5	1.471432	1	1.498592	2	1.475197	5	1.254422
2,4-Dimethylphenol					0.5	0.290979	1	0.3387863	2	0.3432998	5	0.3050926
Dimethyl Phthalate					0.5	1.315552	1	1.511486	2	1.565668	5	1.336039
4,6-Dinitro-2-methylphenol					0.5	6.408563E-02	1	7.455206E-02	2	0.1039494	5	0.1126831
2,4-Dinitrophenol					1	4.711381E-02	2	5.865977E-02	4	8.204926E-02	10	0.1050757
2,6-Dinitrotoluene					0.5	0.262572	1	0.3077345	2	0.3383703	5	0.292652
2,4-Dinitrotoluene					0.5	0.2633796	1	0.3437931	2	0.3738249	5	0.3444464
Di-n-octyl Phthalate					0.5	0.8489201	1	0.999505	2	1.193934	5	1.304083
1,2-Diphenylhydrazine					0.5	0.8872299	1	0.9915661	2	0.9875657	5	0.8248108
Bis(2-ethylhexyl) Phthalate					0.5	0.9437191	1	0.9603862	2	0.9327716	5	0.9865851
Fluoranthene					0.5	1.195171	1	1.335089	2	1.403685	5	1.22844
Fluorene					0.5	1.374296	1	1.568441	2	1.571966	5	1.314559
Hexachlorobenzene					0.5	0.2914709	1	0.3049941	2	0.3124367	5	0.2442822
Hexachlorobutadiene					0.5	0.178148	1	0.1985133	2	0.1883824	5	0.161907
Hexachlorocyclopentadiene					0.5	0.2383151	1	0.2626952	2	0.2722997	5	0.2309829
Hexachloroethane					0.5	0.5950293	1	0.6593583	2	0.6400095	5	0.5314171
Indeno(1,2,3-cd)pyrene					0.5	0.6627124	1	0.80847	2	0.8691199	5	0.8686454
Isophorone					0.5	0.6810046	1	0.7593305	2	0.7627054	5	0.6710729
2-Methylnaphthalene					0.5	0.7550975	1	0.8775953	2	0.8750426	5	0.7442934
1-Methylnaphthalene					0.5	0.757875	1	0.8712307	2	0.8360891	5	0.7189529
4-Methylphenol					0.5	1.352397	1	1.591555	2	1.529381	5	1.366842
2-Methylphenol					0.5	1.24301	1	1.415332	2	1.396822	5	1.260934
Naphthalene					0.5	1.176046	1	1.316839	2	1.259222	5	1.053307
4-Nitroaniline												
2-Nitroaniline												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline												
Nitrobenzene					0.5	0.3598566	1	0.4115773	2	0.3870312	5	0.3252532
2-Nitrophenol					0.5	0.1942815	1	0.2786427	2	0.341749	5	0.327964
4-Nitrophenol					1	0.108981	2	0.1143373	4	0.1382097	10	0.1458218
N-Nitroso-dimethylamine					0.5	0.8338522	1	0.882608	2	0.8714951	5	0.7692185
N-Nitroso-diphenylamine					0.5	0.8090888	1	0.9115173	2	0.8838996	5	0.7231814
N-Nitroso-di-n-propylamine					0.5	0.9166776	1	1.011748	2	1.003115	5	0.8837905
Pentachlorophenol					0.5	6.747051E-02	1	8.806198E-02	2	0.1119149	5	0.119888
Phenanthrene					0.5	1.355726	1	1.487648	2	1.494689	5	1.243384
Phenol					0.5	1.839753	1	2.022792	2	1.97949	5	1.67192
Pyrene					0.5	1.797219	1	1.923001	2	1.833799	5	1.576221
Pyridine					0.5	1.450416	1	1.522226	2	1.524094	5	1.350833
1,2,4,5-Tetrachlorobenzene					0.5	0.5288323	1	0.632425	2	0.6249778	5	0.4756233
2,3,4,6-Tetrachlorophenol					0.5	0.2238579	1	0.2663093	2	0.2989591	5	0.2726651
1,2,4-Trichlorobenzene					0.5	0.3642593	1	0.4164399	2	0.4005165	5	0.3385692
2,4,5-Trichlorophenol					0.5	0.3283967	1	0.3492549	2	0.3729728	5	0.3330754
2,4,6-Trichlorophenol					0.5	0.3312235	1	0.3753003	2	0.3915632	5	0.3408819
1,3-Dinitrobenzene					0.5	8.502585E-02	1	0.1070302	2	0.1131732	5	0.1056745
3-Methylcholanthrene	19.8	0.2942981	24.8	0.2969855								
2,3,5,6-Tetrachlorophenol					0.5	13440	1	17780	2	19306	5	16536.4
Bis(2-chloroethoxy)ethane					0.5	0.3231573	1	0.3738732	2	0.3696121	5	0.309773
2-Fluorophenol					1	1.203739	2	1.391031	4	1.314757	10	1.161477
Phenol-d6					1	1.556975	2	1.816326	4	1.716221	10	1.516721
Nitrobenzene-d5					1.01	0.162056	2.02	0.1905186	4.04	0.183918	10.1	0.1631022
2-Fluorobiphenyl					1	1.421639	2	1.669327	4	1.544684	10	1.228245
2,4,6-Tribromophenol					0.995	0.1200269	1.99	0.1500388	3.98	0.146377	9.95	0.1361834
o-Terphenyl					1	0.7161904	2	0.8505731	4	0.788733	10	0.6230275

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene	10	1.233512	15	1.160355	20	1.086933	25	0.9777764				
Acenaphthylene	10	2.04901	15	1.891845	20	1.759742	25	1.558128				
Acetophenone	10	2.054686	15	1.85246	20	1.852898	25	1.849707				
Aniline									0.5	1.156562	1	1.129931
Anthracene	10	1.343587	15	1.271866	20	1.182006	25	1.074551				
Atrazine	10	0.1905053	15	0.1617511	20	0.1645663	25	0.1497826				
Benzaldehyde	10	2.054686	15	1.85246	20	1.852898	25	1.836381				
1,1'-Biphenyl	10	1.585984	15	1.445666	20	1.388485	25	1.243169				
Benzo(a)anthracene	10	1.348518	15	1.242198	20	1.21422	25	1.159833				
Benzo(a)pyrene	10	1.307923	15	1.223888	20	1.202265	25	1.12102				
Benzo(b)fluoranthene	10	1.497061	15	1.309273	20	1.375994	25	1.244905				
Benzo(k)fluoranthene	10	1.407616	15	1.355284	20	1.21259	25	1.108217				
Benzo(g,h,i)perylene	10	1.096906	15	1.061464	20	1.03253	25	1.00211				
Benzoic Acid	20	0.2556031	30	0.2396394	40	0.2477767	50	0.2384858				
Benzyl Alcohol	10	1.045156	15	0.9423452	20	0.9232851	25	0.8742245				
4-Bromophenyl Phenyl Ether	10	0.2569811	15	0.2435022	20	0.2273149	25	0.2024968				
Butyl Benzyl Phthalate	10	0.850055	15	0.7987186	20	0.794418	25	0.7524164				
Caprolactam	10	0.1238966	15	0.1207804	20	0.1217474	25	0.1157432				
Carbazole	10	0.3942054	15	0.3298379	20	0.3260078	25	0.3604475				
4-Chloro-3-methylphenol	10	0.3388438	15	0.3118173	20	0.3057919	25	0.2479122				
4-Chloroaniline									0.5	0.2710351	1	0.2826917
Bis(2-chloroethoxy)methane	10	0.4589379	15	0.4176013	20	0.4036746	25	0.3760161				
Bis(2-chloroethyl) Ether	10	1.788112	15	1.673184	20	1.498384	25	1.352318				
Bis(2-chloroisopropyl) Ether	10	2.076529	15	1.843335	20	1.768466	25	1.69803				
2-Chloronaphthalene	10	1.188445	15	1.102657	20	1.037768	25	0.9198695				
2-Chlorophenol	10	1.696479	15	1.539143	20	1.489972	25	1.413415				
4-Chlorophenyl Phenyl Ether	10	0.6038274	15	0.5541071	20	0.5231955	25	0.461265				
Chrysene	10	1.27013	15	1.159428	20	1.140891	25	1.05007				
Dibenz(a,h)anthracene	10	0.9129376	15	0.8726694	20	0.8589797	25	0.8181133				
Dibenzofuran	10	1.72888	15	1.560358	20	1.461871	25	1.299569				
Di-n-butyl Phthalate	10	1.674436	15	1.539321	20	1.432748	25	1.316015				

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Calibration: 0L17004

SDG: 1011375

Project: Naval Station Great Lakes

Calibration Date: 12/13/10 09:09

Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene	10	1.885822	15	1.734278	20	1.677977	25	1.618557				
1,2-Dichlorobenzene	10	1.821514	15	1.679955	20	1.629248	25	1.566205				
1,3-Dichlorobenzene	10	1.944679	15	1.79978	20	1.724241	25	1.661249				
3,3'-Dichlorobenzidine									0.5	0.1737827	1	0.1500472
2,4-Dichlorophenol	10	0.332896	15	0.3014756	20	0.2916659	25	0.2695543				
2,6-Dichlorophenol	10	0.3070559	15	0.2790802	20	0.27613	25	0.2578639				
Diethyl Phthalate	10	1.404169	15	1.305834	20	1.216306	25	1.100858				
2,4-Dimethylphenol	10	0.3763132	15	0.3528702	20	0.3402549	25	0.3182384				
Dimethyl Phthalate	10	1.424666	15	1.343993	20	1.292339	25	1.17477				
4,6-Dinitro-2-methylphenol	10	0.16074	15	0.1598794	20	0.1534004	25	0.1491688				
2,4-Dinitrophenol	20	0.1555025	30	0.1522951	40	0.1541894	50	0.1458185				
2,6-Dinitrotoluene	10	0.3275012	15	0.3127035	20	0.3027074	25	0.272177				
2,4-Dinitrotoluene	10	0.4003056	15	0.376141	20	0.3594833	25	0.338275				
Di-n-octyl Phthalate	10	1.831915	15	1.731937	20	1.725083	25	1.698132				
1,2-Diphenylhydrazine	10	0.9424343	15	0.8722989	20	0.8519085	25	0.7646994				
Bis(2-ethylhexyl) Phthalate	10	1.162671	15	1.011302	20	0.997273	25	0.9717724				
Fluoranthene	10	1.393565	15	1.30028	20	1.227511	25	1.135539				
Fluorene	10	1.41278	15	1.327381	20	1.223528	25	1.067011				
Hexachlorobenzene	10	0.2685115	15	0.2517438	20	0.2342925	25	0.206977				
Hexachlorobutadiene	10	0.1843523	15	0.1711717	20	0.1658449	25	0.1550617				
Hexachlorocyclopentadiene	10	0.265596	15	0.2655784	20	0.2739212	25	0.2402948				
Hexachloroethane	10	0.6445046	15	0.5920647	20	0.5695411	25	0.5477181				
Indeno(1,2,3-cd)pyrene	10	1.156388	15	1.105537	20	1.088697	25	1.050191				
Isophorone	10	0.7880179	15	0.7302668	20	0.7170748	25	0.675091				
2-Methylnaphthalene	10	0.8278102	15	0.75462	20	0.7262868	25	0.6692851				
1-Methylnaphthalene	10	0.8149896	15	0.736004	20	0.7136508	25	0.6664995				
4-Methylphenol	10	1.582633	15	1.429922	20	1.387459	25	1.311551				
2-Methylphenol	10	1.512595	15	1.374315	20	1.313887	25	1.222385				
Naphthalene	10	1.199406	15	1.092809	20	1.041983	25	0.9538843				
4-Nitroaniline									0.5	0.0488024	1	3.153266E-02
2-Nitroaniline									0.5	0.1522767	1	0.1422917

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline									0.5	8.790494E-02	1	8.667534E-02
Nitrobenzene	10	0.3893638	15	0.3545009	20	0.3366034	25	0.310557				
2-Nitrophenol	10	0.2326446	15	0.2136238	20	0.2127418	25	0.1922003				
4-Nitrophenol	20	0.1705465	30	0.1575171	40	0.1499866	50	0.124198				
N-Nitroso-dimethylamine	10	1.005395	15	0.8964541	20	0.8528816	25	0.7909084				
N-Nitroso-diphenylamine	10	0.6988831	15	0.6122529	20	0.5649569	25	0.4797988				
N-Nitroso-di-n-propylamine	10	1.018447	15	0.9288081	20	0.910878	25	0.7669112				
Pentachlorophenol	10	0.1778886	15	0.1600068	20	0.1500113	25	0.1382588				
Phenanthrene	10	1.391251	15	1.295453	20	1.210066	25	1.097113				
Phenol	10	1.915169	15	1.702151	20	1.624442	25	1.376774				
Pyrene	10	1.769499	15	1.621061	20	1.585706	25	1.496987				
Pyridine	10	1.744485	15	1.572894	20	1.506867	25	1.398071				
1,2,4,5-Tetrachlorobenzene	10	0.5319195	15	0.4865264	20	0.473786	25	0.4190143				
2,3,4,6-Tetrachlorophenol	10	0.3230926	15	0.3114904	20	0.2866421	25	0.2661472				
1,2,4-Trichlorobenzene	10	0.3789378	15	0.3447535	20	0.3284089	25	0.2992213				
2,4,5-Trichlorophenol	10	0.3919789	15	0.3686738	20	0.3481006	25	0.3146261				
2,4,6-Trichlorophenol	10	0.4012406	15	0.3764303	20	0.359177	25	0.327203				
1,3-Dinitrobenzene	10	0.1302143	15	0.1228513	20	0.1197922	25	0.1105226				
3-Methylcholanthrene												
2,3,5,6-Tetrachlorophenol	10	21953.3	15	19629.2	20	17778.25	25	19748.72				
Bis(2-chloroethoxy)ethane	10	0.3712375	15	0.3382673	20	0.3319562	25	0.3071583				
2-Fluorophenol	20	1.553938	30	1.296084	40	1.244988	50	1.107456				
Phenol-d6	20	1.91431	30	1.628043	40	1.546275	50	1.469126				
Nitrobenzene-d5	20.2	0.1998533	30.3	0.1726916	40.4	0.1697594	50.5	0.1585044				
2-Fluorobiphenyl	20	1.337282	30	1.152224	40	1.090109	50	0.9663796				
2,4,6-Tribromophenol	19.9	0.1646159	29.8	0.1491609	39.8	0.1401652	49.8	0.1284341				
o-Terphenyl	20	0.6799966	30	0.5871434	40	0.5523356	50	0.4927491				

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Acenaphthene												
Acenaphthylene												
Acetophenone												
Aniline	2	1.165897	5	1.222847	10	1.268307	15	1.284047	20	1.258669	25	1.270109
Anthracene												
Atrazine												
Benzaldehyde												
1,1'-Biphenyl												
Benzo(a)anthracene												
Benzo(a)pyrene												
Benzo(b)fluoranthene												
Benzo(k)fluoranthene												
Benzo(g,h,i)perylene												
Benzoic Acid												
Benzyl Alcohol												
4-Bromophenyl Phenyl Ether												
Butyl Benzyl Phthalate												
Caprolactam												
Carbazole												
4-Chloro-3-methylphenol												
4-Chloroaniline	2	0.2937329	5	0.3188218	10	0.3387827	15	0.3457499	20	0.3340772	25	0.3465223
Bis(2-chloroethoxy)methane												
Bis(2-chloroethyl) Ether												
Bis(2-chloroisopropyl) Ether												
2-Chloronaphthalene												
2-Chlorophenol												
4-Chlorophenyl Phenyl Ether												
Chrysene												
Dibenz(a,h)anthracene												
Dibenzofuran												
Di-n-butyl Phthalate												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
1,4-Dichlorobenzene												
1,2-Dichlorobenzene												
1,3-Dichlorobenzene												
3,3'-Dichlorobenzidine	2	0.1549971	5	0.1701208	10	0.2150459	15	0.2116464	20	0.2121472	25	0.2187587
2,4-Dichlorophenol												
2,6-Dichlorophenol												
Diethyl Phthalate												
2,4-Dimethylphenol												
Dimethyl Phthalate												
4,6-Dinitro-2-methylphenol												
2,4-Dinitrophenol												
2,6-Dinitrotoluene												
2,4-Dinitrotoluene												
Di-n-octyl Phthalate												
1,2-Diphenylhydrazine												
Bis(2-ethylhexyl) Phthalate												
Fluoranthene												
Fluorene												
Hexachlorobenzene												
Hexachlorobutadiene												
Hexachlorocyclopentadiene												
Hexachloroethane												
Indeno(1,2,3-cd)pyrene												
Isophorone												
2-Methylnaphthalene												
1-Methylnaphthalene												
4-Methylphenol												
2-Methylphenol												
Naphthalene												
4-Nitroaniline	2	6.797382E-02	5	0.1179709	10	0.1419813	15	0.1563397	20	0.1595631	25	0.1744964
2-Nitroaniline	2	0.1794369	5	0.2171027	10	0.2632627	15	0.2668697	20	0.2722519	25	0.2830827

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
3-Nitroaniline	2	0.1028577	5	0.1465921	10	0.1894793	15	0.2006823	20	0.200868	25	0.2103911
Nitrobenzene												
2-Nitrophenol												
4-Nitrophenol												
N-Nitroso-dimethylamine												
N-Nitroso-diphenylamine												
N-Nitroso-di-n-propylamine												
Pentachlorophenol												
Phenanthrene												
Phenol												
Pyrene												
Pyridine												
1,2,4,5-Tetrachlorobenzene												
2,3,4,6-Tetrachlorophenol												
1,2,4-Trichlorobenzene												
2,4,5-Trichlorophenol												
2,4,6-Trichlorophenol												
1,3-Dinitrobenzene												
3-Methylcholanthrene												
2,3,5,6-Tetrachlorophenol												
Bis(2-chloroethoxy)ethane												
2-Fluorophenol												
Phenol-d6												
Nitrobenzene-d5												
2-Fluorobiphenyl												
2,4,6-Tribromophenol												
o-Terphenyl												

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Calibration: 0L17004

SDG: 1011375
Project: Naval Station Great Lakes
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
Acenaphthene	1.185078	10.78603	8.40125	9.762741E-02			CCC (30)	
Acenaphthylene	1.954715	11.94088	8.20375	6.285445E-02			15	
Acetophenone	1.879784	5.575798	5.37375	9.601236E-02			15	
Aniline	1.219546	4.950261	4.5	0			15	
Anthracene	1.262226	9.088561	10.09625	7.484511E-02			15	
Atrazine	0.1893913	16.34378	9.7475	9.005348E-02	0.99064		0.99	
Benzaldehyde	1.878118	5.615366	5.37375	9.601236E-02			15	
1,1'-Biphenyl	1.551628	13.11966	7.72625	9.566535E-02			15	
Benzo(a)anthracene	1.20419	5.875889	12.9325	5.425862E-02			15	
Benzo(a)pyrene	1.123794	11.10522	14.3575	5.191065E-02			CCC (30)	
Benzo(b)fluoranthene	1.27108	10.45922	14.04625	5.360703E-02			15	
Benzo(k)fluoranthene	1.336906	9.147458	14.07	8.458514E-02			15	
Benzo(g,h,i)perylene	0.9601857	10.97926	15.6625	9.484942E-02			15	
Benzoic Acid	0.1872426	35.06616	6.19875	1.297575	0.99590		0.99	
Benzyl Alcohol	0.9408288	6.347333	5.06875	0.1953639			15	
4-Bromophenyl Phenyl Ether	0.2428625	10.07679	9.53	5.357306E-02			15	
Butyl Benzyl Phthalate	0.7305368	11.46652	12.3525	3.558769E-02			15	
Caprolactam	0.1173172	7.300251	6.955	0.5803169			15	
Carbazole	0.484929	56.71969	10.29167	4.271745E-02		0.9928239	0.99	
4-Chloro-3-methylphenol	0.3006965	9.365271	7.0725	0.1805101			CCC (30)	
4-Chloroaniline	0.3164267	9.477944	6.48	2.237972E-02			15	
Bis(2-chloroethoxy)methane	0.4283691	8.704977	6.125	8.691137E-02			15	
Bis(2-chloroethyl) Ether	1.568885	8.916205	4.585	0.1643597			15	
Bis(2-chloroisopropyl) Ether	1.939067	9.468747	5.22	0.1022064			15	
2-Chloronaphthalene	1.162498	13.51365	7.74125	8.271919E-02			15	
2-Chlorophenol	1.527703	6.886725	4.62625	0.1603698			15	
4-Chlorophenyl Phenyl Ether	0.5992182	14.64321	8.98875	7.233031E-02			15	
Chrysene	1.205005	8.7631	12.9725	7.875353E-02			15	
Dibenz(a,h)anthracene	0.7470312	19.71291	15.40375	6.858845E-02	0.99588		0.99	
Dibenzofuran	1.665061	13.64771	8.59375	5.914474E-02			15	
Di-n-butyl Phthalate	1.474547	9.019911	10.6975	6.732079E-02			15	
1,4-Dichlorobenzene	1.745699	6.422713	4.885	0.1091405			CCC (30)	

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
1,2-Dichlorobenzene	1.705708	6.81565	5.0675	9.307164E-02			15	
1,3-Dichlorobenzene	1.790039	6.218656	4.7975	9.457224E-02			15	
3,3'-Dichlorobenzidine	0.1883183	15.37775	12.93	1.135447E-02	0.99862		0.99	
2,4-Dichlorophenol	0.3006576	8.095296	6.2175	0.1139967			CCC (30)	
2,6-Dichlorophenol	0.2700804	8.936849	6.48375	7.854456E-02			15	
Diethyl Phthalate	1.340851	10.76325	8.89375	0.1185813			15	
2,4-Dimethylphenol	0.3332293	8.198919	6.015	0.1243322			15	
Dimethyl Phthalate	1.370564	9.155928	8.11	0.1474489			15	
4,6-Dinitro-2-methylphenol	0.1223074	31.93179	9.0625	0.12828	0.99572		0.99	
2,4-Dinitrophenol	0.112588	40.33701	8.47375	0.1254666	0.99558		SPCC (0.05)	
2,6-Dinitrotoluene	0.3020522	8.535081	8.1725	0.1266571			15	
2,4-Dinitrotoluene	0.3499561	11.62304	8.61875	0.1305878			15	
Di-n-octyl Phthalate	1.416689	26.74358	13.66125	2.554926E-02	0.99712		CCC (30)	
1,2-Diphenylhydrazine	0.8903142	8.935828	9.16375	5.213346E-02			15	
Bis(2-ethylhexyl) Phthalate	0.99581	7.27022	12.98125	3.201105E-02			15	
Fluoranthene	1.27741	7.547398	11.35375	4.583835E-02			CCC (30)	
Fluorene	1.357495	12.4178	8.9775	7.835617E-02			15	
Hexachlorobenzene	0.2643386	13.91728	9.58375	5.277446E-02			15	
Hexachlorobutadiene	0.1754227	8.331738	6.54	1.353011E-02			CCC (30)	
Hexachlorocyclopentadiene	0.2562104	6.59803	7.37125	4.790613E-02			SPCC (0.05)	
Hexachloroethane	0.5974553	7.877489	5.45375	9.381868E-02			15	
Indeno(1,2,3-cd)pyrene	0.9512201	18.28556	15.38625	6.883365E-02	0.99663		0.99	
Isophorone	0.7230705	6.177626	5.86375	8.978501E-02			15	
2-Methylnaphthalene	0.7787539	9.524837	7.1875	6.656222E-02			15	
1-Methylnaphthalene	0.7644115	9.142112	7.29875	8.672835E-02			15	
4-Methylphenol	1.443968	7.566632	5.39875	0.2514421			15	
2-Methylphenol	1.34241	7.449152	5.205	0.1772859			15	
Naphthalene	1.136687	10.73436	6.39	8.629863E-02			15	
4-Nitroaniline	0.1123325	49.30733	9.0325	4.829022E-02	0.99471		0.99	
2-Nitroaniline	0.2220719	25.82464	7.885	6.826099E-02	0.99856		0.99	
3-Nitroaniline	0.1531813	35.22539	8.35125	3.767622E-02	0.99782		0.99	
Nitrobenzene	0.3593429	9.685494	5.56875	0.1496399			15	

INITIAL CALIBRATION DATA (Continued)
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Calibration: 0L17004
Calibration Date: 12/13/10 09:09
Instrument: 195

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	Limit	Q
2-Nitrophenol	0.249231	23.86773	5.94125	5.701427E-02		0.9926893	CCC (30)	
4-Nitrophenol	0.1386997	15.4962	8.57625	0.1859556		0.9954452	SPCC (0.05)	
N-Nitroso-dimethylamine	0.8628516	8.402644	2.34625	0.2209088			15	
N-Nitroso-diphenylamine	0.7104474	21.58077	9.13375	8.114687E-02		0.9989622	CCC (30)	
N-Nitroso-di-n-propylamine	0.9300469	9.007751	5.39	0.1720774			SPCC (0.05)	
Pentachlorophenol	0.1266876	29.34203	9.815	0.0547645		0.9948311	CCC (30)	
Phenanthrene	1.321916	10.43447	10.04	5.123904E-02			15	
Phenol	1.766561	12.17236	4.48875	0.3845301			CCC (30)	
Pyrene	1.700437	8.828018	11.60375	4.920753E-02			15	
Pyridine	1.508736	7.949585	2.39375	1.045818			15	
1,2,4,5-Tetrachlorobenzene	0.5216381	14.36079	7.3825	6.242357E-02			15	
2,3,4,6-Tetrachlorophenol	0.2811455	11.10778	8.745	6.120477E-02			15	
1,2,4-Trichlorobenzene	0.3588883	10.83148	6.305	8.631672E-02			15	
2,4,5-Trichlorophenol	0.3508849	7.338288	7.56625	9.748663E-02			15	
2,4,6-Trichlorophenol	0.3628775	7.657351	7.53	7.298213E-02			CCC (30)	
1,3-Dinitrobenzene	0.1117855	12.21781	8.14	0.1461842			15	
3-Methylcholanthrene	0.2730558	11.774	14.59	8.747303E-03			15	
2,3,5,6-Tetrachlorophenol	18271.48	13.95199	8.6975	7.924477E-02			15	
Bis(2-chloroethoxy)ethane	0.3406294	8.108878	6.96	0.406665			15	
2-Fluorophenol	1.284184	10.99512	3.4025	0.4645015			15	
Phenol-d6	1.6455	9.529496	4.47375	0.3568486			15	
Nitrobenzene-d5	0.1750504	8.506232	5.5475	0.1267051			15	
2-Fluorobiphenyl	1.301236	18.25063	7.6225	9.275874E-02		0.9979418	0.99	
2,4,6-Tribromophenol	0.1418753	9.79006	9.255	9.980613E-02			15	
o-Terphenyl	0.6613436	18.31265	10.4575	6.734596E-02		0.9980303	0.99	

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L16054-SCV1
Standard ID: 0111144
Sequence: 0L16054
Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
Acenaphthene	10.0	8.70	87	70-130
Acenaphthylene	10.0	8.93	89	70-130
Acetophenone	10.0	9.11	91	70-130
Anthracene	10.0	8.81	88	70-130
Atrazine	10.0	11.4	114	70-130
Benzaldehyde	10.0	9.11	91	70-130
1,1'-Biphenyl	10.0	8.90	89	70-130
Benzo(a)anthracene	10.0	9.11	91	70-130
Benzo(a)pyrene	10.0	9.49	95	70-130
Benzo(b)fluoranthene	10.0	8.73	87	70-130
Benzo(k)fluoranthene	10.0	8.77	88	70-130
Benzo(g,h,i)perylene	10.0	9.19	92	70-130
Benzoic Acid	10.0	9.01	90	70-130
Benzyl Alcohol	10.0	9.02	90	70-130
4-Bromophenyl Phenyl Ether	10.0	9.17	92	70-130
Butyl Benzyl Phthalate	10.0	9.41	94	70-130
Caprolactam	10.0	9.80	98	70-130
Carbazole	10.0	8.32	83	70-130
4-Chloro-3-methylphenol	10.0	9.24	92	70-130
Bis(2-chloroethoxy)methane	10.0	8.08	81	70-130
Bis(2-chloroethyl) Ether	10.0	9.93	99	70-130
Bis(2-chloroisopropyl) Ether	10.0	8.30	83	70-130
2-Chloronaphthalene	10.0	8.67	87	70-130
2-Chlorophenol	10.0	9.07	91	70-130
4-Chlorophenyl Phenyl Ether	10.0	8.48	85	70-130
Chrysene	10.0	8.77	88	70-130
Dibenz(a,h)anthracene	10.0	8.65	87	70-130

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L16054-SCV1
Standard ID: 0111144
Sequence: 0L16054
Calibration: 0L17004

Dibenzofuran	10.0	8.98	90	70-130
Di-n-butyl Phthalate	10.0	9.31	93	70-130
1,4-Dichlorobenzene	10.0	9.00	90	70-130
1,2-Dichlorobenzene	10.0	8.74	87	70-130
1,3-Dichlorobenzene	10.0	8.94	89	70-130
2,4-Dichlorophenol	10.0	9.20	92	70-130
2,6-Dichlorophenol	10.0	9.92	99	70-130
Diethyl Phthalate	10.0	8.81	88	70-130
2,4-Dimethylphenol	10.0	8.84	88	70-130
Dimethyl Phthalate	10.0	8.87	89	70-130
4,6-Dinitro-2-methylphenol	10.0	9.57	96	70-130
2,4-Dinitrophenol	10.0	8.63	86	70-130
2,6-Dinitrotoluene	10.0	9.48	95	70-130
2,4-Dinitrotoluene	10.0	9.89	99	70-130
Di-n-octyl Phthalate	10.0	8.46	85	70-130
1,2-Diphenylhydrazine	10.0	8.56	86	70-130
Bis(2-ethylhexyl) Phthalate	10.0	8.45	85	70-130
Fluoranthene	10.0	9.37	94	70-130
Fluorene	10.0	8.93	89	70-130
Hexachlorobenzene	10.0	8.62	86	70-130
Hexachlorobutadiene	10.0	8.89	89	70-130
Hexachlorocyclopentadiene	10.0	9.23	92	70-130
Hexachloroethane	10.0	8.92	89	70-130
Indeno(1,2,3-cd)pyrene	10.0	8.72	87	70-130
Isophorone	10.0	8.41	84	70-130
2-Methylnaphthalene	10.0	9.14	91	70-130
1-Methylnaphthalene	10.0	8.88	89	70-130
4-Methylphenol	10.0	9.13	91	70-130
2-Methylphenol	10.0	9.24	92	70-130

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L16054-SCV1
Standard ID: 0111144
Sequence: 0L16054
Calibration: 0L17004

Naphthalene	10.0	8.74	87	70-130
Nitrobenzene	10.0	8.96	90	70-130
2-Nitrophenol	10.0	7.99	80	70-130
4-Nitrophenol	10.0	8.85	89	70-130
N-Nitroso-dimethylamine	10.0	8.00	80	70-130
N-Nitroso-diphenylamine	10.0	9.81	98	70-130
N-Nitroso-di-n-propylamine	10.0	8.44	84	70-130
Pentachlorophenol	10.0	8.31	83	70-130
Phenanthrene	10.0	8.73	87	70-130
Phenol	10.0	9.59	96	70-130
Pyrene	10.0	8.43	84	70-130
Pyridine	10.0	8.97	90	70-130
1,2,4,5-Tetrachlorobenzene	10.0	8.52	85	70-130
2,3,4,6-Tetrachlorophenol	10.0	9.80	98	70-130
1,2,4-Trichlorobenzene	10.0	8.27	83	70-130
2,4,5-Trichlorophenol	10.0	9.42	94	70-130
2,4,6-Trichlorophenol	10.0	9.24	92	70-130
1,3-Dinitrobenzene	10.0	9.63	96	70-130
2,3,5,6-Tetrachlorophenol	10.0	8.52	85	70-130

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L16054-SCV2
Standard ID: 0101099
Sequence: 0L16054
Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
Aniline	10.0	10.7	107	70-130
4-Chloroaniline	9.96	12.0	120	70-130
3,3'-Dichlorobenzidine	10.0	9.46	95	70-130
4-Nitroaniline	9.96	11.5	115	70-130
2-Nitroaniline	9.96	11.7	117	70-130
3-Nitroaniline	9.96	11.6	116	70-130

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Laboratory ID: 0L17007-SCV1
Sequence: 0L17007

SDG: 1011375
Project: Naval Station Great Lakes
Standard ID: 0110703
Calibration: 0L17004

Analyte	Expected (ug/mL)	Found (ug/mL)	% Rec.	QC Limit
3-Methylcholanthrene	10.0	18.1	181 *	70-130

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-TUN1
Lab File ID: DFT1214B
Injection Date: 12/14/10
Injection Time: 11:18
Sequence: 0L17046
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	37.5	PASS
68	Less than 2% of 69	1.49	PASS
69	Less than 200% of 198	38.9	PASS
70	Less than 2% of 69	1.09	PASS
127	40 - 60% of 198	50.9	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.72	PASS
275	10 - 30% of 198	21.2	PASS
365	1.0001 - 200% of 198	2.11	PASS
441	0.0001 - 99.9999% of 443	69.9	PASS
442	40.0001 - 200% of 198	63.4	PASS
443	17 - 23% of 442	19.6	PASS

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0L17046

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0L17004

Instrument: 195

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0L17046-TUN1	DFT1214B	12/14/10 11:18
Calibration Check	0L17046-CCV1	10C1214A.D	12/14/10 11:43
Calibration Check	0L17046-CCV2	10AE1214A.D	12/14/10 12:12
Calibration Check	0L17046-CCV3	10APPIX1214.D	12/14/10 12:42
Blank	1012641-BLK1	1012641-BLK1.D	12/14/10 15:11
LCS	1012641-BS1	1012641-BS1.D	12/14/10 15:41

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV1
Lab File ID: 10C1214A.D
Injection Date: 12/14/10
Injection Time: 11:43
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acenaphthene	A	10.0	10.4	1.185078	1.232951		4.0	20
Acenaphthylene	A	10.0	10.6	1.954715	2.063527		5.6	25
Acetophenone	A	10.0	10.5	1.879784	1.96957		4.8	25
Anthracene	A	10.0	10.7	1.262226	1.347321		6.7	25
Atrazine	L	10.0	11.4	0.1893913	0.1887355		14.5	25
1,1'-Biphenyl	A	10.0	10.2	1.551628	1.582847		2.0	25
Benzaldehyde	A	10.0	10.5	1.878118	1.96957		4.9	25
Benzo(a)anthracene	A	10.0	11.0	1.20419	1.324566		10.0	25
Benzo(a)pyrene	A	10.0	11.7	1.123794	1.314445		17.0	20
Benzo(b)fluoranthene	A	10.0	10.9	1.27108	1.381992		8.7	25
Benzo(k)fluoranthene	A	10.0	11.0	1.336906	1.499621		12.2	25
Benzo(g,h,i)perylene	A	10.0	12.0	0.9601857	1.154371		20.2	25
4-Bromophenyl Phenyl Ether	A	10.0	10.8	0.2428625	0.2613665		7.6	25
Butyl Benzyl Phthalate	A	10.0	11.3	0.7305368	0.8275693		13.3	25
Caprolactam	A	10.0	10.7	0.1173172	0.1250624		6.6	25
Carbazole	Q	10.0	8.50	0.484929	0.3231311		-15.0	25
4-Chloro-3-methylphenol	A	10.0	11.2	0.3006965	0.3357992		11.7	20
Bis(2-chloroethoxy)methane	A	10.0	10.5	0.4283691	0.451391		5.4	25
Bis(2-chloroethyl) Ether	A	10.0	11.5	1.568885	1.80144		14.8	25
Bis(2-chloroisopropyl) Ether	A	10.0	10.0	1.939067	1.948921		0.5	25
2-Chloronaphthalene	A	10.0	10.5	1.162498	1.220719		5.0	25
2-Chlorophenol	A	10.0	10.8	1.527703	1.642326		7.5	25
4-Chlorophenyl Phenyl Ether	A	10.0	10.2	0.5992182	0.6081725		1.5	25
Chrysene	A	10.0	10.8	1.205005	1.30304		8.1	25
Dibenz(a,h)anthracene	L	10.0	11.3	0.7470312	0.9430194		12.6	25
Dibenzofuran	A	10.0	10.5	1.665061	1.753076		5.3	25
Di-n-butyl Phthalate	A	10.0	10.9	1.474547	1.609876		9.2	25
2,4-Dichlorophenol	A	10.0	11.0	0.3006576	0.3293176		9.5	20
Diethyl Phthalate	A	10.0	10.3	1.340851	1.381425		3.0	25

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Lab Sample ID: 0L17046-CCV1
Injection Date: 12/14/10
Calibration Date: 12/13/10 09:09
Sequence: 0L17046

SDG: 1011375
Project: Naval Station Great Lakes
Lab File ID: 10C1214A.D
Injection Time: 11:43
Calibration: 0L17004
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-Dimethylphenol	A	10.0	11.0	0.3332293	0.3670405		10.1	25
Dimethyl Phthalate	A	10.0	10.4	1.370564	1.424628		3.9	25
4,6-Dinitro-2-methylphenol	L	10.0	10.9	0.1223074	0.1633657		9.2	25
2,4-Dinitrophenol	L	20.0	21.2	0.112588	0.1541381	0.05	6.2	40
2,6-Dinitrotoluene	A	10.0	11.3	0.3020522	0.3407908		12.8	25
2,4-Dinitrotoluene	A	10.0	11.6	0.3499561	0.4048101		15.7	25
Di-n-octyl Phthalate	L	10.0	10.7	1.416689	1.795456		7.2	20
Bis(2-ethylhexyl) Phthalate	A	10.0	10.8	0.99581	1.079461		8.4	25
Fluoranthene	A	10.0	10.9	1.27741	1.39746		9.4	20
Fluorene	A	10.0	10.4	1.357495	1.411628		4.0	25
Hexachlorobenzene	A	10.0	10.2	0.2643386	0.27029		2.3	25
Hexachlorobutadiene	A	10.0	10.6	0.1754227	0.1855297		5.8	20
Hexachlorocyclopentadiene	A	10.0	9.94	0.2562104	0.2546485	0.05	-0.6	40
Hexachloroethane	A	10.0	10.6	0.5974553	0.6345615		6.2	25
Indeno(1,2,3-cd)pyrene	L	10.0	11.0	0.9512201	1.177237		10.5	25
Isophorone	A	10.0	10.5	0.7230705	0.7585997		4.9	25
2-Methylnaphthalene	A	10.0	10.7	0.7787539	0.8299989		6.6	25
1-Methylnaphthalene	A	10.0	10.5	0.7644115	0.8044907		5.2	25
4-Methylphenol	A	10.0	10.7	1.443968	1.544239		6.9	25
2-Methylphenol	A	10.0	10.9	1.34241	1.467631		9.3	25
Naphthalene	A	10.0	10.5	1.136687	1.195181		5.1	25
Nitrobenzene	A	10.0	10.6	0.3593429	0.3812816		6.1	25
2-Nitrophenol	Q	10.0	9.52	0.249231	0.2329279		-4.8	20
4-Nitrophenol	Q	20.0	19.8	0.1386997	0.1690022	0.05	-1.0	40
N-Nitroso-diphenylamine	Q	10.0	10.1	0.7104474	0.6959699		0.8	20
N-Nitroso-di-n-propylamine	A	10.0	10.5	0.9300469	0.9752359	0.05	4.9	25
Pentachlorophenol	Q	10.0	10.6	0.1266876	0.1751986		5.9	20
Phenanthrene	A	10.0	10.4	1.321916	1.381739		4.5	25
Phenol	A	10.0	10.5	1.766561	1.856977		5.1	20

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV1
Lab File ID: 10C1214A.D
Injection Date: 12/14/10
Injection Time: 11:43
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Pyrene	A	10.0	10.3	1.700437	1.750348		2.9	25
2,4,5-Trichlorophenol	A	10.0	11.3	0.3508849	0.3979807		13.4	25
2,4,6-Trichlorophenol	A	10.0	11.1	0.3628775	0.4013088		10.6	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV2
Lab File ID: 10AE1214A.D
Injection Date: 12/14/10
Injection Time: 12:12
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Aniline	A	10.0	10.4	1.219546	1.264015		3.6	25
4-Chloroaniline	A	10.0	10.7	0.3164267	0.3376459		6.7	40
3,3'-Dichlorobenzidine	L	10.0	10.3	0.1883183			3.4	25
4-Nitroaniline	L	10.0	9.69	0.1123325	0.1490901		-3.1	40
2-Nitroaniline	L	10.0	10.2	0.2220719	0.2701123		1.6	40
3-Nitroaniline	L	10.0	10.0	0.1531813	0.1946761		0.0	40

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

3,3'-Dichlorobenzidine $\frac{10.34 - 10.00}{10.0} \times 100 = 3.4\%$

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L17046-CCV3
Lab File ID: 10APPIX1214.D
Injection Date: 12/14/10
Injection Time: 12:42
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L17046
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
3-Methylcholanthrene	A	9.90	11.4	0.2730558	0.3353823		22.8	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-TUN1
Lab File ID: DFT1215B
Injection Date: 12/15/10
Injection Time: 09:19
Sequence: 0L21016
Instrument ID: 195

m/z	Ion Abundance Criteria	% Relative Abundance	
51	30 - 60% of 198	37.8	PASS
68	Less than 2% of 69	1.18	PASS
69	Less than 200% of 198	40.6	PASS
70	Less than 2% of 69	0	PASS
127	40 - 60% of 198	50.1	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.85	PASS
275	10 - 30% of 198	25.3	PASS
365	1.0001 - 200% of 198	2.34	PASS
441	0.0001 - 99.9999% of 443	67.1	PASS
442	40.0001 - 200% of 198	96.5	PASS
443	17 - 23% of 442	19	PASS

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L21016

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	0L21016-TUN1	DFT1215B	12/15/10 09:19
Calibration Check	0L21016-CCV2	10AE1215A.D	12/15/10 10:10
Calibration Check	0L21016-CCV3	10APPIX1215.D	12/15/10 10:39
Calibration Check	0L21016-CCV1	10C1215B.D	12/15/10 11:08
Blank	1012641-BLK2	1012641-BLK2.D	12/15/10 11:37
LCS	1012641-BS2	1012641-BS2.D	12/15/10 12:07
NTC02GW0113	1011407-01	1011407-01.D	12/15/10 12:36
NTC02GW0513	1011407-02	1011407-02.D	12/15/10 13:05
NTC02GW0213	1011375-01	1011375-01.D	12/15/10 15:08
NTC02GW0313	1011375-02	1011375-02.D	12/15/10 15:39
NTC02GW0413	1011375-03	1011375-03.D	12/15/10 16:09
NTC02GW0613	1011375-04	1011375-04.D	12/15/10 16:39
NTCFD111710-01	1011375-05	1011375-05.D	12/15/10 17:09

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-CCV1
Lab File ID: 10C1215B.D
Injection Date: 12/15/10
Injection Time: 11:08
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L21016
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acenaphthene	A	10.0	10.6	1.185078	1.259292		6.3	20
Acenaphthylene	A	10.0	10.7	1.954715	2.094086		7.1	25
Acetophenone	A	10.0	10.4	1.879784	1.948251		3.6	25
Anthracene	A	10.0	10.8	1.262226	1.36284		8.0	25
Atrazine	L	10.0	12.0	0.1893913	0.1965954		19.7	25
1,1'-Biphenyl	A	10.0	10.3	1.551628	1.60498		3.4	25
Benzaldehyde	A	10.0	10.4	1,878118	1.948251		3.7	25
Benzo(a)anthracene	A	10.0	10.9	1.20419	1.315742		9.3	25
Benzo(a)pyrene	A	10.0	11.8	1.123794	1.329275		18.3	20
Benzo(b)fluoranthene	A	10.0	10.5	1.27108	1.334787		5.0	25
Benzo(k)fluoranthene	A	10.0	11.2	1.336906	1.527607		14.3	25
Benzo(g,h,i)perylene	A	10.0	11.9	0.9601857	1.141397		18.9	25
Benzoic Acid	L	20.0	22.1	0.1872426	0.260087		10.4	40
Benzyl Alcohol	A	10.0	10.1	0.9408288	0.9503559		1.0	25
4-Bromophenyl Phenyl Ether	A	10.0	10.6	0.2428625	0.2571809		5.9	25
Butyl Benzyl Phthalate	A	10.0	11.0	0.7305368	0.799579		9.5	25
Caprolactam	A	10.0	8.58	0.1173172	0.1006226		-14.2	25
Carbazole	Q	10.0	8.21	0.484929	0.3165424		-17.9	25
4-Chloro-3-methylphenol	A	10.0	11.1	0.3006965	0.3331548		10.8	20
Bis(2-chloroethoxy)methane	A	10.0	10.8	0.4283691	0.4634226		8.2	25
Bis(2-chloroethyl) Ether	A	10.0	12.5	1.568885	1.955635		24.7	25
Bis(2-chloroisopropyl) Ether	A	10.0	10.0	1.939067	1.940436		0.07	25
2-Chloronaphthalene	A	10.0	10.4	1.162498	1.210083		4.1	25
2-Chlorophenol	A	10.0	10.7	1.527703	1.633594		6.9	25
4-Chlorophenyl Phenyl Ether	A	10.0	10.4	0.5992182	0.6208568		3.6	25
Chrysene	A	10.0	10.2	1.205005	1.227377		1.9	25
Dibenz(a,h)anthracene	L	10.0	11.6	0.7470312	0.9681602		15.5	25
Dibenzofuran	A	10.0	10.6	1.665061	1.766459		6.1	25
Di-n-butyl Phthalate	A	10.0	10.9	1.474547	1.606605		9.0	25

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-CCV1
Lab File ID: 10C1215B.D
Injection Date: 12/15/10
Injection Time: 11:08
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L21016
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	10.0	10.6	1.745699	1.851918		6.1	20
1,2-Dichlorobenzene	A	10.0	10.3	1.705708	1.75594		2.9	25
1,3-Dichlorobenzene	A	10.0	10.5	1.790039	1.873204		4.6	25
2,4-Dichlorophenol	A	10.0	10.9	0.3006576	0.3281788		9.2	20
2,6-Dichlorophenol	A	10.0	11.4	0.2700804	0.3068549		13.6	25
Diethyl Phthalate	A	10.0	10.7	1.340851	1.434428		7.0	25
2,4-Dimethylphenol	A	10.0	11.0	0.3332293	0.364982		9.5	25
Dimethyl Phthalate	A	10.0	10.5	1.370564	1.441722		5.2	25
4,6-Dinitro-2-methylphenol	L	10.0	10.8	0.1223074	0.1619131		8.3	25
2,4-Dinitrophenol	L	20.0	20.0	0.112588	0.1446366	0.05	0.0	40
2,6-Dinitrotoluene	A	10.0	11.3	0.3020522	0.3424728		13.4	25
2,4-Dinitrotoluene	A	10.0	11.7	0.3499561	0.4097246		17.1	25
Di-n-octyl Phthalate	L	10.0	10.8	1.416689	1.801337		7.5	20
1,2-Diphenylhydrazine	A	10.0	9.96	0.8903142	0.8870913		-0.4	25
Bis(2-ethylhexyl) Phthalate	A	10.0	10.3	0.99581	1.024973		2.9	25
Fluoranthene	A	10.0	11.1	1.27741	1.419111		11.1	20
Fluorene	A	10.0	10.7	1.357495	1.452281		7.0	25
Hexachlorobenzene	A	10.0	10.0	0.2643386	0.2652372		0.3	25
Hexachlorobutadiene	A	10.0	10.6	0.1754227	0.1863704		6.2	20
Hexachlorocyclopentadiene	A	10.0	9.75	0.2562104	0.2498493	0.05	-2.5	40
Hexachloroethane	A	10.0	10.3	0.5974553	0.6156675		3.0	25
Indeno(1,2,3-cd)pyrene	L	10.0	11.4	0.9512201	1.210752		13.6	25
Isophorone	A	10.0	10.5	0.7230705	0.7616044		5.3	25
2-Methylnaphthalene	A	10.0	10.6	0.7787539	0.8264649		6.1	25
1-Methylnaphthalene	A	10.0	10.6	0.7644115	0.8128735		6.3	25
4-Methylphenol	A	10.0	10.7	1.443968	1.539467		6.6	25
2-Methylphenol	A	10.0	10.9	1.34241	1.463708		9.0	25
Naphthalene	A	10.0	10.4	1.136687	1.180299		3.8	25
Nitrobenzene	A	10.0	10.4	0.3593429	0.372254		3.6	25

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-CCV1
Lab File ID: 10C1215B.D
Injection Date: 12/15/10
Injection Time: 11:08
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L21016
Instrument ID: 195

		CONC. (ug/mL)		Response Factor			% Diff. / Drift	
Analyte	Type	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Nitrophenol	Q	10.0	9.55	0.249231	0.2335561		-4.5	20
4-Nitrophenol	Q	20.0	19.2	0.1386997	0.1647322	0.05	-3.8	40
N-Nitroso-dimethylamine	A	10.0	10.4	0.8628516	0.8964847		3.9	25
N-Nitroso-diphenylamine	Q	10.0	11.6	0.7104474	0.7738645		15.5	20
N-Nitroso-di-n-propylamine	A	10.0	10.5	0.9300469	0.9802147	0.05	5.4	25
Pentachlorophenol	Q	10.0	9.45	0.1266876	0.1573595		-5.5	20
Phenanthrene	A	10.0	10.5	1.321916	1.384039		4.7	25
Phenol	A	10.0	10.3	1.766561	1.8224		3.2	20
Pyrene	A	10.0	9.88	1.700437	1.680481		-1.2	25
Pyridine	A	10.0	10.8	1.508736	1.628505		7.9	25
1,2,4,5-Tetrachlorobenzene	A	10.0	10.6	0.5216381	0.5519558		5.8	25
2,3,4,6-Tetrachlorophenol	A	10.0	12.0	0.2811455	0.3380463		20.2	25
1,2,4-Trichlorobenzene	A	10.0	10.6	0.3588883	0.3821917		6.5	25
2,4,5-Trichlorophenol	A	10.0	11.5	0.3508849	0.4041319		15.2	25
2,4,6-Trichlorophenol	A	10.0	11.0	0.3628775	0.3988341		9.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-CCV2
Lab File ID: 10AE1215A.D
Injection Date: 12/15/10
Injection Time: 10:10
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L21016
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Aniline	A	10.0	10.3	1.219546	1.256516		3.0	25
4-Chloroaniline	A	10.0	10.7	0.3164267	0.338832		7.1	40
3,3'-Dichlorobenzidine	L	10.0	11.1	0.1883183	0.2347923		11.4	25
4-Nitroaniline	L	10.0	10.2	0.1123325	0.1587856		2.4	40
2-Nitroaniline	L	10.0	10.1	0.2220719	0.2691986		1.3	40
3-Nitroaniline	L	10.0	9.74	0.1531813	0.1889897		-2.6	40

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

CONTINUING CALIBRATION CHECK
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Lab Sample ID: 0L21016-CCV3
Lab File ID: 10APPIX1215.D
Injection Date: 12/15/10
Injection Time: 10:39
Calibration Date: 12/13/10 09:09
Calibration: 0L17004
Sequence: 0L21016
Instrument ID: 195

Analyte	Type	CONC. (ug/mL)		Response Factor			% Diff. / Drift	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
3-Methylcholanthrene	A	9.90	11.3	0.2730558	0.3338149		22.3	25

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk
* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L17046

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0L17046-CCV1)			**Lab File ID: 10C1214A.D**			**Analyzed: 12/14/10 11:43**			
1,4-Dichlorobenzene-d4	163442	4.87	151054	4.87	108	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	632640	6.36	593418	6.36	107	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	360868	8.36	337411	8.37	107	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	504399	10.01	459310	10.01	110	50 - 200	0.0000	+/-0.50	
Chrysene-d12	411342	12.94	362026	12.94	114	50 - 200	0.0000	+/-0.50	
Perylene-d12	354805	14.4	292945	14.41	121	50 - 200	0.0100	+/-0.50	
Calibration Check (0L17046-CCV2)			**Lab File ID: 10AE1214A.D**			**Analyzed: 12/14/10 12:12**			
1,4-Dichlorobenzene-d4	220508	4.86	218140	4.87	101	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	633809	6.36	618423	6.36	103	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	376212	8.36	368721	8.36	102	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	534609	10.01	516793	10.01	103	50 - 200	0.0000	+/-0.50	
Chrysene-d12	405914	12.93	379784	12.93	107	50 - 200	0.0000	+/-0.50	
Perylene-d12	242091	14.4	224633	14.40	108	50 - 200	0.0000	+/-0.50	
Calibration Check (0L17046-CCV3)			**Lab File ID: 10APPIX1214.D**			**Analyzed: 12/14/10 12:42**			
1,4-Dichlorobenzene-d4	177383	4.86	235731	4.78	75	50 - 200	0.0800	+/-0.50	
Naphthalene-d8	680254	6.36	923962	6.28	74	50 - 200	0.0800	+/-0.50	
Acenaphthene-d10	371995	8.36	501206	8.28	74	50 - 200	0.0800	+/-0.50	
Phenanthrene-d10	499531	10.01	685655	9.93	73	50 - 200	0.0800	+/-0.50	
Chrysene-d12	446652	12.93	662942	12.86	67	50 - 200	0.0700	+/-0.50	
Perylene-d12	335673	14.4	565083	14.33	59	50 - 200	0.0700	+/-0.50	
Blank (1012641-BLK1)			**Lab File ID: 1012641-BLK1.D**			**Analyzed: 12/14/10 15:11**			
1,4-Dichlorobenzene-d4	131252	4.86	151054	4.87	87	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	518395	6.36	593418	6.36	87	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	288452	8.36	337411	8.37	86	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	396928	10	459310	10.01	86	50 - 200	0.0100	+/-0.50	
Chrysene-d12	340517	12.93	362026	12.94	94	50 - 200	0.0100	+/-0.50	
Perylene-d12	262542	14.4	292945	14.41	90	50 - 200	0.0100	+/-0.50	*
LCS (1012641-BS1)			**Lab File ID: 1012641-BS1.D**			**Analyzed: 12/14/10 15:41**			
1,4-Dichlorobenzene-d4	129047	4.86	151054	4.87	85	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	498091	6.36	593418	6.36	84	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	285367	8.36	337411	8.37	85	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	407317	10	459310	10.01	89	50 - 200	0.0100	+/-0.50	
Chrysene-d12	347616	12.93	362026	12.94	96	50 - 200	0.0100	+/-0.50	
Perylene-d12	299714	14.4	292945	14.41	102	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L21016

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (0L21016-CCV2)			**Lab File ID: 10AE1215A.D**			**Analyzed: 12/15/10 10:10**			
1,4-Dichlorobenzene-d4	227532	4.86	218140	4.87	104	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	649158	6.36	618423	6.36	105	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	382034	8.35	368721	8.36	104	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	548635	10.01	516793	10.01	106	50 - 200	0.0000	+/-0.50	
Chrysene-d12	441816	12.93	379784	12.93	116	50 - 200	0.0000	+/-0.50	
Perylene-d12	282928	14.4	224633	14.40	126	50 - 200	0.0000	+/-0.50	
Calibration Check (0L21016-CCV3)			**Lab File ID: 10APPIX1215.D**			**Analyzed: 12/15/10 10:39**			
1,4-Dichlorobenzene-d4	175900	4.86	235731	4.78	75	50 - 200	0.0800	+/-0.50	
Naphthalene-d8	674351	6.36	923962	6.28	73	50 - 200	0.0800	+/-0.50	
Acenaphthene-d10	375274	8.35	501206	8.28	75	50 - 200	0.0700	+/-0.50	
Phenanthrene-d10	500998	10.01	685655	9.93	73	50 - 200	0.0800	+/-0.50	
Chrysene-d12	460841	12.93	662942	12.86	70	50 - 200	0.0700	+/-0.50	
Perylene-d12	369911	14.4	565083	14.33	65	50 - 200	0.0700	+/-0.50	
Calibration Check (0L21016-CCV1)			**Lab File ID: 10C1215B.D**			**Analyzed: 12/15/10 11:08**			
1,4-Dichlorobenzene-d4	172931	4.87	151054	4.87	114	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	666600	6.36	593418	6.36	112	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	379871	8.36	337411	8.37	113	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	543736	10.01	459310	10.01	118	50 - 200	0.0000	+/-0.50	
Chrysene-d12	463609	12.94	362026	12.94	128	50 - 200	0.0000	+/-0.50	
Perylene-d12	397050	14.41	292945	14.41	135	50 - 200	0.0000	+/-0.50	
Blank (1012641-BLK2)			**Lab File ID: 1012641-BLK2.D**			**Analyzed: 12/15/10 11:37**			
1,4-Dichlorobenzene-d4	170038	4.87	151054	4.87	113	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	661158	6.36	593418	6.36	111	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	371069	8.35	337411	8.37	110	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	514461	10	459310	10.01	112	50 - 200	0.0100	+/-0.50	
Chrysene-d12	460052	12.93	362026	12.94	127	50 - 200	0.0100	+/-0.50	
Perylene-d12	349083	14.4	292945	14.41	119	50 - 200	0.0100	+/-0.50	
LCS (1012641-BS2)			**Lab File ID: 1012641-BS2.D**			**Analyzed: 12/15/10 12:07**			
1,4-Dichlorobenzene-d4	157411	4.86	151054	4.87	104	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	613000	6.36	593418	6.36	103	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	344799	8.36	337411	8.37	102	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	488129	10.01	459310	10.01	106	50 - 200	0.0000	+/-0.50	
Chrysene-d12	420625	12.94	362026	12.94	116	50 - 200	0.0000	+/-0.50	
Perylene-d12	356473	14.4	292945	14.41	122	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sequence: 0L21016

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L17004
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
NTC02GW0113 (1011407-01)			**Lab File ID: 1011407-01.D**			**Analyzed: 12/15/10 12:36**			
1,4-Dichlorobenzene-d4	165193	4.86	151054	4.87	109	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	649309	6.36	593418	6.36	109	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	356288	8.35	337411	8.37	108	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	468868	10	459310	10.01	102	50 - 200	0.0100	+/-0.50	
Chrysene-d12	401706	12.93	362026	12.94	111	50 - 200	0.0100	+/-0.50	
Perylene-d12	311442	14.4	292945	14.41	106	50 - 200	0.0100	+/-0.50	
NTC02GW0513 (1011407-02)			**Lab File ID: 1011407-02.D**			**Analyzed: 12/15/10 13:05**			
1,4-Dichlorobenzene-d4	168096	4.86	151054	4.87	111	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	661999	6.36	593418	6.36	112	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	371599	8.36	337411	8.37	110	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	487553	10	459310	10.01	106	50 - 200	0.0100	+/-0.50	
Chrysene-d12	424552	12.93	362026	12.94	117	50 - 200	0.0100	+/-0.50	
Perylene-d12	348356	14.4	292945	14.41	119	50 - 200	0.0300	+/-0.50	
NTC02GW0213 (1011375-01)			**Lab File ID: 1011375-01.D**			**Analyzed: 12/15/10 15:08**			
1,4-Dichlorobenzene-d4	155040	4.87	151054	4.87	103	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	591584	6.36	593418	6.36	100	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	328204	8.35	337411	8.37	97	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	418679	10.01	459310	10.01	91	50 - 200	0.0000	+/-0.50	
Chrysene-d12	387982	12.93	362026	12.94	107	50 - 200	0.0100	+/-0.50	
Perylene-d12	315328	14.4	292945	14.41	108	50 - 200	0.0100	+/-0.50	
NTC02GW0313 (1011375-02)			**Lab File ID: 1011375-02.D**			**Analyzed: 12/15/10 15:39**			
1,4-Dichlorobenzene-d4	155567	4.86	151054	4.87	103	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	606609	6.36	593418	6.36	102	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	338654	8.36	337411	8.37	100	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	460190	10	459310	10.01	100	50 - 200	0.0100	+/-0.50	
Chrysene-d12	415643	12.93	362026	12.94	115	50 - 200	0.0100	+/-0.50	
Perylene-d12	331999	14.4	292945	14.41	113	50 - 200	0.0100	+/-0.50	
NTC02GW0413 (1011375-03)			**Lab File ID: 1011375-03.D**			**Analyzed: 12/15/10 16:09**			
1,4-Dichlorobenzene-d4	149666	4.86	151054	4.87	99	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	584581	6.36	593418	6.36	98	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	321255	8.35	337411	8.37	95	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	446338	10.01	459310	10.01	97	50 - 200	0.0000	+/-0.50	
Chrysene-d12	366960	12.94	362026	12.94	101	50 - 200	0.0000	+/-0.50	
Perylene-d12	317304	14.4	292945	14.41	108	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
USEPA-8270C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Calibration: 0L17004
Sequence: 0L21016
Instrument: 195

