N00174.AR.001960
NSWC INDIAN HEAD
5090.3a

VALIDATED DATA PACKAGE, 76447, NSWC INDIAN HEAD MD
6/30/2015
APPL LABS

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 74807

Summary Report

June 23, 2015

Tetra Tech
5700 Lake Wright Drive, Suite 309
Norfolk, Virginia 23502

Attn: Ed Corack

Title: Report of Data: Case 76447

Project: CTO JU11 112G02622 NSF Indian Head Site 67, MD

Contract #: Prime contract # for DoD: Navy CLEAN. N62470-08-D-1001
Subcontract: MSA # 1045497, Work Release # 08-JU11

Dear Mr. Corack:

Three soils and one water sample were received May 15, 2015, at 3.0°C. Written results for the requested analyses are provided on this June 23, 2015.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Cynthia Clark, cclark@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/rp
Enclosure
cc: File

Number of pages in this report: 96

Sample receipt information

ARF: 76447

Project: CTO JU11 112G02622 NSF Indian Head Site 67, MD

Sample Receipt Information:

The samples were received on May 15, 2015, at 3.0C. The samples were assigned Analytical Request Form (ARF) number 76447. The sample numbers and requested analyses were compared to the chain of custody and email communication. The client requested changes to the target metals and explosives lists. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
S67-TP001-0203	AZ16400	SOIL	05/14/15	05/15/15
S67-TP002-0001	AZ16401	SOIL	05/14/15	05/15/15
S67-TP002-0203	AZ16402	SOIL	05/14/15	05/15/15
S67-MW015-051415	AZ16403	WATER	05/14/15	05/15/15

Percent moisture was determined using CLP 4.0.

The samples and blanks were screened for J-value responses between the detection limit (DL) and limit of quantitation (LOQ).

Laboratory control limits generated in house do not meet the control limits listed in DoD QSM 4.2 for all analytes. Laboratory control limits generated for this project meet all control limits listed in the DoD QSM 4.2 except where noted. A copy of our in house generated control limits is available upon request. In addition, a copy of our LOQ control limits, established using 7 data points, are also available upon request.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request.

Measurement uncertainty can be reported upon request.

EPA Method 8270D
Semi-Volatile Organic Compounds

Sample Preparation and Analysis Information:

The water sample was extracted according to EPA method 3510C. The soil samples were extracted according to EPA method 3550B. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS. Sample S67-TP002-0001 was diluted due to the dark, viscous nature of the extract; the reporting level was raised accordingly. All holding times were met.

Manual integrations were performed in accordance with APPL's SOP. Phenol-D6 was manually integrated in the 100ug/mL standard. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target compound was detected above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. Samples S67-TP001-0203 and S67-TP002-0203 recovered the surrogate 2-Fluorobiphenyl below the 45% lower control limit in both the PAH extract and the 8270 extract. No further action was taken. All other surrogate recoveries were within the control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

Summary:

No other problem was encountered. All data generated are acceptable.

EPA Method 8270D-SIM
Polynuclear Aromatic Hydrocarbons

Sample Preparation and Analysis Information:

The water sample was extracted according to EPA method 3510C. The soil samples were extracted according to EPA method 3550B. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS with selective ion monitoring. Sample S67-TP002-0001 was diluted due to the dark, viscous nature of the extract; the reporting level was raised accordingly. All holding times were met.

Benzo(b)fluoranthene and Benzo(k)fluoranthene could not be chromatographically separated in the soil samples. As a result, each of these is reported from the sum of the two area counts and may be biased high.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target analyte was detected above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. Samples S67-TP001-0203 and S67-TP002-0203 recovered the surrogate 2-Fluorobiphenyl below the 45% lower control limit in both the PAH extract and the 8270 extract. No further action was taken. Sample S67-TP002-0001 recovered Nitrobenzene-d5 above the 100% upper control limit at 115%. The water LCS recovered Terphenyl-d14 above the 135% upper control limit. All other surrogate recoveries were within the control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

Summary:

No other analytical problem was encountered. The data generated are acceptable.

Dissolved Gasses
RSK-175

Sample Preparation and Analysis

The water sample was analyzed with guidance from RSK-175. The sample was allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed using a Hewlett Packard Gas Chromatograph with a flame ionization detector.

Manual integrations were performed in accordance with APPL's SOP. Methane was manually integrated in the calibration standards. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target compound was detected at or above one-half the LOQ in the method blank.

Calibration

The initial and continuing calibrations were performed with guidance from RSK-175. All acceptance criteria were met.

Summary:

No other analytical exception is noted. All data generated are acceptable.

EPA Method 6850

Perchlorate by LC-Mass Spec

Sample Preparation and Analysis Information:

The samples were prepared according to the method. The samples were analyzed according to EPA Method 6850 using an Agilent 6460 Triple Quad LC/MS. The samples were prepared and analyzed within acceptable hold time.

Manual integrations were performed in accordance to APPL's SOP. Perchlorate was manually integrated in the calibration curve, the ICS and the LCS. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the method. All calibration acceptance criteria were met. The second source met acceptance criteria.

Blanks:

Perchlorate was not detected at or above one-half the limit of quantitation (LOQ) in the method blanks.

Spikes:

Laboratory Control Spikes (LCS) and Interference Check Samples (I.C.S.) were used for quality assurance. All LCS acceptance criteria were met..

The Interference Check Samples (I.C.S.) was prepared using a mixed anions solution. The ICS recovery met acceptance criteria.

No sample was selected by the laboratory for MS/MSD analysis.

Internal Standards:

The area counts of the sample Internal Standards were compared to the average IS area counts of the initial calibration. All internal standards were within the 50%D acceptance criteria.

Summary:

All data were acceptable. No other analytical exception is noted.

EPA Method 8330B
Energetics

Sample Preparation:

The water sample was extracted according to EPA method 3535. The soil samples were dried and extracted according to EPA method 8330B, without using incremental sampling procedures. All holding times were met.

Analysis:

The samples were analyzed according to EPA Method 8330B using an Agilent 1290 HPLC with DA detector. Manual integrations were performed in accordance with APPL's SOP. The following analytes were manually integrated in the calibration standards: HMX, Nitroglycerin, PETN, 1,2-Dinitrobenzene, 1,3- Dinitrobenzene, Nitrobenzene, 2,4,6-Trinitrotoluene, Tetryl, 2,6-Dinitrotoluene, 2,4-Dinitrotoluene, 2-Nitrotoluene, 4-Nitrotoluene, 3-Nitrotoluene, 4-Amino-2,6-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene and 3,5-Dinitroaniline. 2-Nitrotoluene was manually integrated in the LCS. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance:

Spike Recovery:

Laboratory Control Spikes (LCS) were used for quality assurance. All spike acceptance criteria was met.

No sample was designated by the client for MS/MSD analysis.

Method blanks:

No target analyte was detected at or above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates:

Surrogate recoveries are summarized on the Form 2 & 8. All surrogates had acceptable recoveries.

Calibration:

The initial and continuing calibrations and second source were analyzed according to the method. All calibration criteria were met.

Summary:

No analytical problem was encountered. The data generated are acceptable.

EPA Methods 6010C, 7470A, 7471A
Metals

Digestion and Analysis Information:

The water sample was digested according to EPA methods 3010A and 7470A. The soil samples were digested according to EPA method s3050B and 7471A. The samples were analyzed s according to EPA method 6010C using a Perkin Elmer Optima 5300DV and according to EPA methods 7470A and 7471A using a Perkin Elmer mercury analyzer FIMS 400. All holding times were met.

Quality Control/Assurance:

Calibrations:

Calibrations were performed according to the methods for the initial calibration and the initial calibration verification. The initial calibration verification is prepared from a second source standard. Sodium had a 119% recovery in the 6-4-15 17:37 CCV.

Blanks:

No target metal was detected above one half the LOQ in the method blanks.

Spikes:

Laboratory Control Spikes (LCS) and Matrix Spikes (MS/MSD) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. Samples were selected by the laboratory for mercury MS/MSDs. Mercury recovered below the 80% lower control limit in the soil MSD. All other recoveries were acceptable.

Summary:

No other analytical problem was encountered. The data generated are acceptable.

Inorganic Analyses

EPA Method 300.0 and SW846 9060

Sample Preparation and Analysis

The sample was prepared according to the methods. All holding times were met.

The sample was analyzed for Anions according to EPA method 300.0 using a Dionex DX500. The sample was analyzed for TOC according to SW846 9060 using a Tekmar Apollo 9000.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target analyte was detected one-half the limit of quantitation (LOQ) in the method blanks.

Calibration

Calibrations were performed according to the method for the initial calibration and the continuing calibration verification. The initial calibration verification is prepared from a second source standard. All calibration criteria were met.

Summary:

No analytical exception was noted.

3,0

CHAIN OF CUSTODY RECORD

76447

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. 48712

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Tetra Tech Phone: 757-466-4908	Company Name: See Contract Phone:
Address: 5700 Lake Wright Dr. Suite 309 Norfolk, VA 23502 Fax:	Address: Fax:
Attn: Ed Corack	Attn:

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
CTO-JU11 12G02622 NSF-Indian Head Site 67	Jacob Birkett		

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	PAHs	Phthalates	Metals	Energetics	Perchlorate	PAHs+Phthalates	Energetics	Total Metals	Diss. Metals	Methane	Perchlorate	TOC	Anions
SG7-TP001-0203	TP001	5-14-15	1055	ET	2			2	2				→								
SG7-TP002-0001	TP002	5-14-15	1100	ET	2			2	2				→								
SG7-TP002-0203	TP002	5-14-15	1105	ET	2			2	2				→								
SG7-MW015-051415	MW015	5-14-15	1430	ET	12	12								2	2	1	1	3	1	1	1

5-14-15

Date Shipped: 5-14-15
Carrier: FedEx
Waybill No.:
Comments:

Analysis Requested/Method Number

Shuttle Temperature:

Turnaround Requested: Check one
☒ Standard 2-3 wk ☐ One week ☐ 24/48 Hrs. ☐ Other

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:
Jacob Birkett	5-14-15	1800	FedEx
Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received at lab by:
	5-15-15	9:50	Brian Braun

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

See reverse side for Container Preservative and Sampling Information

Renee Patterson

From: Cynthia Clark [cclark@applinc.com]
Sent: Tuesday, May 19, 2015 10:01 AM
To: metals@applinc.com; 'Paula Young'; 'Renee Patterson'
Cc: 'Chue Moua'
Subject: TTEC JU11 ARF 76447

I have modified ARF 76447

metals - for this ARF we are reporting the full TAL list plus B and Li - this includes Hg

Explosives - the soils need our full standard explosives list. One of the soils is pink and they think this may be due to TNT in the soil

Sincerely,

Cynthia Clark
Project Manager

Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

Website • Email

DoD accredited for ISM, Dioxins and PCB congeners.

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EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP001-0203

APPL ID: AZ16400

Sample Collection Date: 5/14/2015

QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	0.250 U	0.99	0.250	0.093	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	0.250 U	0.49	0.250	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	0.250 U	0.49	0.250	0.099	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	0.250 U	0.49	0.250	0.087	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	0.250 U	0.49	0.250	0.093	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	0.250 U	0.49	0.250	0.094	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	59.2	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	34.2 #	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	65.2	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	62.9	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	69.4	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	47.4	30-125			%	5/21/2015	5/28/2015

= Recovery (or RPD) is outside QC limits.

Quant Method: Y0520TT.M
Run #: 0520Y067
Instrument: Yoda
Sequence: Y150520
Dilution Factor: 1
Initials: DA

Printed: 6/2/2015 12:43:00 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0001

APPL ID: AZ16401

Sample Collection Date: 5/14/2015

QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	1.800 U	7.20	1.800	0.670	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	1.800 U	3.60	1.800	0.610	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	1.800 U	3.60	1.800	0.720	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	1.800 U	3.60	1.800	0.630	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	1.800 U	3.60	1.800	0.670	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	1.800 U	3.60	1.800	0.680	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	55.6	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.8	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	58.0	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	62.2	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	57.2	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	82.4	30-125			%	5/21/2015	5/28/2015

Quant Method: Y0520TT.M
Run #: 0520Y068
Instrument: Yoda
Sequence: Y150520
Dilution Factor: 10
Initials: DA

Printed: 6/2/2015 12:43:00 PM

APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 5/14/2015

ARF: 76447
APPL ID: AZ16402
QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	0.230 U	0.89	0.230	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	0.230 U	0.45	0.230	0.076	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	0.230 U	0.45	0.230	0.089	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	0.230 U	0.45	0.230	0.079	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	0.230 U	0.45	0.230	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	0.230 U	0.45	0.230	0.085	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	50.6	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	34.6 #	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	47.7	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	48.5	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	52.5	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	42.7	30-125			%	5/21/2015	5/28/2015

= Recovery (or RPD) is outside QC limits.

Quant Method: Y0520TT.M
Run #: 0520Y069
Instrument: Yoda
Sequence: Y150520
Dilution Factor: 1
Initials: DA

Printed: 6/2/2015 12:43:00 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D WATER

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-MW015-051415

APPL ID: AZ16403

Sample Collection Date: 05/14/15

QCG: #87DJU-150520B-197994

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	5.00 U	20.0	5.00	2.90	ug/L	05/20/15	06/12/15
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	05/20/15	06/12/15
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	05/20/15	06/12/15
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	05/20/15	06/12/15
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	05/20/15	06/12/15
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	75.0	40-125			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	60.1	50-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	46.7	20-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	65.1	40-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: PHENOL (S)	30.2	10-115			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	85.6	50-135			%	05/20/15	06/12/15

Quant Method: Y0607TT.M
Run #: 0609Y034
Instrument: Yoda
Sequence: Y150609
Dilution Factor: 1
Initials: MA

Printed: 06/12/15 2:31:17 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8270D SOILS

Blank Name/QCG: **150521S-16137 - 197602**
Batch ID: #87DJU-150521A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	0.167 U	0.66	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	BUTYL BENZYL PHTHALATE	0.167 U	0.33	0.167	0.056	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-BUTYL PHTHALATE	0.167 U	0.33	0.167	0.066	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-OCTYL PHTHALATE	0.167 U	0.33	0.167	0.058	mg/kg	5/21/2015	5/28/2015
BLANK	DIETHYL PHTHALATE	0.167 U	0.33	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	DIMETHYL PHTHALATE	0.167 U	0.33	0.167	0.063	mg/kg	5/21/2015	5/28/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	66.1	35-125			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	66.9	45-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUOROPHENO	70.2	35-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: NITROBENZENE-	67.7	35-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: PHENOL (S)	69.3	40-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: TERPHENYL-D14 (	86.8	30-125			%	5/21/2015	5/28/2015

Quant Method: Y0520TT.M
Run #: 0520Y055
Instrument: Yoda
Sequence: Y150520
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 12:43:18 PM

Method Blank
EPA 8270D WATER

Blank Name/QCG: **150520W-16403 - 197994**
Batch ID: #87DJU-150520B

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	5.00 U	20.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	05/20/15	06/12/15
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	05/20/15	06/12/15
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	05/20/15	06/12/15
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	05/20/15	06/12/15
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	SURROGATE: 2,4,6-TRIBROMOP	81.0	40-125			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUORBIPHENY	60.8	50-110			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUOROPHENO	49.2	20-110			%	05/20/15	06/12/15
BLANK	SURROGATE: NITROBENZENE-	67.6	40-110			%	05/20/15	06/12/15
BLANK	SURROGATE: PHENOL (S)	31.7	10-115			%	05/20/15	06/12/15
BLANK	SURROGATE: TERPHENYL-D14 (	90.1	50-135			%	05/20/15	06/12/15

Quant Method:Y0607TT.M
Run #:0609Y032
Instrument:Yoda
Sequence:Y150609
Initials:MA

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
EPA 8270D SOILS

APPL ID: **150521S-16137 LCS - 197602**
Batch ID: #87DJU-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	1.67	1.35	80.8	45-125
BUTYL BENZYL PHTHALATE	1.67	1.31	78.4	50-125
DI-N-BUTYL PHTHALATE	1.67	1.30	77.8	55-110
DI-N-OCTYL PHTHALATE	1.67	1.39	83.2	40-130
DIETHYL PHTHALATE	1.67	1.19	71.3	50-115
DIMETHYL PHTHALATE	1.67	1.19	71.3	50-110
SURROGATE: 2,4,6-TRIBROMOPHENOL	6.67	5.07	76.0	35-125
SURROGATE: 2-FLUORBIPHENYL (S)	3.33	2.27	68.2	45-105
SURROGATE: 2-FLUOROPHENOL (S)	6.67	4.46	66.9	35-105
SURROGATE: NITROBENZENE-D5 (S)	3.33	2.22	66.7	35-100
SURROGATE: PHENOL (S)	6.67	4.66	69.9	40-100
SURROGATE: TERPHENYL-D14 (S)	3.33	2.98	89.5	30-125

Comments: _____

Primary	SPK
Quant Method :	Y0520TT.M
Extraction Date :	5/21/2015
Analysis Date :	5/28/2015
Instrument :	Yoda
Run :	0520Y056
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8270D WATER

APPL ID: **150520W-16403 LCS - 197994**
Batch ID: #87DJU-150520B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	50.0	39.7	79.4	40-125
BUTYL BENZYL PHTHALATE	50.0	40.2	80.4	45-115
DI-N-BUTYL PHTHALATE	50.0	40.4	80.8	55-115
DI-N-OCTYL PHTHALATE	50.0	40.8	81.6	35-135
DIETHYL PHTHALATE	50.0	37.4	74.8	40-120
DIMETHYL PHTHALATE	50.0	37.3	74.6	25-125
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	164	82.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	64.4	64.4	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	92.8	46.4	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	67.1	67.1	40-110
SURROGATE: PHENOL (S)	200	62.1	31.1	10-115
SURROGATE: TERPHENYL-D14 (S)	100	89.8	89.8	50-135

Comments: _____

Primary	SPK
Quant Method :	Y0607TT.M
Extraction Date :	05/20/15
Analysis Date :	06/12/15
Instrument :	Yoda
Run :	0609Y033
Initials :	MA

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APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	35-125	66.1		45-105	66.9	
150521A-LCS	Lab Control Spike	35-125	76.0		45-105	68.2	
AZ16400	S67-TP001-0203	35-125	59.2		45-105	34.2	#
AZ16401	S67-TP002-0001	35-125	55.6		45-105	63.8	
AZ16402	S67-TP002-0203	35-125	50.6		45-105	34.6	#

Comments: Batch: #87DJU-150521A

= Recovery outside of Control Limits on Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	35-105	70.2		35-100	67.7	
150521A-LCS	Lab Control Spike	35-105	66.9		35-100	66.7	
AZ16400	S67-TP001-0203	35-105	65.2		35-100	62.9	
AZ16401	S67-TP002-0001	35-105	58.0		35-100	62.2	
AZ16402	S67-TP002-0203	35-105	47.7		35-100	48.5	

Comments: Batch: #87DJU-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	40-100	69.3		30-125	86.8	
150521A-LCS	Lab Control Spike	40-100	69.9		30-125	89.5	
AZ16400	S67-TP001-0203	40-100	69.4		30-125	47.4	
AZ16401	S67-TP002-0001	40-100	57.2		30-125	82.4	
AZ16402	S67-TP002-0203	40-100	52.5		30-125	42.7	

Comments: Batch: #87DJU-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	40-125	81.0		50-110	60.8	
150520B-LCS	Lab Control Spike	40-125	82.0		50-110	64.4	
AZ16403	S67-MW015-051415	40-125	75.0		50-110	60.1	

Comments: Batch: #87DJU-150520B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	20-110	49.2		40-110	67.6	
150520B-LCS	Lab Control Spike	20-110	46.4		40-110	67.1	
AZ16403	S67-MW015-051415	20-110	46.7		40-110	65.1	

Comments: Batch: #87DJU-150520B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	10-115	31.7		50-135	90.1	
150520B-LCS	Lab Control Spike	10-115	31.1		50-135	89.8	
AZ16403	S67-MW015-051415	10-115	30.2		50-135	85.6	

Comments: Batch: #87DJU-150520B

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Form 2 & 8, Surrogate Recovery Summary

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

Blank ID: 150521A-BLK Time Analyzed: 1449

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150521A-BLK	Blank	0520Y055	5/28/2015 1449
150521A-LCS	Lab Control Spike	0520Y056	5/28/2015 1518
AZ16400	S67-TP001-0203	0520Y067	5/28/2015 2043
AZ16401	S67-TP002-0001	0520Y068	5/28/2015 2113
AZ16402	S67-TP002-0203	0520Y069	5/28/2015 2142

Comments: Batch: #87DJU-150521A

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

Blank ID: 150520B-BLK Time Analyzed: 1238

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520B-BLK	Blank	0609Y032	06/12/15 1238
150520B-LCS	Lab Control Spike	0609Y033	06/12/15 1308
AZ16403	S67-MW015-051415	0609Y034	06/12/15 1338

Comments: Batch: #87DJU-150520B

Printed: 06/12/15 2:31:16 PM

Form 4, Blank Summary

EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP001-0203

APPL ID: AZ16400

Sample Collection Date: 5/14/2015

QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.013	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	ACENAPHTHENE	0.0025 U	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	ACENAPHTHYLENE	0.015	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	ANTHRACENE	0.0028 J	0.007	0.0025	0.0012	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZ (A) ANTHRACENE	0.0083	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (A) PYRENE	0.0024 J	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.0057 J	0.007	0.0025	0.0016	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.0065 J	0.007	0.0025	0.0019	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.030	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	CHRYSENE	0.012	0.007	0.0025	0.0012	mg/kg	5/21/2015	5/27/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.0072	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	FLUORANTHENE	0.0072	0.007	0.0025	0.0018	mg/kg	5/21/2015	5/27/2015
8270D-LL	FLUORENE	0.0040 J	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.017	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	NAPHTHALENE	0.0051 J	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	PHENANTHRENE	0.016	0.007	0.0025	0.0016	mg/kg	5/21/2015	5/27/2015
8270D-LL	PYRENE	0.011	0.007	0.0025	0.0018	mg/kg	5/21/2015	5/27/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	37.9 #	45-105			%	5/21/2015	5/27/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	49.2	35-100			%	5/21/2015	5/27/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	62.7	30-125			%	5/21/2015	5/27/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method:	P0518-42.M
Run #:	0515L246
Instrument:	Linus
Sequence:	L150515
Dilution Factor:	1
Initials:	DA

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APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0001

APPL ID: AZ16401

Sample Collection Date: 5/14/2015

QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.088	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHENE	0.030 J	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHYLENE	0.70	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	ANTHRACENE	0.29	0.054	0.0180	0.0087	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZ (A) ANTHRACENE	0.73	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (A) PYRENE	0.67	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (B) FLUORANTHENE	1.4	0.054	0.0180	0.0120	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.78	0.054	0.0180	0.0140	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (K) FLUORANTHENE	1.6	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	CHRYSENE	0.80	0.054	0.0180	0.0087	mg/kg	5/21/2015	5/28/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.22	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORANTHENE	0.83	0.054	0.0180	0.0130	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORENE	0.11	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.67	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	NAPHTHALENE	0.074	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	PHENANTHRENE	0.50	0.054	0.0180	0.0120	mg/kg	5/21/2015	5/28/2015
8270D-LL	PYRENE	1.2	0.054	0.0180	0.0130	mg/kg	5/21/2015	5/28/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	67.9	45-105			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	115 #	35-100			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	99.1	30-125			%	5/21/2015	5/28/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method:	P0518-42.M
Run #:	0515L247
Instrument:	Linus
Sequence:	L150515
Dilution Factor:	10
Initials:	DA

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APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0203

APPL ID: AZ16402

Sample Collection Date: 5/14/2015

QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.023	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHENE	0.0023 U	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHYLENE	0.018	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	ANTHRACENE	0.0044 J	0.007	0.0023	0.0011	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZ (A) ANTHRACENE	0.011	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (A) PYRENE	0.0052 J	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.0077	0.007	0.0023	0.0015	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.0075	0.007	0.0023	0.0018	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.030	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	CHRYSENE	0.020	0.007	0.0023	0.0011	mg/kg	5/21/2015	5/28/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.0074	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORANTHENE	0.0023 J	0.007	0.0023	0.0016	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORENE	0.0048 J	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.016	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	NAPHTHALENE	0.0082	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	PHENANTHRENE	0.037	0.007	0.0023	0.0015	mg/kg	5/21/2015	5/28/2015
8270D-LL	PYRENE	0.012	0.007	0.0023	0.0016	mg/kg	5/21/2015	5/28/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	43.5 #	45-105			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	50.5	35-100			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	65.5	30-125			%	5/21/2015	5/28/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method:	P0518-42.M
Run #:	0515L248
Instrument:	Linus
Sequence:	L150515
Dilution Factor:	1
Initials:	DA

Printed: 6/2/2015 2:35:53 PM

APPL-F1-SC-MCRes/MCPQL-REG MDLs

EPA 8270D LL WATER DODv3

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 5/14/2015

ARF: 76447
APPL ID: AZ16403
QCG: #SIMDD-150520A-197650

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-LL	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	60.9	50-110			%	5/20/2015	5/27/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	63.4	40-110			%	5/20/2015	5/27/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	109	50-135			%	5/20/2015	5/27/2015

Quant Method: P0518-42.M
Run #: 0515L231
Instrument: Linus
Sequence: L150515
Dilution Factor: 1
Initials: MA

Printed: 6/11/2015 1:46:40 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8270D LL SOILS

Blank Name/QCG: **150521S-16137 - 197621**
Batch ID: #SIMDD-150521A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHYLENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ANTHRACENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	BENZ (A) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (A) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (B) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (G,H,I) PERYLENE	0.0017 U	0.005	0.0017	0.0013	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (K) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	CHRYSENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	DIBENZ (A,H) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORANTHENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	INDENO (1,2,3-CD) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	NAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	PHENANTHRENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	PYRENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	63.5	45-105			%	5/21/2015	5/27/2015
BLANK	SURROGATE: NITROBENZENE-	44.2	35-100			%	5/21/2015	5/27/2015
BLANK	SURROGATE: TERPHENYL-D14 (	106	30-125			%	5/21/2015	5/27/2015

Quant Method: P0518-42.M
Run #: 0515L235
Instrument: Linus
Sequence: L150515
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 2:36:16 PM

Method Blank

EPA 8270D LL WATER DODv3

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150520W-16403 - 197650**
Batch ID: #SIMDD-150520A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	SURROGATE: 2-FLUORBIPHENY	50.8	50-110			%	05/20/15	05/28/15
BLANK	SURROGATE: NITROBENZENE-	71.9	40-110			%	05/20/15	05/28/15
BLANK	SURROGATE: TERPHENYL-D14 (	114	50-135			%	05/20/15	05/28/15

Quant Method:P0518-42.M
Run #:0515L251
Instrument:Linus
Sequence:L150515
Initials:MA

GC SC-Blank-REG MDLs
Printed: 06/03/15 11:01:03 AM

Laboratory Control Spike Recovery
EPA 8270D LL SOILS

APPL ID: **150521S-16137 LCS - 197621**
Batch ID: #SIMDD-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	0.133	0.0883	66.4	45-105
ACENAPHTHENE	0.133	0.127	95.5	45-110
ACENAPHTHYLENE	0.133	0.112	84.2	45-105
ANTHRACENE	0.133	0.126	94.7	55-105
BENZ (A) ANTHRACENE	0.133	0.139	105	50-110
BENZO (A) PYRENE	0.133	0.132	99.2	50-110
BENZO (B) FLUORANTHENE	0.133	0.140	105	45-115
BENZO (G,H,I) PERYLENE	0.133	0.135	102	40-125
BENZO (K) FLUORANTHENE	0.133	0.132	99.2	45-125
CHRYSENE	0.133	0.144	108	55-110
DIBENZ (A,H) ANTHRACENE	0.133	0.136	102	40-125
FLUORANTHENE	0.133	0.127	95.5	55-115
FLUORENE	0.133	0.120	90.2	50-110
INDENO (1,2,3-CD) PYRENE	0.133	0.145	109	40-120
NAPHTHALENE	0.133	0.0797	59.9	40-105
PHENANTHRENE	0.133	0.120	90.2	50-110
PYRENE	0.133	0.146	110	45-125
SURROGATE: 2-FLUORBIPHENYL (S)	0.0667	0.043	64.5	45-105
SURROGATE: NITROBENZENE-D5 (S)	0.0667	0.0313	46.9	35-100
SURROGATE: TERPHENYL-D14 (S)	0.0667	0.0711	107	30-125

Comments: _____

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	5/21/2015
Analysis Date :	5/27/2015
Instrument :	Linus
Run :	0515L236
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8270D LL WATER DODv3

APPL ID: **150520W-16403 LCS - 197650**
Batch ID: #SIMDD-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	5.00	4.16	83.2	45-105
ACENAPHTHENE	5.00	4.80	96.0	45-110
ACENAPHTHYLENE	5.00	4.41	88.2	50-105
ANTHRACENE	5.00	4.56	91.2	55-110
BENZ (A) ANTHRACENE	5.00	5.17	103	55-110
BENZO (A) PYRENE	5.00	5.09	102	55-110
BENZO (B) FLUORANTHENE	5.00	5.28	106	45-120
BENZO (G,H,I) PERYLENE	5.00	5.20	104	40-125
BENZO (K) FLUORANTHENE	5.00	5.03	101	45-125
CHRYSENE	5.00	5.42	108	55-110
DIBENZ (A,H) ANTHRACENE	5.00	5.15	103	40-125
FLUORANTHENE	5.00	4.63	92.6	55-115
FLUORENE	5.00	4.51	90.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	5.31	106	45-125
NAPHTHALENE	5.00	4.92	98.4	40-100
PHENANTHRENE	5.00	4.38	87.6	50-115
PYRENE	5.00	5.44	109	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.43	57.2	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.70	68.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	3.48	139 #	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	5/20/2015
Analysis Date :	5/27/2015
Instrument :	Linus
Run :	0515L230
Initials :	MA

Printed: 6/11/2015 1:46:34 PM
APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	45-105	63.5		35-100	44.2	
150521A-LCS	Lab Control Spike	45-105	64.5		35-100	46.9	
AZ16400	S67-TP001-0203	45-105	37.9	#	35-100	49.2	
AZ16401	S67-TP002-0001	45-105	67.9		35-100	115	#
AZ16402	S67-TP002-0203	45-105	43.5	#	35-100	50.5	

Comments: Batch: #SIMDD-150521A

= Recovery outside of Control Limits on Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	30-125	106				
150521A-LCS	Lab Control Spike	30-125	107				
AZ16400	S67-TP001-0203	30-125	62.7				
AZ16401	S67-TP002-0001	30-125	99.1				
AZ16402	S67-TP002-0203	30-125	65.5				

Comments: Batch: #SIMDD-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520A-LCS	Lab Control Spike	50-110	57.2		40-110	68.0	
AZ16403	S67-MW015-051415	50-110	60.9		40-110	63.4	
150520A-BLK	Blank	50-110	50.8		40-110	71.9	

Comments: Batch: #SIMDD-150520A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520A-LCS	Lab Control Spike	50-135	139	*			
AZ16403	S67-MW015-051415	50-135	109				
150520A-BLK	Blank	50-135	114				

Comments: Batch: #SIMDD-150520A

* = Recovery outside of Control Limits on QC Sample.

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

Blank ID: 150521A-BLK Time Analyzed: 1917

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150521A-BLK	Blank	0515L235	5/27/2015 1917
150521A-LCS	Lab Control Spike	0515L236	5/27/2015 1942
AZ16400	S67-TP001-0203	0515L246	5/27/2015 2358
AZ16401	S67-TP002-0001	0515L247	5/28/2015 0024
AZ16402	S67-TP002-0203	0515L248	5/28/2015 0049

Comments: Batch: #SIMDD-150521A

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/28/15

Matrix: WATER Instrument: Linus

Blank ID: 150520A-BLK Time Analyzed: 1002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520A-LCS	Lab Control Spike	0515L230	05/27/15 1708
AZ16403	S67-MW015-051415	0515L231	05/27/15 1734
150520A-BLK	Blank	0515L251	05/28/15 1002

Comments: Batch: #SIMDD-150520A

RSK 175

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Loc ID: MN015
ARF: 76447
APPL ID: AZ16403
QCG: #RSK-150520A-197488

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	ETHANE	0.85 U	1.7	0.85	0.51	ug/L	05/20/15	05/20/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	05/20/15	05/20/15
RSK 175	METHANE	28	1.0	0.45	0.25	ug/L	05/20/15	05/20/15

Quant Method: 402RSK.M
Run #: 0520F013
Instrument: Frodo
Sequence: 150520
Dilution Factor: 1
Initials: RSA

Printed: 05/29/15 11:44:07 AM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
RSK 175

Blank Name/QCG: **150520W-16287 - 197488**
Batch ID: #RSK-150520A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	ETHANE	0.85 U	1.7	0.85	0.51	ug/L	05/20/15	05/20/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	05/20/15	05/20/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	05/20/15	05/20/15

Quant Method: 402RSK.M
Run #: 0520F006
Instrument: Frodo
Sequence: 150520
Initials: RSA

GC SC-Blank-REG MDLs
Printed: 05/29/15 11:44:20 AM

Laboratory Control Spike Recovery
RSK 175

APPL ID: **150520W-16287 LCS - 197488**
Batch ID: #RSK-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
ETHANE	25.0	21.6	86.4	70-130
ETHENE	23.3	19.3	82.8	70-130
METHANE	13.3	15.6	117	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	05/20/15
Analysis Date :	05/20/15
Instrument :	Frodo
Run :	0520F005
Initials :	SD

Printed: 06/02/15 3:43:11 PM
APPL Standard LCS

RSK 175

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/20/15

Matrix: WATER Instrument: Frodo

Blank ID: 150520A-BLK Time Analyzed: 1132

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520A-BLK	Blank	0520F006	05/20/15 1132
AZ16403	S67-MW015-051415	0520F013	05/20/15 1206

Comments: Batch: #RSK-150520A

PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP001-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16400
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 33.0 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.033	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_065.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/22/15 1:52:28 PM
APPL-F1-SC-MCResOnly-REG MDLs

PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 7.8 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.0055 J	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

J = Estimated value.

Quant Method:	QTLMFL2
Run #:	T523_066.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/22/15 1:52:28 PM
APPL-F1-SC-MCResOnly-REG MDLs

PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 26.2 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.027	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_067.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/22/15 1:52:28 PM
APPL-F1-SC-MCResOnly-REG MDLs

Perchlorate

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76447
APPL ID: AZ16403
QCG: #6850-150518A-198054

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	6.1	0.60	0.400	0.200	ug/L	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_042.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/22/15 1:52:28 PM
APPL-F1-SC-MCResOnly-REG MDLs

Method Blank
Perchlorate

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150518W-16287 - 198054**
Batch ID: #6850-150518A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.400 U	0.60	0.400	0.200	ug/L	05/18/15	05/23/15

Quant Method: QTLMFL2
Run #: T523_021.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/22/15 1:52:25 PM

Method Blank

PERCHLORATE EPA 6850 - SOIL

Blank Name/QCG: **150518S-16137 - 198067**

Batch ID: #6850SM-150518A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.0040 U	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method: QTLMFL2
Run #: T523_049.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/22/15 1:52:26 PM

Laboratory Control Spike Recovery
PERCHLORATE EPA 6850 - SOIL

APPL ID: **150518S-16137 LCS - 198067**
Batch ID: #6850SM-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/Kg	SPK Result mg/Kg	SPK % Recovery	Recovery Limits
PERCHLORATE	0.00594	0.00556	93.6	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/24/15
Instrument :	AGIL_6460
Run :	T523_047.d
Initials :	RP

Printed: 06/22/15 1:52:26 PM
APPL Standard LCS

Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150518W-16287 LCS - 198054**
Batch ID: #6850-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
PERCHLORATE	0.600	0.567	94.5	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/23/15
Instrument :	AGIL_6460
Run :	T523_019.d
Initials :	RP

Printed: 06/22/15 1:52:26 PM
APPL Standard LCS

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: AGIL_6460

Blank ID: 150518A-BLK Time Analyzed: 2146

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150518A-LCS	Lab Control Spike	T523_019.d	05/23/15 2109
150518A-BLK	Blank	T523_021.d	05/23/15 2146
AZ16403	S67-MW015-051415	T523_042.d	05/24/15 0417

Comments: Batch: #6850-150518A

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/24/15

Matrix: SOIL Instrument: AGIL_6460

Blank ID: 150518A-BLK Time Analyzed: 0628

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150518A-LCS	Lab Control Spike	T523_047.d	05/24/15 0550
150518A-BLK	Blank	T523_049.d	05/24/15 0628
AZ16400	S67-TP001-0203	T523_065.d	05/24/15 1126
AZ16401	S67-TP002-0001	T523_066.d	05/24/15 1144
AZ16402	S67-TP002-0203	T523_067.d	05/24/15 1203

Comments: Batch: #6850SM-150518A

EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP001-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16400
QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	96.8	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000007
Instrument: Waldorf
Sequence: 150527
Dilution Factor: 1
Initials: MP

Printed: 06/01/15 11:43:05 AM
APPL-F1-SC-NoMC-REG MDLs

EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401
QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	96.4	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000008
Instrument: Waldorf
Sequence: 150527
Dilution Factor: 1
Initials: MP

Printed: 06/01/15 11:43:05 AM
APPL-F1-SC-NoMC-REG MDLs

EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402
QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	97.3	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000009
Instrument: Waldorf
Sequence: 150527
Dilution Factor: 1
Initials: MP

Printed: 06/01/15 11:43:05 AM
APPL-F1-SC-NoMC-REG MDLs

EPA 8330B WATER

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403
QCG: #83BJU-150519A-197306

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	2,4-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	05/19/15	05/23/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	05/19/15	05/23/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	05/19/15	05/23/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	05/19/15	05/23/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	86.2	70-130			%	05/19/15	05/23/15

Quant Method:	W150522.M
Run #:	0522_000047
Instrument:	Waldorf
Sequence:	150522
Dilution Factor:	1
Initials:	MP

Printed: 06/01/15 11:43:05 AM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8330B WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150519W-16334 - 197306**
Batch ID: #83BJU-150519A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2,4-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	05/19/15	05/23/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	05/19/15	05/23/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	05/19/15	05/23/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	05/19/15	05/23/15
BLANK	SURROGATE: 1,2-DINITROBENZ	89.5	70-130			%	05/19/15	05/23/15

Quant Method: W150522.M
Run #: 0522_00003
Instrument: Waldorf
Sequence: 150522
Initials: MP

GC SC-Blank-REG MDLs
Printed: 06/01/15 11:43:02 AM

Method Blank
EPA 8330B EXPLOSIVES-SOIL

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150526S-16400 - 197385**
Batch ID: #833BS-150526A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
BLANK	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
BLANK	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
BLANK	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
BLANK	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
BLANK	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
BLANK	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
BLANK	SURROGATE: 1,2-DINITROBENZ	95.0	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_00000
Instrument: Waldorf
Sequence: 150527
Initials: MP

GC SC-Blank-REG MDLs
Printed: 06/01/15 11:43:03 AM

Laboratory Control Spike Recovery
EPA 8330B EXPLOSIVES-SOIL

APPL ID: **150526S-16400 LCS - 197385**
Batch ID: #833BS-150526A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
1,3,5-TRINITROBENZENE	1.99	1.79	89.9	75-125
1,3-DINITROBENZENE	1.99	1.76	88.4	80-125
2,4,6-TRINITROTOLUENE	1.99	1.85	93.0	55-140
2,4-DINITROTOLUENE	1.99	1.81	91.0	80-125
2,6-DINITROTOLUENE	1.99	1.82	91.5	80-120
2-AMINO-4,6-DINITROTOLUENE	1.99	1.88	94.5	80-125
2-NITROTOLUENE	1.99	1.80	90.5	80-125
3,5-DNA	1.99	1.82	91.5	70-130
3-NITROTOLUENE	1.99	1.85	93.0	75-120
4-AMINO-2,6-DINITROTOLUENE	1.99	1.74	87.4	80-125
4-NITROTOLUENE	1.99	1.81	91.0	75-125
HMX	1.99	1.94	97.5	75-125
NITROBENZENE	1.99	1.82	91.5	75-125
NITROGLYCERIN	1.99	1.82	91.5	68-131
PETN	1.99	1.90	95.5	69-132
RDX	1.99	1.82	91.5	70-135
TETRYL	1.99	2.01	101	10-150
SURROGATE: 1,2-DINITROBENZENE (S	1.99	1.81	91.0	70-130

Comments:

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/26/15
Analysis Date :	05/27/15
Instrument :	Waldorf
Run :	0527_000005
Initials :	MP

Printed: 06/01/15 11:43:03 AM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150519W-16334 LCS - 197306**
Batch ID: #83BJU-150519A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4-DINITROTOLUENE	8.00	6.72	84.0	60-135
2,6-DINITROTOLUENE	8.00	6.73	84.1	60-135
HMX	8.00	6.98	87.3	80-115
NITROGLYCERIN	8.00	6.96	87.0	70-130
RDX	8.00	6.66	83.3	50-160
TETRYL	8.00	6.67	83.4	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	6.73	84.1	70-130

Comments: _____

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/19/15
Analysis Date :	05/23/15
Instrument :	Waldorf
Run :	0522_000034
Initials :	MP

Printed: 06/01/15 11:43:03 AM
APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: SOIL Instrument: Waldorf

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150526A-LCS	Lab Control Spike	70-130	91.0				
150526A-BLK	Blank	70-130	95.0				
AZ16400	S67-TP001-0203	70-130	96.8				
AZ16401	S67-TP002-0001	70-130	96.4				
AZ16402	S67-TP002-0203	70-130	97.3				

Comments: Batch: #833BS-150526A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: Waldorf

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150519A-LCS	Lab Control Spike	70-130	84.1				
150519A-BLK	Blank	70-130	89.5				
AZ16403	S67-MW015-051415	70-130	86.2				

Comments: Batch: #83BJU-150519A

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: SOIL Instrument: Waldorf

Blank ID: 150526A-BLK Time Analyzed: 1101

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A-LCS	Lab Control Spike	0527_000005	05/27/15 1024
150526A-BLK	Blank	0527_000006	05/27/15 1101
AZ16400	S67-TP001-0203	0527_000007	05/27/15 1139
AZ16401	S67-TP002-0001	0527_000008	05/27/15 1216
AZ16402	S67-TP002-0203	0527_000009	05/27/15 1254

Comments: Batch: #833BS-150526A

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: Waldorf

Blank ID: 150519A-BLK Time Analyzed: 0235

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150519A-LCS	Lab Control Spike	0522_000034	05/23/15 0158
150519A-BLK	Blank	0522_000035	05/23/15 0235
AZ16403	S67-MW015-051415	0522_000047	05/23/15 0955

Comments: Batch: #83BJU-150519A

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP001-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16400

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	50700	1490.0	119.00	59.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	18.00 U	60.0	18.00	10.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	29.3 J	75.0	24.00	19.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	1020	60.0	12.00	2.10	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	6.4 J	15.0	6.00	1.20	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BORON (B)	108 J	149.0	119.00	46.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	9.9 J	15.0	6.00	1.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	84500	2990	597.0	358.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	11.8 J	104.0	12.00	4.20	mg/kg	20	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	7.8 J	30.0	9.00	3.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	4700	149.0	12.00	6.30	mg/kg	20	06/04/15	06/12/15
6010C/3050B	IRON (FE)	34000	2390.0	119.00	104.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LEAD (PB)	1570	27.0	24.00	7.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	25.2	20.00	15.000	7.500	mg/kg	20	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	24200	896.0	119.00	104.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	3150	134.0	12.00	3.90	mg/kg	20	06/04/15	06/12/15
7471/7471	MERCURY (HG)	0.06 U	0.1	0.06	0.03	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	7.3 J	119.0	12.00	3.30	mg/kg	20	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	2450 J	8960	1490.0	1190.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	30.00 U	90.0	30.00	25.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	15.1 J	45.0	6.00	4.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	1490.0 U	14900	1490.0	1340.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	36.00 U	90.0	36.00	19.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	36.9 J	60.0	12.00	3.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	1470	239.0	119.00	34.00	mg/kg	20	06/04/15	06/12/15

J = Estimated value.

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PL-F1-SC-MCRes/MCPQL-REG MDLs

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	4240	54.0	4.30	2.10	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	2.1 J	2.2	0.65	0.38	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	35.2	2.7	0.87	0.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	53.0	2.2	0.43	0.08	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	0.18 J	0.5	0.22	0.04	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BORON (B)	87.00 U	108.0	87.00	34.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	0.22 U	0.5	0.22	0.05	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	2380	108	22.0	13.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	18.2	3.8	0.43	0.15	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	6.4	1.1	0.33	0.11	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	96.6	5.4	0.43	0.23	mg/kg	1	06/04/15	06/12/15
6010C/3050B	IRON (FE)	50500	1740.0	87.00	76.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LEAD (PB)	465	20.0	17.00	5.40	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	4.0	0.73	0.540	0.270	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	1570	33.0	4.30	3.80	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	70.4	4.9	0.43	0.14	mg/kg	1	06/04/15	06/12/15
7471/7471	MERCURY (HG)	0.04 U	0.1	0.04	0.02	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	41.4	4.3	0.43	0.12	mg/kg	1	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	433	325	54.0	43.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	2.9 J	3.3	1.10	0.92	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	0.66 J	1.6	0.22	0.16	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	88.1 J	542	54.0	49.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	1.30 U	3.3	1.30	0.67	mg/kg	1	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	18.4	2.2	0.43	0.11	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	128	8.7	4.30	1.20	mg/kg	1	06/04/15	06/12/15

J = Estimated value.

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PL-F1-SC-MCRes/MCPQL-REG MDLs

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	1440	68.0	5.40	2.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	4.9	2.7	0.81	0.47	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	102	3.4	1.10	0.88	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	118	2.7	0.54	0.10	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	0.27 U	0.7	0.27	0.05	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BORON (B)	108.00 U	136.0	108.00	42.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	23.3	0.7	0.27	0.07	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	232	136	27.0	16.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	12.5	4.7	0.54	0.19	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	79.4	1.4	0.41	0.14	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	1500	136.0	11.00	5.70	mg/kg	20	06/04/15	06/12/15
6010C/3050B	IRON (FE)	425000	21700.0	1080.00	949.00	mg/kg	200	06/04/15	06/15/15
6010C/3050B	LEAD (PB)	2680	24.0	22.00	6.80	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	0.91	0.91	0.680	0.340	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	710	41.0	5.40	4.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	43.2	6.1	0.54	0.18	mg/kg	1	06/04/15	06/12/15
7471/7471	MERCURY (HG)	1.2	0.1	0.05	0.03	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	26.4	5.4	0.54	0.15	mg/kg	1	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	1710	407	68.0	54.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	30.1 J	81.0	27.00	23.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	30.8	2.0	0.27	0.20	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	286 J	678	68.0	61.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	7.6	4.1	1.60	0.84	mg/kg	1	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	92.8	2.7	0.54	0.14	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	1540	217.0	108.00	31.00	mg/kg	20	06/04/15	06/12/15

J = Estimated value.

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PL-F1-SC-MCRes/MCPQL-REG MDLs

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	204 J	300	80.0	27.4	ug/L	1	05/26/15	06/04/15
6010C/3010A	ANTIMONY (SB)	5.00 U	20.0	5.00	2.90	ug/L	1	05/26/15	06/04/15
6010C/3010A	ARSENIC (AS)	10.00 U	25.0	10.00	4.30	ug/L	1	05/26/15	06/04/15
6010C/3010A	BARIUM (BA)	131	10.0	4.00	0.75	ug/L	1	05/26/15	06/04/15
6010C/3010A	BERYLLIUM (BE)	1.00 U	2.0	1.00	0.45	ug/L	1	05/26/15	06/04/15
6010C/3010A	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	CADMIUM (CD)	3.00 U	5.0	3.00	0.51	ug/L	1	05/26/15	06/04/15
6010C/3010A	CALCIUM (CA)	6220	1000	75.0	27.5	ug/L	1	05/26/15	06/04/15
6010C/3010A	CHROMIUM (CR)	4.00 U	15.0	4.00	1.37	ug/L	1	05/26/15	06/04/15
6010C/3010A	COBALT (CO)	3.1 J	15.0	3.00	0.63	ug/L	1	05/26/15	06/04/15
6010C/3010A	COPPER (CU)	4.00 U	15.0	4.00	1.71	ug/L	1	05/26/15	06/04/15
6010C/3010A	IRON (FE)	379	100	25.0	21.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	LEAD (PB)	2.7 J	15.0	4.00	1.58	ug/L	1	05/26/15	06/04/15
6010C/3010A	LITHIUM (LI)	5.3	1.0	0.80	0.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	MAGNESIUM (MG)	2530	500	30.0	12.9	ug/L	1	05/26/15	06/04/15
6010C/3010A	MANGANESE (MN)	26.3	10.0	4.00	1.23	ug/L	1	05/26/15	06/04/15
6010C/3010A	NICKEL (NI)	6.0 J	40.0	3.00	0.42	ug/L	1	05/26/15	06/04/15
6010C/3010A	POTASSIUM (K)	758 J	3000	500.0	220.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	SELENIUM (SE)	10.00 U	22.0	10.00	4.60	ug/L	1	05/26/15	06/04/15
6010C/3010A	SILVER (AG)	0.90 U	15.0	0.90	0.85	ug/L	1	05/26/15	06/04/15
6010C/3010A	SODIUM (NA)	17800	5000	500.0	111.1	ug/L	1	05/26/15	06/04/15
6010C/3010A	THALLIUM (TL)	10.00 U	40.0	10.00	4.80	ug/L	1	05/26/15	06/04/15
6010C/3010A	VANADIUM (V)	4.00 U	15.0	4.00	0.97	ug/L	1	05/26/15	06/04/15
6010C/3010A	ZINC (ZN)	97.2 J	150	20.0	13.7	ug/L	1	05/26/15	06/04/15
7470A/7470A	MERCURY (HG) (DISSOLVE	0.15 U	0.2	0.15	0.06	ug/L	1	06/08/15	06/09/15

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL) (DISSOLVE	286 J	300	80.0	27.4	ug/L	1	05/26/15	06/04/15
6010C/3010A	ANTIMONY (SB) (DISSOLVE	5.00 U	20.0	5.00	2.90	ug/L	1	05/26/15	06/04/15
6010C/3010A	ARSENIC (AS) (DISSOLVED)	10.00 U	25.0	10.00	4.30	ug/L	1	05/26/15	06/04/15
6010C/3010A	BARIUM (BA) (DISSOLVED)	107	10.0	4.00	0.75	ug/L	1	05/26/15	06/04/15
6010C/3010A	BERYLLIUM (BE) (DISSOLV	1.00 U	2.0	1.00	0.45	ug/L	1	05/26/15	06/04/15
6010C/3010A	BORON (B) (DISSOLVED)	40.00 U	50.0	40.00	29.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	CADMIUM (CD) (DISSOLVE	3.00 U	5.0	3.00	0.51	ug/L	1	05/26/15	06/04/15
6010C/3010A	CALCIUM (CA) (DISSOLVED	5620	1000	75.0	27.5	ug/L	1	05/26/15	06/04/15
6010C/3010A	CHROMIUM (CR) (DISSOLV	4.00 U	15.0	4.00	1.37	ug/L	1	05/26/15	06/04/15
6010C/3010A	COBALT (CO) (DISSOLVED)	2.8 J	15.0	3.00	0.63	ug/L	1	05/26/15	06/04/15
6010C/3010A	COPPER (CU) (DISSOLVED)	4.00 U	15.0	4.00	1.71	ug/L	1	05/26/15	06/04/15
6010C/3010A	IRON (FE) (DISSOLVED)	593	100	25.0	21.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	LEAD (PB) (DISSOLVED)	1.9 J	15.0	4.00	1.58	ug/L	1	05/26/15	06/04/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	4.6	1.0	0.80	0.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	MAGNESIUM (MG) (DISSOL	2190	500	30.0	12.9	ug/L	1	05/26/15	06/04/15
6010C/3010A	MANGANESE (MN) (DISSOL	24.3	10.0	4.00	1.23	ug/L	1	05/26/15	06/04/15
7470A/7470A	MERCURY (HG) (DISSOLVE	0.15 U	0.2	0.15	0.06	ug/L	1	06/08/15	06/09/15
6010C/3010A	NICKEL (NI) (DISSOLVED)	5.2 J	40.0	3.00	0.42	ug/L	1	05/26/15	06/04/15
6010C/3010A	POTASSIUM (K) (DISSOLVE	736 J	3000	500.0	220.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	SELENIUM (SE) (DISSOLVE	10.00 U	22.0	10.00	4.60	ug/L	1	05/26/15	06/04/15
6010C/3010A	SILVER (AG) (DISSOLVED)	0.90 U	15.0	0.90	0.85	ug/L	1	05/26/15	06/04/15
6010C/3010A	SODIUM (NA) (DISSOLVED)	17000	5000	500.0	111.1	ug/L	1	05/26/15	06/04/15
6010C/3010A	THALLIUM (TL) (DISSOLVED	10.00 U	40.0	10.00	4.80	ug/L	1	05/26/15	06/04/15
6010C/3010A	VANADIUM (V) (DISSOLVED	4.00 U	15.0	4.00	0.97	ug/L	1	05/26/15	06/04/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	82.9 J	150	20.0	13.7	ug/L	1	05/26/15	06/04/15

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	4.00 U	50.0	4.00	1.98	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ANTIMONY (SB)	0.60 U	2.0	0.60	0.35	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ARSENIC (AS)	0.80 U	2.5	0.80	0.65	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BARIUM (BA)	0.40 U	2.0	0.40	0.07	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BERYLLIUM (BE)	0.20 U	0.5	0.20	0.04	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BORON (B)	4.00 U	5.0	4.00	1.55	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CADMIUM (CD)	0.20 U	0.5	0.20	0.05	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CALCIUM (CA)	20.0 U	100	20.0	12.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CHROMIUM (CR)	0.40 U	3.5	0.40	0.14	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COBALT (CO)	0.30 U	1.0	0.30	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COPPER (CU)	0.40 U	5.0	0.40	0.21	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	IRON (FE)	4.00 U	80.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LEAD (PB)	0.80 U	0.9	0.80	0.25	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LITHIUM (LI)	0.500 U	0.67	0.500	0.250	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MAGNESIUM (MG)	4.00 U	30.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MANGANESE (MN)	0.40 U	4.5	0.40	0.13	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	NICKEL (NI)	0.40 U	4.0	0.40	0.11	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	POTASSIUM (K)	50.0 U	300	50.0	40.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SELENIUM (SE)	1.00 U	3.0	1.00	0.85	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SILVER (AG)	0.20 U	1.5	0.20	0.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SODIUM (NA)	50.0 U	500	50.0	45.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	THALLIUM (TL)	1.20 U	3.0	1.20	0.62	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	VANADIUM (V)	0.40 U	2.0	0.40	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ZINC (ZN)	4.00 U	8.0	4.00	1.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
7471	MERCURY (HG)	0.04 U	0.1	0.04	0.02	mg/Kg	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ANTIMONY (SB)	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ARSENIC (AS)	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BARIUM (BA)	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BERYLLIUM (BE)	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CADMIUM (CD)	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CALCIUM (CA)	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CHROMIUM (CR)	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COBALT (CO)	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COPPER (CU)	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	IRON (FE)	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LEAD (PB)	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LITHIUM (LI)	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MAGNESIUM (MG)	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MANGANESE (MN)	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	NICKEL (NI)	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	POTASSIUM (K)	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SELENIUM (SE)	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SILVER (AG)	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SODIUM (NA)	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	THALLIUM (TL)	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	VANADIUM (V)	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ZINC (ZN)	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL) (DI	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ANTIMONY (SB) (DI	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ARSENIC (AS) (DIS	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BARIUM (BA) (DISS	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BERYLLIUM (BE) (D	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CADMIUM (CD) (DIS	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CALCIUM (CA) (DIS	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CHROMIUM (CR) (D	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COBALT (CO) (DISS	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COPPER (CU) (DIS	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	IRON (FE) (DISSOL	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LEAD (PB) (DISSOL	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LITHIUM (LI) (DISSO	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MAGNESIUM (MG) (	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MANGANESE (MN) (	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	NICKEL (NI) (DISSO	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	POTASSIUM (K) (DI	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SELENIUM (SE) (DI	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SILVER (AG) (DISS	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SODIUM (NA) (DISS	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	THALLIUM (TL) (DIS	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	VANADIUM (V) (DIS	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ZINC (ZN) (DISSOL	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

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Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	200	186	93.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ANTIMONY (SB)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ARSENIC (AS)	25.0	22.9	91.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BARIUM (BA)	25.0	23.2	92.8	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BERYLLIUM (BE)	5.00	4.9	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BORON (B)	25.0	23.8	95.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CADMIUM (CD)	5.00	4.7	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CALCIUM (CA)	2500	2350	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CHROMIUM (CR)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COBALT (CO)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COPPER (CU)	25.0	24.6	98.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	IRON (FE)	100.0	91.3	91.3	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LEAD (PB)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LITHIUM (LI)	10.00	10.2	102	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MAGNESIUM (MG)	2500	2330	93.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MANGANESE (MN)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	NICKEL (NI)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	POTASSIUM (K)	500	462	92.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SELENIUM (SE)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	10.00	9.7	97.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SODIUM (NA)	2500	2520	101	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	THALLIUM (TL)	25.0	21.8	87.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	VANADIUM (V)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ZINC (ZN)	50.0	46.7	93.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 7471	MERCURY (HG)	0.667	0.65	97.5	80-120	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	2000	2020	101	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ANTIMONY (SB)	250	238	95.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ARSENIC (AS)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BARIUM (BA)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BERYLLIUM (BE)	50.0	48.6	97.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BORON (B)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CADMIUM (CD)	50.0	49.5	99.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CALCIUM (CA)	25000	25800	103	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CHROMIUM (CR)	250	260	104	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COBALT (CO)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COPPER (CU)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	IRON (FE)	1000	987	98.7	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LEAD (PB)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LITHIUM (LI)	100.0	94.5	94.5	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MAGNESIUM (MG)	25000	25100	100	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MANGANESE (MN)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	NICKEL (NI)	250	244	97.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	POTASSIUM (K)	5000	4940	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SELENIUM (SE)	250	234	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	100.0	93.6	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SODIUM (NA)	25000	28700	115	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	THALLIUM (TL)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	VANADIUM (V)	250	262	105	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ZINC (ZN)	500	480	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL) (DISSOLVED)	2000	1840	92.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ANTIMONY (SB) (DISSOLVED)	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ARSENIC (AS) (DISSOLVED)	250	228	91.2	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BARIUM (BA) (DISSOLVED)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BERYLLIUM (BE) (DISSOLVED)	50.0	47.3	94.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BORON (B) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CADMIUM (CD) (DISSOLVED)	50.0	48.0	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CALCIUM (CA) (DISSOLVED)	25000	23400	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CHROMIUM (CR) (DISSOLVED)	250	252	101	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COBALT (CO) (DISSOLVED)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COPPER (CU) (DISSOLVED)	250	235	94.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	IRON (FE) (DISSOLVED)	1000	957	95.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LEAD (PB) (DISSOLVED)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	92.7	92.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MAGNESIUM (MG) (DISSOLVED)	25000	22900	91.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MANGANESE (MN) (DISSOLVED	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	NICKEL (NI) (DISSOLVED)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	POTASSIUM (K) (DISSOLVED)	5000	4550	91.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SELENIUM (SE) (DISSOLVED)	250	227	90.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG) (DISSOLVED)	100.0	91.3	91.3	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SODIUM (NA) (DISSOLVED)	25000	26600	106	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	THALLIUM (TL) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	VANADIUM (V) (DISSOLVED)	250	255	102	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	468	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150603S-16402 MS - 197677**

Sample ID: AZ16402

Client ID: S67-TP002-0203

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/Kg	Matrix Res mg/Kg	SPK Res mg/Kg	DUP Res mg/Kg	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7471	MERCURY (HG)	0.586	0.86	1.4	1.3	92.2	75.1 #	7.4	20	80-120	06/03/15	06/03/15	06/03/15	06/03/15	197677	AZ16402

= Recovery is outside QC limits.

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

6010C/3050B^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: SOIL Instrument: Jules

Blank ID: 150604A-BLK Time Analyzed: 1426

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150604A-LCS	Lab Control Spike	150612A	06/12/15 1432
AZ16402	S67-TP002-0203	150612A	06/12/15 1454
AZ16401	S67-TP002-0001	150612A	06/12/15 1446
150604A-BLK	Blank	150612A	06/12/15 1426
AZ16402	S67-TP002-0203	150612A	06/12/15 1836
AZ16401	S67-TP002-0001	150612A	06/12/15 1829
AZ16400	S67-TP001-0203	150612A	06/12/15 1439
AZ16402	S67-TP002-0203	150615A	06/15/15 2320

Comments: Batch: #61C14-150604A

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/04/15

Matrix: WATER Instrument: Jules

Blank ID: 150526A1-BLK Time Analyzed: 1700

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A1-LCS	Lab Control Spike	150604A	06/04/15 1707
150526A1-BLK	Blank	150604A	06/04/15 1700
AZ16403	S67-MW015-051415	150604A	06/04/15 1725

Comments: Batch: #61C14-150526A1

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/04/15

Matrix: WATER Instrument: Jules

Blank ID: 150526A-BLK Time Analyzed: 1712

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A-LCS	Lab Control Spike	150604A	06/04/15 1719
150526A-BLK	Blank	150604A	06/04/15 1712
AZ16403	S67-MW015-051415	150604A	06/04/15 1730

Comments: Batch: #61C14-150526A

7471/7471

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/03/15

Matrix: SOIL Instrument: Freddie

Blank ID: 150603B-BLK Time Analyzed: 1457

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150603B-MSD	Matrix SpikeD	150603S	06/03/15 1525
150603B-MS	Matrix Spike	150603S	06/03/15 1523
150603B-LCS	Lab Control Spike	150603S	06/03/15 1500
AZ16402	S67-TP002-0203	150603S	06/03/15 1521
AZ16401	S67-TP002-0001	150603S	06/03/15 1519
AZ16400	S67-TP001-0203	150603S	06/03/15 1517
150603B-BLK	Blank	150603S	06/03/15 1457

Comments: Batch: #HGDOD-150603B

7470A/7470A

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150608A-BLK Time Analyzed: 0951

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150608A-MSD	Matrix SpikeD	150609W	06/09/15 1005
150608A-MS	Matrix Spike	150609W	06/09/15 1003
150608A-LCS	Lab Control Spike	150609W	06/09/15 0953
AZ16403	S67-MW015-051415	150609W	06/09/15 1001
150608A-BLK	Blank	150609W	06/09/15 0951

Comments: Batch: #HGDOD-150608A

7470A/7470A

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150608A-BLK Time Analyzed: 0951

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150608A-MSD	Matrix SpikeD	150609W	06/09/15 1005
150608A-MS	Matrix Spike	150609W	06/09/15 1003
150608A-LCS	Lab Control Spike	150609W	06/09/15 0953
AZ16403	S67-MW015-051415	150609W	06/09/15 1001
150608A-BLK	Blank	150609W	06/09/15 0951

Comments: Batch: #HGDOD-150608A

Wet Lab Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

APPL ID: AZ16403
ARF: 76447

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	12.3	1.0	0.20	0.08	mg/L	1	05/15/15	05/15/15
EPA 300.0	NITRATE	1.3	0.5	0.18	0.04	mg/L	1	05/15/15	05/15/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	05/15/15	05/15/15
EPA 300.0	SULFATE	32.8	1.0	0.20	0.09	mg/L	1	05/15/15	05/15/15
SW846 9060	TOTAL ORGANIC CARBON	3.2	0.5	0.35	0.13	mg/L	1	05/19/15	05/19/15

Printed: 06/23/15 11:13:39 AM

APPL-F1-SC-NoMC-REG MDLs

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.20 U	1.0	0.20	0.08	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	05/19/15	05/19/15	#906-150519A-AZ16287

Wetlab SC-Blank-REG MDLs
Printed: 06/23/15 11:13:40 AM

Laboratory Control Spike Recovery

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	20.0	18.6	93.0	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	22.1	21.6	97.7	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	9.98	9.22	92.4	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	20.0	20.0	100	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 906	TOTAL ORGANIC CARBON	10.00	10.8	108	90-110	05/19/15	05/19/15	#906-150519A-AZ16287

Comments: _____

EPA 300.0

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/15/15

Matrix: WATER Instrument: Dionex

Blank ID: 150515A3-BLK Time Analyzed: 0940

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150515A3-LCS	Lab Control Spike	10	05/15/15 0950
AZ16403	S67-MW015-051415	18	05/15/15 1155
150515A3-BLK	Blank	9	05/15/15 0940

Comments: Batch: #300W-150515A3

SW846 9060

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/19/15

Matrix: WATER Instrument: Tekmar

Blank ID: 150519A-BLK Time Analyzed: 1212

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150519A-BLK	Blank	2	05/19/15 1212
AZ16403	S67-MW015-051415	26	05/19/15 2357
150519A-LCS	Lab Control Spike	3	05/19/15 1244

Comments: Batch: #906-150519A

908 North Temperance Ave. ∇ Clovis, CA 93611 ∇ Phone 559-275-2175 ∇ Fax 559-275-4422

Certification Number: CA1312
NELAP Certification number: CA00046
DoD-ELAP Certificate number: 74807

Data Validatable Report

June 23, 2015

Tetra Tech
5700 Lake Wright Drive, Suite 309
Norfolk, Virginia 23502

Attn: Ed Corack

Title: Report of Data: Case 76447

Project: CTO JU11 112G02622 NSF Indian Head Site 67, MD

Contract #: Prime contract # for DoD: Navy CLEAN. N62470-08-D-1001
Subcontract: MSA # 1045497, Work Release # 08-JU11

Dear Mr. Corack:

Three soils and one water sample were received May 15, 2015, at 3.0°C. Written results for the requested analyses are provided on this June 23, 2015.

Results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

If you have any questions or require further information, please contact your APPL Project Manager, Cynthia Clark, cclark@applinc.com, at your convenience. Thank you for choosing APPL, Inc.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. These test results meet all requirements of NELAC and DoD QSM. Release of the hard copy has been authorized by the Laboratory Manager or her designee, as verified by the following signature.

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/rp
Enclosure
cc: File

Number of pages in this report: 1047

Data Validation Package

for

CTO JU11 112G02622 NSF Indian Head Site 67

ARF 76447

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SAMPLE RECEIPT INFORMATION

Sample receipt information

ARF: 76447

Project: CTO JU11 112G02622 NSF Indian Head Site 67, MD

Sample Receipt Information:

The samples were received on May 15, 2015, at 3.0C. The samples were assigned Analytical Request Form (ARF) number 76447. The sample numbers and requested analyses were compared to the chain of custody and email communication. The client requested changes to the target metals and explosives lists. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
S67-TP001-0203	AZ16400	SOIL	05/14/15	05/15/15
S67-TP002-0001	AZ16401	SOIL	05/14/15	05/15/15
S67-TP002-0203	AZ16402	SOIL	05/14/15	05/15/15
S67-MW015-051415	AZ16403	WATER	05/14/15	05/15/15

Percent moisture was determined using CLP 4.0.

The samples and blanks were screened for J-value responses between the detection limit (DL) and limit of quantitation (LOQ).

Laboratory control limits generated in house do not meet the control limits listed in DoD QSM 4.2 for all analytes. Laboratory control limits generated for this project meet all control limits listed in the DoD QSM 4.2 except where noted. A copy of our in house generated control limits is available upon request. In addition, a copy of our LOQ control limits, established using 7 data points, are also available upon request.

Only the portion of the injection log relative to these samples is included. A full sequence log is available upon request.

Measurement uncertainty can be reported upon request.

CASE NARRATIVE

EPA Method 8270D
Semi-Volatile Organic Compounds

Sample Preparation and Analysis Information:

The water sample was extracted according to EPA method 3510C. The soil samples were extracted according to EPA method 3550B. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS. Sample S67-TP002-0001 was diluted due to the dark, viscous nature of the extract; the reporting level was raised accordingly. All holding times were met.

Manual integrations were performed in accordance with APPL's SOP. Phenol-D6 was manually integrated in the 100ug/mL standard. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target compound was detected above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. Samples S67-TP001-0203 and S67-TP002-0203 recovered the surrogate 2-Fluorobiphenyl below the 45% lower control limit in both the PAH extract and the 8270 extract. No further action was taken. All other surrogate recoveries were within the control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

Summary:

No other problem was encountered. All data generated are acceptable.

EPA Method 8270D-SIM
Polynuclear Aromatic Hydrocarbons

Sample Preparation and Analysis Information:

The water sample was extracted according to EPA method 3510C. The soil samples were extracted according to EPA method 3550B. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS with selective ion monitoring. Sample S67-TP002-0001 was diluted due to the dark, viscous nature of the extract; the reporting level was raised accordingly. All holding times were met.

Benzo(b)fluoranthene and Benzo(k)fluoranthene could not be chromatographically separated in the soil samples. As a result, each of these is reported from the sum of the two area counts and may be biased high.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target analyte was detected above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. Samples S67-TP001-0203 and S67-TP002-0203 recovered the surrogate 2-Fluorobiphenyl below the 45% lower control limit in both the PAH extract and the 8270 extract. No further action was taken. Sample S67-TP002-0001 recovered Nitrobenzene-d5 above the 100% upper control limit at 115%. The water LCS recovered Terphenyl-d14 above the 135% upper control limit. All other surrogate recoveries were within the control limits.

Calibration

The initial and continuing calibrations were performed according to the method. All method acceptance criteria were met.

Tuning:

The instrument was tuned using DFTPP. All method criteria were met.

Internal Standards

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

Summary:

No other analytical problem was encountered. The data generated are acceptable.

Dissolved Gasses
RSK-175

Sample Preparation and Analysis

The water sample was analyzed with guidance from RSK-175. The sample was allowed to equilibrate for 10 minutes at 40°C and a portion of the headspace was analyzed using a Hewlett Packard Gas Chromatograph with a flame ionization detector.

Manual integrations were performed in accordance with APPL's SOP. Methane was manually integrated in the calibration standards. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. All acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target compound was detected at or above one-half the LOQ in the method blank.

Calibration

The initial and continuing calibrations were performed with guidance from RSK-175. All acceptance criteria were met.

Summary:

No other analytical exception is noted. All data generated are acceptable.

EPA Method 6850

Perchlorate by LC-Mass Spec

Sample Preparation and Analysis Information:

The samples were prepared according to the method. The samples were analyzed according to EPA Method 6850 using an Agilent 6460 Triple Quad LC/MS. The samples were prepared and analyzed within acceptable hold time.

Manual integrations were performed in accordance to APPL's SOP. Perchlorate was manually integrated in the calibration curve, the ICS and the LCS. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Calibrations:

Calibrations were performed according to the method. All calibration acceptance criteria were met. The second source met acceptance criteria.

Blanks:

Perchlorate was not detected at or above one-half the limit of quantitation (LOQ) in the method blanks.

Spikes:

Laboratory Control Spikes (LCS) and Interference Check Samples (I.C.S.) were used for quality assurance. All LCS acceptance criteria were met..

The Interference Check Samples (I.C.S.) was prepared using a mixed anions solution. The ICS recovery met acceptance criteria.

No sample was selected by the laboratory for MS/MSD analysis.

Internal Standards:

The area counts of the sample Internal Standards were compared to the average IS area counts of the initial calibration. All internal standards were within the 50%D acceptance criteria.

Summary:

All data were acceptable. No other analytical exception is noted.

EPA Method 8330B
Energetics

Sample Preparation:

The water sample was extracted according to EPA method 3535. The soil samples were dried and extracted according to EPA method 8330B, without using incremental sampling procedures. All holding times were met.

Analysis:

The samples were analyzed according to EPA Method 8330B using an Agilent 1290 HPLC with DA detector. Manual integrations were performed in accordance with APPL's SOP. The following analytes were manually integrated in the calibration standards: HMX, Nitroglycerin, PETN, 1,2-Dinitrobenzene, 1,3- Dinitrobenzene, Nitrobenzene, 2,4,6-Trinitrotoluene, Tetryl, 2,6-Dinitrotoluene, 2,4-Dinitrotoluene, 2-Nitrotoluene, 4-Nitrotoluene, 3-Nitrotoluene, 4-Amino-2,6-Dinitrotoluene, 2-Amino-4,6-Dinitrotoluene and 3,5-Dinitroaniline. 2-Nitrotoluene was manually integrated in the LCS. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance:

Spike Recovery:

Laboratory Control Spikes (LCS) were used for quality assurance. All spike acceptance criteria was met.

No sample was designated by the client for MS/MSD analysis.

Method blanks:

No target analyte was detected at or above one-half the limit of quantitation (LOQ) in the method blanks.

Surrogates:

Surrogate recoveries are summarized on the Form 2 & 8. All surrogates had acceptable recoveries.

Calibration:

The initial and continuing calibrations and second source were analyzed according to the method. All calibration criteria were met.

Summary:

No analytical problem was encountered. The data generated are acceptable.

EPA Methods 6010C, 7470A, 7471A
Metals

Digestion and Analysis Information:

The water sample was digested according to EPA methods 3010A and 7470A. The soil samples were digested according to EPA method s3050B and 7471A. The samples were analyzed s according to EPA method 6010C using a Perkin Elmer Optima 5300DV and according to EPA methods 7470A and 7471A using a Perkin Elmer mercury analyzer FIMS 400. All holding times were met.

Quality Control/Assurance:

Calibrations:

Calibrations were performed according to the methods for the initial calibration and the initial calibration verification. The initial calibration verification is prepared from a second source standard. Sodium had a 119% recovery in the 6-4-15 17:37 CCV.

Blanks:

No target metal was detected above one half the LOQ in the method blanks.

Spikes:

Laboratory Control Spikes (LCS) and Matrix Spikes (MS/MSD) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. Samples were selected by the laboratory for mercury MS/MSDs. Mercury recovered below the 80% lower control limit in the soil MSD. All other recoveries were acceptable.

Summary:

No other analytical problem was encountered. The data generated are acceptable.

Inorganic Analyses

EPA Method 300.0 and SW846 9060

Sample Preparation and Analysis

The sample was prepared according to the methods. All holding times were met.

The sample was analyzed for Anions according to EPA method 300.0 using a Dionex DX500. The sample was analyzed for TOC according to SW846 9060 using a Tekmar Apollo 9000.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis.

Method blanks

No target analyte was detected one-half the limit of quantitation (LOQ) in the method blanks.

Calibration

Calibrations were performed according to the method for the initial calibration and the continuing calibration verification. The initial calibration verification is prepared from a second source standard. All calibration criteria were met.

Summary:

No analytical exception was noted.

APPL Inc.
Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
MI1	Manual integration: integration does not follow baseline
MI2	Manual integration: non-target peak interference
MI3	Manual integration: to split a peak that was integrated as one peak by the computer.
MI4	Manual integration: to integrate a split peak
MI5	Manual integration: the whole peak or part of the peak was not integrated
MI6	Manual integration: computer integrated wrong peak
MI7	Manual integration: other – (See case narrative)
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel
U	Not detected
Y	Percent difference between primary and confirmation column > 40%

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 76447

Client: **Tetra Tech**
Address: **5700 Lake Wright Dr, Ste 309**
Norfolk, VA 23502
Attn: **Ed Corack**
Phone: **757-466-4908** Fax: **757-461-4148**
Job: **CTO JU11 112G02622 NSF Indian Head**
PO #: **MSA #1045497 Release #08-CTO JU11**
Chain of Custody (Y/N): **Y** # **48712**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **STD**

Received by: **YL**
Date Received: **05/15/15** Time: **09:50**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **Y** Time Zone: **-4**
Chest Temp(s): **3.0°C**
Color: **VOA,E-Brn,P-OrGn**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark**
QC Report Type: **DVP4/LEDD/MD**
Due Date: **06/05/15**

Comments:
login to ed.corack@ & tobrena.sedlmyer@tetratech.com. 21 calendar day TAT for final report
1HC DVP4 and summary report & 2 BOOKMARKED CDs of DVP4 and
Summary report (sample & QC results w/surrogate & blank summaries) to Amy Thomson (Pittsburgh)
Include original COC with report. NOTHING to Ed in VA office
EDD: TTEC LEDD to http://isg.applications.tetratech.com/LEDDChecker2010/
Guidance: DOD QSM v4.2: DOD Forms, LOD Database
RSK: report Methane only; Metals = TAL + B & LI per email
8330 soils - report full list, pink soli possible TNT per email

Sample Distribution:
GC: 3-$87DJU11S, 3-$SIMDDODSM, 1-$87DJU11W, 1-$SIMDDODW
Extractions: 3-_HPLC6850GROSS, 3-_MSE018, 3-_SON009, 3-_SON009S, 1-_HPL6850, 1-_MWE3535, 1-_SEP004, 1-_SEP004S
VOA: 1-$RSK
LCMS: 3-$6850SM, 3-$833BS, 1-$6850, 1-$83BJU11W
Metals: 3-$61C14S(TAL+B,LI), 3-$HGDODS, 1-$61C14W(TAL+B,LI), 1-$61C14WD(TAL+B,LI), 1-$HGDODDW, 1-$HGDODW
Wetlab: 3-MOIST, 1-$300W(NO2,NO3,CL,SO4), 1-$906
Other: 3-_M3050, 3-_M7471, 1-_M3010, 1-_M3010F, 1-_M7470, 1-_M7470F

Charges:

Invoice To:
ACCOUNTS PAYABLE
661 Andersen Dr, Foster Plaza 7
Pittsburgh, PA 15220-2745
Invoice in triplicate per SOW

	Client ID	APPL ID	Sampled	Analyses Requested
1.	S67-TP001-0203	AZ16400S	05/14/15 10:55	$61C14S(TAL+B,Li), $6850SM, $833BS, $87DJU11S, $HGDODS, $SIMDDODSM, MOIST -- 8330 full list; Li spike
2.	S67-TP002-0001	AZ16401S	05/14/15 11:00	$61C14S(TAL+B,Li), $6850SM, $833BS, $87DJU11S, $HGDODS, $SIMDDODSM, MOIST -- 8330 full list; Li spike
3.	S67-TP002-0203	AZ16402S	05/14/15 11:05	$61C14S(TAL+B,Li), $6850SM, $833BS, $87DJU11S, $HGDODS, $SIMDDODSM, MOIST -- 8330 full list; Li spike

4.	S67-MW015-051415	AZ16403W	05/14/15	14:30	$300W(NO2,NO3,CL,SO4), $61C14W(TAL+B,Li), $61C14WD(TAL+B,Li), $6850, $83BJU11W, $87DJU11W, $906, $HGDODDW, $HGDODW, $RSK, $SIMDDODW -- Li spike

Renee Patterson

From: Cynthia Clark [cclark@applinc.com]
Sent: Tuesday, May 19, 2015 10:01 AM
To: metals@applinc.com; 'Paula Young'; 'Renee Patterson'
Cc: 'Chue Moua'
Subject: TTEC JU11 ARF 76447

I have modified ARF 76447

metals - for this ARF we are reporting the full TAL list plus B and Li - this includes Hg

Explosives - the soils need our full standard explosives list. One of the soils is pink and they think this may be due to TNT in the soil

Sincerely,

Cynthia Clark
Project Manager

Agriculture & Priority Pollutants Laboratories, Inc.
WOSB. NELAP Accredited.

t. 559.275-2175 f. 559.275-4422
a. 908 N. Temperance Ave., Clovis, CA 93611

Website • Email

DoD accredited for ISM, Dioxins and PCB congeners.

This is a PRIVATE and CONFIDENTIAL message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind APPL, Inc. to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

APPL Sample Receipt Form

ARF# **76447**

Sample	Container Type	Count	pH
AZ16400	21 8oz Jar	2	NA
AZ16401	21 8oz Jar	2	NA
AZ16402	21 8oz Jar	2	NA
AZ16403	3 PL 250mL	1	NA
	4 PL 125mL	1	NA
	6 PL 500mL - HNO3	2	1.7
	13 VOAs - HCL	3	NA
	17 Amber Liter	2	NA
	30 Amber 250mL - H2SO4	1	1.7
	40 500mL Amber, unprsrvd	2	NA

Sample	Container Type	Count	pH

3,0

CHAIN OF CUSTODY RECORD

76447

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611

Phone: (559) 275-2175
Fax: (559) 275-4422

C.O.C. 48712

Report to: PLEASE PRINT	Invoice to: PLEASE PRINT
Company Name: Tetra Tech Phone: 757-466-4908	Company Name: See Contract Phone:
Address: 5700 Lake Wright Dr. Suite 309 Norfolk, VA 23502 Fax:	Address: Fax:
Attn: Ed Corack	Attn:

Project Name/Number	Sampler (Print)
CTO-JU11 .112G02622 NSF-Indian Head Site67	Jacob Birkett
Purchase Order Number	Sampler (Signature)

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	Analysis Requested/Method Number: PAHs	Phthalates	Metals	Energetics	Perchlorate	PAHs+Phthalates	Energetics	Total Metals	Diss. Metals	Methane	Perchlorate	TOC	Anions
SG7-TP001-0203	TP001	5-14-15	1055	ET	2			2	2				→								
SG7-TP002-0001	TP002	5-14-15	1100	ET	2			2	2				→								
SG7-TP002-0203	TP002	5-14-15	1105	ET	2			2	2				→								
SG7-MW015-051415	MW015	5-14-15	1430	ET	12	12								2	2	1	1	3	1	1	1

JB 5-14-15

Date Shipped: 5-14-15
Carrier: FedEx
Waybill No.:
Comments:

Shuttle Temperature:

Turnaround Requested: Check one
☒ Standard 2-3 wk ☐ One week ☐ 24/48 Hrs. ☐ Other

Sample Disposal:
☐ Return to client ☒ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:
Jacob Birkett	5-14-15	1800	FedEx
Relinquished by:	Date	Time	Received by:

Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 5-15-15	Time 9:50	Received at lab by: Brian Braun

White: Return to client with report Yellow: Laboratory Copy Pink: Sampler

See reverse side for Container Preservative and Sampling Information

COOLER RECEIPT FORM

ARF: 76447

1) Project: CTO JU11 112G02622 NSF Indian Head Date Received: 05/15/15

2) Coolers: Number of Coolers: 1

3) YES Were custody seals present and intact?
How many? 2 Name/Date on seal? SEE BELOW

4) YES Was there a shipping slip? Carrier name: FED EX

5) Type of packing in cooler: X bubble wrap __ popcorn __ foam X plastic bags
X wet ice __ dry ice __ no ice __ other

6) YES Were cooler temperatures acceptable?

7) Serial number of certified NIST thermometer use J5297

8) Cooler temp(s): In °C
1: 3.0 2: ____ 3: ____ 4: ____ 5: ____ 6: ____
7: ____ 8: ____ 9: ____ 10: ____ 11: ____ 12: ____

Chain of custody:

9) YES Was a chain of custody received?

10) YES Were the custody papers complete/signed in the appropriate places?

Sample Labels:

11) YES Were all sample labels complete (sample ID, date/time of sampling, etc.)?

12) YES Did all container labels agree with custody papers?

Sample Containers:

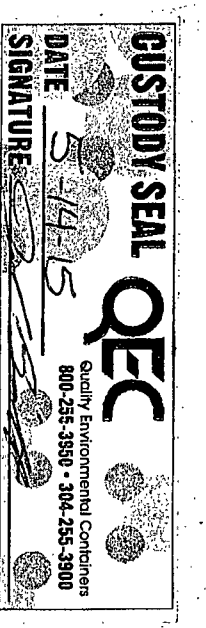
13) YES Were all containers sealed in separate bags?

14) YES Did all containers arrive in good condition:(unbroken, no leakage, no cracked/broken lids)

15) YES Were correct containers and preservatives used for the tests indicated?

16) YES Was a sufficient amount of sample sent for tests indicated?

17) No Were bubbles present in volatile samples?
If yes, the following were received with air bubbles:
Larger than a pea: ____
Smaller than a pea: ____



Preservation Hold time:

18) Yes Was a sufficient amount of holding time remaining to analyze the samples?

19) Yes Was the pH taken of all non-VOA preserved samples and written on the sample containe

20) Yes Was the pH of acid preserved non-VOA samples < 2?

21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9?

22) NO Were unpreserved VOA Vials received?

23) NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?
pH strip lot number: 90B2031
Lab notified if pH was not adequate: ____

Notes/Deficiencies:

Personnel receiving samples: BB Second reviewer: VC
Personnel labeling samples: ____
Project manager notified: ____ Date/Time of notification ____
Name of client notified: ____ Date/Time of notification ____

EPA METHOD 8270D
Semivolatile Organic Compounds

APPL, INC.

EPA METHOD 8270D
Semivolatile Organic Compounds
QC Summary

APPL, INC.

Method Blank
EPA 8270D SOILS

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150521S-16137 - 197602**
Batch ID: #87DJU-150521A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	0.167 U	0.66	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	BUTYL BENZYL PHTHALATE	0.167 U	0.33	0.167	0.056	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-BUTYL PHTHALATE	0.167 U	0.33	0.167	0.066	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-OCTYL PHTHALATE	0.167 U	0.33	0.167	0.058	mg/kg	5/21/2015	5/28/2015
BLANK	DIETHYL PHTHALATE	0.167 U	0.33	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	DIMETHYL PHTHALATE	0.167 U	0.33	0.167	0.063	mg/kg	5/21/2015	5/28/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	66.1	35-125			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	66.9	45-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUOROPHENO	70.2	35-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: NITROBENZENE-	67.7	35-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: PHENOL (S)	69.3	40-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: TERPHENYL-D14 (	86.8	30-125			%	5/21/2015	5/28/2015

Quant Method: Y0520TT.M
Run #: 0520Y055
Instrument: Yoda
Sequence: Y150520
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 12:43:20 PM

Method Blank
EPA 8270D WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150520W-16403 - 197994**
Batch ID: #87DJU-150520B

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	5.00 U	20.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	05/20/15	06/12/15
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	05/20/15	06/12/15
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	05/20/15	06/12/15
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	05/20/15	06/12/15
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	SURROGATE: 2,4,6-TRIBROMOP	81.0	40-125			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUORBIPHENY	60.8	50-110			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUOROPHENO	49.2	20-110			%	05/20/15	06/12/15
BLANK	SURROGATE: NITROBENZENE-	67.6	40-110			%	05/20/15	06/12/15
BLANK	SURROGATE: PHENOL (S)	31.7	10-115			%	05/20/15	06/12/15
BLANK	SURROGATE: TERPHENYL-D14 (	90.1	50-135			%	05/20/15	06/12/15

Quant Method:Y0607TT.M
Run #:0609Y032
Instrument:Yoda
Sequence:Y150609
Initials:MA

GC SC-Blank-REG MDLs
Printed: 06/12/15 2:30:50 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	35-125	66.1		45-105	66.9	
150521A-LCS	Lab Control Spike	35-125	76.0		45-105	68.2	
AZ16400	S67-TP001-0203	35-125	59.2		45-105	34.2	#
AZ16401	S67-TP002-0001	35-125	55.6		45-105	63.8	
AZ16402	S67-TP002-0203	35-125	50.6		45-105	34.6	#

Comments: Batch: #87DJU-150521A

= Recovery outside of Control Limits on Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	35-105	70.2		35-100	67.7	
150521A-LCS	Lab Control Spike	35-105	66.9		35-100	66.7	
AZ16400	S67-TP001-0203	35-105	65.2		35-100	62.9	
AZ16401	S67-TP002-0001	35-105	58.0		35-100	62.2	
AZ16402	S67-TP002-0203	35-105	47.7		35-100	48.5	

Comments: Batch: #87DJU-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	40-100	69.3		30-125	86.8	
150521A-LCS	Lab Control Spike	40-100	69.9		30-125	89.5	
AZ16400	S67-TP001-0203	40-100	69.4		30-125	47.4	
AZ16401	S67-TP002-0001	40-100	57.2		30-125	82.4	
AZ16402	S67-TP002-0203	40-100	52.5		30-125	42.7	

Comments: Batch: #87DJU-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2,4,6-TRIBROMOPHENOL (S)			SURROGATE: 2-FLUORBIPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	40-125	81.0		50-110	60.8	
150520B-LCS	Lab Control Spike	40-125	82.0		50-110	64.4	
AZ16403	S67-MW015-051415	40-125	75.0		50-110	60.1	

Comments: Batch: #87DJU-150520B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	20-110	49.2		40-110	67.6	
150520B-LCS	Lab Control Spike	20-110	46.4		40-110	67.1	
AZ16403	S67-MW015-051415	20-110	46.7		40-110	65.1	

Comments: Batch: #87DJU-150520B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520B-BLK	Blank	10-115	31.7		50-135	90.1	
150520B-LCS	Lab Control Spike	10-115	31.1		50-135	89.8	
AZ16403	S67-MW015-051415	10-115	30.2		50-135	85.6	

Comments: Batch: #87DJU-150520B

Laboratory Control Spike Recovery
EPA 8270D SOILS

APPL ID: **150521S-16137 LCS - 197602**
Batch ID: #87DJU-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	1.67	1.35	80.8	45-125
BUTYL BENZYL PHTHALATE	1.67	1.31	78.4	50-125
DI-N-BUTYL PHTHALATE	1.67	1.30	77.8	55-110
DI-N-OCTYL PHTHALATE	1.67	1.39	83.2	40-130
DIETHYL PHTHALATE	1.67	1.19	71.3	50-115
DIMETHYL PHTHALATE	1.67	1.19	71.3	50-110
SURROGATE: 2,4,6-TRIBROMOPHENOL	6.67	5.07	76.0	35-125
SURROGATE: 2-FLUORBIPHENYL (S)	3.33	2.27	68.2	45-105
SURROGATE: 2-FLUOROPHENOL (S)	6.67	4.46	66.9	35-105
SURROGATE: NITROBENZENE-D5 (S)	3.33	2.22	66.7	35-100
SURROGATE: PHENOL (S)	6.67	4.66	69.9	40-100
SURROGATE: TERPHENYL-D14 (S)	3.33	2.98	89.5	30-125

Comments: _____

Primary	SPK
Quant Method :	Y0520TT.M
Extraction Date :	5/21/2015
Analysis Date :	5/28/2015
Instrument :	Yoda
Run :	0520Y056
Initials :	DA

Printed: 6/2/2015 12:43:08 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8270D WATER

APPL ID: **150520W-16403 LCS - 197994**
Batch ID: #87DJU-150520B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	50.0	39.7	79.4	40-125
BUTYL BENZYL PHTHALATE	50.0	40.2	80.4	45-115
DI-N-BUTYL PHTHALATE	50.0	40.4	80.8	55-115
DI-N-OCTYL PHTHALATE	50.0	40.8	81.6	35-135
DIETHYL PHTHALATE	50.0	37.4	74.8	40-120
DIMETHYL PHTHALATE	50.0	37.3	74.6	25-125
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	164	82.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	64.4	64.4	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	92.8	46.4	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	67.1	67.1	40-110
SURROGATE: PHENOL (S)	200	62.1	31.1	10-115
SURROGATE: TERPHENYL-D14 (S)	100	89.8	89.8	50-135

Comments: _____

Primary	SPK
Quant Method :	Y0607TT.M
Extraction Date :	05/20/15
Analysis Date :	06/12/15
Instrument :	Yoda
Run :	0609Y033
Initials :	MA

Printed: 06/12/15 2:30:53 PM
APPL Standard LCS

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/28/2015

Matrix: SOIL Instrument: Yoda

Blank ID: 150521A-BLK Time Analyzed: 1449

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150521A-BLK	Blank	0520Y055	5/28/2015 1449
150521A-LCS	Lab Control Spike	0520Y056	5/28/2015 1518
AZ16400	S67-TP001-0203	0520Y067	5/28/2015 2043
AZ16401	S67-TP002-0001	0520Y068	5/28/2015 2113
AZ16402	S67-TP002-0203	0520Y069	5/28/2015 2142

Comments: Batch: #87DJU-150521A

EPA 8270D

Form 4

Blank Summary

Lab Name:	APPL, Inc.	SDG No:	76447
Case No:	76447	Date Analyzed:	06/12/15
Matrix:	WATER	Instrument:	Yoda
Blank ID:	150520B-BLK	Time Analyzed:	1238

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520B-BLK	Blank	0609Y032	06/12/15 1238
150520B-LCS	Lab Control Spike	0609Y033	06/12/15 1308
AZ16403	S67-MW015-051415	0609Y034	06/12/15 1338

Comments: Batch: #87DJU-150520B

Printed: 06/12/15 2:31:16 PM
Form 4, Blank Summary

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: ~~0520Y005.D~~ 76447
Matrix: Soil & np6-23-15
ID: SV Tune 5/14/15

SDG No: np6-23-15 ~~Yoda~~ 76447
Date Analyzed: 5/22/2015
Instrument: Yoda
Time Analyzed: 10:28

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5ug/ml SVOC 05/22/15	0520Y006.D	5/22/2015 10:46
2		10ug/ml SVOC 05/22/1	0520Y007.D	5/22/2015 11:15
3		20ug/ml SVOC 05/22/1	0520Y008.D	5/22/2015 11:45
4		40ug/ml SVOC 05/22/1	0520Y009.D	5/22/2015 12:14
5		50ug/ml SVOC 05/22/1	0520Y010.D	5/22/2015 12:43
6		60ug/ml SVOC 05/22/1	0520Y011.D	5/22/2015 13:12
7		80ug/ml SVOC 05/22/1	0520Y012.D	5/22/2015 13:42
8		100ug/ml SVOC 05/22/	0520Y013.D	5/22/2015 14:11
9		50ug/ml SVOC SS 05/2	0520Y014.D	5/22/2015 14:41
10				
11				
12				
13				
14				
15				
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17				
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19				
20				
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22				

m/e		
51	29.95 - 60.04% of mass 198	31.1
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.1
127	40 - 60% of mass 198	51.6
197	0 - 1.4% of mass 198	0.1
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	27.8
365	1 - 100% of mass 198	3.1
441	0.01 - 100% of mass 443	76.5
442	40 - 150% of mass 198	105.2
443	17 - 23% of mass 442	18.9

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76447
Matrix: Soil
ID: SV TUNE 5/14/15

SDG No: 76447
Date Analyzed: 05/28/15
Instrument: Yoda
Time Analyzed: 10:36

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		50ug/ml SVOC 05/28/1	0520Y048.D	05/28/15 10:54
2	Blank	150521A BLK 1/30.00G	0520Y055.D	05/28/15 14:49
3	Lab Control Spike	150521A LCS-1 1/30.0	0520Y056.D	05/28/15 15:18
4	S67-TP001-0203	AZ16400S02 1/30.10G	0520Y067.D	05/28/15 20:43
5	S67-TP002-0001	AZ16401S01 1/30.34G	0520Y068.D	05/28/15 21:13
6	S67-TP002-0203	AZ16402S01 1/30.17G	0520Y069.D	05/28/15 21:42
7				
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13				
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19				
20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	30.0
68	0 - 2% of mass 69	0.1
70	0 - 2% of mass 69	0.4
127	40 - 60% of mass 198	48.9
197	0 - 1.4% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	28.7
365	1 - 100% of mass 198	3.0
441	0.01 - 100% of mass 443	75.6
442	40 - 150% of mass 198	88.4
443	17 - 23% of mass 442	19.4

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0609Y002.D → 76447
Matrix: Water np 6-23-15
ID: SV Tune 5/14/15

SDG No: np 6-23-15 ~~Yoda~~ 76447
Date Analyzed: 06/09/15
Instrument: Yoda
Time Analyzed: 13:56

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5ug/ml SVOC 06/09/15	0609Y003.D	06/09/15 14:14
2		10ug/ml SVOC 06/09/1	0609Y004.D	06/09/15 14:44
3		20ug/ml SVOC 06/09/1	0609Y005.D	06/09/15 15:13
4		40ug/ml SVOC 06/09/1	0609Y006.D	06/09/15 15:43
5		50ug/ml SVOC 06/09/1	0609Y007.D	06/09/15 16:12
6		60ug/ml SVOC 06/09/1	0609Y008.D	06/09/15 16:42
7		80ug/ml SVOC 06/09/1	0609Y009.D	06/09/15 17:12
8		100ug/ml SVOC 06/09/	0609Y010.D	06/09/15 17:42
9		50ug/ml SVOC SS 06/0	0609Y011.D	06/09/15 18:12
10				
11				
12				
13				
14				
15				
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17				
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19				
20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	30.7
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.7
127	40 - 60% of mass 198	50.4
197	0 - 1.4% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	27.9
365	1 - 100% of mass 198	3.4
441	0.01 - 100% of mass 443	74.5
442	40 - 150% of mass 198	106.5
443	17 - 23% of mass 442	19.6

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76447
Matrix: Water
ID: SV TUNE 5/14/15

SDG No: 76447
Date Analyzed: 06/12/15
Instrument: Yoda
Time Analyzed: 11:51

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	150520B BLK 1/1000	0609Y032.D	06/12/15 12:38
2	Lab Control Spike	150520B LCS-1 1/1000	0609Y033.D	06/12/15 13:08
3	S67-MW015-051415	AZ16403W10 1/1000	0609Y034.D	06/12/15 13:38
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19				
20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	32.7
68	0 - 2% of mass 69	0.3
70	0 - 2% of mass 69	0.4
127	40 - 60% of mass 198	50.2
197	0 - 1.4% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	28.4
365	1 - 100% of mass 198	3.3
441	0.01 - 100% of mass 443	74.5
442	40 - 150% of mass 198	107.3
443	17 - 23% of mass 442	19.7

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0520Y010.D Date Analyzed: 05/22/15

Instrument ID: Yoda Time Analyzed: 12:43

GC Column: _____ ID: Heated Purge: (Y/N) _____

		1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	789097	4.80	3524030	6.23	2025700	8.22
	UPPER LIMIT	1578194	5.30	7048060	6.73	4051400	8.72
	LOWER LIMIT	394549	4.30	1762015	5.73	1012850	7.72
	SAMPLE NO.						
01	50ug/ml SVOC SS 05/2	477080	4.80	2254040	6.23	1379160	8.22
02	50ug/ml SVOC 05/28/15	937800	4.80	4119960	6.24	2216050	8.22
03	150521A BLK 1/30.00G	934649	4.80	4145960	6.24	2316230	8.22
04	150521A LCS-1 1/30.07	983964	4.80	4419820	6.23	2490320	8.22
05	AZ16400S02 1/30.10G	803868	4.80	3686800	6.23	2023880	8.22
06	AZ16401S01 1/30.34G	894998	4.80	3814260	6.24	2021270	8.22
07	AZ16402S01 1/30.17G	863831	4.80	3963420	6.24	2183200	8.22
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AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0520Y010.D Date Analyzed: 05/22/15

Instrument ID: Yoda Time Analyzed: 12:43

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	3568970	9.95	3316560	13.01	2280870	14.64
	UPPER LIMIT	7137940	10.45	6633120	13.51	4561740	15.14
	LOWER LIMIT	1784485	9.45	1658280	12.51	1140435	14.14
	SAMPLE NO.						
01	50ug/ml SVOC SS 05/2	2658510	9.95	2791250	13.01	2129350	14.64
02	50ug/ml SVOC 05/28/15	3645220	9.94	2955800	13.00	1573180	14.64
03	150521A BLK 1/30.00G	4141420	9.94	3325730	13.01	2051460	14.64
04	150521A LCS-1 1/30.07	4281750	9.95	3572460	13.01	2131740	14.64
05	AZ16400S02 1/30.10G	3480750	9.95	2600150	13.01	1688900	14.64
06	AZ16401S01 1/30.34G	3312550	9.94	2496640	13.00	1745230	14.64
07	AZ16402S01 1/30.17G	3917830	9.94	3123190	13.00	1878730	14.65
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AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0609Y007.D Date Analyzed: 9 Jun 15 16:12

Instrument ID: Yoda Time Analyzed: 9 Jun 15 16:12

GC Column: _____ ID: Heated Purge: (Y/N) _____

	1,4-dichlorobenzene-D4(IS)		Napthalene-D8(IS)		Acenaphthene-D10(IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	659031	4.80	2842140	6.23	1600410	8.21
UPPER LIMIT	1318062	5.30	5684280	6.73	3200820	8.71
LOWER LIMIT	329516	4.30	1421070	5.73	800205	7.71
SAMPLE NO.						
01 50ug/ml SVOC 06/12/15	687553	4.80	2922150	6.22	1590910	8.21
02 150520B BLK 1/1000	649557	4.80	2850170	6.23	1566120	8.21
03 150520B LCS-1 1/1000	678489	4.80	2994970	6.23	1703780	8.21
04 AZ16403W10 1/1000	620783	4.80	2796160	6.23	1580120	8.21
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AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0609Y007.D Date Analyzed: 9 Jun 15 16:12

Instrument ID: Yoda Time Analyzed: 9 Jun 15 16:12

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Phenanthrene-D10(IS)		Chrysene-D12(IS)		Perylene-D12(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2772740	9.94	2451720	13.00	1683710	14.63
	UPPER LIMIT	5545480	10.44	4903440	13.50	3367420	15.13
	LOWER LIMIT	1386370	9.44	1225860	12.50	841855	14.13
	SAMPLE NO.						
01	50ug/ml SVOC 06/12/15	2742840	9.94	2429110	13.00	1666880	14.64
02	150520B BLK 1/1000	2793620	9.94	2380190	13.00	1559030	14.64
03	150520B LCS-1 1/1000	2969350	9.94	2595310	12.99	1728950	14.63
04	AZ16403W10 1/1000	2801930	9.93	2413130	13.00	1638460	14.65
05							
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07							
08							
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AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA METHOD 8270D
Semivolatile Organic Compounds
Sample Data

APPL, INC.

EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP001-0203

APPL ID: AZ16400

Sample Collection Date: 5/14/2015

QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	0.250 U	0.99	0.250	0.093	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	0.250 U	0.49	0.250	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	0.250 U	0.49	0.250	0.099	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	0.250 U	0.49	0.250	0.087	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	0.250 U	0.49	0.250	0.093	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	0.250 U	0.49	0.250	0.094	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	59.2	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	34.2 #	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	65.2	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	62.9	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	69.4	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	47.4	30-125			%	5/21/2015	5/28/2015

= Recovery (or RPD) is outside QC limits.

Quant Method:	Y0520TT.M
Run #:	0520Y067
Instrument:	Yoda
Sequence:	Y150520
Dilution Factor:	1
Initials:	DA

Printed: 6/2/2015 12:43:01 PM

APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y067.D Vial: 67
Acq On : 28 May 15 20:43 Operator: csc
Sample : AZ16400S02 1/30.10G Inst : Yoda
Misc : soil Multiplr: 33.22

Quant Time: Jun 2 9:56 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	803868	40.00	ppb	0.00
7) Napthalene-D8(IS)	6.23	136	3686795	40.00	ppb	0.00
13) Acenaphthene-D10(IS)	8.22	164	2023880	40.00	ppb	0.00
23) Phenanthrene-D10(IS)	9.95	188	3480747	40.00	ppb	0.00
27) Chrysene-D12(IS)	13.01	240	2600152	40.00	ppb	0.00
32) Perylene-D12(IS)	14.64	264	1688899	40.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.98	112	3854021	4331.15	ppb	-0.06
Spiked Amount 6644.518			Recovery =	65.184%		
3) Phenol-D6 (S)	5.08	99	5534881	4608.35	ppb	-0.03
Spiked Amount 6644.518			Recovery =	69.356%		
8) Nitrobenzene-D5(S)	5.50	82	2381852	2089.78	ppb	0.00
Spiked Amount 3322.259			Recovery =	62.902%		
16) 2-Fluorobiphenyl(S)	7.45	172	2649399	1136.14	ppb	0.00
Spiked Amount 3322.259			Recovery =	34.198%		
22) 2,4,6-Tribromophenol(S)	9.22	330	801930	3930.28	ppb	0.00
Spiked Amount 6644.518			Recovery =	59.151%		
28) Terphenyl-D14(S)	11.74	244	3056058	1575.06	ppb	0.00
Spiked Amount 3322.259			Recovery =	47.409%		
Target Compounds						Qvalue
21) Diethyl phthalate	8.74	149	3580	19.38	ppb	96
26) Di-n-butylphthalate	10.54	149	11369	3.05	ppb	94
30) Bis (2-ethylhexyl) phthala	12.81	149	18683	9.68	ppb	99

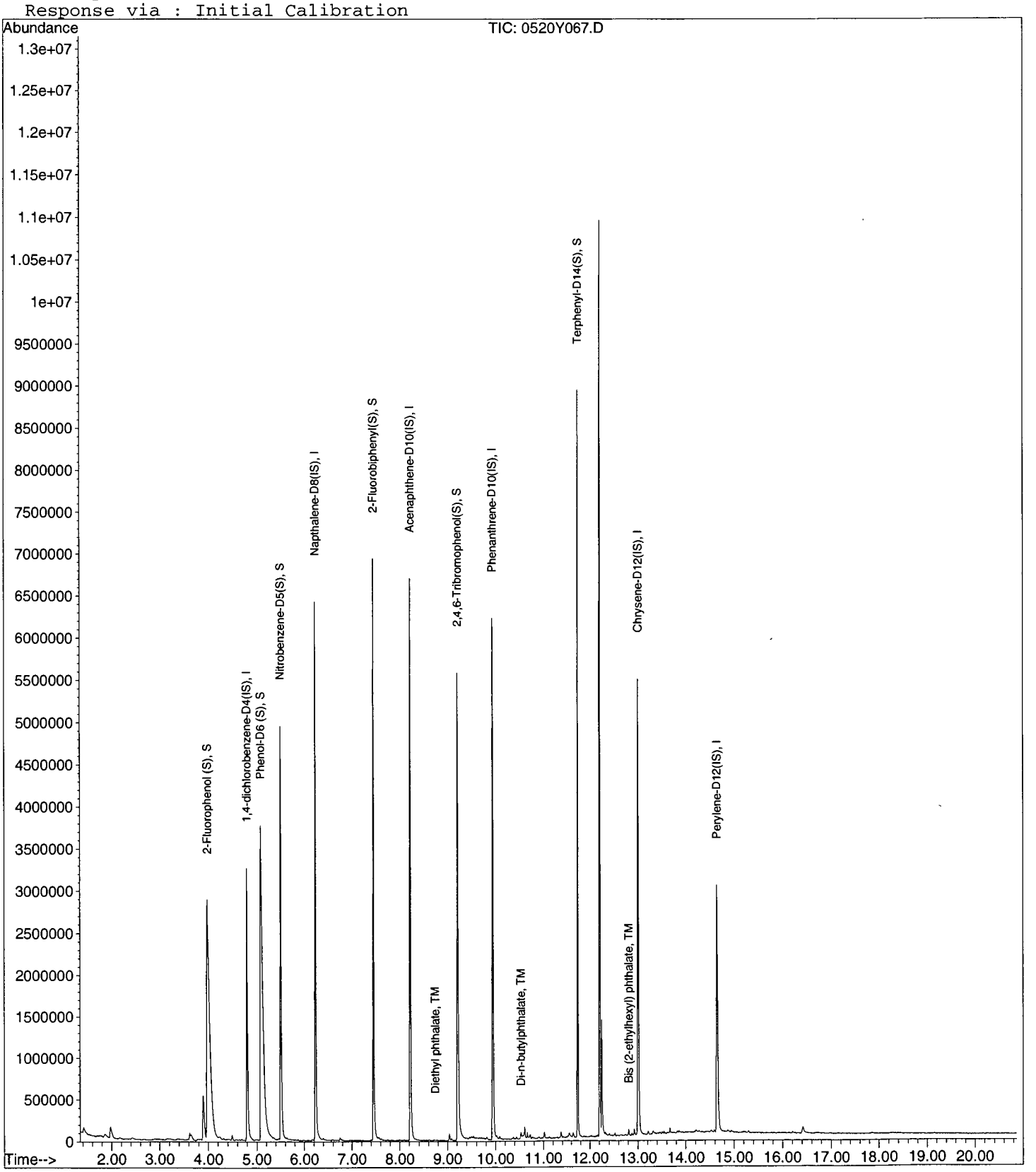
(#) = qualifier out of range (m) = manual integration

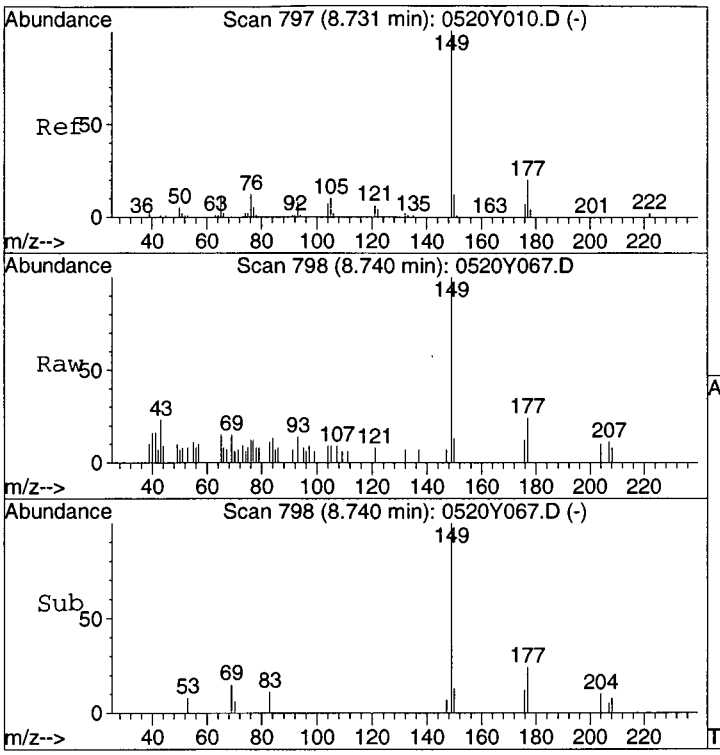
Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y067.D Vial: 67
Acq On : 28 May 15 20:43 Operator: csc
Sample : AZ16400S02 1/30.10G Inst : Yoda
Misc : soil Multiplr: 33.22

Quant Time: Jun 2 9:56 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration

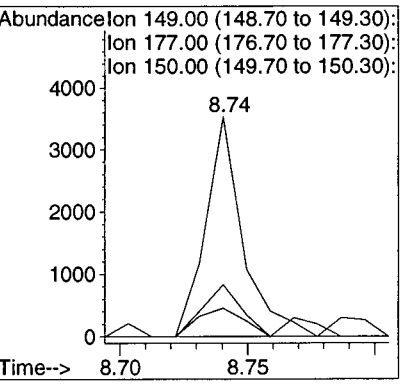


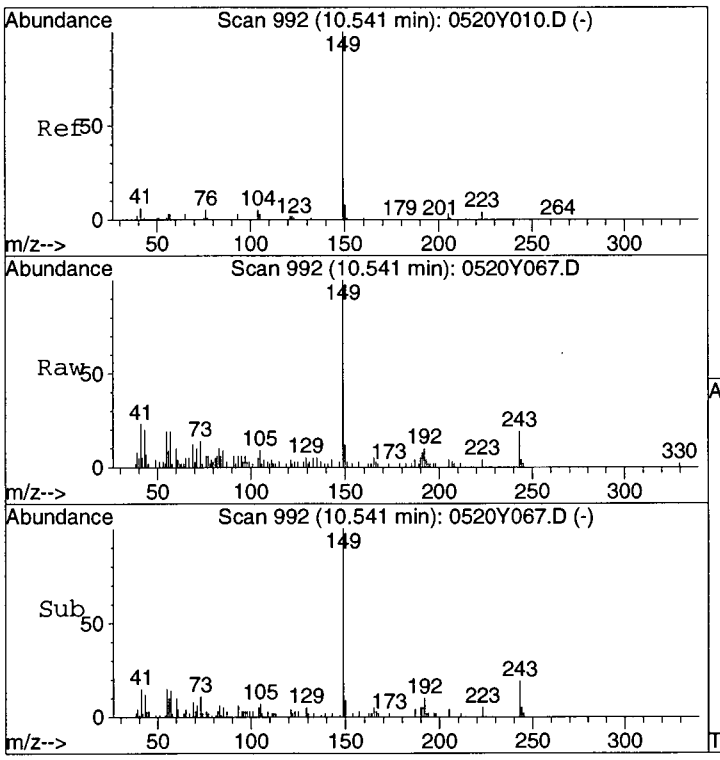


#21
Diethyl phthalate
Concen: 19.38 ppb
RT: 8.74 min Scan# 798
Delta R.T. 0.01 min
Lab File: 0520Y067.D
Acq: 28 May 15 20:43

Tgt Ion:149 Resp: 3580

Ion	Ratio	Lower	Upper
149	100		
177	23.7	15.1	28.0
150	12.9	8.3	15.5

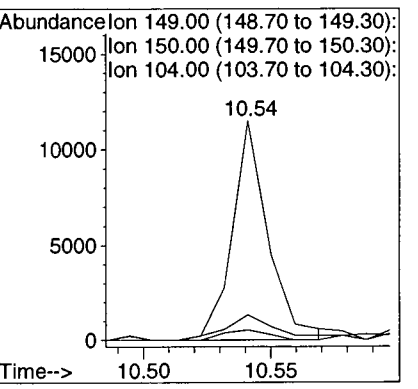


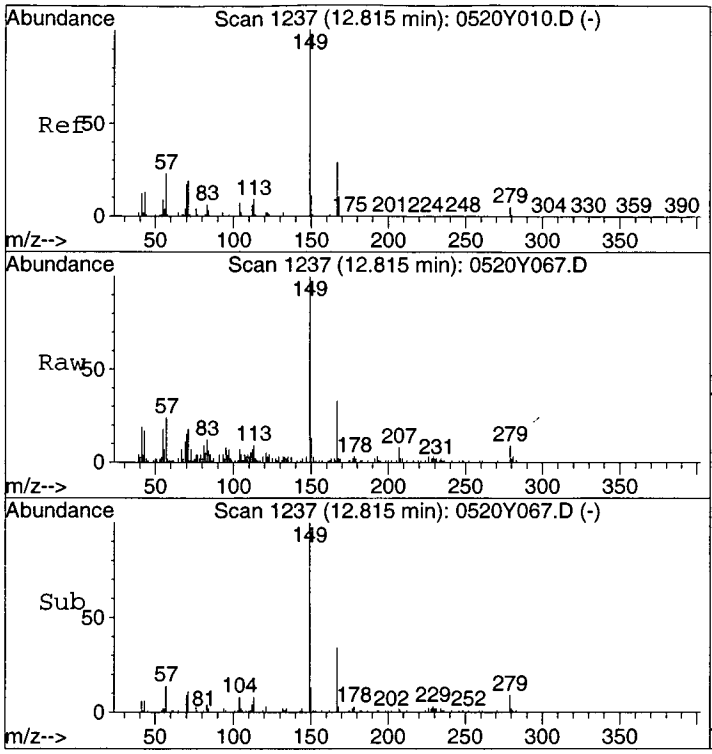


#26
Di-n-butylphthalate
Concen: 3.05 ppb
RT: 10.54 min Scan# 992
Delta R.T. -0.00 min
Lab File: 0520Y067.D
Acq: 28 May 15 20:43

Tgt Ion:149 Resp: 11369

Ion	Ratio	Lower	Upper
149	100		
150	11.6	6.4	11.8
104	4.8	4.3	7.9

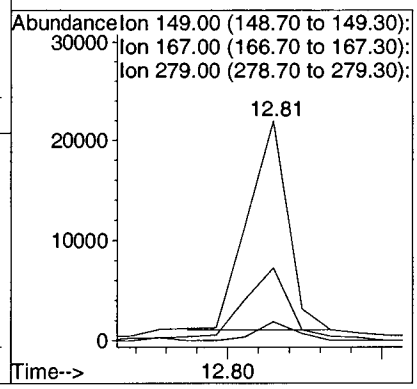




#30
Bis (2-ethylhexyl) phthalate
Concen: 9.68 ppb
RT: 12.81 min Scan# 1237
Delta R.T. -0.00 min
Lab File: 0520Y067.D
Acq: 28 May 15 20:43

Tgt Ion:149 Resp: 18683

Ion	Ratio	Lower	Upper
149	100		
167	33.0	23.1	42.9
279	9.2	7.1	13.3



EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0001

APPL ID: AZ16401

Sample Collection Date: 5/14/2015

QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	1.800 U	7.20	1.800	0.670	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	1.800 U	3.60	1.800	0.610	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	1.800 U	3.60	1.800	0.720	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	1.800 U	3.60	1.800	0.630	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	1.800 U	3.60	1.800	0.670	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	1.800 U	3.60	1.800	0.680	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	55.6	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.8	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	58.0	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	62.2	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	57.2	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	82.4	30-125			%	5/21/2015	5/28/2015

Quant Method: Y0520TT.M
Run #: 0520Y068
Instrument: Yoda
Sequence: Y150520
Dilution Factor: 10
Initials: DA

Printed: 6/2/2015 12:43:01 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y068.D Vial: 68
Acq On : 28 May 15 21:13 Operator: csc
Sample : AZ16401S01 1/30.34G x10 Inst : Yoda
Misc : soil Multiplr: 329.60

Quant Time: Jun 2 9:56 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	894998	40.00	ppb	0.00
7) Napthalene-D8(IS)	6.24	136	3814261	40.00	ppb	0.00
13) Acenaphthene-D10(IS)	8.22	164	2021267	40.00	ppb	0.00
23) Phenanthrene-D10(IS)	9.94	188	3312547	40.00	ppb	0.00
27) Chrysene-D12(IS)	13.00	240	2496644	40.00	ppb	0.00
32) Perylene-D12(IS)	14.64	264	1745225	40.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	4.06	112	384326	3825.54	ppb	0.02
Spiked Amount 6591.958			Recovery =	58.033%		
3) Phenol-D6 (S)	5.16	99	556525	3768.42	ppb	0.05
Spiked Amount 6591.958			Recovery =	57.167%		
8) Nitrobenzene-D5(S)	5.53	82	243726	2050.58	ppb	0.03
Spiked Amount 3295.979			Recovery =	62.215%		
16) 2-Fluorobiphenyl(S)	7.46	172	493788	2103.47	ppb	0.01
Spiked Amount 3295.979			Recovery =	63.819%		
22) 2,4,6-Tribromophenol(S)	9.23	330	59906	3662.25	ppb	0.01
Spiked Amount 6591.958			Recovery =	55.556%		
28) Terphenyl-D14(S)	11.74	244	510303	2717.43	ppb	0.00
Spiked Amount 3295.979			Recovery =	82.447%		

Target Compounds Qvalue

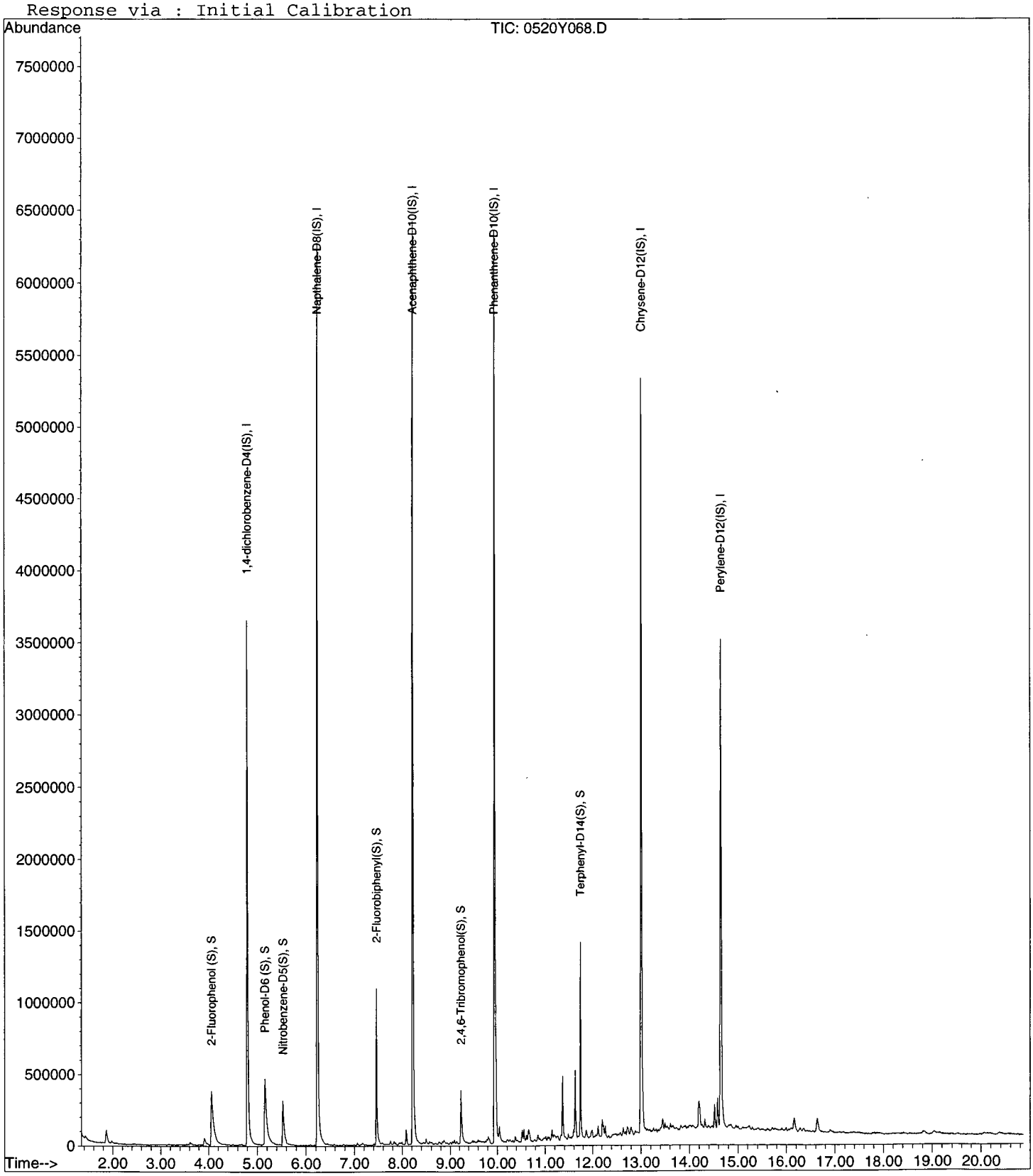
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y068.D Vial: 68
Acq On : 28 May 15 21:13 Operator: csc
Sample : AZ16401S01 1/30.34G x10 Inst : Yoda
Misc : soil Multiplr: 329.60

Quant Time: Jun 2 9:56 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration



EPA 8270D SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0203

APPL ID: AZ16402

Sample Collection Date: 5/14/2015

QCG: #87DJU-150521A-197602

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)								
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	0.230 U	0.89	0.230	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	0.230 U	0.45	0.230	0.076	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	0.230 U	0.45	0.230	0.089	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	0.230 U	0.45	0.230	0.079	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIETHYL PHTHALATE	0.230 U	0.45	0.230	0.084	mg/kg	5/21/2015	5/28/2015
EPA 8270D	DIMETHYL PHTHALATE	0.230 U	0.45	0.230	0.085	mg/kg	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	50.6	35-125			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	34.6 #	45-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	47.7	35-105			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	48.5	35-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: PHENOL (S)	52.5	40-100			%	5/21/2015	5/28/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	42.7	30-125			%	5/21/2015	5/28/2015

= Recovery (or RPD) is outside QC limits.

Quant Method: Y0520TT.M
Run #: 0520Y069
Instrument: Yoda
Sequence: Y150520
Dilution Factor: 1
Initials: DA

Printed: 6/2/2015 12:43:01 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y069.D Vial: 69
Acq On : 28 May 15 21:42 Operator: csc
Sample : AZ16402S01 1/30.17G Inst : Yoda
Misc : soil Multiplr: 33.15

Quant Time: Jun 2 9:57 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	863831	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	3963422	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2183196	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	3917831	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	3123193	40.00	ppb		0.00
32) Perylene-D12(IS)	14.65	264	1878730	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.99	112	3029134	3159.81	ppb		-0.05
Spiked Amount 6629.102			Recovery =	47.666%			
3) Phenol-D6 (S)	5.10	99	4513194	3479.12	ppb		-0.01
Spiked Amount 6629.102			Recovery =	52.483%			
8) Nitrobenzene-D5(S)	5.50	82	1972733	1606.29	ppb		0.00
Spiked Amount 3314.551			Recovery =	48.462%			
16) 2-Fluorobiphenyl(S)	7.45	172	2891541	1146.82	ppb		0.00
Spiked Amount 3314.551			Recovery =	34.600%			
22) 2,4,6-Tribromophenol(S)	9.22	330	737969	3357.00	ppb		0.00
Spiked Amount 6629.102			Recovery =	50.640%			
28) Terphenyl-D14(S)	11.74	244	3305071	1414.84	ppb		0.00
Spiked Amount 3314.551			Recovery =	42.686%			
Target Compounds							Qvalue
21) Diethyl phthalate	8.74	149	4534	19.59	ppb	#	95
30) Bis (2-ethylhexyl) phthala	12.82	149	27326	11.76	ppb		95

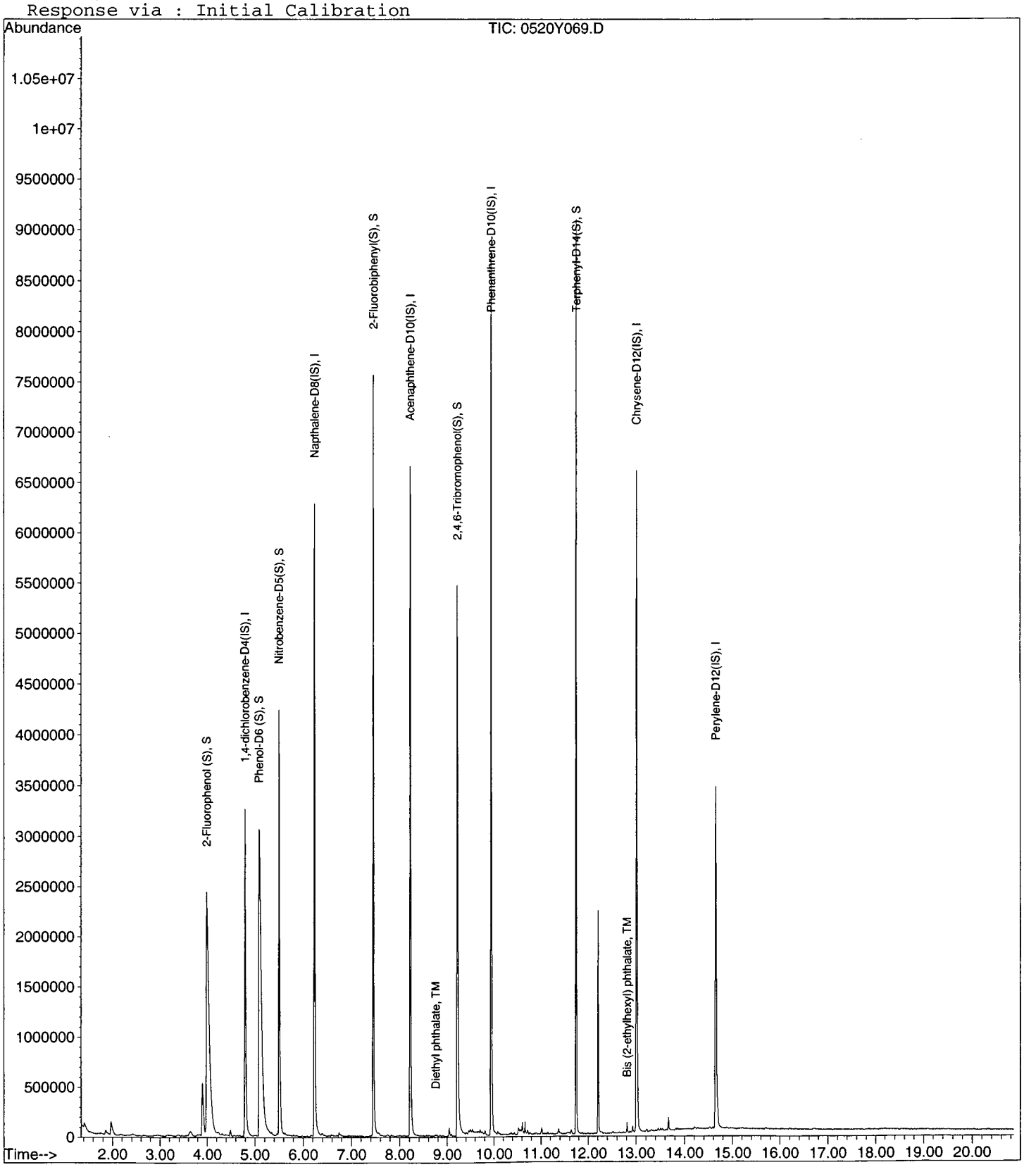
(#) = qualifier out of range (m) = manual integration

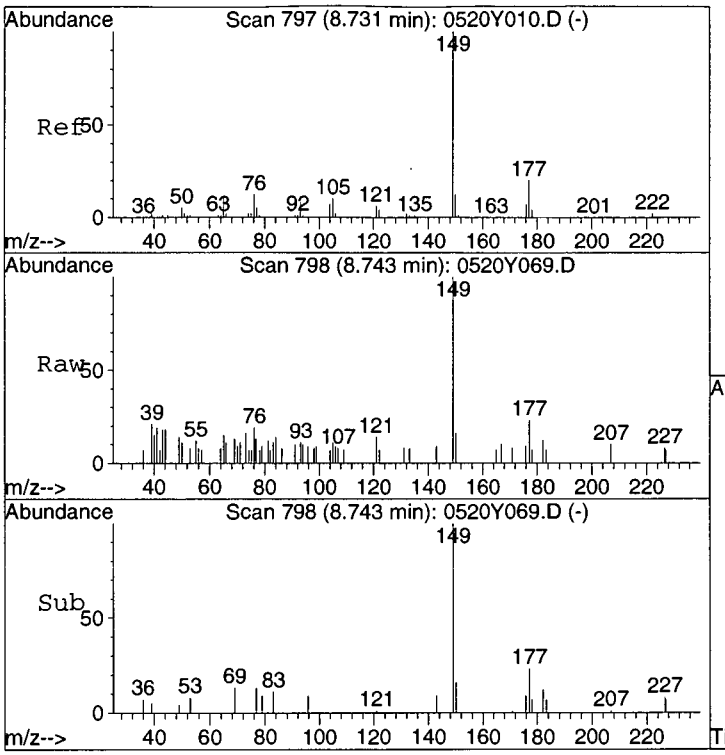
Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y069.D Vial: 69
Acq On : 28 May 15 21:42 Operator: csc
Sample : AZ16402S01 1/30.17G Inst : Yoda
Misc : soil Multiplr: 33.15

Quant Time: Jun 2 9:57 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration

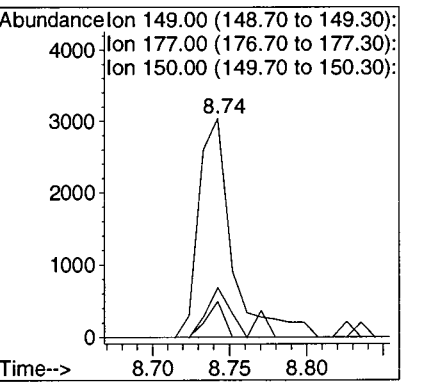


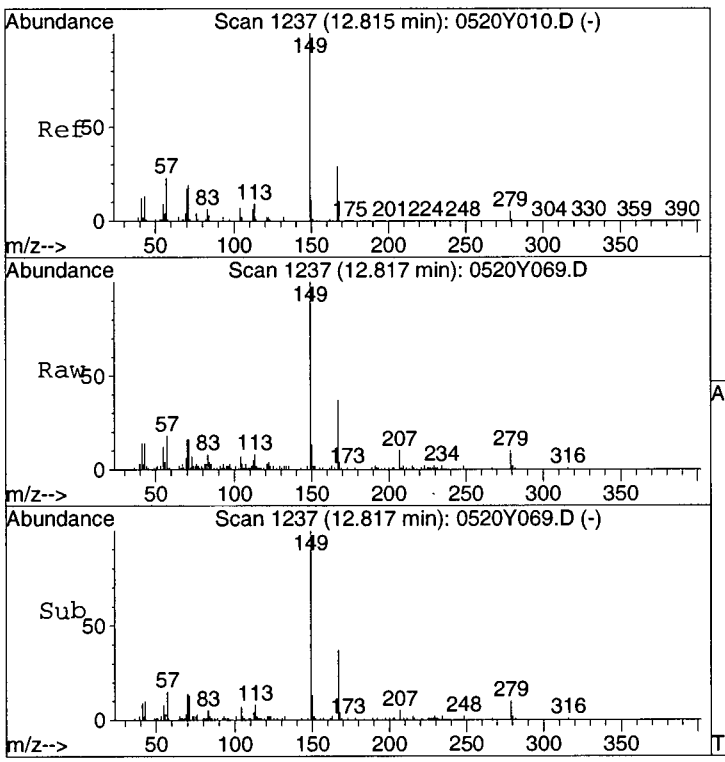


#21
Diethyl phthalate
Concen: 19.59 ppb
RT: 8.74 min Scan# 798
Delta R.T. 0.01 min
Lab File: 0520Y069.D
Acq: 28 May 15 21:42

Tgt Ion:149 Resp: 4534

Ion	Ratio	Lower	Upper
149	100		
177	22.5	15.1	28.0
150	16.3	8.3	15.5#

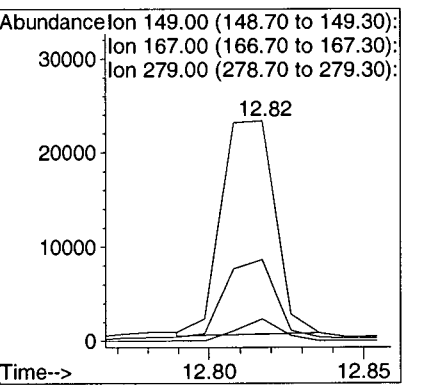




#30
Bis (2-ethylhexyl) phthalate
Concen: 11.76 ppb
RT: 12.82 min Scan# 1237
Delta R.T. 0.00 min
Lab File: 0520Y069.D
Acq: 28 May 15 21:42

Tgt Ion:149 Resp: 27326

Ion	Ratio	Lower	Upper
149	100		
167	36.7	23.1	42.9
279	10.6	7.1	13.3



EPA 8270D WATER

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403
QCG: #87DJU-150520B-197994

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D	BIS (2-ETHYLHEXYL) PHTHALATE	5.00 U	20.0	5.00	2.90	ug/L	05/20/15	06/12/15
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	05/20/15	06/12/15
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	05/20/15	06/12/15
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	05/20/15	06/12/15
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	05/20/15	06/12/15
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	75.0	40-125			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	60.1	50-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	46.7	20-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	65.1	40-110			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: PHENOL (S)	30.2	10-115			%	05/20/15	06/12/15
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	85.6	50-135			%	05/20/15	06/12/15

Quant Method: Y0607TT.M
Run #: 0609Y034
Instrument: Yoda
Sequence: Y150609
Dilution Factor: 1
Initials: MA

Printed: 06/12/15 2:31:17 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y034.D Vial: 34
Acq On : 12 Jun 15 13:38 Operator: csc
Sample : AZ16403W10 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:33 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	620783	40.00000 ppb	0.00
7) Napthalene-D8(IS)	6.23	136	2796161	40.00000 ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1580121	40.00000 ppb	0.00
23) Phenanthrene-D10(IS)	9.93	188	2801928	40.00000 ppb	0.00
27) Chrysene-D12(IS)	13.00	240	2413131	40.00000 ppb	0.01
32) Perylene-D12(IS)	14.65	264	1638456	40.00000 ppb	0.01
System Monitoring Compounds					
2) 2-Fluorophenol (S)	3.91	112	1829229	93.35730 ppb	-0.03
Spiked Amount 200.000			Recovery =	46.679%	
3) Phenol-D6 (S)	5.04	99	1615281	60.42136 ppb	0.02
Spiked Amount 200.000			Recovery =	30.211%	
8) Nitrobenzene-D5(S)	5.50	82	1667951	65.10677 ppb	0.00
Spiked Amount 100.000			Recovery =	65.107%	
16) 2-Fluorobiphenyl(S)	7.44	172	3109841	60.07552 ppb	0.00
Spiked Amount 100.000			Recovery =	60.076%	
22) 2,4,6-Tribromophenol(S)	9.20	330	653548	149.99230 ppb	0.00
Spiked Amount 200.000			Recovery =	74.996%	
28) Terphenyl-D14(S)	11.73	244	4474628	85.56769 ppb	0.00
Spiked Amount 100.000			Recovery =	85.568%	

Target Compounds Qvalue

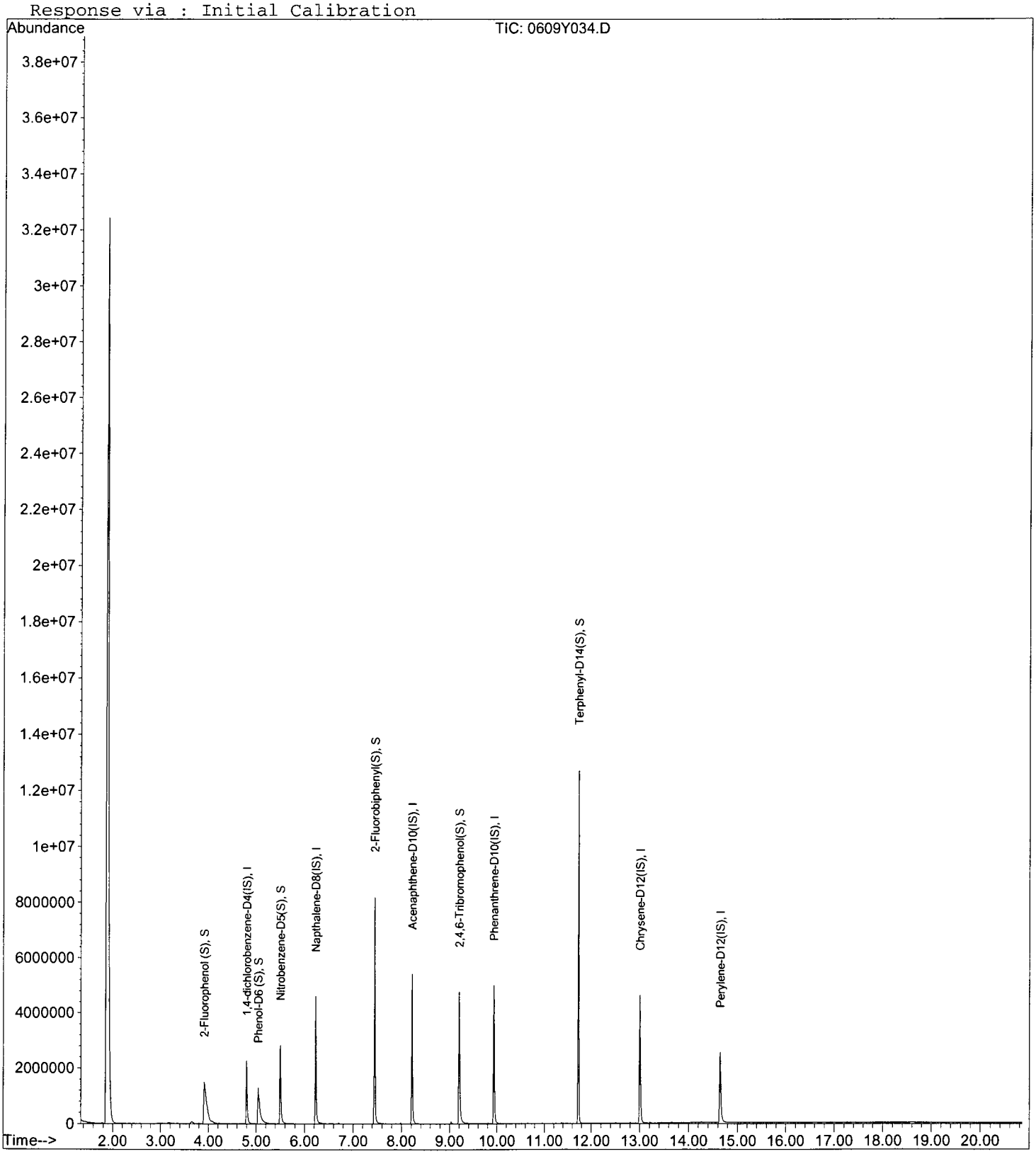
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y034.D Vial: 34
Acq On : 12 Jun 15 13:38 Operator: csc
Sample : AZ16403W10 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:33 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



EPA METHOD 8270D
Semivolatile Organic Compounds
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 76447
Case No: Initial Cal. Date: 5/20/2015
Matrix: Instrument: Yoda
Initials:

		Compound	0520Y006.D 5	0520Y007.D 10	0520Y008.D 20	0520Y009.D 40	0520Y010.D 50	0520Y011.D 60	0520Y012.D 80	0520Y013.D 100			Avg	%RSD		
1	I	1,4-dichlorobenzene-D4(IS)														
2	SL	2-Fluorophenol (S)	1.271	1.563	1.753	1.394	1.441	1.365	1.526	1.482			1.5	9.9	SL	0.994
3	SL	Phenol-D6 (S)	3.382	2.112	2.393	1.845	1.908	1.828	2.061	2.018			2.2	23	SL	0.992
4	*TM	Phenol	2.017	2.265	2.622	2.006	2.131	2.062	2.317	2.269			2.2	9.3	*TM	
5	*TM	1,4-DCB	1.832	2.003	2.305	1.777	1.864	1.769	1.907	1.878			1.9	9.1	*TM	
6	**TM	n-Nitrosodi-n-propylamine	0.7766	0.9711	1.105	0.8531	1.104	1.078	1.211	1.199			1.0	15	**TM	
7	I	Napthalene-D8(IS)														
8	S	Nitrobenzene-D5(S)	0.3446	0.4381	0.4895	0.3927	0.4074	0.3841	0.4259	0.4042			0.41	10	S	
9	*TM	2-Nitrophenol	0.1717	0.2118	0.2471	0.2039	0.2166	0.2034	0.2252	0.2187			0.21	10	*TM	
10	*TM	2,4-Dichlorophenol	0.5642	0.6336	0.7405	0.5908	0.6300	0.5492	0.6545	0.6392			0.63	9.6	*TM	
11	*TM	Hexachlorobutadiene	0.1647	0.1793	0.1992	0.1584	0.1685	0.1522	0.1680	0.1581			0.17	8.8	*TM	
12	*TM	4-Chloro-3-methylphenol	0.0236	0.0254	0.0286	0.0221	0.0227	0.0223	0.0243	0.0232			0.02	8.9	*TM	
13	I	Acenaphthene-D10(IS)														
14	**TMQ	Hexachlorocyclopentadiene	0.0044	0.0290	0.0704	0.1202	0.1586	0.1488	0.1594	0.1694			0.11	60	**TMQ	0.995
15	*TM	2,4,6-Trichlorophenol	0.3268	0.3622	0.4200	0.3384	0.3616	0.3330	0.3735	0.3510			0.36	8.3	*TM	
16	S	2-Fluorobiphenyl(S)	1.437	1.655	1.802	1.453	1.509	1.386	1.554	1.454			1.5	9.0	S	
17	TM	Dimethyl phthalate	1.459	1.611	1.803	1.414	1.555	1.463	1.640	1.600			1.6	8.0	TM	
18	*TM	Acenaphthene	1.245	1.374	1.532	1.223	1.316	1.220	1.367	1.279			1.3	7.9	*TM	
19	**TMQ	2,4-Dinitrophenol	0.0026	0.0242	0.1103	0.1202	0.1438	0.1470	0.1779	0.1805			0.11	59	**TMQ	0.996
20	**TM	4-Nitrophenol	0.3115	0.3716	0.4652	0.3603	0.3844	0.3658	0.4580	0.4232			0.39	13	**TM	
21	TML	Diethyl phthalate	1.375	1.610	1.829	1.464	1.532	1.460	1.656	1.592			1.6	9.0	TML	0.993
22	SL	2,4,6-Tribromophenol(S)	0.1897	0.1306	0.1456	0.1207	0.1282	0.1183	0.1430	0.1379			0.14	16	SL	0.988
23	I	Phenanthrene-D10(IS)														
24	*TM	n-Nitrosodiphenylamine	1.099	1.241	1.437	1.165	1.246	1.167	1.334	1.257			1.2	8.5	*TM	
25	*TMQ	Pentachlorophenol	0.0286	0.0379	0.0481	0.0469	0.0558	0.0560	0.0594	0.0589			0.05	22	*TMQ	0.997
26	TM	Di-n-butylphthalate	1.205	1.443	1.711	1.441	1.518	1.353	1.396	1.318			1.4	11	TM	
27	I	Chrysene-D12(IS)														
28	S	Terphenyl-D14(S)	0.9384	1.075	1.153	0.9403	0.9946	0.9238	0.9484	0.9601			0.99	8.2	S	
29	TM	Butyl benzylphthalate	0.6027	0.7028	0.8216	0.6812	0.7459	0.6870	0.7207	0.7064			0.71	8.7	TM	
30	TM	Bis (2-ethylhexyl) phthalate	0.7826	0.9641	1.153	0.9922	1.056	0.9378	1.017	0.9875			0.99	11	TM	
31	*TM	Di-n-octylphthalate	1.290	1.662	1.776	1.707	1.893	1.665	1.735	1.363			1.6	13	*TM	
32	I	Perylene-D12(IS)														
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y006.D
Acq On : 22 May 15 10:46
Sample : 5ug/ml SVOC 05/22/15
Misc :

Vial: 6
Operator: csc
Inst : Yoda
Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	776980	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3450438	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	1885022	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	3305748	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	2785847	40.00	ppb		0.00
32) Perylene-D12(IS)	14.65	264	1640376	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.12	112	246795	8.57	ppb		0.07
Spiked Amount 200.000			Recovery	=	4.283%		
3) Phenol-D6 (S)	5.19	99	328498	7.39	ppb		0.08
Spiked Amount 200.000			Recovery	=	3.695%		
8) Nitrobenzene-D5(S)	5.52	82	148646	4.19	ppb		0.02
Spiked Amount 100.000			Recovery	=	4.194%		
16) 2-Fluorobiphenyl(S)	7.46	172	338544	4.69	ppb		0.00
Spiked Amount 100.000			Recovery	=	4.692%		
22) 2,4,6-Tribromophenol(S)	9.24	330	44690	9.38	ppb		0.02
Spiked Amount 200.000			Recovery	=	4.689%		
28) Terphenyl-D14(S)	11.75	244	326790	4.73	ppb		0.00
Spiked Amount 100.000			Recovery	=	4.732%		
Target Compounds							Qvalue
4) Phenol	5.20	94	195890	4.56	ppb		96
5) 1,4-DCB	4.81	146	177898	4.78	ppb		96
6) n-Nitrosodi-n-propylamine	5.29	43	75421	3.74	ppb		95
9) 2-Nitrophenol	5.89	139	74035	4.04	ppb		91
10) 2,4-Dichlorophenol	6.52	162	243342	4.51	ppb		99
11) Hexachlorobutadiene	6.36	225	71039	4.89	ppb		98
12) 4-Chloro-3-methylphenol	7.21	107	10165	4.91	ppb	#	17
14) Hexachlorocyclopentadiene	7.17	237	1040	7.78	ppb	#	89
15) 2,4,6-Trichlorophenol	7.58	196	77012	4.56	ppb		94
17) Dimethyl phthalate	7.97	163	343740	4.65	ppb		94
18) Acenaphthene	8.26	154	293434	4.72	ppb		97
19) 2,4-Dinitrophenol	8.65	184	608	6.48	ppb		100
20) 4-Nitrophenol	9.20	65	73389	3.97	ppb		97
21) Diethyl phthalate	8.73	149	324049	4.86	ppb		97
24) n-Nitrosodiphenylamine	10.37	167	454279	4.42	ppb		99
25) Pentachlorophenol	9.98	266	11807	5.71	ppb		88
26) Di-n-butylphthalate	10.54	149	497919	4.23	ppb		98
29) Butyl benzylphthalate	12.27	149	209883	4.25	ppb		89
30) Bis (2-ethylhexyl) phthala	12.81	149	272539	3.97	ppb	#	94
31) Di-n-octylphthalate	13.50	149	449254	3.94	ppb		100

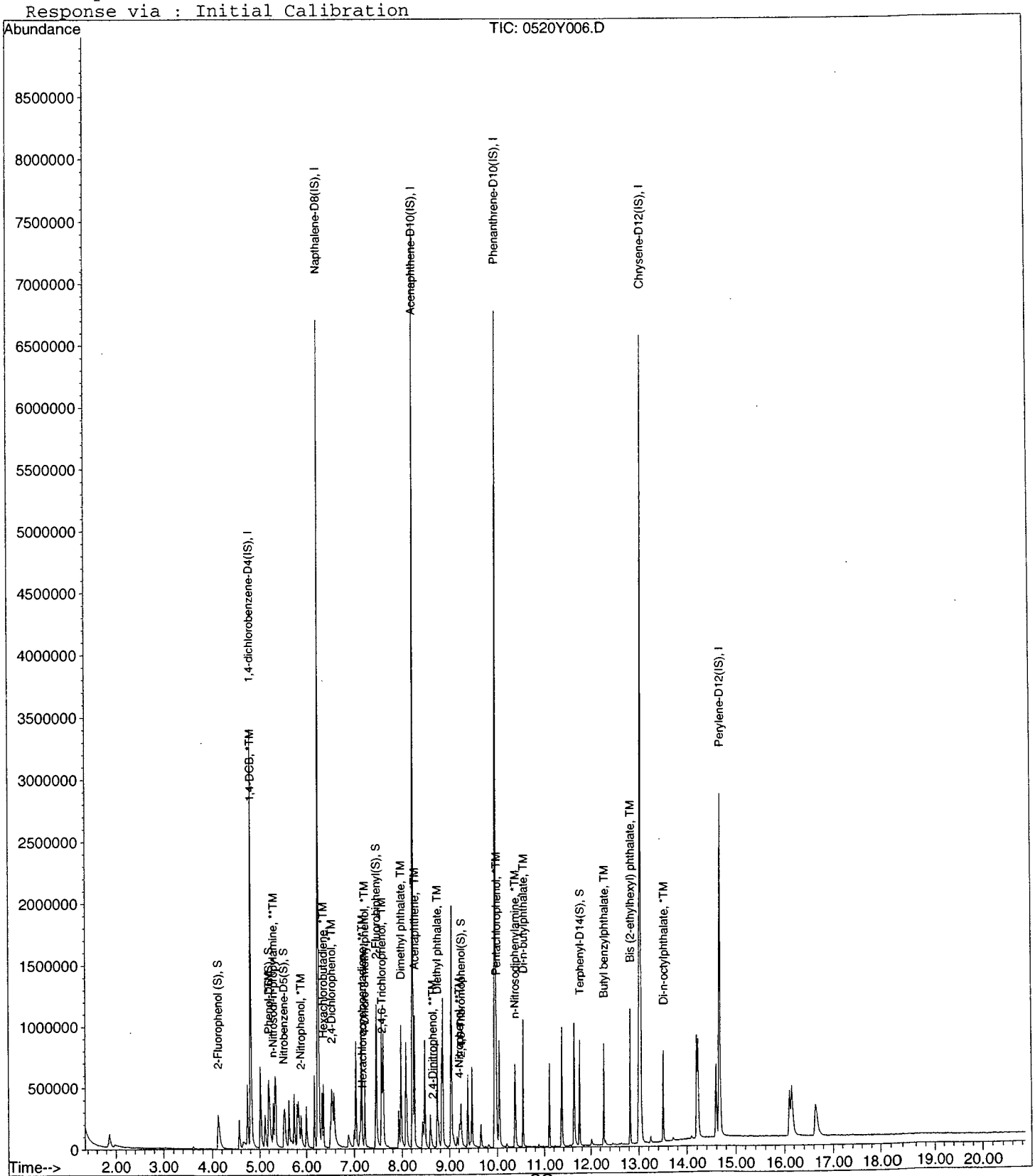
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y006.D Vial: 6
Acq On : 22 May 15 10:46 Operator: csc
Sample : 5ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y007.D Vial: 7
Acq On : 22 May 15 11:15 Operator: csc
Sample : 10ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	711729	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	3204797	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	1853344	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	3328897	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	3013322	40.00	ppb		0.00
32) Perylene-D12(IS)	14.65	264	1886518	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.10	112	556175	21.18	ppb		0.06
Spiked Amount 200.000			Recovery = 10.593%				
3) Phenol-D6 (S)	5.17	99	751709	20.26	ppb		0.06
Spiked Amount 200.000			Recovery = 10.130%				
8) Nitrobenzene-D5(S)	5.51	82	351037	10.66	ppb		0.01
Spiked Amount 100.000			Recovery = 10.665%				
16) 2-Fluorobiphenyl(S)	7.45	172	766903	10.81	ppb		0.00
Spiked Amount 100.000			Recovery = 10.810%				
22) 2,4,6-Tribromophenol(S)	9.23	330	121047	21.54	ppb		0.01
Spiked Amount 200.000			Recovery = 10.771%				
28) Terphenyl-D14(S)	11.74	244	809651	10.84	ppb		0.00
Spiked Amount 100.000			Recovery = 10.838%				
Target Compounds							Qvalue
4) Phenol	5.19	94	403000	10.24	ppb		94
5) 1,4-DCB	4.82	146	356311	10.45	ppb		99
6) n-Nitrosodi-n-propylamine	5.28	43	172784	9.36	ppb		96
9) 2-Nitrophenol	5.87	139	169704	9.98	ppb		97
10) 2,4-Dichlorophenol	6.51	162	507616	10.13	ppb		97
11) Hexachlorobutadiene	6.35	225	143633	10.64	ppb		99
12) 4-Chloro-3-methylphenol	7.21	107	20362	10.58	ppb	#	16
14) Hexachlorocyclopentadiene	7.17	237	13459	9.52	ppb		96
15) 2,4,6-Trichlorophenol	7.57	196	167811	10.10	ppb		94
17) Dimethyl phthalate	7.97	163	746233	10.27	ppb	#	84
18) Acenaphthene	8.25	154	636435	10.41	ppb		98
19) 2,4-Dinitrophenol	8.56	184	11232	8.19	ppb		100
20) 4-Nitrophenol	9.19	65	172161	9.47	ppb		98
21) Diethyl phthalate	8.73	149	745745	10.65	ppb		96
24) n-Nitrosodiphenylamine	10.36	167	1032422	9.98	ppb		99
25) Pentachlorophenol	9.97	266	31530	10.02	ppb		94
26) Di-n-butylphthalate	10.54	149	1200925	10.14	ppb	#	98
29) Butyl benzylphthalate	12.27	149	529447	9.92	ppb		99
30) Bis (2-ethylhexyl) phthala	12.82	149	726265	9.78	ppb		98
31) Di-n-octylphthalate	13.49	149	1251846	10.15	ppb		99

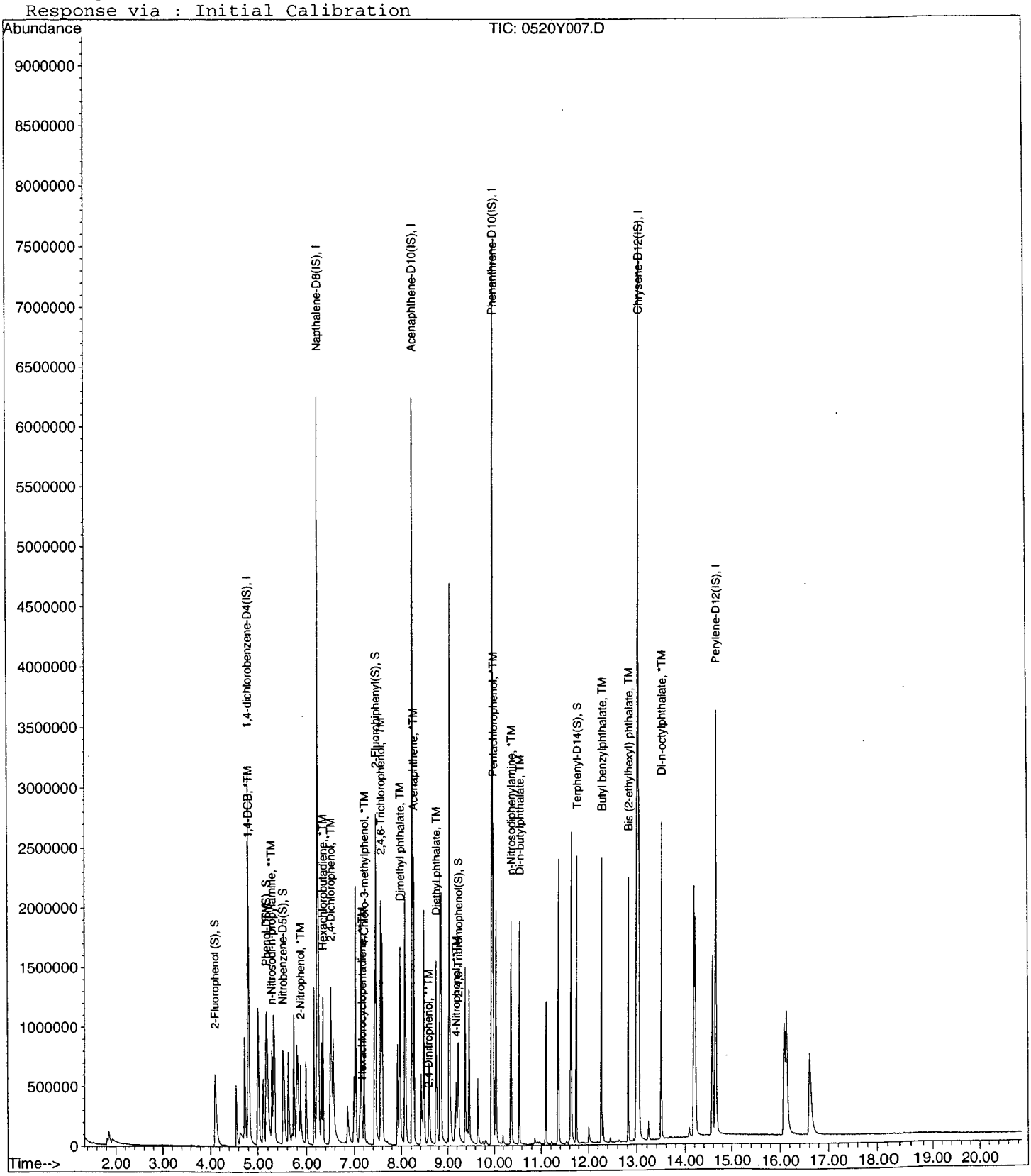
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y007.D Vial: 7
Acq On : 22 May 15 11:15 Operator: csc
Sample : 10ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y008.D Vial: 8
Acq On : 22 May 15 11:45 Operator: csc
Sample : 20ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	536321	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	2460518	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1459456	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	2689962	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2633883	40.00	ppb		0.00
32) Perylene-D12(IS)	14.65	264	1379249	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.08	112	940205	47.62	ppb		0.04
Spiked Amount 200.000			Recovery =	23.810%			
3) Phenol-D6 (S)	5.15	99	1283669	47.43	ppb		0.04
Spiked Amount 200.000			Recovery =	23.717%			
8) Nitrobenzene-D5(S)	5.50	82	602243	23.83	ppb		0.00
Spiked Amount 100.000			Recovery =	23.831%			
16) 2-Fluorobiphenyl(S)	7.45	172	1315033	23.54	ppb		0.00
Spiked Amount 100.000			Recovery =	23.539%			
22) 2,4,6-Tribromophenol(S)	9.23	330	212482	45.01	ppb		0.00
Spiked Amount 200.000			Recovery =	22.508%			
28) Terphenyl-D14(S)	11.74	244	1518105	23.25	ppb		0.00
Spiked Amount 100.000			Recovery =	23.249%			
Target Compounds							Qvalue
4) Phenol	5.17	94	703132	23.72	ppb		96
5) 1,4-DCB	4.82	146	618042	24.05	ppb		99
6) n-Nitrosodi-n-propylamine	5.28	43	296337	21.31	ppb		92
9) 2-Nitrophenol	5.87	139	303943	23.28	ppb		89
10) 2,4-Dichlorophenol	6.51	162	911038	23.69	ppb		96
11) Hexachlorobutadiene	6.35	225	245022	23.63	ppb		99
12) 4-Chloro-3-methylphenol	7.20	107	35158	23.80	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	51348	16.63	ppb		99
15) 2,4,6-Trichlorophenol	7.57	196	306460	23.43	ppb		98
17) Dimethyl phthalate	7.97	163	1315746	23.00	ppb	#	80
18) Acenaphthene	8.25	154	1117896	23.22	ppb		97
19) 2,4-Dinitrophenol	8.53	184	80477	21.77	ppb	#	100
20) 4-Nitrophenol	9.18	65	339484	23.71	ppb		99
21) Diethyl phthalate	8.73	149	1334829	23.52	ppb		95
24) n-Nitrosodiphenylamine	10.36	167	1932983	23.12	ppb		99
25) Pentachlorophenol	9.96	266	64717	20.45	ppb		95
26) Di-n-butylphthalate	10.54	149	2300904	24.04	ppb	#	97
29) Butyl benzylphthalate	12.27	149	1081948	23.19	ppb		99
30) Bis (2-ethylhexyl) phthala	12.82	149	1517895	23.37	ppb		98
31) Di-n-octylphthalate	13.49	149	2339398	21.71	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

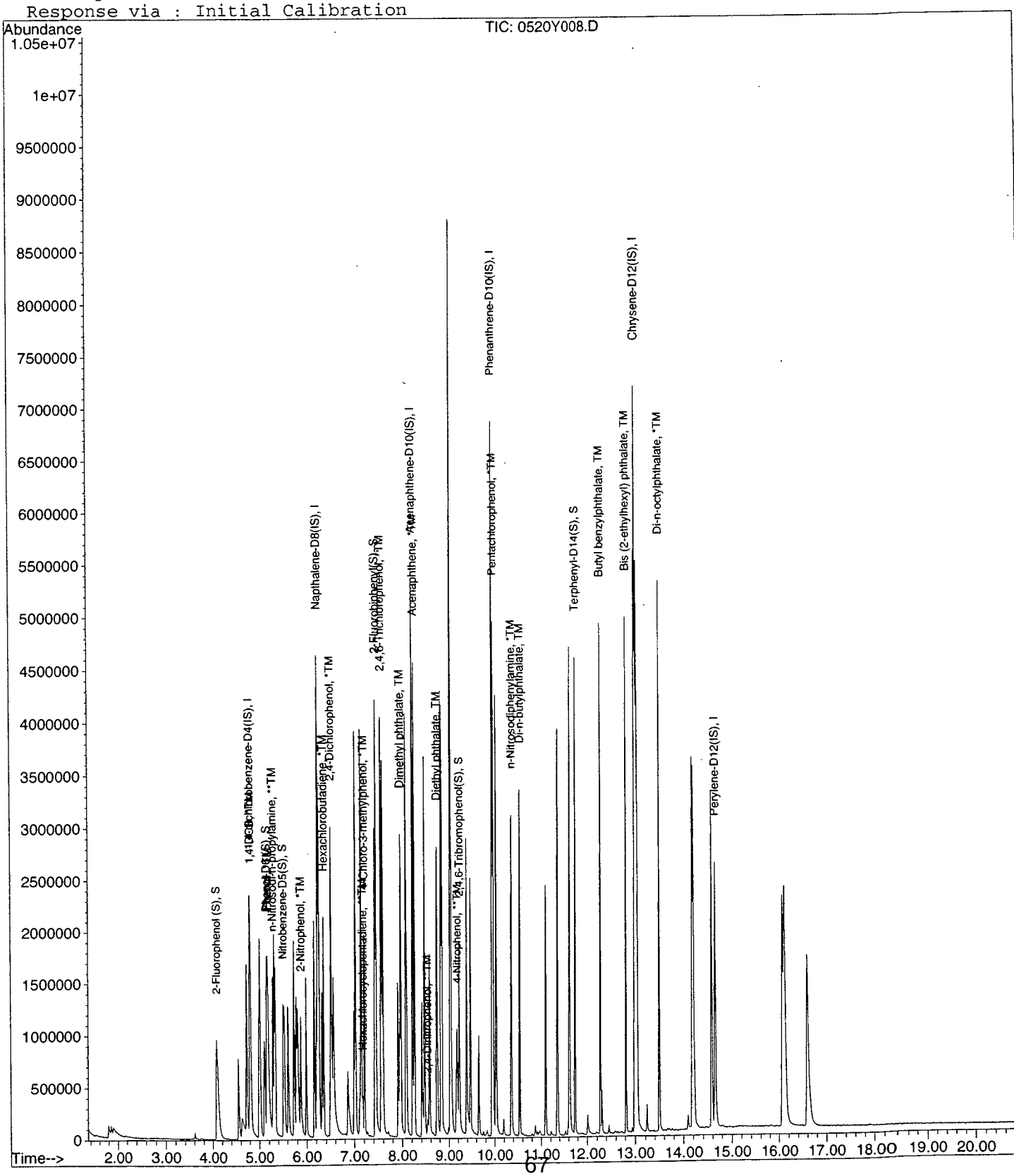
Data File : M:\YODA\DATA\Y150520\0520Y008.D
Acq On : 22 May 15 11:45
Sample : 20ug/ml SVOC 05/22/15
Misc :

Vial: 8
Operator: csc
Inst : Yoda
Multiplr: 1.00

Quant Time: Jun 2 10:47 2015

Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y009.D Vial: 9
Acq On : 22 May 15 12:14 Operator: csc
Sample : 40ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	781016	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3505306	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2036207	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	3623295	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3382326	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2155209	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.05	112	2177862	75.79	ppb		0.00
Spiked Amount 200.000			Recovery =	37.897%			
3) Phenol-D6 (S)	5.12	99	2882043	73.78	ppb		0.01
Spiked Amount 200.000			Recovery =	36.892%			
8) Nitrobenzene-D5(S)	5.50	82	1376418	38.23	ppb		0.00
Spiked Amount 100.000			Recovery =	38.232%			
16) 2-Fluorobiphenyl(S)	7.45	172	2958571	37.96	ppb		0.00
Spiked Amount 100.000			Recovery =	37.957%			
22) 2,4,6-Tribromophenol(S)	9.22	330	491603	73.04	ppb		0.00
Spiked Amount 200.000			Recovery =	36.519%			
28) Terphenyl-D14(S)	11.74	244	3180432	37.93	ppb		0.00
Spiked Amount 100.000			Recovery =	37.929%			
Target Compounds							Qvalue
4) Phenol	5.14	94	1566459	36.29	ppb		99
5) 1,4-DCB	4.81	146	1387561	37.08	ppb		100
6) n-Nitrosodi-n-propylamine	5.29	43	666311	32.90	ppb	#	84
9) 2-Nitrophenol	5.87	139	714614	38.41	ppb		87
10) 2,4-Dichlorophenol	6.49	162	2071011	37.80	ppb		96
11) Hexachlorobutadiene	6.35	225	555140	37.59	ppb		99
12) 4-Chloro-3-methylphenol	7.20	107	77506	36.83	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	244842	37.11	ppb		99
15) 2,4,6-Trichlorophenol	7.56	196	689043	37.76	ppb		95
17) Dimethyl phthalate	7.97	163	2879340	36.07	ppb		92
18) Acenaphthene	8.26	154	2490439	37.08	ppb		97
19) 2,4-Dinitrophenol	8.52	184	244845	37.59	ppb	#	100
20) 4-Nitrophenol	9.17	65	733688	36.72	ppb		98
21) Diethyl phthalate	8.73	149	2980636	37.33	ppb		99
24) n-Nitrosodiphenylamine	10.35	167	4220469	37.48	ppb		99
25) Pentachlorophenol	9.95	266	169881	36.19	ppb		98
26) Di-n-butylphthalate	10.54	149	5221513	40.51	ppb		97
29) Butyl benzylphthalate	12.27	149	2303882	38.45	ppb		92
30) Bis (2-ethylhexyl) phthala	12.82	149	3355899	40.24	ppb	#	94
31) Di-n-octylphthalate	13.49	149	5773216	41.72	ppb		99

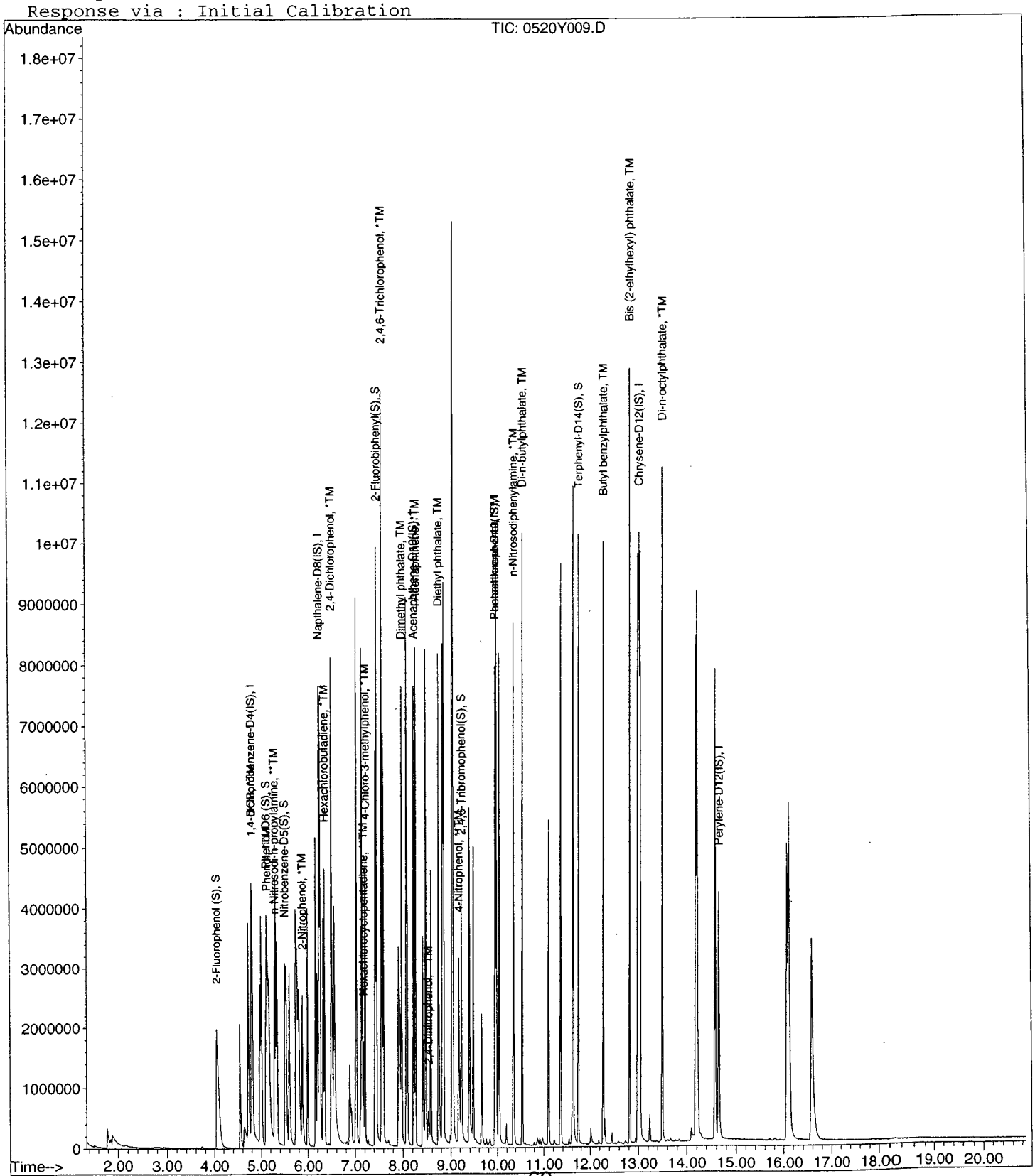
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y009.D Vial: 9
Acq On : 22 May 15 12:14 Operator: csc
Sample : 40ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y010.D Vial: 10
Acq On : 22 May 15 12:43 Operator: csc
Sample : 50ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	789097	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3524029	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2025704	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	3568969	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3316564	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2280872	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.04	112	2842780	97.94	ppb		0.00
Spiked Amount 200.000			Recovery =	48.971%			
3) Phenol-D6 (S)	5.11	99	3764614	95.74	ppb		0.00
Spiked Amount 200.000			Recovery =	47.872%			
8) Nitrobenzene-D5(S)	5.50	82	1794638	49.58	ppb		0.00
Spiked Amount 100.000			Recovery =	49.584%			
16) 2-Fluorobiphenyl(S)	7.45	172	3820599	49.27	ppb		0.00
Spiked Amount 100.000			Recovery =	49.271%			
22) 2,4,6-Tribromophenol(S)	9.22	330	649441	96.19	ppb		0.00
Spiked Amount 200.000			Recovery =	48.094%			
28) Terphenyl-D14(S)	11.74	244	4123162	50.15	ppb		0.00
Spiked Amount 100.000			Recovery =	50.147%			
Target Compounds							Qvalue
4) Phenol	5.13	94	2101573	48.18	ppb		99
5) 1,4-DCB	4.81	146	1838737	48.63	ppb		99
6) n-Nitrosodi-n-propylamine	5.29	43	1088971	53.22	ppb		93
9) 2-Nitrophenol	5.87	139	954247	51.02	ppb		88
10) 2,4-Dichlorophenol	6.49	162	2775088	50.38	ppb		98
11) Hexachlorobutadiene	6.35	225	742040	49.98	ppb		97
12) 4-Chloro-3-methylphenol	7.20	107	99869	47.20	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	401575	54.58	ppb		99
15) 2,4,6-Trichlorophenol	7.56	196	915533	50.44	ppb		96
17) Dimethyl phthalate	7.97	163	3937522	49.58	ppb		96
18) Acenaphthene	8.26	154	3333346	49.88	ppb		97
19) 2,4-Dinitrophenol	8.51	184	364103	50.52	ppb	#	100
20) 4-Nitrophenol	9.17	65	973429	48.97	ppb		98
21) Diethyl phthalate	8.73	149	3880357	48.68	ppb		98
24) n-Nitrosodiphenylamine	10.35	167	5556568	50.09	ppb		98
25) Pentachlorophenol	9.94	266	248731	51.30	ppb		96
26) Di-n-butylphthalate	10.54	149	6772183	53.34	ppb		97
29) Butyl benzylphthalate	12.27	149	3092083	52.63	ppb		88
30) Bis (2-ethylhexyl) phthala	12.81	149	4376747	53.52	ppb	#	92
31) Di-n-octylphthalate	13.49	149	7847240	57.84	ppb		100

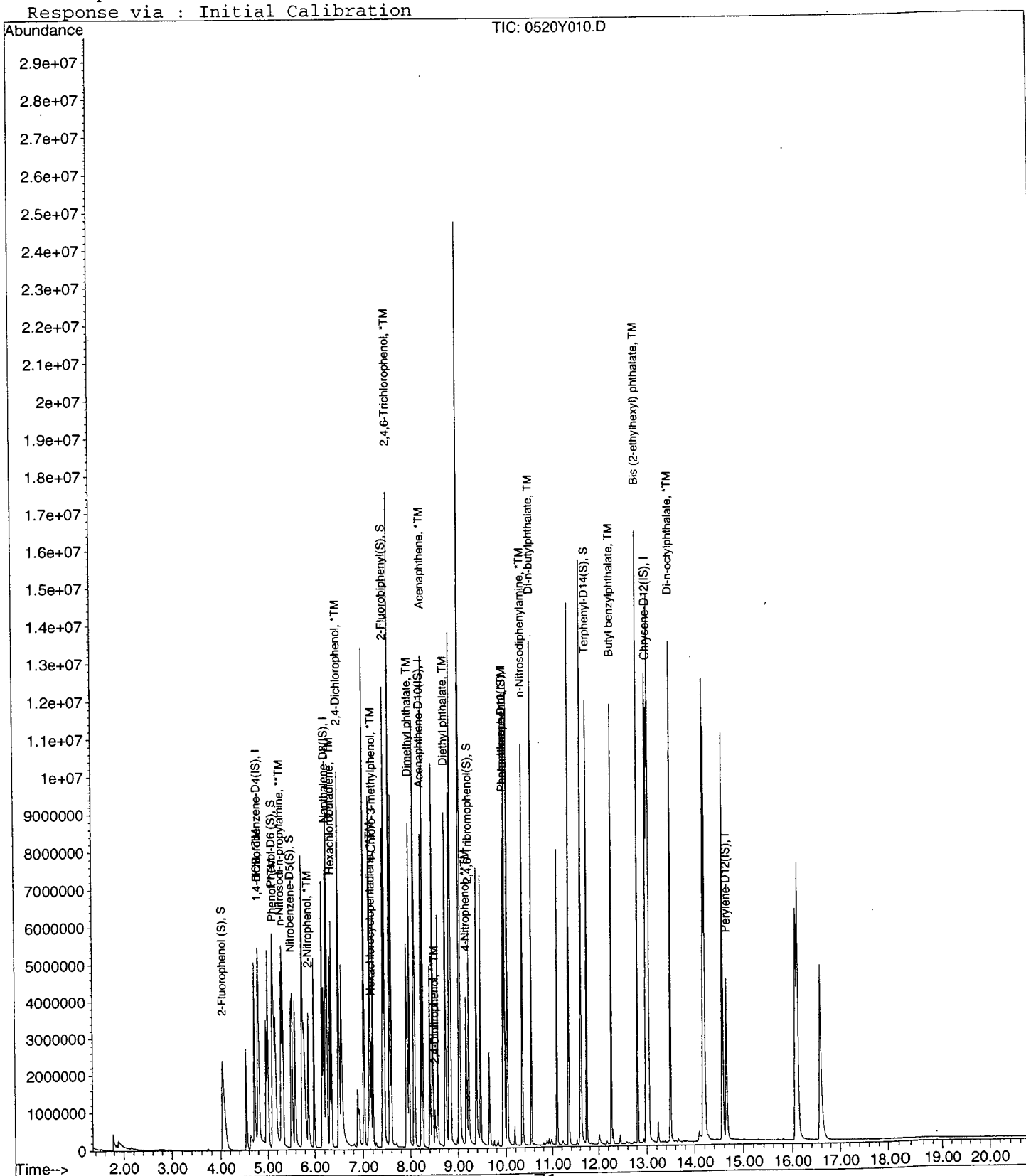
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y010.D Vial: 10
Acq On : 22 May 15 12:43 Operator: csc
Sample : 50ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y011.D Vial: 11
Acq On : 22 May 15 13:12 Operator: csc
Sample : 60ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	745684	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3425046	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2045435	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	3680591	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3637880	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2525912	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.03	112	3054194	111.36	ppb		0.00
Spiked Amount 200.000			Recovery =	55.681%			
3) Phenol-D6 (S)	5.10	99	4088841	110.22	ppb		0.00
Spiked Amount 200.000			Recovery =	55.111%			
8) Nitrobenzene-D5(S)	5.51	82	1973572	56.10	ppb		0.00
Spiked Amount 100.000			Recovery =	56.103%			
16) 2-Fluorobiphenyl(S)	7.45	172	4252492	54.31	ppb		0.00
Spiked Amount 100.000			Recovery =	54.312%			
22) 2,4,6-Tribromophenol(S)	9.22	330	725939	106.22	ppb		0.00
Spiked Amount 200.000			Recovery =	53.109%			
28) Terphenyl-D14(S)	11.75	244	5041242	55.90	ppb		0.00
Spiked Amount 100.000			Recovery =	55.897%			
Target Compounds							Qvalue
4) Phenol	5.13	94	2306105	55.95	ppb		99
5) 1,4-DCB	4.81	146	1978564	55.37	ppb		99
6) n-Nitrosodi-n-propylamine	5.29	43	1205905	62.36	ppb		98
9) 2-Nitrophenol	5.87	139	1044787	57.48	ppb		89
10) 2,4-Dichlorophenol	6.49	162	2821647	52.70	ppb		98
11) Hexachlorobutadiene	6.35	225	781810	54.18	ppb		100
12) 4-Chloro-3-methylphenol	7.21	107	114328	55.60	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	456490	59.93	ppb		98
15) 2,4,6-Trichlorophenol	7.56	196	1021681	55.74	ppb		97
17) Dimethyl phthalate	7.98	163	4489137	55.98	ppb	#	80
18) Acenaphthene	8.26	154	3743229	55.47	ppb		97
19) 2,4-Dinitrophenol	8.51	184	451131	58.75	ppb	#	100
20) 4-Nitrophenol	9.18	65	1122316	55.92	ppb		99
21) Diethyl phthalate	8.74	149	4480539	55.59	ppb		97
24) n-Nitrosodiphenylamine	10.35	167	6444197	56.33	ppb		99
25) Pentachlorophenol	9.94	266	308980	60.45	ppb		96
26) Di-n-butylphthalate	10.54	149	7468640	57.04	ppb		99
29) Butyl benzylphthalate	12.28	149	3748651	58.17	ppb		92
30) Bis (2-ethylhexyl) phthala	12.81	149	5117380	57.05	ppb	#	91
31) Di-n-octylphthalate	13.50	149	9087213	61.06	ppb		96

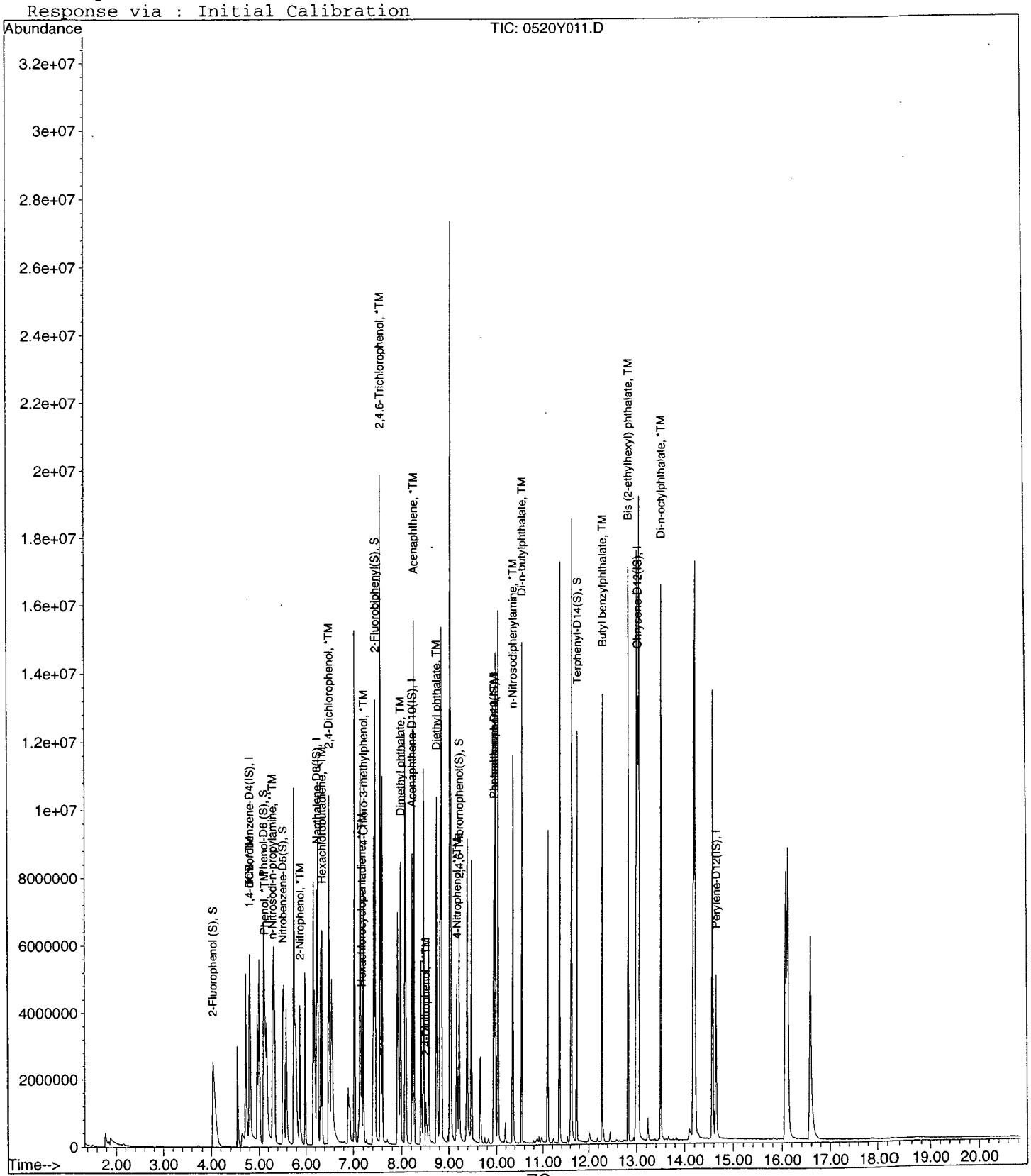
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y011.D Vial: 11
Acq On : 22 May 15 13:12 Operator: csc
Sample : 60ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y012.D Vial: 12
Acq On : 22 May 15 13:42 Operator: csc
Sample : 80ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.79	152	471386	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	2201686	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	1325479	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	2575106	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	2797916	40.00	ppb		0.00
32) Perylene-D12(IS)	14.65	264	2057568	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.04	112	2878109	166.04	ppb		0.00
Spiked Amount 200.000			Recovery =	83.022%			
3) Phenol-D6 (S)	5.10	99	3885528	166.30	ppb		0.00
Spiked Amount 200.000			Recovery =	83.148%			
8) Nitrobenzene-D5(S)	5.50	82	1875307	82.93	ppb		0.00
Spiked Amount 100.000			Recovery =	82.931%			
16) 2-Fluorobiphenyl(S)	7.45	172	4118879	81.18	ppb		0.00
Spiked Amount 100.000			Recovery =	81.178%			
22) 2,4,6-Tribromophenol(S)	9.23	330	757950	169.64	ppb		0.00
Spiked Amount 200.000			Recovery =	84.823%			
28) Terphenyl-D14(S)	11.74	244	5307158	76.51	ppb		0.00
Spiked Amount 100.000			Recovery =	76.512%			
Target Compounds							Qvalue
4) Phenol	5.13	94	2184278	83.83	ppb		98
5) 1,4-DCB	4.81	146	1797847	79.60	ppb		98
6) n-Nitrosodi-n-propylamine	5.29	43	1141626	93.39	ppb	#	86
9) 2-Nitrophenol	5.87	139	991785	84.88	ppb		99
10) 2,4-Dichlorophenol	6.49	162	2881986	83.74	ppb		95
11) Hexachlorobutadiene	6.35	225	739732	79.74	ppb		100
12) 4-Chloro-3-methylphenol	7.20	107	107136	81.05	ppb	#	13
14) Hexachlorocyclopentadiene	7.17	237	422535	79.60	ppb		100
15) 2,4,6-Trichlorophenol	7.56	196	990190	83.36	ppb		99
17) Dimethyl phthalate	7.97	163	4348241	83.68	ppb		94
18) Acenaphthene	8.26	154	3625113	82.90	ppb		96
19) 2,4-Dinitrophenol	8.51	184	471642	83.27	ppb	#	100
20) 4-Nitrophenol	9.17	65	1214197	93.35	ppb		98
21) Diethyl phthalate	8.73	149	4389637	83.77	ppb		98
24) n-Nitrosodiphenylamine	10.35	167	6872196	85.86	ppb		98
25) Pentachlorophenol	9.93	266	306060	82.03	ppb		98
26) Di-n-butylphthalate	10.54	149	7191780	78.50	ppb		97
29) Butyl benzylphthalate	12.27	149	4033100	81.38	ppb		90
30) Bis (2-ethylhexyl) phthala	12.82	149	5693453	82.53	ppb	#	92
31) Di-n-octylphthalate	13.50	149	9711278	84.84	ppb		95

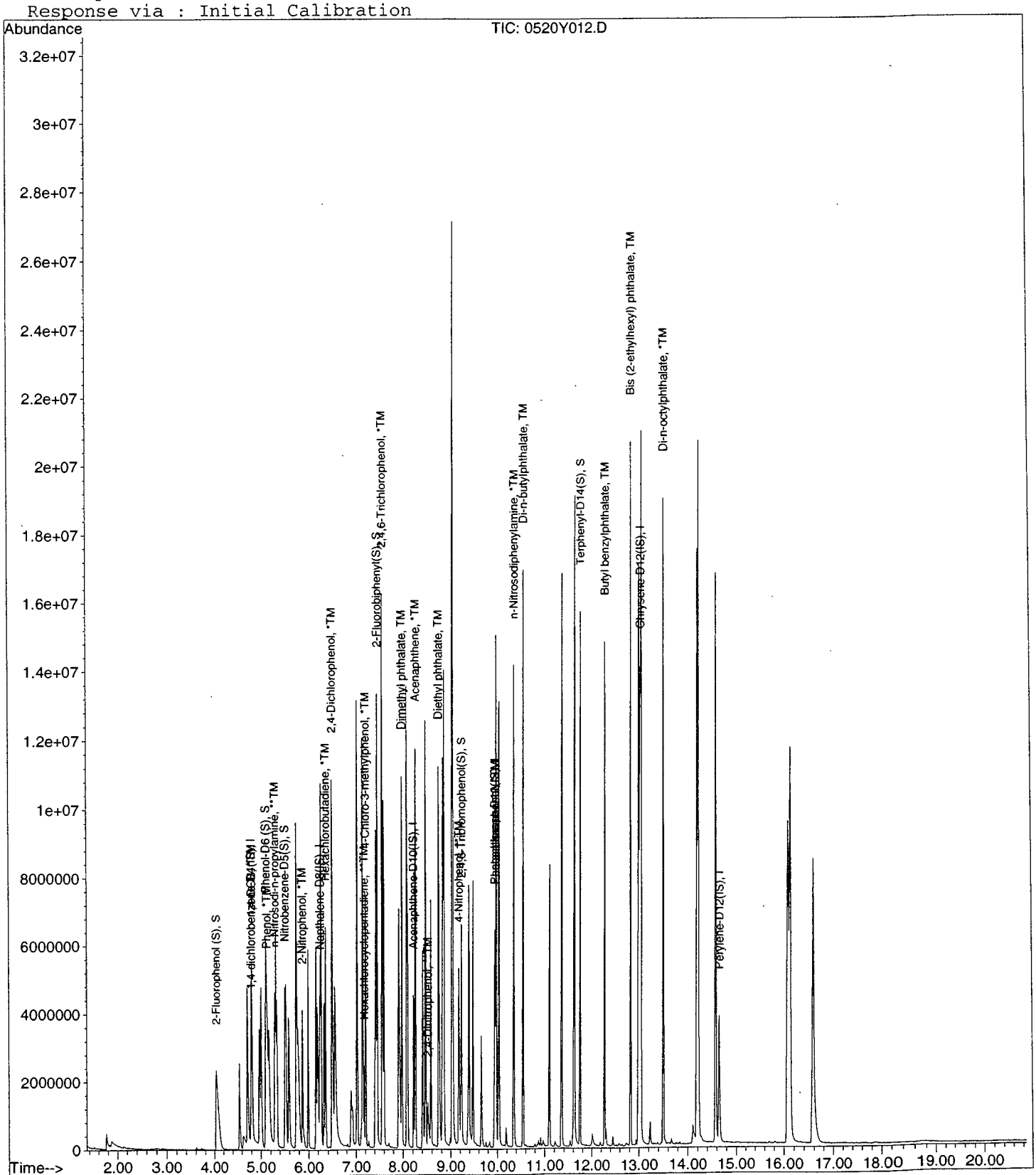
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y012.D Vial: 12
Acq On : 22 May 15 13:42 Operator: csc
Sample : 80ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:47 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y013.D Vial: 13
Acq On : 22 May 15 14:11 Operator: csc
Sample : 100ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:55 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	476024	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	2309482	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	1435509	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	2809978	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3038455	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2240653	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.03	112	3526527	201.49	ppb		-0.02
Spiked Amount 200.000			Recovery = 100.744%				
3) Phenol-D6 (S)	5.09	99	4804030m	203.87	ppb		-0.02
Spiked Amount 200.000			Recovery = 101.937%				
8) Nitrobenzene-D5(S)	5.50	82	2333800	98.39	ppb		0.00
Spiked Amount 100.000			Recovery = 98.390%				
16) 2-Fluorobiphenyl(S)	7.45	172	5217364	94.95	ppb		0.00
Spiked Amount 100.000			Recovery = 94.947%				
22) 2,4,6-Tribromophenol(S)	9.22	330	989432	203.98	ppb		0.00
Spiked Amount 200.000			Recovery = 101.990%				
28) Terphenyl-D14(S)	11.75	244	7293230	96.82	ppb		0.00
Spiked Amount 100.000			Recovery = 96.821%				
Target Compounds							Qvalue
4) Phenol	5.11	94	2700240	102.62	ppb		96
5) 1,4-DCB	4.81	146	2234575	97.97	ppb		96
6) n-Nitrosodi-n-propylamine	5.29	43	1427232	115.62	ppb		98
9) 2-Nitrophenol	5.87	139	1262527	103.01	ppb		87
10) 2,4-Dichlorophenol	6.49	162	3690751	102.24	ppb		95
11) Hexachlorobutadiene	6.35	225	913036	93.83	ppb		99
12) 4-Chloro-3-methylphenol	7.20	107	133875	96.56	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	607791	99.76	ppb		100
15) 2,4,6-Trichlorophenol	7.56	196	1259538	97.91	ppb		98
17) Dimethyl phthalate	7.98	163	5743504	102.06	ppb	#	84
18) Acenaphthene	8.26	154	4588873	96.90	ppb		97
19) 2,4-Dinitrophenol	8.51	184	647728	98.67	ppb	#	100
20) 4-Nitrophenol	9.18	65	1518697	107.82	ppb		98
21) Diethyl phthalate	8.74	149	5715083	100.60	ppb		99
24) n-Nitrosodiphenylamine	10.35	167	8829418	101.10	ppb		98
25) Pentachlorophenol	9.93	266	413809	98.82	ppb		98
26) Di-n-butylphthalate	10.54	149	9256493	92.59	ppb		97
29) Butyl benzylphthalate	12.28	149	5365726	99.70	ppb		93
30) Bis (2-ethylhexyl) phthala	12.82	149	7501525	100.13	ppb		99
31) Di-n-octylphthalate	13.49	149	10350012	83.26	ppb		98

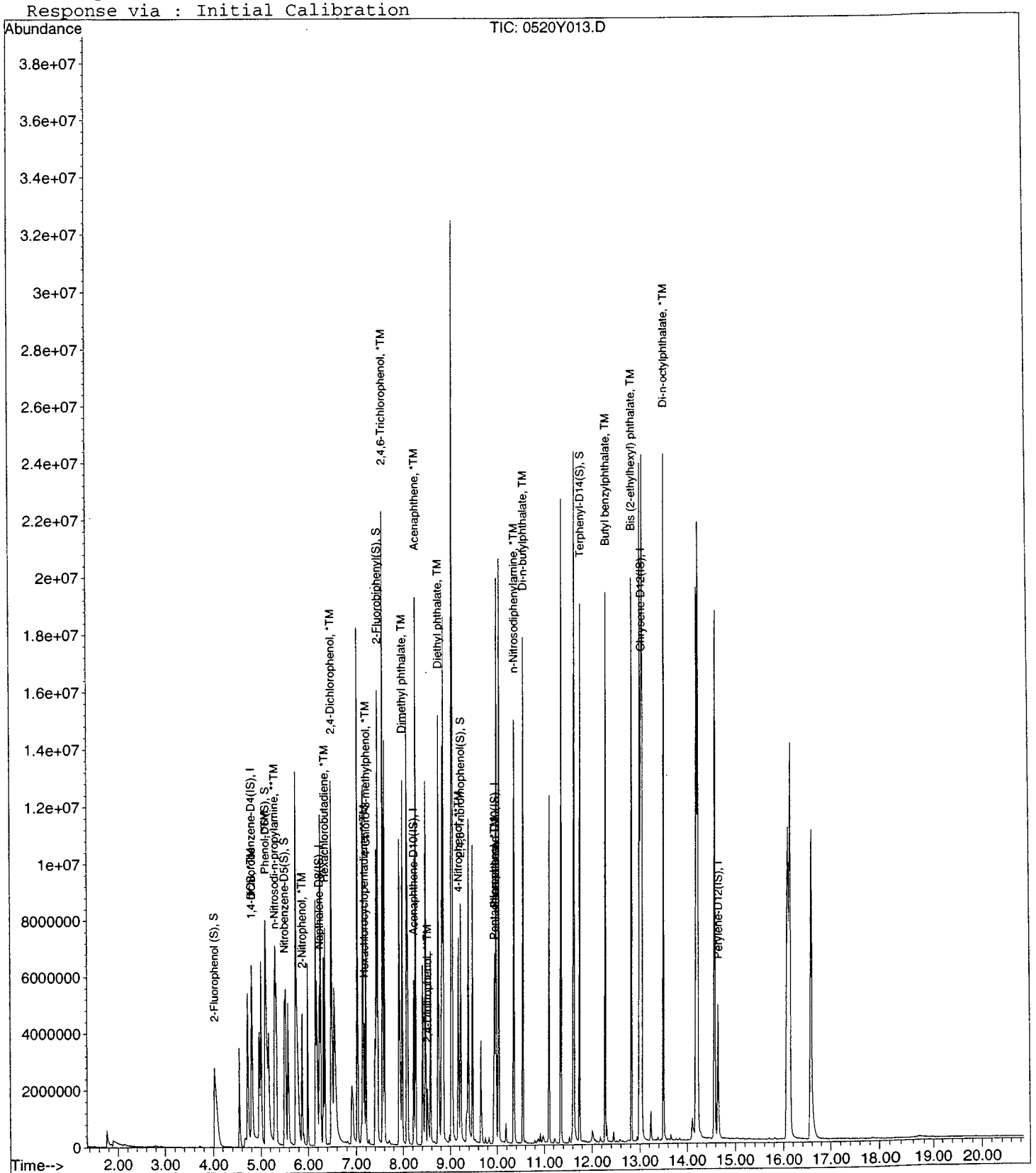
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y013.D Vial: 13
Acq On : 22 May 15 14:11 Operator: csc
Sample : 100ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 10:55 2015 Quant Results File: Y0520TT.RES

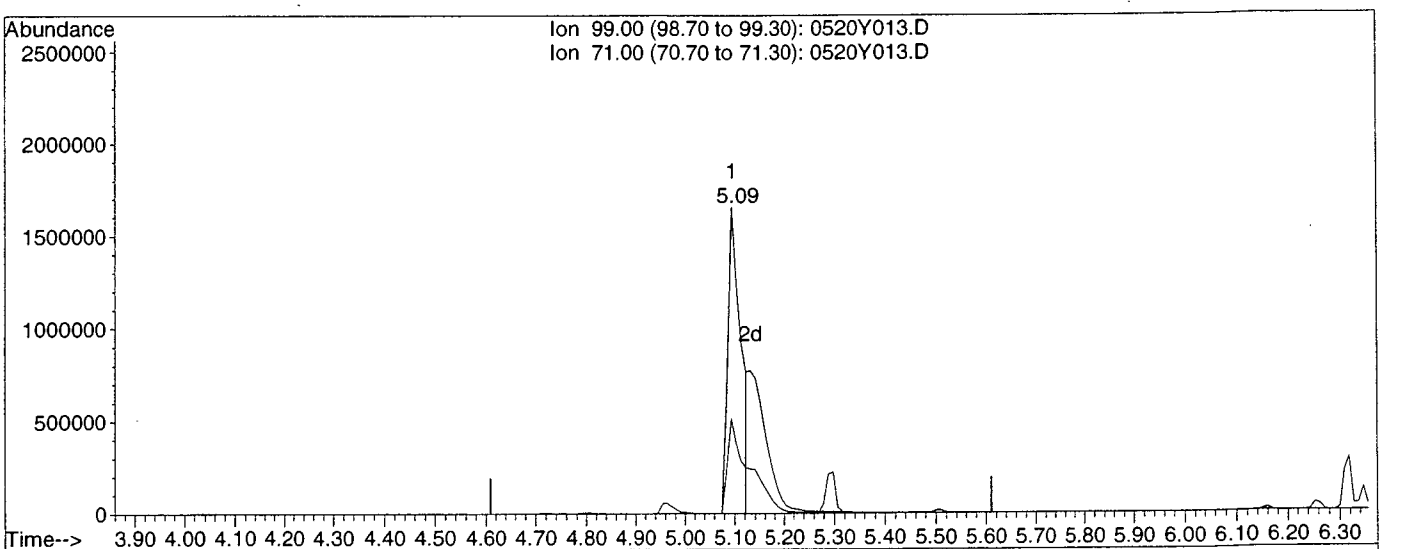
Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Initial Calibration

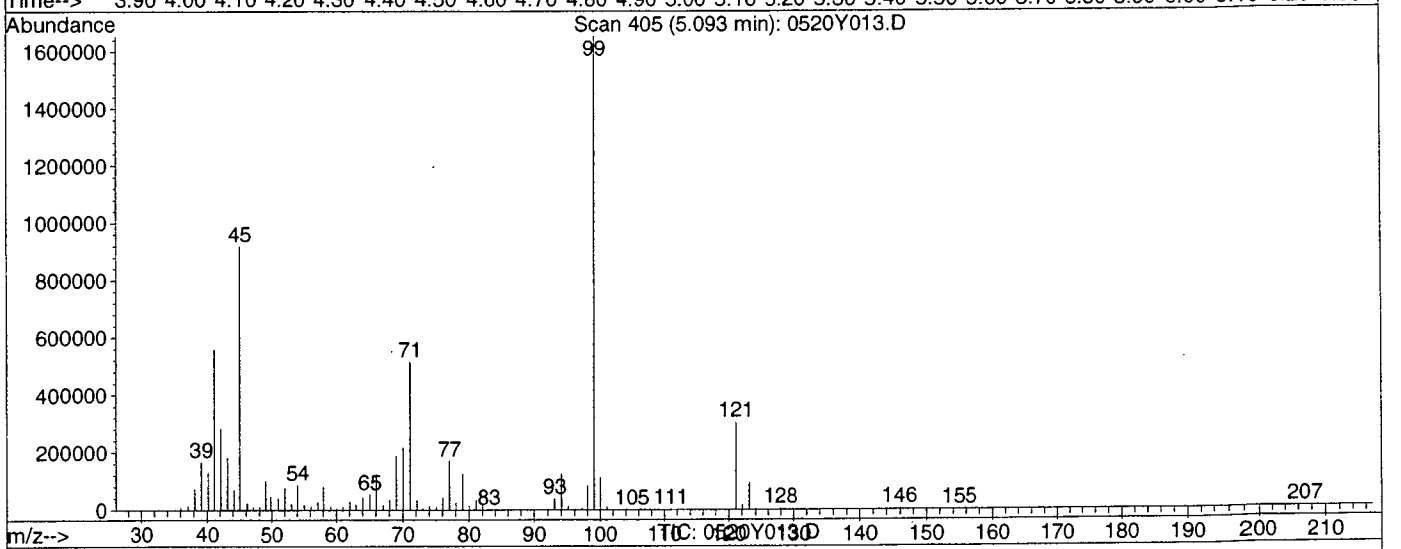


Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y013.D Vial: 13
Acq On : 22 May 15 14:11 Operator: csc
Sample : 100ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Jun 2 10:47 2015 Quant Results File: temp.res

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Multiple Level Calibration





(3) Phenol-D6 (S) (S)

5.09min 122.1724ppb

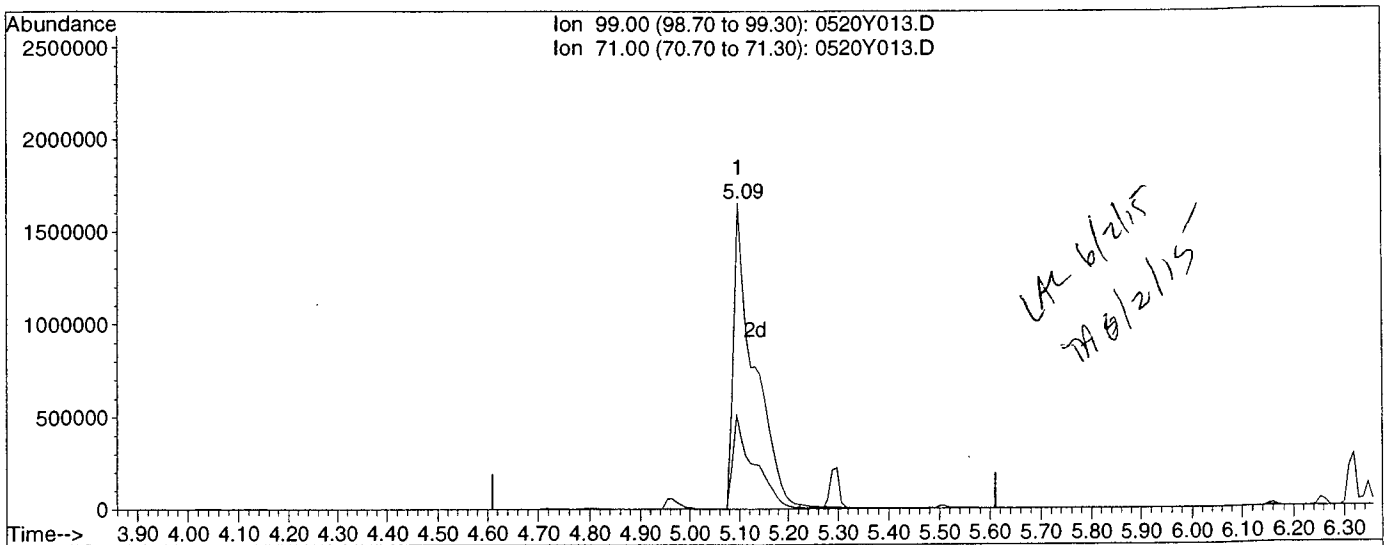
response 2890141

Ion	Exp%	Act%
99.00	100	100
71.00	32.80	36.88
0.00	0.00	0.00
0.00	0.00	0.00

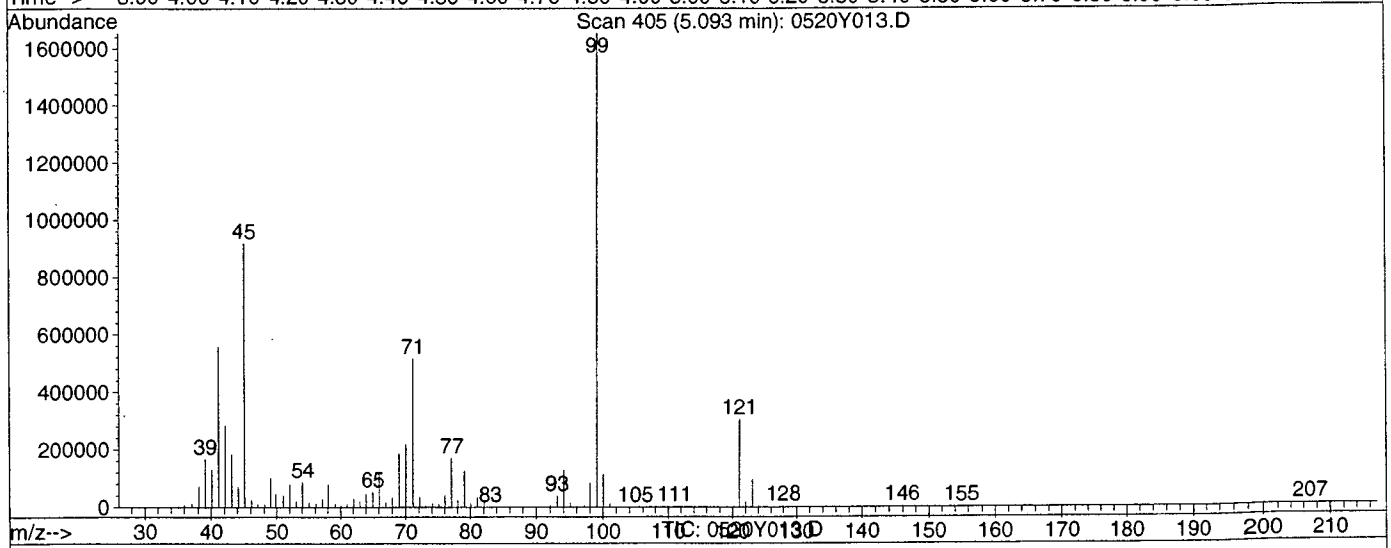
Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y013.D Vial: 13
Acq On : 22 May 15 14:11 Operator: csc
Sample : 100ug/ml SVOC 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00
Quant Time: Jun 2 10:55 2015 Quant Results File: temp.res

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 10:48:52 2015
Response via : Multiple Level Calibration



LAL 6/2/15
TH 6/2/15



(3) Phenol-D6 (S) (S)

5.09min 203.8728ppb m

response 4804030

Ion	Exp%	Act%
99.00	100	100
71.00	32.80	22.19#
0.00	0.00	0.00
0.00	0.00	0.00

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 5/22/2015
Instrument: Yoda
Initial Cal. Date: 5/20/2015
Data File: 0520Y014.D

		Compound	MEAN	CCRF	%D		%Drift	
1	*TM	Phenol	2.211	2.067	6.5	*TM		
2	*TM	1,4-DCB	1.917	2.011	4.9	*TM		
3	**TM	n-Nitrosodi-n-propylamine	1.037	0.8725	16	**TM		
4	*TM	2-Nitrophenol	0.2123	0.2020	4.8	*TM		
5	*TM	2,4-Dichlorophenol	0.6253	0.5989	4.2	*TM		
6	*TM	Hexachlorobutadiene	0.1685	0.1790	6.2	*TM		
7	*TM	4-Chloro-3-methylphenol	0.0240	0.0242	0.85	*TM		
8	**TMQ	Hexachlorocyclopentadiene	0.1075	0.1099	2.2	**TMQ	18	
9	*TM	2,4,6-Trichlorophenol	0.3583	0.3248	9.3	*TM		
10	TM	Dimethyl phthalate	1.568	1.490	5.0	TM		
11	*TM	Acenaphthene	1.320	1.261	4.5	*TM		
12	**TMQ	2,4-Dinitrophenol	0.1133	0.1263	11	**TMQ	8.4	
13	**TM	4-Nitrophenol	0.3925	0.3505	11	**TM		
14	TML	Diethyl phthalate	1.565	1.502	4.0	TML	4.5	
15	*TM	n-Nitrosodiphenylamine	1.243	1.216	2.2	*TM		
16	*TMQ	Pentachlorophenol	0.0489	0.0367	25	*TMQ	29	*
17	TM	Di-n-butylphthalate	1.423	1.386	2.6	TM		
18	TM	Butyl benzylphthalate	0.7085	0.6583	7.1	TM		
19	TM	Bis (2-ethylhexyl) phthalate	0.9863	0.9236	6.4	TM		
20	*TM	Di-n-octylphthalate	1.636	1.704	4.2	*TM		
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
		Average			6.9			

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y014.D Vial: 14
Acq On : 22 May 15 14:41 Operator: csc
Sample : 50ug/ml SVOC SS 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 11:17 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	477080	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	2254044	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	1379161	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	2658514	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	2791249	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2129348	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	0.00	112	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
3) Phenol-D6 (S)	0.00	99	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
8) Nitrobenzene-D5(S)	0.00	82	0	0.00	ppb		
Spiked Amount 100.000			Recovery =	0.000%			
16) 2-Fluorobiphenyl(S)	0.00	172	0	0.00	ppb		
Spiked Amount 100.000			Recovery =	0.000%			
22) 2,4,6-Tribromophenol(S)	0.00	330	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
28) Terphenyl-D14(S)	11.75	244	1177	0.02	ppb		0.00
Spiked Amount 100.000			Recovery =	0.017%			
Target Compounds							Qvalue
4) Phenol	5.17	94	1232753	46.75	ppb		89
5) 1,4-DCB	4.81	146	1199318	52.46	ppb		98
6) n-Nitrosodi-n-propylamine	5.28	43	520296	42.06	ppb		92
9) 2-Nitrophenol	5.87	139	569254	47.59	ppb		89
10) 2,4-Dichlorophenol	6.49	162	1687426	47.89	ppb		96
11) Hexachlorobutadiene	6.35	225	504457	53.12	ppb		100
12) 4-Chloro-3-methylphenol	7.21	107	68238	50.43	ppb	#	15
14) Hexachlorocyclopentadiene	7.17	237	189419	41.04	ppb		100
15) 2,4,6-Trichlorophenol	7.56	196	559947	45.33	ppb		94
17) Dimethyl phthalate	7.97	163	2568426	47.50	ppb		92
18) Acenaphthene	8.26	154	2173065	47.76	ppb		98
19) 2,4-Dinitrophenol	8.52	184	217659	45.81	ppb	#	100
20) 4-Nitrophenol	9.17	65	604234	44.65	ppb		97
21) Diethyl phthalate	8.73	149	2590069	47.74	ppb		100
24) n-Nitrosodiphenylamine	10.35	167	4039348	48.89	ppb		99
25) Pentachlorophenol	9.95	266	121801	35.47	ppb		98
26) Di-n-butylphthalate	10.54	149	4606544	48.70	ppb	#	97
29) Butyl benzylphthalate	12.27	149	2297025	46.46	ppb		88
30) Bis (2-ethylhexyl) phthala	12.81	149	3222474	46.82	ppb	#	93
31) Di-n-octylphthalate	13.49	149	5947012	52.08	ppb		100

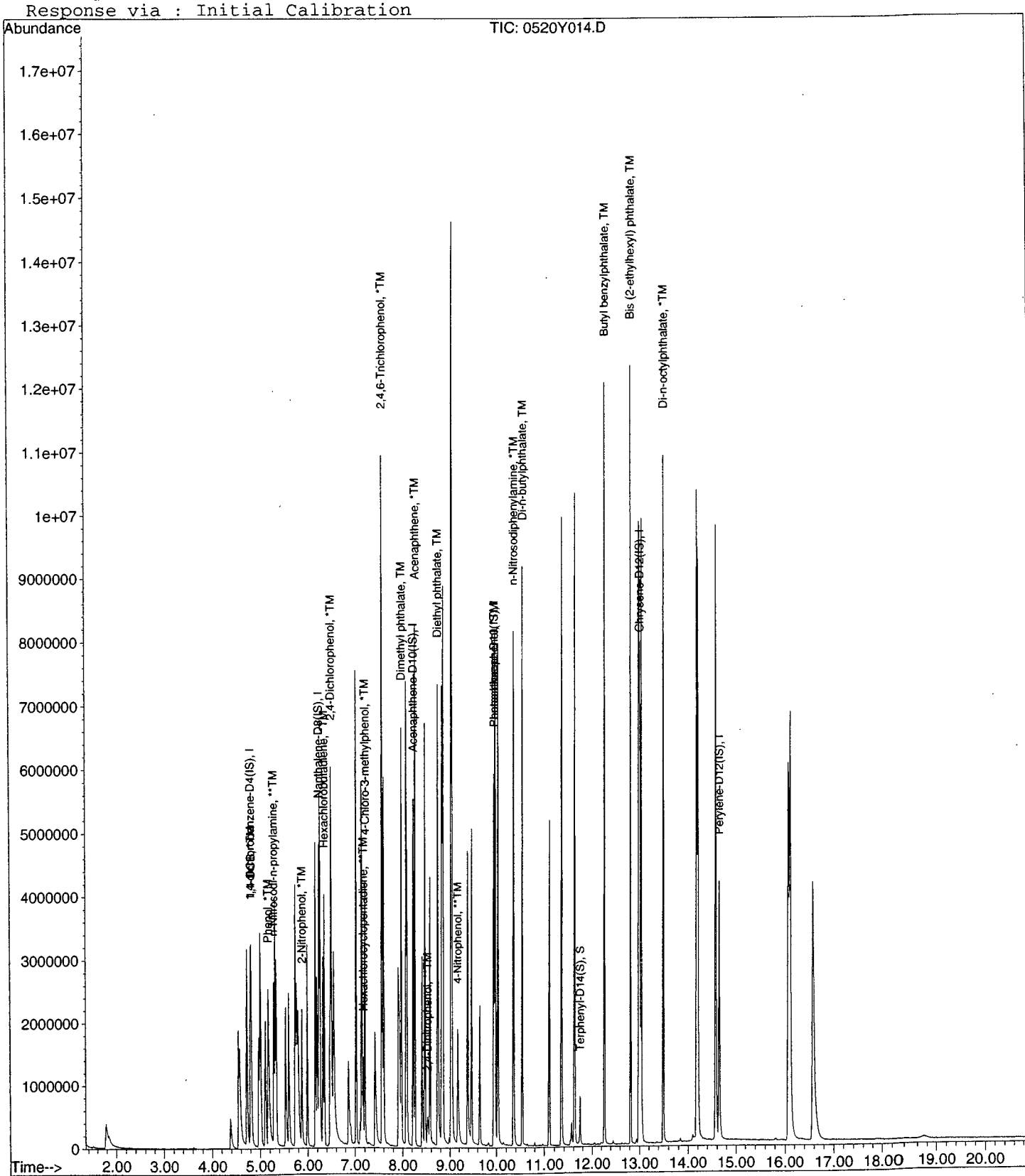
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y014.D Vial: 14
Acq On : 22 May 15 14:41 Operator: csc
Sample : 50ug/ml SVOC SS 05/22/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 11:17 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 5/28/2015
Instrument: Yoda
Initial Cal. Date: 5/20/2015
Data File: 0520Y048.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	SL	2-Fluorophenol (S)	1.474	1.378	6.6	SL	6.4
3	SL	Phenol-D6 (S)	2.194	1.819	17	SL	8.8
4	*TM	Phenol	2.211	2.007	9.2	*TM	
5	*TM	1,4-DCB	1.917	1.794	6.4	*TM	
6	**TM	n-Nitrosodi-n-propylamine	1.037	1.042	0.48	**TM	
7	I	Napthalene-D8(IS)	ISTD			I	
8	S	Nitrobenzene-D5(S)	0.4108	0.3948	3.9	S	
9	*TM	2-Nitrophenol	0.2123	0.2025	4.6	*TM	
10	*TM	2,4-Dichlorophenol	0.6253	0.5768	7.7	*TM	
11	*TM	Hexachlorobutadiene	0.1685	0.1598	5.2	*TM	
12	*TM	4-Chloro-3-methylphenol	0.0240	0.0214	11	*TM	
13	I	Acenaphthene-D10(IS)	ISTD			I	
14	**TMQ	Hexachlorocyclopentadiene	0.1075	0.1627	51	**TMQ	11
15	*TM	2,4,6-Trichlorophenol	0.3583	0.3409	4.9	*TM	
16	S	2-Fluorobiphenyl(S)	1.531	1.500	2.0	S	
17	TM	Dimethyl phthalate	1.568	1.398	11	TM	
18	*TM	Acenaphthene	1.320	1.240	6.0	*TM	
19	**TMQ	2,4-Dinitrophenol	0.1133	0.1283	13	**TMQ	7.3
20	**TM	4-Nitrophenol	0.3925	0.3435	12	**TM	
21	TML	Diethyl phthalate	1.565	1.416	9.5	TML	9.9
22	SL	2,4,6-Tribromophenol(S)	0.1392	0.1158	17	SL	13
23	I	Phenanthrene-D10(IS)	ISTD			I	
24	*TM	n-Nitrosodiphenylamine	1.243	1.157	6.9	*TM	
25	*TMQ	Pentachlorophenol	0.0489	0.0586	20	*TMQ	7.3
26	TM	Di-n-butylphthalate	1.423	1.465	2.9	TM	
27	I	Chrysene-D12(IS)	ISTD			I	
28	S	Terphenyl-D14(S)	0.9916	1.030	3.9	S	
29	TM	Butyl benzylphthalate	0.7085	0.7305	3.1	TM	
30	TM	Bis (2-ethylhexyl) phthalate	0.9863	1.041	5.5	TM	
31	*TM	Di-n-octylphthalate	1.636	1.725	5.4	*TM	
32	I	Perylene-D12(IS)	ISTD			I	
33							
34							
35							
36							
37							
38							
39							
40							
		Average			9.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y048.D Vial: 48
Acq On : 28 May 15 10:54 Operator: csc
Sample : 50ug/ml SVOC 05/28/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 11:26 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	937800	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	4119963	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2216054	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	3645219	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2955804	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	1573179	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.01	112	3229987	93.63	ppb		-0.04
Spiked Amount 200.000			Recovery =	46.817%			
3) Phenol-D6 (S)	5.07	99	4263552	91.18	ppb		-0.04
Spiked Amount 200.000			Recovery =	45.591%			
8) Nitrobenzene-D5(S)	5.50	82	2033215	48.05	ppb		0.00
Spiked Amount 100.000			Recovery =	48.050%			
16) 2-Fluorobiphenyl(S)	7.45	172	4156205	48.99	ppb		0.00
Spiked Amount 100.000			Recovery =	48.995%			
22) 2,4,6-Tribromophenol(S)	9.22	330	641274	87.06	ppb		0.00
Spiked Amount 200.000			Recovery =	43.529%			
28) Terphenyl-D14(S)	11.74	244	3807358	51.96	ppb		0.00
Spiked Amount 100.000			Recovery =	51.958%			
Target Compounds							Qvalue
4) Phenol	5.10	94	2352246	45.38	ppb		98
5) 1,4-DCB	4.82	146	2103462	46.81	ppb		99
6) n-Nitrosodi-n-propylamine	5.29	43	1221727	50.24	ppb		95
9) 2-Nitrophenol	5.86	139	1042994	47.70	ppb		97
10) 2,4-Dichlorophenol	6.49	162	2970632	46.13	ppb		98
11) Hexachlorobutadiene	6.35	225	822742	47.40	ppb		100
12) 4-Chloro-3-methylphenol	7.20	107	110074	44.50	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	450781	55.70	ppb		98
15) 2,4,6-Trichlorophenol	7.55	196	944240	47.57	ppb		98
17) Dimethyl phthalate	7.97	163	3873903	44.59	ppb		96
18) Acenaphthene	8.26	154	3434318	46.98	ppb		97
19) 2,4-Dinitrophenol	8.51	184	355370	46.35	ppb	#	100
20) 4-Nitrophenol	9.17	65	951637	43.76	ppb		99
21) Diethyl phthalate	8.73	149	3923146	45.03	ppb		99
24) n-Nitrosodiphenylamine	10.35	167	5271897	46.53	ppb		98
25) Pentachlorophenol	9.93	266	267156	53.63	ppb		96
26) Di-n-butylphthalate	10.54	149	6673345	51.46	ppb		97
29) Butyl benzylphthalate	12.27	149	2699065	51.55	ppb		90
30) Bis (2-ethylhexyl) phthala	12.82	149	3844926	52.76	ppb	#	93
31) Di-n-octylphthalate	13.49	149	6371887	52.69	ppb		100

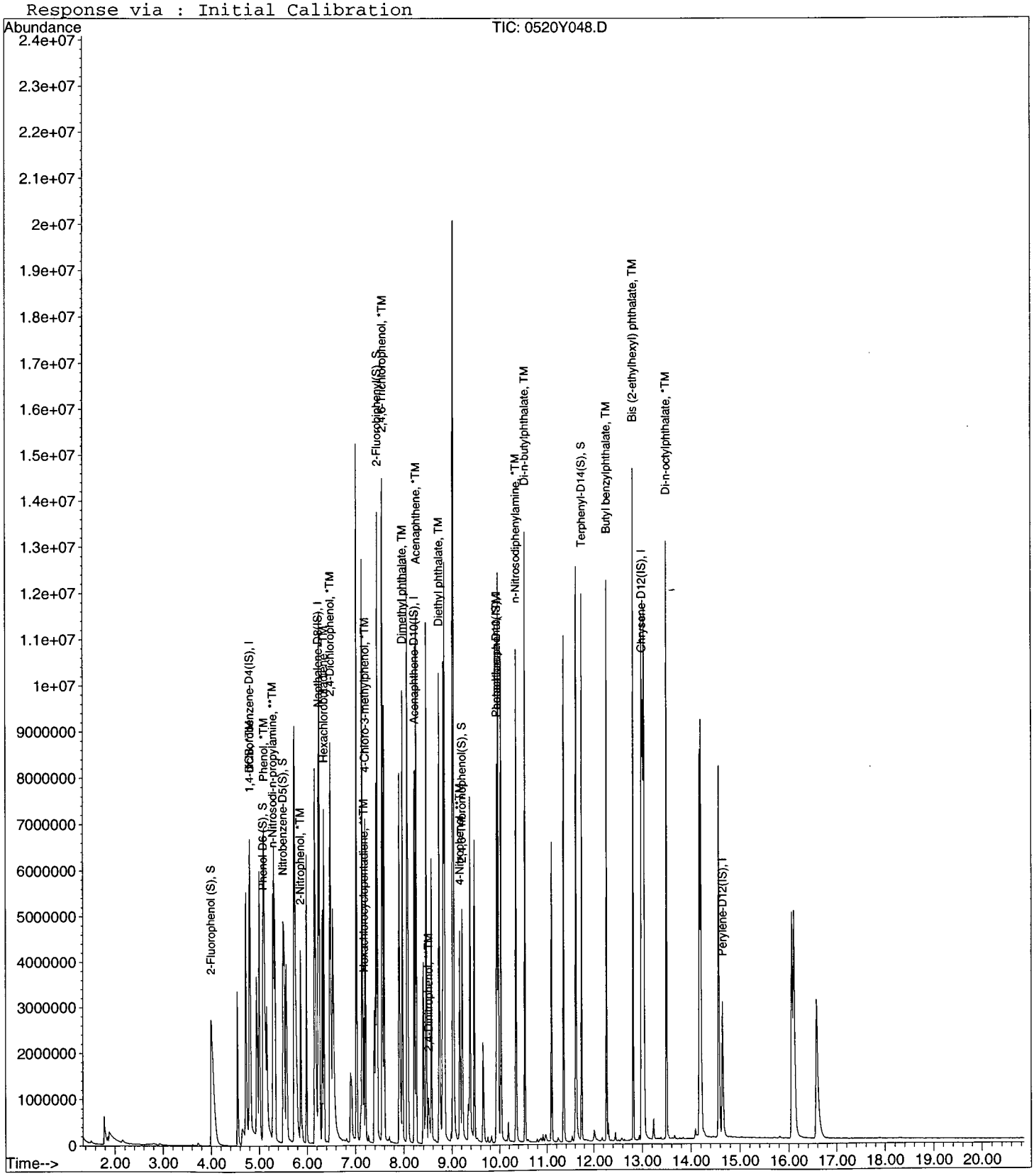
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y048.D Vial: 48
Acq On : 28 May 15 10:54 Operator: csc
Sample : 50ug/ml SVOC 05/28/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 2 11:26 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Tue Jun 02 11:00:10 2015
Response via : Initial Calibration



Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 76447
Case No: Initial Cal. Date: 06/09/15
Matrix: Instrument: Yoda
Initials: MA

			0609Y003 D	0609Y004.D	0609Y005.D	0609Y006.D	0609Y007.D	0609Y008.D	0609Y009 D	0609Y010.D						
		Compound	5	10	20	40	50	60	80	100			Avg	%RSD		
1	I	1,4-dichlorobenzene-D4(IS)														
2	S	2-Fluorophenol (S)	1.153	1.148	1.308	1.264	1.303	1.332	1.324	1.269			1.3	5.8	S	
3	SL	Phenol-D6 (S)	3.079	1.600	1.688	1.639	1.690	1.753	1.756	1.703			1.9	27	SL	0.998
4	*TM	Phenol	1.922	1.755	1.979	1.923	1.987	2.064	2.037	1.969			2.0	4.8	*TM	
5	*TM	1,4-DCB	1.713	1.582	1.769	1.733	1.788	1.800	1.827	1.761			1.7	4.3	*TM	
6	**TML	n-Nitrosodi-n-propylamine	0.7432	0.7002	0.8477	0.8764	1.042	1.088	1.062	1.047			0.93	17	**TML	0.995
7	I	Napthalene-D8(IS)														
8	S	Nitrobenzene-D5(S)	0.3260	0.3330	0.3668	0.3761	0.3812	0.3831	0.3908	0.3749			0.37	6.5	S	
9	*TM	2-Nitrophenol	0.1663	0.1659	0.1896	0.1960	0.2058	0.2107	0.2099	0.2014			0.19	9.4	*TM	
10	*TML	2,4-Dichlorophenol	0.5356	0.3678	0.3561	0.3500	0.3284	0.3434	0.3283	0.3101			0.36	20	*TML	0.996
11	*TM	Hexachlorobutadiene	0.1548	0.1446	0.1593	0.1583	0.1657	0.1668	0.1643	0.1618			0.16	4.5	*TM	
12	*TM	4-Chloro-3-methylphenol	0.0220	0.0200	0.0225	0.0234	0.0229	0.0231	0.0221	0.0216			0.02	4.8	*TM	
13	I	Acenaphthene-D10(IS)														
14	**TMQ	Hexachlorocyclopentadiene	0.0020	0.0136	0.0473	0.0985	0.1318	0.1517	0.1787	0.1915			0.10	72	**TMQ	0.996
15	*TM	2,4,6-Trichlorophenol	0.3123	0.2984	0.3348	0.3383	0.3448	0.3519	0.3505	0.3464			0.33	5.8	*TM	
16	S	2-Fluorobiphenyl(S)	1.245	1.259	1.296	1.348	1.320	1.329	1.371	1.316			1.3	3.3	S	
17	TM	Dimethyl phthalate	1.389	1.263	1.371	1.422	1.413	1.438	1.464	1.464			1.4	4.7	TM	
18	*TM	Acenaphthene	1.237	1.084	1.159	1.196	1.234	1.245	1.264	1.249			1.2	5.0	*TM	
19	**TMQ	2,4-Dinitrophenol	0.0114	0.0118	0.0775	0.1138	0.1307	0.1427	0.1595	0.1633			0.10	61	**TMQ	0.997
20	**TM	4-Nitrophenol	0.3201	0.3141	0.3471	0.3616	0.3650	0.3695	0.3691	0.3623			0.35	6.3	**TM	
21	TM	Diethyl phthalate	1.388	1.227	1.360	1.416	1.424	1.424	1.468	1.444			1.4	5.4	TM	
22	SL	2,4,6-Tribromophenol(S)	0.1557	0.0892	0.0981	0.1024	0.1051	0.1075	0.1121	0.1126			0.11	18	SL	0.998
23	I	Phenanthrene-D10(IS)														
24	*TM	n-Nitrosodiphenylamine	1.074	0.9883	1.076	1.115	1.135	1.160	1.193	1.169			1.1	6.0	*TM	
25	*TMQ	Pentachlorophenol	0.0271	0.0286	0.0304	0.0486	0.0501	0.0528	0.0579	0.0587			0.04	30	*TMQ	0.998
26	TM	Di-n-butylphthalate	1.203	1.119	1.289	1.352	1.414	1.450	1.277	1.131			1.3	9.6	TM	
27	I	Chrysene-D12(IS)														
28	S	Terphenyl-D14(S)	0.8025	0.8528	0.8637	0.8799	0.8641	0.8812	0.8987	0.8916			0.87	3.5	S	
29	TM	Butyl benzylphthalate	0.5887	0.5663	0.6499	0.6927	0.6866	0.6924	0.7007	0.6964			0.66	8.1	TM	
30	TM	Bis (2-ethylhexyl) phthalate	0.8125	0.7709	0.8810	0.9648	0.9845	1.013	1.009	0.9995			0.93	10	TM	
31	*TM	Di-n-octylphthalate	1.382	1.355	1.531	1.691	1.744	1.770	1.617	1.391			1.6	11	*TM	
32	I	Perylene-D12(IS)														
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y003.D Vial: 3
Acq On : 9 Jun 15 14:14 Operator: csc
Sample : 5ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 11 14:36 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jun 11 14:03:57 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

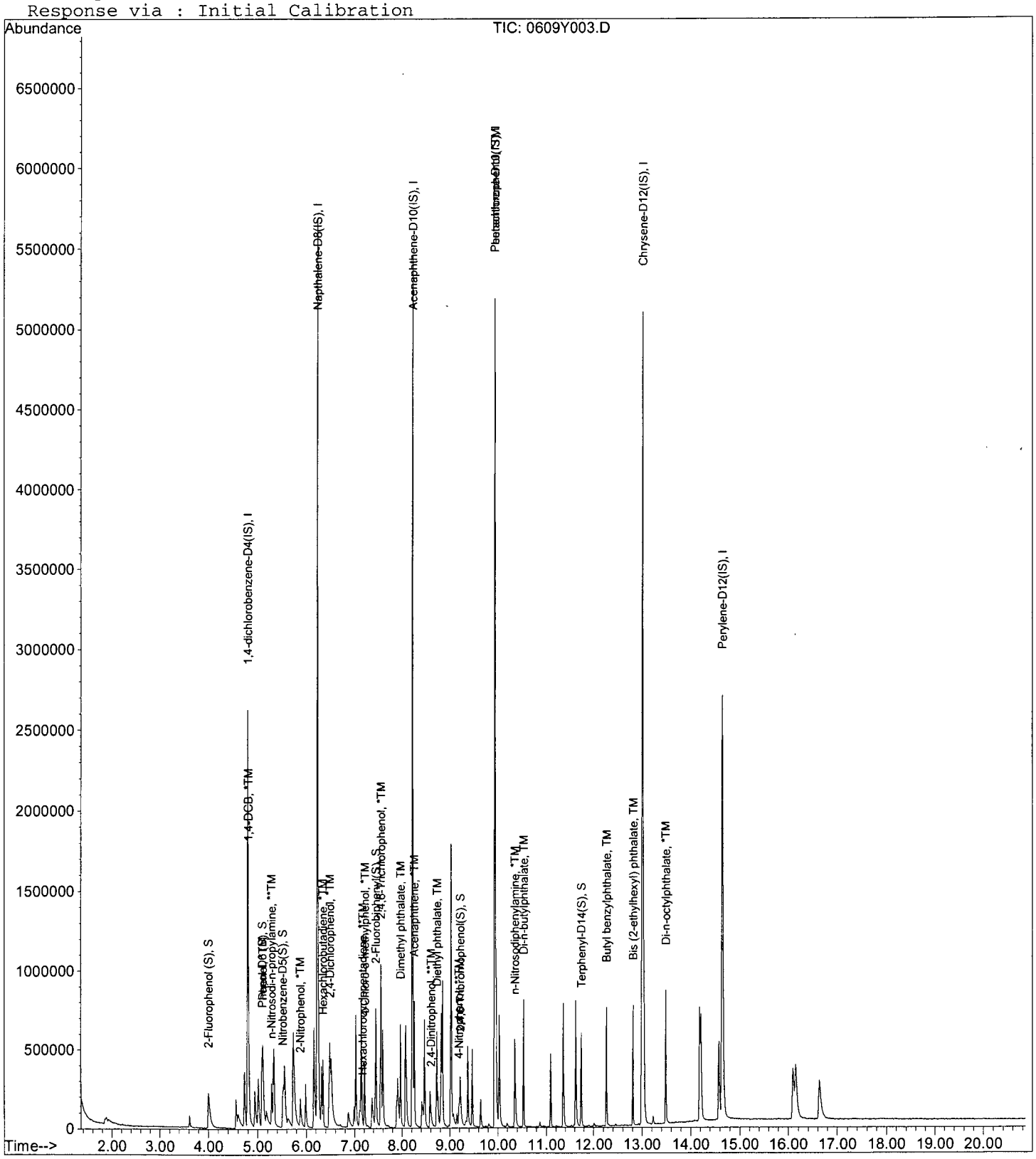
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	675317	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	2954807	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1568963	40.00000	ppb		0.00
23) Phenanthrene-D10(IS)	9.93	188	2787722	40.00000	ppb		-0.02
27) Chrysene-D12(IS)	13.00	240	2425199	40.00000	ppb		0.00
32) Perylene-D12(IS)	14.65	264	1639132	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	4.00	112	194622	7.76433	ppb		-0.07
Spiked Amount 200.000			Recovery =	3.882%			
3) Phenol-D6 (S)	5.09	99	259935	6.61927	ppb		-0.09
Spiked Amount 200.000			Recovery =	3.310%			
8) Nitrobenzene-D5(S)	5.51	82	120415	3.96782	ppb		0.01
Spiked Amount 100.000			Recovery =	3.968%			
16) 2-Fluorobiphenyl(S)	7.45	172	244084	4.06407	ppb		0.00
Spiked Amount 100.000			Recovery =	4.064%			
22) 2,4,6-Tribromophenol(S)	9.22	330	30536	8.13609	ppb		0.00
Spiked Amount 200.000			Recovery =	4.068%			
28) Terphenyl-D14(S)	11.74	244	243291	4.04651	ppb		0.00
Spiked Amount 100.000			Recovery =	4.047%			
Target Compounds							Qvalue
4) Phenol	5.10	94	162255	4.34677	ppb		96
5) 1,4-DCB	4.82	146	144583	4.46812	ppb		97
6) n-Nitrosodi-n-propylamine	5.28	43	62738	3.58253	ppb		97
9) 2-Nitrophenol	5.88	139	61427	3.91716	ppb		91
10) 2,4-Dichlorophenol	6.49	162	197835	4.28328	ppb		96
11) Hexachlorobutadiene	6.35	225	57163	4.59154	ppb		96
12) 4-Chloro-3-methylphenol	7.20	107	8129	4.58247	ppb	#	20
14) Hexachlorocyclopentadiene	7.17	237	383	7.69788	ppb	#	27
15) 2,4,6-Trichlorophenol	7.55	196	61241	4.35578	ppb		98
17) Dimethyl phthalate	7.96	163	272494	4.43008	ppb		92
18) Acenaphthene	8.25	154	242612	4.68736	ppb		93
19) 2,4-Dinitrophenol	8.61	184	2227	6.80707	ppb		100
20) 4-Nitrophenol	9.19	65	62785	4.07815	ppb		98
21) Diethyl phthalate	8.72	149	272228	4.89959	ppb		97
24) n-Nitrosodiphenylamine	10.35	167	374148	4.31817	ppb		97
25) Pentachlorophenol	9.94	266	9443	5.57159	ppb		92
26) Di-n-butylphthalate	10.53	149	419319	4.22788	ppb		98
29) Butyl benzylphthalate	12.26	149	178453	4.15417	ppb		97
30) Bis (2-ethylhexyl) phthala	12.81	149	246308	4.11911	ppb		98
31) Di-n-octylphthalate	13.49	149	418923	4.22236	ppb		98

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y150609\0609Y003.D Vial: 3
Acq On : 9 Jun 15 14:14 Operator: csc
Sample : 5ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 11 14:36 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



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Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y004.D Vial: 4
Acq On : 9 Jun 15 14:44 Operator: csc
Sample : 10ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 11 14:36 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jun 11 14:03:57 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	678070	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3007463	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1628229	40.00000	ppb		-0.02
23) Phenanthrene-D10(IS)	9.93	188	2879960	40.00000	ppb		-0.02
27) Chrysene-D12(IS)	12.99	240	2494781	40.00000	ppb		-0.02
32) Perylene-D12(IS)	14.65	264	1737848	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.98	112	389122	15.53693	ppb		-0.09
Spiked Amount 200.000			Recovery =	7.769%			
3) Phenol-D6 (S)	5.07	99	542573	15.05768	ppb		-0.11
Spiked Amount 200.000			Recovery =	7.529%			
8) Nitrobenzene-D5(S)	5.50	82	250345	8.10475	ppb		0.00
Spiked Amount 100.000			Recovery =	8.105%			
16) 2-Fluorobiphenyl(S)	7.44	172	512290	8.21931	ppb		0.00
Spiked Amount 100.000			Recovery =	8.219%			
22) 2,4,6-Tribromophenol(S)	9.22	330	72584	15.47982	ppb		0.00
Spiked Amount 200.000			Recovery =	7.740%			
28) Terphenyl-D14(S)	11.73	244	531895	8.59994	ppb		0.00
Spiked Amount 100.000			Recovery =	8.600%			
Target Compounds							Qvalue
4) Phenol	5.09	94	297491	7.93736	ppb		99
5) 1,4-DCB	4.82	146	268175	8.25389	ppb		97
6) n-Nitrosodi-n-propylamine	5.28	43	118704	6.75084	ppb	#	84
9) 2-Nitrophenol	5.88	139	124715	7.81375	ppb		92
10) 2,4-Dichlorophenol	6.48	162	276509	5.88181	ppb		98
11) Hexachlorobutadiene	6.34	225	108687	8.57729	ppb		99
12) 4-Chloro-3-methylphenol	7.20	107	15054	8.33765	ppb	#	18
14) Hexachlorocyclopentadiene	7.17	237	5547	8.52075	ppb		94
15) 2,4,6-Trichlorophenol	7.54	196	121473	8.32532	ppb		96
17) Dimethyl phthalate	7.96	163	514061	8.05316	ppb	#	84
18) Acenaphthene	8.24	154	441263	8.21506	ppb		97
19) 2,4-Dinitrophenol	8.55	184	4801	7.26421	ppb	#	100
20) 4-Nitrophenol	9.17	65	127863	8.00295	ppb		97
21) Diethyl phthalate	8.72	149	499353	8.24658	ppb		99
24) n-Nitrosodiphenylamine	10.34	167	711586	7.94962	ppb		100
25) Pentachlorophenol	9.93	266	20616	8.33231	ppb		94
26) Di-n-butylphthalate	10.53	149	805915	7.86558	ppb		99
29) Butyl benzylphthalate	12.26	149	353212	7.99302	ppb		94
30) Bis (2-ethylhexyl) phthala	12.80	149	480812	7.81656	ppb	#	92
31) Di-n-octylphthalate	13.49	149	845130	8.28056	ppb		99

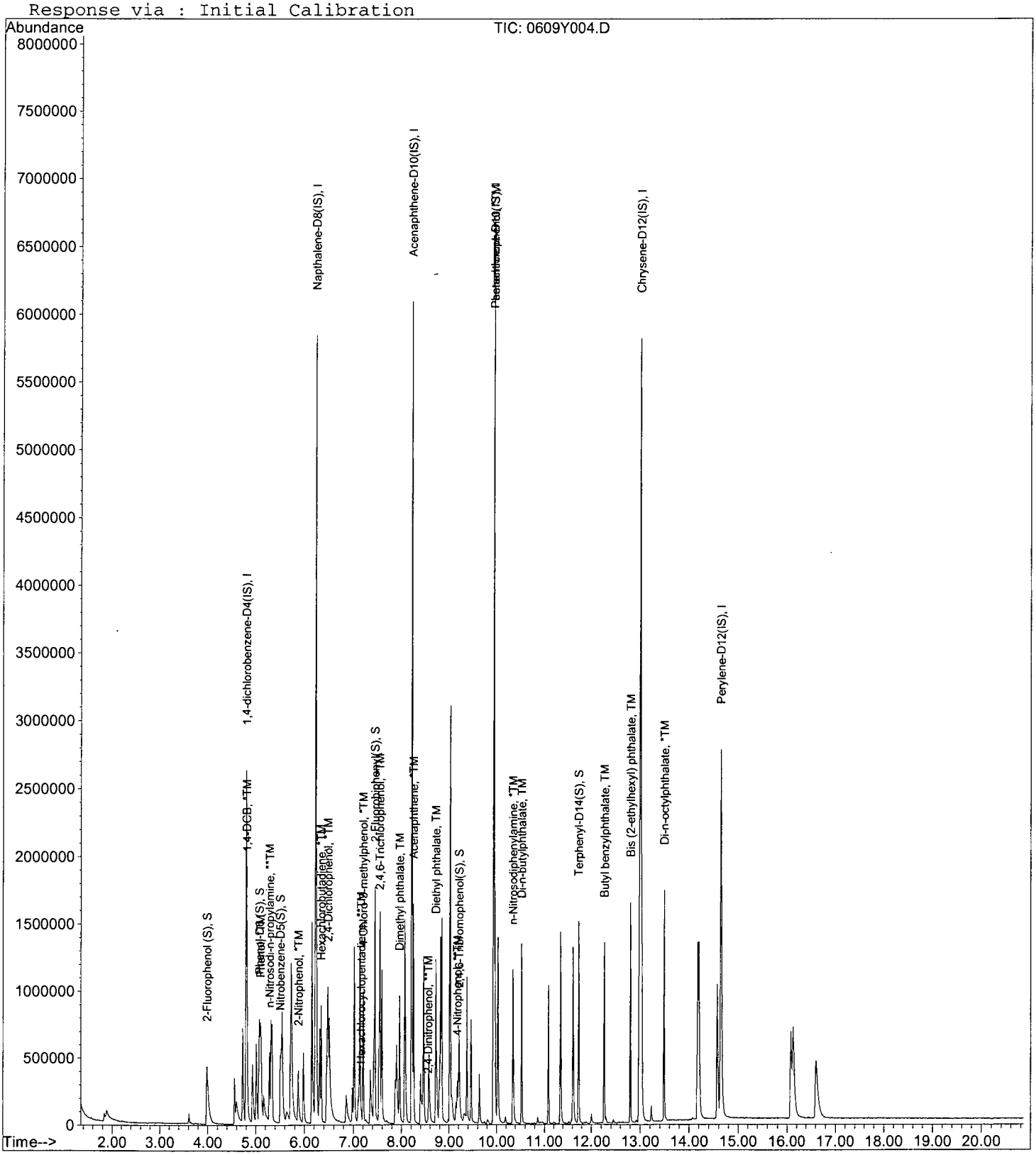
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y004.D Vial: 4
Acq On : 9 Jun 15 14:44 Operator: csc
Sample : 10ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 11 14:36 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y005.D Vial: 5
Acq On : 9 Jun 15 15:13 Operator: csc
Sample : 20ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:24 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:23:19 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	600705	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.22	136	2655616	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1471385	40.00000	ppb		0.00
23) Phenanthrene-D10(IS)	9.93	188	2583247	40.00000	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2265707	40.00000	ppb		0.00
32) Perylene-D12(IS)	14.64	264	1548140	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.96	112	785458	45.68293	ppb		0.04
Spiked Amount 200.000			Recovery =	22.842%			
3) Phenol-D6 (S)	5.05	99	1014280	52.08715	ppb		0.04
Spiked Amount 200.000			Recovery =	26.044%			
8) Nitrobenzene-D5(S)	5.50	82	487028	20.01676	ppb		0.00
Spiked Amount 100.000			Recovery =	20.017%			
16) 2-Fluorobiphenyl(S)	7.44	172	953213	19.77486	ppb		0.00
Spiked Amount 100.000			Recovery =	19.775%			
22) 2,4,6-Tribromophenol(S)	9.20	330	144353	38.59998	ppb		0.00
Spiked Amount 200.000			Recovery =	19.300%			
28) Terphenyl-D14(S)	11.73	244	978459	19.92841	ppb		0.00
Spiked Amount 100.000			Recovery =	19.928%			
Target Compounds							Qvalue
4) Phenol	5.06	94	594522	20.25331	ppb		98
5) 1,4-DCB	4.81	146	531441	20.26103	ppb		99
6) n-Nitrosodi-n-propylamine	5.28	43	254616	18.31587	ppb	#	85
9) 2-Nitrophenol	5.86	139	251716	19.62500	ppb		98
10) 2,4-Dichlorophenol	6.48	162	472769	19.32940	ppb		99
11) Hexachlorobutadiene	6.35	225	211492	19.98009	ppb		98
12) 4-Chloro-3-methylphenol	7.20	107	29907	20.28181	ppb	#	19
14) Hexachlorocyclopentadiene	7.16	237	34765	16.71351	ppb		90
15) 2,4,6-Trichlorophenol	7.52	196	246311	20.00570	ppb		94
17) Dimethyl phthalate	7.96	163	1008845	19.54626	ppb	#	85
18) Acenaphthene	8.25	154	852903	19.18461	ppb		98
19) 2,4-Dinitrophenol	8.53	184	57042	18.70747	ppb	#	100
20) 4-Nitrophenol	9.16	65	255323	19.76937	ppb		99
21) Diethyl phthalate	8.72	149	1000680	19.72955	ppb		96
24) n-Nitrosodiphenylamine	10.34	167	1389262	19.31477	ppb		99
25) Pentachlorophenol	9.92	266	39319	16.46381	ppb		91
26) Di-n-butylphthalate	10.53	149	1664387	20.14305	ppb		97
29) Butyl benzylphthalate	12.26	149	736263	19.71801	ppb		99
30) Bis (2-ethylhexyl) phthala	12.81	149	998008	18.95718	ppb		99
31) Di-n-octylphthalate	13.48	149	1733851	19.62073	ppb		100

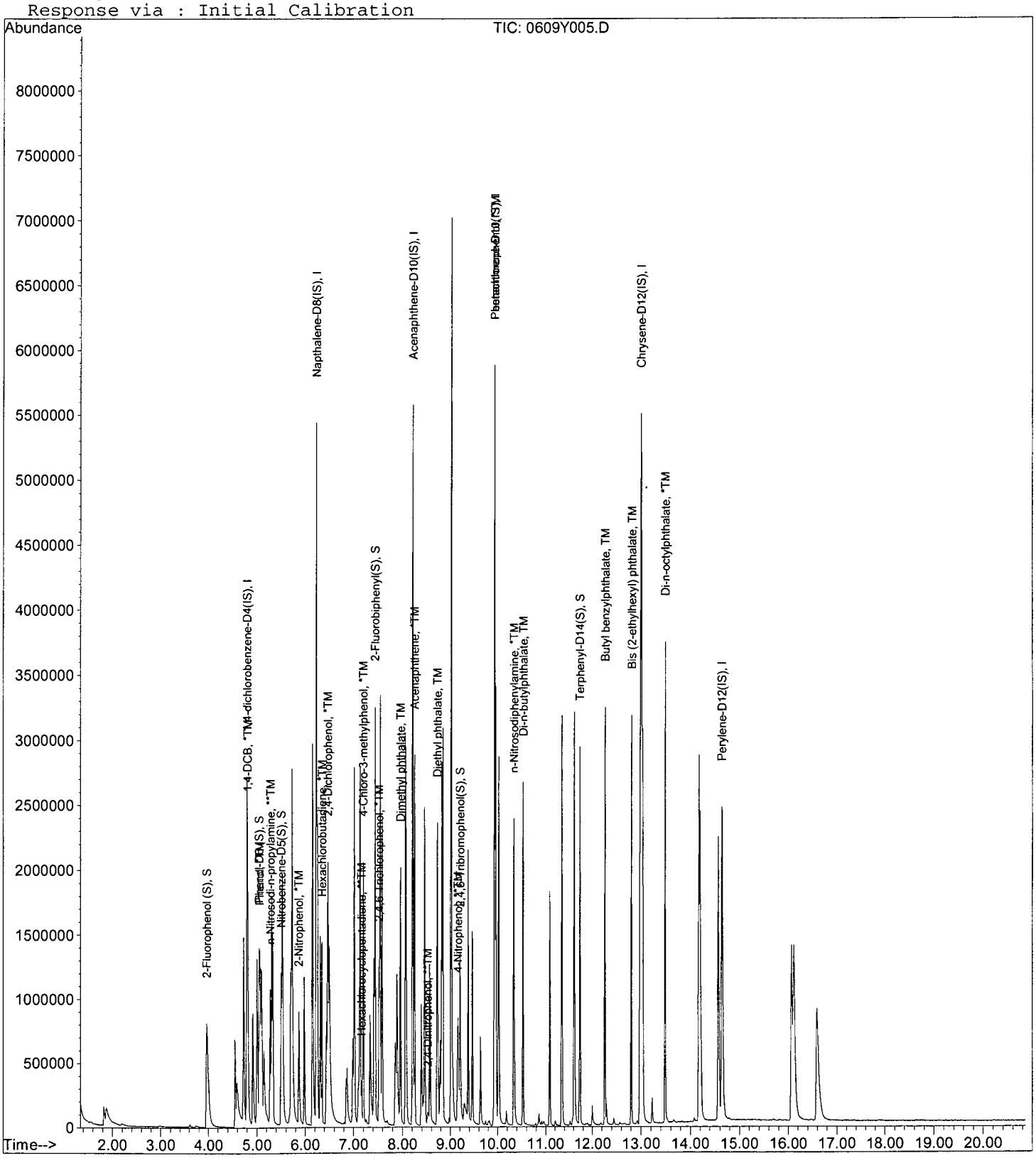
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y005.D Vial: 5
Acq On : 9 Jun 15 15:13 Operator: csc
Sample : 20ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:24 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



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Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y006.D Vial: 6
Acq On : 9 Jun 15 15:43 Operator: csc
Sample : 40ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:40 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:40:21 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	606196	40.00000	ppb	0.00
7) Napthalene-D8(IS)	6.23	136	2608545	40.00000	ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1423860	40.00000	ppb	0.00
23) Phenanthrene-D10(IS)	9.93	188	2503110	40.00000	ppb	0.00
27) Chrysene-D12(IS)	12.99	240	2179997	40.00000	ppb	0.00
32) Perylene-D12(IS)	14.63	264	1488142	40.00000	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.93	112	1532042	78.03581	ppb	0.00
Spiked Amount 200.000			Recovery =	39.018%		
3) Phenol-D6 (S)	5.02	99	1987110	75.61715	ppb	0.00
Spiked Amount 200.000			Recovery =	37.809%		
8) Nitrobenzene-D5(S)	5.50	82	980963	41.04491	ppb	0.00
Spiked Amount 100.000			Recovery =	41.045%		
16) 2-Fluorobiphenyl(S)	7.44	172	1919806	41.15663	ppb	0.00
Spiked Amount 100.000			Recovery =	41.157%		
22) 2,4,6-Tribromophenol(S)	9.21	330	291530	76.25079	ppb	0.00
Spiked Amount 200.000			Recovery =	38.126%		
28) Terphenyl-D14(S)	11.73	244	1918215	40.60459	ppb	0.00
Spiked Amount 100.000			Recovery =	40.605%		
Target Compounds						Qvalue
4) Phenol	5.04	94	1165495	39.34473	ppb	99
5) 1,4-DCB	4.82	146	1050776	39.69764	ppb	99
6) n-Nitrosodi-n-propylamine	5.28	43	531291	37.87238	ppb	93
9) 2-Nitrophenol	5.86	139	511321	40.58442	ppb	100
10) 2,4-Dichlorophenol	6.47	162	913044	41.66220	ppb	97
11) Hexachlorobutadiene	6.35	225	412952	39.71642	ppb	98
12) 4-Chloro-3-methylphenol	7.20	107	61133	42.20623	ppb	95
14) Hexachlorocyclopentadiene	7.16	237	140258	36.31813	ppb	98
15) 2,4,6-Trichlorophenol	7.53	196	481723	40.43768	ppb	99
17) Dimethyl phthalate	7.96	163	2024521	40.53411	ppb	93
18) Acenaphthene	8.25	154	1703240	39.59024	ppb	99
19) 2,4-Dinitrophenol	8.50	184	162081	38.10690	ppb	95
20) 4-Nitrophenol	9.15	65	514849	41.19475	ppb	99
21) Diethyl phthalate	8.72	149	2016368	39.79775	ppb	97
24) n-Nitrosodiphenylamine	10.33	167	2790964	40.04475	ppb	99
25) Pentachlorophenol	9.90	266	121680	40.37553	ppb	98
26) Di-n-butylphthalate	10.53	149	3385309	42.28197	ppb	99
29) Butyl benzylphthalate	12.26	149	1510060	42.03123	ppb	92
30) Bis (2-ethylhexyl) phthala	12.81	149	2103315	41.52331	ppb	96
31) Di-n-octylphthalate	13.48	149	3685466	43.34547	ppb	100

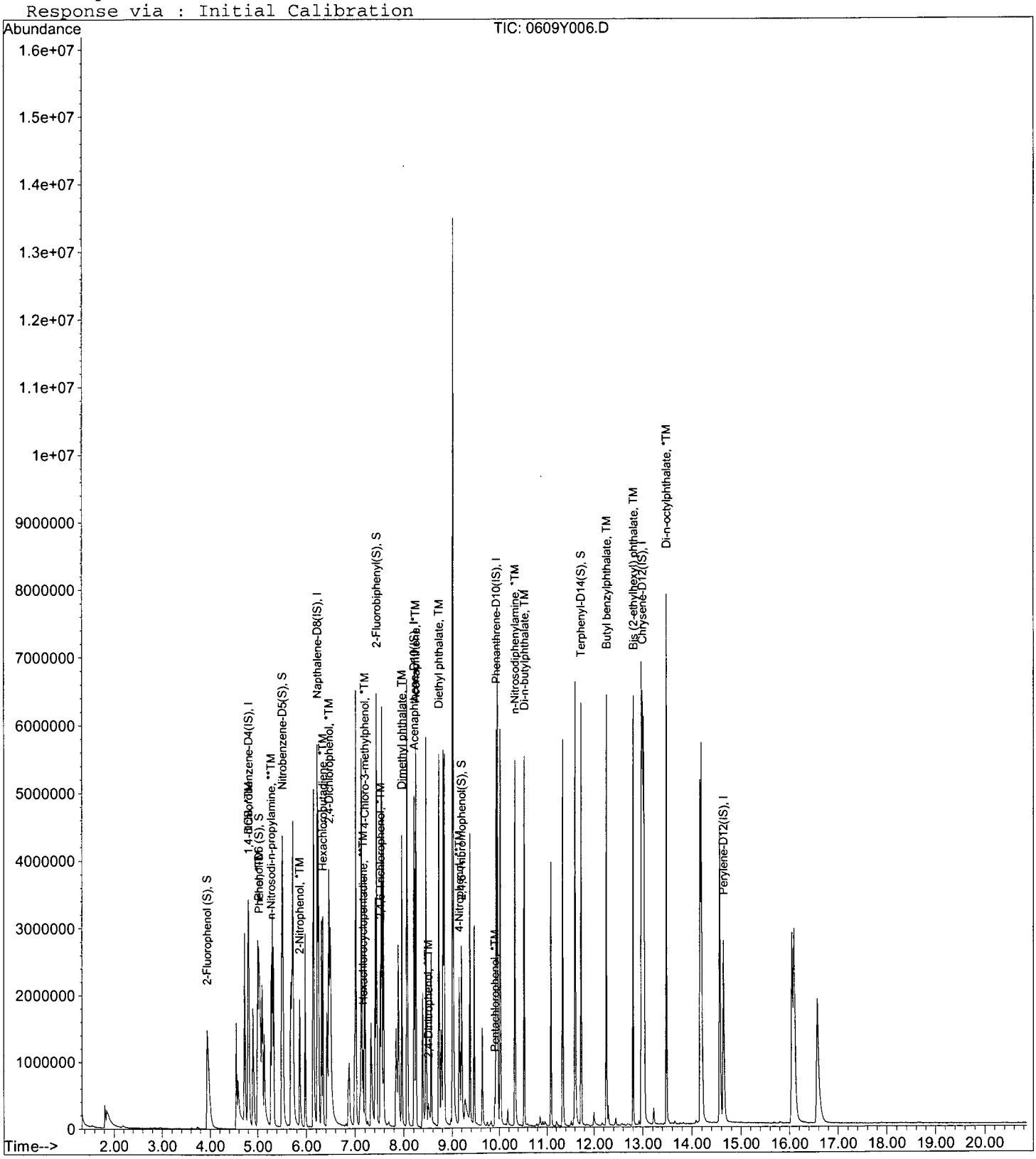
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y006.D Vial: 6
Acq On : 9 Jun 15 15:43 Operator: csc
Sample : 40ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:40 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y007.D Vial: 7
Acq On : 9 Jun 15 16:12 Operator: csc
Sample : 50ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:29 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:29:28 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

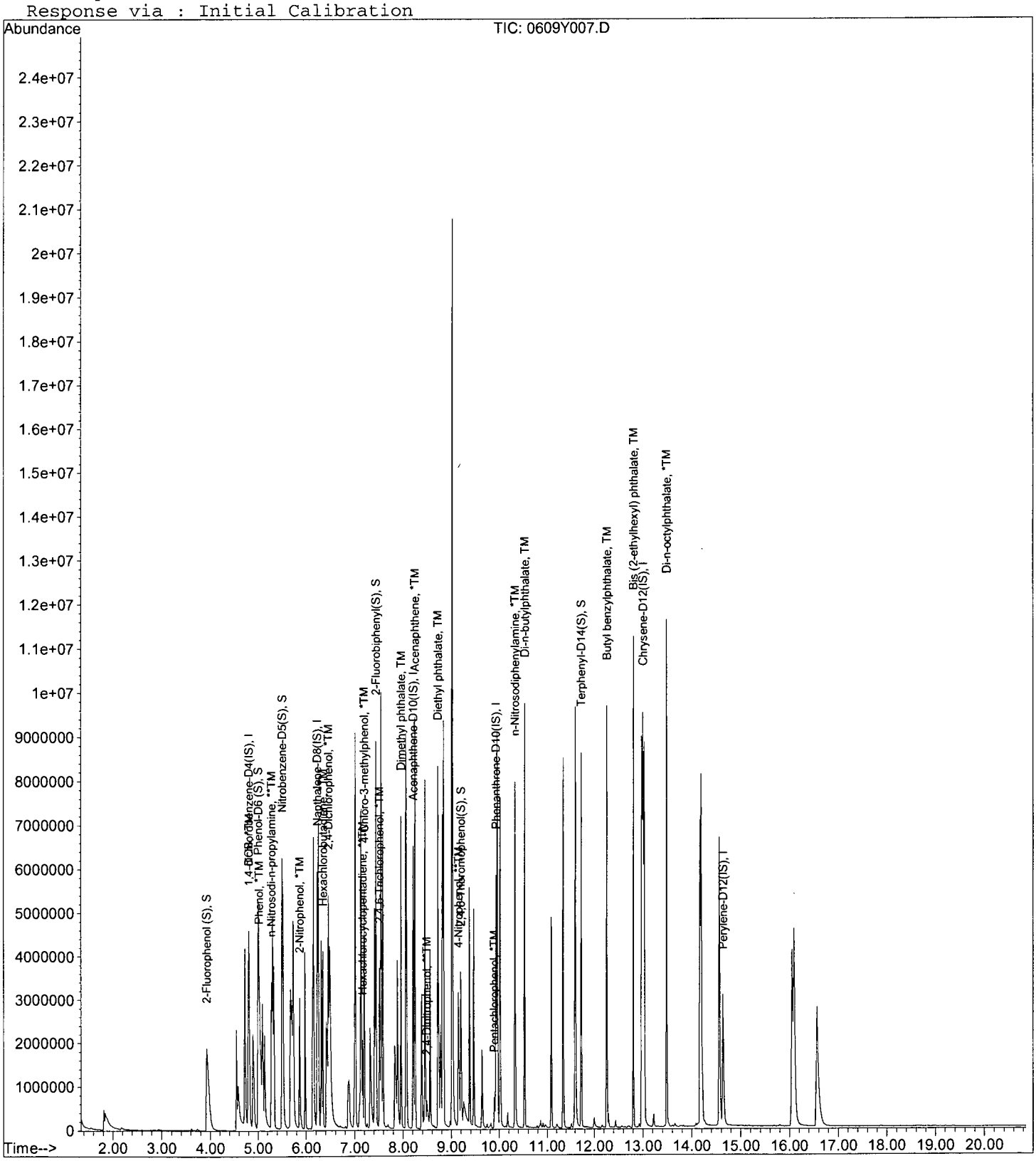
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	659031	40.00000	ppb	0.00
7) Napthalene-D8(IS)	6.23	136	2842143	40.00000	ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1600409	40.00000	ppb	0.00
23) Phenanthrene-D10(IS)	9.94	188	2772743	40.00000	ppb	0.00
27) Chrysene-D12(IS)	13.00	240	2451721	40.00000	ppb	0.00
32) Perylene-D12(IS)	14.63	264	1683714	40.00000	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.92	112	2147294	100.08228	ppb	0.00
Spiked Amount 200.000			Recovery =	50.041%		
3) Phenol-D6 (S)	5.01	99	2784825	100.42226	ppb	0.00
Spiked Amount 200.000			Recovery =	50.211%		
8) Nitrobenzene-D5(S)	5.50	82	1354319	52.00919	ppb	0.00
Spiked Amount 100.000			Recovery =	52.009%		
16) 2-Fluorobiphenyl(S)	7.44	172	2640900	50.36985	ppb	0.00
Spiked Amount 100.000			Recovery =	50.370%		
22) 2,4,6-Tribromophenol(S)	9.20	330	420679	96.76782	ppb	0.00
Spiked Amount 200.000			Recovery =	48.384%		
28) Terphenyl-D14(S)	11.73	244	2648048	49.84121	ppb	0.00
Spiked Amount 100.000			Recovery =	49.841%		
Target Compounds						Qvalue
4) Phenol	5.03	94	1637076	50.83376	ppb	100
5) 1,4-DCB	4.81	146	1473192	51.19425	ppb	100
6) n-Nitrosodi-n-propylamine	5.28	43	858132	56.26670	ppb	100
9) 2-Nitrophenol	5.86	139	731073	53.25726	ppb	100
10) 2,4-Dichlorophenol	6.46	162	1166794	49.51955	ppb	100
11) Hexachlorobutadiene	6.35	225	588636	51.96007	ppb	100
12) 4-Chloro-3-methylphenol	7.20	107	81281	51.50416	ppb	100
14) Hexachlorocyclopentadiene	7.16	237	263626	50.25162	ppb	100
15) 2,4,6-Trichlorophenol	7.52	196	689698	51.50912	ppb	100
17) Dimethyl phthalate	7.96	163	2827021	50.35744	ppb	100
18) Acenaphthene	8.25	154	2468067	51.03939	ppb	100
19) 2,4-Dinitrophenol	8.49	184	261532	49.76593	ppb	100
20) 4-Nitrophenol	9.15	65	730207	51.98096	ppb	100
21) Diethyl phthalate	8.72	149	2848313	49.71176	ppb	100
24) n-Nitrosodiphenylamine	10.33	167	3933740	50.95271	ppb	100
25) Pentachlorophenol	9.89	266	173686	49.66904	ppb	100
26) Di-n-butylphthalate	10.53	149	4900469	55.25415	ppb	100
29) Butyl benzylphthalate	12.26	149	2104122	52.07552	ppb	100
30) Bis (2-ethylhexyl) phthala	12.81	149	3017126	52.96219	ppb	100
31) Di-n-octylphthalate	13.48	149	5345557	55.90222	ppb	100

(#) = qualifier out of range (m) = manual integration

Data File : M:\YODA\DATA\Y150609\0609Y007.D Vial: 7
Acq On : 9 Jun 15 16:12 Operator: csc
Sample : 50ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:29 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y008.D Vial: 8
Acq On : 9 Jun 15 16:42 Operator: csc
Sample : 60ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:29:54 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	660567	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	2908425	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1649463	40.00000	ppb		0.00
23) Phenanthrene-D10(IS)	9.93	188	2844701	40.00000	ppb		0.00
27) Chrysene-D12(IS)	12.99	240	2551004	40.00000	ppb		0.00
32) Perylene-D12(IS)	14.63	264	1722817	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.91	112	2640202	122.32076	ppb		0.00
Spiked Amount 200.000			Recovery = 61.161%				
3) Phenol-D6 (S)	5.00	99	3473964	125.49165	ppb		0.00
Spiked Amount 200.000			Recovery = 62.746%				
8) Nitrobenzene-D5(S)	5.50	82	1671532	62.72806	ppb		0.00
Spiked Amount 100.000			Recovery = 62.728%				
16) 2-Fluorobiphenyl(S)	7.44	172	3288595	60.85798	ppb		0.00
Spiked Amount 100.000			Recovery = 60.858%				
22) 2,4,6-Tribromophenol(S)	9.21	330	531861	117.80627	ppb		0.00
Spiked Amount 200.000			Recovery = 58.903%				
28) Terphenyl-D14(S)	11.73	244	3372028	60.99775	ppb		0.00
Spiked Amount 100.000			Recovery = 60.998%				
Target Compounds							Qvalue
4) Phenol	5.02	94	2045240	63.36022	ppb		99
5) 1,4-DCB	4.82	146	1783089	61.81926	ppb		99
6) n-Nitrosodi-n-propylamine	5.29	43	1077592	70.49214	ppb		91
9) 2-Nitrophenol	5.86	139	919206	65.43634	ppb		98
10) 2,4-Dichlorophenol	6.46	162	1497992	63.09100	ppb		98
11) Hexachlorobutadiene	6.35	225	727669	62.76895	ppb		100
12) 4-Chloro-3-methylphenol	7.20	107	100711	62.36175	ppb		99
14) Hexachlorocyclopentadiene	7.16	237	375225	61.74609	ppb		99
15) 2,4,6-Trichlorophenol	7.52	196	870601	63.08596	ppb		96
17) Dimethyl phthalate	7.96	163	3558066	61.49461	ppb		99
18) Acenaphthene	8.25	154	3079929	61.79846	ppb		99
19) 2,4-Dinitrophenol	8.49	184	353065	60.93190	ppb	#	67
20) 4-Nitrophenol	9.15	65	914138	63.13911	ppb		99
21) Diethyl phthalate	8.72	149	3522462	59.41221	ppb		100
24) n-Nitrosodiphenylamine	10.33	167	4949122	62.48314	ppb		100
25) Pentachlorophenol	9.89	266	225230	60.15447	ppb		98
26) Di-n-butylphthalate	10.53	149	6188258	68.00935	ppb		100
29) Butyl benzylphthalate	12.26	149	2649444	63.01985	ppb		98
30) Bis (2-ethylhexyl) phthala	12.81	149	3877647	65.41852	ppb		99
31) Di-n-octylphthalate	13.48	149	6774310	68.08651	ppb		100

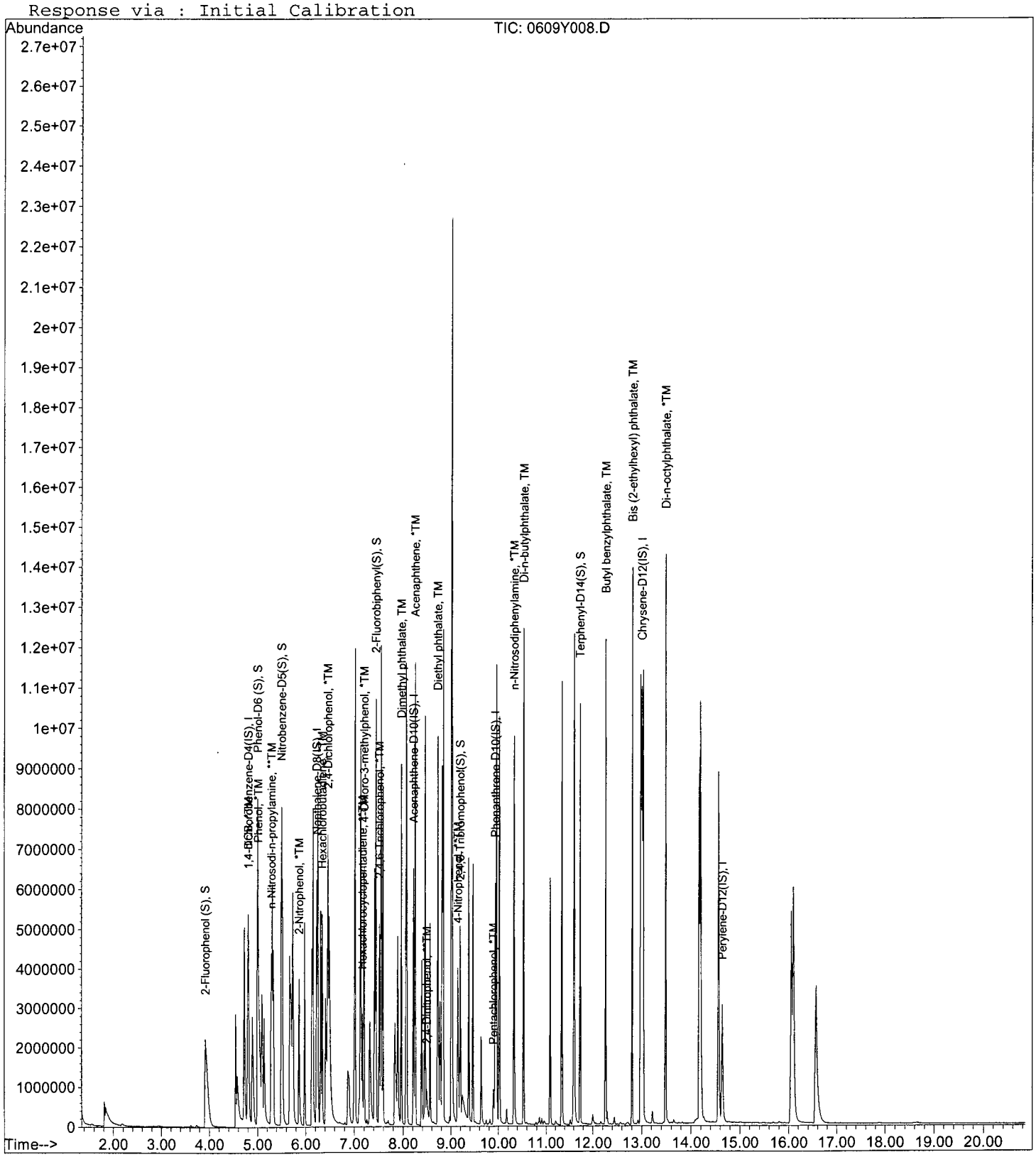
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y008.D Vial: 8
Acq On : 9 Jun 15 16:42 Operator: csc
Sample : 60ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y009.D Vial: 9
Acq On : 9 Jun 15 17:12 Operator: csc
Sample : 80ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:29:54 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.79	152	688070	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	3002120	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1668296	40.00000	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	2871091	40.00000	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2592690	40.00000	ppb		0.00
32) Perylene-D12(IS)	14.63	264	1775181	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.91	112	3644543	161.45839	ppb		0.00
Spiked Amount 200.000			Recovery =	80.729%			
3) Phenol-D6 (S)	4.98	99	4833313	168.31723	ppb		-0.02
Spiked Amount 200.000			Recovery =	84.159%			
8) Nitrobenzene-D5(S)	5.50	82	2346594	85.31295	ppb		0.00
Spiked Amount 100.000			Recovery =	85.313%			
16) 2-Fluorobiphenyl(S)	7.44	172	4575593	83.71899	ppb		0.00
Spiked Amount 100.000			Recovery =	83.719%			
22) 2,4,6-Tribromophenol(S)	9.21	330	747816	162.22433	ppb		0.00
Spiked Amount 200.000			Recovery =	81.112%			
28) Terphenyl-D14(S)	11.73	244	4660031	82.94152	ppb		0.00
Spiked Amount 100.000			Recovery =	82.942%			
Target Compounds							Qvalue
4) Phenol	5.00	94	2803669	83.38413	ppb		99
5) 1,4-DCB	4.82	146	2513864	83.67136	ppb		99
6) n-Nitrosodi-n-propylamine	5.30	43	1461340	91.77446	ppb		94
9) 2-Nitrophenol	5.86	139	1260244	86.91418	ppb		99
10) 2,4-Dichlorophenol	6.46	162	1971284	81.47437	ppb		96
11) Hexachlorobutadiene	6.35	225	986358	82.42812	ppb		99
12) 4-Chloro-3-methylphenol	7.20	107	132823	79.67911	ppb		99
14) Hexachlorocyclopentadiene	7.16	237	596191	82.20358	ppb		99
15) 2,4,6-Trichlorophenol	7.52	196	1169397	83.78090	ppb		97
17) Dimethyl phthalate	7.96	163	4886230	83.49614	ppb		90
18) Acenaphthene	8.25	154	4218683	83.69188	ppb		99
19) 2,4-Dinitrophenol	8.49	184	532304	82.21261	ppb	#	54
20) 4-Nitrophenol	9.15	65	1231532	84.10114	ppb		98
21) Diethyl phthalate	8.73	149	4899455	81.25939	ppb		97
24) n-Nitrosodiphenylamine	10.33	167	6852068	85.71286	ppb		99
25) Pentachlorophenol	9.89	266	332503	81.87525	ppb		99
26) Di-n-butylphthalate	10.53	149	7332306	79.84183	ppb		96
29) Butyl benzylphthalate	12.26	149	3633396	85.03465	ppb		97
30) Bis (2-ethylhexyl) phthala	12.81	149	5231493	86.83976	ppb		98
31) Di-n-octylphthalate	13.48	149	8386710	82.93697	ppb		96

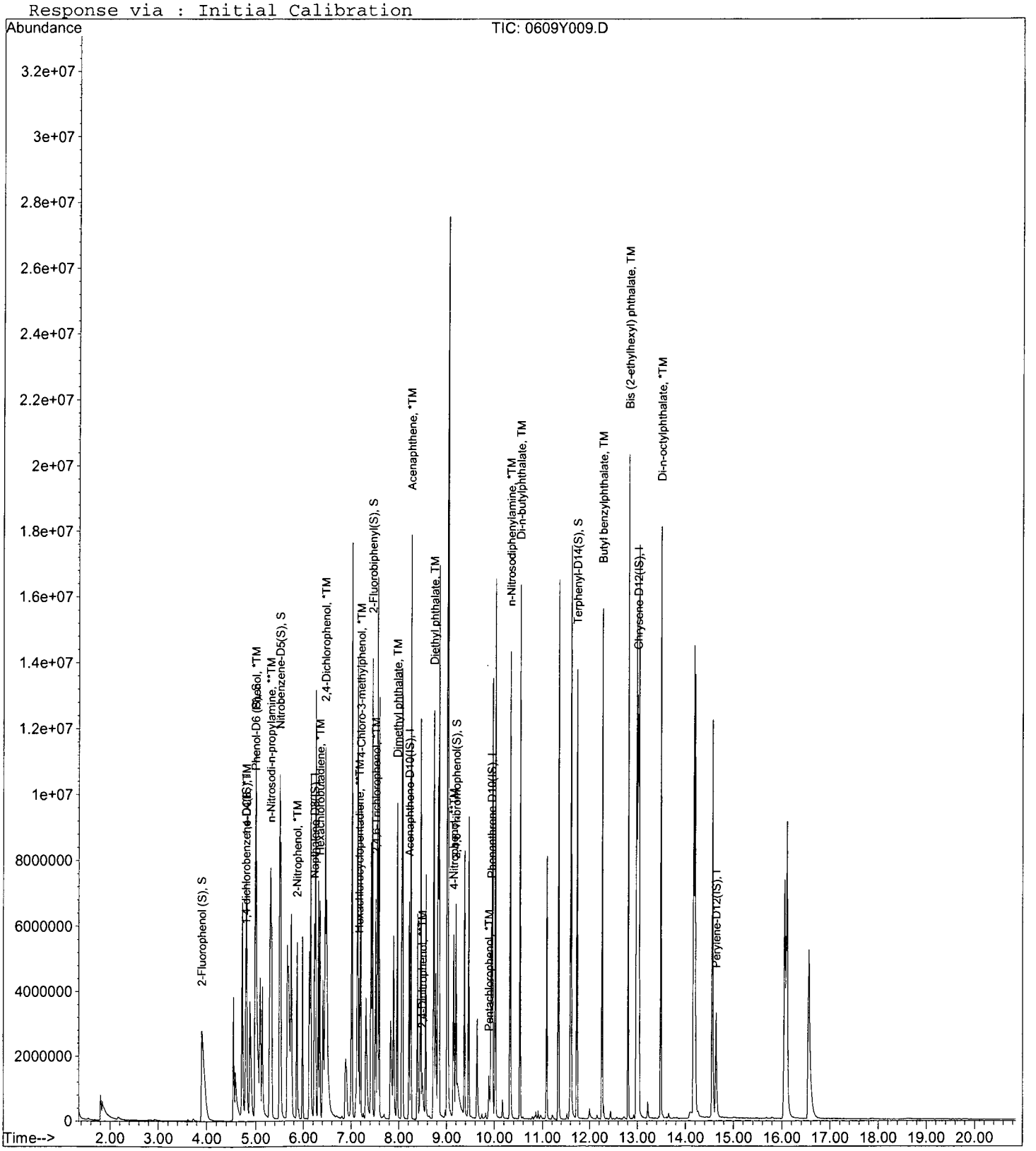
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y009.D Vial: 9
Acq On : 9 Jun 15 17:12 Operator: csc
Sample : 80ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y010.D Vial: 10
Acq On : 9 Jun 15 17:42 Operator: csc
Sample : 100ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:29:54 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.79	152	666642	40.00000 ppb		0.00
7) Napthalene-D8(IS)	6.23	136	2926054	40.00000 ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1621641	40.00000 ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	2809723	40.00000 ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2504941	40.00000 ppb		0.00
32) Perylene-D12(IS)	14.64	264	1710688	40.00000 ppb		0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.90	112	4228823	192.97310 ppb		-0.02
Spiked Amount 200.000			Recovery = 96.487%			
3) Phenol-D6 (S)	4.98	99	5677637	204.51867 ppb		-0.03
Spiked Amount 200.000			Recovery = 102.260%			
8) Nitrobenzene-D5(S)	5.50	82	2742147	102.28535 ppb		0.00
Spiked Amount 100.000			Recovery = 102.285%			
16) 2-Fluorobiphenyl(S)	7.44	172	5333921	100.40182 ppb		0.00
Spiked Amount 100.000			Recovery = 100.402%			
22) 2,4,6-Tribromophenol(S)	9.20	330	913344	202.81664 ppb		0.00
Spiked Amount 200.000			Recovery = 101.409%			
28) Terphenyl-D14(S)	11.73	244	5583232	102.85419 ppb		0.00
Spiked Amount 100.000			Recovery = 102.854%			
Target Compounds						Qvalue
4) Phenol	5.00	94	3282282	100.75637 ppb		98
5) 1,4-DCB	4.81	146	2934226	100.80186 ppb		97
6) n-Nitrosodi-n-propylamine	5.30	43	1744284	113.06488 ppb		99
9) 2-Nitrophenol	5.87	139	1473360	104.25348 ppb		97
10) 2,4-Dichlorophenol	6.46	162	2268158	96.86486 ppb		97
11) Hexachlorobutadiene	6.34	225	1183826	101.50196 ppb		96
12) 4-Chloro-3-methylphenol	7.19	107	158076	97.29328 ppb		96
14) Hexachlorocyclopentadiene	7.17	237	776342	98.65909 ppb		99
15) 2,4,6-Trichlorophenol	7.52	196	1404208	103.49822 ppb		99
17) Dimethyl phthalate	7.96	163	5934631	104.32889 ppb		92
18) Acenaphthene	8.25	154	5064478	103.36167 ppb		99
19) 2,4-Dinitrophenol	8.49	184	662066	98.72597 ppb	#	62
20) 4-Nitrophenol	9.15	65	1468934	103.19932 ppb		97
21) Diethyl phthalate	8.73	149	5854672	99.62356 ppb		97
24) n-Nitrosodiphenylamine	10.33	167	8213462	104.98664 ppb		99
25) Pentachlorophenol	9.89	266	412644	98.94799 ppb		99
26) Di-n-butylphthalate	10.53	149	7943234	88.38340 ppb	#	92
29) Butyl benzylphthalate	12.26	149	4361396	105.64813 ppb		99
30) Bis (2-ethylhexyl) phthala	12.81	149	6259146	107.53780 ppb		99
31) Di-n-octylphthalate	13.49	149	8709499	89.14620 ppb	#	88

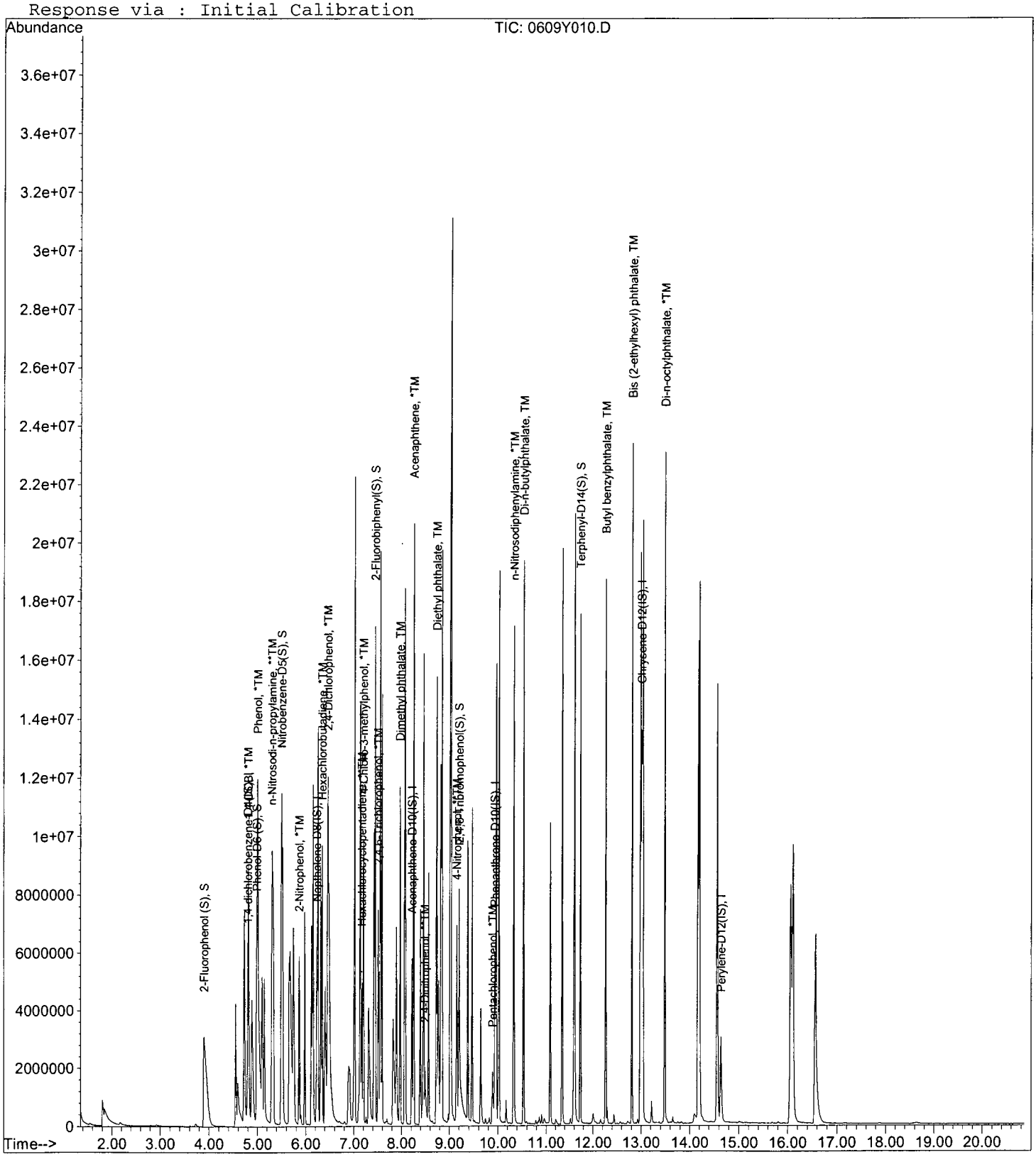
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y010.D Vial: 10
Acq On : 9 Jun 15 17:42 Operator: csc
Sample : 100ug/ml SVOC 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:30 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 9 Jun 15 18:12
Instrument: Yoda
Initial Cal. Date: 06/09/15
Data File: 0609Y011.D

		Compound	MEAN	CCRF	%D		%Drift	
1	*TM	Phenol	1.955	1.836	6.1	*TM		
2	*TM	1,4-DCB	1.747	1.874	7.3	*TM		
3	**TML	n-Nitrosodi-n-propylamine	0.9257	0.7452	20	**TML	25	*NT
4	*TM	2-Nitrophenol	0.1932	0.1908	1.2	*TM		
5	*TML	2,4-Dichlorophenol	0.3650	0.3218	12	*TML	3.1	
6	*TM	Hexachlorobutadiene	0.1594	0.1784	12	*TM		
7	*TM	4-Chloro-3-methylphenol	0.0222	0.0205	7.8	*TM		
8	**TMQ	Hexachlorocyclopentadiene	0.1019	0.1424	40	**TMQ	5.6	
9	*TM	2,4,6-Trichlorophenol	0.3347	0.3128	6.5	*TM		
10	TM	Dimethyl phthalate	1.403	1.360	3.1	TM		
11	*TM	Acenaphthene	1.209	1.162	3.9	*TM		
12	**TMQ	2,4-Dinitrophenol	0.1013	0.1148	13	**TMQ	9.6	
13	**TM	4-Nitrophenol	0.3511	0.2648	25	**TM		*NT
14	TM	Diethyl phthalate	1.394	1.328	4.7	TM		
15	*TM	n-Nitrosodiphenylamine	1.114	1.046	6.0	*TM		
16	*TMQ	Pentachlorophenol	0.0443	0.0403	9.0	*TMQ	17	
17	TM	Di-n-butylphthalate	1.279	1.247	2.5	TM		
18	TM	Butyl benzylphthalate	0.6592	0.6835	3.7	TM		
19	TM	Bis (2-ethylhexyl) phthalate	0.9294	0.9338	0.47	TM		
20	*TM	Di-n-octylphthalate	1.560	1.652	5.9	*TM		
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
		Average			9.5			

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y011.D Vial: 11
Acq On : 9 Jun 15 18:12 Operator: csc
Sample : 50ug/ml SVOC SS 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:46 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.79	152	800527	40.00000	ppb	0.00
7) Napthalene-D8(IS)	6.23	136	3423695	40.00000	ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1876168	40.00000	ppb	0.00
23) Phenanthrene-D10(IS)	9.93	188	3283763	40.00000	ppb	0.00
27) Chrysene-D12(IS)	12.99	240	2681604	40.00000	ppb	0.00
32) Perylene-D12(IS)	14.64	264	1834461	40.00000	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	0.00	112	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
3) Phenol-D6 (S)	4.99	99	7565	-0.03716	ppb	-0.03
Spiked Amount 200.000			Recovery =	-0.019%		
8) Nitrobenzene-D5(S)	0.00	82	0	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
16) 2-Fluorobiphenyl(S)	0.00	172	0	0.00000	ppb	
Spiked Amount 100.000			Recovery =	0.000%		
22) 2,4,6-Tribromophenol(S)	0.00	330	0	0.00000	ppb	
Spiked Amount 200.000			Recovery =	0.000%		
28) Terphenyl-D14(S)	11.73	244	819	0.01409	ppb	0.00
Spiked Amount 100.000			Recovery =	0.014%		
Target Compounds						Qvalue
4) Phenol	5.05	94	1836846	46.95545	ppb	89
5) 1,4-DCB	4.81	146	1875348	53.65047	ppb	98
6) n-Nitrosodi-n-propylamine	5.27	43	745649	37.46418	ppb	99
9) 2-Nitrophenol	5.87	139	816727	49.39078	ppb	93
10) 2,4-Dichlorophenol	6.46	162	1377381	48.45158	ppb	97
11) Hexachlorobutadiene	6.34	225	763620	55.95657	ppb	97
12) 4-Chloro-3-methylphenol	7.19	107	87605	46.08218	ppb	97
14) Hexachlorocyclopentadiene	7.17	237	333926	52.79605	ppb	100
15) 2,4,6-Trichlorophenol	7.52	196	733615	46.73612	ppb	96
17) Dimethyl phthalate	7.96	163	3189308	48.46077	ppb	93
18) Acenaphthene	8.24	154	2724253	48.05685	ppb	99
19) 2,4-Dinitrophenol	8.49	184	269221	45.17601	ppb	97
20) 4-Nitrophenol	9.14	65	621040	37.71179	ppb	97
21) Diethyl phthalate	8.72	149	3113942	47.62883	ppb	99
24) n-Nitrosodiphenylamine	10.33	167	4295379	46.97870	ppb	100
25) Pentachlorophenol	9.89	266	165436	41.56888	ppb	98
26) Di-n-butylphthalate	10.53	149	5119199	48.73793	ppb	99
29) Butyl benzylphthalate	12.26	149	2291172	51.84380	ppb	92
30) Bis (2-ethylhexyl) phthala	12.81	149	3130065	50.23452	ppb	97
31) Di-n-octylphthalate	13.49	149	5539125	52.96070	ppb	100

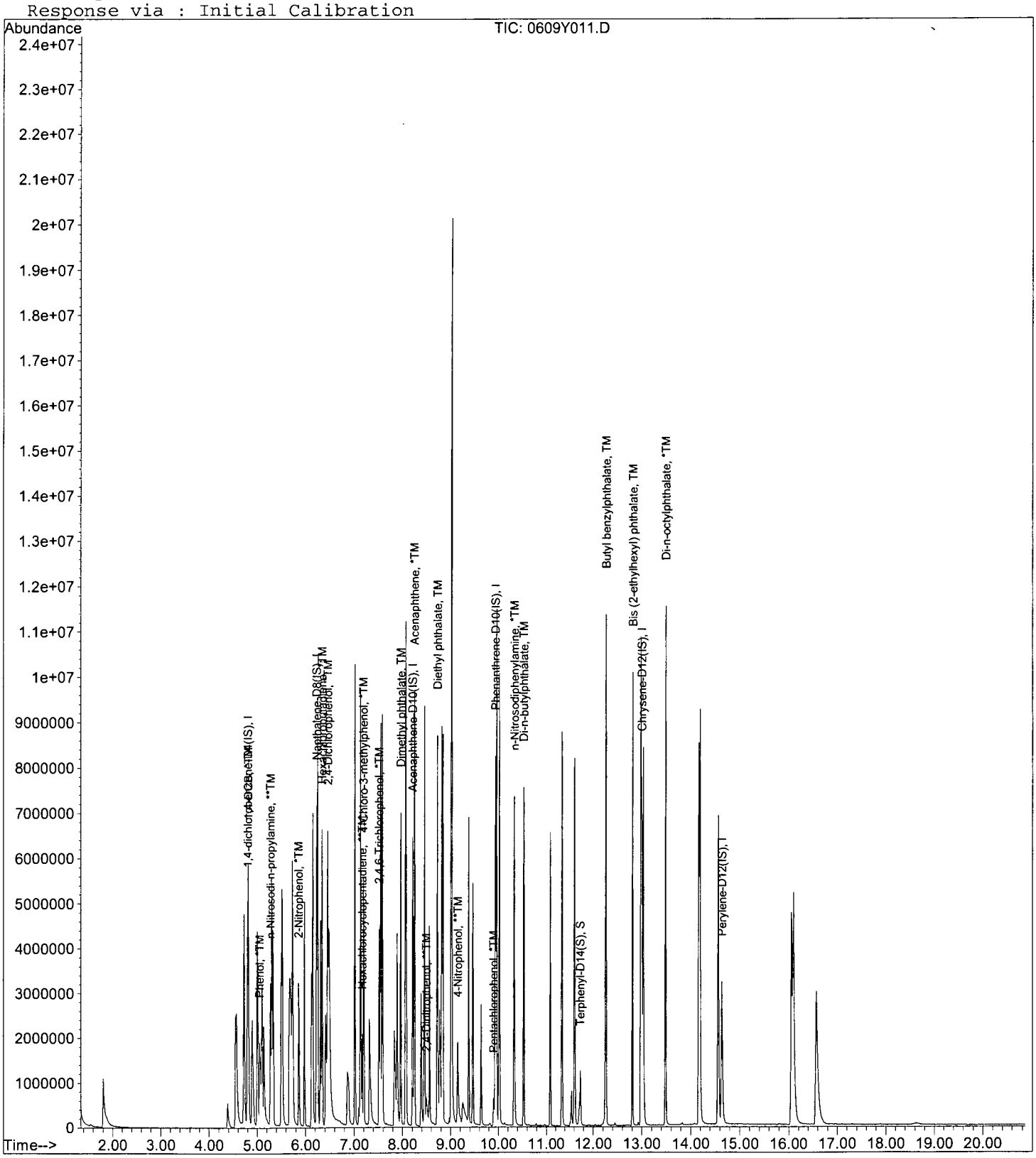
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y011.D Vial: 11
Acq On : 9 Jun 15 18:12 Operator: csc
Sample : 50ug/ml SVOC SS 06/09/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 9:46 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 71447
Date Analyzed: 06/12/15
Instrument: Yoda
Initial Cal. Date: 06/09/15
Data File: 0609Y031.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	S	2-Fluorophenol (S)	1.263	1.264	0.14	S	
3	SL	Phenol-D6 (S)	1.864	1.674	10	SL	2.6
4	*TM	Phenol	1.955	1.932	1.1	*TM	
5	*TM	1,4-DCB	1.747	1.711	2.1	*TM	
6	**TML	n-Nitrosodi-n-propylamine	0.9257	0.9978	7.8	**TML	2.0
7	I	Napthalene-D8(IS)	ISTD			I	
8	S	Nitrobenzene-D5(S)	0.3665	0.3829	4.5	S	
9	*TM	2-Nitrophenol	0.1932	0.1991	3.0	*TM	
10	*TML	2,4-Dichlorophenol	0.3650	0.3311	9.3	*TML	0.10
11	*TM	Hexachlorobutadiene	0.1594	0.1588	0.41	*TM	
12	*TM	4-Chloro-3-methylphenol	0.0222	0.0220	0.89	*TM	
13	I	Acenaphthene-D10(IS)	ISTD			I	
14	**TMQ	Hexachlorocyclopentadiene	0.1019	0.1219	20	**TMQ	4.4
15	*TM	2,4,6-Trichlorophenol	0.3347	0.3461	3.4	*TM	
16	S	2-Fluorobiphenyl(S)	1.310	1.305	0.38	S	
17	TM	Dimethyl phthalate	1.403	1.406	0.20	TM	
18	*TM	Acenaphthene	1.209	1.222	1.1	*TM	
19	**TMQ	2,4-Dinitrophenol	0.1013	0.1326	31	**TMQ	0.59
20	**TM	4-Nitrophenol	0.3511	0.3646	3.8	**TM	
21	TM	Diethyl phthalate	1.394	1.429	2.5	TM	
22	SL	2,4,6-Tribromophenol(S)	0.1103	0.1064	3.6	SL	2.1
23	I	Phenanthrene-D10(IS)	ISTD			I	
24	*TM	n-Nitrosodiphenylamine	1.114	1.133	1.7	*TM	
25	*TMQ	Pentachlorophenol	0.0443	0.0540	22	*TMQ	5.6
26	TM	Di-n-butylphthalate	1.279	1.408	10	TM	
27	I	Chrysene-D12(IS)	ISTD			I	
28	S	Terphenyl-D14(S)	0.8668	0.8973	3.5	S	
29	TM	Butyl benzylphthalate	0.6592	0.6931	5.1	TM	
30	TM	Bis (2-ethylhexyl) phthalate	0.9294	0.9701	4.4	TM	
31	*TM	Di-n-octylphthalate	1.560	1.732	11	*TM	
32	I	Perylene-D12(IS)	ISTD			I	
33							
34							
35							
36							
37							
38							
39							
40							
		Average			6.3		

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y031.D Vial: 31
Acq On : 12 Jun 15 12:08 Operator: csc
Sample : 50ug/ml SVOC 06/12/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 12:28 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	687553	40.00000	ppb		0.00
7) Napthalene-D8(IS)	6.22	136	2922149	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.21	164	1590905	40.00000	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	2742842	40.00000	ppb		0.00
27) Chrysene-D12(IS)	13.00	240	2429109	40.00000	ppb		0.00
32) Perylene-D12(IS)	14.64	264	1666879	40.00000	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.91	112	2173159	100.13948	ppb		-0.02
Spiked Amount 200.000			Recovery = 50.070%				
3) Phenol-D6 (S)	5.00	99	2878109	97.36058	ppb		-0.02
Spiked Amount 200.000			Recovery = 48.681%				
8) Nitrobenzene-D5(S)	5.50	82	1398527	52.23644	ppb		0.00
Spiked Amount 100.000			Recovery = 52.236%				
16) 2-Fluorobiphenyl(S)	7.44	172	2595931	49.80795	ppb		0.00
Spiked Amount 100.000			Recovery = 49.808%				
22) 2,4,6-Tribromophenol(S)	9.20	330	423144	97.86929	ppb		0.00
Spiked Amount 200.000			Recovery = 48.935%				
28) Terphenyl-D14(S)	11.73	244	2724511	51.75775	ppb		0.00
Spiked Amount 100.000			Recovery = 51.758%				
Target Compounds							Qvalue
4) Phenol	5.02	94	1660791	49.43085	ppb		98
5) 1,4-DCB	4.81	146	1470252	48.97261	ppb		100
6) n-Nitrosodi-n-propylamine	5.28	43	857518	48.97780	ppb		99
9) 2-Nitrophenol	5.86	139	727196	51.52442	ppb		98
10) 2,4-Dichlorophenol	6.46	162	1209277	49.94781	ppb		98
11) Hexachlorobutadiene	6.35	225	579999	49.79592	ppb		100
12) 4-Chloro-3-methylphenol	7.20	107	80406	49.55476	ppb	#	96
14) Hexachlorocyclopentadiene	7.16	237	242376	47.81225	ppb		99
15) 2,4,6-Trichlorophenol	7.51	196	688230	51.70654	ppb		96
17) Dimethyl phthalate	7.96	163	2795841	50.09955	ppb		99
18) Acenaphthene	8.25	154	2429227	50.53629	ppb		100
19) 2,4-Dinitrophenol	8.49	184	263695	50.29641	ppb		96
20) 4-Nitrophenol	9.15	65	724970	51.91646	ppb		99
21) Diethyl phthalate	8.72	149	2841163	51.24872	ppb		100
24) n-Nitrosodiphenylamine	10.33	167	3884154	50.85890	ppb		100
25) Pentachlorophenol	9.89	266	185072	52.78412	ppb		99
26) Di-n-butylphthalate	10.53	149	4828397	55.03501	ppb		100
29) Butyl benzylphthalate	12.26	149	2104415	52.56760	ppb		95
30) Bis (2-ethylhexyl) phthala	12.80	149	2945652	52.18888	ppb		100
31) Di-n-octylphthalate	13.48	149	5260162	55.52125	ppb		100

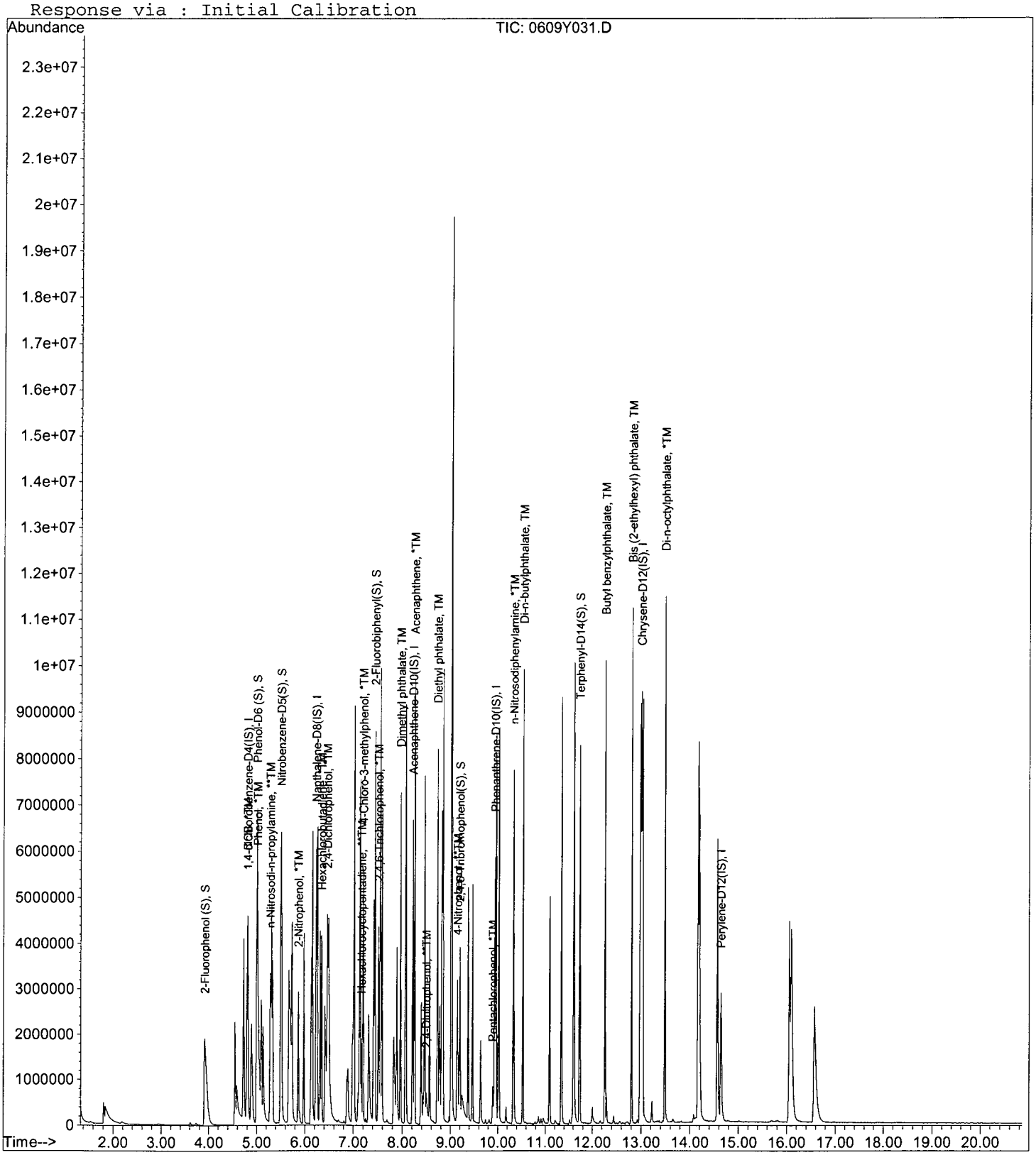
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y031.D Vial: 31
Acq On : 12 Jun 15 12:08 Operator: csc
Sample : 50ug/ml SVOC 06/12/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jun 12 12:28 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



EPA METHOD 8270D
Semivolatile Organic Compounds
Raw Data

APPL, INC.