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
NTC02GW0613 (1011375-04)			**Lab File ID: 1011375-04.D**			**Analyzed: 12/15/10 16:39**			
1,4-Dichlorobenzene-d4	143104	4.86	151054	4.87	95	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	583864	6.36	593418	6.36	98	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	328172	8.35	337411	8.37	97	50 - 200	0.0200	+/-0.50	
Phenanthrene-d10	440657	10.01	459310	10.01	96	50 - 200	0.0000	+/-0.50	
Chrysene-d12	394802	12.93	362026	12.94	109	50 - 200	0.0100	+/-0.50	
Perylene-d12	313849	14.4	292945	14.41	107	50 - 200	0.0100	+/-0.50	
NTCFD111710-01 (1011375-05)			**Lab File ID: 1011375-05.D**			**Analyzed: 12/15/10 17:09**			
1,4-Dichlorobenzene-d4	173649	4.86	151054	4.87	115	50 - 200	0.0100	+/-0.50	
Naphthalene-d8	669828	6.36	593418	6.36	113	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	384217	8.36	337411	8.37	114	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10	585748	10.01	459310	10.01	127	50 - 200	0.0000	+/-0.50	
Chrysene-d12	490733	12.94	362026	12.94	136	50 - 200	0.0000	+/-0.50	
Perylene-d12	433761	14.41	292945	14.41	148	50 - 200	0.0000	+/-0.50	

SAMPLE ID NTC02GW0213

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
387982	1	9844	5	1000	1.2042	0.11
				Sample Volume (mL)		
				950		

Benzo(a)anthracene = 0.12 ug/L

ORGANIC ANALYSIS DATA SHEET
USEPA-8270C

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1011375-01 File ID: 1011375-01.D

Sampled: 11/17/10 16:00 Prepared: 11/19/10 07:40 Analyzed: 12/15/10 15:08

Solids: Preparation: 3510C Liquid-Liquid Ext Initial/Final: 950 mL / 1 mL

QC Batch: 1012641 Sequence: 0L21016 Calibration: 0L17004 Instrument: 195

CAS No.	Analyte	Dilution	CONC. (ug/L)	MDL	MRL	Q
83-32-9	Acenaphthene	1	0.50	0.020	0.50	U
208-96-8	Acenaphthylene	1	0.50	0.033	0.50	U
98-86-2	Acetophenone	1	0.50	0.087	0.50	U
62-53-3	Aniline	1	0.50	0.036	0.50	U
120-12-7	Anthracene	1	0.50	0.035	0.50	U
1912-24-9	Atrazine	1	0.50	0.17	0.50	U
92-52-4	1,1'-Biphenyl	1	0.50	0.10	0.50	U
100-52-7	Benzaldehyde	1	0.50	0.16	0.50	U
56-55-3	Benzo(a)anthracene	1	0.12	0.025	0.50	J
50-32-8	Benzo(a)pyrene	1	0.063	0.028	0.50	J
205-99-2	Benzo(b)fluoranthene	1	0.063	0.029	0.50	J
207-08-9	Benzo(k)fluoranthene	1	0.084	0.049	0.50	J
191-24-2	Benzo(g,h,i)perylene	1	0.50	0.055	0.50	U
101-55-3	4-Bromophenyl Phenyl Ether	1	0.50	0.047	0.50	U
85-68-7	Butyl Benzyl Phthalate	1	0.074	0.057	1.0	J
105-60-2	Caprolactam	1	1.0	0.21	1.0	U
86-74-8	Carbazole	1	0.50	0.12	0.50	U
59-50-7	4-Chloro-3-methylphenol	1	0.50	0.17	0.50	U
106-47-8	4-Chloroaniline	1	1.0	0.14	1.0	U
111-91-1	Bis(2-chloroethoxy)methane	1	0.50	0.039	0.50	U
111-44-4	Bis(2-chloroethyl) Ether	1	0.50	0.034	0.50	U
108-60-1	Bis(2-chloroisopropyl) Ether	1	0.50	0.044	0.50	U
91-58-7	2-Chloronaphthalene	1	0.50	0.032	0.50	U
95-57-8	2-Chlorophenol	1	0.50	0.070	0.50	U
7005-72-3	4-Chlorophenyl Phenyl Ether	1	0.50	0.12	0.50	U
218-01-9	Chrysene	1	0.14	0.022	0.50	J
53-70-3	Dibenz(a,h)anthracene	1	0.50	0.053	0.50	U
132-64-9	Dibenzofuran	1	0.50	0.11	0.50	U
84-74-2	Di-n-butyl Phthalate	1	1.0	0.61	1.0	U
91-94-1	3,3'-Dichlorobenzidine	1	1.0	1.0	1.0	U
120-83-2	2,4-Dichlorophenol	1	0.50	0.23	0.50	U
84-66-2	Diethyl Phthalate	1	0.18	0.12	0.50	J
105-67-9	2,4-Dimethylphenol	1	1.0	0.31	1.0	U

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\12-15-10_195\
Data File : 1011375-01.D
Acq On : 15 Dec 2010 15:08
Operator : DMC
Sample : 1011375-01
Misc :
ALS Vial : 66 Sample Multiplier: 1

Quant Time: Dec 16 13:12:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\VF121410.M
Quant Title : 8270C/625 BNA
QLast Update : Wed Dec 15 10:07:00 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorbenzene-d4	4.87	152	155040	5.00 ug/l	0.00 102.64%
21) Naphthalene-d8	6.36	136	591584	5.00 ug/l	0.00 99.69%
41) Acenaphthene-d10	8.35	164	328204	5.00 ug/l	0.00 97.27%
64) Phenanthrene-d10	10.01	188	418679	5.00 ug/l	0.00 91.15%
78) Chrysene-d12	12.93	240	387982	5.00 ug/l	-0.01 107.17%
89) Perylene-d12	14.40	264	315328	5.00 ug/l	0.00 107.64%
System Monitoring Compounds					
4) 2-Fluorophenol-surr	3.40	112	267899	6.73 ug/l	0.00
5) d5-Phenol-surr	4.46	99	233843	4.58 ug/l	-0.01
19) Decafluorobiphenyl	5.62	334	135073	4.08 ug/l	0.00
22) D5-Nitrobenzene-surr	5.54	128	117242	5.60 ug/l	0.00
46) 2-Fluorobiphenyl-surr	7.61	172	489816	5.21 ug/l	0.00
63) 2,4,6-Tribromophenol	9.24	330	101082	10.91 ug/l	0.00
75) o-Terphenyl-surr	10.45	230	385422	6.38 ug/l	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	2.21	74	1960	0.07 ug/l #	45
3) Pyridine	0.00	79	0	N.D.	
6) Phenol	4.48	94	2201	0.04 ug/l #	1
7) Bis (2-chloroethyl)ether	0.00	93	0	N.D.	
8) 2-Chlorophenol	0.00	128	0	N.D.	
9) 1,3-Dichlorobenzene	0.00	146	0	N.D.	
10) 1,4-Dichlorobenzene	0.00	146	0	N.D.	
11) Benzaldehyde	5.37	105	2709	0.05 ug/l #	50
12) Benzyl Alcohol	5.06	108	12145	0.42 ug/l	96
13) 1,2-Dichlorobenzene	0.00	146	0	N.D.	
14) 2-Methylphenol	5.06	108	12145	10 ~~0.29~~ ug/l #	39
15) Bis-(2-chloroisopropyl)-et	5.17	45	1022	0.02 ug/l #	1
16) Acetophenone	5.37	105	2709	0.05 ug/l	97
17) 4-Methylphenol	5.06	107	8535	10 ~~0.19~~ ug/l #	66
18) N-Nitrosodi-n-propylamine	5.35	70	1564	0.05 ug/l #	58
20) Hexachloroethane	5.62	117	11012	10 ~~0.59~~ ug/l #	20
23) Nitrobenzene	5.54	77	1703	0.04 ug/l #	7
24) Isophorone	5.92	82	2076	0.02 ug/l #	64
25) 2-Nitrophenol	0.00	139	0	N.D.	
26) 2,4-Dimethylphenol	6.36	107	3817	0.10 ug/l #	5
27) Benzoic Acid	6.36	105	1093	1.32 ug/l #	1
28) Bis(2-chloroethoxy)methane	6.41	93	1024	0.02 ug/l #	16
29) 2,4-Dichlorophenol	0.00	162	0	N.D.	
30) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
31) Naphthalene	6.38	128	3077	0.02 ug/l #	1
32) 4-Chloroaniline	5.62	127	1997	0.07 ug/l #	1
33) 2,6-Dichlorophenol	6.94	162	1381	0.04 ug/l #	7
34) Hexachlorobutadiene	0.00	225	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\12-15-10_195\
Data File : 1011375-01.D
Acq On : 15 Dec 2010 15:08
Operator : DMC
Sample : 1011375-01
Misc :
ALS Vial : 66 Sample Multiplier: 1

Quant Time: Dec 16 13:12:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\VF121410.M
Quant Title : 8270C/625 BNA
QLast Update : Wed Dec 15 10:07:00 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
35) Caprolactum	6.93	55	2977	0.21 ug/l #	17
36) 1,2-bis(2-chloroethoxy)e	0.00	63	0	N.D.	
37) 4-Chloro-3-methylphenol	7.07	107	1224	0.03 ug/l #	15
38) 2-Methylnaphthalene	7.18	142	2144	0.02 ug/l #	78
39) 1-Methylnaphthalene	7.29	142	1850	0.02 ug/l #	66
40) 1,3-Dinitrobenzene	8.59	168	2944	0.22 ug/l	100
42) Hexachlorocyclopentadien	0.00	237	0	N.D.	
43) 1,2,4,5-Tetrachlorobenze	0.00	216	0	N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0	N.D.	
45) 2,4,5-Trichlorophenol	7.73	198	1125	0.05 ug/l #	1
47) 2-Chloronaphthalene	0.00	162	0	N.D.	
48) Biphenyl	7.72	154	1814	0.02 ug/l #	34
49) 2-Nitroaniline	7.89	138	1358	0.07 ug/l #	63
50) Dimethylphthalate	8.09	163	4823	0.05 ug/l #	58
51) 2,6-Dinitrotoluene	8.12	165	2077	0.10 ug/l #	21
52) Acenaphthylene	8.20	152	1318	0.01 ug/l #	1
53) Acenaphthene	8.39	154	1370	0.02 ug/l #	8
54) 4-Nitrophenol	8.35	65	1605	1.31 ug/l	88
55) 2,4-Dinitrotoluene	8.65	165	1274	0.06 ug/l #	9
56) 2,4-Dinitrophenol	0.00	184	0	N.D.	
57) Dibenzofuran	8.59	168	2944	0.03 ug/l #	71
58) 2,3,5,6-Tetrachlorophenol	8.99	232	1280	0.53 ug/l #	21
59) 2,3,4,6-Tetrachlorophenol	8.99	232	1280	0.07 ug/l #	21
60) Diethylphthalate	8.88	149	14846	0.17 ug/l	93
61) 4-Chlorophenyl phenyl ethe	9.06	204	1446	0.04 ug/l #	27
62) Fluorene	8.96	166	1851	0.02 ug/l #	1
65) 4,6-Dinitro-2-methyl-pheno	9.34	198	1373	0.58 ug/l #	50
66) 1,2-Diphenylhydrazine	9.15	77	1102	0.01 ug/l #	1
67) N-nitroso-diphenylamine	9.13	169	2221	Below Cal #	1
68) 4-Bromophenyl phenyl ether	9.24	248	5948	0.29 ug/l #	1
69) Hexachlorobenzene	9.31	284	1069	0.05 ug/l #	1
70) Atrazine	0.00	200	0	N.D.	
71) Pentachlorophenol	9.81	266	1022	0.81 ug/l #	1
72) Phenanthrene	10.03	178	10727	0.10 ug/l #	80
73) Anthracene	10.08	178	2765	0.03 ug/l #	65
74) Carbazole	10.29	167	4893	Below Cal #	43
76) Di-n-butylphthalate	10.69	149	25327	0.21 ug/l	99
77) Fluoranthene	11.35	202	5276	0.05 ug/l #	76
79) Benzidine	11.57	184	1455	Below Cal #	80
80) Pyrene	11.59	202	7536	0.06 ug/l #	91
81) Butyl Benzyl Phthalate	12.34	149	4032	0.07 ug/l	86
82) Bis(2-ethylhexyl)adipate	12.42	129	2343	0.05 ug/l #	76
83) Bis(2-ethylhexyl)phthalate	12.97	149	39387	0.51 ug/l	97
84) Dicyclohexylphthalate	12.97	149	39334	0.47 ug/l #	83
85) 3,3' Dichlorobenzidine	12.93	252	4563	0.24 ug/l	94
86) Benzo(a)anthracene	12.92	228	9844	0.11 ug/l #	77
87) Chrysene	12.96	228	12016	0.13 ug/l #	82
88) Di-n-octylphthalate	13.65	149	10875	0.65 ug/l #	100
90) Benzo(b)fluoroanthene	14.03	252	5172	0.06 ug/l #	64
91) Benzo(k)fluoroanthene	14.06	252	6826	0.08 ug/l #	45
92) Benzo(a)pyrene	14.34	252	4247	0.06 ug/l #	49
93) Indeno(1,2,3-cg)pyrene	15.37	276	1517	0.26 ug/l #	41

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**T. EVANS**	**DATE:**	**JANUARY 18, 2011**
FROM:	**TERRI L. SOLOMON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – TOTAL AND DISSOLVED TAL METALS, CYANIDE, TOTAL PHOSPHOROUS, CHLORIDE, CHEMICAL OXYGEN DEMAND, FLUORIDE, AMMONIA, PH, TOTAL DISSOLVED SOLIDS, TOTAL SUSPENDED SOLIDS, SULFATE, TOTAL ORGANIC CARBON, TOTAL PHENOLICS**
NTC GREAT LAKES CTO F273
SAMPLE DELIVERY GROUP (SDG) – 1011375

SAMPLES: 7/Aqueous/

NTC02GW0113	NTC02GW0213	NTC02GW0313
NTC02GW0413	NTC02GW0513	NTC02GW0613
NTCFD111710-01		

Overview

The sample set for NTC Great Lakes CTO F273, SDG 1011375, consists of seven (7) aqueous environmental samples. One (1) field duplicate pair (NTC02GW0413 / NTCFD111710-01) was included within this SDG.

All samples were analyzed for total target analyte list (TAL) metals, cyanide, total phosphorous, chloride, chemical oxygen demand (COD), fluoride, ammonia, pH, total dissolved solids (TDS), total suspended solids (TSS), sulfate, total phenolics and total organic carbon (TOC). Samples NTC02GW0213, NTC02GW0513 and NTC02GW0613 were also analyzed for dissolved TAL metals. The samples were collected by Tetra Tech on November 17 and 18, 2010 and analyzed by TriMatrix Laboratories, Inc. Metals analyses were conducted using SW-846 methods 6020A and 6010B. Mercury analyses were conducted using SW-846 methods 7470A. Cyanide analyses were conducted using EPA method 9014. Total phosphorous, fluoride and ammonia analyses were conducted using Standard Methods 4500-P, 4500-F and 4500-NH_3. Chloride and sulfate analyses were conducted using EPA method 300.0. COD analyses were conducted using Standard Method 5220-D. pH analyses were conducted using EPA method 150.1. TSS and TDS analyses were conducted using Standard Methods 2540-D and 2540-C. TOC analyses were conducted using Standard Method 5310-C. Total phenolics analyses were conducted using EPA method 420.1.

These data were evaluated based on the following parameters:

* • Data Completeness
• Holding Times
* • ICP/MS Tune Analyses
* • Initial and Continuing Calibrations
• Laboratory Method / Preparation Blanks
• ICP Interference Analysis
* • Laboratory Control Sample Recoveries
* • Matrix Spike / Matrix Spike Duplicate Recoveries

* • Laboratory Duplicate Results
• Internal Standard Recoveries
• Field Duplicate Results
* • Detection Limits
* • Analyte Quantitation

* - All quality control criteria were met for this parameter.

Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B. Appendix C contains the documentation to support the findings as discussed in this validation report.

Holding Times

The pH analyses were conducted 12-15 days after the sampling date. The results reported for pH were qualified as estimated, "J".

Laboratory Preparation / Method Blanks

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony	0.13 ug/L	0.65 ug/L
Antimony(2)	0.49 ug/L	2.45 ug/L
Chromium(1)	0.81 ug/L	4.05 ug/L
Chromium(2)	0.89 ug/L	4.45 ug/L
Iron(1)	4.3 ug/L	21.5 ug/L
Silver	0.015 ug/L	0.075 ug/L
Chloride	0.19 mg/L	0.95 mg/L
Sulfate	0.13 mg/L	0.65 mg/L
Total Phosphorus(3)	0.00418 mg/L	0.0209 mg/L

(1) Maximum concentration present in a preparation blank affecting the total metals analyses.
(2) Maximum concentration present in a preparation blank affecting the dissolved metals analyses.
(3) Maximum concentration present in a method blank affecting samples NTC02GW0113 and NTC02GW0513.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level reported for antimony, chromium and silver were qualified "U" as a result of laboratory blank contamination.

Internal Standard Recoveries

The internal standard recovery percent recoveries for Lithium-6 for the total analyses of samples NTC02GW0513 and NTC02GW0113 were above the 125% quality control limit. The positive results reported for total manganese, cobalt, copper and zinc were qualified as estimated, "J". The positive results reported for total chromium were qualified as a result of blank contamination.

Field Duplicate Results

The relative percent difference (> 30%) was noted for sample pair NTC02GW0413 / NTCFD111710-01 for total selenium. The positive and nondetected results reported for total selenium were qualified as estimated, "J" and "UJ", respectively.

Notes

The positive results greater than the method detection limit but below the method reporting limit were qualified as estimated, "J".

Nondetected metals results were reported to the method detection limit (MDL).

The interfering analytes calcium and magnesium were present in several of the total and dissolved metals samples analyzed by ICP. However, no validation actions were warranted as there were no interfents found in the ICS solution.

The laboratory did not include matrix spike / matrix spike duplicate analyses, laboratory duplicate analyses or ICP serial dilution analyses for the metals analyses for this SDG.

Executive Summary

Laboratory Performance: The pH analyses were conducted 12-15 days after the sampling date. Several contaminants were present in the laboratory preparation / method blanks. The internal standard recovery percent recoveries for Lithium-6 for the total analyses of samples NTC02GW0513 and NTC02GW0113 were above the 125% quality control limit.

Other Factors Affecting Data Quality: The relative percent difference (> 30%) was noted for sample pair NTC02GW0413 / NTCFD111710-01 for total selenium. The positive results greater than the method detection limit but below the method reporting limit were qualified as estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004, and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (Jan 2006).

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

Terri L. Solomon

Tetra Tech NUS
Terri L. Solomon
Environmental Scientist

Edward Sullivan / for

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DOT and Endrin
U = % Difference between columns/detectors >25% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 01620	NSAMPLE	NTC02GW0113			NTC02GW0213			NTC02GW0313			NTC02GW0413		
SDG: 1011375	LAB_ID	1011407-01			1011375-01			1011375-02			1011375-03		
FRACTION: M	SAMP_DATE	11/18/2010			11/17/2010			11/17/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		28	U		6500			28	U		28	U	
ANTIMONY		0.36	U		0.36	U		0.36	U		0.74	J	P
ARSENIC		0.38	U		2.9	J	P	47			4.4		
BARIUM		20			85			280			1200		
BERYLLIUM		0.3	U		0.36	J	P	0.3	U		0.3	U	
CADMIUM		0.055	U		0.19	J	P	0.055	U		0.055	U	
CALCIUM		130000			58000			150000			170000		
CHROMIUM		0.73	U	A	12			0.46	U		2		
COBALT		0.38	J	NP	4			3.2			6.5		
COPPER		1.6	J	N	7.6			0.99	J	P	1.7		
IRON		120			7400			16000			12000		
LEAD		0.22	U		3.6			0.22	U		0.22	U	
MAGNESIUM		150000			39000			82000			130000		
MANGANESE		51	J	N	140			59			100		
MERCURY		0.061	U		0.061	U		0.061	U		0.061	U	
NICKEL		9.2			12			16			17		
POTASSIUM		3800			4000			2200			39000		
SELENIUM		1.1	J	G	0.82	UJ	G	1.6	J	G	2.3	J	G
SILVER		0.061	U		0.077	J	P	0.061	U		0.061	U	
SODIUM		64000			63000			65000			320000		
THALLIUM		0.056	U		0.14	J	P	0.056	U		0.056	U	
VANADIUM		0.45	J	P	16			0.28	U		1.9	J	P
ZINC		6.2	J	NP	18	J	P	5.2	J	P	4.1	J	P

PROJ_NO: 01620	NSAMPLE	NTC02GW0413-D			NTC02GW0513			NTC02GW0613		
SDG: 1011375	LAB_ID	1011375-05			1011407-02			1011375-04		
FRACTION: M	SAMP_DATE	11/17/2010			11/18/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	FD			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF	NTC02GW0413								
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		28	U		1200			850		
ANTIMONY		0.97	J	P	0.36	U		0.5	U	A
ARSENIC		3.5			4.3			0.38	U	
BARIUM		1200			51			56		
BERYLLIUM		0.3	U		0.3	U		0.3	U	
CADMIUM		0.055	U		0.067	J	P	0.13	J	P
CALCIUM		170000			80000			120000		
CHROMIUM		2.1	U	A	2.1	U	A	2.1	U	A
COBALT		6.6			2.2	J	N	1		
COPPER		2			1.4	J	N	3.4		
IRON		12000			3300			1200		
LEAD		0.24	J	P	0.49	J	P	1.3		
MAGNESIUM		130000			49000			69000		
MANGANESE		100			91	J	N	190		
MERCURY		0.061	U		0.061	U		0.061	U	
NICKEL		17			7.8			11		
POTASSIUM		41000			1900			2000		
SELENIUM		4.9	J	G	0.82	UJ	G	0.82	UJ	G
SILVER		0.079	J	P	0.061	U		0.066	U	A
SODIUM		320000			41000			27000		
THALLIUM		0.056	U		0.056	U		0.11	J	P
VANADIUM		2.1	J	P	3.2			2.4	J	P
ZINC		7	J	P	4.4	J	NP	6.6	J	P

PROJ_NO: 01620	NSAMPLE	NTC02GW0213			NTC02GW0513			NTC02GW0613		
SDG: 1011375	LAB_ID	1011375-01			1011407-02			1011375-04		
FRACTION: MF	SAMP_DATE	11/17/2010			11/18/2010			11/17/2010		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS									
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		2500			28	U		28	U	
ANTIMONY		0.36	U		0.36	U		0.36	U	
ARSENIC		2.1	J	P	5.2			0.38	U	
BARIUM		58			48			52		
BERYLLIUM		0.3	U		0.3	U		0.3	U	
CADMIUM		0.18	J	P	0.055	U		0.055	U	
CALCIUM		49000			76000			130000		
CHROMIUM		4.8			0.65	U	A	0.65	U	A
COBALT		1.3			1.6			0.23	J	P
COPPER		3			0.71	U		1.9		
IRON		2400			1300			12	J	P
LEAD		1.1			0.22	U		0.22	U	
MAGNESIUM		38000			52000			76000		
MANGANESE		36			53			75		
MERCURY		0.061	U		0.061	U		0.061	U	
NICKEL		4.7			3.2			4.6		
POTASSIUM		2700			1600			1900		
SELENIUM		0.82	U		0.82	U		0.92	J	P
SILVER		0.061	U		0.061	U		0.061	U	
SODIUM		70000			44000			32000		
THALLIUM		0.08	J	P	0.056	U		0.1	J	P
VANADIUM		6.5			0.28	U		0.33	J	P
ZINC		7.5	J	P	3	J	P	3	J	P

PROJ_NO: 01620	NSAMPLE	NTC02GW0113						NTC02GW0213					
SDG: 1011375	LAB_ID	1011407-01						1011375-01					
FRACTION: MISC	SAMP_DATE	11/18/2010						11/17/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		0.11						0.35					
CHEMICAL OXYGEN DEMAND		6.4						15					
CHLORIDE		42						85					
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.53						0.73					
PH					7.7	J	H				8.1	J	H
SULFATE		590						190					
TOTAL DISSOLVED RESIDUE		1300						560					
TOTAL ORGANIC CARBON		2.3						1.4					
TOTAL PHENOLICS		0.05	U					0.05	U				
TOTAL PHOSPHORUS		0.02	U	A				0.08					
TOTAL RESIDUE		3.9						160					

PROJ_NO: 01620	NSAMPLE	NTC02GW0313						NTC02GW0413					
SDG: 1011375	LAB_ID	1011375-02						1011375-03					
FRACTION: MISC	SAMP_DATE	11/17/2010						11/17/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		0.12						43					
CHEMICAL OXYGEN DEMAND		27						130					
CHLORIDE		110						440					
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.28						0.16					
PH					7.4	J	H				7.2	J	H
SULFATE		21						2.4					
TOTAL DISSOLVED RESIDUE		950						1900					
TOTAL ORGANIC CARBON		11						41					
TOTAL PHENOLICS		0.05	U					0.0029	J	P			
TOTAL PHOSPHORUS		0.027						0.23					
TOTAL RESIDUE		23						32					

PROJ_NO: 01620	NSAMPLE	NTC02GW0513						NTC02GW0613					
SDG: 1011375	LAB_ID	1011407-02						1011375-04					
FRACTION: MISC	SAMP_DATE	11/18/2010						11/17/2010					
MEDIA: WATER	QC_TYPE	NM						NM					
	UNITS	MG/L			S.U.			MG/L			S.U.		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		0.67						0.049					
CHEMICAL OXYGEN DEMAND		14						7.8					
CHLORIDE		29						29					
CYANIDE		0.005	U					0.005	U				
FLUORIDE		0.51						0.33					
PH					8	J	H				7.6	J	H
SULFATE		170						260					
TOTAL DISSOLVED RESIDUE		540						870					
TOTAL ORGANIC CARBON		4.4						2					
TOTAL PHENOLICS		0.05	U					0.05	U				
TOTAL PHOSPHORUS		0.026						0.011					
TOTAL RESIDUE		52						35					

PROJ_NO: 01620	NSAMPLE	NTCFD111710-01					
SDG: 1011375	LAB_ID	1011375-05					
FRACTION: MISC	SAMP_DATE	11/17/2010					
MEDIA: WATER	QC_TYPE	NM					
	UNITS	MG/L			S.U.		
	PCT_SOLIDS						
	DUP_OF	NTC02GW0413			NTC02GW0413		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AMMONIA-N		43					
CHEMICAL OXYGEN DEMAND		130					
CHLORIDE		440					
CYANIDE		0.005	U				
FLUORIDE		0.16					
PH					7.2	J	H
SULFATE		2.5					
TOTAL DISSOLVED RESIDUE		1900					
TOTAL ORGANIC CARBON		43					
TOTAL PHENOLICS		0.05	U				
TOTAL PHOSPHORUS		0.29					
TOTAL RESIDUE		32					

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 13:43
7440-70-2	Calcium, Total	1	130000	ug/L	67	500		11/29/10 13:43
7439-89-6	Iron, Total	1	120	ug/L	4.2	20		11/29/10 13:43
7439-95-4	Magnesium, Total	1	150000	ug/L	48	500		11/29/10 13:43
7440-09-7	Potassium, Total	1	3800	ug/L	82	200		11/29/10 13:43
7440-23-5	Sodium, Total	1	64000	ug/L	140	500		11/29/10 13:43

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 22:25
7440-38-2	Arsenic, Total	1	3.0	ug/L	0.38	3.0	U	11/29/10 22:25
7440-39-3	Barium, Total	1	20	ug/L	0.59	2.0		11/29/10 22:25
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 09:13
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 22:25
7440-47-3	Chromium, Total	1	0.73	ug/L	0.46	1.0	J	11/29/10 22:25
7440-48-4	Cobalt, Total	1	0.38	ug/L	0.042	1.0	J	11/29/10 22:25
7440-50-8	Copper, Total	1	1.6	ug/L	0.71	1.0		11/29/10 22:25
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 22:25
7439-96-5	Manganese, Total	1	51	ug/L	0.42	2.0		11/29/10 22:25
7440-02-0	Nickel, Total	1	9.2	ug/L	0.37	1.0		11/30/10 09:13
7782-49-2	Selenium, Total	1	1.1	ug/L	0.82	1.0		11/29/10 22:25
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 22:25
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 22:25
7440-62-2	Vanadium, Total	1	0.45	ug/L	0.28	3.0	J	11/30/10 09:13
7440-66-6	Zinc, Total	1	6.2	ug/L	2.9	20	J	11/29/10 22:25

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:53

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	6500	ug/L	28	100		11/29/10 13:26
7440-70-2	Calcium, Total	1	58000	ug/L	67	500		11/29/10 13:26
7439-89-6	Iron, Total	1	7400	ug/L	4.2	20		11/29/10 13:26
7439-95-4	Magnesium, Total	1	39000	ug/L	48	500		11/29/10 13:26
7440-09-7	Potassium, Total	1	4000	ug/L	82	200		11/29/10 13:26
7440-23-5	Sodium, Total	1	63000	ug/L	140	500		11/29/10 13:26

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:54
7440-38-2	Arsenic, Total	1	2.9	ug/L	0.38	3.0	J	11/29/10 21:54
7440-39-3	Barium, Total	1	85	ug/L	0.59	2.0		11/29/10 21:54
7440-41-7	Beryllium, Total	1	0.36	ug/L	0.30	1.0	J	11/30/10 08:55
7440-43-9	Cadmium, Total	1	0.19	ug/L	0.055	0.20	J	11/29/10 21:54
7440-47-3	Chromium, Total	1	12	ug/L	0.46	1.0		11/29/10 21:54
7440-48-4	Cobalt, Total	1	4.0	ug/L	0.042	1.0		11/29/10 21:54
7440-50-8	Copper, Total	1	7.6	ug/L	0.71	1.0		11/29/10 21:54
7439-92-1	Lead, Total	1	3.6	ug/L	0.22	1.0		11/29/10 21:54
7439-96-5	Manganese, Total	1	140	ug/L	0.42	2.0		11/29/10 21:54
7440-02-0	Nickel, Total	1	12	ug/L	0.37	1.0		11/29/10 21:54
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 21:54
7440-22-4	Silver, Total	1	0.077	ug/L	0.061	0.20	J	11/29/10 21:54
7440-28-0	Thallium, Total	1	0.14	ug/L	0.056	1.0	J	11/29/10 21:54
7440-62-2	Vanadium, Total	1	16	ug/L	0.28	3.0		11/29/10 21:54
7440-66-6	Zinc, Total	1	18	ug/L	2.9	20	J	11/29/10 21:54

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:07

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 13:29
7440-70-2	Calcium, Total	1	150000	ug/L	67	500		11/29/10 13:29
7439-89-6	Iron, Total	1	16000	ug/L	4.2	20		11/29/10 13:29
7439-95-4	Magnesium, Total	1	82000	ug/L	48	500		11/29/10 13:29
7440-09-7	Potassium, Total	1	2200	ug/L	82	200		11/29/10 13:29
7440-23-5	Sodium, Total	1	65000	ug/L	140	500		11/29/10 13:29

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 21:58
7440-38-2	Arsenic, Total	1	47	ug/L	0.38	3.0		11/29/10 21:58
7440-39-3	Barium, Total	1	280	ug/L	0.59	2.0		11/29/10 21:58
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:58
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 21:58
7440-47-3	Chromium, Total	1	1.0	ug/L	0.46	1.0	U	11/29/10 21:58
7440-48-4	Cobalt, Total	1	3.2	ug/L	0.042	1.0		11/29/10 21:58
7440-50-8	Copper, Total	1	0.99	ug/L	0.71	1.0	J	11/29/10 21:58
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 21:58
7439-96-5	Manganese, Total	1	59	ug/L	0.42	2.0		11/29/10 21:58
7440-02-0	Nickel, Total	1	16	ug/L	0.37	1.0		11/29/10 21:58
7782-49-2	Selenium, Total	1	1.6	ug/L	0.82	1.0		11/29/10 21:58
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 21:58
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 21:58
7440-62-2	Vanadium, Total	1	3.0	ug/L	0.28	3.0	U	11/29/10 21:58
7440-66-6	Zinc, Total	1	5.2	ug/L	2.9	20	J	11/29/10 21:58

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:12

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 13:33
7440-70-2	Calcium, Total	1	170000	ug/L	67	500		11/29/10 13:33
7439-89-6	Iron, Total	1	12000	ug/L	4.2	20		11/29/10 13:33
7439-95-4	Magnesium, Total	1	130000	ug/L	48	500		11/29/10 13:33
7440-09-7	Potassium, Total	1	39000	ug/L	82	200		11/29/10 13:33
7440-23-5	Sodium, Total	1	320000	ug/L	140	500		11/29/10 13:33

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	0.74	ug/L	0.36	1.0	J	11/29/10 22:02
7440-38-2	Arsenic, Total	1	4.4	ug/L	0.38	3.0		11/29/10 22:02
7440-39-3	Barium, Total	5	1200	ug/L	2.9	10		11/30/10 09:18
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 09:00
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 22:02
7440-47-3	Chromium, Total	1	2.0	ug/L	0.46	1.0		11/29/10 22:02
7440-48-4	Cobalt, Total	1	6.5	ug/L	0.042	1.0		11/29/10 22:02
7440-50-8	Copper, Total	1	1.7	ug/L	0.71	1.0		11/29/10 22:02
7439-92-1	Lead, Total	1	1.0	ug/L	0.22	1.0	U	11/29/10 22:02
7439-96-5	Manganese, Total	1	100	ug/L	0.42	2.0		11/29/10 22:02
7440-02-0	Nickel, Total	1	17	ug/L	0.37	1.0		11/29/10 22:02
7782-49-2	Selenium, Total	1	2.3	ug/L	0.82	1.0		11/29/10 22:02
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 22:02
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 22:02
7440-62-2	Vanadium, Total	1	1.9	ug/L	0.28	3.0	J	11/29/10 22:02
7440-66-6	Zinc, Total	1	4.1	ug/L	2.9	20	J	11/29/10 22:02

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:37

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	1200	ug/L	28	100		11/29/10 13:48
7440-70-2	Calcium, Total	1	80000	ug/L	67	500		11/29/10 13:48
7439-89-6	Iron, Total	1	3300	ug/L	4.2	20		11/29/10 13:48
7439-95-4	Magnesium, Total	1	49000	ug/L	48	500		11/29/10 13:48
7440-09-7	Potassium, Total	1	1900	ug/L	82	200		11/29/10 13:48
7440-23-5	Sodium, Total	1	41000	ug/L	140	500		11/29/10 13:48

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	1.0	ug/L	0.36	1.0	U	11/29/10 22:29
7440-38-2	Arsenic, Total	1	4.3	ug/L	0.38	3.0		11/29/10 22:29
7440-39-3	Barium, Total	1	51	ug/L	0.59	2.0		11/29/10 22:29
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 09:16
7440-43-9	Cadmium, Total	1	0.067	ug/L	0.055	0.20	J	11/29/10 22:29
7440-47-3	Chromium, Total	1	2.1	ug/L	0.46	1.0		11/29/10 22:29
7440-48-4	Cobalt, Total	1	2.2	ug/L	0.042	1.0		11/29/10 22:29
7440-50-8	Copper, Total	1	1.4	ug/L	0.71	1.0		11/29/10 22:29
7439-92-1	Lead, Total	1	0.49	ug/L	0.22	1.0	J	11/29/10 22:29
7439-96-5	Manganese, Total	1	91	ug/L	0.42	2.0		11/29/10 22:29
7440-02-0	Nickel, Total	1	7.8	ug/L	0.37	1.0		11/30/10 09:16
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 22:29
7440-22-4	Silver, Total	1	0.20	ug/L	0.061	0.20	U	11/29/10 22:29
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 22:29
7440-62-2	Vanadium, Total	1	3.2	ug/L	0.28	3.0		11/30/10 09:16
7440-66-6	Zinc, Total	1	4.4	ug/L	2.9	20	J	11/29/10 22:29

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:58

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	850	ug/L	28	100		11/29/10 13:36
7440-70-2	Calcium, Total	1	120000	ug/L	67	500		11/29/10 13:36
7439-89-6	Iron, Total	1	1200	ug/L	4.2	20		11/29/10 13:36
7439-95-4	Magnesium, Total	1	69000	ug/L	48	500		11/29/10 13:36
7440-09-7	Potassium, Total	1	2000	ug/L	82	200		11/29/10 13:36
7440-23-5	Sodium, Total	1	27000	ug/L	140	500		11/29/10 13:36

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	0.50	ug/L	0.36	1.0	J	11/29/10 22:17
7440-38-2	Arsenic, Total	1	3.0	ug/L	0.38	3.0	U	11/29/10 22:17
7440-39-3	Barium, Total	1	56	ug/L	0.59	2.0		11/29/10 22:17
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 09:08
7440-43-9	Cadmium, Total	1	0.13	ug/L	0.055	0.20	J	11/29/10 22:17
7440-47-3	Chromium, Total	1	2.1	ug/L	0.46	1.0		11/29/10 22:17
7440-48-4	Cobalt, Total	1	1.0	ug/L	0.042	1.0		11/29/10 22:17
7440-50-8	Copper, Total	1	3.4	ug/L	0.71	1.0		11/29/10 22:17
7439-92-1	Lead, Total	1	1.3	ug/L	0.22	1.0		11/29/10 22:17
7439-96-5	Manganese, Total	1	190	ug/L	0.42	2.0		11/29/10 22:17
7440-02-0	Nickel, Total	1	11	ug/L	0.37	1.0		11/30/10 09:08
7782-49-2	Selenium, Total	1	1.0	ug/L	0.82	1.0	U	11/29/10 22:17
7440-22-4	Silver, Total	1	0.066	ug/L	0.061	0.20	J	11/29/10 22:17
7440-28-0	Thallium, Total	1	0.11	ug/L	0.056	1.0	J	11/29/10 22:17
7440-62-2	Vanadium, Total	1	2.4	ug/L	0.28	3.0	J	11/30/10 09:08
7440-66-6	Zinc, Total	1	6.6	ug/L	2.9	20	J	11/29/10 22:17

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:42

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012888

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/23/10 18:00
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Total	1	100	ug/L	28	100	U	11/29/10 13:40
7440-70-2	Calcium, Total	1	170000	ug/L	67	500		11/29/10 13:40
7439-89-6	Iron, Total	1	12000	ug/L	4.2	20		11/29/10 13:40
7439-95-4	Magnesium, Total	1	130000	ug/L	48	500		11/29/10 13:40
7440-09-7	Potassium, Total	1	41000	ug/L	82	200		11/29/10 13:40
7440-23-5	Sodium, Total	1	320000	ug/L	140	500		11/29/10 13:40

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012934

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/29/10 08:00
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Total	1	0.97	ug/L	0.36	1.0	J	11/29/10 22:21
7440-38-2	Arsenic, Total	1	3.5	ug/L	0.38	3.0		11/29/10 22:21
7440-39-3	Barium, Total	5	1200	ug/L	2.9	10		11/29/10 22:37
7440-41-7	Beryllium, Total	1	1.0	ug/L	0.30	1.0	U	11/30/10 09:11
7440-43-9	Cadmium, Total	1	0.20	ug/L	0.055	0.20	U	11/29/10 22:21
7440-47-3	Chromium, Total	1	2.1	ug/L	0.46	1.0		11/29/10 22:21
7440-48-4	Cobalt, Total	1	6.6	ug/L	0.042	1.0		11/29/10 22:21
7440-50-8	Copper, Total	1	2.0	ug/L	0.71	1.0		11/29/10 22:21
7439-92-1	Lead, Total	1	0.24	ug/L	0.22	1.0	J	11/29/10 22:21
7439-96-5	Manganese, Total	1	100	ug/L	0.42	2.0		11/29/10 22:21
7440-02-0	Nickel, Total	1	17	ug/L	0.37	1.0		11/30/10 09:11
7782-49-2	Selenium, Total	1	4.9	ug/L	0.82	1.0		11/29/10 22:21
7440-22-4	Silver, Total	1	0.079	ug/L	0.061	0.20	J	11/29/10 22:21
7440-28-0	Thallium, Total	1	1.0	ug/L	0.056	1.0	U	11/29/10 22:21
7440-62-2	Vanadium, Total	1	2.1	ug/L	0.28	3.0	J	11/30/10 09:11
7440-66-6	Zinc, Total	1	7.0	ug/L	2.9	20	J	11/29/10 22:21

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012976

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Total	1	0.20	ug/L	0.061	0.20	U	11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012910

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	2500	ug/L	28	100		11/29/10 14:54
7440-70-2	Calcium, Dissolved	1	49000	ug/L	67	500		11/29/10 14:54
7439-89-6	Iron, Dissolved	1	2400	ug/L	4.2	20		11/29/10 14:54
7439-95-4	Magnesium, Dissolved	1	38000	ug/L	48	500		11/29/10 14:54
7440-09-7	Potassium, Dissolved	1	2700	ug/L	82	200		11/29/10 14:54
7440-23-5	Sodium, Dissolved	1	70000	ug/L	140	500		11/29/10 14:54

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012940

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 20:15
7440-38-2	Arsenic, Dissolved	1	2.1	ug/L	0.38	3.0	J	11/29/10 20:15
7440-39-3	Barium, Dissolved	1	58	ug/L	0.59	2.0		11/29/10 20:15
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:11
7440-43-9	Cadmium, Dissolved	1	0.18	ug/L	0.055	0.20	J	11/29/10 20:15
7440-47-3	Chromium, Dissolved	1	4.8	ug/L	0.46	1.0		11/29/10 20:15
7440-48-4	Cobalt, Dissolved	1	1.3	ug/L	0.042	1.0		11/29/10 20:15
7440-50-8	Copper, Dissolved	1	3.0	ug/L	0.71	1.0		11/29/10 20:15
7439-92-1	Lead, Dissolved	1	1.1	ug/L	0.22	1.0		11/29/10 20:15
7439-96-5	Manganese, Dissolved	1	36	ug/L	0.42	2.0		11/29/10 20:15
7440-02-0	Nickel, Dissolved	1	4.7	ug/L	0.37	1.0		11/29/10 20:15
7782-49-2	Selenium, Dissolved	1	1.0	ug/L	0.82	1.0	U	11/29/10 20:15
7440-22-4	Silver, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/29/10 20:15
7440-28-0	Thallium, Dissolved	1	0.080	ug/L	0.056	1.0	J	11/29/10 20:15
7440-62-2	Vanadium, Dissolved	1	6.5	ug/L	0.28	3.0		11/29/10 20:15
7440-66-6	Zinc, Dissolved	1	7.5	ug/L	2.9	20	J	11/29/10 20:15

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012974

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 09:12

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012910

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 15:02
7440-70-2	Calcium, Dissolved	1	76000	ug/L	67	500		11/29/10 15:02
7439-89-6	Iron, Dissolved	1	1300	ug/L	4.2	20		11/29/10 15:02
7439-95-4	Magnesium, Dissolved	1	52000	ug/L	48	500		11/29/10 15:02
7440-09-7	Potassium, Dissolved	1	1600	ug/L	82	200		11/29/10 15:02
7440-23-5	Sodium, Dissolved	1	44000	ug/L	140	500		11/29/10 15:02

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012940

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 20:22
7440-38-2	Arsenic, Dissolved	1	5.2	ug/L	0.38	3.0		11/29/10 20:22
7440-39-3	Barium, Dissolved	1	48	ug/L	0.59	2.0		11/29/10 20:22
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:16
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 20:22
7440-47-3	Chromium, Dissolved	1	0.65	ug/L	0.46	1.0	J	11/29/10 20:22
7440-48-4	Cobalt, Dissolved	1	1.6	ug/L	0.042	1.0		11/29/10 20:22
7440-50-8	Copper, Dissolved	1	1.0	ug/L	0.71	1.0	U	11/29/10 20:22
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 20:22
7439-96-5	Manganese, Dissolved	1	53	ug/L	0.42	2.0		11/29/10 20:22
7440-02-0	Nickel, Dissolved	1	3.2	ug/L	0.37	1.0		11/29/10 20:22
7782-49-2	Selenium, Dissolved	1	1.0	ug/L	0.82	1.0	U	11/29/10 20:22
7440-22-4	Silver, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/29/10 20:22
7440-28-0	Thallium, Dissolved	1	1.0	ug/L	0.056	1.0	U	11/29/10 20:22
7440-62-2	Vanadium, Dissolved	1	3.0	ug/L	0.28	3.0	U	11/29/10 20:22
7440-66-6	Zinc, Dissolved	1	3.0	ug/L	2.9	20	J	11/29/10 20:22

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012974

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 09:31

INORGANIC ANALYSIS DATA SHEET
USEPA-6010C

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012910

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/24/10 07:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7429-90-5	Aluminum, Dissolved	1	100	ug/L	28	100	U	11/29/10 14:57
7440-70-2	Calcium, Dissolved	1	130000	ug/L	67	500		11/29/10 14:57
7439-89-6	Iron, Dissolved	1	12	ug/L	4.2	20	J	11/29/10 14:57
7439-95-4	Magnesium, Dissolved	1	76000	ug/L	48	500		11/29/10 14:57
7440-09-7	Potassium, Dissolved	1	1900	ug/L	82	200		11/29/10 14:57
7440-23-5	Sodium, Dissolved	1	32000	ug/L	140	500		11/29/10 14:57

INORGANIC ANALYSIS DATA SHEET
USEPA-6020A

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012940

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/29/10 08:00
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-36-0	Antimony, Dissolved	1	1.0	ug/L	0.36	1.0	U	11/29/10 20:18
7440-38-2	Arsenic, Dissolved	1	3.0	ug/L	0.38	3.0	U	11/29/10 20:18
7440-39-3	Barium, Dissolved	1	52	ug/L	0.59	2.0		11/29/10 20:18
7440-41-7	Beryllium, Dissolved	1	1.0	ug/L	0.30	1.0	U	11/30/10 08:14
7440-43-9	Cadmium, Dissolved	1	0.20	ug/L	0.055	0.20	U	11/29/10 20:18
7440-47-3	Chromium, Dissolved	1	0.65	ug/L	0.46	1.0	J	11/29/10 20:18
7440-48-4	Cobalt, Dissolved	1	0.23	ug/L	0.042	1.0	J	11/29/10 20:18
7440-50-8	Copper, Dissolved	1	1.9	ug/L	0.71	1.0		11/29/10 20:18
7439-92-1	Lead, Dissolved	1	1.0	ug/L	0.22	1.0	U	11/29/10 20:18
7439-96-5	Manganese, Dissolved	1	75	ug/L	0.42	2.0		11/29/10 20:18
7440-02-0	Nickel, Dissolved	1	4.6	ug/L	0.37	1.0		11/29/10 20:18
7782-49-2	Selenium, Dissolved	1	0.92	ug/L	0.82	1.0	J	11/29/10 20:18
7440-22-4	Silver, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/29/10 20:18
7440-28-0	Thallium, Dissolved	1	0.10	ug/L	0.056	1.0	J	11/29/10 20:18
7440-62-2	Vanadium, Dissolved	1	0.33	ug/L	0.28	3.0	J	11/29/10 20:18
7440-66-6	Zinc, Dissolved	1	3.0	ug/L	2.9	20	J	11/29/10 20:18

INORGANIC ANALYSIS DATA SHEET
USEPA-7470A

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012974

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/29/10 14:00
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7439-97-6	Mercury, Dissolved	1	0.20	ug/L	0.061	0.20	U	11/30/10 09:27

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012844

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/23/10 15:55
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1300	mg/L	50.0	50.0		11/23/10 15:55

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	558	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012654

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	954	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012654

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1880	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012844

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/23/10 15:55
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	544	mg/L	50.0	50.0		11/23/10 15:55

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012654

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	866	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 C 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012654

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Dissolved @ 180° C	1	1860	mg/L	50.0	50.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012838

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/23/10 15:55
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	3.9	mg/L	3.3	3.3		11/23/10 15:55

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 300 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	158	mg/L	8.2	8.2		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012644

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	22.9	mg/L	3.3	3.3		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012644

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 500 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	31.8	mg/L	5.0	5.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012838

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/23/10 15:55
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	51.9	mg/L	3.3	3.3		11/23/10 15:55

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012644

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 750 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	35.5	mg/L	3.3	3.3		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 2540 D 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012644

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/19/10 13:43
Preparation: General Inorganic Prep
Initial/Final: 500 mL / 1000 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Residue, Suspended	1	31.6	mg/L	5.0	5.0		11/19/10 13:43

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.53	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.73	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.28	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.16	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.51	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.33	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET
SM 4500-F C 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1013058

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/30/10 08:30
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16984-48-8	Fluoride	1	0.16	mg/L	0.0040	0.10		11/30/10 13:19

INORGANIC ANALYSIS DATA SHEET

SM 4500-NH3 G 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.11	mg/L	0.0089	0.010		11/22/10 12:42

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.35	mg/L	0.0089	0.010		11/22/10 10:52

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.12	mg/L	0.0089	0.010		11/22/10 12:03

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	25	43	mg/L	0.22	0.25		11/22/10 11:39

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.67	mg/L	0.0089	0.010		11/22/10 12:42

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	1	0.049	mg/L	0.0089	0.010		11/22/10 11:31

INORGANIC ANALYSIS DATA SHEET
SM 4500-NH3 G 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012790

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/22/10 08:51
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7664-41-7	Nitrogen, Ammonia	25	43	mg/L	0.22	0.25		11/22/10 11:39

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012990

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/29/10 06:39
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0195	mg/L	0.00170	0.0100		11/30/10 13:02

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0800	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012732

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0266	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012732

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.234	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012990

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 06:39
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0260	mg/L	0.00170	0.0100		11/30/10 11:22

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012732

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.0114	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 4500-P E 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012732

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/22/10 06:55
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7723-14-0	Phosphorus, Total	1	0.293	mg/L	0.00170	0.0100		11/23/10 09:40

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	6.4	mg/L	3.7	5.0		11/23/10 12:45

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012893

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	15	mg/L	3.7	5.0		11/23/10 12:42

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012893

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	27	mg/L	3.7	5.0		11/23/10 12:43

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1013211

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 12/02/10 12:00
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	130	mg/L	20	50		12/02/10 15:26

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012893

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	14	mg/L	3.7	5.0		11/23/10 12:45

INORGANIC ANALYSIS DATA SHEET

SM 5220 D 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012893

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/23/10 08:20
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	7.8	mg/L	3.7	5.0		11/23/10 12:44

INORGANIC ANALYSIS DATA SHEET
SM 5220 D 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1013211

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 12/02/10 12:00
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Chemical Oxygen Demand	1	130	mg/L	20	50		12/02/10 15:26

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012992

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/24/10 11:08
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	2.3	mg/L	0.25	0.50		11/24/10 13:39

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012830

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	1.4	mg/L	0.25	0.50		11/22/10 18:39

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012922

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	11	mg/L	0.25	1.0		11/23/10 15:07

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012922

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	41	mg/L	0.25	1.0		11/23/10 15:14

INORGANIC ANALYSIS DATA SHEET

SM 5310 C 20th

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012992

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/24/10 11:08
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	4.4	mg/L	0.25	0.50		11/24/10 14:03

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012830

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/22/10 12:32
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	2.0	mg/L	0.25	0.50		11/22/10 19:03

INORGANIC ANALYSIS DATA SHEET
SM 5310 C 20th

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012922

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/23/10 13:26
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
7440-44-0	Carbon, Total Organic	1	43	mg/L	0.25	1.0		11/23/10 15:48

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1013083

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.7	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 12/01/10 13:55
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	8.1	pH Units	1.0	1.0		12/01/10 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 12/01/10 13:55
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.4	pH Units	1.0	1.0		12/01/10 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 12/01/10 13:55
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.2	pH Units	1.0	1.0		12/01/10 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1013083

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/30/10 10:28
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	8.0	pH Units	1.0	1.0		11/30/10 12:47

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 12/01/10 13:55
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.6	pH Units	1.0	1.0		12/01/10 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-150.1

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 12/01/10 13:55
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	pH	1	7.2	pH Units	1.0	1.0		12/01/10 15:40

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	42	mg/L	0.098	1.0		11/30/10 16:41
14808-79-8	Sulfate	10	590	mg/L	0.61	20		12/01/10 00:40

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	85	mg/L	0.098	1.0		11/30/10 14:32
14808-79-8	Sulfate	4	190	mg/L	0.24	8.0		11/30/10 23:08

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	2	110	mg/L	0.20	2.0		11/30/10 23:26
14808-79-8	Sulfate	1	21	mg/L	0.061	2.0		11/30/10 14:51

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	10	440	mg/L	0.98	10		11/30/10 23:45
14808-79-8	Sulfate	1	2.4	mg/L	0.061	2.0		11/30/10 15:46

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	29	mg/L	0.098	1.0		11/30/10 17:00
14808-79-8	Sulfate	4	170	mg/L	0.24	8.0		12/01/10 00:58

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	1	29	mg/L	0.098	1.0		11/30/10 16:04
14808-79-8	Sulfate	5	260	mg/L	0.31	10		12/01/10 00:03

INORGANIC ANALYSIS DATA SHEET
USEPA-300.0

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1013122

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/30/10 08:43
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
16887-00-6	Chloride	10	440	mg/L	0.98	10		12/01/10 00:21
14808-79-8	Sulfate	1	2.5	mg/L	0.061	2.0		11/30/10 16:23

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1013010

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 11/29/10 09:42
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/30/10 11:32

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012750

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/22/10 10:09
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/24/10 14:13

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012750

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/22/10 10:09
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/24/10 14:19

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012750

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/22/10 10:09
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.00287	mg/L	0.00280	0.0500	J	11/24/10 14:19

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1013010

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 11/29/10 09:42
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/30/10 11:33

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012750

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/22/10 10:09
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/24/10 14:19

INORGANIC ANALYSIS DATA SHEET
USEPA-420.1

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012750

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/22/10 10:09
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
	Phenolics, Total	1	0.0500	mg/L	0.00280	0.0500	U	11/24/10 14:19

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-01
Prepared: 12/01/10 06:15
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	12/01/10 14:01

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 16:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-01
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0313

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 15:45
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-02
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:22

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0413

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:05
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-03
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:29

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0513

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/18/10 09:10
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011407-02
Prepared: 12/01/10 06:15
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	12/01/10 14:01

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTC02GW0613

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 09:10
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-04
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:29

INORGANIC ANALYSIS DATA SHEET
USEPA-9014

NTCFD111710-01

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Sampled: 11/17/10 00:00
Solids: 0.00
QC Batch: 1012747

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1011375-05
Prepared: 11/22/10 08:30
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

CAS No.	Analyte	Dil. Factor	Conc.	Units	MDL	MRL	Q	Analyzed
57-12-5	Cyanide, Total	1	0.00500	mg/L	0.00170	0.00500	U	11/24/10 09:29

APPENDIX C
SUPPORT DOCUMENTATION

TRIMATRIX
LABORATORIES

SDG CASE NARRATIVE

TETRA TECH NUS - Pittsburgh
Naval Station Great Lakes

SDG Executive Summary

This case narrative applies to samples received on November 18, 2010 through November 19, 2010. All samples were scheduled for analysis in accordance with parameters outlined on the field chain of custody record, the TriMatrix bid form, and/or oral and written correspondence between TETRA TECH NUS - Pittsburgh and TriMatrix Laboratories, Inc.

Each sample receipt event was assigned a unique TriMatrix work order number. Sample receipt documentation is included in section A of this data package.

Project Technical Issues/Problems

Project-related data qualification designations and reporting conventions are included in Attachment 1 - *Project Technical Narrative.*

QA/QC Data Qualifications/Narrations

Quality assurance issues and/or quality control data qualifications and narrations related to the analysis and reporting of this SDG are presented in Attachment 2 - *Statement of Data Qualifications.* The absence of a statement page for a particular analyte group (*e.g.* Percent Solids) implies that no qualifying statements were generated for that analyte.

Data Review and Approval

All data was peer-reviewed by a second analyst, and then by appropriate data management staff against laboratory quality control requirements and project specifications. It was then reviewed and approved by the group supervisor/manager prior to further review by the project chemist.

Data Deliverables

The data deliverables, both hardcopy and/or electronic (EDD), that comprise this data package are intended to comply with the documents referenced in the introductory section of this narrative. The EDD, if requested, will be issued separately from this hardcopy report. Hold time reports for each test procedure are presented following the CLP-like forms section of this report.

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Conference (NELAC). Estimates of analytical uncertainties for the test results contained within the report are available upon request.

Gary L. Wood, Project Chemist

12/30/10
Date

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Individual sample results relate only to the sample tested.
5560 Corporate Exchange Court SE ♦ Grand Rapids, MI 49512 ♦ Phone: 616.975.4500 ♦ Fax: 616.942.7463 ♦ www.trimatrixlabs.com

TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1011375

TriMatrix Laboratories received the cooler(s) for this work order on November 18, 2010, at 08:20am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
NTC02GW0213	1011375-01	Water	11/17/2010
NTC02GW0313	1011375-02	Water	11/17/2010
NTC02GW0413	1011375-03	Water	11/17/2010
NTC02GW0613	1011375-04	Water	11/17/2010
NTCFD111710-01	1011375-05	Water	11/17/2010
TB111710	1011375-06	Water	11/17/2010

No administrative issues were encountered during the receipt and analysis of this work order.

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TRIMATRIX LABORATORIES

SDG CASE NARRATIVE

Sample Receipt and Login -- Work Order: 1011407

TriMatrix Laboratories received the cooler(s) for this work order on November 19, 2010, at 09:00am. Receiving documents include field chain-of-custody (COC) record(s), sample receipt form(s), and FedEx shipping document(s). The condition of the custody seals, the type and location of the coolant, and the temperatures recorded for each cooler are presented on the TriMatrix *Sample Receiving / Log-In Checklist* provided in section A of this package. The receipt temperature of the samples was determined by using an infrared thermometer to record the temperature of three random samples of varying container types and the accompanying temperature blank, if present.

Samples were scheduled for the analyses listed on the corresponding COC form. Field IDs and assigned laboratory identifiers are presented in the table below.

Field Sample Name	Laboratory Sample ID	Matrix	Date Sampled
NTC02GW0113	1011407-01	Water	11/18/2010
NTC02GW0513	1011407-02	Water	11/18/2010
TB111801	1011407-03	Water	11/18/2010

No administrative issues were encountered during the receipt and analysis of this work order.

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Individual sample results relate only to the sample tested.

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TETRA TECH NUS, INC

E 1011375

TM2660, 2665

CHAIN OF CUSTODY
NUMBER: ED00000144-5

25-3 551 W Cart 3

91666

Project No: 112G01620	Facility: GREAT LAKES NTC	Project Manager: Tim Evans	Carrier: Federal Express	Laboratory Name: Trimatrix Labs 5560 Corporate Exchange Court SE Grand Rapids, MI 49512-5503
Task No: F273	Turn Around Time: Standard	Field Ops Leader: Mark Mengel	Carrier/Waybill No. 873560122221	Point of Contact: Gary Wood 616-940-4206

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/17/2010	NTC02GW0213	16:00	4500-NH3-G/4500-P-F/5220 D	FL-02	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0213	16:00	EPA 420.1	FL-02	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0213	16:00	5310C	FL-02	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	-01
11/17/2010	NTC02GW0213	16:00	SW-846 8260B	FL-02	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/17/2010	NTC02GW0213	16:00	SW-846 6010B / 7841 / 7470A	FL-02	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0313	15:45	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	FL-03	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0313	15:45	EPA 420.1	FL-03	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0313	15:45	SW-846 8260B	FL-03	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	-02
11/17/2010	NTC02GW0313	15:45	SW-846 9014	FL-03	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/17/2010	NTC02GW0313	15:45	5310C	FL-03	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/17/2010	NTC02GW0313	15:45	SW-846 6010B / 7841 / 7470A	FL-03	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0313	15:45	SW-846 8270C/8270C SIM	FL-03	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/17/2010	NTC02GW0313	15:45	4500-NH3-G/4500-P-F/5220 D	FL-03	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0413	09:05	SW-846 8260B	FL-04	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/17/2010	NTC02GW0413	09:05	SW-846 6010B / 7841 / 7470A	FL-04	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0413	09:05	SW-846 8270C/8270C SIM	FL-04	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	-03
11/17/2010	NTC02GW0413	09:05	4500-NH3-G/4500-P-F/5220 D	FL-04	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/17/2010	NTC02GW0413	09:05	EPA 420.1	FL-04	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0413	09:05	5310C	FL-04	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/17/2010	NTC02GW0413	09:05	SW-846 9014	FL-04	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/17/2010	NTC02GW0413	09:05	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	FL-04	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0613	09:10	SW-846 8270C/8270C SIM	FL-06	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/17/2010	NTC02GW0613	09:10	SW-846 9014	FL-06	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/17/2010	NTC02GW0613	09:10	SW-846 8260B	FL-06	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	-04
11/17/2010	NTC02GW0613	09:10	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	FL-06	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/17/2010	NTC02GW0613	09:10	EPA 420.1	FL-06	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/17/2010	NTC02GW0613	09:10	SW-846 6010B / 7841 / 7470A	FL-06	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0613	09:10	SW-846 6010B / 7841 / 7470A	FL-06	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/17/2010	NTC02GW0613	09:10	5310C	FL-06	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	

	11/17/2010	NTCFD111710-01	00:00	SW-846 8260B	QC	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	SW-846 6010B / 7841 / 7470A ✓	QC	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
	11/17/2010	NTCFD111710-01	00:00	SW-846 8270C/8270C SIM	QC	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	-05
	11/17/2010	NTCFD111710-01	00:00	4500-NH3-G/4500-P-F/5220 D ✓	QC	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
	11/17/2010	NTCFD111710-01	00:00	EPA 420.1 ✓	QC	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
	11/17/2010	NTCFD111710-01	00:00	5310C	QC	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
	11/17/2010	NTCFD111710-01	00:00	SW-846 9014	QC	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
	11/17/2010	NTCFD111710-01	00:00	EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1	QC	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
	11/17/2010	TB111710	07:18	SW-846 8260B	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	-06

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/17/2010	17:17	**Federal Express**	11/17/2010	17:17

2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:

3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[signature]	11/18/10	0820

Comments:

00017-1960

477W

Cart 8 27.14

E-1011407

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000144-7

Project No:	Facility:	Project Manager:	Carrier:	Laboratory Name:
112G01620	**GREAT LAKES NTC**	**Tim Evans**	**Federal Express**	**Trimatrix Labs** **5560 Corporate Exchange Court SE** **Grand Rapids, MI 49512-5503**
Task No:	Turn Around Time:	Field Ops Leader:	Carrier/Waybill No.	Point of Contact:
F273	**Standard**	**Mark Mengel**	**873560122254**	**Gary Wood** **616-940-4206**

Date	Sample ID #	Time	Analysis	Loc ID	Matrix	Description	Preservative	Container Count	Container Type	Container Reqs	Comments
11/18/2010	NTC02GW0113	09:00	**4500-NH3-G/4500-P-F/5220 D**	FL-01	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8270C/8270C SIM**	FL-01	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 6010B / 7841 / 7470A**	FL-01	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0113	09:00	**SW-846 8260B**	FL-01	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0113	09:00	**EPA 420.1**	FL-01	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0113	09:00	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-01	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0113	09:00	**SW-846 9014**	FL-01	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	NTC02GW0113	09:00	**5310C**	FL-01	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**5310C**	FL-05	GW	TOC	4°C/H2SO4	3	Glass - Amber	40ml vials	
11/18/2010	NTC02GW0513	09:10	**EPA 420.1**	FL-05	GW	Phenols	4°C/H2SO4	1	Glass - Amber	500ml	
11/18/2010	NTC02GW0513	09:10	**4500-NH3-G/4500-P-F/5220 D**	FL-05	GW	Nutrients (Ammonia, P, COD)	4°C/H2SO4	1	Plastic - PE	500ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8260B**	FL-05	GW	VOCs	4°C/HCL	3	Glass - Clear	40ml vials	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals (Dissolved)	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**SW-846 8270C/8270C SIM**	FL-05	GW	SVOCs (PAHs via SIM)	4°C	2	Glass - Amber	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 6010B / 7841 / 7470A**	FL-05	GW	TAL Metals	4°C/HNO3	1	Plastic - PE	250ml	
11/18/2010	NTC02GW0513	09:10	**EPA 300/EPA 300/EPA 300/2540 C/2540 D/EPA 150.1**	FL-05	GW	General (Cl-, F-, SO4, TDS, TSS, pH)	4°C	1	Plastic - PE	1L	
11/18/2010	NTC02GW0513	09:10	**SW-846 9014**	FL-05	GW	Cyanides	4°C/NAOH	1	Plastic - PE (Amber)	500ml	
11/18/2010	TB111801	07:18	**SW-846 8260B**	QC	AQ	VOCs	4°C/HCL	1	Glass - Clear	40ml vials	

1. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Keith Simpson	11/18/2010	16:33	**Federal Express**	11/18/2010	16:33
2. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	Received By:	Date:	Time:
			[illegible]	11/19/10	0900

HOLDTIME

SDG 1011375

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HG	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HG	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HG	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/29/2010	5	6	11
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
M	UG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
M	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/29/2010	5	6	11
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
M	UG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/23/2010	11/29/2010	6	6	12
M	UG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HGF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
HGF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
HGF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	11/29/2010	6	5	11
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/29/2010	11	0	11
MF	UG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/24/2010	11/29/2010	7	5	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/29/2010	12	0	12
MF	UG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/29/2010	11/30/2010	12	1	13
MF	UG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/24/2010	11/29/2010	7	5	12
CL	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
CL	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
CL	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
CL	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	12/01/2010	13	1	14
CN	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	12/01/2010	12/01/2010	13	0	13
CN	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CN	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7
CN	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	12/01/2010	12/01/2010	13	0	13
COD	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	12/02/2010	12/02/2010	15	0	15
COD	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
COD	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
COD	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
COD	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	12/02/2010	12/02/2010	15	0	15
COD	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
COD	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
FL	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
FL	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
FL	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
FL	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
MISC	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MISC	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
MISC	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
MISC	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/23/2010	11/23/2010	5	0	5
MISC	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/19/2010	11/19/2010	2	0	2
NH3	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/22/2010	11/22/2010	4	0	4
NH3	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/22/2010	11/22/2010	4	0	4
NH3	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
NH3	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
PH	S.U.	NTC02GW0413	1011375-03	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTCFD111710-01	1011375-05	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
PH	S.U.	NTC02GW0313	1011375-02	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
PH	S.U.	NTC02GW0213	1011375-01	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PH	S.U.	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	11/30/2010	12	0	12
PH	S.U.	NTC02GW0613	1011375-04	NM	11/17/2010	12/01/2010	12/01/2010	14	0	14
SO4	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/30/2010	12/01/2010	12	1	13
SO4	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/30/2010	12/01/2010	12	1	13
SO4	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/30/2010	11/30/2010	13	0	13
SO4	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/30/2010	12/01/2010	13	1	14
TOC	MG/L	NTCFD111710-01	1011375-05	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
TOC	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
TOC	MG/L	NTC02GW0313	1011375-02	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0413	1011375-03	NM	11/17/2010	11/23/2010	11/23/2010	6	0	6
TOC	MG/L	NTC02GW0613	1011375-04	NM	11/17/2010	11/22/2010	11/22/2010	5	0	5
TOC	MG/L	NTC02GW0513	1011407-02	NM	11/18/2010	11/24/2010	11/24/2010	6	0	6
TPHE	MG/L	NTC02GW0113	1011407-01	NM	11/18/2010	11/29/2010	11/30/2010	11	1	12
TPHE	MG/L	NTC02GW0213	1011375-01	NM	11/17/2010	11/22/2010	11/24/2010	5	2	7

NTC GREAT LAKES
WATER DATA
1011375

FRACTION	CHEMICAL	NTC02GW0413	UNITS	NTCFD111710-01	RPD	D
M	ANTIMONY	0.74 J	UG/L	0.97 J	26.90	0.23
M	ARSENIC	4.4	UG/L	3.5	22.78	0.90
M	BARIUM	1200	UG/L	1200	0.00	0.00
M	CALCIUM	170000	UG/L	170000	0.00	0.00
M	CHROMIUM	2	UG/L	ND	200.00	2.00
M	COBALT	6.5	UG/L	6.6	1.53	0.10
M	COPPER	1.7	UG/L	2	16.22	0.30
M	IRON	12000	UG/L	12000	0.00	0.00
M	LEAD	ND	UG/L	0.24 J	200.00	0.24
M	MAGNESIUM	130000	UG/L	130000	0.00	0.00
M	MANGANESE	100	UG/L	100	0.00	0.00
M	NICKEL	17	UG/L	17	0.00	0.00
M	POTASSIUM	39000	UG/L	41000	5.00	2000.00
M	SELENIUM	2.3	UG/L	4.9	72.22	2.60
M	SILVER	ND	UG/L	0.079 J	200.00	0.08
M	SODIUM	320000	UG/L	320000	0.00	0.00
M	VANADIUM	1.9 J	UG/L	2.1 J	10.00	0.20
M	ZINC	4.1 J	UG/L	7 J	52.25	2.90
MISC	AMMONIA-N	43 D	MG/L	43 D	0.00	0.00
~~MISC~~	~~BIOCHEMICAL OXYGEN DEMAND~~	~~18~~	~~MG/L~~	~~18~~	~~0.00~~	~~0.00~~
MISC	CHEMICAL OXYGEN DEMAND	130	MG/L	130	0.00	0.00
MISC	CHLORIDE	440 D	MG/L	440 D	0.00	0.00
MISC	FLUORIDE	0.16	MG/L	0.16	0.00	0.00
~~MISC~~	~~NITRITE-N~~	~~0.0033 J~~	~~MG/L~~	~~0.0054 J~~	~~48.28~~	~~0.00~~
MISC	PH	7.2	S.U.	7.2	0.00	0.00
MISC	SULFATE	2.4	MG/L	2.5	4.08	0.10
MISC	TOTAL DISSOLVED RESIDUE	1900	MG/L	1900	0.00	0.00
MISC	TOTAL ORGANIC CARBON	41	MG/L	43	4.76	2.00
MISC	TOTAL PHENOLICS	0.0029 J	MG/L	ND	200.00	0.00
MISC	TOTAL PHOSPHORUS	0.23	MG/L	0.29	23.08	0.06

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

NTC GREAT LAKES
WATER DATA
1011375

FRACTION	CHEMICAL	NTC02GW0413	UNITS	NTCFD111710-01	RPD	D
MISC	TOTAL RESIDUE	32 D	MG/L	32 D	0.00	0.00

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

SAMPLE ID SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

SDG: 1011375

Project: Naval Station Great Lakes

Client Sample Id:	Lab Sample Id:
NTC02GW0213	1011375-01
NTC02GW0313	1011375-02
NTC02GW0413	1011375-03
NTC02GW0613	1011375-04
NTCFD111710-01	1011375-05
NTC02GW0113	1011407-01
NTC02GW0513	1011407-02

STATEMENT OF DATA QUALIFICATIONS

Dissolved Metals by EPA 6000/7000 Series Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-6020A

Sample/Analyte:

1011375-04	NTC02GW0613	Chromium
1011407-02	NTC02GW0513	Chromium

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: USEPA-6020A

Sample/Analyte:

1011375-01	NTC02GW0213	Chromium

Qualification: The % difference between the values of the isotopes monitored for this analyte exceeded 25%; the lower of the two results has been reported.

Analysis: USEPA-6020A

Sample/Analyte:

1011375-04	NTC02GW0613	Nickel
1011407-02	NTC02GW0513	Nickel

STATEMENT OF DATA QUALIFICATIONS

Total Metals by EPA 6000/7000 Series Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: USEPA-6020A

Sample/Analyte:		
1011375-03	NTC02GW0413	Chromium
1011375-04	NTC02GW0613	Chromium
1011375-05	NTCFD111710-01	Chromium
1011407-01	NTC02GW0113	Chromium
1011407-02	NTC02GW0513	Chromium

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: USEPA-6010C

Sample/Analyte:		
1011375-01	NTC02GW0213	Iron
1011375-02	NTC02GW0313	Iron
1011375-03	NTC02GW0413	Iron
1011375-04	NTC02GW0613	Iron
1011375-05	NTCFD111710-01	Iron
1011407-01	NTC02GW0113	Iron
1011407-02	NTC02GW0513	Iron

Analysis: USEPA-6020A

Sample/Analyte:		
1011375-01	NTC02GW0213	Chromium

Qualification: The % difference between the values of the isotopes monitored for this analyte exceeded 25%; the lower of the two results has been reported.

Analysis: USEPA-6020A

Sample/Analyte:		
1011375-01	NTC02GW0213	Cadmium
1011375-03	NTC02GW0413	Copper
1011375-03	NTC02GW0413	Selenium
1011375-05	NTCFD111710-01	Copper
1011407-02	NTC02GW0513	Cadmium

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/24/10	7	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/29/10	11	180	

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	

HOLDING TIME SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	NA	11/29/10	12	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/29/10	13	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/29/10	11	180	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Control Limt: +/- 10.00%
Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29031-CCV1	Aluminum	2500	2470	99	ug/L	11/29/10 11:44
	Aluminum	2500	2470	99	ug/L	11/29/10 11:44
	Calcium	5.00	4.83	97	mg/L	11/29/10 11:44
	Calcium	5.00	4.83	97	mg/L	11/29/10 11:44
	Iron	500	489	98	ug/L	11/29/10 11:44
	Iron	500	489	98	ug/L	11/29/10 11:44
	Magnesium	5.00	4.89	98	mg/L	11/29/10 11:44
	Magnesium	5.00	4.89	98	mg/L	11/29/10 11:44
	Potassium	5.00	5.04	101	mg/L	11/29/10 11:44
	Potassium	5.00	5.04	101	mg/L	11/29/10 11:44
	Sodium	5.00	4.97	99	mg/L	11/29/10 11:44
	Sodium	5.00	4.97	99	mg/L	11/29/10 11:44
0K29031-CCV2	Aluminum	2500	2510	100	ug/L	11/29/10 12:19
	Aluminum	2500	2510	100	ug/L	11/29/10 12:19
	Calcium	5.00	4.84	97	mg/L	11/29/10 12:19
	Calcium	5.00	4.84	97	mg/L	11/29/10 12:19
	Iron	500	486	97	ug/L	11/29/10 12:19
	Iron	500	486	97	ug/L	11/29/10 12:19
	Magnesium	5.00	4.92	98	mg/L	11/29/10 12:19
	Magnesium	5.00	4.92	98	mg/L	11/29/10 12:19
	Potassium	5.00	5.01	100	mg/L	11/29/10 12:19
	Potassium	5.00	5.01	100	mg/L	11/29/10 12:19
	Sodium	5.00	5.06	101	mg/L	11/29/10 12:19
	Sodium	5.00	5.06	101	mg/L	11/29/10 12:19
0K29031-CCV3	Aluminum	2500	2550	102	ug/L	11/29/10 13:06
	Aluminum	2500	2550	102	ug/L	11/29/10 13:06
	Calcium	5.00	4.88	98	mg/L	11/29/10 13:06
	Calcium	5.00	4.88	98	mg/L	11/29/10 13:06
	Iron	500	490	98	ug/L	11/29/10 13:06
	Iron	500	490	98	ug/L	11/29/10 13:06
	Magnesium	5.00	5.00	100	mg/L	11/29/10 13:06
	Magnesium	5.00	5.00	100	mg/L	11/29/10 13:06
	Potassium	5.00	4.96	99	mg/L	11/29/10 13:06
	Potassium	5.00	4.96	99	mg/L	11/29/10 13:06
	Sodium	5.00	5.18	104	mg/L	11/29/10 13:06
	Sodium	5.00	5.18	104	mg/L	11/29/10 13:06
0K29031-CCV4	Aluminum	2500	2510	100	ug/L	11/29/10 13:53
	Aluminum	2500	2510	100	ug/L	11/29/10 13:53

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031
Control Limt: +/- 10.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29031-CCV4	Calcium	5.00	4.82	96	mg/L	11/29/10 13:53
	Calcium	5.00	4.82	96	mg/L	11/29/10 13:53
	Iron	500	485	97	ug/L	11/29/10 13:53
	Iron	500	485	97	ug/L	11/29/10 13:53
	Magnesium	5.00	4.96	99	mg/L	11/29/10 13:53
	Magnesium	5.00	4.96	99	mg/L	11/29/10 13:53
	Potassium	5.00	5.00	100	mg/L	11/29/10 13:53
	Potassium	5.00	5.00	100	mg/L	11/29/10 13:53
	Sodium	5.00	5.16	103	mg/L	11/29/10 13:53
	Sodium	5.00	5.16	103	mg/L	11/29/10 13:53
0K29031-CCV5	Aluminum	2500	2630	105	ug/L	11/29/10 14:43
	Aluminum	2500	2630	105	ug/L	11/29/10 14:43
	Calcium	5.00	5.07	101	mg/L	11/29/10 14:43
	Calcium	5.00	5.07	101	mg/L	11/29/10 14:43
	Iron	500	510	102	ug/L	11/29/10 14:43
	Iron	500	510	102	ug/L	11/29/10 14:43
	Magnesium	5.00	5.18	104	mg/L	11/29/10 14:43
	Magnesium	5.00	5.18	104	mg/L	11/29/10 14:43
	Potassium	5.00	5.10	102	mg/L	11/29/10 14:43
	Potassium	5.00	5.10	102	mg/L	11/29/10 14:43
	Sodium	5.00	5.37	107	mg/L	11/29/10 14:43
	Sodium	5.00	5.37	107	mg/L	11/29/10 14:43
0K29031-CCV6	Aluminum	2500	2560	103	ug/L	11/29/10 15:29
	Aluminum	2500	2560	103	ug/L	11/29/10 15:29
	Calcium	5.00	4.92	98	mg/L	11/29/10 15:29
	Calcium	5.00	4.92	98	mg/L	11/29/10 15:29
	Iron	500	496	99	ug/L	11/29/10 15:29
	Iron	500	496	99	ug/L	11/29/10 15:29
	Magnesium	5.00	5.05	101	mg/L	11/29/10 15:29
	Magnesium	5.00	5.05	101	mg/L	11/29/10 15:29
	Potassium	5.00	5.07	101	mg/L	11/29/10 15:29
	Potassium	5.00	5.07	101	mg/L	11/29/10 15:29
	Sodium	5.00	5.20	104	mg/L	11/29/10 15:29
	Sodium	5.00	5.20	104	mg/L	11/29/10 15:29

* Values outside of QC limits

CRDL STANDARD

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29031

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29031-CRL1	Aluminum	100	118	118	ug/L	50 - 150
	Aluminum	100	118	118	ug/L	50 - 150
	Calcium	1.00	0.998	100	mg/L	50 - 150
	Calcium	1.00	0.998	100	mg/L	50 - 150
	Iron	20.0	22.1	111	ug/L	50 - 150
	Iron	20.0	22.1	111	ug/L	50 - 150
	Magnesium	1.00	0.993	99	mg/L	50 - 150
	Magnesium	1.00	0.993	99	mg/L	50 - 150
	Potassium	0.200	0.245	122	mg/L	50 - 150
	Potassium	0.200	0.245	122	mg/L	50 - 150
	Sodium	1.00	0.993	99	mg/L	50 - 150
	Sodium	1.00	0.993	99	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB1	Aluminum	3.1	ug/L	28	100	U	11/29/10 11:48
	Aluminum	3.1	ug/L	28	100	U	11/29/10 11:48
	Calcium	0.040	mg/L	0.067	0.50	U	11/29/10 11:48
	Calcium	0.040	mg/L	0.067	0.50	U	11/29/10 11:48
	Iron	2.6	ug/L	4.2	20	U	11/29/10 11:48
	Iron	2.6	ug/L	4.2	20	U	11/29/10 11:48
	Magnesium	0.027	mg/L	0.048	0.50	U	11/29/10 11:48
	Magnesium	0.027	mg/L	0.048	0.50	U	11/29/10 11:48
	Potassium	-0.062	mg/L	0.082	0.20	U	11/29/10 11:48
	Potassium	-0.062	mg/L	0.082	0.20	U	11/29/10 11:48
	Sodium	-0.012	mg/L	0.14	0.50	U	11/29/10 11:48
	Sodium	-0.012	mg/L	0.14	0.50	U	11/29/10 11:48
0K29031-CCB2	Aluminum	-6.8	ug/L	28	100	U	11/29/10 12:23
	Aluminum	-6.8	ug/L	28	100	U	11/29/10 12:23
	Calcium	0.038	mg/L	0.067	0.50	U	11/29/10 12:23
	Calcium	0.038	mg/L	0.067	0.50	U	11/29/10 12:23
	Iron	3.6	ug/L	4.2	20	U	11/29/10 12:23
	Iron	3.6	ug/L	4.2	20	U	11/29/10 12:23
	Magnesium	0.039	mg/L	0.048	0.50	U	11/29/10 12:23
	Magnesium	0.039	mg/L	0.048	0.50	U	11/29/10 12:23
	Potassium	0.0086	mg/L	0.082	0.20	U	11/29/10 12:23
	Potassium	0.0086	mg/L	0.082	0.20	U	11/29/10 12:23
	Sodium	-0.0093	mg/L	0.14	0.50	U	11/29/10 12:23
	Sodium	-0.0093	mg/L	0.14	0.50	U	11/29/10 12:23
0K29031-CCB3	Aluminum	2.4	ug/L	28	100	U	11/29/10 13:10
	Aluminum	2.4	ug/L	28	100	U	11/29/10 13:10
	Calcium	0.042	mg/L	0.067	0.50	U	11/29/10 13:10
	Calcium	0.042	mg/L	0.067	0.50	U	11/29/10 13:10
	Iron	2.5	ug/L	4.2	20	U	11/29/10 13:10
	Iron	2.5	ug/L	4.2	20	U	11/29/10 13:10
	Magnesium	0.035	mg/L	0.048	0.50	U	11/29/10 13:10
	Magnesium	0.035	mg/L	0.048	0.50	U	11/29/10 13:10
	Potassium	-0.012	mg/L	0.082	0.20	U	11/29/10 13:10

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29031
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB3	Potassium	-0.012	mg/L	0.082	0.20	U	11/29/10 13:10
	Sodium	0.032	mg/L	0.14	0.50	U	11/29/10 13:10
	Sodium	0.032	mg/L	0.14	0.50	U	11/29/10 13:10
0K29031-CCB4	Aluminum	4.9	ug/L	28	100	U	11/29/10 13:57
	Aluminum	4.9	ug/L	28	100	U	11/29/10 13:57
	Calcium	0.037	mg/L	0.067	0.50	U	11/29/10 13:57
	Calcium	0.037	mg/L	0.067	0.50	U	11/29/10 13:57
	Iron	2.7	ug/L	4.2	20	U	11/29/10 13:57
	Iron	2.7	ug/L	4.2	20	U	11/29/10 13:57
	Magnesium	0.025	mg/L	0.048	0.50	U	11/29/10 13:57
	Magnesium	0.025	mg/L	0.048	0.50	U	11/29/10 13:57
	Potassium	-0.030	mg/L	0.082	0.20	U	11/29/10 13:57
	Potassium	-0.030	mg/L	0.082	0.20	U	11/29/10 13:57
	Sodium	0.034	mg/L	0.14	0.50	U	11/29/10 13:57
	Sodium	0.034	mg/L	0.14	0.50	U	11/29/10 13:57
0K29031-CCB5	Aluminum	-13	ug/L	28	100	U	11/29/10 14:47
	Aluminum	-13	ug/L	28	100	U	11/29/10 14:47
	Calcium	0.036	mg/L	0.067	0.50	U	11/29/10 14:47
	Calcium	0.036	mg/L	0.067	0.50	U	11/29/10 14:47
	Iron	3.9	ug/L	4.2	20	U	11/29/10 14:47
	Iron	3.9	ug/L	4.2	20	U	11/29/10 14:47
	Magnesium	0.023	mg/L	0.048	0.50	U	11/29/10 14:47
	Magnesium	0.023	mg/L	0.048	0.50	U	11/29/10 14:47
	Potassium	0.0075	mg/L	0.082	0.20	U	11/29/10 14:47
	Potassium	0.0075	mg/L	0.082	0.20	U	11/29/10 14:47
	Sodium	0.052	mg/L	0.14	0.50	U	11/29/10 14:47
	Sodium	0.052	mg/L	0.14	0.50	U	11/29/10 14:47
0K29031-CCB6	Aluminum	8.2	ug/L	28	100	U	11/29/10 15:33
	Aluminum	8.2	ug/L	28	100	U	11/29/10 15:33
	Calcium	0.034	mg/L	0.067	0.50	U	11/29/10 15:33
	Calcium	0.034	mg/L	0.067	0.50	U	11/29/10 15:33
	Iron	3.5	ug/L	4.2	20	U	11/29/10 15:33
	Iron	3.5	ug/L	4.2	20	U	11/29/10 15:33

BLANKS
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument ID: 311

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29031-CCB6	Magnesium	0.032	mg/L	0.048	0.50	U	11/29/10 15:33
	Magnesium	0.032	mg/L	0.048	0.50	U	11/29/10 15:33
	Potassium	-0.033	mg/L	0.082	0.20	U	11/29/10 15:33
	Potassium	-0.033	mg/L	0.082	0.20	U	11/29/10 15:33
	Sodium	0.020	mg/L	0.14	0.50	U	11/29/10 15:33
	Sodium	0.020	mg/L	0.14	0.50	U	11/29/10 15:33

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012888-BLK1 File ID: 0K29031-015

Prepared: 11/23/10 18:00 Analyzed: 11/29/10 12:27

Preparation: 3010A Digestion Initial/Final: 25 mL / 25 mL

QC Batch: 1012888 Sequence: 0K29031 Calibration: 0K30006 Instrument: 311

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7429-90-5	Aluminum, Total	100	ug/L	28	100	U
7440-70-2	Calcium, Total	500	ug/L	67	500	U
7439-89-6	Iron, Total	4.3	ug/L	4.2	20	J
7439-95-4	Magnesium, Total	500	ug/L	48	500	U
7440-09-7	Potassium, Total	200	ug/L	82	200	U
7440-23-5	Sodium, Total	500	ug/L	140	500	U

METHOD BLANK DATA SHEET
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012910-BLK1 File ID: 0K29031-039

Prepared: 11/24/10 07:00 Analyzed: 11/29/10 14:01

Preparation: General Metals Prep Initial/Final: 25 mL / 25 mL

QC Batch: 1012910 Sequence: 0K29031 Calibration: 0K30006 Instrument: 311

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7429-90-5	Aluminum, Dissolved	100	ug/L	28	100	U
7440-70-2	Calcium, Dissolved	500	ug/L	67	500	U
7439-89-6	Iron, Dissolved	20	ug/L	4.2	20	U
7439-95-4	Magnesium, Dissolved	500	ug/L	48	500	U
7440-09-7	Potassium, Dissolved	200	ug/L	82	200	U
7440-23-5	Sodium, Dissolved	500	ug/L	140	500	U

ICP INTERFERENCE CHECK SAMPLE

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0K29031

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units
0K29031-IFA1	Aluminum	100000	98400	98	ug/L
	Aluminum	100000	98400	98	ug/L
	Calcium	100	93.4	93	mg/L
	Calcium	100	93.4	93	mg/L
	Iron	40000	37500	94	ug/L
	Iron	40000	37500	94	ug/L
	Magnesium	100	95.5	96	mg/L
	Magnesium	100	95.5	96	mg/L
	Potassium	0.00	0.00219		mg/L
	Potassium	0.00	0.00219		mg/L
	Sodium	0.00	0.00366		mg/L
	Sodium	0.00	0.00366		mg/L
0K29031-IFA2	Aluminum	0.00	54.3		ug/L
	Aluminum	0.00	54.3		ug/L
	Calcium	0.00	0.0325		mg/L
	Calcium	0.00	0.0325		mg/L
	Iron	0.00	8.66		ug/L
	Iron	0.00	8.66		ug/L
	Magnesium	0.00	-0.0813		mg/L
	Magnesium	0.00	-0.0813		mg/L
	Potassium	0.00	-0.00161		mg/L
	Potassium	0.00	-0.00161		mg/L
	Sodium	0.00	0.0323		mg/L
	Sodium	0.00	0.0323		mg/L
0K29031-IFB1	Aluminum	100000	99500	100	ug/L
	Aluminum	100000	99500	100	ug/L
	Calcium	100	94.1	94	mg/L
	Calcium	100	94.1	94	mg/L
	Iron	40000	37800	94	ug/L
	Iron	40000	37800	94	ug/L
	Magnesium	100	96.6	97	mg/L
	Magnesium	100	96.6	97	mg/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0K29031

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0K30006

Instrument ID: 311

Lab Sample ID	Analyte	True	Found	%R	Units
0K29031-IFB2	Aluminum	1000	1080	108	ug/L
	Aluminum	1000	1080	108	ug/L
	Calcium	5.00	4.66	93	mg/L
	Calcium	5.00	4.66	93	mg/L
	Magnesium	5.00	4.87	97	mg/L
	Magnesium	5.00	4.87	97	mg/L
	Sodium	5.00	5.11	102	mg/L
	Sodium	5.00	5.11	102	mg/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012888-BS1
Preparation: 3010A Digestion
Initial/Final: 25 mL / 25 mL
Sequence: 0K29031

QC Batch: 1012888

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Aluminum, Total	2000	1960	98	80 - 120	ug/L
Calcium, Total	20000	18300	92	80 - 120	ug/L
Iron, Total	400	384	96	80 - 120	ug/L
Magnesium, Total	20000	19600	98	80 - 120	ug/L
Potassium, Total	20000	19600	98	80 - 120	ug/L
Sodium, Total	20000	20200	101	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012910-BS1
Preparation: General Metals Prep
Initial/Final: 25 mL / 25 mL

QC Batch: 1012910
Sequence: 0K29031

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Aluminum, Dissolved	2000	2010	101	80 - 120	ug/L
Calcium, Dissolved	20000	18700	93	80 - 120	ug/L
Iron, Dissolved	400	391	98	80 - 120	ug/L
Magnesium, Dissolved	20000	20100	100	80 - 120	ug/L
Potassium, Dissolved	20000	19700	98	80 - 120	ug/L
Sodium, Dissolved	20000	20600	103	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012888 QC Batch Matrix: Water

Preparation: 3010A Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/23/10 18:00	
NTC02GW0313	1011375-02	11/23/10 18:00	
NTC02GW0413	1011375-03	11/23/10 18:00	
NTC02GW0613	1011375-04	11/23/10 18:00	
NTCFD111710-01	1011375-05	11/23/10 18:00	
NTC02GW0113	1011407-01	11/23/10 18:00	
NTC02GW0513	1011407-02	11/23/10 18:00	
Blank	1012888-BLK1	11/23/10 18:00	
LCS	1012888-BS1	11/23/10 18:00	

QC BATCH SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012910 QC Batch Matrix: Water

Preparation: General Metals Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/24/10 07:00	
NTC02GW0613	1011375-04	11/24/10 07:00	
NTC02GW0513	1011407-02	11/24/10 07:00	
Blank	1012910-BLK1	11/24/10 07:00	
LCS	1012910-BS1	11/24/10 07:00	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012888

Printed: 12/14/2010 1:22:53PM

Metals, Water, 3010A Digestion

Batch comments:

DWJ 11-23-10 6:00PM-2:00AM
INST#217 @94.2C #234
HOTBLOCK VESSEL LOT#1008257

00787

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-01	V	Nov-23-10 18:00		25	25	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29031 Added for SequenceQC in: 0K29031
Al Diss 6010B	*Al Total 6010B*	*Ca Diss 6010B*	*Ca Total 6010B*	*Fe Diss 6010B*	*Fe Total 6010B*	*K Diss 6010B*	*K Total 6010B*	*Mg Diss 6010B*	*Mg Total 6010B*
Na Diss 6010B	*Na Total 6010B*								
1011352-02	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-01	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-02	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-03	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-04	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011356-05	J	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-01	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-02	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-03	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-04	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011375-05	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				

Comments:	Analyst Initials:

Metals, Water, 3010A Digestion

Batch comments:

DWJ 11-23-10 6:00PM-2:00AM
INST#217 @94.2C #234
HOTBLOCK VESSEL LOT#1008257

00788

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011407-01	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1011407-02	I	Nov-23-10 18:00	DWJ	25	25	TETRA TECH NUS - Pittsburgh			
Al Total 6010B	*Ca Total 6010B*	*Fe Total 6010B*	*K Total 6010B*	*Mg Total 6010B*	*Na Total 6010B*				
1012888-BLK1		Nov-23-10 18:00	DWJ	25	25				
1012888-BS1		Nov-23-10 18:00	DWJ	25	25		0060826	200	
1012888-MS1		Nov-23-10 18:00	DWJ	25	25	1011352-01	0060826	200	
1012888-MSD1		Nov-23-10 18:00	DWJ	25	25	1011352-01	0060826	200	
1012888-PS1		Nov-29-10 11:30	JMF	4	4	1011352-01	0020878	20	
1012888-PS2		Nov-29-10 11:30	JMF	1	1	1011352-01	0020878	50	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012910

Printed: 12/14/2010 1:23:18PM

Metals, Water, General Metals Prep

Batch comments:

MAS 11/24/10 7:00AM-4;00PM
INST#219@93.4C#235
HOTBLOCK VESSEL LOT#1008257

00789

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-02	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011356-01	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011356-03	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011356-04	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011356-05	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011375-01	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011375-04	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1011407-02	N	Nov-24-10 07:00	MAS	25	25	TETRA TECH NUS - Pittsburgh			
Al Diss 6010B	*Ca Diss 6010B*	*Fe Diss 6010B*	*K Diss 6010B*	*Mg Diss 6010B*	*Na Diss 6010B*				
1012910-BLK1		Nov-24-10 07:00	MAS	25	25				
1012910-BS1		Nov-24-10 07:00	MAS	25	25		0060826	200	
1012910-MS1		Nov-24-10 07:00	MAS	25	25	1011352-02	0060826	200	
1012910-MSD1		Nov-24-10 07:00	MAS	25	25	1011352-02	0060826	200	
1012910-PS1		Nov-29-10 11:30	JMF	4	4	1011352-02	0020878	20	
1012910-PS2		Nov-29-10 11:30	JMF	1	1	1011352-02	0020878	50	

Comments:

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K29031-CAL1	0K29031-001	11/29/10 11:25
Cal Standard	0K29031-CAL2	0K29031-002	11/29/10 11:29
Cal Standard	0K29031-CAL3	0K29031-003	11/29/10 11:33
Cal Standard	0K29031-CAL4	0K29031-004	11/29/10 11:37
Cal Standard	0K29031-CAL5	0K29031-005	11/29/10 11:41
Secondary Cal Check	0K29031-SCV1	0K29031-006	11/29/10 11:44
Calibration Check	0K29031-CCV1	0K29031-006	11/29/10 11:44
Calibration Blank	0K29031-CCB1	0K29031-007	11/29/10 11:48
Instrument RL Check	0K29031-CRL1	0K29031-008	11/29/10 11:52
Interference Check A	0K29031-IFA1	0K29031-009	11/29/10 11:56
Interference Check A	0K29031-IFA2	0K29031-010	11/29/10 12:02
Interference Check B	0K29031-IFB1	0K29031-011	11/29/10 12:08
Interference Check B	0K29031-IFB2	0K29031-012	11/29/10 12:13
Calibration Check	0K29031-CCV2	0K29031-013	11/29/10 12:19
Calibration Blank	0K29031-CCB2	0K29031-014	11/29/10 12:23
Blank	1012888-BLK1	0K29031-015	11/29/10 12:27
LCS	1012888-BS1	0K29031-016	11/29/10 12:31
Serial Dilution	0K29031-SRD1	0K29031-020	11/29/10 12:46
Calibration Check	0K29031-CCV3	0K29031-025	11/29/10 13:06
Calibration Blank	0K29031-CCB3	0K29031-026	11/29/10 13:10
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0213	1011375-01	0K29031-030	11/29/10 13:26
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29
NTC02GW0313	1011375-02	0K29031-031	11/29/10 13:29

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0413	1011375-03	0K29031-032	11/29/10 13:33
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTC02GW0613	1011375-04	0K29031-033	11/29/10 13:36
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTCFD111710-01	1011375-05	0K29031-034	11/29/10 13:40
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0113	1011407-01	0K29031-035	11/29/10 13:43
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
NTC02GW0513	1011407-02	0K29031-036	11/29/10 13:48
Calibration Check	0K29031-CCV4	0K29031-037	11/29/10 13:53
Calibration Blank	0K29031-CCB4	0K29031-038	11/29/10 13:57

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6010C

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29031

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30006
Instrument: 311

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012910-BLK1	0K29031-039	11/29/10 14:01
LCS	1012910-BS1	0K29031-040	11/29/10 14:05
Serial Dilution	0K29031-SRD2	0K29031-044	11/29/10 14:23
Calibration Check	0K29031-CCV5	0K29031-049	11/29/10 14:43
Calibration Blank	0K29031-CCB5	0K29031-050	11/29/10 14:47
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0213	1011375-01	0K29031-052	11/29/10 14:54
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0613	1011375-04	0K29031-053	11/29/10 14:57
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
NTC02GW0513	1011407-02	0K29031-054	11/29/10 15:02
Serial Dilution	0K29031-SRD3	0K29031-056	11/29/10 15:10
Serial Dilution	0K29031-SRD4	0K29031-059	11/29/10 15:21
Calibration Check	0K29031-CCV6	0K29031-061	11/29/10 15:29
Calibration Blank	0K29031-CCB6	0K29031-062	11/29/10 15:33

Mo 202.031†	272.9	19.6085 ug/L	0.23321	19.6085 ug/L	0.23321	1.19%
Na 589.592†	214094.8	27.0727 mg/L	0.53964	27.0727 mg/L	0.53964	1.99%
Ni 231.604†	174.2	6.11790 ug/L	0.575029	6.11790 ug/L	0.575029	9.40%
Pb 220.353†	7.8	1.81168 ug/L	2.180108	1.81168 ug/L	2.180108	120.34%
Sb 217.584†	-31.6	4.21039 ug/L	1.403977	4.21039 ug/L	1.403977	33.35%
Se 196.026†	-13.2	-42.8092 ug/L	12.12187	-42.8092 ug/L	12.12187	28.32%
Si 251.611†	145471.1	8424.49 ug/L	1.917	8424.49 ug/L	1.917	0.02%
Sn 189.927†	-105.9	-18.9402 ug/L	3.03521	-18.9402 ug/L	3.03521	16.03%
Sr 407.771†	2099960.5	1940.34 ug/L	42.808	1940.34 ug/L	42.808	2.21%
Ti 334.940†	780.0	22.1463 ug/L	0.06365	22.1463 ug/L	0.06365	0.29%
Tl 190.801†	-18.2	-13.8006 ug/L	3.48120	-13.8006 ug/L	3.48120	25.23%
V 292.395†	-9.6	1.08473 ug/L	0.316103	1.08473 ug/L	0.316103	29.14%
Zn 206.200†	64.1	-0.126763 ug/L	0.5841880	-0.126763 ug/L	0.5841880	460.85%

Sequence No.: 34
Sample ID: 1011375-05 Sample NTCFD11710-01
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 11/29/2010 1:40:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Potassium rep result 41000 ug/L

Replicate Data: 1011375-05

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 357.234	586330.2	586330.2	91.5218	%			13:41:34
1	Al 396.153†	110.2	-403.1	-66.1461	ug/L	-66.1461	ug/L	13:41:39
1	Ba 455.398†	405904.3	443133.0	1313.90	ug/L	1313.90	ug/L	13:41:34
1	Ca 315.887†	598712.2	654173.5	171.462	mg/L	171.462	mg/L	13:41:34
1	Fe 238.204†	49145.6	53678.4	11839.6	ug/L	11839.6	ug/L	13:41:39
1	K 766.490	53153.7	52459.0	40.5094	mg/L	40.5094	mg/L	13:41:34
1	Li 670.784†	526.6	880.6	14.7883	ug/L	14.7883	ug/L	13:41:39
1	Mg 279.071†	91578.2	99945.2	130.197	mg/L	130.197	mg/L	13:41:34
1	Na 589.592†	2340175.3	2556067.2	323.389	mg/L	323.389	mg/L	13:41:34
1	Sr 407.771†	1771835.1	1933671.4	1786.84	ug/L	1786.84	ug/L	13:41:34
1	Ti 334.940†	15.4	-27.0	3.60003	ug/L	3.60003	ug/L	13:41:39
1	Y 360.076	443534.9	443534.9	90.9397	%			13:41:57
1	Ag 328.068†	211.8	-205.8	-0.473230	ug/L	-0.473230	ug/L	13:41:57
1	As 188.979†	-22.5	5.4	-5.23886	ug/L	-5.23886	ug/L	13:42:17
1	B 249.677†	28110.1	30907.5	1126.83	ug/L	1126.83	ug/L	13:41:57
1	Be 234.861†	563.3	982.3	-1.09437	ug/L	-1.09437	ug/L	13:41:57
1	Cd 214.437†	588.7	149.5	0.707591	ug/L	0.707591	ug/L	13:42:17
1	Ce 413.764†	-677.9	-179.3	-5.57268	ug/L	-5.57268	ug/L	13:41:57
1	Co 228.616†	-31.1	105.4	5.88139	ug/L	5.88139	ug/L	13:42:17
1	Cr 205.557†	-0.4	36.8	1.69673	ug/L	1.69673	ug/L	13:42:17
1	Cu 327.397†	-834.0	-217.7	-5.08923	ug/L	-5.08923	ug/L	13:41:57
1	Mn 257.610†	26526.3	28550.6	104.999	ug/L	104.999	ug/L	13:41:57
1	Mo 202.031†	240.2	119.3	8.52683	ug/L	8.52683	ug/L	13:42:17
1	Ni 231.604†	518.9	262.9	9.87977	ug/L	9.87977	ug/L	13:42:17
1	Pb 220.353†	42.9	-0.3	-0.379131	ug/L	-0.379131	ug/L	13:42:17
1	Sb 217.584†	-121.4	-92.9	23.6042	ug/L	23.6042	ug/L	13:42:17
1	Se 196.026†	-69.4	-31.3	-81.0138	ug/L	-81.0138	ug/L	13:42:17
1	Si 251.611†	238902.0	262065.5	15196.0	ug/L	15196.0	ug/L	13:41:57
1	Sn 189.927†	-92.4	-101.7	-10.8622	ug/L	-10.8622	ug/L	13:42:17
1	Tl 190.801†	-62.6	-14.6	-11.7780	ug/L	-11.7780	ug/L	13:42:17
1	V 292.395†	-1912.2	3.9	-0.721624	ug/L	-0.721624	ug/L	13:41:57
1	Zn 206.200†	-4.1	113.3	0.942009	ug/L	0.942009	ug/L	13:42:17
2	Sc 357.234	584532.5	584532.5	91.2412	%			13:41:46
2	Al 396.153†	167.2	-340.3	-52.3979	ug/L	-52.3979	ug/L	13:41:51
2	Ba 455.398†	405231.4	443759.6	1315.76	ug/L	1315.76	ug/L	13:41:46
2	Ca 315.887†	597883.5	655277.1	171.751	mg/L	171.751	mg/L	13:41:46
2	Fe 238.204†	48718.2	53375.1	11772.6	ug/L	11772.6	ug/L	13:41:51
2	K 766.490	53162.3	52467.6	40.5160	mg/L	40.5160	mg/L	13:41:46
2	Li 670.784†	518.4	873.4	14.6579	ug/L	14.6579	ug/L	13:41:51
2	Mg 279.071†	91757.2	100449.1	130.854	mg/L	130.854	mg/L	13:41:46
2	Na 589.592†	2337720.1	2561240.3	324.044	mg/L	324.044	mg/L	13:41:46
2	Sr 407.771†	1768357.2	1935813.7	1788.82	ug/L	1788.82	ug/L	13:41:46
2	Ti 334.940†	39.4	-0.6	4.20799	ug/L	4.20799	ug/L	13:41:51
2	Y 360.076	445281.5	445281.5	91.2978	%			13:42:23
2	Ag 328.068†	242.2	-173.3	-0.140160	ug/L	-0.140160	ug/L	13:42:23
2	As 188.979†	-21.1	7.0	-3.57957	ug/L	-3.57957	ug/L	13:42:43

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Dissolved Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	11	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	12	180	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/29/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/29/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	

HOLDING TIME SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Total Metals

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	180	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093
Control Limt: +/- 10.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV1	Antimony	40.0	37.4	94	ug/L	11/29/10 18:23
	Antimony	40.0	37.4	94	ug/L	11/29/10 18:23
	Arsenic	40.0	37.6	94	ug/L	11/29/10 18:23
	Arsenic	40.0	37.6	94	ug/L	11/29/10 18:23
	Barium	40.0	37.0	93	ug/L	11/29/10 18:23
	Barium	40.0	37.0	93	ug/L	11/29/10 18:23
	Beryllium	40.0	37.1	93	ug/L	11/29/10 18:23
	Beryllium	40.0	37.1	93	ug/L	11/29/10 18:23
	Cadmium	40.0	37.0	93	ug/L	11/29/10 18:23
	Cadmium	40.0	37.0	93	ug/L	11/29/10 18:23
	Chromium	40.0	37.5	94	ug/L	11/29/10 18:23
	Chromium	40.0	37.5	94	ug/L	11/29/10 18:23
	Cobalt	40.0	38.4	96	ug/L	11/29/10 18:23
	Cobalt	40.0	38.4	96	ug/L	11/29/10 18:23
	Copper	40.0	37.9	95	ug/L	11/29/10 18:23
	Copper	40.0	37.9	95	ug/L	11/29/10 18:23
	Lead	40.0	36.3	91	ug/L	11/29/10 18:23
	Lead	40.0	36.3	91	ug/L	11/29/10 18:23
	Manganese	40.0	37.0	92	ug/L	11/29/10 18:23
	Manganese	40.0	37.0	92	ug/L	11/29/10 18:23
	Nickel	40.0	37.1	93	ug/L	11/29/10 18:23
	Nickel	40.0	37.1	93	ug/L	11/29/10 18:23
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:23
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:23
	Silver	40.0	37.8	95	ug/L	11/29/10 18:23
	Silver	40.0	37.8	95	ug/L	11/29/10 18:23
	Thallium	40.0	36.4	91	ug/L	11/29/10 18:23
	Thallium	40.0	36.4	91	ug/L	11/29/10 18:23
	Vanadium	40.0	36.9	92	ug/L	11/29/10 18:23
	Vanadium	40.0	36.9	92	ug/L	11/29/10 18:23
	Zinc	40.0	38.3	96	ug/L	11/29/10 18:23
	Zinc	40.0	38.3	96	ug/L	11/29/10 18:23
0K29093-CCV2	Antimony	40.0	36.7	92	ug/L	11/29/10 18:52
	Antimony	40.0	36.7	92	ug/L	11/29/10 18:52
	Arsenic	40.0	38.1	95	ug/L	11/29/10 18:52
	Arsenic	40.0	38.1	95	ug/L	11/29/10 18:52
	Barium	40.0	37.1	93	ug/L	11/29/10 18:52
	Barium	40.0	37.1	93	ug/L	11/29/10 18:52

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV2	Beryllium	40.0	36.5	91	ug/L	11/29/10 18:52
	Beryllium	40.0	36.5	91	ug/L	11/29/10 18:52
	Cadmium	40.0	37.0	92	ug/L	11/29/10 18:52
	Cadmium	40.0	37.0	92	ug/L	11/29/10 18:52
	Chromium	40.0	36.9	92	ug/L	11/29/10 18:52
	Chromium	40.0	36.9	92	ug/L	11/29/10 18:52
	Cobalt	40.0	38.8	97	ug/L	11/29/10 18:52
	Cobalt	40.0	38.8	97	ug/L	11/29/10 18:52
	Copper	40.0	38.1	95	ug/L	11/29/10 18:52
	Copper	40.0	38.1	95	ug/L	11/29/10 18:52
	Lead	40.0	36.7	92	ug/L	11/29/10 18:52
	Lead	40.0	36.7	92	ug/L	11/29/10 18:52
	Manganese	40.0	37.8	94	ug/L	11/29/10 18:52
	Manganese	40.0	37.8	94	ug/L	11/29/10 18:52
	Nickel	40.0	36.8	92	ug/L	11/29/10 18:52
	Nickel	40.0	36.8	92	ug/L	11/29/10 18:52
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:52
	Selenium	40.0	38.2	95	ug/L	11/29/10 18:52
	Silver	40.0	38.1	95	ug/L	11/29/10 18:52
	Silver	40.0	38.1	95	ug/L	11/29/10 18:52
	Thallium	40.0	36.8	92	ug/L	11/29/10 18:52
	Thallium	40.0	36.8	92	ug/L	11/29/10 18:52
	Vanadium	40.0	36.5	91	ug/L	11/29/10 18:52
	Vanadium	40.0	36.5	91	ug/L	11/29/10 18:52
	Zinc	40.0	38.5	96	ug/L	11/29/10 18:52
	Zinc	40.0	38.5	96	ug/L	11/29/10 18:52
0K29093-CCV3	Antimony	40.0	37.4	93	ug/L	11/29/10 19:59
	Antimony	40.0	37.4	93	ug/L	11/29/10 19:59
	Arsenic	40.0	37.1	93	ug/L	11/29/10 19:59
	Arsenic	40.0	37.1	93	ug/L	11/29/10 19:59
	Barium	40.0	37.5	94	ug/L	11/29/10 19:59
	Barium	40.0	37.5	94	ug/L	11/29/10 19:59
	Beryllium	40.0	37.1	93	ug/L	11/29/10 19:59
	Beryllium	40.0	37.1	93	ug/L	11/29/10 19:59
	Cadmium	40.0	37.6	94	ug/L	11/29/10 19:59
	Cadmium	40.0	37.6	94	ug/L	11/29/10 19:59
	Chromium	40.0	37.6	94	ug/L	11/29/10 19:59
	Chromium	40.0	37.6	94	ug/L	11/29/10 19:59

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV3	Cobalt	40.0	38.2	96	ug/L	11/29/10 19:59
	Cobalt	40.0	38.2	96	ug/L	11/29/10 19:59
	Copper	40.0	38.2	95	ug/L	11/29/10 19:59
	Copper	40.0	38.2	95	ug/L	11/29/10 19:59
	Lead	40.0	37.6	94	ug/L	11/29/10 19:59
	Lead	40.0	37.6	94	ug/L	11/29/10 19:59
	Manganese	40.0	37.6	94	ug/L	11/29/10 19:59
	Manganese	40.0	37.6	94	ug/L	11/29/10 19:59
	Nickel	40.0	36.9	92	ug/L	11/29/10 19:59
	Nickel	40.0	36.9	92	ug/L	11/29/10 19:59
	Selenium	40.0	38.1	95	ug/L	11/29/10 19:59
	Selenium	40.0	38.1	95	ug/L	11/29/10 19:59
	Silver	40.0	38.1	95	ug/L	11/29/10 19:59
	Silver	40.0	38.1	95	ug/L	11/29/10 19:59
	Thallium	40.0	37.3	93	ug/L	11/29/10 19:59
	Thallium	40.0	37.3	93	ug/L	11/29/10 19:59
	Vanadium	40.0	36.9	92	ug/L	11/29/10 19:59
	Vanadium	40.0	36.9	92	ug/L	11/29/10 19:59
	Zinc	40.0	38.7	97	ug/L	11/29/10 19:59
	Zinc	40.0	38.7	97	ug/L	11/29/10 19:59
0K29093-CCV4	Antimony	40.0	36.9	92	ug/L	11/29/10 21:02
	Antimony	40.0	36.9	92	ug/L	11/29/10 21:02
	Arsenic	40.0	37.3	93	ug/L	11/29/10 21:02
	Arsenic	40.0	37.3	93	ug/L	11/29/10 21:02
	Barium	40.0	36.7	92	ug/L	11/29/10 21:02
	Barium	40.0	36.7	92	ug/L	11/29/10 21:02
	Cadmium	40.0	37.0	93	ug/L	11/29/10 21:02
	Cadmium	40.0	37.0	93	ug/L	11/29/10 21:02
	Chromium	40.0	38.1	95	ug/L	11/29/10 21:02
	Chromium	40.0	38.1	95	ug/L	11/29/10 21:02
	Cobalt	40.0	39.5	99	ug/L	11/29/10 21:02
	Cobalt	40.0	39.5	99	ug/L	11/29/10 21:02
	Copper	40.0	37.6	94	ug/L	11/29/10 21:02
	Copper	40.0	37.6	94	ug/L	11/29/10 21:02
	Lead	40.0	36.3	91	ug/L	11/29/10 21:02
	Lead	40.0	36.3	91	ug/L	11/29/10 21:02
	Manganese	40.0	38.3	96	ug/L	11/29/10 21:02
	Manganese	40.0	38.3	96	ug/L	11/29/10 21:02

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093
Control Limt: +/- 10.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV4	Nickel	40.0	37.7	94	ug/L	11/29/10 21:02
	Nickel	40.0	37.7	94	ug/L	11/29/10 21:02
	Selenium	40.0	37.7	94	ug/L	11/29/10 21:02
	Selenium	40.0	37.7	94	ug/L	11/29/10 21:02
	Silver	40.0	37.8	95	ug/L	11/29/10 21:02
	Silver	40.0	37.8	95	ug/L	11/29/10 21:02
	Thallium	40.0	36.4	91	ug/L	11/29/10 21:02
	Thallium	40.0	36.4	91	ug/L	11/29/10 21:02
	Vanadium	40.0	37.6	94	ug/L	11/29/10 21:02
	Vanadium	40.0	37.6	94	ug/L	11/29/10 21:02
	Zinc	40.0	38.3	96	ug/L	11/29/10 21:02
	Zinc	40.0	38.3	96	ug/L	11/29/10 21:02
0K29093-CCV5	Antimony	40.0	36.6	91	ug/L	11/29/10 22:06
	Antimony	40.0	36.6	91	ug/L	11/29/10 22:06
	Arsenic	40.0	36.5	91	ug/L	11/29/10 22:06
	Arsenic	40.0	36.5	91	ug/L	11/29/10 22:06
	Barium	40.0	36.8	92	ug/L	11/29/10 22:06
	Barium	40.0	36.8	92	ug/L	11/29/10 22:06
	Cadmium	40.0	36.9	92	ug/L	11/29/10 22:06
	Cadmium	40.0	36.9	92	ug/L	11/29/10 22:06
	Chromium	40.0	37.6	94	ug/L	11/29/10 22:06
	Chromium	40.0	37.6	94	ug/L	11/29/10 22:06
	Cobalt	40.0	37.8	95	ug/L	11/29/10 22:06
	Cobalt	40.0	37.8	95	ug/L	11/29/10 22:06
	Copper	40.0	36.9	92	ug/L	11/29/10 22:06
	Copper	40.0	36.9	92	ug/L	11/29/10 22:06
	Lead	40.0	36.6	91	ug/L	11/29/10 22:06
	Lead	40.0	36.6	91	ug/L	11/29/10 22:06
	Manganese	40.0	36.9	92	ug/L	11/29/10 22:06
	Manganese	40.0	36.9	92	ug/L	11/29/10 22:06
	Nickel	40.0	36.1	90	ug/L	11/29/10 22:06
	Nickel	40.0	36.1	90	ug/L	11/29/10 22:06
	Selenium	40.0	38.0	95	ug/L	11/29/10 22:06
	Selenium	40.0	38.0	95	ug/L	11/29/10 22:06
	Silver	40.0	37.6	94	ug/L	11/29/10 22:06
	Silver	40.0	37.6	94	ug/L	11/29/10 22:06
	Thallium	40.0	36.9	92	ug/L	11/29/10 22:06
	Thallium	40.0	36.9	92	ug/L	11/29/10 22:06

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29093-CCV5	Vanadium	40.0	36.6	92	ug/L	11/29/10 22:06
	Vanadium	40.0	36.6	92	ug/L	11/29/10 22:06
	Zinc	40.0	37.9	95	ug/L	11/29/10 22:06
	Zinc	40.0	37.9	95	ug/L	11/29/10 22:06
0K29093-CCV6	Antimony	40.0	38.2	95	ug/L	11/29/10 22:56
	Antimony	40.0	38.2	95	ug/L	11/29/10 22:56
	Arsenic	40.0	38.1	95	ug/L	11/29/10 22:56
	Arsenic	40.0	38.1	95	ug/L	11/29/10 22:56
	Barium	40.0	38.0	95	ug/L	11/29/10 22:56
	Barium	40.0	38.0	95	ug/L	11/29/10 22:56
	Cadmium	40.0	37.3	93	ug/L	11/29/10 22:56
	Cadmium	40.0	37.3	93	ug/L	11/29/10 22:56
	Chromium	40.0	36.8	92	ug/L	11/29/10 22:56
	Chromium	40.0	36.8	92	ug/L	11/29/10 22:56
	Cobalt	40.0	36.1	90	ug/L	11/29/10 22:56
	Cobalt	40.0	36.1	90	ug/L	11/29/10 22:56
	Copper	40.0	36.8	92	ug/L	11/29/10 22:56
	Copper	40.0	36.8	92	ug/L	11/29/10 22:56
	Lead	40.0	37.9	95	ug/L	11/29/10 22:56
	Lead	40.0	37.9	95	ug/L	11/29/10 22:56
	Manganese	40.0	37.1	93	ug/L	11/29/10 22:56
	Manganese	40.0	37.1	93	ug/L	11/29/10 22:56
	Selenium	40.0	39.7	99	ug/L	11/29/10 22:56
	Selenium	40.0	39.7	99	ug/L	11/29/10 22:56
	Silver	40.0	38.6	97	ug/L	11/29/10 22:56
	Silver	40.0	38.6	97	ug/L	11/29/10 22:56
	Thallium	40.0	37.7	94	ug/L	11/29/10 22:56
	Thallium	40.0	37.7	94	ug/L	11/29/10 22:56
	Zinc	40.0	36.6	92	ug/L	11/29/10 22:56
	Zinc	40.0	36.6	92	ug/L	11/29/10 22:56

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30007
Calibration: 0K30034
Control Limt: +/- 10.00%
Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30007-CCV1	Barium	40.0	40.5	101	ug/L	11/30/10 07:49
	Beryllium	40.0	39.9	100	ug/L	11/30/10 07:49
	Beryllium	40.0	39.9	100	ug/L	11/30/10 07:49
	Nickel	40.0	38.7	97	ug/L	11/30/10 07:49
	Vanadium	40.0	39.6	99	ug/L	11/30/10 07:49
0K30007-CCV2	Barium	40.0	40.0	100	ug/L	11/30/10 08:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 08:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 08:03
	Nickel	40.0	38.8	97	ug/L	11/30/10 08:03
	Vanadium	40.0	39.9	100	ug/L	11/30/10 08:03
0K30007-CCV3	Barium	40.0	39.7	99	ug/L	11/30/10 08:33
	Beryllium	40.0	38.8	97	ug/L	11/30/10 08:33
	Beryllium	40.0	38.8	97	ug/L	11/30/10 08:33
	Nickel	40.0	38.4	96	ug/L	11/30/10 08:33
	Vanadium	40.0	40.4	101	ug/L	11/30/10 08:33
0K30007-CCV4	Barium	40.0	39.5	99	ug/L	11/30/10 09:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 09:03
	Beryllium	40.0	38.5	96	ug/L	11/30/10 09:03
	Nickel	40.0	38.1	95	ug/L	11/30/10 09:03
	Vanadium	40.0	38.3	96	ug/L	11/30/10 09:03
0K30007-CCV5	Barium	40.0	39.2	98	ug/L	11/30/10 09:20
	Beryllium	40.0	37.1	93	ug/L	11/30/10 09:20
	Beryllium	40.0	37.1	93	ug/L	11/30/10 09:20
	Nickel	40.0	37.8	94	ug/L	11/30/10 09:20
	Vanadium	40.0	37.9	95	ug/L	11/30/10 09:20

* Values outside of QC limits

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29093-CRL1	Cadmium	0.200	0.192	96	ug/L	50 - 150
	Cadmium	0.200	0.192	96	ug/L	50 - 150
	Silver	0.200	0.208	104	ug/L	50 - 150
	Silver	0.200	0.208	104	ug/L	50 - 150
	Thallium	0.200	0.200	100	ug/L	50 - 150
	Thallium	0.200	0.200	100	ug/L	50 - 150
0K29093-CRL2	Antimony	1.00	1.02	102	ug/L	50 - 150
	Antimony	1.00	1.02	102	ug/L	50 - 150
	Arsenic	1.00	0.950	95	ug/L	50 - 150
	Arsenic	1.00	0.950	95	ug/L	50 - 150
	Barium	1.00	0.975	97	ug/L	50 - 150
	Barium	1.00	0.975	97	ug/L	50 - 150
	Beryllium	1.00	1.00	100	ug/L	50 - 150
	Beryllium	1.00	1.00	100	ug/L	50 - 150
	Chromium	1.00	1.05	105	ug/L	50 - 150
	Chromium	1.00	1.05	105	ug/L	50 - 150
	Cobalt	1.00	0.982	98	ug/L	50 - 150
	Cobalt	1.00	0.982	98	ug/L	50 - 150
	Copper	1.00	1.02	102	ug/L	50 - 150
	Copper	1.00	1.02	102	ug/L	50 - 150
	Lead	1.00	0.984	98	ug/L	50 - 150
	Lead	1.00	0.984	98	ug/L	50 - 150
	Manganese	1.00	0.980	98	ug/L	50 - 150
	Manganese	1.00	0.980	98	ug/L	50 - 150
	Nickel	1.00	0.992	99	ug/L	50 - 150
	Nickel	1.00	0.992	99	ug/L	50 - 150
	Selenium	1.00	1.08	108	ug/L	50 - 150
	Selenium	1.00	1.08	108	ug/L	50 - 150

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29093-CRL2	Vanadium	1.00	0.972	97	ug/L	50 - 150
	Vanadium	1.00	0.972	97	ug/L	50 - 150
	Zinc	1.00	0.964	96	ug/L	50 - 150
	Zinc	1.00	0.964	96	ug/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30007