Method Blank
EPA 8270D SOILS

Blank Name/QCG: **150521S-16137 - 197602**
Batch ID: #87DJU-150521A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	0.167 U	0.66	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	BUTYL BENZYL PHTHALATE	0.167 U	0.33	0.167	0.056	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-BUTYL PHTHALATE	0.167 U	0.33	0.167	0.066	mg/kg	5/21/2015	5/28/2015
BLANK	DI-N-OCTYL PHTHALATE	0.167 U	0.33	0.167	0.058	mg/kg	5/21/2015	5/28/2015
BLANK	DIETHYL PHTHALATE	0.167 U	0.33	0.167	0.062	mg/kg	5/21/2015	5/28/2015
BLANK	DIMETHYL PHTHALATE	0.167 U	0.33	0.167	0.063	mg/kg	5/21/2015	5/28/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	66.1	35-125			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	66.9	45-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: 2-FLUOROPHENO	70.2	35-105			%	5/21/2015	5/28/2015
BLANK	SURROGATE: NITROBENZENE-	67.7	35-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: PHENOL (S)	69.3	40-100			%	5/21/2015	5/28/2015
BLANK	SURROGATE: TERPHENYL-D14 (	86.8	30-125			%	5/21/2015	5/28/2015

Quant Method: Y0520TT.M
Run #: 0520Y055
Instrument: Yoda
Sequence: Y150520
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 12:43:22 PM

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y055.D Vial: 55
Acq On : 28 May 15 14:49 Operator: csc
Sample : 150521A BLK 1/30.00G Inst : Yoda
Misc : soil Multiplr: 33.33333
MS Integration Params: rteint.p
Quant Time: Jun 2 10:36 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	934649	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.24	136	4145958	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2316228	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.94	188	4141417	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3325730	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2051463	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.97	112	4826646	4680.95	ppb		-0.07
Spiked Amount 6666.667			Recovery =	70.214%			
3) Phenol-D6 (S)	5.08	99	6426671	4617.42	ppb		-0.03
Spiked Amount 6666.667			Recovery =	69.261%			
8) Nitrobenzene-D5(S)	5.50	82	2882944	2256.79	ppb		0.00
Spiked Amount 3333.333			Recovery =	67.704%			
16) 2-Fluorobiphenyl(S)	7.45	172	5934326	2231.02	ppb		0.00
Spiked Amount 3333.333			Recovery =	66.931%			
22) 2,4,6-Tribromophenol(S)	9.22	330	1027477	4405.02	ppb		0.00
Spiked Amount 6666.667			Recovery =	66.075%			
28) Terphenyl-D14(S)	11.74	244	7155193	2892.78	ppb		0.00
Spiked Amount 3333.333			Recovery =	86.783%			
Target Compounds							Qvalue
21) Diethyl phthalate	8.74	149	3647	19.28	ppb		95
26) Di-n-butylphthalate	10.54	149	10722	2.43	ppb		97
30) Bis (2-ethylhexyl) phthala	12.82	149	13551	5.51	ppb	#	96
31) Di-n-octylphthalate	13.50	149	3285	0.80	ppb		93

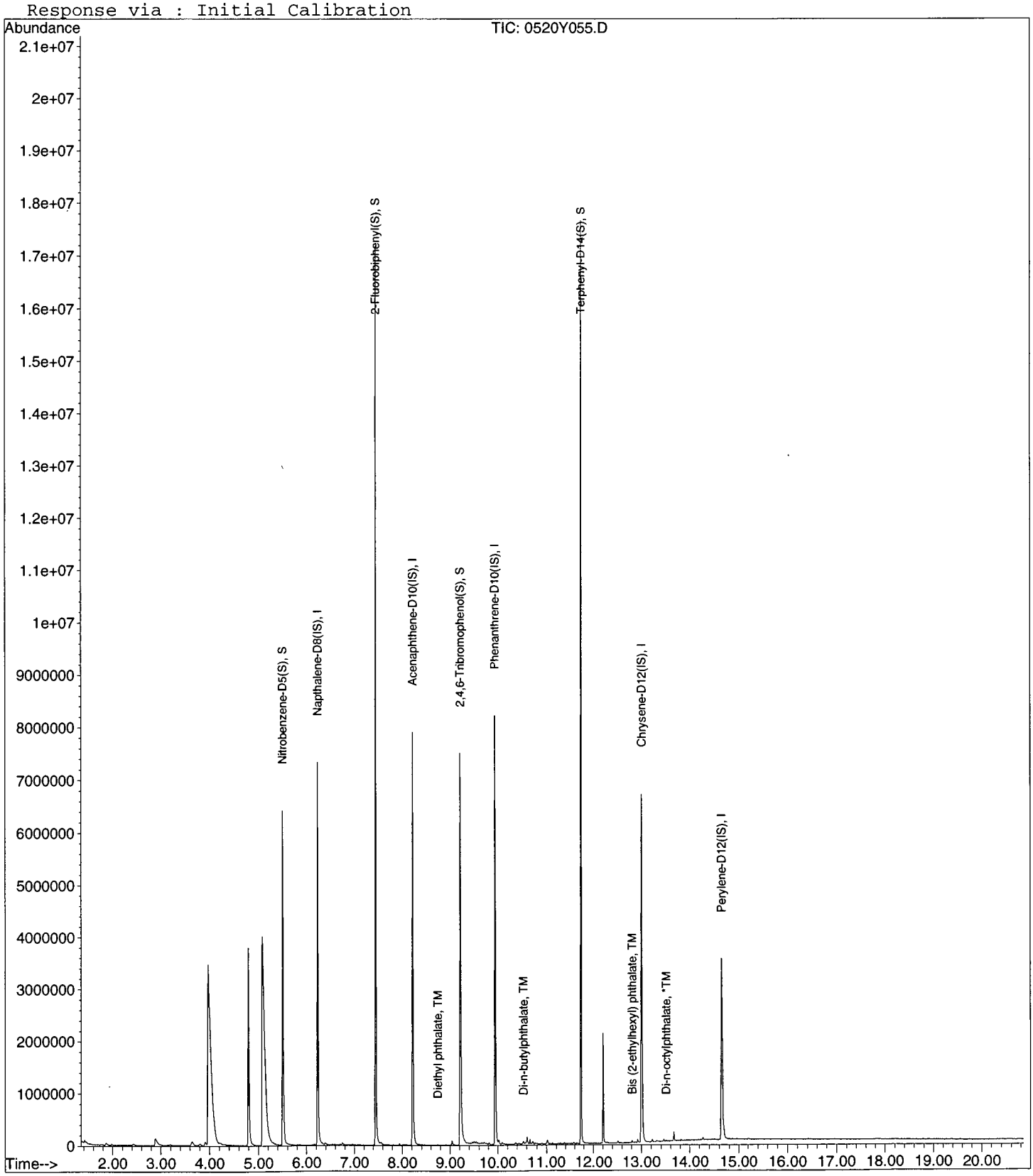
(#) = qualifier out of range (m) = manual integration
0520Y055.D Y0520TT.M Tue Jun 02 10:37:01 2015

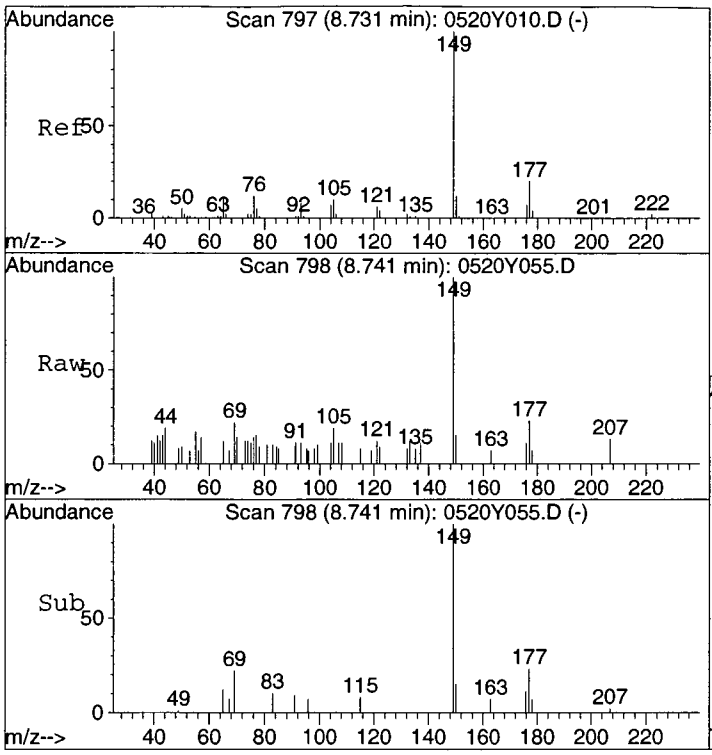
Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y055.D Vial: 55
Acq On : 28 May 15 14:49 Operator: csc
Sample : 150521A BLK 1/30.00G Inst : Yoda
Misc : soil Multiplr: 33.33

Quant Time: Jun 2 10:17 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration

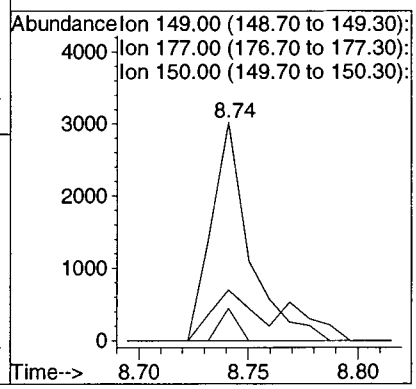


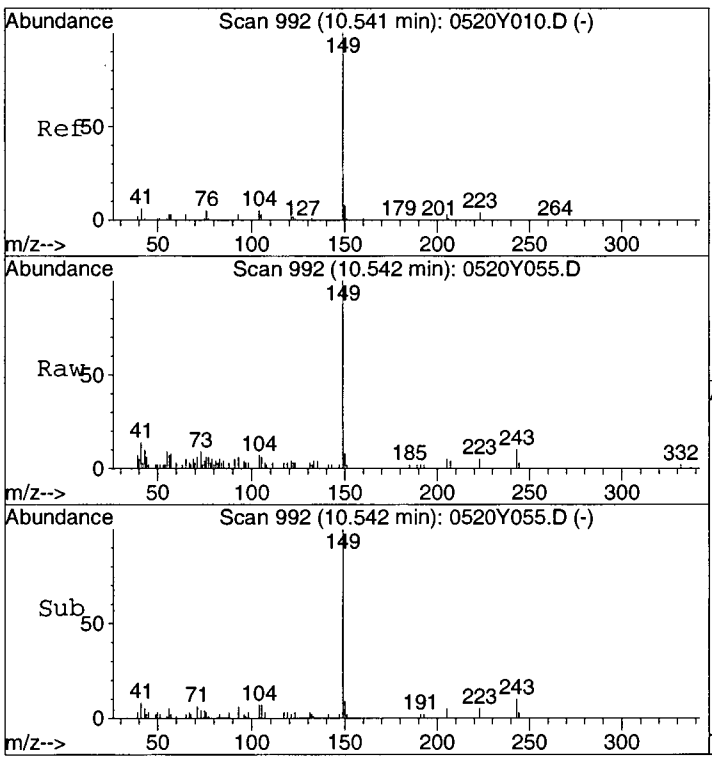


#21
Diethyl phthalate
Concen: 19.28 ppb
RT: 8.74 min Scan# 798
Delta R.T. 0.01 min
Lab File: 0520Y055.D
Acq: 28 May 15 14:49

Tgt Ion:149 Resp: 3647

Ion	Ratio	Lower	Upper
149	100		
177	23.2	15.1	28.0
150	14.9	8.3	15.5

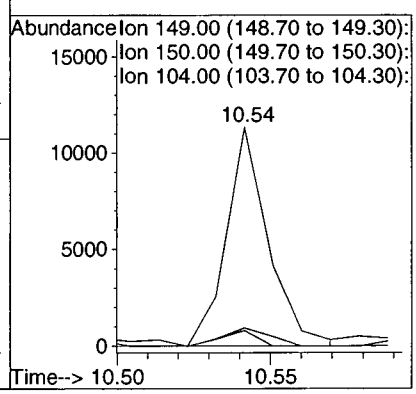


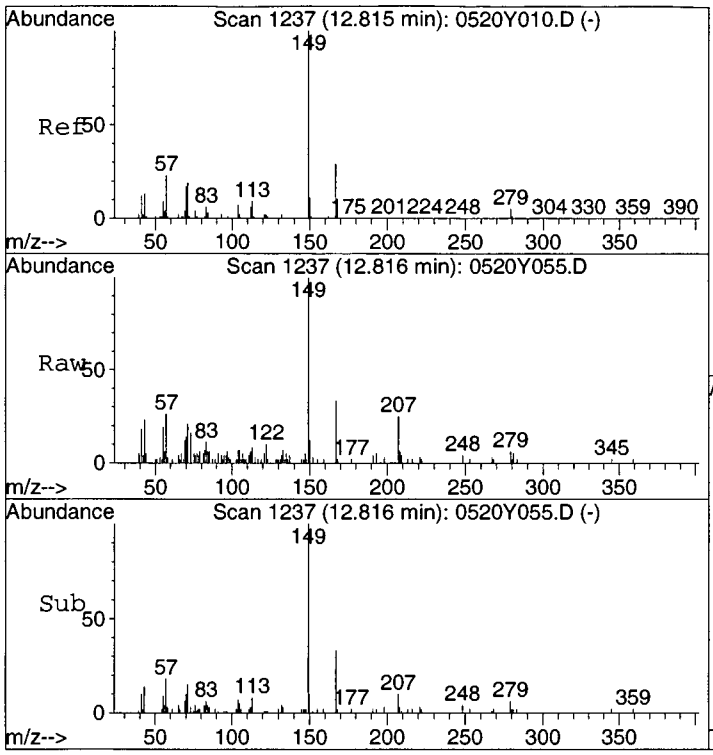


#26
Di-n-butylphthalate
Concen: 2.43 ppb
RT: 10.54 min Scan# 992
Delta R.T. 0.00 min
Lab File: 0520Y055.D
Acq: 28 May 15 14:49

Tgt Ion:149 Resp: 10722

Ion	Ratio	Lower	Upper
149	100		
150	8.4	6.4	11.8
104	7.2	4.3	7.9

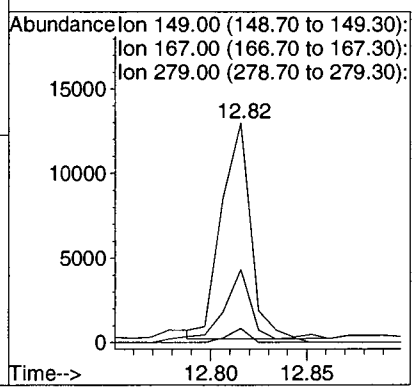


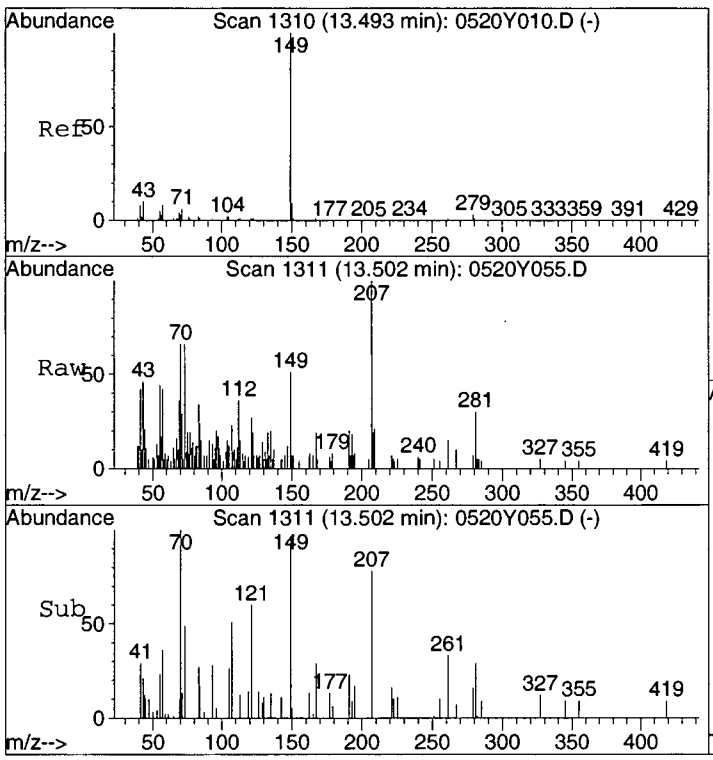


#30
Bis (2-ethylhexyl) phthalate
Concen: 5.51 ppb
RT: 12.82 min Scan# 1237
Delta R.T. 0.00 min
Lab File: 0520Y055.D
Acq: 28 May 15 14:49

Tgt Ion:149 Resp: 13551

Ion	Ratio	Lower	Upper
149	100		
167	34.1	23.1	42.9
279	6.6	7.1	13.3#

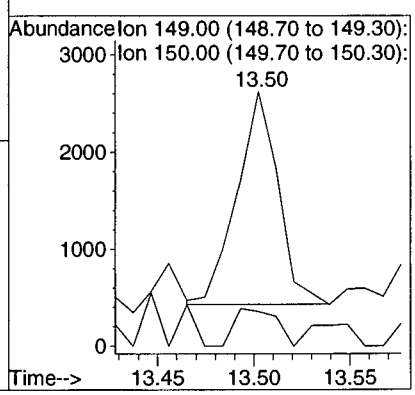




#31
Di-n-octylphthalate
Concen: 0.80 ppb
RT: 13.50 min Scan# 1311
Delta R.T. 0.01 min
Lab File: 0520Y055.D
Acq: 28 May 15 14:49

Tgt Ion:149 Resp: 3285

Ion	Ratio	Lower	Upper
149	100		
150	6.7	6.4	12.0



Method Blank
EPA 8270D WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150520W-16403 - 197994**
Batch ID: #87DJU-150520B

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	BIS (2-ETHYLHEXYL) PHTHALAT	5.00 U	20.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	05/20/15	06/12/15
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	05/20/15	06/12/15
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	05/20/15	06/12/15
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	05/20/15	06/12/15
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	05/20/15	06/12/15
BLANK	SURROGATE: 2,4,6-TRIBROMOP	81.0	40-125			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUORBIPHENY	60.8	50-110			%	05/20/15	06/12/15
BLANK	SURROGATE: 2-FLUOROPHENO	49.2	20-110			%	05/20/15	06/12/15
BLANK	SURROGATE: NITROBENZENE-	67.6	40-110			%	05/20/15	06/12/15
BLANK	SURROGATE: PHENOL (S)	31.7	10-115			%	05/20/15	06/12/15
BLANK	SURROGATE: TERPHENYL-D14 (	90.1	50-135			%	05/20/15	06/12/15

Quant Method:Y0607TT.M
Run #:0609Y032
Instrument:Yoda
Sequence:Y150609
Initials:MA

GC SC-Blank-REG MDLs
Printed: 06/12/15 2:31:23 PM

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y032.D Vial: 32
Acq On : 12 Jun 15 12:38 Operator: csc
Sample : 150520B BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:33 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	649557	40.00000 ppb	0.00
7) Napthalene-D8(IS)	6.23	136	2850168	40.00000 ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1566115	40.00000 ppb	0.00
23) Phenanthrene-D10(IS)	9.94	188	2793617	40.00000 ppb	0.00
27) Chrysene-D12(IS)	13.00	240	2380194	40.00000 ppb	0.00
32) Perylene-D12(IS)	14.64	264	1559030	40.00000 ppb	0.00
System Monitoring Compounds					
2) 2-Fluorophenol (S)	3.91	112	2015701	98.31705 ppb	-0.03
Spiked Amount 200.000			Recovery =	49.159%	
3) Phenol-D6 (S)	5.04	99	1772032	63.36100 ppb	0.02
Spiked Amount 200.000			Recovery =	31.681%	
8) Nitrobenzene-D5(S)	5.50	82	1764834	67.58315 ppb	0.00
Spiked Amount 100.000			Recovery =	67.583%	
16) 2-Fluorobiphenyl(S)	7.44	172	3121248	60.83512 ppb	0.00
Spiked Amount 100.000			Recovery =	60.835%	
22) 2,4,6-Tribromophenol(S)	9.20	330	701203	162.04167 ppb	0.00
Spiked Amount 200.000			Recovery =	81.021%	
28) Terphenyl-D14(S)	11.73	244	4644737	90.04976 ppb	0.00
Spiked Amount 100.000			Recovery =	90.050%	

Target Compounds Qvalue

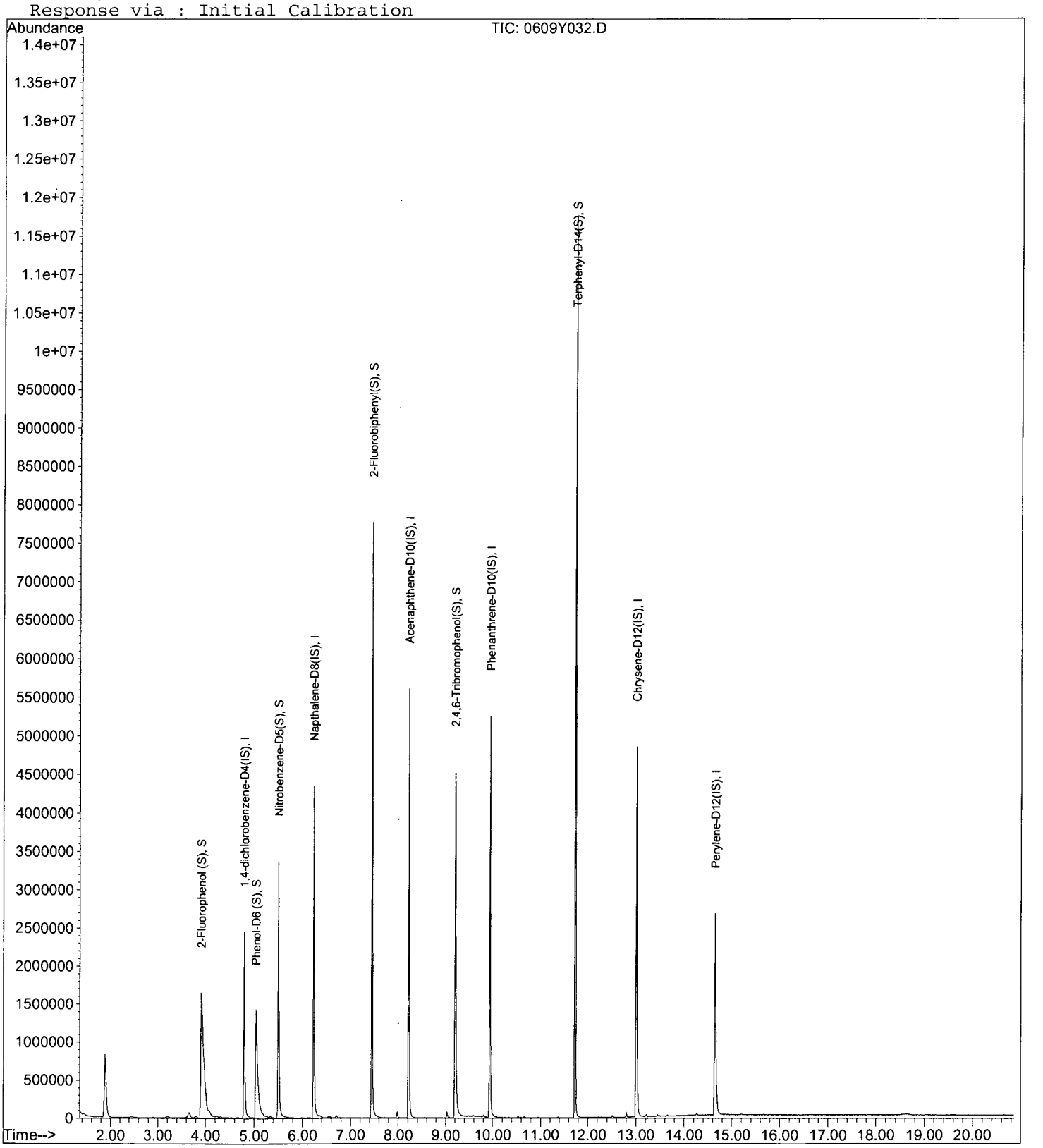
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y032.D Vial: 32
Acq On : 12 Jun 15 12:38 Operator: csc
Sample : 150520B BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:33 2015 Quant Results File: Y0607TT.RES

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D SOILS

APPL ID: **150521S-16137 LCS - 197602**
Batch ID: #87DJU-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	1.67	1.35	80.8	45-125
BUTYL BENZYL PHTHALATE	1.67	1.31	78.4	50-125
DI-N-BUTYL PHTHALATE	1.67	1.30	77.8	55-110
DI-N-OCTYL PHTHALATE	1.67	1.39	83.2	40-130
DIETHYL PHTHALATE	1.67	1.19	71.3	50-115
DIMETHYL PHTHALATE	1.67	1.19	71.3	50-110
SURROGATE: 2,4,6-TRIBROMOPHENOL	6.67	5.07	76.0	35-125
SURROGATE: 2-FLUORBIPHENYL (S)	3.33	2.27	68.2	45-105
SURROGATE: 2-FLUOROPHENOL (S)	6.67	4.46	66.9	35-105
SURROGATE: NITROBENZENE-D5 (S)	3.33	2.22	66.7	35-100
SURROGATE: PHENOL (S)	6.67	4.66	69.9	40-100
SURROGATE: TERPHENYL-D14 (S)	3.33	2.98	89.5	30-125

Comments:

Primary	SPK
Quant Method :	Y0520TT.M
Extraction Date :	5/21/2015
Analysis Date :	5/28/2015
Instrument :	Yoda
Run :	0520Y056
Initials :	DA

Printed: 6/2/2015 12:43:07 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150520\0520Y056.D Vial: 56
Acq On : 28 May 15 15:18 Operator: csc
Sample : 150521A LCS-1 1/30.07G Inst : Yoda
Misc : soil Multiplr: 33.26

Quant Time: Jun 1 11:22 2015 Quant Results File: Y0520TT.RES

Quant Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	983964	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.23	136	4419817	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.22	164	2490321	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	9.95	188	4281753	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.01	240	3572459	40.00	ppb		0.00
32) Perylene-D12(IS)	14.64	264	2131735	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.97	112	4854290	4461.29	ppb		-0.07
Spiked Amount 6651.147			Recovery =	67.076%			
3) Phenol-D6 (S)	5.06	99	6850450	4664.83	ppb		-0.05
Spiked Amount 6651.147			Recovery =	70.136%			
8) Nitrobenzene-D5(S)	5.50	82	3025830	2216.70	ppb		0.00
Spiked Amount 3325.574			Recovery =	66.656%			
16) 2-Fluorobiphenyl(S)	7.45	172	6501011	2267.92	ppb		0.00
Spiked Amount 3325.574			Recovery =	68.196%			
22) 2,4,6-Tribromophenol(S)	9.22	330	1278414	5073.03	ppb		0.00
Spiked Amount 6651.147			Recovery =	76.273%			
28) Terphenyl-D14(S)	11.75	244	7946573	2983.88	ppb		0.00
Spiked Amount 3325.574			Recovery =	89.725%			
Target Compounds							Qvalue
4) Phenol	5.07	94	1862536	1138.86	ppb		88
5) 1,4-DCB	4.81	146	1584760	1117.80	ppb		99
6) n-Nitrosodi-n-propylamine	5.29	43	973854	1269.25	ppb		97
9) 2-Nitrophenol	5.87	139	847441	1201.47	ppb		87
10) 2,4-Dichlorophenol	6.48	162	2434236	1171.73	ppb		99
11) Hexachlorobutadiene	6.35	225	658624	1176.18	ppb		98
12) 4-Chloro-3-methylphenol	7.20	107	90997	1140.46	ppb	#	14
14) Hexachlorocyclopentadiene	7.17	237	248717	1076.07	ppb		99
15) 2,4,6-Trichlorophenol	7.55	196	818478	1219.71	ppb		98
17) Dimethyl phthalate	7.97	163	3500272	1192.29	ppb		90
18) Acenaphthene	8.26	154	2931202	1186.55	ppb		97
19) 2,4-Dinitrophenol	8.51	184	258619	1123.90	ppb	#	100
20) 4-Nitrophenol	9.17	65	853905	1162.09	ppb		99
21) Diethyl phthalate	8.73	149	3487656	1188.43	ppb		100
24) n-Nitrosodiphenylamine	10.35	167	4799487	1199.35	ppb		98
25) Pentachlorophenol	9.93	266	184061	1115.79	ppb		90
26) Di-n-butylphthalate	10.54	149	5972882	1303.94	ppb	#	97
29) Butyl benzylphthalate	12.27	149	2488530	1307.83	ppb		93
30) Bis (2-ethylhexyl) phthala	12.81	149	3586234	1353.98	ppb	#	93
31) Di-n-octylphthalate	13.49	149	6108460	1389.95	ppb		100

Algorithm = $\frac{1862536 \times 1 \times 33.26 \times 40}{2.211 \times 983964} = 1138.9$ HA 6/12/15

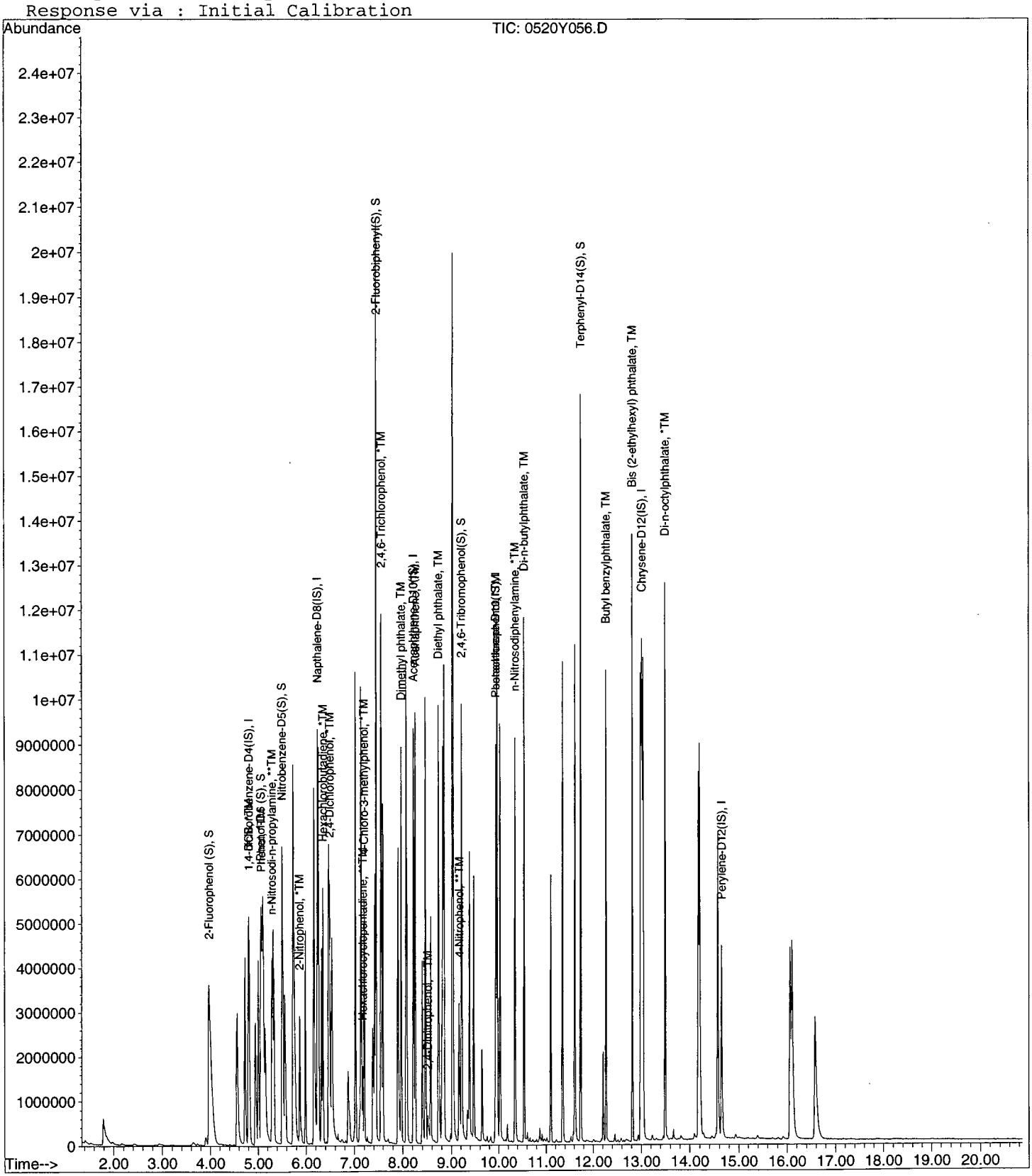
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150520\0520Y056.D Vial: 56
Acq On : 28 May 15 15:18 Operator: csc
Sample : 150521A LCS-1 1/30.07G Inst : Yoda
Misc : soil Multiplr: 33.26

Quant Time: Jun 1 11:22 2015 Quant Results File: Y0520TT.RES

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri May 29 12:06:14 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D WATER

APPL ID: **150520W-16403 LCS - 197994**
Batch ID: #87DJU-150520B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
BIS (2-ETHYLHEXYL) PHTHALATE	50.0	39.7	79.4	40-125
BUTYL BENZYL PHTHALATE	50.0	40.2	80.4	45-115
DI-N-BUTYL PHTHALATE	50.0	40.4	80.8	55-115
DI-N-OCTYL PHTHALATE	50.0	40.8	81.6	35-135
DIETHYL PHTHALATE	50.0	37.4	74.8	40-120
DIMETHYL PHTHALATE	50.0	37.3	74.6	25-125
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	164	82.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	64.4	64.4	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	92.8	46.4	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	67.1	67.1	40-110
SURROGATE: PHENOL (S)	200	62.1	31.1	10-115
SURROGATE: TERPHENYL-D14 (S)	100	89.8	89.8	50-135

Comments: _____

Primary	SPK
Quant Method :	Y0607TT.M
Extraction Date :	05/20/15
Analysis Date :	06/12/15
Instrument :	Yoda
Run :	0609Y033
Initials :	MA

Printed: 06/12/15 2:31:24 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150609\0609Y033.D Vial: 33
Acq On : 12 Jun 15 13:08 Operator: csc
Sample : 150520B LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:03 2015 Quant Results File: Y0607TT.RES

Quant Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	4.80	152	678489	40.00000 ppb	0.00
7) Napthalene-D8(IS)	6.23	136	2994973	40.00000 ppb	0.00
13) Acenaphthene-D10(IS)	8.21	164	1703779	40.00000 ppb	0.00
23) Phenanthrene-D10(IS)	9.94	188	2969348	40.00000 ppb	0.00
27) Chrysene-D12(IS)	12.99	240	2595311	40.00000 ppb	0.00
32) Perylene-D12(IS)	14.63	264	1728945	40.00000 ppb	0.00
System Monitoring Compounds					
2) 2-Fluorophenol (S)	3.91	112	1987533	92.80931 ppb	-0.03
Spiked Amount 200.000			Recovery =	46.405%	
3) Phenol-D6 (S)	5.01	99	1814211	62.09791 ppb	0.00
Spiked Amount 200.000			Recovery =	31.049%	
8) Nitrobenzene-D5(S)	5.49	82	1839885	67.05062 ppb	0.00
Spiked Amount 100.000			Recovery =	67.051%	
16) 2-Fluorobiphenyl(S)	7.44	172	3592648	64.36520 ppb	0.00
Spiked Amount 100.000			Recovery =	64.365%	
22) 2,4,6-Tribromophenol(S)	9.20	330	773710	164.29424 ppb	0.00
Spiked Amount 200.000			Recovery =	82.147%	
28) Terphenyl-D14(S)	11.73	244	5048839	89.77097 ppb	0.00
Spiked Amount 100.000			Recovery =	89.771%	
Target Compounds					Qvalue
4) Phenol	5.04	94	510999	15.41227 ppb	90
5) 1,4-DCB	4.81	146	388154	13.10174 ppb	99
6) n-Nitrosodi-n-propylamine	5.28	43	527533	31.85109 ppb	91
9) 2-Nitrophenol	5.86	139	488979	33.80347 ppb	99
10) 2,4-Dichlorophenol	6.46	162	817059	31.63674 ppb	99
11) Hexachlorobutadiene	6.35	225	151079	12.65552 ppb	98
12) 4-Chloro-3-methylphenol	7.20	107	30678	18.44732 ppb	99
14) Hexachlorocyclopentadiene	7.16	237	15442	12.08288 ppb	97
15) 2,4,6-Trichlorophenol	7.52	196	507935	35.63289 ppb	97
17) Dimethyl phthalate	7.96	163	2229801	37.30942 ppb	95
18) Acenaphthene	8.25	154	1433957	27.85495 ppb	99
19) 2,4-Dinitrophenol	8.50	184	174273	35.27277 ppb	88
20) 4-Nitrophenol	9.15	65	595697	39.83285 ppb	100
21) Diethyl phthalate	8.72	149	2222160	37.42770 ppb	98
24) n-Nitrosodiphenylamine	10.33	167	3090306	37.37762 ppb	99
25) Pentachlorophenol	9.90	266	123542	35.58216 ppb	98
26) Di-n-butylphthalate	10.53	149	3834689	40.37438 ppb	99
29) Butyl benzylphthalate	12.26	149	1720568	40.22687 ppb	94
30) Bis (2-ethylhexyl) phthala	12.81	149	2392773	39.67854 ppb	97
31) Di-n-octylphthalate	13.48	149	4133343	40.83374 ppb	100

Algorithm = $\frac{510999 \times 1 \times 40}{1.955 \times 678489} = 15.41$ MA 6/12/15

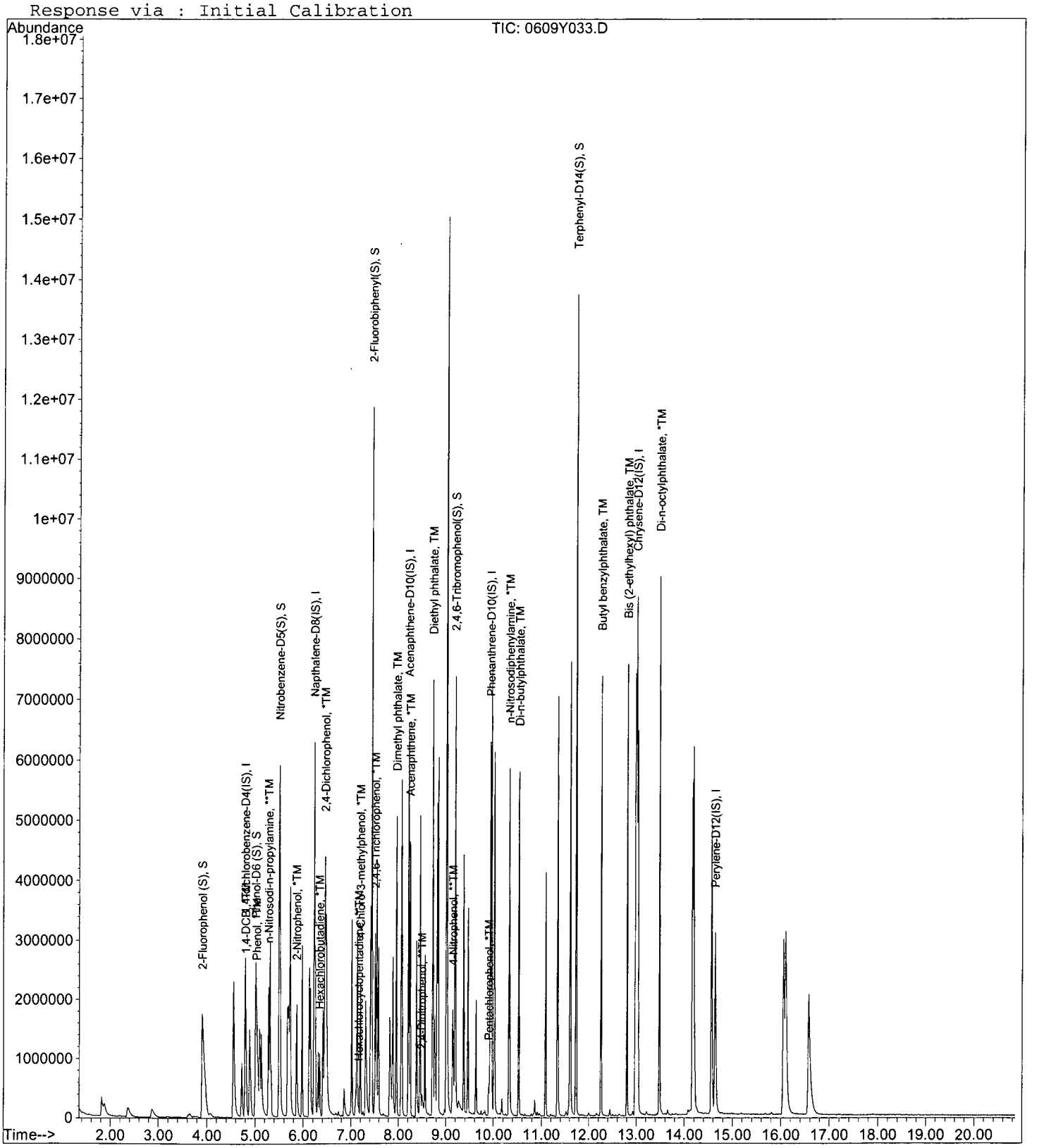
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150609\0609Y033.D Vial: 33
Acq On : 12 Jun 15 13:08 Operator: csc
Sample : 150520B LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jun 12 14:03 2015 Quant Results File: Y0607TT.RES

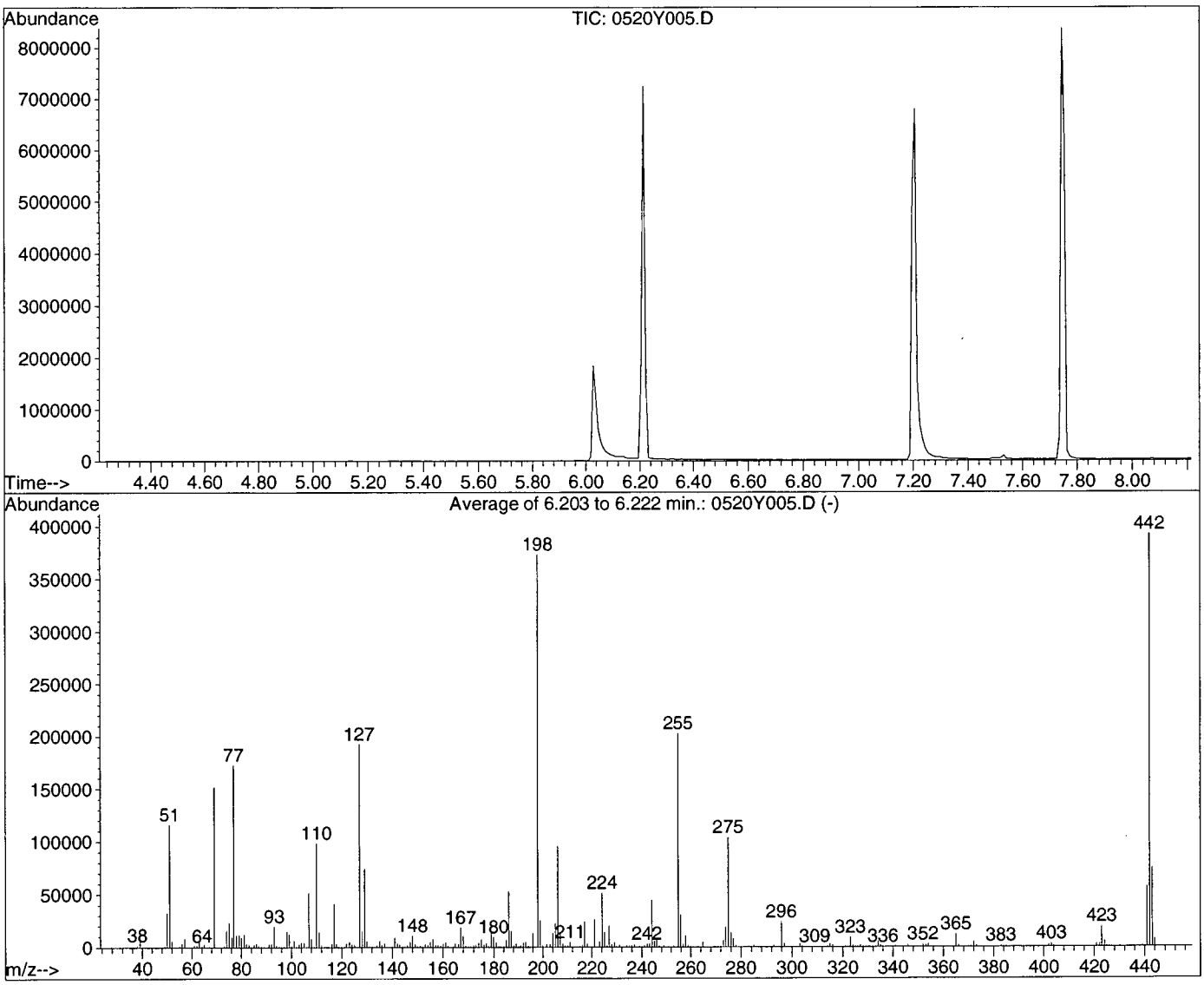
Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jun 12 09:43:02 2015
Response via : Initial Calibration



DFTPP

Data File : M:\YODA\DATA\Y150520\0520Y005.D Vial: 5
Acq On : 22 May 15 10:28 Operator: csc
Sample : SV Tune 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150520\Y0520TT.M (RTE Integrator)
Title : EPA 8270C

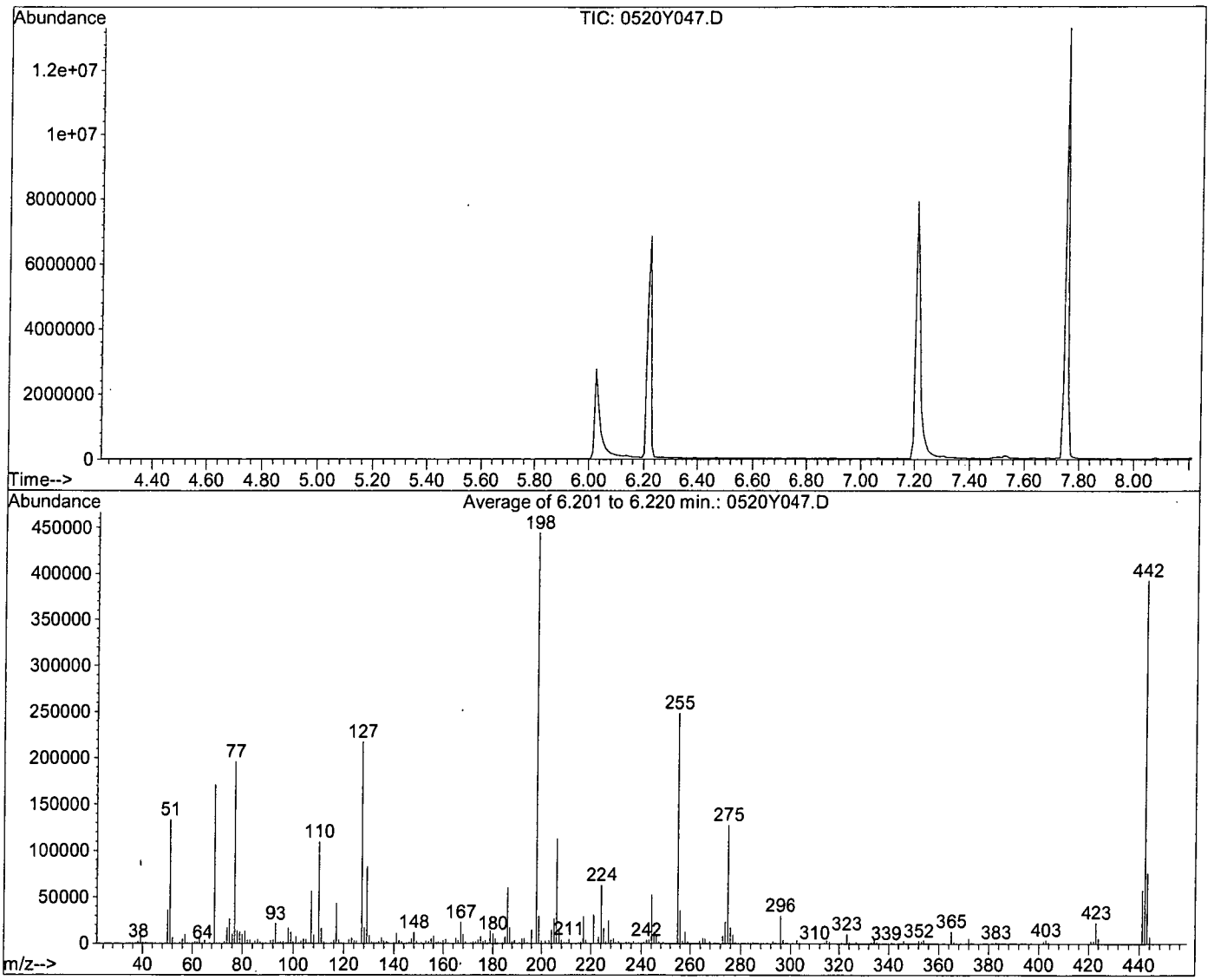


AutoFind: Scans 282, 283, 284; Background Corrected with Scan 279

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.1	115997	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.1	127	PASS
127	198	40	60	51.6	192476	PASS
197	198	0.00	1	0.1	253	PASS
198	198	100	100	100.0	373053	PASS
199	198	5	9	6.8	25312	PASS
275	198	10	30	27.8	103725	PASS
365	198	1	100	3.1	11748	PASS
441	443	0.01	100	76.5	56619	PASS
442	198	40	150	105.2	392399	PASS
443	442	17	23	18.9	74045	PASS

Data File : M:\YODA\DATA\Y150520\0520Y047.D Vial: 47
Acq On : 28 May 15 10:36 Operator: csc
Sample : SV TUNE 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150520\Y0520.M (RTE Integrator)
Title : EPA 8270C



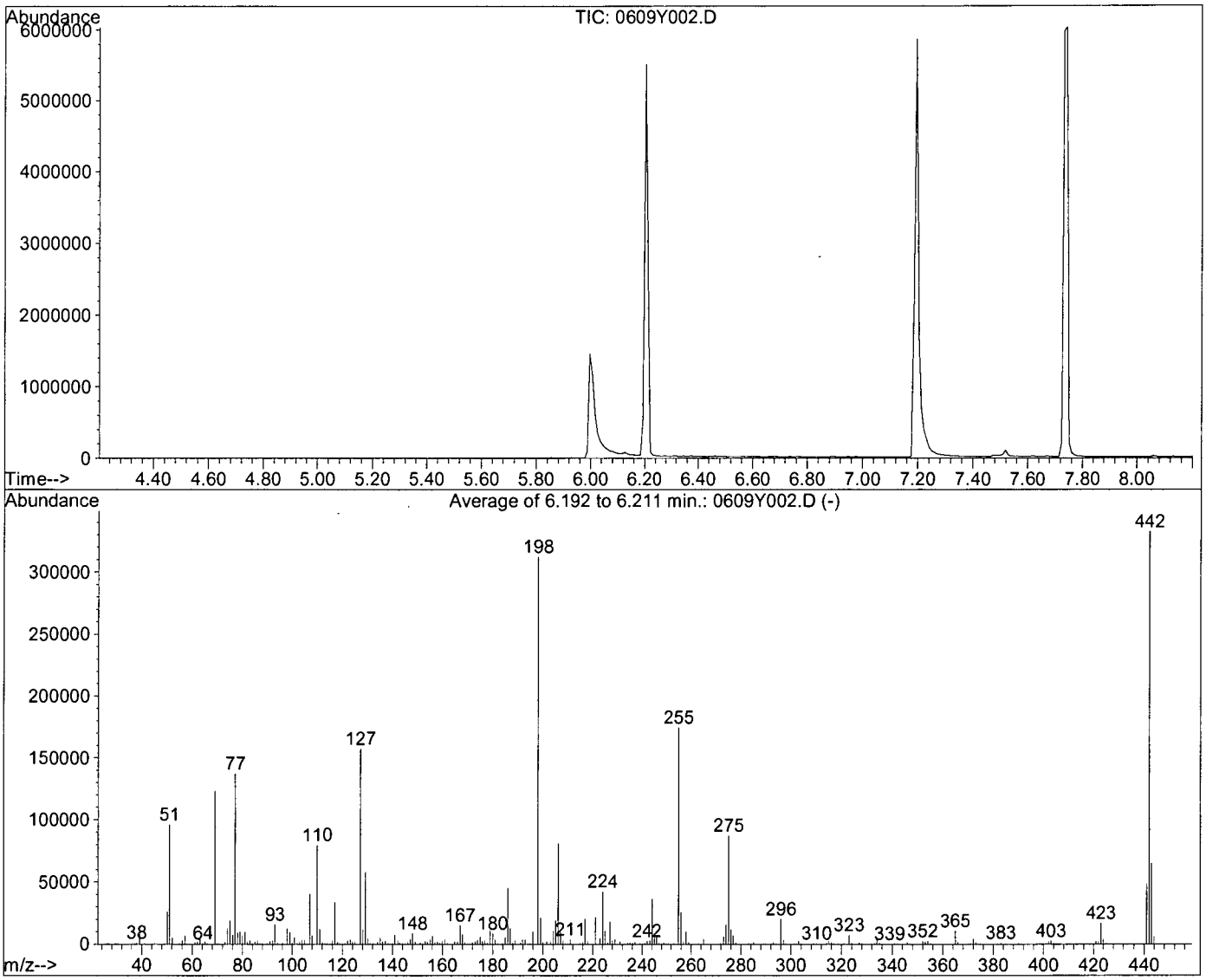
Spectrum Information: Average of 6.201 to 6.220 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.0	133405	PASS
68	69	0.00	2	0.1	168	PASS
70	69	0.00	2	0.4	723	PASS
127	198	40	60	48.9	217427	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	444517	PASS
199	198	5	9	6.6	29426	PASS
275	198	10	30	28.7	127578	PASS
365	198	1	100	3.0	13174	PASS
441	443	0.01	100	75.6	57498	PASS
442	198	40	150	88.4	393040	PASS
443	442	17	23	19.4	76072	PASS

DFTPP

Data File : M:\YODA\DATA\Y150609\0609Y002.D Vial: 2
Acq On : 9 Jun 15 13:56 Operator: csc
Sample : SV Tune 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C



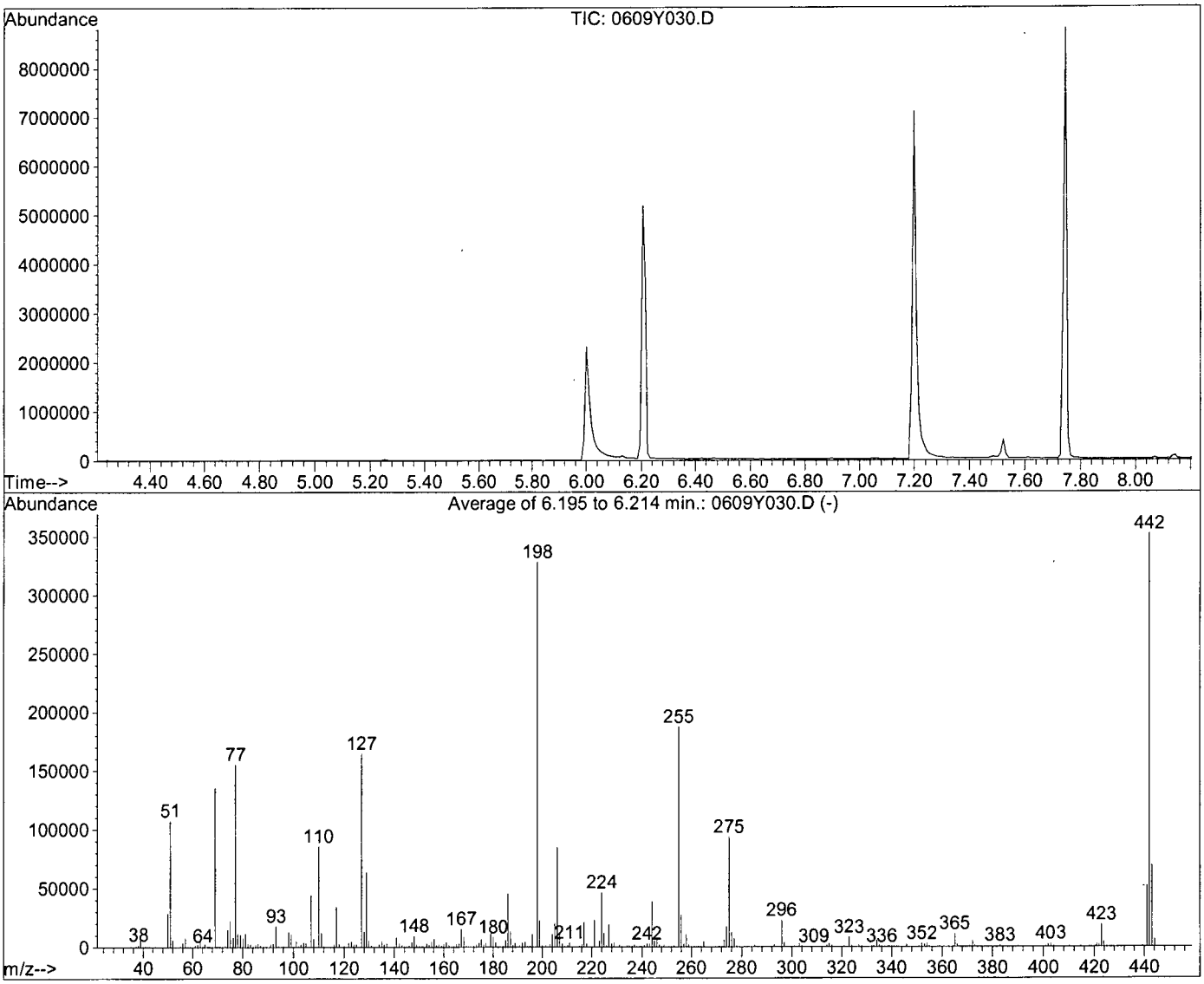
AutoFind: Scans 281, 282, 283; Background Corrected with Scan 279

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.7	95893	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.7	807	PASS
127	198	40	60	50.4	157232	PASS
197	198	0.00	1	0.0	114	PASS
198	198	100	100	100.0	312125	PASS
199	198	5	9	6.7	21015	PASS
275	198	10	30	27.9	87218	PASS
365	198	1	100	3.4	10540	PASS
441	443	0.01	100	74.5	48480	PASS
442	198	40	150	106.5	332529	PASS
443	442	17	23	19.6	65043	PASS

DFTPP

Data File : M:\YODA\DATA\Y150609\0609Y030.D Vial: 30
Acq On : 12 Jun 15 11:51 Operator: csc
Sample : SV TUNE 5/14/15 Inst : Yoda
Misc : soil Multiplr: 1.00

Method : M:\YODA\DATA\Y150609\Y0607TT.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 281, 282, 283; Background Corrected with Scan 279

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.7	107306	PASS
68	69	0.00	2	0.3	362	PASS
70	69	0.00	2	0.4	569	PASS
127	198	40	60	50.2	164728	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	328277	PASS
199	198	5	9	6.8	22185	PASS
275	198	10	30	28.4	93298	PASS
365	198	1	100	3.3	10929	PASS
441	443	0.01	100	74.5	51587	PASS
442	198	40	150	107.3	352326	PASS
443	442	17	23	19.7	69244	PASS

0609Y030.D Y0607TT.M Fri Jun 12 12:05:36 2015

INDOXACARB CURVE											
Prep: 5/14/15 Ex: 7/31/15-L.H.											
Supplier	**ID#**	**ug/mL**	**LOT#**	**DATE**	**EXP.DATE**	**µL**	**µL**	**µL**	**µL**	**µL**	**µL**
INDOXACARB STD.		1		07/31/14	07/31/15	5	50	100	150	200	250
						995	950	900	850	800	750
	Hexane		051914A		**FINAL VOL**	1000	1000	1000	1000	1000	1000

8270 Full Scan Second Source Stock						
	5/14/15-L.H.					
8270 Second Source Stock						
Exp:	7/21/15					
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	116070-02	2000	34696-3398	5/14/15	5/14/16	1000
o2si	110391-01	2000	34693-3401	5/14/15	5/14/16	1000
o2si	010337-01	1000	17950-3514	5/14/15	11/14/15	1000
o2si	110396-01	2000	34698-3515	5/14/15	5/14/16	1000
o2si	110397-01	2000	50011-3505	5/14/15	7/21/15	1000
o2si	110393-01	2000	34694-3515	5/14/15	5/14/16	1000
o2si	110394-01	2000	35110-3515	5/14/15	5/14/16	1000
o2si	110395-01	2000	34697-3402	5/14/15	5/14/16	1000
o2si	110392-01	2000	18075-3397	5/14/15	5/14/16	1000
EM Science	Methylene Chloride		55006	11/06/14		1000
				Final Vol.		10000

Semivolatile (SV) Tuning Solution -L.H.						
PREP DATE:	5/14/15					
Semivolatile (SV) Tune Solution 50ug/ml						
Exp:	5/14/16					
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Ultra Scient	Semivolatile	1000	CL-5063-3518	05/14/15	5/14/16	1000
EM Science	Methylene Chloride		47186	11/06/14		19000
				Final Vol.		20000

PCB CONGENERS SPIKE
Source: O2Si **Con.** 100mg/L
CAT: 130116-01-SS
LOT: 250062-35148
Open: 05/22/15-L.H.
Ex: 5/22/16

PCB CONGENERS SURR.					
Prep: 5/22/15-L.H. Ex: 11/22/15					
Compounds		**Int. Conc.**	**ALIQUOT**	**Fin. Vol.**	**Fin. Conc.**
TCMX		1000µg/mL	500µL	50mL	10µg/mL
Part: 70273		OP: 4/21/15			
Lot: 041111-30678		EX: 4/11/16			
Source: Absolute					
Solvent:					
Acetone:		051413C			

8270 Full Scan Standard Curve

PREP DATE:	05/22/15-L.H.												
8270 Standard Curve													
Exp:	05/29/15					5	10	20	40	50	60	80	100
		Conc.		Date									
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	5	5	10	20	25	30	40	50
o2si	8270 BN:A (200	VAR	242352-34963	05/21/15	5/21/16	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		54200	11/06/14		190	90	80	60	50	40	20	0
Supelco	SV Internal St	2000	XA10079V-34496	05/21/15	5/21/16	4	2	2	2	2	2	2	2
				Final Vol.		204	102	102	102	102	102	102	102

8270 PAH SIM CCV

PREP DATE:	05/22/15-LH					
8270 PAH SIM Continuing Calibration Verification 5ug/ml						
Exp.DATE:	05/29/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM S	200	230271-34569	02/27/15	06/08/16	5
o2si	8270 BN:A (200	VAR	242352-34963	02/27/15	#######	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SIM SV Interna	125	XA10079V-34496	05/15/15	5/15/16	4
				Final Vol.		204

Tech. Chlordane Spike
Source: Absolute **Con.** 1000mg/L
CAT: 130116-01-SS
LOT: 101311-32223
Open: 05/22/15-L.H.
Ex: 5/22/16

GC/MS STANDARD PREPARATION BOOK # L PAGE #

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04/27/15
ac

PREP DATE:	04/27/15					
8270 Stock/Spike Standard						
Exp:	**10/27/15**					
		Conc.				
Supplier	ID #	µg/mL	Lot #	Open Date	Exp.Date	µL
Absolute	10001	2000	053014-34968	04/01/15	05/03/17	1000
Absolute	10001	2000	053014-34967	04/01/15	05/03/17	1000
Absolute	10001	2000	053014-34966	04/01/15	05/03/17	1000
Absolute	10002	2000	111114-34973	04/01/15	11/11/17	1000
Absolute	10002	2000	111114-34972	04/01/15	11/11/17	1000
Absolute	10002	2000	111114-34971	04/01/15	11/11/17	1000
Absolute	10004	2000	010815-34978	04/01/15	01/08/20	1000
Absolute	10004	2000	010815-34977	04/01/15	01/08/20	1000
Absolute	10004	2000	010815-34976	04/01/15	01/08/20	1000
Absolute	10005	2000	110314-34983	04/01/15	11/03/19	1000
Absolute	10005	2000	110314-34982	04/01/15	11/03/19	1000
Absolute	10005	2000	110314-34981	04/01/15	11/03/19	1000
Absolute	10006	2000	031715-34988	04/01/15	03/17/18	1000
Absolute	10006	2000	031715-34987	04/01/15	03/17/18	1000
Absolute	10006	2000	031715-34986	04/01/15	03/17/18	1000
Absolute	10007	2000	020515-34993	04/01/15	02/05/20	1000
Absolute	10007	2000	020515-34992	04/01/15	02/05/20	1000
Absolute	10007	2000	020515-34991	04/01/15	02/05/20	1000
Absolute	10018	2000	020315-34998	04/01/15	02/03/20	1000
Absolute	10018	2000	020315-34997	04/01/15	02/03/20	1000
Absolute	10018	2000	020315-34996	04/01/15	02/03/20	1000
Absolute	70023	1000	112114-35003	04/01/15	11/21/19	1000
Absolute	70023	1000	112114-35002	04/01/15	11/21/19	1000
Absolute	70023	1000	112114-35001	04/01/15	11/21/19	1000
Absolute	82705	2000	031215-35008	04/01/15	03/12/18	1000
Absolute	82705	2000	031215-35007	04/01/15	03/12/18	1000
Absolute	82705	2000	031215-35006	04/01/15	03/12/18	1000
Absolute	94552	2000	082914-35013	04/01/15	08/29/19	1000
Absolute	94552	2000	082914-35012	04/01/15	08/29/19	1000
Absolute	94552	2000	082914-35011	04/01/15	08/29/19	1000
				Final Vol.		30000

04/21/15
csc

PREP DATE:	04/21/15					
8270 Continuing Calibration Verification 50ug/ml						**50**
Exp:	04/28/15			Date		
		Conc.				
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	11/18/14	05/21/15	25
o2si	8270 BN:A Surrogate	VAR	237956-34559	02/27/15	10/08/16	25
EM Science	Methylene Chloride		54200	11/06/14		50
Supelco	SV Internal Standard	2000	XA10079V-34496	02/27/15	09/30/17	2
				Final Vol.		102

04/21/15
csc

PREP DATE:	04/21/15					
8270 Continuing Calibration Verification 50ug/ml						**50**
Exp:	04/28/15			Date		
		Conc.				
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	11/18/14	05/21/15	25
o2si	8270 BN:A Surrogate	VAR	237956-34559	02/27/15	10/08/16	25
EM Science	Methylene Chloride		54200	11/06/14		50
Supelco	SV Internal Standard	2000	XA10079V-34496	02/27/15	09/30/17	2
				Final Vol.		102

SV Internal Stanard Stock Prep: 05/21/15-L.H. Ex: 5/21/16						
		Conc.				
Supplier	ID #	µg/mL	Lot #	Open Date	Exp.Date	µL
Supleco	CRM48902	2000	XA10079V-34489	5/21/15	5/21/16	1000

8270 BNA Surrogate Stock 5/21/15-L.H. Ex: 5/21/16						
		Conc.				
Supplier	ID #	µg/mL	Lot #	Open Date	Exp.Date	µL
O2SI	110004-17	200/400	242352-34956	5/21/15	5/21/16	1000

PREP DATE	05/21/15-L.H.					
8270 Lv. 1						
Exp:	05/28/15					5
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	5
o2si	8270 BN:A (200:400)	VAR	242352-34956	05/21/15	05/21/16	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SV Internal S	2000	A10079V-344	05/21/15	5/21/16	4
				Final Vol.		204

		AR 1254 CALIBRATION CURVE					
AR1254 STANDARD		Prep:4/16/15-L.H.					
		Exp: 10/1/15					
		final					Final Vol.
	initial	conc.		Aliquot		Solvent	Solvent
LEVELS ID	conc.	(ug/ml)		(uL)			(ml)
LEVEL 10	1ug/ml	0.010		10 µL			1.0
LEVEL 50		0.050		50 µL		HEXANE	1.0
LEVEL 100		0.100		100 µL			1.0
LEVEL 250		0.250		250 µL		LOT #05191	1.0
LEVEL 1000		1.000		100 µL			1.0

MITC CURVE Prep: 5/21/15-L.H. Ex: 6/11/15												
						1	2	3	4	5	6	7
SUPPLIER	**ID#**	**ug/mL**	**LOT #**	**DATE**	**EXP.**	mL	mL	mL	mL	mL	mL	mL
					Final Conc.	0.02	0.13	0.25	1	2.5	3.5	5
	MITC STD	5		05/05/15	06/11/15	4	25	50	20	50	70	100
VWR	ETHYL ACETATE		043014E			996	975	950	80	50	30	N/A
					Final VOL.	1000	1000	1000	100	100	100	100

Prep: 5/21/15 Exp: 8/21/15 GA Diesel 400ppm CCV							
STANDARD	INITIAL CONC.	SOURCE D	ALIQUOT	FINAL VOL	FINAL CONC	SOLVENT	
DIESEL STD.	1000 µg/mL	Diesel Std.	2000µL	5mL	400 µg/ml	MC	
STANDARD	Prep:	12/05/14				55006	
DIESEL STD.	Exp:	11/24/15					

Prep: 5/22/15	Exp: 6/26/15	OCL Level 2 Standard			GA
Compound	**Initial conc**	**ource Stoc**	**Aliquot**	**Final Conc**	**Final Vol.**
Various	10 ug/ml	OCL Stock	125ul	0.050 ug/ml	25 mL
		Prep: 11/17/14			
		Exp: 6/26/15			
	Hexane:	051914A			

OP/F CURVE		Prep: 5/20/15 Exp: 10/24/15			
SUPPLIER	**ID#**	**[µg/mL]**	**LOT #**	**DATE**	**EXP. DATE**
	OP/F STD	5		04/24/15	######
VWR	Hexane		051914A		
					Final VOL.

PCB Water Spike													
Prep: 5/22/15-L.H. Ex: 8/22/15						Acetone:051413C							
Compounds		**Int. Conc.**	**ALIQUOT**	**Fin. Vol.**	**Fin. Conc.**								
AR 1016		1000µg/mL	50µL	10mL	5µg/mL								
AR1260						**IA**	**IB**	**1**	**2**	**3**	**4**	**5**	**6**
Cat: 130011-03		OP: 5/22/15				**mL**	**mL**	**mL**	**mL**	**mL**	**mL**	**mL**	**mL**
Lot:235487-34300		EX: 5/22/16				2	5	10	50	20	100	70	100
Source: O2Si						998	995	990	950	80	100	30	NA
Solvent:						**1000**	**1000**	**1000**	**1000**	**100**	**200**	**100**	**100**

8270 Full Scan Second Source (SS)						
PREP DATE:	/022/15-L.	EX. 5/29/15				
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
o2si	8270 Stock S	200	VAR	05/14/15	7/21/15	25
EM Science	Methylene Chloride		54200	11/06/14		75
Supelco	SV Internal	2000	XA10079V-34496	02/27/15	09/30/17	2
				Final Vol.		102

INDOXACARB CURVE											
Prep: 5/14/15 Ex: 7/31/15-L.H.											
Supplier	**ID#**	**ug/mL**	**LOT#**	**DATE**	**EXP.DATE**	**µL**	**µL**	**µL**	**µL**	**µL**	**µL**
INDOXACARB STD.		1		07/31/14	07/31/15	5	50	100	150	200	250
						995	950	900	850	800	750
	Hexane		051914A		**FINAL VOL**	1000	1000	1000	1000	1000	1000

8270 Full Scan Second Source Stock						
	5/14/15-L.H.					
8270 Second Source Stock						
Exp:	7/21/15					
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	116070-02	2000	34696-3398	5/14/15	5/14/16	1000
o2si	110391-01	2000	34693-3401	5/14/15	5/14/16	1000
o2si	010337-01	1000	17950-3514	5/14/15	11/14/15	1000
o2si	110396-01	2000	34698-3515	5/14/15	5/14/16	1000
o2si	110397-01	2000	50011-3505	5/14/15	7/21/15	1000
o2si	110393-01	2000	34694-3515	5/14/15	5/14/16	1000
o2si	110394-01	2000	35110-3515	5/14/15	5/14/16	1000
o2si	110395-01	2000	34697-3402	5/14/15	5/14/16	1000
o2si	110392-01	2000	18075-3397	5/14/15	5/14/16	1000
EM Science	Methylene Chloride		55006	11/06/14		1000
				Final Vol.		10000

Semivolatile (SV) Tuning Solution -L.H.						
PREP DATE:	5/14/15					
Semivolatile (SV) Tune Solution 50ug/ml						
Exp:	5/14/16					
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Ultra Scient	Semivolatile	1000	CL-5063-3518	05/14/15	5/14/16	1000
EM Science	Methylene Chloride		47186	11/06/14		19000
				Final Vol.		20000

072

02/24/15
CSC

GC/MS STANDARD PREPARATION BOOK # L PAGE

PREP DATE:	02/24/15					
8270 PAH SIM Continuing Calibration Verification 5ug/ml						
Exp.DATE:	02/31/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM Stock	10	213931-33759	12/23/14	08/26/15	5
o2si	8270 BN:A Surrogate	VAR	226244-34103	12/23/14	04/10/16	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SIM Internal Standard	125	XA10079V-34507	12/23/14	09/30/17	4
				Final Vol.		204

02/27/15
CSC

8270D PAH SIM Solution, 200 mg/L, 1 ml
110780-01
Lot # 230271 Storage ≤-10 °C Expiry 8/June/2016
Solv: Methylene Chloride

8270D PAH SIM
Lot #: 230271 - 34569
Rec: 1/13/15 MFR exp. 6/8/16

Recieved: 01/13/15
Opened: 02/27/15
Expired: 06/8/16

02/27/15
CSC

8270 BN:A (200:400) Surrogate Solution, 1 mL
110004-17
Lot # 237956 Storage ≤-10 °C Expiry 8/Oct/2016
Solv: Methylene Chloride

8270 BN:A (200:400) Surrogate Solution
Lot #: 237956 - 34559
Rec: 1/13/15 MFR exp. 10/8/16

Recieved: 01/13/15
Opened: 02/27/15
Expired: 10/8/16

NOTEBOOK INSERT LABEL

Semivolatile Internal Std Mix **CRM48902**
Lot: XA10079V EXP: SEP/2017 STORAGE: REFRIGERATE 2 x 1ml

DATE RECEIVED:_____

SUPELCO Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD TRANSFER LABEL

Date of Preparation: **Exp. Date:**
Reference Number: **Storage:** EXP: SEP/2017
Description:_____ REFRIGERATE
CHEMST

02/28/15
CSC

Semivolatile Internal Standard Mix
Lot #: XA10079V - 34496
Rec: 12/11/14 MFR exp. 9/30/17

CRM48902 XA10079V
Semivolatile Internal Std Mix
2000ug/ml in dichloromethane

Recieved: 12/11/14
Opened: 02/27/15
Expired: 09/30/17

PAC ECO CURVE													
						1a	1b	1	2	3	4	5	6
	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL ST	5		05/07/15	11/19/15	2	5	10	50	20	100	70	1000
						998	995	990	950	80	100	30	N/A
	Hexane		051914A		Final VOL.	1000	1000	1000	1000	100	200	100	1000

OP/F CURVE													
						IA	1B	1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	mL	mL	mL	mL	mL	mL	mL	mL
	OP/F STD	5		05/27/15	01/17/16	2	5	10	50	20	100	70	100
VWR	Hexane		051914A			998	995	990	950	80	100	30	NA
					Final VOL.	1000	1000	1000	1000	100	200	100	100
Prep: 5/28/15-L.H. EX. 11/28/15													

OP 2ND SOURCE						
PREP:	05/28/2015-L.H	EXP:	11/28/15			
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL
	OP 2ND SRC	5		02/27/15	06/25/15	100
VWR	HEXANE		051914A			100
					Final VOL.	200

Decanoic Acid CCV				
Prep: 5/28/15-L.H.		Ex. 11/28/15		
D.A.Std.	Prep: 2/17/15		EX: 2/17/16	
Aliquot:	400µL			
Fin. Vol:	1mL			
Solvent:	MC	54200		

8270 Full Scan CCV						
PREP DATE:	5/28/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	06/02/15					50
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	25
o2si	8270 BN:A (2	VAR	242352-34963	05/21/15	5/21/16	25
EM Science	Methylene Chloride		47186	11/06/14		50
Supelco	SV Internal	2000	XA10079V-34496	05/21/15	5/21/16	2

Technical Chlordane Calibration Curve						
Compound	Initial Conc.	Stock Src.	Aliquot	Final Conc.	Solvent	Final Vol
Technical	10µg/mL	Tech. Chld St	1A- 25µL	0.025 µg/mL	Hexane	10 mL
Chlordane		Prep: 10/29/14	1- 50uL	0.05µg/mL	Lot#	10 mL
		Exp: 10/29/15	2- 100uL	0.10µg/mL	051914A	10 mL
			3- 250uL	0.25µg/mL		10 mL
			4- 500uL	0.50µg/mL		10 mL
			5- 750uL	0.75µg/mL		10 mL

8270 Full Scan CCV

PREP DATE:	06/09/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	06/16/15					50
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	25
o2si	8270 BN:A (2	VAR	242352-34963	05/21/15	5/21/16	25
EM Science	Methylene Chloride		47186	11/06/14		50
Supelco	SV Internal	2000	XA10079V-34496	05/21/15	5/21/16	2

8270 Full Scan Standard Curve

PREP DATE:	6/09/15-L.H.												
8270 Standard Curve													
Exp:	06/15/15					5	10	20	40	50	60	80	100
		Conc.		Date									
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	5	5	10	20	25	30	40	50
o2si	8270 BN:A (2	VAR	242352-34963	05/21/15	5/21/16	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		54200	11/06/14		190	90	80	60	50	40	20	0
Supelco	SV Internal	2000	A10079V-3449	05/21/15	5/21/16	4	2	2	2	2	2	2	2
				Final Vol.		204	102	102	102	102	102	102	102

8270 Full Scan Second Source (SS)

PREP DATE:	6/09/15-L.H	EX. 06/15/15				
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
o2si	8270 Stock S	200	VAR	05/14/15	7/21/15	25
EM Science	Methylene Chloride		54200	11/06/14		75
Supelco	SV Internal	2000	A10079V-3449	05/21/15	5/21/16	2
				Final Vol.		102

8270 Full Scan CCV						
PREP DATE:	06/12/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	06/19/15					**50**
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	25
o2si	8270 BN:A (2	VAR	242352-34963	05/21/15	5/21/16	25
EM Science	Methylene Chloride		47186	11/06/14		50
Supelco	SV Internal	2000	XA10079V-34496	05/21/15	5/21/16	2

Organic Extraction Worksheet

Method	8270 Sonication Ext. Methylene c 3550	Extraction Set	150521A	Extraction Method	SON009	Units	mL

Spiked ID 1	8270T Spike 4-27-15 EXP 10-27-15		Surrogate ID 1	8270 Surrogate 248398-35028	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	05/21/15 8:15	
Spiked ID 8			Ext. End Time:	05/21/15 14:45	
			GC Requires Extract By:	**05/29/15 0:00**	

pH1			Water Bath Temp Criteria	79,80 °C
pH2				
pH3				

Spiked By: IC **Date** 05/21/15 **Witnessed By:** DL **Date** 05/21/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150521A Blk				1	1 equip	30.00g E-S5 E-WB7	1	NA	05/21/15 8:15	
2	150521A LCS-1		0.250	1	1	1 equip	30.07g E-S4 E-WB7	1	NA	05/21/15 8:15	
3	AZ16137	AZ16137S01			1	1 equip	30.15g E-S3.1 E-WB7	1	NA	05/21/15 8:15	76380
4	AZ16138	AZ16138S01			1	1 equip	30.26g E-S2 E-WB7	1	NA	05/21/15 8:15	76380
5	AZ16139	AZ16139S01			1	1 equip	30.17g E-S1.2 E-WB7	1	NA	05/21/15 8:15	76380
6	AZ16140	AZ16140S01			1	1 equip	30.04g E-S1.1 E-WB7	1	NA	05/21/15 8:15	76380
7	AZ16141	AZ16141S01			1	1 equip	30.33g E-S6 E-WB7	1	NA	05/21/15 8:15	76380
8	AZ16198	AZ16198S02			1	1 equip	30.11g E-S7 E-WB7	1	NA	05/21/15 8:15	76390
9	AZ16199	AZ16199S01			1	1 equip	30.01g E-S5 E-WB6	1	NA	05/21/15 8:15	76390
10	AZ16201	AZ16201S02			1	1 equip	30.10g E-S4 E-WB6	1	NA	05/21/15 8:15	76390
11	AZ16202	AZ16202S01			1	1 equip	30.18g E-S3.1 E-WB6	1	NA	05/21/15 8:15	76390
12	AZ16286	AZ16286S02			1	1 equip	30.10g E-S2 E-WB6	1	NA	05/21/15 8:15	76414
13	AZ16400	AZ16400S02			1	1 equip	30.10g E-S1.2 E-WB6	1	NA	05/21/15 8:15	76447
14	AZ16401	AZ16401S01			1	1 equip	30.34g E-S1.1 E-WB6	1	NA	05/21/15 8:15	76447
15	AZ16402	AZ16402S01			1	1 equip	30.17g E-S6 E-WB6	1	NA	05/21/15 8:15	76447

KY 5/21/15

Solvent and Lot#	
B.Na2SO4	XE21E
MC	55006
Filter Paper	9624720
Acidified Na2SO4	4-13-15

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	BA
Date	5/21/15
Time	1600
Refrigerator	Hobart

	Technician's Initials
Scanned By	KY
Sample Preparation	KY
Extraction	IC
Concentration	IC

Modified	05/21/15 3:46:20 PM

Reviewed By: Key **Date** 5/21/15

05/21/15 3:46:41 PM

Ext_ID 138 47831

_SEP004

Organic Extraction Worksheet

Method	625/8270 Separatory Funnel Extra 3510C	Extraction Set	150520B	Extraction Method	SEP004	Units	mL

Spiked ID 1	8270T Spike 4-27-15 exp 10-27-15		Surrogate ID 1	8270 Surrogate 248398-35028	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	05/20/15 15:30	
Spiked ID 8			Ext. End Time:	05/21/15 9:35	
			GC Requires Extract By:	**06/05/15 0:00**	

pH1	2	05/20/15 3:35:00 PM	Water Bath Temp Criteria	79 °C
pH2	14	05/20/15 4:15:00 PM		
pH3				

Spiked By: DL **Date** 05/20/15 **Witnessed By:** DC **Date** 05/20/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150520B Blk				1	1	1000	1	2/1	05/20/15 15:30	
						equip	E-WB7				
2	150520B LCS-1		0.250	1	1	1	1000	1	2/1	05/20/15 15:30	
						equip	E-WB7				
3	AZ16403	AZ16403W10			1	1	1000	1	2/1	05/20/15 15:30	76447 rush 2 weeks
						equip	E-WB7				

KY 5/21/15

Solvent and Lot#	
MC	55009
1+1 Sulfuric Acid	3-6-15
Acidified Na2SO4	4-13-15
Na2SO4	XE21E
10N NaOH	5-20-15
ph strips	HC421273
Filter Paper	400091

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	LH
Date	5/21/15
Time	12:15
Refrigerator	GC-C

	Technician's Initials
Scanned By	DC
Sample Preparation	DC
Extraction	DC,CFM,IC
Concentration	IC

Modified	05/21/15 10:01:23 AM

Reviewed By: Ky **Date** 5/21/15

05/21/15 10:01:55 AM Ext_ID 47846

Injection Log

Directory: M:\YODA\DATA\Y150520\

Vial	FileName	Multiplier	SampleName	Misc Info	Injected
5	0520Y005.D	1	SV Tune 5/14/15		22 May 15 10:28
6	0520Y006.D	1	5ug/ml SVOC 05/22/15		22 May 15 10:46
7	0520Y007.D	1	10ug/ml SVOC 05/22/15		22 May 15 11:15
8	0520Y008.D	1	20ug/ml SVOC 05/22/15		22 May 15 11:45
9	0520Y009.D	1	40ug/ml SVOC 05/22/15		22 May 15 12:14
10	0520Y010.D	1	50ug/ml SVOC 05/22/15		22 May 15 12:43
11	0520Y011.D	1	60ug/ml SVOC 05/22/15		22 May 15 13:12
12	0520Y012.D	1	80ug/ml SVOC 05/22/15		22 May 15 13:42
13	0520Y013.D	1	100ug/ml SVOC 05/22/15		22 May 15 14:11
14	0520Y014.D	1	50ug/ml SVOC SS 05/22/15		22 May 15 14:41
47	0520Y047.D	1	SV TUNE 5/14/15		28 May 15 10:36
48	0520Y048.D	1	50ug/ml SVOC 05/28/15		28 May 15 10:54
55	0520Y055.D	33.3333	150521A BLK 1/30.00G	soil	28 May 15 14:49
56	0520Y056.D	33.2557	150521A LCS-1 1/30.07G	soil	28 May 15 15:18
67	0520Y067.D	33.2226	AZ16400S02 1/30.10G	soil	28 May 15 20:43
68	0520Y068.D	329.598	AZ16401S01 1/30.34G x10	soil	28 May 15 21:13
69	0520Y069.D	33.1455	AZ16402S01 1/30.17G	soil	28 May 15 21:42
2	0609Y002.D	1	SV Tune 5/14/15		9 Jun 15 13:56
3	0609Y003.D	1	5ug/ml SVOC 06/09/15		9 Jun 15 14:14
4	0609Y004.D	1	10ug/ml SVOC 06/09/15		9 Jun 15 14:44
5	0609Y005.D	1	20ug/ml SVOC 06/09/15		9 Jun 15 15:13
6	0609Y006.D	1	40ug/ml SVOC 06/09/15		9 Jun 15 15:43
7	0609Y007.D	1	50ug/ml SVOC 06/09/15		9 Jun 15 16:12
8	0609Y008.D	1	60ug/ml SVOC 06/09/15		9 Jun 15 16:42
9	0609Y009.D	1	80ug/ml SVOC 06/09/15		9 Jun 15 17:12
10	0609Y010.D	1	100ug/ml SVOC 06/09/15		9 Jun 15 17:42
11	0609Y011.D	1	50ug/ml SVOC SS 06/09/15		9 Jun 15 18:12
30	0609Y030.D	1	SV TUNE 5/14/15	soil	12 Jun 15 11:51
31	0609Y031.D	1	50ug/ml SVOC 06/12/15		12 Jun 15 12:08
32	0609Y032.D	1	150520B BLK 1/1000	water	12 Jun 15 12:38
33	0609Y033.D	1	150520B LCS-1 1/1000	water	12 Jun 15 13:08
34	0609Y034.D	1	AZ16403W10 1/1000	water	12 Jun 15 13:38

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons

APPL, INC.

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
QC Summary

APPL, INC.

Method Blank
EPA 8270D LL SOILS

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150521S-16137 - 197621**
Batch ID: #SIMDD-150521A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHYLENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ANTHRACENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	BENZ (A) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (A) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (B) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (G,H,I) PERYLENE	0.0017 U	0.005	0.0017	0.0013	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (K) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	CHRYSENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	DIBENZ (A,H) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORANTHENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	INDENO (1,2,3-CD) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	NAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	PHENANTHRENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	PYRENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	63.5	45-105			%	5/21/2015	5/27/2015
BLANK	SURROGATE: NITROBENZENE-	44.2	35-100			%	5/21/2015	5/27/2015
BLANK	SURROGATE: TERPHENYL-D14 (	106	30-125			%	5/21/2015	5/27/2015

Quant Method: P0518-42.M
Run #: 0515L235
Instrument: Linus
Sequence: L150515
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 2:36:13 PM

Method Blank

EPA 8270D LL WATER DODv3

Blank Name/QCG: **150520W-16403 - 197650**
Batch ID: #SIMDD-150520A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/28/15
BLANK	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/28/15
BLANK	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/28/15
BLANK	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/28/15
BLANK	SURROGATE: 2-FLUORBIPHENY	50.8	50-110			%	05/20/15	05/28/15
BLANK	SURROGATE: NITROBENZENE-	71.9	40-110			%	05/20/15	05/28/15
BLANK	SURROGATE: TERPHENYL-D14 (	114	50-135			%	05/20/15	05/28/15

Quant Method:P0518-42.M
Run #:0515L251
Instrument:Linus
Sequence:L150515
Initials:MA

GC SC-Blank-REG MDLs
Printed: 06/03/15 11:00:58 AM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	45-105	63.5		35-100	44.2	
150521A-LCS	Lab Control Spike	45-105	64.5		35-100	46.9	
AZ16400	S67-TP001-0203	45-105	37.9	#	35-100	49.2	
AZ16401	S67-TP002-0001	45-105	67.9		35-100	115	#
AZ16402	S67-TP002-0203	45-105	43.5	#	35-100	50.5	

Comments: Batch: #SIMDD-150521A

= Recovery outside of Control Limits on Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150521A-BLK	Blank	30-125	106				
150521A-LCS	Lab Control Spike	30-125	107				
AZ16400	S67-TP001-0203	30-125	62.7				
AZ16401	S67-TP002-0001	30-125	99.1				
AZ16402	S67-TP002-0203	30-125	65.5				

Comments: Batch: #SIMDD-150521A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520A-LCS	Lab Control Spike	50-110	57.2		40-110	68.0	
AZ16403	S67-MW015-051415	50-110	60.9		40-110	63.4	
150520A-BLK	Blank	50-110	50.8		40-110	71.9	

Comments: Batch: #SIMDD-150520A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150520A-LCS	Lab Control Spike	50-135	139	*			
AZ16403	S67-MW015-051415	50-135	109				
150520A-BLK	Blank	50-135	114				

Comments: Batch: #SIMDD-150520A

* = Recovery outside of Control Limits on QC Sample.

Laboratory Control Spike Recovery
EPA 8270D LL SOILS

APPL ID: **150521S-16137 LCS - 197621**
Batch ID: #SIMDD-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	0.133	0.0883	66.4	45-105
ACENAPHTHENE	0.133	0.127	95.5	45-110
ACENAPHTHYLENE	0.133	0.112	84.2	45-105
ANTHRACENE	0.133	0.126	94.7	55-105
BENZ (A) ANTHRACENE	0.133	0.139	105	50-110
BENZO (A) PYRENE	0.133	0.132	99.2	50-110
BENZO (B) FLUORANTHENE	0.133	0.140	105	45-115
BENZO (G,H,I) PERYLENE	0.133	0.135	102	40-125
BENZO (K) FLUORANTHENE	0.133	0.132	99.2	45-125
CHRYSENE	0.133	0.144	108	55-110
DIBENZ (A,H) ANTHRACENE	0.133	0.136	102	40-125
FLUORANTHENE	0.133	0.127	95.5	55-115
FLUORENE	0.133	0.120	90.2	50-110
INDENO (1,2,3-CD) PYRENE	0.133	0.145	109	40-120
NAPHTHALENE	0.133	0.0797	59.9	40-105
PHENANTHRENE	0.133	0.120	90.2	50-110
PYRENE	0.133	0.146	110	45-125
SURROGATE: 2-FLUORBIPHENYL (S)	0.0667	0.043	64.5	45-105
SURROGATE: NITROBENZENE-D5 (S)	0.0667	0.0313	46.9	35-100
SURROGATE: TERPHENYL-D14 (S)	0.0667	0.0711	107	30-125

Comments: _____

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	5/21/2015
Analysis Date :	5/27/2015
Instrument :	Linus
Run :	0515L236
Initials :	DA

Printed: 6/2/2015 2:36:01 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8270D LL WATER DODv3

APPL ID: **150520W-16403 LCS - 197650**
Batch ID: #SIMDD-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	5.00	4.16	83.2	45-105
ACENAPHTHENE	5.00	4.80	96.0	45-110
ACENAPHTHYLENE	5.00	4.41	88.2	50-105
ANTHRACENE	5.00	4.56	91.2	55-110
BENZ (A) ANTHRACENE	5.00	5.17	103	55-110
BENZO (A) PYRENE	5.00	5.09	102	55-110
BENZO (B) FLUORANTHENE	5.00	5.28	106	45-120
BENZO (G,H,I) PERYLENE	5.00	5.20	104	40-125
BENZO (K) FLUORANTHENE	5.00	5.03	101	45-125
CHRYSENE	5.00	5.42	108	55-110
DIBENZ (A,H) ANTHRACENE	5.00	5.15	103	40-125
FLUORANTHENE	5.00	4.63	92.6	55-115
FLUORENE	5.00	4.51	90.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	5.31	106	45-125
NAPHTHALENE	5.00	4.92	98.4	40-100
PHENANTHRENE	5.00	4.38	87.6	50-115
PYRENE	5.00	5.44	109	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.43	57.2	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.70	68.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	3.48	139 #	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	05/20/15
Analysis Date :	05/27/15
Instrument :	Linus
Run :	0515L230
Initials :	MA

Printed: 06/03/15 11:01:00 AM
APPL Standard LCS

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 5/27/2015

Matrix: SOIL Instrument: Linus

Blank ID: 150521A-BLK Time Analyzed: 1917

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150521A-BLK	Blank	0515L235	5/27/2015 1917
150521A-LCS	Lab Control Spike	0515L236	5/27/2015 1942
AZ16400	S67-TP001-0203	0515L246	5/27/2015 2358
AZ16401	S67-TP002-0001	0515L247	5/28/2015 0024
AZ16402	S67-TP002-0203	0515L248	5/28/2015 0049

Comments: Batch: #SIMDD-150521A

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/28/15

Matrix: WATER Instrument: Linus

Blank ID: 150520A-BLK Time Analyzed: 1002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520A-LCS	Lab Control Spike	0515L230	05/27/15 1708
AZ16403	S67-MW015-051415	0515L231	05/27/15 1734
150520A-BLK	Blank	0515L251	05/28/15 1002

Comments: Batch: #SIMDD-150520A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0515L002.D 76447
Matrix: Soil np 6-23-15
ID: SV Tune 05/14/15

SDG No: np 6-23-14 ~~Linus~~ 76447
Date Analyzed: 5/15/2015
Instrument: Linus
Time Analyzed: 16:56

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1ug/ml PAH 05/15/1	0515L003.D	5/15/2015 17:15
2		0.2ug/ml PAH	0515L004.D	5/15/2015 17:41
3		0.5ug/ml PAH	0515L005.D	5/15/2015 18:06
4		1.0ug/ml PAH	0515L006.D	5/15/2015 18:32
5		5.0ug/ml PAH	0515L007.D	5/15/2015 18:58
6		10ug/ml PAH	0515L008.D	5/15/2015 19:23
7		50ug/ml PAH	0515L009.D	5/15/2015 19:49
8		100ug/ml PAH	0515L010.D	5/15/2015 20:14
9		5.0ug/ml PAH SS 05/1	0515L011.D	5/15/2015 20:40
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	36.1
68	0 - 2.05% of mass 69	1.4
70	0 - 2% of mass 69	0.5
127	39.5 - 60% of mass 198	46.9
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	20.7
365	1 - 100% of mass 198	2.0
441	0.01 - 100% of mass 443	76.6
442	40 - 150% of mass 198	69.5
443	17 - 23% of mass 442	19.2

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76447
Matrix: Soil
ID: SV TUNE 5/14/15

SDG No: 76447
Date Analyzed: 5/27/2015
Instrument: Linus
Time Analyzed: 15:59

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5.0ug/ml PAH 5/26/15	0515L228.D	5/27/2015 16:17
2	Blank	150521A BLK 1/30.00G	0515L235.D	5/27/2015 19:17
3	Lab Control Spike	150521A LCS-1 1/30.0	0515L236.D	5/27/2015 19:42
4	S67-TP001-0203	AZ16400S02 1/30.13G	0515L246.D	5/27/2015 23:58
5	S67-TP002-0001	AZ16401S01 1/30.09G	0515L247.D	5/28/2015 0:24
6	S67-TP002-0203	AZ16402S01 1/30.11G	0515L248.D	5/28/2015 0:49
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	35.0
68	0 - 2.05% of mass 69	1.5
70	0 - 2% of mass 69	0.6
127	39.5 - 60% of mass 198	45.4
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.2
365	1 - 100% of mass 198	2.1
441	0.01 - 100% of mass 443	77.8
442	40 - 150% of mass 198	78.3
443	17 - 23% of mass 442	19.3

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76447
Matrix: Water
ID: SV TUNE 5/14/15

SDG No: 76447
Date Analyzed: 5/27/2015
Instrument: Linus
Time Analyzed: 15:59

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5.0ug/ml PAH 5/26/15	0515L228.D	5/27/2015 16:17
2	Lab Control Spike	150520A LCS-1 1/1000	0515L230.D	5/27/2015 17:08
3	S67-MW015-051415	AZ16403W09 1/1030	0515L231.D	5/27/2015 17:34
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	35.0
68	0 - 2.05% of mass 69	1.5
70	0 - 2% of mass 69	0.6
127	39.5 - 60% of mass 198	45.4
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	22.2
365	1 - 100% of mass 198	2.1
441	0.01 - 100% of mass 443	77.8
442	40 - 150% of mass 198	78.3
443	17 - 23% of mass 442	19.3

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0515L249.D
Matrix: Water
ID: SV TUNE 5/14/15

SDG No: Linus
Date Analyzed: 5/28/2015
Instrument: Linus
Time Analyzed: 1:12

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5.0ug/ml PAH 5/26/15	0515L250.D	5/28/2015 1:30
2	Blank	150520A BLK 1/1000	0515L251.D	5/28/2015 10:02
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	38.5
68	0 - 2.05% of mass 69	1.4
70	0 - 2% of mass 69	0.7
127	39.5 - 60% of mass 198	47.9
197	0 - 1% of mass 198	0.3
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	23.6
365	1 - 100% of mass 198	2.4
441	0.01 - 100% of mass 443	78.3
442	40 - 150% of mass 198	90.9
443	17 - 23% of mass 442	19.2

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0515L009.D Date Analyzed: 05/15/15

Instrument ID: Linus Time Analyzed: 19:49

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	9907	6.16	4610	8.16	7949	9.88
	UPPER LIMIT	19814	6.66	9220	8.66	15898	10.38
	LOWER LIMIT	4954	5.66	2305	7.66	3975	9.38
	SAMPLE NO.						
01	5.0ug/ml PAH SS 05/15	9571	6.16	4405	8.16	7622	9.90
02	AZ16400S02 1/30.13G	8882	6.16	4348	8.17	7970	9.90
03	AZ16401S01 1/30.09G	10737	6.16	5380	8.17	9435	9.90
04	AZ16402S01 1/30.11G	9993	6.16	5068	8.17	8825	9.90
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0515L009.D Date Analyzed: 05/15/15

Instrument ID: Linus Time Analyzed: 19:49

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	8664	12.96	5437	14.57		
	UPPER LIMIT	17328	13.46	10874	15.07		
	LOWER LIMIT	4332	12.46	2719	14.07		
	SAMPLE NO.						
01	5.0ug/ml PAH SS 05/15	7750	12.96	4908	14.57		
02	AZ16400S02 1/30.13G	8691	12.97	5584	14.59		
03	AZ16401S01 1/30.09G	10007	12.96	6434	14.58		
04	AZ16402S01 1/30.11G	9164	12.97	6091	14.58		
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0515L009.D Date Analyzed: 05/15/15

Instrument ID: Linus Time Analyzed: 19:49

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	9907	6.16	4610	8.16	7949	9.88
	UPPER LIMIT	19814	6.66	9220	8.66	15898	10.38
	LOWER LIMIT	4954	5.66	2305	7.66	3975	9.38
	SAMPLE NO.						
01	5.0ug/ml PAH 5/26/15	7511	6.16	3616	8.17	6351	9.90
02	150520A LCS-1 1/1000	8572	6.16	4504	8.17	8254	9.90
03	AZ16403W09 1/1030	8768	6.16	4532	8.17	8180	9.90
04	5.0ug/ml PAH 5/26/15	8036	6.16	3806	8.17	6551	9.90
05	150520A BLK 1/1000	9616	6.16	4834	8.17	8641	9.90
06							
07							
08							
09							
10							
11							
12							
13							
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16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76447

Lab File ID (Standard): 0515L009.D Date Analyzed: 05/15/15

Instrument ID: Linus Time Analyzed: 19:49

GC Column: _____ ID: Heated Purge: (Y/N) _____

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	8664	12.96	5437	14.57		
	UPPER LIMIT	17328	13.46	10874	15.07		
	LOWER LIMIT	4332	12.46	2719	14.07		
	SAMPLE NO.						
01	5.0ug/ml PAH 5/26/15	6697	12.97	4324	14.59		
02	150520A LCS-1 1/1000	8430	12.97	5453	14.59		
03	AZ16403W09 1/1030	8298	12.97	5387	14.59		
04	5.0ug/ml PAH 5/26/15	6774	12.97	4540	14.58		
05	150520A BLK 1/1000	8673	12.97	5768	14.59		
06							
07							
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10							
11							
12							
13							
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22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Sample Data

APPL, INC.

EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP001-0203

APPL ID: AZ16400

Sample Collection Date: 5/14/2015

QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.013	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	ACENAPHTHENE	0.0025 U	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	ACENAPHTHYLENE	0.015	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	ANTHRACENE	0.0028 J	0.007	0.0025	0.0012	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZ (A) ANTHRACENE	0.0083	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (A) PYRENE	0.0024 J	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.0057 J	0.007	0.0025	0.0016	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.0065 J	0.007	0.0025	0.0019	mg/kg	5/21/2015	5/27/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.030	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	CHRYSENE	0.012	0.007	0.0025	0.0012	mg/kg	5/21/2015	5/27/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.0072	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	FLUORANTHENE	0.0072	0.007	0.0025	0.0018	mg/kg	5/21/2015	5/27/2015
8270D-LL	FLUORENE	0.0040 J	0.007	0.0025	0.0015	mg/kg	5/21/2015	5/27/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.017	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	NAPHTHALENE	0.0051 J	0.007	0.0025	0.0013	mg/kg	5/21/2015	5/27/2015
8270D-LL	PHENANTHRENE	0.016	0.007	0.0025	0.0016	mg/kg	5/21/2015	5/27/2015
8270D-LL	PYRENE	0.011	0.007	0.0025	0.0018	mg/kg	5/21/2015	5/27/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	37.9 #	45-105			%	5/21/2015	5/27/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	49.2	35-100			%	5/21/2015	5/27/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	62.7	30-125			%	5/21/2015	5/27/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method:	P0518-42.M
Run #:	0515L246
Instrument:	Linus
Sequence:	L150515
Dilution Factor:	1
Initials:	DA

Printed: 6/2/2015 2:35:52 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L246.D Vial: 46
Acq On : 27 May 15 23:58 Operator: MA
Sample : AZ16400S02 1/30.13G Inst : Linus
Misc : soil Multiplr: 33.19

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8882	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4348	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	7970	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	8691	2.50	ppb		0.01
21) Perylene-D12(IS)	14.59	264	5584	2.50	ppb		0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	1218	40.83	ppb		0.01
Spiked Amount 82.974			Recovery = 49.207%				
7) Surrogate Recovery (FBP)	7.41	172	2601	31.42	ppb		0.01
Spiked Amount 82.974			Recovery = 37.873%				
17) Surrogate Recovery (TPH)	11.77	244	4373	52.00	ppb		0.00
Spiked Amount 82.974			Recovery = 62.670%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	360	3.44	ppb		100
4) 2-Methylnaphthalene	6.98	142	473	8.41	ppb		88
5) 1-Methylnaphthalene	7.08	142	287	4.35	ppb		83
8) Acenaphthylene	8.00	152	211	10.22	ppb		95
9) Acenaphthene	8.21	154	24	0.36	ppb	#	34
10) Fluorene	8.81	166	44	2.71	ppb		93
12) Phenanthrene	9.92	178	1569	10.61	ppb		98
13) Anthracene	9.98	178	136	1.88	ppb		96
14) Fluoranthene	11.30	202	1327	4.85	ppb	#	89
16) Pyrene	11.56	202	1077	7.23	ppb	#	87
18) Benz (a) anthracene	12.96	228	566	5.56	ppb		92
19) Chrysene	13.00	228	994	7.96	ppb		96
20) Indeno (1,2,3-cd) pyrene	16.09	276	474	11.16	ppb	#	99
22) Benzo (b) fluoranthene	14.15	252	1224	3.85	ppb		97
23) Benzo (k) fluoranthene	14.15	252	1224	20.30	ppb	#	94
24) Benzo (a) pyrene	14.45	252	479	1.62	ppb		96
25) Dibenz (a,h) anthracene	16.11	278	159	4.81	ppb		94
26) Benzo (g,h,i) perylene	16.52	276	485	4.33	ppb		97

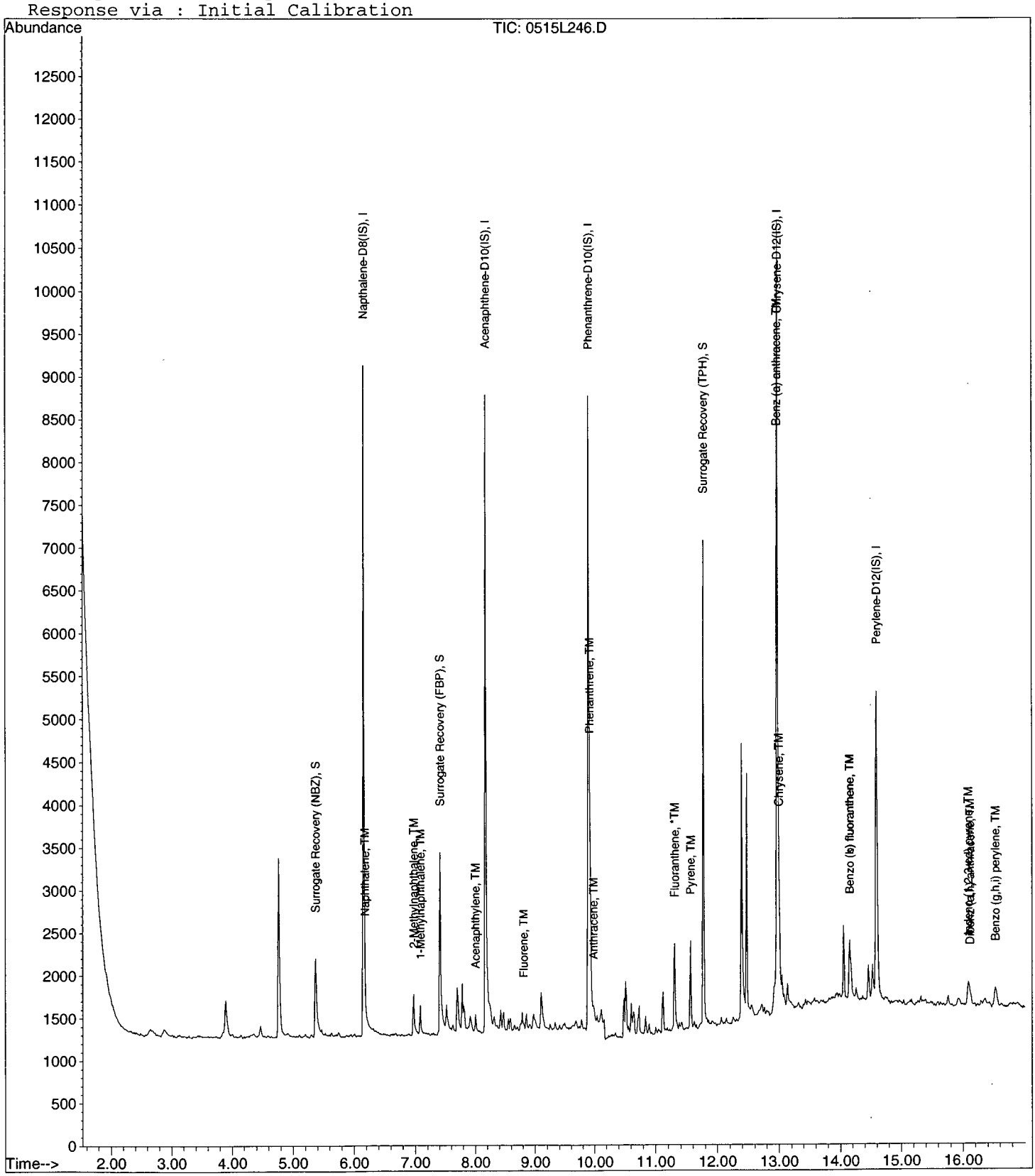
(#) = qualifier out of range (m) = manual integration

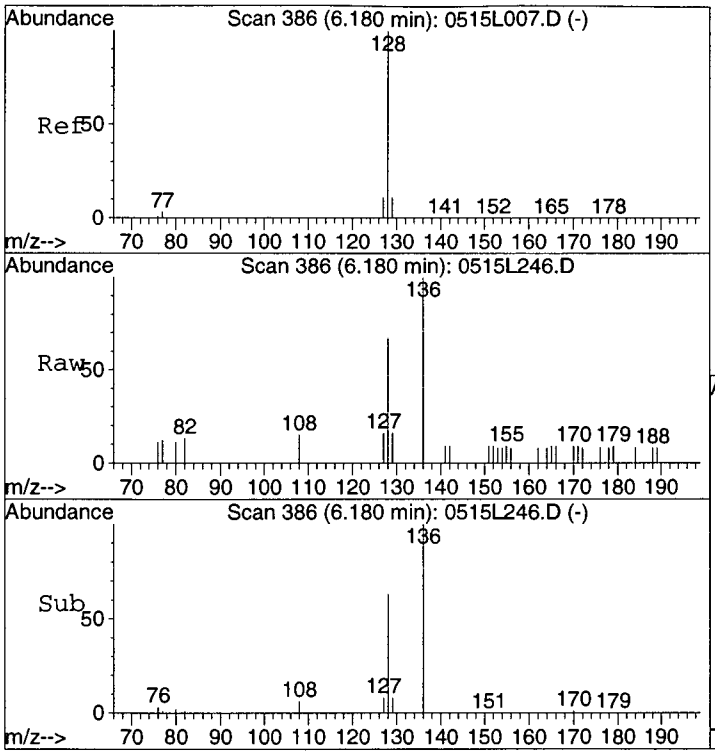
Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L246.D Vial: 46
Acq On : 27 May 15 23:58 Operator: MA
Sample : AZ16400S02 1/30.13G Inst : Linus
Misc : soil Multiplr: 33.19

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration

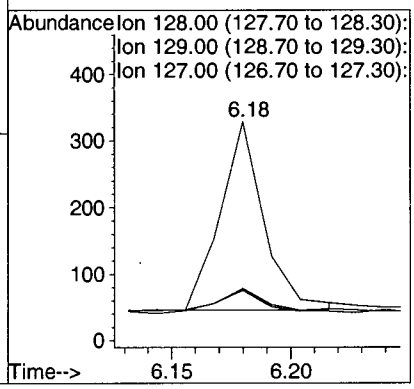


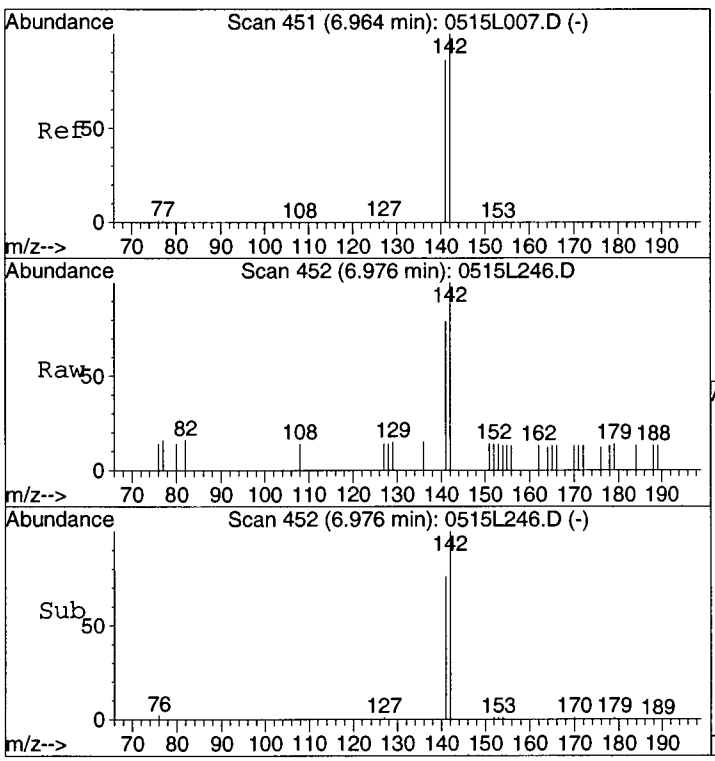


#3
Naphthalene
Concen: 3.44 ppb
RT: 6.18 min Scan# 386
Delta R.T. 0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:128 Resp: 360

Ion	Ratio	Lower	Upper
128	100		
129	11.3	7.8	14.6
127	11.3	8.0	14.8

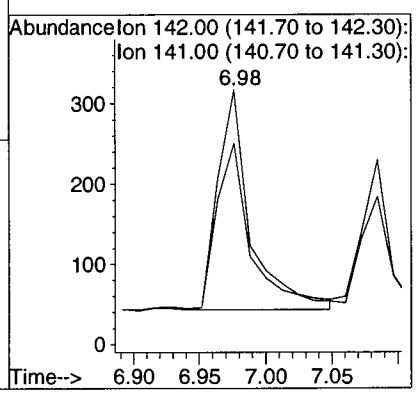


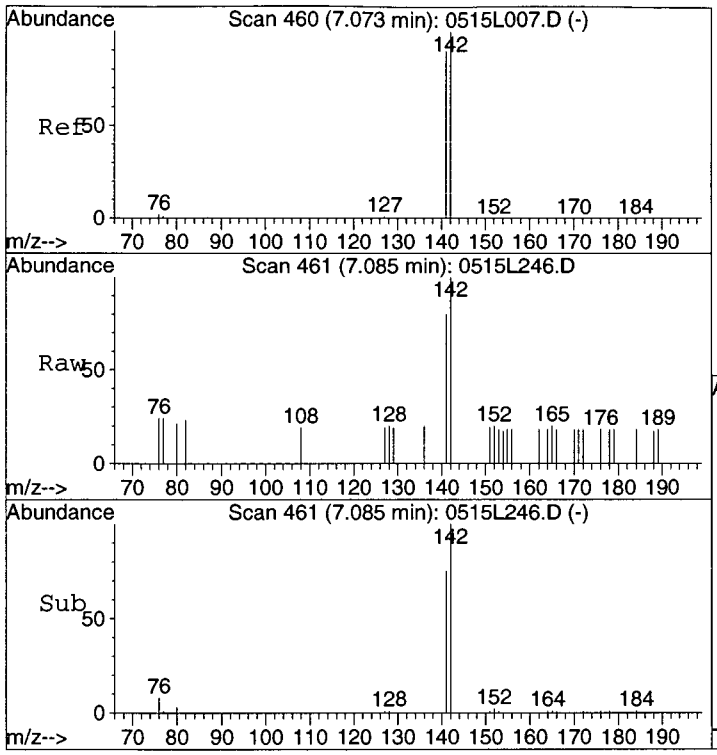


#4
2-Methylnaphthalene
Concen: 8.41 ppb
RT: 6.98 min Scan# 452
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:142 Resp: 473

Ion	Ratio	Lower	Upper
142	100		
141	75.2	60.1	111.5

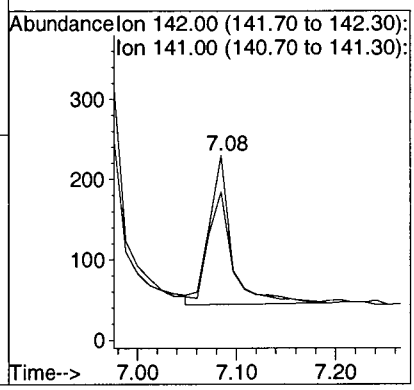


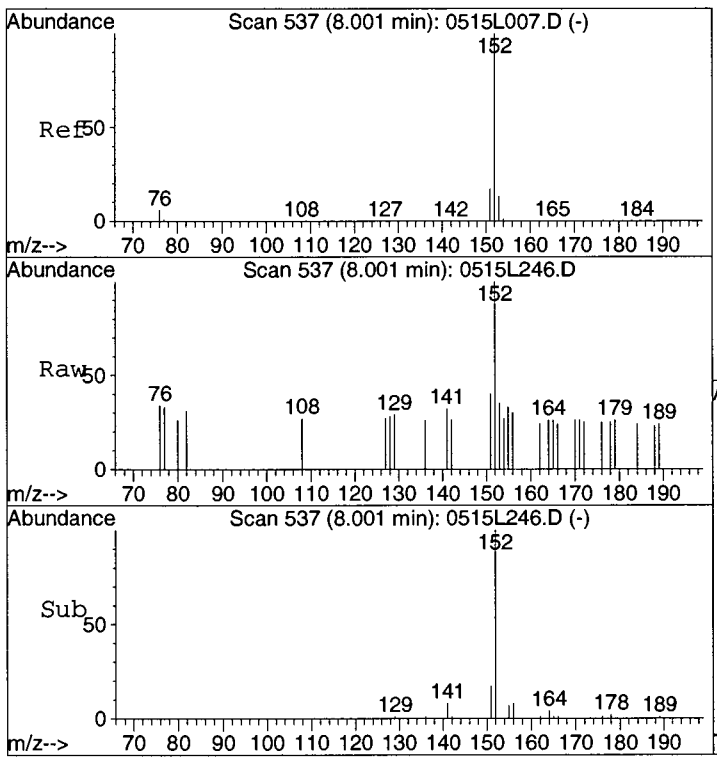


#5
1-Methylnaphthalene
Concen: 4.35 ppb
RT: 7.08 min Scan# 461
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:142 Resp: 287

Ion	Ratio	Lower	Upper
142	100		
141	73.9	63.1	117.3

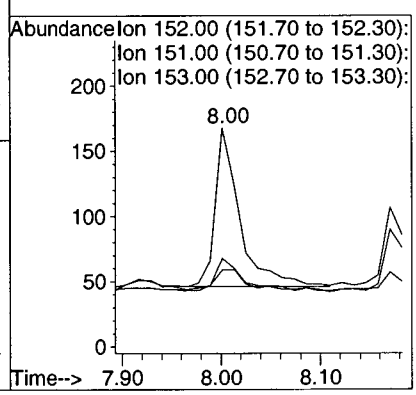


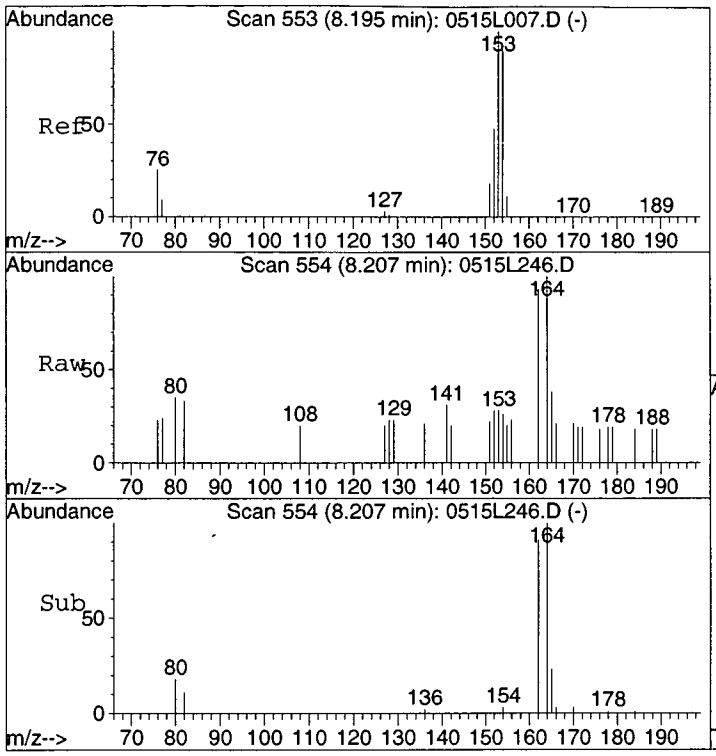


#8
Acenaphthylene
Concen: 10.22 ppb
RT: 8.00 min Scan# 537
Delta R.T. -0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:152 Resp: 211

Ion	Ratio	Lower	Upper
152	100		
151	20.5	12.1	22.5
153	13.9	9.2	17.2

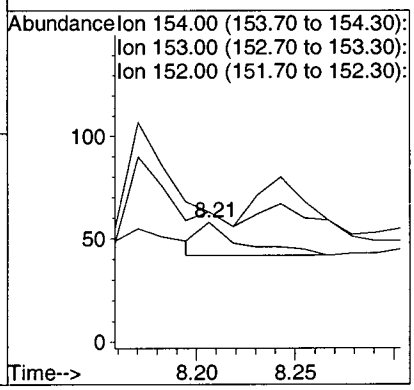


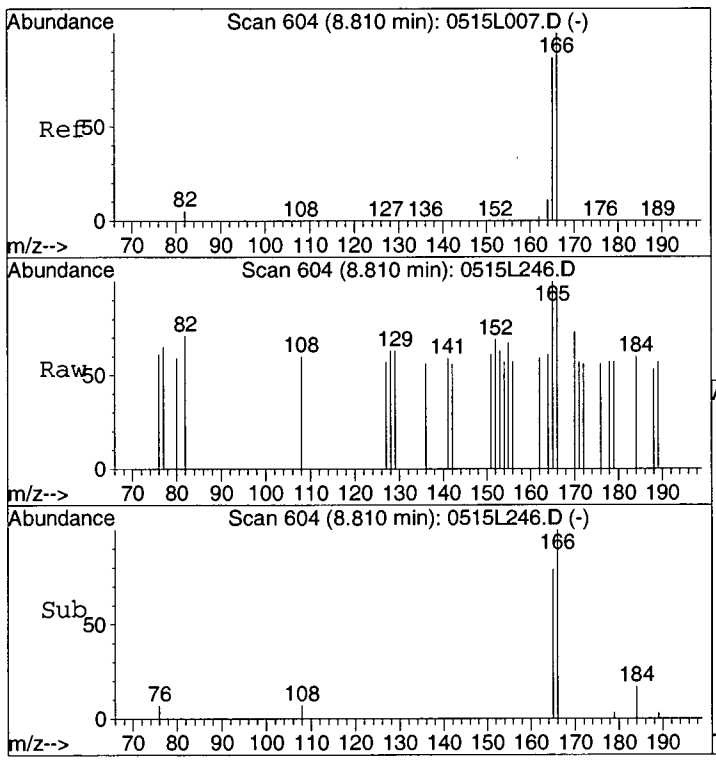


#9
Acenaphthene
Concen: 0.36 ppb
RT: 8.21 min Scan# 554
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:154 Resp: 24

Ion	Ratio	Lower	Upper
154	100		
153	25.0	74.9	139.1#
152	25.0	35.9	66.7#

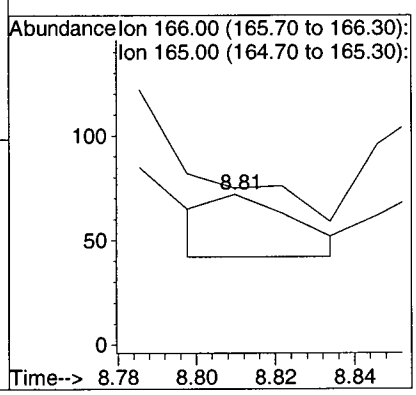


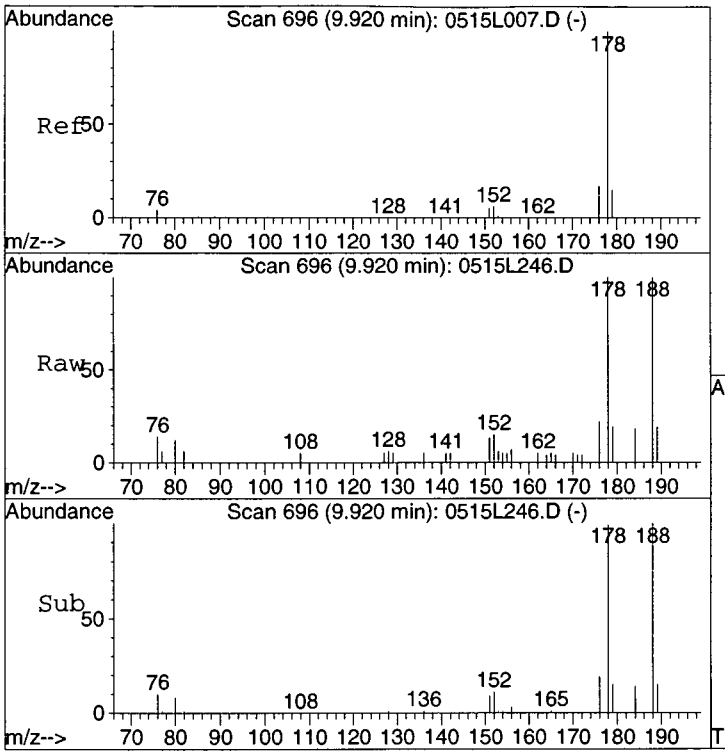


#10
Fluorene
Concen: 2.71 ppb
RT: 8.81 min Scan# 604
Delta R.T. -0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:166 Resp: 44

Ion	Ratio	Lower	Upper
166	100		
165	80.0	60.7	112.7

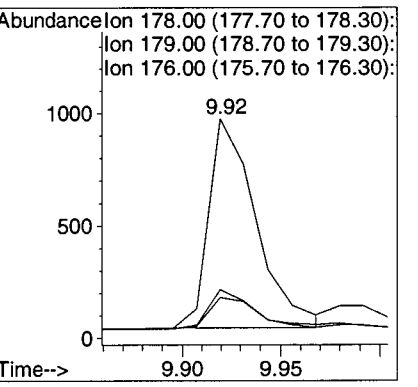


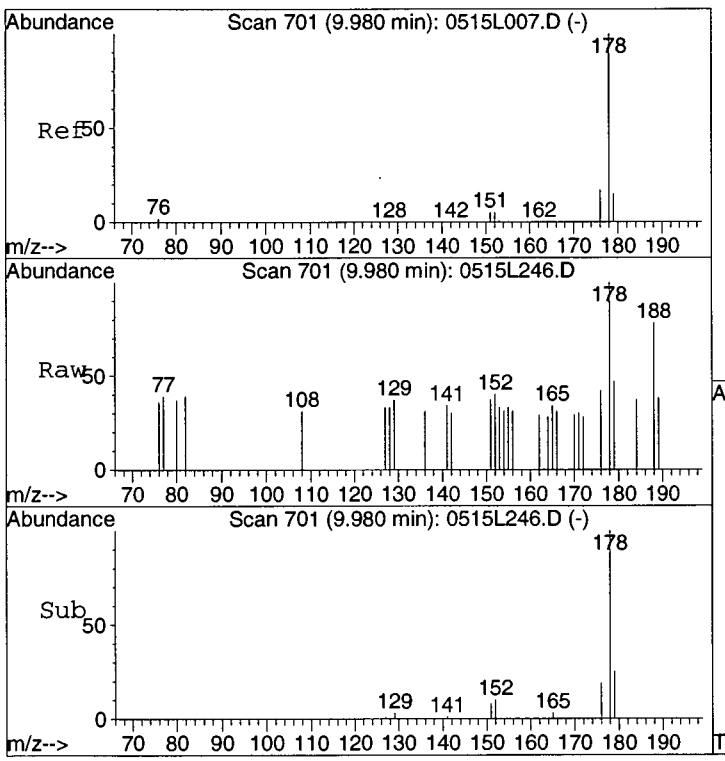


#12
Phenanthrene
Concen: 10.61 ppb
RT: 9.92 min Scan# 696
Delta R.T. 0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:178 Resp: 1569

Ion	Ratio	Lower	Upper
178	100		
179	14.8	10.6	19.6
176	18.8	12.2	22.6

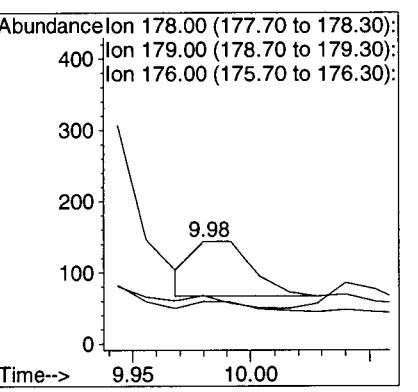


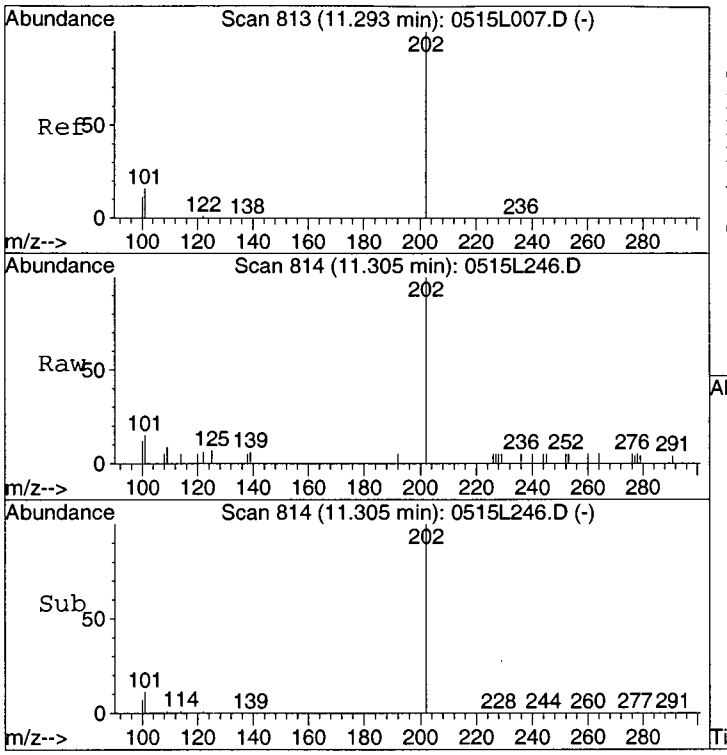


#13
Anthracene
Concen: 1.88 ppb
RT: 9.98 min Scan# 701
Delta R.T. -0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:178 Resp: 136

Ion	Ratio	Lower	Upper
178	100		
179	14.3	10.5	19.5
176	19.5	12.0	22.4

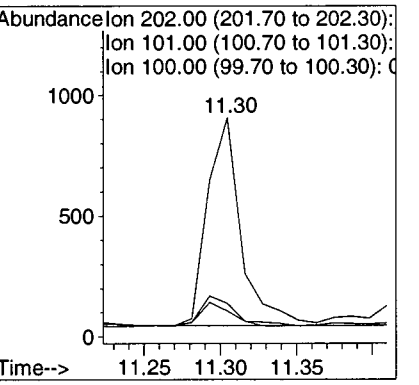


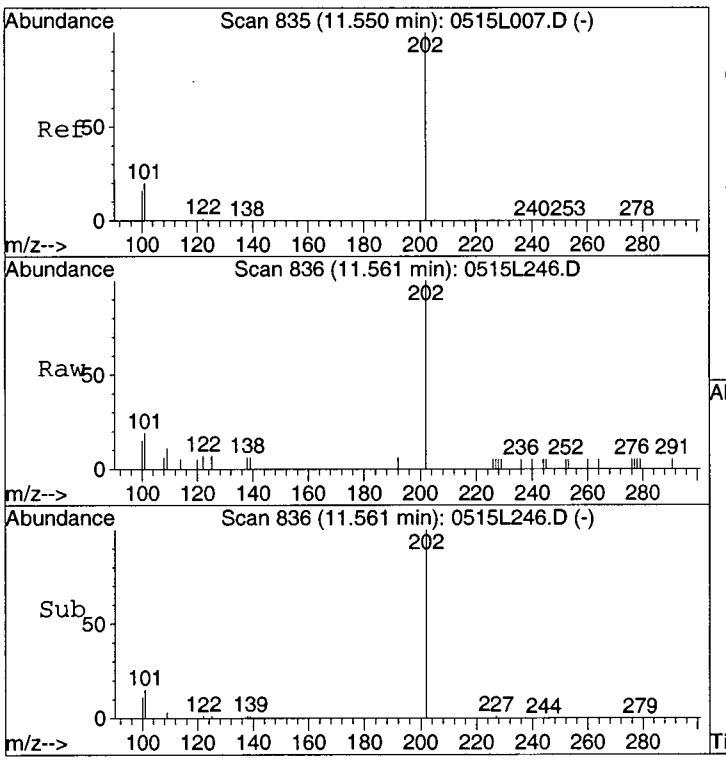


#14
Fluoranthene
Concen: 4.85 ppb
RT: 11.30 min Scan# 814
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:202 Resp: 1327

Ion	Ratio	Lower	Upper
202	100		
101	11.0	11.3	20.9#
100	7.3	7.8	14.6#

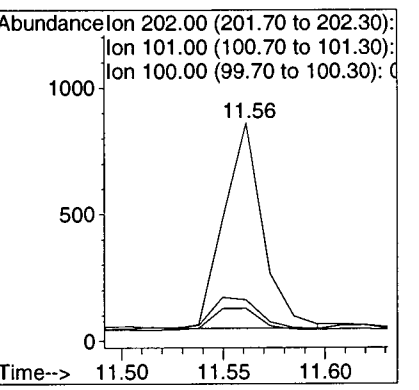


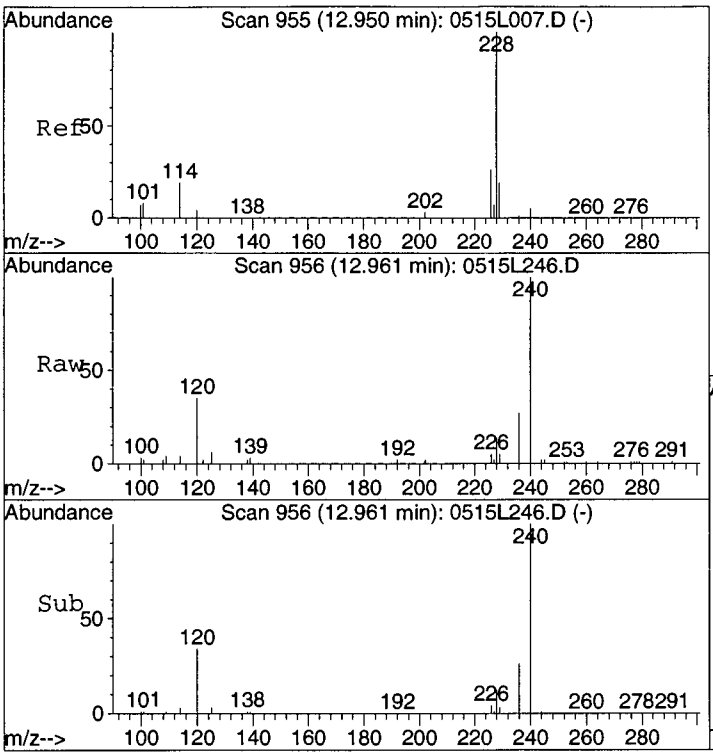


#16
Pyrene
Concen: 7.23 ppb
RT: 11.56 min Scan# 836
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:202 Resp: 1077

Ion	Ratio	Lower	Upper
202	100		
101	13.9	14.3	26.5#
100	10.3	10.9	20.3#

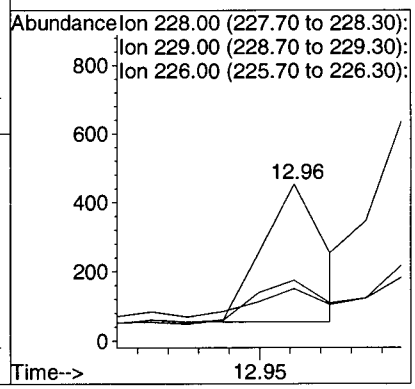


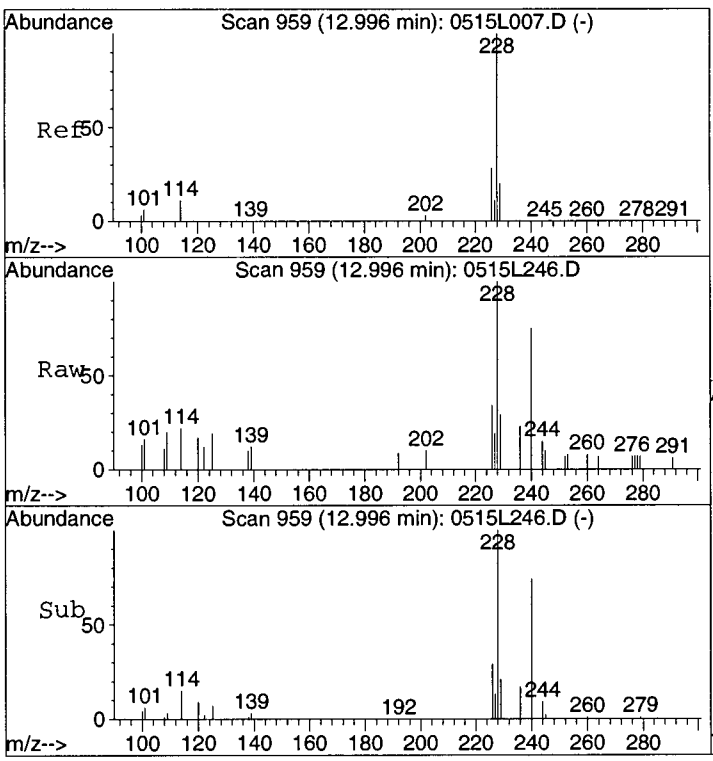


#18
Benz (a) anthracene
Concen: 5.56 ppb
RT: 12.96 min Scan# 956
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:228 Resp: 566

Ion	Ratio	Lower	Upper
228	100		
229	20.5	13.1	24.3
226	31.5	18.3	33.9

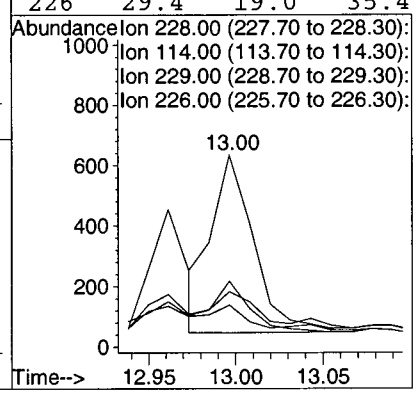


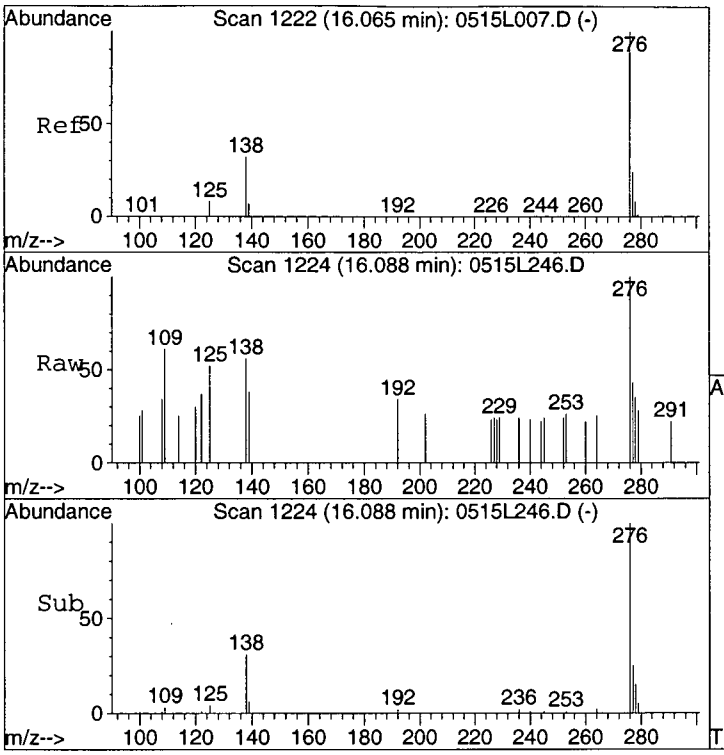


#19
Chrysene
Concen: 7.96 ppb
RT: 13.00 min Scan# 959
Delta R.T. -0.00 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:228 Resp: 994

Ion	Ratio	Lower	Upper
228	100		
114	14.6	8.5	15.9
229	19.5	14.1	26.1
226	29.4	19.0	35.4

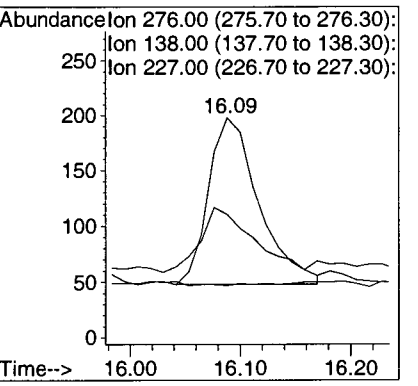


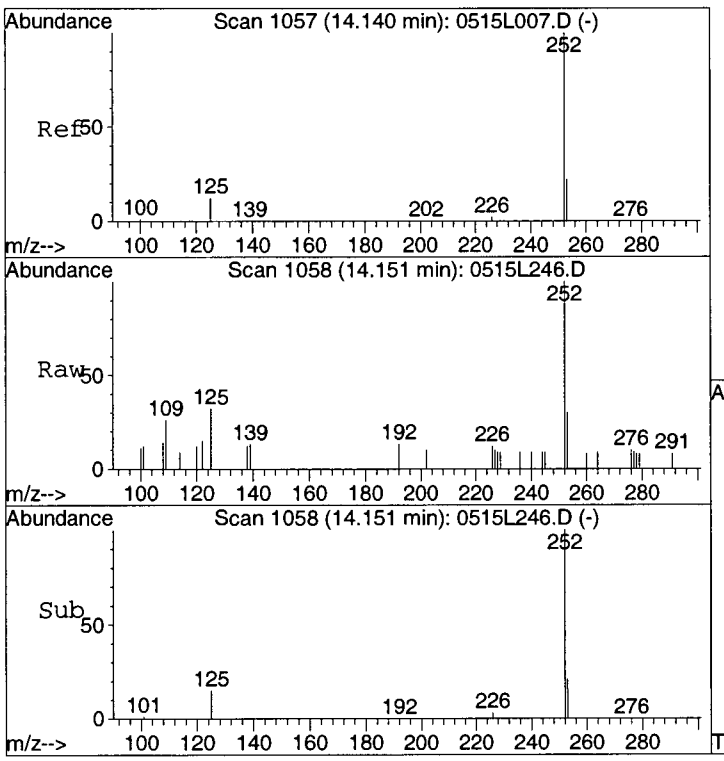


#20
Indeno (1,2,3-cd) pyrene
Concen: 11.16 ppb
RT: 16.09 min Scan# 1224
Delta R.T. 0.02 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:276 Resp: 474