Calibration: 0K30034

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30007-CRL1	Barium	1.00	1.01	101	ug/L	50 - 150
	Beryllium	1.00	1.02	102	ug/L	50 - 150
	Beryllium	1.00	1.02	102	ug/L	50 - 150
	Nickel	1.00	0.979	98	ug/L	50 - 150
	Vanadium	1.00	1.02	102	ug/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB1	Antimony	0.14	ug/L	0.071	0.20	J	11/29/10 18:31
	Antimony	0.14	ug/L	0.071	0.20	J	11/29/10 18:31
	Arsenic	-0.031	ug/L	0.076	0.60	U	11/29/10 18:31
	Arsenic	-0.031	ug/L	0.076	0.60	U	11/29/10 18:31
	Barium	0.0012	ug/L	0.12	0.40	U	11/29/10 18:31
	Barium	0.0012	ug/L	0.12	0.40	U	11/29/10 18:31
	Beryllium	0.0027	ug/L	0.060	0.20	U	11/29/10 18:31
	Beryllium	0.0027	ug/L	0.060	0.20	U	11/29/10 18:31
	Cadmium	0.0012	ug/L	0.011	0.040	U	11/29/10 18:31
	Cadmium	0.0012	ug/L	0.011	0.040	U	11/29/10 18:31
	Chromium	-0.0060	ug/L	0.091	0.20	U	11/29/10 18:31
	Chromium	-0.0060	ug/L	0.091	0.20	U	11/29/10 18:31
	Cobalt	0.00093	ug/L	0.0084	0.20	U	11/29/10 18:31
	Cobalt	0.00093	ug/L	0.0084	0.20	U	11/29/10 18:31
	Copper	0.019	ug/L	0.14	0.20	U	11/29/10 18:31
	Copper	0.019	ug/L	0.14	0.20	U	11/29/10 18:31
	Lead	0.0051	ug/L	0.043	0.20	U	11/29/10 18:31
	Lead	0.0051	ug/L	0.043	0.20	U	11/29/10 18:31
	Manganese	0.0041	ug/L	0.084	0.40	U	11/29/10 18:31
	Manganese	0.0041	ug/L	0.084	0.40	U	11/29/10 18:31
	Nickel	0.0013	ug/L	0.075	0.20	U	11/29/10 18:31
	Nickel	0.0013	ug/L	0.075	0.20	U	11/29/10 18:31
	Selenium	0.027	ug/L	0.16	0.20	U	11/29/10 18:31
	Selenium	0.027	ug/L	0.16	0.20	U	11/29/10 18:31
	Silver	0.020	ug/L	0.012	0.040	J	11/29/10 18:31
	Silver	0.020	ug/L	0.012	0.040	J	11/29/10 18:31
	Thallium	0.0017	ug/L	0.011	0.20	U	11/29/10 18:31
	Thallium	0.0017	ug/L	0.011	0.20	U	11/29/10 18:31
	Vanadium	-0.0034	ug/L	0.056	0.60	U	11/29/10 18:31
	Vanadium	-0.0034	ug/L	0.056	0.60	U	11/29/10 18:31
	Zinc	-0.0077	ug/L	0.58	4.0	U	11/29/10 18:31
	Zinc	-0.0077	ug/L	0.58	4.0	U	11/29/10 18:31
0K29093-CCB2	Antimony	0.13	ug/L	0.071	0.20	J	11/29/10 19:00

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB2	Antimony	0.13	ug/L	0.071	0.20	J	11/29/10 19:00
	Arsenic	-0.093	ug/L	0.076	0.60	J	11/29/10 19:00
	Arsenic	-0.093	ug/L	0.076	0.60	J	11/29/10 19:00
	Barium	0.0027	ug/L	0.12	0.40	U	11/29/10 19:00
	Barium	0.0027	ug/L	0.12	0.40	U	11/29/10 19:00
	Beryllium	-0.00020	ug/L	0.060	0.20	U	11/29/10 19:00
	Beryllium	-0.00020	ug/L	0.060	0.20	U	11/29/10 19:00
	Cadmium	-0.00061	ug/L	0.011	0.040	U	11/29/10 19:00
	Cadmium	-0.00061	ug/L	0.011	0.040	U	11/29/10 19:00
	Chromium	-0.050	ug/L	0.091	0.20	U	11/29/10 19:00
	Chromium	-0.050	ug/L	0.091	0.20	U	11/29/10 19:00
	Cobalt	-0.00098	ug/L	0.0084	0.20	U	11/29/10 19:00
	Cobalt	-0.00098	ug/L	0.0084	0.20	U	11/29/10 19:00
	Copper	0.013	ug/L	0.14	0.20	U	11/29/10 19:00
	Copper	0.013	ug/L	0.14	0.20	U	11/29/10 19:00
	Lead	0.0028	ug/L	0.043	0.20	U	11/29/10 19:00
	Lead	0.0028	ug/L	0.043	0.20	U	11/29/10 19:00
	Manganese	-0.0012	ug/L	0.084	0.40	U	11/29/10 19:00
	Manganese	-0.0012	ug/L	0.084	0.40	U	11/29/10 19:00
	Nickel	-0.0014	ug/L	0.075	0.20	U	11/29/10 19:00
	Nickel	-0.0014	ug/L	0.075	0.20	U	11/29/10 19:00
	Selenium	-0.043	ug/L	0.16	0.20	U	11/29/10 19:00
	Selenium	-0.043	ug/L	0.16	0.20	U	11/29/10 19:00
	Silver	0.015	ug/L	0.012	0.040	J	11/29/10 19:00
	Silver	0.015	ug/L	0.012	0.040	J	11/29/10 19:00
	Thallium	0.0022	ug/L	0.011	0.20	U	11/29/10 19:00
	Thallium	0.0022	ug/L	0.011	0.20	U	11/29/10 19:00
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/29/10 19:00
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/29/10 19:00
	Zinc	-0.00016	ug/L	0.58	4.0	U	11/29/10 19:00
	Zinc	-0.00016	ug/L	0.58	4.0	U	11/29/10 19:00
0K29093-CCB3	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 20:07
	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 20:07

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB3	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 20:07
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 20:07
	Barium	0.0025	ug/L	0.12	0.40	U	11/29/10 20:07
	Barium	0.0025	ug/L	0.12	0.40	U	11/29/10 20:07
	Beryllium	0.0018	ug/L	0.060	0.20	U	11/29/10 20:07
	Beryllium	0.0018	ug/L	0.060	0.20	U	11/29/10 20:07
	Cadmium	-0.0016	ug/L	0.011	0.040	U	11/29/10 20:07
	Cadmium	-0.0016	ug/L	0.011	0.040	U	11/29/10 20:07
	Chromium	0.074	ug/L	0.091	0.20	U	11/29/10 20:07
	Chromium	0.074	ug/L	0.091	0.20	U	11/29/10 20:07
	Cobalt	-0.00021	ug/L	0.0084	0.20	U	11/29/10 20:07
	Cobalt	-0.00021	ug/L	0.0084	0.20	U	11/29/10 20:07
	Copper	-0.00034	ug/L	0.14	0.20	U	11/29/10 20:07
	Copper	-0.00034	ug/L	0.14	0.20	U	11/29/10 20:07
	Lead	0.0022	ug/L	0.043	0.20	U	11/29/10 20:07
	Lead	0.0022	ug/L	0.043	0.20	U	11/29/10 20:07
	Manganese	0.0026	ug/L	0.084	0.40	U	11/29/10 20:07
	Manganese	0.0026	ug/L	0.084	0.40	U	11/29/10 20:07
	Nickel	-0.0021	ug/L	0.075	0.20	U	11/29/10 20:07
	Nickel	-0.0021	ug/L	0.075	0.20	U	11/29/10 20:07
	Selenium	-0.0021	ug/L	0.16	0.20	U	11/29/10 20:07
	Selenium	-0.0021	ug/L	0.16	0.20	U	11/29/10 20:07
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 20:07
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 20:07
	Thallium	0.0073	ug/L	0.011	0.20	U	11/29/10 20:07
	Thallium	0.0073	ug/L	0.011	0.20	U	11/29/10 20:07
	Vanadium	0.020	ug/L	0.056	0.60	U	11/29/10 20:07
	Vanadium	0.020	ug/L	0.056	0.60	U	11/29/10 20:07
	Zinc	0.018	ug/L	0.58	4.0	U	11/29/10 20:07
	Zinc	0.018	ug/L	0.58	4.0	U	11/29/10 20:07
0K29093-CCB4	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 21:09
	Antimony	0.10	ug/L	0.071	0.20	J	11/29/10 21:09
	Arsenic	-0.24	ug/L	0.076	0.60	J	11/29/10 21:09

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB4	Arsenic	-0.24	ug/L	0.076	0.60	J	11/29/10 21:09
	Barium	-0.000043	ug/L	0.12	0.40	U	11/29/10 21:09
	Barium	-0.000043	ug/L	0.12	0.40	U	11/29/10 21:09
	Beryllium	0.00043	ug/L	0.060	0.20	U	11/29/10 21:09
	Beryllium	0.00043	ug/L	0.060	0.20	U	11/29/10 21:09
	Cadmium	-0.0019	ug/L	0.011	0.040	U	11/29/10 21:09
	Cadmium	-0.0019	ug/L	0.011	0.040	U	11/29/10 21:09
	Chromium	0.048	ug/L	0.091	0.20	U	11/29/10 21:09
	Chromium	0.048	ug/L	0.091	0.20	U	11/29/10 21:09
	Cobalt	-0.00067	ug/L	0.0084	0.20	U	11/29/10 21:09
	Cobalt	-0.00067	ug/L	0.0084	0.20	U	11/29/10 21:09
	Copper	-0.0028	ug/L	0.14	0.20	U	11/29/10 21:09
	Copper	-0.0028	ug/L	0.14	0.20	U	11/29/10 21:09
	Lead	0.0027	ug/L	0.043	0.20	U	11/29/10 21:09
	Lead	0.0027	ug/L	0.043	0.20	U	11/29/10 21:09
	Manganese	0.0046	ug/L	0.084	0.40	U	11/29/10 21:09
	Manganese	0.0046	ug/L	0.084	0.40	U	11/29/10 21:09
	Nickel	-0.0058	ug/L	0.075	0.20	U	11/29/10 21:09
	Nickel	-0.0058	ug/L	0.075	0.20	U	11/29/10 21:09
	Selenium	0.090	ug/L	0.16	0.20	U	11/29/10 21:09
	Selenium	0.090	ug/L	0.16	0.20	U	11/29/10 21:09
	Silver	0.012	ug/L	0.012	0.040	J	11/29/10 21:09
	Silver	0.012	ug/L	0.012	0.040	J	11/29/10 21:09
	Thallium	0.0040	ug/L	0.011	0.20	U	11/29/10 21:09
	Thallium	0.0040	ug/L	0.011	0.20	U	11/29/10 21:09
	Vanadium	0.0081	ug/L	0.056	0.60	U	11/29/10 21:09
	Vanadium	0.0081	ug/L	0.056	0.60	U	11/29/10 21:09
	Zinc	-0.0072	ug/L	0.58	4.0	U	11/29/10 21:09
	Zinc	-0.0072	ug/L	0.58	4.0	U	11/29/10 21:09
0K29093-CCB5	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:13
	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:13
	Arsenic	-0.26	ug/L	0.076	0.60	J	11/29/10 22:13
	Arsenic	-0.26	ug/L	0.076	0.60	J	11/29/10 22:13

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB5	Barium	0.0015	ug/L	0.12	0.40	U	11/29/10 22:13
	Barium	0.0015	ug/L	0.12	0.40	U	11/29/10 22:13
	Cadmium	-0.00091	ug/L	0.011	0.040	U	11/29/10 22:13
	Cadmium	-0.00091	ug/L	0.011	0.040	U	11/29/10 22:13
	Chromium	0.030	ug/L	0.091	0.20	U	11/29/10 22:13
	Chromium	0.030	ug/L	0.091	0.20	U	11/29/10 22:13
	Cobalt	0.00013	ug/L	0.0084	0.20	U	11/29/10 22:13
	Cobalt	0.00013	ug/L	0.0084	0.20	U	11/29/10 22:13
	Copper	-0.000035	ug/L	0.14	0.20	U	11/29/10 22:13
	Copper	-0.000035	ug/L	0.14	0.20	U	11/29/10 22:13
	Lead	0.0024	ug/L	0.043	0.20	U	11/29/10 22:13
	Lead	0.0024	ug/L	0.043	0.20	U	11/29/10 22:13
	Manganese	0.0038	ug/L	0.084	0.40	U	11/29/10 22:13
	Manganese	0.0038	ug/L	0.084	0.40	U	11/29/10 22:13
	Nickel	-0.0059	ug/L	0.075	0.20	U	11/29/10 22:13
	Nickel	-0.0059	ug/L	0.075	0.20	U	11/29/10 22:13
	Selenium	-0.021	ug/L	0.16	0.20	U	11/29/10 22:13
	Selenium	-0.021	ug/L	0.16	0.20	U	11/29/10 22:13
	Silver	0.010	ug/L	0.012	0.040	U	11/29/10 22:13
	Silver	0.010	ug/L	0.012	0.040	U	11/29/10 22:13
	Thallium	0.0015	ug/L	0.011	0.20	U	11/29/10 22:13
	Thallium	0.0015	ug/L	0.011	0.20	U	11/29/10 22:13
	Vanadium	0.013	ug/L	0.056	0.60	U	11/29/10 22:13
	Vanadium	0.013	ug/L	0.056	0.60	U	11/29/10 22:13
	Zinc	-0.0053	ug/L	0.58	4.0	U	11/29/10 22:13
0K29093-CCB6	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:49
	Antimony	0.11	ug/L	0.071	0.20	J	11/29/10 22:49
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 22:49
	Arsenic	-0.25	ug/L	0.076	0.60	J	11/29/10 22:49
	Barium	0.0013	ug/L	0.12	0.40	U	11/29/10 22:49
	Barium	0.0013	ug/L	0.12	0.40	U	11/29/10 22:49
	Cadmium	-0.00088	ug/L	0.011	0.040	U	11/29/10 22:49
	Cadmium	-0.00088	ug/L	0.011	0.040	U	11/29/10 22:49

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29093
Calibration: 0K29031
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29093-CCB6	Chromium	0.018	ug/L	0.091	0.20	U	11/29/10 22:49
	Chromium	0.018	ug/L	0.091	0.20	U	11/29/10 22:49
	Cobalt	-0.00037	ug/L	0.0084	0.20	U	11/29/10 22:49
	Cobalt	-0.00037	ug/L	0.0084	0.20	U	11/29/10 22:49
	Copper	-0.0020	ug/L	0.14	0.20	U	11/29/10 22:49
	Copper	-0.0020	ug/L	0.14	0.20	U	11/29/10 22:49
	Lead	0.0018	ug/L	0.043	0.20	U	11/29/10 22:49
	Lead	0.0018	ug/L	0.043	0.20	U	11/29/10 22:49
	Manganese	0.0030	ug/L	0.084	0.40	U	11/29/10 22:49
	Manganese	0.0030	ug/L	0.084	0.40	U	11/29/10 22:49
	Selenium	0.013	ug/L	0.16	0.20	U	11/29/10 22:49
	Selenium	0.013	ug/L	0.16	0.20	U	11/29/10 22:49
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 22:49
	Silver	0.011	ug/L	0.012	0.040	U	11/29/10 22:49
	Thallium	0.00023	ug/L	0.011	0.20	U	11/29/10 22:49
	Thallium	0.00023	ug/L	0.011	0.20	U	11/29/10 22:49
	Zinc	0.013	ug/L	0.58	4.0	U	11/29/10 22:49
	Zinc	0.013	ug/L	0.58	4.0	U	11/29/10 22:49

* Values outside of QC limits

BLANKS
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30007
Calibration: 0K30034
Instrument ID: 114

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30007-CCB1	Barium	0.0033	ug/L	0.12	0.40	U	11/30/10 07:52
	Beryllium	0.010	ug/L	0.060	0.20	U	11/30/10 07:52
	Beryllium	0.010	ug/L	0.060	0.20	U	11/30/10 07:52
	Nickel	0.0044	ug/L	0.075	0.20	U	11/30/10 07:52
	Vanadium	0.0035	ug/L	0.056	0.60	U	11/30/10 07:52
0K30007-CCB2	Barium	0.00026	ug/L	0.12	0.40	U	11/30/10 08:06
	Beryllium	0.0051	ug/L	0.060	0.20	U	11/30/10 08:06
	Beryllium	0.0051	ug/L	0.060	0.20	U	11/30/10 08:06
	Nickel	-0.0030	ug/L	0.075	0.20	U	11/30/10 08:06
	Vanadium	-0.016	ug/L	0.056	0.60	U	11/30/10 08:06
0K30007-CCB3	Barium	0.00025	ug/L	0.12	0.40	U	11/30/10 08:36
	Beryllium	0.0035	ug/L	0.060	0.20	U	11/30/10 08:36
	Beryllium	0.0035	ug/L	0.060	0.20	U	11/30/10 08:36
	Nickel	-0.0078	ug/L	0.075	0.20	U	11/30/10 08:36
	Vanadium	0.025	ug/L	0.056	0.60	U	11/30/10 08:36
0K30007-CCB4	Barium	0.00065	ug/L	0.12	0.40	U	11/30/10 09:05
	Beryllium	0.0037	ug/L	0.060	0.20	U	11/30/10 09:05
	Beryllium	0.0037	ug/L	0.060	0.20	U	11/30/10 09:05
	Nickel	-0.0077	ug/L	0.075	0.20	U	11/30/10 09:05
	Vanadium	0.026	ug/L	0.056	0.60	U	11/30/10 09:05
0K30007-CCB5	Barium	0.0023	ug/L	0.12	0.40	U	11/30/10 09:23
	Beryllium	0.0010	ug/L	0.060	0.20	U	11/30/10 09:23
	Beryllium	0.0010	ug/L	0.060	0.20	U	11/30/10 09:23
	Nickel	-0.0055	ug/L	0.075	0.20	U	11/30/10 09:23
	Vanadium	0.025	ug/L	0.056	0.60	U	11/30/10 09:23

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012934-BLK1
File ID: 0k29093-033
Prepared: 11/29/10 08:00
Analyzed: 11/29/10 20:26
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL
QC Batch: 1012934
Sequence: 0K29093
Calibration: 0K29031
Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-36-0	Antimony, Total	1.0	ug/L	0.36	1.0	U
7440-38-2	Arsenic, Total	3.0	ug/L	0.38	3.0	U
7440-39-3	Barium, Total	2.0	ug/L	0.59	2.0	U
7440-43-9	Cadmium, Total	0.20	ug/L	0.055	0.20	U
7440-47-3	Chromium, Total	0.81	ug/L	0.46	1.0	J
7440-48-4	Cobalt, Total	1.0	ug/L	0.042	1.0	U
7440-50-8	Copper, Total	1.0	ug/L	0.71	1.0	U
7439-92-1	Lead, Total	1.0	ug/L	0.22	1.0	U
7439-96-5	Manganese, Total	2.0	ug/L	0.42	2.0	U
7440-02-0	Nickel, Total	1.0	ug/L	0.37	1.0	U
7782-49-2	Selenium, Total	1.0	ug/L	0.82	1.0	U
7440-22-4	Silver, Total	0.20	ug/L	0.061	0.20	U
7440-28-0	Thallium, Total	1.0	ug/L	0.056	1.0	U
7440-62-2	Vanadium, Total	3.0	ug/L	0.28	3.0	U
7440-66-6	Zinc, Total	20	ug/L	2.9	20	U

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012934-BLK2
File ID: 0k30007-019
Prepared: 11/29/10 08:00
Analyzed: 11/30/10 08:18
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL
QC Batch: 1012934
Sequence: 0K30007
Calibration: 0K30034
Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-41-7	Beryllium, Total	1.0	ug/L	0.30	1.0	U

METHOD BLANK DATA SHEET
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012940-BLK1 File ID: 0k29093-018

Prepared: 11/29/10 08:00 Analyzed: 11/29/10 19:04

Preparation: General Metals Prep Initial/Final: 25 mL / 125 mL

QC Batch: 1012940 Sequence: 0K29093 Calibration: 0K29031 Instrument: 114

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-36-0	Antimony, Dissolved	0.49	ug/L	0.36	1.0	J
7440-38-2	Arsenic, Dissolved	3.0	ug/L	0.38	3.0	U
7440-39-3	Barium, Dissolved	2.0	ug/L	0.59	2.0	U
7440-41-7	Beryllium, Dissolved	1.0	ug/L	0.30	1.0	U
7440-43-9	Cadmium, Dissolved	0.20	ug/L	0.055	0.20	U
7440-47-3	Chromium, Dissolved	0.89	ug/L	0.46	1.0	J
7440-48-4	Cobalt, Dissolved	1.0	ug/L	0.042	1.0	U
7440-50-8	Copper, Dissolved	1.0	ug/L	0.71	1.0	U
7439-92-1	Lead, Dissolved	1.0	ug/L	0.22	1.0	U
7439-96-5	Manganese, Dissolved	2.0	ug/L	0.42	2.0	U
7440-02-0	Nickel, Dissolved	1.0	ug/L	0.37	1.0	U
7782-49-2	Selenium, Dissolved	1.0	ug/L	0.82	1.0	U
7440-22-4	Silver, Dissolved	0.20	ug/L	0.061	0.20	U
7440-28-0	Thallium, Dissolved	1.0	ug/L	0.056	1.0	U
7440-62-2	Vanadium, Dissolved	3.0	ug/L	0.28	3.0	U
7440-66-6	Zinc, Dissolved	20	ug/L	2.9	20	U

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29093

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K29093-IFA1	Antimony	0.00	0.0731		ug/L
	Antimony	0.00	0.0731		ug/L
	Arsenic	0.00	-0.0505		ug/L
	Arsenic	0.00	-0.0505		ug/L
	Barium	0.00	0.0164		ug/L
	Barium	0.00	0.0164		ug/L
	Beryllium	0.00	0.00592		ug/L
	Beryllium	0.00	0.00592		ug/L
	Cadmium	0.00	0.0526		ug/L
	Cadmium	0.00	0.0526		ug/L
	Chromium	0.00	0.165		ug/L
	Chromium	0.00	0.165		ug/L
	Cobalt	0.00	0.0173		ug/L
	Cobalt	0.00	0.0173		ug/L
	Copper	0.00	0.233		ug/L
	Copper	0.00	0.233		ug/L
	Lead	0.00	0.0157		ug/L
	Lead	0.00	0.0157		ug/L
	Manganese	0.00	0.0128		ug/L
	Manganese	0.00	0.0128		ug/L
	Nickel	0.00	0.343		ug/L
	Nickel	0.00	0.343		ug/L
	Selenium	0.00	0.0519		ug/L
	Selenium	0.00	0.0519		ug/L
	Silver	0.00	0.0430		ug/L
	Silver	0.00	0.0430		ug/L
	Thallium	0.00	0.00246		ug/L
	Thallium	0.00	0.00246		ug/L
	Vanadium	0.00	-0.0267		ug/L
	Vanadium	0.00	-0.0267		ug/L
	Zinc	0.00	0.516		ug/L
	Zinc	0.00	0.516		ug/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0K29093

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0K29031

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K29093-IFB1	Antimony	20.0	20.2	101	ug/L
	Antimony	20.0	20.2	101	ug/L
	Arsenic	20.0	20.7	104	ug/L
	Arsenic	20.0	20.7	104	ug/L
	Barium	20.0	20.3	102	ug/L
	Barium	20.0	20.3	102	ug/L
	Beryllium	20.0	19.7	99	ug/L
	Beryllium	20.0	19.7	99	ug/L
	Cadmium	20.0	20.9	104	ug/L
	Cadmium	20.0	20.9	104	ug/L
	Chromium	20.0	20.0	100	ug/L
	Chromium	20.0	20.0	100	ug/L
	Cobalt	20.0	20.5	103	ug/L
	Cobalt	20.0	20.5	103	ug/L
	Copper	20.0	20.5	102	ug/L
	Copper	20.0	20.5	102	ug/L
	Lead	20.0	20.1	101	ug/L
	Lead	20.0	20.1	101	ug/L
	Manganese	20.0	20.4	102	ug/L
	Manganese	20.0	20.4	102	ug/L
	Nickel	20.0	20.4	102	ug/L
	Nickel	20.0	20.4	102	ug/L
	Selenium	20.0	20.8	104	ug/L
	Selenium	20.0	20.8	104	ug/L
	Silver	20.0	20.6	103	ug/L
	Silver	20.0	20.6	103	ug/L
	Thallium	20.0	20.0	100	ug/L
	Thallium	20.0	20.0	100	ug/L
	Vanadium	20.0	19.3	97	ug/L
	Vanadium	20.0	19.3	97	ug/L
	Zinc	20.0	20.7	103	ug/L
	Zinc	20.0	20.7	103	ug/L

ICP INTERFERENCE CHECK SAMPLE

USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30007

Calibration: 0K30034

Instrument ID: 114

Lab Sample ID	Analyte	True	Found	%R	Units
0K30007-IFA1	Barium	0.00	0.0171		ug/L
	Beryllium	0.00	0.00965		ug/L
	Beryllium	0.00	0.00965		ug/L
	Nickel	0.00	0.307		ug/L
	Vanadium	0.00	0.00441		ug/L
0K30007-IFB1	Barium	20.0	19.6	98	ug/L
	Beryllium	20.0	19.0	95	ug/L
	Beryllium	20.0	19.0	95	ug/L
	Nickel	20.0	18.2	91	ug/L
	Vanadium	20.0	18.9	95	ug/L

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012934-BS1
Preparation: 3020A Digestion
Initial/Final: 25 mL / 125 mL
Sequence: 0K29093

QC Batch: 1012934

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Antimony, Total	50.0	48.1	96	80 - 120	ug/L
Arsenic, Total	50.0	48.5	97	80 - 120	ug/L
Barium, Total	50.0	48.2	96	80 - 120	ug/L
Cadmium, Total	50.0	49.4	99	80 - 120	ug/L
Chromium, Total	50.0	51.4	103	80 - 120	ug/L
Cobalt, Total	50.0	49.9	100	80 - 120	ug/L
Copper, Total	50.0	50.8	102	80 - 120	ug/L
Lead, Total	50.0	48.3	97	80 - 120	ug/L
Manganese, Total	50.0	50.6	101	80 - 120	ug/L
Nickel, Total	50.0	50.6	101	80 - 120	ug/L
Selenium, Total	50.0	48.5	97	80 - 120	ug/L
Silver, Total	50.0	50.8	102	80 - 120	ug/L
Thallium, Total	50.0	48.8	98	80 - 120	ug/L
Vanadium, Total	50.0	49.0	98	80 - 120	ug/L
Zinc, Total	50.0	49.2	98	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012934-BS2

Preparation: 3020A Digestion

Initial/Final: 25 mL / 125 mL

Sequence: 0K30007

QC Batch: 1012934

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Beryllium, Total	50.0	48.0	96	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012940-BS1
Preparation: General Metals Prep
Initial/Final: 25 mL / 125 mL
Sequence: 0K29093

QC Batch: 1012940

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Antimony, Dissolved	50.0	49.8	100	80 - 120	ug/L
Arsenic, Dissolved	50.0	49.1	98	80 - 120	ug/L
Barium, Dissolved	50.0	49.4	99	80 - 120	ug/L
Beryllium, Dissolved	50.0	49.0	98	80 - 120	ug/L
Cadmium, Dissolved	50.0	49.9	100	80 - 120	ug/L
Chromium, Dissolved	50.0	50.9	102	80 - 120	ug/L
Cobalt, Dissolved	50.0	49.8	100	80 - 120	ug/L
Copper, Dissolved	50.0	50.1	100	80 - 120	ug/L
Lead, Dissolved	50.0	48.0	96	80 - 120	ug/L
Manganese, Dissolved	50.0	49.5	99	80 - 120	ug/L
Nickel, Dissolved	50.0	49.2	98	80 - 120	ug/L
Selenium, Dissolved	50.0	47.9	96	80 - 120	ug/L
Silver, Dissolved	50.0	50.7	101	80 - 120	ug/L
Thallium, Dissolved	50.0	48.3	97	80 - 120	ug/L
Vanadium, Dissolved	50.0	49.8	100	80 - 120	ug/L
Zinc, Dissolved	50.0	50.9	102	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Sample Information

6W0513 Dissolved Total

Internal stds

Sample ID: 1011407-02
Autosampler Position: 50
Sample Date/Time: Monday, November 29, 2010 22:29:32
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011407-02.057
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Dm

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
							ug/L
Li	6	527908.741	527908.741				ug/L
Be	9	10.333	0.000	0.024932	0.014	55.667	ug/L
V	51	9242.843	0.019	0.630706	0.047	7.478	ug/L
Cr	52	11594.846	0.010	0.415726	0.071	17.190	ug/L
Cr	53	870.721	0.002	0.583392	0.026	4.442	ug/L
Mn	55	253856.693	0.717	18.137751	1.674	9.227	ug/L
Co	59	5148.309	0.014	0.440646	0.030	6.703	ug/L
Ni	60	2913.541	0.008	1.117218	0.073	6.542	ug/L
Ni	62	379.679	0.001	0.944420	0.134	14.172	ug/L
Cu	63	1901.903	0.004	0.278129	0.029	10.529	ug/L
Cu	65	921.727	0.002	0.285923	0.040	13.999	ug/L
Zn	66	1497.150	0.004	0.870194	0.113	12.993	ug/L
Zn	68	1818.883	0.003	1.055844	0.120	11.402	ug/L
							ug/L
Ge	72	354476.164	354476.164				ug/L
As	75	2132.920	0.005	0.865607	0.108	12.446	ug/L
Se	77	136.669	0.000	0.082662	0.082	99.651	ug/L
Se	82	3.371	0.000	0.057293	0.060	104.047	ug/L
							ug/L
Rh	103	437093.897	437093.897				ug/L
Ag	107	75.334	0.000	0.005239	0.001	13.008	ug/L
Cd	111	191.846	0.000	0.068478	0.091	133.266	ug/L
Cd	114	96.164	0.000	0.013460	0.000	3.591	ug/L
							ug/L
In	115	388547.417	388547.417				ug/L
Sb	121	382.013	0.001	0.032010	0.005	17.092	ug/L
Sb	123	308.002	0.001	0.035304	0.008	21.960	ug/L
Ba	135	25719.230	0.051	10.290066	0.889	8.641	ug/L
Ba	137	44019.734	0.087	10.239507	0.777	7.593	ug/L
							ug/L
Tb	159	510419.941	510419.941				ug/L
Tl	203	191.004	0.000	0.008554	0.000	2.157	ug/L
Tl	205	494.686	0.001	0.009502	0.002	19.199	ug/L
Pb	208	4622.203	0.007	0.097921	0.004	4.120	ug/L
Bi	209	549737.919	549737.919				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	133.486
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Sample ID: 1011407-02
Report Date/Time: Monday, November 29, 2010 22:31:44
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Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	109.070
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	100.872
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	105.531
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	105.703
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	108.608

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible].053	[illegible]		ug/L
Be	9	[illegible].000	0.[illegible]	[illegible].024163	ug/L
V	51	[illegible].019	0.[illegible]	[illegible].588211	ug/L
Cr	52	[illegible].377	[illegible]	[illegible].33717	ug/L
Cr	53	114.050	0.002	0.554175	ug/L
Mn	55	254672.401	0.890	16.680037	ug/L
Co	59	5308.743	0.014	0.416484	ug/L
Ni	60	3173.636	0.008	1.118871	ug/L
Ni	62	352.011	0.001	0.701887	ug/L
Cu	63	1800.233	0.004	0.248047	ug/L
Cu	65	472.364	0.002	[illegible].240076	ug/L
Zn	66	1467.142	0.001	[illegible].758415	ug/L
Zn	68	1826.219	0.003	0.922011	ug/L
Ge	72	395147.028	395147.020		ug/L
As	75	2194.128	0.004	0.800330	ug/L
Se	77	139.002	-0.000	-0.006227	ug/L
Se	82	[illegible].353	-0.000	-0.006617	ug/L
Rh	103	464571.974	464571.074		ug/L
Ag	107	[illegible].001	0.000	[illegible]0.004882	ug/L
Cd	111	[illegible].527	0.[illegible]	[illegible]0.01420	ug/L
Cd	114	[illegible].12	[illegible]	[illegible]	ug/L
In	115	[illegible]	[illegible]		ug/L
Sb	121	[illegible].912	[illegible]	0.02728	ug/L
Sb	123	[illegible].875	[illegible]	[illegible]0.02071	ug/L
Ba	135	[illegible].614	[illegible]	[illegible].273726	ug/L
Ba	137	[illegible].160	[illegible]	[illegible].341787	ug/L
Tb	159	554790.560	554790.560		ug/L
Tl	203	205.006	0.000	0.008760	ug/L
Tl	205	460.018	0.000	0.007704	ug/L
Pb	208	4706.565	0.007	0.060318	ug/L
Bi	209	582623.036	582523.036		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	527266.008	527265.000		ug/L
Be	9	[illegible].000	0.[illegible]	[illegible]0.01145[illegible]	ug/L
V	51	9118.459	0.020	0.681450	ug/L
Cr	52	[illegible].796	0.012	[illegible].476882	ug/L
Cr	53	[illegible].160	0.002	[illegible]	ug/L
Mn	55	[illegible].278	0.[illegible]	[illegible].585263	ug/L
Co	59	[illegible].447	[illegible]	[illegible]	ug/L
Ni	60	[illegible].528	[illegible]	[illegible]	ug/L
Ni	62	[illegible].013	[illegible]	[illegible].041225	ug/L
Cu	63	[illegible].242	[illegible]	[illegible].300540	ug/L
Cu	65	[illegible].158	[illegible]	[illegible].300780	ug/L
Zn	66	1552.161	0.004	[illegible].584504	ug/L
Zn	68	1799.212	0.003	[illegible].155314	ug/L
Ge	72	320[illegible].438	320683.436		ug/L
As	75	2207.395	0.005	0.980060	ug/L
Se	77	137.002	0.000	0.152302	ug/L
Se	82	[illegible].528	0.000	[illegible]0.073067	ug/L

Sample ID: 1011407-02
Report Date/Time: Monday, November 29, 2010 22:31:44
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Sample Information

GW0113 total

Sample ID: 1011407-01
Autosampler Position: 49
Sample Date/Time: Monday, November 29, 2010 22:25:38
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011407-01.056
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	497534.822	497534.822				ug/L
Be	9	3.333	0.000	0.003918	0.007	166.685	ug/L
V	51	3362.473	0.003	0.088926	0.018	20.440	ug/L
Cr	52	8771.707	0.004	0.146960	0.065	43.989	ug/L
Cr	53	436.016	0.001	0.192973	0.016	8.072	ug/L
Mn	55	136780.479	0.404	10.225728	0.260	2.545	ug/L
Co	59	911.392	0.002	0.076071	0.003	4.447	ug/L
Ni	60	3902.953	0.011	1.584427	0.040	2.494	ug/L
Ni	62	455.684	0.001	1.198826	0.041	3.393	ug/L
Cu	63	2017.931	0.005	0.315825	0.001	0.418	ug/L
Cu	65	1303.782	0.003	0.450902	0.029	6.523	ug/L
Zn	66	1932.577	0.005	1.231031	0.106	8.636	ug/L
Zn	68	1734.531	0.003	1.057005	0.037	3.524	ug/L
Ge	72	336653.441	336653.441				ug/L
As	75	249.321	-0.001	-0.140314	0.032	23.128	ug/L
Se	77	155.336	0.000	0.265463	0.034	12.767	ug/L
Se	82	34.938	0.000	0.221809	0.063	28.609	ug/L
Rh	103	422276.166	422276.166				ug/L
Ag	107	79.001	0.000	0.005801	0.001	13.706	ug/L
Cd	111	37.639	0.000	0.010991	0.001	12.584	ug/L
Cd	114	113.355	0.000	0.016830	0.000	2.271	ug/L
In	115	368537.874	368537.874				ug/L
Sb	121	597.694	0.001	0.058033	0.002	3.680	ug/L
Sb	123	448.303	0.001	0.057922	0.002	3.971	ug/L
Ba	135	9403.063	0.019	3.905887	0.016	0.413	ug/L
Ba	137	16334.160	0.033	3.947944	0.082	2.075	ug/L
Tb	159	488749.765	488749.765				ug/L
Tl	203	181.004	0.000	0.008762	0.001	15.106	ug/L
Tl	205	398.680	0.000	0.007149	0.001	9.103	ug/L
Pb	208	1901.771	0.002	0.033093	0.002	5.326	ug/L
Bi	209	514362.544	514362.544				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	125.806
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	103.586
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.452
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.096
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.216
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.619

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	0.000	0.000427	ug/L
[illegible]	[illegible]	[illegible]	0.002	0.071838	ug/L
[illegible]	[illegible]	[illegible]	0.002	0.006470	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	3.405	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
As	75	230.013	-0.001	-0.148373	ug/L
Se	77	102.003	0.000	0.304467	ug/L
Se	82	27.814	0.000	0.182540	ug/L
Rh	103	421010.508	421010.508		ug/L
Ag	107	88.001	0.000	0.006673	ug/L
Cd	111	35.568	0.000	0.010237	ug/L
Cd	114	115.418	0.000	0.017227	ug/L
In	115	385464.232	385464.232		ug/L
Sb	121	[illegible]	0.001	0.058973	ug/L
Sb	123	[illegible]	0.001	0.057858	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L

Repeat 2

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	-0.000	-0.001465	ug/L
V	51	3450.772	0.003	0.108024	ug/L
Cr	52	9130.080	0.008	0.219820	ug/L
Cr	53	430.018	0.001	0.208380	ug/L
Mn	55	138275.577	0.414	10.470120	ug/L
Co	59	925.081	0.003	0.079710	ug/L
Ni	60	3801.082	0.012	1.629778	ug/L
Ni	62	428.018	0.001	1.187277	ug/L
Cu	63	1897.252	0.005	0.316837	ug/L
[illegible]	65	1,151.123	0.004	0.483616	ug/L
Zn	66	2,144.271	0.004	1.351240	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L

Sample ID: 1011407-01
Report Date/Time: Monday, November 29, 2010 22:27:51

01136

Sample Information

Sample ID: 1011375-01
Autosampler Position: 44
Sample Date/Time: Monday, November 29, 2010 21:54:22
Initial Sample Quantity (mg):
Sample Prep Volume (mL)
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-01.049
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	476532.352	476532.352				ug/L
Be	9	20.334	0.000	0.061498	0.017	27.474	ug/L
V	51	34691.649	0.095	3.195869	0.084	2.633	ug/L
Cr	52	27154.481	0.058	2.314315	0.097	4.178	ug/L
Cr	53	2780.158	0.008	2.515416	0.079	3.127	ug/L
Mn	55	363874.498	1.074	27.162268	0.625	2.300	ug/L
Co	59	8972.918	0.026	0.808629	0.007	0.850	ug/L
Ni	60	5949.850	0.017	2.416869	0.083	3.450	ug/L
Ni	62	1017.406	0.003	2.734988	0.085	3.114	ug/L
Cu	63	8569.491	0.024	1.523245	0.043	2.848	ug/L
Cu	65	4131.065	0.012	1.542176	0.017	1.099	ug/L
Zn	66	5211.014	0.015	3.556332	0.053	1.493	ug/L
Zn	68	4594.646	0.012	3.873758	0.028	0.713	ug/L
Ge	72	338082.538	338082.538				ug/L
As	75	1525.988	0.003	0.575614	0.032	5.637	ug/L
Se	77	152.336	0.000	0.238760	0.062	26.034	ug/L
Se	82	14.604	0.000	0.114185	0.107	93.845	ug/L
Rh	103	427300.424	427300.424				ug/L
Ag	107	183.337	0.000	0.015460	0.002	12.026	ug/L
Cd	111	431.021	0.001	0.163411	0.200	122.386	ug/L
Cd	114	245.335	0.001	0.038161	0.004	11.453	ug/L
In	115	368410.483	368410.483				ug/L
Sb	121	430.015	0.001	0.039313	0.002	4.294	ug/L
Sb	123	325.921	0.001	0.039901	0.002	4.839	ug/L
Ba	135	40766.228	0.083	16.850340	0.652	3.870	ug/L
Ba	137	70367.324	0.143	16.913609	0.600	3.545	ug/L
Tb	159	492434.304	492434.304				ug/L
Tl	203	399.347	0.001	0.027183	0.001	3.231	ug/L
Tl	205	912.392	0.001	0.024962	0.001	2.782	ug/L
Pb	208	28323.277	0.053	0.726072	0.013	1.783	ug/L
Bi	209	522994.262	522994.262				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	120.495
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	104.026
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.612
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.062
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.979
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	103.325

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	25.000	0.000	0.076400	ug/L
V	51	15755.830	0.000	3.261664	ug/L
Cr	52	28106.905	0.061	2.410198	ug/L
Co	59	2604.500	0.006	2.623009	ug/L
Mn	55	359280.223	[illegible]	[illegible]	ug/L
Cu	63	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	525.075	[illegible]	2.341224	ug/L
Ni	62	1.444.078	0.033	[illegible]	ug/L
Cu	63	6457.174	[illegible]	[illegible]	ug/L
Cu	65	4102.053	0.012	[illegible]	ug/L
Zn	66	[illegible]	0.015	[illegible]	ug/L
Zn	68	4561.809	0.012	0.842901	ug/L
Ge	72	328457.570	328457.570		ug/L
As	75	1504.185	0.003	0.608012	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Rh	103	428582.878	428582.878		ug/L
Ag	107	182.304	0.001	0.015269	ug/L
Cd	111	127.231	0.000	0.044469	ug/L
Cd	114	255.215	0.001	0.041242	ug/L
In	115	844564.013	844564.013		ug/L
Sb	121	621.015	0.001	0.038785	ug/L
Sb	123	318.876	0.001	0.038370	ug/L
Ba	135	41226.145	0.085	17.382212	ug/L
Ba	137	69422.982	0.144	17.023160	ug/L
Tb	159	4425503.237	4425503.237		ug/L
Tl	203	[illegible]	[illegible]	[illegible]	ug/L
Tl	205	[illegible]	[illegible]	[illegible]	ug/L
Pb	208	28170.757	0.062	0.710284	ug/L
Bi	209	529452.412	529452.412		ug/L

Repeat 2

Analyte	Mass	Mass Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	409229.364		ug/L
Be	9	25.000	0.000	0.004804	ug/L
V	51	[illegible]	0.006	3.112489	ug/L
Cr	52	[illegible]	0.056	2.228732	ug/L
Co	59	2439.509	0.006	2.580847	ug/L
Mn	55	335.[illegible]	[illegible]	27.557663	ug/L
Cu	63	[illegible]	0.027	[illegible]	ug/L
Ni	60	[illegible]	0.018	2.509282	ug/L
Ni	62	[illegible]	0.003	2.637154	ug/L
Cu	63	6701.383	0.025	1.573025	ug/L
Cu	65	4103.051	0.012	1.645220	ug/L
Zn	66	5163.851	0.016	3.554780	ug/L
Zn	68	4503.285	0.012	3.882225	ug/L
Ge	72	[illegible]	105145.719		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L

Sample ID: 1011375-01
Report Date/Time: Monday, November 29, 2010 21:56:34

01115

Sample Information

Sample ID: 1011375-02
Autosampler Position: 45
Sample Date/Time: Monday, November 29, 2010 21:58:16
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-02.050
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Dwf

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	475620.226	475620.226				ug/L
Be	9	3.667	0.000	0.005616	0.004	71.969	ug/L
V	51	2658.086	0.001	0.018085	0.006	35.460	ug/L
Cr	52	7886.810	0.001	0.039637	0.013	33.265	ug/L
Cr	53	437.349	0.001	0.193730	0.027	13.995	ug/L
Mn	55	158657.476	0.469	11.849326	0.175	1.477	ug/L
Co	59	7014.021	0.021	0.632461	0.014	2.135	ug/L
Ni	60	8072.991	0.024	3.297841	0.125	3.788	ug/L
Ni	62	976.067	0.003	2.629898	0.070	2.662	ug/L
Cu	63	1383.129	0.003	0.197861	0.005	2.670	ug/L
Cu	65	531.689	0.001	0.150273	0.006	4.031	ug/L
Zn	66	1663.516	0.004	1.035858	0.050	4.791	ug/L
Zn	68	3249.333	0.008	2.554793	0.064	2.520	ug/L
Ge	72	337116.592	337116.592				ug/L
As	75	17184.635	0.050	9.402164	0.355	3.772	ug/L
Se	77	160.003	0.000	0.298393	0.185	62.145	ug/L
Se	82	54.925	0.000	0.325931	0.302	92.778	ug/L
Rh	103	425340.258	425340.258				ug/L
Ag	107	54.001	0.000	0.003405	0.001	30.109	ug/L
Cd	111	17.839	0.000	0.003272	0.002	63.304	ug/L
Cd	114	37.240	0.000	0.004225	0.001	21.830	ug/L
In	115	368733.184	368733.184				ug/L
Sb	121	387.346	0.001	0.034502	0.002	6.716	ug/L
Sb	123	297.502	0.001	0.035724	0.002	6.397	ug/L
Ba	135	138773.718	0.280	56.893794	0.438	0.770	ug/L
Ba	137	237896.924	0.479	56.722884	0.503	0.887	ug/L
Tb	159	496409.388	496409.388				ug/L
Tl	203	154.670	0.000	0.006384	0.001	16.705	ug/L
Tl	205	319.676	0.000	0.004249	0.000	8.906	ug/L
Pb	208	1511.402	0.002	0.022399	0.000	2.109	ug/L
Bi	209	517918.681	517918.681				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	120.264
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	103.728
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.159
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.149
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	102.802
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	102.322

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible] 277	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible] 457	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible] 454	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible] 016	[illegible]	[illegible]	ug/L
Mn	55	[illegible] 835	0.458	11.827821	ug/L
Co	59	[illegible] 978	0.020	[illegible]	ug/L
Ni	60	7[illegible] 888	0.023	3.208007	ug/L
Ni	62	[illegible] 070	0.003	2.651889	ug/L
Cu	63	1404 132	0.003	0.198001	ug/L
Cu	65	525 022	0.001	0.144783	ug/L
Zn	[illegible]	[illegible] 174	[illegible]	0.088209	ug/L
Zn	68	3284 080	0.006	2.543054	ug/L
Ge	72	341867 606	341867.606		ug/L
As	75	16777 330	0.048	0.037346	ug/L
Se	77	178 004	0.000	0.411987	ug/L
Se	82	57 560	0.000	0.337447	ug/L
Rh	103	425[illegible] 728	425[illegible]4.728		ug/L
Ag	107	[illegible] 001	[illegible]	0.00[illegible]	ug/L
Cd	[illegible]	[illegible] 471	[illegible]	[illegible]	ug/L
Cd	114	[illegible] 181	[illegible]	[illegible]	ug/L
In	115	[illegible] 283	[illegible]		ug/L
Sb	121	[illegible] 013	[illegible]	[illegible]	ug/L
Sb	123	[illegible] 127	[illegible]	[illegible]	ug/L
Ba	135	[illegible] 450	[illegible]	57 24725[illegible]	ug/L
Ba	137	247[illegible] 354	[illegible]	57 251850	ug/L
Tb	159	400076 475	400076.475		ug/L
Tl	203	167 003	0.000	0.007507	ug/L
Tl	205	[illegible] 009	0.000	0.00420[illegible]	ug/L
Pb	208	1481 088	0.002	0.022010	ug/L
Bi	209	512407 783	512407.783		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	[illegible] 047	461741 047		ug/L
Be	9	[illegible]	[illegible]	0.003222	ug/L
[illegible]	[illegible]	[illegible] 773	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible] 144	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible] 015	[illegible]	[illegible]	ug/L
Mn	55	[illegible] 036	[illegible]	11.[illegible]	ug/L
Co	59	[illegible]	[illegible]	[illegible]	ug/L
Ni	[illegible]	[illegible] 478	[illegible]	[illegible]	ug/L
Ni	[illegible]	[illegible] 084	[illegible]	[illegible]	ug/L
Cu	[illegible]	[illegible] 124	[illegible]	[illegible]	ug/L
Cu	65	[illegible] 022	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible] 182	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible] 045	0.007	[illegible]	ug/L
Ge	72	[illegible] 480	[illegible]		ug/L
As	75	17254 235	0.050	0.423[illegible]	ug/L
Se	77	[illegible] 002	0.000	0.084404	ug/L
Se	82	[illegible] 915	0.000	0.622300	ug/L

Sample ID 1011375-02

Report Date/Time: Monday, November 29, 2010 22:00:28

Sample Information

Sample ID: 1011375-03
Autosampler Position: 46
Sample Date/Time: Monday, November 29, 2010 22:02:09
Initial Sample Quantity (mg)
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-03.051
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Dwa

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
							ug/L
Li	6	458098.101	458098.101				ug/L
Be	9	2.000	0.000	0.000282	0.009	3310.571	ug/L
V	51	6077.384	0.011	0.382169	0.010	2.740	ug/L
Cr	52	10576.480	0.010	0.407932	0.027	6.596	ug/L
Cr	53	789.045	0.002	0.573643	0.034	5.852	ug/L
Mn	55	256075.199	0.787	19.906686	0.445	2.233	ug/L
Co	59	13800.223	0.042	1.300711	0.032	2.466	ug/L
Ni	60	7896.822	0.024	3.352694	0.153	4.571	ug/L
Ni	62	907.392	0.003	2.540528	0.260	10.217	ug/L
Cu	63	4871.806	0.014	0.878646	0.011	1.287	ug/L
Cu	65	975.734	0.003	0.337686	0.035	10.247	ug/L
Zn	66	1304.115	0.003	0.815372	0.020	2.420	ug/L
Zn	68	6825.530	0.019	6.362807	0.215	3.374	ug/L
							ug/L
Ge	72	324402.086	324402.086				ug/L
As	75	1973.111	0.005	0.874112	0.058	6.637	ug/L
Se	77	174.670	0.000	0.456691	0.081	17.723	ug/L
Se	82	202.320	0.001	1.149279	0.218	18.999	ug/L
							ug/L
Rh	103	420745.973	420745.973				ug/L
Ag	107	69.334	0.000	0.004907	0.001	30.338	ug/L
Cd	111	-69.324	-0.000	-0.030557	0.003	11.236	ug/L
Cd	114	14.364	0.000	0.000508	0.001	244.627	ug/L
							ug/L
In	115	371103.695	371103.695				ug/L
Sb	121	1401.465	0.004	0.146856	0.003	2.210	ug/L
Sb	123	1069.616	0.003	0.148355	0.007	4.660	ug/L
Ba	135	541553.859	1.096	222.998244	1.847	0.828	ug/L
Ba	137	933766.943	1.889	223.608523	1.981	0.886	ug/L
							ug/L
Tb	159	494302.301	494302.301				ug/L
Tl	203	100.002	0.000	0.001922	0.001	40.131	ug/L
Tl	205	238.339	0.000	0.001629	0.000	15.853	ug/L
Pb	208	1060.037	0.001	0.011311	0.001	5.301	ug/L
Bi	209	502169.275	502169.275				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	115.834
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	99.816
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.099
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.793
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	102.365
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	99.210

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
Li	6	457061.066	457061.066		ug/L
Be	9	0.000	-0.000	-0.006737	ug/L
V	51	[illegible]	0.012	[illegible]	ug/L
Cr	52	[illegible]	0.011	0.427831	ug/L
Cr	53	760.042	0.002	0.580353	ug/L
Mn	55	[illegible]	0.177	19.634931	ug/L
Co	59	[illegible]	0.004	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Zn	67	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L
As	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Se	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Se	82	244.765	[illegible]	[illegible]	ug/L
Rh	103	418625.986	418625.986		ug/L
Ag	107	51.001	0.000	0.003197	ug/L
Cd	111	-71.264	-0.000	-0.031438	ug/L
Cd	114	19.260	0.000	0.001331	ug/L
In	115	373550.175	373550.175		ug/L
Sb	121	1388.120	0.003	0.144120	ug/L
Sb	123	[illegible]	0.001	0.141651	ug/L
Ba	135	540428.174	1.102	224.303307	ug/L
Ba	137	[illegible]	1.102	225.163437	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	0.000	0.001779	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]			ug/L

Repeat 2

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
Be	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
V	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Cr	52	[illegible]	[illegible]	[illegible]	ug/L
Cr	53	773.044	0.002	0.558464	ug/L
Mn	55	262123.419	0.906	20.414537	ug/L
Co	59	13774.512	0.042	1.299022	ug/L
Ni	60	7952.589	0.023	3.251291	ug/L
Ni	62	962.088	0.003	2.755692	ug/L
Cu	63	4126.505	0.014	0.890410	ug/L
Cu	65	1371.087	0.003	0.330184	ug/L
Zn	66	1331.120	0.003	0.538140	ug/L
Zn	68	[illegible]	0.020	0.518873	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample ID 1011375-03
Report Date/Time: Monday, November 29, 2010 22:04:22

Sample Information

Sample ID: 1011375-04
Autosampler Position: 47
Sample Date/Time: Monday, November 29, 2010 22:17:49
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-04.054
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	478451.866	478451.866				ug/L
Be	9	6.000	0.000	0.013428	0.012	93.011	ug/L
V	51	8305.552	0.018	0.589515	0.033	5.608	ug/L
Cr	52	10939.622	0.010	0.416121	0.037	8.836	ug/L
Cr	53	721.372	0.001	0.483994	0.013	2.766	ug/L
Mn	55	489926.760	1.468	37.107424	0.736	1.984	ug/L
Co	59	2238.656	0.006	0.199207	0.003	1.662	ug/L
Ni	60	4682.363	0.014	1.924236	0.074	3.828	ug/L
Ni	62	568.692	0.002	1.526575	0.048	3.143	ug/L
Cu	63	3896.616	0.011	0.671008	0.005	0.769	ug/L
Cu	65	2001.594	0.006	0.729238	0.017	2.287	ug/L
Zn	66	2038.937	0.005	1.319905	0.051	3.842	ug/L
Zn	68	2217.984	0.005	1.557513	0.051	3.268	ug/L
Ge	72	333393.175	333393.175				ug/L
As	75	439.068	-0.000	-0.031352	0.008	24.016	ug/L
Se	77	138.336	0.000	0.151781	0.117	77.396	ug/L
Se	82	23.242	0.000	0.162252	0.047	28.724	ug/L
Rh	103	422514.330	422514.330				ug/L
Ag	107	156.670	0.000	0.013106	0.002	12.120	ug/L
Cd	111	77.202	0.000	0.026306	0.001	3.250	ug/L
Cd	114	94.127	0.000	0.013629	0.001	10.914	ug/L
In	115	367288.743	367288.743				ug/L
Sb	121	999.404	0.003	0.103294	0.012	11.900	ug/L
Sb	123	729.368	0.002	0.099672	0.005	4.625	ug/L
Ba	135	27646.396	0.056	11.394345	0.125	1.094	ug/L
Ba	137	46729.482	0.095	11.201057	0.120	1.068	ug/L
Tb	159	493480.800	493480.800				ug/L
Tl	203	339.344	0.000	0.021556	0.001	4.570	ug/L
Tl	205	787.712	0.001	0.020120	0.001	4.136	ug/L
Pb	208	10384.631	0.018	0.250413	0.007	2.608	ug/L
Bi	209	532115.026	532115.026				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	120.980
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.583
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.507
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.757
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	102.195
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	105.126

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
[illegible]	5	[illegible]	[illegible]		ug/L
[illegible]	9	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	4	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	4	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	[illegible]	ug/L
Co	59	2766.431	0.007	0.202012	ug/L
Ni	60	4764.421	0.014	1.975369	ug/L
Ni	62	[illegible]	0.002	1.534505	ug/L
Cu	63	[illegible]	0.011	0.674685	ug/L
Cu	65	2141.270	0.006	0.746405	ug/L
Zn	66	2181.281	0.006	1.356534	ug/L
Zn	68	2154.300	0.006	1.503772	ug/L
Ge	72	131641.514	131641.514		ug/L
As	75	430.924	0.000	0.034946	ug/L
Se	77	140.003	0.000	0.235048	ug/L
Se	82	27.637	0.000	0.188234	ug/L
Rh	103	[illegible]	[illegible]		ug/L
Ag	107	[illegible]	[illegible]	[illegible]	ug/L
Cd	111	[illegible]	[illegible]	[illegible]	ug/L
Cd	114	[illegible]	[illegible]	[illegible]	ug/L
In	115	[illegible]	[illegible]		ug/L
Sb	121	[illegible]	[illegible]	[illegible]	ug/L
Sb	123	[illegible]	[illegible]	[illegible]	ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L
Tl	203	[illegible]	[illegible]	0.020469	ug/L
Tl	205	[illegible]	[illegible]	0.010214	ug/L
Pb	208	[illegible]	[illegible]	0.245775	ug/L
Bi	209	540491.447	540491.847		ug/L

Repeat 2

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
Li	6	477225.938	477225.938		ug/L
Be	9	[illegible]	[illegible]	0.000312	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Co	59	[illegible]	[illegible]	[illegible]	ug/L
Cu	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	[illegible]	[illegible]	[illegible]	ug/L
Zn	68	[illegible]	[illegible]	[illegible]	ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	[illegible]	[illegible]	[illegible]	ug/L
Se	82	[illegible]	[illegible]	[illegible]	ug/L
Cd	111	[illegible]	[illegible]	[illegible]	ug/L
Cd	114	[illegible]	[illegible]	[illegible]	ug/L
In	115	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	2181.272	[illegible]	[illegible]	ug/L
Zn	68	2244.325	[illegible]	[illegible]	ug/L
Ge	72	330287.435	330287.435		ug/L
As	75	[illegible]	0.000	0.022601	ug/L
Se	77	144.003	0.000	0.202864	ug/L
Se	82	24.915	0.000	0.191963	ug/L

Sample ID: 1011375-04
Report Date/Time: Monday, November 29, 2010 22:20:01

Sample Information

Sample ID: 1011375-05
Autosampler Position: 48
Sample Date/Time: Monday, November 29, 2010 22:21:43
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-05.055
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	476476.504	476476.504				ug/L
Be	9	3.000	0.000	0.003329	0.000	4.302	ug/L
V	51	6027.784	0.011	0.368828	0.028	7.664	ug/L
Cr	52	10842.491	0.011	0.423343	0.019	4.582	ug/L
Cr	53	1339.454	0.003	1.125132	0.058	5.146	ug/L
Mn	55	270256.536	0.820	20.742357	0.323	1.556	ug/L
Co	59	14177.861	0.043	1.319175	0.040	3.042	ug/L
Ni	60	7832.424	0.024	3.281253	0.057	1.734	ug/L
Ni	62	905.725	0.003	2.499366	0.126	5.036	ug/L
Cu	63	5079.932	0.015	0.906128	0.008	0.910	ug/L
Cu	65	1132.755	0.003	0.394988	0.028	7.065	ug/L
Zn	66	2129.627	0.006	1.407384	0.030	2.099	ug/L
Zn	68	7659.931	0.021	7.118150	0.213	2.992	ug/L
Ge	72	328642.596	328642.596				ug/L
As	75	1692.696	0.004	0.696763	0.020	2.837	ug/L
Se	77	271.674	0.000	1.167086	0.276	23.670	ug/L
Se	82	173.941	0.001	0.980546	0.122	12.396	ug/L
Rh	103	412241.145	412241.145				ug/L
Ag	107	181.670	0.000	0.015886	0.002	9.909	ug/L
Cd	111	-66.652	-0.000	-0.030007	0.004	12.875	ug/L
Cd	114	24.441	0.000	0.002243	0.001	55.063	ug/L
In	115	367220.548	367220.548				ug/L
Sb	121	1820.551	0.005	0.195489	0.009	4.403	ug/L
Sb	123	1368.872	0.004	0.194149	0.005	2.413	ug/L
Ba	135	564117.842	1.148	233.671535	0.501	0.214	ug/L
Ba	137	971866.437	1.978	234.111900	3.446	1.472	ug/L
Tb	159	491369.417	491369.417				ug/L
Tl	203	117.669	0.000	0.003472	0.000	3.009	ug/L
Tl	205	253.340	0.000	0.002150	0.000	22.832	ug/L
Pb	208	2388.823	0.003	0.047508	0.002	3.848	ug/L
Bi	209	503470.171	503470.171				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	120.481
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	66.926	
Zn	67.925	
Ge	71.922	101.121
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	95.136
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.738
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	101.758
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	99.467

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	[illegible]	Int Std outside of limits

Replicates

Repeat 1

Analyte	Mass	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	478160.302		ug/L
Be	9	[illegible]	0.000331	ug/L
V	51	5700.450	0.010	0.335060 ug/L
Cr	52	10741.025	0.010	0.414150 ug/L
Cr	53	1905.131	0.004	1.185207 ug/L
Mn	55	272540.068	0.030	20.971448 ug/L
Co	59	14190.229	0.043	1.324171 ug/L
Ni	60	7446.770	0.024	3.294710 ug/L
Ni	62	478.456	[illegible]	2.428602 ug/L
Cu	[illegible]	[illegible]	[illegible]	[illegible] ug/L
Cu	65	1150.091	[illegible]	0.402801 ug/L
Zn	[illegible]	[illegible]	[illegible]	[illegible] ug/L
Zn	[illegible]	7880.403	[illegible]	2.302547 ug/L
Ge	[illegible]	[illegible]		ug/L
As	[illegible]	[illegible]	[illegible]	ug/L
Se	[illegible]	[illegible]	[illegible]	ug/L
Se	[illegible]	[illegible]		ug/L
Rh	[illegible]	[illegible]	[illegible]	ug/L
Ag	[illegible]	[illegible]	[illegible]	ug/L
Cd	[illegible]	77.450	[illegible]	[illegible] ug/L
Cd	114	[illegible]	[illegible]	[illegible] ug/L
In	115	373707.647	373707.647	ug/L
Sn	121	1630.221	0.035	0.104022 ug/L
Sb	123	1410.128	0.004	0.197543 ug/L
Ba	135	513335.738	1.150	234.005302 ug/L
Ba	137	940264.634	2.000	236.800885 ug/L
Tb	[illegible]	498249.742	498249.742	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] ug/L
[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]		ug/L
Be	[illegible]	[illegible]	[illegible]	ug/L
V	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Co	[illegible]	[illegible]	[illegible]	ug/L
Ni	[illegible]	7757.719	3.021	5.21e02 ug/L
Ni	62	[illegible]	0.004	2.04e00.1 ug/L
Cu	[illegible]	[illegible]	0.014	0.900023 ug/L
Cu	65	1070.079	0.003	0.364067 ug/L
Zn	66	2113.289	0.005	1.374146 ug/L
Zn	68	7807.003	0.021	7.019760 ug/L
Ge	72	333180.272	333180.272	ug/L
As	75	1070.838	0.004	0.674230 ug/L
Se	77	[illegible]	0.001	1.364891 ug/L
Se	82	[illegible]	0.000	0.478276 ug/L

Sample ID: 1011375-05
Report Date/Time: Monday, November 29, 2010 22:23:56

Sample Information

Sample ID: 1011375-01
Autosampler Position: 28
Sample Date/Time: Monday November 29, 2010 20:15:03
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-01.031
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	435448.031	435448.031				ug/L
Be	9	10.667	0.000	0.032451	0.006	18.238	ug/L
V	51	15664.690	0.039	1.309736	0.013	1.001	ug/L
Cr	52	15648.505	0.024	0.957561	0.075	7.784	ug/L
Cr	53	1368.793	0.003	1.117497	0.027	2.454	ug/L
Mn	55	97593.971	0.287	7.259781	0.311	4.286	ug/L
Co	59	2913.873	0.008	0.258228	0.018	7.074	ug/L
Ni	60	2367.360	0.007	0.948669	0.038	3.982	ug/L
Ni	62	461.351	0.001	1.212133	0.097	7.964	ug/L
Cu	63	3527.782	0.010	0.593775	0.023	3.843	ug/L
Cu	65	1597.169	0.004	0.563018	0.036	6.400	ug/L
Zn	66	2330.683	0.006	1.509677	0.083	5.520	ug/L
Zn	68	2452.052	0.005	1.761419	0.082	4.651	ug/L
Ge	72	337740.112	337740.112				ug/L
As	75	1244.545	0.002	0.418806	0.047	11.212	ug/L
Se	77	146.336	0.000	0.194760	0.127	65.111	ug/L
Se	82	0.837	0.000	0.042241	0.088	208.451	ug/L
Rh	103	422644.604	422644.604				ug/L
Ag	107	131.336	0.000	0.010729	0.001	6.297	ug/L
Cd	111	100.109	0.000	0.035212	0.014	39.488	ug/L
Cd	114	242.862	0.001	0.038170	0.005	12.671	ug/L
In	115	367946.957	367946.957				ug/L
Sb	121	667.700	0.002	0.065916	0.006	8.972	ug/L
Sb	123	478.347	0.001	0.062475	0.001	2.112	ug/L
Ba	135	27571.149	0.057	11.544617	0.219	1.895	ug/L
Ba	137	47449.222	0.098	11.554460	0.182	1.576	ug/L
Tb	159	485723.958	485723.958				ug/L
Tl	203	260.007	0.000	0.016076	0.001	8.528	ug/L
Tl	205	568.025	0.001	0.013587	0.000	2.107	ug/L
Pb	208	9012.317	0.017	0.227432	0.005	2.144	ug/L
Bi	209	504854.757	504854.757				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	110.107
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	103.920
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	97.53[illegible]
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.936
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	100.589
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	99.741

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Mn	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	[illegible]	2460.391	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	0.002	0.384877	ug/L
Se	77	[illegible]	0.000	0.340826	ug/L
Se	82	15.575	0.000	0.118460	ug/L
Rh	[illegible]	422323.058	422323.058		ug/L
Ag	[illegible]	[illegible]	0.000	0.010705	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.030220	ug/L
[illegible]	[illegible]	214.562	0.000	0.033523	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ba	[illegible]	[illegible]	[illegible]	11.774337	ug/L
Ba	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	6	445012.760	445012.760		ug/L
Be	9	11.000	0.000	0.032696	ug/L
V	51	15175.261	0.039	1.321911	ug/L
Cr	52	15024.360	0.026	1.039782	ug/L
Cr	53	1381.125	0.003	1.145912	ug/L
Mn	55	[illegible]	0.301	7.613057	ug/L
Co	[illegible]	[illegible]	[illegible]	0.277447	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ge	[illegible]	[illegible]	[illegible]		ug/L
As	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]		ug/L

Sample Information

Sample ID: 1011407-02
Autosampler Position: 30
Sample Date/Time: Monday, November 29, 2010 20:22:48
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates. 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011407-02.033
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	455019.140	455019.140				ug/L
Be	9	2.000	0.000	0.000641	0.006	1824.321	ug/L
V	51	2813.699	0.001	0.038179	0.007	17.066	ug/L
Cr	52	8512.765	0.003	0.130536	0.012	9.287	ug/L
Cr	53	357.678	0.000	0.119877	0.018	15.411	ug/L
Mn	55	139872.733	0.420	10.613850	0.328	3.087	ug/L
Co	59	3444.080	0.010	0.311968	0.012	3.764	ug/L
Ni	60	2509.071	0.007	1.024907	0.062	6.037	ug/L
Ni	62	251.673	0.001	0.647575	0.017	2.630	ug/L
Cu	63	932.061	0.002	0.117306	0.008	6.584	ug/L
Cu	65	439.016	0.001	0.117145	0.012	10.444	ug/L
Zn	66	1039.075	0.003	0.602371	0.032	5.370	ug/L
Zn	68	1454.142	0.002	0.799832	0.031	3.829	ug/L
Ge	72	331672.663	331672.663				ug/L
As	75	2317.345	0.006	1.045050	0.074	7.105	ug/L
Se	77	133.669	0.000	0.121011	0.030	25.054	ug/L
Se	82	18.583	0.000	0.136865	0.050	36.477	ug/L
Rh	103	425929.090	425929.090				ug/L
Ag	107	47.334	0.000	0.002772	0.001	20.048	ug/L
Cd	111	-0.858	-0.000	-0.003973	0.003	78.035	ug/L
Cd	114	111.675	0.000	0.016454	0.004	25.594	ug/L
In	115	368196.297	368196.297				ug/L
Sb	121	326.343	0.001	0.027723	0.001	4.845	ug/L
Sb	123	249.960	0.001	0.028754	0.001	2.323	ug/L
Ba	135	23425.449	0.048	9.768703	0.190	1.949	ug/L
Ba	137	39923.826	0.082	9.684794	0.284	2.936	ug/L
Tb	159	487688.059	487688.059				ug/L
Tl	203	169.003	0.000	0.007662	0.001	13.402	ug/L
Tl	205	433.349	0.000	0.008331	0.001	6.330	ug/L
Pb	208	799.690	0.000	0.003599	0.000	9.905	ug/L
Bi	209	516285.209	516285.209				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	115.055
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	102.053
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.295
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	100.003
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	100.996
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.999

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	60	[illegible]	[illegible]	1.091835	ug/L
[illegible]	62	253.007	0.001	0.667213	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Cu	65	411.014	0.001	0.103313	ug/L
Zn	66	1021.073	0.002	0.575831	ug/L
Zn	68	1475.145	0.002	[illegible]	ug/L
Ge	72	3172613.526	3172613.526		ug/L
As	75	2277.921	0.005	[illegible]	ug/L
Se	77	1.05.003	0.000	[illegible]	ug/L
Se	82	23.589	0.001	0.102324	ug/L
Rh	103	421529.341	421529.341		ug/L
Ag	107	53.001	0.000	0.003366	ug/L
Cd	111	-4.781	-0.000	-0.000441	ug/L
Cd	114	[illegible]	[illegible]	0.015023	ug/L
In	115	[illegible]	[illegible]		ug/L
Sb	121	[illegible]	[illegible]	0.027562	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ba	135	[illegible]	[illegible]	0.024750	ug/L
Ba	137	[illegible]	[illegible]	0.073702	ug/L
[illegible]	159	[illegible]	[illegible]		ug/L
Tl	203	157.003	0.000	0.000561	ug/L
Tl	205	651.017	0.000	0.000023	ug/L
Pb	208	765.022	0.000	0.000424	ug/L
Bi	209	5172424.978	5172424.978		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	448527.684	448527.684		ug/L
Be	9	4.000	0.000	0.007510	ug/L
V	51	2738.309	0.001	0.037272	ug/L
Cr	52	8410.326	0.004	0.142185	ug/L
Cr	53	329.010	0.000	0.080082	ug/L
Mn	55	137473.567	0.424	10.708884	ug/L
Co	59	3364.721	0.010	0.313030	ug/L
Ni	60	2422.376	0.007	1.013084	ug/L
Fe	57	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.125410	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	0.036459	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	72	[illegible]	[illegible]		ug/L
As	75	[illegible]	[illegible]	[illegible]	ug/L
Se	77	126.002	0.000	0.089834	ug/L
Se	82	7.559	0.000	0.070343	ug/L
Rh	103	[illegible]	[illegible]		ug/L

Sample ID: 1011407-02
Report Date/Time: Monday, November 29, 2010 20:25:00

Sample Information

Sample ID: 1011375-04
Autosampler Position: 29
Sample Date/Time: Monday, November 29, 2010 20:18:56
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-04.032
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	449603.314	449603.314				ug/L
Be	9	1.667	-0.000	-0.000603	0.002	259.012	ug/L
V	51	3164.581	0.002	0.066134	0.008	11.652	ug/L
Cr	52	8721.316	0.003	0.130668	0.024	18.221	ug/L
Cr	53	395.013	0.000	0.148440	0.013	8.437	ug/L
Mn	55	202374.879	0.594	15.010872	0.329	2.192	ug/L
Co	59	592.360	0.002	0.046393	0.002	5.310	ug/L
Ni	60	3596.146	0.010	1.443791	0.069	4.788	ug/L
Ni	62	360.345	0.001	0.928257	0.111	12.007	ug/L
Cu	63	2386.699	0.006	0.380135	0.009	2.269	ug/L
Cu	65	1308.783	0.003	0.447911	0.028	6.279	ug/L
Zn	66	1075.414	0.003	0.609692	0.016	2.543	ug/L
Zn	68	1431.137	0.002	0.742944	0.048	6.517	ug/L
Ge	72	339742.687	339742.687				ug/L
As	75	183.447	-0.001	-0.178962	0.039	21.938	ug/L
Se	77	154.670	0.000	0.250216	0.072	28.589	ug/L
Se	82	27.984	0.000	0.184463	0.099	53.649	ug/L
Rh	103	427520.019	427520.019				ug/L
Ag	107	69.668	0.000	0.004839	0.001	10.865	ug/L
Cd	111	30.570	0.000	0.008113	0.003	40.180	ug/L
Cd	114	86.492	0.000	0.012223	0.001	4.782	ug/L
In	115	367632.140	367632.140				ug/L
Sb	121	467.018	0.001	0.043566	0.003	7.632	ug/L
Sb	123	362.590	0.001	0.045436	0.000	0.907	ug/L
Ba	135	24665.372	0.051	10.403993	0.080	0.765	ug/L
Ba	137	42766.557	0.089	10.495923	0.263	2.503	ug/L
Tb	159	482075.532	482075.532				ug/L
Tl	203	318.678	0.000	0.020741	0.003	12.841	ug/L
Tl	205	777.044	0.001	0.020651	0.000	2.391	ug/L
Pb	208	1749.423	0.002	0.029034	0.002	7.922	ug/L
Bi	209	514607.826	514607.826				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	113.686
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

Ni	59.933	
Ni	61.928	
Cu	62.930	
Cu	64.928	
Zn	65.926	
Zn	67.925	
Ge	71.922	104.536
As	74.922	
Se	76.920	
Se	81.917	
Rh	102.905	98.662
Ag	106.905	
Cd	110.904	
Cd	113.904	
In	114.904	99.850
Sb	120.904	
Sb	122.904	
Ba	134.906	
Ba	136.905	
Tb	158.925	99.833
Tl	202.972	
Tl	204.975	
Pb	207.977	
Bi	208.980	101.668

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	52	[illegible]	0.129564	ug/L
Cr	53	185.013	0.130224	ug/L
Mn	55	109.328.712	14.663101	ug/L
Co	59	626.000	0.040019	ug/L
Ni	60	3917.617	1.438869	ug/L
Ni	62	326.010	0.825914	ug/L
Cu	63	2349.356	0.370654	ug/L
Cu	65	1237.104	0.417321	ug/L
Zn	66	[illegible]	0.627447	ug/L
Zn	68	1196.130	0.803201	ug/L
[illegible]	72	[illegible]		ug/L
[illegible]	75	[illegible]	[illegible]	ug/L
[illegible]	77	[illegible]	0.332805	ug/L
[illegible]	82	[illegible]	0.168205	ug/L
[illegible]	[illegible]	[illegible]		ug/L
Rh	103	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ag	107	[illegible]		ug/L
Ag	109	326.111.578		ug/L
Cd	111	936.020	0.047255	ug/L
Cd	113	320.686	0.045652	ug/L
In	115	24266.853	10.312867	ug/L
Ba	135	43071.452	10.672002	ug/L
Ba	137	477336.981		ug/L
Tb	159	290.008	1.018542	ug/L
Tl	203	833.047	0.021006	ug/L
Tl	205	1161.083	0.020380	ug/L
Pb	208	524920.712		ug/L
Bi	209			ug/L

Repeat 2

Analyte	Mass	Net Intensity	Concentration	Report Unit
[illegible]	[illegible]	[illegible]		ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Mn	55	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]		ug/L
Ni	62	[illegible]	[illegible]	ug/L
Cu	63	[illegible]	[illegible]	ug/L
[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Zn	66	1052.077	0.588621	ug/L
Zn	68	1486.144	0.780924	ug/L
Ge	72	337210.684		ug/L
As	75	149.829	-0.197225	ug/L
Se	77	144.003	-0.210074	ug/L
Se	82	23.661	0.163682	ug/L
Rh	103	428442.047		ug/L

Sample ID: 1011375-04
Report Date/Time: Monday, November 29, 2010 20:21:07
Page 2

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Sample Information

Sample ID: 1011407-01
Autosampler Position: 39
Sample Date/Time: Tuesday, November 30, 2010 09:13:41
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011407-01.041
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	460822.120	460822.120				ug/L
Be	9	2.000	0.000	0.003333	0.006	182.281	ug/L
V	51	3255.183	0.003	0.089088	0.006	7.023	ug/L
Ni	60	4527.610	0.014	1.847917	0.096	5.196	ug/L
Ni	62	591.694	0.002	1.591947	0.032	2.006	ug/L
Ge	72	327781.715	327781.715				ug/L
Ba	135	9151.448	0.020	4.192788	0.112	2.660	ug/L
Ba	137	15889.294	0.035	4.223406	0.072	1.696	ug/L
Tb	159	451758.074	451758.074				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	104.559
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	97.217
Ba	134.906	
Ba	136.905	
Tb	158.925	97.501

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	460873.180	460873.180		ug/L
Be	9	4.000	0.000	0.010347	ug/L
V	51	3301.565	0.003	0.094203	ug/L
Ni	60	4630.332	0.014	1.882711	ug/L
Ni	62	593.026	0.002	1.570309	ug/L
Ge	72	327291.615	327291.615		ug/L
Ba	135	9157.902	0.020	4.075823	ug/L
Ba	137	[illegible]	[illegible]	4.205133	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	[illegible]	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	448494.973	448494.973		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	457024.235	457024.235		ug/L
Be	9	1.000	-0.000	-0.000312	ug/L
V	51	3244.883	0.003	0.090951	ug/L

Sample Information

Sample ID: 1011375-01
Autosampler Position: 34
Sample Date/Time: Tuesday, November 30, 2010 08:55:52
Initial Sample Quantity (mg)
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-01.034
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	451734.539	451734.539				ug/L
Be	9	21.667	0.000	0.072865	0.016	21.441	ug/L
V	51	26907.348	0.075	2.464983	0.057	2.298	ug/L
Ni	60	6273.760	0.019	2.574098	0.114	4.427	ug/L
Ni	62	941.063	0.003	2.574258	0.077	2.995	ug/L
Ge	72	327298.394	327298.394				ug/L
Ba	135	32679.963	0.072	14.918537	0.295	1.980	ug/L
Ba	137	55606.890	0.122	14.734567	0.403	2.734	ug/L
Tb	159	453985.688	453985.688				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	102.497
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	97.074
Ba	134.906	
Ba	136.905	
Tb	158.925	97.982

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	458328.008	458328.008		ug/L
Be	9	17.000	0.000	0.086421	ug/L
V	51	26957.108	0.076	2.483485	ug/L
Ni	60	6522.617	0.020	2.690512	ug/L
Ni	62	920.080	0.003	2.527977	ug/L
Ge	72	326661.712	326661.712		ug/L
Ba	135	33311.786	0.074	15.20888	ug/L
Ba	137	56037.383	0.125	15.088811	ug/L
Tb	159	453403.386	453403.386		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	53044.575	0.118	14.20646	ug/L
Tb	159	453800.214	453800.214		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	446157.346	446157.346		ug/L
Be	9	25.000	0.000	0.085561	ug/L
V	51	27567.378	0.076	2.510081	ug/L

Sample Information

Sample ID: 1011375-02
Autosampler Position: 35
Sample Date/Time: Tuesday, November 30 2010 08:58:17
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-02.035
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	450229.341	450229.341				ug/L
Be	9	4.367	0.000	0.012911	0.002	17.748	ug/L
V	51	2776.390	0.001	0.037291	0.024	64.898	ug/L
Ni	60	8560.483	0.026	3.464311	0.073	2.119	ug/L
Ni	62	1057.078	0.003	2.852768	0.122	4.266	ug/L
Ge	72	332732.460	332732.460				ug/L
Ba	135	133525.489	0.288	59.757343	1.614	2.700	ug/L
Ba	137	229562.512	0.495	59.645590	1.507	2.526	ug/L
Tb	159	463544.309	463544.309				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	102.155
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.685
Ba	134.906	
Ba	136.905	
Tb	158.925	100.045

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	454641.954	[illegible]		ug/L
Be	9	4.000	0.000	0.010271	ug/L
V	51	2565.022	0.000	0.011067	ug/L
Ni	60	8643.770	0.026	3.484882	ug/L
Ni	62	1031.074	0.003	2.712467	ug/L
Ge	72	340737.914	340737.914		ug/L
Ba	135	136786.835	0.291	59.246584	ug/L
Ba	137	232626.508	0.461	57.926564	ug/L
Tb	159	463174.632	463174.632		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	448441.874	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	452189.203	452189.203		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	442214.245	442214.245		ug/L
Be	9	5.000	0.000	0.014384	ug/L
V	51	2506.777	0.002	0.060213	ug/L

Sample ID: 1011375-02
Report Date/Time: Tuesday, November 30, 2010 08:58:59

01230

Sample Information

Sample ID: 1011375-03
Autosampler Position: 41
Sample Date/Time: Tuesday, November 30, 2010 09:18:28
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-03.943
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
							ug/L
Li	6	463527.490	463527.490				ug/L
Be	9	2.667	0.000	0.005544	0.007	128.942	ug/L
V	51	3126.581	0.002	0.070269	0.011	16.185	ug/L
Ni	60	1657.848	0.005	0.646448	0.024	3.657	ug/L
Ni	62	206.338	0.001	0.502288	0.053	10.647	ug/L
							ug/L
Ge	72	334124.486	334124.486				ug/L
Ba	135	103617.790	0.228	47.320908	0.617	1.303	ug/L
Ba	137	179457.377	0.395	47.576222	0.213	0.448	ug/L
Tb	159	453973.691	453973.691				ug/L

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QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	105.172
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	99.098
Ba	134.906	
Ba	136.905	
Tb	158.925	97.980

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	101115.770	0.228	46.712263	ug/L
Ba	137	177456.551	0.395	47.584621	ug/L
Tb	159	448767.066	448767.066		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L

Sample Information

Sample ID: 1011407-02
Autosampler Position: 40
Sample Date/Time: Tuesday, November 30, 2010 09:16:04
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011407-02.042
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	462294.957	462294.957				ug/L
Be	9	8.000	0.000	0.023988	0.007	29.820	ug/L
V	51	8889.845	0.020	0.644132	0.009	1.446	ug/L
Ni	60	3878.942	0.011	1.560413	0.044	2.837	ug/L
Ni	62	482.685	0.001	1.272049	0.044	3.478	ug/L
Ge	72	331529.240	331529.240				ug/L
Ba	135	26155.243	0.058	12.013547	0.114	0.950	ug/L
Ba	137	45173.237	0.100	12.044137	0.256	2.124	ug/L
Tb	159	451185.838	451185.838				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	104.893
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.328
Ba	134.906	
Ba	136.905	
Tb	158.925	97.378

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	471312.166	471312.166		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	12.13162	ug/L
Ba	137	[illegible]	[illegible]	12.14500	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L

01244

Sample Information

Sample ID: 1011375-04
Autosampler Position: 37
Sample Date/Time: Tuesday, November 30, 2010 09:08:53
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-04.039
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	445341.584	445341.584				ug/L
Be	9	6.000	0.000	~~0.017849~~	0.004	20.914	ug/L
V	51	7219.482	0.015	0.483795	0.023	4.762	ug/L
Ni	60	5588.264	0.017	2.277073	0.089	3.920	ug/L
Ni	62	629.363	0.002	~~1.690369~~	0.058	3.445	ug/L
Ge	72	329228.539	329228.539				ug/L
Ba	135	24675.731	0.054	11.275489	0.306	2.717	ug/L
Ba	137	43230.293	0.095	11.465583	0.314	2.735	ug/L
Tb	159	453587.044	453587.044				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	101.046
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	97.646
Ba	134.906	
Ba	136.905	
Tb	158.925	97.896

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	447374.668	447374.668		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	7124.048	0.014	0.457363	ug/L
Ni	60	5485.860	0.016	2.181374	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	329177.432	329177.432		ug/L
Ba	135	24294.576	0.053	11.082376	ug/L
Ba	137	42422.127	0.093	11.215483	ug/L
Tb	159	454669.861	454669.861		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	447192.446	447192.446		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	24755.978	0.054	11.137462	ug/L
Ba	137	43510.761	0.094	11.302604	ug/L
Tb	159	453993.823	453993.823		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	447428.698	447428.698		ug/L
Be	9	6.000	0.000	[illegible]	ug/L
V	51	7230.373	0.016	[illegible]	ug/L

Sample Information

Sample ID: 1011375-05
Autosampler Position: 38
Sample Date/Time: Tuesday, November 30, 2010 09:11:17
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-05.040
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	439930.014	439930.014				ug/L
Be	9	1.333	0.000	0.001212	0.004	344.705	ug/L
V	51	6478.143	0.013	0.416212	0.032	7.667	ug/L
Ni	60	8204.787	0.025	3.389713	0.092	2.706	ug/L
Ni	62	990.402	0.003	2.724981	0.074	2.723	ug/L
Ge	72	325867.621	325867.621				ug/L
Ba	135	547125.484	1.206	250.035851	3.558	1.423	ug/L
Ba	137	948199.800	2.090	251.567281	2.758	1.096	ug/L
Tb	159	453758.451	453758.451				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	99.818
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	96.649
Ba	134.906	
Ba	136.905	
Tb	158.925	97.93[illegible]

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L

R

01240

Sample Information

Sample ID: 1011375-01
Autosampler Position: 18
Sample Date/Time: Tuesday, November 30, 2010 08:11:46
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-01.016
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	434582.431	434582.431				ug/L
Be	9	6.000	0.000	0.018442	0.007	36.871	ug/L
V	51	10943.093	0.027	0.874277	0.052	5.981	ug/L
Ni	60	2566.421	0.008	1.049306	0.053	5.049	ug/L
Ni	62	410.014	0.001	1.097413	0.061	5.590	ug/L
Ge	72	323761.567	323761.567				ug/L
Ba	135	22879.595	0.051	10.496557	0.224	2.137	ug/L
Ba	137	39393.291	0.087	10.487875	0.089	0.849	ug/L
Tb	159	451750.338	451750.338				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	98.605
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	96.025
Ba	134.906	
Ba	136.905	
Tb	158.925	97.500

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	441787.744	441752.744		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	10936.332	[illegible]	[illegible]	ug/L
Ni	60	2561.400	[illegible]	[illegible]	ug/L
Ni	62	426.015	0.001	1.118562	ug/L
Ge	72	332027.586	332027.586		ug/L
Ba	135	22630.476	0.049	10.240001	ug/L
Ba	137	38870.563	0.086	10.368875	ug/L
Tb	159	461033.194	461033.194		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	436182.427	436182.427		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	[illegible]	[illegible]	ug/L
Ba	137	[illegible]	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	425772.122	425772.122		ug/L
Be	9	6.000	0.000	[illegible]	ug/L
V	51	10950.476	0.026	0.857130	ug/L

Sample ID: 1011375-01
Report Date/Time: Tuesday, November 30, 2010 08:12:28

01192

Sample Information

Sample ID: 1011407-02
Autosampler Position: 20
Sample Date/Time: Tuesday, November 30, 2010 08:16:33
Initial Sample Quantity (mg)
Sample Prep Volume (mL)
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011407-02.018
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	449627.481	449627.481				ug/L
Be	9	3.000	0.000	0.007009	0.012	174.971	ug/L
V	51	2826.262	0.001	~~0.044278~~	0.003	6.844	ug/L
Ni	60	2808.835	0.008	1.128855	0.040	3.502	ug/L
Ni	62	291.008	0.001	0.746174	0.070	9.320	ug/L
Ge	72	329795.691	329795.691				ug/L
Ba	135	21756.247	0.048	9.937933	0.166	1.670	ug/L
Ba	137	37345.205	0.082	9.901559	0.240	2.419	ug/L
Tb	159	453650.725	453650.725				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	102.019
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	97.814
Ba	134.906	
Ba	136.905	
Tb	158.925	97.910

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	453366.886	453366.886		ug/L
Be	9	1.000	-0.000	-0.000101	ug/L
V	51	2918.945	0.001	0.047530	ug/L
Ni	60	2867.822	0.008	1.128448	ug/L
Ni	62	294.007	0.001	0.000911	ug/L
Ge	72	336759.973	336759.973		ug/L
Ba	135	21746.539	0.047	9.760849	ug/L
Ba	137	36887.822	0.080	9.840863	ug/L
Tb	159	458467.032	458467.032		ug/L

Repeat 2

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	[illegible]	[illegible]	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L
Ni	60	[illegible]	[illegible]	[illegible]	ug/L
Ni	62	[illegible]	[illegible]	[illegible]	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	21686.427	0.048	9.805521	ug/L
Ba	137	37567.820	0.083	9.951785	ug/L
Tb	159	453631.625	453631.625		ug/L

Repeat 3

Analyte	Mass	Meas. Intensity	Net Intensity	Concentration	Report Unit
Li	6	449570.686	449570.686		ug/L
Be	9	2.000	0.000	0.021170	ug/L
V	51	2764.837	0.001	0.041532	ug/L

Sample Information

Sample ID: 1011375-04
Autosampler Position: 19
Sample Date/Time: Tuesday, November 30, 2010 08:14:09
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K30007.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K30007\1011375-04.017
Tuning File: C:\Elandata\Tuning\30NOV2010_6020A_A.tun
Optimization File: C:\Elandata\Optimize\30NOV2010_6020A.dac

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
							ug/L
Li	6	443552.109	443552.109				ug/L
Be	9	2.333	0.000	0.004755	0.002	42.658	ug/L
V	51	2990.336	0.002	0.058342	0.013	21.968	ug/L
Ni	60	3716.868	0.011	1.490946	0.107	7.187	ug/L
Ni	62	354.678	0.001	0.914592	0.042	4.628	ug/L
							ug/L
Ge	72	332526.250	332526.250				ug/L
Ba	135	24104.051	0.053	10.943362	0.153	1.395	ug/L
Ba	137	40993.327	0.090	10.801473	0.090	0.830	ug/L
Tb	159	456435.450	456435.450				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	100.640
Be	9.012	
V	50.944	
Ni	59.933	
Ni	61.928	
Ge	71.922	98.624
Ba	134.906	
Ba	136.905	
Tb	158.925	98.511

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Replicates

Repeat 1

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
		[illegible]	[illegible]		ug/L
Li	6	[illegible]	[illegible]		ug/L
Be	9	2.000	0.000	0.003570	ug/L
V	51	[illegible]	0.002	0.072827	ug/L
Ni	60	[illegible]	0.012	1.501984	ug/L
Ni	62	[illegible]	0.001	0.886264	ug/L
Ge	72	327768.473	327768.473		ug/L
Ba	135	23974.677	0.052	[illegible]	ug/L
Ba	137	40475.410	[illegible]	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 2

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	1.000	0.000	0.007082	ug/L
V	51	[illegible]	0.002	0.053724	ug/L
Ni	60	[illegible]	0.011	1.482757	ug/L
Ni	62	[illegible]	0.001	0.876730	ug/L
Ge	72	[illegible]	[illegible]		ug/L
Ba	135	[illegible]	0.054	[illegible]	ug/L
Ba	137	[illegible]	0.091	[illegible]	ug/L
Tb	159	[illegible]	[illegible]		ug/L

Repeat 3

Analyte	Mass	Mean Intensity	Net Intensity	Concentration	Report Unit
Li	6	[illegible]	[illegible]		ug/L
Be	9	2.000	0.000	[illegible]	ug/L
V	51	[illegible]	[illegible]	[illegible]	ug/L

Sample ID: 1011375-04
Report Date/Time: Tuesday, November 30, 2010 08:14:51

01194

QC BATCH SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012934 QC Batch Matrix: Water

Preparation: 3020A Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/29/10 08:00	
NTC02GW0313	1011375-02	11/29/10 08:00	
NTC02GW0413	1011375-03	11/29/10 08:00	
NTC02GW0613	1011375-04	11/29/10 08:00	
NTCFD111710-01	1011375-05	11/29/10 08:00	
NTC02GW0113	1011407-01	11/29/10 08:00	
NTC02GW0513	1011407-02	11/29/10 08:00	
Blank	1012934-BLK1	11/29/10 08:00	
Blank	1012934-BLK2	11/29/10 08:00	
LCS	1012934-BS1	11/29/10 08:00	
LCS	1012934-BS2	11/29/10 08:00	

QC BATCH SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012940 QC Batch Matrix: Water

Preparation: General Metals Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/29/10 08:00	
NTC02GW0613	1011375-04	11/29/10 08:00	
NTC02GW0513	1011407-02	11/29/10 08:00	
Blank	1012940-BLK1	11/29/10 08:00	
LCS	1012940-BS1	11/29/10 08:00	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012934

Printed: 12/14/2010 1:24:15PM

Metals, Water, 3020A Digestion

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

19550

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client: Source ID	Client: Spike ID	Client: uL Spike	Comments
1011352-01	V	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29093 Added for SequenceQC in: 0K29093
Ag Diss 6020	Ag Total 6020	As Diss 6020	As Total 6020	Ba Diss 6020	Ba Total 6020	Be Diss 6020	Be Total 6020		
Cd Diss 6020	Cd Total 6020	Co Diss 6020	Co Total 6020	Cr Diss 6020	Cr Total 6020	Cu Diss 6020	Cu Total 6020		
Mn Diss 6020	Mn Total 6020	Ni Diss 6020	Ni Total 6020	Pb Diss 6020	Pb Total 6020	Sb Diss 6020	Sb Total 6020		
Se Diss 6020	Se Total 6020	Tl Diss 6020	Tl Total 6020	V Diss 6020	V Total 6020	Zn Diss 6020	Zn Total 6020		
1011352-01RE1	V	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K30007 Added for SequenceQC in: 0K30007
Ba Total 6020	Be Diss 6020	Be Total 6020	Ni Total 6020	V Total 6020					
1011352-02	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-01	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-02	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-03	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-04	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-05	J	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		

Comments:

Analyst Initials:

Metals, Water, 3020A Digestion

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011375-01	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011375-02	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011375-03	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011375-04	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011375-05	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011407-01	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1011407-02	I	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Total 6020	*As Total 6020*	*Ba Total 6020*	*Be Total 6020*	*Cd Total 6020*	*Co Total 6020*	*Cr Total 6020*	*Cu Total 6020*		
Mn Total 6020	*Ni Total 6020*	*Pb Total 6020*	*Sb Total 6020*	*Se Total 6020*	*Tl Total 6020*	*V Total 6020*	*Zn Total 6020*		
1012934-BLK1		Nov-29-10 08:00	RDB	25	125				
1012934-BLK2		Nov-29-10 08:00	RDB	25	125				
1012934-BS1		Nov-29-10 08:00	RDB	25	125		0110693	25	
1012934-BS2		Nov-29-10 08:00	RDB	25	125		0110693	25	

Comments:	Analyst Initials:

PREPARATION BATCH 1012934

Printed: 12/14/2010 1:24:15PM

Metals, Water, 3020A Digestion

Batch comments:
RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1012934-MS1		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MS2		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MSD1		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-MSD2		Nov-29-10 08:00	RDB	25	125	1011352-01	0110693	25	
1012934-PS1		Nov-29-10 17:45	DWJ	2	10	1011352-01	0070820	50	[Spk] 25mL->125mL; 10mL->10mL; Spike
1012934-PS2		Nov-30-10 07:00	DSC	1	5	1011352-01	0070820	25	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012940

Printed: 12/14/2010 1:24:56PM

Metals, Water, General Metals Prep

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-02	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011352-02RE1	N	Nov-29-10 08:00		25	125	TETRA TECH NUS - Pittsburgh			Added for SequenceQC in: 0K29093 Added for SequenceQC in: 0K29093
Ag Total 6020	As Total 6020	Ba Total 6020	Be Total 6020	Cd Total 6020	Co Total 6020	Cr Total 6020	Cu Total 6020		
Mn Total 6020	Ni Total 6020	Pb Total 6020	Sb Total 6020	Se Total 6020	Tl Total 6020	V Total 6020	Zn Total 6020		
1011356-01	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-03	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-04	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011356-05	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011375-01	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		
1011375-04	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	As Diss 6020	Ba Diss 6020	Be Diss 6020	Cd Diss 6020	Co Diss 6020	Cr Diss 6020	Cu Diss 6020		
Mn Diss 6020	Ni Diss 6020	Pb Diss 6020	Sb Diss 6020	Se Diss 6020	Tl Diss 6020	V Diss 6020	Zn Diss 6020		

Comments:

Analyst Initials:

Metals, Water, General Metals Prep

Batch comments:

RDB 11-29-10 8:00AM-4:00PM
INST#220 @93.2C #226
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011407-02	N	Nov-29-10 08:00	RDB	25	125	TETRA TECH NUS - Pittsburgh			
Ag Diss 6020	*As Diss 6020*	*Ba Diss 6020*	*Be Diss 6020*	*Cd Diss 6020*	*Co Diss 6020*	*Cr Diss 6020*	*Cu Diss 6020*		
Mn Diss 6020	*Ni Diss 6020*	*Pb Diss 6020*	*Sb Diss 6020*	*Se Diss 6020*	*Tl Diss 6020*	*V Diss 6020*	*Zn Diss 6020*		
1012940-BLK1		Nov-29-10 08:00	RDB	25	125				
1012940-BS1		Nov-29-10 08:00	RDB	25	125		0110693	25	
1012940-MS1		Nov-29-10 08:00	RDB	25	125	1011352-02	0110693	25	
1012940-MSD1		Nov-29-10 08:00	RDB	25	125	1011352-02	0110693	25	
1012940-PS1		Nov-29-10 17:45	DWJ	2	10	1011352-02	0070820	50	[Spk] 25mL->125mL; 10mL->10mL; Spike

Comments:

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K29093-CAL1	0k29093-002	11/29/10 17:48
Cal Standard	0K29093-CAL2	0k29093-003	11/29/10 17:52
Cal Standard	0K29093-CAL3	0k29093-004	11/29/10 17:56
Cal Standard	0K29093-CAL4	0k29093-005	11/29/10 17:59
Cal Standard	0K29093-CAL5	0k29093-006	11/29/10 18:03
Cal Standard	0K29093-CAL6	0k29093-007	11/29/10 18:07
Cal Standard	0K29093-CAL7	0k29093-008	11/29/10 18:11
Cal Standard	0K29093-CAL8	0k29093-009	11/29/10 18:15
Secondary Cal Check	0K29093-SCV1	0k29093-010	11/29/10 18:23
Calibration Check	0K29093-CCV1	0k29093-010	11/29/10 18:23
Calibration Blank	0K29093-CCB1	0k29093-011	11/29/10 18:31
Instrument RL Check	0K29093-CRL1	0k29093-012	11/29/10 18:35
Instrument RL Check	0K29093-CRL2	0k29093-013	11/29/10 18:39
Interference Check A	0K29093-IFA1	0k29093-014	11/29/10 18:42
Interference Check B	0K29093-IFB1	0k29093-015	11/29/10 18:47
Calibration Check	0K29093-CCV2	0k29093-016	11/29/10 18:52
Calibration Blank	0K29093-CCB2	0k29093-017	11/29/10 19:00
Blank	1012940-BLK1	0k29093-018	11/29/10 19:04
LCS	1012940-BS1	0k29093-019	11/29/10 19:08
Serial Dilution	0K29093-SRD1	0k29093-023	11/29/10 19:35
Calibration Check	0K29093-CCV3	0k29093-028	11/29/10 19:59
Calibration Blank	0K29093-CCB3	0k29093-029	11/29/10 20:07
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0213	1011375-01	0k29093-030	11/29/10 20:15
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0613	1011375-04	0k29093-031	11/29/10 20:18
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
NTC02GW0513	1011407-02	0k29093-032	11/29/10 20:22
Blank	1012934-BLK1	0k29093-033	11/29/10 20:26
LCS	1012934-BS1	0k29093-034	11/29/10 20:30
Serial Dilution	0K29093-SRD2	0k29093-038	11/29/10 20:58
Calibration Check	0K29093-CCV4	0k29093-039	11/29/10 21:02
Calibration Blank	0K29093-CCB4	0k29093-040	11/29/10 21:09
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0213	1011375-01	0k29093-048	11/29/10 21:54
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0313	1011375-02	0k29093-049	11/29/10 21:58
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
NTC02GW0413	1011375-03	0k29093-050	11/29/10 22:02
Calibration Check	0K29093-CCV5	0k29093-051	11/29/10 22:06
Calibration Blank	0K29093-CCB5	0k29093-052	11/29/10 22:13
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTC02GW0613	1011375-04	0k29093-053	11/29/10 22:17
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTCFD111710-01	1011375-05	0k29093-054	11/29/10 22:21
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0113	1011407-01	0k29093-055	11/29/10 22:25
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29093

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K29031
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTC02GW0513	1011407-02	0k29093-056	11/29/10 22:29
NTCFD111710-01	1011375-05	0k29093-058	11/29/10 22:37
Calibration Blank	0K29093-CCB6	0k29093-060	11/29/10 22:49
Calibration Check	0K29093-CCV6	0k29093-061	11/29/10 22:56

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30007

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30034
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30007-CAL1	0k30007-001	11/30/10 07:28
Cal Standard	0K30007-CAL2	0k30007-002	11/30/10 07:31
Cal Standard	0K30007-CAL3	0k30007-003	11/30/10 07:34
Cal Standard	0K30007-CAL4	0k30007-004	11/30/10 07:37
Cal Standard	0K30007-CAL5	0k30007-005	11/30/10 07:40
Cal Standard	0K30007-CAL6	0k30007-006	11/30/10 07:43
Cal Standard	0K30007-CAL7	0k30007-007	11/30/10 07:46
Secondary Cal Check	0K30007-SCV1	0k30007-008	11/30/10 07:49
Calibration Check	0K30007-CCV1	0k30007-008	11/30/10 07:49
Calibration Blank	0K30007-CCB1	0k30007-009	11/30/10 07:52
Instrument RL Check	0K30007-CRL1	0k30007-010	11/30/10 07:54
Interference Check A	0K30007-IFA1	0k30007-011	11/30/10 07:57
Interference Check B	0K30007-IFB1	0k30007-012	11/30/10 08:00
Calibration Check	0K30007-CCV2	0k30007-013	11/30/10 08:03
Calibration Blank	0K30007-CCB2	0k30007-014	11/30/10 08:06
NTC02GW0213	1011375-01	0k30007-016	11/30/10 08:11
NTC02GW0613	1011375-04	0k30007-017	11/30/10 08:14
NTC02GW0513	1011407-02	0k30007-018	11/30/10 08:16
Blank	1012934-BLK2	0k30007-019	11/30/10 08:18
LCS	1012934-BS2	0k30007-020	11/30/10 08:21
Serial Dilution	0K30007-SRD1	0k30007-024	11/30/10 08:31
Calibration Check	0K30007-CCV3	0k30007-025	11/30/10 08:33
Calibration Blank	0K30007-CCB3	0k30007-026	11/30/10 08:36
NTC02GW0213	1011375-01	0k30007-034	11/30/10 08:55
NTC02GW0313	1011375-02	0k30007-035	11/30/10 08:58
NTC02GW0413	1011375-03	0k30007-036	11/30/10 09:00
Calibration Check	0K30007-CCV4	0k30007-037	11/30/10 09:03
Calibration Blank	0K30007-CCB4	0k30007-038	11/30/10 09:05
NTC02GW0613	1011375-04	0k30007-039	11/30/10 09:08
NTC02GW0613	1011375-04	0k30007-039	11/30/10 09:08
NTC02GW0613	1011375-04	0k30007-039	11/30/10 09:08
NTCFD111710-01	1011375-05	0k30007-040	11/30/10 09:11

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-6020A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30007

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30034
Instrument: 114

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTCFD111710-01	1011375-05	0k30007-040	11/30/10 09:11
NTCFD111710-01	1011375-05	0k30007-040	11/30/10 09:11
NTC02GW0113	1011407-01	0k30007-041	11/30/10 09:13
NTC02GW0113	1011407-01	0k30007-041	11/30/10 09:13
NTC02GW0113	1011407-01	0k30007-041	11/30/10 09:13
NTC02GW0513	1011407-02	0k30007-042	11/30/10 09:16
NTC02GW0513	1011407-02	0k30007-042	11/30/10 09:16
NTC02GW0513	1011407-02	0k30007-042	11/30/10 09:16
NTC02GW0413	1011375-03	0k30007-043	11/30/10 09:18
Calibration Check	0K30007-CCV5	0k30007-044	11/30/10 09:20
Calibration Blank	0K30007-CCB5	0k30007-045	11/30/10 09:23

Sample Information

Sample ID: 1011375-01
Autosampler Position: 44
Sample Date/Time: Monday, November 29, 2010 21:54:22
Initial Sample Quantity (mg):
Sample Prep Volume (mL):
Aliquot Volume (mL):
Diluted To Volume (mL):
Number of Replicates: 3
Sample File: C:\Elandata\Sample\0K29093.sam
Method File: c:\elandata\Method\TriMatrix_Aqueous_6020a_114.mth
Dataset File: C:\Elandata\DataSet\0K29093\1011375-01.049
Tuning File: C:\Elandata\Tuning\29NOV2010_6020A_E.tun
Optimization File: C:\Elandata\Optimize\29NOV2010_6020A.dac

Sample NTC026W0213 arsenic rep result 2.9ug/L

$\left(\frac{0.5756\,ug}{L}\right)\left(\frac{0.125L}{0.025L}\right) = 2.878\ ug/L$

Summary

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Report Unit
Li	6	476532.352	476532.352				ug/L
Be	9	20.334	0.000	0.061498	0.017	27.474	ug/L
V	51	34691.649	0.095	3.195869	0.084	2.633	ug/L
Cr	52	27154.481	0.058	2.314315	0.097	4.178	ug/L
Cr	53	2780.158	0.008	2.515416	0.079	3.127	ug/L
Mn	55	363874.498	1.074	27.162268	0.625	2.300	ug/L
Co	59	8972.918	0.026	0.808629	0.007	0.850	ug/L
Ni	60	5949.850	0.017	2.416869	0.083	3.450	ug/L
Ni	62	1017.406	0.003	2.734988	0.085	3.114	ug/L
Cu	63	8569.491	0.024	1.523245	0.043	2.848	ug/L
Cu	65	4131.065	0.012	1.542176	0.017	1.099	ug/L
Zn	66	5211.014	0.015	3.556332	0.053	1.493	ug/L
Zn	68	4594.646	0.012	3.873758	0.028	0.713	ug/L
Ge	72	338082.538	338082.538				ug/L
As	75	1525.988	0.003	0.575614	0.032	5.637	ug/L
Se	77	152.336	0.000	0.298760	0.062	26.034	ug/L
Se	82	14.604	0.000	0.114185	0.107	93.845	ug/L
Rh	103	427300.424	427300.424				ug/L
Ag	107	183.337	0.000	0.015460	0.002	12.026	ug/L
Cd	111	431.021	0.001	0.163411	0.200	122.386	ug/L
Cd	114	245.335	0.001	0.038161	0.004	11.453	ug/L
In	115	368410.483	368410.483				ug/L
Sb	121	430.015	0.001	0.039313	0.002	4.294	ug/L
Sb	123	325.921	0.001	0.039901	0.002	4.839	ug/L
Ba	135	40766.228	0.083	16.850340	0.652	3.870	ug/L
Ba	137	70367.324	0.143	16.913609	0.600	3.545	ug/L
Tb	159	492434.304	492434.304				ug/L
Tl	203	399.347	0.001	0.027183	0.001	3.231	ug/L
Tl	205	912.392	0.001	0.024962	0.001	2.782	ug/L
Pb	208	28323.277	0.053	0.726072	0.013	1.783	ug/L
Bi	209	522994.262	522994.262				ug/L

QC Calculated Values

Analyte	Mass	Int Std % Recovery
Li	6.015	120.495
Be	9.012	
V	50.944	
Cr	51.941	
Cr	52.941	
Mn	54.938	
Co	58.933	

HOLDING TIME SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Mercury

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTC02GW0213	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTC02GW0313	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTC02GW0413	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTC02GW0613	11/17/10	11/18/10		11/29/10	12	NA	11/30/10	13	28	
NTCFD111710-01	11/17/10	11/18/10		11/29/10	13	NA	11/30/10	14	28	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30080
Calibration: 0L01008
Control Limt: +/- 10.00%
Instrument ID: 216

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30080-CCV1	Mercury	2.00	1.98	99	ug/L	11/30/10 07:59
	Mercury	2.00	1.98	99	ug/L	11/30/10 07:59
0K30080-CCV2	Mercury	2.00	2.00	100	ug/L	11/30/10 08:18
	Mercury	2.00	2.00	100	ug/L	11/30/10 08:18
0K30080-CCV3	Mercury	2.00	1.97	98	ug/L	11/30/10 09:17
	Mercury	2.00	1.97	98	ug/L	11/30/10 09:17
0K30080-CCV4	Mercury	2.00	1.90	95	ug/L	11/30/10 10:16
	Mercury	2.00	1.90	95	ug/L	11/30/10 10:16
0K30080-CCV5	Mercury	2.00	1.95	98	ug/L	11/30/10 11:17
	Mercury	2.00	1.95	98	ug/L	11/30/10 11:17
0K30080-CCV6	Mercury	2.00	1.80	90	ug/L	11/30/10 12:17
	Mercury	2.00	1.80	90	ug/L	11/30/10 12:17
0K30080-CCV7	Mercury	2.00	1.94	97	ug/L	11/30/10 13:28
	Mercury	2.00	1.94	97	ug/L	11/30/10 13:28

* Values outside of QC limits

CRDL STANDARD

USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30080

Calibration: 0L01008

Instrument ID: 216

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30080-CRL1	Mercury	0.200	0.207	104	ug/L	60 - 140
	Mercury	0.200	0.207	104	ug/L	60 - 140

* Values outside of QC limits

BLANKS
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30080

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01008
Instrument ID: 216

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30080-CCB1	Mercury	-0.022	ug/L	0.061	0.20	U	11/30/10 08:09
	Mercury	-0.022	ug/L	0.061	0.20	U	11/30/10 08:09
0K30080-CCB2	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 08:23
	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 08:23
0K30080-CCB3	Mercury	-0.024	ug/L	0.061	0.20	U	11/30/10 09:22
	Mercury	-0.024	ug/L	0.061	0.20	U	11/30/10 09:22
0K30080-CCB4	Mercury	-0.017	ug/L	0.061	0.20	U	11/30/10 10:20
	Mercury	-0.017	ug/L	0.061	0.20	U	11/30/10 10:20
0K30080-CCB5	Mercury	-0.0025	ug/L	0.061	0.20	U	11/30/10 11:22
	Mercury	-0.0025	ug/L	0.061	0.20	U	11/30/10 11:22
0K30080-CCB6	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 12:22
	Mercury	-0.011	ug/L	0.061	0.20	U	11/30/10 12:22
0K30080-CCB7	Mercury	-0.0082	ug/L	0.061	0.20	U	11/30/10 13:33
	Mercury	-0.0082	ug/L	0.061	0.20	U	11/30/10 13:33

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012974-BLK1 File ID: v30wt-a2-037

Prepared: 11/29/10 14:00 Analyzed: 11/30/10 08:28

Preparation: 7470A Digestion - Dissol Initial/Final: 30 mL / 30 mL

QC Batch: 1012974 Sequence: 0K30080 Calibration: 0L01008 Instrument: 216

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7439-97-6	Mercury, Dissolved	0.20	ug/L	0.061	0.20	U

METHOD BLANK DATA SHEET
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012976-BLK1 File ID: v30wt-a2-130

Prepared: 11/29/10 14:00 Analyzed: 11/30/10 11:02

Preparation: 7470A Digestion - Total Initial/Final: 30 mL / 30 mL

QC Batch: 1012976 Sequence: 0K30080 Calibration: 0L01008 Instrument: 216

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7439-97-6	Mercury, Total	0.20	ug/L	0.061	0.20	U

LCS / LCS DUPLICATE RECOVERY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012974-BS1
Preparation: 7470A Digestion - Dissolved
Initial/Final: 30 mL / 30 mL

QC Batch: 1012974
Sequence: 0K30080

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Mercury, Dissolved	2.00	2.10	105	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012976-BS1
Preparation: 7470A Digestion - Total
Initial/Final: 30 mL / 30 mL
Sequence: 0K30080

QC Batch: 1012976

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Mercury, Total	2.00	2.06	103	80 - 120	ug/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012974 QC Batch Matrix: Water

Preparation: 7470A Digestion - Dissolved

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/29/10 14:00	
NTC02GW0613	1011375-04	11/29/10 14:00	
NTC02GW0513	1011407-02	11/29/10 14:00	
Blank	1012974-BLK1	11/29/10 14:00	
LCS	1012974-BS1	11/29/10 14:00	

QC BATCH SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012976 QC Batch Matrix: Water

Preparation: 7470A Digestion - Total

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/29/10 14:00	
NTC02GW0313	1011375-02	11/29/10 14:00	
NTC02GW0413	1011375-03	11/29/10 14:00	
NTC02GW0613	1011375-04	11/29/10 14:00	
NTCFD111710-01	1011375-05	11/29/10 14:00	
NTC02GW0113	1011407-01	11/29/10 14:00	
NTC02GW0513	1011407-02	11/29/10 14:00	
Blank	1012976-BLK1	11/29/10 14:00	
LCS	1012976-BS1	11/29/10 14:00	

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012974

Printed: 12/14/2010 1:25:15PM

Metals, Water, 7470A Digestion - Dissolved

Batch comments:

MAS 11/29/10 2:00-4:00PM
INST#218@93.9C#237
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-02	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011356-01	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011356-03	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011356-04	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011356-05	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011375-01	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011375-04	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1011407-02	N	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Diss 7470A									
1012974-BLK1		Nov-29-10 14:00	MAS	30	30				
1012974-BS1		Nov-29-10 14:00	MAS	30	30		9100898	60	
1012974-MS1		Nov-29-10 14:00	MAS	30	30	1011352-02	9100898	60	
1012974-MSD1		Nov-29-10 14:00	MAS	30	30	1011352-02	9100898	60	

Comments:

Analyst Initials:

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012976**

Printed: 12/14/2010 1:25:35PM

Metals, Water, 7470A Digestion - Total

61278

Batch comments:

MAS 11/29/10 2:00-4:00PM
INST#218@93.9C#237
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011352-01	V	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011352-02	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011356-01	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011356-02	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011356-03	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011356-04	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011356-05	J	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011375-01	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011375-02	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011375-03	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011375-04	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011375-05	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									

Comments:	Analyst Initials:

PREPARATION BATCH 1012976

Printed: 12/14/2010 1:25:35PM

Metals, Water, 7470A Digestion - Total

Batch comments:

MAS 11/29/10 2:00-4:00PM
INST#218@93.9C#237
HOTBLOCK VESSEL LOT#1008257

Lab Number	Container	Prepared	By	Initial (mL)	Final (mL)	Client Source ID	Client Spike ID	Client uL Spike	Comments
1011407-01	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1011407-02	I	Nov-29-10 14:00	MAS	30	30	TETRA TECH NUS - Pittsburgh			
Hg Total 7470A									
1012976-BLK1		Nov-29-10 14:00	MAS	30	30				
1012976-BS1		Nov-29-10 14:00	MAS	30	30		9100898	60	
1012976-MS1		Nov-29-10 14:00	MAS	30	30	1011352-01	9100898	60	
1012976-MSD1		Nov-29-10 14:00	MAS	30	30	1011352-01	9100898	60	

Comments:

Analyst Initials:

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30080

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01008
Instrument: 216

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30080-CAL1	v30wt-a2-001	11/30/10 07:29
Cal Standard	0K30080-CAL2	v30wt-a2-004	11/30/10 07:34
Cal Standard	0K30080-CAL3	v30wt-a2-007	11/30/10 07:39
Cal Standard	0K30080-CAL4	v30wt-a2-010	11/30/10 07:43
Cal Standard	0K30080-CAL5	v30wt-a2-013	11/30/10 07:48
Cal Standard	0K30080-CAL6	v30wt-a2-016	11/30/10 07:53
Calibration Check	0K30080-CCV1	v30wt-a2-019	11/30/10 07:59
Secondary Cal Check	0K30080-SCV1	v30wt-a2-022	11/30/10 08:04
Calibration Blank	0K30080-CCB1	v30wt-a2-025	11/30/10 08:09
Instrument RL Check	0K30080-CRL1	v30wt-a2-028	11/30/10 08:14
Calibration Check	0K30080-CCV2	v30wt-a2-031	11/30/10 08:18
Calibration Blank	0K30080-CCB2	v30wt-a2-034	11/30/10 08:23
Blank	1012974-BLK1	v30wt-a2-037	11/30/10 08:28
LCS	1012974-BS1	v30wt-a2-040	11/30/10 08:33
NTC02GW0213	1011375-01	v30wt-a2-064	11/30/10 09:12
Calibration Check	0K30080-CCV3	v30wt-a2-067	11/30/10 09:17
Calibration Blank	0K30080-CCB3	v30wt-a2-070	11/30/10 09:22
NTC02GW0613	1011375-04	v30wt-a2-073	11/30/10 09:27
NTC02GW0513	1011407-02	v30wt-a2-076	11/30/10 09:31
Calibration Check	0K30080-CCV4	v30wt-a2-103	11/30/10 10:16
Calibration Blank	0K30080-CCB4	v30wt-a2-106	11/30/10 10:20
Blank	1012976-BLK1	v30wt-a2-130	11/30/10 11:02
LCS	1012976-BS1	v30wt-a2-133	11/30/10 11:07
Calibration Check	0K30080-CCV5	v30wt-a2-139	11/30/10 11:17
Calibration Blank	0K30080-CCB5	v30wt-a2-142	11/30/10 11:22
NTC02GW0213	1011375-01	v30wt-a2-169	11/30/10 12:07
NTC02GW0313	1011375-02	v30wt-a2-172	11/30/10 12:12
Calibration Check	0K30080-CCV6	v30wt-a2-175	11/30/10 12:17
Calibration Blank	0K30080-CCB6	v30wt-a2-178	11/30/10 12:22
NTC02GW0413	1011375-03	v30wt-a2-181	11/30/10 12:37
NTC02GW0613	1011375-04	v30wt-a2-184	11/30/10 12:42
NTCFD111710-01	1011375-05	v30wt-a2-187	11/30/10 12:47

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-7470A

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30080

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01008
Instrument: 216

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
NTC02GW0113	1011407-01	v30wt-a2-190	11/30/10 12:53
NTC02GW0513	1011407-02	v30wt-a2-193	11/30/10 12:58
Calibration Check	0K30080-CCV7	v30wt-a2-211	11/30/10 13:28
Calibration Blank	0K30080-CCB7	v30wt-a2-214	11/30/10 13:33

STATEMENT OF DATA QUALIFICATIONS

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was less than 5 times the MB value, is considered estimated.

Analysis: SM 4500-P E 20th

Sample/Analyte: 1011407-01 NTC02GW0113 Phosphorus, Total

Qualification: The analyte concentration in the associated MB was greater than the MDL but less than the RL. The positive sample result, which was greater than 5 times the MB value, is not considered estimated.

Analysis: SM 4500-P E 20th

Sample/Analyte: 1011407-02 NTC02GW0513 Phosphorus, Total

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 21.6 C

Analysis: USEPA-150.1

Sample/Analyte: 1011407-01 NTC02GW0113 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
11-30-2010 12:47PM 21.3 C

Analysis: USEPA-150.1

Sample/Analyte: 1011407-02 NTC02GW0513 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
12-1-2010 3:40PM 20.4 C

Analysis: USEPA-150.1

Sample/Analyte: 1011375-01 NTC02GW0213 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
12-1-2010 3:40PM 21.6 C

Analysis: USEPA-150.1

Sample/Analyte: 1011375-02 NTC02GW0313 pH
1011375-04 NTC02GW0613 pH

Qualification: The referenced method requires analysis occur immediately after sample collection. Since the analysis was not performed in the field, the reported result is considered estimated. Analysis date, time and temperature were:
12-1-2010 3:40PM 21.7 C

Analysis: USEPA-150.1

Sample/Analyte: 1011375-03 NTC02GW0413 pH
1011375-05 NTCFD111710-01 pH

HOLDING TIME SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Residue, Dissolved @ 180° C

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0313	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0413	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0613	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTCFD111710-01	11/17/10	11/18/10		11/19/10	3	NA	11/19/10	3	7	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	7	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	7	

METHOD BLANK DATA SHEET
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012654-BLK1 File ID:

Prepared: 11/19/10 13:43 Analyzed: 11/19/10 13:43

Preparation: General Inorganic Prep Initial/Final: 50 mL / 1000 mL

QC Batch: 1012654 Sequence: 0K19018 Calibration: UNASSIGNE Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Dissolved @ 180° C	50.0	mg/L	50.0	50.0	U

METHOD BLANK DATA SHEET
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012844-BLK1 File ID:

Prepared: 11/23/10 15:55 Analyzed: 11/23/10 15:55

Preparation: General Inorganic Prep Initial/Final: 50 mL / 1000 mL

QC Batch: 1012844 Sequence: 0K23017 Calibration: UNASSIGNE Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Dissolved @ 180° C	50.0	mg/L	50.0	50.0	U

LCS / LCS DUPLICATE RECOVERY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012654-BS1
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL

QC Batch: 1012654
Sequence: 0K19018

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Dissolved @ 180° C	200	190	95	87 - 115	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012844-BS1
Preparation: General Inorganic Prep
Initial/Final: 50 mL / 1000 mL
Sequence: 0K23017

QC Batch: 1012844

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Dissolved @ 180° C	200	196	98	87 - 115	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Due 12.1.10

TriMatrix Laboratories, Inc.

NLB 11-27-10

PREPARATION BATCH **1012654** Page 1 of 1

Printed: 11/23/2010 5:31:14PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Level 4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Solids, TDS 2540 C	1011356	Solids, TDS 2540 C	1011375	Solids, TDS 2540 C

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012654-BLK1		Nov-19-10 13:43	KAR	50	1000					BLANK	
1012654-DUP1		Nov-19-10 13:43	KAR	50	1000		1011352-01			DUPLICATE	
1012654-BS1		Nov-19-10 13:43	KAR	50	1000			0110185	50000	LCS	
1011352-01	R	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

Due 12.6.10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012844** Page 1 of 1

Printed: 11/24/2010 3:50:19PM

Level 4

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011407	Solids, TDS 2540 C				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012844-BLK1		Nov-23-10 15:55	KAR	50	1000					BLANK	
1012844-BS1		Nov-23-10 15:55	KAR	50	1000			0110937	50000	LCS	
1011407-01	F	Nov-23-10 15:55	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-23-10 15:55	KAR	50	1000					TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

bch_TriMatrix.rpt

QC BATCH SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012654 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/19/10 13:43	
NTC02GW0313	1011375-02	11/19/10 13:43	
NTC02GW0413	1011375-03	11/19/10 13:43	
NTC02GW0613	1011375-04	11/19/10 13:43	
NTCFD111710-01	1011375-05	11/19/10 13:43	
Blank	1012654-BLK1	11/19/10 13:43	
LCS	1012654-BS1	11/19/10 13:43	

QC BATCH SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012844 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/23/10 15:55	
NTC02GW0513	1011407-02	11/23/10 15:55	
Blank	1012844-BLK1	11/23/10 15:55	
LCS	1012844-BS1	11/23/10 15:55	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19018

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012654-BLK1		11/19/10 13:43
LCS	1012654-BS1		11/19/10 13:43
NTC02GW0213	1011375-01		11/19/10 13:43
NTC02GW0313	1011375-02		11/19/10 13:43
NTC02GW0413	1011375-03		11/19/10 13:43
NTC02GW0613	1011375-04		11/19/10 13:43
NTCFD111710-01	1011375-05		11/19/10 13:43

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23017

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012844-BLK1		11/23/10 15:55
LCS	1012844-BS1		11/23/10 15:55
NTC02GW0113	1011407-01		11/23/10 15:55
NTC02GW0513	1011407-02		11/23/10 15:55

HOLDING TIME SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Residue, Suspended

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0313	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0413	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTC02GW0613	11/17/10	11/18/10		11/19/10	2	NA	11/19/10	2	7	
NTCFD111710-01	11/17/10	11/18/10		11/19/10	3	NA	11/19/10	3	7	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	7	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	NA	11/23/10	5	7	

METHOD BLANK DATA SHEET
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012644-BLK1 File ID:

Prepared: 11/19/10 13:43 Analyzed: 11/19/10 13:43

Preparation: General Inorganic Prep Initial/Final: 750 mL / 1000 mL

QC Batch: 1012644 Sequence: 0K19007 Calibration: UNASSIGNE Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Suspended	3.3	mg/L	3.3	3.3	U

METHOD BLANK DATA SHEET
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012838-BLK1 File ID:

Prepared: 11/23/10 15:55 Analyzed: 11/23/10 15:55

Preparation: General Inorganic Prep Initial/Final: 750 mL / 1000 mL

QC Batch: 1012838 Sequence: 0K23009 Calibration: UNASSIGNE Instrument: 210

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Residue, Suspended	3.3	mg/L	3.3	3.3	U

LCS / LCS DUPLICATE RECOVERY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012644-BS1
Preparation: General Inorganic Prep
Initial/Final: 100 mL / 1000 mL

QC Batch: 1012644
Sequence: 0K19007

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Suspended	200	193	96	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012838-BS1
Preparation: General Inorganic Prep
Initial/Final: 100 mL / 1000 mL

QC Batch: 1012838
Sequence: 0K23009

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Residue, Suspended	200	185	92	80 - 120	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Due 12·1·10

TriMatrix Laboratories, Inc.