Ion	Ratio	Lower	Upper
276	100		
138	31.3	22.4	41.6
227	0.0	0.1	0.1#

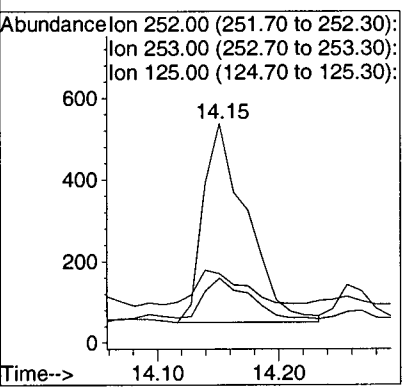


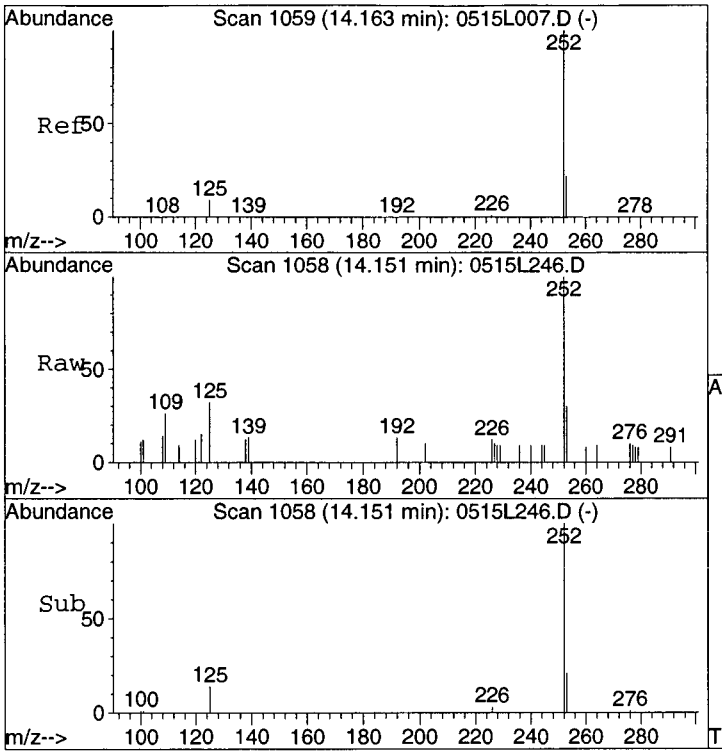


#22
Benzo (b) fluoranthene
Concen: 3.85 ppb
RT: 14.15 min Scan# 1058
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:252 Resp: 1224

Ion	Ratio	Lower	Upper
252	100		
253	20.5	15.4	28.6
125	14.1	10.8	20.0

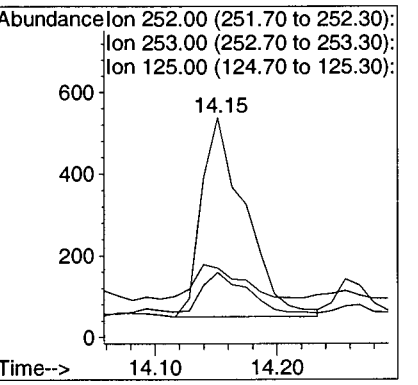


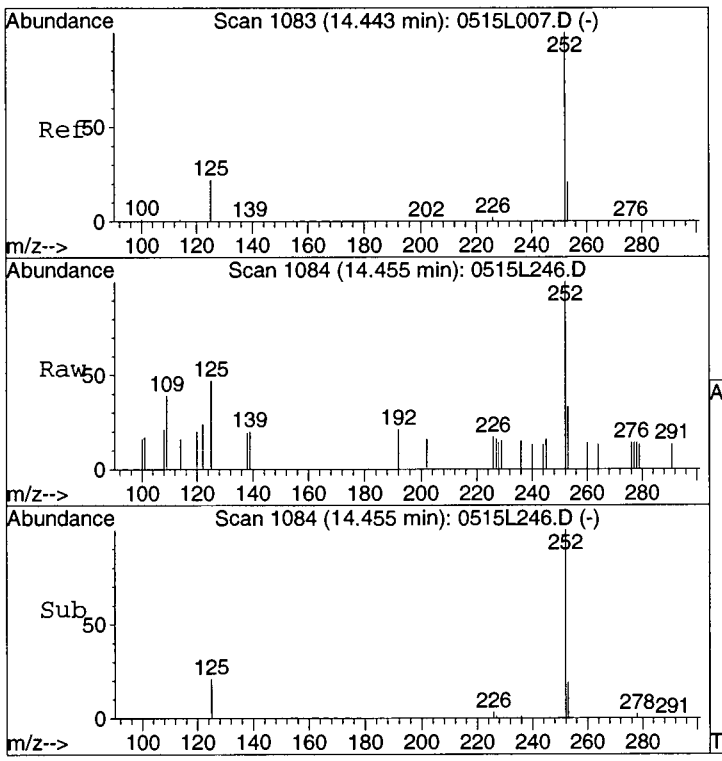


#23
Benzo (k) fluoranthene
Concen: 20.30 ppb
RT: 14.15 min Scan# 1058
Delta R.T. -0.02 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:252 Resp: 1224

Ion	Ratio	Lower	Upper
252	100		
253	20.5	15.6	29.0
125	14.1	7.0	13.0#

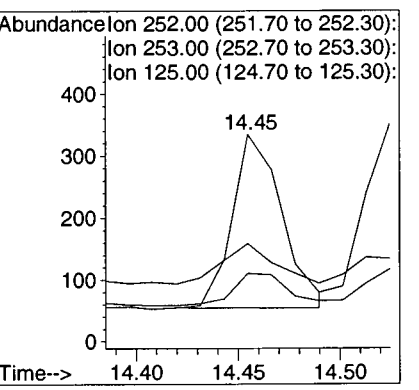


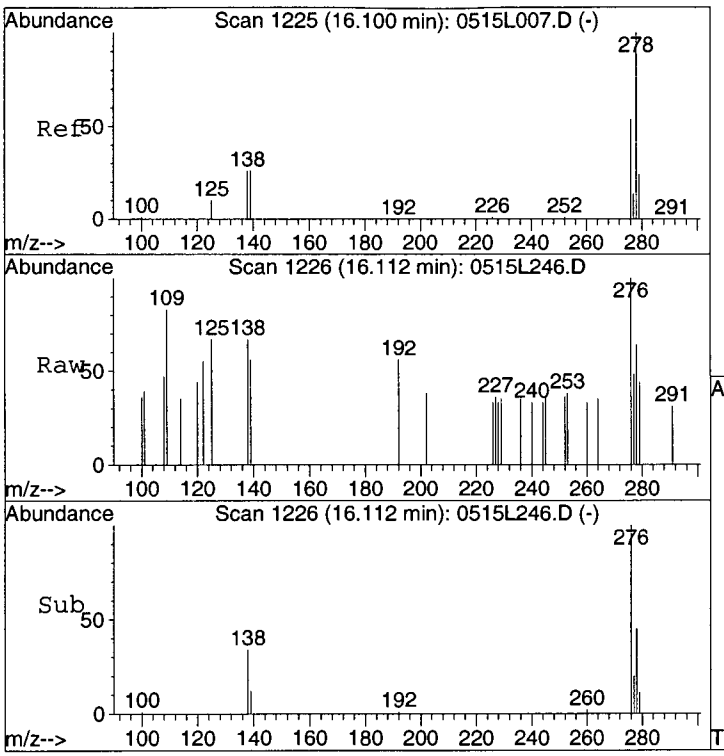


#24
Benzo (a) pyrene
Concen: 1.62 ppb
RT: 14.45 min Scan# 1084
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:252 Resp: 479

Ion	Ratio	Lower	Upper
252	100		
253	18.6	15.0	27.8
125	23.2	15.7	29.1

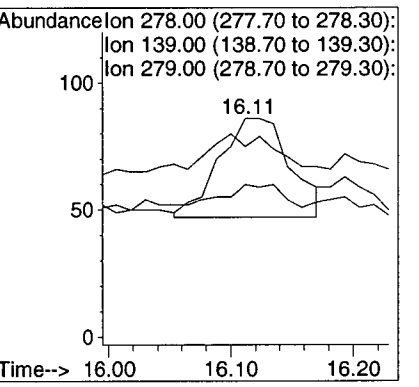


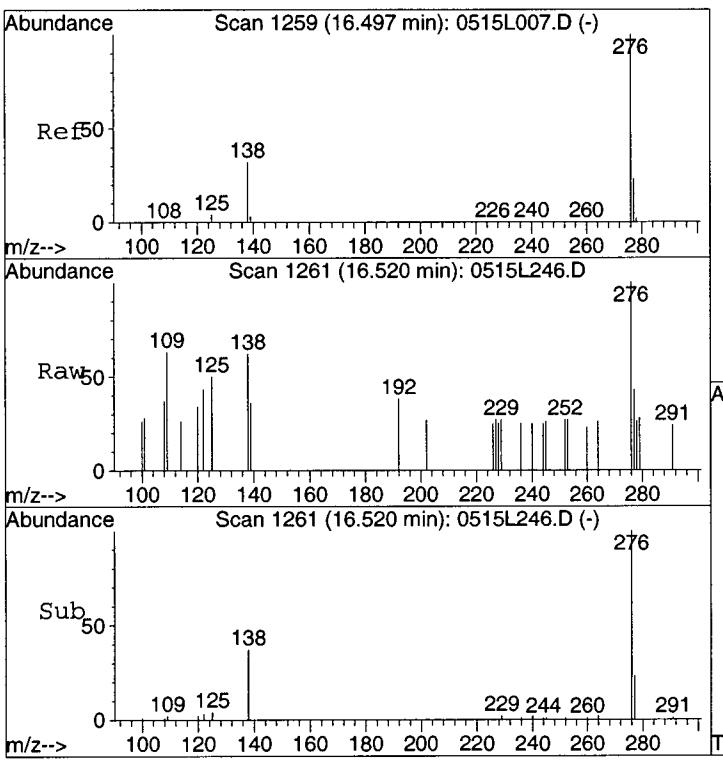


#25
Dibenz (a,h) anthracene
Concen: 4.81 ppb
RT: 16.11 min Scan# 1226
Delta R.T. 0.01 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:278 Resp: 159

Ion	Ratio	Lower	Upper
278	100		
139	21.6	17.9	33.3
279	21.6	16.7	30.9

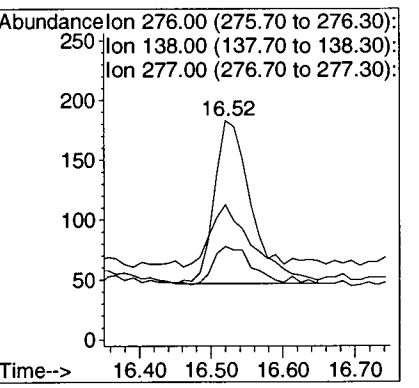




#26
Benzo (g,h,i) perylene
Concen: 4.33 ppb
RT: 16.52 min Scan# 1261
Delta R.T. 0.02 min
Lab File: 0515L246.D
Acq: 27 May 15 23:58

Tgt Ion:276 Resp: 485

Ion	Ratio	Lower	Upper
276	100		
138	34.6	22.3	41.5
277	22.8	16.4	30.4



EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP002-0001

APPL ID: AZ16401

Sample Collection Date: 5/14/2015

QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.088	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHENE	0.030 J	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHYLENE	0.70	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	ANTHRACENE	0.29	0.054	0.0180	0.0087	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZ (A) ANTHRACENE	0.73	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (A) PYRENE	0.67	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (B) FLUORANTHENE	1.4	0.054	0.0180	0.0120	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.78	0.054	0.0180	0.0140	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (K) FLUORANTHENE	1.6	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	CHRYSENE	0.80	0.054	0.0180	0.0087	mg/kg	5/21/2015	5/28/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.22	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORANTHENE	0.83	0.054	0.0180	0.0130	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORENE	0.11	0.054	0.0180	0.0110	mg/kg	5/21/2015	5/28/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.67	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	NAPHTHALENE	0.074	0.054	0.0180	0.0098	mg/kg	5/21/2015	5/28/2015
8270D-LL	PHENANTHRENE	0.50	0.054	0.0180	0.0120	mg/kg	5/21/2015	5/28/2015
8270D-LL	PYRENE	1.2	0.054	0.0180	0.0130	mg/kg	5/21/2015	5/28/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	67.9	45-105			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	115 #	35-100			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	99.1	30-125			%	5/21/2015	5/28/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method: P0518-42.M
Run #: 0515L247
Instrument: Linus
Sequence: L150515
Dilution Factor: 10
Initials: DA

Printed: 6/2/2015 2:35:52 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L247.D Vial: 47
Acq On : 28 May 15 00:24 Operator: MA
Sample : AZ16401S01 1/30.09G df10 Inst : Linus
Misc : soil Multiplr: 332.34

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	10737	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	5380	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	9435	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.96	240	10007	2.50	ppb		0.00
21) Perylene-D12(IS)	14.58	264	6434	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	162	95.86	ppb		0.01
Spiked Amount 83.084			Recovery = 115.381%				
7) Surrogate Recovery (FBP)	7.41	172	577	56.41	ppb		0.01
Spiked Amount 83.084			Recovery = 67.900%				
17) Surrogate Recovery (TPH)	11.77	244	796	82.31	ppb		0.00
Spiked Amount 83.084			Recovery = 99.074%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	860	68.06	ppb		98
4) 2-Methylnaphthalene	6.98	142	540	80.79	ppb		91
5) 1-Methylnaphthalene	7.08	142	465	58.36	ppb		94
8) Acenaphthylene	8.00	152	9337	647.44	ppb		98
9) Acenaphthene	8.21	154	228	27.82	ppb		88
10) Fluorene	8.82	166	850	103.00	ppb	#	57
12) Phenanthrene	9.92	178	7194	459.30	ppb		99
13) Anthracene	9.98	178	3790	270.18	ppb		99
14) Fluoranthene	11.29	202	14477	763.41	ppb		95
16) Pyrene	11.56	202	18701	1091.91	ppb	#	81
18) Benz (a) anthracene	12.95	228	10389	675.18	ppb	#	64
19) Chrysene	13.00	228	10608	738.94	ppb		99
20) Indeno (1,2,3-cd) pyrene	16.06	276	9034	616.85	ppb	#	95
22) Benzo (b) fluoranthene	14.14	252	20237	1317.46	ppb		97
23) Benzo (k) fluoranthene	14.14	252	20237	1511.49	ppb	#	92
24) Benzo (a) pyrene	14.45	252	9228	619.68	ppb	#	91
25) Dibenz (a,h) anthracene	16.10	278	2356	200.11	ppb		97
26) Benzo (g,h,i) perylene	16.51	276	10180	715.78	ppb		96

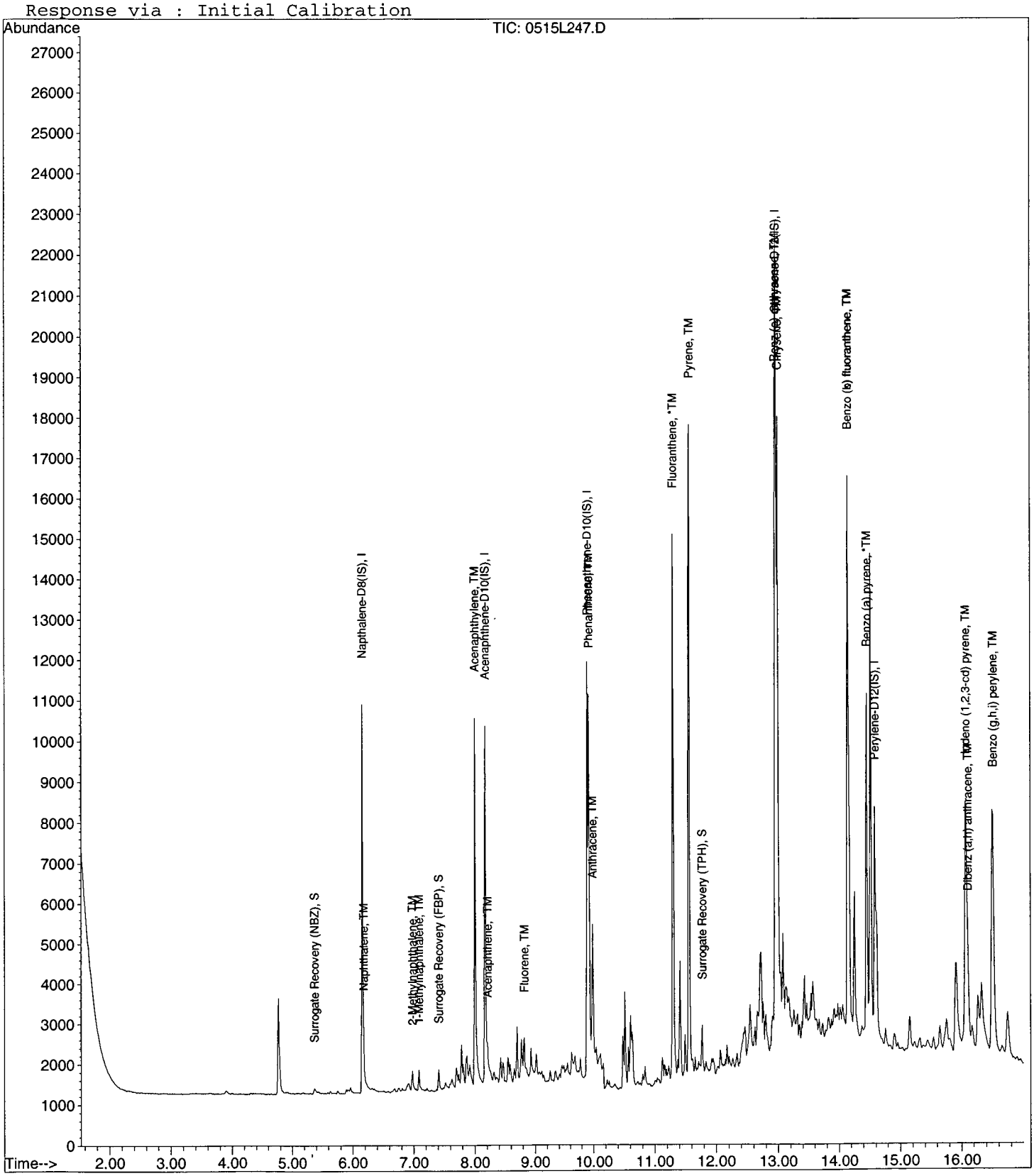
(#) = qualifier out of range (m) = manual integration

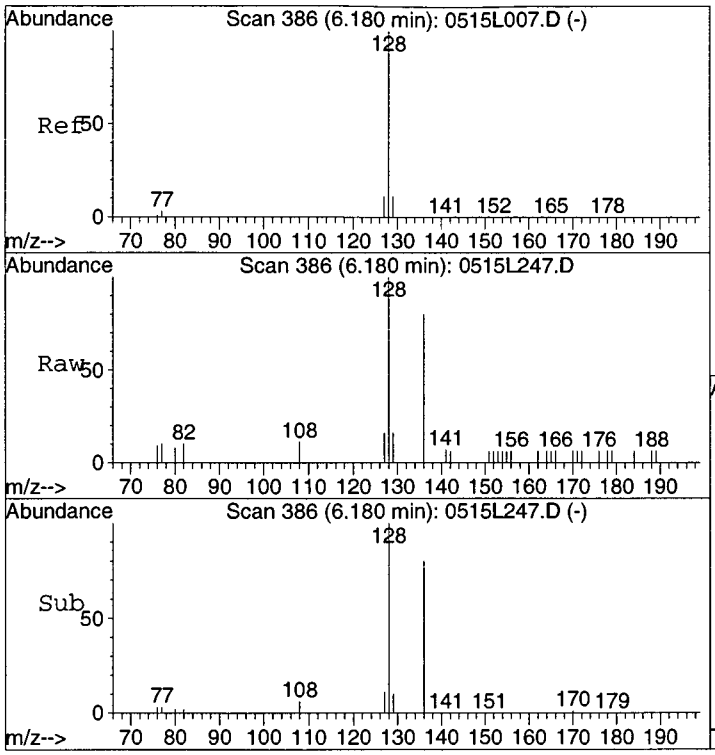
Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L247.D Vial: 47
Acq On : 28 May 15 00:24 Operator: MA
Sample : AZ16401S01 1/30.09G df10 Inst : Linus
Misc : soil Multiplr: 332.34

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration

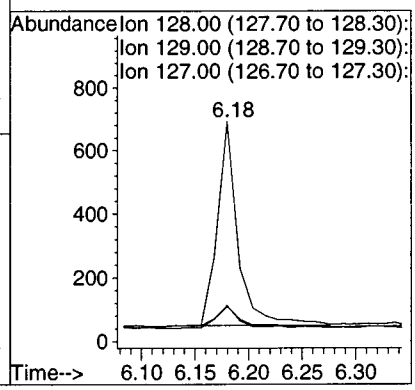


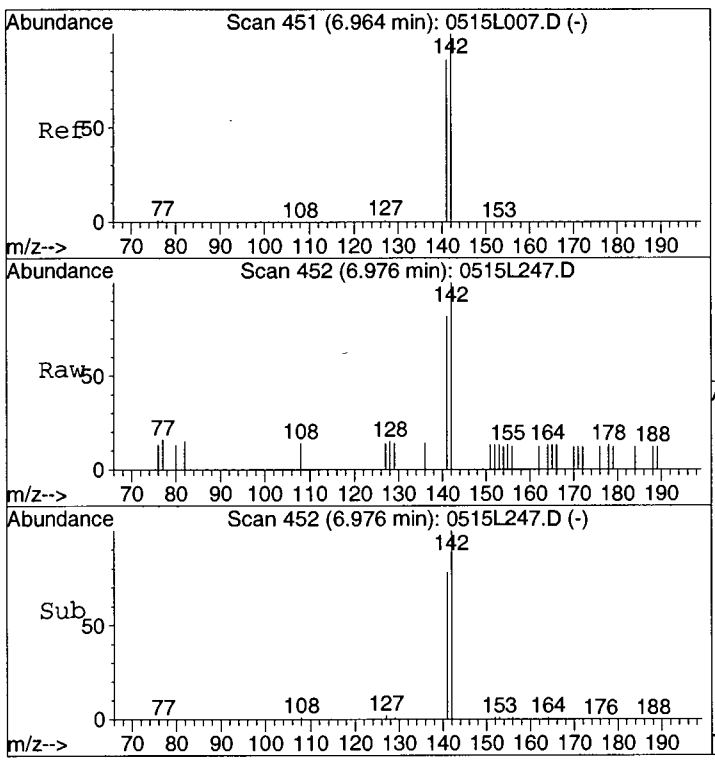


#3
Naphthalene
Concen: 68.06 ppb
RT: 6.18 min Scan# 386
Delta R.T. 0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:128 Resp: 860

Ion	Ratio	Lower	Upper
128	100		
129	10.3	7.8	14.6
127	11.1	8.0	14.8

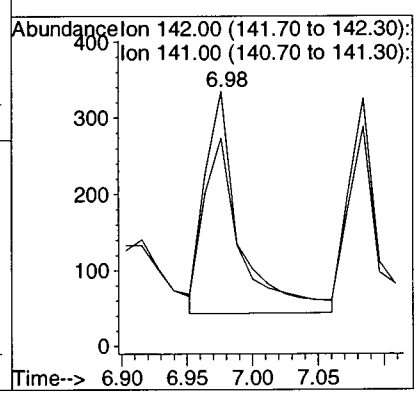


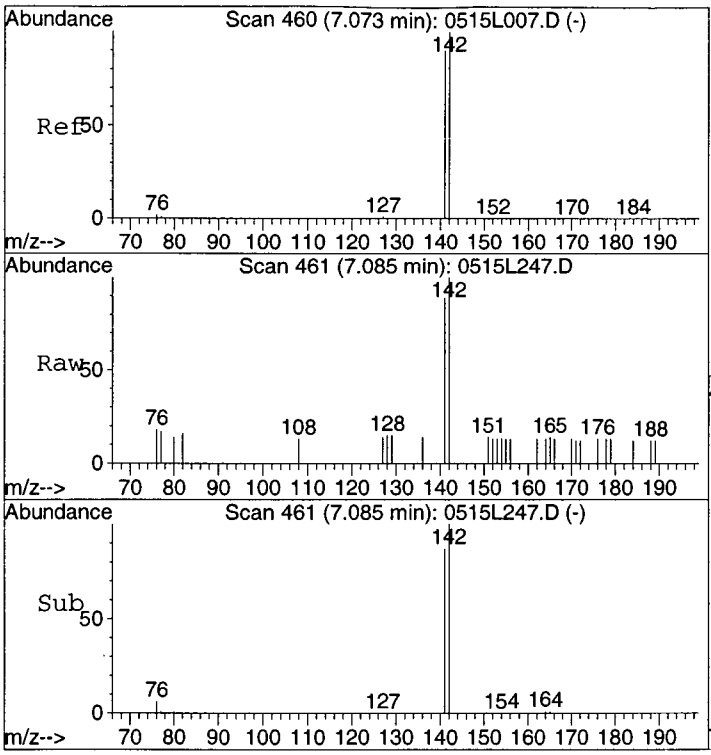


#4
2-Methylnaphthalene
Concen: 80.79 ppb
RT: 6.98 min Scan# 452
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:142 Resp: 540

Ion	Ratio	Lower	Upper
142	100		
141	77.1	60.1	111.5

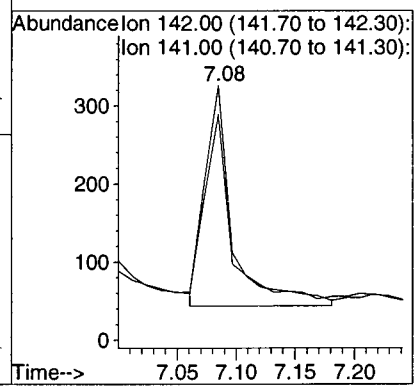


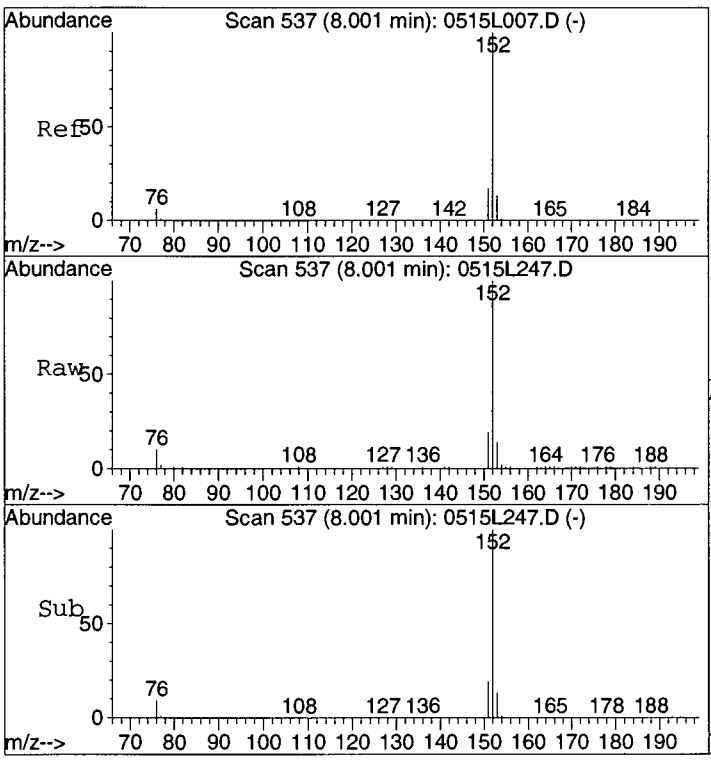


#5
1-Methylnaphthalene
Concen: 58.36 ppb
RT: 7.08 min Scan# 461
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:142 Resp: 465

Ion	Ratio	Lower	Upper
142	100		
141	84.7	63.1	117.3

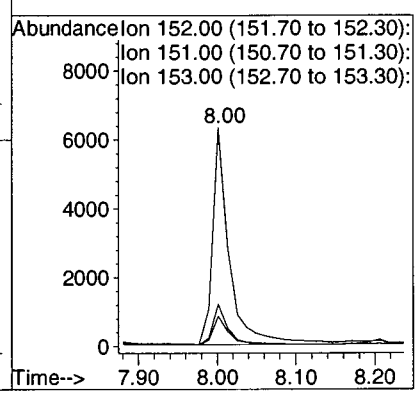


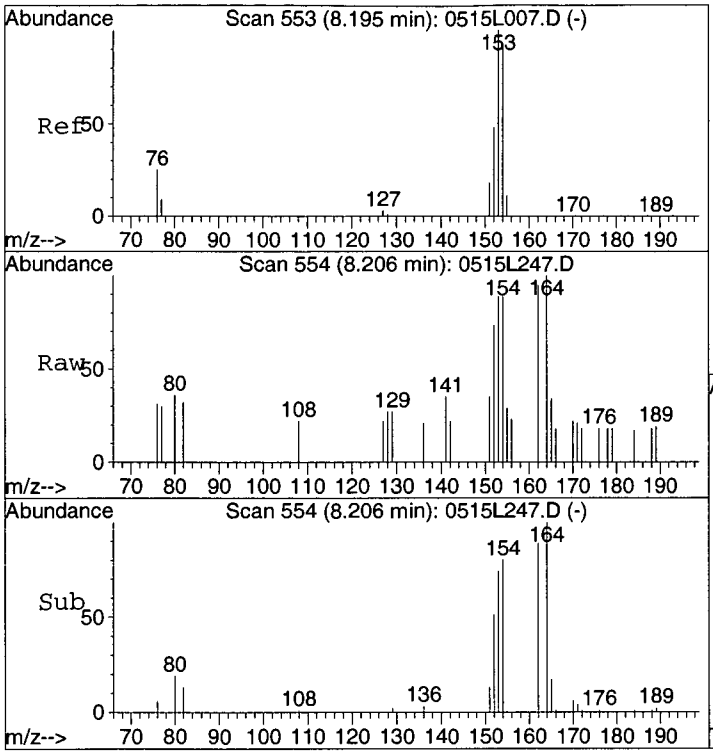


#8
Acenaphthylene
Concen: 647.44 ppb
RT: 8.00 min Scan# 537
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:152 Resp: 9337

Ion	Ratio	Lower	Upper
152	100		
151	18.7	12.1	22.5
153	13.2	9.2	17.2

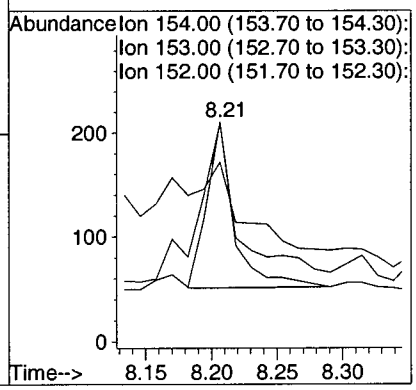


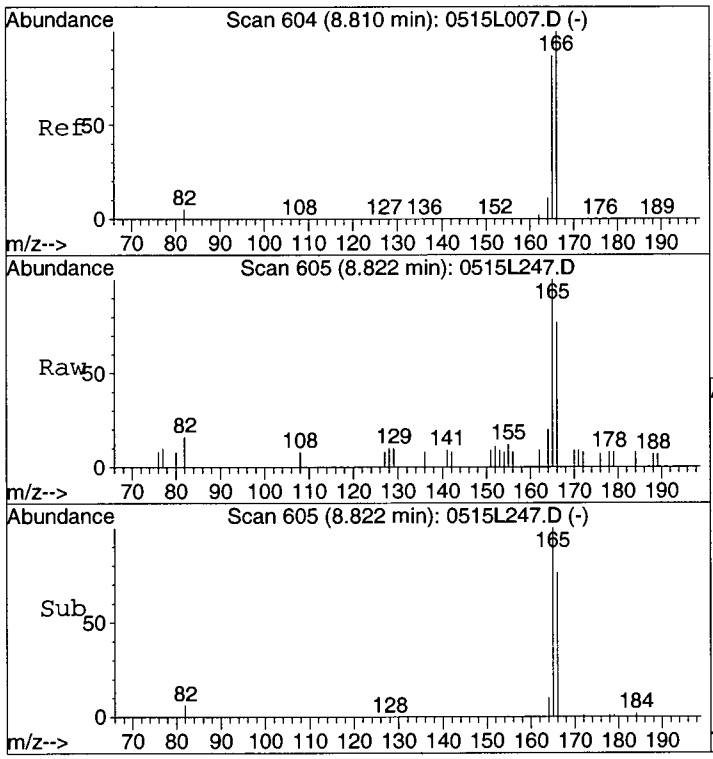


#9
Acenaphthene
Concen: 27.82 ppb
RT: 8.21 min Scan# 554
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:154 Resp: 228

Ion	Ratio	Lower	Upper
154	100		
153	90.6	74.9	139.1
152	53.5	35.9	66.7

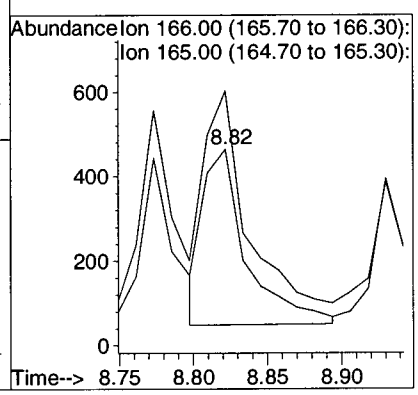


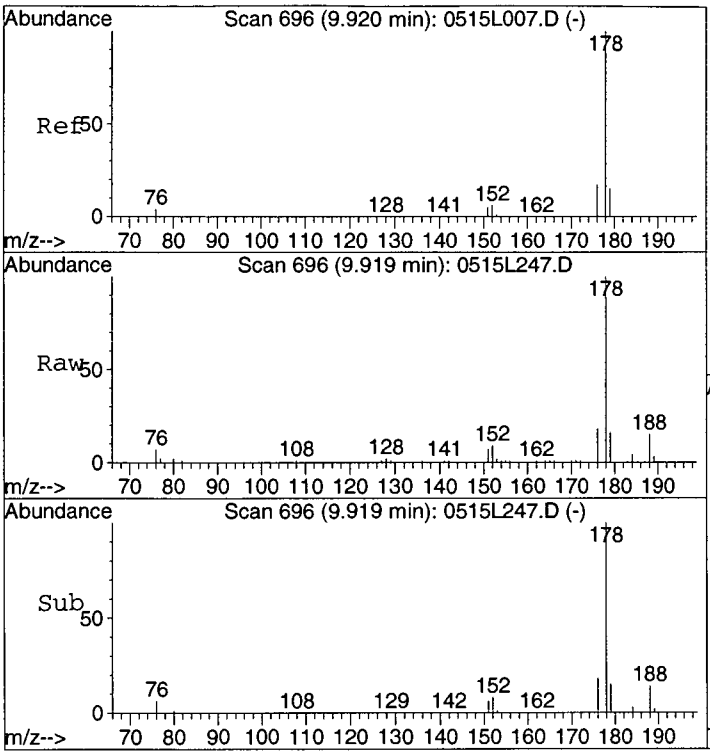


#10
Fluorene
Concen: 103.00 ppb
RT: 8.82 min Scan# 605
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:166 Resp: 850

Ion	Ratio	Lower	Upper
166	100		
165	126.7	60.7	112.7#

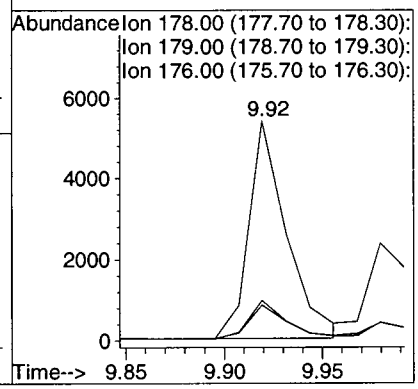


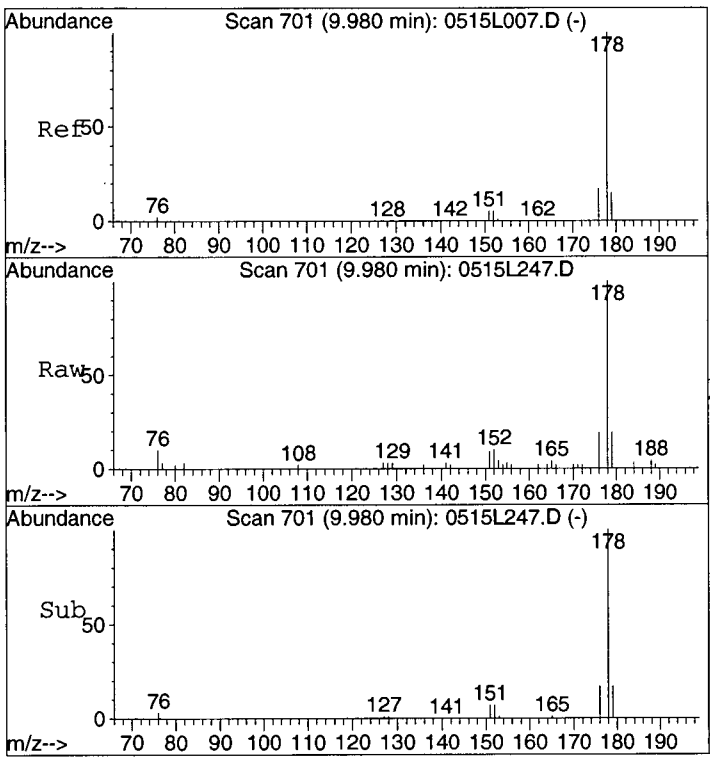


#12
Phenanthrene
Concen: 459.30 ppb
RT: 9.92 min Scan# 696
Delta R.T. 0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:178 Resp: 7194

Ion	Ratio	Lower	Upper
178	100		
179	15.4	10.6	19.6
176	17.7	12.2	22.6

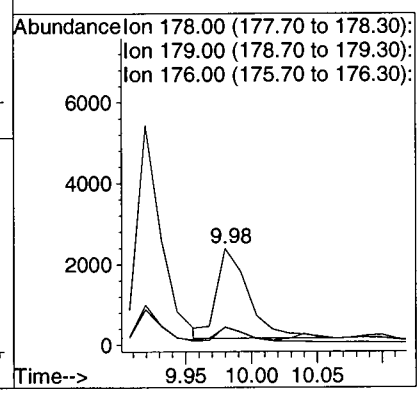


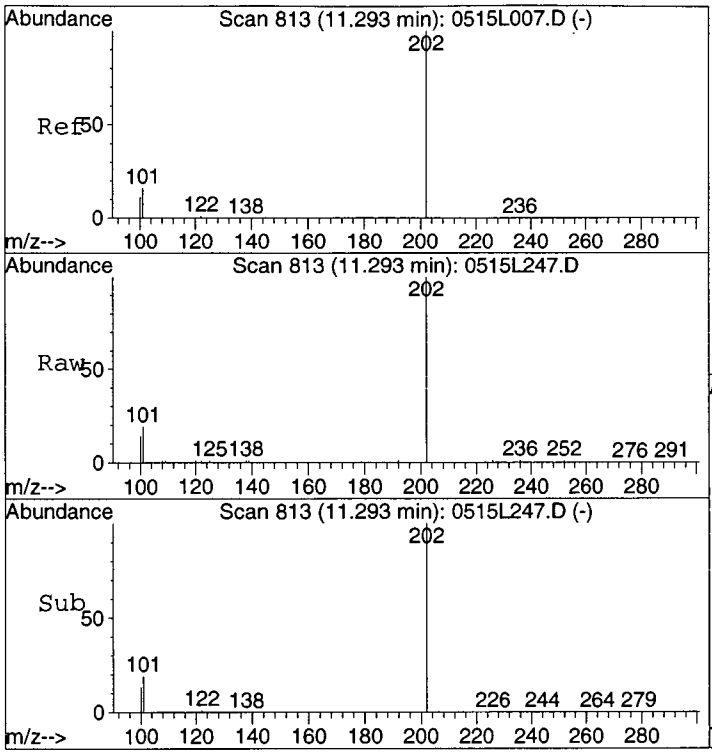


#13
Anthracene
Concen: 270.18 ppb
RT: 9.98 min Scan# 701
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:178 Resp: 3790

Ion	Ratio	Lower	Upper
178	100		
179	13.8	10.5	19.5
176	17.2	12.0	22.4

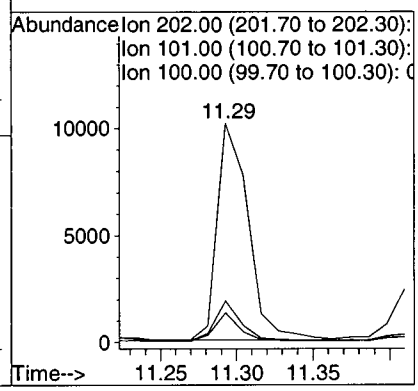


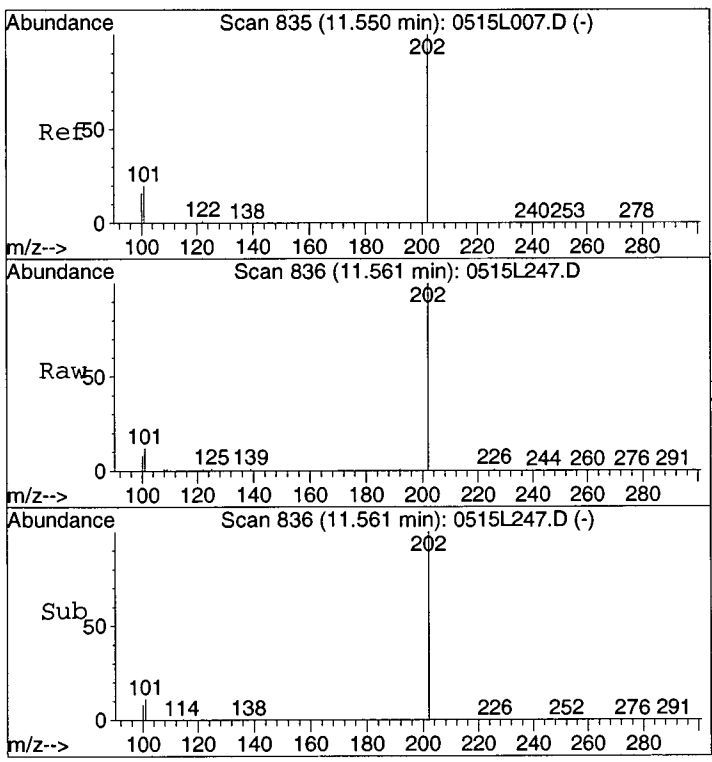


#14
Fluoranthene
Concen: 763.41 ppb
RT: 11.29 min Scan# 813
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:202 Resp: 14477

Ion	Ratio	Lower	Upper
202	100		
101	18.5	11.3	20.9
100	13.2	7.8	14.6

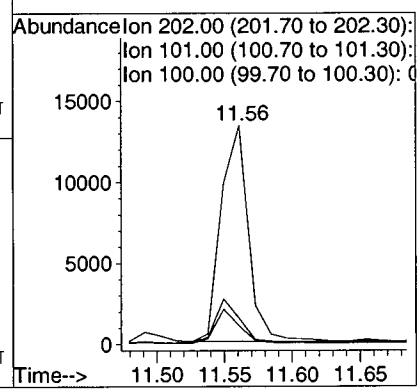


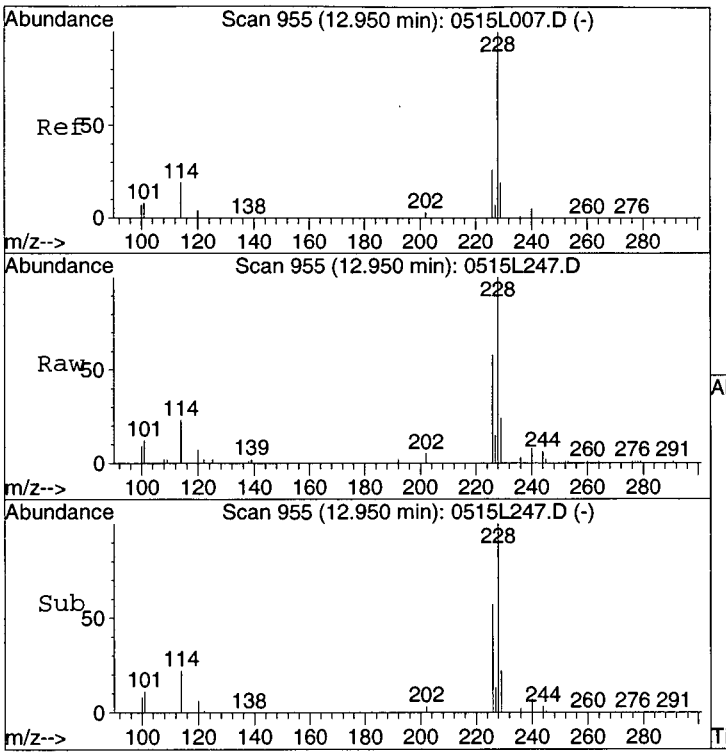


#16
Pyrene
Concen: 1091.91 ppb
RT: 11.56 min Scan# 836
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:202 Resp: 18701

Ion	Ratio	Lower	Upper
202	100		
101	11.1	14.3	26.5#
100	8.0	10.9	20.3#

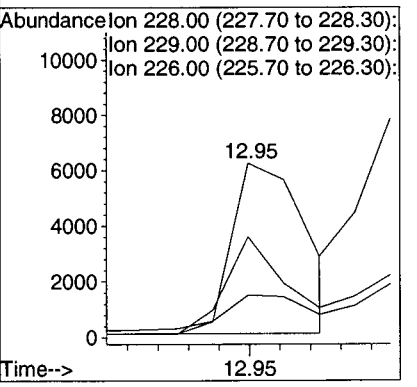


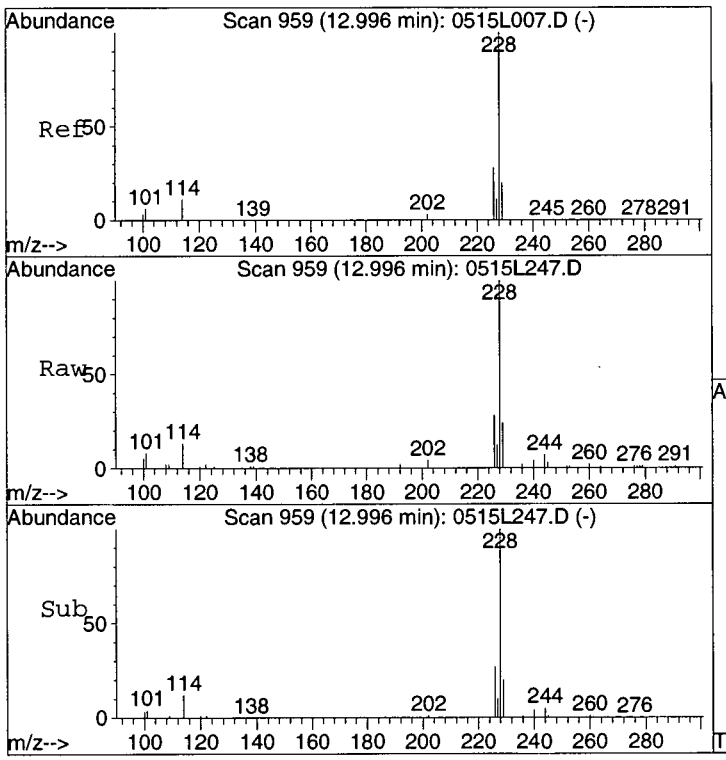


#18
Benz (a) anthracene
Concen: 675.18 ppb
RT: 12.95 min Scan# 955
Delta R.T. 0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:228 Resp: 10389

Ion	Ratio	Lower	Upper
228	100		
229	19.5	13.1	24.3
226	56.9	18.3	33.9#

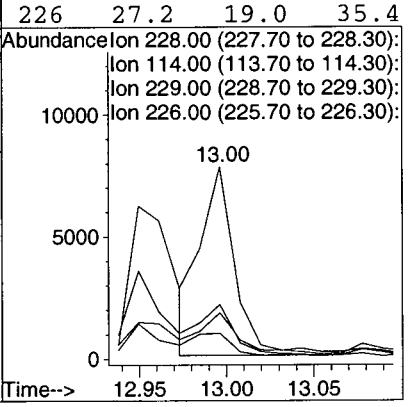


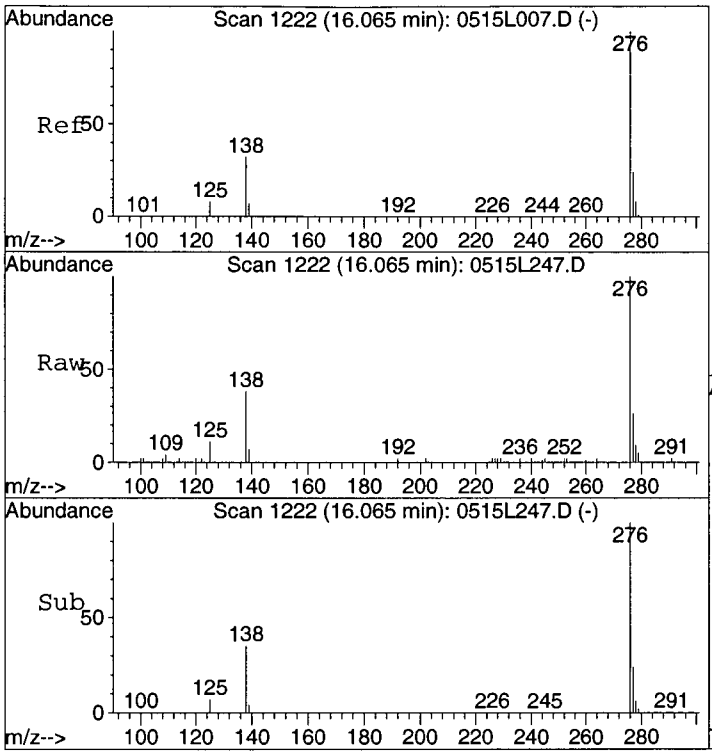


#19
Chrysene
Concen: 738.94 ppb
RT: 13.00 min Scan# 959
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:228 Resp: 10608

Ion	Ratio	Lower	Upper
228	100		
114	12.1	8.5	15.9
229	21.1	14.1	26.1
226	27.2	19.0	35.4

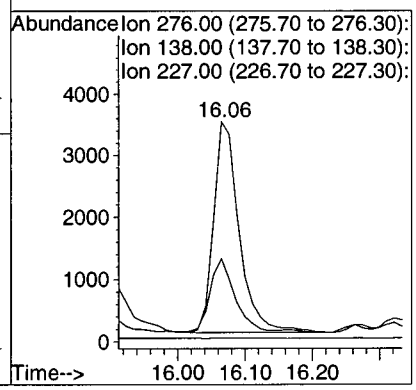


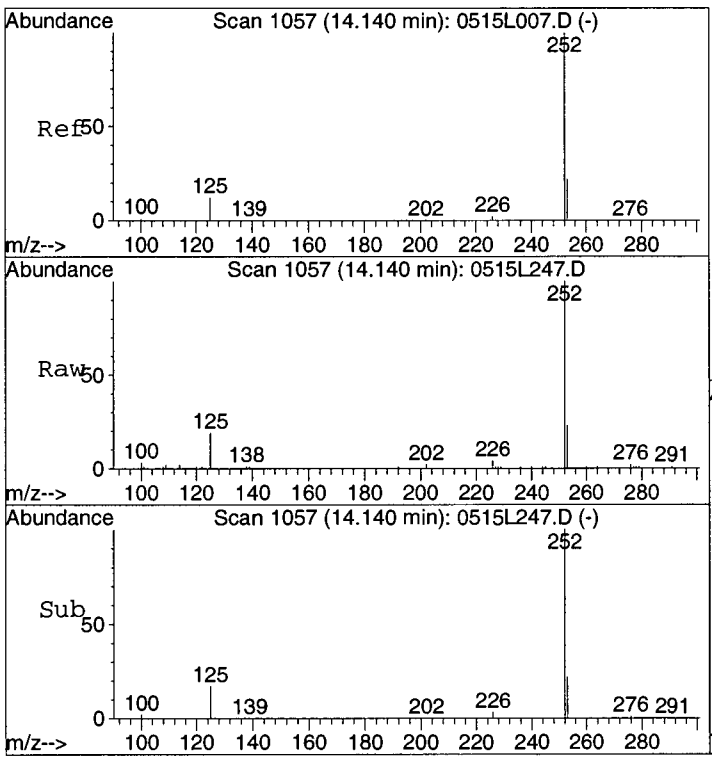


#20
Indeno (1,2,3-cd) pyrene
Concen: 616.85 ppb
RT: 16.06 min Scan# 1222
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:276 Resp: 9034

Ion	Ratio	Lower	Upper
276	100		
138	35.1	22.4	41.6
227	0.2	0.1	0.1#

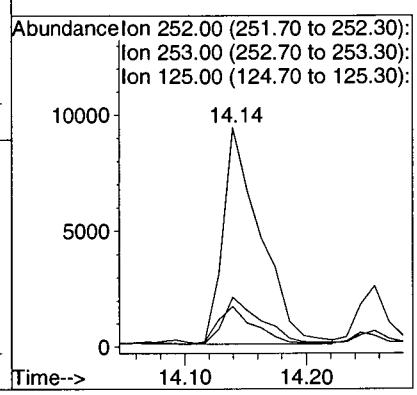


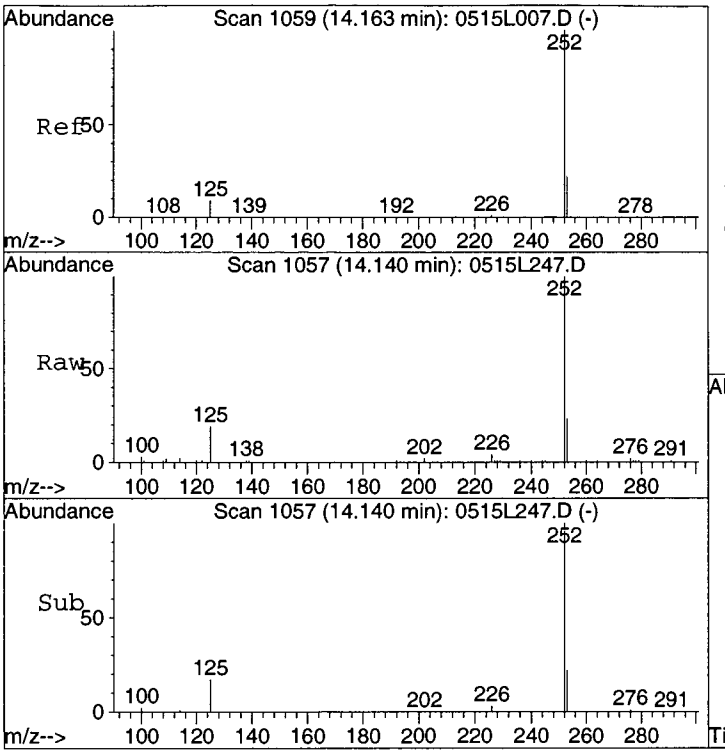


#22
Benzo (b) fluoranthene
Concen: 1317.46 ppb
RT: 14.14 min Scan# 1057
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:252 Resp: 20237

Ion	Ratio	Lower	Upper
252	100		
253	21.1	15.4	28.6
125	17.5	10.8	20.0

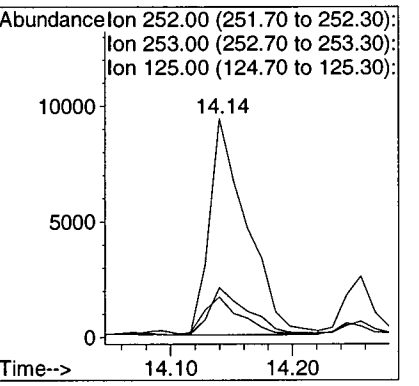


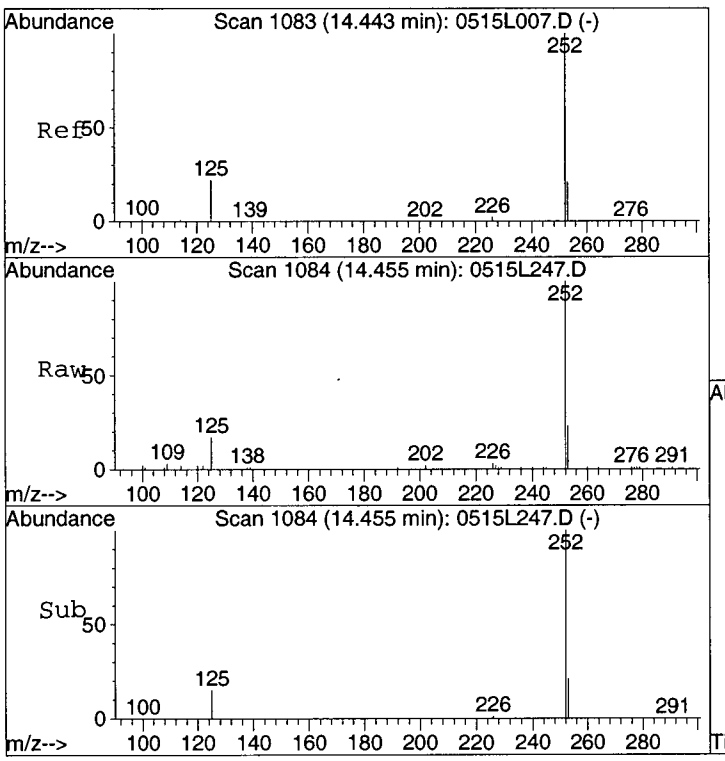


#23
Benzo (k) fluoranthene
Concen: 1511.49 ppb
RT: 14.14 min Scan# 1057
Delta R.T. -0.04 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:252 Resp: 20237

Ion	Ratio	Lower	Upper
252	100		
253	21.1	15.6	29.0
125	17.5	7.0	13.0#

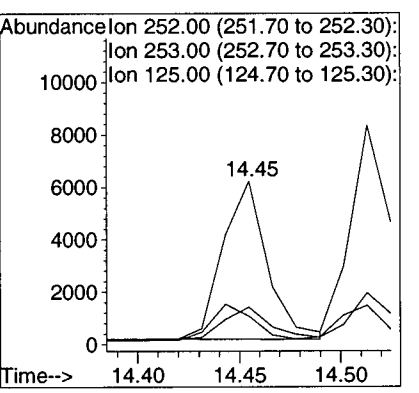


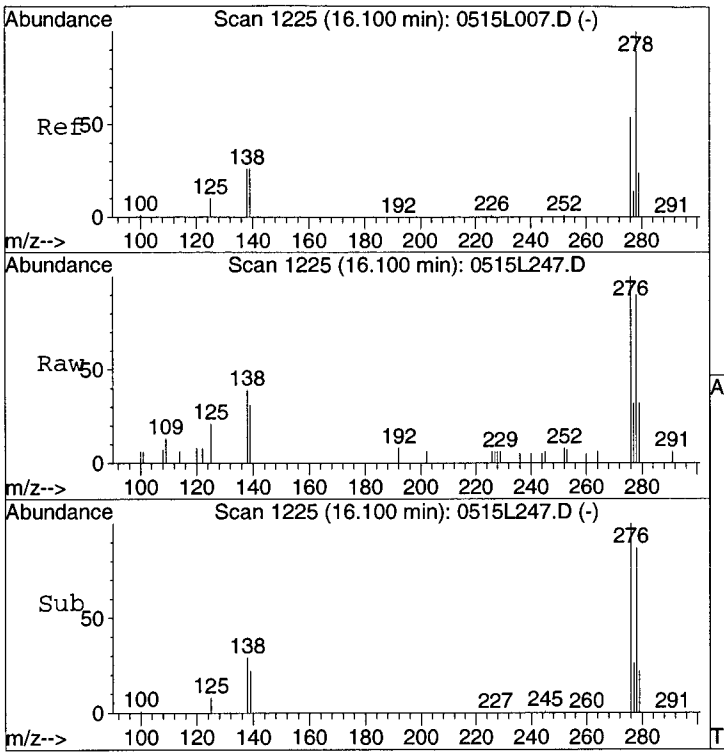


#24
Benzo (a) pyrene
Concen: 619.68 ppb
RT: 14.45 min Scan# 1084
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:252 Resp: 9228

Ion	Ratio	Lower	Upper
252	100		
253	19.9	15.0	27.8
125	15.2	15.7	29.1#

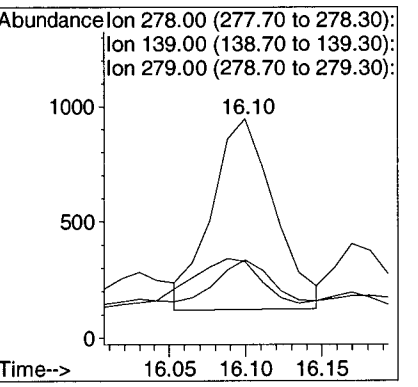


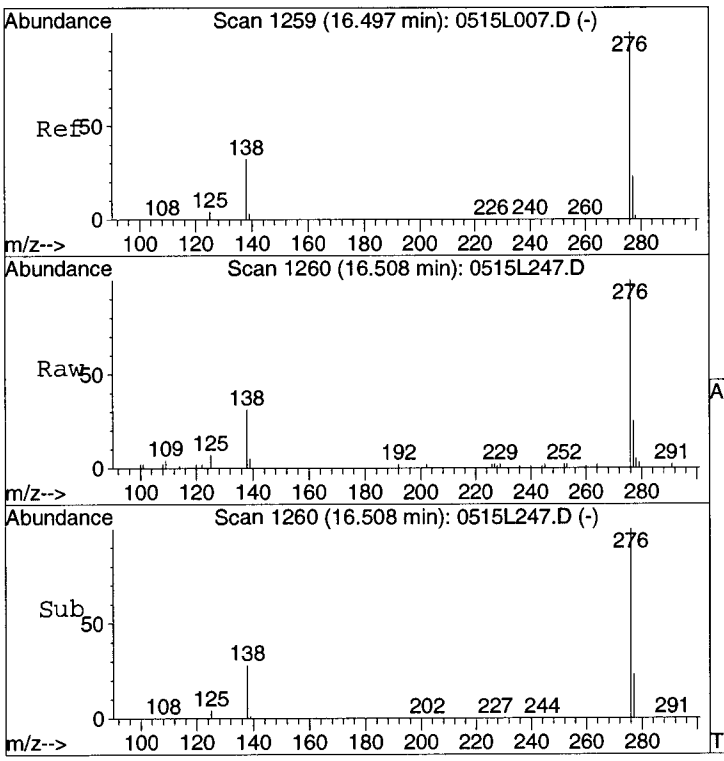


#25
Dibenz (a,h) anthracene
Concen: 200.11 ppb
RT: 16.10 min Scan# 1225
Delta R.T. -0.00 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:278 Resp: 2356

Ion	Ratio	Lower	Upper
278	100		
139	23.5	17.9	33.3
279	24.9	16.7	30.9

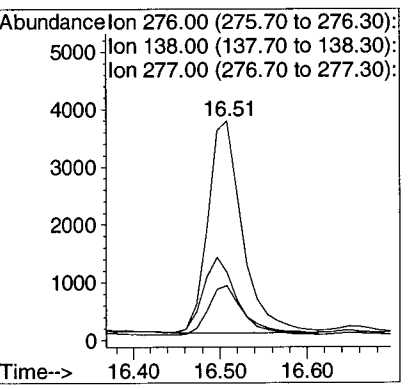




#26
Benzo (g,h,i) perylene
Concen: 715.78 ppb
RT: 16.51 min Scan# 1260
Delta R.T. 0.01 min
Lab File: 0515L247.D
Acq: 28 May 15 00:24

Tgt Ion:276 Resp: 10180

Ion	Ratio	Lower	Upper
276	100		
138	28.3	22.3	41.5
277	23.4	16.4	30.4



EPA 8270D LL SOILS

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 5/14/2015

ARF: 76447
APPL ID: AZ16402
QCG: #SIMDD-150521A-197621

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)								
8270D-LL	2-METHYLNAPHTHALENE	0.023	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHENE	0.0023 U	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	ACENAPHTHYLENE	0.018	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	ANTHRACENE	0.0044 J	0.007	0.0023	0.0011	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZ (A) ANTHRACENE	0.011	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (A) PYRENE	0.0052 J	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.0077	0.007	0.0023	0.0015	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.0075	0.007	0.0023	0.0018	mg/kg	5/21/2015	5/28/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.030	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	CHRYSENE	0.020	0.007	0.0023	0.0011	mg/kg	5/21/2015	5/28/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.0074	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORANTHENE	0.0023 J	0.007	0.0023	0.0016	mg/kg	5/21/2015	5/28/2015
8270D-LL	FLUORENE	0.0048 J	0.007	0.0023	0.0014	mg/kg	5/21/2015	5/28/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.016	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	NAPHTHALENE	0.0082	0.007	0.0023	0.0012	mg/kg	5/21/2015	5/28/2015
8270D-LL	PHENANTHRENE	0.037	0.007	0.0023	0.0015	mg/kg	5/21/2015	5/28/2015
8270D-LL	PYRENE	0.012	0.007	0.0023	0.0016	mg/kg	5/21/2015	5/28/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	43.5 #	45-105			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	50.5	35-100			%	5/21/2015	5/28/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	65.5	30-125			%	5/21/2015	5/28/2015

J = Estimated value.
# = Recovery (or RPD) is outside QC limits.

Quant Method: P0518-42.M
Run #: 0515L248
Instrument: Linus
Sequence: L150515
Dilution Factor: 1
Initials: DA

Printed: 6/2/2015 2:35:52 PM
APPL-F1-SC-MCRes/MCPQL-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L248.D Vial: 48
Acq On : 28 May 15 00:49 Operator: MA
Sample : AZ16402S01 1/30.11G Inst : Linus
Misc : soil Multiplr: 33.21

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9993	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	5068	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	8825	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	9164	2.50	ppb		0.01
21) Perylene-D12(IS)	14.58	264	6091	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	1413	41.95	ppb		0.00
Spiked Amount 83.029			Recovery = 50.525%				
7) Surrogate Recovery (FBP)	7.41	172	3486	36.16	ppb		0.01
Spiked Amount 83.029			Recovery = 43.549%				
17) Surrogate Recovery (TPH)	11.77	244	4820	54.39	ppb		0.00
Spiked Amount 83.029			Recovery = 65.511%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	712	6.05	ppb		97
4) 2-Methylnaphthalene	6.98	142	1266	16.80	ppb		88
5) 1-Methylnaphthalene	7.08	142	924	12.45	ppb		93
8) Acenaphthylene	8.00	152	764	13.53	ppb		97
9) Acenaphthene	8.21	154	20	0.26	ppb	#	87
10) Fluorene	8.81	166	132	3.53	ppb		74
12) Phenanthrene	9.92	178	4143	27.62	ppb		100
13) Anthracene	9.98	178	332	3.22	ppb		95
14) Fluoranthene	11.29	202	938	1.71	ppb		91
16) Pyrene	11.56	202	1414	9.01	ppb	#	82
18) Benz (a) anthracene	12.96	228	951	8.02	ppb	#	86
19) Chrysene	13.00	228	1982	15.07	ppb		98
20) Indeno (1,2,3-cd) pyrene	16.08	276	585	11.72	ppb	#	86
22) Benzo (b) fluoranthene	14.14	252	1593	5.70	ppb		95
23) Benzo (k) fluoranthene	14.14	252	1593	22.21	ppb	#	90
24) Benzo (a) pyrene	14.45	252	823	3.83	ppb		93
25) Dibenz (a,h) anthracene	16.11	278	264	5.48	ppb	#	88
26) Benzo (g,h,i) perylene	16.52	276	694	5.55	ppb		97

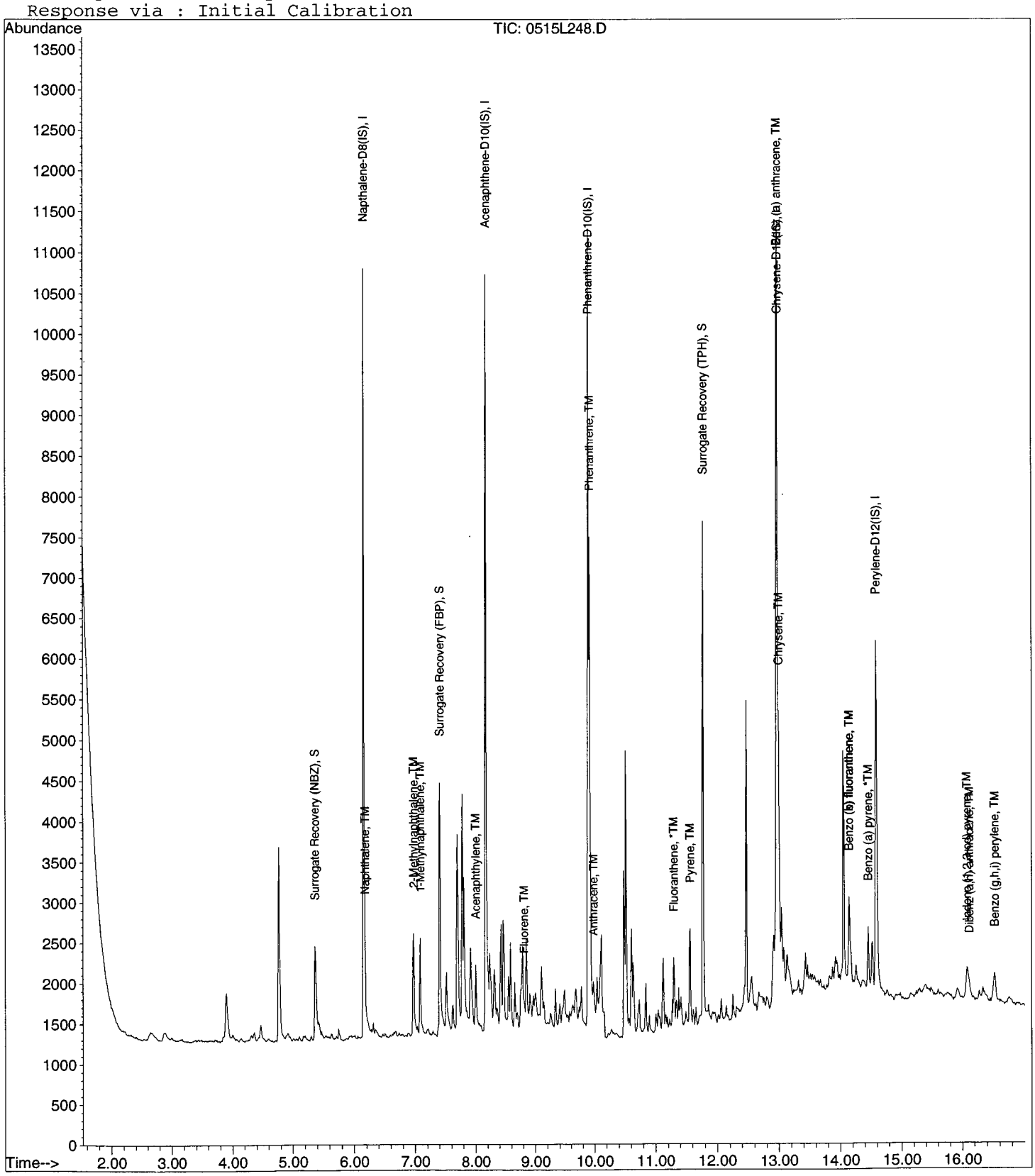
(#) = qualifier out of range (m) = manual integration

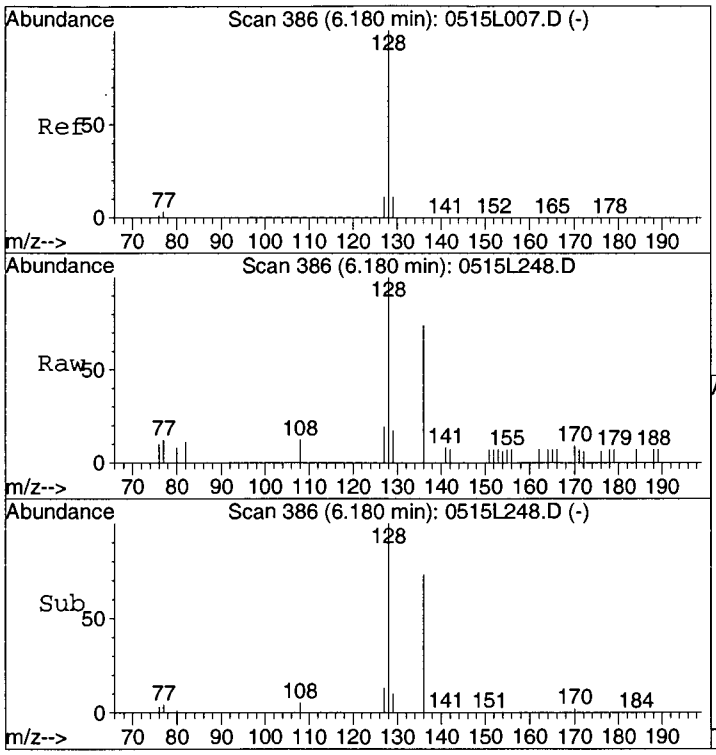
Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L248.D Vial: 48
Acq On : 28 May 15 00:49 Operator: MA
Sample : AZ16402S01 1/30.11G Inst : Linus
Misc : soil Multiplr: 33.21

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration

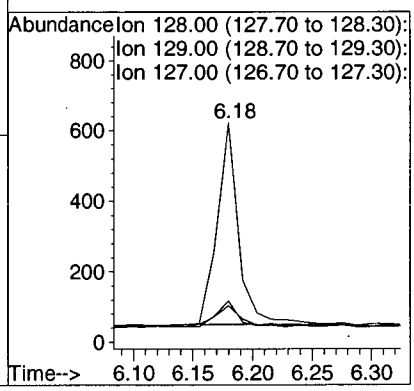


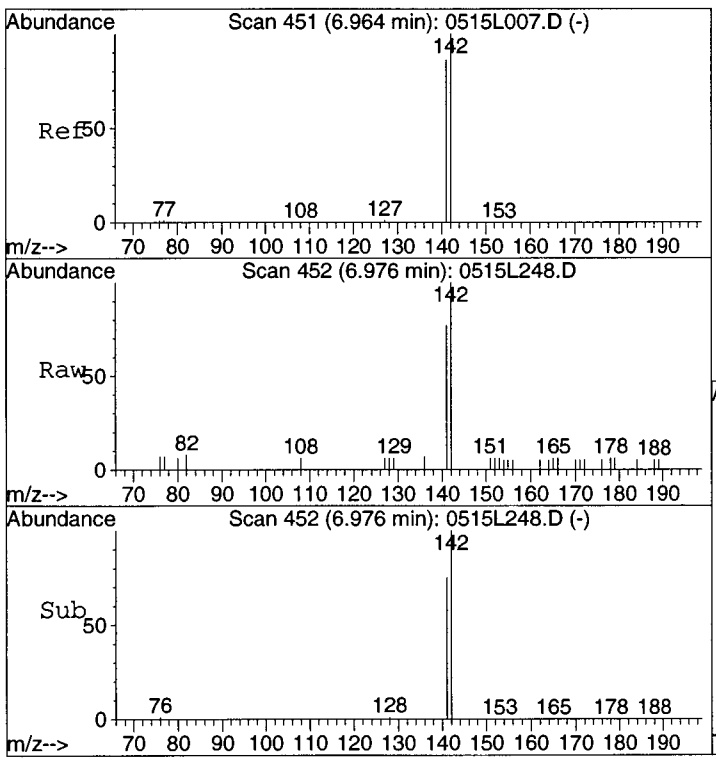


#3
Naphthalene
Concen: 6.05 ppb
RT: 6.18 min Scan# 386
Delta R.T. 0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:128 Resp: 712

Ion	Ratio	Lower	Upper
128	100		
129	10.3	7.8	14.6
127	12.9	8.0	14.8

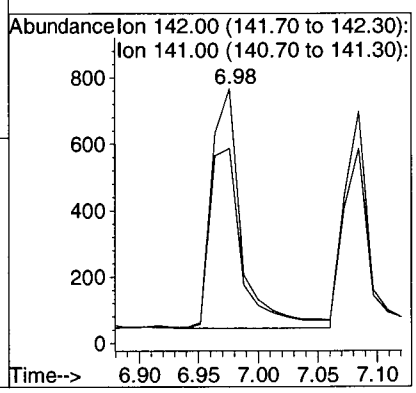


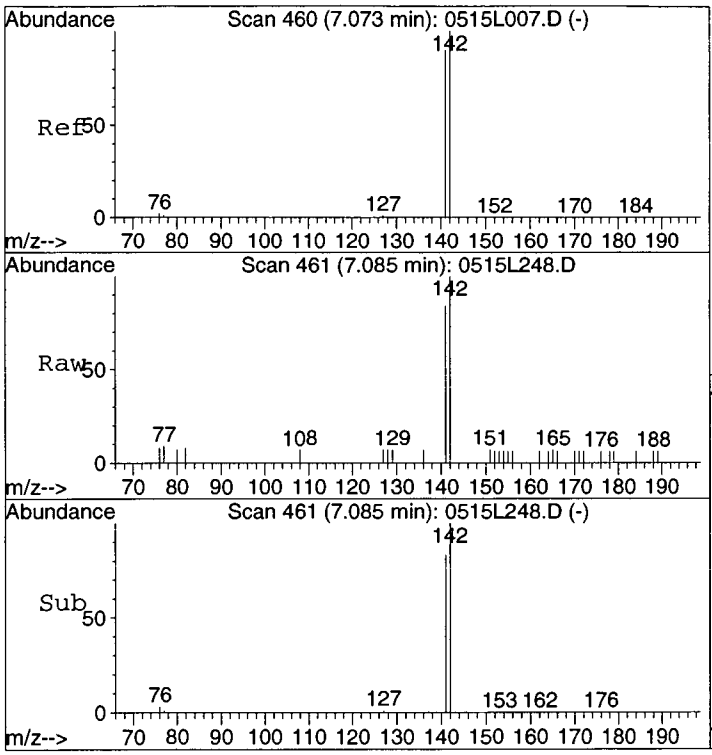


#4
2-Methylnaphthalene
Concen: 16.80 ppb
RT: 6.98 min Scan# 452
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:142 Resp: 1266

Ion	Ratio	Lower	Upper
142	100		
141	74.8	60.1	111.5

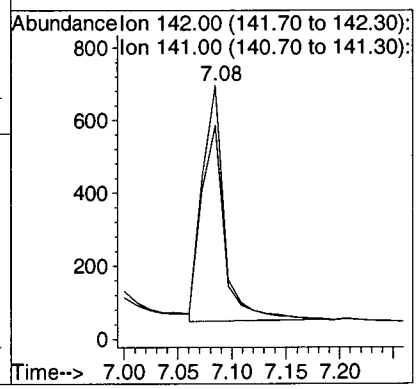


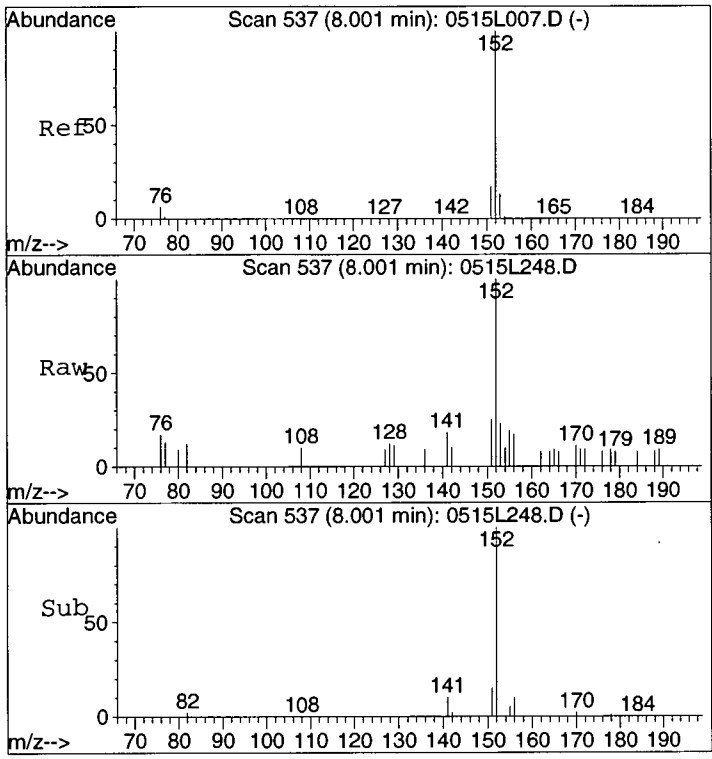


#5
1-Methylnaphthalene
Concen: 12.45 ppb
RT: 7.08 min Scan# 461
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:142 Resp: 924

Ion	Ratio	Lower	Upper
142	100		
141	83.2	63.1	117.3

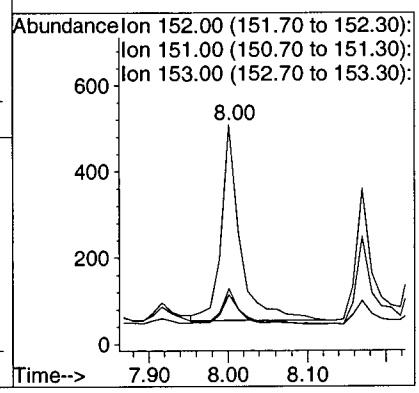


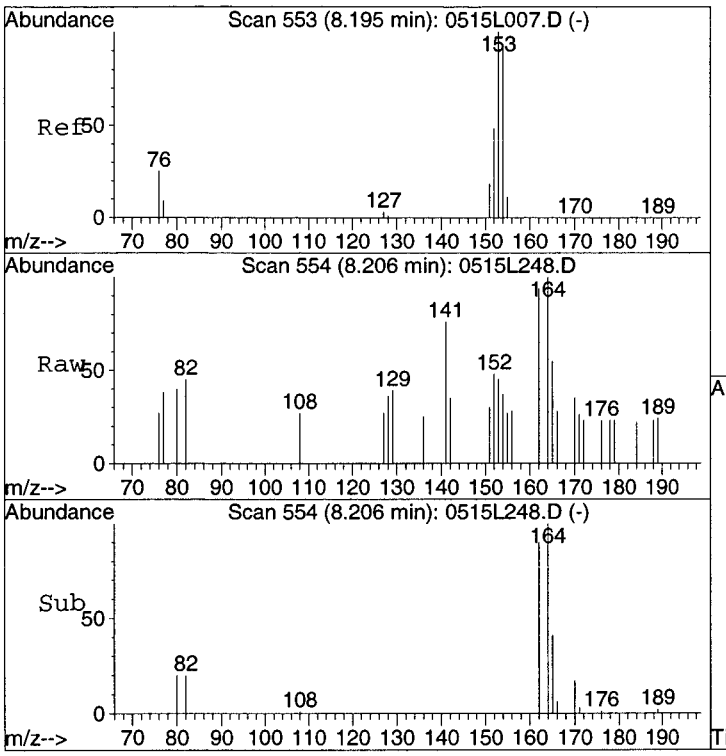


#8
Acenaphthylene
Concen: 13.53 ppb
RT: 8.00 min Scan# 537
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:152 Resp: 764

Ion	Ratio	Lower	Upper
152	100		
151	17.8	12.1	22.5
153	15.0	9.2	17.2

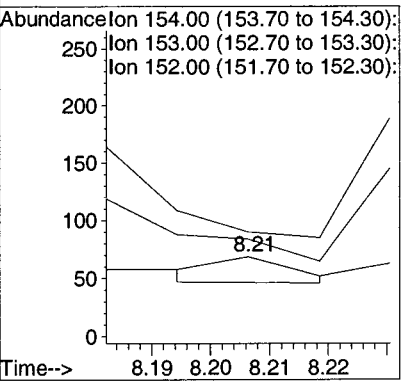


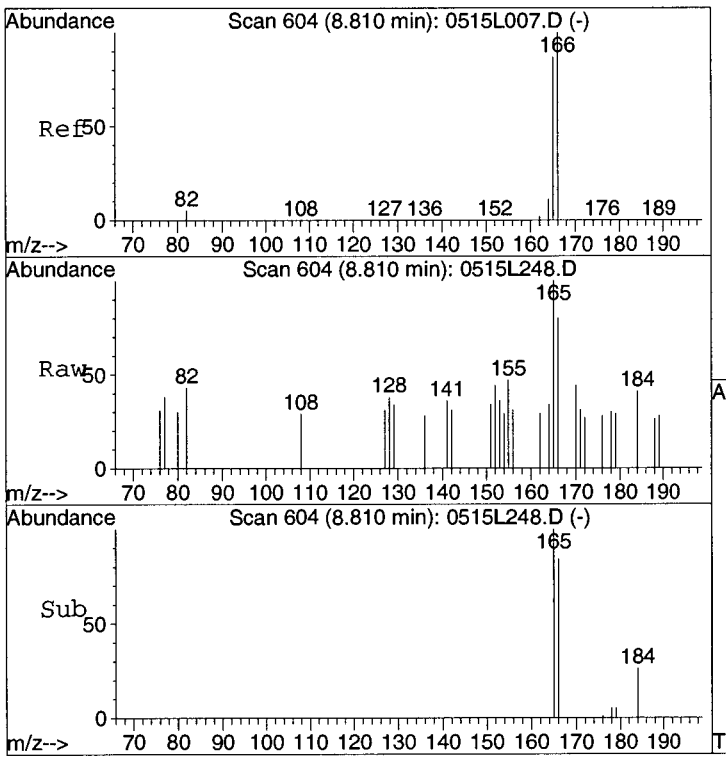


#9
Acenaphthene
Concen: 0.26 ppb
RT: 8.21 min Scan# 554
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:154 Resp: 20

Ion	Ratio	Lower	Upper
154	100		
153	111.8	74.9	139.1
152	29.4	35.9	66.7#

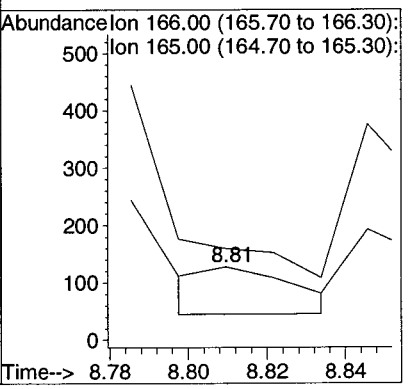


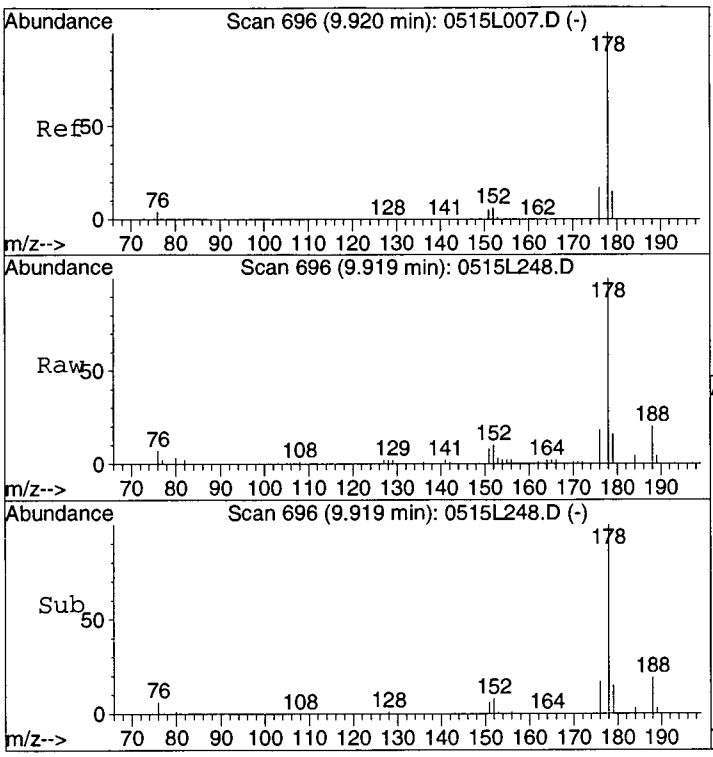


#10
Fluorene
Concen: 3.53 ppb
RT: 8.81 min Scan# 604
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:166 Resp: 132

Ion	Ratio	Lower	Upper
166	100		
165	110.9	60.7	112.7

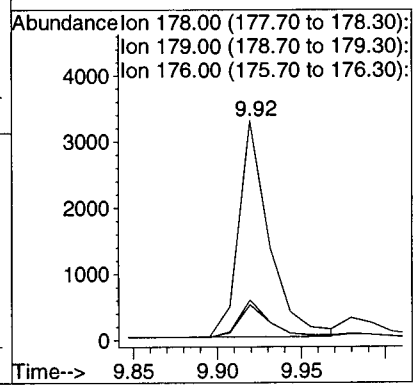


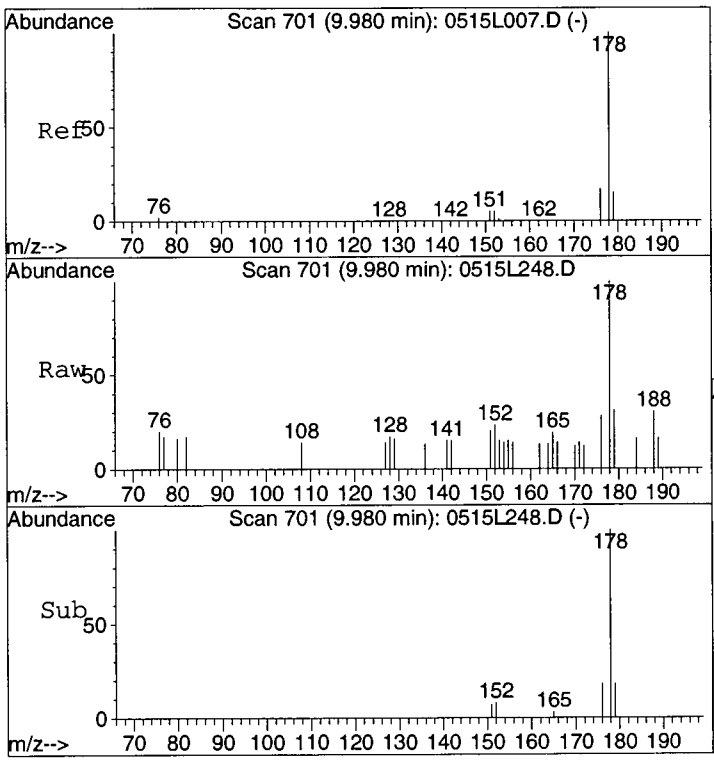


#12
Phenanthrene
Concen: 27.62 ppb
RT: 9.92 min Scan# 696
Delta R.T. 0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:178 Resp: 4143

Ion	Ratio	Lower	Upper
178	100		
179	15.0	10.6	19.6
176	17.3	12.2	22.6

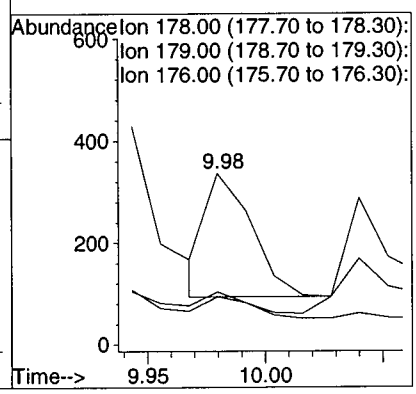


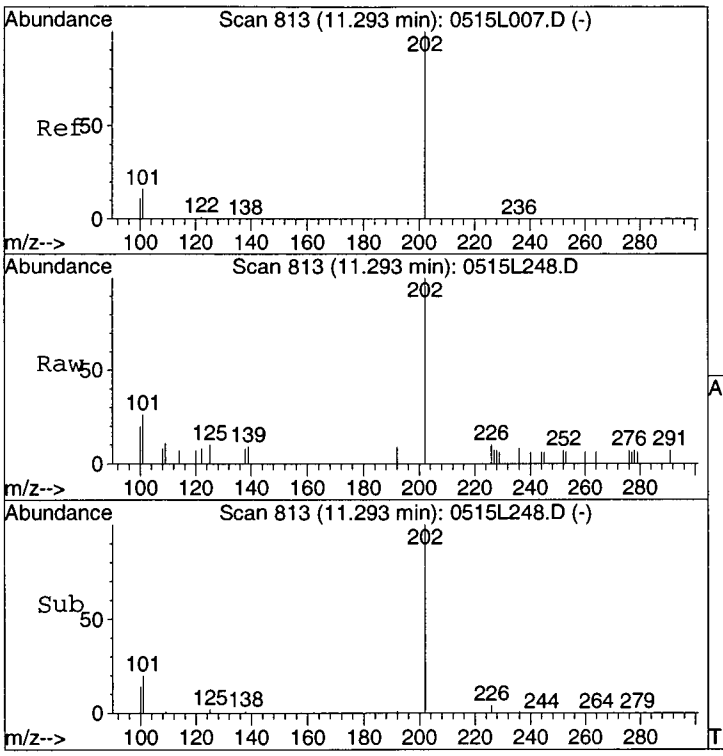


#13
Anthracene
Concen: 3.22 ppb
RT: 9.98 min Scan# 701
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:178 Resp: 332

Ion	Ratio	Lower	Upper
178	100		
179	11.1	10.5	19.5
176	17.7	12.0	22.4

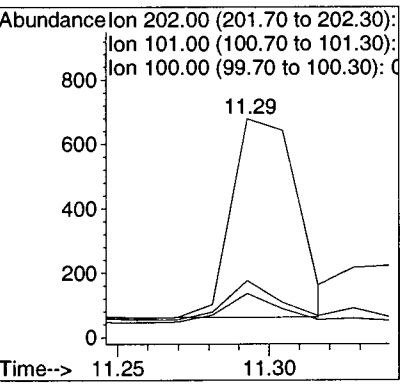


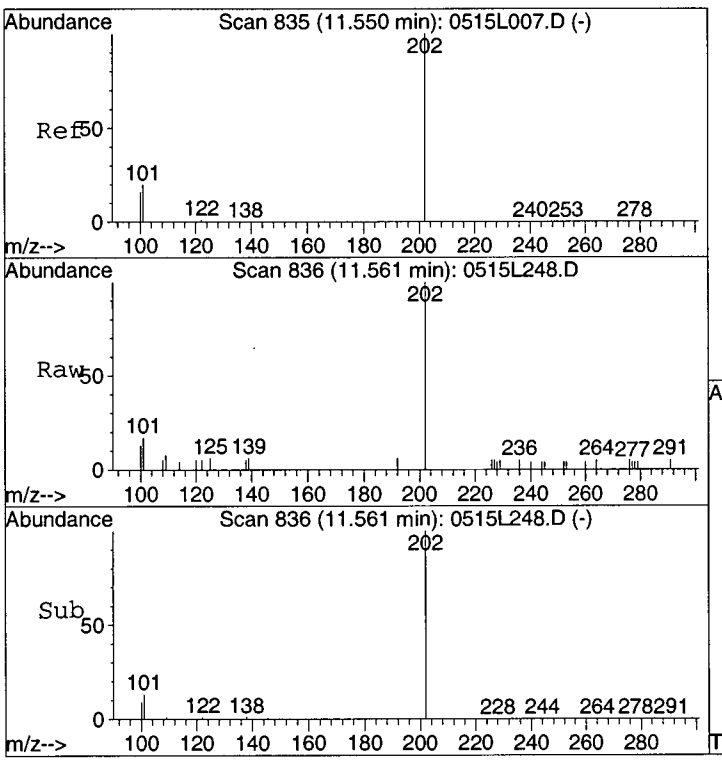


#14
Fluoranthene
Concen: 1.71 ppb
RT: 11.29 min Scan# 813
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:202 Resp: 938

Ion	Ratio	Lower	Upper
202	100		
101	19.8	11.3	20.9
100	14.4	7.8	14.6

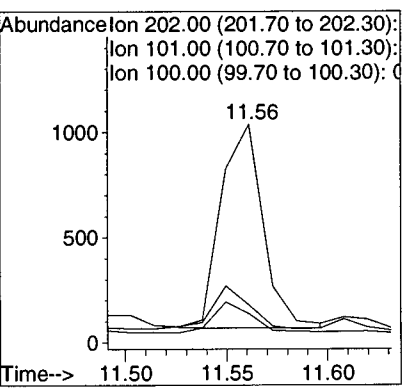


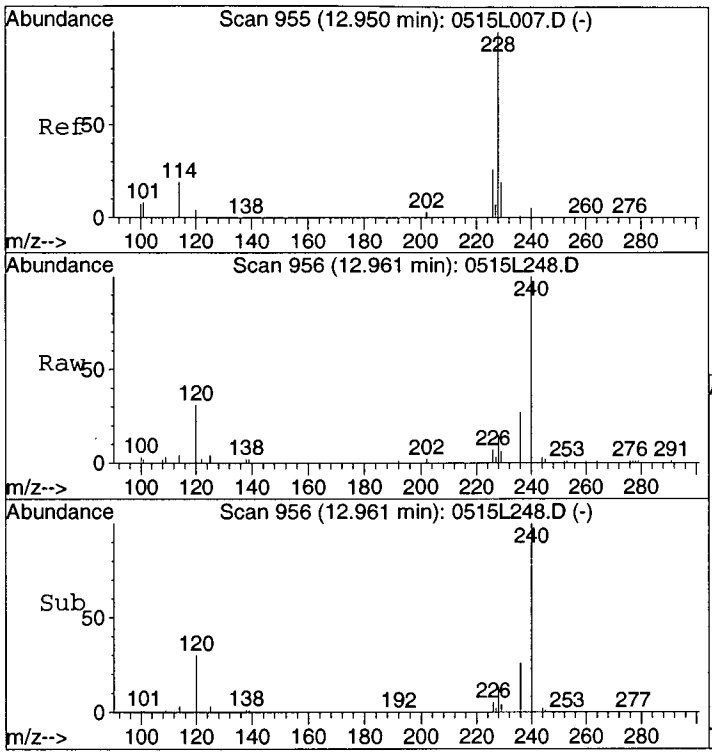


#16
Pyrene
Concen: 9.01 ppb
RT: 11.56 min Scan# 836
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:202 Resp: 1414

Ion	Ratio	Lower	Upper
202	100		
101	11.3	14.3	26.5#
100	9.3	10.9	20.3#

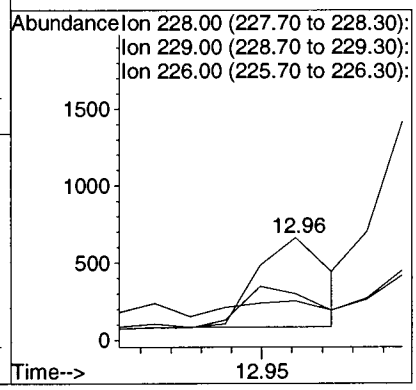


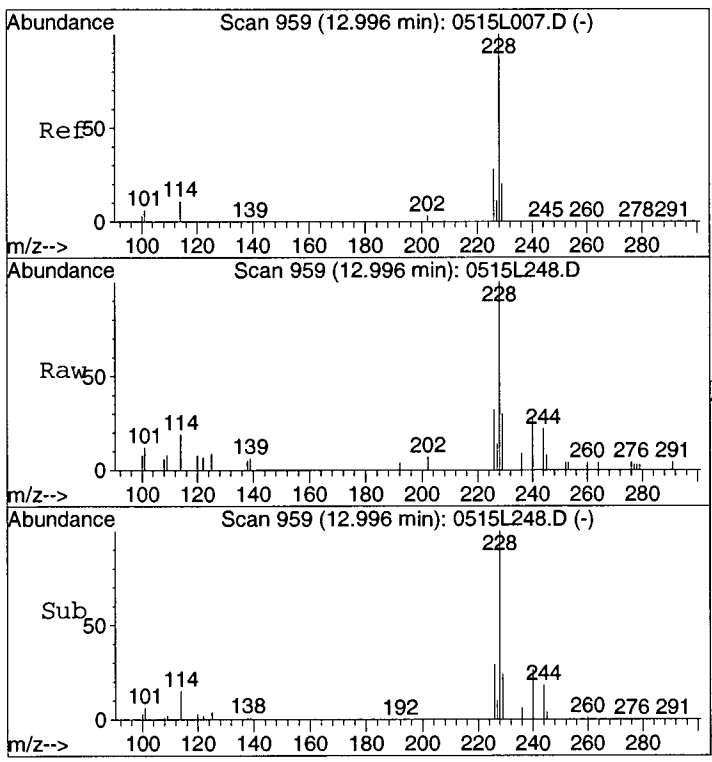


#18
Benz (a) anthracene
Concen: 8.02 ppb
RT: 12.96 min Scan# 956
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:228 Resp: 951

Ion	Ratio	Lower	Upper
228	100		
229	17.5	13.1	24.3
226	37.7	18.3	33.9#

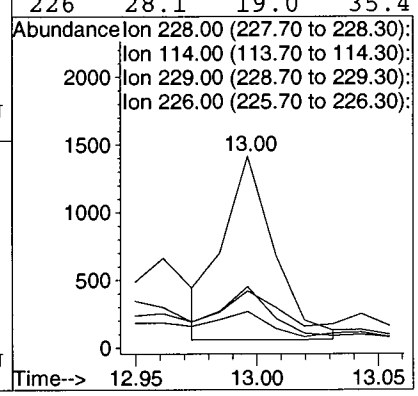


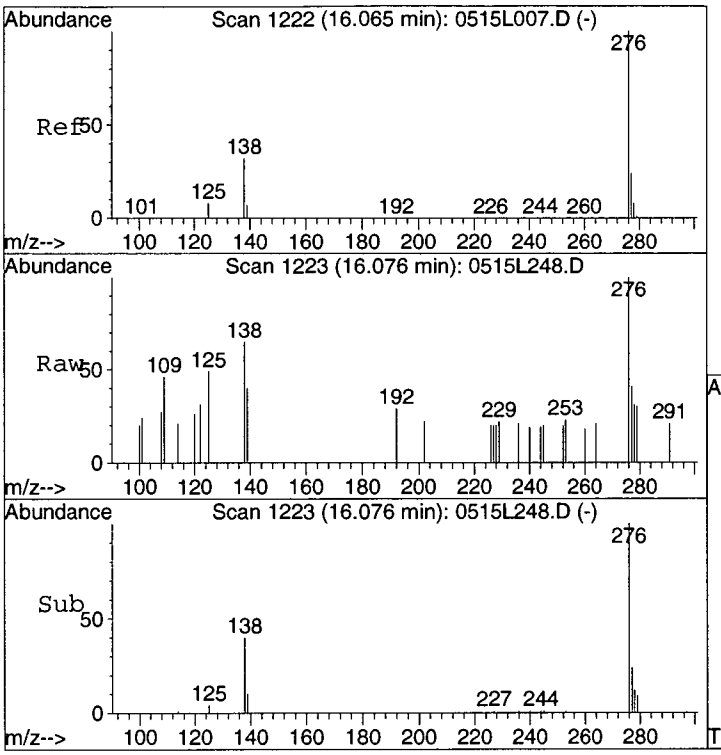


#19
Chrysene
Concen: 15.07 ppb
RT: 13.00 min Scan# 959
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:228 Resp: 1982

Ion	Ratio	Lower	Upper
228	100		
114	12.4	8.5	15.9
229	19.1	14.1	26.1
226	28.1	19.0	35.4

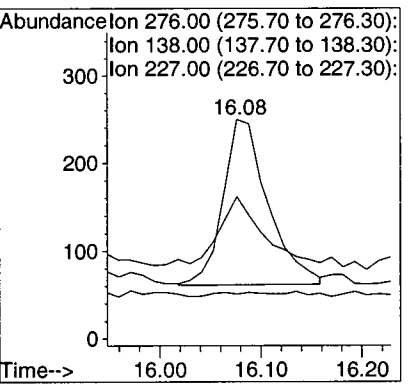


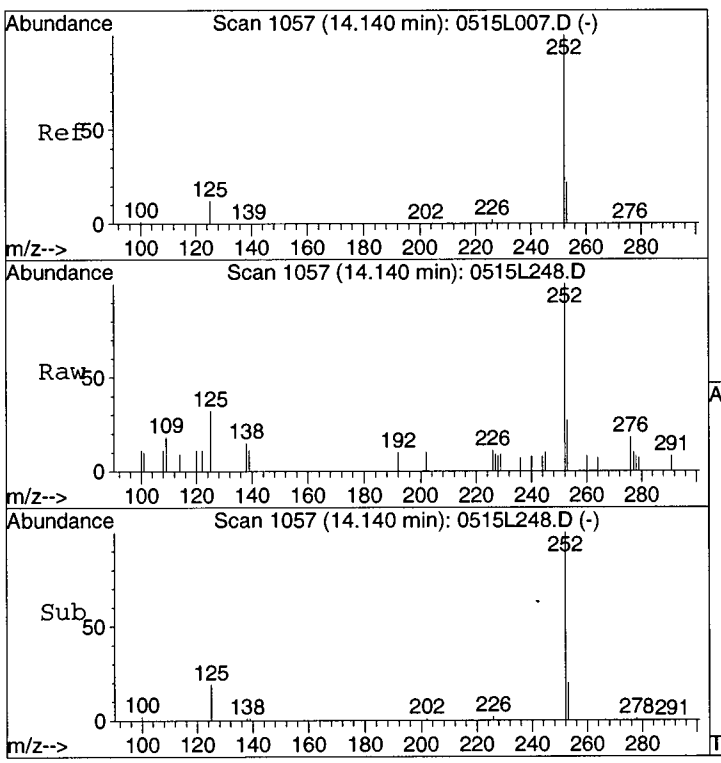


#20
Indeno (1,2,3-cd) pyrene
Concen: 11.72 ppb
RT: 16.08 min Scan# 1223
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:276 Resp: 585

Ion	Ratio	Lower	Upper
276	100		
138	40.1	22.4	41.6
227	0.0	0.1	0.1#

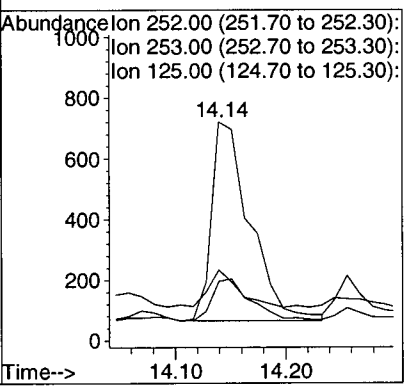


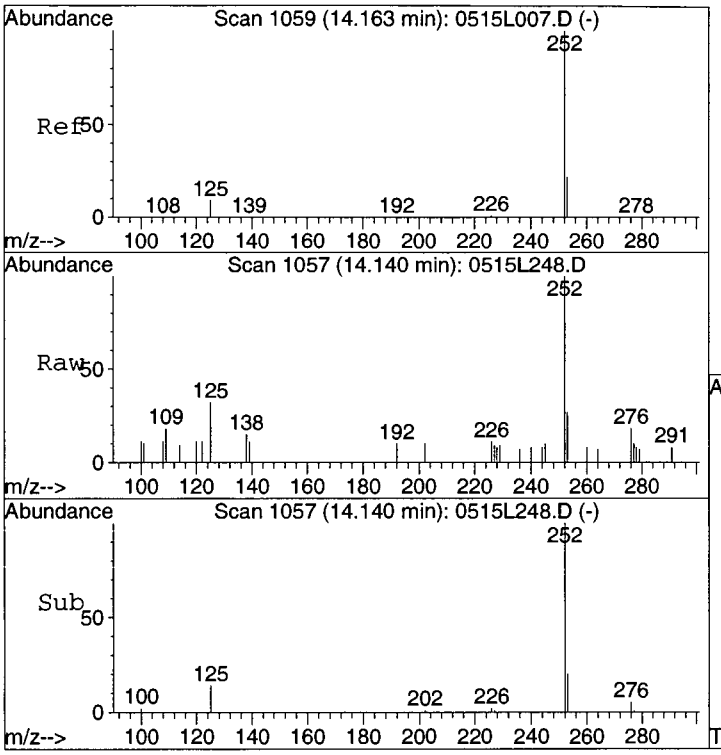


#22
Benzo (b) fluoranthene
Concen: 5.70 ppb
RT: 14.14 min Scan# 1057
Delta R.T. -0.00 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:252 Resp: 1593

Ion	Ratio	Lower	Upper
252	100		
253	19.8	15.4	28.6
125	18.0	10.8	20.0

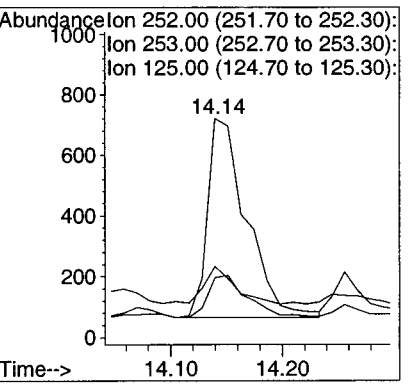


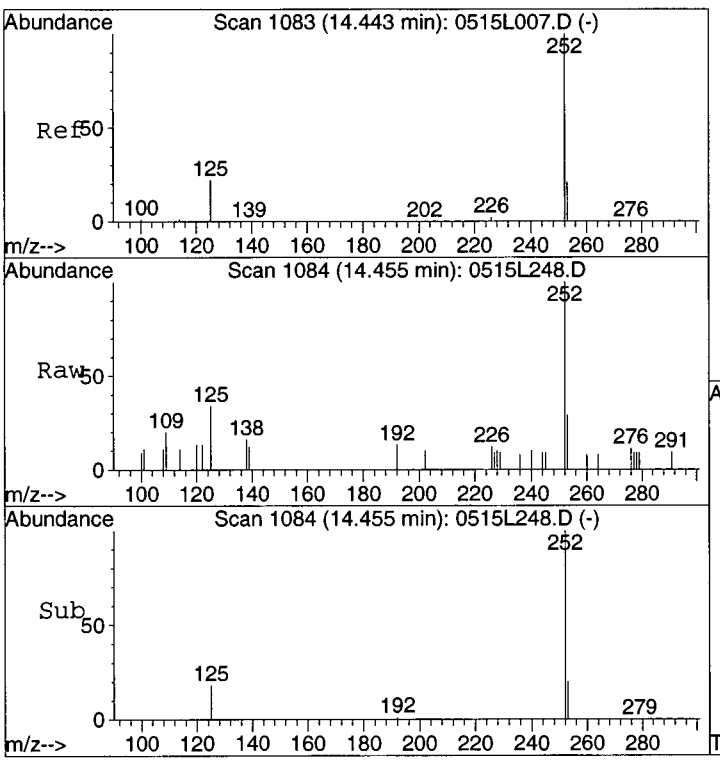


#23
Benzo (k) fluoranthene
Concen: 22.21 ppb
RT: 14.14 min Scan# 1057
Delta R.T. -0.04 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:252 Resp: 1593

Ion	Ratio	Lower	Upper
252	100		
253	19.8	15.6	29.0
125	18.0	7.0	13.0#

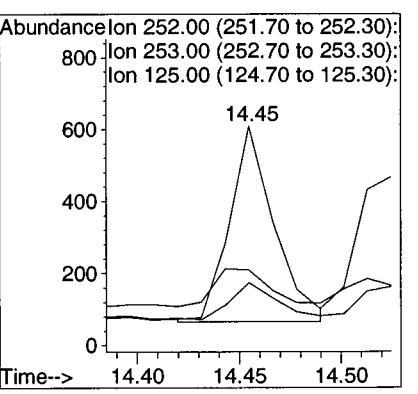


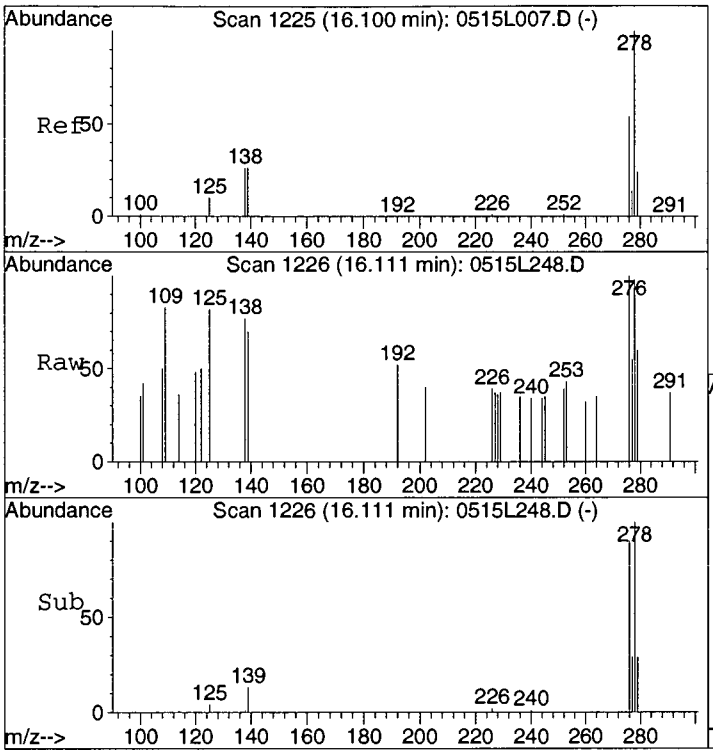


#24
Benzo (a) pyrene
Concen: 3.83 ppb
RT: 14.45 min Scan# 1084
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:252 Resp: 823

Ion	Ratio	Lower	Upper
252	100		
253	18.1	15.0	27.8
125	18.7	15.7	29.1

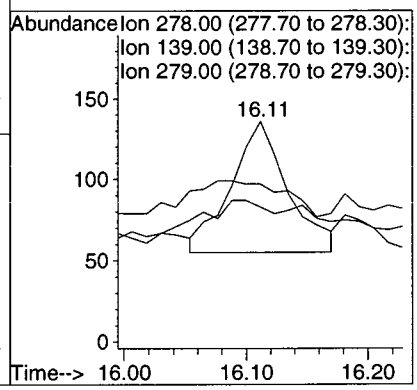


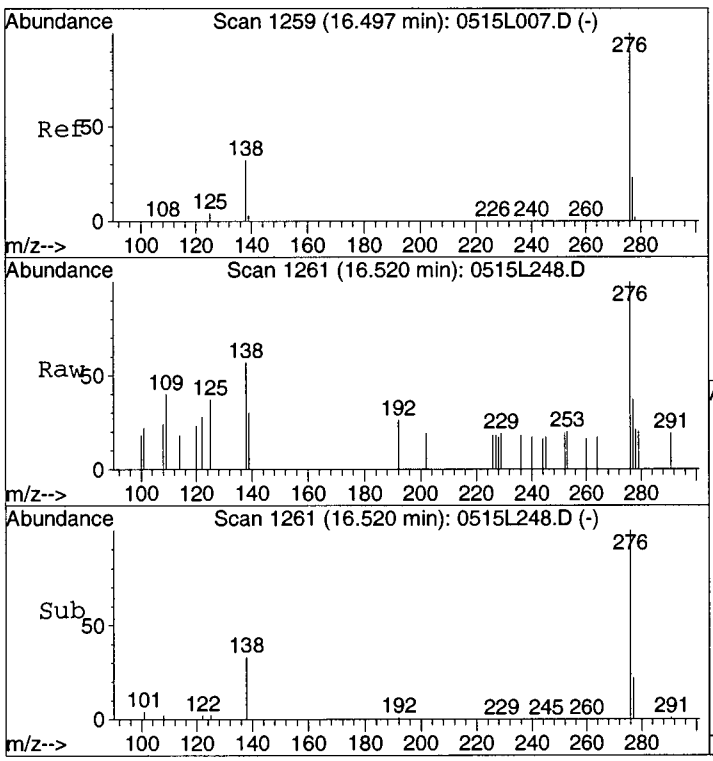


#25
Dibenz (a,h) anthracene
Concen: 5.48 ppb
RT: 16.11 min Scan# 1226
Delta R.T. 0.01 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:278 Resp: 264

Ion	Ratio	Lower	Upper
278	100		
139	25.0	17.9	33.3
279	12.5	16.7	30.9#

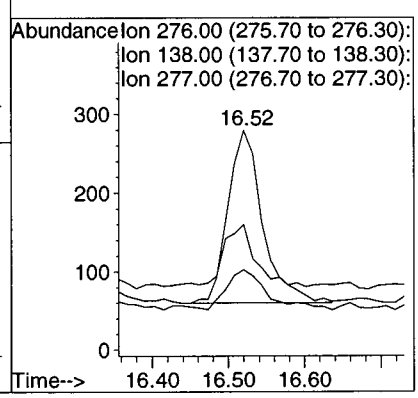




#26
Benzo (g,h,i) perylene
Concen: 5.55 ppb
RT: 16.52 min Scan# 1261
Delta R.T. 0.02 min
Lab File: 0515L248.D
Acq: 28 May 15 00:49

Tgt Ion:276 Resp: 694

Ion	Ratio	Lower	Upper
276	100		
138	35.0	22.3	41.5
277	23.6	16.4	30.4



EPA 8270D LL WATER DODv3

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 5/14/2015

ARF: 76447
APPL ID: AZ16403
QCG: #SIMDD-150520A-197650

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-LL	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	5/20/2015	5/27/2015
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	5/20/2015	5/27/2015
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	5/20/2015	5/27/2015
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	5/20/2015	5/27/2015
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	60.9	50-110			%	5/20/2015	5/27/2015
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	63.4	40-110			%	5/20/2015	5/27/2015
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	109	50-135			%	5/20/2015	5/27/2015

Quant Method: P0518-42.M
Run #: 0515L231
Instrument: Linus
Sequence: L150515
Dilution Factor: 1
Initials: MA

Printed: 6/11/2015 1:46:39 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L231.D Vial: 31
Acq On : 27 May 15 17:34 Operator: MA
Sample : AZ16403W09 1/1030 Inst : Linus
Misc : water Multiplr: 0.97

Quant Time: Jun 3 11:11 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8768	2.50	ppb	0.00
6) Acenaphthene-D10(IS)	8.17	164	4532	2.50	ppb	0.01
11) Phenanthrene-D10(IS)	9.90	188	8180	2.50	ppb	0.00
15) Chrysene-D12(IS)	12.97	240	8298	2.50	ppb	0.01
21) Perylene-D12(IS)	14.59	264	5387	2.50	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.37	82	1604	1.54	ppb	0.01
Spiked Amount 2.427			Recovery = 63.366%			
7) Surrogate Recovery (FBP)	7.41	172	4358	1.48	ppb	0.01
Spiked Amount 2.427			Recovery = 60.894%			
17) Surrogate Recovery (TPH)	11.77	244	7247	2.64	ppb	0.00
Spiked Amount 2.427			Recovery = 108.768%			
Target Compounds						Qvalue

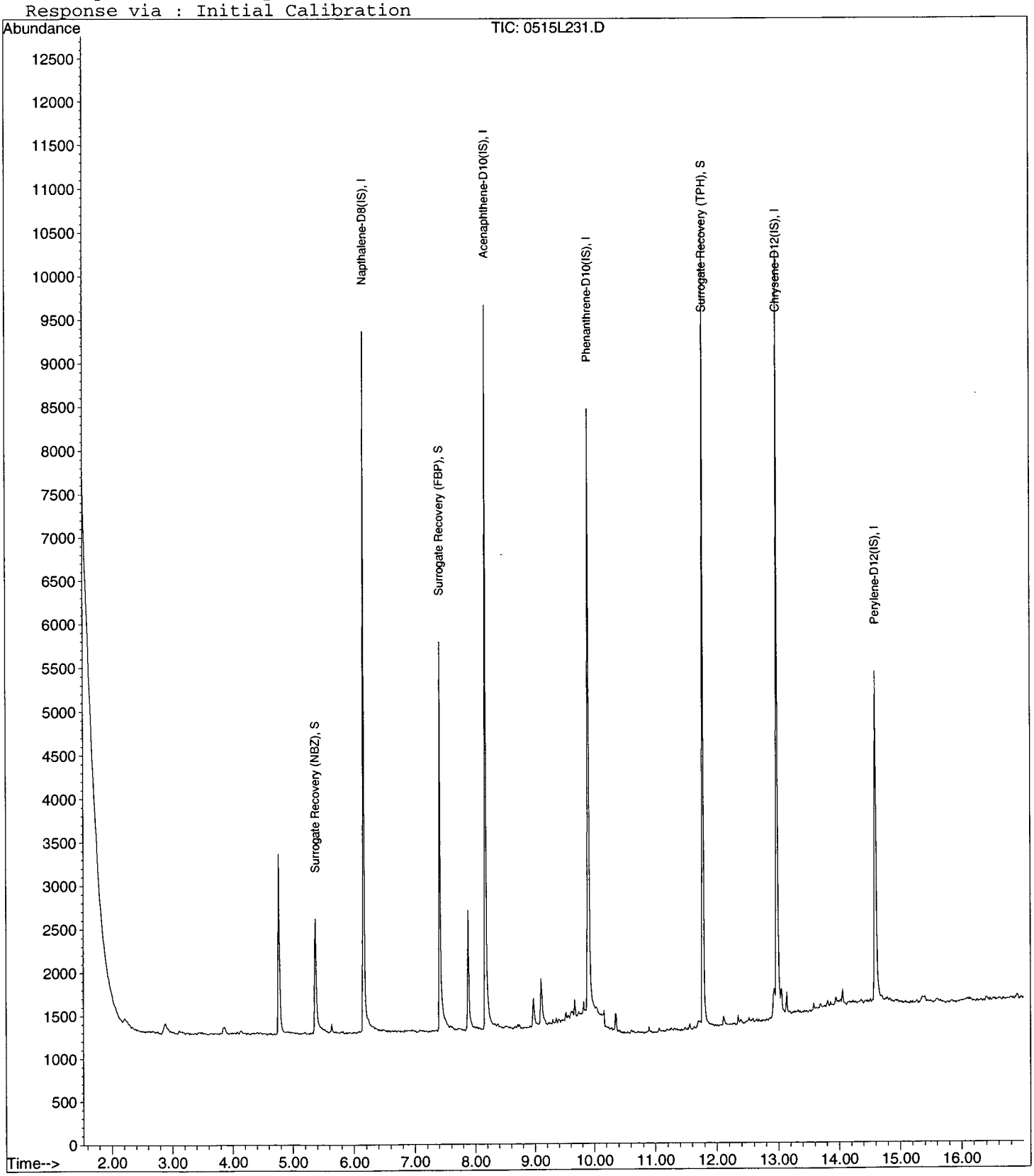
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L231.D Vial: 31
Acq On : 27 May 15 17:34 Operator: MA
Sample : AZ16403W09 1/1030 Inst : Linus
Misc : water Multiplr: 0.97

Quant Time: Jun 3 11:11 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Calibration Data

APPL, INC.

EPA 8270C SIM
P0518-42

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 76447
Case No: Initial Cal. Date: 5/15/2015
Matrix: Instrument: Linus Initials:

		Compound	0515L003.D	0515L004.D	0515L005.D	0515L006.D	0515L007.D	0515L008.D	0515L009.D	0515L010.D			Avg	%RSD		
			0.1	0.2	0.5	1	5	10	50	100						
1	I	Napthalene-D8(IS)														
2	SL	Surrogate Recovery (NBZ)	0.2254	0.3678	0.1834	0.1860	0.2776	0.2909	0.3391	0.3198			0.27	25	SL	0.999
3	TM	Naphthalene	0.8554	0.8475	0.7845	0.9100	1.049	1.089	1.174	1.113			0.98	15	TM	
4	TML	2-Methylnaphthalene	0.4994	0.5010	0.4785	0.5210	0.6104	0.6851	0.7669	0.7167			0.60	19	TML	0.999
5	TM	1-Methylnaphthalene	0.5762	0.5810	0.4580	0.5662	0.6341	0.6730	0.7484	0.6954			0.62	15	TM	
6	I	Acenaphthene-D10(IS)														
7	S	Surrogate Recovery (FBP)				1.217	1.812	1.617	1.675	1.577			1.6	14	S	
8	TML	Acenaphthylene	1.795	1.721	1.606	1.730	2.314	2.330	2.600	2.556			2.1	20	TML	1.000
9	*TM	Acenaphthene	1.152	1.120	1.004	1.083	1.397	1.402	1.500	1.468			1.3	15	*TM	
10	TML	Fluorene	1.331	1.190	1.050	1.116	1.471	1.579	1.671	1.606			1.4	17	TML	1.000
11	I	Phenanthrene-D10(IS)														
12	TML	Phenanthrene	1.072	1.012	0.9085	0.9592	1.237	1.307	1.401	1.315			1.2	16	TML	0.999
13	TML	Anthracene	0.9138	0.9496	0.8756	0.9497	1.174	1.229	1.322	1.259			1.1	17	TML	0.999
14	*TML	Fluoranthene	1.292	1.160	1.048	1.124	1.461	1.555	1.707	1.564			1.4	18	*TML	0.998
15	I	Chrysene-D12(IS)														
16	TM	Pyrene	1.385	1.349	1.165	1.236	1.554	1.564	1.593	1.529			1.4	11	TM	
17	S	Surrogate Recovery (TPH)	0.7828	0.7480	0.6866	0.6959	0.9635	0.8453	0.8659	0.8351			0.80	12	S	
18	TML	Benz (a) anthracene	1.074	0.9169	0.8316	0.8680	1.146	1.248	1.372	1.288			1.1	19	TML	0.999
19	TM	Chrysene	1.181	1.069	1.140	1.165	1.314	1.284	1.211	1.171			1.2	6.6	TM	
20	TML	Indeno (1,2,3-cd) pyrene	1.032	0.8816	0.8741	0.9520	1.205	1.296	1.416	1.386			1.1	20	TML	1.000
21	I	Perylene-D12(IS)														
22	TML	Benzo (b) fluoranthene	1.181	1.366	0.9970	1.080	1.710	1.633	2.174	1.841			1.5	27	TML	0.993
23	TML	Benzo (k) fluoranthene	1.572	0.9926	1.318	1.357	1.658	1.985	1.740	1.877			1.6	21	TML	0.999
24	*TML	Benzo (a) pyrene	1.523	1.336	1.301	1.388	1.764	1.857	1.940	1.838			1.6	16	*TML	0.999
25	TML	Dibenz (a,h) anthracene	1.133	1.051	1.104	1.146	1.622	1.761	1.922	1.826			1.4	26	TML	0.999
26	TML	Benzo (g,h,i) perylene	1.398	1.182	1.173	1.261	1.698	1.811	1.927	1.828			1.5	20	TML	0.999
27																
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L003.D Vial: 3
Acq On : 15 May 15 17:15 Operator: csc
Sample : 0.1ug/ml PAH 05/15/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 10:26 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9762	2.50 ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4471	2.50 ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	7606	2.50 ppb		0.00
15) Chrysene-D12(IS)	12.97	240	7218	2.50 ppb		0.01
21) Perylene-D12(IS)	14.58	264	4613	2.50 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.37	82	88	0.24 ppb		0.01
Spiked Amount 2.500			Recovery =	9.680%		
7) Surrogate Recovery (FBP)	7.41	172	230	-0.18 ppb		0.01
Spiked Amount 2.500			Recovery =	-7.400%		
17) Surrogate Recovery (TPH)	11.77	244	226	0.10 ppb		0.00
Spiked Amount 2.500			Recovery =	3.880%		
Target Compounds						Qvalue
3) Naphthalene	6.18	128	334	0.09 ppb		96
4) 2-Methylnaphthalene	6.96	142	195	0.14 ppb		95
5) 1-Methylnaphthalene	7.07	142	225	0.09 ppb		100
8) Acenaphthylene	8.00	152	321	0.33 ppb		96
9) Acenaphthene	8.19	154	208	0.09 ppb		98
10) Fluorene	8.81	166	238	0.15 ppb		99
13) Anthracene	9.98	178	278	0.09 ppb		94
16) Pyrene	11.56	202	400	0.10 ppb		92
18) Benz (a) anthracene	12.96	228	310	0.12 ppb		97
19) Chrysene	13.00	228	341	0.10 ppb		94
20) Indeno (1,2,3-cd) pyrene	16.09	276	298	0.31 ppb	#	97
22) Benzo (b) fluoranthene	14.14	252	218	-0.11 ppb		96
23) Benzo (k) fluoranthene	14.17	252	290	0.40 ppb	#	94
25) Dibenz (a,h) anthracene	16.12	278	209	0.17 ppb		90
26) Benzo (g,h,i) perylene	16.51	276	258	0.09 ppb		88

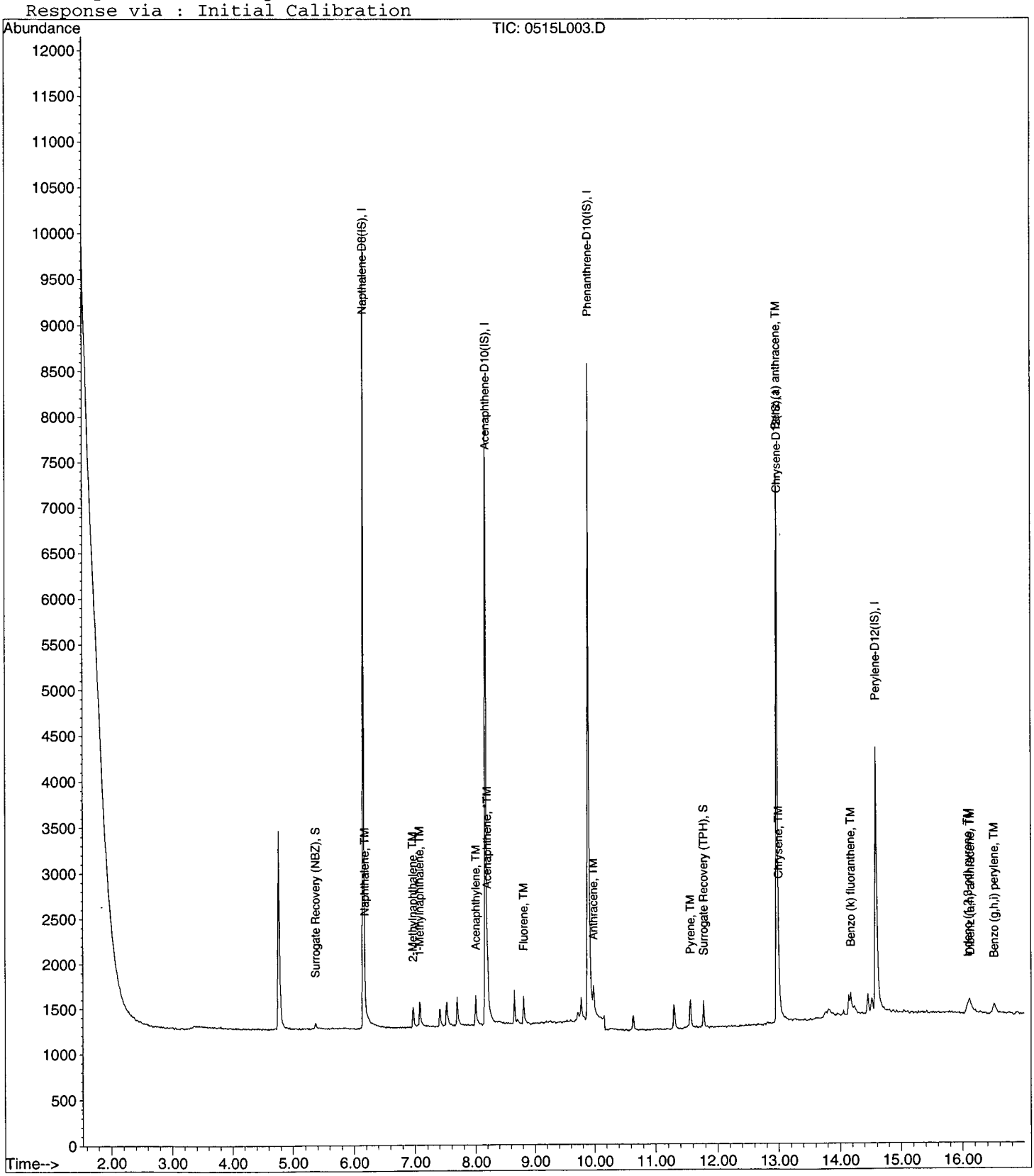
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L003.D Vial: 3
Acq On : 15 May 15 17:15 Operator: csc
Sample : 0.1ug/ml PAH 05/15/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 10:26 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L004.D Vial: 4
Acq On : 15 May 15 17:41 Operator: csc
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9381	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4264	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	7253	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	6735	2.50	ppb		0.01
21) Perylene-D12(IS)	14.58	264	4483	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	138	0.81	ppb		0.01
Spiked Amount 2.500			Recovery = 32.400%				
7) Surrogate Recovery (FBP)	7.41	172	438	0.18	ppb		0.01
Spiked Amount 2.500			Recovery = 7.280%				
17) Surrogate Recovery (TPH)	11.77	244	403	0.20	ppb		0.00
Spiked Amount 2.500			Recovery = 8.000%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	636	0.50	ppb		99
4) 2-Methylnaphthalene	6.96	142	376	0.79	ppb		100
5) 1-Methylnaphthalene	7.07	142	436	0.52	ppb		99
8) Acenaphthylene	8.00	152	587	0.32	ppb		99
9) Acenaphthene	8.21	154	382	0.40	ppb		91
10) Fluorene	8.81	166	406	0.46	ppb		91
12) Phenanthrene	9.92	178	587	0.19	ppb		99
13) Anthracene	9.98	178	551	0.55	ppb		99
14) Fluoranthene	11.30	202	673	0.78	ppb		92
16) Pyrene	11.56	202	727	0.21	ppb		91
18) Benz (a) anthracene	12.96	228	494	0.17	ppb		93
19) Chrysene	13.00	228	576	0.20	ppb		97
20) Indeno (1,2,3-cd) pyrene	16.09	276	475	0.63	ppb	#	92
22) Benzo (b) fluoranthene	14.14	252	490	0.41	ppb	#	89
23) Benzo (k) fluoranthene	14.17	252	356	0.38	ppb		97
24) Benzo (a) pyrene	14.45	252	479	0.38	ppb		97
25) Dibenz (a,h) anthracene	16.12	278	377	0.57	ppb		95
26) Benzo (g,h,i) perylene	16.51	276	424	0.55	ppb		98

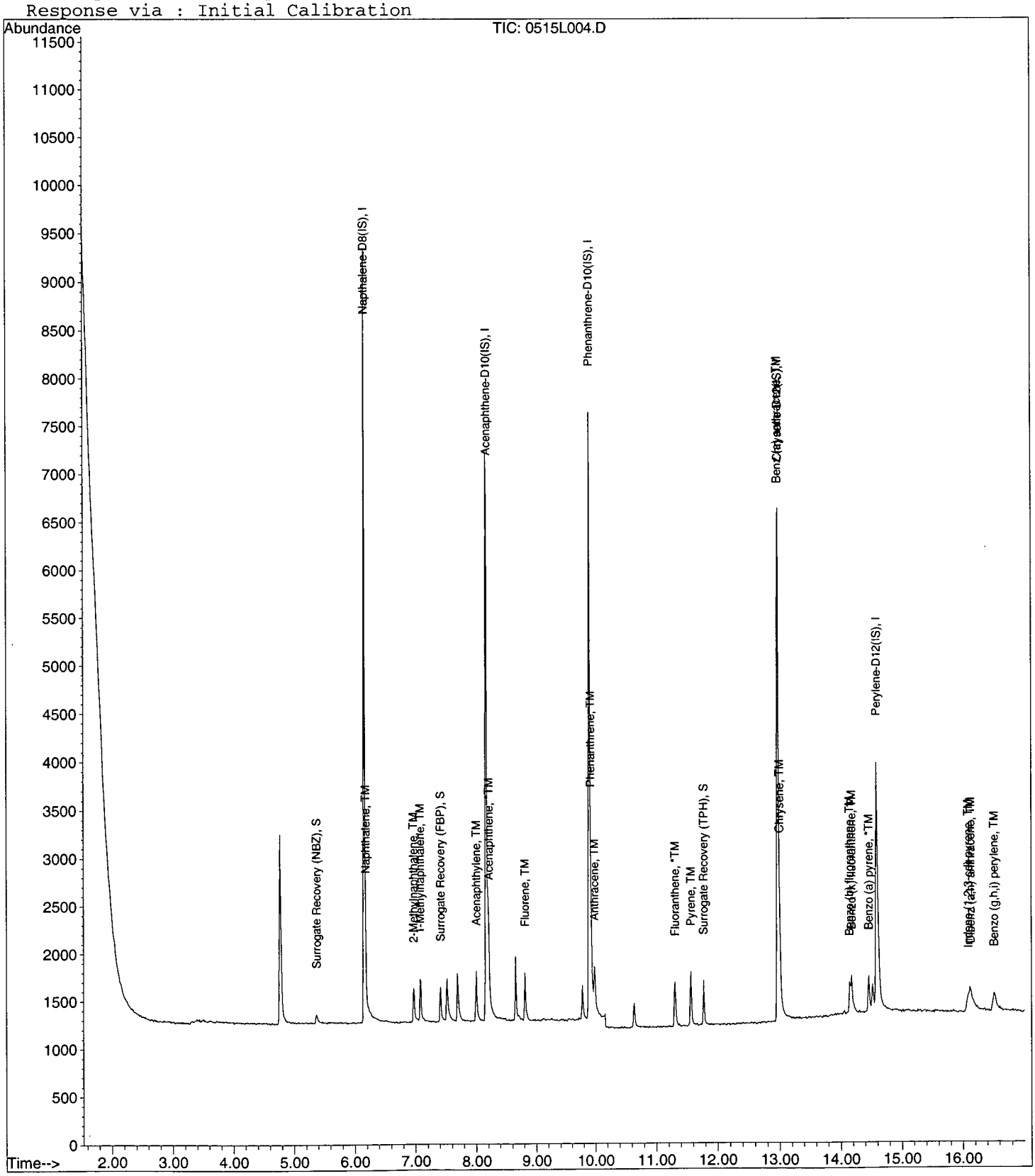
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L004.D Vial: 4
Acq On : 15 May 15 17:41 Operator: csc
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L005.D Vial: 5
Acq On : 15 May 15 18:06 Operator: csc
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9050	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4233	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	7149	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	6590	2.50	ppb		0.01
21) Perylene-D12(IS)	14.58	264	4308	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	332	0.98	ppb		0.01
Spiked Amount 2.500			Recovery = 39.000%				
7) Surrogate Recovery (FBP)	7.41	172	955	0.40	ppb		0.01
Spiked Amount 2.500			Recovery = 15.960%				
17) Surrogate Recovery (TPH)	11.77	244	905	0.46	ppb		0.00
Spiked Amount 2.500			Recovery = 18.400%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	1420	0.70	ppb		100
4) 2-Methylnaphthalene	6.96	142	866	0.97	ppb		99
5) 1-Methylnaphthalene	7.07	142	829	0.67	ppb		94
8) Acenaphthylene	8.00	152	1360	0.51	ppb		97
9) Acenaphthene	8.21	154	850	0.60	ppb		96
10) Fluorene	8.81	166	889	0.64	ppb		94
12) Phenanthrene	9.92	178	1299	0.42	ppb		98
13) Anthracene	9.98	178	1252	0.76	ppb		98
14) Fluoranthene	11.30	202	1498	0.96	ppb		93
16) Pyrene	11.56	202	1536	0.46	ppb		91
18) Benz (a) anthracene	12.96	228	1096	0.39	ppb		96
19) Chrysene	13.00	228	1502	0.53	ppb		97
20) Indeno (1,2,3-cd) pyrene	16.08	276	1152	0.83	ppb	#	90
22) Benzo (b) fluoranthene	14.14	252	859	0.55	ppb	#	96
23) Benzo (k) fluoranthene	14.17	252	1136	0.72	ppb		97
24) Benzo (a) pyrene	14.45	252	1121	0.64	ppb		94
25) Dibenz (a,h) anthracene	16.11	278	951	0.80	ppb		94
26) Benzo (g,h,i) perylene	16.51	276	1011	0.80	ppb		97

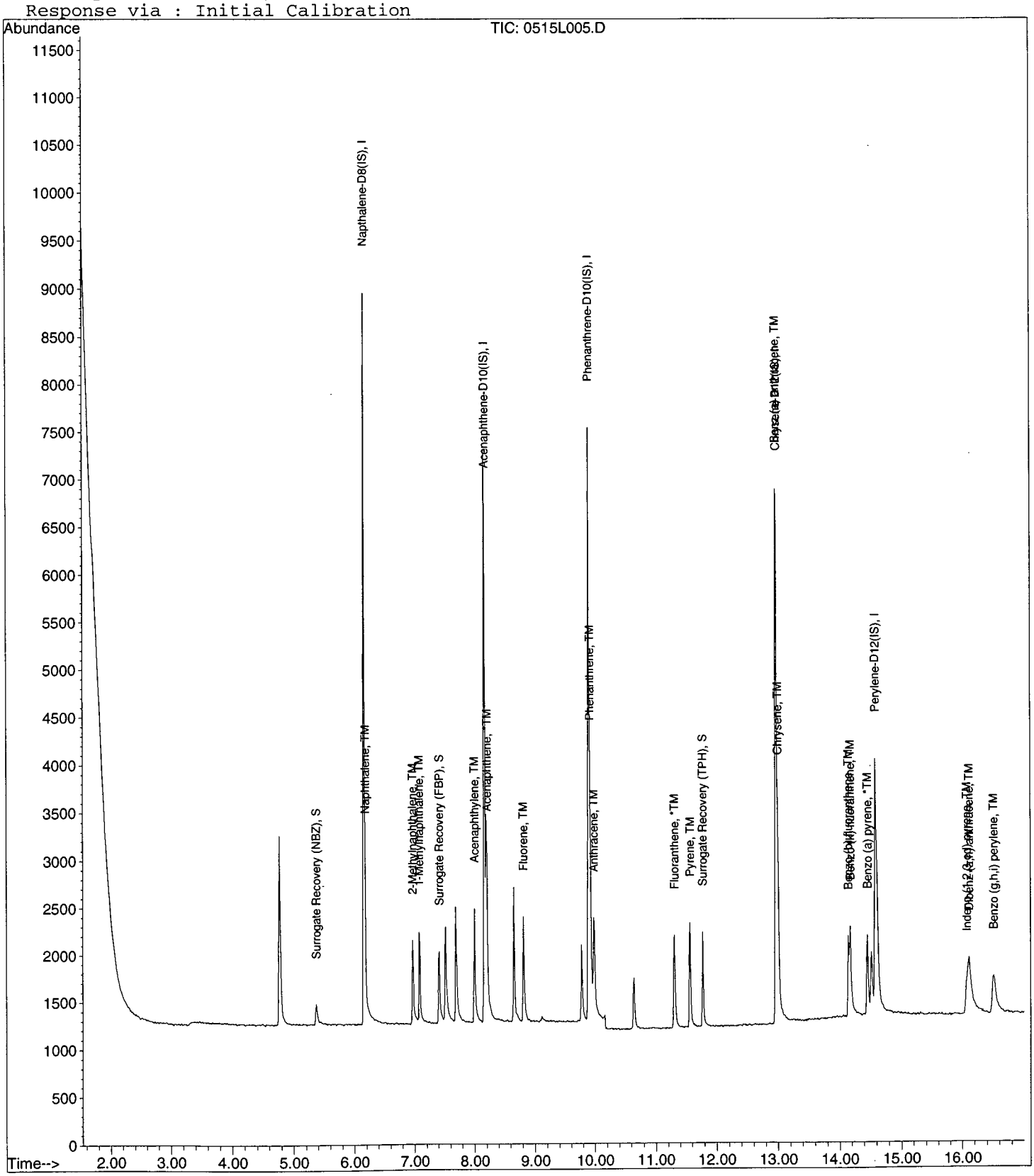
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L005.D Vial: 5
Acq On : 15 May 15 18:06 Operator: csc
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L006.D Vial: 6
Acq On : 15 May 15 18:32 Operator: csc
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8964	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	4488	2.50	ppb		0.00
11) Phenanthrene-D10(IS)	9.90	188	7363	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	6941	2.50	ppb		0.01
21) Perylene-D12(IS)	14.58	264	4617	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	667	1.26	ppb		0.01
Spiked Amount 2.500			Recovery = 50.400%				
7) Surrogate Recovery (FBP)	7.41	172	2185	0.86	ppb		0.01
Spiked Amount 2.500			Recovery = 34.440%				
17) Surrogate Recovery (TPH)	11.77	244	1932	0.93	ppb		0.00
Spiked Amount 2.500			Recovery = 37.280%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	3263	1.16	ppb		99
4) 2-Methylnaphthalene	6.96	142	1868	1.34	ppb		98
5) 1-Methylnaphthalene	7.07	142	2030	1.14	ppb		96
8) Acenaphthylene	8.00	152	3106	0.91	ppb		99
9) Acenaphthene	8.19	154	1945	1.01	ppb		97
10) Fluorene	8.81	166	2003	1.02	ppb		94
12) Phenanthrene	9.92	178	2825	0.89	ppb		99
13) Anthracene	9.98	178	2797	1.18	ppb		98
14) Fluoranthene	11.30	202	3311	1.32	ppb		92
16) Pyrene	11.56	202	3431	0.97	ppb	#	87
18) Benz (a) anthracene	12.96	228	2410	0.81	ppb		97
19) Chrysene	13.00	228	3235	1.09	ppb		98
20) Indeno (1,2,3-cd) pyrene	16.08	276	2643	1.22	ppb	#	97
22) Benzo (b) fluoranthene	14.14	252	1994	0.91	ppb		96
23) Benzo (k) fluoranthene	14.17	252	2506	1.22	ppb		96
24) Benzo (a) pyrene	14.45	252	2564	1.14	ppb		96
25) Dibenz (a,h) anthracene	16.11	278	2117	1.20	ppb		98
26) Benzo (g,h,i) perylene	16.51	276	2328	1.27	ppb		98

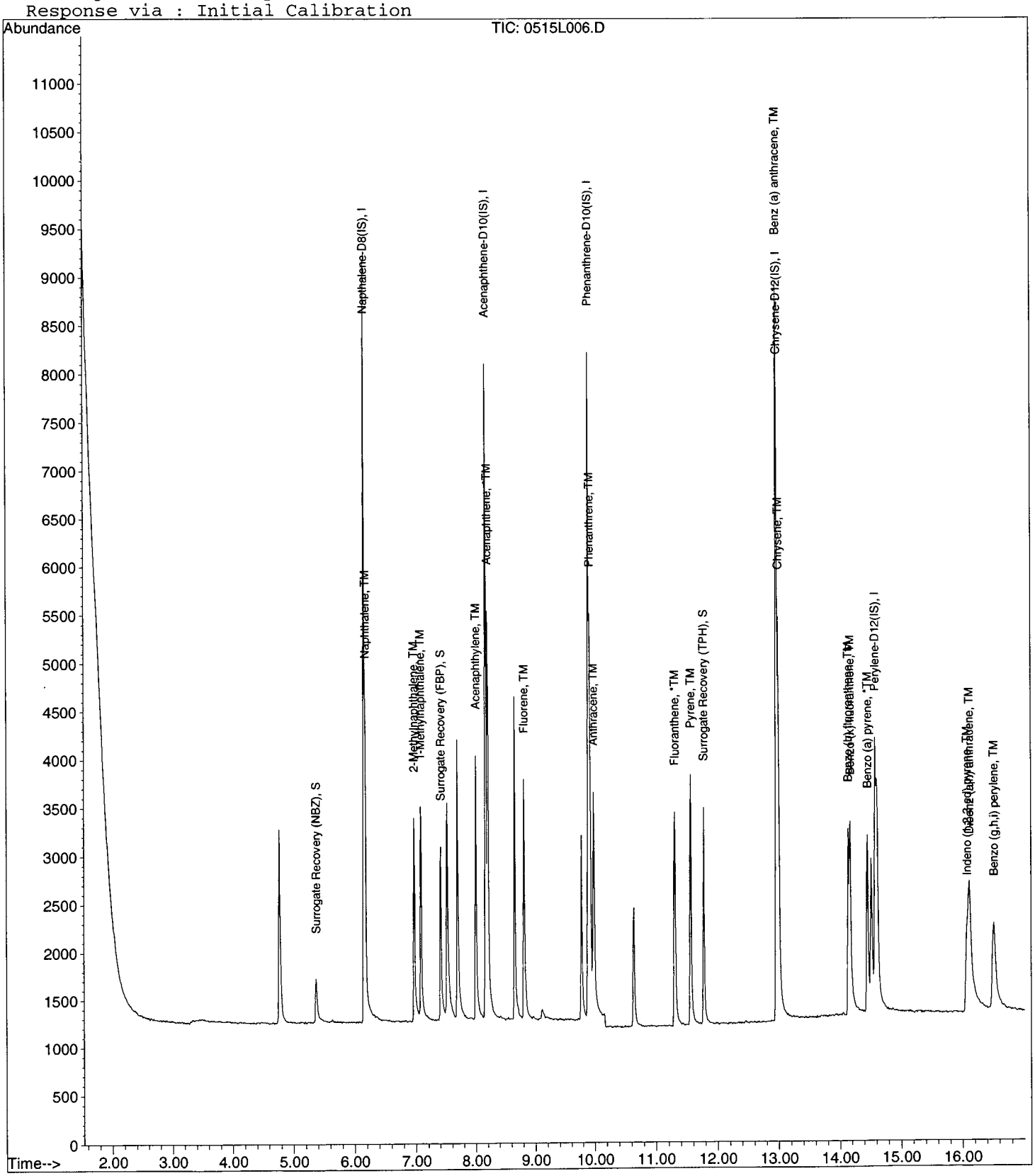
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L006.D Vial: 6
Acq On : 15 May 15 18:32 Operator: csc
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L007.D Vial: 7
Acq On : 15 May 15 18:58 Operator: csc
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	7444	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	3374	2.50	ppb		0.00
11) Phenanthrene-D10(IS)	9.90	188	5789	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.96	240	5736	2.50	ppb		0.00
21) Perylene-D12(IS)	14.58	264	3671	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	4133	4.89	ppb		0.00
Spiked Amount 2.500			Recovery	=	195.520%		
7) Surrogate Recovery (FBP)	7.40	172	12230	6.41	ppb		0.00
Spiked Amount 2.500			Recovery	=	256.280%		
17) Surrogate Recovery (TPH)	11.77	244	11053	6.45	ppb		0.00
Spiked Amount 2.500			Recovery	=	258.000%		
Target Compounds							Qvalue
3) Naphthalene	6.18	128	15624	5.05	ppb		100
4) 2-Methylnaphthalene	6.96	142	9087	4.65	ppb		100
5) 1-Methylnaphthalene	7.07	142	9441	4.77	ppb		100
8) Acenaphthylene	8.00	152	15612	5.09	ppb		100
9) Acenaphthene	8.19	154	9425	5.21	ppb		100
10) Fluorene	8.81	166	9927	5.02	ppb		100
12) Phenanthrene	9.92	178	14320	5.74	ppb		100
13) Anthracene	9.98	178	13594	5.20	ppb		100
14) Fluoranthene	11.29	202	16914	5.05	ppb		100
16) Pyrene	11.55	202	17823	6.08	ppb		100
18) Benz (a) anthracene	12.95	228	13150	5.34	ppb		100
19) Chrysene	13.00	228	15075	6.16	ppb		100
20) Indeno (1,2,3-cd) pyrene	16.06	276	13822	5.05	ppb	#	100
22) Benzo (b) fluoranthene	14.14	252	12555	5.60	ppb		100
23) Benzo (k) fluoranthene	14.16	252	12170	6.25	ppb		100
24) Benzo (a) pyrene	14.44	252	12949	6.16	ppb		100
25) Dibenz (a,h) anthracene	16.10	278	11907	5.92	ppb		100
26) Benzo (g,h,i) perylene	16.50	276	12470	6.31	ppb		100