NLB 12-1-10

PREPARATION BATCH **1012644** Page 1 of 1

Printed: 11/29/2010 7:28:47AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Level 4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Solids, TSS 2540 D	1011356	Solids, TSS 2540 D	1011375	Solids, TSS 2540 D

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012644-BLK1		Nov-19-10 13:43	KAR	750	1000					BLANK	
1012644-DUP1		Nov-19-10 13:43	KAR	750	1000		1011352-01			DUPLICATE	
1012644-BS1		Nov-19-10 13:43	KAR	100	1000			0110185	100000	LCS	
1011352-01	R	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-19-10 13:43	KAR	550	1000					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-19-10 13:43	KAR	50	1000					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-19-10 13:43	KAR	300	1000					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-19-10 13:43	KAR	500	1000					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-19-10 13:43	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-19-10 13:43	KAR	500	1000					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

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Due 12·6·10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012838** Page 1 of 1

Printed: 11/24/2010 3:15:32PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Level 4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011407	Solids, TSS 2540 D				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012838-BLK1		Nov-23-10 15:55	KAR	750	1000					BLANK	
1012838-BS1		Nov-23-10 15:55	KAR	100	1000			0110937	100000	LCS	
1011407-01	F	Nov-23-10 15:55	KAR	750	1000					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-23-10 15:55	KAR	750	1000					TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

bch_TriMatrix.rpt

QC BATCH SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
QC Batch: 1012644
QC Batch Matrix: Water
Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/19/10 13:43	
NTC02GW0313	1011375-02	11/19/10 13:43	
NTC02GW0413	1011375-03	11/19/10 13:43	
NTC02GW0613	1011375-04	11/19/10 13:43	
NTCFD111710-01	1011375-05	11/19/10 13:43	
Blank	1012644-BLK1	11/19/10 13:43	
LCS	1012644-BS1	11/19/10 13:43	

QC BATCH SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012838 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/23/10 15:55	
NTC02GW0513	1011407-02	11/23/10 15:55	
Blank	1012838-BLK1	11/23/10 15:55	
LCS	1012838-BS1	11/23/10 15:55	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K19007

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012644-BLK1		11/19/10 13:43
LCS	1012644-BS1		11/19/10 13:43
NTC02GW0213	1011375-01		11/19/10 13:43
NTC02GW0313	1011375-02		11/19/10 13:43
NTC02GW0413	1011375-03		11/19/10 13:43
NTC02GW0613	1011375-04		11/19/10 13:43
NTCFD111710-01	1011375-05		11/19/10 13:43

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 2540 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23009

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 210

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Blank	1012838-BLK1		11/23/10 15:55
LCS	1012838-BS1		11/23/10 15:55
NTC02GW0113	1011407-01		11/23/10 15:55
NTC02GW0513	1011407-02		11/23/10 15:55

HOLDING TIME SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Fluoride

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0313	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0413	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0613	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTCFD111710-01	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	14	28	
NTC02GW0113	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30013
Calibration: UNASSIGNED
Control Limt: +/- 15.00%
Instrument ID: 100

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30013-CCV1	Fluoride	0.500	0.502	100	mg/L	11/30/10 13:19
0K30013-CCV2	Fluoride	0.500	0.508	102	mg/L	11/30/10 13:19
0K30013-CCV3	Fluoride	0.500	0.512	102	mg/L	11/30/10 13:19

* Values outside of QC limits

CRDL STANDARD

SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30013

Calibration: UNASSIGNED

Instrument ID: 100

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30013-CRL1	Fluoride	0.100	0.0910	91	mg/L	81 - 119

* Values outside of QC limits

BLANKS
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30013

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument ID: 100

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30013-CCB1	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19
0K30013-CCB2	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19
0K30013-CCB3	Fluoride	0.0	mg/L	0.0040	0.10	U	11/30/10 13:19

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1013058-BLK1 File ID:

Prepared: 11/30/10 08:30 Analyzed: 11/30/10 13:19

Preparation: General Inorganic Prep Initial/Final: 30 mL / 30 mL

QC Batch: 1013058 Sequence: 0K30013 Calibration: UNASSIGNE Instrument: 100

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16984-48-8	Fluoride	0.10	mg/L	0.0040	0.10	U

LCS / LCS DUPLICATE RECOVERY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1013058-BS1
Preparation: General Inorganic Prep
Initial/Final: 30 mL / 30 mL

QC Batch: 1013058
Sequence: 0K30013

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Fluoride	0.200	0.197	98	89 - 116	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

HLB 12-1-10

PREPARATION BATCH 1013058

Printed: 11/30/2010 2:24:29PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

dell: 12/01 LVL

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Fluoride 4500-F C	1011356	Fluoride 4500-F C	1011375	Fluoride 4500-F C
1011407	Fluoride 4500-F C				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013058-BLK1		Nov-30-10 08:30	CKD	30	30					BLANK	
1013058-DUP1		Nov-30-10 08:30	CKD	30	30		1011352-01			DUPLICATE	
1013058-BS1		Nov-30-10 08:30	CKD	30	30			0081057	60	LCS	
1013058-MS1		Nov-30-10 08:30	CKD	30	30		1011352-01	0081057	60	MATRIX SPIKE	
1011352-01	S	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:30	CKD	30	30					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

QC BATCH SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
QC Batch: 1013058
QC Batch Matrix: Water
Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/30/10 08:30	
NTC02GW0313	1011375-02	11/30/10 08:30	
NTC02GW0413	1011375-03	11/30/10 08:30	
NTC02GW0613	1011375-04	11/30/10 08:30	
NTCFD111710-01	1011375-05	11/30/10 08:30	
NTC02GW0113	1011407-01	11/30/10 08:30	
NTC02GW0513	1011407-02	11/30/10 08:30	
Blank	1013058-BLK1	11/30/10 08:30	
LCS	1013058-BS1	11/30/10 08:30	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-F C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30013

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 100

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K30013-CCV1		11/30/10 13:19
Calibration Blank	0K30013-CCB1		11/30/10 13:19
Blank	1013058-BLK1		11/30/10 13:19
LCS	1013058-BS1		11/30/10 13:19
Secondary Cal Check	0K30013-SCV1		11/30/10 13:19
Instrument RL Check	0K30013-CRL1		11/30/10 13:19
Calibration Check	0K30013-CCV2		11/30/10 13:19
Calibration Blank	0K30013-CCB2		11/30/10 13:19
NTC02GW0213	1011375-01		11/30/10 13:19
NTC02GW0313	1011375-02		11/30/10 13:19
NTC02GW0413	1011375-03		11/30/10 13:19
NTC02GW0613	1011375-04		11/30/10 13:19
NTCFD111710-01	1011375-05		11/30/10 13:19
NTC02GW0113	1011407-01		11/30/10 13:19
NTC02GW0513	1011407-02		11/30/10 13:19
Calibration Check	0K30013-CCV3		11/30/10 13:19
Calibration Blank	0K30013-CCB3		11/30/10 13:19

ANALYSIS SEQUENCE 0K30013

Inorganic - Wet Chemistry, Water, Nov-30-10

Instrument = 100, Calibration = UNASSIGNED

Sequence Analyses:
Fluoride 4500-F C

Lab Number	Analysis	STD ID	Client / QC Type	Contain	Order	Source ID	Run Date/Time	Instrument Reading	Dilution Factor	Reported Conc.	Qualifier
1011356-04	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	G	16		11/30/10 13:19	0.345	-	0.345	-
1011356-05	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	G	17			0.270	-	0.270	-
1011375-01	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	18			0.726	-	0.726	-
1011375-02	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	19			0.283	-	0.283	-
1011375-03	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	20			0.165	-	0.165	-
1011375-04	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	21			0.329	-	0.329	-
1011375-05	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	22			0.159	-	0.159	-
1011407-01	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	23			0.529	-	0.529	-
1011407-02	Fluoride 4500-F C		TETRA TECH NUS - Pittsburgh	F	24			0.510	-	0.510	-
0K30013-CCV3	QC	0111130	CALIBRATION CHECK		25	-		0.512	-	0.512	-
0K30013-CCB3	QC		CALIBRATION BLANK		26	-		0.000	-	0.0	-

sample NTC026W0113 rep result fluoride 0.53 mg/L

Comments:	Analyst Initials:	Reviewed By Initials:	Reviewed Date:

HOLDING TIME SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Nitrogen, Ammonia

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTC02GW0313	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTC02GW0413	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTC02GW0613	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTCFD111710-01	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTC02GW0113	11/18/10	11/19/10		11/22/10	4	NA	11/22/10	4	28	
NTC02GW0513	11/18/10	11/19/10		11/22/10	4	NA	11/22/10	4	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23065
Control Limt: +/- 10.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K23030
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K23065-CCV1	Nitrogen, Ammonia	1.00	0.935	93	mg/L	11/22/10 09:12
0K23065-CCV2	Nitrogen, Ammonia	1.00	0.983	98	mg/L	11/22/10 09:47
0K23065-CCV3	Nitrogen, Ammonia	1.00	0.957	96	mg/L	11/22/10 10:25
0K23065-CCV4	Nitrogen, Ammonia	1.00	0.987	99	mg/L	11/22/10 11:31
0K23065-CCV5	Nitrogen, Ammonia	1.00	0.948	95	mg/L	11/22/10 12:44

* Values outside of QC limits

CRDL STANDARD

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K23065

Calibration: 0K23030

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K23065-CRL1	Nitrogen, Ammonia	0.0100	0.00788	79	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K23065
Calibration: 0K23030
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K23065-CCB1	Nitrogen, Ammonia	-0.015	mg/L	0.0089	0.050	J	11/22/10 09:12
0K23065-CCB2	Nitrogen, Ammonia	-0.013	mg/L	0.0089	0.050	J	11/22/10 09:47
0K23065-CCB3	Nitrogen, Ammonia	-0.018	mg/L	0.0089	0.050	J	11/22/10 10:25
0K23065-CCB4	Nitrogen, Ammonia	-0.014	mg/L	0.0089	0.050	J	11/22/10 11:31
0K23065-CCB5	Nitrogen, Ammonia	-0.019	mg/L	0.0089	0.050	J	11/22/10 12:44

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012790-BLK1 File ID: 112210nh4m-010

Prepared: 11/22/10 08:51 Analyzed: 11/22/10 09:12

Preparation: General Inorganic Prep Initial/Final: 10 mL / 10 mL

QC Batch: 1012790 Sequence: 0K23065 Calibration: 0K23030 Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7664-41-7	Nitrogen, Ammonia	0.050	mg/L	0.0089	0.050	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC02GW0213

SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012790

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012790-MS2

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.347	0.827	96	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 4500-NH3 G 20th

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012790

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012790-MSD2

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.868	104	5	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012790-BS1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

QC Batch: 1012790

Sequence: 0K23065

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.483	97	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012790-BSD1
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

QC Batch: 1012790
Sequence: 0K23065

Analyte	Spike Added mg/L	LCSD Conc.	LCSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Nitrogen, Ammonia	0.500	0.486	97	0.6	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

HLB 11-27-10

PREPARATION BATCH 1012790

due 12-1

Printed: 11/23/2010 3:06:47PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Lv4

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Nitrogen, Ammonia 4500-NH3 G	1011356	Nitrogen, Ammonia 4500-NH3 G	1011375	Nitrogen, Ammonia 4500-NH3 G
1011407	Nitrogen, Ammonia 4500-NH3 G				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012790-BLK1		Nov-22-10 08:51	GEH	10	10					BLANK	
1012790-BS1		Nov-22-10 08:51	GEH	20	20			0110761	100	LCS	
1012790-BSD1		Nov-22-10 08:51	GEH	20	20			0110761	100	LCS DUP	
1012790-MS1		Nov-22-10 08:51	GEH	20	20		1011352-01	0110761	100	MATRIX SPIKE	
1012790-MS2		Nov-22-10 08:51	GEH	20	20		1011375-01	0110761	100	MATRIX SPIKE	
1012790-MSD1		Nov-22-10 08:51	GEH	20	20		1011352-01	0110761	100	MATRIX SPIKE DUP	
1012790-MSD2		Nov-22-10 08:51	GEH	20	20		1011375-01	0110761	100	MATRIX SPIKE DUP	
1011352-01	T	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-03	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	G	Nov-22-10 08:51	GEH	10	10					TETRA TECH NUS - Pittsburgh	

Comments: All pH < 2

Analyst Initials:

QC BATCH SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012790 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/22/10 08:51	
NTC02GW0313	1011375-02	11/22/10 08:51	
NTC02GW0413	1011375-03	11/22/10 08:51	
NTC02GW0613	1011375-04	11/22/10 08:51	
NTCFD111710-01	1011375-05	11/22/10 08:51	
NTC02GW0113	1011407-01	11/22/10 08:51	
NTC02GW0513	1011407-02	11/22/10 08:51	
Blank	1012790-BLK1	11/22/10 08:51	
LCS	1012790-BS1	11/22/10 08:51	
LCS Dup	1012790-BSD1	11/22/10 08:51	
NTC02GW0213	1012790-MS2	11/22/10 08:51	
NTC02GW0213	1012790-MSD2	11/22/10 08:51	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-NH3 G 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23065

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K23030
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K23065-CAL1	112210nh4m-001	11/22/10 08:51
Cal Standard	0K23065-CAL2	112210nh4m-002	11/22/10 08:51
Cal Standard	0K23065-CAL3	112210nh4m-006	11/22/10 08:51
Cal Standard	0K23065-CAL4	112210nh4m-005	11/22/10 08:51
Cal Standard	0K23065-CAL5	112210nh4m-007	11/22/10 08:51
Cal Standard	0K23065-CAL6	112210nh4m-003	11/22/10 08:51
Cal Standard	0K23065-CAL7	112210nh4m-004	11/22/10 08:51
Calibration Check	0K23065-CCV1	112210nh4m-008	11/22/10 09:12
Calibration Blank	0K23065-CCB1	112210nh4m-009	11/22/10 09:12
Blank	1012790-BLK1	112210nh4m-010	11/22/10 09:12
Instrument RL Check	0K23065-CRL1	112210nh4m-011	11/22/10 09:12
LCS	1012790-BS1	112210nh4m-012	11/22/10 09:12
LCS Dup	1012790-BSD1	112210nh4m-013	11/22/10 09:12
Secondary Cal Check	0K23065-SCV1	112210nh4m-029	11/22/10 09:41
Calibration Check	0K23065-CCV2	112210nh4m-030	11/22/10 09:47
Calibration Blank	0K23065-CCB2	112210nh4m-031	11/22/10 09:47
Calibration Check	0K23065-CCV3	112210nh4m-043	11/22/10 10:25
Calibration Blank	0K23065-CCB3	112210nh4m-044	11/22/10 10:25
NTC02GW0213	1011375-01	112210nh4m-065	11/22/10 10:52
NTC02GW0213	1012790-MS2	112210nh4m-066	11/22/10 10:52
NTC02GW0213	1012790-MSD2	112210nh4m-067	11/22/10 10:52
Calibration Check	0K23065-CCV4	112210nh4m-092	11/22/10 11:31
Calibration Blank	0K23065-CCB4	112210nh4m-093	11/22/10 11:31
NTC02GW0613	1011375-04	112210nh4m-094	11/22/10 11:31
NTC02GW0413	1011375-03	112210nh4m-101	11/22/10 11:39
NTCFD111710-01	1011375-05	112210nh4m-102	11/22/10 11:39
NTC02GW0313	1011375-02	112210nh4m-113	11/22/10 12:03
NTC02GW0113	1011407-01	112210nh4m-120	11/22/10 12:42
NTC02GW0513	1011407-02	112210nh4m-121	11/22/10 12:42
Calibration Check	0K23065-CCV5	112210nh4m-122	11/22/10 12:44
Calibration Blank	0K23065-CCB5	112210nh4m-123	11/22/10 12:44

Laboratory inst#303
Konelab User

Date : 2010-11-22
Time : 14.00

Test Ammonia
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
1011364-04	0.4462	0.225	2010-11-22 12.03		
1011375-02	0.1201	0.125	2010-11-22 12.03		
NH3 CCV	0.9773	0.390	2010-11-22 12.06		
NH3 CCB	-0.0163	0.082	2010-11-22 12.06		
NH3 CCV	0.9916	0.394	2010-11-22 12.36		
NH3 CCB	-0.0107	0.084	2010-11-22 12.36		
NH3 CCV	0.9804	0.391	2010-11-22 12.39		
~~NH3 CCB~~	~~-0.0151~~	~~0.083~~	~~2010-11-22 12.39~~		
1011407-01	0.1054	0.120	2010-11-22 12.42		
~~1011407-02~~	~~0.6701~~	~~0.295~~	~~2010-11-22 12.42~~		
NH3 CCV 5	0.9477	0.381	2010-11-22 12.44		
NH3 CCB	-0.0190	0.082	2010-11-22 12.44		
1011391-03	30.4632	0.464	2010-11-22 12.57	1+24.0	
1011391-04	28.0217	0.434	2010-11-22 12.57	1+24.0	
1011391-08	-0.0158	0.083	2010-11-22 13.02		
1011391-10	-0.0031	0.087	2010-11-22 13.02		
1011391-10 spk1	0.5017	0.243	2010-11-22 13.02		
1011391-10 spk2	0.4865	0.238	2010-11-22 13.02		
1011391-12	-0.0015	0.087	2010-11-22 13.02		
1011391-05	8.1744	0.593	2010-11-22 13.09	1+4.0	
NH3 CCV	0.9948	0.395	2010-11-22 13.09		
NH3 CCB	-0.0097	0.084	2010-11-22 13.09		
NH3 CCV	0.9812	0.391	2010-11-22 13.12		
NH3 CCB	-0.0060	0.086	2010-11-22 13.12		
1011391-01	51.9088	0.409	2010-11-22 13.16	1+49.0	
1011391-02	51.2002	0.404	2010-11-22 13.16	1+49.0	
NH3 CCV	0.9809	0.391	2010-11-22 13.19		
NH3 CCB	-0.0192	0.082	2010-11-22 13.19		
1011391-06	8.7947	0.359	2010-11-22 13.25	1+9.0	
1011391-09	9.5614	0.383	2010-11-22 13.25	1+9.0	
NH3 CCV	0.9819	0.391	2010-11-22 13.28		
NH3 CCB	-0.0145	0.083	2010-11-22 13.28		

Sample GW0113 ammonia rep result 0.11 mg/L

HOLDING TIME SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Phosphorus, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/22/10	5	NA	11/23/10	6	28	
NTC02GW0313	11/17/10	11/18/10		11/22/10	5	NA	11/23/10	6	28	
NTC02GW0413	11/17/10	11/18/10		11/22/10	5	NA	11/23/10	6	28	
NTC02GW0613	11/17/10	11/18/10		11/22/10	5	NA	11/23/10	6	28	
NTCFD111710-01	11/17/10	11/18/10		11/22/10	5	NA	11/23/10	6	28	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K24019
Calibration: 0K24004
Control Limt: +/- 10.00%
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K24019-CCV1	Phosphorus, Total	0.500	0.504	101	mg/L	11/23/10 07:52
0K24019-CCV2	Phosphorus, Total	0.500	0.502	100	mg/L	11/23/10 09:37
0K24019-CCV3	Phosphorus, Total	0.500	0.506	101	mg/L	11/23/10 09:40
0K24019-CCV4	Phosphorus, Total	0.500	0.504	101	mg/L	11/23/10 09:41

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L01011
Calibration: 0L01006
Control Limt: +/- 10.00%
Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L01011-CCV1	Phosphorus, Total	0.500	0.474	95	mg/L	11/30/10 09:46
0L01011-CCV2	Phosphorus, Total	0.500	0.499	100	mg/L	11/30/10 13:39

* Values outside of QC limits

CRDL STANDARD

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K24019

Calibration: 0K24004

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K24019-CRL1	Phosphorus, Total	0.0100	0.0123	123	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0L01011

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0L01006

Instrument ID: 303

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L01011-CRL1	Phosphorus, Total	0.0100	0.0111	111	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K24019
Calibration: 0K24004
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K24019-CCB1	Phosphorus, Total	0.000556	mg/L	0.00170	0.0100	U	11/23/10 07:52
0K24019-CCB2	Phosphorus, Total	-0.00174	mg/L	0.00170	0.0100	J	11/23/10 09:37
0K24019-CCB3	Phosphorus, Total	-0.00182	mg/L	0.00170	0.0100	J	11/23/10 09:40
0K24019-CCB4	Phosphorus, Total	-0.00220	mg/L	0.00170	0.0100	J	11/23/10 09:41

* Values outside of QC limits

BLANKS
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01011

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01006
Instrument ID: 303

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L01011-CCB1	Phosphorus, Total	0.00229	mg/L	0.00170	0.0100	J	11/30/10 09:46
0L01011-CCB2	Phosphorus, Total	0.00248	mg/L	0.00170	0.0100	J	11/30/10 13:39

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012732-BLK1 File ID: 112310TPO4M-010

Prepared: 11/22/10 06:55 Analyzed: 11/23/10 07:52

Preparation: Method-Specific Preparat Initial/Final: 25 mL / 50 mL

QC Batch: 1012732 Sequence: 0K24019 Calibration: 0K24004 Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7723-14-0	Phosphorus, Total	0.0100	mg/L	0.00170	0.0100	U

METHOD BLANK DATA SHEET
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012990-BLK1
File ID: 113010TPO4M-018
Prepared: 11/29/10 06:39
Analyzed: 11/30/10 10:25
Preparation: Method-Specific Preparat
Initial/Final: 25 mL / 50 mL
QC Batch: 1012990
Sequence: 0L01011
Calibration: 0L01006
Instrument: 303

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7723-14-0	Phosphorus, Total	0.00418	mg/L	0.00170	0.0100	J

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC02GW0113

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012990

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012990-MS1

Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 50 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.0195	0.744	91	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC02GW0113

SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012990

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012990-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 25 mL / 50 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.740	90	0.7	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012732-BS1
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL
Sequence: 0K24019

QC Batch: 1012732

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.814	102	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012990-BS1
Preparation: Method-Specific Preparation
Initial/Final: 25 mL / 50 mL
Sequence: 0L01011

QC Batch: 1012990

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Phosphorus, Total	0.800	0.743	93	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

DUE 12/1/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012732** Page 1 of 1

Printed: 11/22/2010 6:57:17AM

LV4

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Phosphorus, Total 4500-P E	1011356	Phosphorus, Total 4500-P E	1011375	Phosphorus, Total 4500-P E

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012732-BLK1		Nov-22-10 06:55	CLD	25	50					BLANK	
1012732-BS1		Nov-22-10 06:55	CLD	25	50			0110894	200	LCS	
1012732-MS1		Nov-22-10 06:55	CLD	25	50		1011352-01	0110894	200	MATRIX SPIKE	
1012732-MSD1		Nov-22-10 06:55	CLD	25	50		1011352-01	0110894	200	MATRIX SPIKE DUP	
1011352-01	T	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-03	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011375-05	G	Nov-22-10 06:55	CLD	25	50					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

bch_TriMatrix.rpt

TriMatrix Laboratories, Inc.

MLB 12-2-10

PREPARATION BATCH 1012990

DUE 12/6/10

Printed: 11/29/2010 6:40:28AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

LY 4

Batch Comments: (none)

52119

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011407	Phosphorus, Total 4500-P E				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012990-BLK1		Nov-29-10 06:39	CLD	25	50					BLANK	
1012990-BS1		Nov-29-10 06:39	CLD	25	50			0110894	200	LCS	
1012990-MS1		Nov-29-10 06:39	CLD	25	50		1011407-01	0110894	200	MATRIX SPIKE	
1012990-MSD1		Nov-29-10 06:39	CLD	25	50		1011407-01	0110894	200	MATRIX SPIKE DUP	
1011407-01	G	Nov-29-10 06:39	CLD	25	50					TETRA TECH NUS - Pittsburgh	
1011407-02	G	Nov-29-10 06:39	CLD	25	50					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

QC BATCH SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

QC Batch: 1012732 QC Batch Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/22/10 06:55	
NTC02GW0313	1011375-02	11/22/10 06:55	
NTC02GW0413	1011375-03	11/22/10 06:55	
NTC02GW0613	1011375-04	11/22/10 06:55	
NTCFD111710-01	1011375-05	11/22/10 06:55	
Blank	1012732-BLK1	11/22/10 06:55	
LCS	1012732-BS1	11/22/10 06:55	

QC BATCH SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012990 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/29/10 06:39	
NTC02GW0513	1011407-02	11/29/10 06:39	
Blank	1012990-BLK1	11/29/10 06:39	
LCS	1012990-BS1	11/29/10 06:39	
NTC02GW0113	1012990-MS1	11/29/10 06:39	
NTC02GW0113	1012990-MSD1	11/29/10 06:39	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K24019

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K24004
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K24019-CAL1	112310TPO4M-006	11/23/10 07:23
Cal Standard	0K24019-CAL2	112310TPO4M-002	11/23/10 07:23
Cal Standard	0K24019-CAL3	112310TPO4M-003	11/23/10 07:23
Cal Standard	0K24019-CAL4	112310TPO4M-004	11/23/10 07:23
Cal Standard	0K24019-CAL5	112310TPO4M-005	11/23/10 07:23
Cal Standard	0K24019-CAL6	112310TPO4M-001	11/23/10 07:23
Calibration Check	0K24019-CCV1	112310TPO4M-007	11/23/10 07:52
Calibration Blank	0K24019-CCB1	112310TPO4M-008	11/23/10 07:52
Blank	1012732-BLK1	112310TPO4M-010	11/23/10 07:52
LCS	1012732-BS1	112310TPO4M-013	11/23/10 07:52
Secondary Cal Check	0K24019-SCV1	112310TPO4M-016	11/23/10 07:52
Instrument RL Check	0K24019-CRL1	112310TPO4M-017	11/23/10 07:52
Calibration Check	0K24019-CCV2	112310TPO4M-070	11/23/10 09:37
Calibration Blank	0K24019-CCB2	112310TPO4M-071	11/23/10 09:37
Calibration Check	0K24019-CCV3	112310TPO4M-082	11/23/10 09:40
Calibration Blank	0K24019-CCB3	112310TPO4M-083	11/23/10 09:40
NTC02GW0213	1011375-01	112310TPO4M-084	11/23/10 09:40
NTC02GW0313	1011375-02	112310TPO4M-085	11/23/10 09:40
NTC02GW0413	1011375-03	112310TPO4M-086	11/23/10 09:40
NTC02GW0613	1011375-04	112310TPO4M-087	11/23/10 09:40
NTCFD111710-01	1011375-05	112310TPO4M-088	11/23/10 09:40
Calibration Check	0K24019-CCV4	112310TPO4M-091	11/23/10 09:41
Calibration Blank	0K24019-CCB4	112310TPO4M-092	11/23/10 09:41

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 4500-P E 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01011

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01006
Instrument: 303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0L01011-CAL1	113010TPO4M-005	11/30/10 09:18
Cal Standard	0L01011-CAL2	113010TPO4M-001	11/30/10 09:18
Cal Standard	0L01011-CAL3	113010TPO4M-002	11/30/10 09:18
Cal Standard	0L01011-CAL4	113010TPO4M-004	11/30/10 09:18
Cal Standard	0L01011-CAL5	113010TPO4M-006	11/30/10 09:18
Cal Standard	0L01011-CAL6	113010TPO4M-003	11/30/10 09:18
Calibration Check	0L01011-CCV1	113010TPO4M-007	11/30/10 09:46
Calibration Blank	0L01011-CCB1	113010TPO4M-008	11/30/10 09:46
Instrument RL Check	0L01011-CRL1	113010TPO4M-013	11/30/10 09:47
Blank	1012990-BLK1	113010TPO4M-018	11/30/10 10:25
LCS	1012990-BS1	113010TPO4M-019	11/30/10 10:25
Secondary Cal Check	0L01011-SCV1	113010TPO4M-021	11/30/10 10:25
NTC02GW0513	1011407-02	113010TPO4M-042	11/30/10 11:22
NTC02GW0113	1011407-01	113010TPO4M-099	11/30/10 13:02
NTC02GW0113	1012990-MS1	113010TPO4M-105	11/30/10 13:37
NTC02GW0113	1012990-MSD1	113010TPO4M-106	11/30/10 13:37
Calibration Check	0L01011-CCV2	113010TPO4M-107	11/30/10 13:39
Calibration Blank	0L01011-CCB2	113010TPO4M-108	11/30/10 13:39

Result Report AquaKem 6.5 Page: 1

Laboratory inst#303
Konelab User

Date : 2010-11-30
Time : 13.56

Test TOTAL PHOS
Unit mg/l

Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
TP04 ccv	0.47416	0.314	2010-11-30 09.46		
TP04 ccb	0.00229	-0.000	2010-11-30 09.46		
BLK1	0.00216	-0.000	2010-11-30 09.46		
BLK2	0.00244	0.000	2010-11-30 09.46		
BS1	0.37050	0.245	2010-11-30 09.46		
BS2	0.36895	0.244	2010-11-30 09.47		
CRL	0.01107	0.006	2010-11-30 09.47		
TP04 ccv	0.47878	0.317	2010-11-30 09.53		
TP04 ccb	0.00183	-0.000	2010-11-30 09.53		
TP04 ccv	0.48075	0.318	2010-11-30 10.25		
TP04 ccb	0.00221	-0.000	2010-11-30 10.25		
BLK3	0.00209	-0.000	2010-11-30 10.25		
BS3	0.37157	0.246	2010-11-30 10.25		
\BS4	0.36625	0.242	2010-11-30 10.25		
SCV	0.36703	0.243	2010-11-30 10.25		
1PPM	0.99683	0.330	2010-11-30 10.28	1+1.0	
2PPM	1.87301	0.248	2010-11-30 10.28	1+4.0	
5PPM	4.72798	0.313	2010-11-30 10.28	1+9.0	
10PPM	9.62721	0.319	2010-11-30 10.28	1+19.0	
20PPM	20.54830	0.340	2010-11-30 10.28	1+39.0	
TP04 ccv	0.48820	0.323	2010-11-30 10.29		
TP04 ccb	0.00235	0.000	2010-11-30 10.29		
TP04 ccv	0.49253	0.326	2010-11-30 10.46		
TP04 ccb	0.00192	-0.000	2010-11-30 10.46		
BLK4	0.00225	-0.000	2010-11-30 10.46		
TP04 ccv	0.49382	0.327	2010-11-30 10.47		
TP04 ccb	0.00270	0.000	2010-11-30 10.47		
TP04 ccv	0.48402	0.321	2010-11-30 11.07		
TP04 ccb	0.00246	0.000	2010-11-30 11.07		
TP04 ccv	0.49097	0.325	2010-11-30 11.13		
TP04 ccb	0.00281	0.000	2010-11-30 11.13		
1011450-01	0.09269	0.060	2010-11-30 11.22		
1011454-01	0.00631	0.003	2010-11-30 11.22		
1011455-01	0.02108	0.013	2010-11-30 11.22		
1011460-01	0.17989	0.118	2010-11-30 11.22		
1011407-02	0.01300	0.007	2010-11-30 11.22		
TP04 ccv	0.47769	0.316	2010-11-30 11.25		
TP04 ccb	0.00288	0.000	2010-11-30 11.25		
1011393-04	0.16130	0.106	2010-11-30 11.25		
1011393-06	0.18513	0.122	2010-11-30 11.25		
1011393-07	0.01355	0.007	2010-11-30 11.25		
1011393-08	0.02016	0.012	2010-11-30 11.25		
1011403-01	0.57333	0.380	2010-11-30 11.25		
1011404-01	0.00719	0.003	2010-11-30 11.25		
1011431-01	0.12704	0.083	2010-11-30 11.25		
1011447-01	0.12063	0.079	2010-11-30 11.25		
TP04 ccv	0.48649	0.322	2010-11-30 11.26		
TP04 ccb	0.00327	0.001	2010-11-30 11.26		
TP04 ccv	0.49069	0.325	2010-11-30 12.07		
TP04 ccb	0.00266	0.000	2010-11-30 12.07		
1011391-03	0.20966	0.138	2010-11-30 12.07		
1011391-04	0.26520	0.175	2010-11-30 12.07		

GW0513
Phos. rep. result
0.026 mg/L

$\left(\frac{0.013\,mg}{2}\right)\left(\frac{50ml}{25ml}\right)$
0.026 mg/L

01431

HOLDING TIME SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Chemical Oxygen Demand

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/23/10	6	28	11/23/10	0	28	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	28	11/23/10	0	28	
NTC02GW0413	11/17/10	11/18/10		12/02/10	15	28	12/02/10	0	28	
NTC02GW0613	11/17/10	11/18/10		11/23/10	6	28	11/23/10	0	28	
NTCFD111710-01	11/17/10	11/18/10		12/02/10	16	28	12/02/10	0	28	
NTC02GW0113	11/18/10	11/19/10		11/23/10	5	28	11/23/10	0	28	
NTC02GW0513	11/18/10	11/19/10		11/23/10	5	28	11/23/10	0	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29044
Control Limt: +/- 15.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0J21020
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29044-CCV1	Chemical Oxygen Demand	20.0	20.5	102	mg/L	11/23/10 12:31
0K29044-CCV2	Chemical Oxygen Demand	20.0	20.8	104	mg/L	11/23/10 12:39
0K29044-CCV3	Chemical Oxygen Demand	20.0	20.7	104	mg/L	11/23/10 12:46

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L02042
Control Limt: +/- 15.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0J21021
Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L02042-CCV1	Chemical Oxygen Demand	500	475	95	mg/L	12/02/10 15:22
0L02042-CCV2	Chemical Oxygen Demand	500	472	94	mg/L	12/02/10 15:27

* Values outside of QC limits

CRDL STANDARD

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29044

Calibration: 0J21020

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29044-CRL1	Chemical Oxygen Demand	5.00	5.30	106	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0L02042

Calibration: 0J21021

Instrument ID: 330

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L02042-CRL1	Chemical Oxygen Demand	50.0	31.0	62	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29044
Calibration: 0J21020
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29044-CCB1	Chemical Oxygen Demand	0.18	mg/L	3.7	5.0	U	11/23/10 12:32
0K29044-CCB2	Chemical Oxygen Demand	-0.15	mg/L	3.7	5.0	U	11/23/10 12:39
0K29044-CCB3	Chemical Oxygen Demand	0.58	mg/L	3.7	5.0	U	11/23/10 12:46

* Values outside of QC limits

BLANKS
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L02042

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0J21021
Instrument ID: 330

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L02042-CCB1	Chemical Oxygen Demand	-17	mg/L	20	50	U	12/02/10 15:24
0L02042-CCB2	Chemical Oxygen Demand	-17	mg/L	20	50	U	12/02/10 15:27

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012893-BLK1
File ID:
Prepared: 11/23/10 08:20
Analyzed: 11/23/10 12:32
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL
QC Batch: 1012893
Sequence: 0K29044
Calibration: 0J21020
Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Chemical Oxygen Demand	5.0	mg/L	3.7	5.0	U

METHOD BLANK DATA SHEET
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1013211-BLK1 File ID:

Prepared: 12/02/10 12:00 Analyzed: 12/02/10 15:24

Preparation: 410.4 COD Digestion Initial/Final: 2 mL / 2 mL

QC Batch: 1013211 Sequence: 0L02042 Calibration: 0J21021 Instrument: 330

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Chemical Oxygen Demand	50	mg/L	20	50	U

LCS / LCS DUPLICATE RECOVERY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012893-BS1
Preparation: 410.4 COD Digestion
Initial/Final: 2 mL / 2 mL

QC Batch: 1012893
Sequence: 0K29044

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chemical Oxygen Demand	20.0	21.5	107	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1013211-BS1
Preparation: 410.4 COD Digestion
Initial/Final: 10 mL / 10 mL

QC Batch: 1013211
Sequence: 0L02042

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chemical Oxygen Demand	500	489	98	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

QC BATCH SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012893 QC Batch Matrix: Water

Preparation: 410.4 COD Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/23/10 08:20	
NTC02GW0313	1011375-02	11/23/10 08:20	
NTC02GW0613	1011375-04	11/23/10 08:20	
NTC02GW0113	1011407-01	11/23/10 08:20	
NTC02GW0513	1011407-02	11/23/10 08:20	
Blank	1012893-BLK1	11/23/10 08:20	
LCS	1012893-BS1	11/23/10 08:20	

TriMatrix Laboratories, Inc.

NLB 12-1-10

PREPARATION BATCH **1012893** Page 1 of 1

Printed: 11/29/2010 11:59:23AM

Inorganic - Wet Chemistry, Water, 410.4 COD Digestion

(No Surrogate)

Batch Comments: (none)

due: 12/10 LVY

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	COD 5220 D	1011356	COD 5220 D	1011375	COD 5220 D
1011407	COD 5220 D				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012893-BLK1		Nov-23-10 08:20	CKD	2	2					BLANK	
1012893-BS1		Nov-23-10 08:20	CKD	2	2			0080031	20	LCS	
1012893-MS1		Nov-23-10 08:20	CKD	2	2		1011352-01	0080031	20	MATRIX SPIKE	
1012893-MSD1		Nov-23-10 08:20	CKD	2	2		1011352-01	0080031	20	MATRIX SPIKE DUP	
1011352-01	T	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011352-02	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-01	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-02	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-03	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-04	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011356-05	H	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-01	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-02	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-04	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011407-01	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011407-02	G	Nov-23-10 08:20	CKD	2	2					TETRA TECH NUS - Pittsburgh	

Comments: digestion temp in/out: 150.1°C/150.3°C

Analyst Initials: CKD

bch_TriMatrix.rpt

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1013211** Page 1 of 1

Printed: 12/2/2010 3:39:30PM

Inorganic - Wet Chemistry, Water, 410.4 COD Digestion

(No Surrogate)

Batch Comments: (none)

due: 12/03 EVY

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011375	COD 5220 D (High Level)				

√bicis 12-2-10

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013211-BLK1		Dec-02-10 12:00	CKD	2	2					BLANK	
1013211-BS1		Dec-02-10 12:00	CKD	10	10			0080043	100	LCS	
1011375-03	G	Dec-02-10 12:00	CKD	2	2					TETRA TECH NUS - Pittsburgh	
1011375-05	G	Dec-02-10 12:00	CKD	2	2					TETRA TECH NUS - Pittsburgh	

Comments: digestion temp inlet: 151.42/150.9°C

Analyst Initials: CKD

bch_TriMatrix.rpt

7516

QC BATCH SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013211 QC Batch Matrix: Water

Preparation: 410.4 COD Digestion

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0413	1011375-03	12/02/10 12:00	
NTCFD111710-01	1011375-05	12/02/10 12:00	
Blank	1013211-BLK1	12/02/10 12:00	
LCS	1013211-BS1	12/02/10 12:00	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29044

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0J21020
Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29044-CCV1		11/23/10 12:31
Calibration Blank	0K29044-CCB1		11/23/10 12:32
Blank	1012893-BLK1		11/23/10 12:32
LCS	1012893-BS1		11/23/10 12:32
Secondary Cal Check	0K29044-SCV1		11/23/10 12:33
Instrument RL Check	0K29044-CRL1		11/23/10 12:33
Calibration Check	0K29044-CCV2		11/23/10 12:39
Calibration Blank	0K29044-CCB2		11/23/10 12:39
NTC02GW0213	1011375-01		11/23/10 12:42
NTC02GW0313	1011375-02		11/23/10 12:43
NTC02GW0613	1011375-04		11/23/10 12:44
NTC02GW0113	1011407-01		11/23/10 12:45
NTC02GW0513	1011407-02		11/23/10 12:45
Calibration Check	0K29044-CCV3		11/23/10 12:46
Calibration Blank	0K29044-CCB3		11/23/10 12:46

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5220 D 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L02042

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0J21021
Instrument: 330

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0L02042-CCV1		12/02/10 15:22
Calibration Blank	0L02042-CCB1		12/02/10 15:24
Blank	1013211-BLK1		12/02/10 15:24
LCS	1013211-BS1		12/02/10 15:24
Secondary Cal Check	0L02042-SCV1		12/02/10 15:25
Instrument RL Check	0L02042-CRL1		12/02/10 15:25
NTC02GW0413	1011375-03		12/02/10 15:26
NTCFD111710-01	1011375-05		12/02/10 15:26
Calibration Check	0L02042-CCV2		12/02/10 15:27
Calibration Blank	0L02042-CCB2		12/02/10 15:27

HOLDING TIME SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Carbon, Total Organic

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTC02GW0313	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	28	
NTC02GW0413	11/17/10	11/18/10		11/23/10	6	NA	11/23/10	6	28	
NTC02GW0613	11/17/10	11/18/10		11/22/10	5	NA	11/22/10	5	28	
NTCFD111710-01	11/17/10	11/18/10		11/23/10	7	NA	11/23/10	7	28	
NTC02GW0113	11/18/10	11/19/10		11/24/10	6	NA	11/24/10	6	28	
NTC02GW0513	11/18/10	11/19/10		11/24/10	6	NA	11/24/10	6	28	

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23070
Control Limt: +/- 15.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0H11001
Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K23070-CCV1	Carbon, Total Organic	5.00	5.07	101	mg/L	11/22/10 12:32
0K23070-CCV2	Carbon, Total Organic	5.00	5.03	101	mg/L	11/22/10 14:15
0K23070-CCV3	Carbon, Total Organic	5.00	4.97	99	mg/L	11/22/10 16:11
0K23070-CCV4	Carbon, Total Organic	5.00	4.92	98	mg/L	11/22/10 17:55
0K23070-CCV5	Carbon, Total Organic	5.00	4.82	96	mg/L	11/22/10 19:38

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039
Control Limt: +/- 15.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29039-CCV1	Carbon, Total Organic	50.0	50.2	100	mg/L	11/23/10 13:26
0K29039-CCV2	Carbon, Total Organic	50.0	49.2	98	mg/L	11/23/10 15:22
0K29039-CCV3	Carbon, Total Organic	50.0	49.7	99	mg/L	11/23/10 16:56

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29071
Control Limt: +/- 15.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0H11001
Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K29071-CCV1	Carbon, Total Organic	5.00	5.06	101	mg/L	11/24/10 11:08
0K29071-CCV2	Carbon, Total Organic	5.00	5.04	101	mg/L	11/24/10 13:07
0K29071-CCV3	Carbon, Total Organic	5.00	4.94	99	mg/L	11/24/10 14:50

* Values outside of QC limits

CRDL STANDARD

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0K23070

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0H11001

Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K23070-CRL1	Carbon, Total Organic	0.500	0.538	108	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0K29039

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0I01016

Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29039-CRL1	Carbon, Total Organic	1.00	1.13	113	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K29071

Calibration: 0H11001

Instrument ID: 324

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K29071-CRL1	Carbon, Total Organic	0.500	0.493	99	mg/L	50 - 150

* Values outside of QC limits

BLANKS
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K23070
Calibration: 0H11001
Instrument ID: 324

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K23070-CCB1	Carbon, Total Organic	0.044	mg/L	0.25	1.0	U	11/22/10 12:45
0K23070-CCB2	Carbon, Total Organic	0.039	mg/L	0.25	1.0	U	11/22/10 14:28
0K23070-CCB3	Carbon, Total Organic	0.052	mg/L	0.25	1.0	U	11/22/10 16:24
0K23070-CCB4	Carbon, Total Organic	0.073	mg/L	0.25	1.0	U	11/22/10 18:08
0K23070-CCB5	Carbon, Total Organic	0.037	mg/L	0.25	1.0	U	11/22/10 19:51

* Values outside of QC limits

BLANKS
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument ID: 324

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29039-CCB1	Carbon, Total Organic	0.0	mg/L	0.25	1.0	U	11/23/10 13:39
0K29039-CCB2	Carbon, Total Organic	0.033	mg/L	0.25	1.0	U	11/23/10 15:35
0K29039-CCB3	Carbon, Total Organic	0.087	mg/L	0.25	1.0	U	11/23/10 17:09

* Values outside of QC limits

BLANKS
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K29071
Calibration: 0H11001
Instrument ID: 324

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K29071-CCB1	Carbon, Total Organic	0.041	mg/L	0.25	1.0	U	11/24/10 11:20
0K29071-CCB2	Carbon, Total Organic	0.040	mg/L	0.25	1.0	U	11/24/10 13:20
0K29071-CCB3	Carbon, Total Organic	0.12	mg/L	0.25	1.0	U	11/24/10 15:04

* Values outside of QC limits

METHOD BLANK DATA SHEET
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Matrix: Water
Laboratory ID: 1012830-BLK1
File ID: 112210-036
Prepared: 11/22/10 12:32
Analyzed: 11/22/10 13:37
Preparation: General Inorganic Prep
Initial/Final: 40 mL / 40 mL
QC Batch: 1012830
Sequence: 0K23070
Calibration: 0H11001
Instrument: 324

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-44-0	Carbon, Total Organic	1.0	mg/L	0.25	1.0	U

METHOD BLANK DATA SHEET
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012922-BLK1 File ID: 112310-020

Prepared: 11/23/10 13:26 Analyzed: 11/23/10 14:30

Preparation: General Inorganic Prep Initial/Final: 40 mL / 40 mL

QC Batch: 1012922 Sequence: 0K29039 Calibration: 0I01016 Instrument: 324

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-44-0	Carbon, Total Organic	1.0	mg/L	0.25	1.0	U

METHOD BLANK DATA SHEET
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012992-BLK1 File ID: 112410-026

Prepared: 11/24/10 11:08 Analyzed: 11/24/10 12:13

Preparation: General Inorganic Prep Initial/Final: 40 mL / 40 mL

QC Batch: 1012992 Sequence: 0K29071 Calibration: 0H11001 Instrument: 324

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
7440-44-0	Carbon, Total Organic	1.0	mg/L	0.25	1.0	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SM 5310 C 20th

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012992

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012992-MS1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.25	4.43	109	75 - 124	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC02GW0113

SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Matrix: Water

Laboratory ID: 1012992-MSD1

Preparation: General Inorganic Prep

QC Batch: 1012992

Initial/Final: 25 mL / 25 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Carbon, Total Organic	2.00	4.35	105	2	20	75 - 124	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012830-BS1
Preparation: General Inorganic Prep
Initial/Final: 25 mL / 25 mL

QC Batch: 1012830
Sequence: 0K23070

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.13	106	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012830-BSD1
Preparation: General Inorganic Prep
Initial/Final: 25 mL / 25 mL
Sequence: 0K23070

QC Batch: 1012830

Analyte	Spike Added mg/L	LCSD Conc.	LCSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.07	103	3	20	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012922-BS1

Preparation: General Inorganic Prep

Initial/Final: 25 mL / 25 mL

QC Batch: 1012922

Sequence: 0K29039

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	40.0	38.8	97	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012992-BS1
Preparation: General Inorganic Prep
Initial/Final: 25 mL / 25 mL
Sequence: 0K29071

QC Batch: 1012992

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Carbon, Total Organic	2.00	2.15	108	87 - 111	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

NLB 11-27-10

PREPARATION BATCH 1012830

due 12-1

LVY

Printed: 11/23/2010 4:27:05PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	TOC 5310 C	1011356	TOC 5310 C	1011375	TOC 5310 C

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012830-BLK1		Nov-22-10 12:32	GEH	40	40					BLANK	
1012830-BS1		Nov-22-10 12:32	GEH	25	25			0080358	50	LCS	
1012830-BSD1		Nov-22-10 12:32	GEH	25	25			0080358	50	LCS DUP	
1012830-MS1		Nov-22-10 12:32	GEH	25	25		1011352-01	0080358	50	MATRIX SPIKE	
1012830-MSD1		Nov-22-10 12:32	GEH	25	25		1011352-01	0080358	50	MATRIX SPIKE DUP	
1011352-01	AA	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011352-02	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-01	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-02	K	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-01	J	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-04	J	Nov-22-10 12:32	GEH	40	40					TETRA TECH NUS - Pittsburgh	

Comments:

All pH <2

Analyst Initials:

bch_TriMatrix.rpt

TriMatrix Laboratories, Inc.

NLB 12-1-10

PREPARATION BATCH 1012922

due 12-2

Printed: 11/29/2010 11:58:48AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

LVY

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011356	TOC 5310 C (High Level)	1011375	TOC 5310 C (High Level)		

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012922-BLK1		Nov-23-10 13:26	GEH	40	40					BLANK	
1012922-BS1		Nov-23-10 13:26	GEH	25	25			0080358	1000	LCS	
1011356-03	L	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-04	L	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011356-05	L	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-02	K	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-03	K	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011375-05	K	Nov-23-10 13:26	GEH	40	40					TETRA TECH NUS - Pittsburgh	

Comments:
All pH <2 matrix QC completed on separate run, these are reruns

Analyst Initials:

TriMatrix Laboratories, Inc.

MB 12-2-10

PREPARATION BATCH 1012992

due 12-6

LVU

Printed: 11/29/2010 2:31:54PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011407	TOC 5310 C				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012992-BLK1		Nov-24-10 11:08	GEH	40	40					BLANK	
1012992-BS1		Nov-24-10 11:08	GEH	25	25			0080358	50	LCS	
1012992-MS1		Nov-24-10 11:08	GEH	25	25		1011407-01	0080358	50	MATRIX SPIKE	
1012992-MSD1		Nov-24-10 11:08	GEH	25	25		1011407-01	0080358	50	MATRIX SPIKE DUP	
1011407-01	K	Nov-24-10 11:08	GEH	40	40					TETRA TECH NUS - Pittsburgh	
1011407-02	K	Nov-24-10 11:08	GEH	40	40					TETRA TECH NUS - Pittsburgh	

Comments:
All pH <2

Analyst Initials:

bch_TriMatrix.rpt

015414

QC BATCH SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012830 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/22/10 12:32	
NTC02GW0613	1011375-04	11/22/10 12:32	
Blank	1012830-BLK1	11/22/10 12:32	
LCS	1012830-BS1	11/22/10 12:32	
LCS Dup	1012830-BSD1	11/22/10 12:32	

QC BATCH SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012922 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0313	1011375-02	11/23/10 13:26	
NTC02GW0413	1011375-03	11/23/10 13:26	
NTCFD111710-01	1011375-05	11/23/10 13:26	
Blank	1012922-BLK1	11/23/10 13:26	
LCS	1012922-BS1	11/23/10 13:26	

QC BATCH SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012992 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/24/10 11:08	
NTC02GW0513	1011407-02	11/24/10 11:08	
Blank	1012992-BLK1	11/24/10 11:08	
LCS	1012992-BS1	11/24/10 11:08	
NTC02GW0113	1012992-MS1	11/24/10 11:08	
NTC02GW0113	1012992-MSD1	11/24/10 11:08	

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K23070

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0H11001
Instrument: 324

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K23070-CCV1	112210-047	11/22/10 12:32
Calibration Blank	0K23070-CCB1	112210-041	11/22/10 12:45
Secondary Cal Check	0K23070-SCV1	112210-063	11/22/10 12:58
Instrument RL Check	0K23070-CRL1	112210-057	11/22/10 13:11
Blank	1012830-BLK1	112210-036	11/22/10 13:37
LCS	1012830-BS1	112210-038	11/22/10 13:44
LCS Dup	1012830-BSD1	112210-040	11/22/10 13:51
Calibration Check	0K23070-CCV2	112210-048	11/22/10 14:15
Calibration Blank	0K23070-CCB2	112210-042	11/22/10 14:28
Calibration Check	0K23070-CCV3	112210-049	11/22/10 16:11
Calibration Blank	0K23070-CCB3	112210-043	11/22/10 16:24
Calibration Check	0K23070-CCV4	112210-050	11/22/10 17:55
Calibration Blank	0K23070-CCB4	112210-044	11/22/10 18:08
NTC02GW0213	1011375-01	112210-019	11/22/10 18:39
NTC02GW0613	1011375-04	112210-022	11/22/10 19:03
Calibration Check	0K23070-CCV5	112210-051	11/22/10 19:38
Calibration Blank	0K23070-CCB5	112210-045	11/22/10 19:51

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29039

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0I01016
Instrument: 324

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29039-CCV1	112310-026	11/23/10 13:26
Calibration Blank	0K29039-CCB1	112310-022	11/23/10 13:39
Secondary Cal Check	0K29039-SCV1	112310-039	11/23/10 13:52
Instrument RL Check	0K29039-CRL1	112310-033	11/23/10 14:04
Blank	1012922-BLK1	112310-020	11/23/10 14:30
LCS	1012922-BS1	112310-021	11/23/10 14:36
NTC02GW0313	1011375-02	112310-009	11/23/10 15:07
NTC02GW0413	1011375-03	112310-010	11/23/10 15:14
Calibration Check	0K29039-CCV2	112310-027	11/23/10 15:22
Calibration Blank	0K29039-CCB2	112310-023	11/23/10 15:35
NTCFD111710-01	1011375-05	112310-011	11/23/10 15:48
Calibration Check	0K29039-CCV3	112310-028	11/23/10 16:56
Calibration Blank	0K29039-CCB3	112310-024	11/23/10 17:09

ANALYSIS BATCH (SEQUENCE) SUMMARY
SM 5310 C 20th

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K29071

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0H11001
Instrument: 324

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K29071-CCV1	112410-032	11/24/10 11:08
Calibration Blank	0K29071-CCB1	112410-028	11/24/10 11:20
Secondary Cal Check	0K29071-SCV1	112410-043	11/24/10 11:34
Instrument RL Check	0K29071-CRL1	112410-037	11/24/10 11:47
Blank	1012992-BLK1	112410-026	11/24/10 12:13
LCS	1012992-BS1	112410-027	11/24/10 12:19
Calibration Check	0K29071-CCV2	112410-033	11/24/10 13:07
Calibration Blank	0K29071-CCB2	112410-029	11/24/10 13:20
NTC02GW0113	1011407-01	112410-007	11/24/10 13:39
NTC02GW0113	1012992-MS1	112410-008	11/24/10 13:47
NTC02GW0113	1012992-MSD1	112410-009	11/24/10 13:55
NTC02GW0513	1011407-02	112410-010	11/24/10 14:03
Calibration Check	0K29071-CCV3	112410-034	11/24/10 14:50
Calibration Blank	0K29071-CCB3	112410-030	11/24/10 15:04

Spl #:	42	Sample ID :	1011365-01	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	41	Method :	081010low - Aug 10, 2010; 06-	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:15 pm	-	-	-	18,704	5.116	1.023
Avg.		-	-	-	18,704	5.116	1.023
Std.Dev.					0		
% RSD.					0.00		

Spl #:	43	Sample ID :	1011365-02	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	42	Method :	081010low - Aug 10, 2010; 06-	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:23 pm	-	-	-	19,429	5.320	1.064
Avg.		-	-	-	19,429	5.320	1.064
Std.Dev.					0		
% RSD.					0.00		

Spl #:	44	Sample ID :	1011365-03	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	43	Method :	081010low - Aug 10, 2010; 06-	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:31 pm	-	-	-	105,259	29.423	5.885
Avg.		-	-	-	105,259	29.423	5.885
Std.Dev.					0		
% RSD.					0.00		

Spl #:	45	Sample ID :	1011375-01	Type :	Sample	Date:	11/22/2010	Status:	Passed
Vial #:	44	Method :	081010low - Aug 10, 2010; 06-	Dilution	1 : 1	Customer ID:	00000000		

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:39 pm	-	-	-	24,914	6.860	1.371
Avg.		-	-	-	24,914	6.860	1.371
Std.Dev.					0		
% RSD.					0.00		

Sample GW0213 TOC rep result 1.4 mg/L

01525

HOLDING TIME SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: pH

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		12/01/10	14	NA	12/01/10	14	1	*
NTC02GW0313	11/17/10	11/18/10		12/01/10	14	NA	12/01/10	14	1	*
NTC02GW0413	11/17/10	11/18/10		12/01/10	14	NA	12/01/10	14	1	*
NTC02GW0613	11/17/10	11/18/10		12/01/10	14	NA	12/01/10	14	1	*
NTCFD111710-01	11/17/10	11/18/10		12/01/10	15	NA	12/01/10	15	1	*
NTC02GW0113	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	1	*
NTC02GW0513	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	1	*

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30046
Calibration: UNASSIGNED
Control Limt: +/- 5.00%
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30046-CCV1	pH	7.00	7.03	100	pH Units	11/30/10 12:47
0K30046-CCV2	pH	4.00	4.03	101	pH Units	11/30/10 12:47
0K30046-CCV3	pH	10.0	10.03	100	pH Units	11/30/10 12:47
0K30046-CCV4	pH	7.00	7.03	100	pH Units	11/30/10 12:47
0K30046-CCV5	pH	4.00	4.04	101	pH Units	11/30/10 12:47
0K30046-CCV6	pH	10.0	10.03	100	pH Units	11/30/10 12:47
0K30046-CCV7	pH	7.00	7.04	101	pH Units	11/30/10 12:47
0K30046-CCV8	pH	4.00	4.02	100	pH Units	11/30/10 12:47
0K30046-CCV9	pH	10.0	10.01	100	pH Units	11/30/10 12:47

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01055
Control Limt: +/- 5.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument ID: 309

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L01055-CCV1	pH	7.00	6.95	99	pH Units	12/01/10 15:40
0L01055-CCV2	pH	4.00	3.97	99	pH Units	12/01/10 15:40
0L01055-CCV3	pH	10.0	10.01	100	pH Units	12/01/10 15:40
0L01055-CCV4	pH	7.00	7.01	100	pH Units	12/01/10 15:40
0L01055-CCV5	pH	4.00	4.03	101	pH Units	12/01/10 15:40
0L01055-CCV6	pH	10.0	10.05	100	pH Units	12/01/10 15:40

* Values outside of QC limits

DUPLICATES
USEPA-150.1

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water
Lab Source ID: 1011375-01
% Solids:
QC Batch: 1013154

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1013154-DUP1
Source Sample Name: NTC02GW0213
Preparation: General Inorganic Prep
Initial/Final: 20 mL / 20 mL

Analyte	Control Limit	Sample Conc.	C	Dup. Conc.	C	RPD %	Q	Method	Units
pH	20	8.12		8.12		0		USEPA-150.1	pH Units

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013083

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013083-SRM1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	6.00	6.04	101	98.6 - 101.4

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013083

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013083-SRM2

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	8.00	7.96	100	99 - 101

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013154

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013154-SRM1

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	6.00	5.99	100	98.6 - 101.4

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013154

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013154-SRM2

Preparation: General Inorganic Prep

Initial/Final: 20 mL / 20 mL

Analyte	True (pH Units)	Found (pH Units)	SRM % REC.	QC Limits Rec.
pH	8.00	7.95	99	99 - 101

* Values outside of QC limits

TriMatrix Laboratories, Inc.

NLB 12-1-10

LV24

PREPARATION BATCH **1013083** Page 1 of 1

Printed: 11/30/2010 10:30:06AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Due: 12-1-2010

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	pH 150.1	1011356	pH 150.1	1011407	pH 150.1

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1013083-DUP1		Nov-30-10 10:28	KRK	20	20		1011352-01			DUPLICATE	
1013083-SRM1		Nov-30-10 10:28	KRK	20	20			0101007	20000	REFERENCE	
1013083-SRM2		Nov-30-10 10:28	KRK	20	20			0010811	20000	REFERENCE	
1011352-01	S	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 10:28	KRK	20	20					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials: YCL

bch_TriMatrix.rpt

TriMatrix Laboratories, Inc.

AHB 12-2-10

(LVL4)

PREPARATION BATCH 1013154

Printed: 12/1/2010 1:56:53PM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

Due: 12-3-2010

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011375	pH 150.1				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013154-DUP1		Dec-01-10 13:55	KRK	20	20		1011375-01			DUPLICATE	
1013154-SRM1		Dec-01-10 13:55	KRK	20	20			0101007	20000	REFERENCE	
1013154-SRM2		Dec-01-10 13:55	KRK	20	20			0010811	20000	REFERENCE	
1011375-01	F	Dec-01-10 13:55	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Dec-01-10 13:55	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Dec-01-10 13:55	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Dec-01-10 13:55	KRK	20	20					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Dec-01-10 13:55	KRK	20	20					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials: RC

bch_TriMatrix.rpt

91584

QC BATCH SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013083 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/30/10 10:28	
NTC02GW0513	1011407-02	11/30/10 10:28	
Reference	1013083-SRM1	11/30/10 10:28	
Reference	1013083-SRM2	11/30/10 10:28	

QC BATCH SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013154 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	12/01/10 13:55	
NTC02GW0313	1011375-02	12/01/10 13:55	
NTC02GW0413	1011375-03	12/01/10 13:55	
NTC02GW0613	1011375-04	12/01/10 13:55	
NTCFD111710-01	1011375-05	12/01/10 13:55	
NTC02GW0213	1013154-DUP1	12/01/10 13:55	
Reference	1013154-SRM1	12/01/10 13:55	
Reference	1013154-SRM2	12/01/10 13:55	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30046

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0K30046-CCV1		11/30/10 12:47
Calibration Check	0K30046-CCV2		11/30/10 12:47
Calibration Check	0K30046-CCV3		11/30/10 12:47
Reference	1013083-SRM1		11/30/10 12:47
Reference	1013083-SRM2		11/30/10 12:47
Calibration Check	0K30046-CCV4		11/30/10 12:47
Calibration Check	0K30046-CCV5		11/30/10 12:47
Calibration Check	0K30046-CCV6		11/30/10 12:47
NTC02GW0113	1011407-01		11/30/10 12:47
NTC02GW0513	1011407-02		11/30/10 12:47
Calibration Check	0K30046-CCV7		11/30/10 12:47
Calibration Check	0K30046-CCV8		11/30/10 12:47
Calibration Check	0K30046-CCV9		11/30/10 12:47

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-150.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01055

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: UNASSIGNED
Instrument: 309

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0L01055-CCV1		12/01/10 15:40
Calibration Check	0L01055-CCV2		12/01/10 15:40
Calibration Check	0L01055-CCV3		12/01/10 15:40
Reference	1013154-SRM1		12/01/10 15:40
Reference	1013154-SRM2		12/01/10 15:40
NTC02GW0213	1011375-01		12/01/10 15:40
NTC02GW0213	1013154-DUP1		12/01/10 15:40
NTC02GW0313	1011375-02		12/01/10 15:40
NTC02GW0413	1011375-03		12/01/10 15:40
NTC02GW0613	1011375-04		12/01/10 15:40
NTCFD111710-01	1011375-05		12/01/10 15:40
Calibration Check	0L01055-CCV4		12/01/10 15:40
Calibration Check	0L01055-CCV5		12/01/10 15:40
Calibration Check	0L01055-CCV6		12/01/10 15:40

HOLDING TIME SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Chloride

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0313	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0413	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	14	28	
NTC02GW0613	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTCFD111710-01	11/17/10	11/18/10		11/30/10	13	NA	12/01/10	14	28	
NTC02GW0113	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/30/10	12	NA	11/30/10	12	28	

HOLDING TIME SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Sulfate

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0313	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0413	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	13	28	
NTC02GW0613	11/17/10	11/18/10		11/30/10	13	NA	12/01/10	14	28	
NTCFD111710-01	11/17/10	11/18/10		11/30/10	13	NA	11/30/10	14	28	
NTC02GW0113	11/18/10	11/19/10		11/30/10	12	NA	12/01/10	13	28	
NTC02GW0513	11/18/10	11/19/10		11/30/10	12	NA	12/01/10	13	28	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01017
Control Limt: +/- 10.00%

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01012
Instrument ID: 306

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L01017-CCV1	Chloride	60.0	59.1	99	mg/L	11/30/10 11:28
	Sulfate	60.0	59.7	99	mg/L	11/30/10 11:28
0L01017-CCV2	Chloride	60.0	63.4	106	mg/L	11/30/10 15:09
	Sulfate	60.0	63.8	106	mg/L	11/30/10 15:09
0L01017-CCV3	Chloride	60.0	60.1	100	mg/L	11/30/10 18:50
	Sulfate	60.0	61.1	102	mg/L	11/30/10 18:50
0L01017-CCV4	Chloride	60.0	59.6	99	mg/L	11/30/10 22:31
	Sulfate	60.0	60.2	100	mg/L	11/30/10 22:31
0L01017-CCV5	Chloride	60.0	63.7	106	mg/L	12/01/10 01:17
	Sulfate	60.0	64.4	107	mg/L	12/01/10 01:17

* Values outside of QC limits

CRDL STANDARD

USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0L01017

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0L01012

Instrument ID: 306

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L01017-CRL1	Chloride	1.00	1.17	117	mg/L	50 - 150
	Sulfate	1.00	0.971	97	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L01017
Calibration: 0L01012
Instrument ID: 306

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L01017-CCB1	Chloride	0.16	mg/L	0.098	1.0	J	11/30/10 11:47
	Sulfate	-0.043	mg/L	0.061	2.0	U	11/30/10 11:47
0L01017-CCB2	Chloride	0.19	mg/L	0.098	1.0	J	11/30/10 15:28
	Sulfate	-0.038	mg/L	0.061	2.0	U	11/30/10 15:28
0L01017-CCB3	Chloride	0.17	mg/L	0.098	1.0	J	11/30/10 19:08
	Sulfate	0.041	mg/L	0.061	2.0	U	11/30/10 19:08
0L01017-CCB4	Chloride	0.18	mg/L	0.098	1.0	J	11/30/10 22:49
	Sulfate	0.12	mg/L	0.061	2.0	J	11/30/10 22:49
0L01017-CCB5	Chloride	0.18	mg/L	0.098	1.0	J	12/01/10 01:35
	Sulfate	0.13	mg/L	0.061	2.0	J	12/01/10 01:35

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1013122-BLK1 File ID: 113010.seq-12

Prepared: 11/30/10 08:43 Analyzed: 11/30/10 11:47

Preparation: General Inorganic Prep Initial/Final: 10 mL / 10 mL

QC Batch: 1013122 Sequence: 0L01017 Calibration: 0L01012 Instrument: 306

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
16887-00-6	Chloride	1.0	mg/L	0.098	1.0	U
14808-79-8	Sulfate	2.0	mg/L	0.061	2.0	U

LCS / LCS DUPLICATE RECOVERY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1013122-BS1
Preparation: General Inorganic Prep
Initial/Final: 10 mL / 10 mL

QC Batch: 1013122
Sequence: 0L01017

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Chloride	20.0	20.9	105	90 - 110	mg/L
Sulfate	20.0	21.1	106	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TriMatrix Laboratories, Inc.

NLB 12-1-10

PREPARATION BATCH 1013122

Printed: 12/1/2010 11:12:13AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

due: 12/01 LV4

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Sulfate 300.0	1011352	Chloride 300.0	1011356	Sulfate 300.0
1011356	Chloride 300.0	1011375	Sulfate 300.0	1011375	Chloride 300.0
1011407	Sulfate 300.0	1011407	Chloride 300.0		

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013122-BLK1		Nov-30-10 08:43	CKD	10	10					BLANK	
1013122-BS1		Nov-30-10 08:43	CKD	10	10			0120038	10000	LCS	
1013122-MS1		Nov-30-10 08:43	CKD	10	10		1011352-01	0120037	10000	MATRIX SPIKE	
1013122-MSD1		Nov-30-10 08:43	CKD	10	10		1011352-01	0120037	10000	MATRIX SPIKE DUP	
1011352-01	R	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-01	R	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011352-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-01	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-02	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-03	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-04	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011356-05	G	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

PREPARATION BATCH 1013122

Printed: 12/1/2010 11:12:13AM

Inorganic - Wet Chemistry, Water, General Inorganic Prep

(No Surrogate)

Batch Comments: (none)

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1011375-03	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-03	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-04	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011375-05	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-01	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	
1011407-02	F	Nov-30-10 08:43	CKD	10	10					TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

QC BATCH SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013122 QC Batch Matrix: Water

Preparation: General Inorganic Prep

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/30/10 08:43	
NTC02GW0313	1011375-02	11/30/10 08:43	
NTC02GW0413	1011375-03	11/30/10 08:43	
NTC02GW0613	1011375-04	11/30/10 08:43	
NTCFD111710-01	1011375-05	11/30/10 08:43	
NTC02GW0113	1011407-01	11/30/10 08:43	
NTC02GW0513	1011407-02	11/30/10 08:43	
Blank	1013122-BLK1	11/30/10 08:43	
LCS	1013122-BS1	11/30/10 08:43	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01017

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01012
Instrument: 306

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0L01017-CAL1	113010.seq-02	11/30/10 08:43
Cal Standard	0L01017-CAL2	113010.seq-03	11/30/10 09:01
Cal Standard	0L01017-CAL3	113010.seq-04	11/30/10 09:19
Cal Standard	0L01017-CAL4	113010.seq-05	11/30/10 09:38
Cal Standard	0L01017-CAL5	113010.seq-06	11/30/10 09:56
Cal Standard	0L01017-CAL6	113010.seq-07	11/30/10 10:15
Secondary Cal Check	0L01017-SCV1	113010.seq-09	11/30/10 10:51
Instrument RL Check	0L01017-CRL1	113010.seq-10	11/30/10 11:10
Calibration Check	0L01017-CCV1	113010.seq-11	11/30/10 11:28
Calibration Blank	0L01017-CCB1	113010.seq-12	11/30/10 11:47
Blank	1013122-BLK1	113010.seq-12	11/30/10 11:47
LCS	1013122-BS1	113010.seq-13	11/30/10 12:05
NTC02GW0213	1011375-01	113010.seq-21	11/30/10 14:32
NTC02GW0313	1011375-02	113010.seq-22	11/30/10 14:51
Calibration Check	0L01017-CCV2	113010.seq-23	11/30/10 15:09
Calibration Blank	0L01017-CCB2	113010.seq-24	11/30/10 15:28
NTC02GW0413	1011375-03	113010.seq-25	11/30/10 15:46
NTC02GW0613	1011375-04	113010.seq-26	11/30/10 16:04
NTCFD111710-01	1011375-05	113010.seq-27	11/30/10 16:23
NTC02GW0113	1011407-01	113010.seq-28	11/30/10 16:41
NTC02GW0513	1011407-02	113010.seq-29	11/30/10 17:00
Calibration Check	0L01017-CCV3	113010.seq-35	11/30/10 18:50
Calibration Blank	0L01017-CCB3	113010.seq-36	11/30/10 19:08
Calibration Check	0L01017-CCV4	113010.seq-47	11/30/10 22:31
Calibration Blank	0L01017-CCB4	113010.seq-48	11/30/10 22:49
NTC02GW0213	1011375-01	113010.seq-49	11/30/10 23:08
NTC02GW0313	1011375-02	113010.seq-50	11/30/10 23:26
NTC02GW0413	1011375-03	113010.seq-51	11/30/10 23:45
NTC02GW0613	1011375-04	113010.seq-52	12/01/10 00:03
NTCFD111710-01	1011375-05	113010.seq-53	12/01/10 00:21
NTC02GW0113	1011407-01	113010.seq-54	12/01/10 00:40
NTC02GW0513	1011407-02	113010.seq-55	12/01/10 00:58

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-300.0

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Sequence: 0L01017

SDG: 1011375

Project: Naval Station Great Lakes

Calibration: 0L01012

Instrument: 306

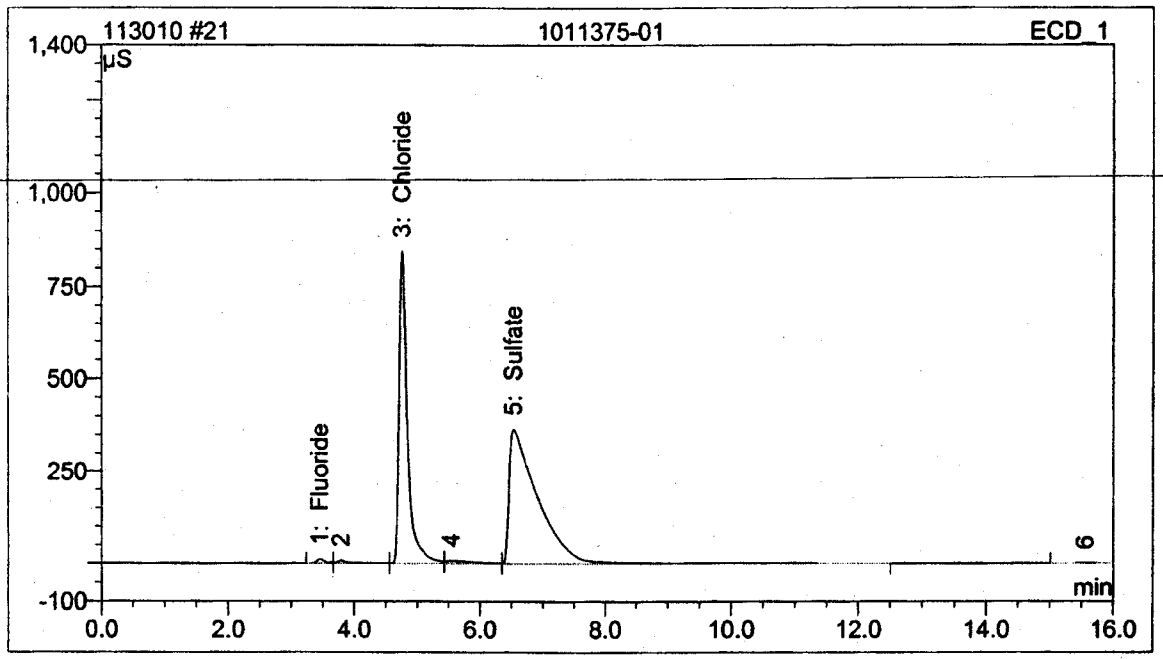
Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	0L01017-CCV5	113010.seq-56	12/01/10 01:17
Calibration Blank	0L01017-CCB5	113010.seq-57	12/01/10 01:35

Sample GW0313 Chloride MP Round 85 mg/L

Sample Analysis Report

Sample Name:	1011375-01	**Sample No.:**	21
Sequence Name:	113010		
Program Method:	NEW	**Injection vol.:**	25.0
Quantitation Method:	AS18 113010	**Dilution Factor:**	1.0000
Date Time Collected:	11/30/2010 2:32 PM	**Sample Wt.:**	1.0000
System Operator:	CKD		

Peak No.	Component Name	Retention Time	Area µS*min	Height µS	Amount mg/L	Relative Amount %
1	Fluoride	3.46	1.517	10.822	0.5878	0.23
2	n.a.	3.80	1.155	6.956	n.a.	n.a.
3	Chloride	4.76	131.021	844.856	85.1873	33.30
4	n.a.	5.55	3.700	7.295	n.a.	n.a.
5	Sulfate	6.53	190.127	365.099	170.0779 4X	66.47
6	n.a.	15.56	0.063	0.150	n.a.	n.a.



HOLDING TIME SUMMARY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Phenolics, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	28	
NTC02GW0313	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	28	
NTC02GW0413	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	28	
NTC02GW0613	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	28	
NTCFD111710-01	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	8	28	
NTC02GW0113	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	
NTC02GW0513	11/18/10	11/19/10		11/29/10	11	NA	11/30/10	12	28	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30035
Calibration: 0K30018
Control Limt: +/- 10.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30035-CCV1	Phenolics, Total	0.200	0.204	102	mg/L	11/24/10 13:12
0K30035-CCV2	Phenolics, Total	0.200	0.208	104	mg/L	11/24/10 13:51
0K30035-CCV3	Phenolics, Total	0.200	0.203	102	mg/L	11/24/10 14:21

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L01034
Calibration: 0L01015
Control Limt: +/- 10.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L01034-CCV1	Phenolics, Total	0.200	0.207	104	mg/L	11/30/10 10:11
0L01034-CCV2	Phenolics, Total	0.200	0.208	104	mg/L	11/30/10 11:35

* Values outside of QC limits

CRDL STANDARD

USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30035

Calibration: 0K30018

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30035-CRL1	Phenolics, Total	0.00500	0.00534	107	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0L01034

Calibration: 0L01015

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L01034-CRL1	Phenolics, Total	0.00500	0.00419	84	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30035
Calibration: 0K30018
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30035-CCB1	Phenolics, Total	0.00266	mg/L	0.00280	0.0500	U	11/24/10 13:12
0K30035-CCB2	Phenolics, Total	0.00271	mg/L	0.00280	0.0500	U	11/24/10 13:51
0K30035-CCB3	Phenolics, Total	0.00251	mg/L	0.00280	0.0500	U	11/24/10 14:21

* Values outside of QC limits

BLANKS
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L01034
Calibration: 0L01015
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L01034-CCB1	Phenolics, Total	0.00105	mg/L	0.00280	0.0500	U	11/30/10 10:11
0L01034-CCB2	Phenolics, Total	-0.00141	mg/L	0.00280	0.0500	U	11/30/10 11:35

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012750-BLK1 File ID: 112410PHENOLM-020

Prepared: 11/22/10 10:09 Analyzed: 11/24/10 13:49

Preparation: Method-Specific Preparat Initial/Final: 100 mL / 100 mL

QC Batch: 1012750 Sequence: 0K30035 Calibration: 0K30018 Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Phenolics, Total	0.0500	mg/L	0.00280	0.0500	U

METHOD BLANK DATA SHEET
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1013010-BLK1 File ID: 113010PHENOLM-018

Prepared: 11/29/10 09:42 Analyzed: 11/30/10 10:48

Preparation: Method-Specific Preparat Initial/Final: 100 mL / 100 mL

QC Batch: 1013010 Sequence: 0L01034 Calibration: 0L01015 Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
	Phenolics, Total	0.0500	mg/L	0.00280	0.0500	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

NTC02GW0213

USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012750

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012750-MS1

Preparation: Method-Specific Preparation

Initial/Final: 100 mL / 100 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Phenolics, Total	0.400	ND	0.366	91	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-420.1

NTC02GW0213

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1012750

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012750-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 100 mL / 100 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Phenolics, Total	0.400	0.366	92	0.2	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-420.1

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013010

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013010-MS1

Preparation: Method-Specific Preparation

Initial/Final: 100 mL / 100 mL

Analyte	Spike Added	Sample Conc.	MS Conc.	MS % Rec. #	QC Limits Rec.	Units
Phenolics, Total	0.400	ND	0.416	104	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

USEPA-420.1

NTC02GW0113

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

QC Batch: 1013010

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1013010-MSD1

Preparation: Method-Specific Preparation

Initial/Final: 100 mL / 100 mL

Analyte	Spike Added	MSD Conc.	MSD % Rec. #	% RPD #	QC Limits RPD	QC Limits Rec.	Units
Phenolics, Total	0.400	0.413	103	0.7	20	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012750-BS1
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

QC Batch: 1012750
Sequence: 0K30035

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Phenolics, Total	0.400	0.425	106	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1013010-BS1
Preparation: Method-Specific Preparation
Initial/Final: 100 mL / 100 mL

QC Batch: 1013010
Sequence: 0L01034

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Phenolics, Total	0.400	0.375	94	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

DUE 12/3/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012750** Page 1 of 1

Printed: 11/23/2010 7:57:25AM

LV4

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011375	Phenolics 420.1				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012750-BLK1		Nov-22-10 10:09	CLD	100	100					BLANK	
1012750-BS1		Nov-22-10 10:09	CLD	100	100			0070221	40	LCS	
1012750-MS1		Nov-22-10 10:09	CLD	100	100		1011375-01	0070221	40	MATRIX SPIKE	
1012750-MSD1		Nov-22-10 10:09	CLD	100	100		1011375-01	0070221	40	MATRIX SPIKE DUP	
1011375-01	M	Nov-22-10 10:09	CLD	100	100					TETRA TECH NUS - Pittsburgh	
1011375-02	M	Nov-22-10 10:09	CLD	100	100					TETRA TECH NUS - Pittsburgh	
1011375-03	M	Nov-22-10 10:09	CLD	100	100					TETRA TECH NUS - Pittsburgh	
1011375-04	M	Nov-22-10 10:09	CLD	100	100					TETRA TECH NUS - Pittsburgh	
1011375-05	M	Nov-22-10 10:09	CLD	100	100					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

bch_TriMatrix.rpt

TriMatrix Laboratories, Inc.

PREPARATION BATCH **1012750** Page 1 of 1

Printed: 11/22/2010 10:11:07AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

1213

01695

Standard	Description	Solvent	LotNum
0070221	Phenol Stk 1000 ppm (spk,curve)	Di H2O +0.25 ml of c.H2SO4	std # 7060947

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011375	Phenolics 420.1				

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*Dilution*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012750-BLK1										BLANK	
1012750-BS1										LCS	
1012750-MS1		3.86					1011375-01			MATRIX SPIKE	
1012750-MSD1		3.52					1011375-01			MATRIX SPIKE DUP	
1011375-01		3.56								TETRA TECH NUS - Pittsburgh	
1011375-02		4.30								TETRA TECH NUS - Pittsburgh	
1011375-03		4.05								TETRA TECH NUS - Pittsburgh	
1011375-04		4.30								TETRA TECH NUS - Pittsburgh	
1011375-05		4.00								TETRA TECH NUS - Pittsburgh	

Comments:	Analyst Initials:

bch_TriMatrix_blank.rpt

TriMatrix Laboratories, Inc.

NLB 12-2-10

DUE 12/6/10

LV4

PREPARATION BATCH 1013010

Printed: 11/29/2010 9:44:21AM

Inorganic - Wet Chemistry, Water, Method-Specific Preparation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011407	Phenolics 420.1				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1013010-BLK1		Nov-29-10 09:42	CLD	100	100					BLANK	
1013010-BS1		Nov-29-10 09:42	CLD	100	100			0070221	40	LCS	
1013010-MS1		Nov-29-10 09:42	CLD	100	100		1011407-01	0070221	40	MATRIX SPIKE	
1013010-MSD1		Nov-29-10 09:42	CLD	100	100		1011407-01	0070221	40	MATRIX SPIKE DUP	
1011407-01	M	Nov-29-10 09:42	CLD	100	100					TETRA TECH NUS - Pittsburgh	
1011407-02	M	Nov-29-10 09:42	CLD	100	100					TETRA TECH NUS - Pittsburgh	

Comments:

Analyst Initials:

bch_TriMatrix.rpt

QC BATCH SUMMARY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1013010 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0113	1011407-01	11/29/10 09:42	
NTC02GW0513	1011407-02	11/29/10 09:42	
Blank	1013010-BLK1	11/29/10 09:42	
LCS	1013010-BS1	11/29/10 09:42	
NTC02GW0113	1013010-MS1	11/29/10 09:42	
NTC02GW0113	1013010-MSD1	11/29/10 09:42	

QC BATCH SUMMARY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012750 QC Batch Matrix: Water

Preparation: Method-Specific Preparation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/22/10 10:09	
NTC02GW0313	1011375-02	11/22/10 10:09	
NTC02GW0413	1011375-03	11/22/10 10:09	
NTC02GW0613	1011375-04	11/22/10 10:09	
NTCFD111710-01	1011375-05	11/22/10 10:09	
Blank	1012750-BLK1	11/22/10 10:09	
LCS	1012750-BS1	11/22/10 10:09	
NTC02GW0213	1012750-MS1	11/22/10 10:09	
NTC02GW0213	1012750-MSD1	11/22/10 10:09	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30035

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30018
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30035-CAL1	112410PHENOLM-001	11/24/10 12:20
Cal Standard	0K30035-CAL2	112410PHENOLM-007	11/24/10 12:20
Cal Standard	0K30035-CAL3	112410PHENOLM-008	11/24/10 12:20
Cal Standard	0K30035-CAL4	112410PHENOLM-004	11/24/10 12:20
Cal Standard	0K30035-CAL5	112410PHENOLM-005	11/24/10 12:20
Cal Standard	0K30035-CAL6	112410PHENOLM-006	11/24/10 12:20
Cal Standard	0K30035-CAL7	112410PHENOLM-002	11/24/10 12:20
Cal Standard	0K30035-CAL8	112410PHENOLM-003	11/24/10 12:20
Calibration Check	0K30035-CCV1	112410PHENOLM-011	11/24/10 13:12
Calibration Blank	0K30035-CCB1	112410PHENOLM-012	11/24/10 13:12
LCS	1012750-BS1	112410PHENOLM-013	11/24/10 13:12
Secondary Cal Check	0K30035-SCV1	112410PHENOLM-015	11/24/10 13:12
Blank	1012750-BLK1	112410PHENOLM-020	11/24/10 13:49
Instrument RL Check	0K30035-CRL1	112410PHENOLM-022	11/24/10 13:49
Calibration Check	0K30035-CCV2	112410PHENOLM-023	11/24/10 13:51
Calibration Blank	0K30035-CCB2	112410PHENOLM-024	11/24/10 13:51
NTC02GW0213	1011375-01	112410PHENOLM-030	11/24/10 14:13
NTC02GW0213	1012750-MS1	112410PHENOLM-033	11/24/10 14:19
NTC02GW0213	1012750-MSD1	112410PHENOLM-034	11/24/10 14:19
NTC02GW0313	1011375-02	112410PHENOLM-035	11/24/10 14:19
NTC02GW0413	1011375-03	112410PHENOLM-036	11/24/10 14:19
NTC02GW0613	1011375-04	112410PHENOLM-037	11/24/10 14:19
NTCFD111710-01	1011375-05	112410PHENOLM-038	11/24/10 14:19
Calibration Check	0K30035-CCV3	112410PHENOLM-040	11/24/10 14:21
Calibration Blank	0K30035-CCB3	112410PHENOLM-041	11/24/10 14:21

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-420.1

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L01034

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L01015
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0L01034-CAL1	113010PHENOLM-001	11/30/10 09:40
Cal Standard	0L01034-CAL2	113010PHENOLM-002	11/30/10 09:40
Cal Standard	0L01034-CAL3	113010PHENOLM-003	11/30/10 09:40
Cal Standard	0L01034-CAL4	113010PHENOLM-004	11/30/10 09:40
Cal Standard	0L01034-CAL5	113010PHENOLM-005	11/30/10 09:40
Cal Standard	0L01034-CAL6	113010PHENOLM-008	11/30/10 09:40
Cal Standard	0L01034-CAL7	113010PHENOLM-006	11/30/10 09:40
Cal Standard	0L01034-CAL8	113010PHENOLM-007	11/30/10 09:40
Calibration Check	0L01034-CCV1	113010PHENOLM-009	11/30/10 10:11
Calibration Blank	0L01034-CCB1	113010PHENOLM-010	11/30/10 10:11
LCS	1013010-BS1	113010PHENOLM-012	11/30/10 10:11
Secondary Cal Check	0L01034-SCV1	113010PHENOLM-014	11/30/10 10:11
Instrument RL Check	0L01034-CRL1	113010PHENOLM-015	11/30/10 10:11
Blank	1013010-BLK1	113010PHENOLM-018	11/30/10 10:48
NTC02GW0113	1011407-01	113010PHENOLM-027	11/30/10 11:32
NTC02GW0113	1013010-MS1	113010PHENOLM-028	11/30/10 11:32
NTC02GW0113	1013010-MSD1	113010PHENOLM-029	11/30/10 11:32
NTC02GW0513	1011407-02	113010PHENOLM-030	11/30/10 11:33
Calibration Check	0L01034-CCV2	113010PHENOLM-031	11/30/10 11:35
Calibration Blank	0L01034-CCB2	113010PHENOLM-032	11/30/10 11:35

Result Report AquaKem 6.5 Page: 1

Laboratory inst#298
Konelab User

Date : 2010-11-24
Time : 15.05

Test	Phenol				
Unit	mg/l				
Sample ID:	Result	Resp.	Date and Time	Dilut	Man.dilut
phen ccv	0.2070	0.029	2010-11-24 12.50		
phen ccb	0.0012	0.001	2010-11-24 12.50		
1 phen ccv	0.2041	0.028	2010-11-24 13.12		
phen ccb	0.0027	0.001	2010-11-24 13.12		
BS1	0.4254	0.058	2010-11-24 13.12		
BS2	0.4258	0.058	2010-11-24 13.12		
SCV	0.2572	0.035	2010-11-24 13.12		
phen ccv	0.1869	0.026	2010-11-24 13.15		
phen ccb	0.0018	0.001	2010-11-24 13.15		
phen ccv	0.2058	0.028	2010-11-24 13.49		
phen ccb	0.0016	0.001	2010-11-24 13.49		
BLK1	0.0014	0.001	2010-11-24 13.49		
BLK2	0.0008	0.001	2010-11-24 13.49		
CRL	0.0053	0.001	2010-11-24 13.49		
2 phen ccv	0.2076	0.029	2010-11-24 13.51		
phen ccb	0.0027	0.001	2010-11-24 13.51		
1011389-01	0.0015	0.001	2010-11-24 14.13		
1011389-02	0.0912	0.013	2010-11-24 14.13		
1011389-03	0.0994	0.014	2010-11-24 14.13		
1011389-04	0.0077	0.002	2010-11-24 14.13		
1011389-05	0.0053	0.001	2010-11-24 14.13		
1011375-01	0.0011	0.001	2010-11-24 14.13		
phen ccv	0.2080	0.029	2010-11-24 14.13		
phen ccb	0.0030	0.001	2010-11-24 14.14		
1011375-01MS	0.3657	0.050	2010-11-24 14.19		
1011375-01MSD	0.3663	0.050	2010-11-24 14.19		
1011375-02	0.0027	0.001	2010-11-24 14.19		
1011375-03	0.0029	0.001	2010-11-24 14.19		
1011375-04	0.0013	0.001	2010-11-24 14.19		
1011375-05	0.0015	0.001	2010-11-24 14.19		
1011326-01	0.0032	0.001	2010-11-24 14.19		
3 phen ccv	0.2031	0.028	2010-11-24 14.21		
phen ccb	0.0025	0.001	2010-11-24 14.21		
1011333-01	0.0034	0.001	2010-11-24 14.37		
1011321-01	0.0170	0.003	2010-11-24 14.38		
phen ccv	0.2171	0.030	2010-11-24 14.41		
phen ccb	0.0246	0.004	2010-11-24 14.41		
1011385-01	-0.1436	-0.019	2010-11-24 14.59		
1011333-02	-0.0037	0.000	2010-11-24 15.00		
phen ccv	0.2067	0.029	2010-11-24 15.03		
phen ccb	0.0031	0.001	2010-11-24 15.03		

Sample GW0413 total phenolics rep result 0.00287 mg/l

01697

HOLDING TIME SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Analyte: Cyanide, Total

Sample Name	Date Collected	Date Received	Date Leached	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
NTC02GW0213	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	14	
NTC02GW0313	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	14	
NTC02GW0413	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	14	
NTC02GW0613	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	14	
NTCFD111710-01	11/17/10	11/18/10		11/22/10	5	NA	11/24/10	7	14	
NTC02GW0113	11/18/10	11/19/10		12/01/10	13	NA	12/01/10	13	14	
NTC02GW0513	11/18/10	11/19/10		12/01/10	13	NA	12/01/10	13	14	

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30025
Calibration: 0K30014
Control Limt: +/- 10.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0K30025-CCV1	Cyanide, Total	0.100	0.0995	99	mg/L	11/24/10 09:14
0K30025-CCV2	Cyanide, Total	0.100	0.0978	98	mg/L	11/24/10 09:22
0K30025-CCV3	Cyanide, Total	0.100	0.100	100	mg/L	11/24/10 09:29
0K30025-CCV4	Cyanide, Total	0.100	0.106	106	mg/L	11/24/10 10:48

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L03004
Calibration: 0L03002
Control Limt: +/- 10.00%
Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	Analyzed
0L03004-CCV1	Cyanide, Total	0.100	0.100	100	mg/L	12/01/10 11:47
0L03004-CCV2	Cyanide, Total	0.100	0.0999	100	mg/L	12/01/10 11:55
0L03004-CCV3	Cyanide, Total	0.100	0.105	105	mg/L	12/01/10 14:05

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 0K30025-LCV1

Sequence: 0K30025

SDG: 1011375

Project: Naval Station Great Lakes

Instrument: 298

Calibration: 0K30014

Analyte	Expected	Found	% Drift	QC Limit	Units
Cyanide, Total	0.0500	0.0492	-1.5	10.00	mg/L

* Values outside of QC limits

LOW-CONCENTRATION CALIBRATION VERIFICATION

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L03004-LCV1
Instrument: 298
Sequence: 0L03004
Calibration: 0L03002

Analyte	Expected	Found	% Drift	QC Limit	Units
Cyanide, Total	0.0500	0.0511	2.3	10.00	mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Laboratory ID: 0K30025-HCV1

Sequence: 0K30025

SDG: 1011375

Project: Naval Station Great Lakes

Instrument: 298

Calibration: 0K30014

Analyte	Expected	Found	% Drift	QC Limit	Units
Cyanide, Total	0.100	0.0995	-0.5	10.00	mg/L

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Laboratory ID: 0L03004-HCV1
Instrument: 298
Sequence: 0L03004
Calibration: 0L03002

Analyte	Expected	Found	% Drift	QC Limit	Units
Cyanide, Total	0.100	0.0979	-2.1	10.00	mg/L

* Values outside of QC limits

CRDL STANDARD

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0K30025

Calibration: 0K30014

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0K30025-CRL1	Cyanide, Total	0.00500	0.00415	83	mg/L	50 - 150

* Values outside of QC limits

CRDL STANDARD

USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

Sequence: 0L03004

Calibration: 0L03002

Instrument ID: 298

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
0L03004-CRL1	Cyanide, Total	0.00500	0.00464	93	mg/L	50 - 150

* Values outside of QC limits

BLANKS
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0K30025
Calibration: 0K30014
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0K30025-CCB1	Cyanide, Total	-0.000790	mg/L	0.00170	0.00500	U	11/24/10 09:14
0K30025-CCB2	Cyanide, Total	-0.000770	mg/L	0.00170	0.00500	U	11/24/10 09:22
0K30025-CCB3	Cyanide, Total	-0.000580	mg/L	0.00170	0.00500	U	11/24/10 09:29
0K30025-CCB4	Cyanide, Total	-0.000570	mg/L	0.00170	0.00500	U	11/24/10 10:48

* Values outside of QC limits

BLANKS
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
SDG: 1011375
Client: TETRA TECH NUS - Pittsburgh
Project: Naval Station Great Lakes
Sequence: 0L03004
Calibration: 0L03002
Instrument ID: 298

Lab Sample ID	Analyte	Found	Unit	MDL	MRL	C	Analyzed
0L03004-CCB1	Cyanide, Total	-0.000300	mg/L	0.00170	0.00500	U	12/01/10 11:47
0L03004-CCB2	Cyanide, Total	-0.000330	mg/L	0.00170	0.00500	U	12/01/10 11:55
0L03004-CCB3	Cyanide, Total	-0.0000500	mg/L	0.00170	0.00500	U	12/01/10 14:05

* Values outside of QC limits

METHOD BLANK DATA SHEET
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012747-BLK1 File ID: 112410cn-014

Prepared: 11/22/10 08:30 Analyzed: 11/24/10 09:14

Preparation: 9010B Cyanide Distillatic Initial/Final: 50 mL / 50 mL

QC Batch: 1012747 Sequence: 0K30025 Calibration: 0K30014 Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
57-12-5	Cyanide, Total	0.00500	mg/L	0.00170	0.00500	U

METHOD BLANK DATA SHEET
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc. SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh Project: Naval Station Great Lakes

Matrix: Water Laboratory ID: 1012747-BLK2 File ID: 120110cn-034

Prepared: 12/01/10 06:15 Analyzed: 12/01/10 12:30

Preparation: 9010B Cyanide Distillatic Initial/Final: 50 mL / 50 mL

QC Batch: 1012747 Sequence: 0L03004 Calibration: 0L03002 Instrument: 298

CAS No.	Analyte	Concentration	Unit	MDL	MRL	Q
57-12-5	Cyanide, Total	0.00500	mg/L	0.00170	0.00500	U

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012747-BS1

Preparation: 9010B Cyanide Distillation

Initial/Final: 50 mL / 50 mL

QC Batch: 1012747

Sequence: 0K30025

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.100	0.0966	97	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012747-BS2
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

QC Batch: 1012747
Sequence: 0K30025

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.0400	0.0377	94	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

Client: TETRA TECH NUS - Pittsburgh

Matrix: Water

SDG: 1011375

Project: Naval Station Great Lakes

Laboratory ID: 1012747-BS3

Preparation: 9010B Cyanide Distillation

Initial/Final: 50 mL / 50 mL

QC Batch: 1012747

Sequence: 0L03004

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.100	0.0956	96	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Matrix: Water

SDG: 1011375
Project: Naval Station Great Lakes
Laboratory ID: 1012747-BS4
Preparation: 9010B Cyanide Distillation
Initial/Final: 50 mL / 50 mL

QC Batch: 1012747
Sequence: 0L03004

Analyte	Spike Added	LCS Conc.	LCS % Rec. #	QC Limits Rec.	Units
Cyanide, Total	0.0400	0.0368	92	90 - 110	mg/L

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

due 12/01/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012747

Printed: 11/22/2010 9:54:00AM

NB 12-1-10

4MD

Inorganic - Wet Chemistry, Water, 9010B Cyanide Distillation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Cyanide, Total 9014	1011356	Cyanide, Total 9014	1011375	Cyanide, Total 9014

Lab Number	*Contain*	*Prepared*	*By*	*Initial (mL)*	*Final (mL)*	*uL Surrogate*	*Source ID*	*Spike ID*	*uL Spike*	*Client / QC Type*	*Extraction Comments*
1012747-BLK1		Nov-22-10 08:30	LMA	50	50					BLANK	
1012747-BS1		Nov-22-10 08:30	LMA	50	50			0110775	50	LCS	
1012747-BS2		Nov-22-10 08:30	LMA	50	50			0110775	20	LCS	
1012747-MS1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE	
1012747-MSD1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE DUP	
1011352-01	U	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011352-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-01	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-03	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-04	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-05	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-01	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-02	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-03	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-04	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-05	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	

Comments:
pH>12 w/NaOH checked for interferences Reagents INR1097-9, INR1086-6, INR1086-14, INR1116-4

Analyst Initials:

bch_TriMatrix.rpt

due 12/06/10

TriMatrix Laboratories, Inc.

PREPARATION BATCH 1012747

Printed: 12/1/2010 8:08:15AM

HMD

NLB 12-3-10

Inorganic - Wet Chemistry, Water, 9010B Cyanide Distillation

(No Surrogate)

Batch Comments: (none)

Work Order	Analysis	Work Order	Analysis	Work Order	Analysis
1011352	Cyanide, Total 9014	1011356	Cyanide, Total 9014	1011375	Cyanide, Total 9014
1011407	Cyanide, Total 9014				

Lab Number	Contain	Prepared	By	Initial (mL)	Final (mL)	uL Surrogate	Source ID	Spike ID	uL Spike	Client / QC Type	Extraction Comments
1012747-BLK2		Dec-01-10 06:15	LMA	50	50					BLANK	
1012747-BS3		Dec-01-10 06:15	LMA	50	50			0111173	50	LCS	
1012747-BS4		Dec-01-10 06:15	LMA	50	50			0111173	20	LCS	
1011407-01	H	Dec-01-10 06:15	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011407-02	H	Dec-01-10 06:15	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1012747-BLK1		Nov-22-10 08:30	LMA	50	50					BLANK	
1012747-BS1		Nov-22-10 08:30	LMA	50	50			0110775	50	LCS	
1012747-BS2		Nov-22-10 08:30	LMA	50	50			0110775	20	LCS	
1012747-MS1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE	
1012747-MSD1		Nov-22-10 08:30	LMA	50	50		1011352-01	0110775	50	MATRIX SPIKE DUP	
1011352-01	U	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011352-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-01	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-02	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-03	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-04	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011356-05	I	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-01	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-02	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-03	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-04	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	
1011375-05	H	Nov-22-10 08:30	LMA	50	50					TETRA TECH NUS - Pittsburgh	

Comments:
pH>12w/NaOH checked for interferences Reagents IUR10.97-9, IUR11.26-15, IUR11.16-5, IUR10.86-8 6:13 2.00am

Analyst Initials:

QC BATCH SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.

SDG: 1011375

Client: TETRA TECH NUS - Pittsburgh

Project: Naval Station Great Lakes

QC Batch: 1012747 QC Batch Matrix: Water

Preparation: 9010B Cyanide Distillation

Sample Name	Lab Sample ID	Date Prepared	Observations
NTC02GW0213	1011375-01	11/22/10 08:30	
NTC02GW0313	1011375-02	11/22/10 08:30	
NTC02GW0413	1011375-03	11/22/10 08:30	
NTC02GW0613	1011375-04	11/22/10 08:30	
NTCFD111710-01	1011375-05	11/22/10 08:30	
NTC02GW0113	1011407-01	12/01/10 06:15	
NTC02GW0513	1011407-02	12/01/10 06:15	
Blank	1012747-BLK1	11/22/10 08:30	
Blank	1012747-BLK2	12/01/10 06:15	
LCS	1012747-BS1	11/22/10 08:30	
LCS	1012747-BS2	11/22/10 08:30	
LCS	1012747-BS3	12/01/10 06:15	
LCS	1012747-BS4	12/01/10 06:15	

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-9014

Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0K30025

SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0K30014
Instrument: 298

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0K30025-CAL1	112410cn-001	11/24/10 08:47
Cal Standard	0K30025-CAL2	112410cn-002	11/24/10 08:47
Cal Standard	0K30025-CAL3	112410cn-003	11/24/10 08:47
Cal Standard	0K30025-CAL4	112410cn-004	11/24/10 08:47
Cal Standard	0K30025-CAL5	112410cn-005	11/24/10 08:47
Cal Standard	0K30025-CAL6	112410cn-006	11/24/10 08:47
Cal Standard	0K30025-CAL7	112410cn-007	11/24/10 08:47
Calibration Blank	0K30025-CCB1	112410cn-009	11/24/10 09:14
Calibration Check	0K30025-CCV1	112410cn-011	11/24/10 09:14
High Cal Check	0K30025-HCV1	112410cn-011	11/24/10 09:14
Low Cal Check	0K30025-LCV1	112410cn-012	11/24/10 09:14
Instrument RL Check	0K30025-CRL1	112410cn-013	11/24/10 09:14
Blank	1012747-BLK1	112410cn-014	11/24/10 09:14
LCS	1012747-BS1	112410cn-015	11/24/10 09:14
Calibration Check	0K30025-CCV2	112410cn-019	11/24/10 09:22
Calibration Blank	0K30025-CCB2	112410cn-020	11/24/10 09:22
NTC02GW0213	1011375-01	112410cn-027	11/24/10 09:22
NTC02GW0313	1011375-02	112410cn-028	11/24/10 09:22
NTC02GW0413	1011375-03	112410cn-029	11/24/10 09:29
NTC02GW0613	1011375-04	112410cn-030	11/24/10 09:29
Calibration Check	0K30025-CCV3	112410cn-031	11/24/10 09:29
Calibration Blank	0K30025-CCB3	112410cn-032	11/24/10 09:29
NTCFD111710-01	1011375-05	112410cn-037	11/24/10 09:29
LCS	1012747-BS2	112410cn-080	11/24/10 10:45
Calibration Check	0K30025-CCV4	112410cn-081	11/24/10 10:48
Calibration Blank	0K30025-CCB4	112410cn-082	11/24/10 10:48

ANALYSIS BATCH (SEQUENCE) SUMMARY
USEPA-9014

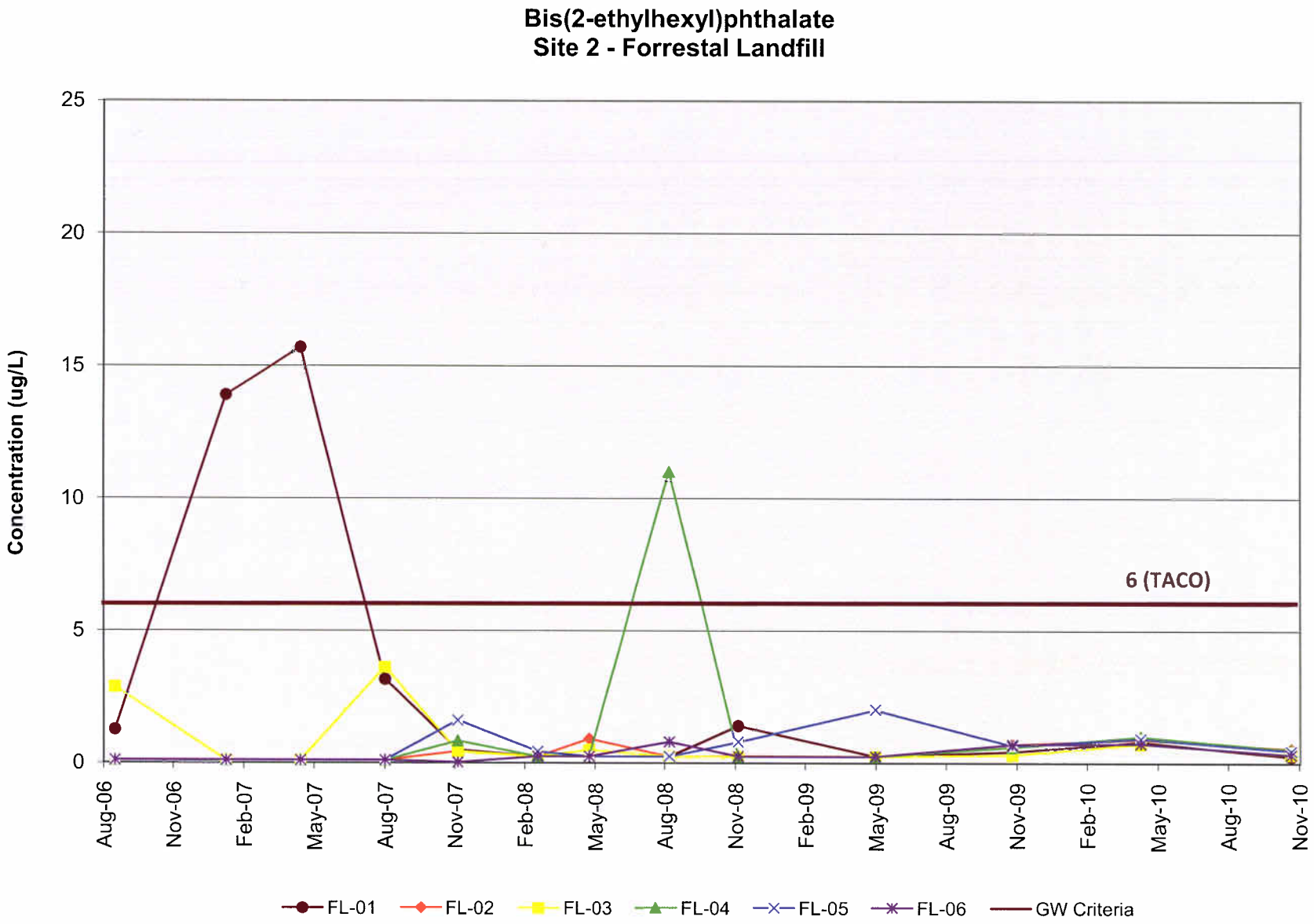
Laboratory: TriMatrix Laboratories, Inc.
Client: TETRA TECH NUS - Pittsburgh
Sequence: 0L03004

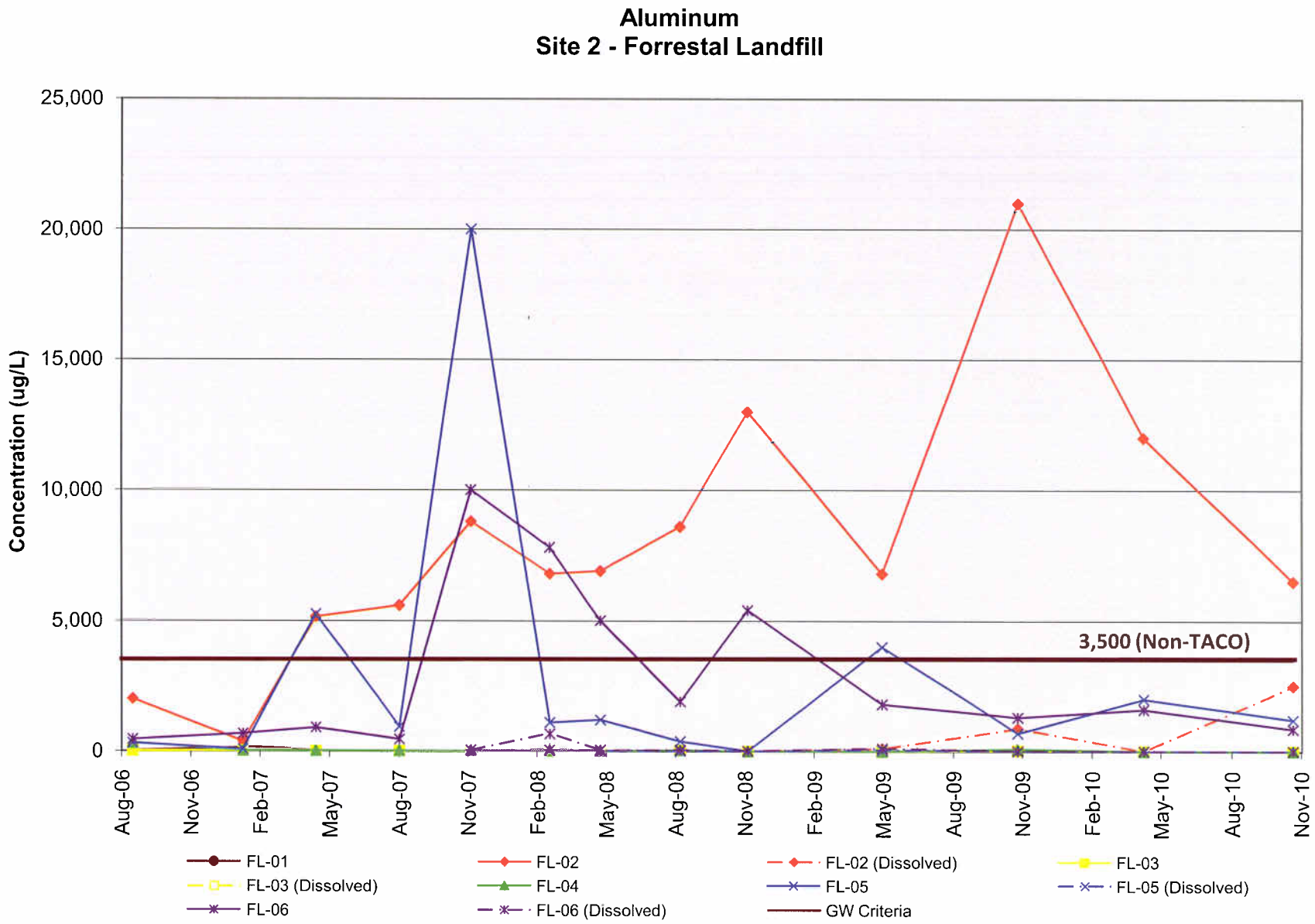
SDG: 1011375
Project: Naval Station Great Lakes
Calibration: 0L03002
Instrument: 298

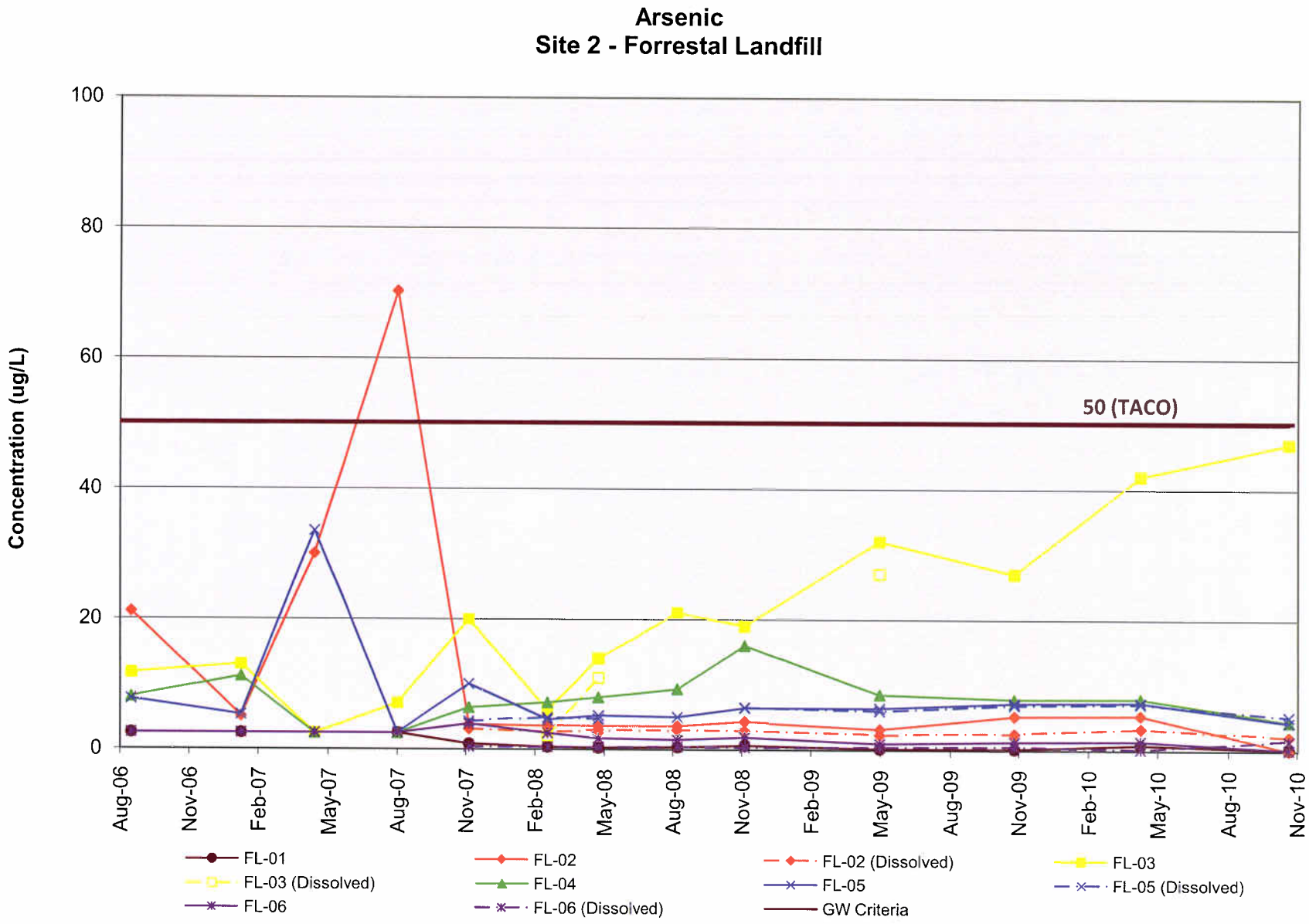
Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	0L03004-CAL1	120110cn-001	12/01/10 11:29
Cal Standard	0L03004-CAL2	120110cn-002	12/01/10 11:29
Cal Standard	0L03004-CAL3	120110cn-003	12/01/10 11:29
Cal Standard	0L03004-CAL4	120110cn-004	12/01/10 11:29
Cal Standard	0L03004-CAL5	120110cn-005	12/01/10 11:29
Cal Standard	0L03004-CAL6	120110cn-006	12/01/10 11:29
Cal Standard	0L03004-CAL7	120110cn-007	12/01/10 11:29
Calibration Check	0L03004-CCV1	120110cn-008	12/01/10 11:47
Calibration Blank	0L03004-CCB1	120110cn-009	12/01/10 11:47
High Cal Check	0L03004-HCV1	120110cn-011	12/01/10 11:47
Low Cal Check	0L03004-LCV1	120110cn-012	12/01/10 11:47
Instrument RL Check	0L03004-CRL1	120110cn-013	12/01/10 11:47
Calibration Check	0L03004-CCV2	120110cn-020	12/01/10 11:55
Calibration Blank	0L03004-CCB2	120110cn-021	12/01/10 11:55
Blank	1012747-BLK2	120110cn-034	12/01/10 12:30
LCS	1012747-BS3	120110cn-035	12/01/10 12:30
LCS	1012747-BS4	120110cn-065	12/01/10 13:17
NTC02GW0113	1011407-01	120110cn-071	12/01/10 14:01
NTC02GW0513	1011407-02	120110cn-072	12/01/10 14:01
Calibration Check	0L03004-CCV3	120110cn-075	12/01/10 14:05
Calibration Blank	0L03004-CCB3	120110cn-076	12/01/10 14:05

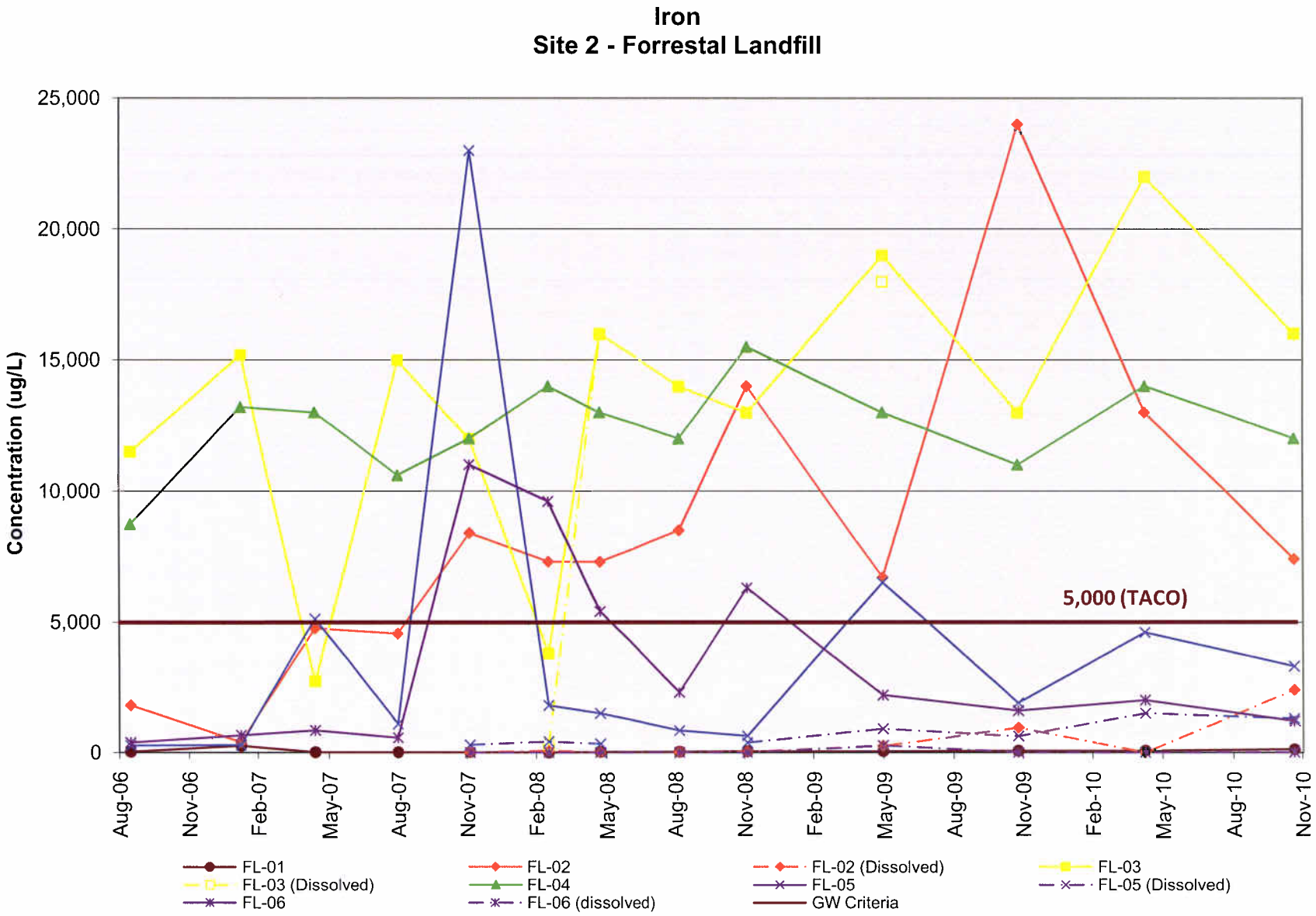
APPENDIX E

TREND GRAPHS

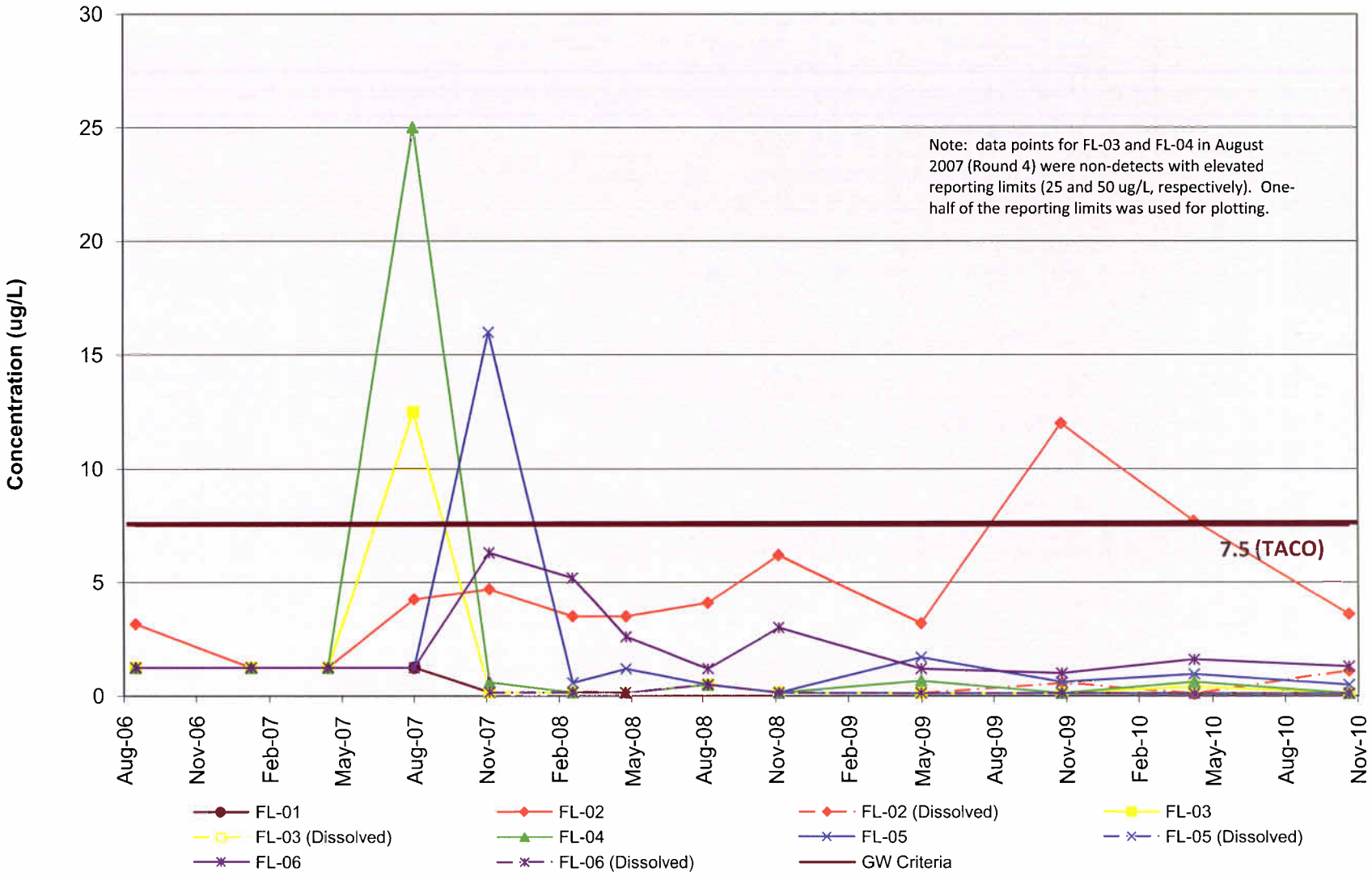

Bis(2-ethylhexyl)phthalate
Site 2 - Forrestal Landfill
Concentration (ug/L)
25
20
15
10
5
0
6 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-03
FL-04
FL-05
FL-06
GW Criteria