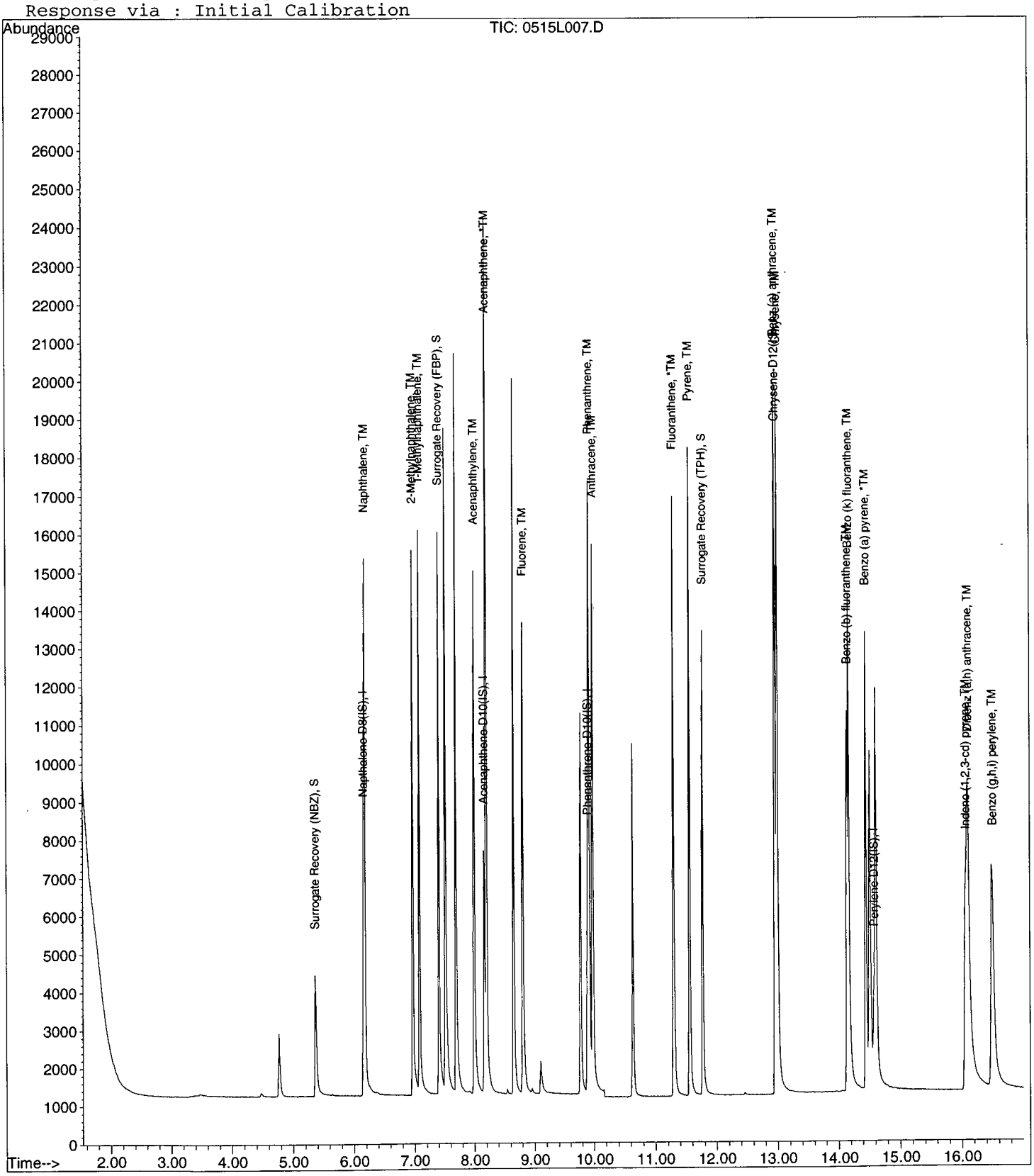
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L007.D Vial: 7
Acq On : 15 May 15 18:58 Operator: csc
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L008.D Vial: 8
Acq On : 15 May 15 19:23 Operator: csc
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	10891	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	5030	2.50	ppb		0.00
11) Phenanthrene-D10(IS)	9.88	188	8662	2.50	ppb		-0.01
15) Chrysene-D12(IS)	12.96	240	8905	2.50	ppb		0.00
21) Perylene-D12(IS)	14.57	264	5552	2.50	ppb		-0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	12674	9.48	ppb		0.00
Spiked Amount 2.500			Recovery =	379.120%			
7) Surrogate Recovery (FBP)	7.40	172	32526	11.43	ppb		0.00
Spiked Amount 2.500			Recovery =	457.200%			
17) Surrogate Recovery (TPH)	11.77	244	30110	11.32	ppb		0.00
Spiked Amount 2.500			Recovery =	452.680%			
Target Compounds							Qvalue
3) Naphthalene	6.18	128	47430	10.10	ppb		100
4) 2-Methylnaphthalene	6.96	142	29844	9.62	ppb		99
5) 1-Methylnaphthalene	7.07	142	29320	9.71	ppb		98
8) Acenaphthylene	7.99	152	46873	10.07	ppb		97
9) Acenaphthene	8.19	154	28199	10.20	ppb		99
10) Fluorene	8.80	166	31766	10.43	ppb		92
12) Phenanthrene	9.92	178	45279	12.14	ppb		100
13) Anthracene	9.98	178	42591	10.46	ppb		99
14) Fluoranthene	11.29	202	53862	10.02	ppb		94
16) Pyrene	11.55	202	55714	12.24	ppb		95
18) Benz (a) anthracene	12.95	228	44470	11.64	ppb		98
19) Chrysene	12.98	228	45739	12.03	ppb	#	93
20) Indeno (1,2,3-cd) pyrene	16.05	276	46158	10.29	ppb	#	96
22) Benzo (b) fluoranthene	14.13	252	36269	10.48	ppb		96
23) Benzo (k) fluoranthene	14.16	252	44089	14.63	ppb		95
24) Benzo (a) pyrene	14.44	252	41250	12.77	ppb		95
25) Dibenz (a,h) anthracene	16.09	278	39115	12.37	ppb		98
26) Benzo (g,h,i) perylene	16.48	276	40228	13.02	ppb		98

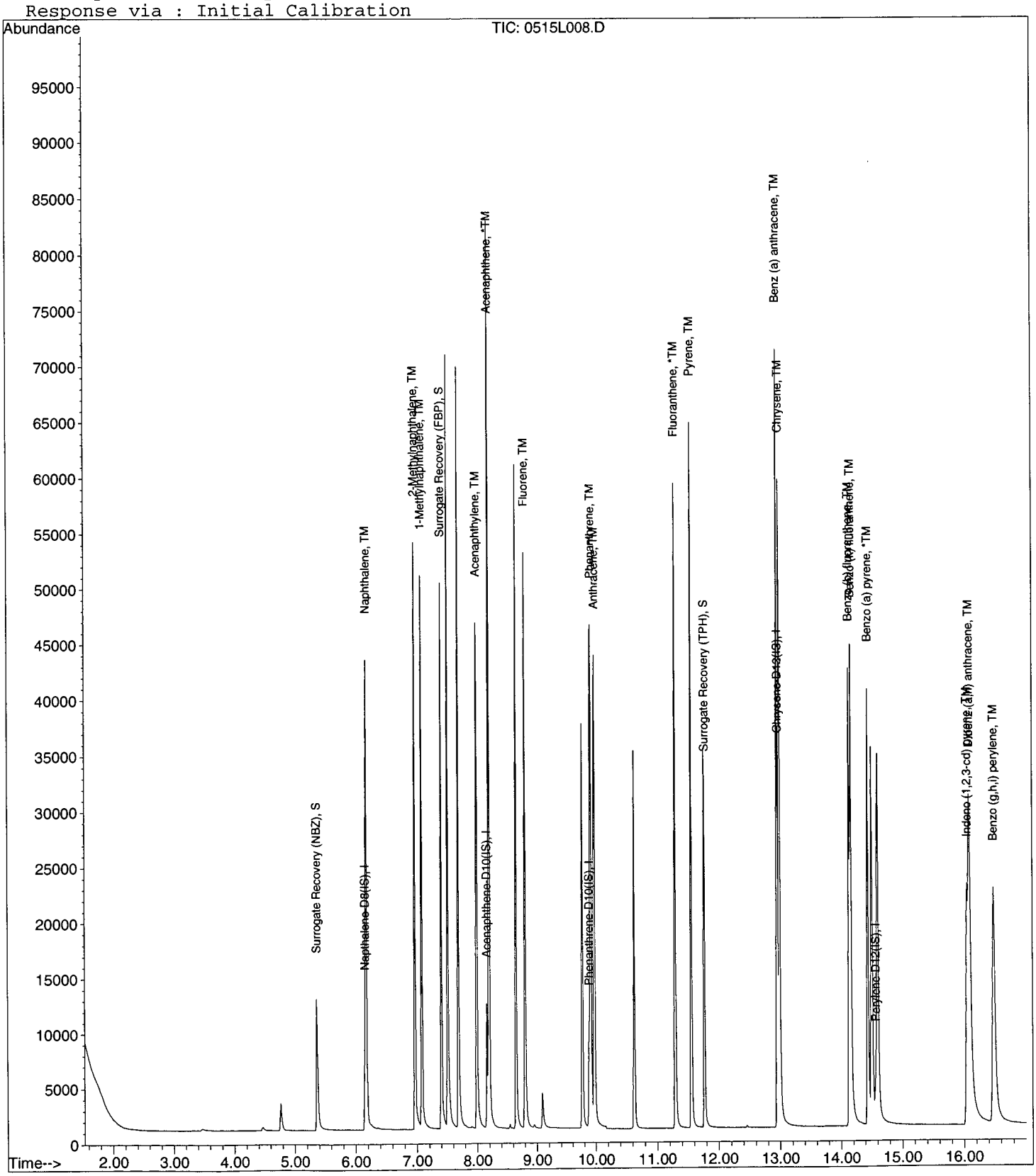
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L008.D Vial: 8
Acq On : 15 May 15 19:23 Operator: csc
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L009.D Vial: 9
Acq On : 15 May 15 19:49 Operator: csc
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:13:03 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9907	2.50 ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	4610	2.50 ppb		0.00
11) Phenanthrene-D10(IS)	9.88	188	7949	2.50 ppb		-0.01
15) Chrysene-D12(IS)	12.96	240	8664	2.50 ppb		0.00
21) Perylene-D12(IS)	14.57	264	5437	2.50 ppb		-0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.36	82	67181	51.86 ppb		0.00
Spiked Amount 2.500			Recovery	= 2074.400%		
7) Surrogate Recovery (FBP)	7.40	172	154415	59.21 ppb		0.00
Spiked Amount 2.500			Recovery	= 2368.360%		
17) Surrogate Recovery (TPH)	11.76	244	150044	57.96 ppb		-0.01
Spiked Amount 2.500			Recovery	= 2318.600%		
Target Compounds						Qvalue
3) Naphthalene	6.18	128	232647	52.94 ppb		100
4) 2-Methylnaphthalene	6.96	142	151960	50.80 ppb		99
5) 1-Methylnaphthalene	7.07	142	148295	52.39 ppb		99
8) Acenaphthylene	8.00	152	239701	55.40 ppb		99
9) Acenaphthene	8.19	154	138275	53.52 ppb		98
10) Fluorene	8.80	166	154069	53.88 ppb		93
12) Phenanthrene	9.92	178	222761	65.08 ppb		99
13) Anthracene	9.98	178	210206	54.53 ppb		99
14) Fluoranthene	11.29	202	271453	52.11 ppb		95
16) Pyrene	11.55	202	276045	62.33 ppb		99
18) Benz (a) anthracene	12.95	228	237738	63.94 ppb		99
19) Chrysene	13.00	228	209845	56.74 ppb	#	96
20) Indeno (1,2,3-cd) pyrene	16.05	276	245430	54.01 ppb	#	98
22) Benzo (b) fluoranthene	14.14	252	236425	68.41 ppb		97
23) Benzo (k) fluoranthene	14.16	252	189251	63.32 ppb		100
24) Benzo (a) pyrene	14.44	252	210997	65.87 ppb		98
25) Dibenz (a,h) anthracene	16.09	278	208974	65.60 ppb		94
26) Benzo (g,h,i) perylene	16.48	276	209511	67.57 ppb		92

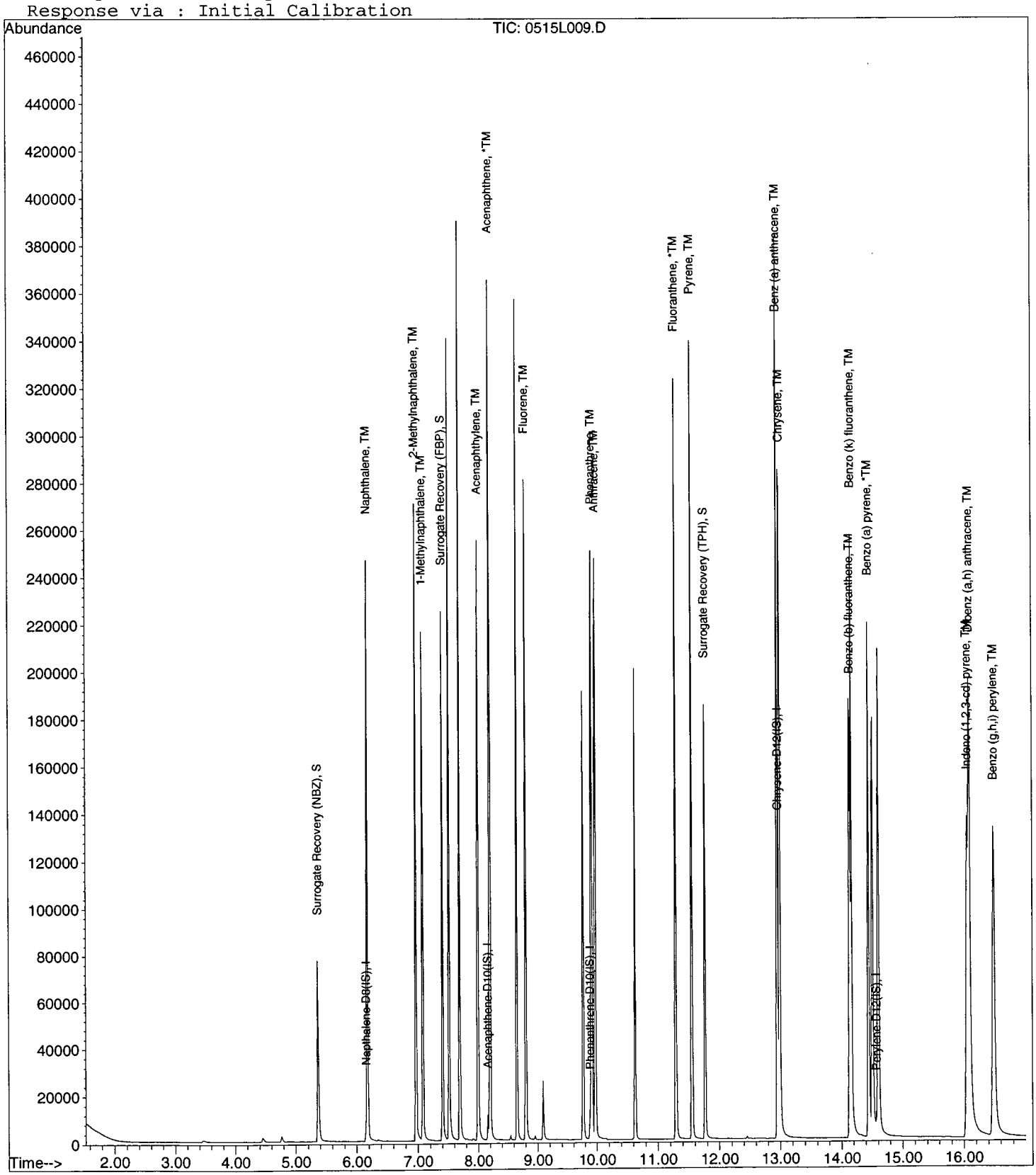
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L009.D Vial: 9
Acq On : 15 May 15 19:49 Operator: csc
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:13 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L010.D Vial: 10
Acq On : 15 May 15 20:14 Operator: csc
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:16 2015 Quant Results File: P0518.RES

Quant Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:16:04 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	10112	2.50 ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	4552	2.50 ppb		0.00
11) Phenanthrene-D10(IS)	9.90	188	7824	2.50 ppb		0.00
15) Chrysene-D12(IS)	12.96	240	8642	2.50 ppb		0.00
21) Perylene-D12(IS)	14.57	264	5573	2.50 ppb		-0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.36	82	129333	98.87 ppb		0.00
Spiked Amount 2.500			Recovery	= 3954.600%		
7) Surrogate Recovery (FBP)	7.40	172	287071	108.77 ppb		0.00
Spiked Amount 2.500			Recovery	= 4350.920%		
17) Surrogate Recovery (TPH)	11.77	244	288680	104.01 ppb		0.00
Spiked Amount 2.500			Recovery	= 4160.560%		
Target Compounds						Qvalue
3) Naphthalene	6.18	128	450212	98.96 ppb		99
4) 2-Methylnaphthalene	6.96	142	289899	98.68 ppb		99
5) 1-Methylnaphthalene	7.08	142	281266	98.57 ppb		89
8) Acenaphthylene	8.00	152	465419	99.67 ppb		99
9) Acenaphthene	8.21	154	267375	99.59 ppb		90
10) Fluorene	8.81	166	292349	99.21 ppb		98
12) Phenanthrene	9.92	178	411564	114.22 ppb		98
13) Anthracene	9.98	178	393985	99.04 ppb		98
14) Fluoranthene	11.29	202	489534	98.27 ppb		96
16) Pyrene	11.55	202	528567	107.53 ppb		91
18) Benz (a) anthracene	12.95	228	445303	117.84 ppb		99
19) Chrysene	13.00	228	404821	98.25 ppb		98
20) Indeno (1,2,3-cd) pyrene	16.06	276	479086	99.57 ppb		94
22) Benzo (b) fluoranthene	14.14	252	410473	96.69 ppb		100
23) Benzo (k) fluoranthene	14.17	252	418502	102.96 ppb		100
24) Benzo (a) pyrene	14.45	252	409725	98.93 ppb		94
25) Dibenz (a,h) anthracene	16.11	278	407020	98.99 ppb	#	91
26) Benzo (g,h,i) perylene	16.51	276	407552	98.96 ppb		98

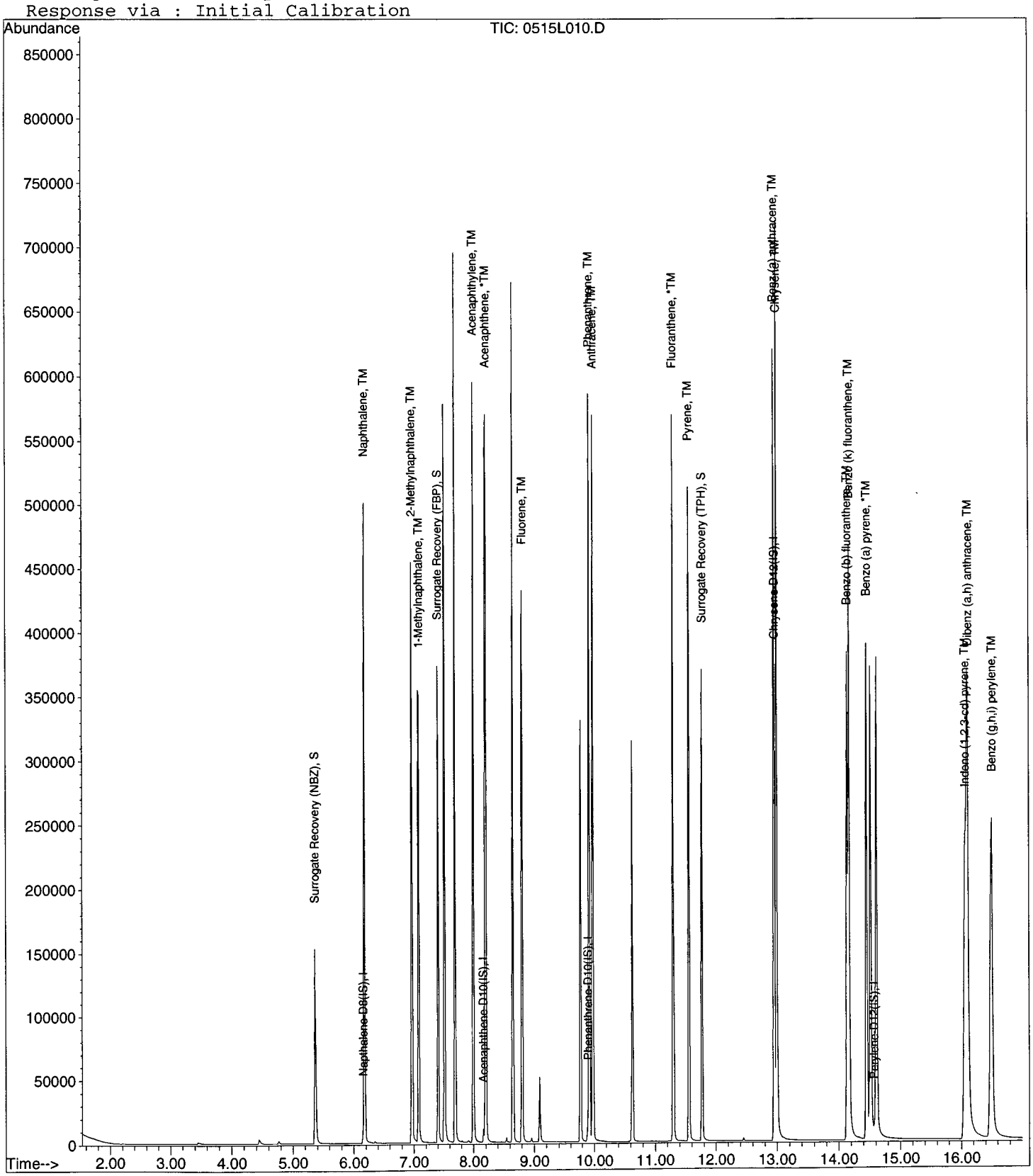
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L010.D Vial: 10
Acq On : 15 May 15 20:14 Operator: csc
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 18 9:16 2015 Quant Results File: P0518.RES

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270
Last Update : Mon May 18 09:20:47 2015
Response via : Initial Calibration



Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: J 76447 HA 6/11/15
Date Analyzed: 5/15/2015
Instrument: Linus
Initial Cal. Date: 5/15/2015
Data File: 0515L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	Naphthalene	0.9778	1.160	19	TM	
2	TML	2-Methylnaphthalene	0.5974	0.6612	11	TML	7.6
3	TM	1-Methylnaphthalene	0.6165	0.6742	9.3	TM	
4	TML	Acenaphthylene	2.081	2.416	16	TML	0.82
5	*TM	Acenaphthene	1.266	1.506	19	*TM	
6	TML	Fluorene	1.377	1.617	17	TML	1.2
7	TML	Phenanthrene	1.151	1.293	12	TML	3.9
8	TML	Anthracene	1.084	1.193	10	TML	5.7
9	*TML	Fluoranthene	1.364	1.541	13	*TML	5.4
10	TM	Pyrene	1.422	1.591	12	TM	
11	TML	Benz (a) anthracene	1.093	1.209	11	TML	6.5
12	TM	Chrysene	1.192	1.400	17	TM	
13	TML	Indeno (1,2,3-cd) pyrene	1.130	1.364	21	TML	2.6
14	TML	Benzo (b) fluoranthene	1.498	1.918	28	TML	2.6
15	TML	Benzo (k) fluoranthene	1.563	1.660	6.2	TML	4.3
16	*TML	Benzo (a) pyrene	1.618	1.795	11	*TML	4.7
17	TML	Dibenz (a,h) anthracene	1.446	1.775	23	TML	1.7
18	TML	Benzo (g,h,i) perylene	1.535	1.762	15	TML	4.4
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
		Average			15.0		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L011.D Vial: 11
Acq On : 15 May 15 20:40 Operator: csc
Sample : 5.0ug/ml PAH SS 05/15/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 2 13:17 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9571	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.16	164	4405	2.50	ppb		0.00
11) Phenanthrene-D10(IS)	9.90	188	7622	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.96	240	7750	2.50	ppb		0.00
21) Perylene-D12(IS)	14.57	264	4908	2.50	ppb		-0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	6	0.18	ppb		0.00
Spiked Amount 2.500			Recovery =	7.080%			
7) Surrogate Recovery (FBP)	7.40	172	46	0.02	ppb		0.00
Spiked Amount 2.500			Recovery =	0.680%			
17) Surrogate Recovery (TPH)	11.77	244	66	0.03	ppb		0.00
Spiked Amount 2.500			Recovery =	1.080%			
Target Compounds							Qvalue
3) Naphthalene	6.18	128	22202	5.93	ppb		99
4) 2-Methylnaphthalene	6.96	142	12656	4.62	ppb		100
5) 1-Methylnaphthalene	7.07	142	12905	5.47	ppb		100
8) Acenaphthylene	8.00	152	21286	4.96	ppb		99
9) Acenaphthene	8.19	154	13269	5.95	ppb		99
10) Fluorene	8.81	166	14244	5.06	ppb		100
12) Phenanthrene	9.92	178	19706	4.81	ppb		99
13) Anthracene	9.98	178	18184	4.71	ppb		99
14) Fluoranthene	11.29	202	23497	4.73	ppb		99
16) Pyrene	11.55	202	24659	5.59	ppb		98
18) Benz (a) anthracene	12.95	228	18746	4.68	ppb		99
19) Chrysene	13.00	228	21695	5.87	ppb		98
20) Indeno (1,2,3-cd) pyrene	16.05	276	21147	5.13	ppb		93
22) Benzo (b) fluoranthene	14.13	252	18824	4.87	ppb	#	93
23) Benzo (k) fluoranthene	14.16	252	16293	4.78	ppb	#	95
24) Benzo (a) pyrene	14.44	252	17615	4.77	ppb		100
25) Dibenz (a,h) anthracene	16.10	278	17424	4.91	ppb		99
26) Benzo (g,h,i) perylene	16.50	276	17299	4.78	ppb		99

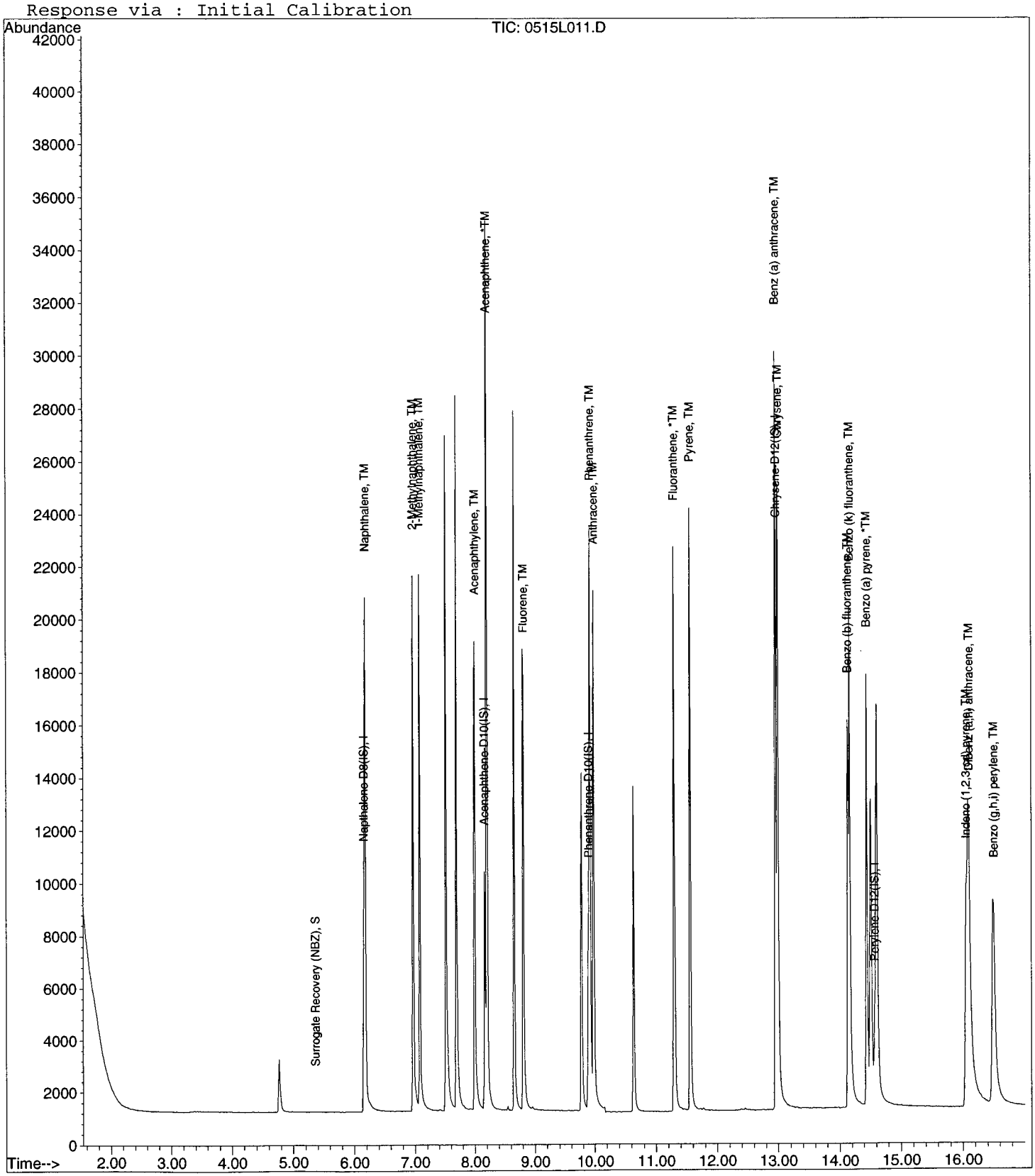
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L011.D Vial: 11
Acq On : 15 May 15 20:40 Operator: csc
Sample : 5.0ug/ml PAH SS 05/15/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 2 13:17 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



EPA 8270C SIM
P0518-42

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 5/27/2015
Instrument: Linus
Initial Cal. Date: 5/15/2015
Data File: 0515L228.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Napthalene-D8(IS)	ISTD			I	
2	SL	Surrogate Recovery (NBZ)	0.2737	0.2480	9.4	SL	20
3	TM	Naphthalene	0.9778	1.026	5.0	TM	
4	TML	2-Methylnaphthalene	0.5974	0.6372	6.7	TML	11
5	TM	1-Methylnaphthalene	0.6165	0.6495	5.3	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.580	1.511	4.3	S	
8	TML	Acenaphthylene	2.081	2.279	9.5	TML	6.2
9	*TM	Acenaphthene	1.266	1.360	7.4	*TM	
10	TML	Fluorene	1.377	1.494	8.5	TML	6.4
11	I	Phenanthrene-D10(IS)	ISTD			I	
12	TML	Phenanthrene	1.151	1.223	6.2	TML	9.1
13	TML	Anthracene	1.084	1.169	7.9	TML	7.6
14	*TML	Fluoranthene	1.364	1.488	9.1	*TML	8.7
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.422	1.483	4.3	TM	
17	S	Surrogate Recovery (TPH)	0.8029	0.7985	0.55	S	
18	TML	Benz (a) anthracene	1.093	1.248	14	TML	3.5
19	TM	Chrysene	1.192	1.214	1.9	TM	
20	TML	Indeno (1,2,3-cd) pyrene	1.130	1.360	20	TML	2.2
21	I	Perylene-D12(IS)	ISTD			I	
22	TML	Benzo (b) fluoranthene	1.498	1.894	26	TML	3.8
23	TML	Benzo (k) fluoranthene	1.563	1.735	11	TML	0.28
24	*TML	Benzo (a) pyrene	1.618	1.761	8.8	*TML	6.5
25	TML	Dibenz (a,h) anthracene	1.446	1.775	23	TML	1.7
26	TML	Benzo (g,h,i) perylene	1.535	1.784	16	TML	3.2
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			9.8		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L228.D Vial: 28
Acq On : 27 May 15 16:17 Operator: MA
Sample : 5.0ug/ml PAH 5/26/15 Inst : Linus
Misc : soil Multiplr: 1.00

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	7511	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	3616	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	6351	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	6697	2.50	ppb		0.01
21) Perylene-D12(IS)	14.59	264	4324	2.50	ppb		0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	3726	4.00	ppb		0.00
Spiked Amount 2.500			Recovery	=	160.000%		
7) Surrogate Recovery (FBP)	7.41	172	10930	4.78	ppb		0.01
Spiked Amount 2.500			Recovery	=	191.360%		
17) Surrogate Recovery (TPH)	11.77	244	10695	4.97	ppb		0.00
Spiked Amount 2.500			Recovery	=	198.920%		
Target Compounds							Qvalue
3) Naphthalene	6.18	128	15420	5.25	ppb		99
4) 2-Methylnaphthalene	6.98	142	9572	4.45	ppb		92
5) 1-Methylnaphthalene	7.08	142	9757	5.27	ppb		92
8) Acenaphthylene	8.00	152	16480	4.69	ppb		98
9) Acenaphthene	8.21	154	9832	5.37	ppb		94
10) Fluorene	8.81	166	10803	4.68	ppb		96
12) Phenanthrene	9.92	178	15536	4.54	ppb		98
13) Anthracene	9.99	178	14853	4.62	ppb		98
14) Fluoranthene	11.30	202	18903	4.56	ppb		94
16) Pyrene	11.56	202	19858	5.21	ppb		91
18) Benz (a) anthracene	12.96	228	16717	4.83	ppb		98
19) Chrysene	13.01	228	16265	5.09	ppb		97
20) Indeno (1,2,3-cd) pyrene	16.09	276	18213	5.11	ppb	#	97
22) Benzo (b) fluoranthene	14.15	252	16376	4.81	ppb	#	95
23) Benzo (k) fluoranthene	14.17	252	15008	4.99	ppb	#	94
24) Benzo (a) pyrene	14.45	252	15227	4.68	ppb		97
25) Dibenz (a,h) anthracene	16.12	278	15351	4.91	ppb		98
26) Benzo (g,h,i) perylene	16.52	276	15430	4.84	ppb		98

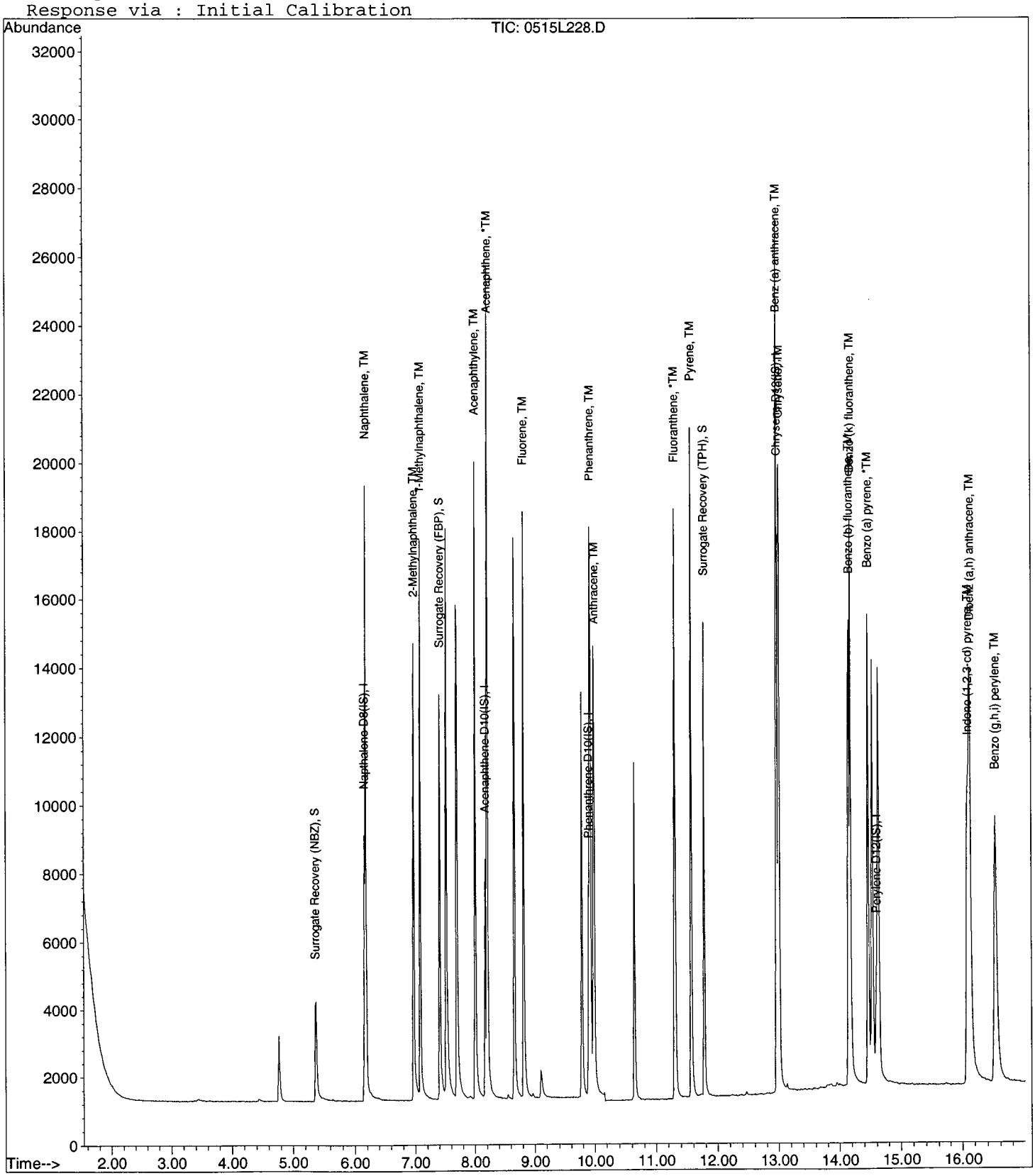
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L228.D Vial: 28
Acq On : 27 May 15 16:17 Operator: MA
Sample : 5.0ug/ml PAH 5/26/15 Inst : Linus
Misc : soil Multiplr: 1.00

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



EPA 8270C SIM
P0518-42

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 5/28/2015
Instrument: Linus
Initial Cal. Date: 5/15/2015
Data File: 0515L250.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	SL	Surrogate Recovery (NBZ)	0.2737	0.2544	7.1	SL	18
3	TM	Naphthalene	0.9778	1.060	8.4	TM	
4	TML	2-Methylnaphthalene	0.5974	0.6038	1.1	TML	16
5	TM	1-Methylnaphthalene	0.6165	0.6190	0.39	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.580	1.458	7.7	S	
8	TML	Acenaphthylene	2.081	2.275	9.3	TML	6.3
9	*TM	Acenaphthene	1.266	1.316	4.0	*TM	
10	TML	Fluorene	1.377	1.458	5.9	TML	8.6
11	I	Phenanthrene-D10(IS)	ISTD			I	
12	TML	Phenanthrene	1.151	1.192	3.6	TML	11
13	TML	Anthracene	1.084	1.187	9.5	TML	6.1
14	*TML	Fluoranthene	1.364	1.453	6.6	*TML	11
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.422	1.494	5.1	TM	
17	S	Surrogate Recovery (TPH)	0.8029	0.8146	1.5	S	
18	TML	Benz (a) anthracene	1.093	1.293	18	TML	0.08
19	TM	Chrysene	1.192	1.171	1.7	TM	
20	TML	Indeno (1,2,3-cd) pyrene	1.130	1.351	20	TML	1.6
21	I	Perylene-D12(IS)	ISTD			I	
22	TML	Benzo (b) fluoranthene	1.498	2.054	37	TML	4.6
23	TML	Benzo (k) fluoranthene	1.563	1.440	7.8	TML	16
24	*TML	Benzo (a) pyrene	1.618	1.739	7.5	*TML	7.7
25	TML	Dibenz (a,h) anthracene	1.446	1.737	20	TML	3.8
26	TML	Benzo (g,h,i) perylene	1.535	1.731	13	TML	6.0
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			9.3		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L250.D Vial: 50
Acq On : 28 May 15 1:30 Operator: MA
Sample : 5.0ug/ml PAH 5/26/15 Inst : Linus
Misc : soil Multiplr: 1.00

Quant Time: May 28 9:27 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8036	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	3806	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	6551	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	6774	2.50	ppb		0.01
21) Perylene-D12(IS)	14.58	264	4540	2.50	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	4089m	4.10	ppb		0.00
Spiked Amount 2.500			Recovery	=	163.920%		
7) Surrogate Recovery (FBP)	7.41	172	11098	4.62	ppb		0.01
Spiked Amount 2.500			Recovery	=	184.600%		
17) Surrogate Recovery (TPH)	11.77	244	11036	5.07	ppb		0.00
Spiked Amount 2.500			Recovery	=	202.920%		
Target Compounds							Qvalue
3) Naphthalene	6.18	128	17036	5.42	ppb		99
4) 2-Methylnaphthalene	6.96	142	9704	4.22	ppb		99
5) 1-Methylnaphthalene	7.08	142	9948	5.02	ppb		91
8) Acenaphthylene	8.00	152	17320	4.69	ppb		99
9) Acenaphthene	8.21	154	10020	5.20	ppb		94
10) Fluorene	8.81	166	11100	4.57	ppb		99
12) Phenanthrene	9.92	178	15622	4.43	ppb		99
13) Anthracene	9.98	178	15557	4.69	ppb		100
14) Fluoranthene	11.30	202	19041	4.45	ppb		90
16) Pyrene	11.56	202	20241	5.25	ppb		89
18) Benz (a) anthracene	12.96	228	17513	5.00	ppb		98
19) Chrysene	13.00	228	15870	4.91	ppb	#	96
20) Indeno (1,2,3-cd) pyrene	16.08	276	18306	5.08	ppb		97
22) Benzo (b) fluoranthene	14.14	252	18646	5.23	ppb		96
23) Benzo (k) fluoranthene	14.17	252	13076	4.19	ppb		97
24) Benzo (a) pyrene	14.45	252	15793	4.62	ppb		98
25) Dibenz (a,h) anthracene	16.11	278	15775	4.81	ppb		97
26) Benzo (g,h,i) perylene	16.52	276	15721	4.70	ppb		99

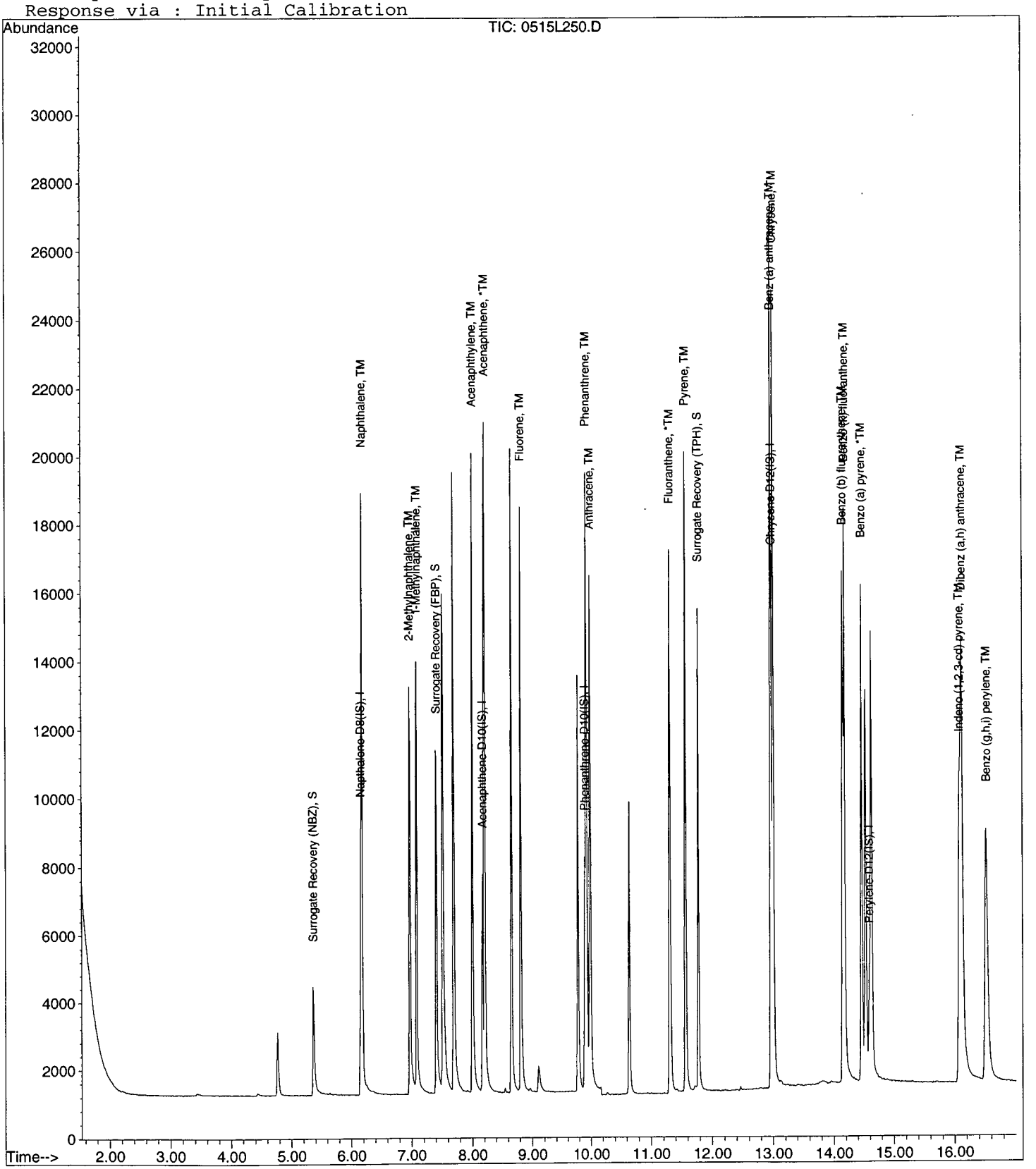
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L250.D Vial: 50
Acq On : 28 May 15 1:30 Operator: MA
Sample : 5.0ug/ml PAH 5/26/15 Inst : Linus
Misc : soil Multiplr: 1.00

Quant Time: May 28 9:27 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Raw Data

APPL, INC.

Method Blank
EPA 8270D LL SOILS

Blank Name/QCG: **150521S-16137 - 197621**
Batch ID: #SIMDD-150521A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	ACENAPHTHYLENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	ANTHRACENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	BENZ (A) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (A) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (B) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (G,H,I) PERYLENE	0.0017 U	0.005	0.0017	0.0013	mg/kg	5/21/2015	5/27/2015
BLANK	BENZO (K) FLUORANTHENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	CHRYSENE	0.0017 U	0.005	0.0017	0.0008	mg/kg	5/21/2015	5/27/2015
BLANK	DIBENZ (A,H) ANTHRACENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORANTHENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	FLUORENE	0.0017 U	0.005	0.0017	0.0010	mg/kg	5/21/2015	5/27/2015
BLANK	INDENO (1,2,3-CD) PYRENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	NAPHTHALENE	0.0017 U	0.005	0.0017	0.0009	mg/kg	5/21/2015	5/27/2015
BLANK	PHENANTHRENE	0.0017 U	0.005	0.0017	0.0011	mg/kg	5/21/2015	5/27/2015
BLANK	PYRENE	0.0017 U	0.005	0.0017	0.0012	mg/kg	5/21/2015	5/27/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	63.5	45-105			%	5/21/2015	5/27/2015
BLANK	SURROGATE: NITROBENZENE-	44.2	35-100			%	5/21/2015	5/27/2015
BLANK	SURROGATE: TERPHENYL-D14 (	106	30-125			%	5/21/2015	5/27/2015

Quant Method: P0518-42.M
Run #: 0515L235
Instrument: Linus
Sequence: L150515
Initials: DA

GC SC-Blank-REG MDLs
Printed: 6/2/2015 2:36:18 PM

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L235.D Vial: 35
Acq On : 27 May 15 19:17 Operator: MA
Sample : 150521A BLK 1/30.00G Inst : Linus
Misc : soil Multiplr: 33.33

Quant Time: Jun 1 10:50 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8216	2.50	ppb	0.00
6) Acenaphthene-D10(IS)	8.17	164	3798	2.50	ppb	0.01
11) Phenanthrene-D10(IS)	9.91	188	6307	2.50	ppb	0.01
15) Chrysene-D12(IS)	12.97	240	6696	2.50	ppb	0.01
21) Perylene-D12(IS)	14.61	264	4479	2.50	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.37	82	993	36.82	ppb	0.01
Spiked Amount 83.333			Recovery = 44.186%			
7) Surrogate Recovery (FBP)	7.41	172	3807	52.88	ppb	0.01
Spiked Amount 83.333			Recovery = 63.461%			
17) Surrogate Recovery (TPH)	11.77	244	5720	88.66	ppb	0.00
Spiked Amount 83.333			Recovery = 106.397%			

Target Compounds Qvalue

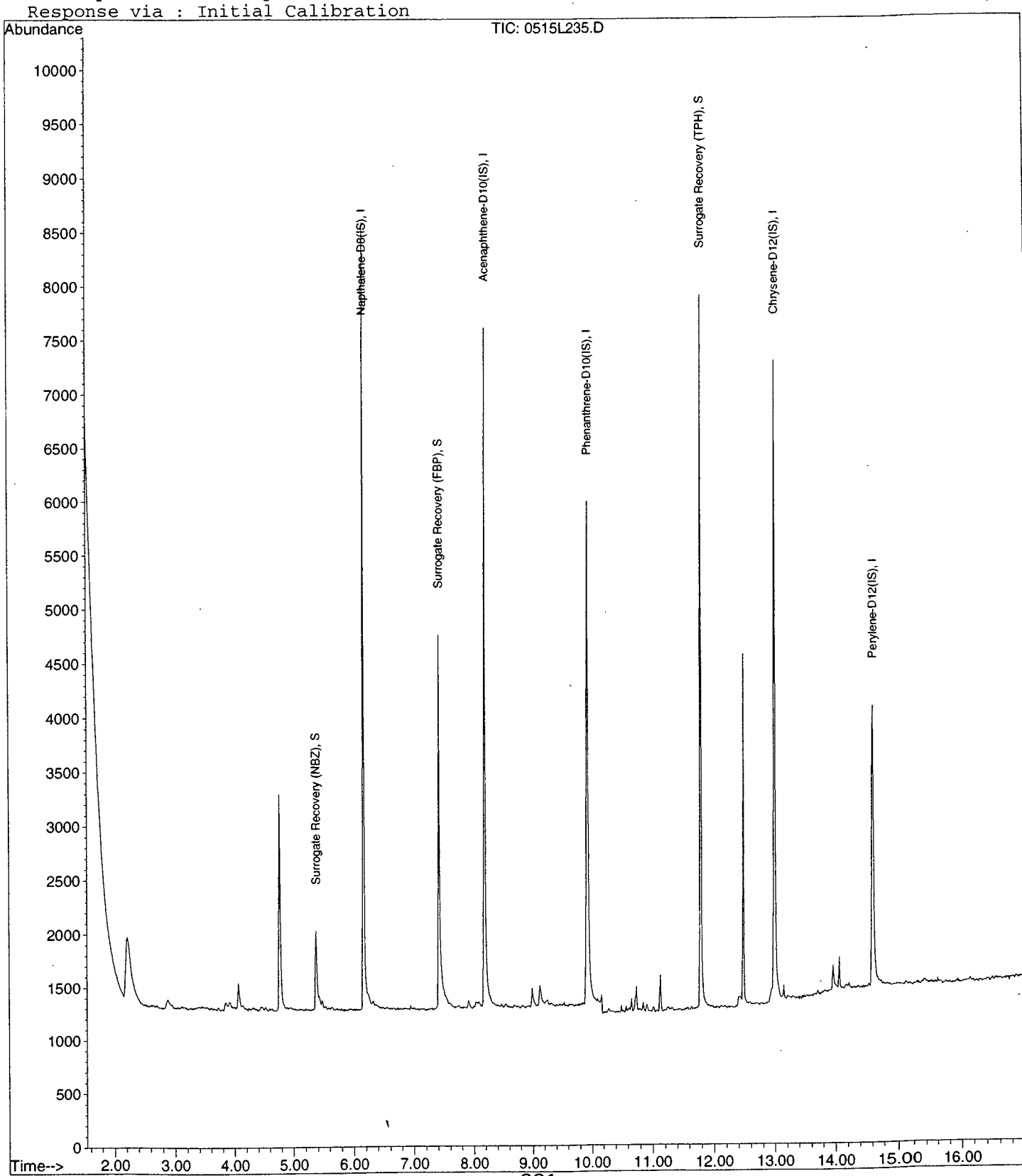
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L235.D Vial: 35
Acq On : 27 May 15 19:17 Operator: MA
Sample : 150521A BLK 1/30.00G Inst : Linus
Misc : soil Multiplr: 33.33

Quant Time: Jun 1 10:50 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



EPA 8270D LL WATER DODv3

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403
QCG: #SIMDD-150520A-197650

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-LL	2-METHYLNAPHTHALENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/27/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/27/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/27/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/27/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/27/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/27/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/27/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	05/20/15	05/27/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/27/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	05/20/15	05/27/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	05/20/15	05/27/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	05/20/15	05/27/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	60.9	50-110			%	05/20/15	05/27/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	63.4	40-110			%	05/20/15	05/27/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	109	50-135			%	05/20/15	05/27/15

Quant Method: P0518-42.M
Run #: 0515L231
Instrument: Linus
Sequence: L150515
Dilution Factor: 1
Initials: MA

Printed: 06/03/15 11:01:02 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L251.D Vial: 51
Acq On : 28 May 15 10:02 Operator: MA
Sample : 150520A BLK 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jun 3 10:54 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9616	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4834	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	8641	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	8673	2.50	ppb		0.01
21) Perylene-D12(IS)	14.59	264	5768	2.50	ppb		0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.36	82	2025	1.80	ppb		0.00
Spiked Amount 2.500			Recovery = 71.880%				
7) Surrogate Recovery (FBP)	7.40	172	3880	1.27	ppb		0.00
Spiked Amount 2.500			Recovery = 50.800%				
17) Surrogate Recovery (TPH)	11.77	244	7951	2.85	ppb		0.00
Spiked Amount 2.500			Recovery = 114.200%				
Target Compounds							Qvalue
26) Benzo (g,h,i) perylene	16.52	276	178	0.05	ppb	#	87

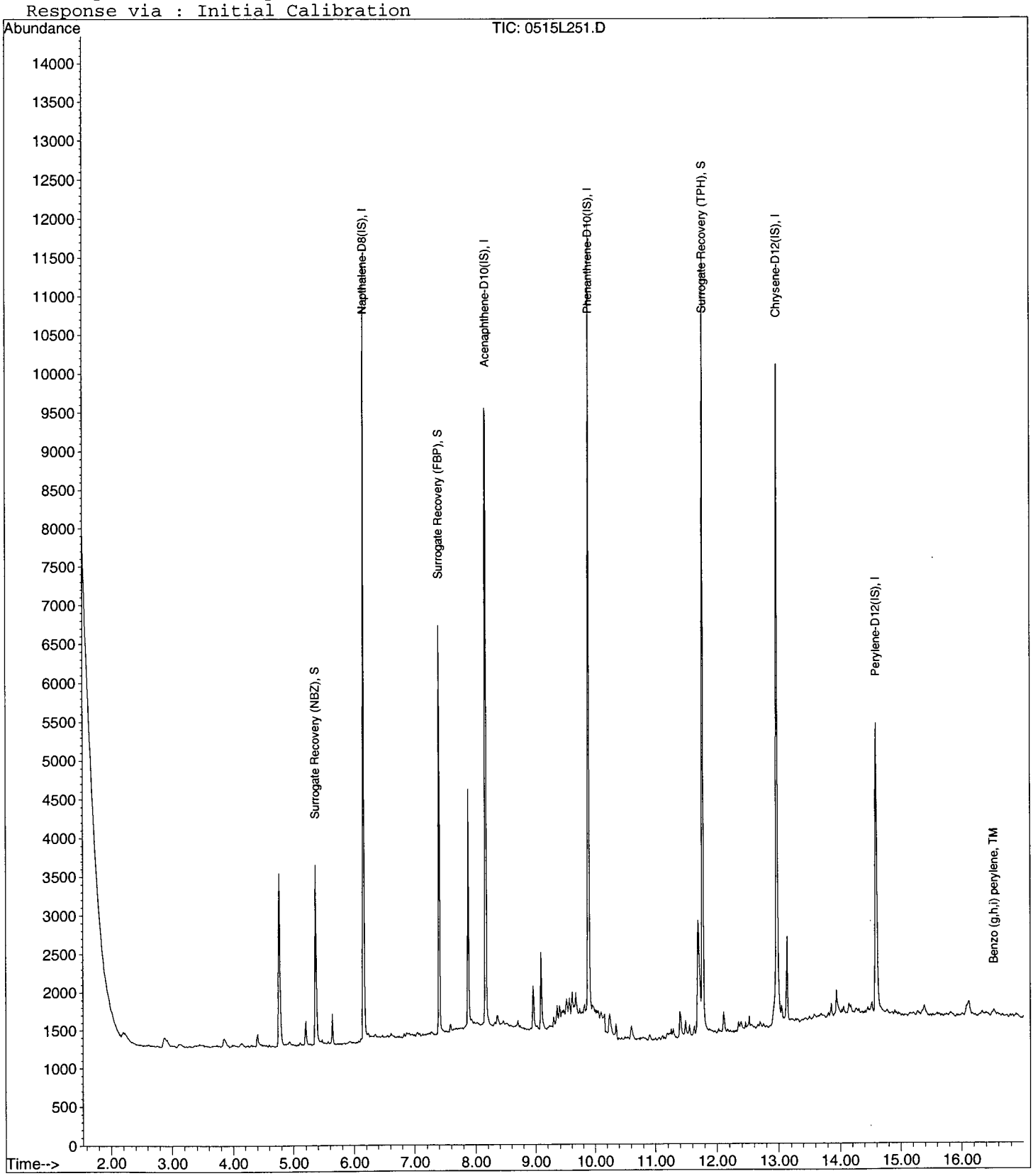
(#) = qualifier out of range (m) = manual integration

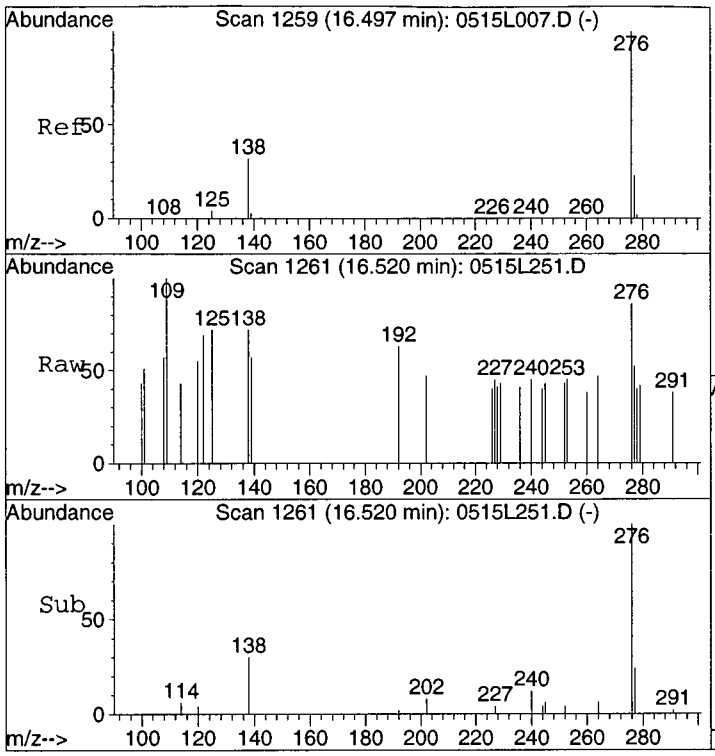
Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L251.D Vial: 51
Acq On : 28 May 15 10:02 Operator: MA
Sample : 150520A BLK 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jun 3 10:54 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration

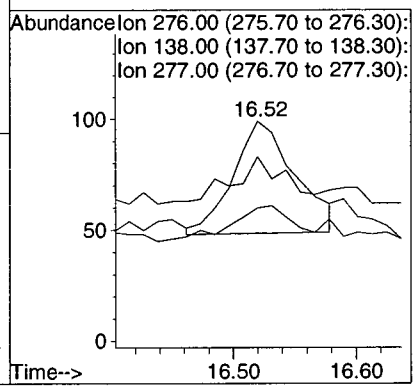




#26
Benzo (g,h,i) perylene
Concen: 0.05 ppb
RT: 16.52 min Scan# 1261
Delta R.T. 0.02 min
Lab File: 0515L251.D
Acq: 28 May 15 10:02

Tgt Ion:276 Resp: 178

Ion	Ratio	Lower	Upper
276	100		
138	41.7	22.3	41.5#
277	27.1	16.4	30.4



Laboratory Control Spike Recovery
EPA 8270D LL SOILS

APPL ID: **150521S-16137 LCS - 197621**
Batch ID: #SIMDD-150521A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	0.133	0.0883	66.4	45-105
ACENAPHTHENE	0.133	0.127	95.5	45-110
ACENAPHTHYLENE	0.133	0.112	84.2	45-105
ANTHRACENE	0.133	0.126	94.7	55-105
BENZ (A) ANTHRACENE	0.133	0.139	105	50-110
BENZO (A) PYRENE	0.133	0.132	99.2	50-110
BENZO (B) FLUORANTHENE	0.133	0.140	105	45-115
BENZO (G,H,I) PERYLENE	0.133	0.135	102	40-125
BENZO (K) FLUORANTHENE	0.133	0.132	99.2	45-125
CHRYSENE	0.133	0.144	108	55-110
DIBENZ (A,H) ANTHRACENE	0.133	0.136	102	40-125
FLUORANTHENE	0.133	0.127	95.5	55-115
FLUORENE	0.133	0.120	90.2	50-110
INDENO (1,2,3-CD) PYRENE	0.133	0.145	109	40-120
NAPHTHALENE	0.133	0.0797	59.9	40-105
PHENANTHRENE	0.133	0.120	90.2	50-110
PYRENE	0.133	0.146	110	45-125
SURROGATE: 2-FLUORBIPHENYL (S)	0.0667	0.043	64.5	45-105
SURROGATE: NITROBENZENE-D5 (S)	0.0667	0.0313	46.9	35-100
SURROGATE: TERPHENYL-D14 (S)	0.0667	0.0711	107	30-125

Comments: _____

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	5/21/2015
Analysis Date :	5/27/2015
Instrument :	Linus
Run :	0515L236
Initials :	DA

Printed: 6/2/2015 2:36:02 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L236.D Vial: 36
Acq On : 27 May 15 19:42 Operator: MA
Sample : 150521A LCS-1 1/30.01G Inst : Linus
Misc : soil Multiplr: 33.32

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	9702	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4792	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	8492	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	8827	2.50	ppb		0.01
21) Perylene-D12(IS)	14.59	264	5818	2.50	ppb		0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	965	31.31	ppb		0.01
Spiked Amount 83.306			Recovery = 37.581%				
7) Surrogate Recovery (FBP)	7.41	172	3908	43.01	ppb		0.01
Spiked Amount 83.306			Recovery = 51.632%				
17) Surrogate Recovery (TPH)	11.77	244	6049	71.10	ppb		0.00
Spiked Amount 83.306			Recovery = 85.353%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	9072	79.66	ppb		99
4) 2-Methylnaphthalene	6.98	142	7276	88.29	ppb		92
5) 1-Methylnaphthalene	7.08	142	7088	98.71	ppb		91
8) Acenaphthylene	8.00	152	15303	112.15	ppb		99
9) Acenaphthene	8.21	154	9254	127.10	ppb		93
10) Fluorene	8.81	166	10972	119.98	ppb		97
12) Phenanthrene	9.92	178	16547	120.29	ppb		98
13) Anthracene	9.98	178	16286	126.43	ppb		99
14) Fluoranthene	11.30	202	21238	127.19	ppb	#	89
16) Pyrene	11.56	202	21965	145.78	ppb	#	88
18) Benz (a) anthracene	12.96	228	19049	139.19	ppb		98
19) Chrysene	13.00	228	18206	144.16	ppb	#	94
20) Indeno (1,2,3-cd) pyrene	16.09	276	20309	145.32	ppb	#	99
22) Benzo (b) fluoranthene	14.15	252	19316	139.75	ppb	#	94
23) Benzo (k) fluoranthene	14.17	252	15753	131.93	ppb	#	95
24) Benzo (a) pyrene	14.45	252	17432	132.22	ppb		97
25) Dibenz (a,h) anthracene	16.12	278	17052	135.78	ppb		98
26) Benzo (g,h,i) perylene	16.52	276	17381	135.13	ppb		96

$\frac{9072 \times 2.5}{9702 \times 0.9778} \times 33.32 = 79.659$

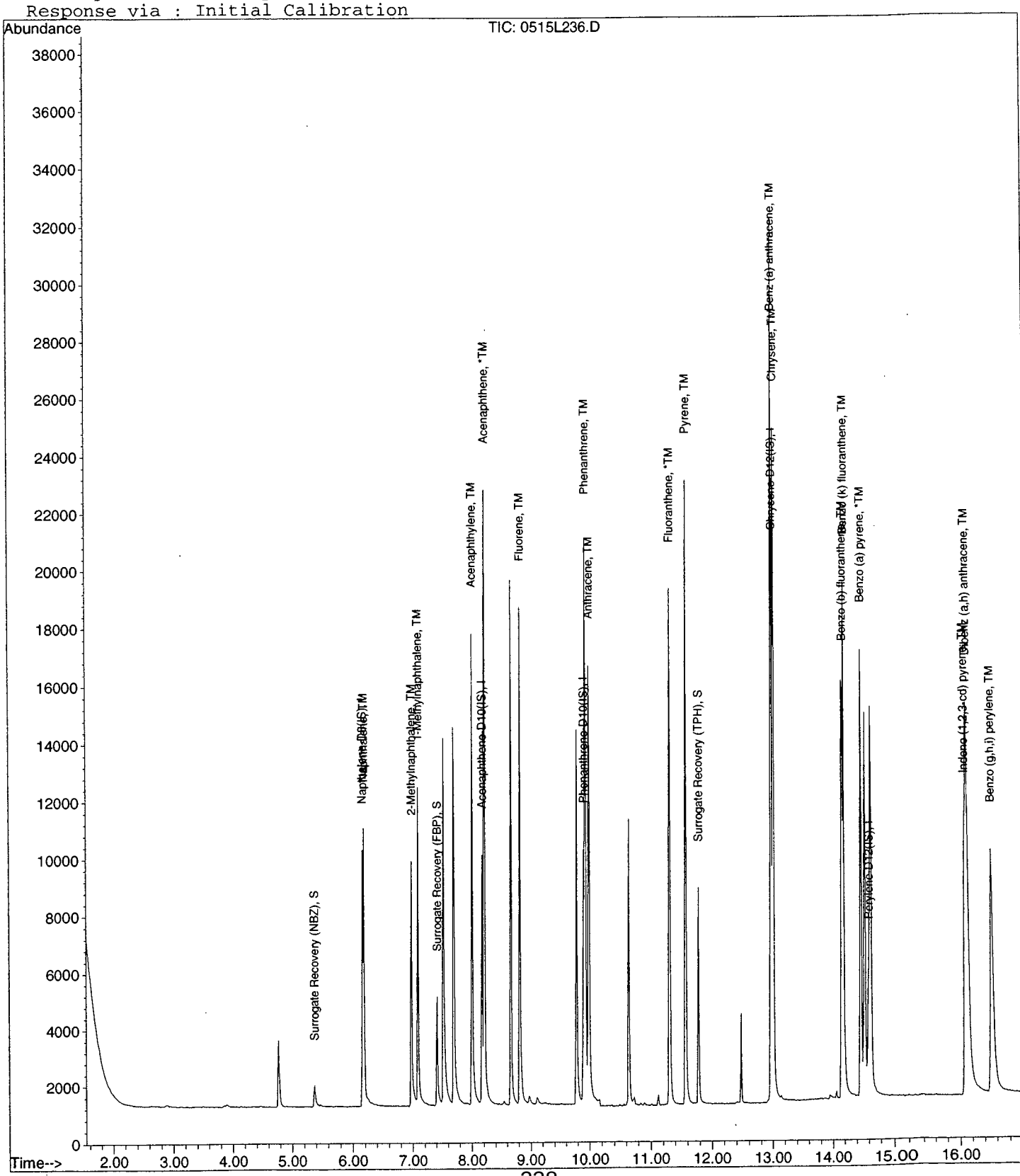
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L236.D Vial: 36
Acq On : 27 May 15 19:42 Operator: MA
Sample : 150521A LCS-1 1/30.01G Inst : Linus
Misc : soil Multiplr: 33.32

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8270D LL WATER DODv3

APPL ID: **150520W-16403 LCS - 197650**
Batch ID: #SIMDD-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2-METHYLNAPHTHALENE	5.00	4.16	83.2	45-105
ACENAPHTHENE	5.00	4.80	96.0	45-110
ACENAPHTHYLENE	5.00	4.41	88.2	50-105
ANTHRACENE	5.00	4.56	91.2	55-110
BENZ (A) ANTHRACENE	5.00	5.17	103	55-110
BENZO (A) PYRENE	5.00	5.09	102	55-110
BENZO (B) FLUORANTHENE	5.00	5.28	106	45-120
BENZO (G,H,I) PERYLENE	5.00	5.20	104	40-125
BENZO (K) FLUORANTHENE	5.00	5.03	101	45-125
CHRYSENE	5.00	5.42	108	55-110
DIBENZ (A,H) ANTHRACENE	5.00	5.15	103	40-125
FLUORANTHENE	5.00	4.63	92.6	55-115
FLUORENE	5.00	4.51	90.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	5.31	106	45-125
NAPHTHALENE	5.00	4.92	98.4	40-100
PHENANTHRENE	5.00	4.38	87.6	50-115
PYRENE	5.00	5.44	109	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.43	57.2	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.70	68.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	3.48	139 #	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	P0518-42.M
Extraction Date :	05/20/15
Analysis Date :	05/27/15
Instrument :	Linus
Run :	0515L230
Initials :	MA

Printed: 06/03/15 11:01:04 AM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150515\0515L230.D Vial: 30
Acq On : 27 May 15 17:08 Operator: MA
Sample : 150520A LCS-1 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

Quant Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.16	136	8572	2.50	ppb		0.00
6) Acenaphthene-D10(IS)	8.17	164	4504	2.50	ppb		0.01
11) Phenanthrene-D10(IS)	9.90	188	8254	2.50	ppb		0.00
15) Chrysene-D12(IS)	12.97	240	8430	2.50	ppb		0.01
21) Perylene-D12(IS)	14.59	264	5453	2.50	ppb		0.01
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.37	82	1693	1.70	ppb		0.01
Spiked Amount 2.500			Recovery = 67.840%				
7) Surrogate Recovery (FBP)	7.41	172	4077	1.43	ppb		0.01
Spiked Amount 2.500			Recovery = 57.320%				
17) Surrogate Recovery (TPH)	11.77	244	9409	3.48	ppb		0.00
Spiked Amount 2.500			Recovery = 139.000%				
Target Compounds							Qvalue
3) Naphthalene	6.18	128	16482	4.92	ppb		99
4) 2-Methylnaphthalene	6.98	142	10195	4.16	ppb		92
5) 1-Methylnaphthalene	7.08	142	10178	4.81	ppb		93
8) Acenaphthylene	8.00	152	19217	4.41	ppb		99
9) Acenaphthene	8.21	154	10954	4.80	ppb		93
10) Fluorene	8.81	166	12972	4.51	ppb		98
12) Phenanthrene	9.92	178	19454	4.38	ppb		99
13) Anthracene	9.98	178	19047	4.56	ppb		99
14) Fluoranthene	11.30	202	24901	4.63	ppb	#	89
16) Pyrene	11.56	202	26072	5.44	ppb	#	89
18) Benz (a) anthracene	12.96	228	22539	5.17	ppb		98
19) Chrysene	13.00	228	21776	5.42	ppb	#	95
20) Indeno (1,2,3-cd) pyrene	16.09	276	23842	5.31	ppb		96
22) Benzo (b) fluoranthene	14.14	252	22621	5.28	ppb		94
23) Benzo (k) fluoranthene	14.17	252	19093	5.03	ppb	#	95
24) Benzo (a) pyrene	14.45	252	20871	5.09	ppb		97
25) Dibenz (a,h) anthracene	16.12	278	20333	5.15	ppb		96
26) Benzo (g,h,i) perylene	16.52	276	20885	5.20	ppb		97

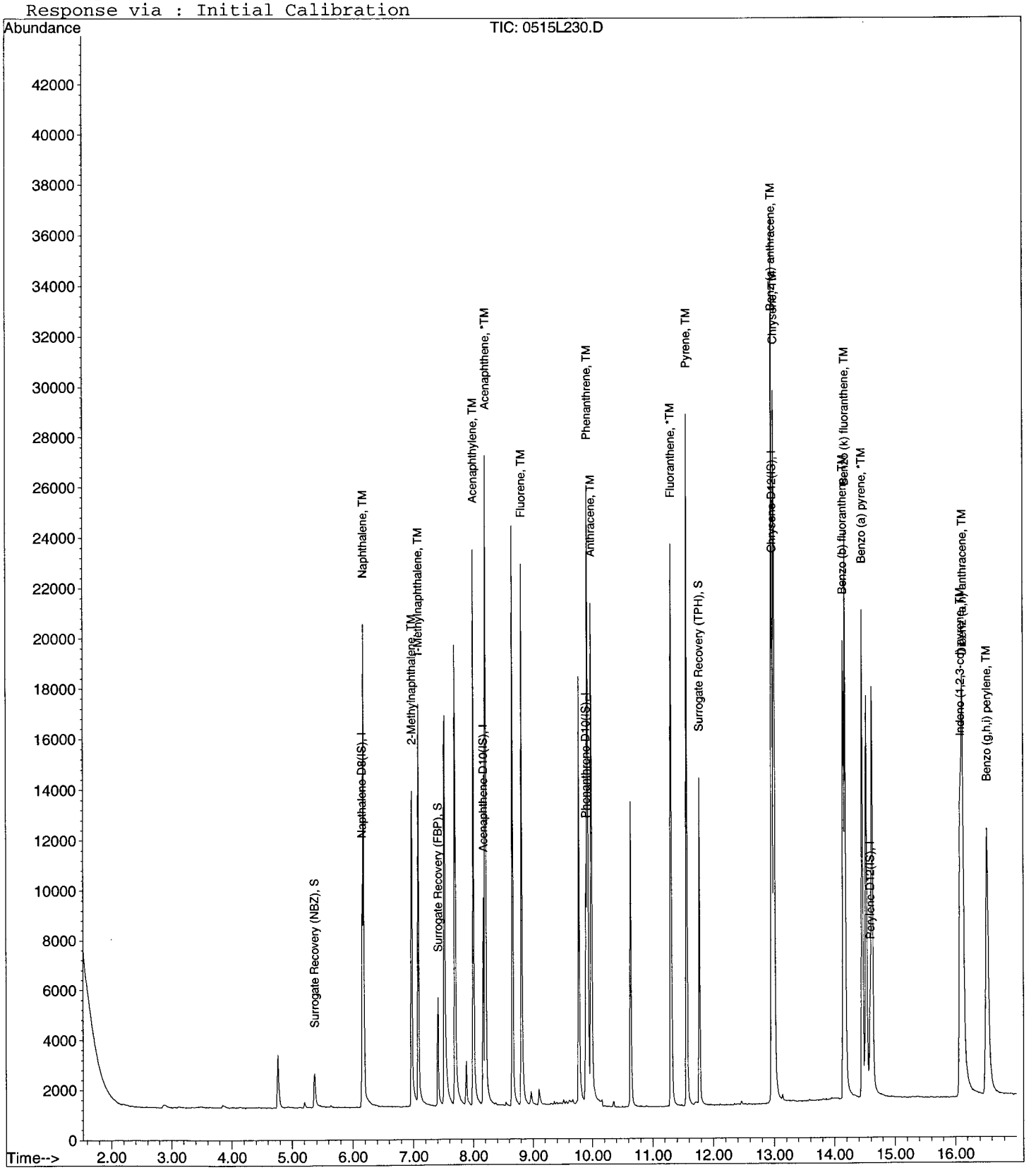
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150515\0515L230.D Vial: 30
Acq On : 27 May 15 17:08 Operator: MA
Sample : 150520A LCS-1 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: May 28 9:21 2015 Quant Results File: P0518-42.RES

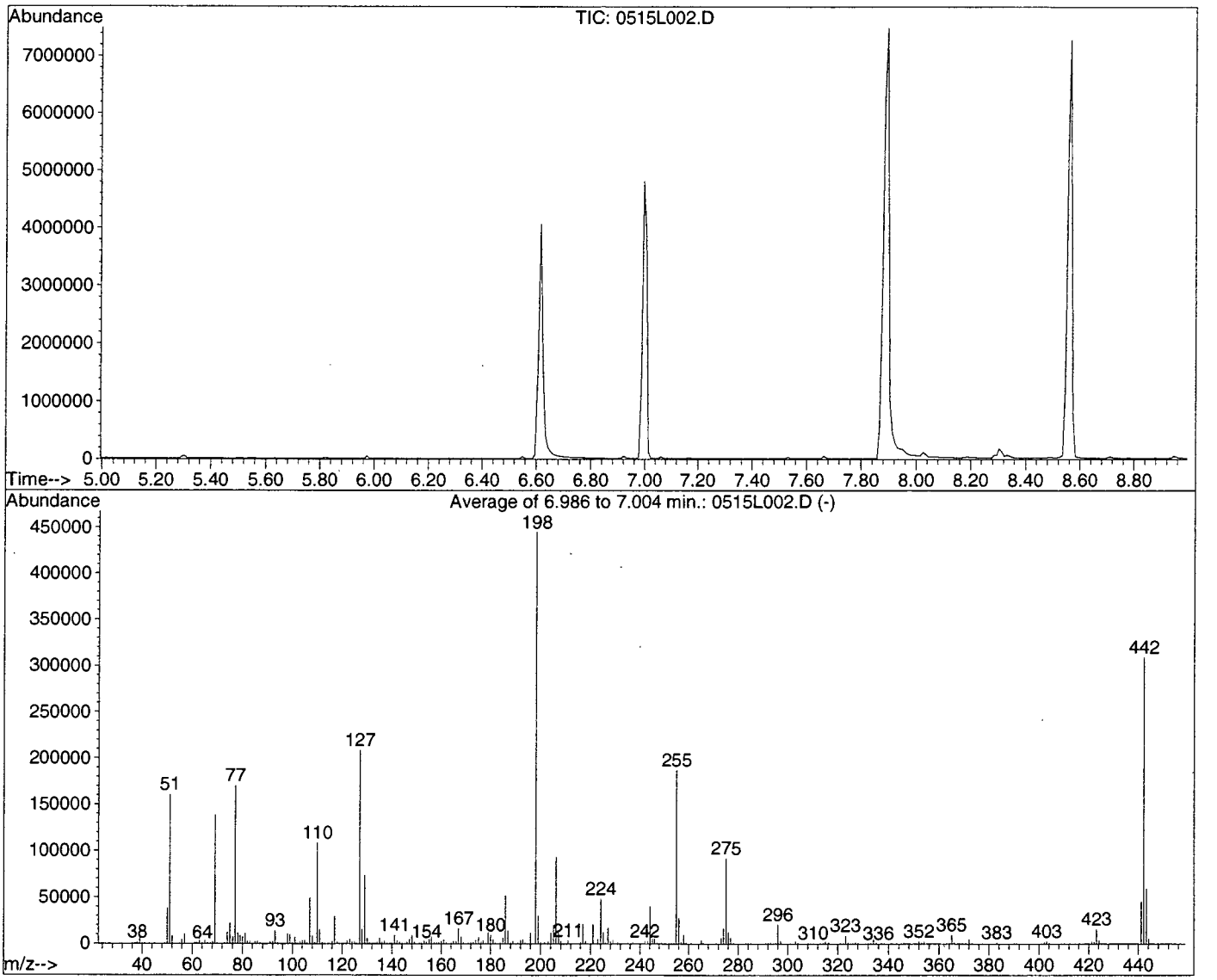
Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270
Last Update : Wed May 27 13:24:37 2015
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L150515\0515L002.D Vial: 2
Acq On : 15 May 15 16:56 Operator: csc
Sample : SV Tune 05/14/15 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L150515\P0518.M (RTE Integrator)
Title : EPA 8270



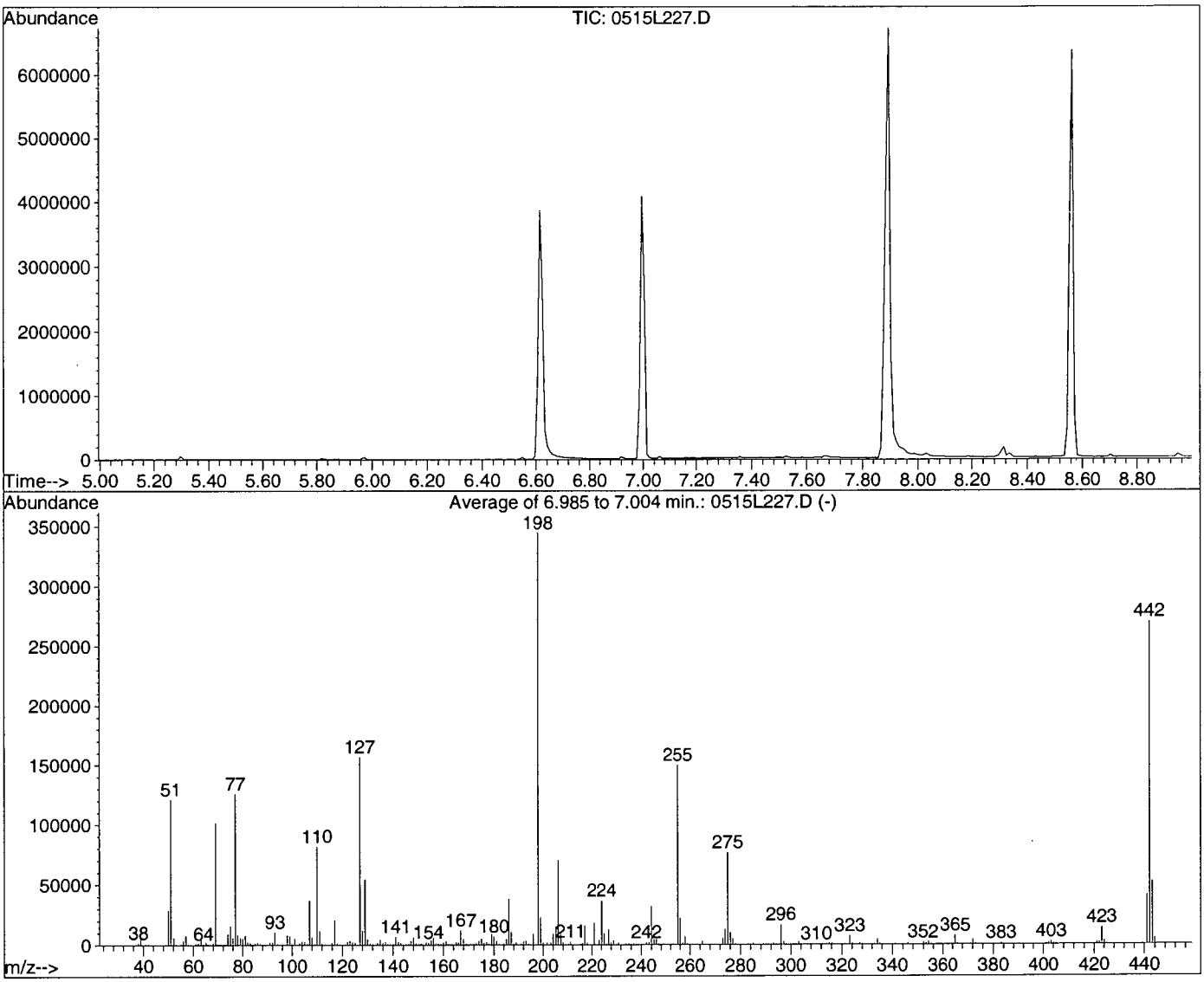
AutoFind: Scans 475, 476, 477; Background Corrected with Scan 472

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	160774	PASS
68	69	0.00	2	1.4	1998	PASS
70	69	0.00	2	0.5	725	PASS
127	198	40	60	46.9	208571	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	444800	PASS
199	198	5	9	6.8	30375	PASS
275	198	10	30	20.7	91932	PASS
365	198	1	100	2.0	9111	PASS
441	443	0.01	100	76.6	45477	PASS
442	198	40	150	69.5	309146	PASS
443	442	17	23	19.2	59336	PASS

DFTPP

Data File : M:\LINUS\DATA\L150515\0515L227.D Vial: 27
Acq On : 27 May 15 15:59 Operator: MA
Sample : SV TUNE 5/14/15 Inst : Linus
Misc : soil Multiplr: 1.00

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270



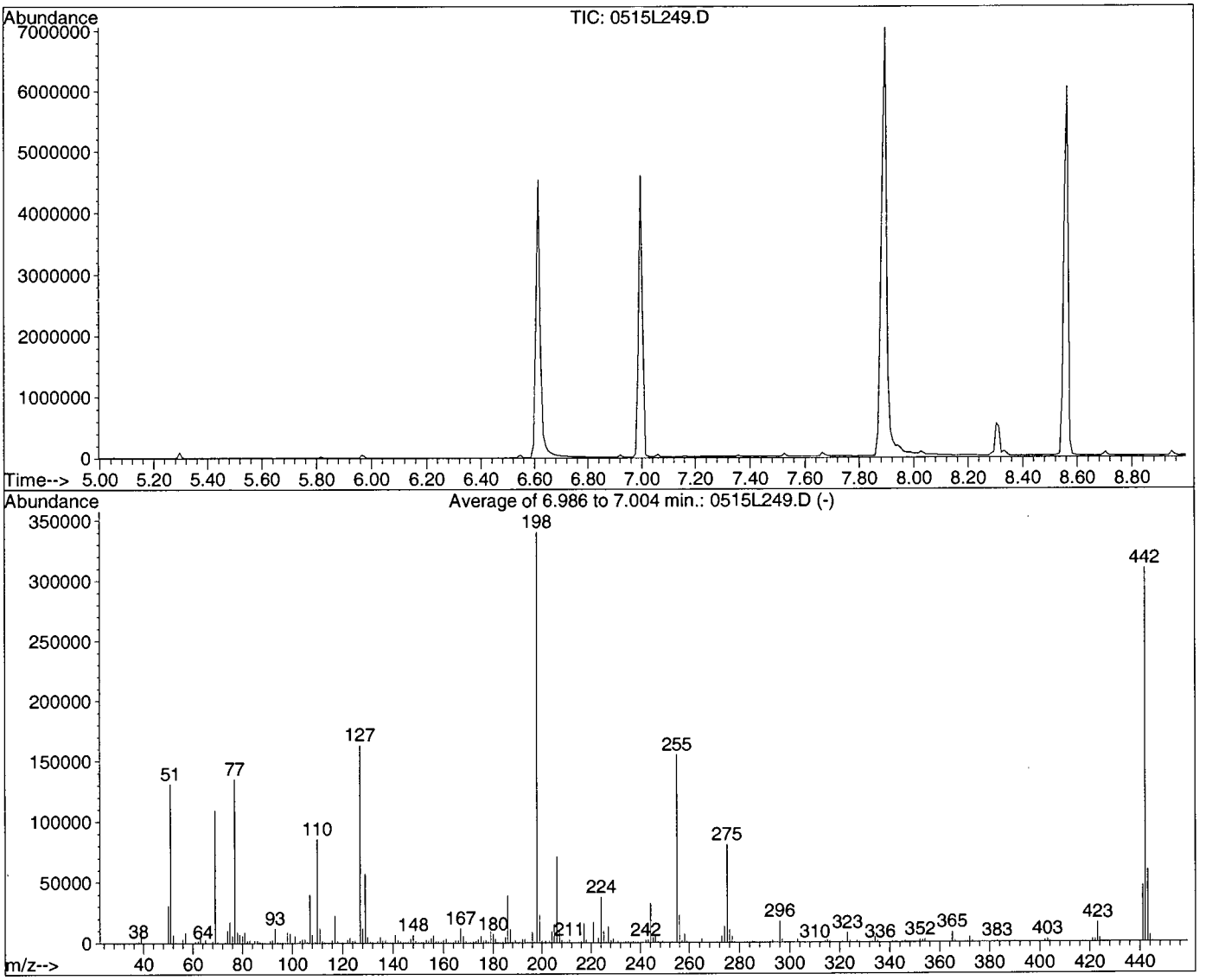
AutoFind: Scans 475, 476, 477; Background Corrected with Scan 472

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	120837	PASS
68	69	0.00	2	1.5	1553	PASS
70	69	0.00	2	0.6	627	PASS
127	198	40	60	45.4	156717	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	344816	PASS
199	198	5	9	6.6	22697	PASS
275	198	10	30	22.2	76418	PASS
365	198	1	100	2.1	7407	PASS
441	443	0.01	100	77.8	40627	PASS
442	198	40	150	78.3	270147	PASS
443	442	17	23	19.3	52208	PASS

0515L227.D P0518-42.M Tue Jun 02 12:49:49 2015

Data File : M:\LINUS\DATA\L150515\0515L249.D Vial: 49
Acq On : 28 May 15 1:12 Operator: MA
Sample : SV TUNE 5/14/15 Inst : Linus
Misc : soil Multiplr: 1.00

Method : M:\LINUS\DATA\L150515\P0518-42.M (RTE Integrator)
Title : EPA 8270



Spectrum Information: Average of 6.986 to 7.004 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.5	131072	PASS
68	69	0.00	2	1.4	1510	PASS
70	69	0.00	2	0.7	722	PASS
127	198	40	60	47.9	163264	PASS
197	198	0.00	1	0.3	947	PASS
198	198	100	100	100.0	340715	PASS
199	198	5	9	6.8	23220	PASS
275	198	10	30	23.6	80507	PASS
365	198	1	100	2.4	8316	PASS
441	443	0.01	100	78.3	46629	PASS
442	198	40	150	90.9	309659	PASS
443	442	17	23	19.2	59534	PASS

INDOXACARB CURVE											
Prep: 5/14/15 Ex: 7/31/15-L.H.											
Supplier	**ID#**	**ug/mL**	**LOT#**	**DATE**	**EXP.DATE**	**µL**	**µL**	**µL**	**µL**	**µL**	**µL**
INDOXACARB STD.		1		07/31/14	07/31/15	5	50	100	150	200	250
						995	950	900	850	800	750
	Hexane		051914A		**FINAL VOL**	1000	1000	1000	1000	1000	1000

8270 Full Scan Second Source Stock						
	5/14/15-L.H.					
8270 Second Source Stock						
Exp:	7/21/15					
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	116070-02	2000	34696-3398	5/14/15	5/14/16	1000
o2si	110391-01	2000	34693-3401	5/14/15	5/14/16	1000
o2si	010337-01	1000	17950-3514	5/14/15	11/14/15	1000
o2si	110396-01	2000	34698-3515	5/14/15	5/14/16	1000
o2si	110397-01	2000	50011-3505	5/14/15	7/21/15	1000
o2si	110393-01	2000	34694-3515	5/14/15	5/14/16	1000
o2si	110394-01	2000	35110-3515	5/14/15	5/14/16	1000
o2si	110395-01	2000	34697-3402	5/14/15	5/14/16	1000
o2si	110392-01	2000	18075-3397	5/14/15	5/14/16	1000
EM Science	Methylene Chloride		55006	11/06/14		1000
				Final Vol.		10000

Semivolatile (SV) Tuning Solution -L.H.						
PREP DATE:	5/14/15					
Semivolatile (SV) Tune Solution 50ug/ml						
Exp:	5/14/16					
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Ultra Scient	Semivolatile	1000	CL-5063-3518	05/14/15	5/14/16	1000
EM Science	Methylene Chloride		47186	11/06/14		19000
				Final Vol.		20000

8270 PAH SIM Standard Curve

PREP DATE:	05/15/15-L.H.												
8270 PAH SIM STANDARD CURVE													
Exp.DATE:	05/22/15					0.1	0.2	0.5	1	5	10	50	100
		Conc.		Date									
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL
o2si	8270 PAH SIM Stock	200	230271-34569	02/27/15	06/08/16	0	0	0	0	5	5	25	50
	5.0ug/mL	5		05/15/15	05/22/15	0	0	10	20	0	0	0	0
	1.0ug/mL	1		05/15/15	05/22/15	10	20	0	0	0	0	0	0
o2si	8270 BN:A (200:400	VAR	242352-34963	05/04/15	01/01/17	0	0	0	0	5	5	25	50
EM Science	Methylene Chloride		54200	11/06/14		90	80	90	80	190	90	50	0
Supelco	SIM SV Internal St	125	A10079V-3449	05/15/15	5/15/16	2	2	2	2	4	2	2	2
				Final Vol.		102	102	102	102	204	102	102	102

8270 PAH SIM SS

PREP DATE:	05/15/15-L.H.					
8270 PAH SIM Second Source 5µg/mL						
Exp.DATE:	05/15/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM Stock	200	243252-34609	02/27/15	01/15/17	5
EM Science	Methylene Chloride		54200	11/06/14		195
Supelco	SIM SV Internal St	125	A10079V-3449	05/15/15	5/15/16	4
				Final Vol.		204

8270 PAH SIM CCV

PREP DATE:	05/15/15					
8270 PAH SIM Continuing Calibration Verification 5ug/ml						
Exp.DATE:	05/22/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM Stock	200	230271-34569	02/27/15	06/08/16	5
o2si	8270 BN:A (200:400	VAR	242352-34963	05/04/15	01/01/17	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SIM SV Internal St	125	A10079V-3449	05/15/15	5/15/16	4
				Final Vol.		204

072

02/24/15 csc

GC/MS STANDARD PREPARATION BOOK # 1 PAGE

PREP DATE:	02/24/15					
8270 PAH SIM Continuing Calibration Verification 5ug/ml						
Exp.DATE:	02/31/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM Stock	10	213931-33759	12/23/14	08/26/15	5
o2si	8270 BN:A Surrogate	VAR	226244-34103	12/23/14	04/10/16	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SIM Internal Standard	125	XA10079V-34507	12/23/14	09/30/17	4
				Final Vol.		204

02/27/15 csc

8270D PAH SIM Solution, 200 mg/L, 1 ml csc

110780-01

Lot #	Storage	Expiry
230271	≤ -10 °C	8/Jun/2016

Solv: Methylene Chloride

R&D Only, not human consump. Made in the USA

8270D PAH SIM
Lot #: 230271 - 34569
Rec: 1/13/15 MFR exp. 6/8/16

Recieved: 01/31/15
Opened: 02/27/15
Expired: 06/8/16

02/27/15 csc

8270 BN:A (200:400) Surrogate Solution, 1 mL csc

110004-17

Lot #	Storage	Expiry
237956	≤ -10 °C	8/Oct/2016

Solv: Methylene Chloride

R&D Only, not human consump. Made in the USA

8270 BN:A (200:400) Surrogate Solution
Lot #: 237956 - 34559
Rec: 1/13/15 MFR exp. 10/8/16

Recieved: 01/13/15
Opened: 02/27/15
Expired: 10/8/16

csc

NOTEBOOK INSERT LABEL

Semivolatile Internal Std Mix **CRM48902**
Lot: XA10079V EXP: SEP/2017 STORAGE: REFRIGERATE 2 x 1ml

DATE RECEIVED:_____

SUPELCO
Solutions within.
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD TRANSFER LABEL

Date of Preparation: **Exp. Date:**
Reference Number: **Storage:** EXP: SEP/2017
Description: REFRIGERATE
CHEMST

02/27/15 csc

Semivolatile Internal Standard Mix csc
Lot #: XA10079V - 34496
Rec: 12/11/14 MFR exp. 9/30/17

CRM48902 XA10079V
Semivolatile Internal Std Mix
2000ug/ml in dichloromethane

Recieved: 12/11/14
Opened: 02/27/15
Expired: 09/30/17

8270 SIM PAH Internal Standard

PREP DATE:	5/15/15-L.H.					
8270 SIM PAH Internal Standard Mix 125ug/ml						
Exp.DATE:	11/15/15					
		Conc.		Date	Exp.	125
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
Supelco	SV Internal Standa	2000	A10079V-3449	05/15/15	5/15/16	50
EM Science	Methylene Chloride		47186	11/06/14		750
				Final Vol.		800

8270 Full Scan CCV

PREP DATE:	05/15/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	05/22/15					50
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	11/18/14	05/21/15	25
o2si	8270 BN:A (200:400	VAR	242352-34963	02/27/15	10/8/16	25
EM Science	Methylene Chloride		47186	11/06/14		50
Supelco	SV Internal Standa	2000	A10079V-3449	02/27/15	09/30/17	2

1ug/ml 1,2,3-TCP

PREP DATE:	05/15/15-LH					
1,2,3-TCP 1ug/ml						
Exp. Date:	11/04/15					
		Conc.		Date	Exp.	
Supplier	ID#	µg/mL	Lot #	Code	Date	µL
O2si	1,2,3-TCP	1000	02872-3201	05/15/15-LH	01/23/16	5
J.T.Baker	Purge & Trap MeoH		0000062345	10/10/13		4995

1,2,3-TCP CCV

PREP DATE:	5/15/15-L.H.					
1,2,3-TCP Continuing Calibration Verification 0.05ug/mL						
Exp. Date:	11/4/15					
		Conc.		Date	Exp.	
Supplier	ID#	µg/mL	Lot #	Code	Date	µL
O2si	1,2,3-TCP	1.0	02641-3200	5/4/15	01/23/16	50
O2si	1,2,3-TCP-d5	2.0	02640-3200	5/4/15	01/27/16	25
J.T.Baker	Purge & Trap MeoH		0000062345	10/10/13		925
				Final Vol.		1000

GC/MS STANDARD PREPARATION BOOK # ___ PAGE # ___ 073

02/27/15 CSC

8270D PAH SIM Solution, Second Source, 200 mg/L, 1 mL
110780-81-SS
Lot # 243252 | Storage ≤-10 °C | Expiry 15/Jan/2017
Solv: Methylene Chloride

8270D PAH SIM (SS)
Lot #: 243252 - 34609
Rec: 1/23/15 MFR exp. 1/15/17

Received: 01/23/15
Opened: 02/27/15
Expired: 01/15/17

02/27/15 CSC

Part #: 30031 Lot #: 060111
Laboratory Use Only - See MSDS
Exp: 060116 Storage 20 °C
EPA Method 525 - Internal Standard
4 components CAUTION: Sonicate Before Use
500 ug/mL in aceto
ABSOLUTE STANDA

EPA Method 525 Internal Std
Lot #: 060111 - 32256
Rec: 4/16/13 MFR exp. 6/1/16

Received: 04/16/13
opened: 02/27/15
Expired: 06/01/16

02/27/15 CSC

PREP DATE:	02/27/15						
8270 SIM PAH Internal Standard Mix 125ug/ml							
Exp.DATE:	08/27/15						
		Conc.		Date	Exp.	125	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL	
Supelco	Internal Standard	2000	XA10079V-34496	12/11/14	09/30/17	50	
EM Science	Methylene Chloride		54200	11/06/14		750	
				Final Vol.		800	

02/27/15 CSC

PREP DATE:	02/27/15					
525 Working Standard 20ug/mL (PCP @ 80ug/ml)						
Exp. DATE:	03/04/15					20
		Conc.		Date	Exp.	
Supplier	ID #	ug/ml	Lot #	Code	Date	ul
Ultra-Scientific	Extractables Mixture (PSM-525A)	500	CK-2769-34658	02/17/15	09/30/16	24
Ultra-Scientific	PAH Mixture (PM-525B)	500	CK-2706-34660	02/17/15	09/30/16	24
EM Science	Methylene Chloride		54200	11/06/14		552
				Final Vol.		600

02/27/15 CSC

PREP DATE:	02/27/15					
525 Continuing Calibration Verification 5ug/ml (20ppb PC						
Exp.DATE:	03/04/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
Ultra Scienti	525 Working Std (PSM-525A) & (PM-525B)	20	VAR	02/17/15	09/30/16	50
Absolute	525 Internal Std (30031)	500	060111-32256	04/16/13	06/01/16	2
EM Science	Methylene Chloride		54200	11/06/14		148
				Final Vol.		200

02/26/15 CSC

PREP DATE:	02/26/15		EXP:	03/03/15										
Sulfolane Standard Curve														
						1	5	10	20	40	50	60	80	100
		Conc.		Date	Exp.									
Supplier	ID #	µg/mL	Lot#	Code	Date	µL	µL	µL	µL	µL	µL	µL	µL	µL
o2si	Sulfolane Calibration Standard	200	VAR	10/22/14	03/11/15	5	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		54200	11/06/14		995	195	95	90	80	75	70	60	50
				Final Vol.		1000	200	100	100	100	100	100	100	100

8270 PAH SIM CCV

PREP DATE:	05/26/15-LH					
8270 PAH SIM Continuing Calibration Verification 5ug/ml						
Exp.DATE:	06/02/15					5
		Conc.		Date	Exp.	
Supplier	ID #	µg/mL	Lot #	Code	Date	µL
o2si	8270 PAH SIM Stock	200	230271-34569	02/27/15	06/08/16	5
o2si	8270 BN:A (200:400)S	VAR	242352-34963	02/27/15	10/08/16	5
EM Science	Methylene Chloride		54200	11/06/14		190
Supelco	SIM SV Internal Star	125	A10079V-3449	05/15/15	5/15/16	4
				Final Vol.		204

8270 Full Scan CCV

PREP DATE:	06/02/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	05/22/15					50
		Conc.		Date		
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	8270 Stock	200	VAR	04/27/15	10/27/15	25
o2si	8270 BN:A (200:400)	VAR	242352-34963	05/21/15	5/21/16	25
EM Science	Methylene Chloride		47186	11/06/14		50
Supelco	SV Internal Standard	2000	A10079V-3449	05/21/15	5/21/16	2

Prep: 05/26/15 Exp: 04/27/15 GA	**HERB SECOND SOURCE**				
	Conc.	**Conc.**	**Aliqout**	**OCK SOUIR**	**Final Vol.**
	in mix	**In Stock**			**Solvent**
Analytes:	**(ug/ml)**	**(ug/ml)**	**(uL)**	**O2SI**	**(ml)**
Dalapon	12.8	64	1000	AT: 132070-0	5
3,5 Dichlorobenzoic Acid	1.28	6.4		Lot: 207738	MTBE
4-Nitrophenol	3.2	16		OP: 5/26/15	Lot #
2,4-DCAA (S)	6.4	32		Exp: 4/27/16	50223
Dicamba	1.28	6.4			
MCPP	1280	6400			
MCPA	1280	6400			
2,4-DP	6.4	32			
2,4-D	6.4	32			
DNOC	2.56	12.8			
PCP	1.28	6.4			
2,4,5-TP	1.28	6.4			
Chloramben	6.4	32			
2,4,5-T	1.28	6.4			
Dinoseb	3.2	16			
2,4-DB	12.8	64			
Bentazon	6.4	32			
Picloram	1.28	6.4			
Dacthal	1.28	6.4			
Acifluorfen	3.2	16			
***1 ml ampule is derivitized by extraction and brought up to 5ml in MTBE*					

_SEP004S

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	150520A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 230271-33745		Surrogate ID 1	SIM Surrogate 248398-35028	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	05/20/15 15:30	
Spiked ID 8			Ext. End Time:	05/21/15 9:35	
			GC Requires Extract By:	**06/05/15 0:00**	

pH1	2	05/20/15 3:35:00 PM	Water Bath Temp Criteria	79 °C
pH2	14	05/20/15 4:15:00 PM		
pH3				

Spiked By: DL **Date** 05/20/15 **Witnessed By:** DC **Date** 05/20/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150520A Blk				0.0250	1	1000	1	2/1	05/20/15 15:30	
						equip	E-WB7				
2	150520A LCS-1		0.0250	1	0.0250	1	1000	1	2/1	05/20/15 15:30	
						equip	E-WB7				
3	AZ16403	AZ16403W09			0.0250	1	1030	1	2/1	05/20/15 15:30	76447 RUSH 2 WEEKS
						equip	E-WB7				

LH 5/21/15

Solvent and Lot#	
MC	55006
Na2SO4	XE21E
10N NaOH	5-20-15
1+1 Acid	3-6-15
A. Na2SO4	4-13-15
ph strips	HC427312
Filter Paper	400091

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	LH
Date 5/21/15	~~5/21/15~~ LH
Time	12:15
Refrigerator	GC-C

	Technician's Initials
Scanned By	DC
Sample Preparation	DC
Extraction	DC,IC,CFM
Concentration	IC

Modified	05/21/15 10:00:08 AM

Reviewed By: LH **Date** 5/21/15

05/21/15 10:01:02 AM Ext_ID 25147847

_SON009S

Organic Extraction Worksheet

Method	SIM Sonicat Ext. Methylene c 3550	Extraction Set	150521A	Extraction Method	SON009S	Units	mL

Spiked ID 1	SIM Spike 230271-33745		Surrogate ID 1	SIM Surrogate 248398-35028	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:	05/21/15 8:15	
Spiked ID 8			Ext. End Time:	05/21/15 15:30	
			GC Requires Extract By:	**05/29/15 0:00**	

pH1			Water Bath Temp Criteria	81,80 °C
pH2				
pH3				

Spiked By: IC **Date** 05/21/15 **Witnessed By:** DL **Date** 05/21/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150521A Blk				0.0250	1	30.00g	1	NA	05/21/15 8:15	
						equip	E-S5 E-WB7				
2	150521A LCS-1		0.0250	1	0.0250	1	30.01g	1	NA	05/21/15 8:15	
						equip	E-S4 E-WB7				
3	AZ16137	AZ16137S01			0.0250	1	30.02g	1	NA	05/21/15 8:15	76380
						equip	E-S3.1 E-WB7				
4	AZ16138	AZ16138S01			0.0250	1	30.25g	1	NA	05/21/15 8:15	76380
						equip	E-S2 E-WB7				
5	AZ16139	AZ16139S01			0.0250	1	30.07g	1	NA	05/21/15 8:15	76380
						equip	E-S1.2 E-WB7				
6	AZ16140	AZ16140S01			0.0250	1	30.07g	1	NA	05/21/15 8:15	76380
						equip	E-S1.1 E-WB7				
7	AZ16141	AZ16141S01			0.0250	1	30.23g	1	NA	05/21/15 8:15	76380
						equip	E-S6 E-WB7				
8	AZ16198	AZ16198S02			0.0250	1	30.19g	1	NA	05/21/15 8:15	76390
						equip	E-S7 E-WB7				
9	AZ16199	AZ16199S01			0.0250	1	30.11g	1	NA	05/21/15 8:15	76390
						equip	E-S5 E-WB6				
10	AZ16201	AZ16201S02			0.0250	1	30.11g	1	NA	05/21/15 8:15	76390
						equip	E-S4 E-WB6				
11	AZ16202	AZ16202S01			0.0250	1	30.02g	1	NA	05/21/15 8:15	76390
						equip	E-S3.1 E-WB6				
12	AZ16400	AZ16400S02			0.0250	1	30.13g	1	NA	05/21/15 8:15	76447
						equip	E-S2 E-WB6				
13	AZ16401	AZ16401S01			0.0250	1	30.09g	1	NA	05/21/15 8:15	76447
						equip	E-S1.2 E-WB6				
14	AZ16402	AZ16402S01			0.0250	1	30.11g	1	NA	05/21/15 8:15	76447
						equip	E-S1.1 E-WB6				

KY 5/21/15

Solvent and Lot#	
SAND	WF27C
MC	55006
Filter Paper	9624720
B.Na2SO4	XE21E

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	GA
Date	5/21/15
Time	1600
Refrigerator	Hobart

	Technician's Initials
Scanned By	KY
Sample Preparation	KY
Extraction	IC
Concentration	IC

Modified	05/21/15 3:43:46 PM

Reviewed By: KY **Date** 5/21/15

Injection Log

Directory: M:\LINUS\DATA\L150515

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	0515L002.D	1	SV Tune 05/14/15		05/15/2015 16:56
2	3	0515L003.D	1	0.1ug/ml PAH 05/15/15		05/15/2015 17:15
3	4	0515L004.D	1	0.2ug/ml PAH		05/15/2015 17:41
4	5	0515L005.D	1	0.5ug/ml PAH		05/15/2015 18:06
5	6	0515L006.D	1	1.0ug/ml PAH		05/15/2015 18:32
6	7	0515L007.D	1	5.0ug/ml PAH		05/15/2015 18:58
7	8	0515L008.D	1	10ug/ml PAH		05/15/2015 19:23
8	9	0515L009.D	1	50ug/ml PAH		05/15/2015 19:49
9	10	0515L010.D	1	100ug/ml PAH		05/15/2015 20:14
10	11	0515L011.D	1	5.0ug/ml PAH SS 05/15/15		05/15/2015 20:40
11	27	0515L227.D	1	SV TUNE 5/14/15	soil	05/27/2015 15:59
12	28	0515L228.D	1	5.0ug/ml PAH 5/26/15	soil	05/27/2015 16:17
13	35	0515L235.D	33.33333	150521A BLK 1/30.00G	soil	05/27/2015 19:17
14	36	0515L236.D	33.32223	150521A LCS-1 1/30.01G	soil	05/27/2015 19:42
15	46	0515L246.D	33.18951	AZ16400S02 1/30.13G	soil	05/27/2015 23:58
16	47	0515L247.D	332.33632	AZ16401S01 1/30.09G df10	soil	05/28/2015 00:24
17	48	0515L248.D	33.21156	AZ16402S01 1/30.11G	soil	05/28/2015 00:49

Injection Log

Directory: M:\LINUS\DATA\L150515

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	0515L002.D	1	SV Tune 05/14/15		05/15/2015 16:56
2	3	0515L003.D	1	0.1ug/ml PAH 05/15/15		05/15/2015 17:15
3	4	0515L004.D	1	0.2ug/ml PAH		05/15/2015 17:41
4	5	0515L005.D	1	0.5ug/ml PAH		05/15/2015 18:06
5	6	0515L006.D	1	1.0ug/ml PAH		05/15/2015 18:32
6	7	0515L007.D	1	5.0ug/ml PAH		05/15/2015 18:58
7	8	0515L008.D	1	10ug/ml PAH		05/15/2015 19:23
8	9	0515L009.D	1	50ug/ml PAH		05/15/2015 19:49
9	10	0515L010.D	1	100ug/ml PAH		05/15/2015 20:14
10	11	0515L011.D	1	5.0ug/ml PAH SS 05/15/15		05/15/2015 20:40
11	12	0515L012.D	1	SV Tune 05/15/15		05/15/2015 21:02
12	27	0515L227.D	1	SV TUNE 5/14/15	soil	05/27/2015 15:59
13	28	0515L228.D	1	5.0ug/ml PAH 5/26/15	soil	05/27/2015 16:17
14	30	0515L230.D	1	150520A LCS-1 1/1000	water	05/27/2015 17:08
15	31	0515L231.D	0.97087	AZ16403W09 1/1030	water	05/27/2015 17:34
16	49	0515L249.D	1	SV TUNE 5/14/15	soil	05/28/2015 01:12
17	50	0515L250.D	1	5.0ug/ml PAH 5/26/15	soil	05/28/2015 01:30
18	51	0515L251.D	1	150520A BLK 1/1000	water	05/28/2015 10:02

RSK-175

APPL, INC.

RSK-175
QC Summary

APPL, INC.

Method Blank
RSK 175

Blank Name/QCG: **150520W-16287 - 197488**
Batch ID: #RSK-150520A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	ETHANE	0.85 U	1.7	0.85	0.51	ug/L	05/20/15	05/20/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	05/20/15	05/20/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	05/20/15	05/20/15

Quant Method: 402RSK.M
Run #: 0520F006
Instrument: Frodo
Sequence: 150520
Initials: RSA

GC SC-Blank-REG MDLs
Printed: 05/29/15 11:44:20 AM

Laboratory Control Spike Recovery

RSK 175

APPL ID: **150520W-16287 LCS - 197488**
Batch ID: #RSK-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
ETHANE	25.0	21.6	86.4	70-130
ETHENE	23.3	19.3	82.8	70-130
METHANE	13.3	15.6	117	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	05/20/15
Analysis Date :	05/20/15
Instrument :	Frodo
Run :	0520F005
Initials :	SD

Printed: 06/02/15 3:43:11 PM
APPL Standard LCS

RSK 175

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/20/15

Matrix: WATER Instrument: Frodo

Blank ID: 150520A-BLK Time Analyzed: 1132

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150520A-BLK	Blank	0520F006	05/20/15 1132
AZ16403	S67-MW015-051415	0520F013	05/20/15 1206

Comments: Batch: #RSK-150520A

Printed: 05/29/15 11:43:54 AM

Form 4, Blank Summary

RSK-175
Sample Data

APPL, INC.

RSK 175

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Loc ID: MN015
ARF: 76447
APPL ID: AZ16403
QCG: #RSK-150520A-197488

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
RSK 175	ETHANE	0.85 U	1.7	0.85	0.51	ug/L	05/20/15	05/20/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	05/20/15	05/20/15
RSK 175	METHANE	28	1.0	0.45	0.25	ug/L	05/20/15	05/20/15

Quant Method: 402RSK.M
Run #: 0520F013
Instrument: Frodo
Sequence: 150520
Dilution Factor: 1
Initials: RSA

Printed: 05/29/15 11:44:07 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

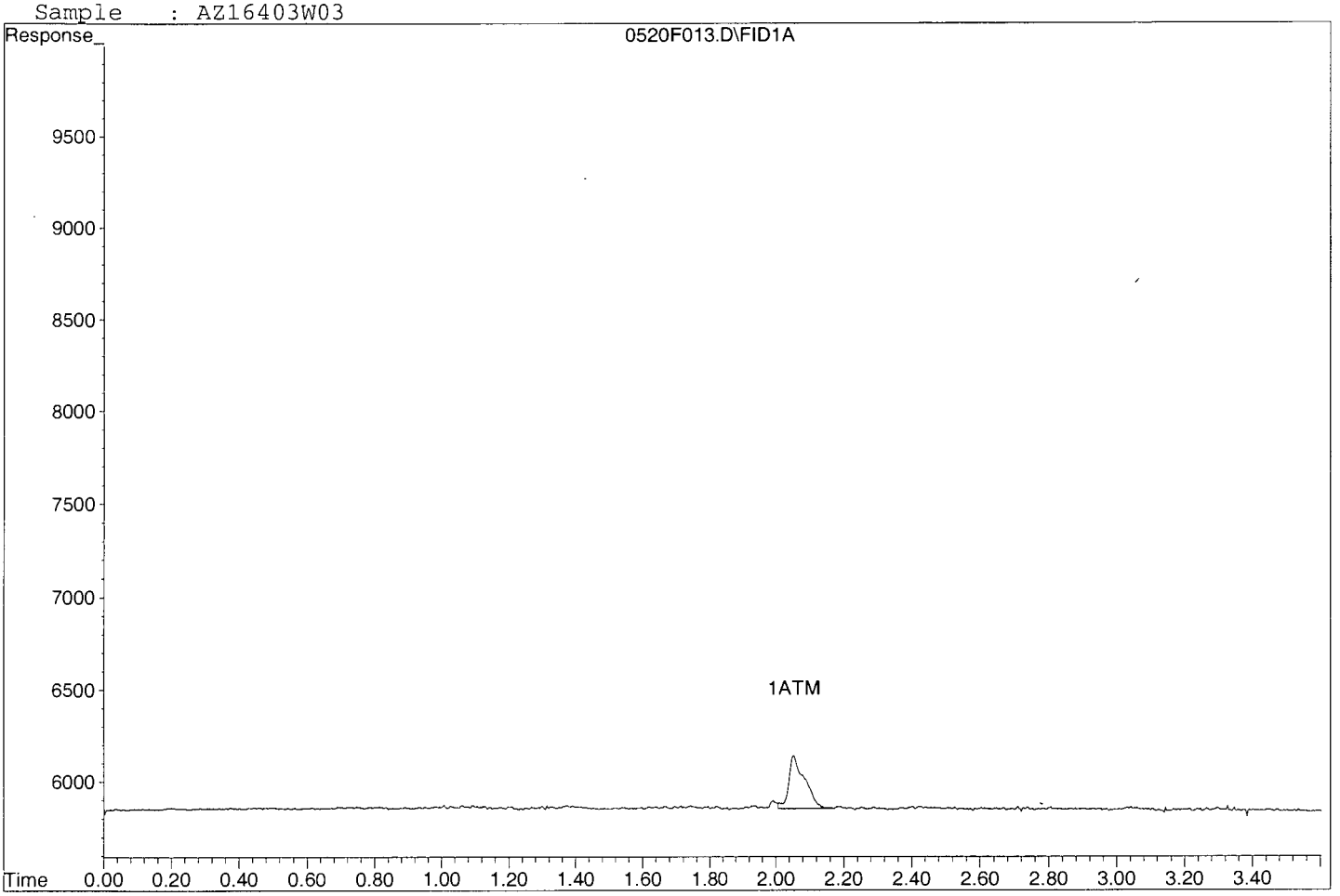
Data File : V:\FRODO\DATA\150520\0520F013.D Vial: 13
Acq On : 20 May 2015 12:06 Operator: SD
Sample : AZ16403W03 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 20 12:11 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150520\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed May 20 10:29:31 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.05	9377	28.330 ppb

Data File: V:\FRODO\DATA\150520\0520F013.D
Sample : AZ16403W03



RSK-175
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water
SDG No:
Initial Cal. Date: 3/29/15 and 4/2/15
Instrument: Frodo
Initials: sd

		Compound	1	2	3	4	5	6	7	8	1A		Avg	%RSD		
			0329F010.D	0329F001.D	0329F005.D	0329F012.D	0329F013.D	0329F015 D	0329F016.D	0402F001.D	0329F009.D					
1	ATM	Methane	364	332	325	371	276	318	258	300	433		331	16	ATM	
2	ATM	Ethane	285	219	313	327	277	316	267	321	232		284	14	ATM	
3	ATM	Ethene	352	253	348	326	293	340	281	333	205		303	16	ATM	
4																
5																
6																
7																
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1.3236504

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

Gas Mix 1%
Lot #: 164PLU4SPC05L - 34437
Rec: 12/1/14 MFR exp. 7/8/17

Shipped From: 6141 EASTON ROAD, BLDG 1 PO BOX 310
PLUMSTEADVILLE PA 18949-0310
Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ANALYSIS

SIGMA-ALDRICH
PO#P442671
595 NORTH HARRISON ROAD
BELLEFONTE PA 16823
US

DOCUMENT#:56058812 -005
PO#: P442671
ITEM #: T216-48
CUST ITEM #: 23462
DATE: 08Jul2014

ANALYTICAL ACCURACY: +/-02%
PRODUCT EXPIRATION: 08Jul2017

LOT # : 164PLU4SPC05L

COMPONENT	REQUESTED GAS CONC MOLES		ANALYSIS (MOLES)	
ACETYLENE	1.	%	1.0	%
CARBON DIOXIDE	1.	%	1.0	%
CARBON MONOXIDE	1.	%	1.01	%
ETHANE	1.	%	1.01	%
ETHYLENE	1.	%	1.01	%
METHANE	1.	%	1.01	%
NITROGEN		BALANCE		BALANCE

MANUFACTURED DATE: 08Jul2014 SCOTTY SIZE: 48

APPROVED BY: DAN TRAVISANO

Quantitation Report (QT Reviewed)

Data File : V:\FRODO\DATA\150329\0329F009.D Vial: 9
Acq On : 29 Mar 2015 09:45 Operator: SD
Sample : RSK Std - 1A 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:37 2015 Quant Results File: RSK175Q.RES

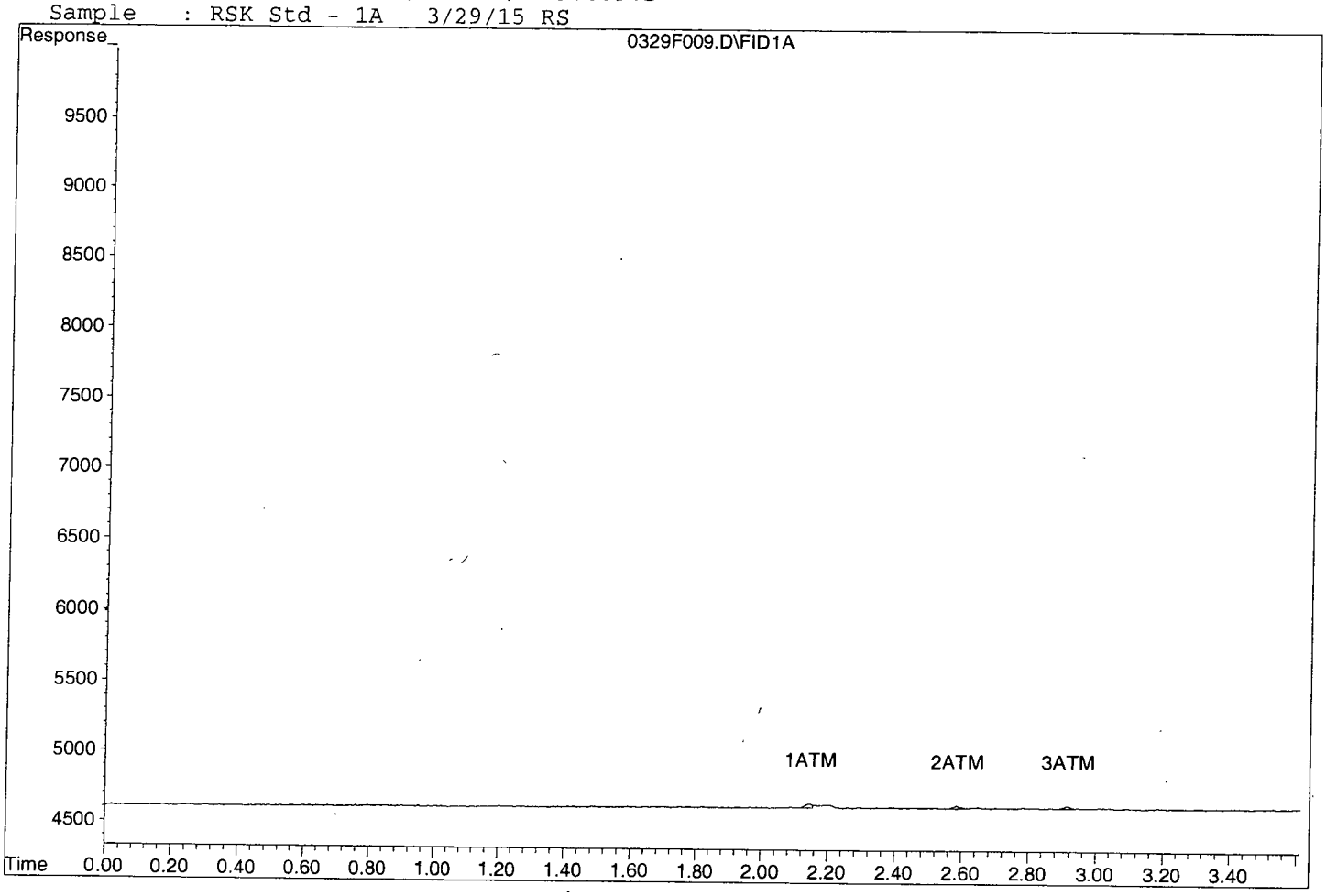
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.15	390	1.029 ppb m
2) ATM Ethane	2.59	395	1.285 ppb
3) ATM Ethene	2.92	328	0.962 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F009.D
Sample : RSK Std - 1A 3/29/15 RS

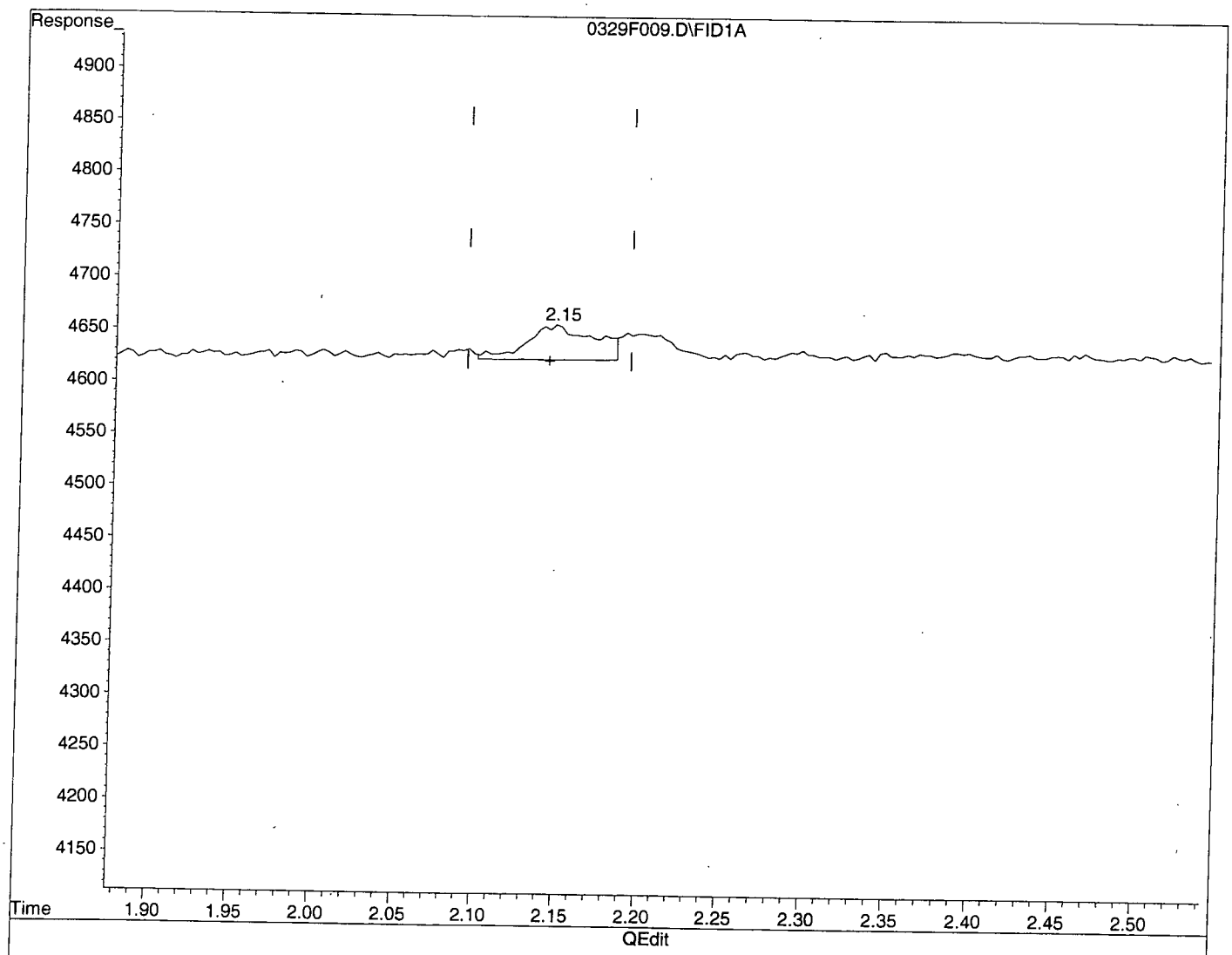


Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F009.D
Acq On : 29 Mar 2015 09:45
Sample : RSK Std - 1A 3/29/15 RS
Misc : Water
IntFile : autoint1.e
Quant Time: Mar 29 10:54 2015 Quant Results File: RSK175Q.RES

Vial: 9
Operator: SD
Inst : Frodo
Multiplr: 1.00

Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 10:50:10 2015
Response via : Multiple Level Calibration



(1) Methane (ATM)

2.15min 2.405ppb

response 911

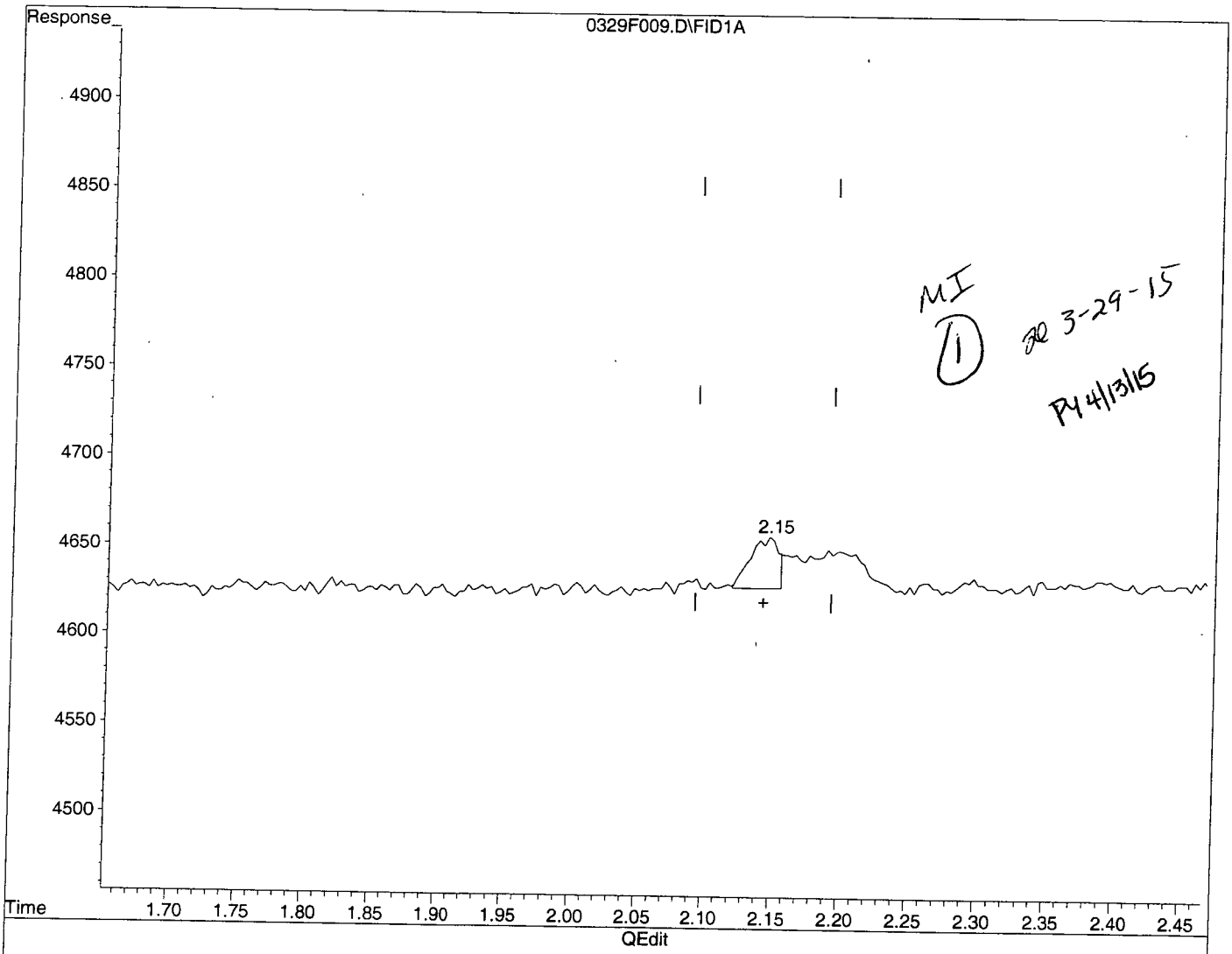
(+) = Expected Retention Time

Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F009.D
Acq On : 29 Mar 2015 09:45
Sample : RSK Std - 1A 3/29/15 RS
Misc : Water
IntFile : autoint1.e
Quant Time: Mar 29 10:55 2015 Quant Results File: RSK175Q.RES

Vial: 9
Operator: SD
Inst : Frodo
Multiplr: 1.00

Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration



(1) Methane (ATM)

2.15min 1.029ppb m

response 390

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data File : V:\FRODO\DATA\150329\0329F010.D Vial: 10
Acq On : 29 Mar 2015 10:04 Operator: SD
Sample : RSK Std 1 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:43 2015 Quant Results File: RSK175Q.RES

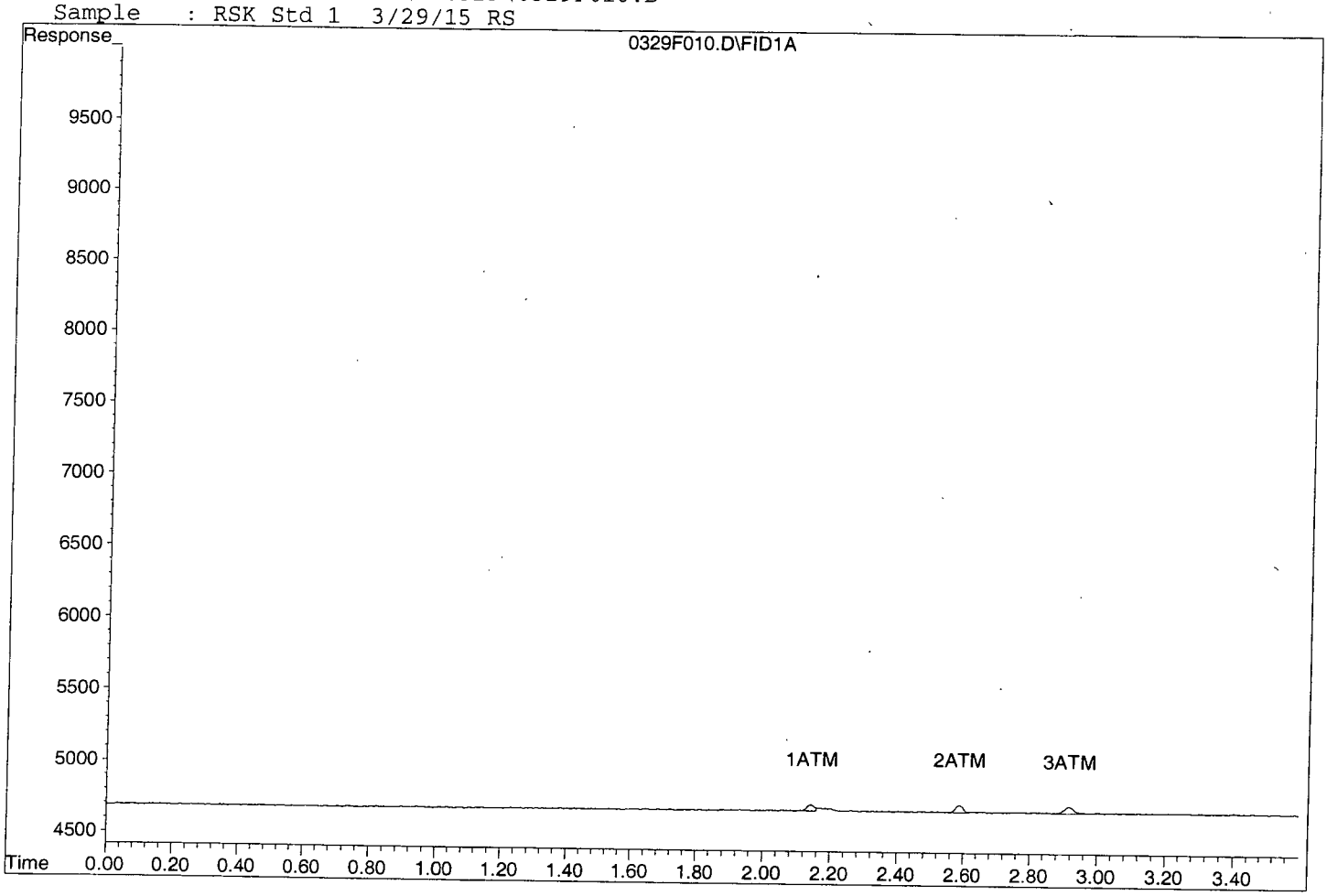
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.14	656	1.735 ppb m
2) ATM Ethane	2.59	968	3.187 ppb
3) ATM Ethene	2.92	1125	3.540 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F010.D
Sample : RSK Std 1 3/29/15 RS

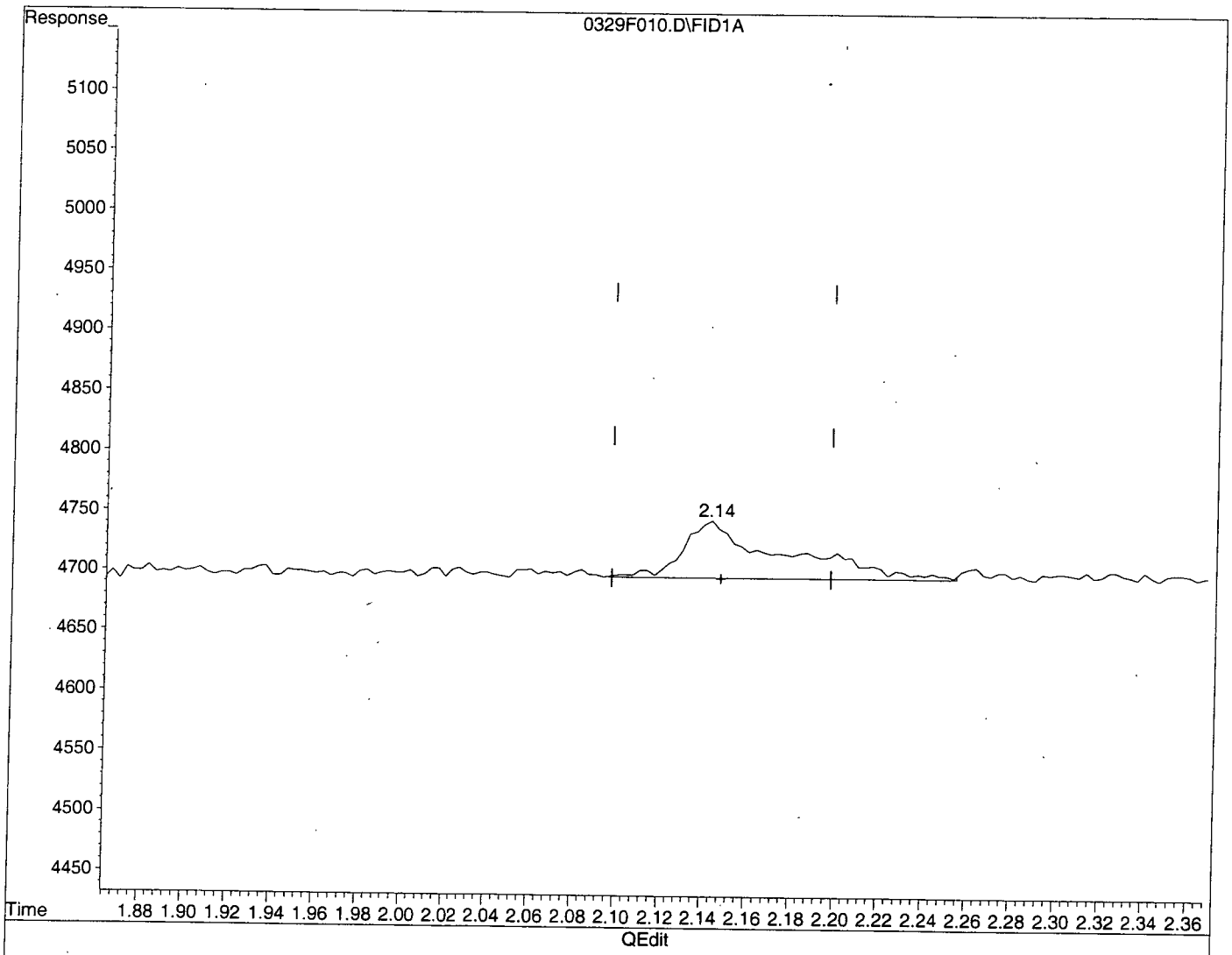


Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F010.D
Acq On : 29 Mar 2015 10:04
Sample : RSK Std 1 3/29/15 RS
Misc : Water
IntFile : autoint1.e
Quant Time: Mar 29 10:08 2015 Quant Results File: RSK175Q.RES

Vial: 10
Operator: SD
Inst : Frodo
Multiplr: 1.00

Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 10:50:10 2015
Response via : Multiple Level Calibration



(1) Methane (ATM)

2.14min 1.589ppb

response 1509

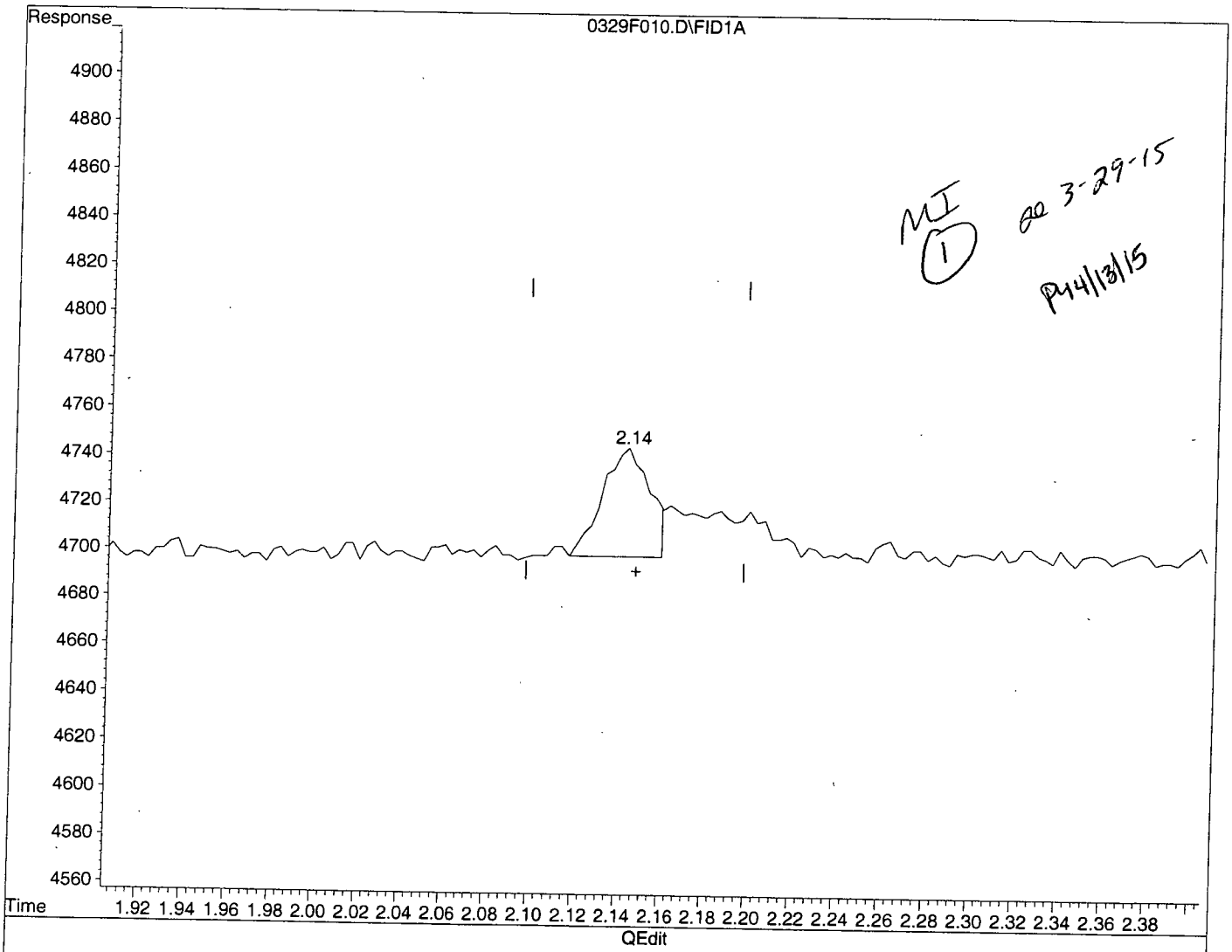
(+) = Expected Retention Time

Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F010.D
Acq On : 29 Mar 2015 10:04
Sample : RSK Std 1 3/29/15 RS
Misc : Water
IntFile : autoint1.e
Quant Time: Mar 29 10:57 2015 Quant Results File: RSK175Q.RES

Vial: 10
Operator: SD
Inst : Frodo
Multiplr: 1.00

Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration



MI (1) 3-29-15

PM 4/13/15

(1) Methane (ATM)

2.14min 1.735ppb m

response 656

(+) = Expected Retention Time

0329F010.D RSK175Q.M Sun Mar 29 11:43:55 2015

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F001.D Vial: 1
Acq On : 29 Mar 2015 08:09 Operator: SD
Sample : RSK Std -2 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:36 2015 Quant Results File: RSK175Q.RES

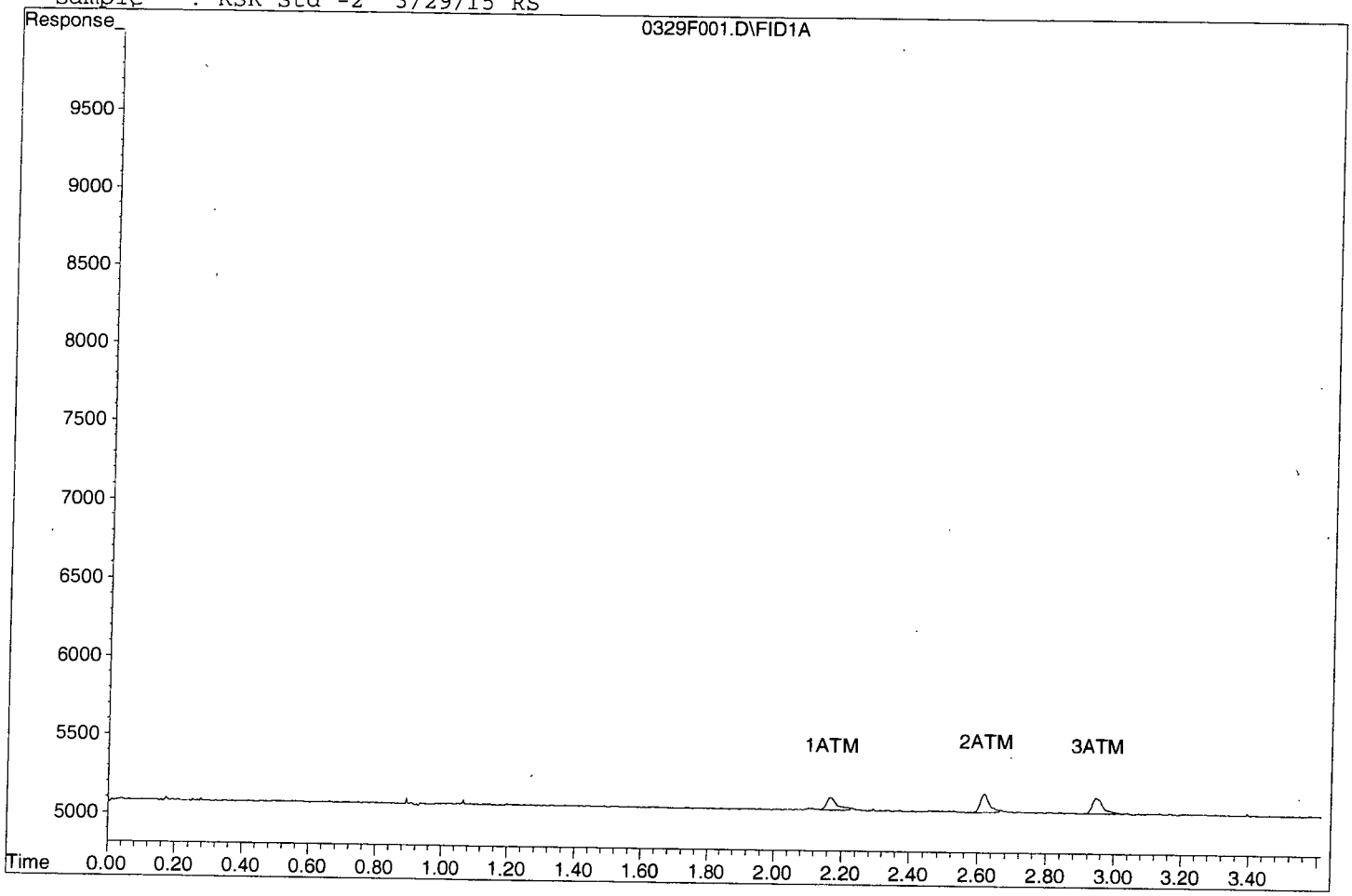
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.17	1692	4.997 ppb
2) ATM Ethane	2.62	2079	7.159 ppb
3) ATM Ethene	2.95	2255	7.357 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F001.D
Sample : RSK Std -2 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F005.D Vial: 5
Acq On : 29 Mar 2015 09:04 Operator: SD
Sample : RSK Std -3 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:31 2015 Quant Results File: RSK175Q.RES

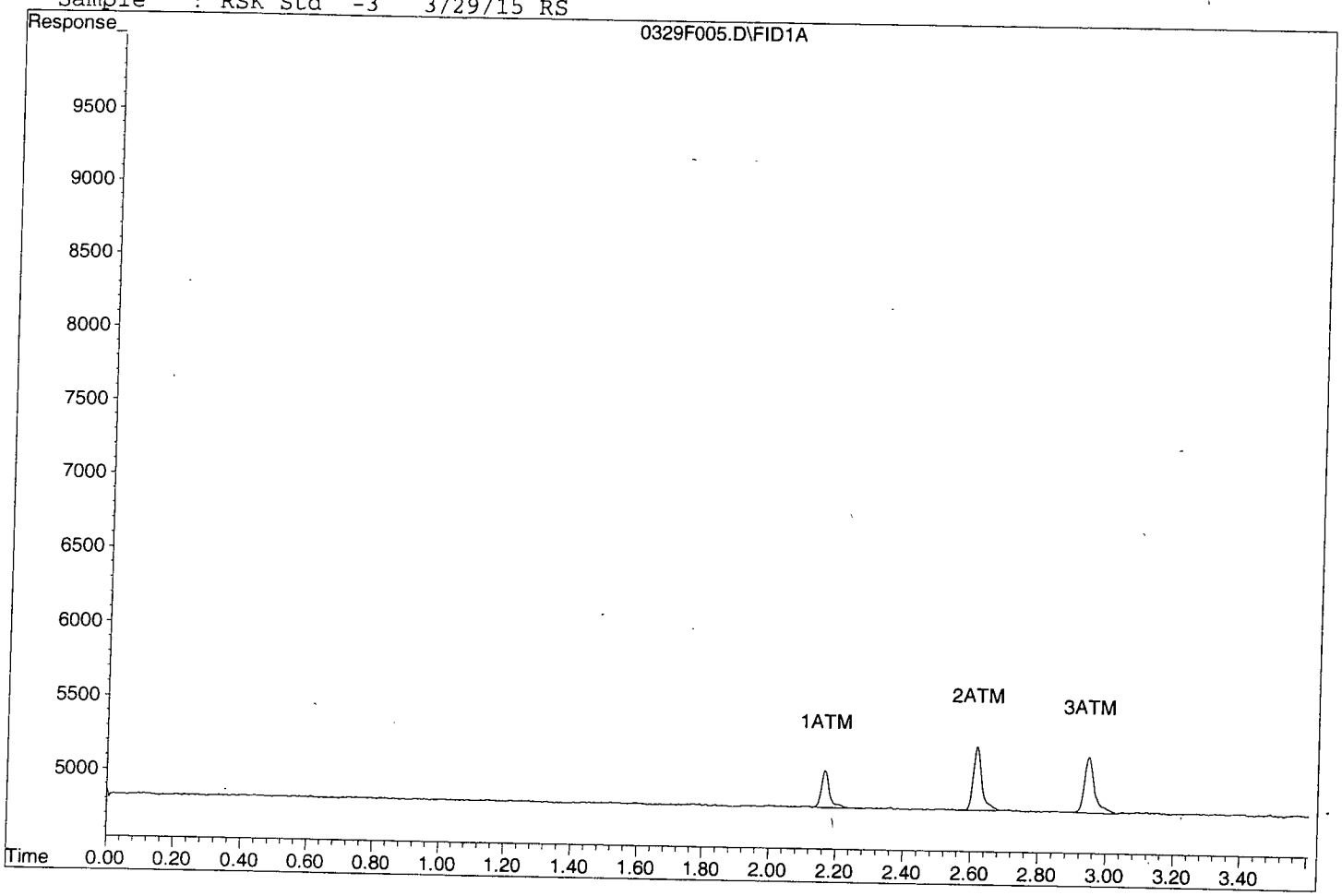
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.17	4339	12.304 ppb
2) ATM Ethane	2.62	7833	26.979 ppb
3) ATM Ethene	2.95	8101	26.692 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F005.D
Sample : RSK Std -3 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F012.D Vial: 12
Acq On : 29 Mar 2015 10:16 Operator: SD
Sample : RSK Std - 4 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:31 2015 Quant Results File: RSK175Q.RES

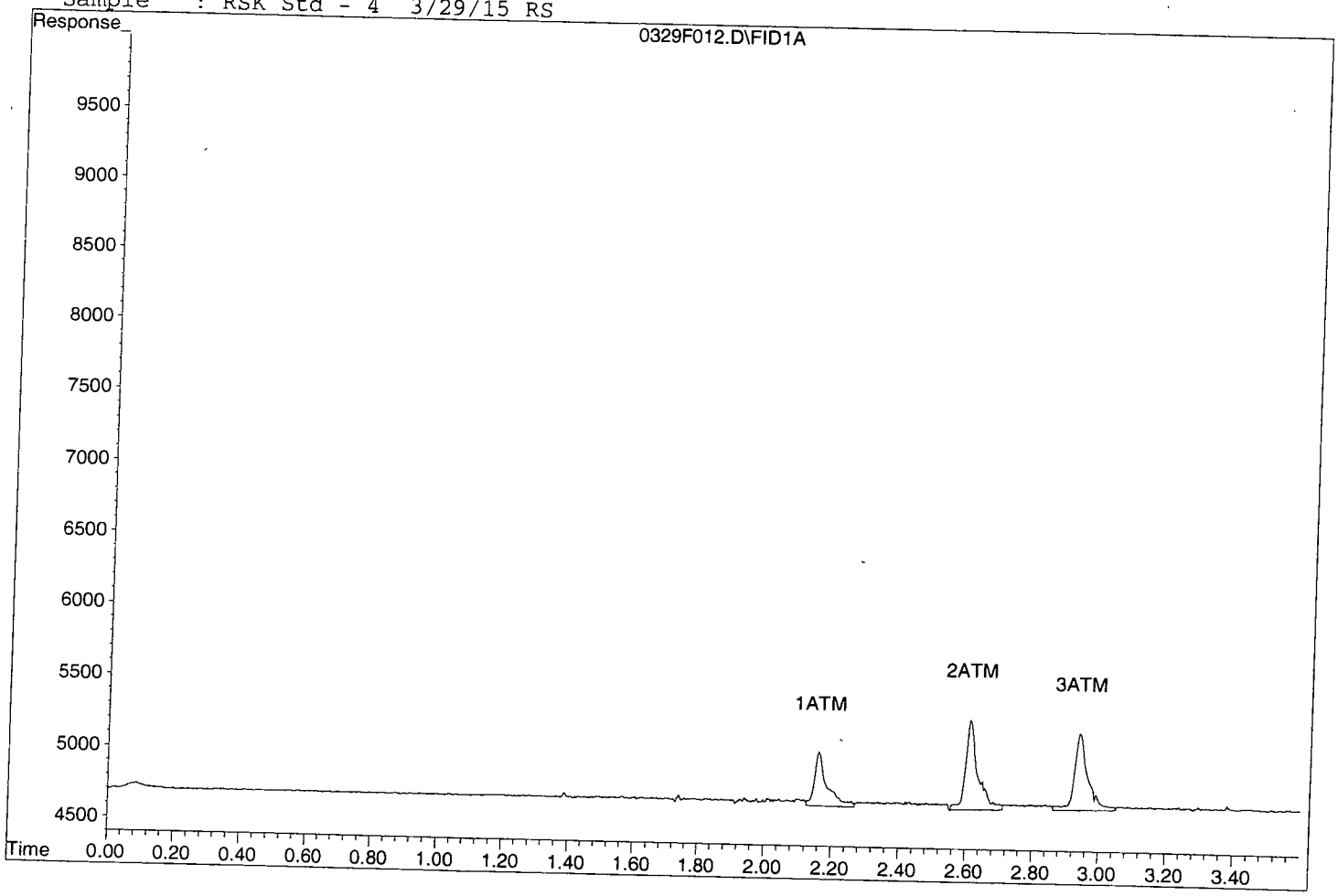
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.16	9905	28.474 ppb
2) ATM Ethane	2.61	16348	56.938 ppb
3) ATM Ethene	2.94	15197	50.416 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F012.D
Sample : RSK Std - 4 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F013.D Vial: 13
Acq On : 29 Mar 2015 10:20 Operator: SD
Sample : RSK Std - 5 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:33 2015 Quant Results File: RSK175Q.RES

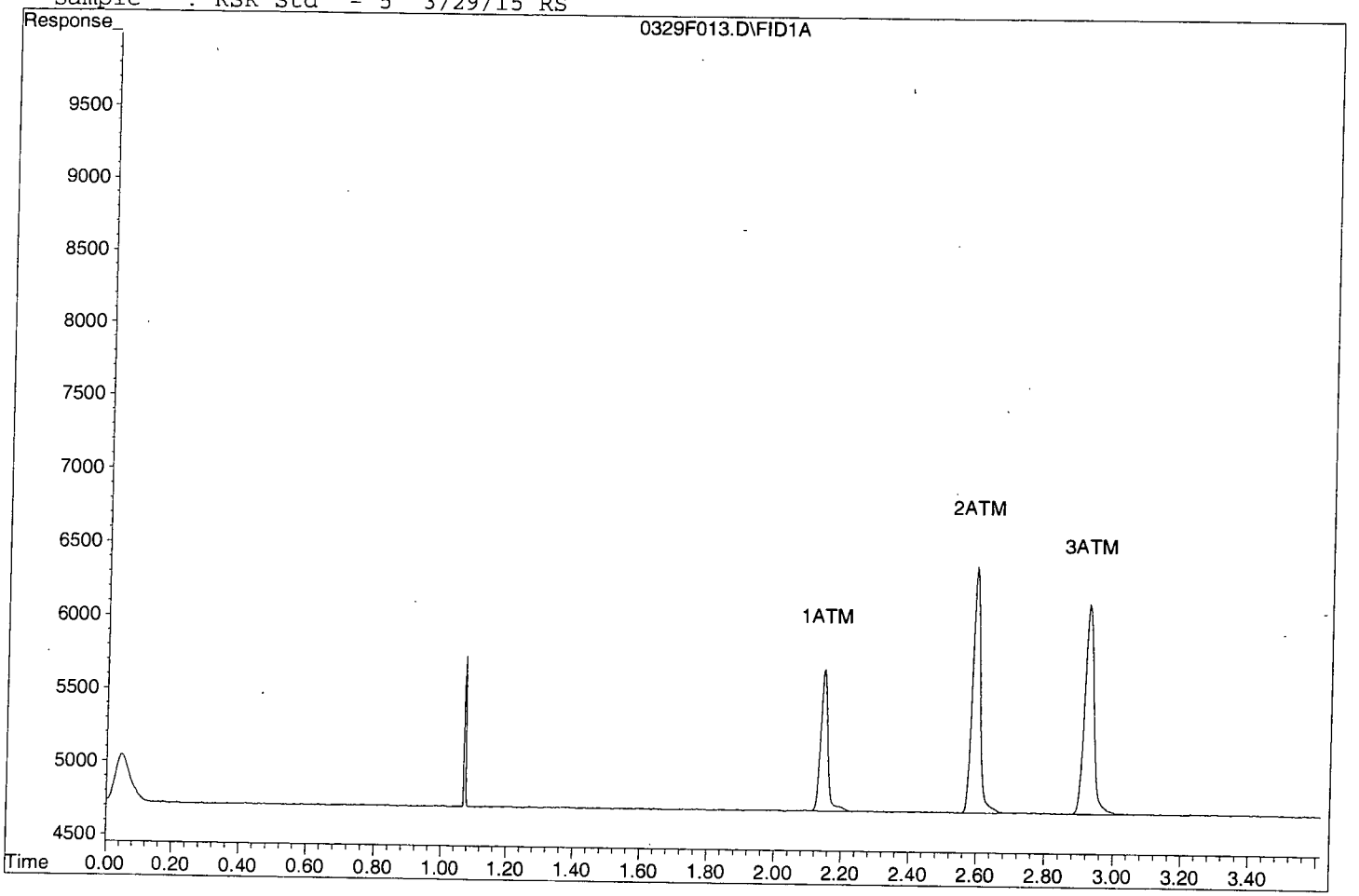
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.15	14757	37.309 ppb
2) ATM Ethane	2.60	27687	82.950 ppb
3) ATM Ethene	2.93	27304	77.476 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F013.D
Sample : RSK Std - 5 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F015.D Vial: 15
Acq On : 29 Mar 2015 10:34 Operator: SD
Sample : RSK Std 6 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:32 2015 Quant Results File: RSK175Q.RES

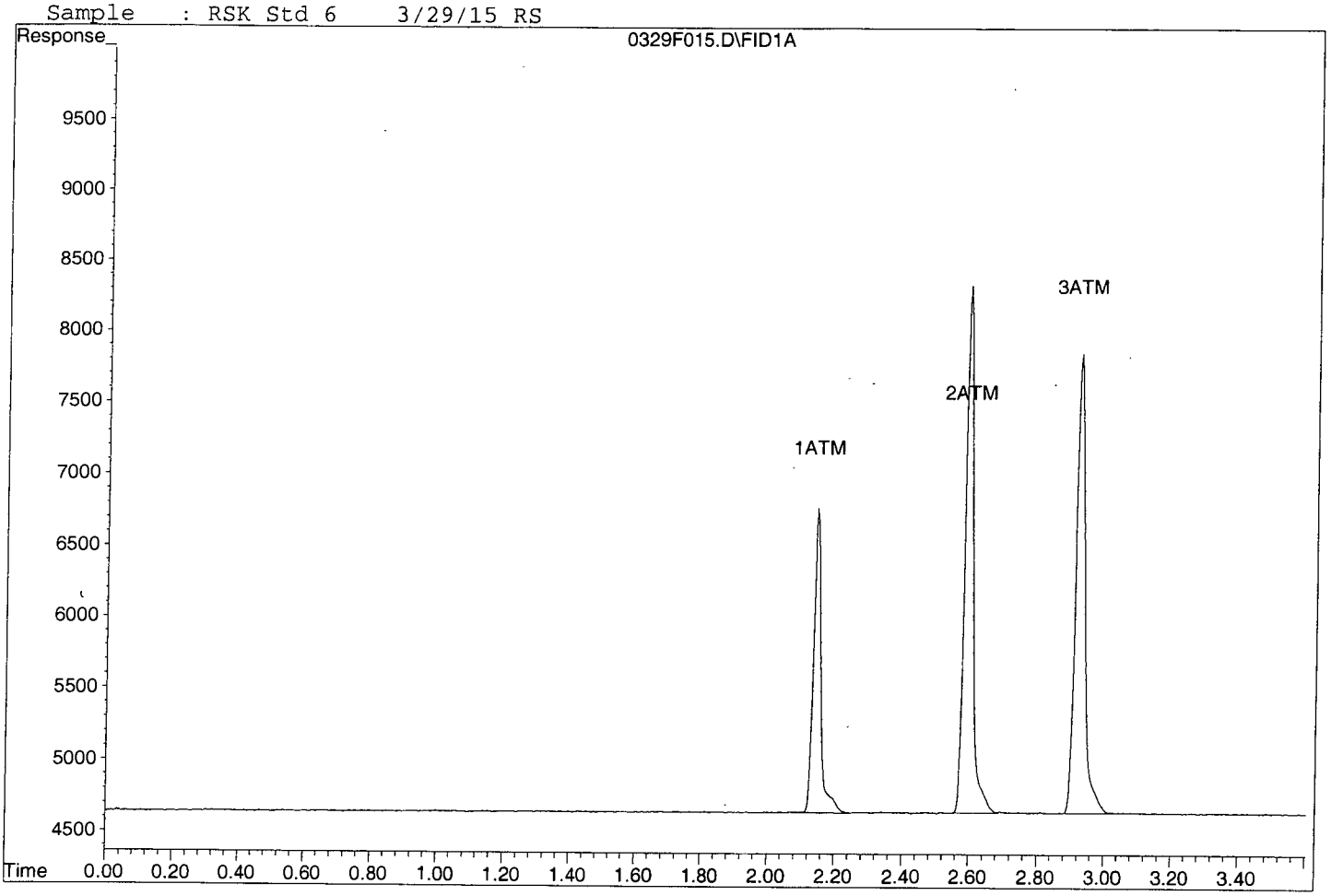
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.15	33981	96.772 ppb
2) ATM Ethane	2.59	63177	217.921 ppb
3) ATM Ethene	2.92	63376	208.092 ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: V:\FRODO\DATA\150329\0329F015.D
Sample : RSK Std 6 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150329\0329F016.D
Acq On : 29 Mar 2015 11:11
Sample : RSK Std - 7 3/29/15 RS
Misc : Water
IntFile : autoint1.e
Quant Time: Mar 29 11:33 2015 Quant Results File: RSK175Q.RES

Vial: 16
Operator: SD
Inst : Frodo
Multiplr: 1.00

Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

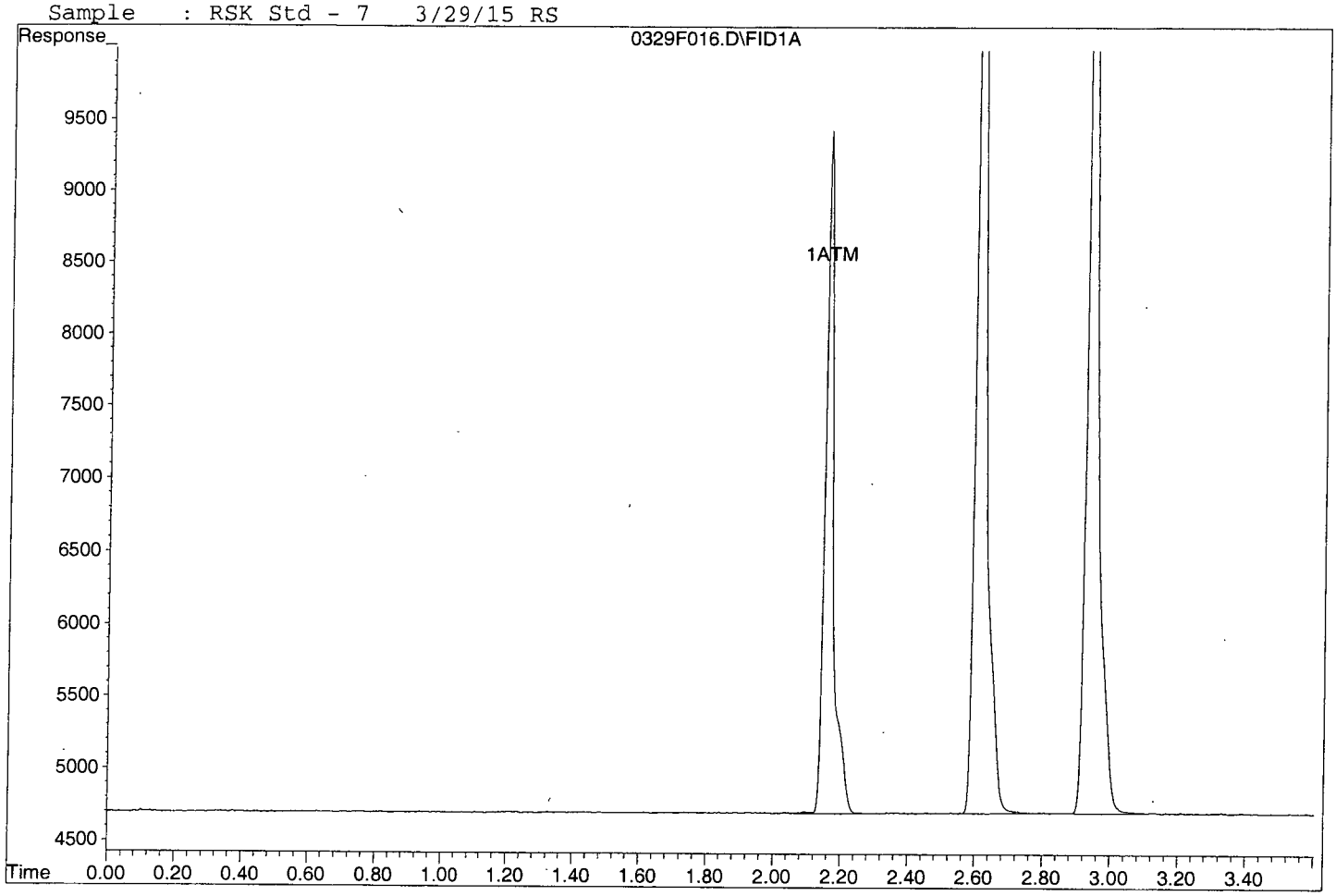
Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.16	82685	235.885 ppb
2) ATM Ethane	2.61	160017	552.898 ppb
3) ATM Ethene	2.94	156995	516.370 ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File: V:\FRODO\DATA\150329\0329F016.D
Sample : RSK Std - 7 3/29/15 RS



Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150402\0402F001.D Vial: 1
Acq On : 2 Apr 2015 07:55 Operator: SD
Sample : RSK STD - 8 04-02-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 2 10:14 2015 Quant Results File: RSK175Q.RES

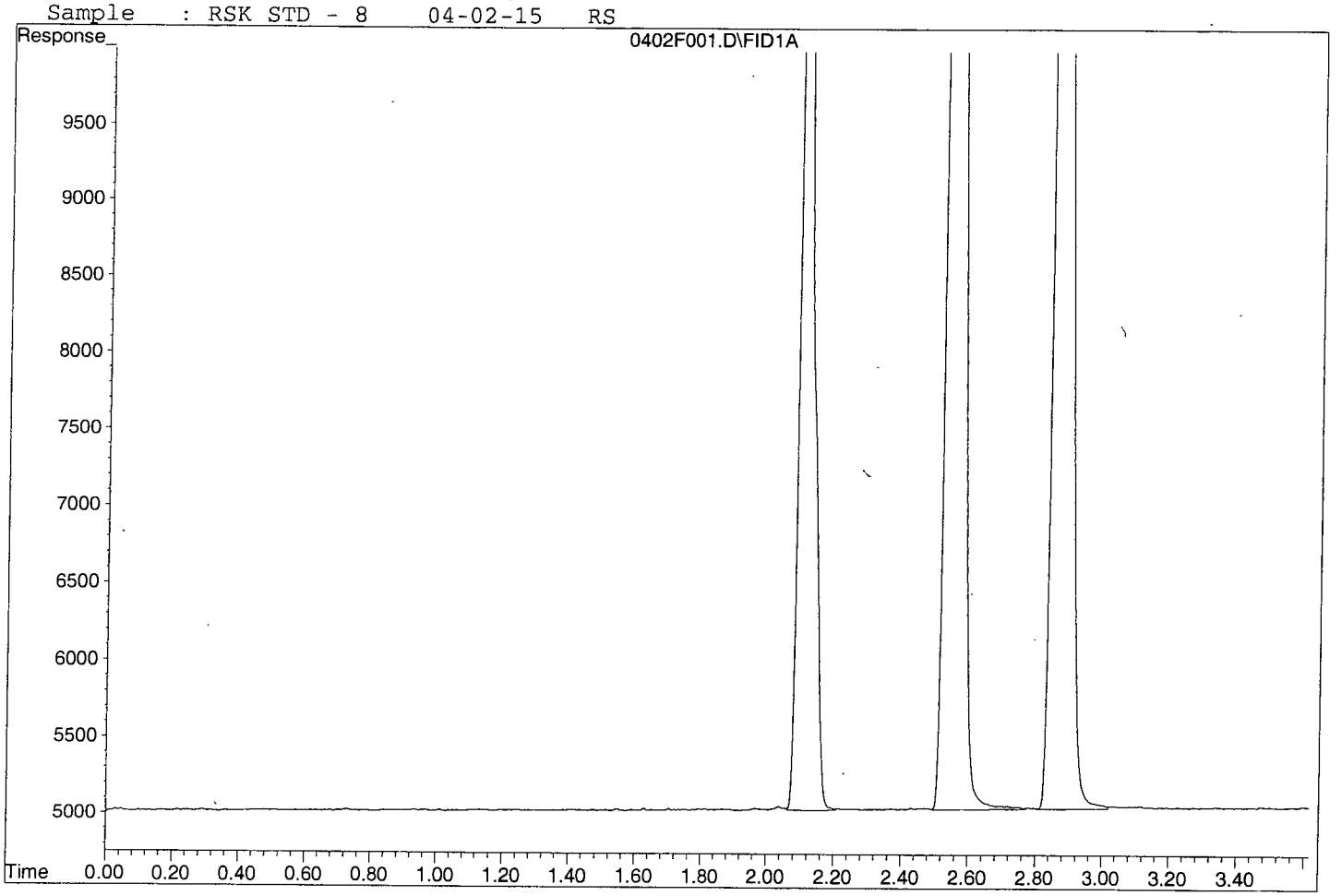
Method : V:\FRODO\DATA\150402\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Thu Apr 02 11:00:03 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) ATM Methane	2.10	240698	719.028	ppb
2) ATM Ethane	2.54	482100	1724.981	ppb
3) ATM Ethene	2.86	466060	1555.247	ppb

Quantitation Report

Data File: V:\FRODO\DATA\150402\0402F001.D
Sample : RSK STD - 8 04-02-15 RS



Form 7

Second Source

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 2 Apr 2015 08:15
Instrument: Frodo
Initial Cal. Date: 04/02/15
Data File: 0402F002.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATM	Methane	331	331	0.04	ATM	
2	ATM	Ethane	284	303	6.5	ATM	
3	ATM	Ethene	303	312	2.8	ATM	
4							
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40							
		Average			3.1		

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150402\0402F002.D Vial: 2
Acq On : 2 Apr 2015 08:15 Operator: SD
Sample : RSK SS - 4 04-02-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 10 17:44 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150402\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Fri Apr 03 10:14:53 2015
Response via : Multiple Level Calibration

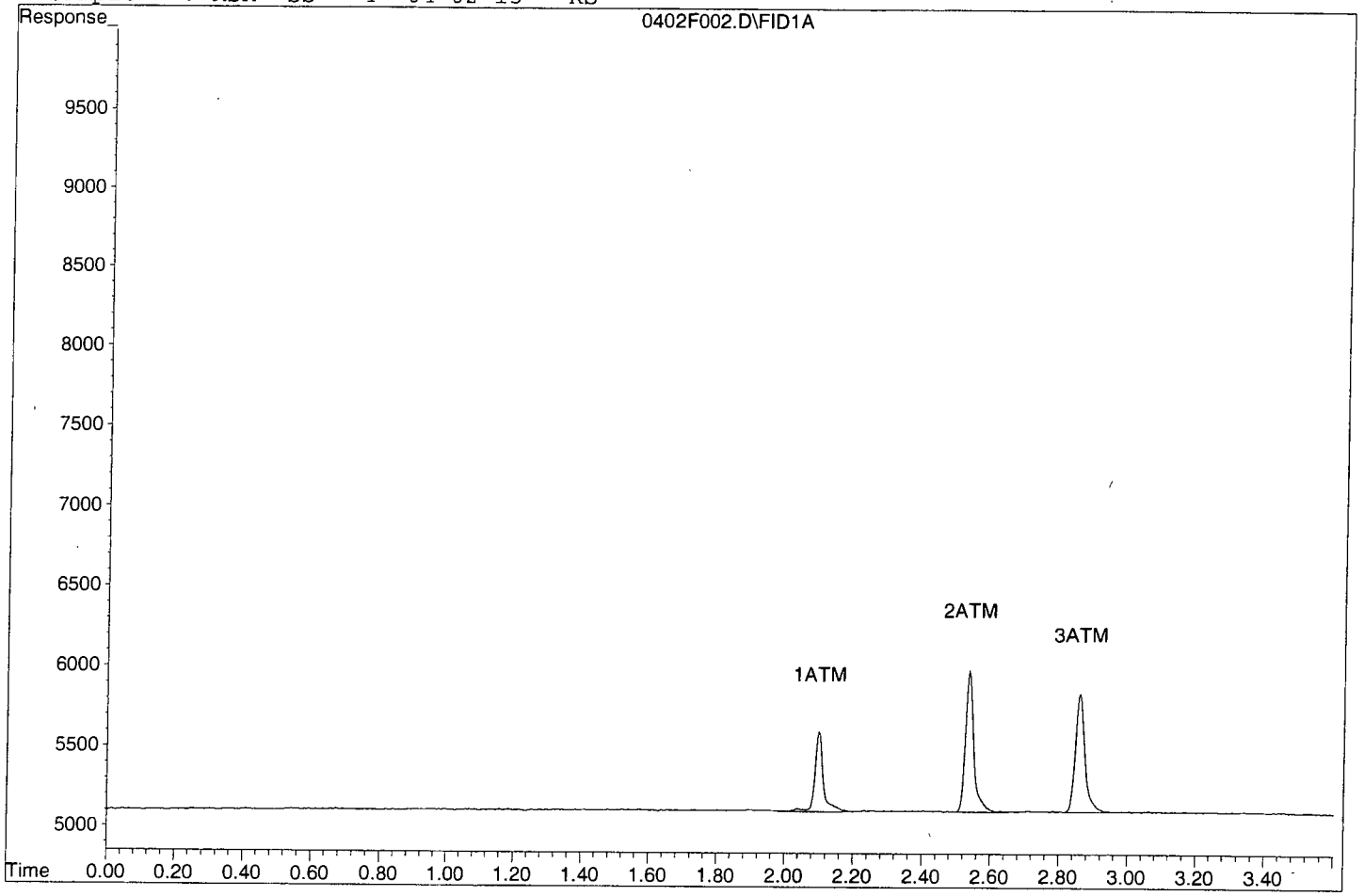
Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.10	8834	26.690 ppb
2) ATM Ethane	2.54	15133	53.264 ppb
3) ATM Ethene	2.86	14529	47.882 ppb

(f)=RT Delta > 1/2 Window (m)=manual int.
0402F002.D 402RSK.M Fri Apr 10 17:45:11 2015

Quantitation Report

Data File: V:\FRODO\DATA\150402\0402F002.D
Sample : RSK SS - 4 04-02-15 RS



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 05/20/15
Instrument: Frodo
Initial Cal. Date: 05/20/15
Data File: 0520F004.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATM	Methane	331	376	14	ATM	
2	ATM	Ethane	284	266	6.5	ATM	
3	ATM	Ethene	303	283	6.8	ATM	
4							
5							
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40							
		Average			9.1		

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150520\0520F004.D Vial: 4
Acq On : 20 May 2015 11:08 Operator: SD
Sample : RSK CCV3 05-20-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 20 11:13 2015 Quant Results File: 402RSK.RES

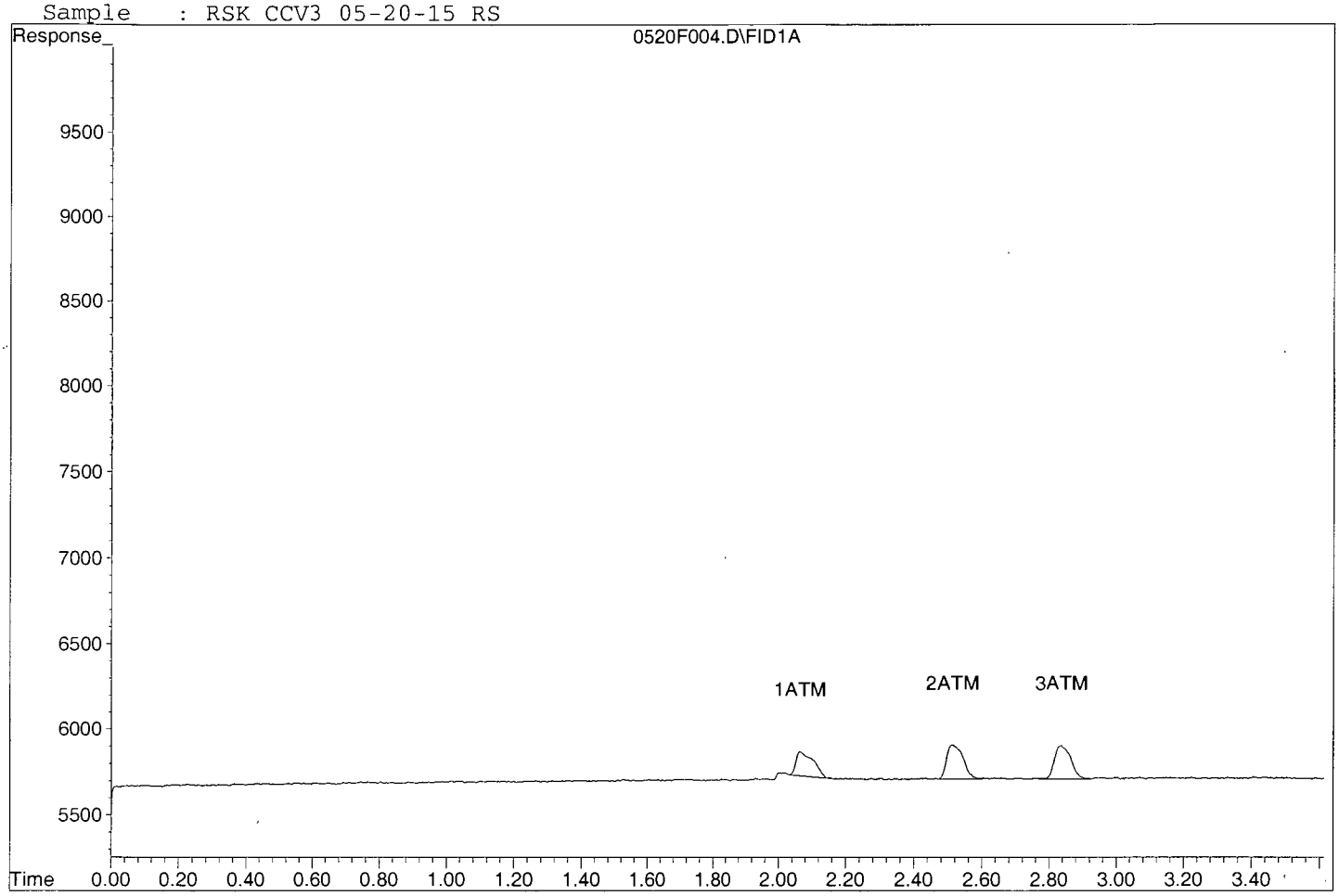
Method : V:\FRODO\DATA\150520\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed May 20 10:29:31 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.07	5017	15.158 ppb
2) ATM Ethane	2.51	6643	23.381 ppb
3) ATM Ethene	2.84	6591	21.722 ppb

Quantitation Report

Data File: V:\FRODO\DATA\150520\0520F004.D
Sample : RSK CCV3 05-20-15 RS



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: Water

SDG No:
Date Analyzed: 05/20/15
Instrument: Frodo
Initial Cal. Date: 05/20/15
Data File: 0520F020.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATM	Methane	331	398	20	ATM	
2	ATM	Ethane	284	351	24	ATM	
3	ATM	Ethene	303	357	18	ATM	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
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28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			20.7		

Quantitation Report (Not Reviewed)

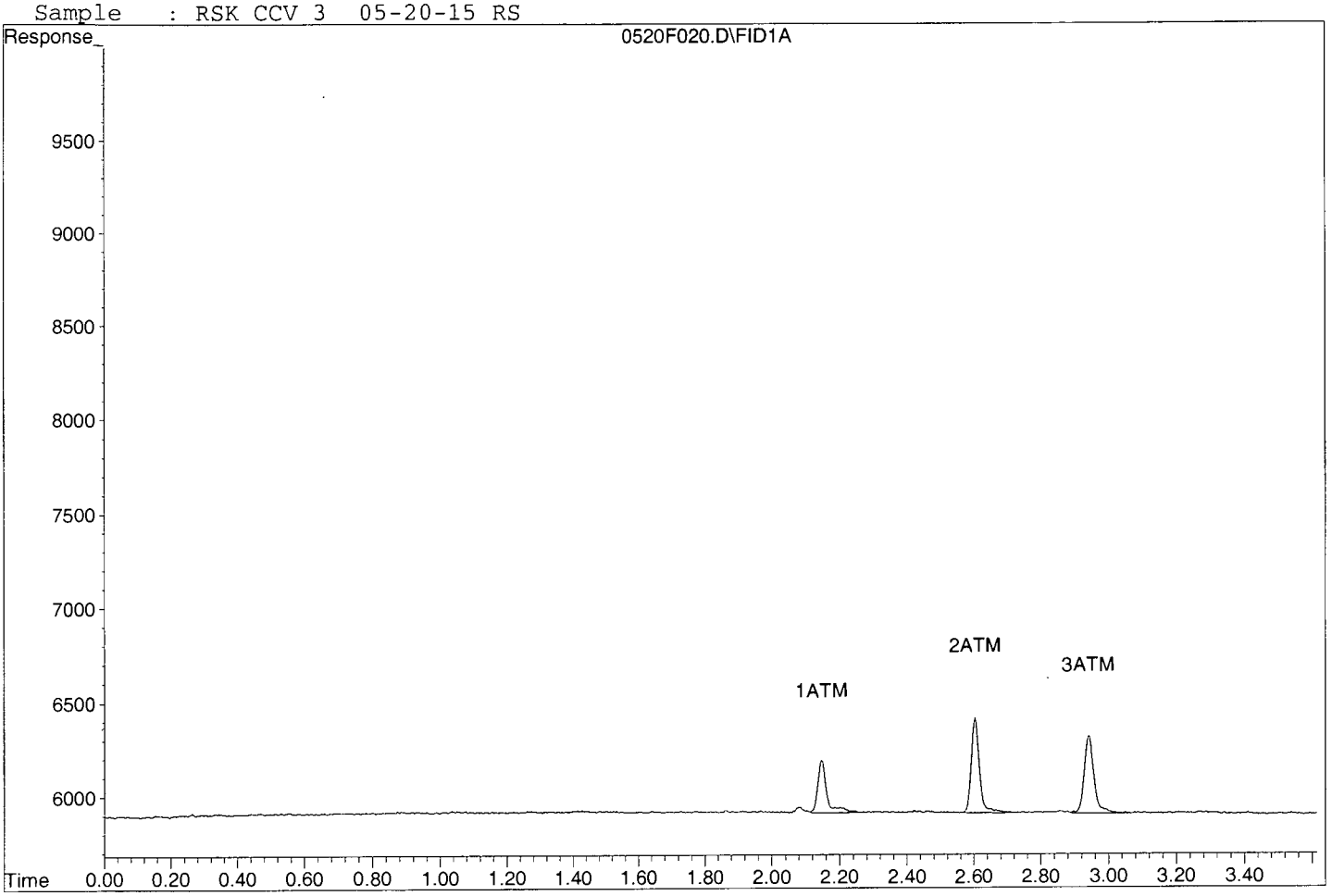
Data File : V:\FRODO\DATA\150520\0520F020.D Vial: 20
Acq On : 20 May 2015 18:07 Operator: SD
Sample : RSK CCV 3 05-20-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 20 18:12 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150520\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed May 20 18:12:22 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.15	5306	16.031 ppb
2) ATM Ethane	2.60	8783	30.914 ppb
3) ATM Ethene	2.94	8316	27.407 ppb

Data File: V:\FRODO\DATA\150520\0520F020.D
Sample : RSK CCV 3 05-20-15 RS



RSK-175
Raw Data

APPL, INC.

Method Blank

RSK 175

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150520W-16287 - 197488**
Batch ID: #RSK-150520A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	ETHANE	0.85 U	1.7	0.85	0.51	ug/L	05/20/15	05/20/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	05/20/15	05/20/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	05/20/15	05/20/15

Quant Method: 402RSK.M
Run #: 0520F006
Instrument: Frodo
Sequence: 150520
Initials: RSA

GC SC-Blank-REG MDLs
Printed: 05/29/15 11:58:19 AM

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150520\0520F006.D Vial: 6
Acq On : 20 May 2015 11:32 Operator: SD
Sample : 150520A BLK-1 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 20 11:38 2015 Quant Results File: 402RSK.RES

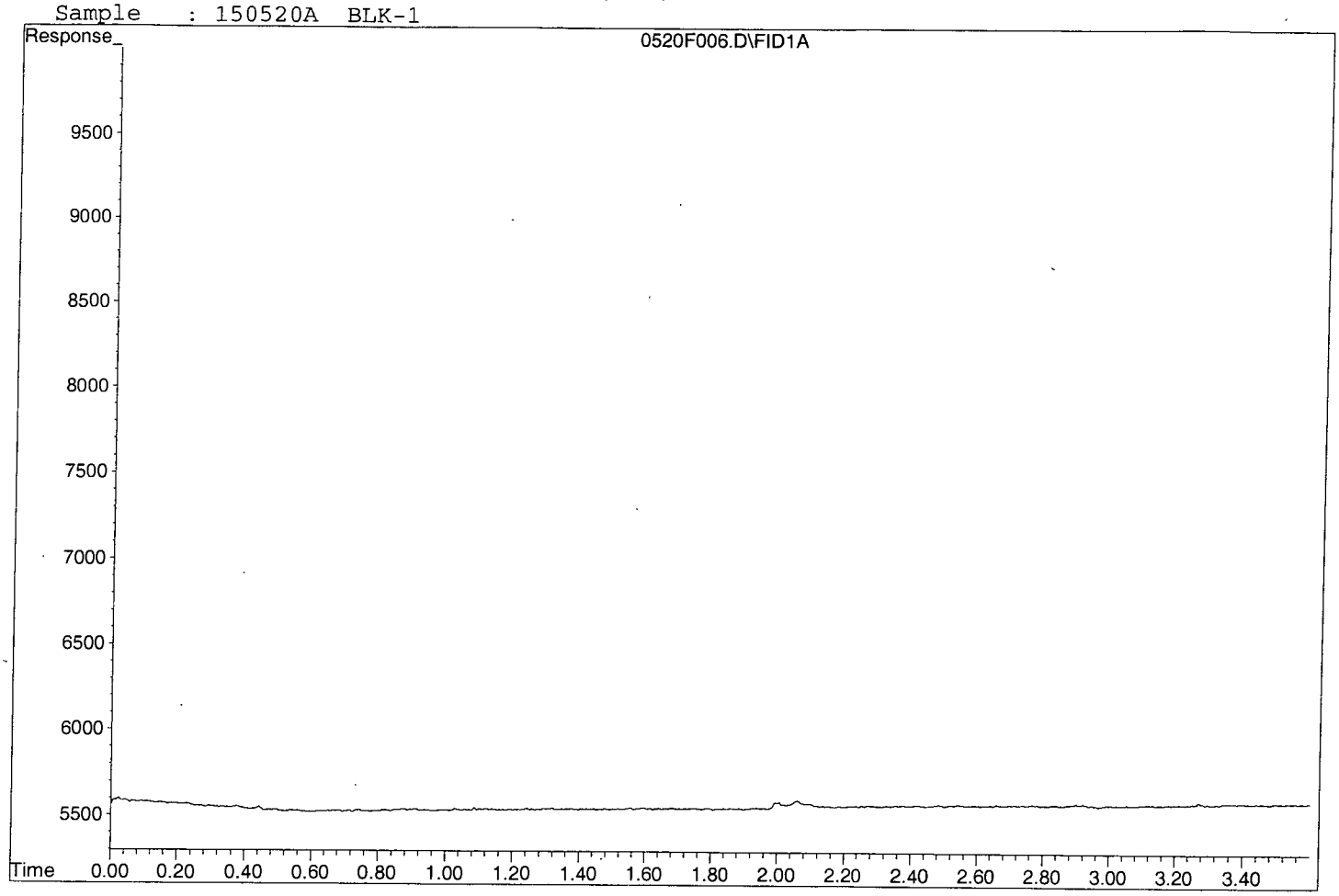
Method : V:\FRODO\DATA\150520\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed May 20 10:29:31 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units

Target Compounds

Data File: V:\FRODO\DATA\150520\0520F006.D
Sample : 150520A BLK-1



Laboratory Control Spike Recovery

RSK 175

APPL ID: **150520W-16287 LCS - 197488**
Batch ID: #RSK-150520A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
ETHANE	25.0	21.6	86.4	70-130
ETHENE	23.3	19.3	82.8	70-130
METHANE	13.3	15.6	117	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	05/20/15
Analysis Date :	05/20/15
Instrument :	Frodo
Run :	0520F005
Initials :	SD

Printed: 06/02/15 3:43:22 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150520\0520F005.D Vial: 5
Acq On : 20 May 2015 11:15 Operator: SD
Sample : 150520A LCS-3 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 20 11:23 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150520\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed May 20 10:29:31 2015
Response via : Multiple Level Calibration

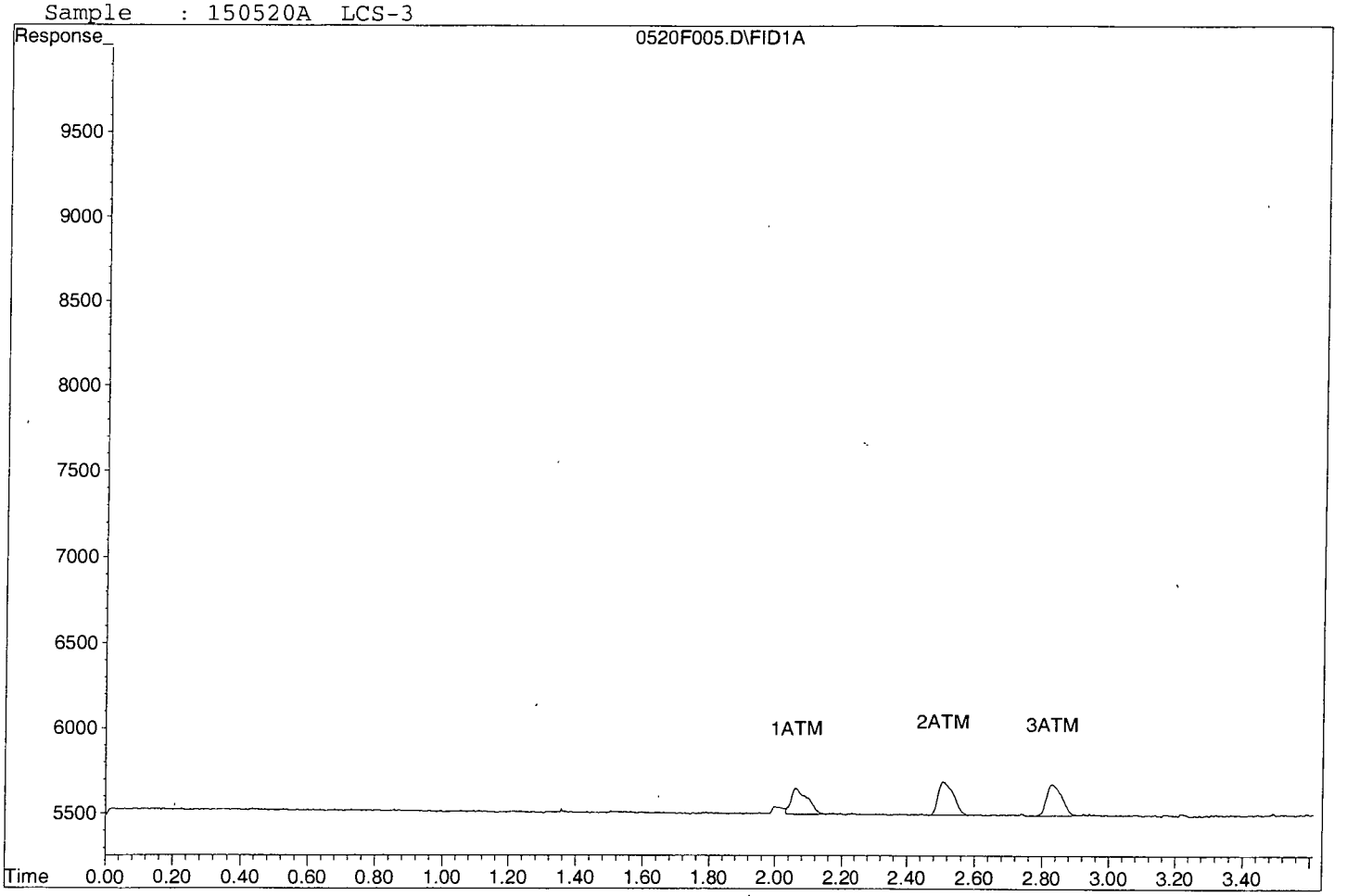
Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.06	5177	15.640 ppb
2) ATM Ethane	2.51	6124	21.553 ppb
3) ATM Ethene	2.83	5844	19.260 ppb

Algorithm @ 5.26.15

$\frac{5177}{331}(1.00) = 15.64$ ✓

Data File: V:\FRODO\DATA\150520\0520F005.D
Sample : 150520A LCS-3



Injection Log

Directory: V:\FRODO\DATA\150520\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	4	0520F004.D	1	RSK CCV3 05-20-15 RS	Water	20 May 2015 11:08
2	5	0520F005.D	1	150520A LCS-3	Water	20 May 2015 11:15
3	6	0520F006.D	1	150520A BLK-1	Water	20 May 2015 11:32
4	13	0520F013.D	1	AZ16403W03	Water	20 May 2015 12:06
5	20	0520F020.D	1	RSK CCV 3 05-20-15 RS	Water	20 May 2015 18:07

Primary Source Stock Standard 10,000ppmV **Expires 7-8-2017**

RSK Gas Mix (Scott Specialty Gas) Cat.# T216-48, Lot # 164PLU4SPC95L-34437, Manufacturer Exp Date 7-8-2017 RS 3/29/15

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

Intermediate Calibration Stock Standard 100ppmV 3/29/15 **Expires 4/29/15** RS 3/29/15

Prepared in a 1 L Tedlar bag. Add 990mL Helium and 10mL of 164PLU4SPC05L-34437 standard.

RSK Calibration Curve **Vial expiration date 4/29/14** RS 3/29/15

Analye	Conc Std 1A (ug/L)	Conc Std 1 (ug/L)	Conc Std 2 (ug/L)	Conc Std 3 (ug/L)	Conc Std 4 (ug/L)	Conc Std 5 (ug/L)	Conc Std 6 (ug/L)	Conc Std 7 (ug/L)
Methane (MW 16.04)	0.90	1.80	5.10	13.33	26.70	53.40	106.80	320.40
Ethane (MW 30.07)	1.70	3.40	9.50	25.00	50.00	100.00	200.00	600.00
Ethene (MW 28.05)	1.60	3.20	8.90	23.30	46.60	93.20	186.40	559.20
Stock Source	Intermediate Calib Std 3/29/15	Intermediate Calib Std 3/29/16	Intermediate Calib Std 3/29/17	Intermediate Calib Std 3/29/18	Intermediate Calib Std 3/29/19	Intermediate Calib Std 3/29/20	Primary Source Std #164PLU4SPC05L-34439	Primary Source Std #164PLU4SPC05L-34440
Stock Conc (ppmv)	100 ppmV	100 ppmV	100 ppmV	100 ppmV	100 ppmV	0 100 ppmV	10,000 ppmV	10,000 ppmV
Stock Aliquot (mL)	0.135 mL	0.270 mL	0.760 mL	2.0 mL	4.0 mL	8.0 mL	0.160 mL	0.480 mL
Final Volume P&T Water	10 mL	10 mL	10 mL	10 mL	10 mL	10 mL	10 mL	10 mL

Second Source Stock Standard 10,000ppmV APPL extended Exp Date: 9/29/15 (comparrison to primary source on 3/29/15)

RSK Gas Mix (Scott Specialty Gas) Cat.# 0104E40028`4, Lot # 248PLU2SPC03L-31312, Manufacturer Exp Date 9-6-12 RS 3/29/15

1% Gas Concentration Moles = 10,000ppmV Methane, Ethane, Ethene

Intermediate Second Source Standard 100ppmV 3/29/15 **Expires 7/29/15** RS 3/29/15

Prepared in a 1 L Tedlar bag. Add 990mL Helium and 10mL of 248PLU2SPC03L-31312 standard.

Second Source - Level 3, 3/29/15 **Expires 04/29/15** RS 3/29/15

2mL of Intermediate cal stock 3/29/15 into 10mL P&T water

final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

Analye	Conc Std 8 (ug/L)
Methane (MW 16.04)	801.00
Ethane (MW 30.07)	1500.00
Ethene (MW 28.05)	1398.00
Stock Source	Primary Source Std #164PLU4SPC05L-34440
Stock Conc (ppmv)	10,000 ppmV
Stock Aliquot (mL)	1.20 mL
Final Volume P&T Water	10 mL

Added higher ICAL point to curve. RS 04/02/15

Second Source - Level 4 3/29/15 **Expires 05/02/15** RS 04/02/15

4mL of Intermediate cal stock 1/26/15A into 10mL P&T water

final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

Intermediate Calibration Stock Standard 100ppmV 05/12/15 **Expires 6/12/15** RS 05/12/15
Prepared in a 1 L Tedlar bag. Add 990mL Helium and 10mL of 164PLU4SPC05L-34437 standard.

CCV3 5/12/15 Expires 06/12/15 RS 05/12/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

CCV4 5/12/15 Expires 06/12/15 RS 05/12/15
4mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

LCS-3 150512A RS 05/12/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

AZ15731W05 MS/MSD RS 05/12/15
1mL of Intermediate cal stock 5/12/15 into 10mL Sample AZ15731W05
final conc:6.65ppb Methane, 12.5ppb Ethane, and 11.7ppb Ethene

CCV3 5/20/15 Expires 06/20/15 RS 05/20/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

LCS-3 150520A RS 05/20/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

AZ16287W03 MS/MSD (level2) RS 05/20/15
1mL of Intermediate cal stock 5/12/15 into 10mL Sample AZ15731W05
final conc:6.65ppb Methane, 12.5ppb Ethane, and 11.7ppb Ethene

CCV4 5/26/15 Expires 06/12/15 RS 05/26/15
4mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

LCS-3 150526A RS 05/26/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

CCV4 06/04/15 Expires 06/12/15 RS 06/04/15
4mL of Intermediate cal stock 5/12/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

CCV3 06/04/15
2mL of Intermediate cal stock 5/12/15 into 10mL P&T water RS 06/04/15
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

LCS-4 150604A
4mL of Intermediate cal stock 5/12/15 into 10mL P&T water RS 06/04/15
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

Injection Log

Directory: V:\FRODO\DATA\150329\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0329F001.D	1	RSK Std -2 3/29/15 RS	Water	29 Mar 2015 08:09
2	5	0329F005.D	1	RSK Std -3 3/29/15 RS	Water	29 Mar 2015 09:04
3	9	0329F009.D	1	RSK Std - 1A 3/29/15 RS	Water	29 Mar 2015 09:45
4	10	0329F010.D	1	RSK Std 1 3/29/15 RS	Water	29 Mar 2015 10:04
5	12	0329F012.D	1	RSK Std - 4 3/29/15 RS	Water	29 Mar 2015 10:16
6	13	0329F013.D	1	RSK Std - 5 3/29/15 RS	Water	29 Mar 2015 10:20
7	15	0329F015.D	1	RSK Std 6 3/29/15 RS	Water	29 Mar 2015 10:34
8	16	0329F016.D	1	RSK Std - 7 3/29/15 RS	Water	29 Mar 2015 11:11
9	1	0402F001.D	1	RSK STD - 8 04-02-15 RS	Water	2 Apr 2015 07:55
10	2	0402F002.D	1	RSK SS - 4 04-02-15 RS	Water	2 Apr 2015 08:15
11	4	0520F004.D	1	RSK CCV3 05-20-15 RS	Water	20 May 2015 11:08
12	5	0520F005.D	1	150520A LCS-3	Water	20 May 2015 11:15
13	6	0520F006.D	1	150520A BLK-1	Water	20 May 2015 11:32
14	13	0520F013.D	1	AZ16403W03	Water	20 May 2015 12:06
15	20	0520F020.D	1	RSK CCV 3 05-20-15 RS	Water	20 May 2015 18:07

EPA METHOD 6850
Perchlorate
LC/MS

APPL, INC.

EPA METHOD 6850
Perchlorate
LC/MS

QC Summary

APPL, INC.

Method Blank
Perchlorate

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150518W-16287 - 198054**
Batch ID: #6850-150518A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.400 U	0.60	0.400	0.200	ug/L	05/18/15	05/23/15

Quant Method: QTLMFL2
Run #: T523_021.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/17/15 10:51:56 AM

Method Blank
PERCHLORATE EPA 6850 - SOIL

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150518S-16137 - 198067**
Batch ID: #6850SM-150518A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.0040 U	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method: QTLMFL2
Run #: T523_049.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/17/15 10:46:01 AM

Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150518W-16287 LCS - 198054**
Batch ID: #6850-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
PERCHLORATE	0.600	0.567	94.5	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/23/15
Instrument :	AGIL_6460
Run :	T523_019.d
Initials :	RP

Printed: 06/18/15 11:15:13 AM
APPL Standard LCS

Laboratory Control Spike Recovery
PERCHLORATE EPA 6850 - SOIL

APPL ID: **150518S-16137 LCS - 198067**
Batch ID: #6850SM-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/Kg	SPK Result mg/Kg	SPK % Recovery	Recovery Limits
PERCHLORATE	0.00594	0.00556	93.6	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/24/15
Instrument :	AGIL_6460
Run :	T523_047.d
Initials :	RP

Printed: 06/17/15 10:45:51 AM
APPL Standard LCS

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/24/15

Matrix: SOIL Instrument: AGIL_6460

Blank ID: 150518A-BLK Time Analyzed: 0628

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150518A-LCS	Lab Control Spike	T523_047.d	05/24/15 0550
150518A-BLK	Blank	T523_049.d	05/24/15 0628
AZ16400	S67-TP001-0203	T523_065.d	05/24/15 1126
AZ16401	S67-TP002-0001	T523_066.d	05/24/15 1144
AZ16402	S67-TP002-0203	T523_067.d	05/24/15 1203

Comments: Batch: #6850SM-150518A

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: AGIL_6460

Blank ID: 150518A-BLK Time Analyzed: 2146

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150518A-LCS	Lab Control Spike	T523_019.d	05/23/15 2109
150518A-BLK	Blank	T523_021.d	05/23/15 2146
AZ16403	S67-MW015-051415	T523_042.d	05/24/15 0417

Comments: Batch: #6850-150518A

Interferrence Check Sample

Perchlorate EPA 6850 Soil

APPL ID: 150518S-16137 ICS - 198067
Batch ID: #6850SM-150518A

APPL Inc.
908 N. Temperance Ave.
Clovis, CA 93711

Compound Name	Spike Level mg/Kg	Spk Result mg/Kg	SPK% Recovery	Recovery Limits
Perchlorate	0.00571	0.00599	104.9%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	05/18/15
Analysis Date:	05/24/15
Instrument:	AGIL_6560
Run:	T523_048.D
Initials:	RP

Interferrence Check Sample

Perchlorate EPA 6850 Water

APPL ID: 150518W-16287 ICS-198054
Batch ID: #6850-150518A

APPL Inc.
908 N. Temperance Ave.
Clovis, CA 93711

Compound Name	Spike Level ug/L	Spk Result ug/L	SPK% Recovery	Recovery Limits
Perchlorate	0.600	0.585	97.5%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	05/18/15
Analysis Date:	05/23/15
Instrument:	AGIL_6560
Run:	T523_020.D
Initials:	RP

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. **SDG No.**

Lab File ID (Standard): T312_003-_008.d

Instrument ID: Agilent 6460 Triple Quad LC/MS

	PER_IS			
	12_HOUR_STD AVERAGE	11032021		
	UPPER LIMIT RESPONSE	16548032		
	LOWER LIMIT RESPONSE	5516011		
Data File ID:	Sample ID:	Analysis Date and Time	IS AREA COUNT #	IS R.T. #
T312_003.d	PERCHLORATE 0.0002 ug/ml 11/11/14	3/12/15 17:52	8337058	13.732
T312_004.d	PERCHLORATE 0.0004 ug/ml 11/11/14	3/12/15 18:11	10671196	13.783
T312_005.d	PERCHLORATE 0.001 ug/ml 11/11/14	3/12/15 18:29	10651968	13.803
T312_006.d	PERCHLORATE 0.002 ug/ml 11/11/14	3/12/15 18:48	13529952	13.803
T312_007.d	PERCHLORATE 0.005 ug/ml 11/11/14	3/12/15 19:07	11028880	13.874
T312_008.d	PERCHLORATE 0.010 ug/ml 08/27/14	3/12/15 19:25	11973072	13.874
T312_010.d	PER_SS 0.0004 ug/ml 11/11/14	3/12/15 20:02	12977621	13.946
T312_011.d	PER_SS 0.002 ug/ml 11/11/14	3/12/15 20:21	13747369	13.976
T312_013.d	PER_CCV_1 0.0004 ug/ml 11/11/14	3/12/15 20:58	12323795	14.109
T312_014.d	PER_CCV_1 0.002 ug/ml 11/11/14	3/12/15 21:17	13576634	14.139

AREA UPPER LIMIT = +50% of internal standard average
AREA LOWER LIMIT = -50% of internal standard average
Column used to flag values outside QC limits
* Values outside of QC limits

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. **SDG No.** **76447**

Lab File ID (Standard): T523_003.d

Instrument ID: Agilent 6460 Triple Quad LC/MS

	PER_IS			
	12_HOUR_STD AVERAGE	8764619		
	UPPER LIMIT RESPONSE	13146929		
	LOWER LIMIT RESPONSE	4382310		
Data File ID:	Sample ID:	Analysis Date and Time	IS AREA COUNT #	IS R.T. #
T523_002.d	PER_CCV 0.0004 ug/ml 05/07/15	5/23/15 15:38	7841423	12.957
T523_003.d	PER_CCV 0.002 ug/ml 05/07/15	5/23/15 15:57	8764619	13.13
T523_016.d	PER_CCV 0.0004 ug/ml 05/07/15	5/23/15 20:13	5972858	13.294
T523_017.d	PER_CCV 0.002 ug/ml 05/07/15	5/23/15 20:32	6513163	13.416
T523_019.d	150518WA_LCS-1 1052.6 DF 05/18/15	5/23/15 21:09	4862068	13.528
T523_020.d	150518W_ICSA 1052.6 DF 05/18/15	5/23/15 21:28	4707314	12.489
T523_021.d	150518WBLKA 1052.6 DF 05/18/15	5/23/15 21:46	5254586	13.609
T523_030.d	PER_CCV 0.0004 ug/ml 05/07/15	5/24/15 0:34	5763820	13.783
T523_031.d	PER_CCV 0.002 ug/ml 05/07/15	5/24/15 0:53	6154538	13.864
T523_042.d	AZ16403_W04 1052.6 DF 05/18/15	5/24/15 4:17	4676252	13.599
T523_044.d	PER_CCV 0.0004 ug/ml 05/07/15	5/24/15 4:55	6579582	14.037
T523_045.d	PER_CCV 0.002 ug/ml 05/07/15	5/24/15 5:13	6755219	14.2
T523_047.d	150518SA_LCS-1 10422.1 DF 05/18/15	5/24/15 5:50	5484178	14.262
T523_048.d	150518S_ICSA 10025.1 DF 05/18/15	5/24/15 6:09	4353871	13.273
T523_049.d	150518SBLKA 10319.9 DF 05/18/15	5/24/15 6:28	5786126	14.251
T523_057.d	PER_CCV 0.0004 ug/ml 05/07/15	5/24/15 8:57	6631309	13.762
T523_058.d	PER_CCV 0.002 ug/ml 05/07/15	5/24/15 9:15	7264937	13.823
T523_065.d	AZ16400_S01 7914.5 DF 05/18/15	5/24/15 11:26	5382646	13.12
T523_066.d	AZ16401_S01 8097.2 DF 05/18/15	5/24/15 11:44	5465072	13.212
T523_067.d	AZ16402_S01 7914.5 DF 05/18/15	5/24/15 12:03	5311084	13.018
T523_069.d	PER_CCV 0.0004 ug/ml 05/07/15	5/24/15 13:00	4418362	13.406
T523_070.d	PER_CCV 0.002 ug/ml 05/07/15	5/24/15 13:18	5503588	13.497

AREA UPPER LIMIT = +50% of internal standard average
AREA LOWER LIMIT = -50% of internal standard average
Column used to flag values outside QC limits
* Values outside of QC limits

Perchlorate LC/MS Ion Ratio Report

acceptable ratio is between 2.3 and 3.8 (DoD Perchlorate Handbook, 2006)

Data File Path : D:\masshunter\data\150312
Instrument Name : TQ (Agilent 6460 Triple Quad LC/MS)
Method File : 6460_ESI_PER_N_NEWER_K'_COLUMN.m
Operator : BA

Date Aquired: 03/12/15 17:15 Vial Number: NA
Sample Name: PER_IS_50:50 0.005 ug/ml 11/11/14 Data File ID: T312_001.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.014	113760	3.1
2)	Perchlorate_85	14.071	36914	

Date Aquired: 03/12/15 17:33 Vial Number: NA
Sample Name: PERCHLORATE 0.0001 ug/ml 11/11/14 Data File ID: T312_002.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.504	237168	3.1
2)	Perchlorate_85	13.541	77486	

Date Aquired: 03/12/15 17:52 Vial Number: NA
Sample Name: PERCHLORATE 0.0002 ug/ml 11/11/14 Data File ID: T312_003.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.789	446712	3.1
2)	Perchlorate_85	13.704	144754	

Date Aquired: 03/12/15 18:11 Vial Number: NA
Sample Name: PERCHLORATE 0.0004 ug/ml 11/11/14 Data File ID: T312_004.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.8	1023403	3.0
2)	Perchlorate_85	13.827	337305	

Date Aquired: 03/12/15 18:29 Vial Number: NA
Sample Name: PERCHLORATE 0.001 ug/ml 11/11/14 Data File ID: T312_005.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.82	2483393	3.2
2)	Perchlorate_85	13.827	781617	

Date Aquired: 03/12/15 18:48 Vial Number: NA
Sample Name: PERCHLORATE 0.002 ug/ml 11/11/14 Data File ID: T312_006.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.83	6351752	3.3
2)	Perchlorate_85	13.817	1920912	

Date Aquired: 03/12/15 19:07 Vial Number: NA
Sample Name: PERCHLORATE 0.005 ug/ml 11/11/14 Data File ID: T312_007.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.861	14499255	3.4
2)	Perchlorate_85	13.878	4209044	

Date Aquired: 03/12/15 19:25 Vial Number: NA
Sample Name: PERCHLORATE 0.010 ug/ml 08/27/14 Data File ID: T312_008.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.881	34223790	3.4
2)	Perchlorate_85	13.878	9985270	

Date Aquired: 03/12/15 19:44 Vial Number: NA
Sample Name: PER_IS_50:50 0.005 ug/ml 11/11/14 Data File ID: T312_009.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.912	249406	2.9
2)	Perchlorate_85	13.949	85978	

Date Aquired: 03/12/15 20:02 Vial Number: NA
Sample Name: PER_SS 0.0004 ug/ml 11/11/14 Data File ID: T312_010.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.942	1472839	3.3
2)	Perchlorate_85	13.959	440675	

Date Aquired: 03/12/15 20:21 Vial Number: NA
Sample Name: PER_SS 0.002 ug/ml 11/11/14 Data File ID: T312_011.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.014	7468678	3.4
2)	Perchlorate_85	14	2222387	

Date Aquired: 03/12/15 20:40 Vial Number: NA
Sample Name: PER_IS_50:50 0.005 ug/ml 11/11/14 Data File ID: T312_012.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.657	10916	2.0
2)	Perchlorate_85	13.776	5521	

Date Aquired: 03/12/15 20:58 Vial Number: NA
Sample Name: PER_CCV_1 0.0004 ug/ml 11/11/14 Data File ID: T312_013.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.105	1267031	3.1
2)	Perchlorate_85	14.143	410558	

Date Aquired: 03/12/15 21:17 Vial Number: NA
Sample Name: PER_CCV_1 0.002 ug/ml 11/11/14 Data File ID: T312_014.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.146	6907110	3.3
2)	Perchlorate_85	14.122	2093567	

Date Aquired: 03/12/15 21:36 Vial Number: NA
Sample Name: PER_IS_50:50 0.005 ug/ml 11/11/14 Data File ID: T312_015.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.36	64783	9.6
2)	Perchlorate_85	13.715	6730	

Perchlorate LC/MS Ion Ratio Report

acceptable ratio is between 2.3 and 3.8 (DoD Perchlorate Handbook, 2006)

Data File Path : D:\masshunter\data\150523
Instrument Name : TQ (Agilent 6460 Triple Quad LC/MS)
Method File : 6460_ESI_PER_N_NEWER_K'_COLUMN.m
Operator : BA

Date Aquired: 05/23/15 15:20 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_001.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.117	71005	1.9
2)	Perchlorate_85	13.134	37385	

Date Aquired: 05/23/15 15:38 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_002.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.974	857023	2.7
2)	Perchlorate_85	12.981	313246	

Date Aquired: 05/23/15 15:57 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_003.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.127	4097326	3.3
2)	Perchlorate_85	13.134	1252418	

Date Aquired: 05/23/15 16:15 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_004.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.147	50856	2.5
2)	Perchlorate_85	12.981	20452	

Date Aquired: 05/23/15 16:37 Vial Number: NA
Sample Name: 150521SA_LCS-1 10422.1 DF 05/21/15 Data File ID: T523_005.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.147	595644	2.8
2)	Perchlorate_85	13.175	215686	

Date Aquired: 05/23/15 17:05 Vial Number: NA
Sample Name: 150521S_ICSA 10526.3 DF 05/21/15 Data File ID: T523_006.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	11.986	838693	2.4
2)	Perchlorate_85	12.013	355640	

Date Aquired: 05/23/15 17:24 Vial Number: NA
Sample Name: 150521SBLKA 10121.5 DF 05/21/15 Data File ID: T523_007.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.097	1068	0.5
2)	Perchlorate_85	12.92	2287	

Date Aquired: 05/23/15 17:43 Vial Number: NA
Sample Name: AZ16473_S04 8558.0 DF 05/21/15 Data File ID: T523_008.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.025	1130631	3.1
2)	Perchlorate_85	13.001	367229	

Date Aquired: 05/23/15 18:03 Vial Number: NA
Sample Name: AZ16474_S04 7683.4 DF 05/21/15 Data File ID: T523_009.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.985	1586560	3.0
2)	Perchlorate_85	13.012	530666	

Date Aquired: 05/23/15 18:21 Vial Number: NA
Sample Name: 150521SA_LCS-1 10422.1 DF 05/21/15 Data File ID: T523_010.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.148	862434	2.9
2)	Perchlorate_85	13.144	299560	

Date Aquired: 05/23/15 18:40 Vial Number: NA
Sample Name: 150521S_ICSA 10526.3 DF 05/21/15 Data File ID: T523_011.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.108	808424	2.4
2)	Perchlorate_85	12.105	331775	

Date Aquired: 05/23/15 18:59 Vial Number: NA
Sample Name: 150521SBLKA 10121.5 DF 05/21/15 Data File ID: T523_012.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.832	2790	3.5
2)	Perchlorate_85	12.889	806	

Date Aquired: 05/23/15 19:17 Vial Number: NA
Sample Name: AZ16473_S04 8558.0 DF 05/21/15 Data File ID: T523_013.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.158	1100562	2.8
2)	Perchlorate_85	13.165	389757	

Date Aquired: 05/23/15 19:36 Vial Number: NA
Sample Name: AZ16474_S04 7683.4 DF 05/21/15 Data File ID: T523_014.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.168	1578905	3.0
2)	Perchlorate_85	13.165	518303	

Date Aquired: 05/23/15 19:55 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_015.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.311	61433	14.6
2)	Perchlorate_85	12.961	4219	

Date Aquired: 05/23/15 20:13 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_016.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.3	652656	3.0
2)	Perchlorate_85	13.256	216334	

Date Aquired: 05/23/15 20:32 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_017.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.423	3082637	3.2
2)	Perchlorate_85	13.399	975975	

Date Aquired: 05/23/15 20:50 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_018.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.412	64516	11.2
2)	Perchlorate_85	12.889	5773	

Date Aquired: 05/23/15 21:09 Vial Number: NA
Sample Name: 150518WA_LCS-1 1052.6 DF 05/18/15 Data File ID: T523_019.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.555	665139	3.3
2)	Perchlorate_85	13.541	200728	

Date Aquired: 05/23/15 21:28 Vial Number: NA
Sample Name: 150518W_ICSA 1052.6 DF 05/18/15 Data File ID: T523_020.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.516	664547	2.2
2)	Perchlorate_85	12.502	307706	

Date Aquired: 05/23/15 21:46 Vial Number: NA
Sample Name: 150518WBLKA 1052.6 DF 05/18/15 Data File ID: T523_021.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.015	2031	0.2
2)	Perchlorate_85	12.849	8841	

Date Aquired: 05/23/15 22:05 Vial Number: NA
Sample Name: AZ16287_W10 1052.6 DF 05/18/15 Data File ID: T523_022.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.249	67686	24.4
2)	Perchlorate_85	12.686	2778	

Date Aquired: 05/23/15 22:24 Vial Number: NA
Sample Name: AZ16287_W10_MS-1 1052.6 DF 05/18/15 Data File ID: T523_023.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.311	790539	3.0
2)	Perchlorate_85	13.317	260884	

Date Aquired: 05/23/15 22:42 Vial Number: NA
Sample Name: AZ16287_W10_MSD-1 1052.6 DF 05/18/15 Data File ID: T523_024.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.311	944951	3.0
2)	Perchlorate_85	13.317	310703	

Date Aquired: 05/23/15 23:01 Vial Number: NA
Sample Name: AZ16288_W04 1052.6 DF 05/18/15 Data File ID: T523_025.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.689	205032312	3.0
2)	Perchlorate_85	12.686	67665361	

Date Aquired: 05/23/15 23:20 Vial Number: NA
Sample Name: AZ16289_W04 1052.6 DF 05/18/15 Data File ID: T523_026.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.832	838542	2.9
2)	Perchlorate_85	12.788	286601	

Date Aquired: 05/23/15 23:38 Vial Number: NA
Sample Name: AZ16290_W04 1052.6 DF 05/18/15 Data File ID: T523_027.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.251	212854131	3.1
2)	Perchlorate_85	12.258	69367602	

Date Aquired: 05/23/15 23:57 Vial Number: NA
Sample Name: AZ16334_W04 1052.6 DF 05/18/15 Data File ID: T523_028.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.821	906074091	2.5
2)	Perchlorate_85	12.808	368463307	

Date Aquired: 05/24/15 0:15 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_029.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.718	72196	13.9
2)	Perchlorate_85	12.951	5194	

Date Aquired: 05/24/15 0:34 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_030.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.8	666150	3.1
2)	Perchlorate_85	13.817	216626	

Date Aquired: 05/24/15 0:53 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_031.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.902	2871773	3.3
2)	Perchlorate_85	13.898	880296	

Date Aquired: 05/24/15 1:11 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_032.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.932	65339	59.8
2)	Perchlorate_85	12.91	1092	

Date Aquired: 05/24/15 1:30 Vial Number: NA
Sample Name: AZ16335_W04 1052.6 DF 05/18/15 Data File ID: T523_033.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.229	532183921	2.7
2)	Perchlorate_85	13.215	200150581	

Date Aquired: 05/24/15 1:48 Vial Number: NA
Sample Name: AZ16336_W04 1052.6 DF 05/18/15 Data File ID: T523_034.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.219	502148432	2.7
2)	Perchlorate_85	13.236	186208076	

Date Aquired: 05/24/15 2:07 Vial Number: NA
Sample Name: AZ16337_W04 1052.6 DF 05/18/15 Data File ID: T523_035.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.903	88240244	3.2
2)	Perchlorate_85	12.9	27251061	

Date Aquired: 05/24/15 2:26 Vial Number: NA
Sample Name: AZ16338_W04 1052.6 DF 05/18/15 Data File ID: T523_036.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.832	725861229	2.5
2)	Perchlorate_85	12.828	285902242	

Date Aquired: 05/24/15 2:44 Vial Number: NA
Sample Name: AZ16339_W04 1052.6 DF 05/18/15 Data File ID: T523_037.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.351	133242727	3.1
2)	Perchlorate_85	13.348	42847535	

Date Aquired: 05/24/15 3:03 Vial Number: NA
Sample Name: AZ16340_W04 1052.6 DF 05/18/15 Data File ID: T523_038.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.606	749200	2.9
2)	Perchlorate_85	13.623	258064	

Date Aquired: 05/24/15 3:22 Vial Number: NA
Sample Name: AZ16341_W04 1052.6 DF 05/18/15 Data File ID: T523_039.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.893	436781196	2.8
2)	Perchlorate_85	12.9	158150361	

Date Aquired: 05/24/15 3:40 Vial Number: NA
Sample Name: AZ16342_W04 1052.6 DF 05/18/15 Data File ID: T523_040.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.382	137592520	3.1
2)	Perchlorate_85	13.389	44336749	

Date Aquired: 05/24/15 3:59 Vial Number: NA
Sample Name: AZ16343_W01 1052.6 DF 05/18/15 Data File ID: T523_041.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.126	79506	35.6
2)	Perchlorate_85	12.961	2233	

Date Aquired: 05/24/15 4:17 Vial Number: NA
Sample Name: AZ16403_W04 1052.6 DF 05/18/15 Data File ID: T523_042.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.626	6933729	3.3
2)	Perchlorate_85	13.613	2075967	

Date Aquired: 05/24/15 4:36 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_043.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.126	79123	26.2
2)	Perchlorate_85	12.94	3023	

Date Aquired: 05/24/15 4:55 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_044.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.024	691196	2.8
2)	Perchlorate_85	14.031	247754	

Date Aquired: 05/24/15 5:13 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_045.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.217	3171297	3.3
2)	Perchlorate_85	14.194	970030	

Date Aquired: 05/24/15 5:32 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_046.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.207	77653	13.8
2)	Perchlorate_85	12.971	5620	

Date Aquired: 05/24/15 5:50 Vial Number: NA
Sample Name: 150518SA_LCS-1 10422.1 DF 05/18/15 Data File ID: T523_047.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.248	742644	2.9
2)	Perchlorate_85	14.245	256573	

Date Aquired: 05/24/15 6:09 Vial Number: NA
Sample Name: 150518S_ICSA 10025.1 DF 05/18/15 Data File ID: T523_048.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.26	660527	2.2
2)	Perchlorate_85	13.246	295223	

Date Aquired: 05/24/15 6:28 Vial Number: NA
Sample Name: 150518SBLKA 10319.9 DF 05/18/15 Data File ID: T523_049.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.995	7316	1.3
2)	Perchlorate_85	13.052	5610	

Date Aquired: 05/24/15 6:46 Vial Number: NA
Sample Name: AZ16137-S01 9153.3 DF 05/18/15 Data File ID: T523_050.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.832	7187	0.5
2)	Perchlorate_85	12.614	15819	

Date Aquired: 05/24/15 7:05 Vial Number: NA
Sample Name: AZ16137_S01_MS-1 8920.6 DF 05/18/15 Data File ID: T523_051.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.126	798462	3.1
2)	Perchlorate_85	14.132	261182	

Date Aquired: 05/24/15 7:24 Vial Number: NA
Sample Name: AZ16137_S01_MSD-1 8996.9 DF 05/18/15 Data File ID: T523_052.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	14.064	809460	3.1
2)	Perchlorate_85	14.071	260591	

Date Aquired: 05/24/15 7:42 Vial Number: NA
Sample Name: AZ16138_S01 9074.4 DF 05/18/15 Data File ID: T523_053.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.964	8625	5.2
2)	Perchlorate_85	12.961	1657	

Date Aquired: 05/24/15 8:01 Vial Number: NA
Sample Name: AZ16139_S01 8628.1 DF 05/18/15 Data File ID: T523_054.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.035	5371	0.9
2)	Perchlorate_85	13.022	5841	

Date Aquired: 05/24/15 8:19 Vial Number: NA
Sample Name: AZ16140_S01 9153.3 DF 05/18/15 Data File ID: T523_055.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.993	3337205	3.3
2)	Perchlorate_85	13.99	1007106	

Date Aquired: 05/24/15 8:38 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_056.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.932	66732	15.4
2)	Perchlorate_85	12.889	4323	

Date Aquired: 05/24/15 8:57 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_057.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.769	758603	3.0
2)	Perchlorate_85	13.786	254673	

Date Aquired: 05/24/15 9:15 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_058.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.82	3406090	3.3
2)	Perchlorate_85	13.806	1040769	

Date Aquired: 05/24/15 9:34 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_059.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.749	65303	27.8
2)	Perchlorate_85	12.991	2347	

Date Aquired: 05/24/15 9:53 Vial Number: NA
Sample Name: AZ16141_S01 7683.4 DF 05/18/15 Data File ID: T523_060.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.667	2251605	3.2
2)	Perchlorate_85	13.674	705207	

Date Aquired: 05/24/15 10:11 Vial Number: NA
Sample Name: AZ16198_S01 8628.1 DF 05/18/15 Data File ID: T523_061.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.616	190072	2.7
2)	Perchlorate_85	13.603	71515	

Date Aquired: 05/24/15 10:30 Vial Number: NA
Sample Name: AZ16199_S01 8354.2 DF 05/18/15 Data File ID: T523_062.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.351	2265490	3.1
2)	Perchlorate_85	13.338	726832	

Date Aquired: 05/24/15 10:48 Vial Number: NA
Sample Name: AZ16201_S01 8421.1 DF 05/18/15 Data File ID: T523_063.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.944	2540	0.1
2)	Perchlorate_85	12.787	17805	

Date Aquired: 05/24/15 11:07 Vial Number: NA
Sample Name: AZ16202_S01 8489.0 DF 05/18/15 Data File ID: T523_064.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.29	18415075	3.4
2)	Perchlorate_85	13.297	5380483	

Date Aquired: 05/24/15 11:26 Vial Number: NA
Sample Name: AZ16400_S01 7914.5 DF 05/18/15 Data File ID: T523_065.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.127	3795664	3.2
2)	Perchlorate_85	13.124	1177554	

Date Aquired: 05/24/15 11:44 Vial Number: NA
Sample Name: AZ16401_S01 8097.2 DF 05/18/15 Data File ID: T523_066.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.229	872107	3.2
2)	Perchlorate_85	13.277	270166	

Date Aquired: 05/24/15 12:03 Vial Number: NA
Sample Name: AZ16402_S01 7914.5 DF 05/18/15 Data File ID: T523_067.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.035	3325948	3.3
2)	Perchlorate_85	13.032	995494	

Date Aquired: 05/24/15 12:41 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_068.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.198	55871	40.2
2)	Perchlorate_85	12.981	1390	

Date Aquired: 05/24/15 13:00 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 05/07/15 Data File ID: T523_069.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.423	521126	3.0
2)	Perchlorate_85	13.429	173626	

Date Aquired: 05/24/15 13:18 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 05/07/15 Data File ID: T523_070.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.504	2587270	3.2
2)	Perchlorate_85	13.521	812912	

Date Aquired: 05/24/15 13:37 Vial Number: NA
Sample Name: PER_IS 0.005 ug/ml 05/07/15 Data File ID: T523_071.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.219	52496	40.9
2)	Perchlorate_85	13.032	1282	

EPA METHOD 6850
Perchlorate
LC/MS

Sample Data

APPL, INC.

PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP001-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16400
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 33.0 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.033	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_065.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/17/15 10:50:36 AM
APPL-F1-SC-MCResOnly-REG MDLs

Data File ID: T523_065.d

Date Injected : 05/24/15

Time Injected : 11:26

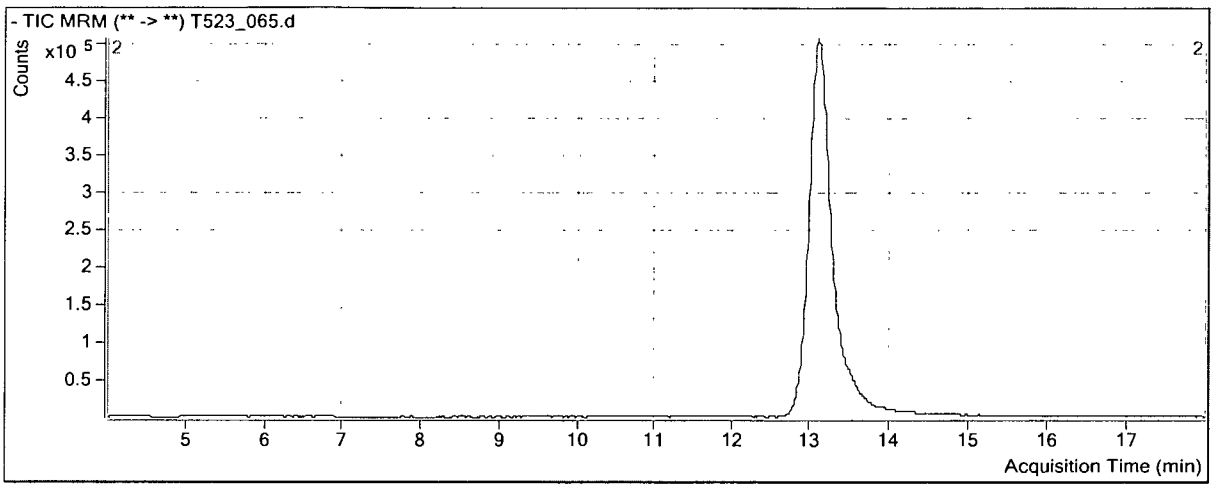
Sample ID : AZ16400_S01 7914.5 DF 05/18/15

Client ID : S67-TP001-0203

Retention Time	Area Count Response	Compound_ID Product Ion				
13.12	5382646	PER_IS_89				
13.127	3795664	Perchlorate_83	(3795664 * 0.0050) / (1.27 * 5382646.00) *	7914.50 =	21.968197	ppb
13.124	1177554	Perchlorate_85	(1177554 * 0.0050) / (0.39 * 5382646.00) *	7914.50 =	22.107024	ppb

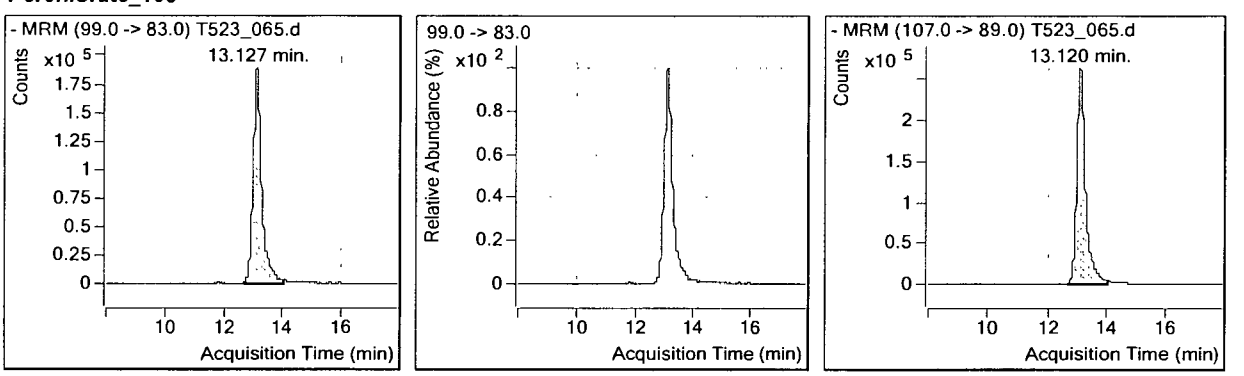
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_065.d	**Sample Name**	AZ16400_S01 7914.5 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	11:26
ClientID	S67-TP001-0203	**Inj Vol**	20

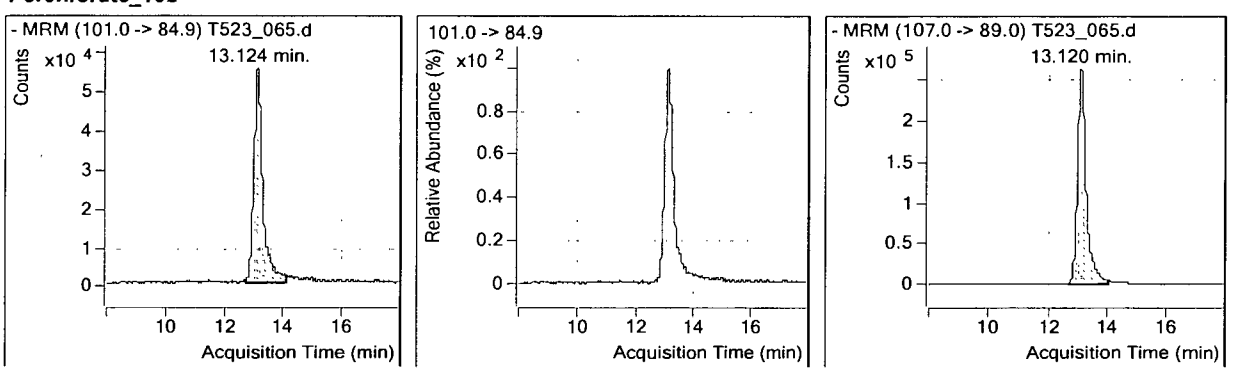


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.127	3795664	5382646
Perchlorate_102	PER_IS_108	13.124	1177554	5382646

Perchlorate_100



Perchlorate_102



PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 7.8 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.0055 J	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

J = Estimated value.

Quant Method:	QTLMFL2
Run #:	T523_066.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/17/15 10:50:36 AM
APPL-F1-SC-MCResOnly-REG MDLs

Data File ID: T523_066.d

Date Injected : 05/24/15

Time Injected : 11:44

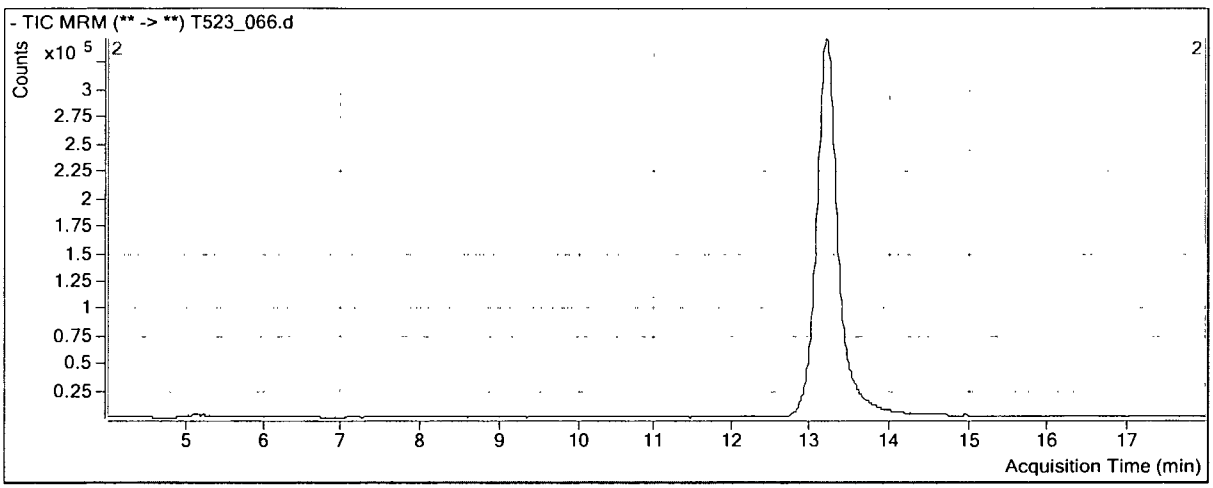
Sample ID : AZ16401_S01 8097.2 DF 05/18/15

Client ID : S67-TP002-0001

Retention Time	Area Count Response	Compound_ID Product Ion			
13.212	5465072	PER_IS_89			
13.229	872107	Perchlorate_83	(872107 * 0.0050) / (1.27 * 5465072.00) *	8097.20 =	5.086133 ppb
13.277	270166	Perchlorate_85	(270166 * 0.0050) / (0.39 * 5465072.00) *	8097.20 =	5.110830 ppb

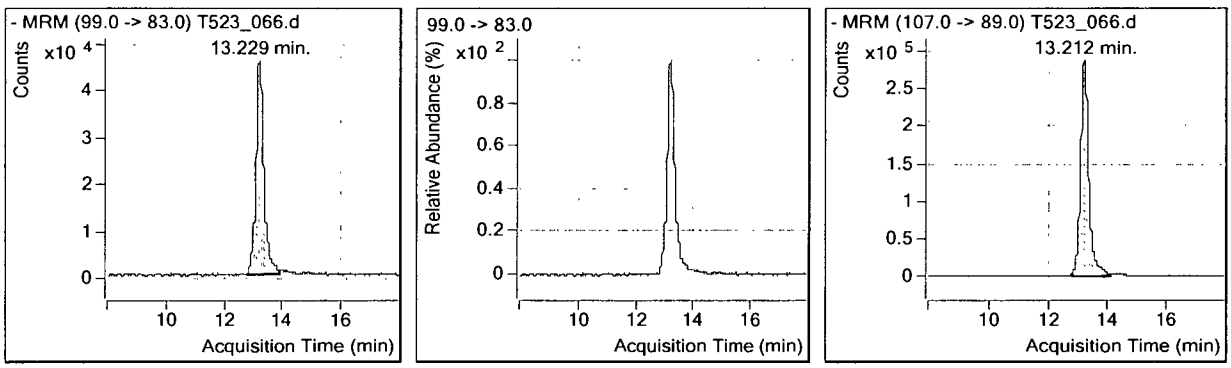
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_066.d	**Sample Name**	AZ16401_S01 8097.2 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	11:44
ClientID	S67-TP002-0001	**Inj Vol**	20

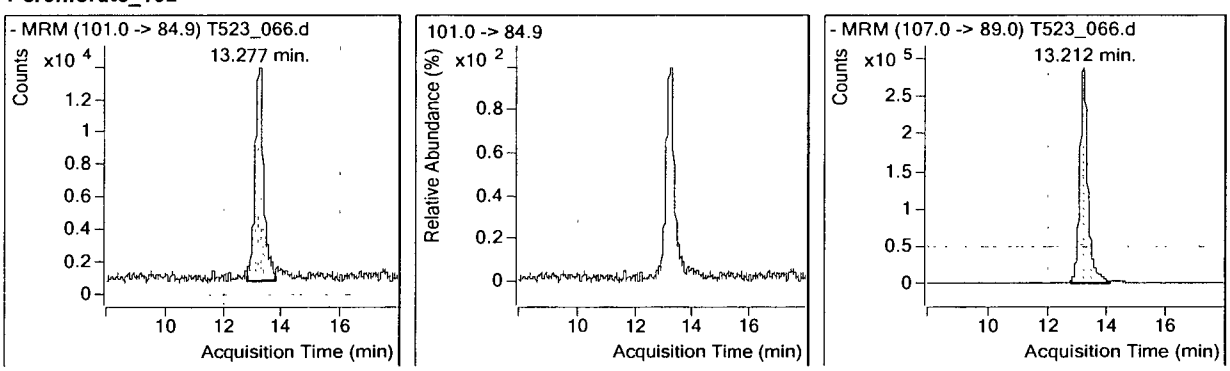


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.229	872107	5465072
Perchlorate_102	PER_IS_108	13.277	270166	5465072

Perchlorate_100



Perchlorate_102



PERCHLORATE EPA 6850 - SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402
QCG: #6850SM-150518A-198067

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
(Solid Concentrations have been adjusted to reflect 26.2 Percent Moisture.)								
EPA 6850	PERCHLORATE	0.027	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_067.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/17/15 10:50:36 AM
APPL-F1-SC-MCResOnly-REG MDLs

Data File ID: T523_067.d

Date Injected : 05/24/15

Time Injected : 12:03

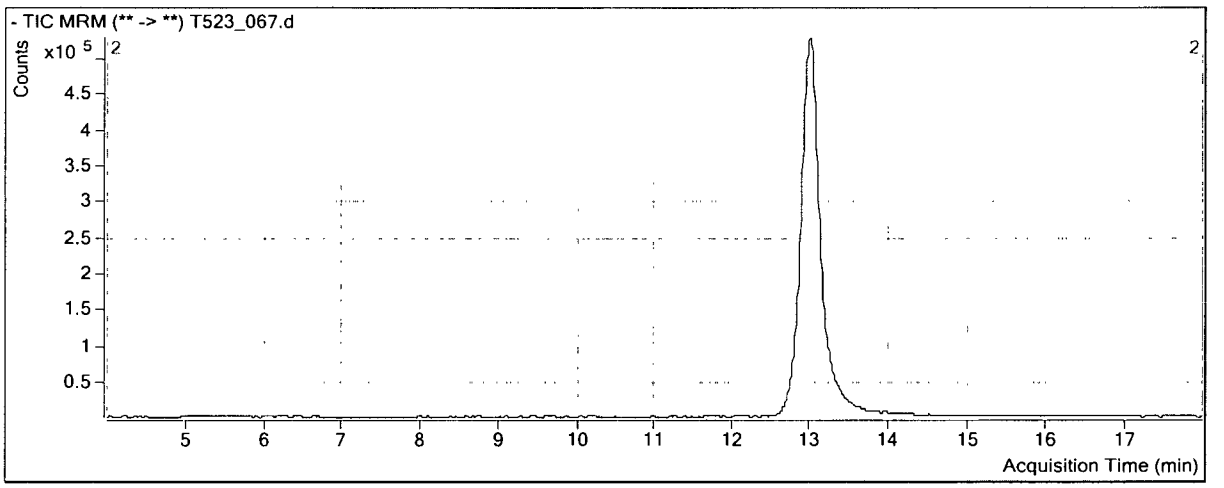
Sample ID : AZ16402_S01 7914.5 DF 05/18/15

Client ID : S67-TP002-0203

Retention Time	Area Count Response	Compound_ID Product Ion		
13.018	5311084	PER_IS_89		
13.035	3325948	Perchlorate_83	(3325948 * 0.0050) / (1.27 * 5311084.00) * 7914.50 =	19.508989 ppb
13.032	995494	Perchlorate_85	(995494 * 0.0050) / (0.39 * 5311084.00) * 7914.50 =	18.940905 ppb

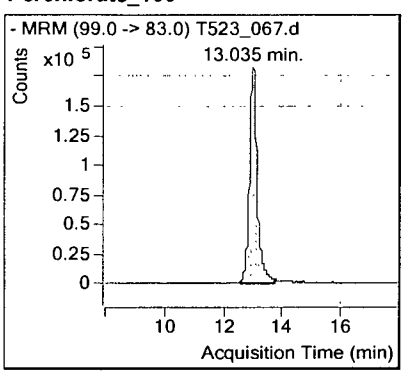
Quantitative Analysis Sample Report

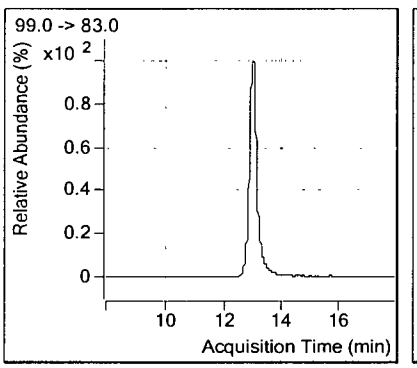
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_067.d	**Sample Name**	AZ16402_S01 7914.5 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	12:03
ClientID	S67-TP002-0203	**Inj Vol**	20

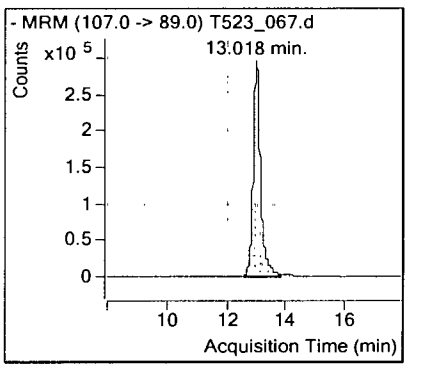


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.035	3325948	5311084
Perchlorate_102	PER_IS_108	13.032	995494	5311084

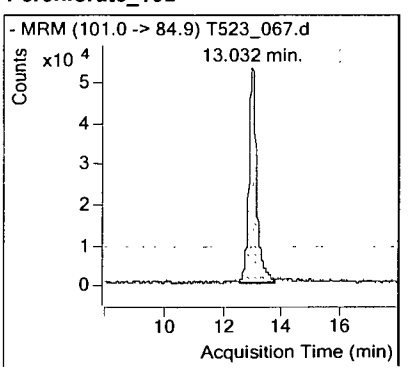
Perchlorate_100

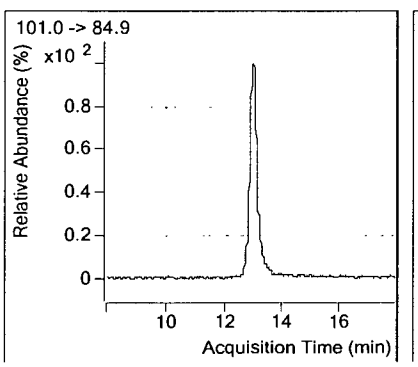


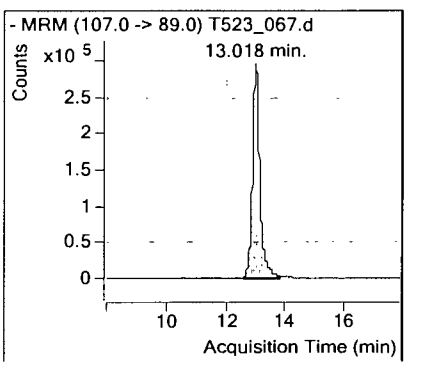




Perchlorate_102







Perchlorate

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76447
APPL ID: AZ16403
QCG: #6850-150518A-198054

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	6.1	0.60	0.400	0.200	ug/L	05/18/15	05/24/15

Quant Method:	QTLMFL2
Run #:	T523_042.d
Instrument:	AGIL_6460
Sequence:	TQ052315
Dilution Factor:	1
Initials:	RP

Printed: 06/17/15 10:51:53 AM
APPL-F1-SC-NoMC-REG MDLs

Data File ID: T523_042.d

Date Injected : 05/24/15

Time Injected : 4:17

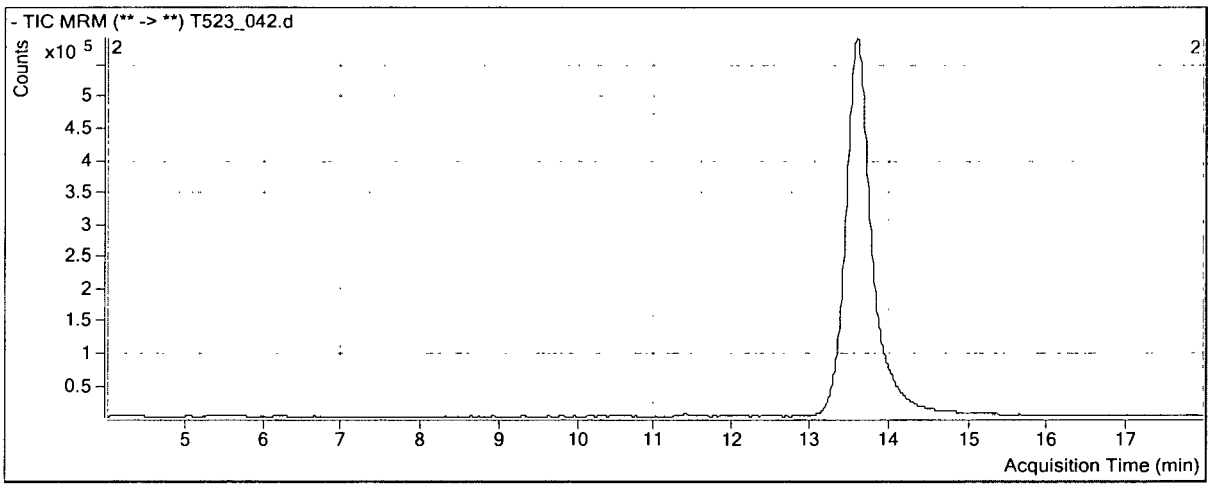
Sample ID : AZ16403_W04 1052.6 DF 05/18/15

Client ID : S67-MW015-051415

Retention Time	Area Count Response	Compound_ID Product Ion			
13.599	4676252	PER_IS_89			
13.626	6933729	Perchlorate_83	(6933729 * 0.0050) / (1.27 * 4676252.00) *	1052.60 =	6.143436 ppb
13.613	2075967	Perchlorate_85	(2075967 * 0.0050) / (0.39 * 4676252.00) *	1052.60 =	5.966336 ppb

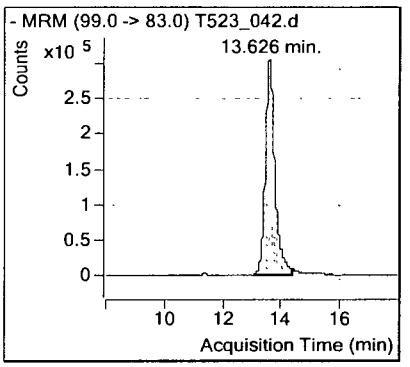
Quantitative Analysis Sample Report

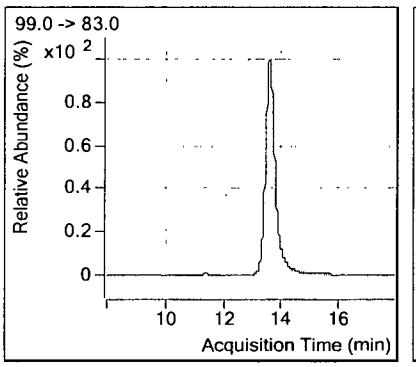
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_042.d	**Sample Name**	AZ16403_W04 1052.6 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	4:17
ClientID	S67-MW015-051415	**Inj Vol**	20

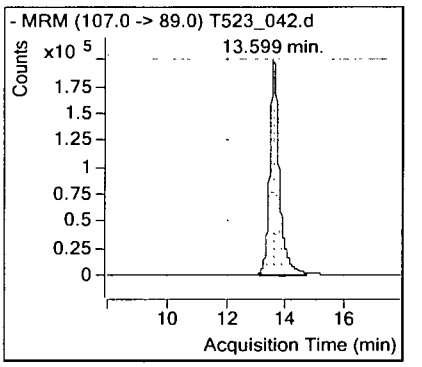


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.626	6933729	4676252
Perchlorate_102	PER_IS_108	13.613	2075967	4676252

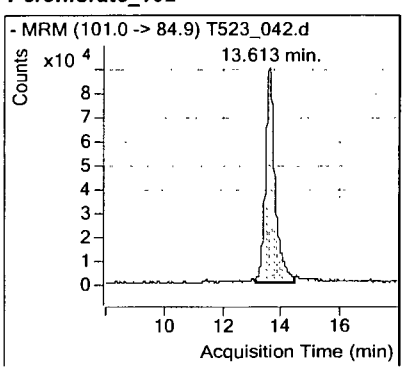
Perchlorate_100

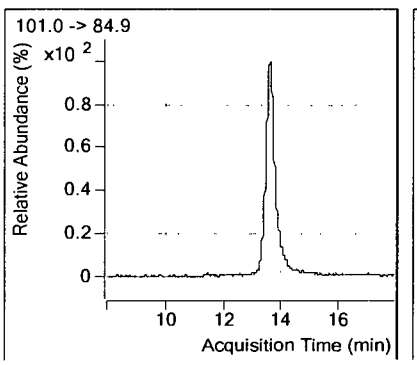


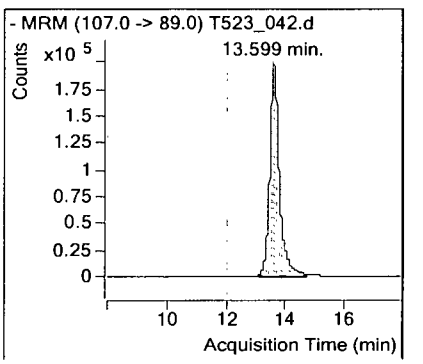




Perchlorate_102







EPA METHOD 6850
Perchlorate
LC/MS

Calibration Data

APPL, INC.

METHOD 6850 CALIBRATION SUMMARY

Lab Name: APPL Inc. **DETECTOR ID : Agilent 6460 Triple Quad LC/MS**

Average Relative Response Factor Summary

Analyte Id:	R.R.F.#1 PERCHLORATE 0.0002 PPM	R.R.F.#2 PERCHLORATE 0.0004 PPM	R.R.F.#3 PERCHLORATE 0.001 PPM	R.R.F.#4 PERCHLORATE 0.002 PPM	R.R.F.#5 PERCHLORATE 0.005 PPM	R.R.F.#6 PERCHLORATE 0.010 PPM	AVERAGE REL.RESP. FACTOR	%RSD RRF
Perchlorate_83	1.339537	1.198791	1.165697	1.173646	1.314663	1.429198	1.270255	8.44
Perchlorate_85	0.434068	0.395112	0.366889	0.354937	0.381638	0.416989	0.391605	7.67

FILE ID : TQ0312A.FRB

Perchlorate_83

RESPONSE FACTOR CALCULATIONS - AREA COUNTS

DATA FILES : T312_003.d - T312_008.d

The Data points that were Read Were

Standard Response	Standard Concentration µg/ml	Internal Standard Response	Internal Standard Concentration µg/ml	Response Factor	RPD	%RSD
446712.00	0.0002	8337058.00	0.0050	1.339537	5.45	8.44
1023403.00	0.0004	10671196.00	0.0050	1.198791	5.63	
2483393.00	0.0010	10651968.00	0.0050	1.165697	8.23	
6351752.00	0.0020	13529952.00	0.0050	1.173646	7.61	
14499255.00	0.0050	11028880.00	0.0050	1.314663	3.50	
34223790.00	0.0100	11973072.00	0.0050	1.429198	12.51	

The Average Response Factor = 1.270255

Perchlorate_85

RESPONSE FACTOR CALCULATIONS - AREA COUNTS

DATA FILES : T312_003.d - T312_008.d

The Data points that were Read Were

Standard Response	Standard Concentration µg/ml	Internal Standard Response	Internal Standard Concentration µg/ml	Response Factor	RPD	%RSD
144754.00	0.0002	8337058.00	0.0050	0.434068	10.84	7.67
337305.00	0.0004	10671196.00	0.0050	0.395112	0.90	
781617.00	0.0010	10651968.00	0.0050	0.366889	6.31	
1920912.00	0.0020	13529952.00	0.0050	0.354937	9.36	
4209044.00	0.0050	11028880.00	0.0050	0.381638	2.55	
9985270.00	0.0100	11973072.00	0.0050	0.416989	6.48	

The Average Response Factor = 0.391605

Data File ID: T312_002.d

Date Injected : 03/12/15

Time Injected : 17:33

Sample ID : PERCHLORATE 0.0001 ug/ml 11/11/14

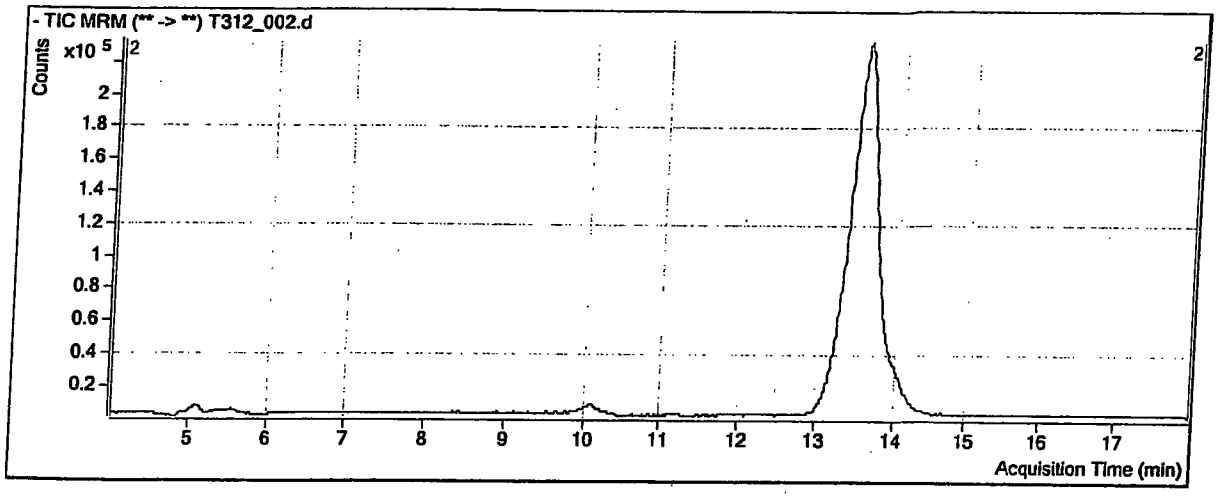
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
13.548		5980396	PER_IS_89
13.504	*	237168	Perchlorate_83
13.541	*	77486	Perchlorate_85

* MANUAL INTEGRAION

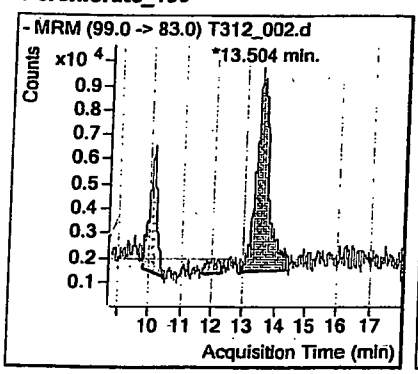
Quantitative Analysis Sample Report

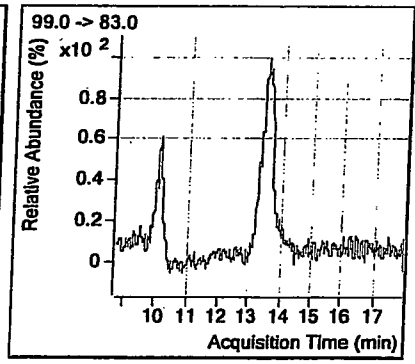
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_002.d	**Sample Name**	PERCHLORATE 0.0001 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	17:33
ClientID	NA	**Inj Vol**	20

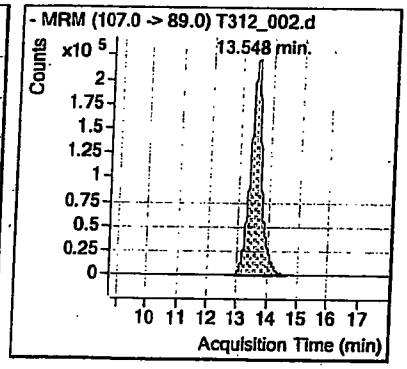


Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108	*	13.504	237168	5980396	* MANUAL INT
Perchlorate_102	PER_IS_108	*	13.541	77486	5980396	* MANUAL INT

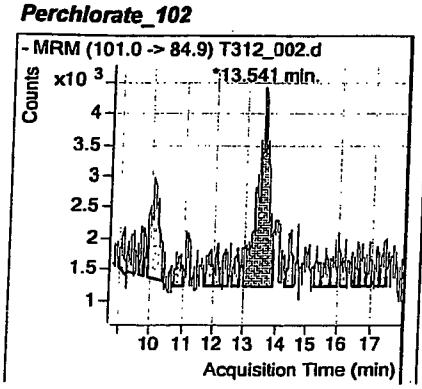
Perchlorate_100

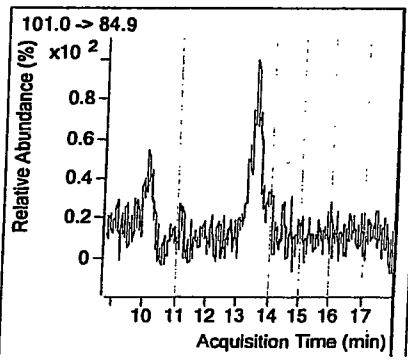


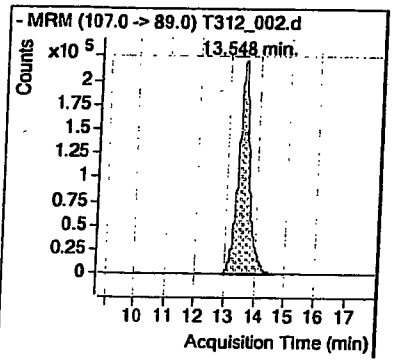


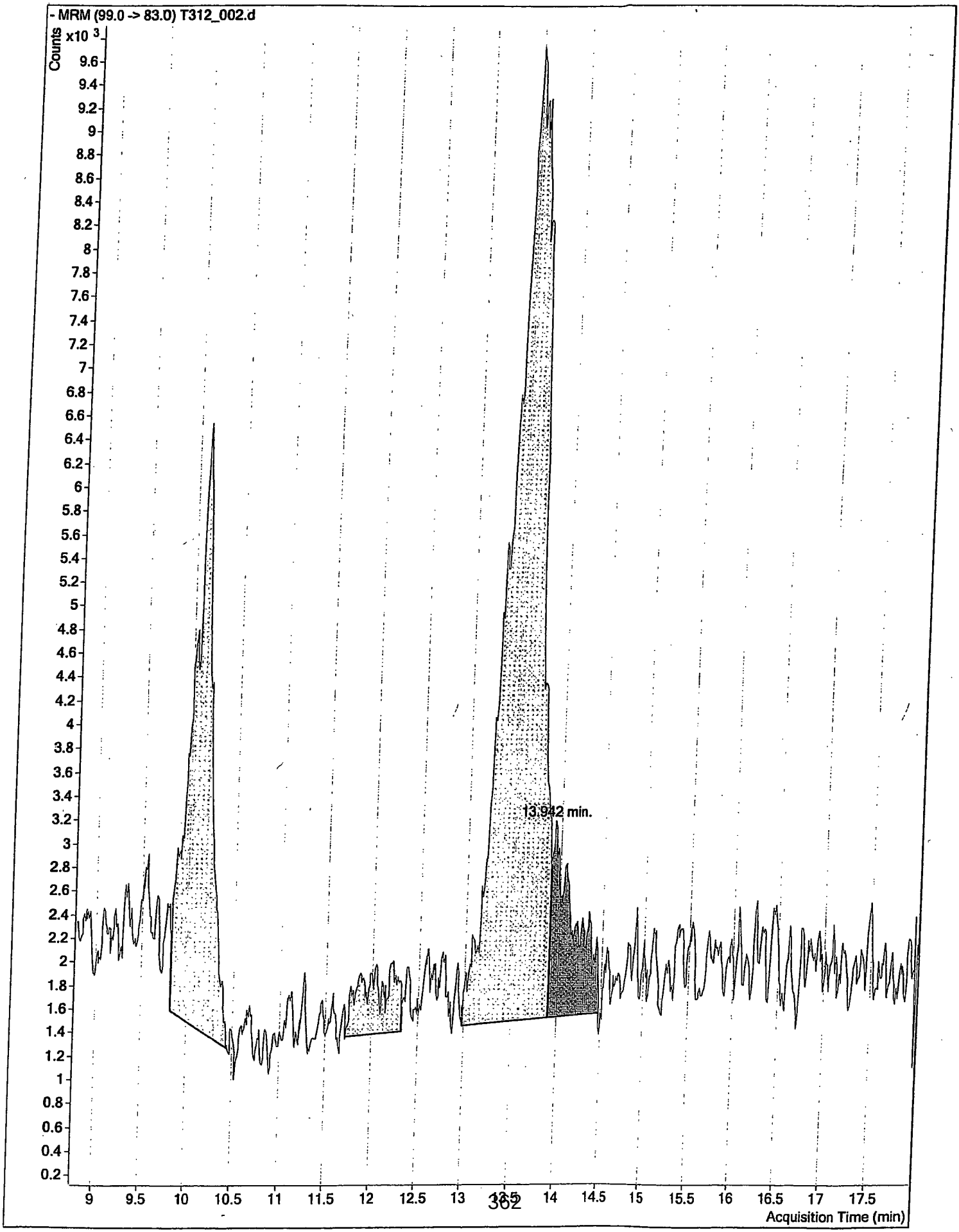


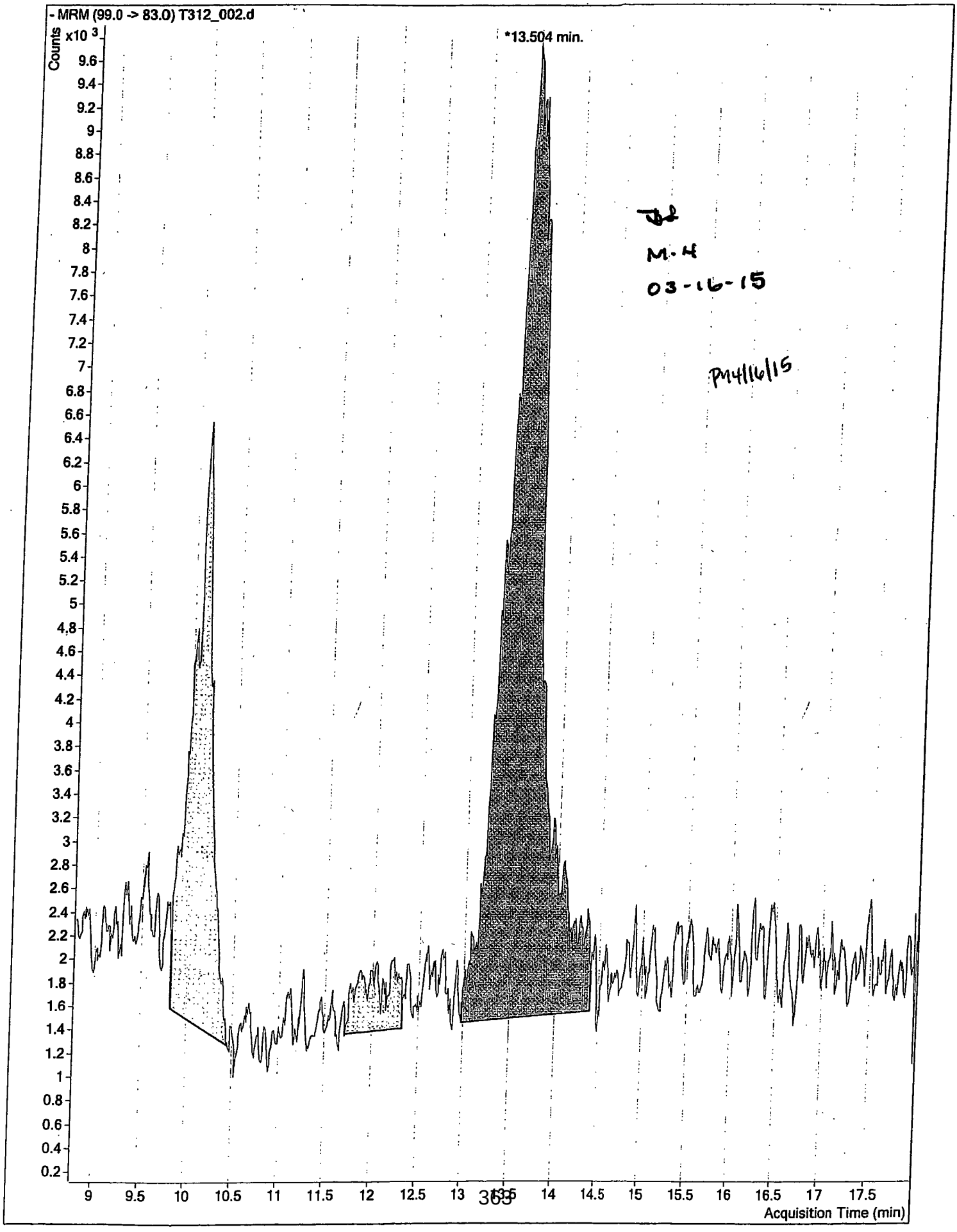
Perchlorate_102

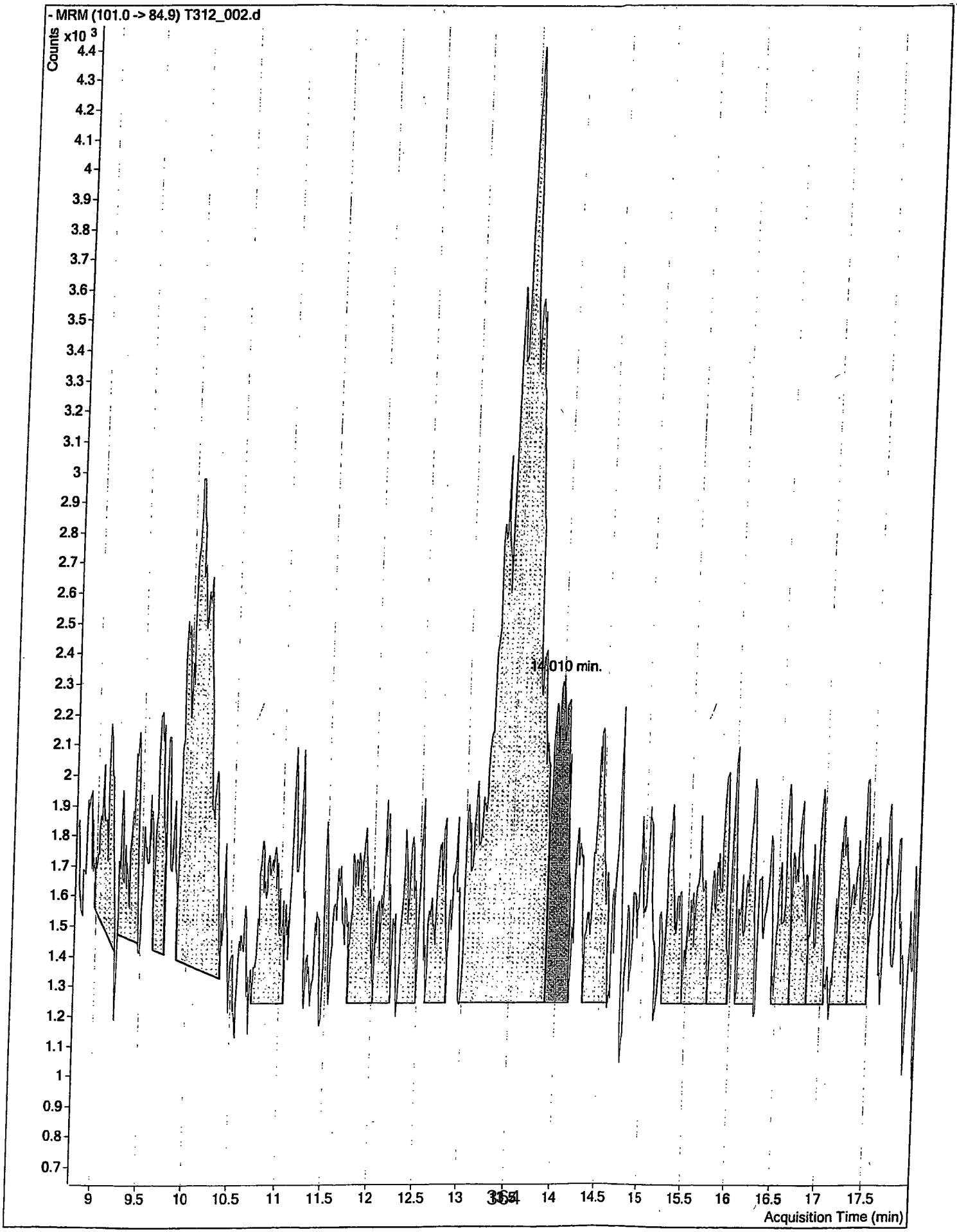


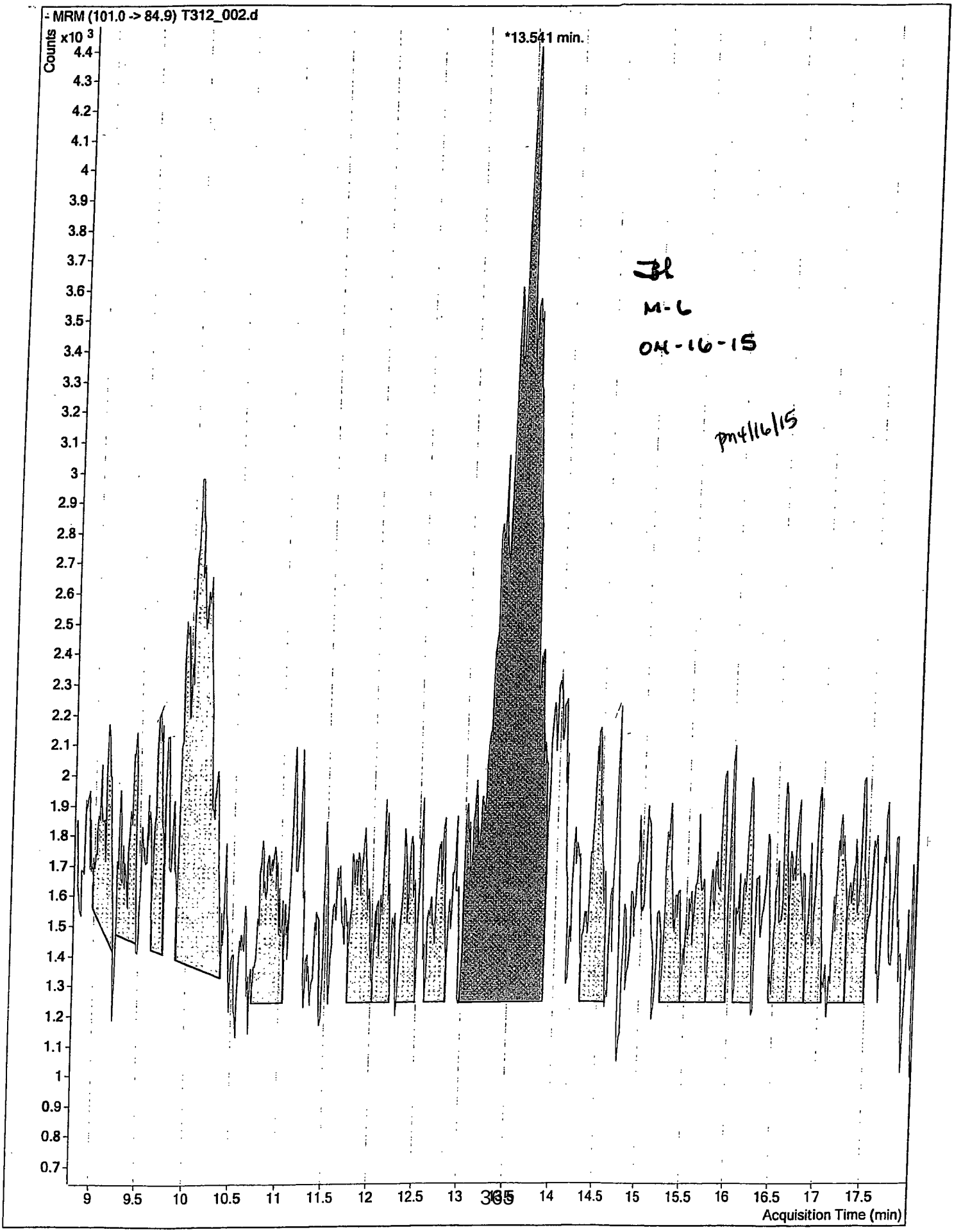





- MRM (99.0 -> 83.0) T312_002.d
Counts
x10 3
9.6
9.4
9.2
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
13.942 min.
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)


- MRM (99.0 -> 83.0) T312_002.d
Counts x10 3
*13.504 min.
M.H
03-16-15
PH4/16/15
Acquisition Time (min)


- MRM (101.0 -> 84.9) T312_002.d
Counts
x10 3
4.4
4.3
4.2
4.1
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
14.010 min.
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)


- MRM (101.0 -> 84.9) T312_002.d
*13.541 min.
Counts
x10 3
4.4
4.3
4.2
4.1
4
3.9
3.8
3.7
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)
JL
M-L
04-16-15
pm 4/16/15

Data File ID: T312_004.d

Date Injected : 03/12/15

Time Injected : 18:11

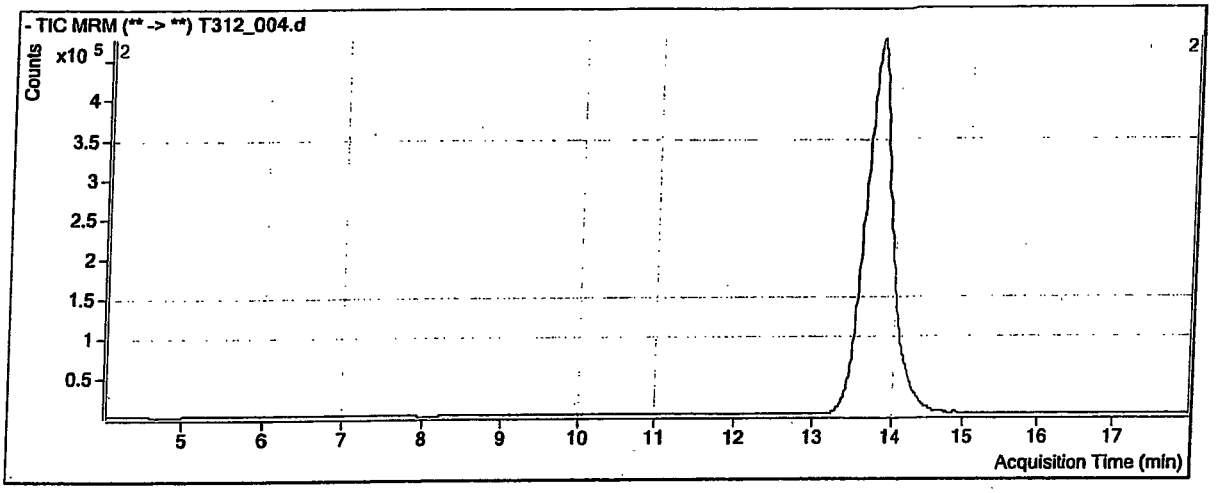
Sample ID : PERCHLORATE 0.0004 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.783	10671196	PER_IS_89
13.8	1023403	Perchlorate_83
13.827	337305	Perchlorate_85

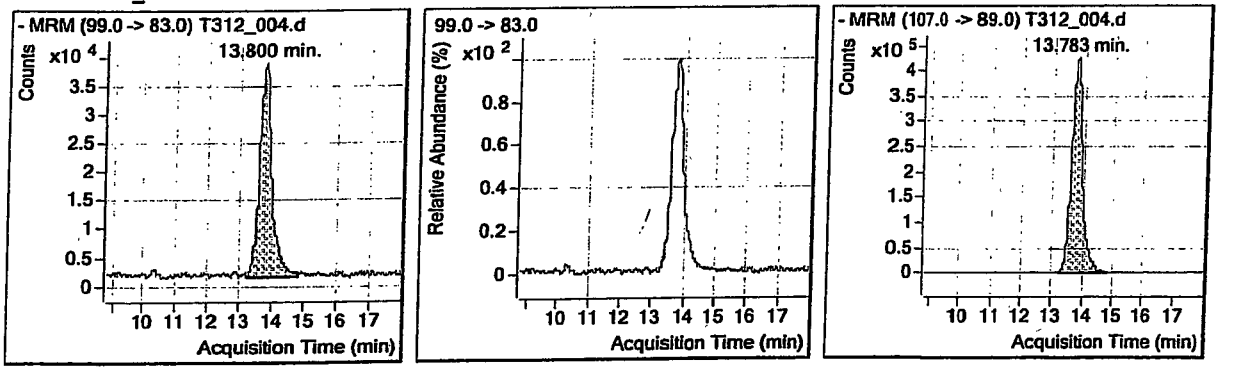
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_004.d	**Sample Name**	PERCHLORATE 0.0004 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:11
ClientID	NA	**Inj Vol**	20

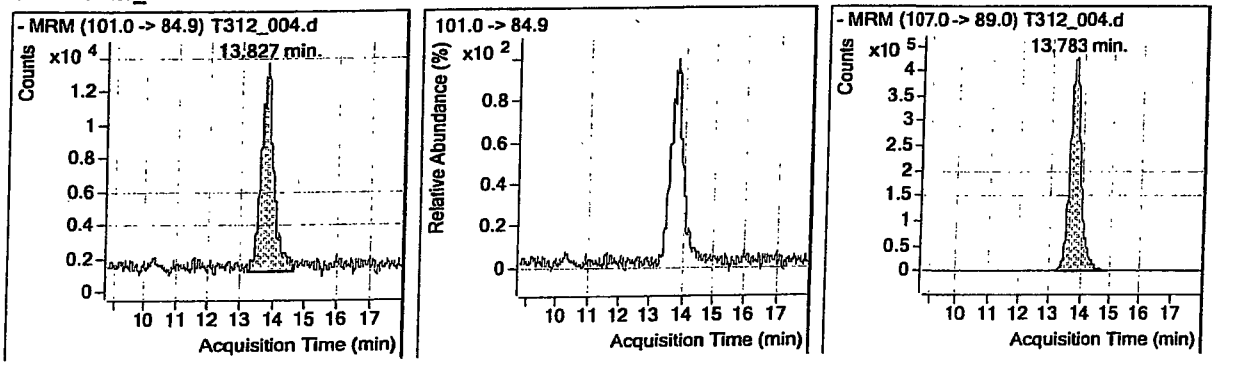


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.800	1023403	10671196
Perchlorate_102	PER_IS_108	13.827	337305	10671196

Perchlorate_100



Perchlorate_102



Data File ID: T312_005.d

Date Injected : 03/12/15

Time Injected : 18:29

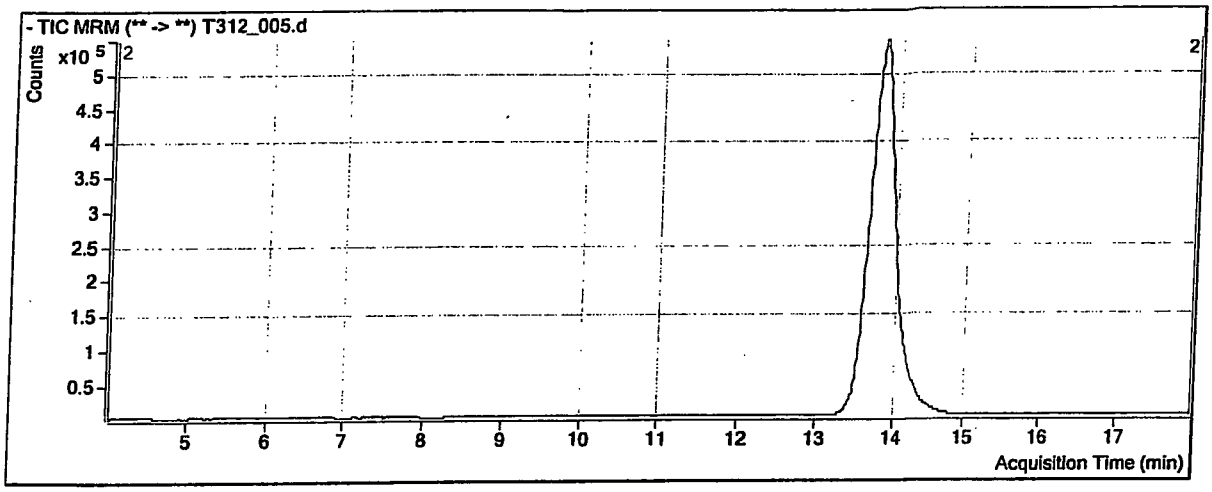
Sample ID : PERCHLORATE 0.001 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.803	10651968	PER_IS_89
13.82	2483393	Perchlorate_83
13.827	781617	Perchlorate_85

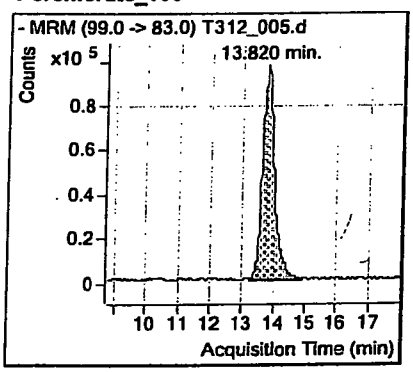
Quantitative Analysis Sample Report

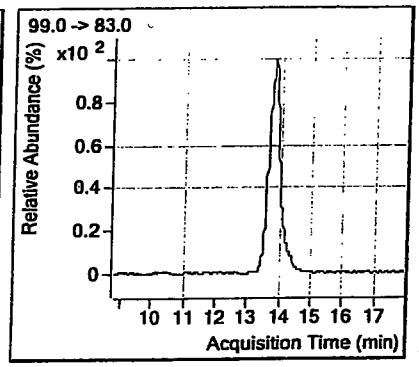
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_005.d	**Sample Name**	PERCHLORATE 0.001 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:29
ClientID	NA	**Inj Vol**	20

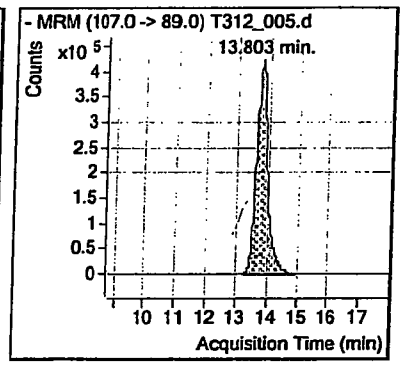


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.820	2483393	10651968
Perchlorate_102	PER_IS_108	13.827	781617	10651968

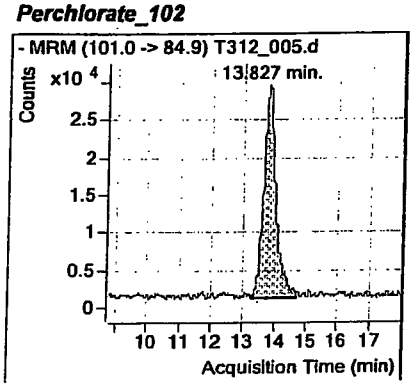
Perchlorate_100

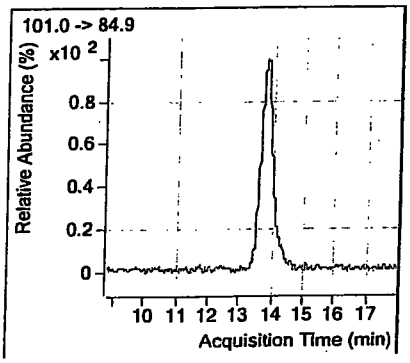


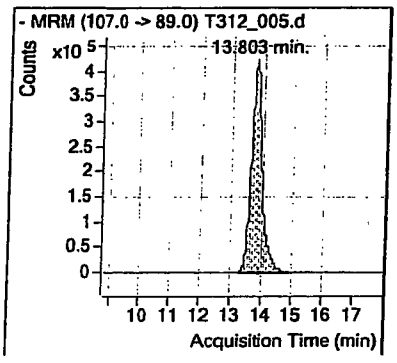




Perchlorate_102







Data File ID: T312_006.d

Date Injected : 03/12/15

Time Injected : 18:48

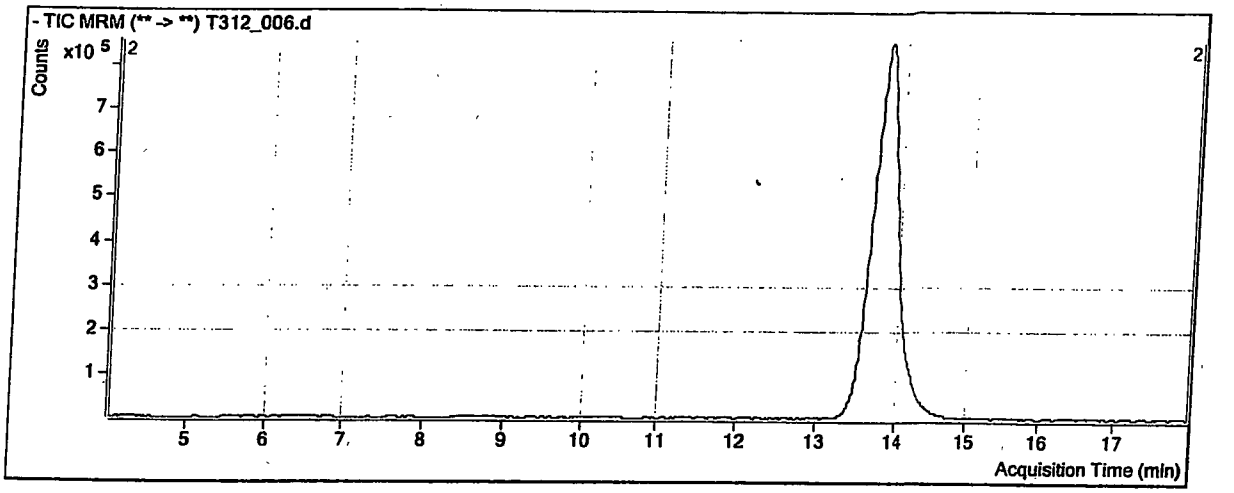
Sample ID : PERCHLORATE 0.002 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.803	13529952	PER_IS_89
13.83	6351752	Perchlorate_83
13.817	1920912	Perchlorate_85

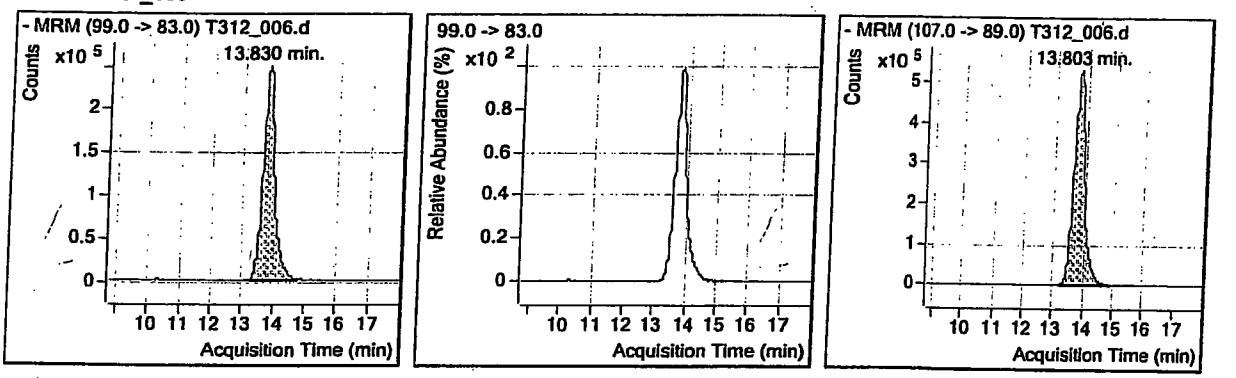
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_006.d	**Sample Name**	PERCHLORATE 0.002 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:48
ClientID	NA	**Inj Vol**	20

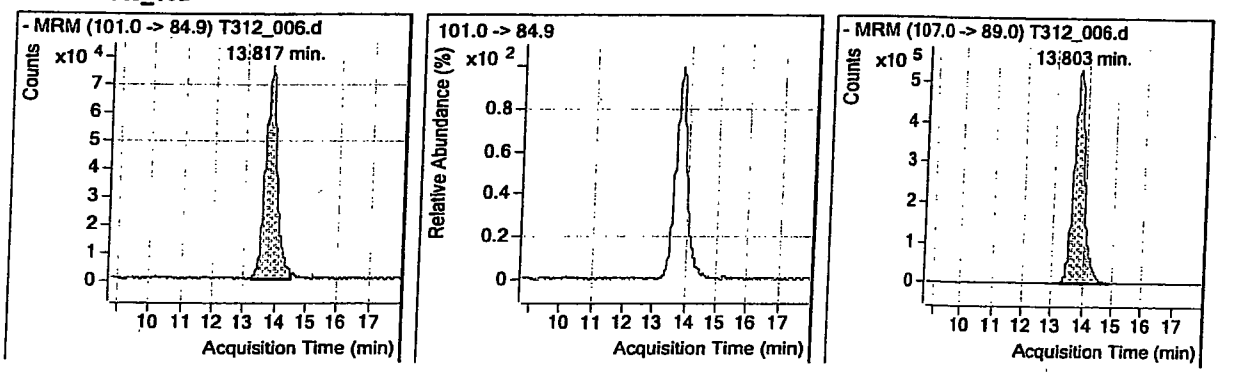


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.830	6351752	13529952
Perchlorate_102	PER_IS_108	13.817	1920912	13529952

Perchlorate_100



Perchlorate_102



Data File ID: T312_007.d

Date Injected : 03/12/15

Time Injected : 19:07

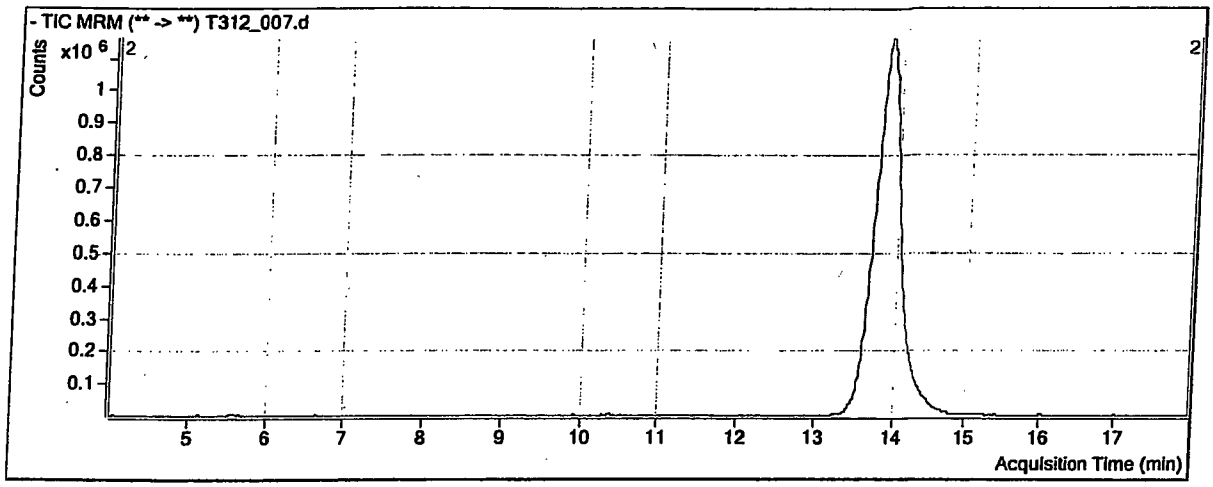
Sample ID : PERCHLORATE 0.005 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.874	11028880	PER_IS_89
13.861	14499255	Perchlorate_83
13.878	4209044	Perchlorate_85