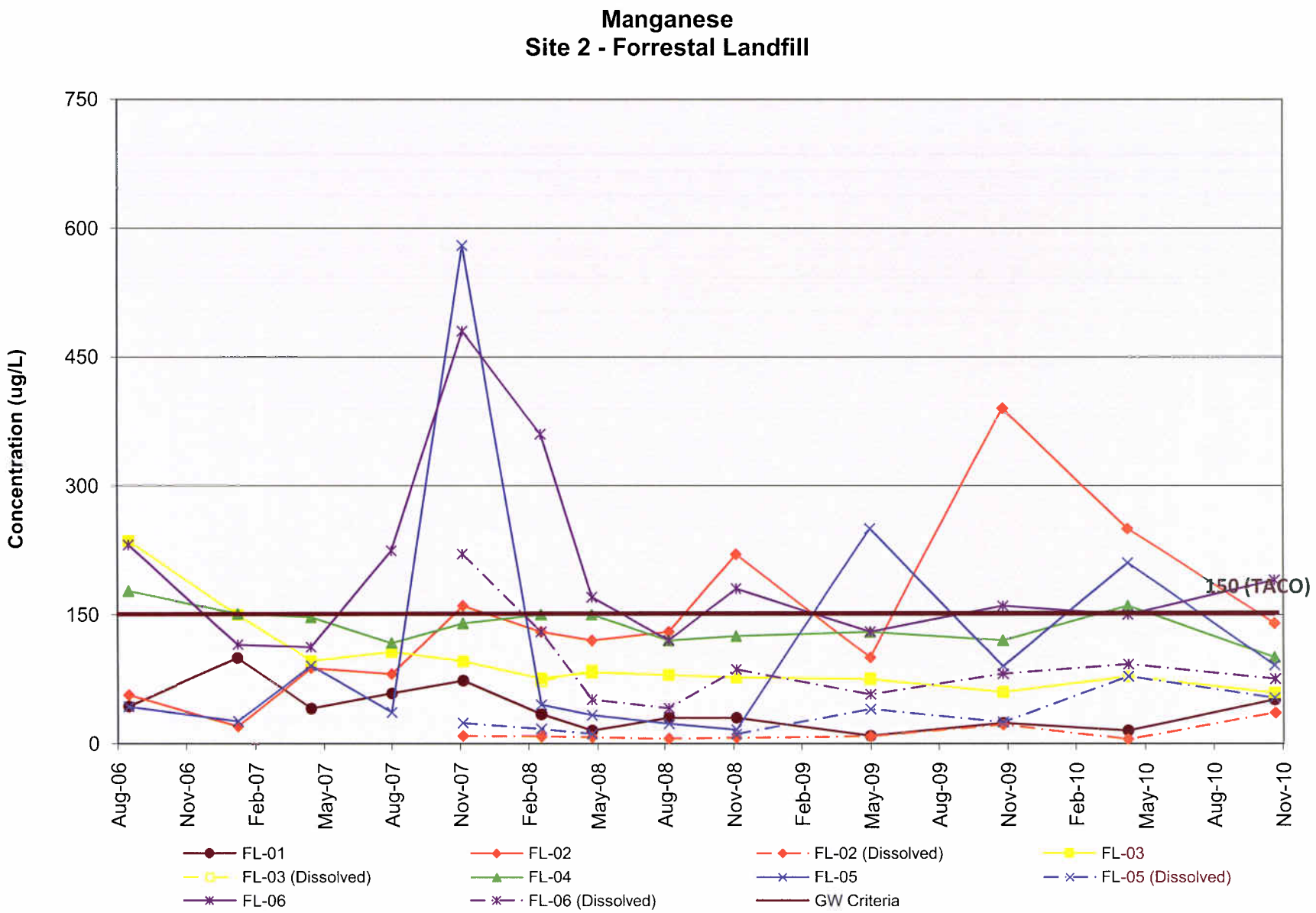

Aluminum
Site 2 - Forrestal Landfill
Concentration (ug/L)
25,000
20,000
15,000
10,000
5,000
0
3,500 (Non-TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-02 (Dissolved)
FL-03
FL-03 (Dissolved)
FL-04
FL-05
FL-05 (Dissolved)
FL-06
FL-06 (Dissolved)
GW Criteria

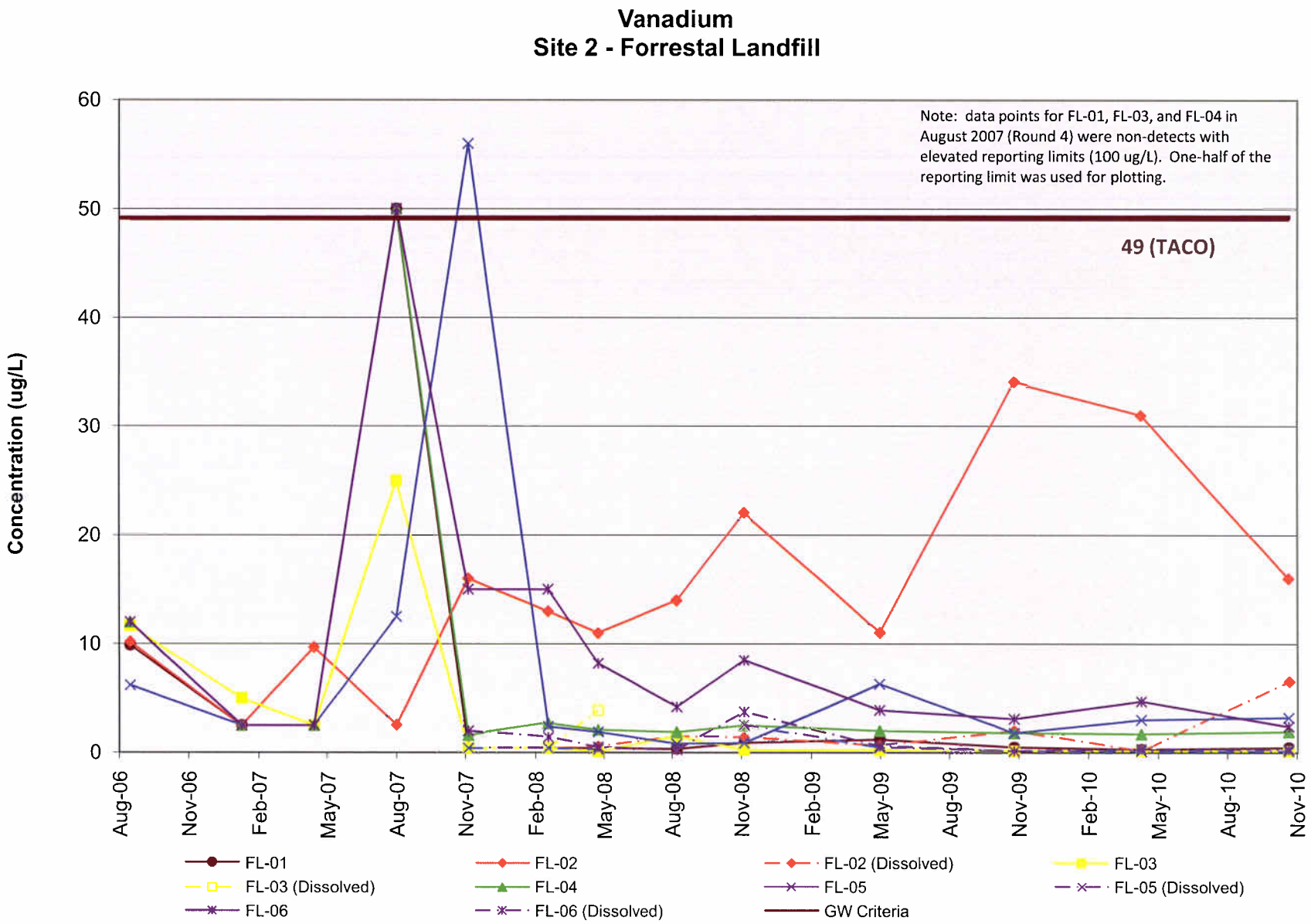

Arsenic
Site 2 - Forrestal Landfill
Concentration (ug/L)
100
80
60
40
20
0
50 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-02 (Dissolved)
FL-03
FL-03 (Dissolved)
FL-04
FL-05
FL-05 (Dissolved)
FL-06
FL-06 (Dissolved)
GW Criteria

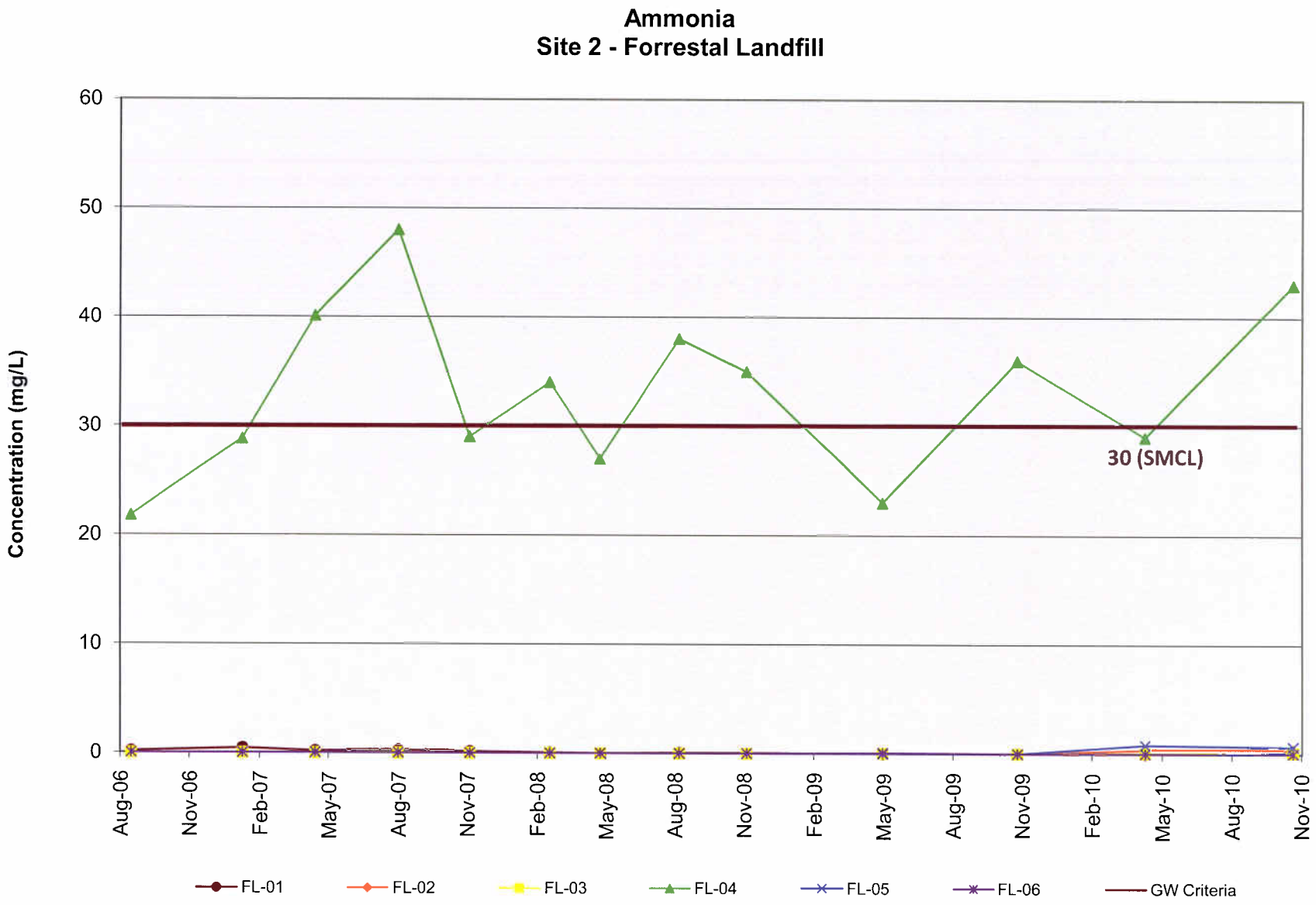

Iron
Site 2 - Forrestal Landfill
Concentration (ug/L)
25,000
20,000
15,000
10,000
5,000
0
5,000 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-02 (Dissolved)
FL-03
FL-03 (Dissolved)
FL-04
FL-05
FL-05 (Dissolved)
FL-06
FL-06 (dissolved)
GW Criteria

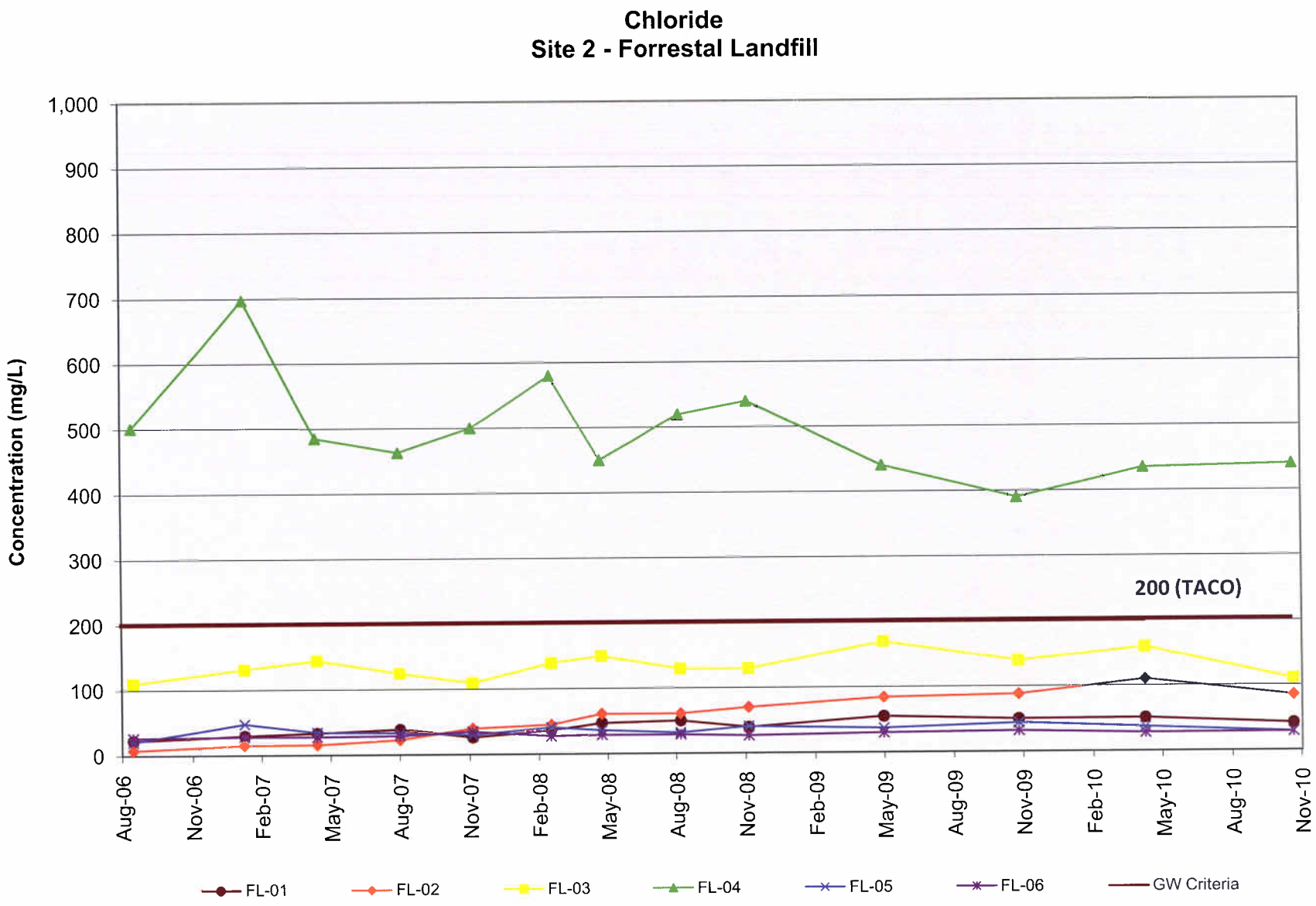
Lead
Site 2 - Forrestal Landfill

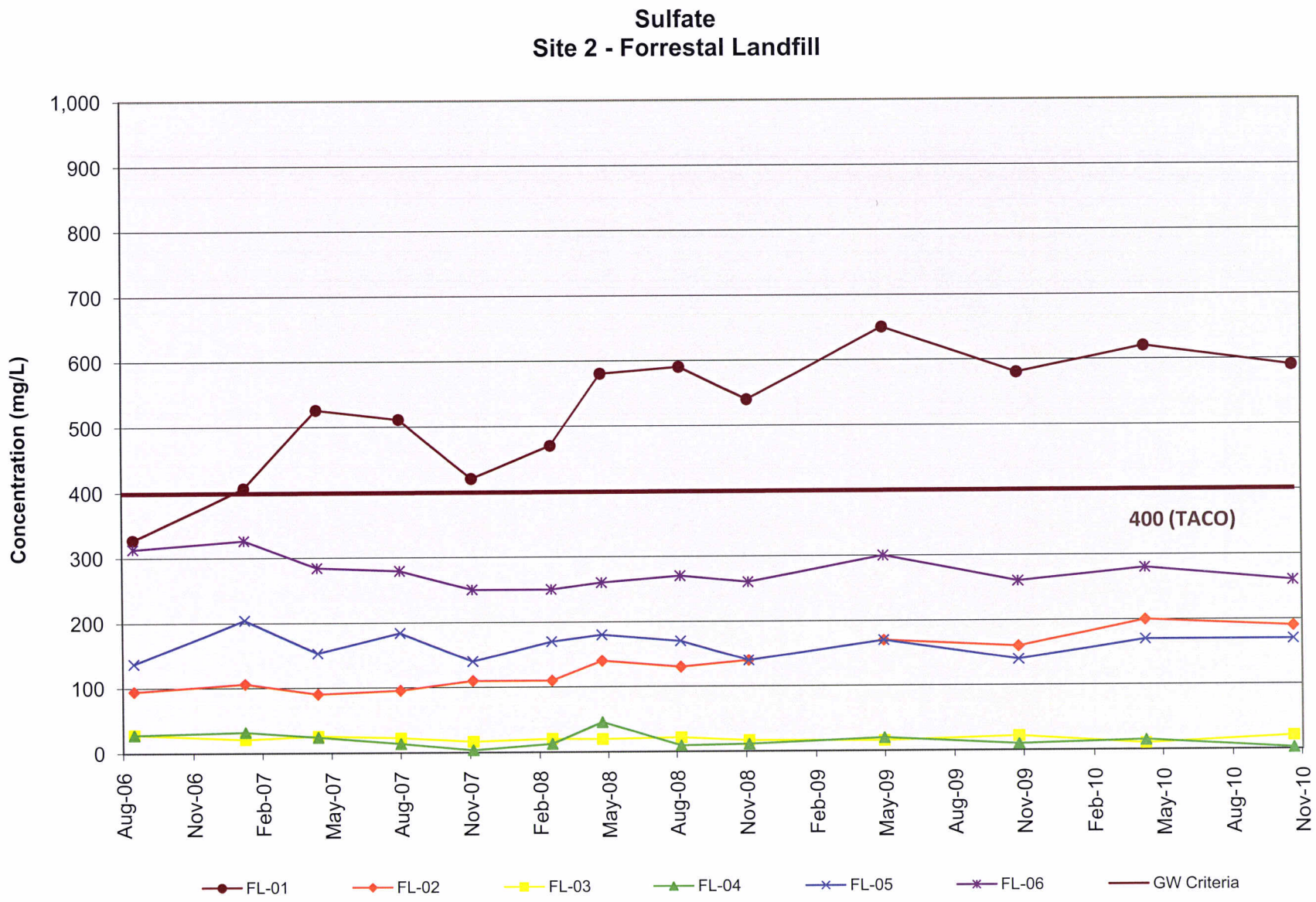


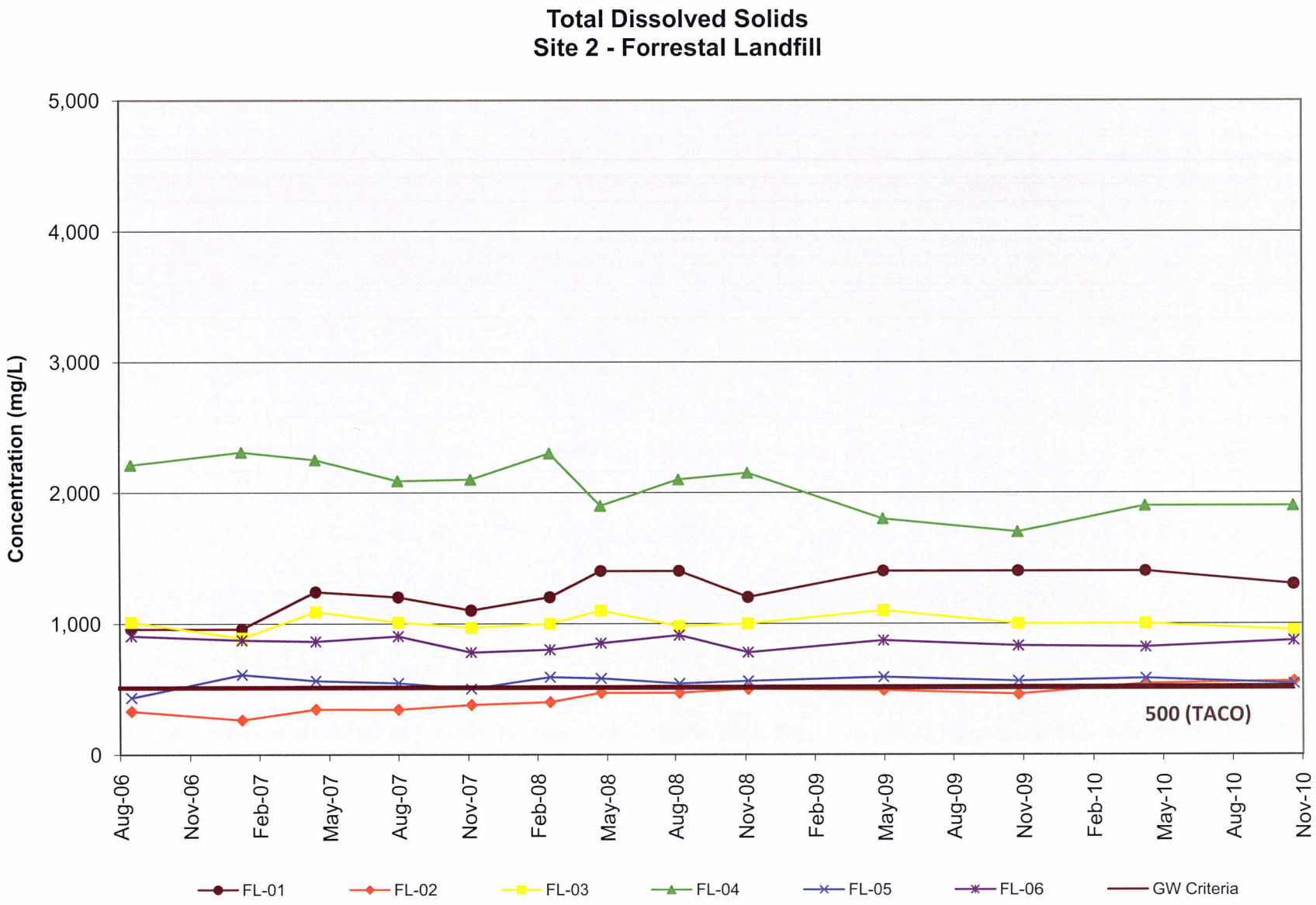

Manganese
Site 2 - Forrestal Landfill
Concentration (ug/L)
750
600
450
300
150
0
150 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-02 (Dissolved)
FL-03
FL-03 (Dissolved)
FL-04
FL-05
FL-05 (Dissolved)
FL-06
FL-06 (Dissolved)
GW Criteria

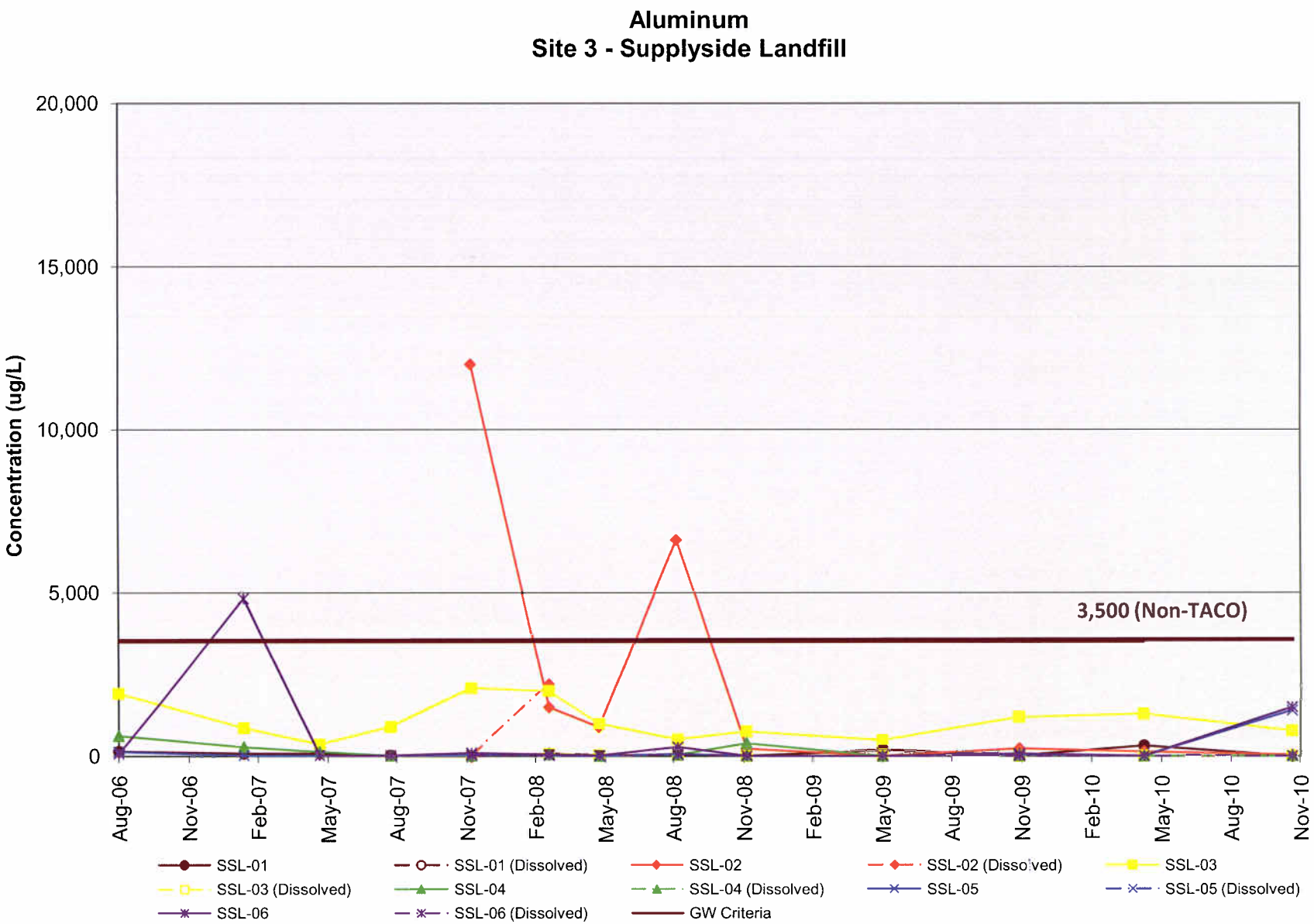

Vanadium
Site 2 - Forrestal Landfill
Note: data points for FL-01, FL-03, and FL-04 in August 2007 (Round 4) were non-detects with elevated reporting limits (100 ug/L). One-half of the reporting limit was used for plotting.
49 (TACO)
Concentration (ug/L)
60
50
40
30
20
10
0
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-02 (Dissolved)
FL-03
FL-03 (Dissolved)
FL-04
FL-05
FL-05 (Dissolved)
FL-06
FL-06 (Dissolved)
GW Criteria

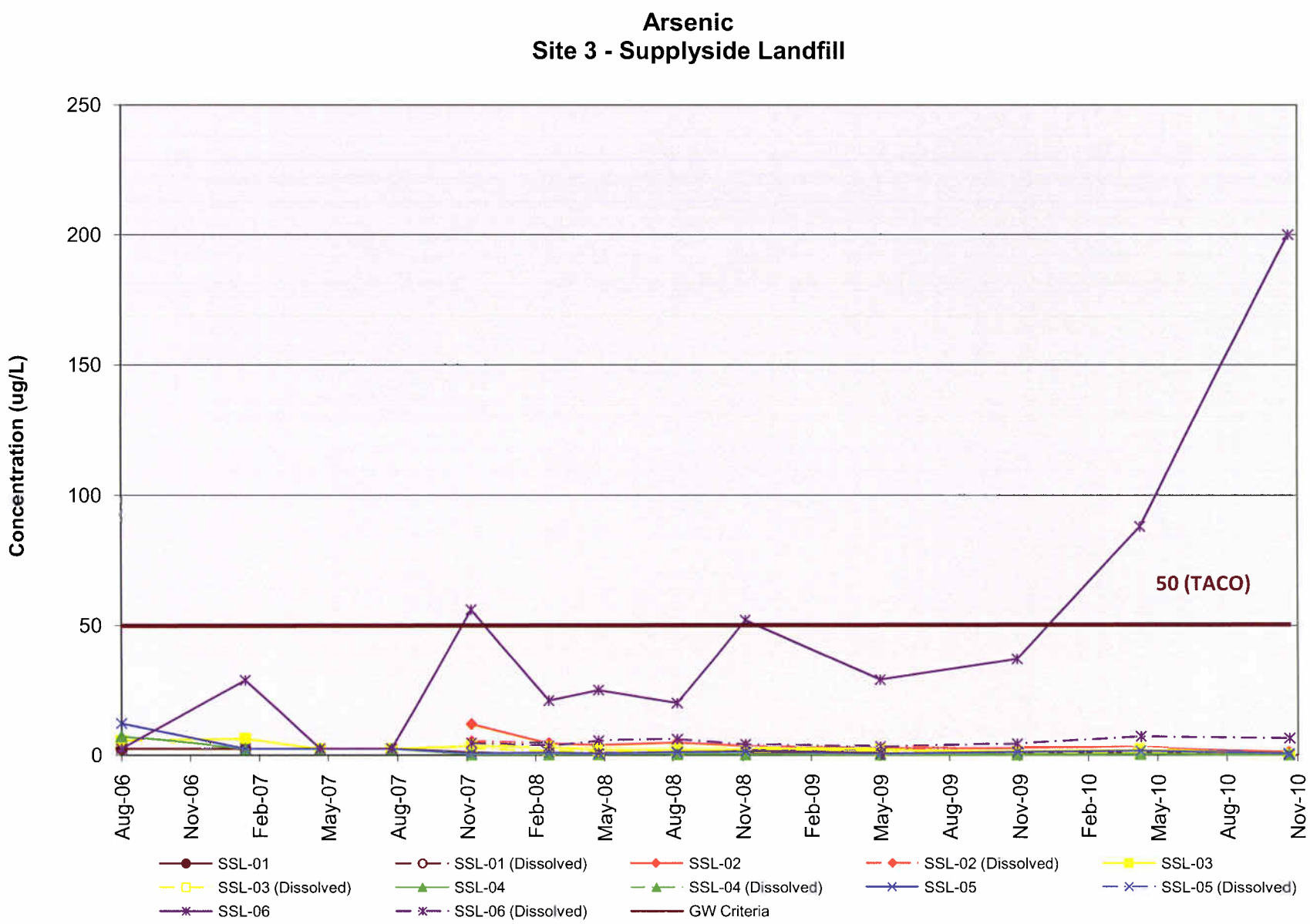

Ammonia
Site 2 - Forrestal Landfill
Concentration (mg/L)
60
50
40
30
20
10
0
30 (SMCL)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-03
FL-04
FL-05
FL-06
GW Criteria

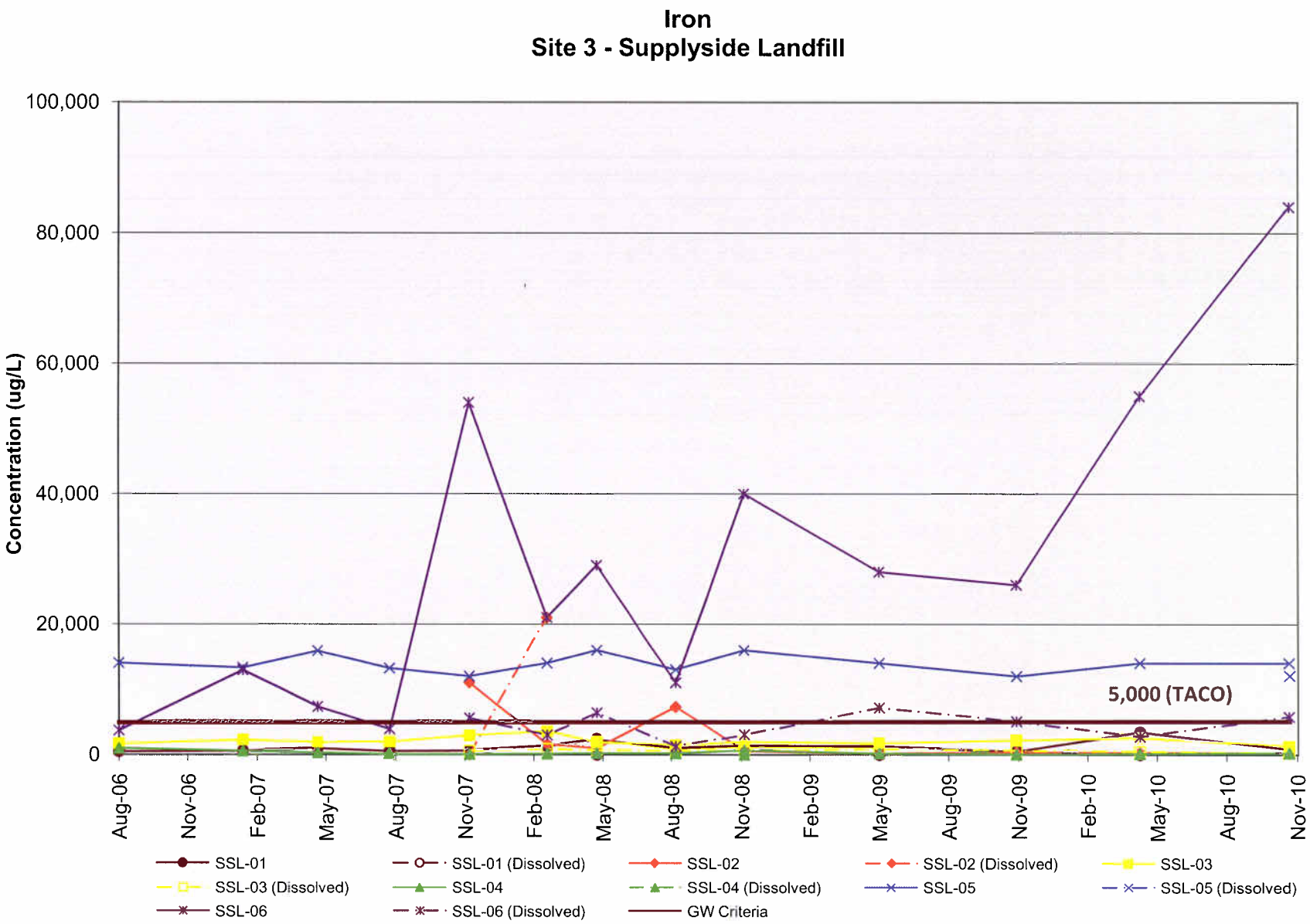

Chloride
Site 2 - Forrestal Landfill
Concentration (mg/L)
1,000
900
800
700
600
500
400
300
200
100
0
200 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-03
FL-04
FL-05
FL-06
GW Criteria

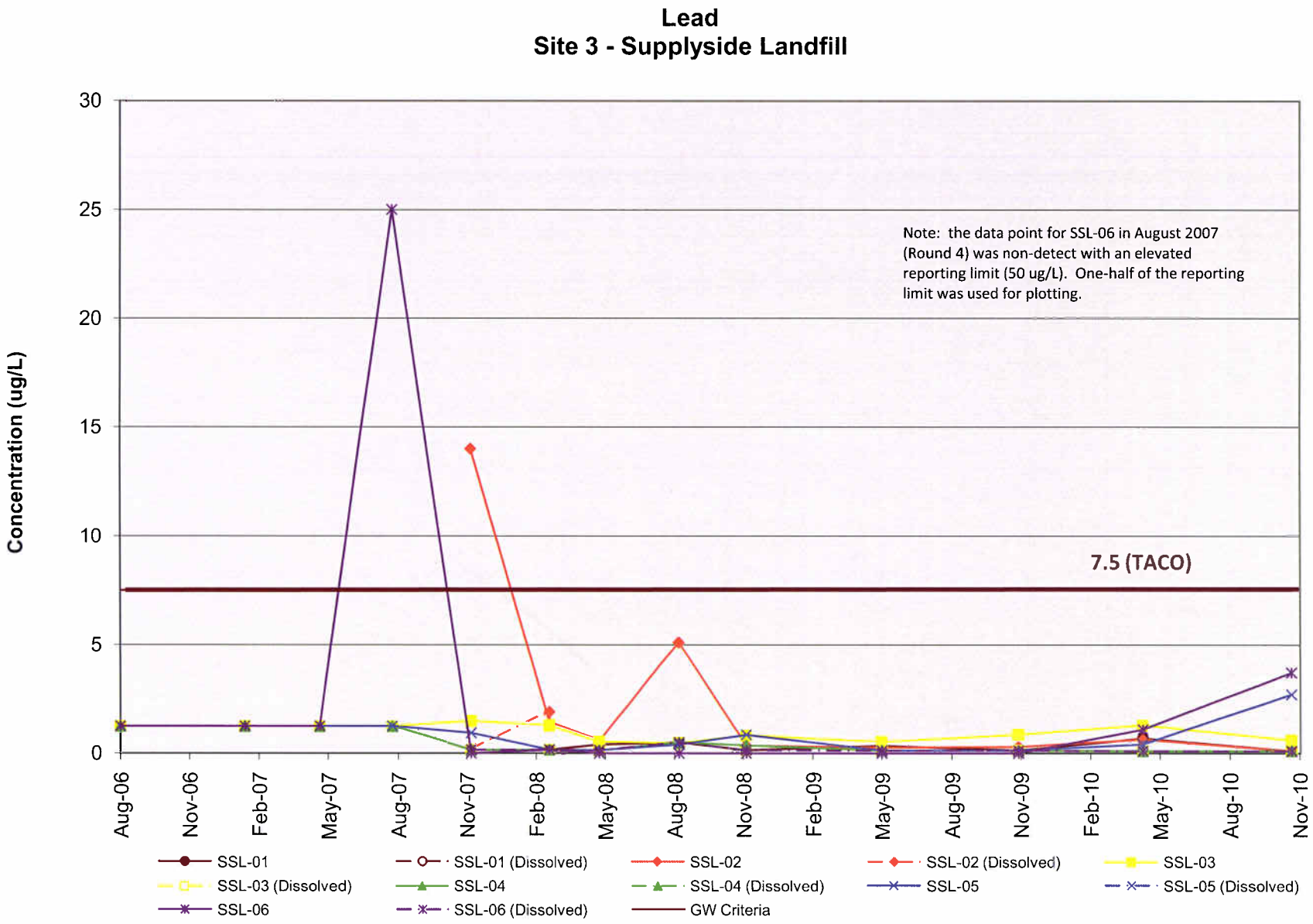

Sulfate
Site 2 - Forrestal Landfill
Concentration (mg/L)
1,000
900
800
700
600
500
400
300
200
100
0
400 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-03
FL-04
FL-05
FL-06
GW Criteria

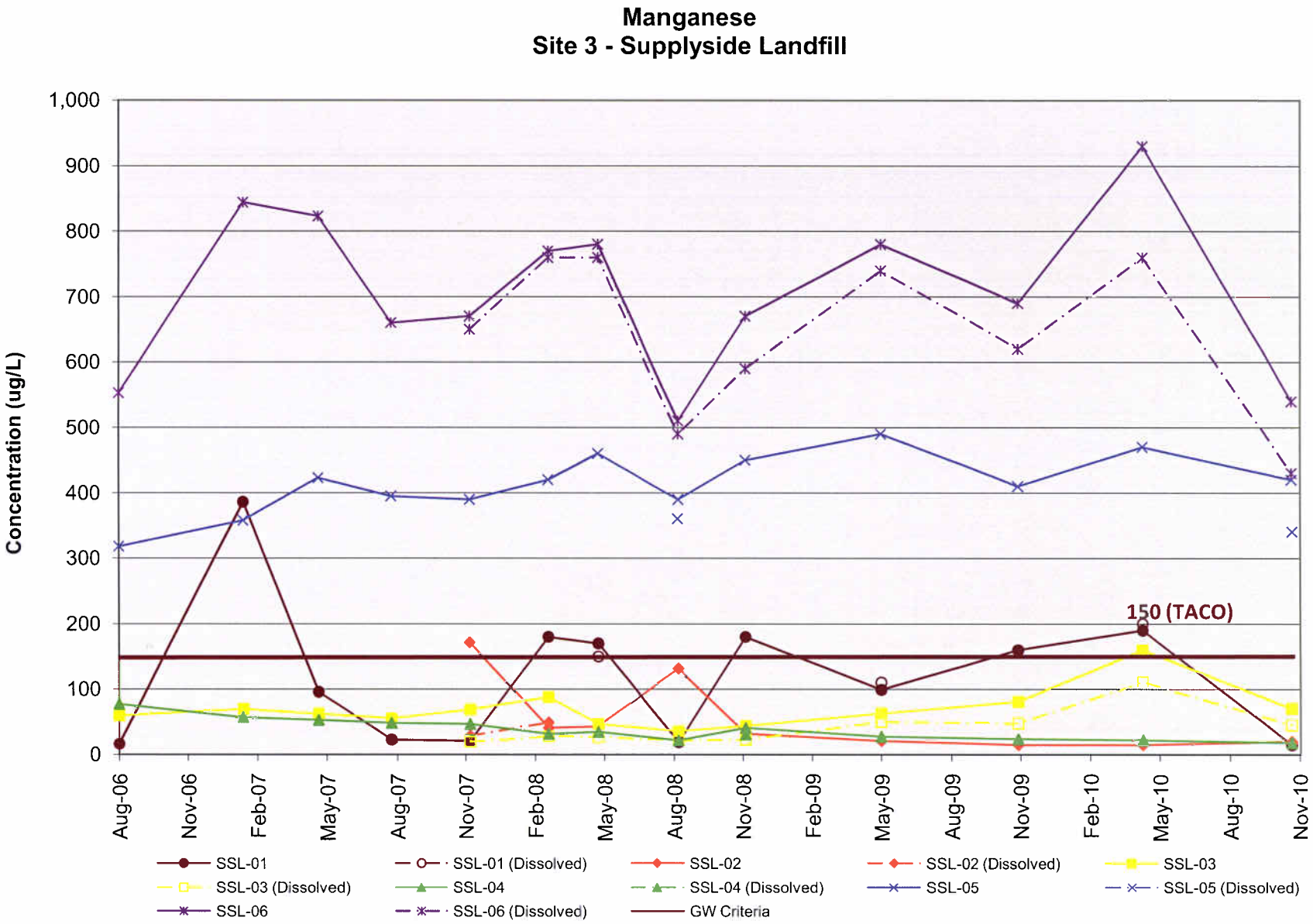

Total Dissolved Solids
Site 2 - Forrestal Landfill
Concentration (mg/L)
5,000
4,000
3,000
2,000
1,000
0
500 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
FL-01
FL-02
FL-03
FL-04
FL-05
FL-06
GW Criteria

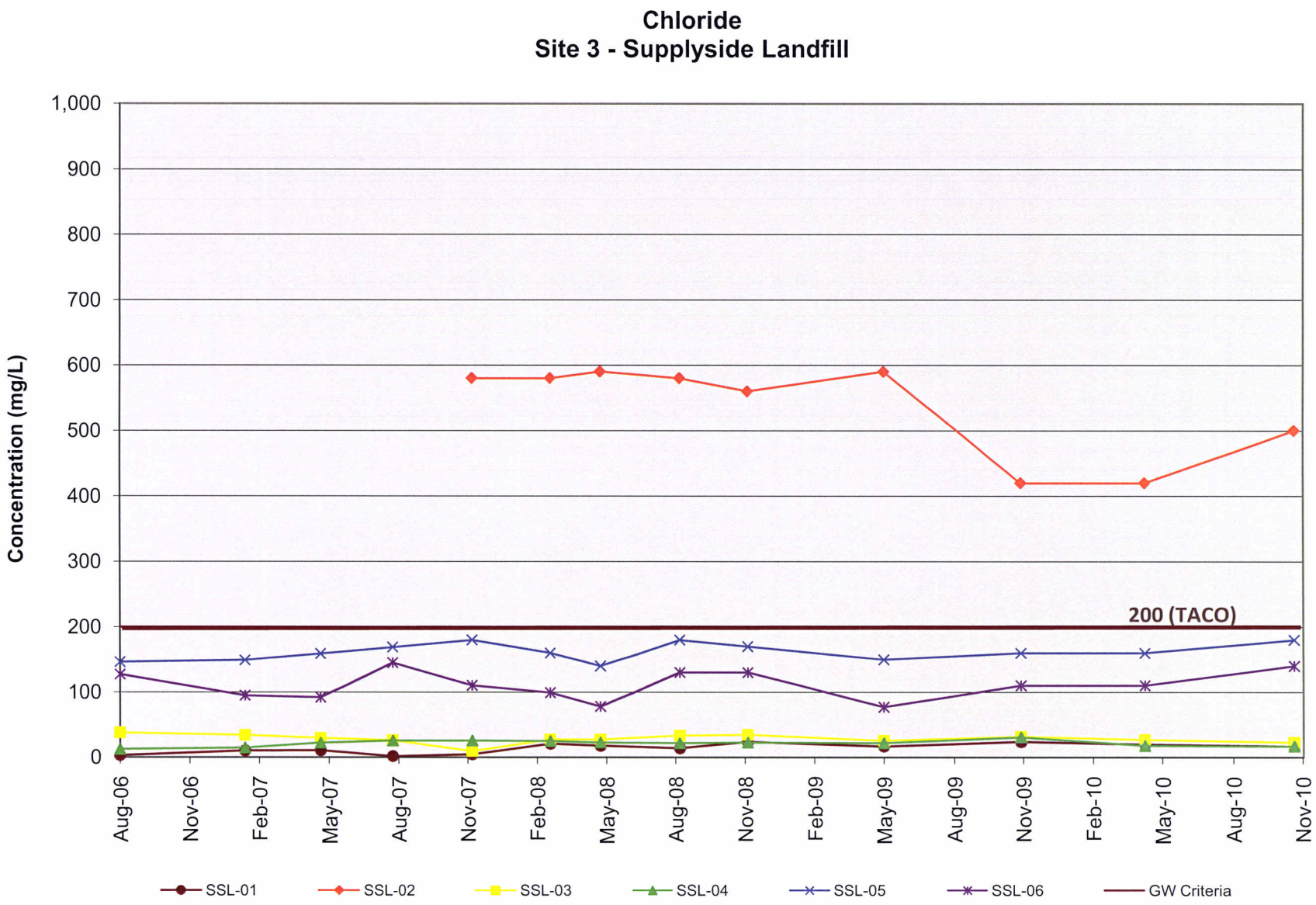

Aluminum
Site 3 - Supplyside Landfill
Concentration (ug/L)
20,000
15,000
10,000
5,000
0
3,500 (Non-TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-01 (Dissolved)
SSL-02
SSL-02 (Dissolved)
SSL-03
SSL-03 (Dissolved)
SSL-04
SSL-04 (Dissolved)
SSL-05
SSL-05 (Dissolved)
SSL-06
SSL-06 (Dissolved)
GW Criteria

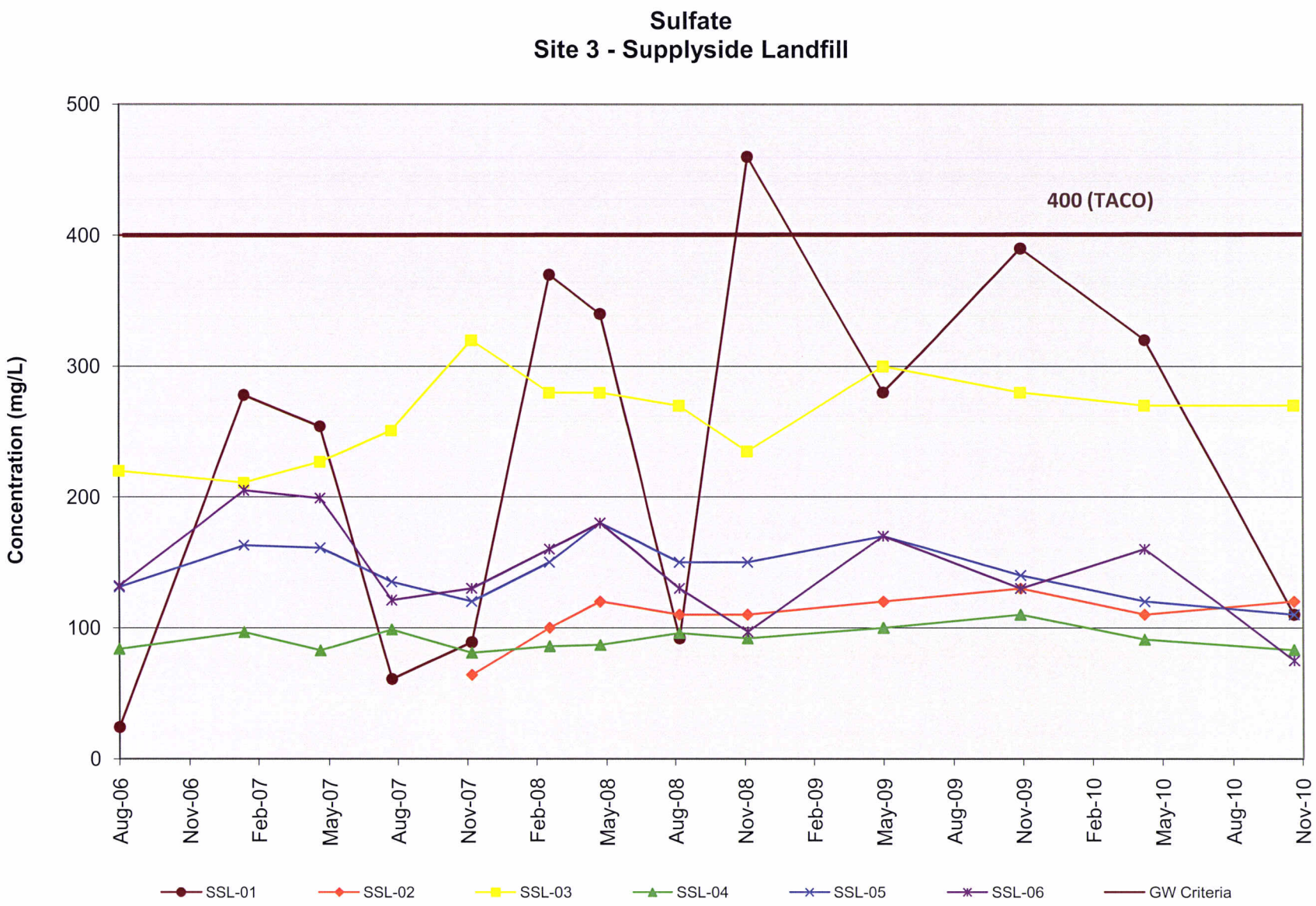

Arsenic
Site 3 - Supplyside Landfill
Concentration (ug/L)
250
200
150
100
50
0
50 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-01 (Dissolved)
SSL-02
SSL-02 (Dissolved)
SSL-03
SSL-03 (Dissolved)
SSL-04
SSL-04 (Dissolved)
SSL-05
SSL-05 (Dissolved)
SSL-06
SSL-06 (Dissolved)
GW Criteria

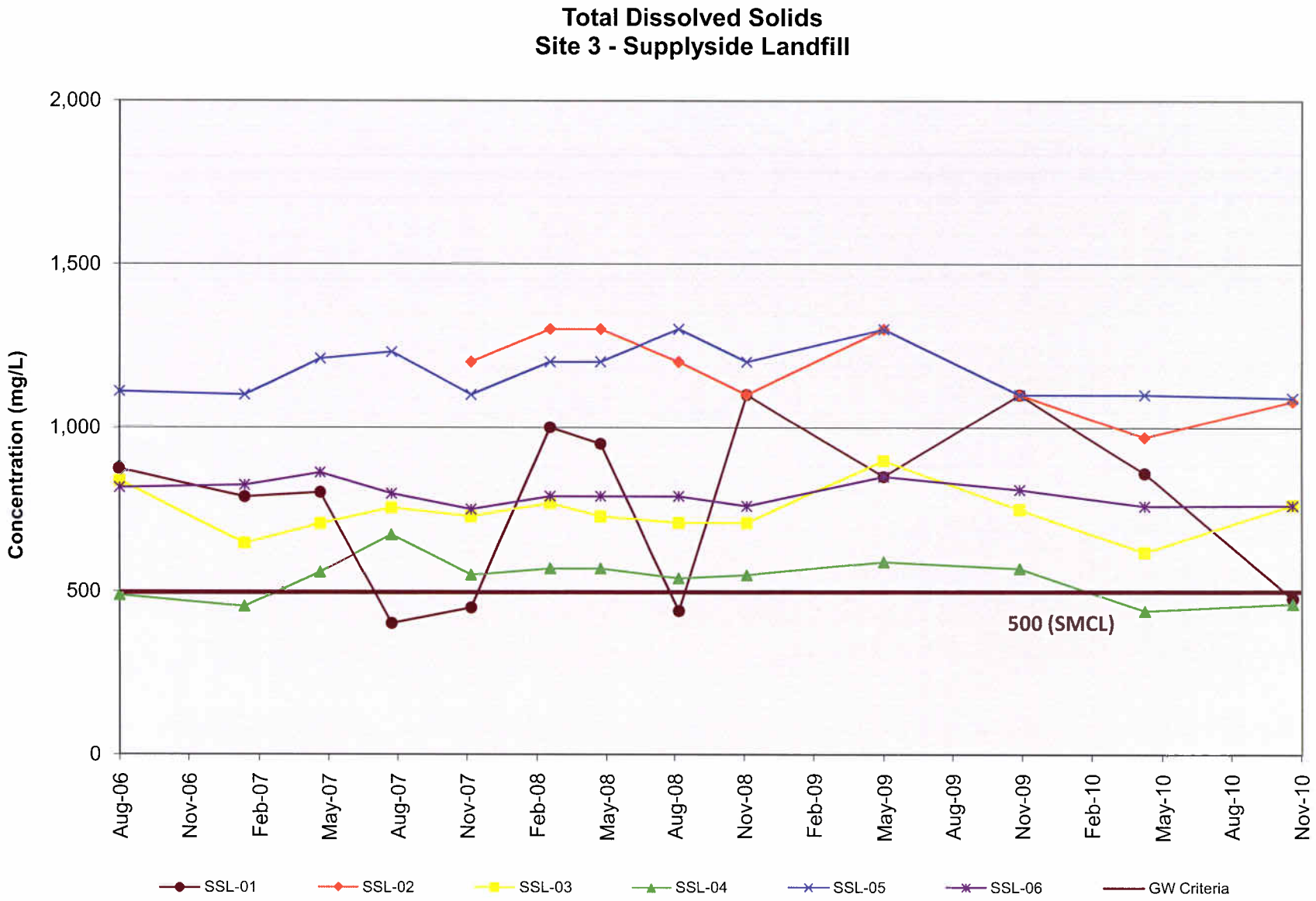

Iron
Site 3 - Supplyside Landfill
Concentration (ug/L)
100,000
80,000
60,000
40,000
20,000
0
5,000 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-01 (Dissolved)
SSL-02
SSL-02 (Dissolved)
SSL-03
SSL-03 (Dissolved)
SSL-04
SSL-04 (Dissolved)
SSL-05
SSL-05 (Dissolved)
SSL-06
SSL-06 (Dissolved)
GW Criteria


Lead
Site 3 - Supplyside Landfill
Concentration (ug/L)
30
25
20
15
10
5
0
Note: the data point for SSL-06 in August 2007 (Round 4) was non-detect with an elevated reporting limit (50 ug/L). One-half of the reporting limit was used for plotting.
7.5 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-01 (Dissolved)
SSL-02
SSL-02 (Dissolved)
SSL-03
SSL-03 (Dissolved)
SSL-04
SSL-04 (Dissolved)
SSL-05
SSL-05 (Dissolved)
SSL-06
SSL-06 (Dissolved)
GW Criteria


Manganese
Site 3 - Supplyside Landfill
Concentration (ug/L)
1,000
900
800
700
600
500
400
300
200
100
0
150 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-01 (Dissolved)
SSL-02
SSL-02 (Dissolved)
SSL-03
SSL-03 (Dissolved)
SSL-04
SSL-04 (Dissolved)
SSL-05
SSL-05 (Dissolved)
SSL-06
SSL-06 (Dissolved)
GW Criteria


Chloride
Site 3 - Supplyside Landfill
Concentration (mg/L)
1,000
900
800
700
600
500
400
300
200
100
0
200 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-02
SSL-03
SSL-04
SSL-05
SSL-06
GW Criteria


Sulfate
Site 3 - Supplyside Landfill
Concentration (mg/L)
500
400
300
200
100
0
400 (TACO)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-02
SSL-03
SSL-04
SSL-05
SSL-06
GW Criteria


Total Dissolved Solids
Site 3 - Supplyside Landfill
Concentration (mg/L)
2,000
1,500
1,000
500
0
500 (SMCL)
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Feb-09
May-09
Aug-09
Nov-09
Feb-10
May-10
Aug-10
Nov-10
SSL-01
SSL-02
SSL-03
SSL-04
SSL-05
SSL-06
GW Criteria