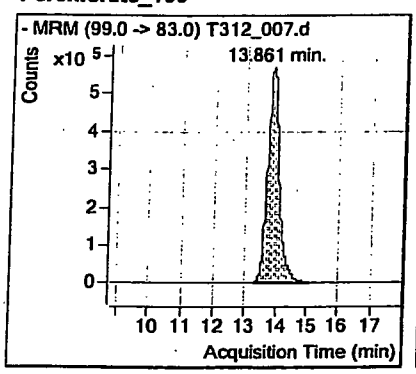
Quantitative Analysis Sample Report

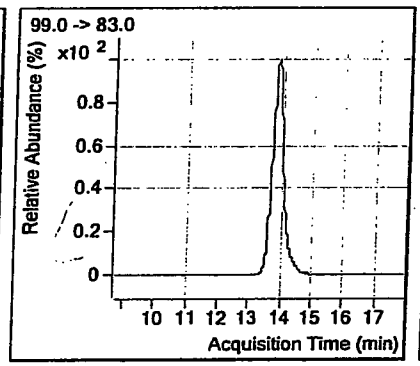
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_007.d	**Sample Name**	PERCHLORATE 0.005 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	19:07
ClientID	NA	**Inj Vol**	20

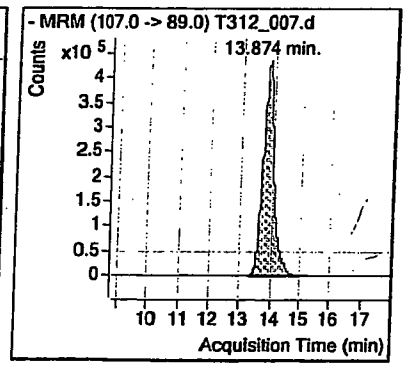


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.861	14499255	11028880
Perchlorate_102	PER_IS_108	13.878	4209044	11028880

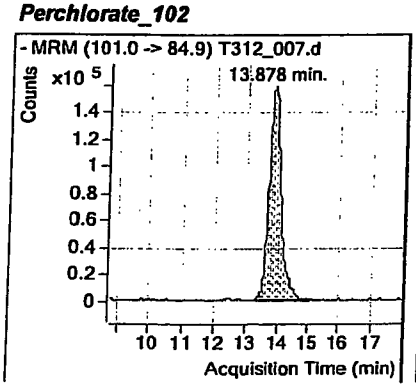
Perchlorate_100

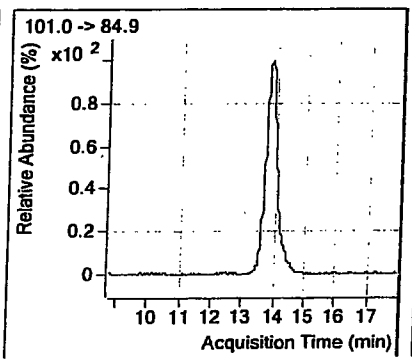


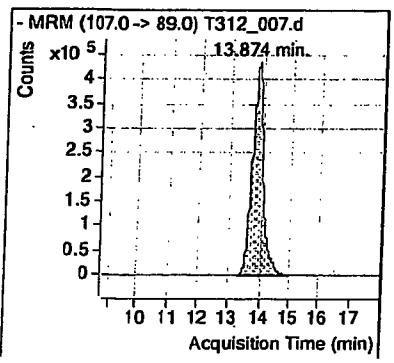




Perchlorate_102







Data File ID: T312_008.d

Date Injected : 03/12/15

Time Injected : 19:25

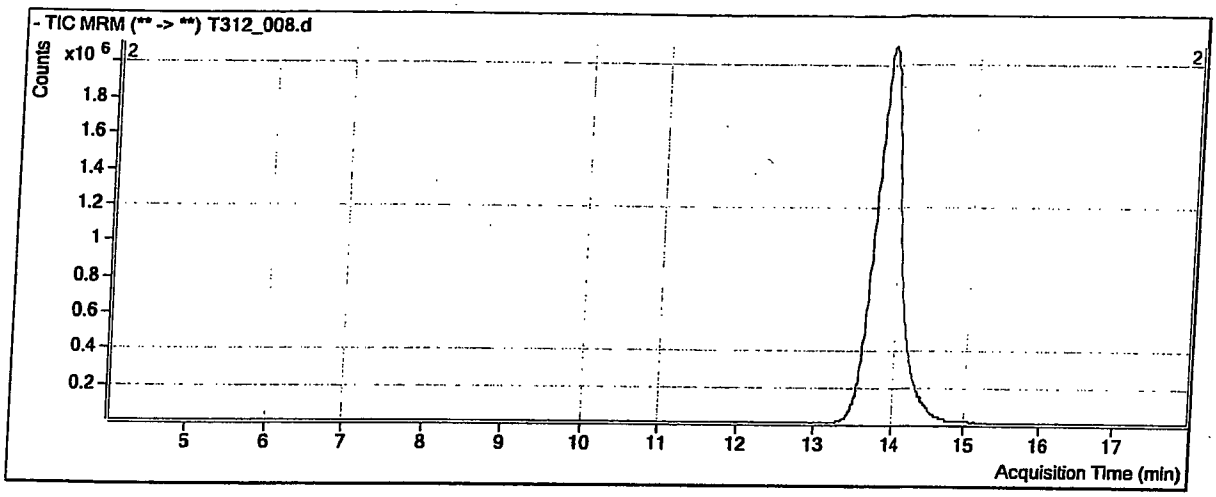
Sample ID : PERCHLORATE 0.010 ug/ml 08/27/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.874	11973072	PER_IS_89
13.881	34223790	Perchlorate_83
13.878	9985270	Perchlorate_85

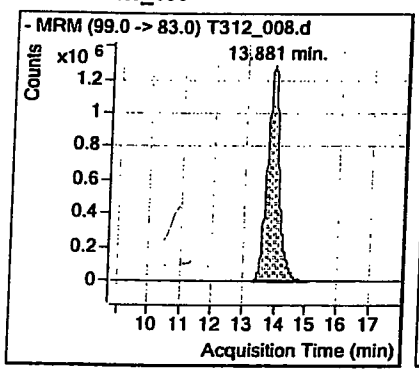
Quantitative Analysis Sample Report

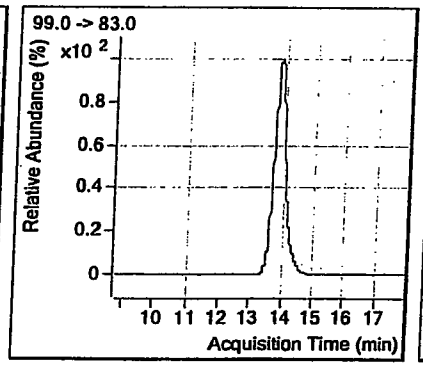
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_008.d	**Sample Name**	PERCHLORATE 0.010 ug/ml 08/27/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	19:25
ClientID	NA	**Inj Vol**	20

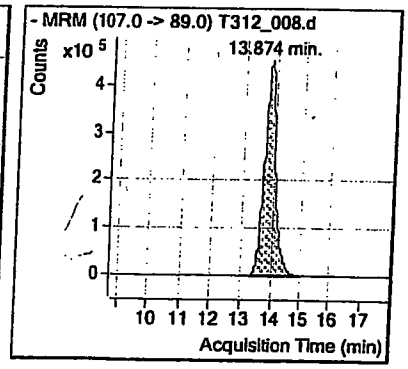


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.881	34223790	11973072
Perchlorate_102	PER_IS_108	13.878	9985270	11973072

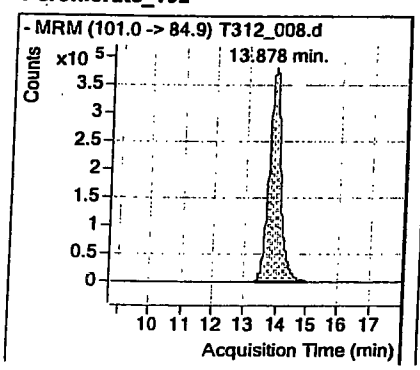
Perchlorate_100

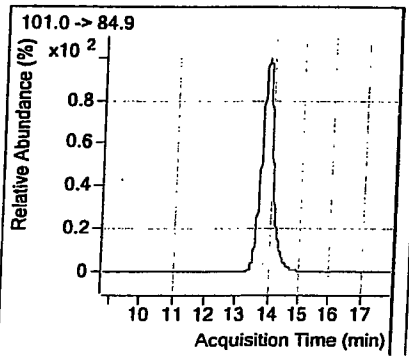


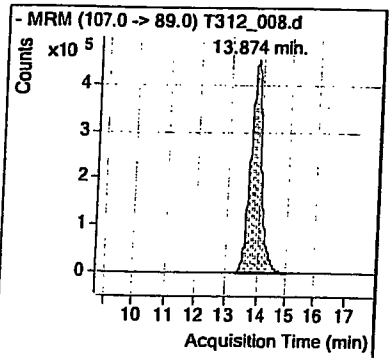




Perchlorate_102







SECOND SOURCE CALIBRATION VERIFICATION SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T312_010.d

	Date (s) of Analysis From:03/12/15 To:03/12/15 Time (s) of Analysis From:17:33 To:19:44				Date of Analysis: 03/12/15 Time of Analysis: 20:02 Standard Id: PER_SS (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.50	13.40	13.60	1.270255	13.94	1.418633	N	11.7
Perchlorate_85	13.54	13.44	13.64	0.391605	13.96	0.424457	N	8.4

ILE ID : TQCK1210.RFB

Data File ID: T312_010.d

Date Injected : 03/12/15

Time Injected : 20:02

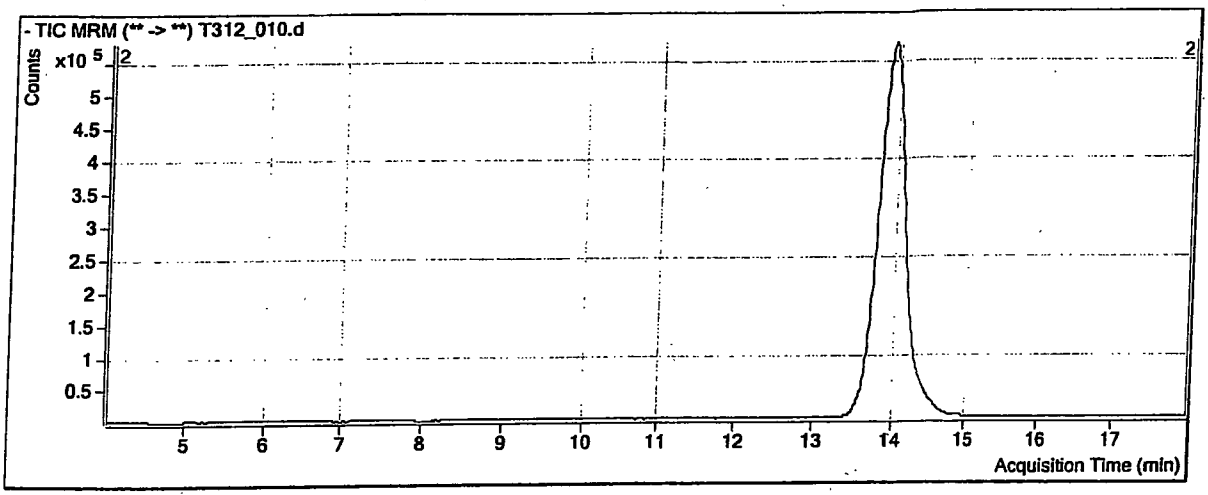
Sample ID : PER_SS 0.0004 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.946	12977621	PER_IS_89
13.942	1472839	Perchlorate_83
13.959	440675	Perchlorate_85

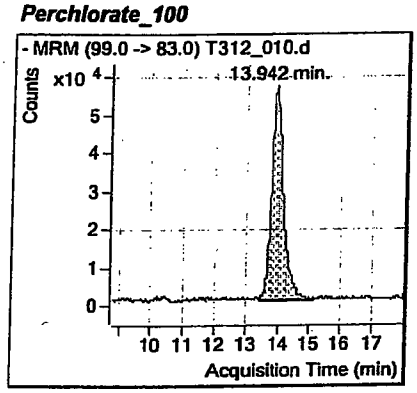
Quantitative Analysis Sample Report

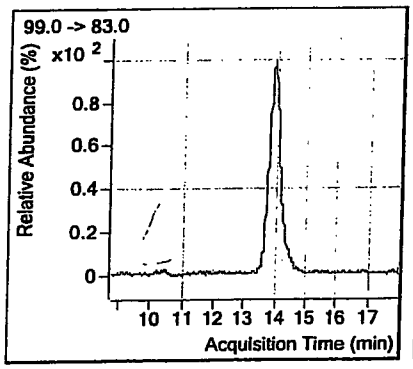
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_010.d	**Sample Name**	PER_SS 0.0004 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:02
ClientID	NA	**Inj Vol**	20

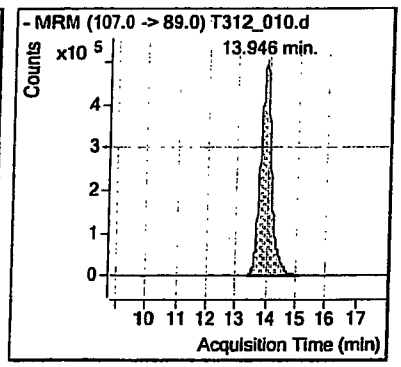


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.942	1472839	12977621
Perchlorate_102	PER_IS_108	13.959	440675	12977621

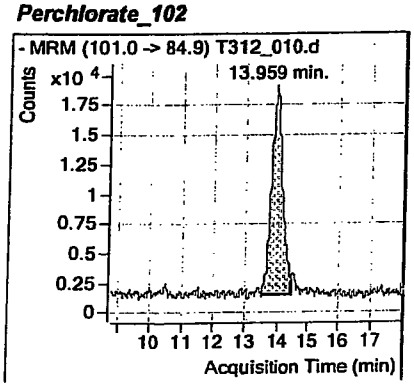
Perchlorate_100

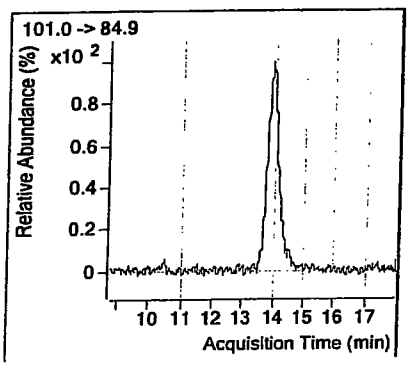


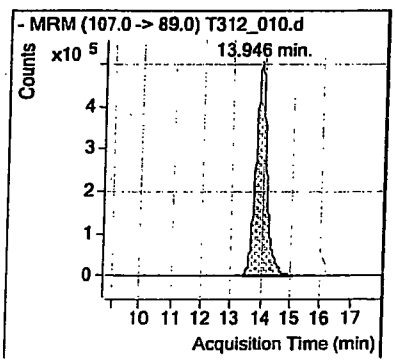




Perchlorate_102







SECOND SOURCE CALIBRATION VERIFICATION SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T312_011.d

	Date (s) of Analysis From:03/12/15 To:03/12/15 Time (s) of Analysis From:17:33 To:19:44				Date of Analysis: 03/12/15 Time of Analysis: 20:21 Standard Id: PER_SS (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.50	13.40	13.60	1.270255	14.01	1.358201	N	6.9
Perchlorate_85	13.54	13.44	13.64	0.391605	14.00	0.404148	N	3.2

FILE ID : TQCK1211.RFB

Data File ID: T312_011.d

Date Injected : 03/12/15

Time Injected : 20:21

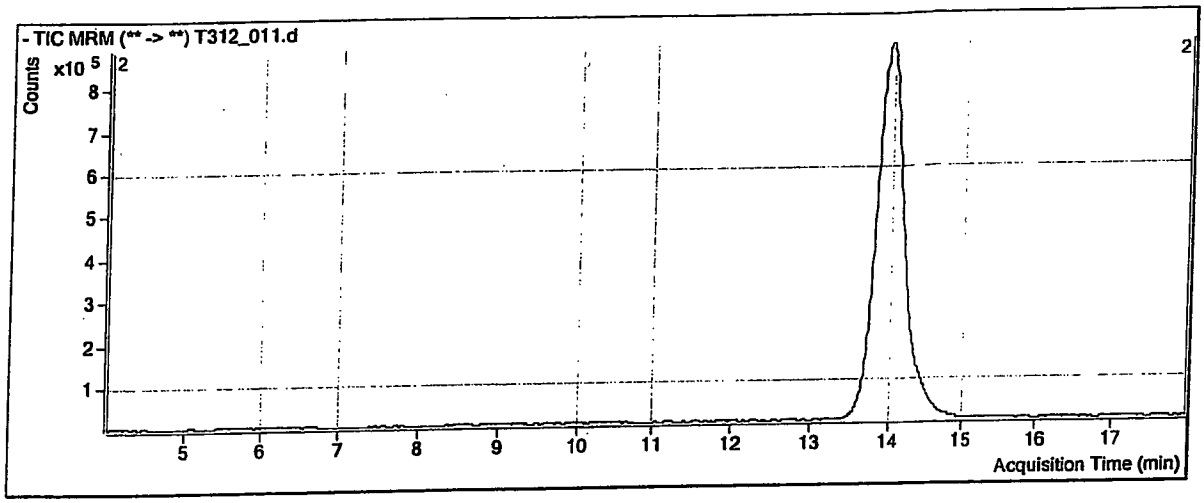
Sample ID : PER_SS 0.002 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.976	13747369	PER_IS_89
14.014	7468678	Perchlorate_83
14.000	2222387	Perchlorate_85

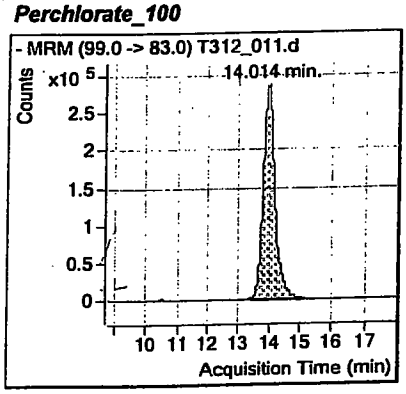
Quantitative Analysis Sample Report

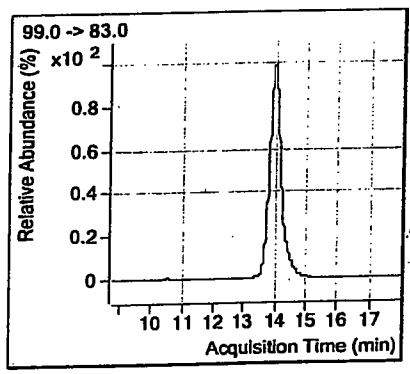
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_011.d	**Sample Name**	PER_SS 0.002 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:21
ClientID	NA	**Inj Vol**	20

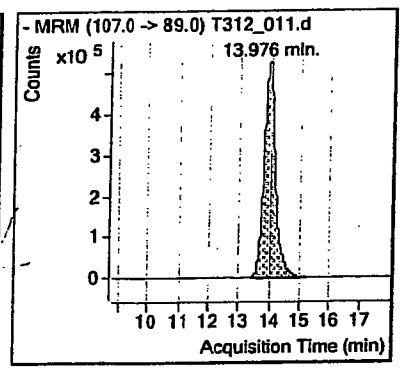


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.014	7468678	13747369
Perchlorate_102	PER_IS_108	14.000	2222387	13747369

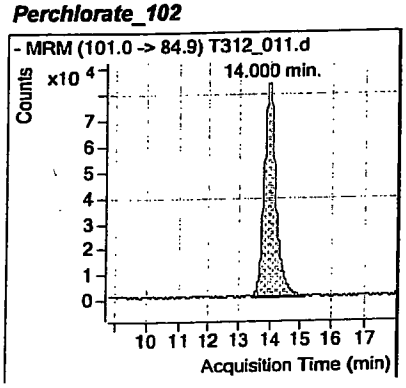
Perchlorate_100

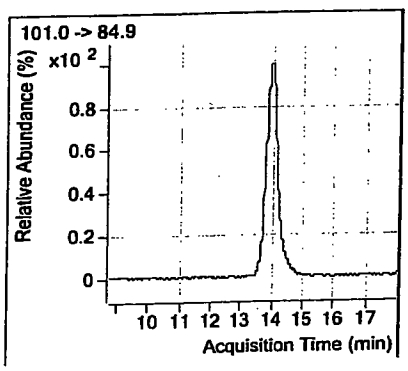


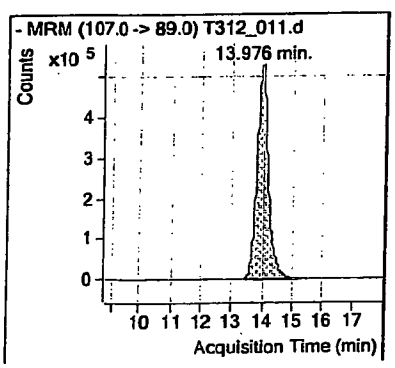




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T312_013.d

	Date (s) of Analysis From:03/12/15 To:03/12/15 Time (s) of Analysis From:17:33 To:20:40				Date of Analysis: 03/12/15 Time of Analysis: 20:58 Standard Id: PER_CCV_1 (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.50	13.40	13.60	1.270255	14.10	1.285147	N	1.2
Perchlorate_85	13.54	13.44	13.64	0.391605	14.14	0.416428	N	6.3

ILE ID : TQCK1213.RFB

Data File ID: T312_013.d

Date Injected : 03/12/15

Time Injected : 20:58

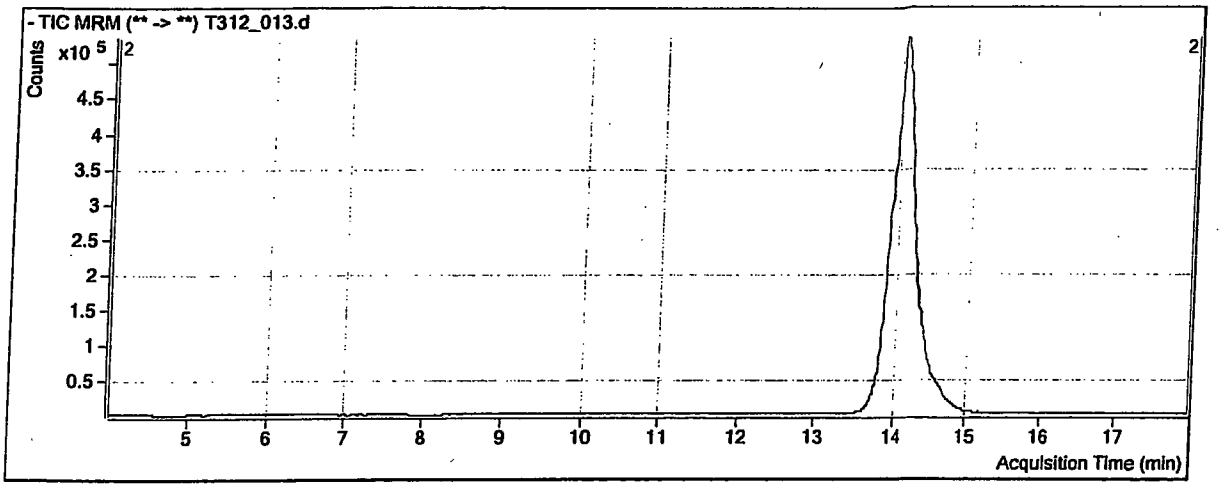
Sample ID : PER_CCV_1 0.0004 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.109	12323795	PER_IS_89
14.105	1267031	Perchlorate_83
14.143	410558	Perchlorate_85

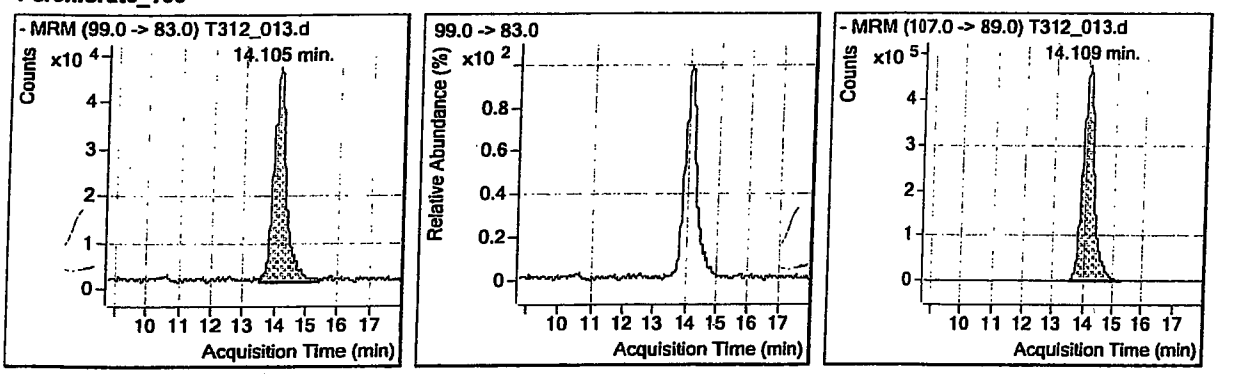
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_013.d	**Sample Name**	PER_CCV_1 0.0004 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:58
ClientID	NA	**Inj Vol**	20

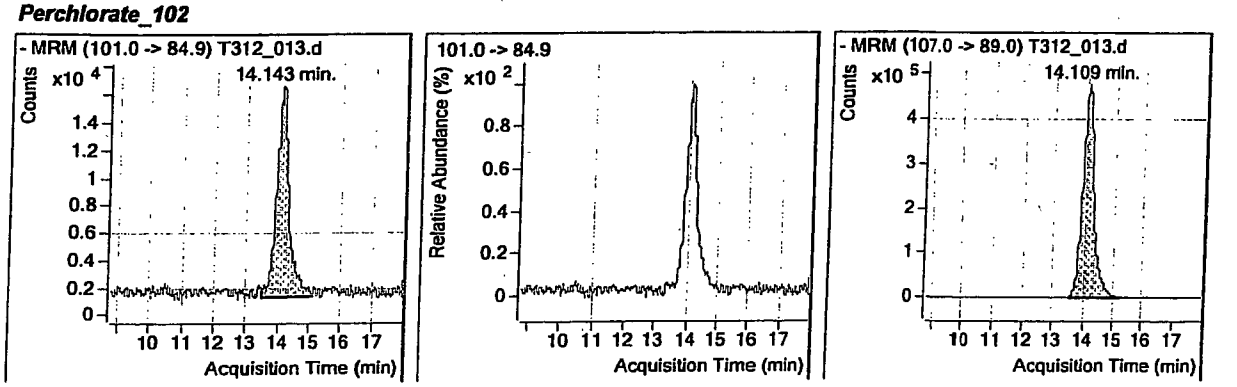


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.105	1267031	12323795
Perchlorate_102	PER_IS_108	14.143	410558	12323795

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T312_014.d

	Date (s) of Analysis From:03/12/15 To:03/12/15 Time (s) of Analysis From:17:33 To:20:40				Date of Analysis: 03/12/15 Time of Analysis: 21:17 Standard Id: PER_CCV_1 (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.50	13.40	13.60	1.270255	14.15	1.271875	N	0.1
Perchlorate_85	13.54	13.44	13.64	0.391605	14.12	0.385509	N	1.6

ILE ID : TQCK1214.RFB

Data File ID: T312_014.d

Date Injected : 03/12/15

Time Injected : 21:17

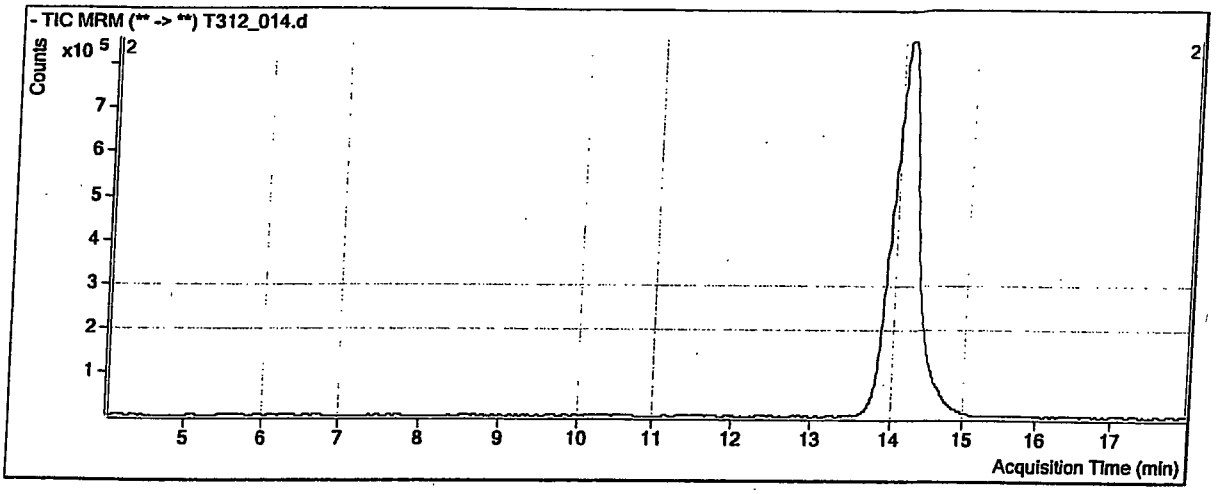
Sample ID : PER_CCV_1 0.002 ug/ml 11/11/14

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.139	13576634	PER_IS_89
14.146	6907110	Perchlorate_83
14.122	2093567	Perchlorate_85

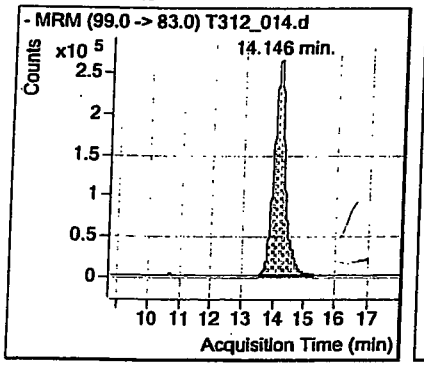
Quantitative Analysis Sample Report

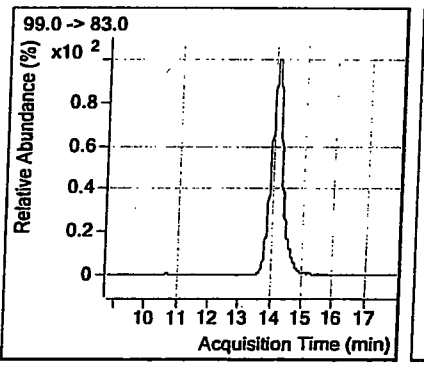
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_014.d	**Sample Name**	PER_CCV_1 0.002 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:17
ClientID	NA	**Inj Vol**	20

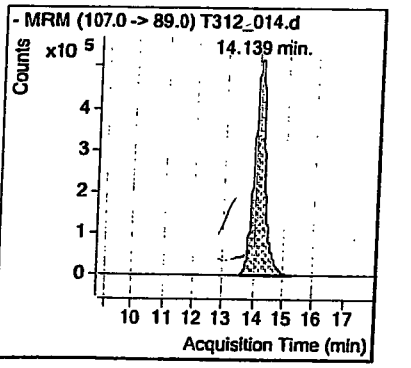


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.146	6907110	13576634
Perchlorate_102	PER_IS_108	14.122	2093567	13576634

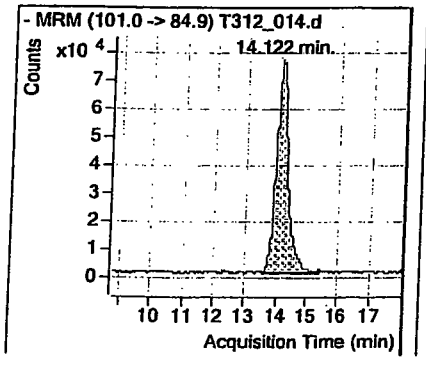
Perchlorate_100

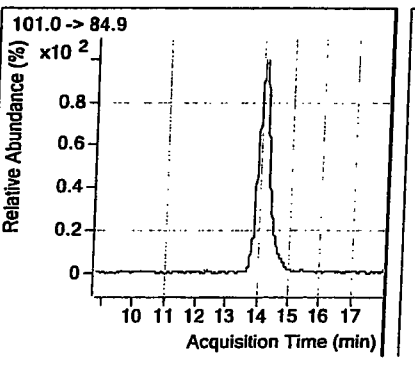


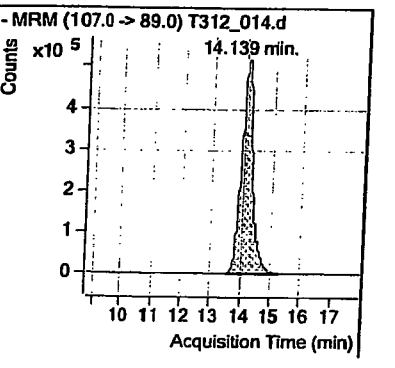




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_002.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:15:20				Date of Analysis: 05/23/15 Time of Analysis: 15:38 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	12.97	1.366179	N	7.6
Perchlorate_85	13.70	13.60	13.80	0.391605	12.98	0.499345	N	27.5

FILE ID : TQCK2302.RFB

Data File ID: T523_002.d

Date Injected : 05/23/15

Time Injected : 15:38

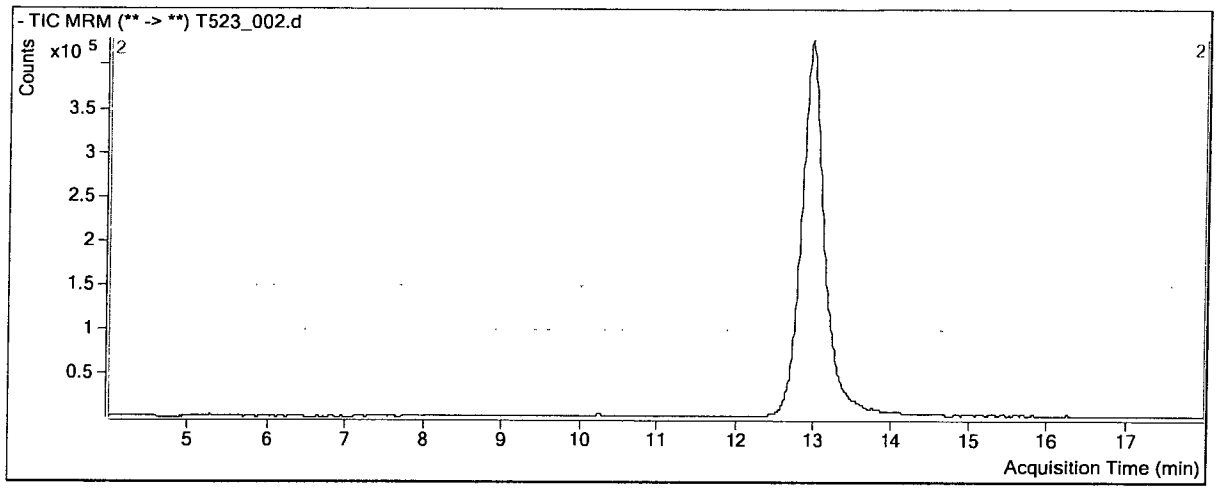
Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
12.957	7841423	PER_IS_89
12.974	857023	Perchlorate_83
12.981	313246	Perchlorate_85

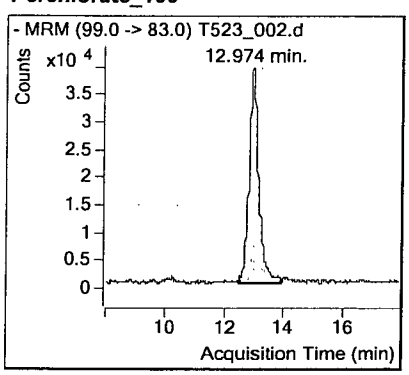
Quantitative Analysis Sample Report

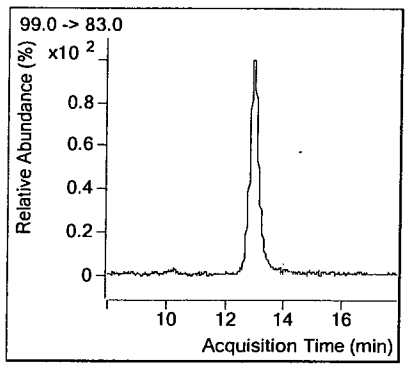
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_002.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	15:38
ClientID	NA	**Inj Vol**	20

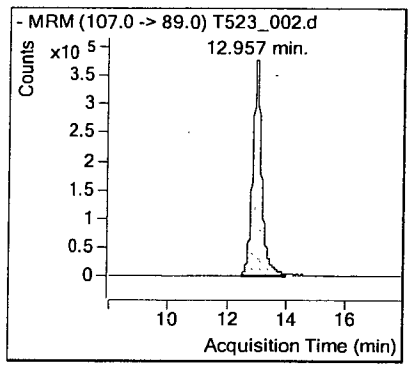


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	12.974	857023	7841423
Perchlorate_102	PER_IS_108	12.981	313246	7841423

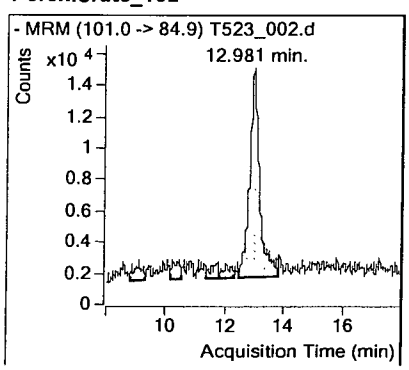
Perchlorate_100

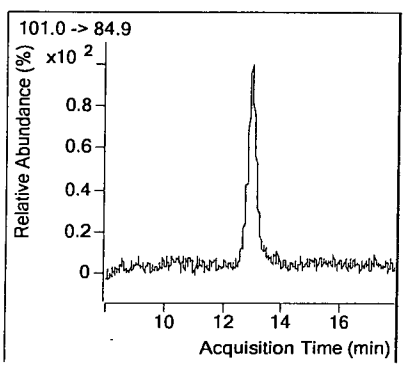


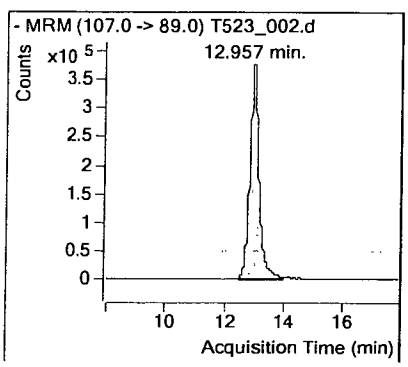




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_003.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:15:20				Date of Analysis: 05/23/15 Time of Analysis: 15:57 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.13	1.168712	N	8.0
Perchlorate_85	13.70	13.60	13.80	0.391605	13.13	0.357237	N	8.8

FILE ID : TQCK2303.RFB

Data File ID: T523_003.d

Date Injected : 05/23/15

Time Injected : 15:57

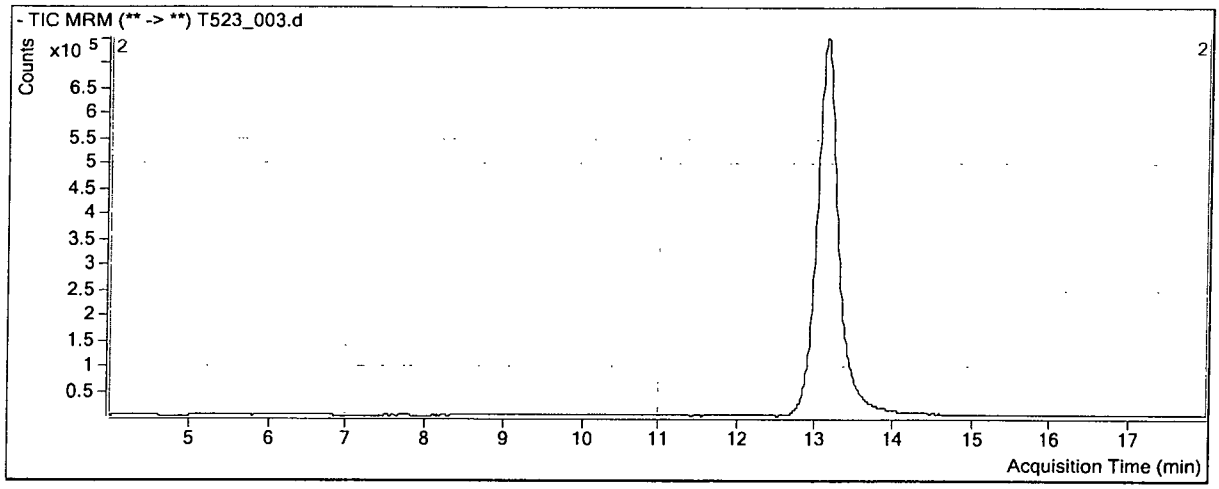
Sample ID : PER_CCV 0.002 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.13	8764619	PER_IS_89
13.127	4097326	Perchlorate_83
13.134	1252418	Perchlorate_85

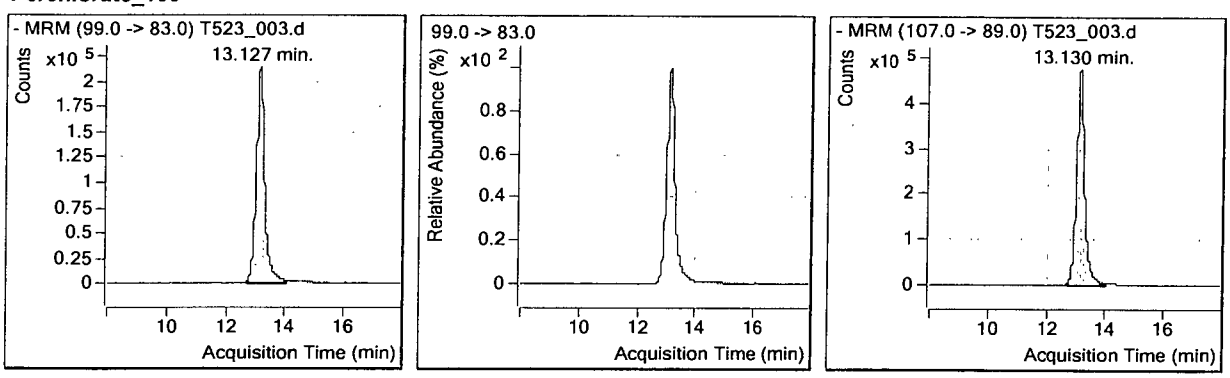
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_003.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	15:57
ClientID	NA	**Inj Vol**	20

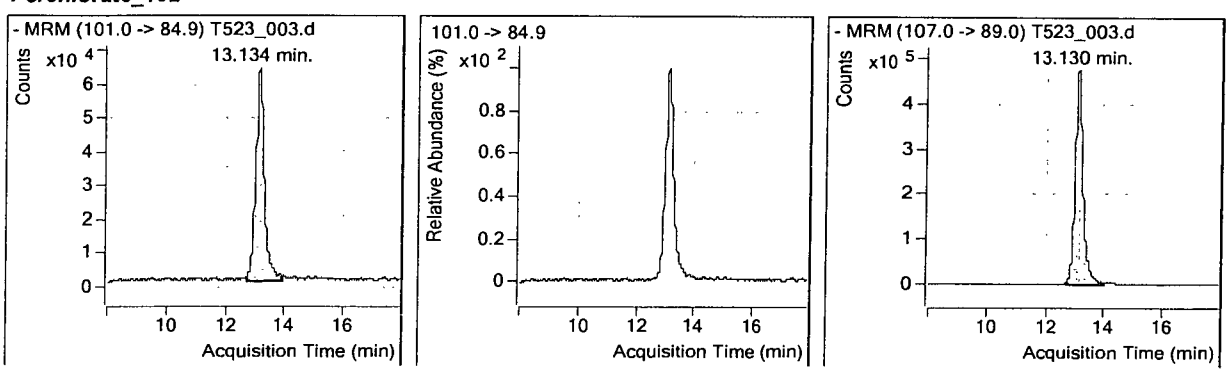


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.127	4097326	8764619
Perchlorate_102	PER_IS_108	13.134	1252418	8764619

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_016.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:19:36				Date of Analysis: 05/23/15 Time of Analysis: 20:13 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.30	1.365879	N	7.5
Perchlorate_85	13.70	13.60	13.80	0.391605	13.26	0.452744	N	15.6

FILE ID : TQCK2316.RFB

Data File ID: T523_016.d

Date Injected : 05/23/15

Time Injected : 20:13

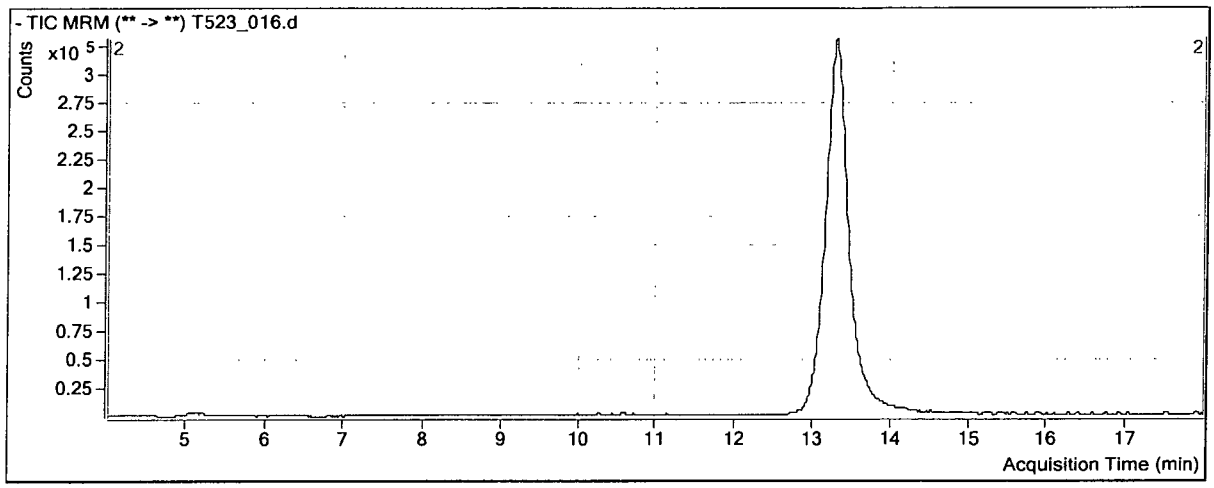
Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.294	5972858	PER_IS_89
13.3	652656	Perchlorate_83
13.256	216334	Perchlorate_85

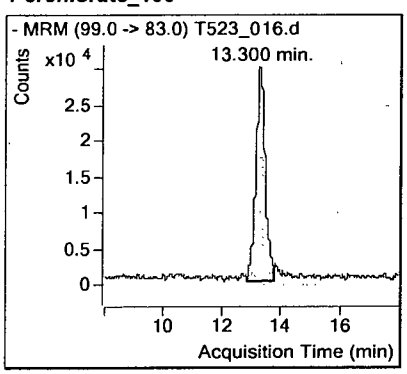
Quantitative Analysis Sample Report

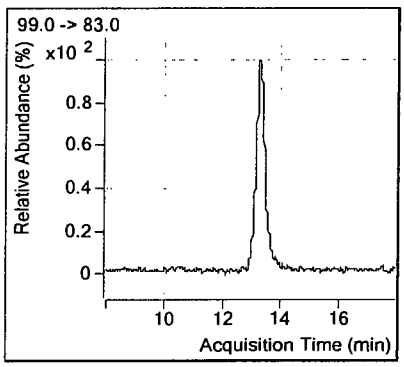
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_016.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:13
ClientID	NA	**Inj Vol**	20

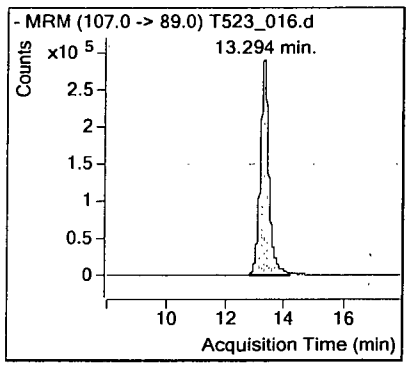


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.300	652656	5972858
Perchlorate_102	PER_IS_108	13.256	216334	5972858

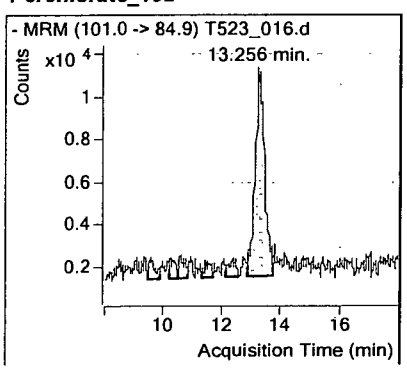
Perchlorate_100

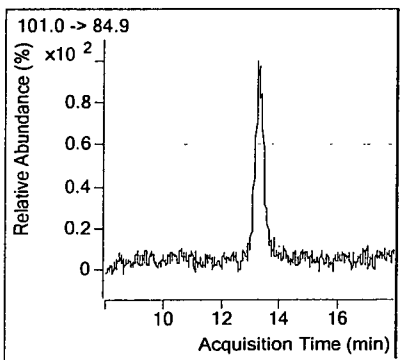


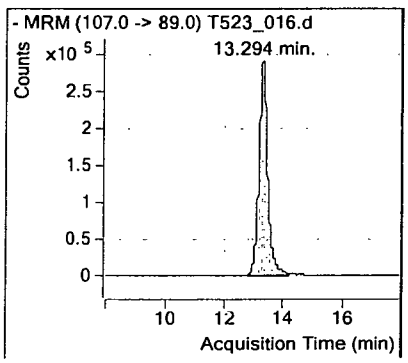




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_017.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:19:36				Date of Analysis: 05/23/15 Time of Analysis: 20:32 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.42	1.183233	N	6.9
Perchlorate_85	13.70	13.60	13.80	0.391605	13.40	0.374616	N	4.3

FILE ID : TQCK2317.RFB

Data File ID: T523_017.d

Date Injected : 05/23/15

Time Injected : 20:32

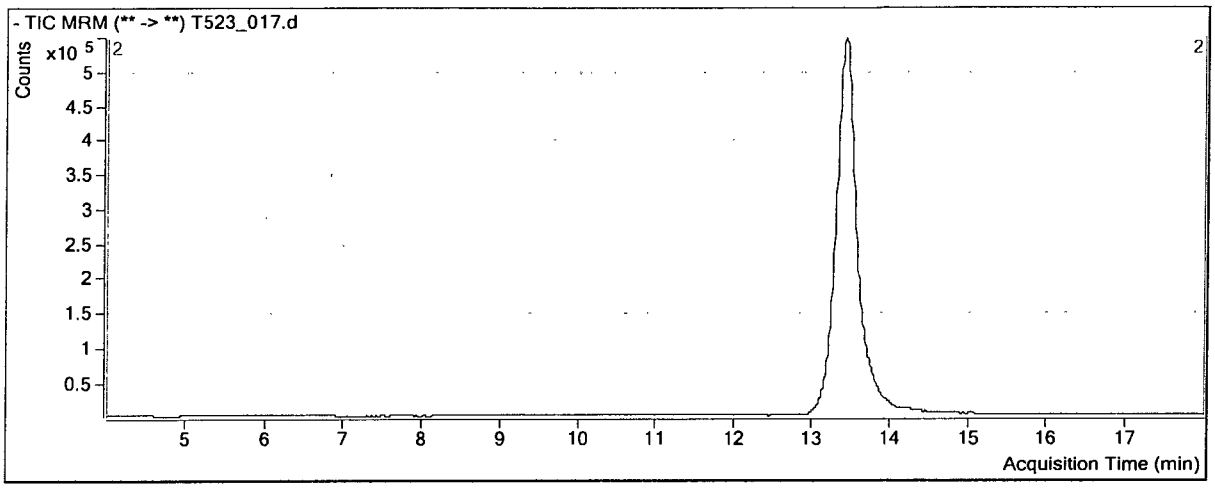
Sample ID : PER_CCV 0.002 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.416	6513163	PER_IS_89
13.423	3082637	Perchlorate_83
13.399	975975	Perchlorate_85

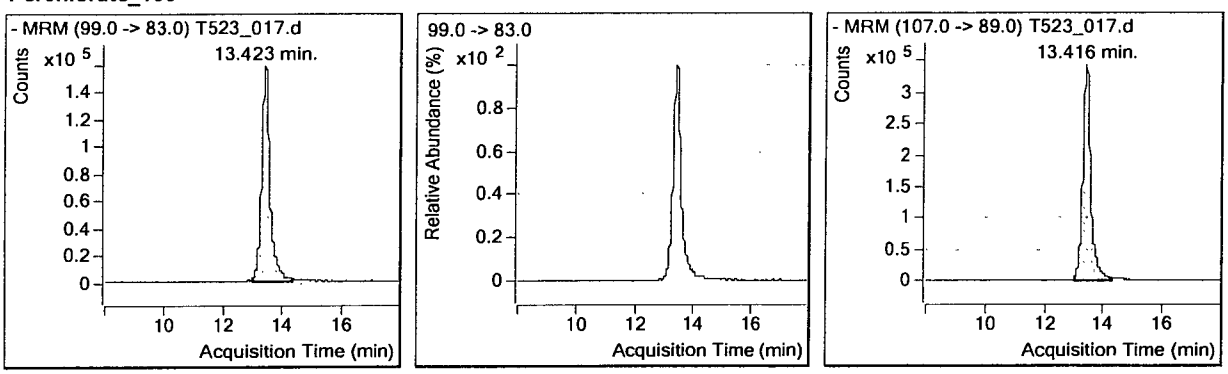
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_017.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:32
ClientID	NA	**Inj Vol**	20

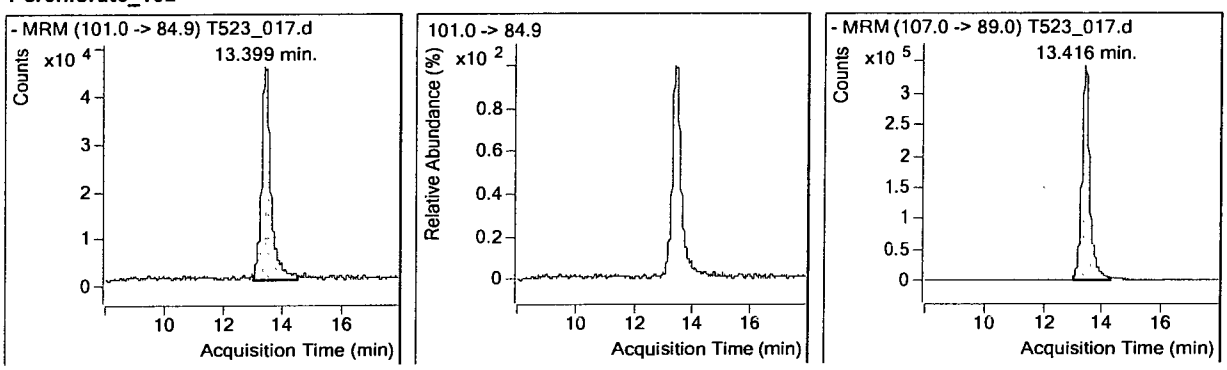


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.423	3082637	6513163
Perchlorate_102	PER_IS_108	13.399	975975	6513163

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_030.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:23:57				Date of Analysis: 05/24/15 Time of Analysis: 0:34 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.80	1.444680	N	13.7
Perchlorate_85	13.70	13.60	13.80	0.391605	13.82	0.469797	N	20.0

FILE ID : TQCK2330.RFB

Data File ID: T523_030.d

Date Injected : 05/24/15

Time Injected : 0:34

Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

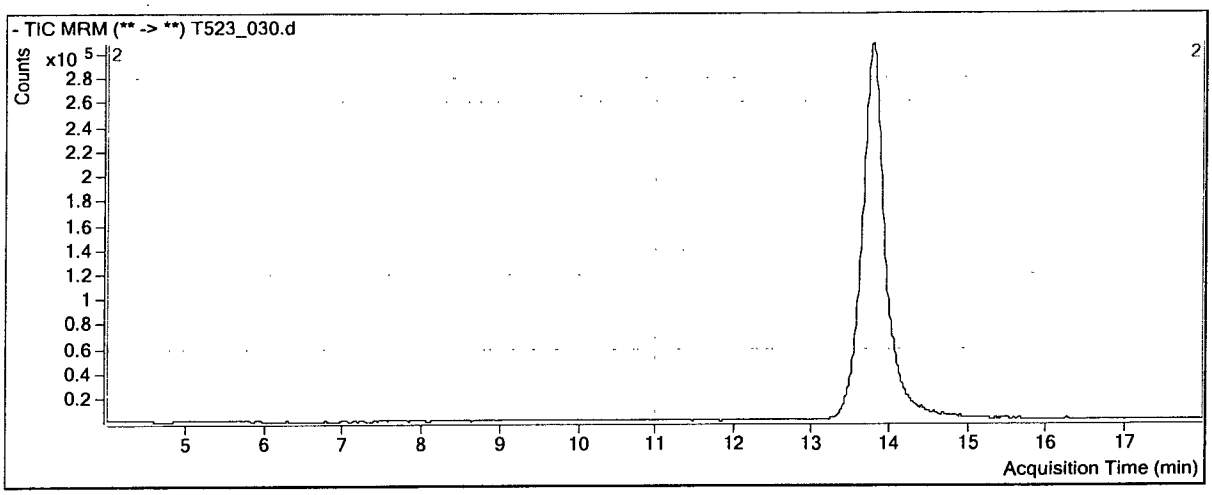
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
13.783		5763820	PER_IS_89
13.8		666150	Perchlorate_83
13.817	*	216626	Perchlorate_85

* MANUAL INTEGRAION

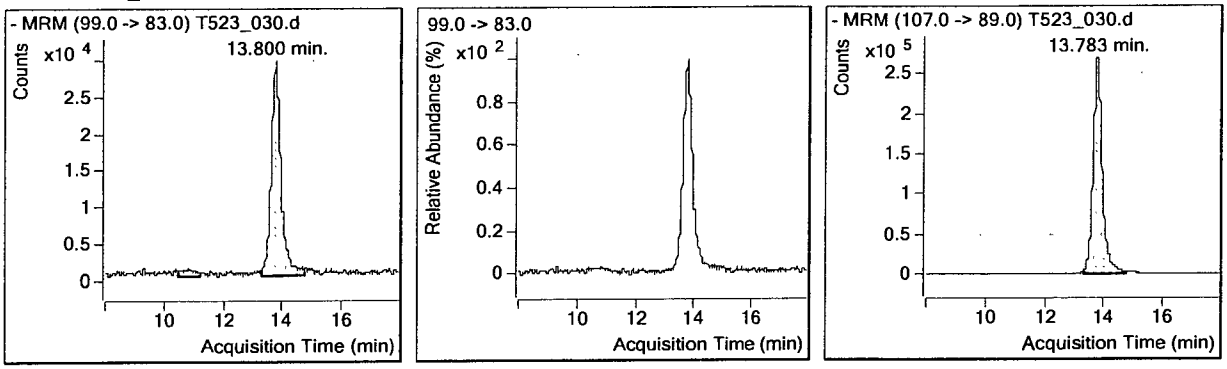
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_030.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	0:34
ClientID	NA	**Inj Vol**	20

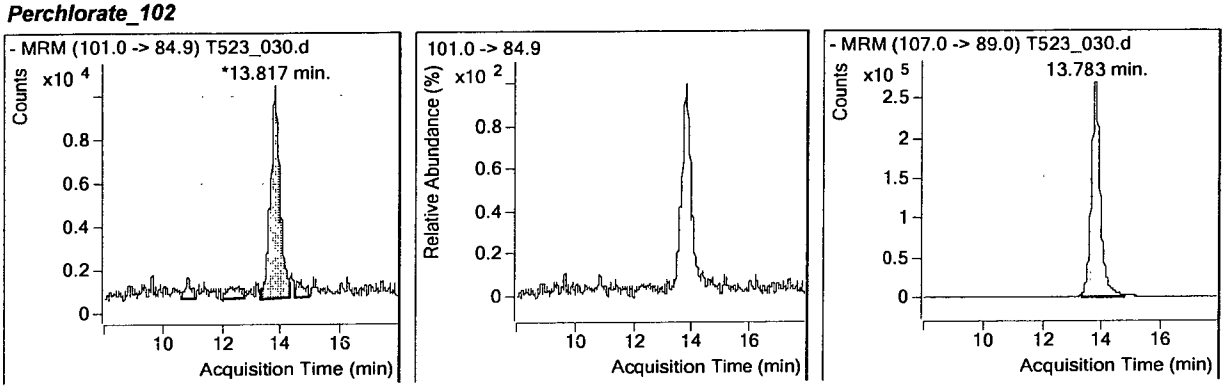


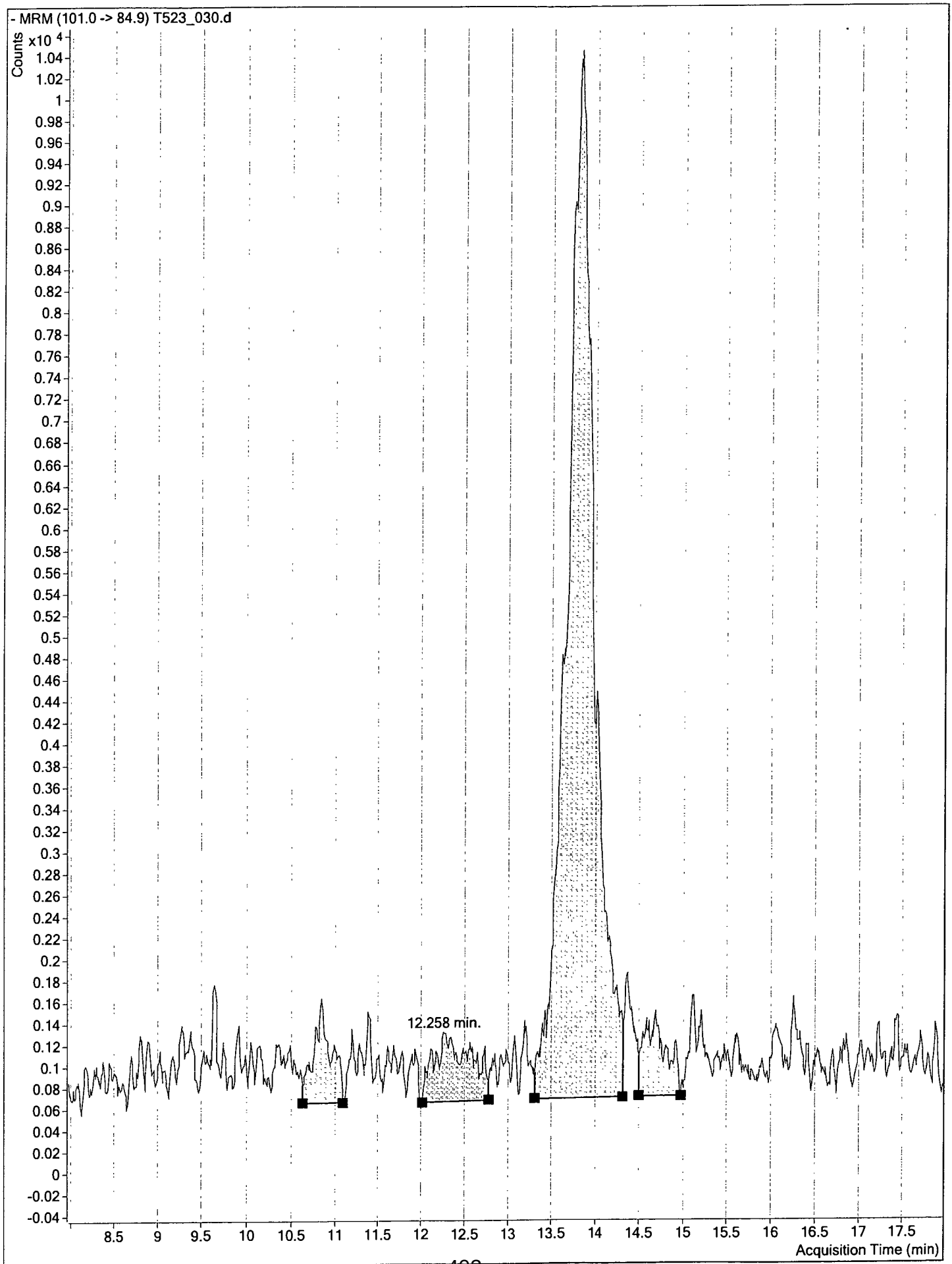
Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108		13.800	666150	5763820	
Perchlorate_102	PER_IS_108	*	13.817	216626	5763820	* MANUAL INT

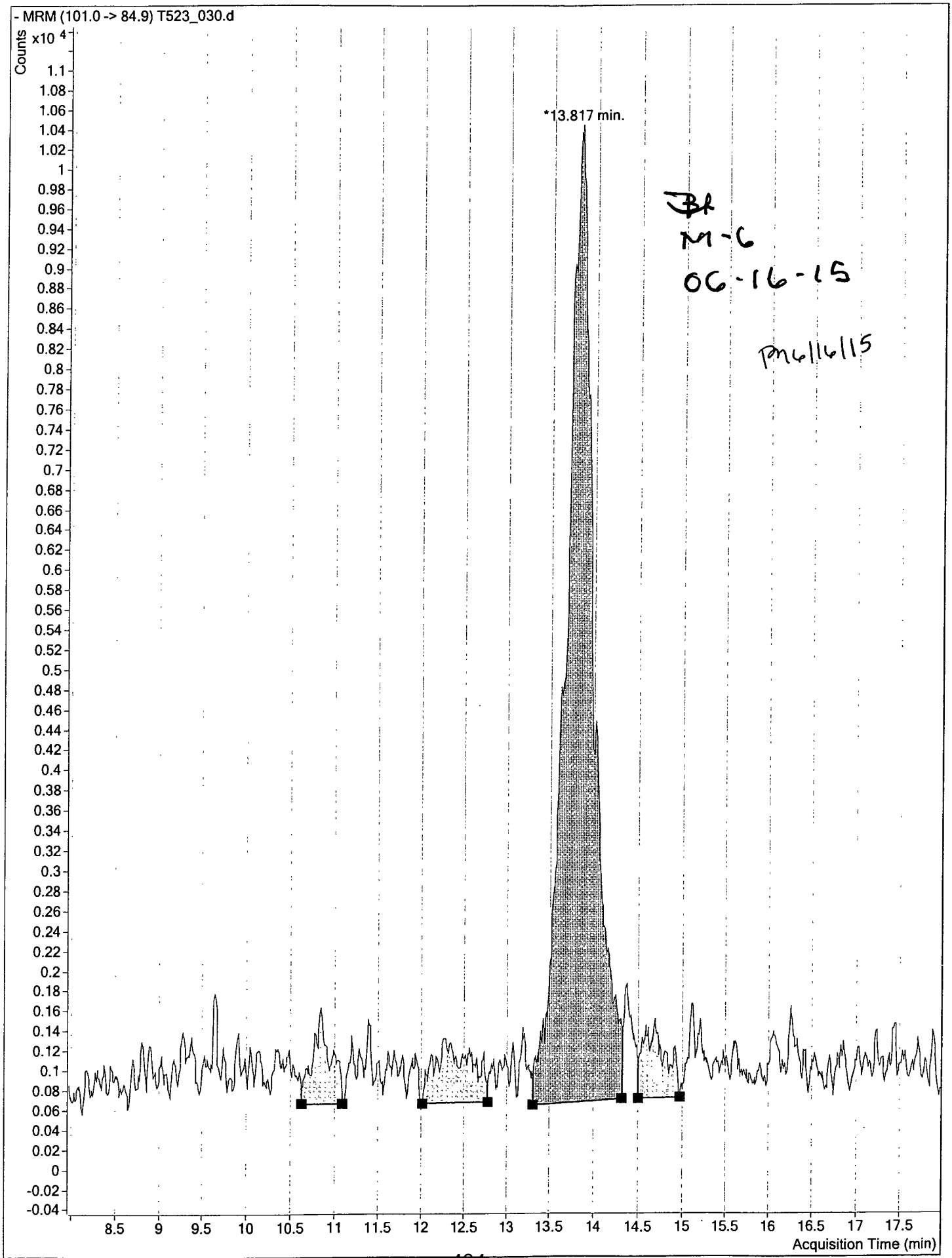
Perchlorate_100



Perchlorate_102




- MRM (101.0 -> 84.9) T523_030.d
Counts
x10 4
1.04
1.02
1
0.98
0.96
0.94
0.92
0.9
0.88
0.86
0.84
0.82
0.8
0.78
0.76
0.74
0.72
0.7
0.68
0.66
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5
0.48
0.46
0.44
0.42
0.4
0.38
0.36
0.34
0.32
0.3
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
12.258 min.
8.5
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)


- MRM (101.0 -> 84.9) T523_030.d
Counts
x10 4
*13.817 min.
Acquisition Time (min)
BL
M-6
06-16-15
PM6/16/15

CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_031.d

	Date (s) of Analysis From:03/12/15 To:05/23/15 Time (s) of Analysis From:17:52 To:23:57				Date of Analysis: 05/24/15 Time of Analysis: 0:53 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.90	1.166527	N	8.2
Perchlorate_85	13.70	13.60	13.80	0.391605	13.90	0.357580	N	8.7

FILE ID : TQCK2331.RFB

Data File ID: T523_031.d

Date Injected : 05/24/15

Time Injected : 0:53

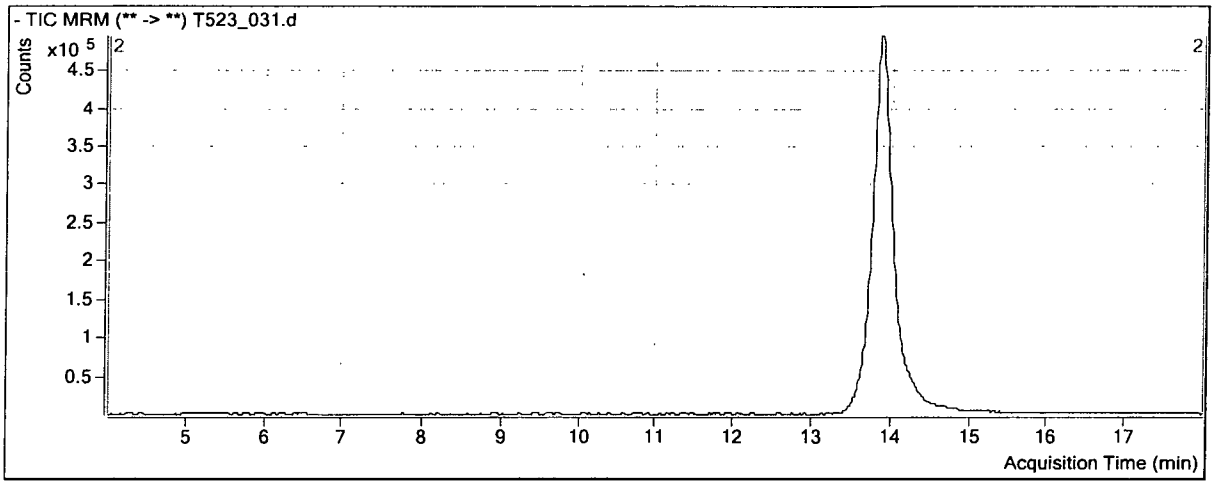
Sample ID : PER_CCV 0.002 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.864	6154538	PER_IS_89
13.902	2871773	Perchlorate_83
13.898	880296	Perchlorate_85

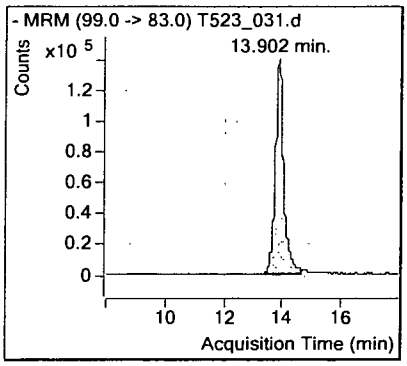
Quantitative Analysis Sample Report

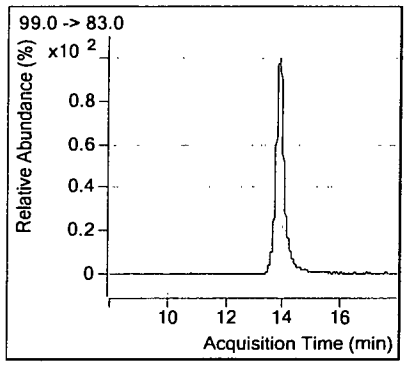
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_031.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	0:53
ClientID	NA	**Inj Vol**	20

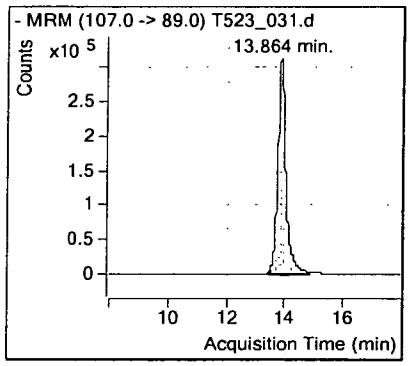


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.902	2871773	6154538
Perchlorate_102	PER_IS_108	13.898	880296	6154538

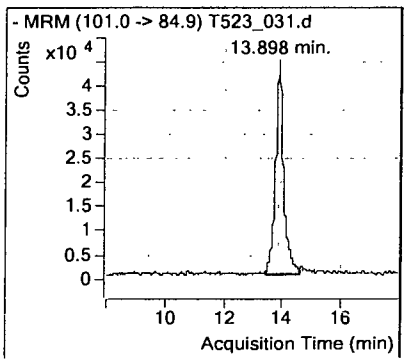
Perchlorate_100

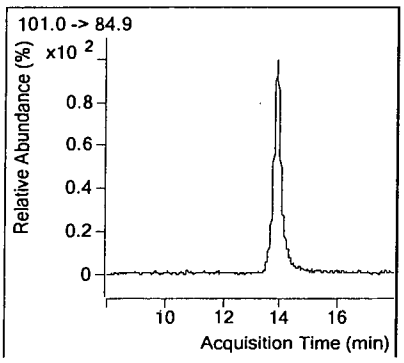


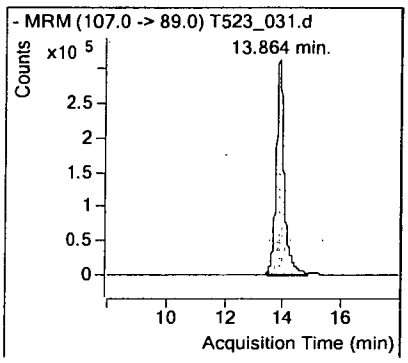




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_044.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:4:17				Date of Analysis: 05/24/15 Time of Analysis: 4:55 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	14.02	1.313146	N	3.4
Perchlorate_85	13.70	13.60	13.80	0.391605	14.03	0.470687	N	20.2

FILE ID : TQCK2344.RFB

Data File ID: T523_044.d

Date Injected : 05/24/15

Time Injected : 4:55

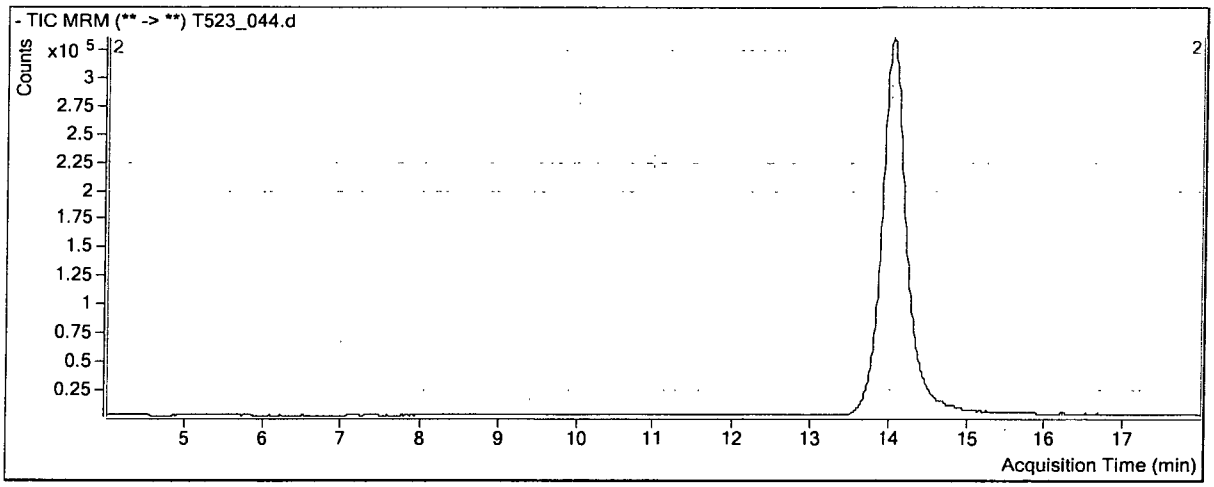
Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.037	6579582	PER_IS_89
14.024	691196	Perchlorate_83
14.031	247754	Perchlorate_85

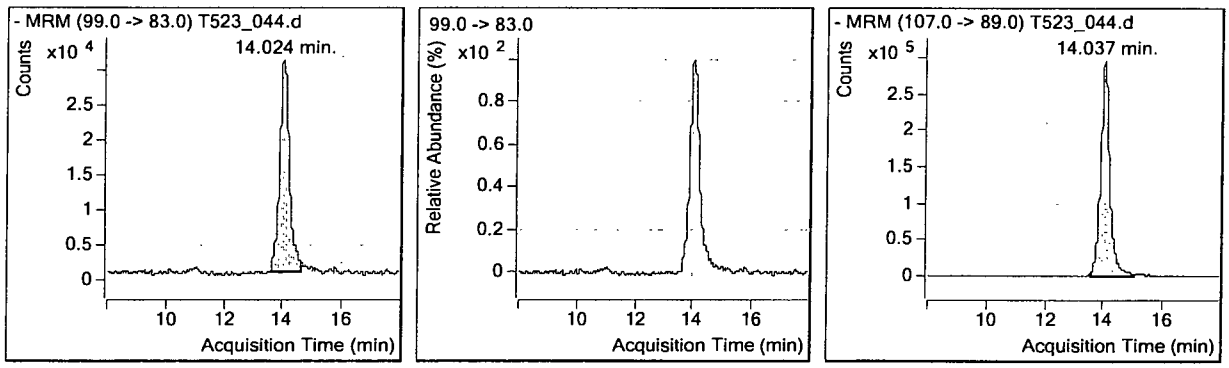
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_044.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	4:55
ClientID	NA	**Inj Vol**	20

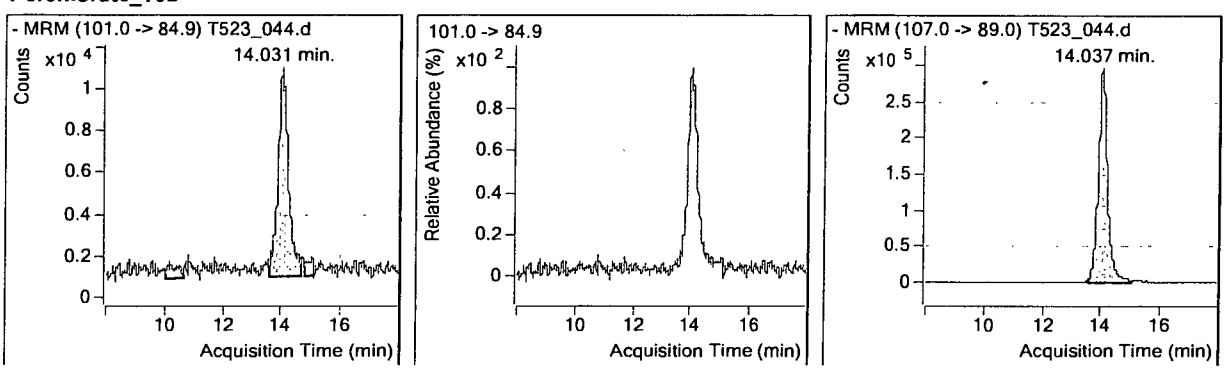


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.024	691196	6579582
Perchlorate_102	PER_IS_108	14.031	247754	6579582

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_045.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:4:17				Date of Analysis: 05/24/15 Time of Analysis: 5:13 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	14.22	1.173647	N	7.6
Perchlorate_85	13.70	13.60	13.80	0.391605	14.19	0.358993	N	8.3

FILE ID : TQCK2345.RFB

Data File ID: T523_045.d

Date Injected : 05/24/15

Time Injected : 5:13

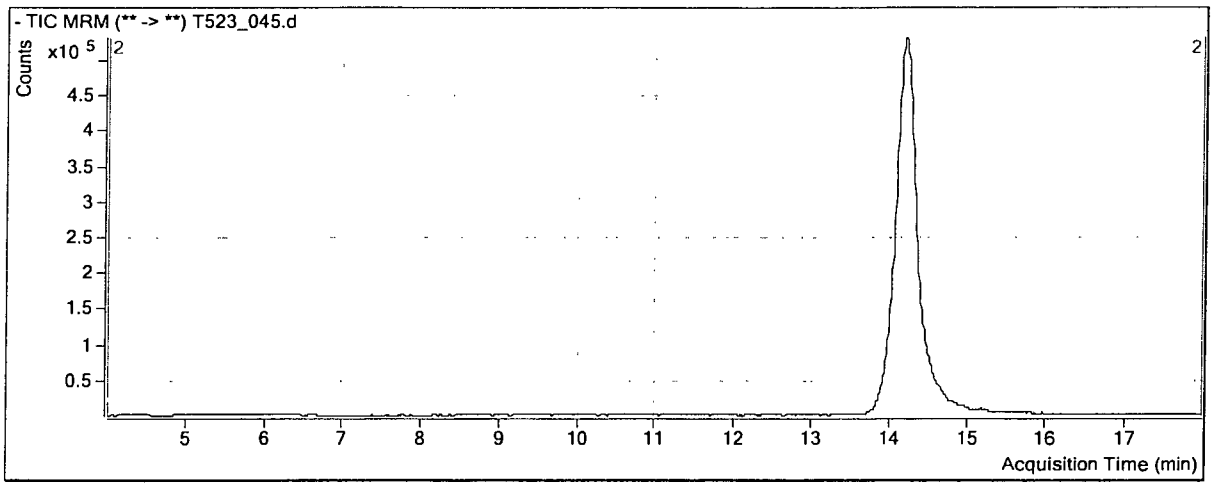
Sample ID : PER_CCV 0.002 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.2	6755219	PER_IS_89
14.217	3171297	Perchlorate_83
14.194	970030	Perchlorate_85

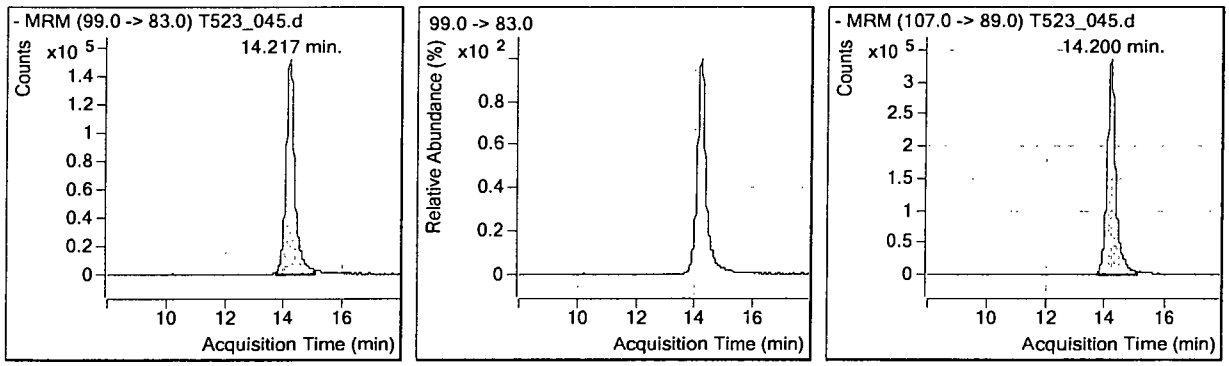
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_045.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	5:13
ClientID	NA	**Inj Vol**	20

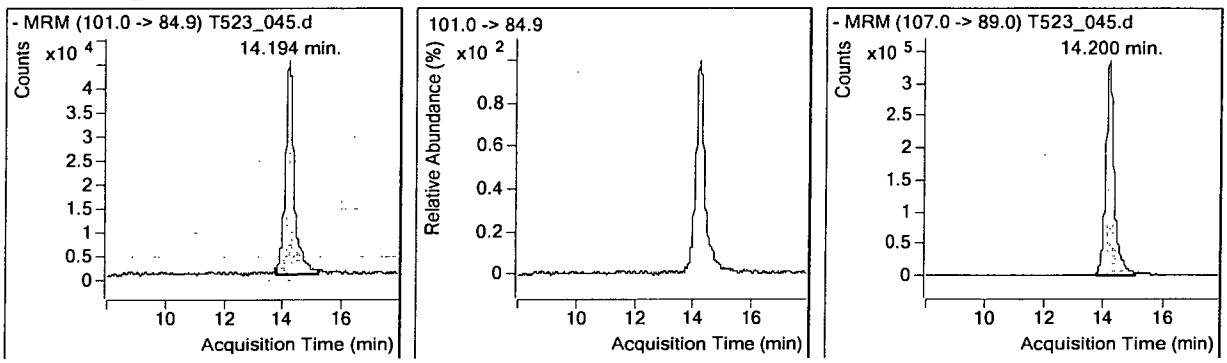


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.217	3171297	6755219
Perchlorate_102	PER_IS_108	14.194	970030	6755219

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_057.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:8:19				Date of Analysis: 05/24/15 Time of Analysis: 8:57 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.77	1.429965	N	12.6
Perchlorate_85	13.70	13.60	13.80	0.391605	13.79	0.480058	N	22.6

FILE ID : TQCK2357.RFB

Data File ID: T523_057.d

Date Injected : 05/24/15

Time Injected : 8:57

Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

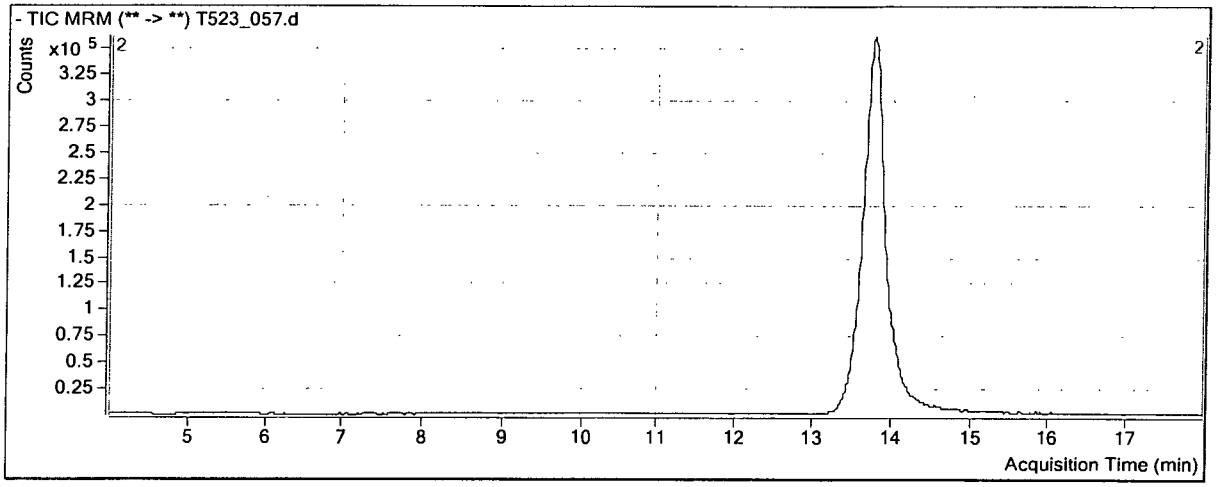
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
13.762		6631309	PER_IS_89
13.769		758603	Perchlorate_83
13.786	*	254673	Perchlorate_85

* MANUAL INTEGRAION

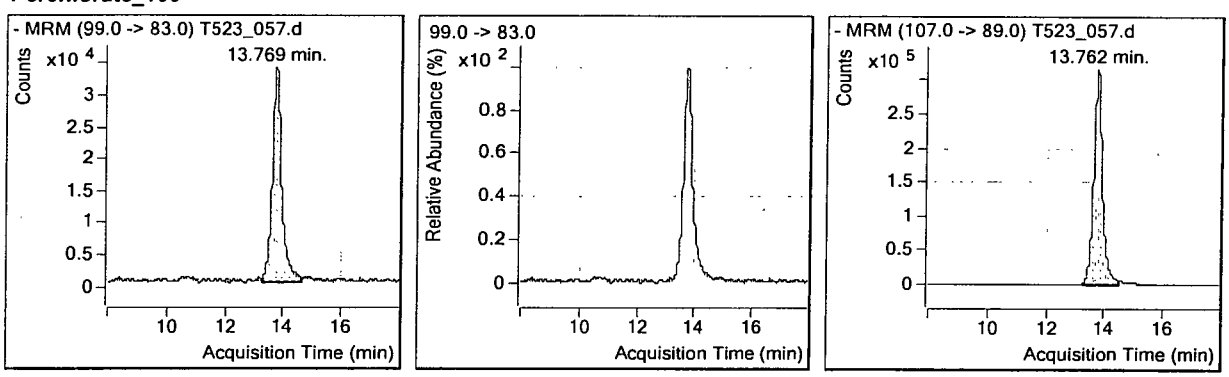
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_057.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	8:57
ClientID	NA	**Inj Vol**	20

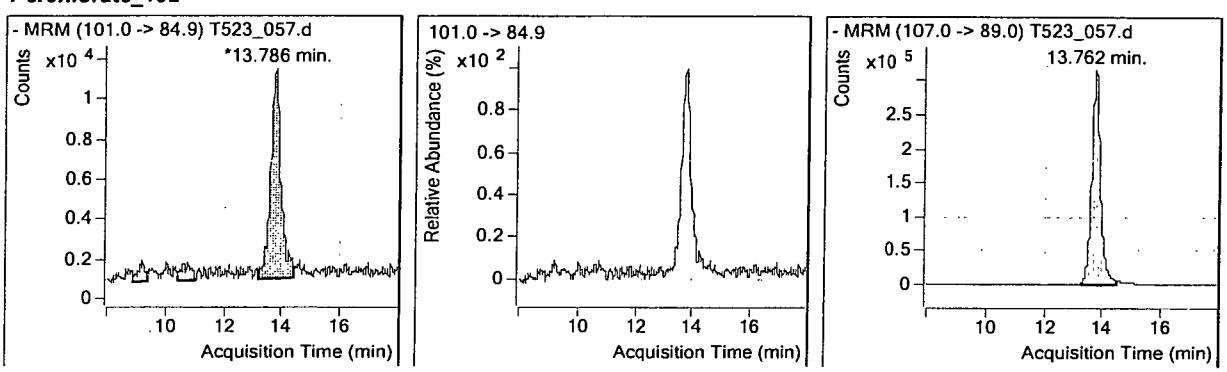


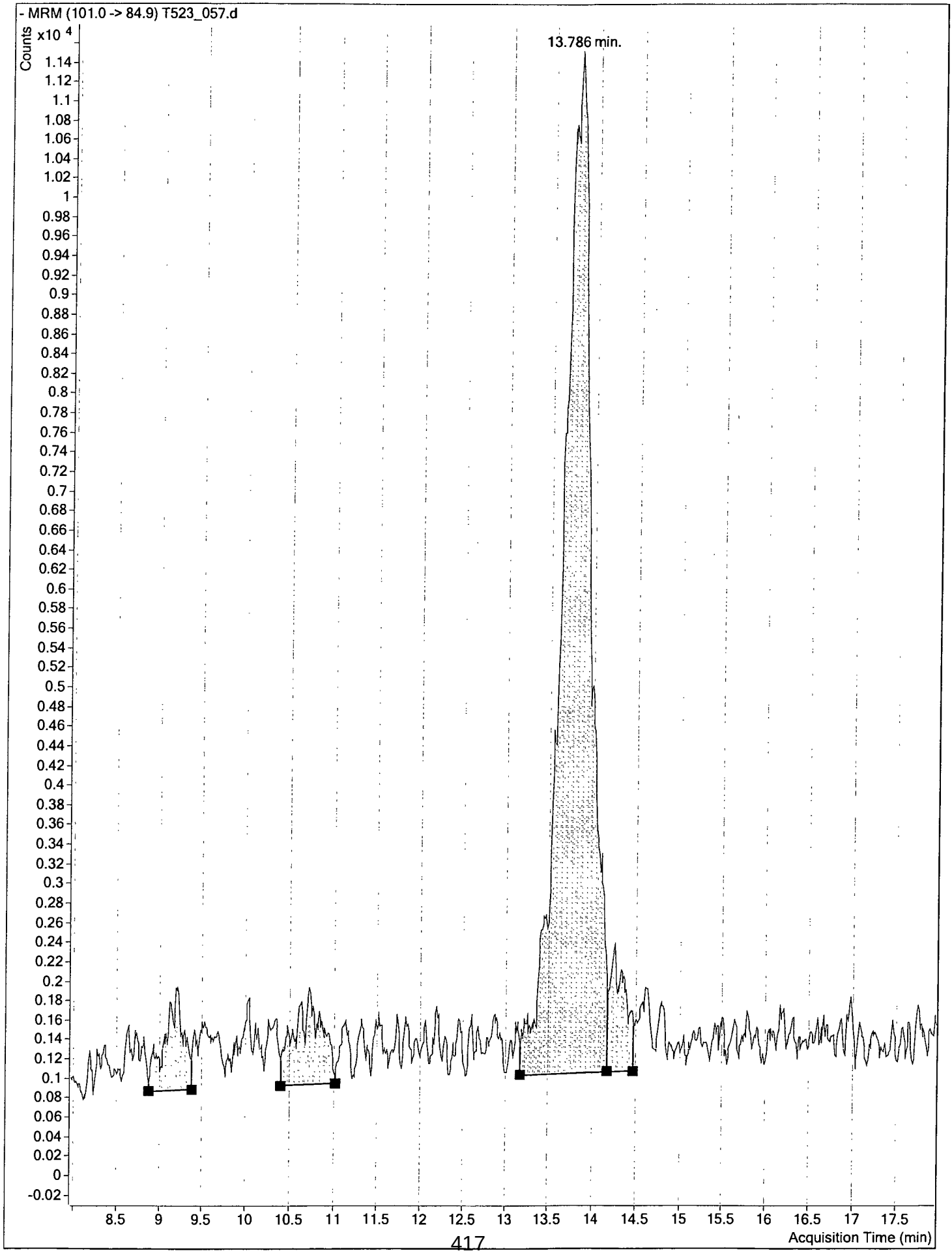
Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108		13.769	758603	6631309	
Perchlorate_102	PER_IS_108	*	13.786	254673	6631309	* MANUAL INT

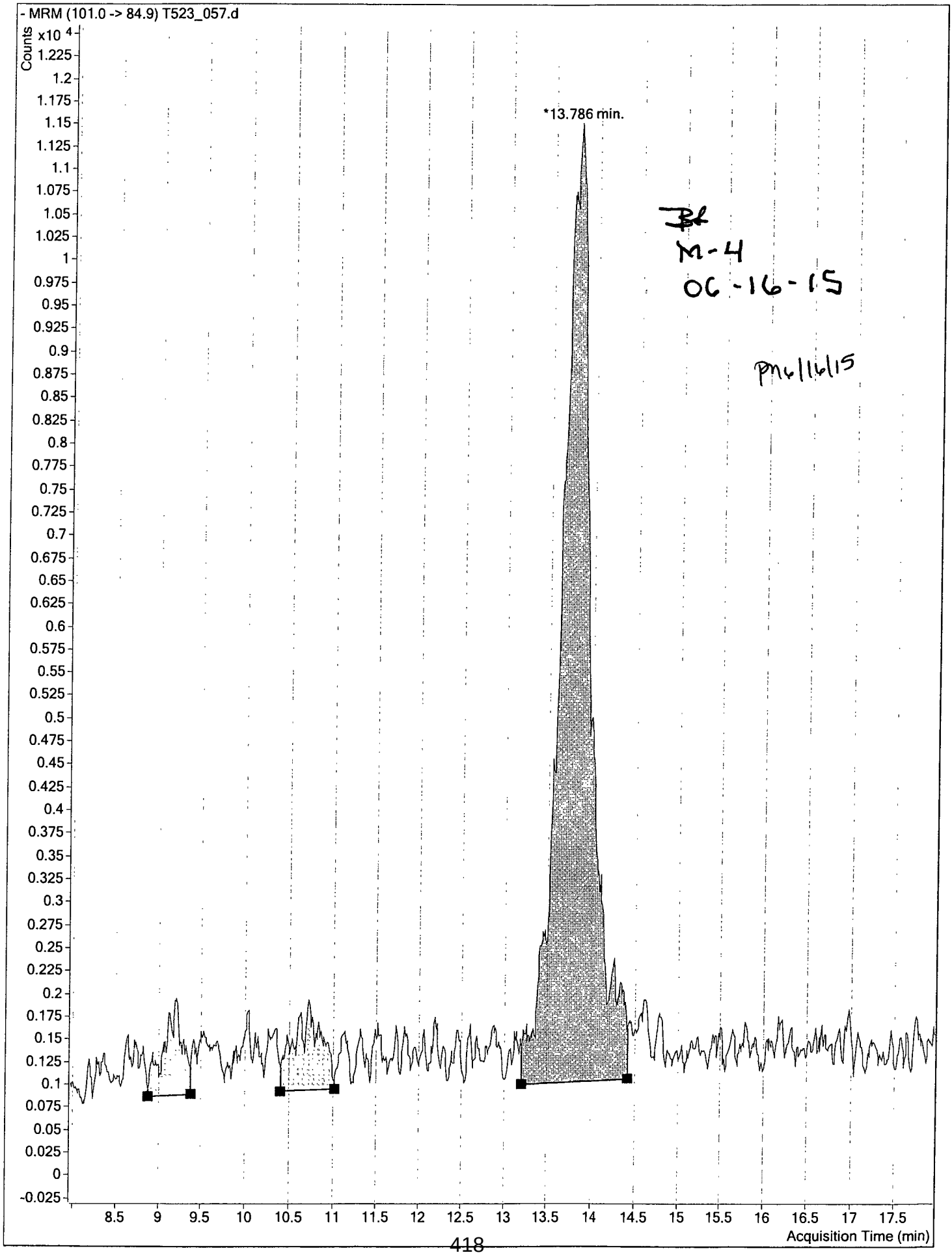
Perchlorate_100



Perchlorate_102




- MRM (101.0 -> 84.9) T523_057.d
Counts
x10 4
13.786 min.
Acquisition Time (min)


- MRM (101.0 -> 84.9) T523_057.d
Counts
x10 4
*13.786 min.
Acquisition Time (min)
M-4
OC-16-15
PM 6/16/15

CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_058.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:8:19				Date of Analysis: 05/24/15 Time of Analysis: 9:15 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.82	1.172099	N	7.7
Perchlorate_85	13.70	13.60	13.80	0.391605	13.81	0.358148	N	8.5

FILE ID : TQCK2358.RFB

Data File ID: T523_058.d

Date Injected : 05/24/15

Time Injected : 9:15

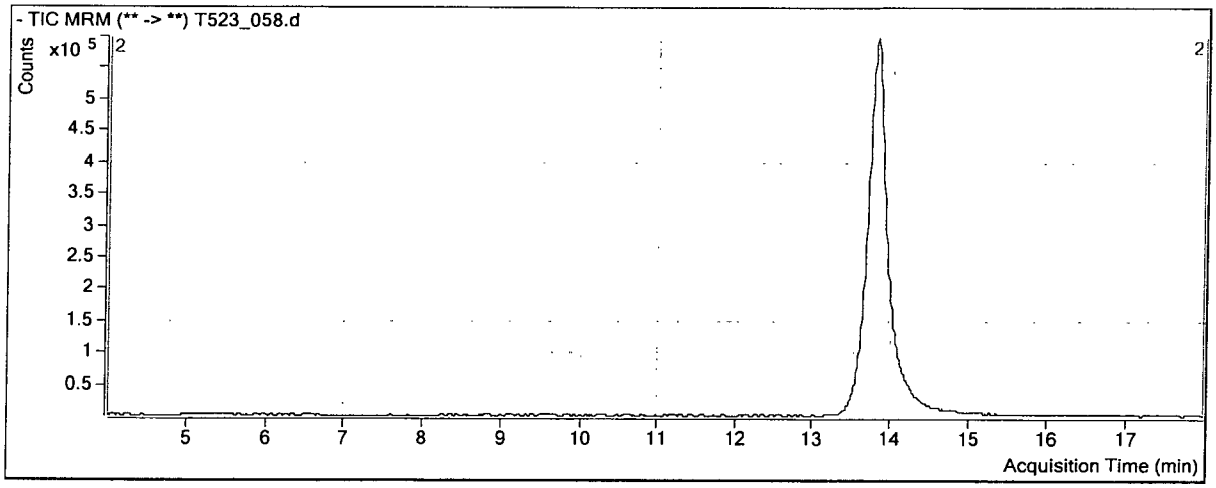
Sample ID : PER_CCV 0.002 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.823	7264937	PER_IS_89
13.82	3406090	Perchlorate_83
13.806	1040769	Perchlorate_85

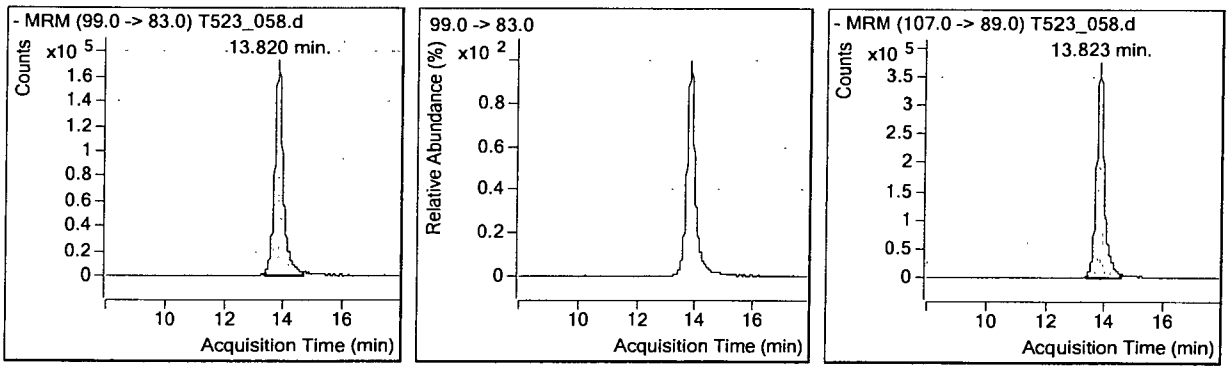
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_058.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	9:15
ClientID	NA	**Inj Vol**	20

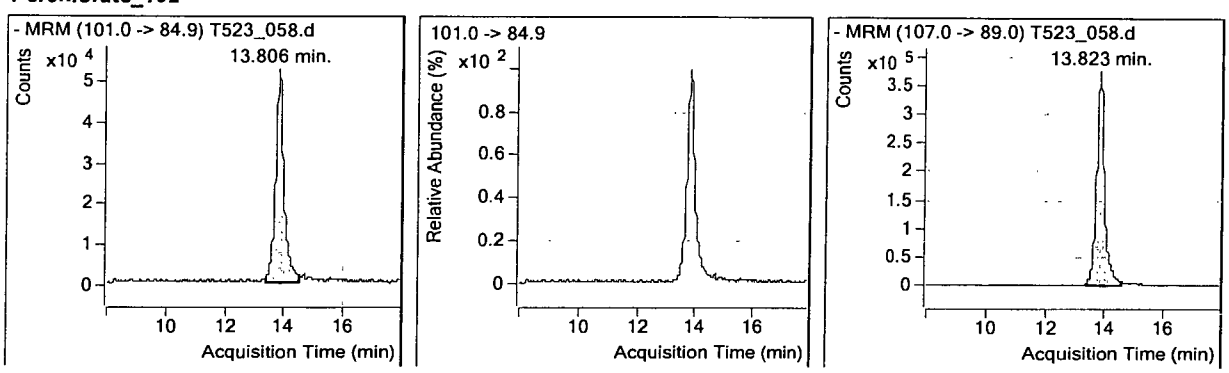


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.820	3406090	7264937
Perchlorate_102	PER_IS_108	13.806	1040769	7264937

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_069.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:12:03				Date of Analysis: 05/24/15 Time of Analysis: 13:00 Standard Id: PER_CCV (Standard) 0.0004ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.42	1.474319	N	16.1
Perchlorate_85	13.70	13.60	13.80	0.391605	13.43	0.491206	N	25.4

FILE ID : TQCK2369.RFB

Data File ID: T523_069.d

Date Injected : 05/24/15

Time Injected : 13:00

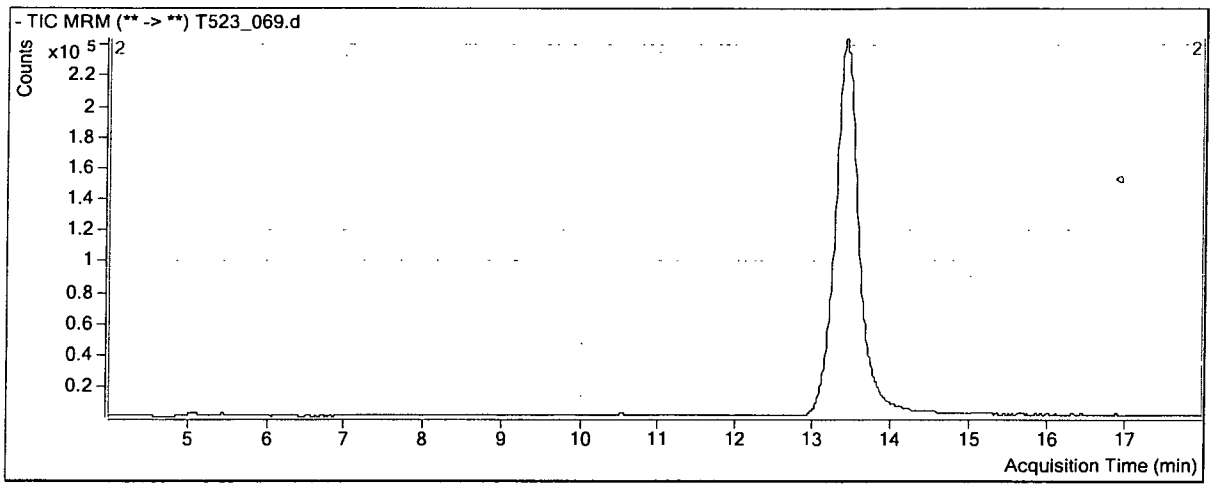
Sample ID : PER_CCV 0.0004 ug/ml 05/07/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.406	4418362	PER_IS_89
13.423	521126	Perchlorate_83
13.429	173626	Perchlorate_85

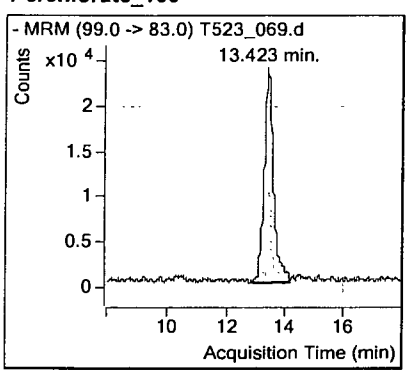
Quantitative Analysis Sample Report

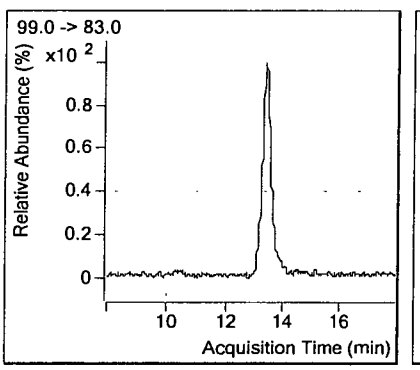
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_069.d	**Sample Name**	PER_CCV 0.0004 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	13:00
ClientID	NA	**Inj Vol**	20

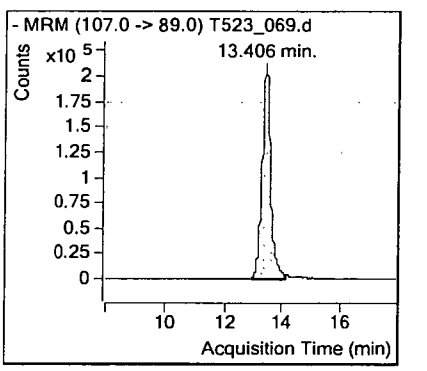


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.423	521126	4418362
Perchlorate_102	PER_IS_108	13.429	173626	4418362

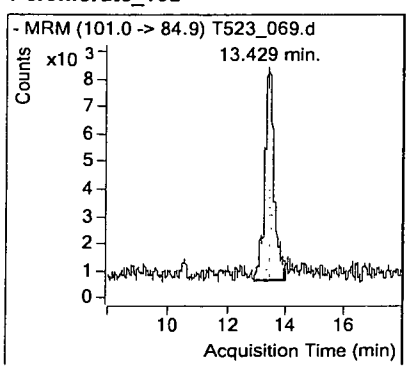
Perchlorate_100

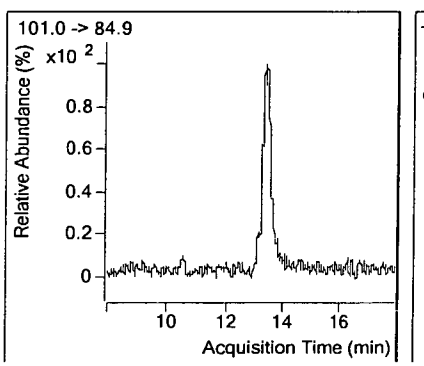


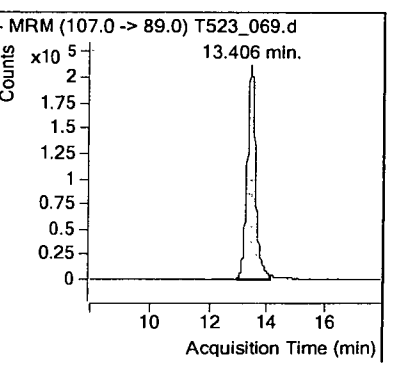




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T523_070.d

	Date (s) of Analysis From:03/12/15 To:05/24/15 Time (s) of Analysis From:17:52 To:12:03				Date of Analysis: 05/24/15 Time of Analysis: 13:18 Standard Id: PER_CCV (Standard) 0.002 ug/ml			
COMPOUND	RT	RT WINDOW FROM	TO	AVERAGE RELATIVE RESPONSE FACTOR	RT	CALCULATED RELATIVE RESPONSE FACTOR	QNT Y/N	%D
Perchlorate_83	13.79	13.69	13.89	1.270255	13.50	1.175265	N	7.5
Perchlorate_85	13.70	13.60	13.80	0.391605	13.52	0.369265	N	5.7

FILE ID : TQCK2370.RFB

Data File ID: T523_070.d

Date Injected : 05/24/15

Time Injected : 13:18

Sample ID : PER_CCV 0.002 ug/ml 05/07/15

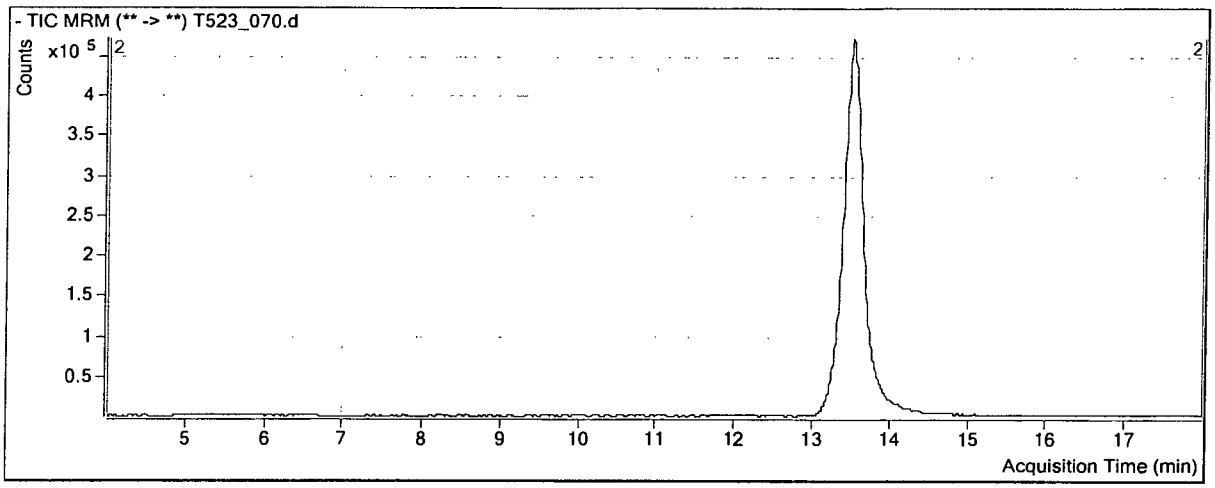
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
13.497		5503588	PER_IS_89
13.504	*	2587270	Perchlorate_83
13.521		812912	Perchlorate_85

* MANUAL INTEGRAION

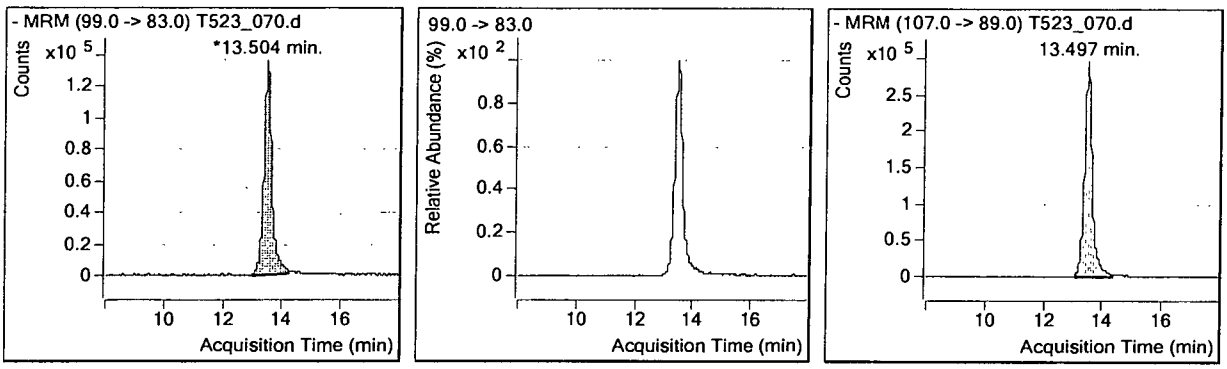
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_070.d	**Sample Name**	PER_CCV 0.002 ug/ml 05/07/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	13:18
ClientID	NA	**Inj Vol**	20

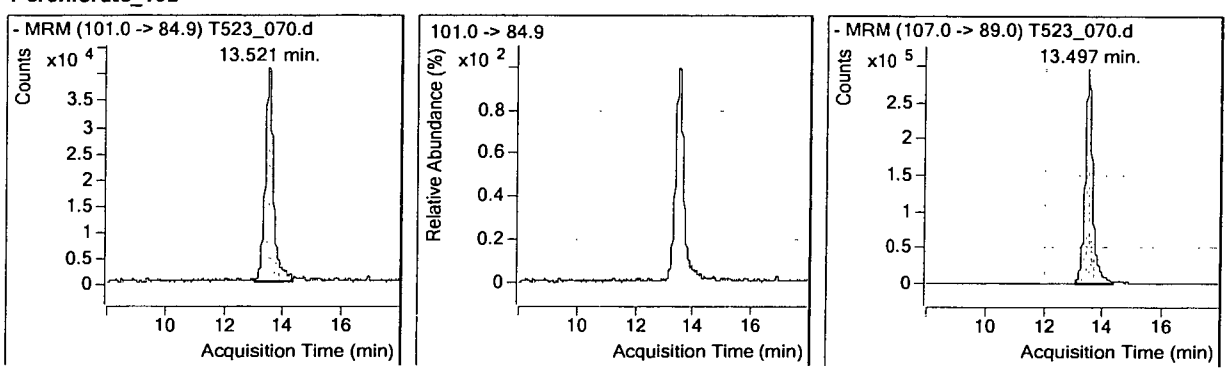


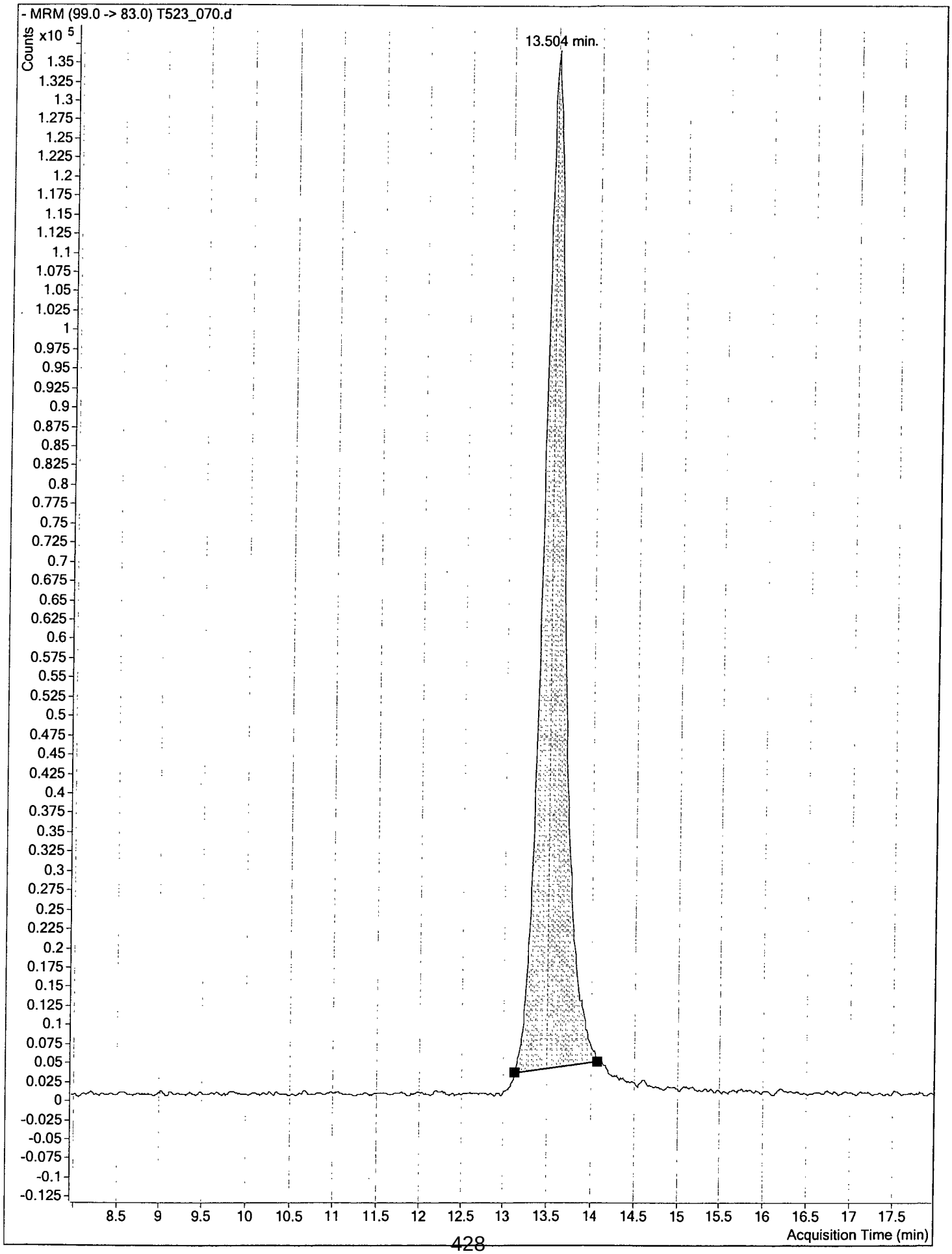
Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108	*	13.504	2587270	5503588	* MANUAL INT
Perchlorate_102	PER_IS_108		13.521	812912	5503588	

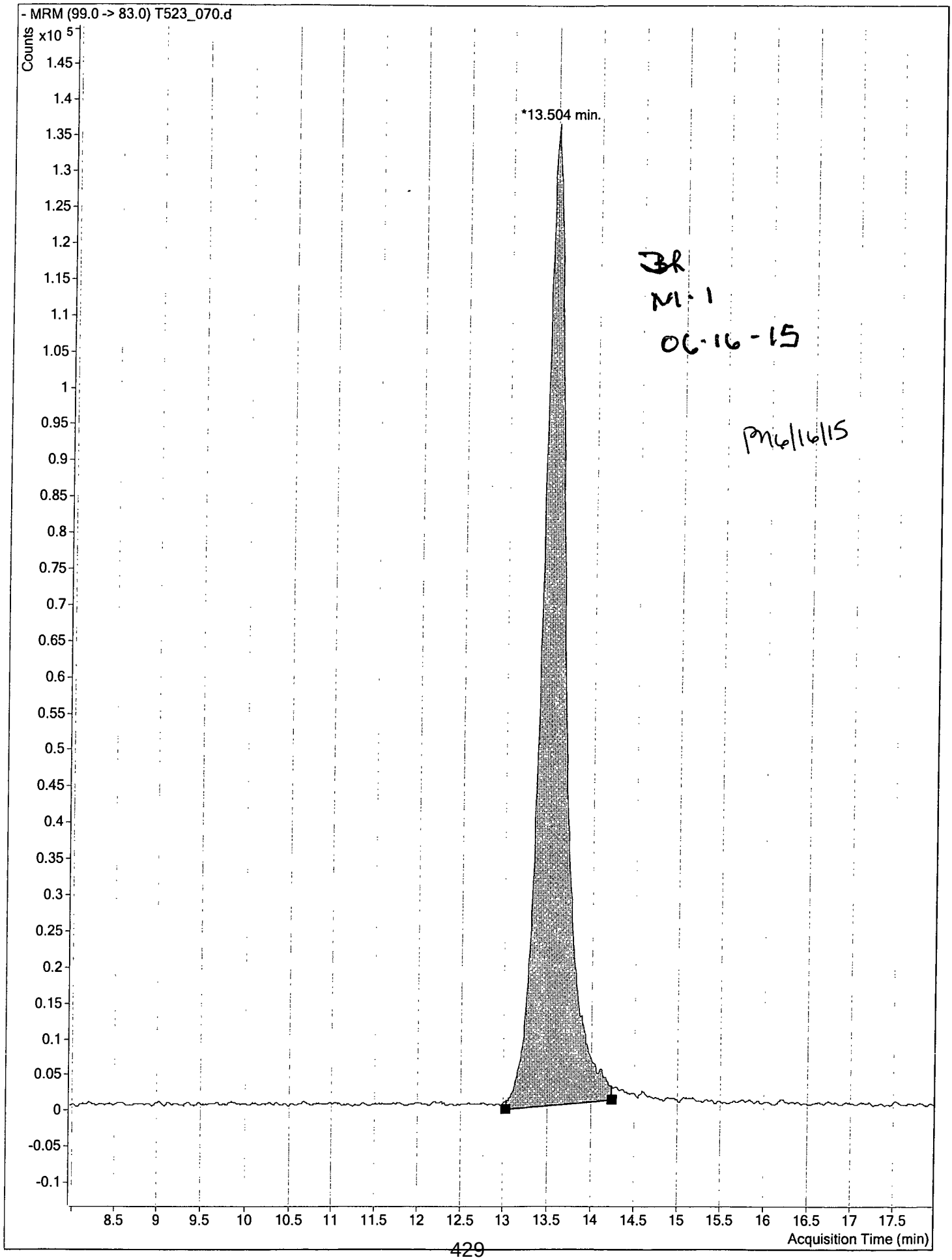
Perchlorate_100



Perchlorate_102




- MRM (99.0 -> 83.0) T523_070.d
Counts
x10 5
13.504 min.
Acquisition Time (min)


- MRM (99.0 -> 83.0) T523_070.d
Counts
x10 5
*13.504 min.
Acquisition Time (min)
3R
M-1
06-16-15
PM6/16/15

EPA METHOD 6850
Perchlorate
LC/MS

Raw Data

APPL, INC.

Method Blank
Perchlorate

Blank Name/QCG: **150518W-16287 - 198054**
Batch ID: #6850-150518A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.400 U	0.60	0.400	0.200	ug/L	05/18/15	05/23/15

Quant Method: QTLMFL2
Run #: T523_021.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/17/15 10:51:56 AM

Data File ID: T523_021.d

Date Injected : 05/23/15

Time Injected : 21:46

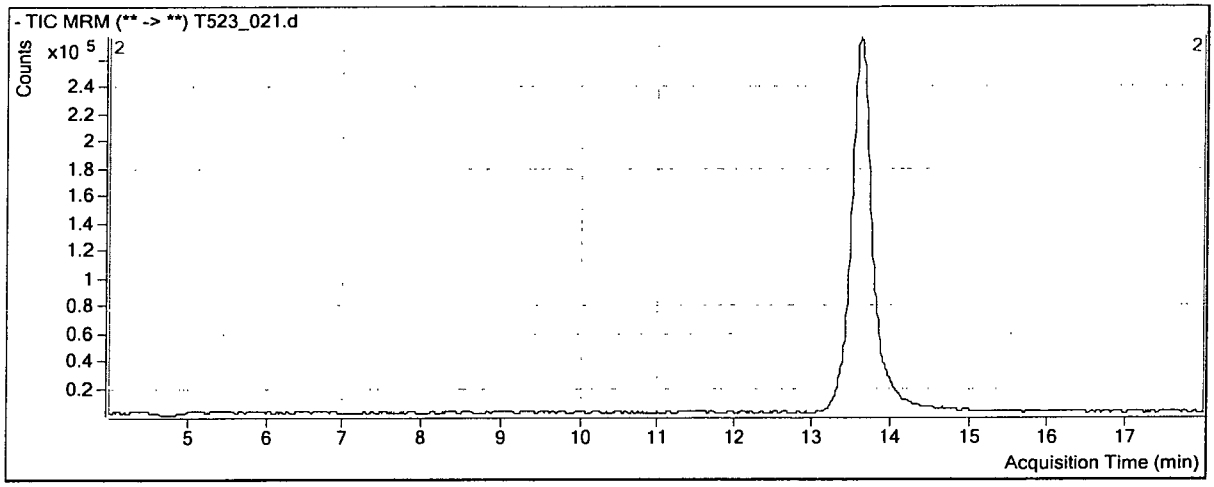
Sample ID : 150518WBLKA 1052.6 DF 05/18/15

Client ID : LAB_CNTL_W_BLKA

Retention Time	Area Count Response	Compound_ID Product Ion			
13.609	5254586	PER_IS_89			
13.015	2031	Perchlorate_83	(2031 * 0.0050) / (1.27 * 5254586.00) *	1052.60 =	0.001601 ppb
12.849	8841	Perchlorate_85	(8841 * 0.0050) / (0.39 * 5254586.00) *	1052.60 =	0.022612 ppb

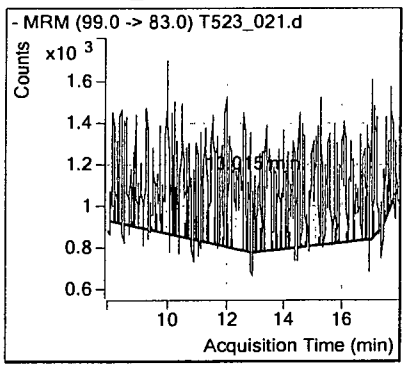
Quantitative Analysis Sample Report

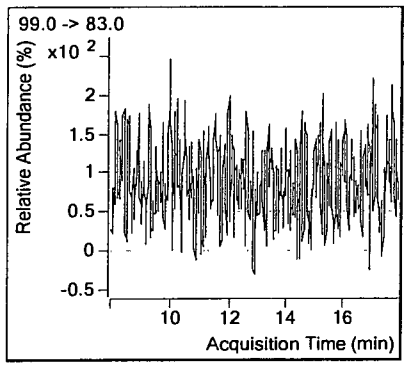
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_021.d	**Sample Name**	150518WBLKA 1052.6 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:46
ClientID	LAB_CNTL_W_BLKA	**Inj Vol**	20

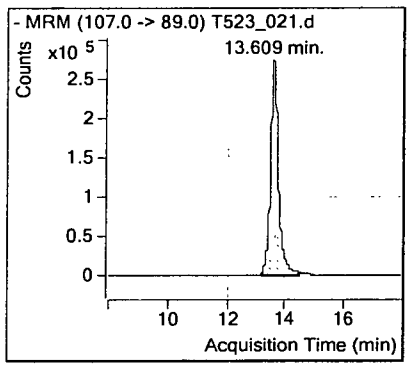


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.015	2031	5254586
Perchlorate_102	PER_IS_108	12.849	8841	5254586

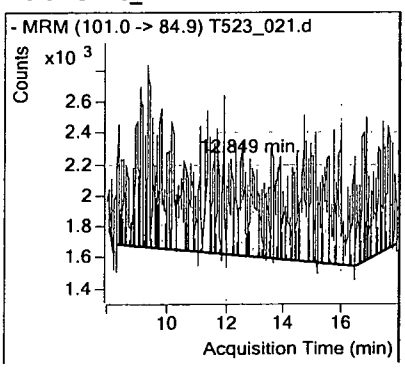
Perchlorate_100

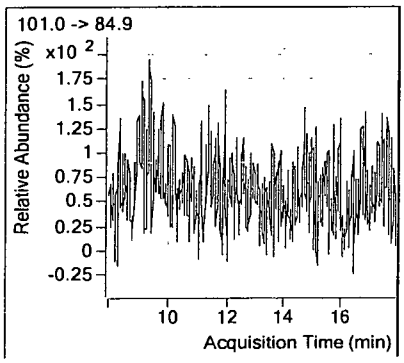


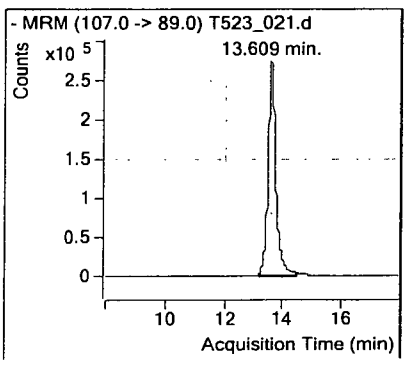




Perchlorate_102







Method Blank
PERCHLORATE EPA 6850 - SOIL

Blank Name/QCG: **150518S-16137 - 198067**
Batch ID: #6850SM-150518A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	PERCHLORATE	0.0040 U	0.006	0.0040	0.0020	mg/Kg	05/18/15	05/24/15

Quant Method: QTLMFL2
Run #: T523_049.d
Instrument: AGIL_6460
Sequence: TQ052315
Initials: RP

GC SC-Blank-REG MDLs
Printed: 06/17/15 10:46:01 AM

Data File ID: T523_049.d

Date Injected : 05/24/15

Time Injected : 6:28

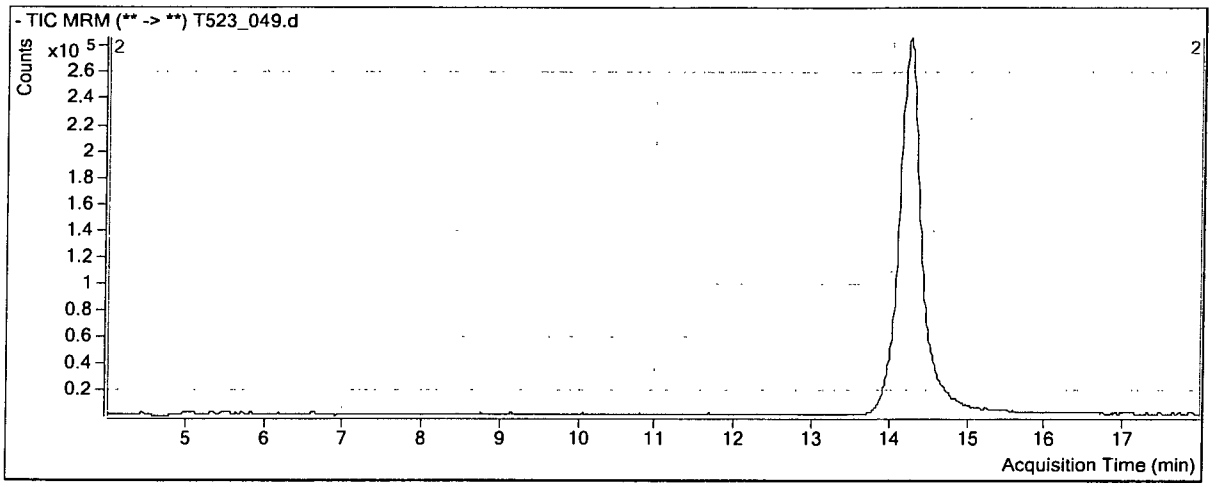
Sample ID : 150518SBLKA 10319.9 DF 05/18/15

Client ID : LAB_CNTL_S_BLKA

Retention Time	Area Count Response	Compound_ID Product Ion		
14.251	5786126	PER_IS_89		
12.995	7316	Perchlorate_83	(7316 * 0.0050) / (1.27 * 5786126.00) * 10319.90 =	0.051362 ppb
13.052	5610	Perchlorate_85	(5610 * 0.0050) / (0.39 * 5786126.00) * 10319.90 =	0.127753 ppb

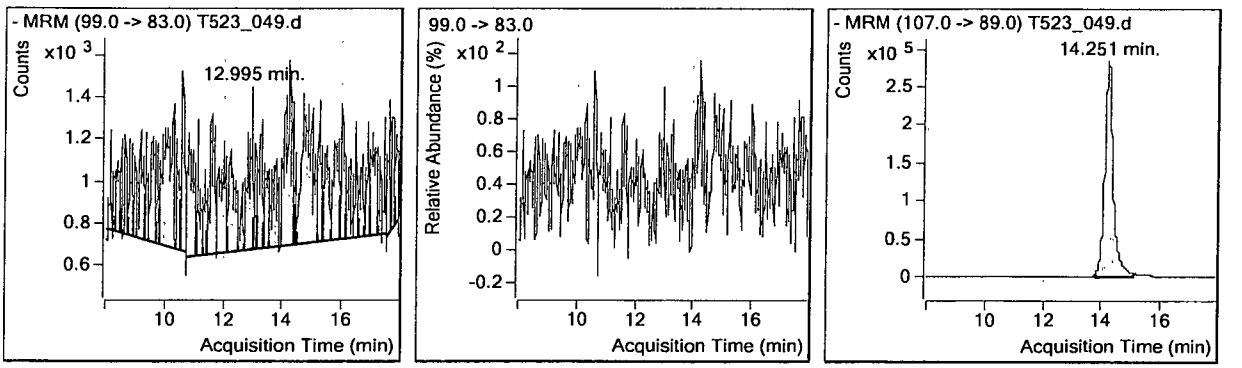
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_049.d	**Sample Name**	150518SBLKA 10319.9 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	6:28
ClientID	LAB_CNTL_S_BLKA	**Inj Vol**	20

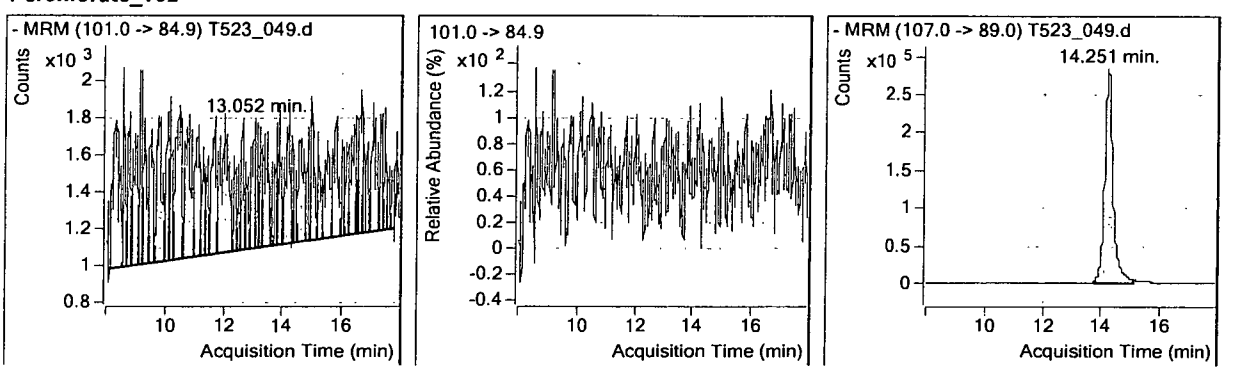


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	12.995	7316	5786126
Perchlorate_102	PER_IS_108	13.052	5610	5786126

Perchlorate_100



Perchlorate_102



Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150518W-16287 LCS - 198054**
Batch ID: #6850-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
PERCHLORATE	0.600	0.567	94.5	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/23/15
Instrument :	AGIL_6460
Run :	T523_019.d
Initials :	RP

Printed: 06/18/15 11:15:15 AM
APPL Standard LCS

Data File ID: T523_019.d

Date Injected : 05/23/15

Time Injected : 21:09

Sample ID : 150518WA_LCS-1 1052.6 DF 05/18/15

Client ID : LAB_CNTL_W_SPKA

Retention Time		Area Count Response	Compound_ID Product Ion			
13.528		4862068	PER_IS_89			
13.555		665139	Perchlorate_83	(665139 * 0.0050) / (1.27 * 4862068.00) * 1052.60 =		0.566805 ppb
13.541	*	200728	Perchlorate_85	(200728 * 0.0050) / (0.39 * 4862068.00) * 1052.60 =		0.554846 ppb

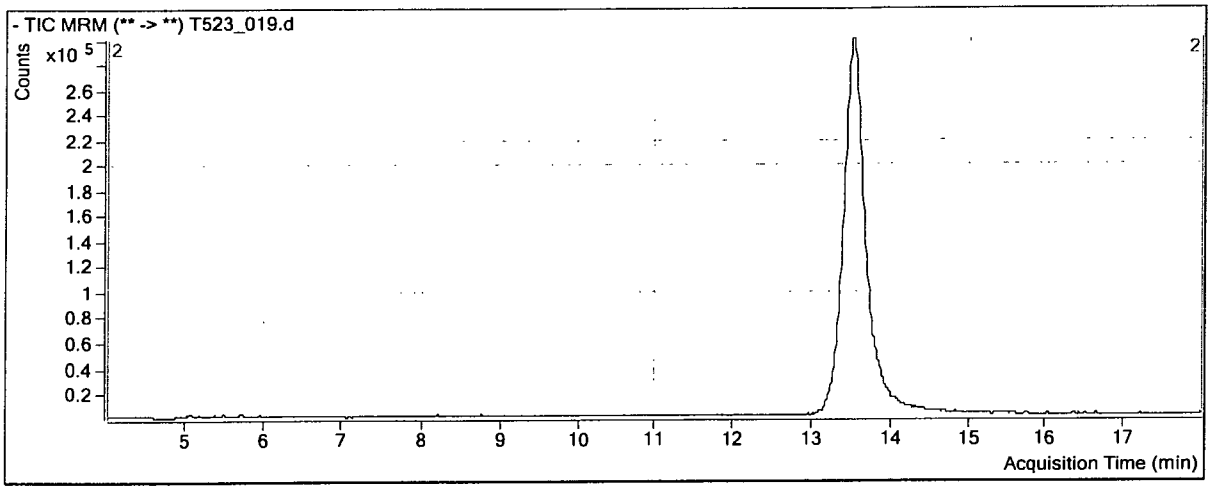
* MANUAL INTEGRAION

$$\frac{(1052.6 + 665139)(0.005)}{(1.270255)(4862068)} = 0.566805$$

6/18/15
pm

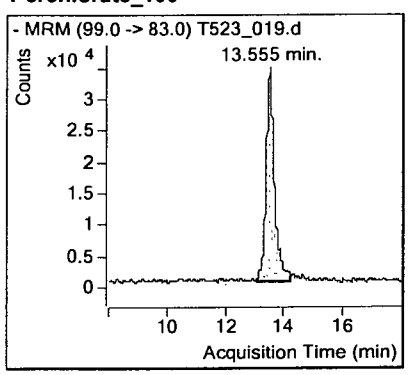
Quantitative Analysis Sample Report

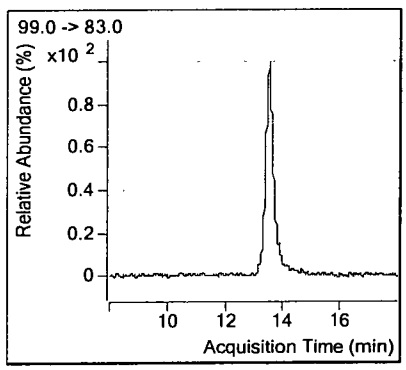
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_019.d	**Sample Name**	150518WA_LCS-1 1052.6 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:09
ClientID	LAB_CNTL_W_SPKA	**Inj Vol**	20

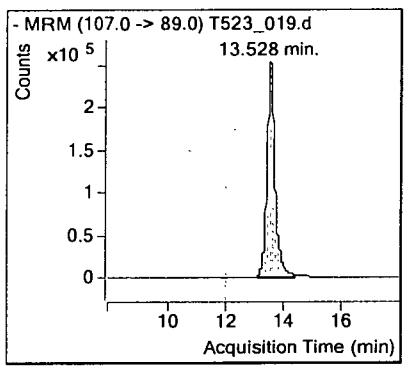


Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108		13.555	665139	4862068	
Perchlorate_102	PER_IS_108	*	13.541	200728	4862068	* MANUAL INT

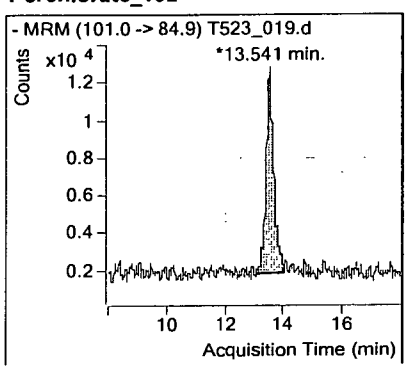
Perchlorate_100

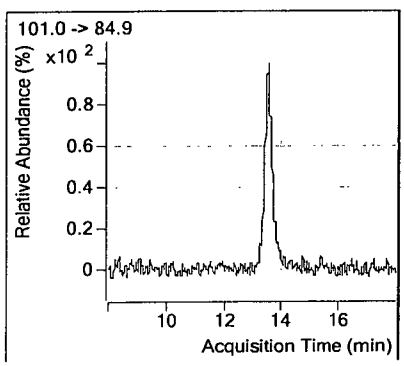


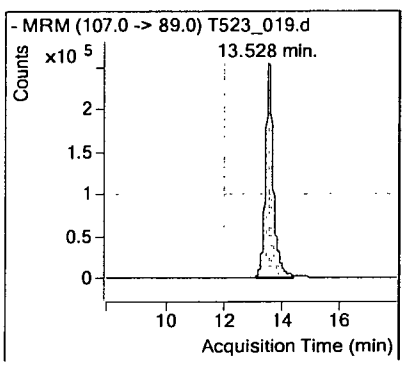


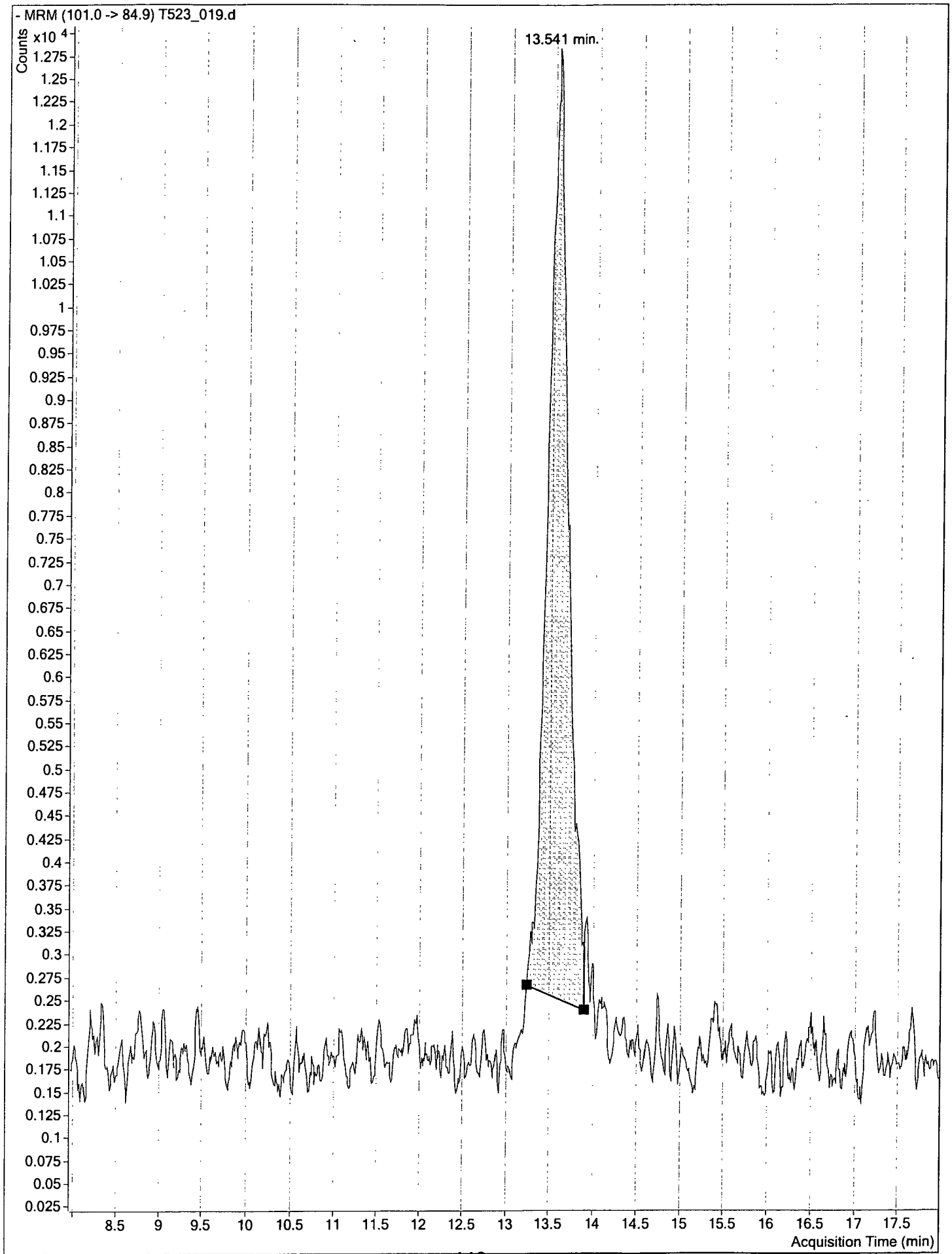


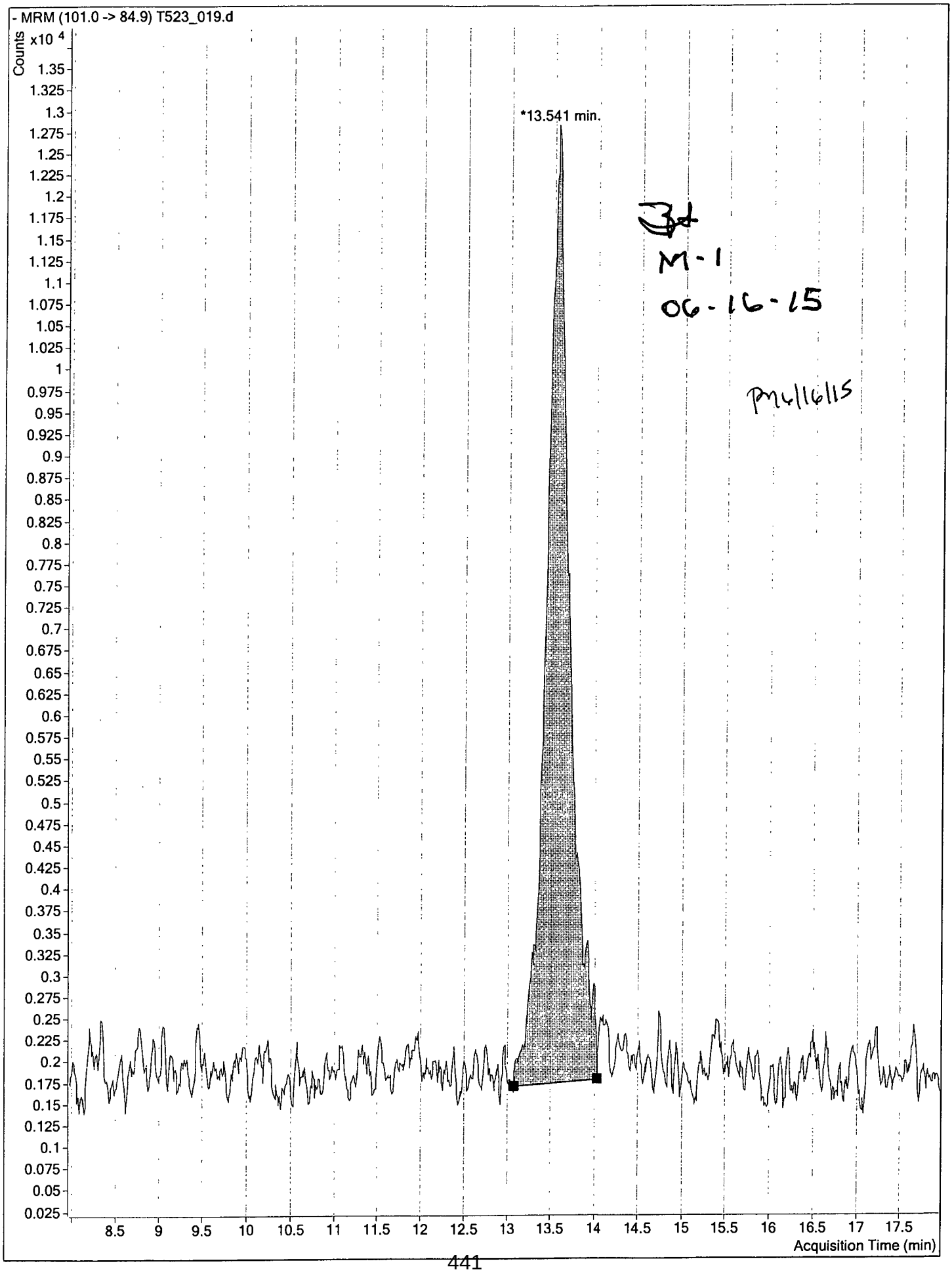
Perchlorate_102








- MRM (101.0 -> 84.9) T523_019.d
Counts
x10 4
13.541 min.
Acquisition Time (min)


- MRM (101.0 -> 84.9) T523_019.d
Counts
x10 4
*13.541 min.
3d
M-1
06-16-15
PM 6/16/15
Acquisition Time (min)

Laboratory Control Spike Recovery
PERCHLORATE EPA 6850 - SOIL

APPL ID: **150518S-16137 LCS - 198067**
Batch ID: #6850SM-150518A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/Kg	SPK Result mg/Kg	SPK % Recovery	Recovery Limits
PERCHLORATE	0.00594	0.00556	93.6	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	05/18/15
Analysis Date :	05/24/15
Instrument :	AGIL_6460
Run :	T523_047.d
Initials :	RP

Printed: 06/17/15 10:45:50 AM
APPL Standard LCS

Data File ID: T523_047.d

Date Injected : 05/24/15

Time Injected : 5:50

Sample ID : 150518SA_LCS-1 10422.1 DF 05/18/15

Client ID : LAB_CNTL_S_SPKA

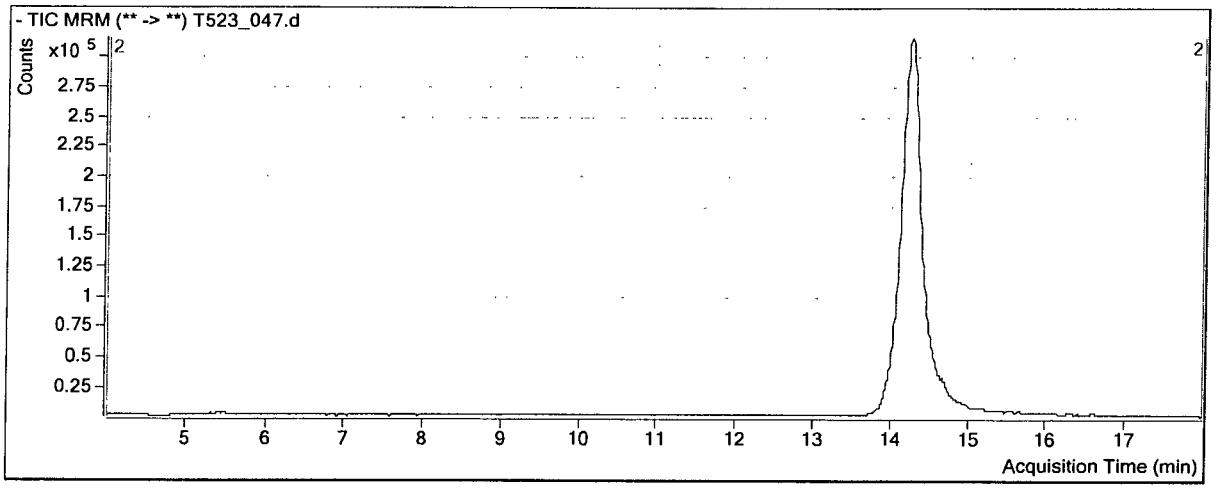
Retention Time	Area Count Response	Compound_ID Product Ion		
14.262	5484178	PER_IS_89		
14.248	742644	Perchlorate_83	(742644 * 0.0050) / (1.27 * 5484178.00) * 10422.10 =	5.555247 ppb
14.245	256573	Perchlorate_85	(256573 * 0.0050) / (0.39 * 5484178.00) * 10422.10 =	6.225531 ppb

$$\frac{(10422.1)(742644)(0.005)}{(1.270255)(5484178)} = 5.555248$$

6/17/15
PP

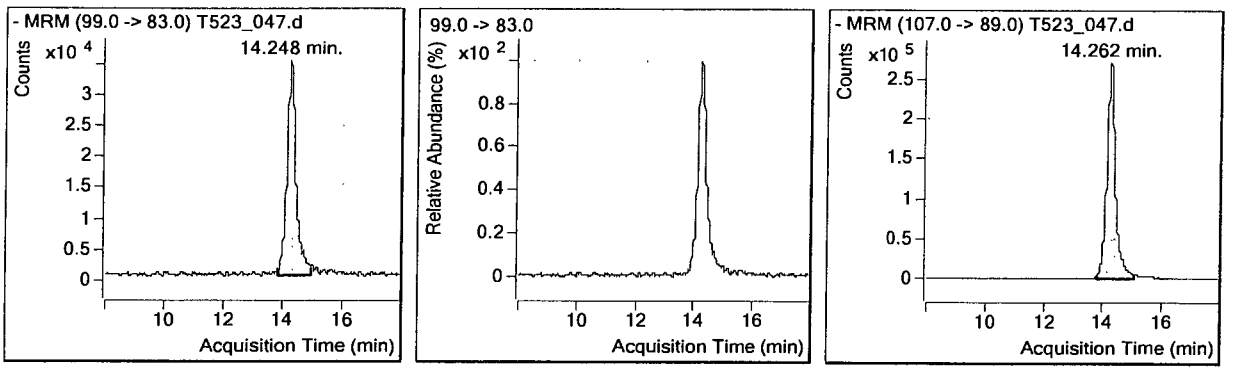
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_047.d	**Sample Name**	150518SA_LCS-1 10422.1 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	5:50
ClientID	LAB_CNTL_S_SPKA	**Inj Vol**	20

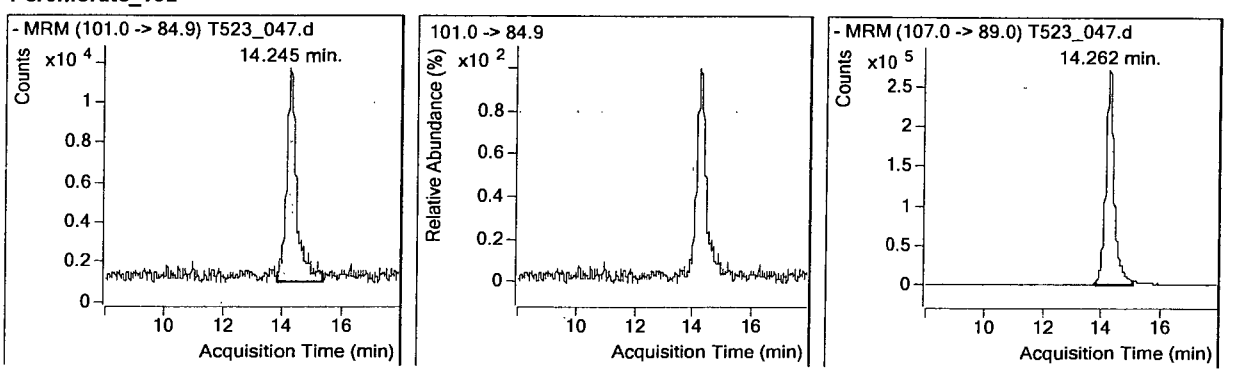


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.248	742644	5484178
Perchlorate_102	PER_IS_108	14.245	256573	5484178

Perchlorate_100



Perchlorate_102



Interferrence Check Sample

Perchlorate EPA 6850 Water

APPL ID: 150518W-16287 ICS-198054
Batch ID: #6850-150518A

APPL Inc.
908 N. Temperance Ave.
Clovis, CA 93711

Compound Name	Spike Level ug/L	Spk Result ug/L	SPK% Recovery	Recovery Limits
Perchlorate	0.600	0.585	97.5%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	05/18/15
Analysis Date:	05/23/15
Instrument:	AGIL_6560
Run:	T523_020.D
Initials:	RP

Data File ID: T523_020.d

Date Injected : 05/23/15

Time Injected : 21:28

Sample ID : 150518W_ICSA 1052.6 DF 05/18/15

Client ID : LAB_CNTL_W_ICSA

Retention Time		Area Count Response	Compound_ID Product Ion			
12.489		4707314	PER_IS_89			
12.516	*	664547	Perchlorate_83	(664547 * 0.0050) / (1.27 * 4707314.00) *	1052.60 =	0.584918 ppb
12.502		307706	Perchlorate_85	(307706 * 0.0050) / (0.39 * 4707314.00) *	1052.60 =	0.878512 ppb

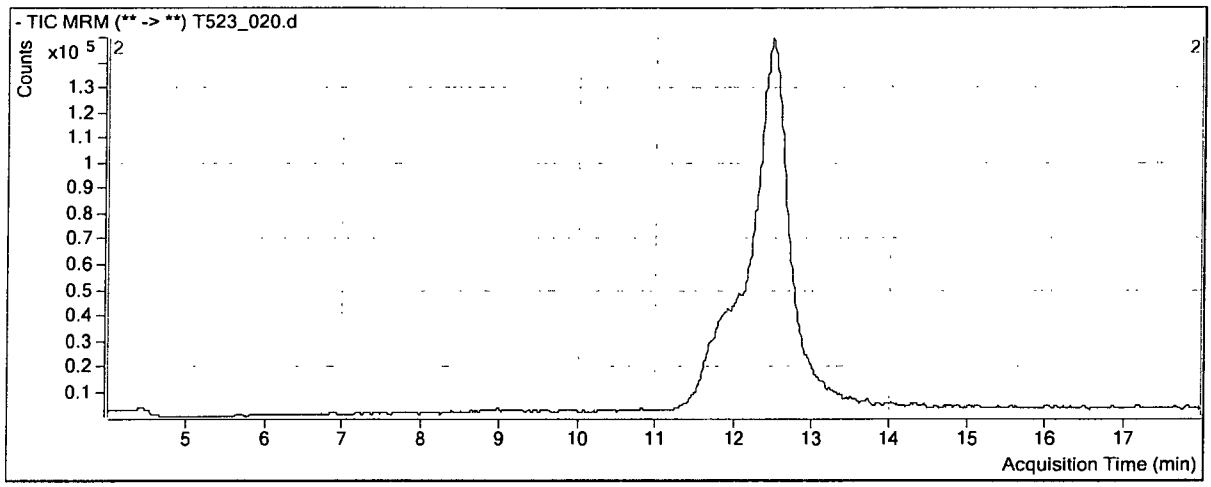
* MANUAL INTEGRAION

$$\frac{(1052.6)(664547)(0.005)}{(1.27)(4707314)} = 0.584918$$

6/16/15
PP

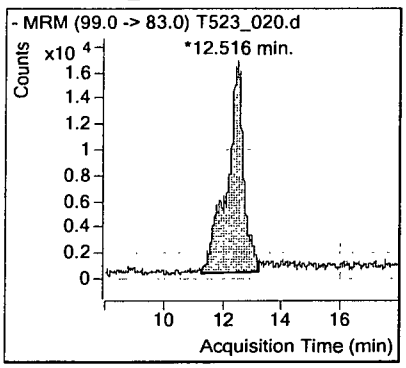
Quantitative Analysis Sample Report

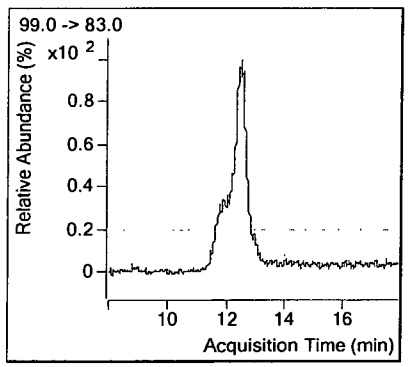
Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_020.d	**Sample Name**	150518W_ICSA 1052.6 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/23/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:28
ClientID	LAB_CNTL_W_ICSA	**Inj Vol**	20

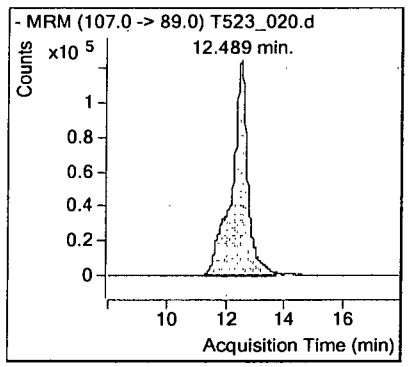


Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108	*	12.516	664547	4707314	* MANUAL INT
Perchlorate_102	PER_IS_108		12.502	307706	4707314	

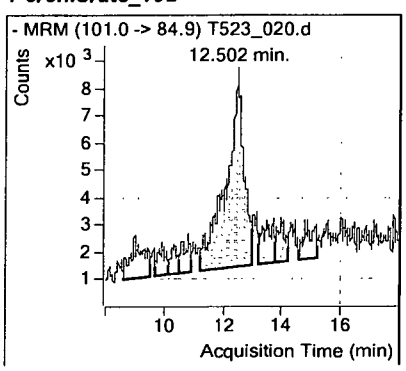
Perchlorate_100

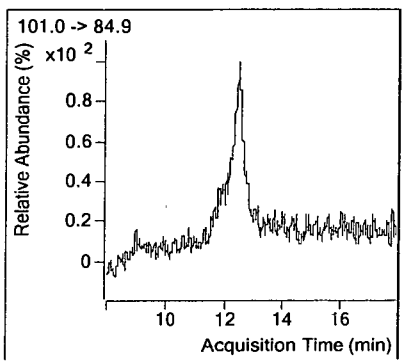


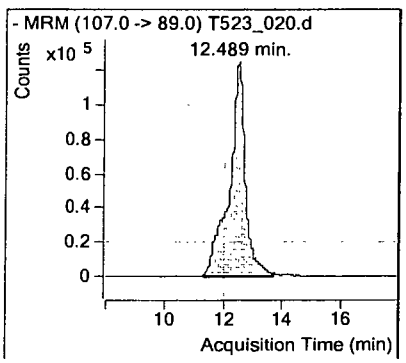


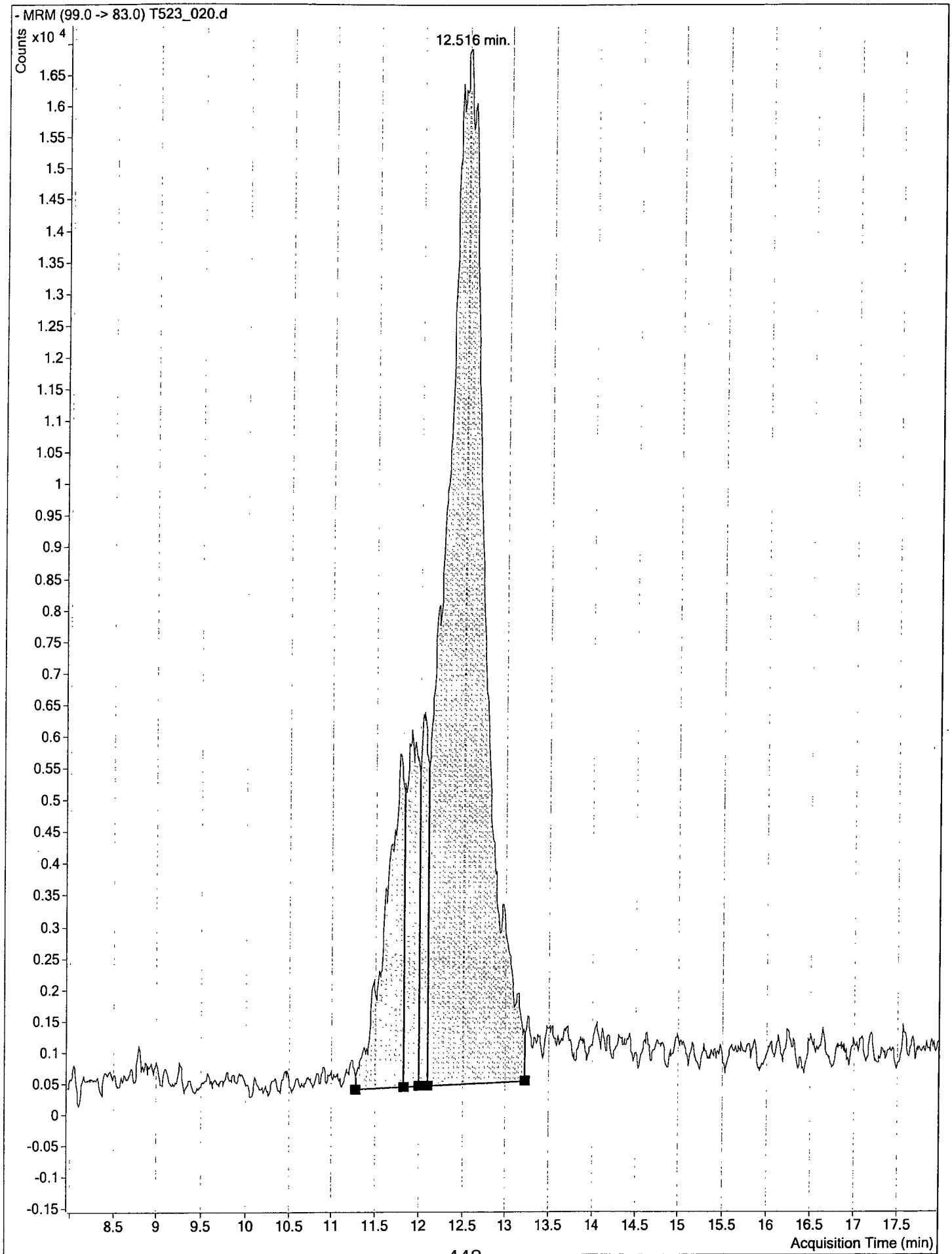


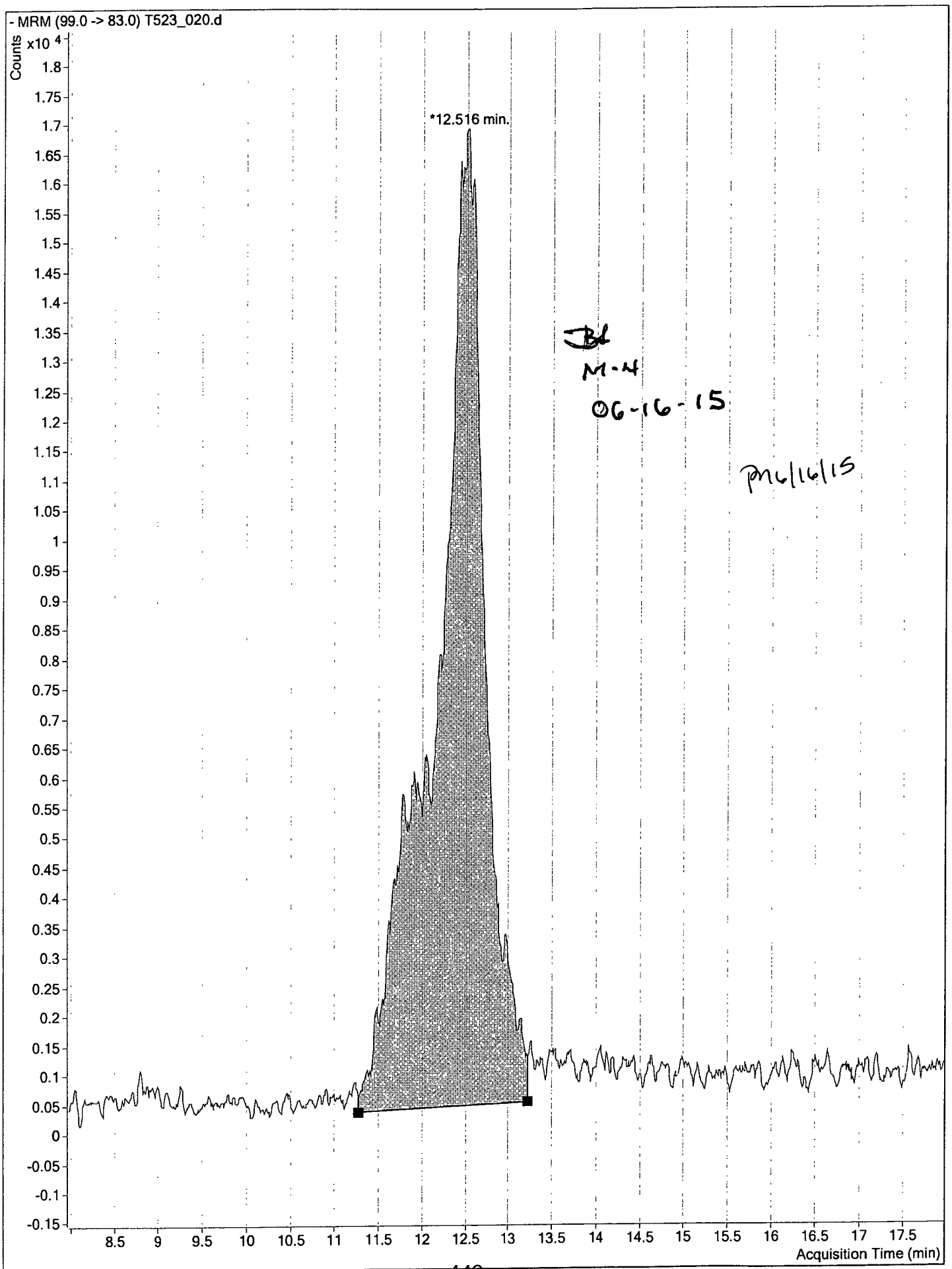
Perchlorate_102








- MRM (99.0 -> 83.0) T523_020.d
Counts
x10 4
12.516 min.
1.65
1.6
1.55
1.5
1.45
1.4
1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
8.5
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)


- MRM (99.0 -> 83.0) T523_020.d
Counts
x10 4
1.8
1.75
1.7
1.65
1.6
1.55
1.5
1.45
1.4
1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
*12.516 min.
8.5
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5
16
16.5
17
17.5
Acquisition Time (min)
M-4
06-16-15
pm 6/16/15

Interferrence Check Sample

Perchlorate EPA 6850 Soil

APPL ID: 150518S-16137 ICS - 198067
Batch ID: #6850SM-150518A

APPL Inc.
908 N. Temperance Ave.
Clovis, CA 93711

Compound Name	Spike Level mg/Kg	Spk Result mg/Kg	SPK% Recovery	Recovery Limits
Perchlorate	0.00571	0.00599	104.9%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	05/18/15
Analysis Date:	05/24/15
Instrument:	AGIL_6560
Run:	T523_048.D
Initials:	RP

Data File ID: T523_048.d

Date Injected : 05/24/15

Time Injected : 6:09

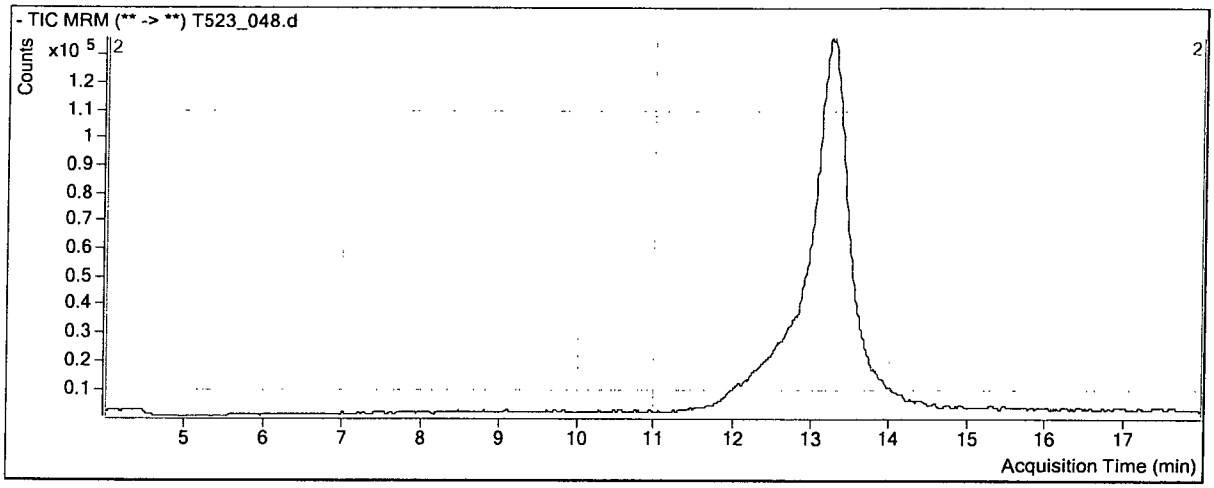
Sample ID : 150518S_ICSA 10025.1 DF 05/18/15

Client ID : LAB_CNTL_S_ICSA

Retention Time	Area Count Response	Compound_ID Product Ion		
13.273	4353871	PER_IS_89		
13.26	660527	Perchlorate_83	(660527 * 0.0050) / (1.27 * 4353871.00) * 10025.10 =	5.986634 ppb
13.246	295223	Perchlorate_85	(295223 * 0.0050) / (0.39 * 4353871.00) * 10025.10 =	8.679308 ppb

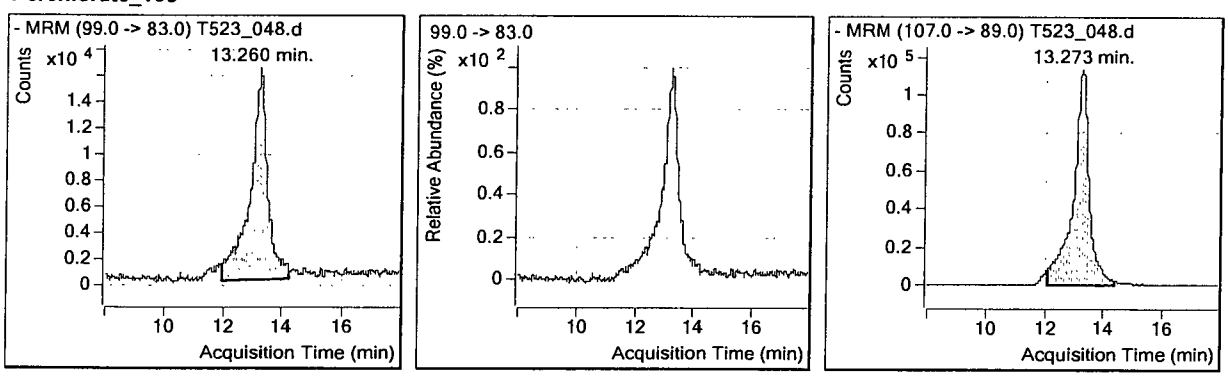
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150523\QuantResults\150523_A2_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T523_048.d	**Sample Name**	150518S_ICSA 10025.1 DF 05/18/15
Sample Type	Sample	**Acq_Date**	05/24/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	6:09
ClientID	LAB_CNTL_S_ICSA	**Inj Vol**	20

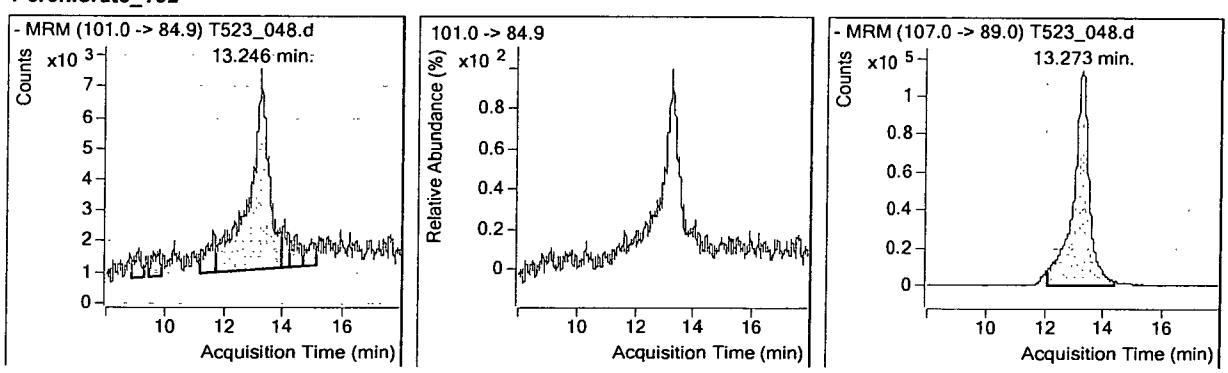


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.260	660527	4353871
Perchlorate_102	PER_IS_108	13.246	295223	4353871

Perchlorate_100



Perchlorate_102



ACN_H20_50:50 1 DF 08/27/14: Burdick & Jackson Acetonitrile Lot DL308 took 10.000 ml and added to 10.000 ml Laboratory Source DI_H20 Note : Above solution was prepared as needed.
PER_IS_50:50 0.005 ug/ml 11/11/14: Took 19.000 ml ACN_H20_50:50 11/11/14 and added 1.000 ml O2SI 18_O_4 Perchlorate 100 ug/L lot 1059192-33479 Note: Solution prepared as needed.
PERCHLORATE 0.005 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/28/14 took 0.500 ml and added to 0.500 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PERCHLORATE 0.002 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PERCHLORATE 0.001 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.100 ml and added to 0.900 ml PER_IS_50:50 0.005 ug/ml 11/11/14.

PERCHLORATE 0.0004 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PERCHLORATE 0.0002 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.020 ml and added to 0.980 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PERCHLORATE 0.0001 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.010 ml and added to 0.990 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_1 0.0004 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_1 0.002 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_2 0.0004 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.

PER_CCV_2 0.002 ug/ml 08/27/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_3 0.0004 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_3 0.002 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/28/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_4 0.0004 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_CCV_4 0.002 ug/ml 11/11/14: PERCHLORATE 0.010 ug/ml 08/27/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_SS 0.0004 ug/ml 11/11/14: PER_SS 0.010 ug/ml 08/28/14 took 0.040 ml and added to 0.960 ml PER_IS_50:50 0.005 ug/ml 11/11/14.
PER_SS 0.002 ug/ml 11/11/14: PER_SS 0.010 ug/ml 08/28/14 took 0.200 ml and added to 0.800 ml PER_IS_50:50 0.005 ug/ml 11/11/14.

LC/MS STANDARD PREP LOG# 105 PAGE# 34

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	VOL. ENT. LOT #	DATE INITIALS
Scav_spk 250 ug/ml							
Hexahydro-1,3,5-tris-hydroxyethyltriazine	1010	04-10-15	1.24	5.0	250	ACN/DM394	04-17-15
2,2'-thiodiethanol	1090	04-10-15	1.15				
2-(1,3,5-Dithiazinan-5-yl)ethanol	1020	04-10-15	1.23				

PER_CCV 0.0004 µg/ml 04-20-15:
PER_SS 0.010 µg/ml 08-28-14
took 0.040 ml and added to
0.910 ml Laboratory Source DI_H2O
that had previously received
0.050 ml O2SI $^{18}O_4$ Perchlorate
100 µg/L lot 1059192-33479

PER_CCV 0.002 µg/ml 04-20-15:
PER_SS 0.010 µg/ml 08-28-14
took 0.200 ml and added to
0.750 ml Laboratory Source DI_H2O
that had previously received
0.050 ml O2SI $^{18}O_4$ Perchlorate
100 µg/L lot 1059192-33479

040 LC/MS STANDARD PREP LOG# 105 PAGE# 40

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE/ INITIALS

PER IS 0.005µg/mL 04-20-15: JB

02SI $^{18}O_4$ Perchlorate 100µg/L 04-21-15

Lot 1059192-33479 took 0.050mL and added to 0.950 mL Laboratory Source DI H2O.

NOTE: Repeated the above process four times in order to prepare 2-2mL vials that were full. The above was performed as dated. JB

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE · INITIALS
						068	

NOTE: THE FOLLOWING DOCUMENTATION JF
WAS PERFORMED AS DATED: 05-19-15

PER. CCV 0.0004 µg/mL 05:07-15: JF
PER. SS 0.010 µg/mL 08-28-14 took 05-07-15
0.040 mL and added to 0.910 mL
Laboratory Source DI-H2O that
had previously received 0.050 mL
02SI $^{18}O_4$ Perchlorate 100 µg/L
lot 1074176-35163

PER. CCV 0.002 µg/mL 05-07-15:
PER. SS 0.010 µg/mL 08-28-14
took 0.200 mL and added to
0.750 ML Laboratory Source
DI-H2O that had previously
received 0.050 mL 02SI $^{18}O_4$
Perchlorate 100 µg/L lot
1074176-35163

PER. IS 0.005 µg/mL 05-07-15:
02SI $^{18}O_4$ Perchlorate 100 µg/L
Lot 1074176-35163 took 0.050
mL and added to 0.950 mL
Laboratory Source DI-H2O
NOTE: Repeated the above
process four times in order
to prepare 2-2 mL vials
that were full.

076

LC/MS STANDARD PREP LOG# 105 PAGE# 76

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT#	DATE/ INITIALS
NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: 06-02-15							JL 06-02-15
PER_IS_50:50 0.005µg/mL 05-10-15: COMBINED 10.000 mL Laboratory Source DI_H2O with 10.000 mL Burdick & Jackson Acetonitrile lot DL308 Withdrew 1.000mL and then delivered 1.000 mL 02 5I $^{18}O_4$ Perchlorate 100µg/L lot 10TH176-35163							JL 05-10-15
AZ16057_W01 10526.3 DF 05-07-15_5/10: AZ16057_W01 1052.6 DF 05-07-15 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005µg/mL 05-10-15							
AZ16057_W01 105263.2 DF 05-07-15_5/10: AZ16057_W01 10526.3 DF 05-07-15_5/10 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005µg/mL 05-10-15							
AZ16057_W01 1052631.6 DF 05-07-15_5/10: AZ16057_W01 105263.2 DF 05-07-15_5/10 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005µg/mL 05-10-15							

_HPLC6850G

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150518A	Extraction Method	HPLC6850GROS	Units	mL

Spiked ID 1	Perchlorate Spike Mix 0.1ppm 8-28-14 exp 7-31-15		Surrogate ID 1		
Spiked ID 2	Mix Anions 25,000ppm 2-10-15 exp 2-10-16		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NA	
Spiked ID 7			Ext. Start Time:	05/18/15 12:00	
Spiked ID 8			Ext. End Time:	05/18/15 13:48	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria
pH2			
pH3			

Spiked By: CFM **Date** 05/18/15 11:52:00 AM **Witnessed By:** DL **Date** 05/18/15 11:52:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150518A Blk				NA	NA equip	1.02g	10ML	NA	05/18/15 12:00	
2	150518A LCS-1		0.060	1	NA	NA equip	1.01g	10ML	NA	05/18/15 12:00	
3	150518A ICS		0.060/0.120	1/2	NA	NA equip	1.05g	10ML	NA	05/18/15 12:00	
4	AZ16137 MS-1	AZ16137S01	0.060		NA	NA equip	1.18g	10ML	NA	05/18/15 12:00	76380
5	AZ16137 MSD-1	AZ16137S01	0.060		NA	NA equip	1.17g	10ML	NA	05/18/15 12:00	76380
6	AZ16137	AZ16137S01			NA	NA equip	1.15g	10ML	NA	05/18/15 12:00	76380
7	AZ16138	AZ16138S01			NA	NA equip	1.16g	10ML	NA	05/18/15 12:00	76380
8	AZ16139	AZ16139S01			NA	NA equip	1.22g	10ML	NA	05/18/15 12:00	76380
9	AZ16140	AZ16140S01			NA	NA equip	1.15g	10ML	NA	05/18/15 12:00	76380
10	AZ16141	AZ16141S01			NA	NA equip	1.37g	10ML	NA	05/18/15 12:00	76380
11	AZ16198	AZ16198S01			NA	NA equip	1.22g	10ML	NA	05/18/15 12:00	76390
12	AZ16199	AZ16199S01			NA	NA equip	1.26g	10ML	NA	05/18/15 12:00	76390
13	AZ16201	AZ16201S01			NA	NA equip	1.25g	10ML	NA	05/18/15 12:00	76390
14	AZ16202	AZ16202S01			NA	NA equip	1.24g	10ML	NA	05/18/15 12:00	76390
15	AZ16400	AZ16400S01			NA	NA equip	1.33g	10ML	NA	05/18/15 12:00	76447
16	AZ16401	AZ16401S01			NA	NA equip	1.30g	10ML	NA	05/18/15 12:00	76447

Solvent and Lot#	
DI WATER	5-18-15
SAND	3223C517

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PM
Date	5/18/15
Time	13:00
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/18/15 12:07:37 PM

Reviewed By: PM **Date** 5/18/15

_HPLC6850G

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150518A	Extraction Method	HPLC6850GROS	Units	mL

Spiked ID 1	Perchlorate Spike Mix 0.1ppm 8-28-14 exp 7-31-15		Surrogate ID 1		
Spiked ID 2	Mix Anions 25,000ppm 2-10-15 exp 2-10-16		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NA	
Spiked ID 7			Ext. Start Time:	05/18/15 12:00	
Spiked ID 8			Ext. End Time:	05/18/15 13:48	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 05/18/15 11:52:00 AM **Witnessed By:** DL **Date** 05/18/15 11:52:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ16402	AZ16402S01			NA	NA	1.33g	10ML	NA	05/18/15 12:00	76447
						equip					

PM 5/18/15

lvent and Lot#	
WATER	5-18-15
ND	3223C517

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PM
Date	5/18/15
Time	13:00
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/18/15 12:07:37 PM

Reviewed By: PM **Date** 5/18/15

_HPL6850

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150518A	Extraction Method	HPL6850	Units	mL

Spiked ID 1	Perchlorate Spike Mix 0.1ppm 8-28-14 EXP 7-31-15		Surrogate ID 1		
Spiked ID 2	Mix Anions 25,000ppm 2-10-15 EXP 2-10-16		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	05/18/15 10:05	
Spiked ID 8			Ext. End Time:	05/18/15 10:23	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 05/18/15 10:03:00 AM **Witnessed By:** DL **Date** 05/18/15 10:03:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150518A Blk				NA	NA equip	5ML	5ML	NA	05/18/15 10:05	
2	150518A LCS-1		0.030	1	NA	NA equip	5ML	5ML	NA	05/18/15 10:05	
3	150518A ICS		0.030/0.060	1/2	NA	NA equip	5ML	5ML	NA	05/18/15 10:05	
4	AZ16287 MS-1	AZ16287W10	0.030	1	NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
5	AZ16287 MSD-1	AZ16287W10	0.030	1	NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
6	AZ16287	AZ16287W10			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
7	AZ16288	AZ16288W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
8	AZ16289	AZ16289W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
9	AZ16290	AZ16290W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76413
10	AZ16334	AZ16334W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
11	AZ16335	AZ16335W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
12	AZ16336	AZ16336W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
13	AZ16337	AZ16337W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
14	AZ16338	AZ16338W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
15	AZ16339	AZ16339W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
16	AZ16340	AZ16340W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424

olvent and Lot#	
)I WATER	5-18-15

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PY
Date	5/18/15
Time	11:00
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/18/15 10:25:11 AM

Reviewed By: PY **Date** 5/18/15

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150518A	Extraction Method	HPL6850	Units	mL

Spiked ID 1	Perchlorate Spike Mix 0.1ppm 8-28-14 EXP 7-31-15		Surrogate ID 1		
Spiked ID 2	Mix Anions 25,000ppm 2-10-15 EXP 2-10-16		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	YES	
Spiked ID 7			Ext. Start Time:	05/18/15 10:05	
Spiked ID 8			Ext. End Time:	05/18/15 10:23	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 05/18/15 10:03:00 AM **Witnessed By:** DL **Date** 05/18/15 10:03:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ16341	AZ16341W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
18	AZ16342	AZ16342W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
19	AZ16343	AZ16343W01			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76424
20	AZ16403	AZ16403W04			NA	NA equip	5ML	5ML	NA	05/18/15 10:05	76447

PM 5/18/15

olvent and Lot#	
I WATER	5-18-15

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PM
Date	5/18/15
Time	11:00
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/18/15 10:25:11 AM

Reviewed By: PM **Date** 5/18/15

METHOD 6850 INJECTION LOG: 03/12/15, 05/23/15

DETECTOR ID: Agilent 6460 Triple Quad LC/MS

SAMPLE INJECTION ID:	DATA FILE ID:	INJECTION DATE/TIME
PERCHLORATE 0.0002 ug/ml 11/11/14	T312_003.d	03/12/15 17:52
PERCHLORATE 0.0004 ug/ml 11/11/14	T312_004.d	03/12/15 18:11
PERCHLORATE 0.001 ug/ml 11/11/14	T312_005.d	03/12/15 18:29
PERCHLORATE 0.002 ug/ml 11/11/14	T312_006.d	03/12/15 18:48
PERCHLORATE 0.005 ug/ml 11/11/14	T312_007.d	03/12/15 19:07
PERCHLORATE 0.010 ug/ml 08/27/14	T312_008.d	03/12/15 19:25
PER_SS 0.0004 ug/ml 11/11/14	T312_010.d	03/12/15 20:02
PER_SS 0.002 ug/ml 11/11/14	T312_011.d	03/12/15 20:21
PER_CCV_1 0.0004 ug/ml 11/11/14	T312_013.d	03/12/15 20:58
PER_CCV_1 0.002 ug/ml 11/11/14	T312_014.d	03/12/15 21:17
PER_CCV 0.0004 ug/ml 05/07/15	T523_002.d	05/23/15 15:38
PER_CCV 0.002 ug/ml 05/07/15	T523_003.d	05/23/15 15:57
PER_CCV 0.0004 ug/ml 05/07/15	T523_016.d	05/23/15 20:13
PER_CCV 0.002 ug/ml 05/07/15	T523_017.d	05/23/15 20:32
150518WA_LCS-1 1052.6 DF 05/18/15	T523_019.d	05/23/15 21:09
150518W_ICSA 1052.6 DF 05/18/15	T523_020.d	05/23/15 21:28
150518WBLKA 1052.6 DF 05/18/15	T523_021.d	05/23/15 21:46
PER_CCV 0.0004 ug/ml 05/07/15	T523_030.d	05/24/15 0:34
PER_CCV 0.002 ug/ml 05/07/15	T523_031.d	05/24/15 0:53
AZ16403_W04 1052.6 DF 05/18/15	T523_042.d	05/24/15 4:17
PER_CCV 0.0004 ug/ml 05/07/15	T523_044.d	05/24/15 4:55
PER_CCV 0.002 ug/ml 05/07/15	T523_045.d	05/24/15 5:13
150518SA_LCS-1 10422.1 DF 05/18/15	T523_047.d	05/24/15 5:50
150518S_ICSA 10025.1 DF 05/18/15	T523_048.d	05/24/15 6:09
150518SBLKA 10319.9 DF 05/18/15	T523_049.d	05/24/15 6:28
PER_CCV 0.0004 ug/ml 05/07/15	T523_057.d	05/24/15 8:57
PER_CCV 0.002 ug/ml 05/07/15	T523_058.d	05/24/15 9:15
AZ16400_S01 7914.5 DF 05/18/15	T523_065.d	05/24/15 11:26
AZ16401_S01 8097.2 DF 05/18/15	T523_066.d	05/24/15 11:44
AZ16402_S01 7914.5 DF 05/18/15	T523_067.d	05/24/15 12:03
PER_CCV 0.0004 ug/ml 05/07/15	T523_069.d	05/24/15 13:00
PER_CCV 0.002 ug/ml 05/07/15	T523_070.d	05/24/15 13:18

EXPLOSIVES
EPA METHOD 8330

APPL, INC.

EPA 8330
EXPLOSIVES

QC Summary

APPL, INC.

Method Blank
EPA 8330B WATER

Blank Name/QCG: **150519W-16334 - 197306**
Batch ID: #83BJU-150519A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2,4-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	05/19/15	05/23/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	05/19/15	05/23/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	05/19/15	05/23/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	05/19/15	05/23/15
BLANK	SURROGATE: 1,2-DINITROBENZ	89.5	70-130			%	05/19/15	05/23/15

Quant Method: W150522.M
Run #: 0522_000035
Instrument: Waldorf
Sequence: 150522
Initials: MP

GC SC-Blank-REG MDLs
Printed: 05/26/15 10:10:17 AM

Method Blank

EPA 8330B EXPLOSIVES-SOIL

Blank Name/QCG: **150526S-16400 - 197385**
Batch ID: #833BS-150526A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
BLANK	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
BLANK	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
BLANK	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
BLANK	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
BLANK	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
BLANK	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
BLANK	SURROGATE: 1,2-DINITROBENZ	95.0	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000006
Instrument: Waldorf
Sequence: 150527
Initials: MP

GC SC-Blank-REG MDLs
Printed: 05/27/15 2:21:43 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: Waldorf

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150519A-LCS	Lab Control Spike	70-130	84.1				
150519A-BLK	Blank	70-130	89.5				
AZ16403	S67-MW015-051415	70-130	86.2				

Comments: Batch: #83BJU-150519A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: SOIL Instrument: Waldorf

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150526A-LCS	Lab Control Spike	70-130	91.0				
150526A-BLK	Blank	70-130	95.0				
AZ16400	S67-TP001-0203	70-130	96.8				
AZ16401	S67-TP002-0001	70-130	96.4				
AZ16402	S67-TP002-0203	70-130	97.3				

Comments: Batch: #833BS-150526A

Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150519W-16334 LCS - 197306**
Batch ID: #83BJU-150519A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4-DINITROTOLUENE	8.00	6.72	84.0	60-135
2,6-DINITROTOLUENE	8.00	6.73	84.1	60-135
HMX	8.00	6.98	87.3	80-115
NITROGLYCERIN	8.00	6.96	87.0	70-130
RDX	8.00	6.66	83.3	50-160
TETRYL	8.00	6.67	83.4	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	6.73	84.1	70-130

Comments: _____

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/19/15
Analysis Date :	05/23/15
Instrument :	Waldorf
Run :	0522_000034
Initials :	MP

Printed: 05/26/15 10:10:20 AM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8330B EXPLOSIVES-SOIL

APPL ID: **150526S-16400 LCS - 197385**
Batch ID: #833BS-150526A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
1,3,5-TRINITROBENZENE	1.99	1.79	89.9	75-125
1,3-DINITROBENZENE	1.99	1.76	88.4	80-125
2,4,6-TRINITROTOLUENE	1.99	1.85	93.0	55-140
2,4-DINITROTOLUENE	1.99	1.81	91.0	80-125
2,6-DINITROTOLUENE	1.99	1.82	91.5	80-120
2-AMINO-4,6-DINITROTOLUENE	1.99	1.88	94.5	80-125
2-NITROTOLUENE	1.99	1.80	90.5	80-125
3,5-DNA	1.99	1.82	91.5	70-130
3-NITROTOLUENE	1.99	1.85	93.0	75-120
4-AMINO-2,6-DINITROTOLUENE	1.99	1.74	87.4	80-125
4-NITROTOLUENE	1.99	1.81	91.0	75-125
HMX	1.99	1.94	97.5	75-125
NITROBENZENE	1.99	1.82	91.5	75-125
NITROGLYCERIN	1.99	1.82	91.5	68-131
PETN	1.99	1.90	95.5	69-132
RDX	1.99	1.82	91.5	70-135
TETRYL	1.99	2.01	101	10-150
SURROGATE: 1,2-DINITROBENZENE (S	1.99	1.81	91.0	70-130

Comments:

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/26/15
Analysis Date :	05/27/15
Instrument :	Waldorf
Run :	0527_000005
Initials :	MP

Printed: 05/27/15 2:21:45 PM
APPL Standard LCS

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/23/15

Matrix: WATER Instrument: Waldorf

Blank ID: 150519A-BLK Time Analyzed: 0235

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150519A-LCS	Lab Control Spike	0522_000034	05/23/15 0158
150519A-BLK	Blank	0522_000035	05/23/15 0235
AZ16403	S67-MW015-051415	0522_000047	05/23/15 0955

Comments: Batch: #83BJU-150519A

Printed: 05/26/15 10:10:25 AM

Form 4, Blank Summary

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/27/15

Matrix: SOIL Instrument: Waldorf

Blank ID: 150526A-BLK Time Analyzed: 1101

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A-LCS	Lab Control Spike	0527_000005	05/27/15 1024
150526A-BLK	Blank	0527_000006	05/27/15 1101
AZ16400	S67-TP001-0203	0527_000007	05/27/15 1139
AZ16401	S67-TP002-0001	0527_000008	05/27/15 1216
AZ16402	S67-TP002-0203	0527_000009	05/27/15 1254

Comments: Batch: #833BS-150526A

Printed: 05/27/15 2:21:50 PM

Form 4, Blank Summary

EPA 8330
EXPLOSIVES

Sample Data

APPL, INC.

EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-TP001-0203

APPL ID: AZ16400

Sample Collection Date: 05/14/15

QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	96.8	70-130			%	05/26/15	05/27/15

Quant Method:	W150522.M
Run #:	0527_000007
Instrument:	Waldorf
Sequence:	150527
Dilution Factor:	1
Initials:	MP

Printed: 05/27/15 2:21:43 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 11:39:25
Operator : MP
Sample : AZ16400S01 7.992 DF 05/26/15
Misc : Soil
ALS Vial : 4098 Sample Multiplier: 7.99201

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:10:16 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb		ppb	
	System Monitoring Compounds								
4)	S 1,2-DINIT...	0.000	3.515	0	939790	N.D.		580.444	#
	Spiked Amount 599.401			Recovery	=	0.00%		96.84%	
	Target Compounds								
1)	TM HMX	0.000	0.000	0	0	N.D.		N.D.	
2)	TM RDX	0.000	0.000	0	0	N.D.		N.D.	
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.		N.D.	
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D.		N.D.	
6)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.		N.D.	
7)	TM NITROBENZENE	0.000	0.000	0	0	N.D.		N.D.	
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D.	<DL	N.D.	
9)	TM TETRYL	6.360	0.000	14638	0	NoCal		N.D.	
10)	TM 2,4,6-TRI...	6.834	0.000	25994	0	NoCal		N.D.	
11)	TM 2-AMINO-4...	7.025	0.000	23336	0	NoCal		N.D.	
12)	TM 4-AMINO-2...	7.347	0.000	33634	0	NoCal		N.D.	
13)	TM 2,4-DINIT...	8.496	0.000	16076	0	NoCal		N.D.	
14)	TM 2,6-DINIT...	8.887	0.000	9269	0	NoCal		N.D.	
15)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.		N.D.	
16)	TM 4-NITROTO...	0.000	0.000	0	0	N.D.		N.D.	
17)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	<DL	N.D.	d
18)	TM PETN	0.000	0.000	0	0	N.D.		N.D.	

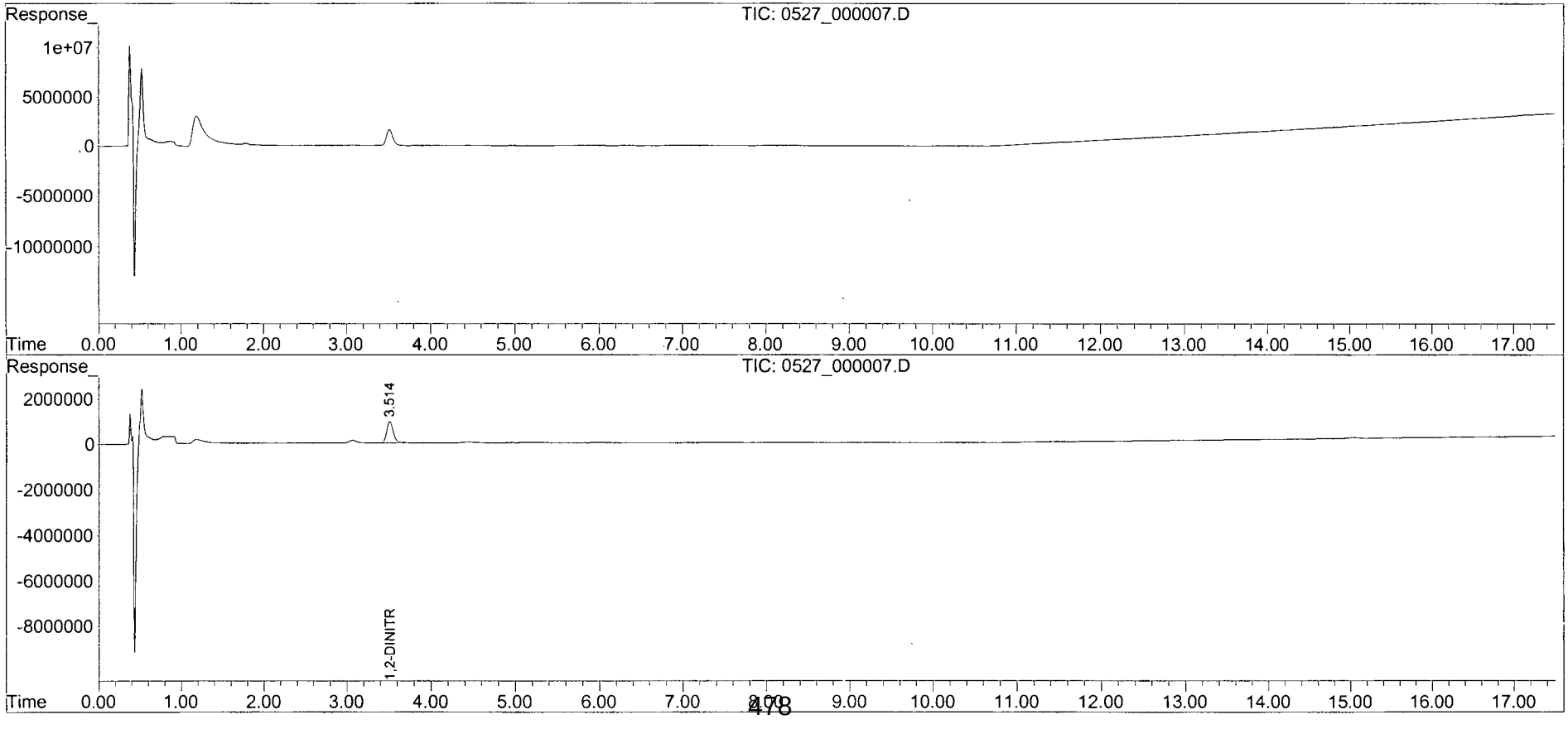
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 11:39:25
Operator : MP
Sample : AZ16400S01 7.992 DF 05/26/15
Misc : Soil
ALS Vial : 4098 Sample Multiplier: 7.99201

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:10:16 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401
QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	96.4	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000008
Instrument: Waldorf
Sequence: 150527
Dilution Factor: 1
Initials: MP

Printed: 05/27/15 2:21:44 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 12:16:55
Operator : MP
Sample : AZ16401S01 7.921 DF 05/26/15
Misc : Soil
ALS Vial : 4099 Sample Multiplier: 7.92079

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:11:38 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	3.518	0	935916	N.D.	572.900 #
Spiked Amount 594.059			Recovery	=	0.00%	96.44%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D.	N.D.
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
7) TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d<DL	N.D.
9) TM TETRYL	6.338	0.000	2866	0	NoCal	N.D.
10) TM 2,4,6-TRI...	6.833	0.000	14440	0	NoCal	N.D.
11) TM 2-AMINO-4...	7.025	0.000	7947	0	NoCal	N.D.
12) TM 4-AMINO-2...	7.352	0.000	17798	0	NoCal	N.D.
13) TM 2,4-DINIT...	8.516	0.000	24249	0	NoCal <DL	N.D. d
14) TM 2,6-DINIT...	8.874	0.000	18101	0	NoCal	N.D.
15) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

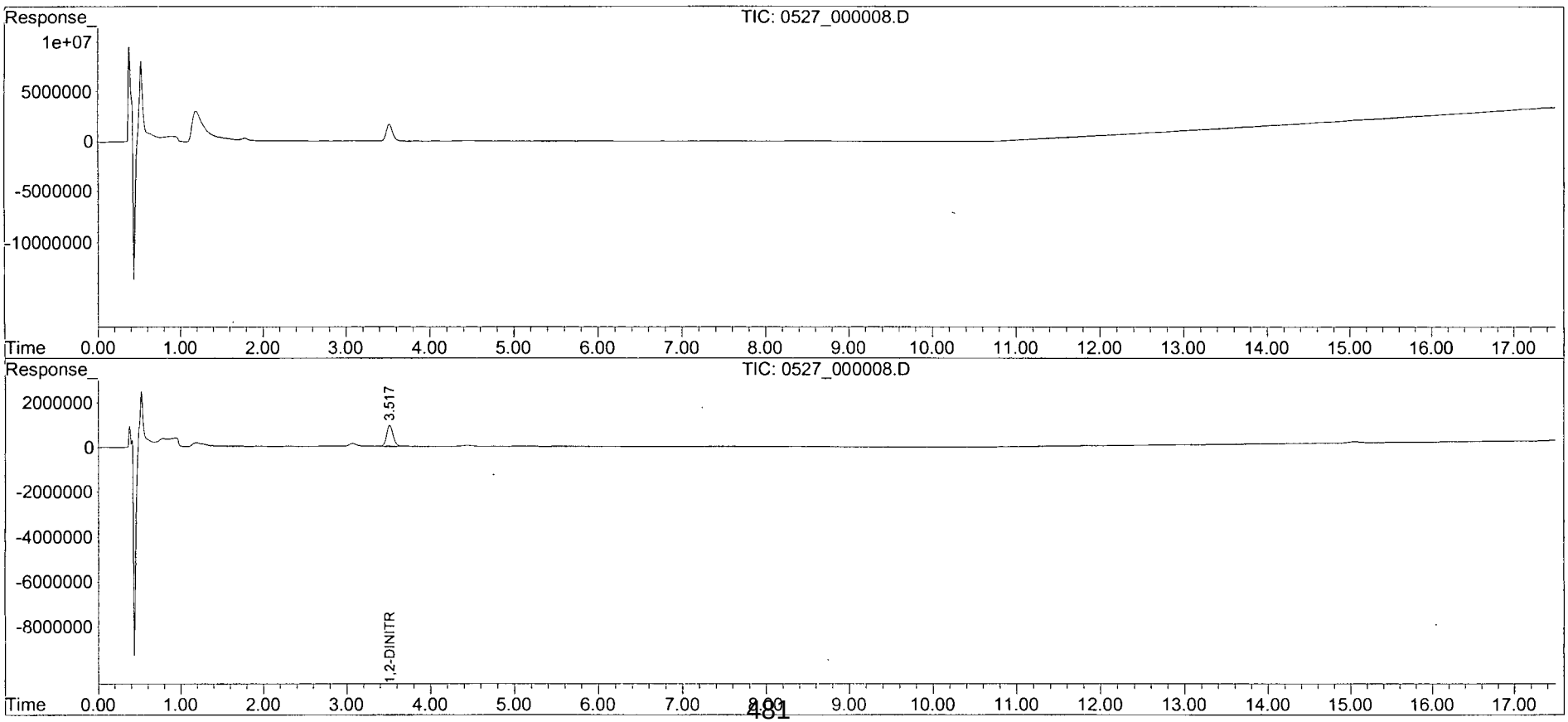
MP
05-27-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 12:16:55
Operator : MP
Sample : AZ16401S01 7.921 DF 05/26/15
Misc : Soil
ALS Vial : 4099 Sample Multiplier: 7.92079

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:11:38 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



EPA 8330B EXPLOSIVES-SOIL

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402
QCG: #833BS-150526A-197385

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
EPA 8330B	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
EPA 8330B	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
EPA 8330B	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
EPA 8330B	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
EPA 8330B	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
EPA 8330B	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
EPA 8330B	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
EPA 8330B	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	97.3	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_000009
Instrument: Waldorf
Sequence: 150527
Dilution Factor: 1
Initials: MP

Printed: 05/27/15 2:21:44 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 12:54:26
Operator : MP
Sample : AZ16402S01 7.897 DF 05/26/15
Misc : Soil
ALS Vial : 4100 Sample Multiplier: 7.89733

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:12:11 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	3.516	0	944220	N.D.	576.271 #
Spiked Amount 592.300			Recovery	=	0.00%	97.29%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D.	N.D.
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
7) TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d<DL	N.D.
9) TM TETRYL	6.322	0.000	9591	0	NoCal	N.D.
10) TM 2,4,6-TRI...	6.820	0.000	11414	0	NoCal	N.D.
11) TM 2-AMINO-4...	7.034	0.000	3321	0	NoCal	N.D.
12) TM 4-AMINO-2...	7.348	0.000	22236	0	NoCal	N.D.
13) TM 2,4-DINIT...	8.544	0.000	13388	0	NoCal	N.D.
14) TM 2,6-DINIT...	8.868	0.000	4413	0	NoCal	N.D.
15) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

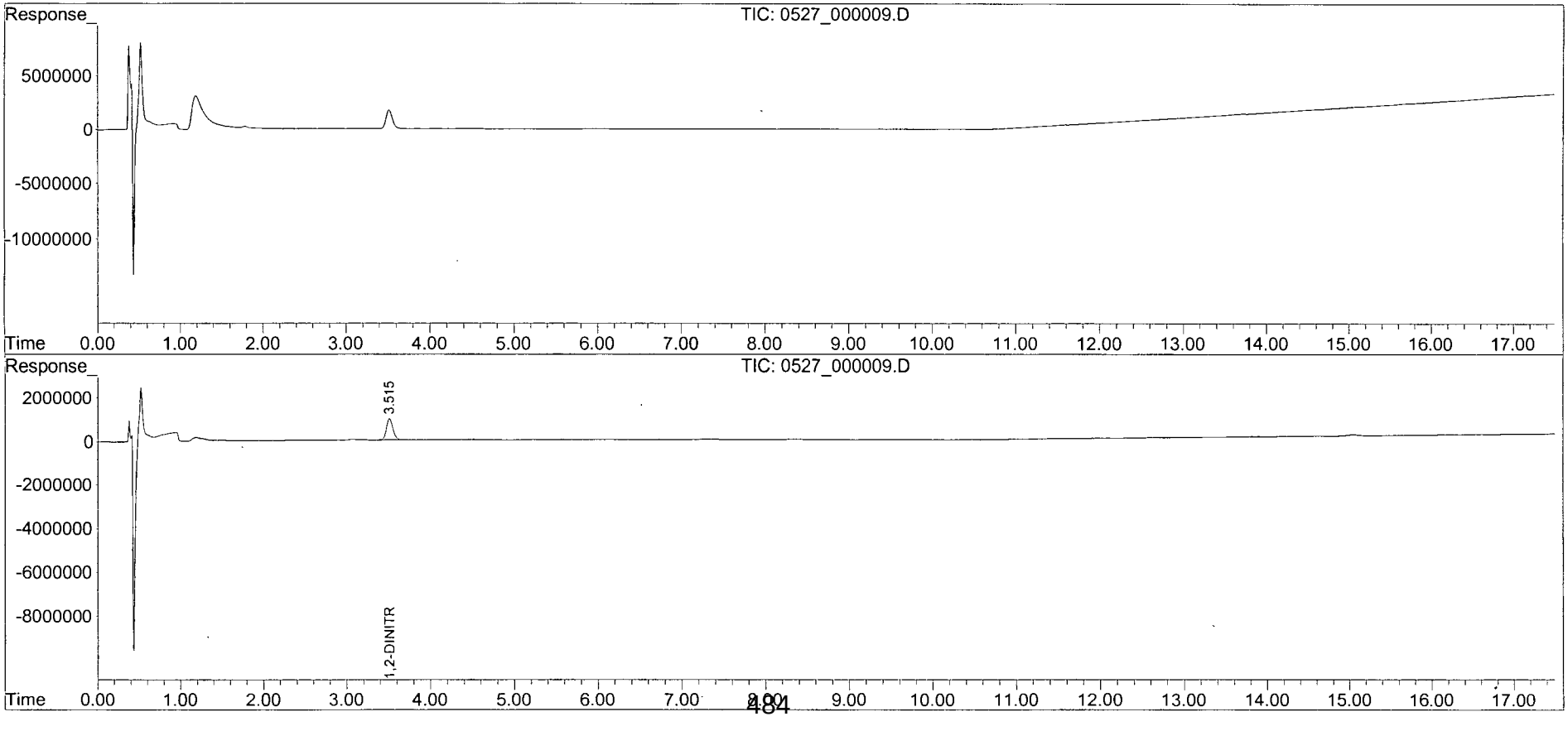
MP
05-27-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 12:54:26
Operator : MP
Sample : AZ16402S01 7.897 DF 05/26/15
Misc : Soil
ALS Vial : 4100 Sample Multiplier: 7.89733

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:12:11 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



EPA 8330B WATER

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76447

Sample ID: S67-MW015-051415

APPL ID: AZ16403

Sample Collection Date: 05/14/15

QCG: #83BJU-150519A-197306

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8330B	2,4-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	05/19/15	05/23/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	05/19/15	05/23/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	05/19/15	05/23/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	05/19/15	05/23/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	86.2	70-130			%	05/19/15	05/23/15

Quant Method: W150522.M
Run #: 0522_000047
Instrument: Waldorf
Sequence: 150522
Dilution Factor: 1
Initials: MP

Printed: 05/26/15 10:10:18 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000047.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 09:55:49
Operator : MP
Sample : AZ16403W07 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4163 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 11:30:18 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:19:45 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	3.549	0	697127	N.D.	0.862 #
	Spiked Amount 1.000			Recovery =		0.00%	86.20%
	Target Compounds						
1) TM	HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM	RDX	0.000	0.000	0	0	N.D.	N.D.
3) TM	1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM	1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM	3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
7) TM	NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
8) TM	NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D.
9) TM	TETRYL	6.402	0.000	5060	0	NoCal	N.D.
10) TM	2,4,6-TRI...	6.984	0.000	7088	0	NoCal	N.D.
11) TM	2-AMINO-4...	7.199	0.000	8853	0	NoCal	N.D.
12) TM	4-AMINO-2...	7.485	0.000	13272	0	NoCal	N.D.
13) TM	2,4-DINIT...	8.639	0.000	5084	0	NoCal	N.D.
14) TM	2,6-DINIT...	8.889	0.000	12903	0	NoCal	N.D.
15) TM	2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM	4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17) TM	3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

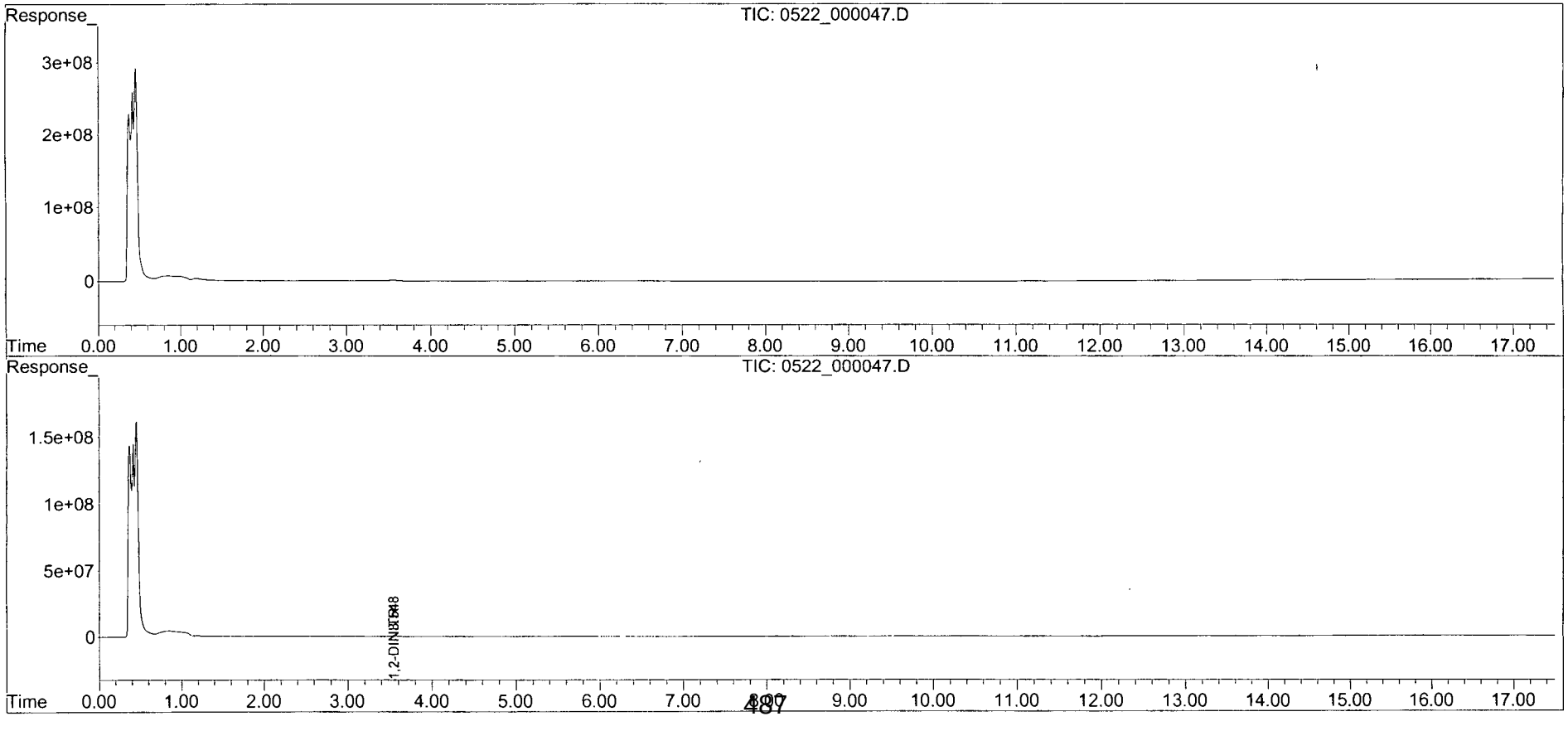
MP 05-26-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000047.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 09:55:49
Operator : MP
Sample : AZ16403W07 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4163 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 11:30:18 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:19:45 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



EPA 8330
EXPLOSIVES

Calibration Data

APPL, INC.

Initial Calibration

Lab Name: APPL, Inc. SDG No: 76447
Case No: Initial Cal. Date: 05/22/15
Matrix: Instrument: Waldorf
Initials: MP

			0522_000014.D	0522_000015.D	0522_000016.D	0522_000017.D	0522_000018.D	0522_000019.D	0522_000020.D	0522_000021.D	0522_000023.D				
		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	
####	TM	NITROGLYCERIN	137	120	138	132	133	133	130	129	131		131.4	3.9	TM
####	TM	PETN			81.5	95.0	103	108	107	107	109		101.4	10	TM
####		Signal #2													
####	TM	HMX #2	584	694	666	640	652	676	655	639	639		649.5	4.7	TM
####	TM	RDX #2	425	422	426	427	424	428	428	424	429		425.8	0.52	TM
####	TM	1,3,5-TRINITROBENZENE #2	773	767	777	772	769	778	777	772	780		773.7	0.58	TM
####	S	1,2-DINITROBENZENE #2	303	319	328	325	323	326	327	327	334		323.5	2.6	S
####	TM	1,3-DINITROBENZENE #2	716	721	729	728	723	731	733	732	746		728.7	1.2	TM
####	TM	3,5-DINITROANILINE #2	548	552	557	555	552	558	559	559	562		555.8	0.77	TM
####	TM	NITROBENZENE #2	334	333	331	333	330	334	334	334	340		333.8	0.84	TM
####	TM	TETRYL #2	230	229	224	228	226	228	230	228	237		228.9	1.6	TM
####	TM	2,4,6-TRINITROTOLUENE #2	316	312	312	311	309	313	313	312	318		312.8	0.88	TM
####	TM	2-AMINO-4,6-DINITROTOLUENE	287	278	279	280	277	281	281	280	286		281.1	1.2	TM
####	TM	4-AMINO-2,6-DINITROTOLUENE	208	199	202	202	200	202	202	201	205		202.4	1.3	TM
####	TM	2,4-DINITROTOLUENE #2	285	291	296	295	293	297	297	298	304		295.2	1.7	TM
####	TM	2,6-DINITROTOLUENE #2	161	158	164	164	161	163	163	163	166		162.6	1.4	TM
####	TM	2-NITROTOLUENE #2	119	114	110	110	110	111	111	110	113		112.1	2.6	TM
####	TM	4-NITROTOLUENE #2	113	110	110	110	109	111	111	111	113		110.9	1.1	TM
####	TM	3-NITROTOLUENE #2	125	135	132	132	131	133	134	134	136		132.4	2.5	TM
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:07:53
Operator : MP
Sample : 8330CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 8384 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:56:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	3.531	0	60695	N.D.	4.454 #
	Spiked Amount 62.500			Recovery =		0.00%	7.13%
	Target Compounds						
1)	TM HMX	0.000	0.908	0	116863	N.D.	4.440m#
2)	TM RDX	0.000	1.722	0	84918	N.D.	4.849 #
3)	TM 1,3,5-TRI...	0.000	2.812	0	154593	N.D.	4.887 #
5)	TM 1,3-DINIT...	0.000	3.704	0	143190	N.D.	4.738 #
6)	TM 3,5-DINIT...	0.000	3.912	0	109681	N.D.	4.555 #
7)	TM NITROBENZENE	0.000	5.027	0	66852	N.D.	4.834 #
8)	TM NITROGLYC...	6.023	0.000	27427	0	4.921	N.D. #
9)	TM TETRYL	6.381	6.373	88335	45934	NoCal	4.382 #
10)	TM 2,4,6-TRI...	6.857	6.877	74624	63205	NoCal	4.842 #
11)	TM 2-AMINO-4...	7.080	7.070	88869	57386	NoCal	4.625 #
12)	TM 4-AMINO-2...	7.420	7.415	81261	41596	NoCal	4.574 #
13)	TM 2,4-DINIT...	8.527	8.554	58052	57084	NoCal	4.506 #
14)	TM 2,6-DINIT...	8.925	8.908	51464	32183	NoCal	4.563 #
15)	TM 2-NITROTO...	0.000	12.272	0	23750	N.D.	4.800 #
16)	TM 4-NITROTO...	0.000	12.869	0	22503	N.D.	4.548 #
17)	TM 3-NITROTO...	0.000	13.759	0	24956	N.D.	4.244 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

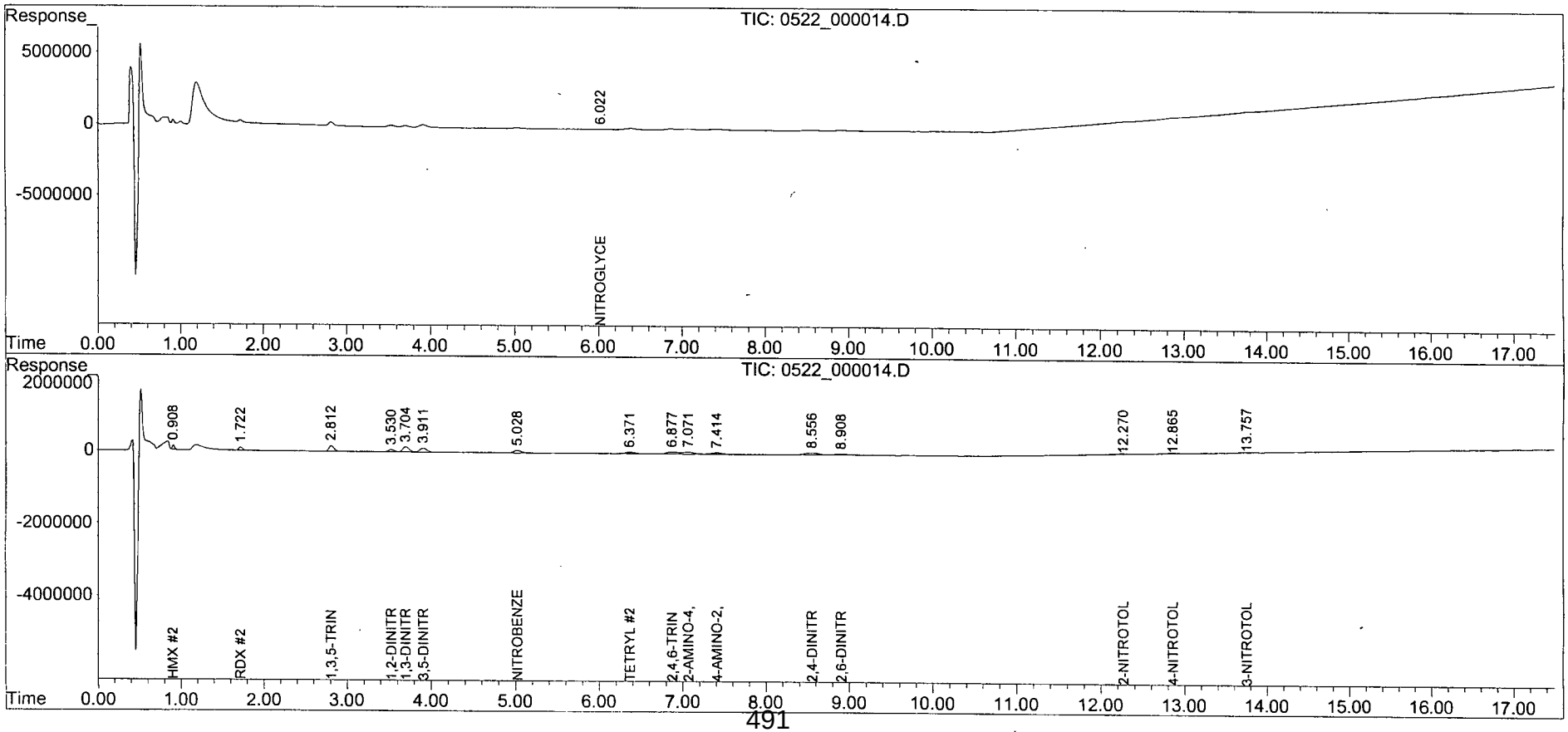
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:07:53
Operator : MP
Sample : 8330CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 8384 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:56:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

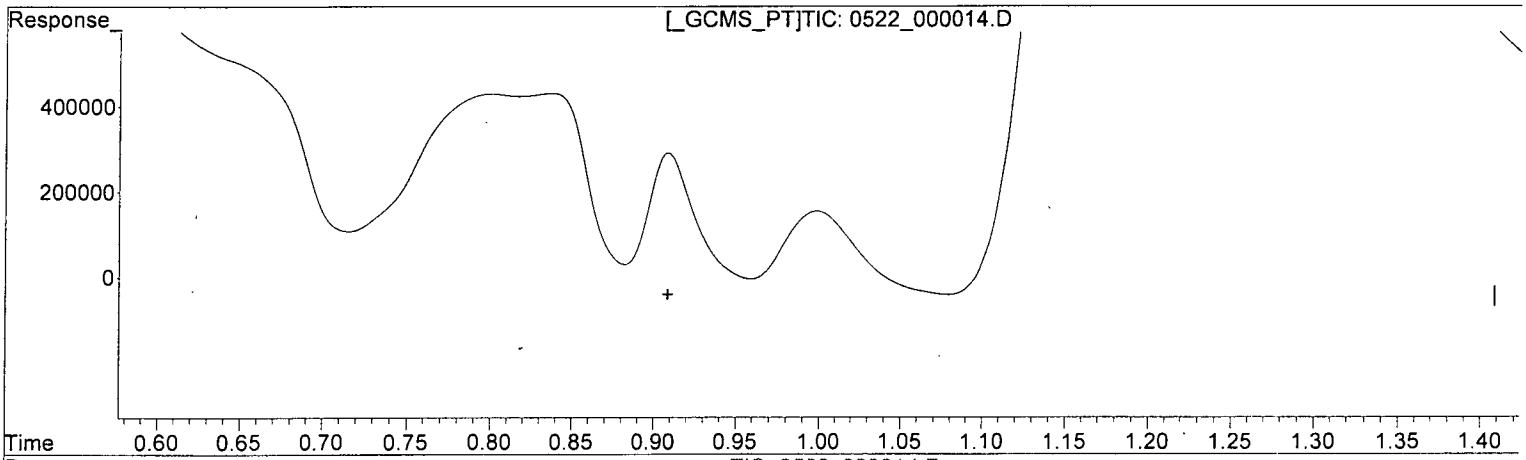


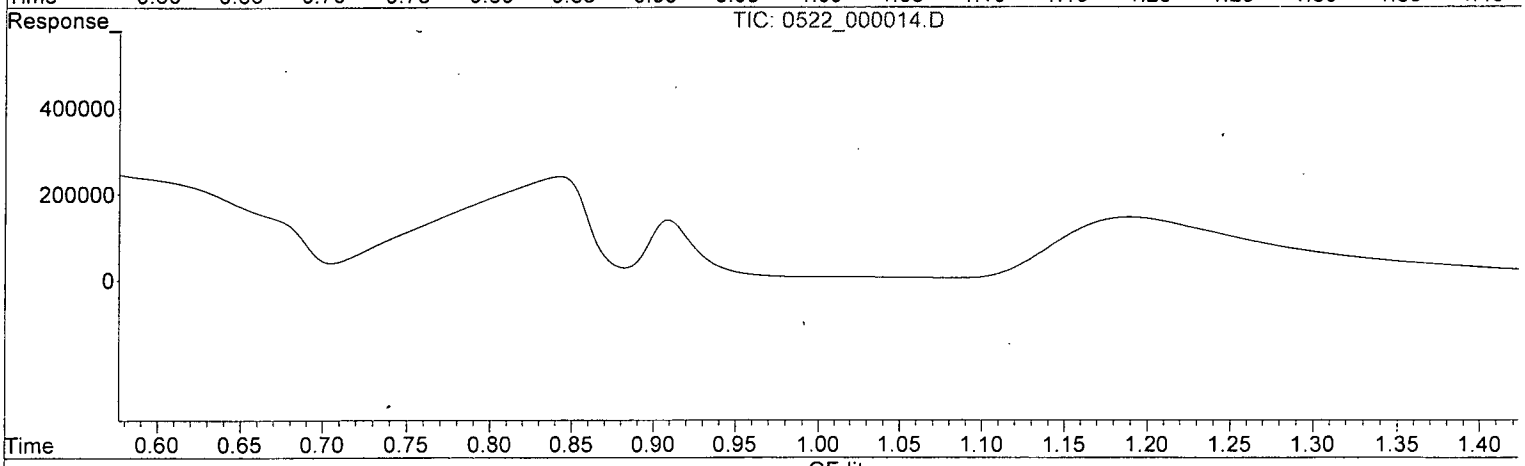
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:07:53
Operator : MP
Sample : 8330CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 8384 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:16 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.000min 0.000 ppb

response 0

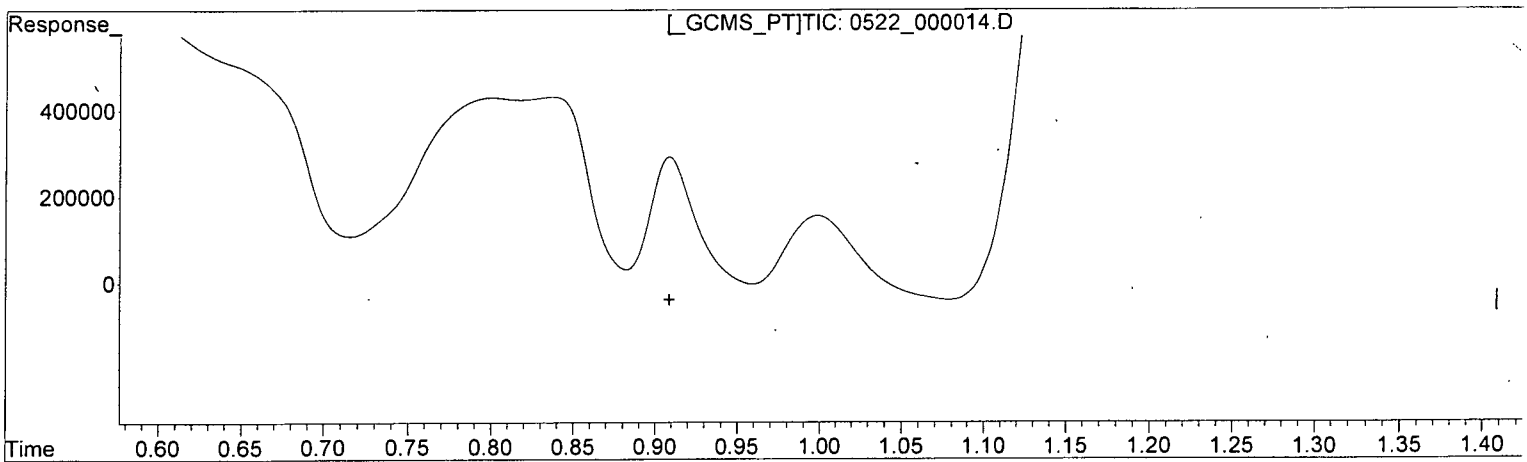
(+) = Expected Retention Time

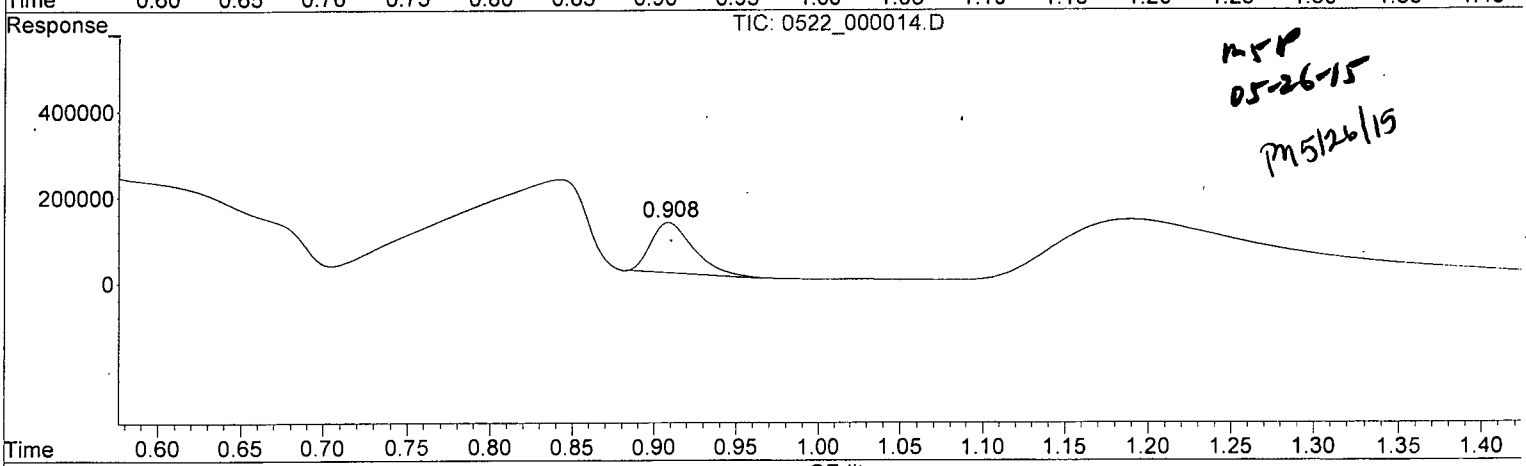
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:07:53
Operator : MP
Sample : 8330CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 8384 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:16 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





MRP 05-26-15 PM 5/26/15

QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.908min 4.440 ppb m

response 116863

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:55:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	3.535	0	127701	N.D.	9.372 #
	Spiked Amount 62.500			Recovery	=	0.00%	15.00%
	Target Compounds						
1) TM	HMX	0.000	0.910	0	277521	N.D.	10.544m#
2) TM	RDX	0.000	1.724	0	168970	N.D.	9.648 #
3) TM	1,3,5-TRI...	0.000	2.815	0	306613	N.D.	9.693 #
5) TM	1,3-DINIT...	0.000	3.708	0	288212	N.D.	9.537 #
6) TM	3,5-DINIT...	0.000	3.916	0	220804	N.D.	9.170 #
7) TM	NITROBENZENE	0.000	5.032	0	133342	N.D.	9.642 #
8) TM	NITROGLYC...	6.053	0.000	48081	0	8.627m	N.D. #
9) TM	TETRYL	6.386	6.386	168423	91646	NoCal	8.744 #
10) TM	2,4,6-TRI...	6.883	6.880	174881	124840	NoCal	9.563 #
11) TM	2-AMINO-4...	7.081	7.079	184134	111282	NoCal	8.969 #
12) TM	4-AMINO-2...	7.429	7.425	168272	79765	NoCal	8.771 #
13) TM	2,4-DINIT...	8.557	8.561	96512	116390	NoCal	9.188 #
14) TM	2,6-DINIT...	8.910	8.918	102587	63336	NoCal	8.980 #
15) TM	2-NITROTO...	0.000	12.277	0	45530	N.D.	9.202 #
16) TM	4-NITROTO...	0.000	12.877	0	43915	N.D.	8.875 #
17) TM	3-NITROTO...	0.000	13.766	0	53902	N.D.	9.167 #
18) TM	PETN	16.091	0.000	33221	0	7.221	N.D. #

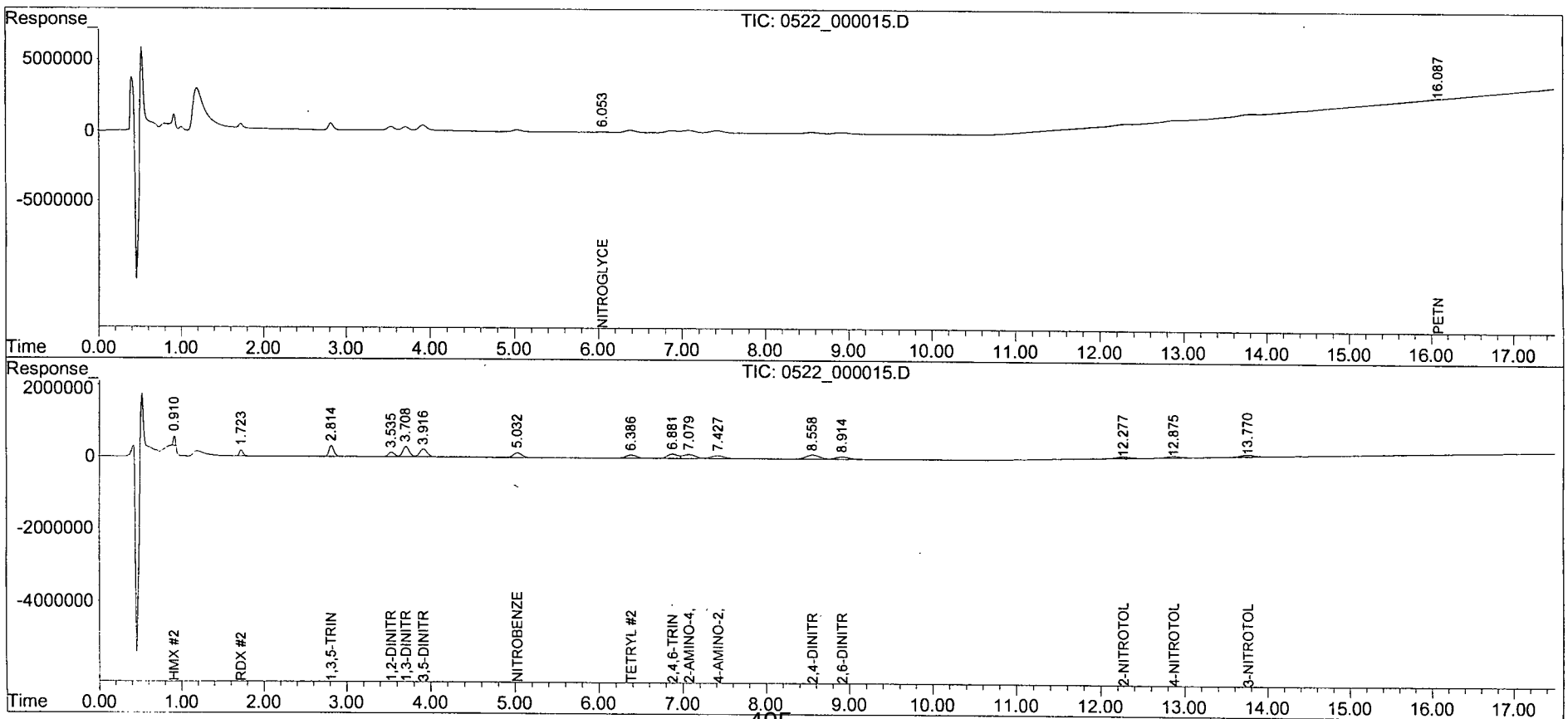
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:55:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

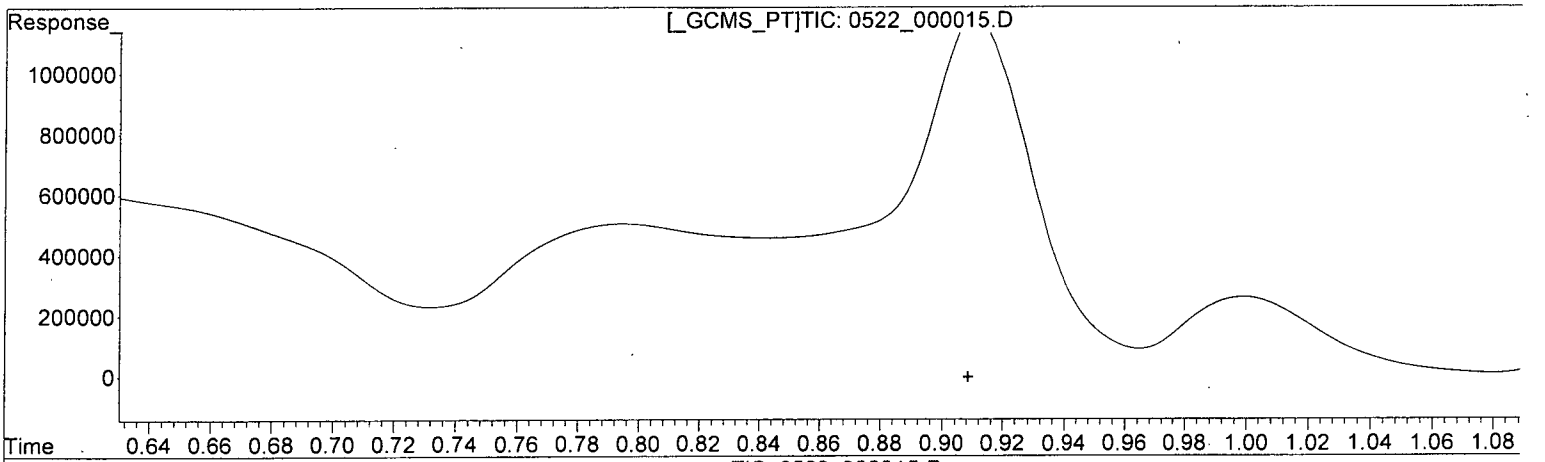


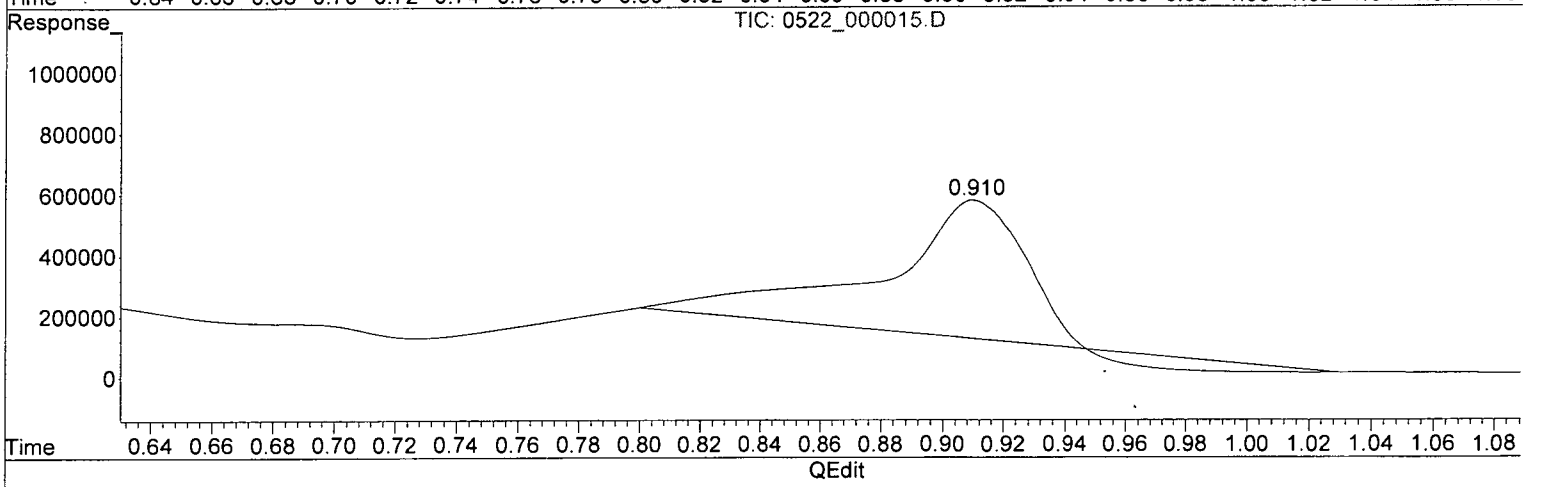
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.911min 17.212 ppb

response 452998

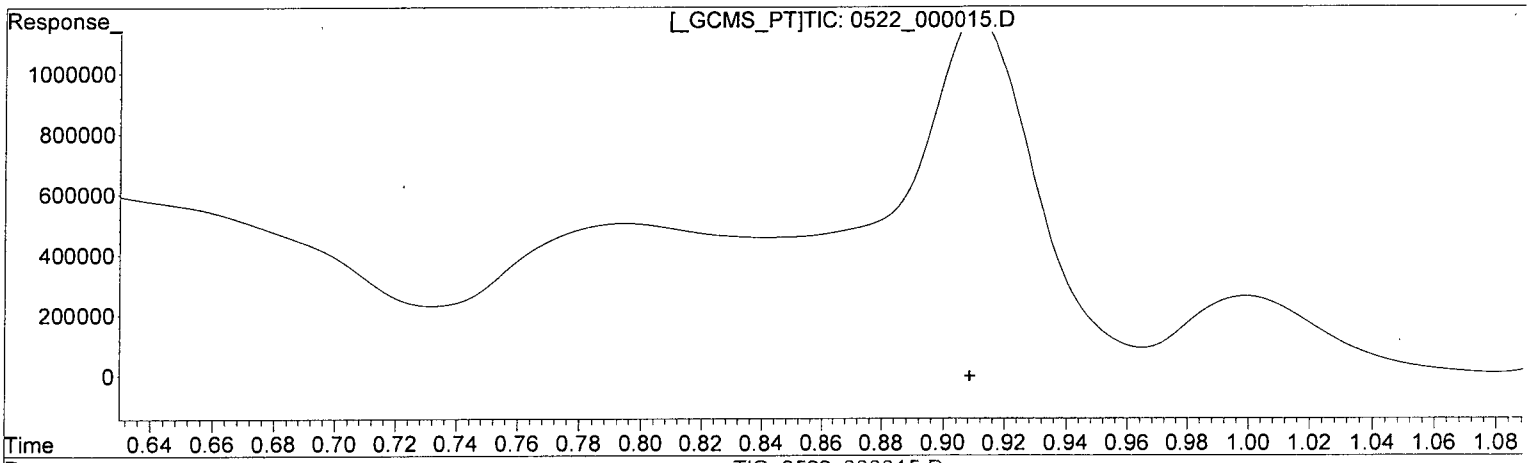
(+) = Expected Retention Time

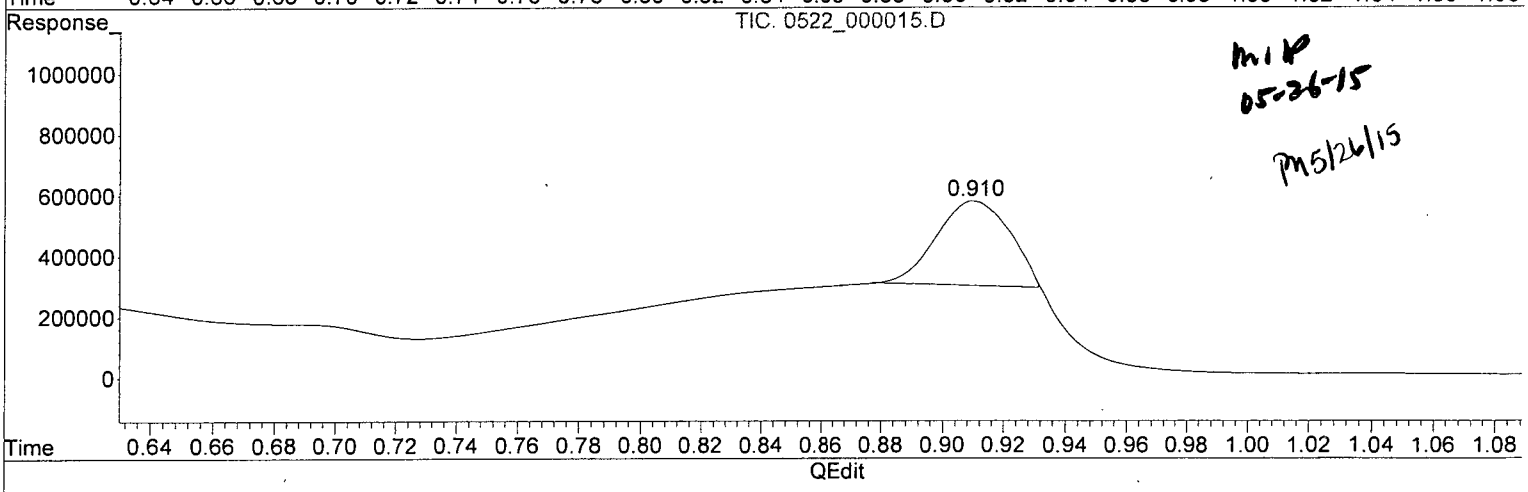
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





MP 05-26-15

PM 5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.910min 10.544 ppb m

response 277521

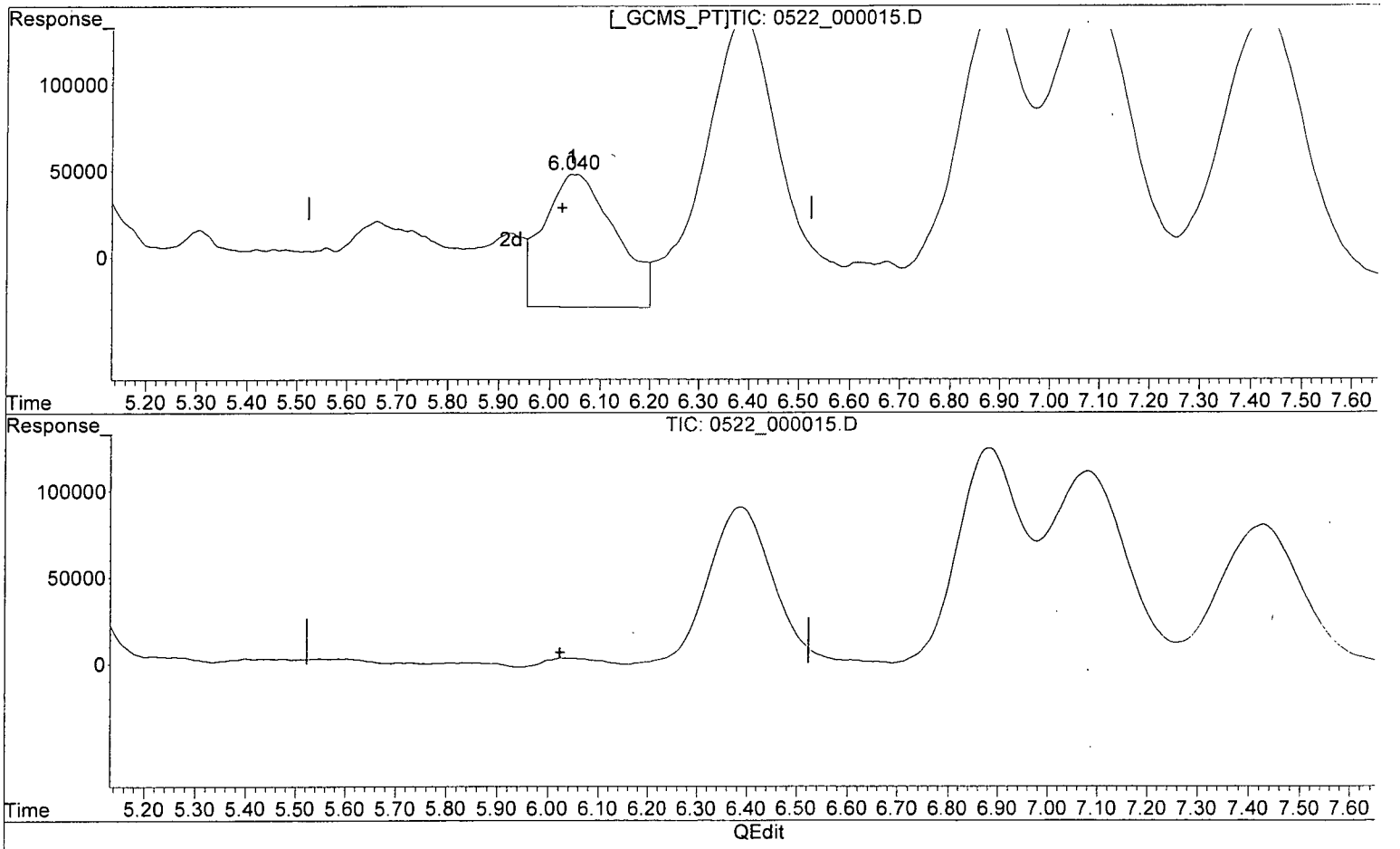
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.042min 13.749 ppb

response 76625

(8) NITROGLYCERIN #2 (TM)

0.000min 0.000 ppb

response 0

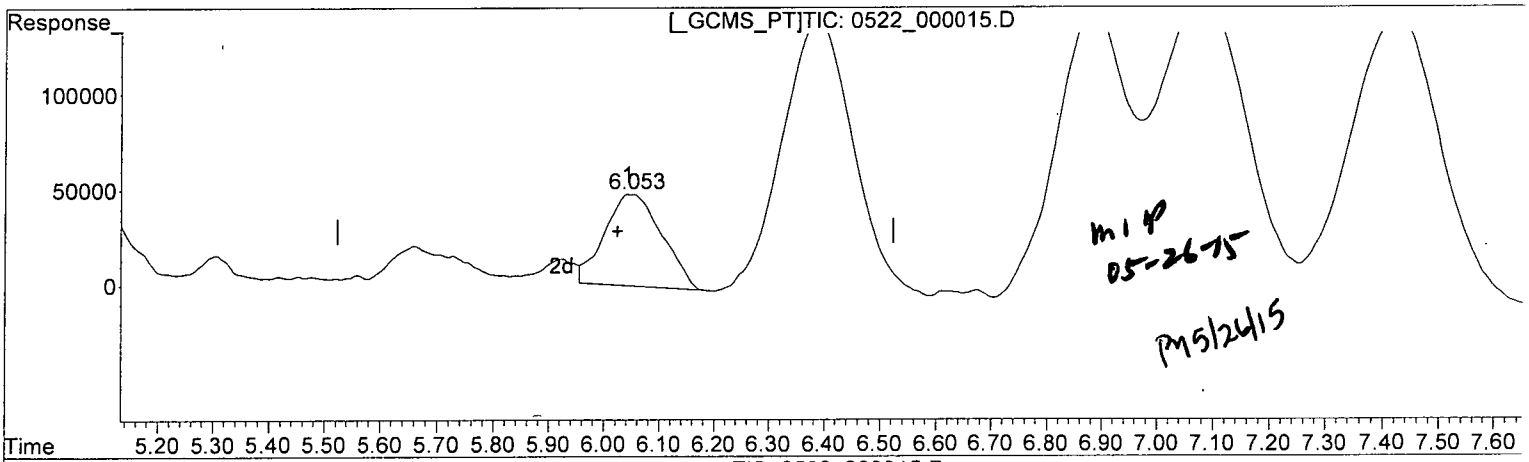
(+) = Expected Retention Time

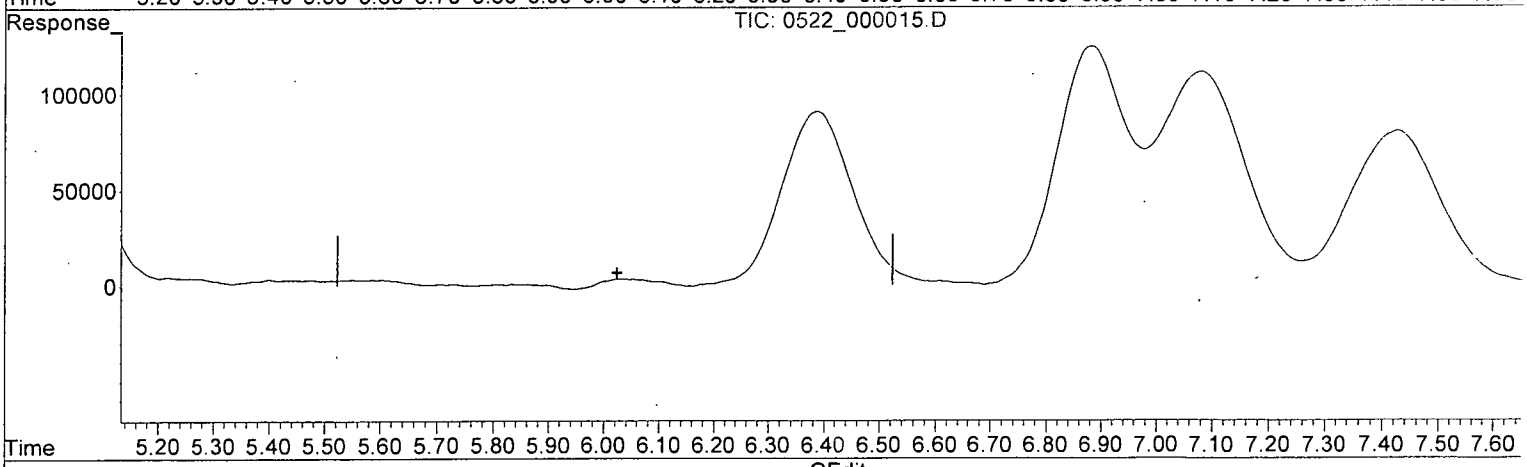
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:35:23
Operator : MP
Sample : 8330CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 8385 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





QEdit

(8) NITROGLYCERIN (TM)

6.053min 8.627 ppb m

response 48081

(8) NITROGLYCERIN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:54:25 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.537	0	262646	N.D.	19.275	#
	Spiked Amount 62.500			Recovery	=	0.00%	30.84%	
	Target Compounds							
1)	TM HMX	0.000	0.910	0	533059	N.D.	20.254m	#
2)	TM RDX	0.000	1.724	0	341011	N.D.	19.471	#
3)	TM 1,3,5-TRI...	0.000	2.816	0	621520	N.D.	19.648	#
5)	TM 1,3-DINIT...	0.000	3.709	0	583563	N.D.	19.310	#
6)	TM 3,5-DINIT...	0.000	3.916	0	445840	N.D.	18.515	#
7)	TM NITROBENZENE	0.000	5.033	0	264975	N.D.	19.161	#
8)	TM NITROGLYC...	6.040	0.000	110320	0	19.796	N.D.	#
9)	TM TETRYL	6.383	6.385	295550	179101	NoCal	17.088	#
10)	TM 2,4,6-TRI...	6.880	6.880	322710	249913	NoCal	19.144	#
11)	TM 2-AMINO-4...	7.079	7.078	332535	223533	NoCal	18.016	#
12)	TM 4-AMINO-2...	7.421	7.422	308181	161739	NoCal	17.785	#
13)	TM 2,4-DINIT...	8.559	8.558	184676	237033	NoCal	18.712	#
14)	TM 2,6-DINIT...	8.921	8.916	196417	131074	NoCal	18.585	#
15)	TM 2-NITROTO...	0.000	12.267	0	87831	N.D.	17.751	#
16)	TM 4-NITROTO...	0.000	12.868	0	88090	N.D.	17.803	#
17)	TM 3-NITROTO...	0.000	13.759	0	105360	N.D.	17.918	#
18)	TM PETN	16.096	0.000	65233	0	14.180m	N.D.	#

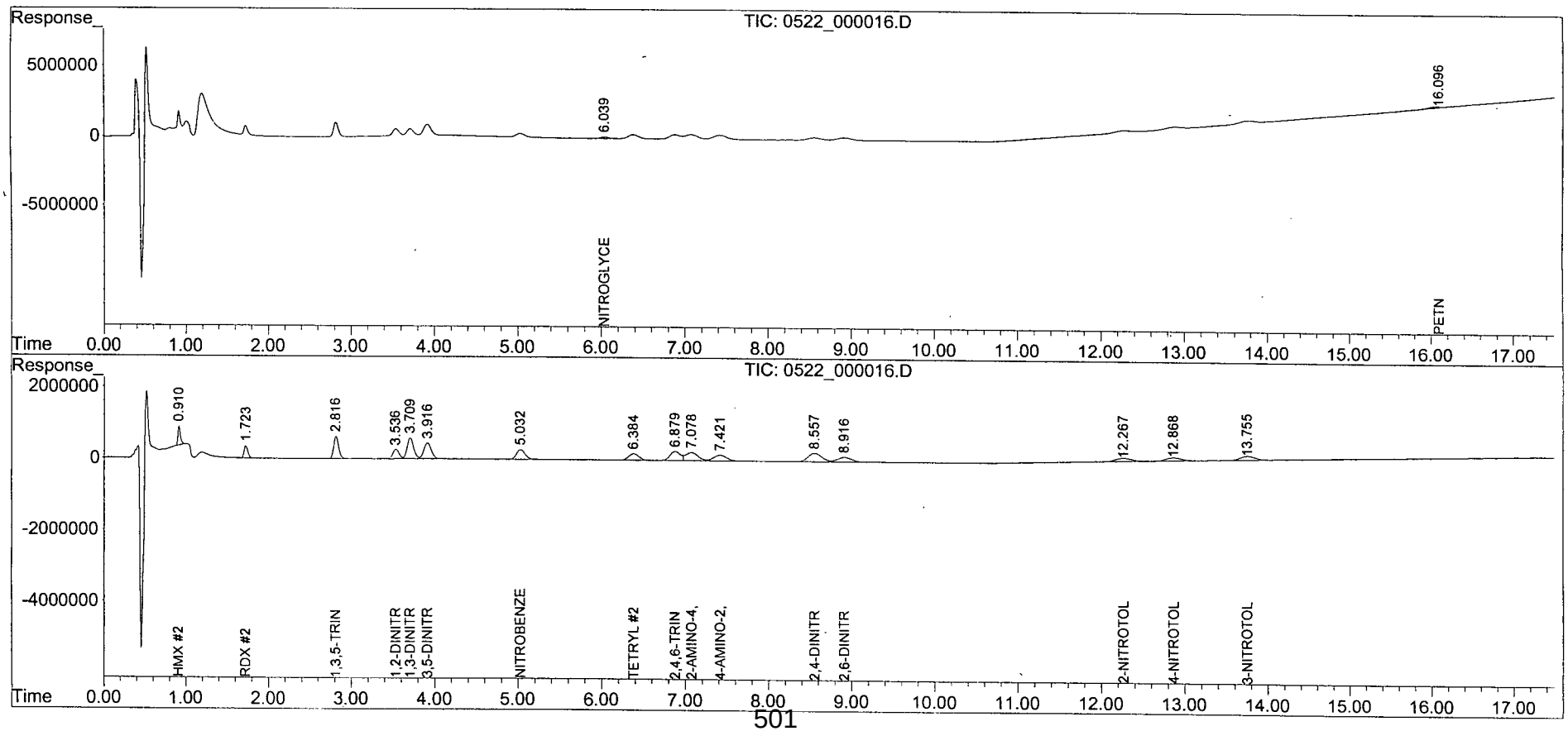
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:54:25 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



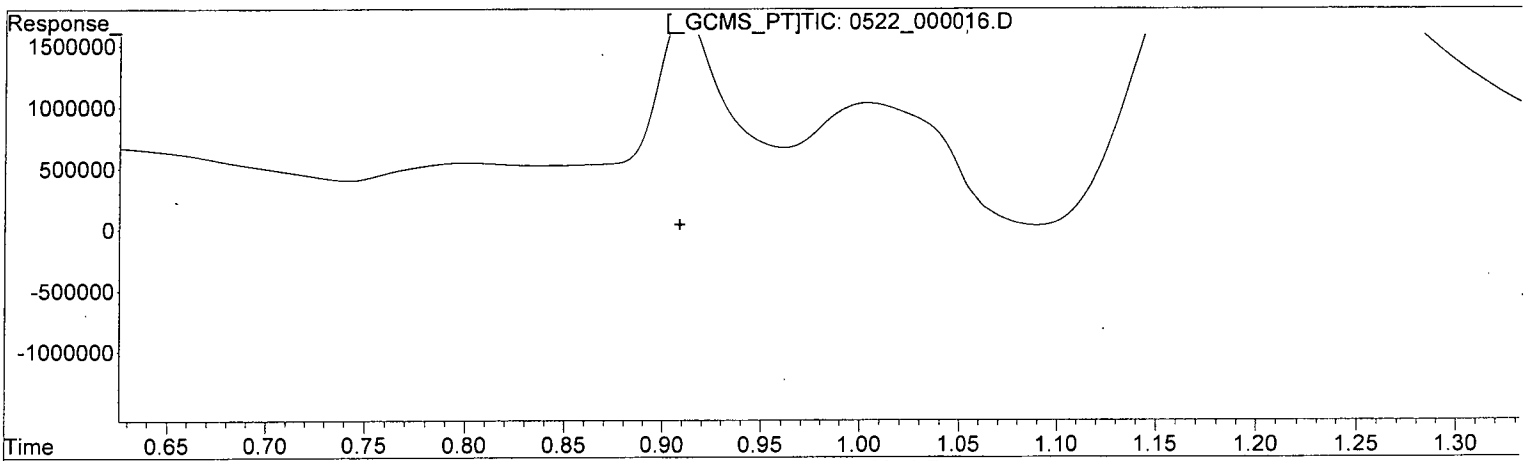
W150522.M Sat May 23 08:54:26 2015 WALDORF Page: 2

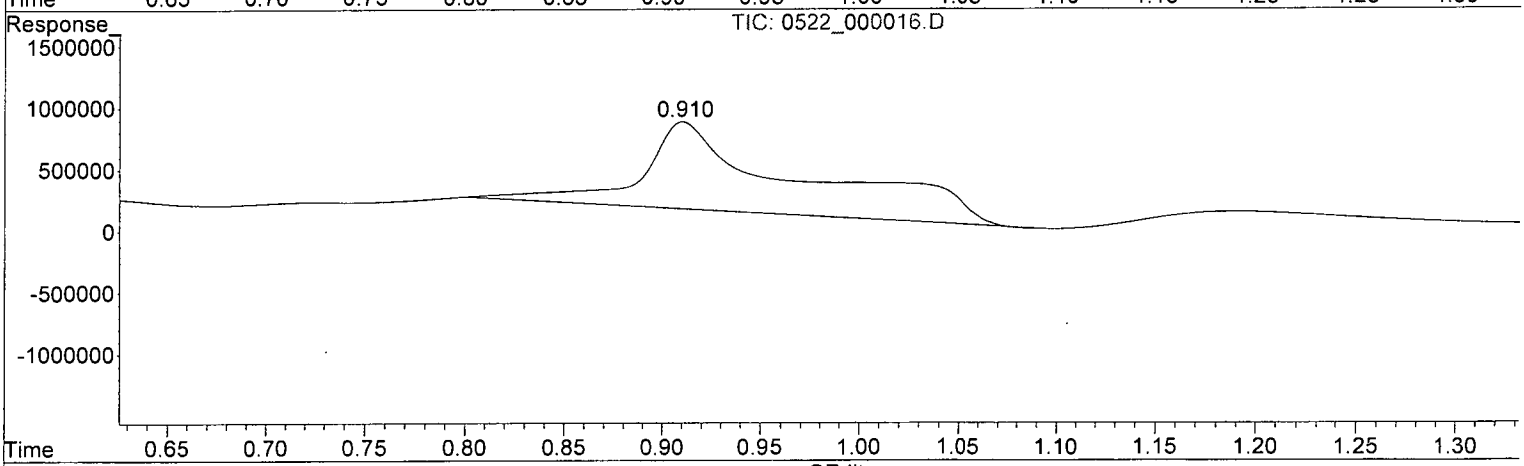
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.911min 26.788 ppb

response 705027

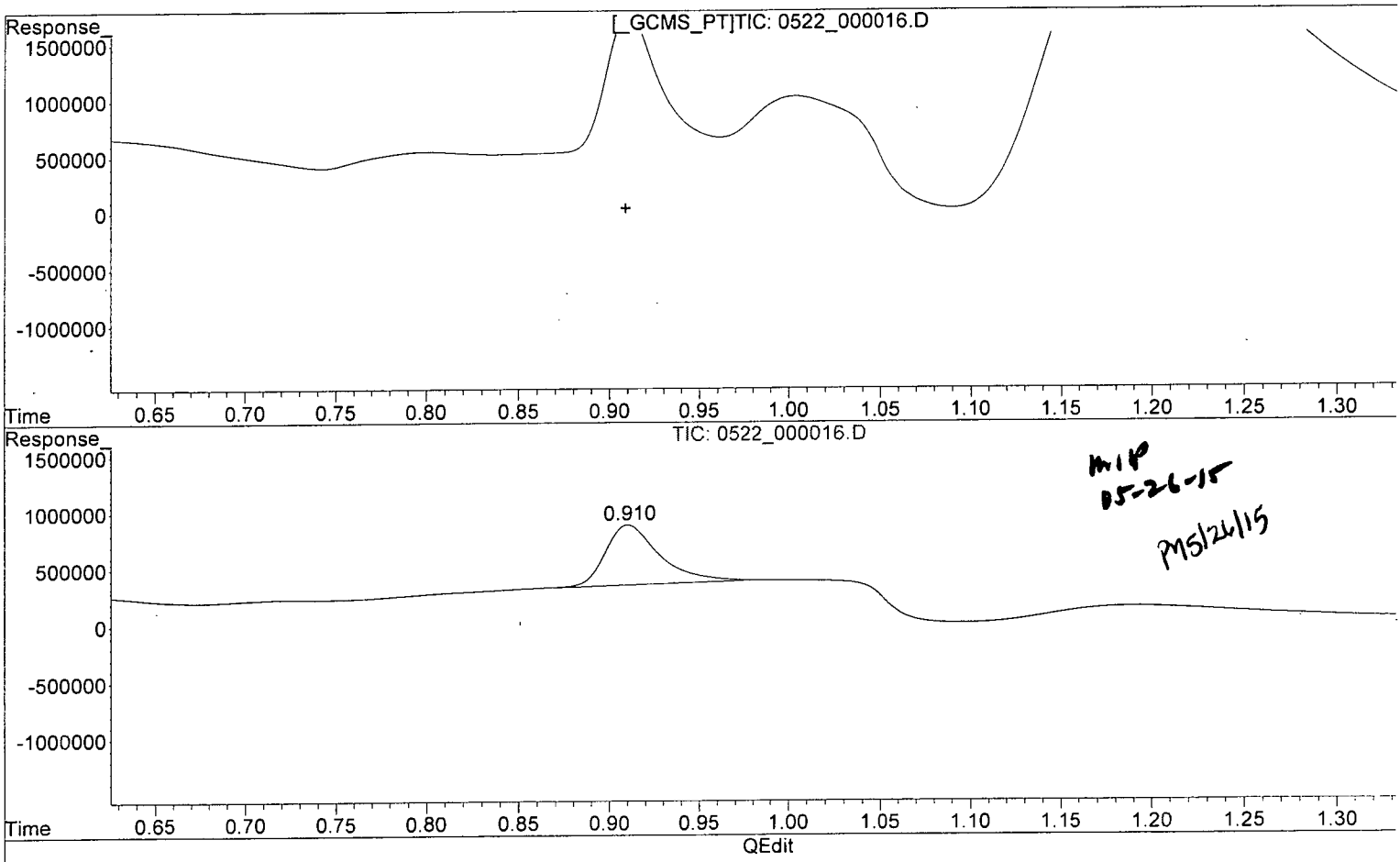
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.910min 20.254 ppb m

response 533059

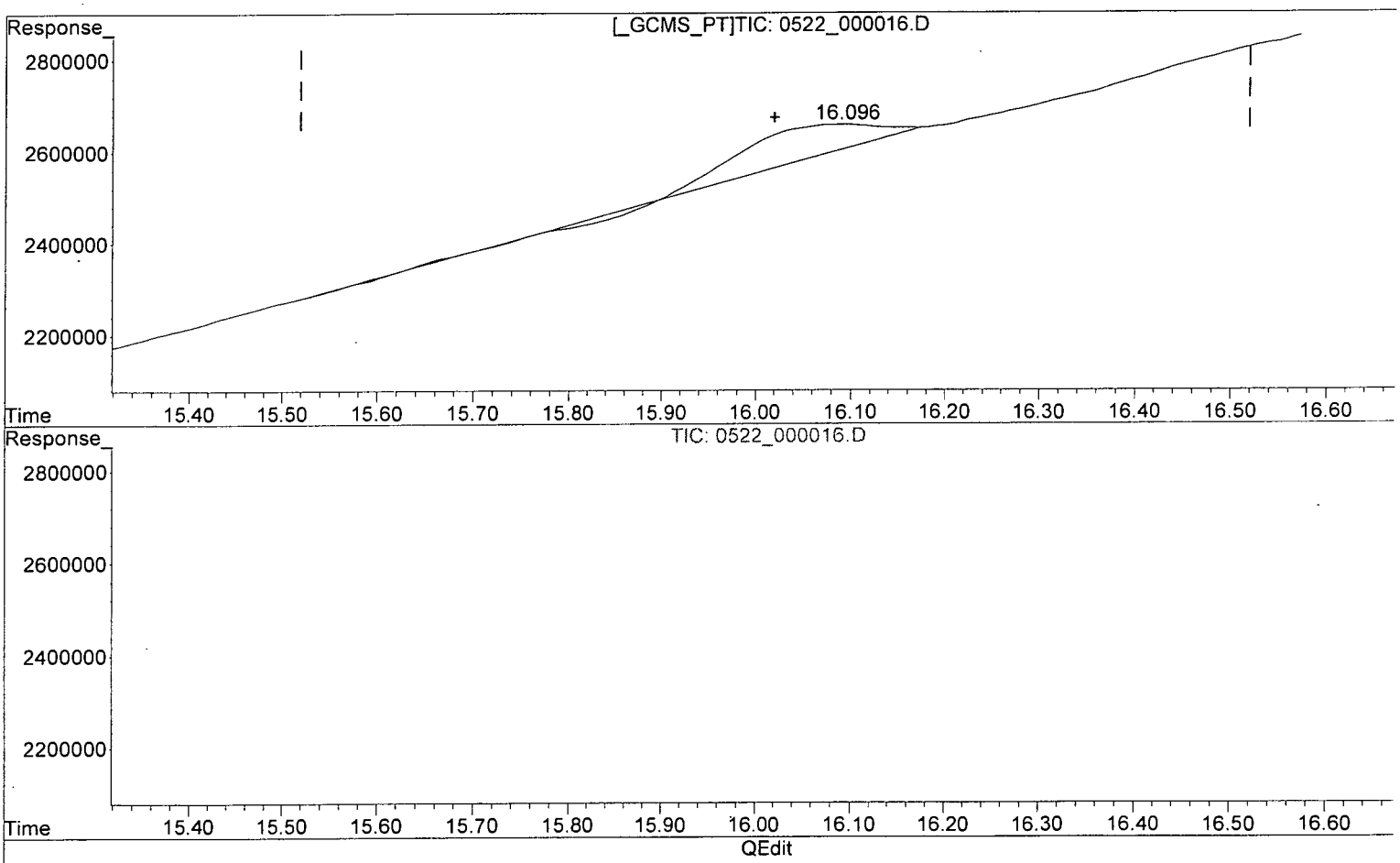
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(18) PETN (TM)

16.090min 11.845 ppb

response 54492

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

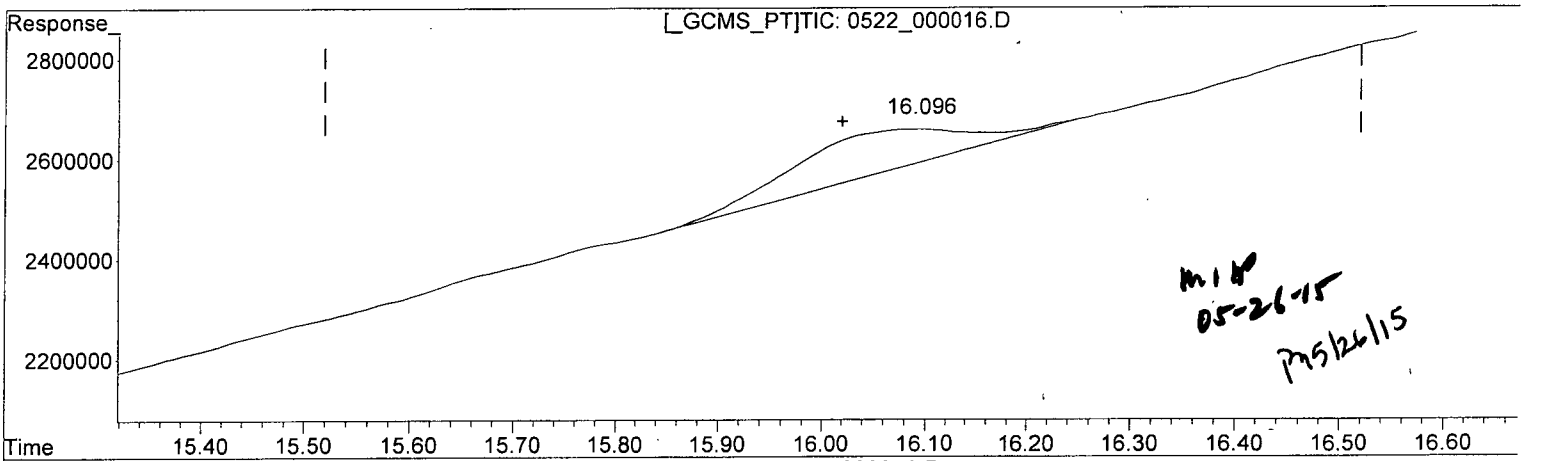
(+) = Expected Retention Time

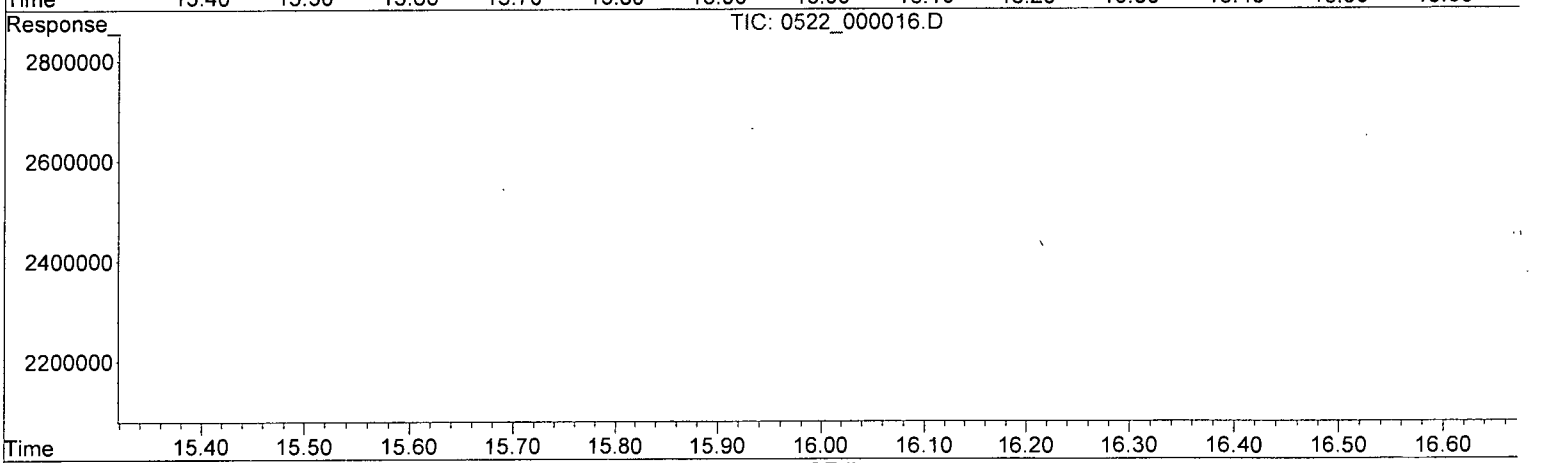
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:02:53
Operator : MP
Sample : 8330CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 8386 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





QEdit

(18) PETN (TM)

16.096min 14.180 ppb m

response 65233

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:23
Operator : MP
Sample : 8330CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 8387 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:52:06 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	3.531	0	649173	N.D.	47.641 #
	Spiked Amount 62.500			Recovery =		0.00%	76.23%
	Target Compounds						
1) TM	HMX	0.000	0.908	0	1280731	N.D.	48.662m#
2) TM	RDX	0.000	1.722	0	853611	N.D.	48.739 #
3) TM	1,3,5-TRI...	0.000	2.812	0	1543113	N.D.	48.782 #
5) TM	1,3-DINIT...	0.000	3.705	0	1455101	N.D.	48.148 #
6) TM	3,5-DINIT...	0.000	3.912	0	1110694	N.D.	46.126 #
7) TM	NITROBENZENE	0.000	5.029	0	665871	N.D.	48.151 #
8) TM	NITROGLYC...	6.037	0.000	263621	0	47.304	N.D. #
9) TM	TETRYL	6.378	6.376	744181	455426	NoCal	43.451 #
10) TM	2,4,6-TRI...	6.872	6.872	806095	621067	NoCal	47.575 #
11) TM	2-AMINO-4...	7.070	7.070	843942	559774	NoCal	45.115 #
12) TM	4-AMINO-2...	7.413	7.414	750390	404091	NoCal	44.434 #
13) TM	2,4-DINIT...	8.551	8.551	439128	590887	NoCal	46.645 #
14) TM	2,6-DINIT...	8.911	8.909	453309	328053	NoCal	46.514 #
15) TM	2-NITROTO...	0.000	12.256	0	220810	N.D.	44.628 #
16) TM	4-NITROTO...	0.000	12.859	0	220626	N.D.	44.589 #
17) TM	3-NITROTO...	0.000	13.751	0	264010	N.D.	44.899 #
18) TM	PETN	16.045	0.000	189934	0	41.287	N.D. #

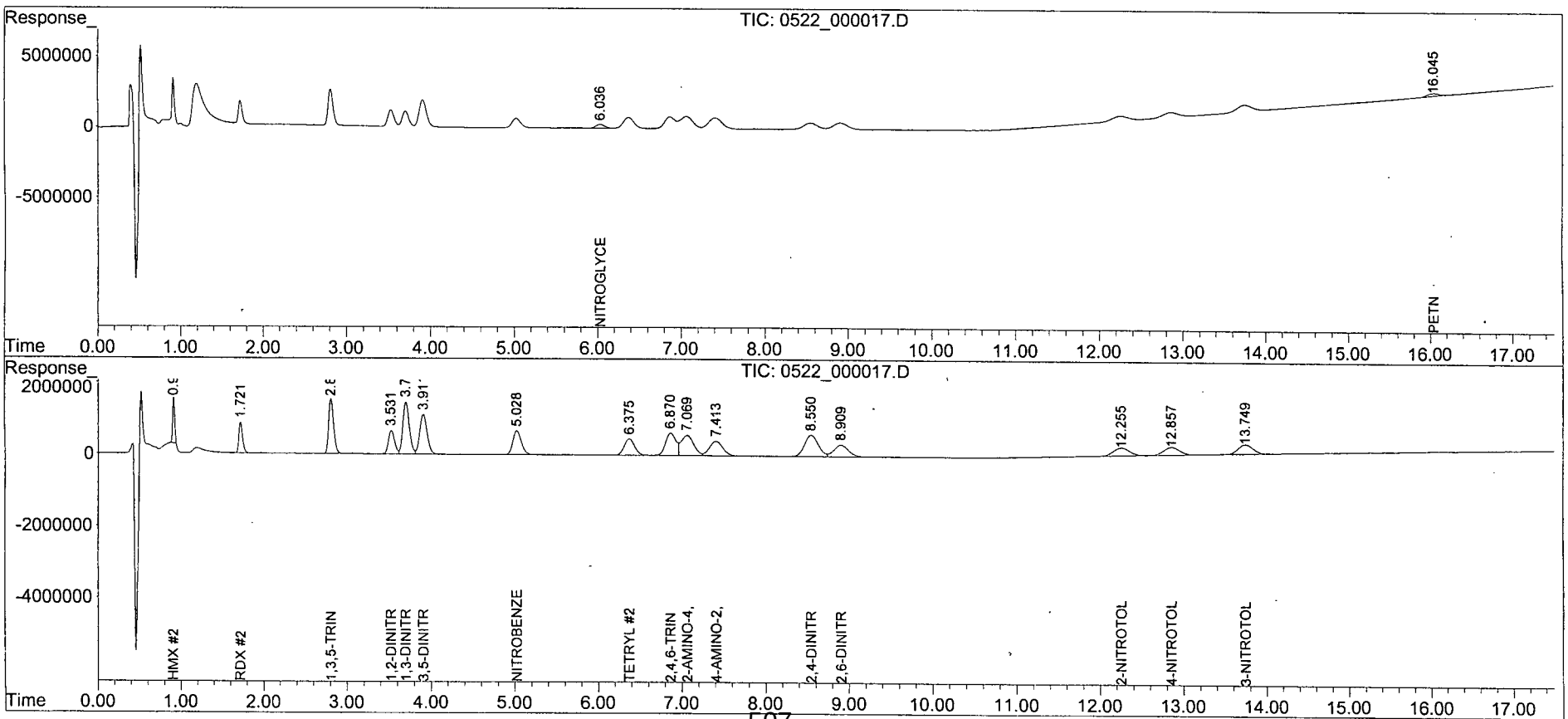
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:23
Operator : MP
Sample : 8330CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 8387 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:52:06 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

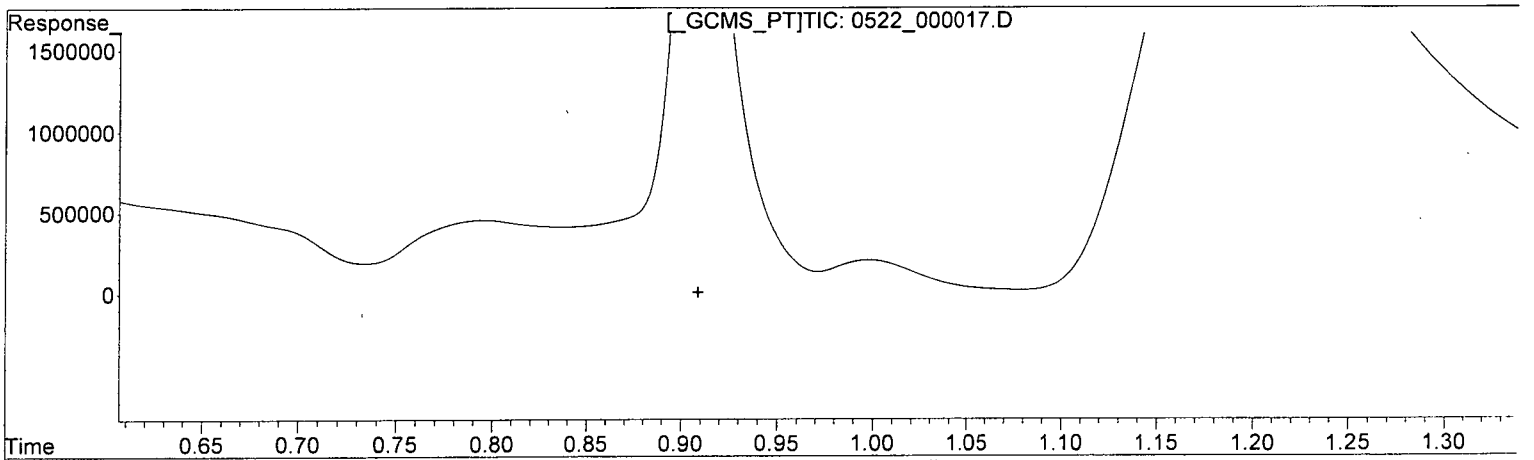


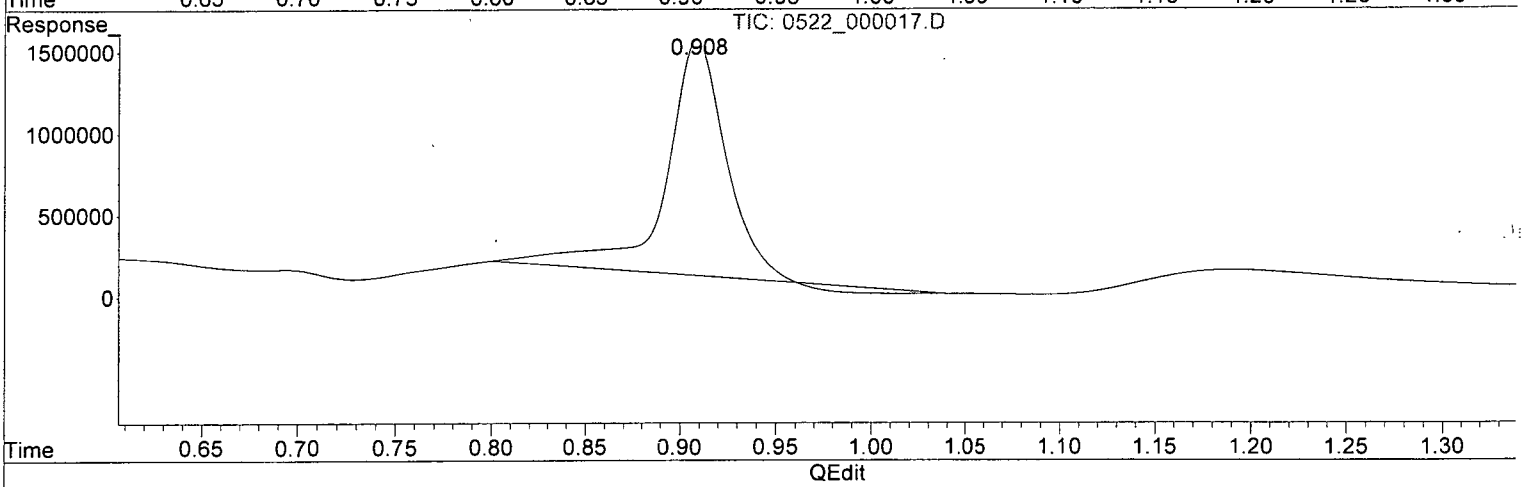
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:23
Operator : MP
Sample : 8330CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 8387 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:25 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.909min 54.634 ppb

response 1437929

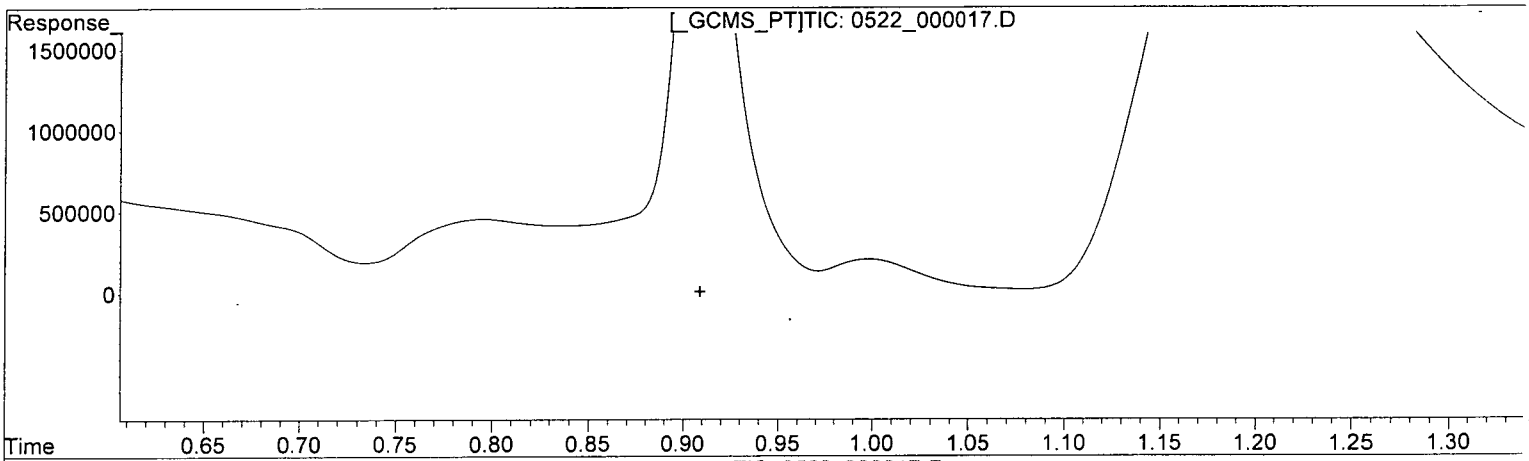
(+) = Expected Retention Time

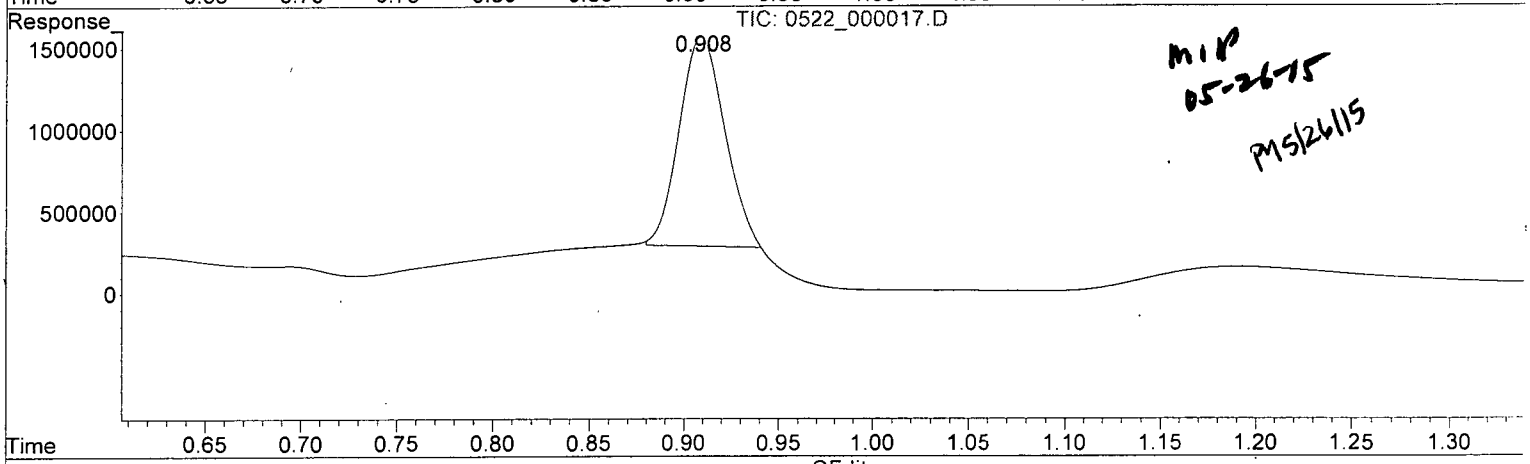
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:23
Operator : MP
Sample : 8330CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 8387 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:25 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





MP 05-26-15 5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.908min 48.662 ppb m

response 1280731

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:57:54
Operator : MP
Sample : 8330CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 8388 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:50:59 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	3.535	0	1290640	N.D.	94.716 #
	Spiked Amount 62.500			Recovery	=	0.00%	151.55%
	Target Compounds						
1)	TM HMX	0.000	0.910	0	2606306	N.D.	99.027m#
2)	TM RDX	0.000	1.724	0	1695994	N.D.	96.838 #
3)	TM 1,3,5-TRI...	0.000	2.814	0	3075082	N.D.	97.212 #
5)	TM 1,3-DINIT...	0.000	3.707	0	2892550	N.D.	95.712 #
6)	TM 3,5-DINIT...	0.000	3.915	0	2207280	N.D.	91.666 #
7)	TM NITROBENZENE	0.000	5.032	0	1320781	N.D.	95.510 #
8)	TM NITROGLYC...	6.041	0.000	530814	0	95.248	N.D. #
9)	TM TETRYL	6.383	6.383	1485615	902928	NoCal	86.147 #
10)	TM 2,4,6-TRI...	6.877	6.876	1600218	1235293	NoCal	94.627 #
11)	TM 2-AMINO-4...	7.078	7.077	1672837	1109691	NoCal	89.435 #
12)	TM 4-AMINO-2...	7.422	7.421	1488563	801060	NoCal	88.085 #
13)	TM 2,4-DINIT...	8.557	8.557	870898	1172656	NoCal	92.571 #
14)	TM 2,6-DINIT...	8.915	8.916	898126	644179	NoCal	91.337 #
15)	TM 2-NITROTO...	0.000	12.257	0	439307	N.D.	88.788 #
16)	TM 4-NITROTO...	0.000	12.858	0	437816	N.D.	88.484 #
17)	TM 3-NITROTO...	0.000	13.750	0	524084	N.D.	89.129 #
18)	TM PETN	16.035	0.000	411789	0	89.514	N.D. #

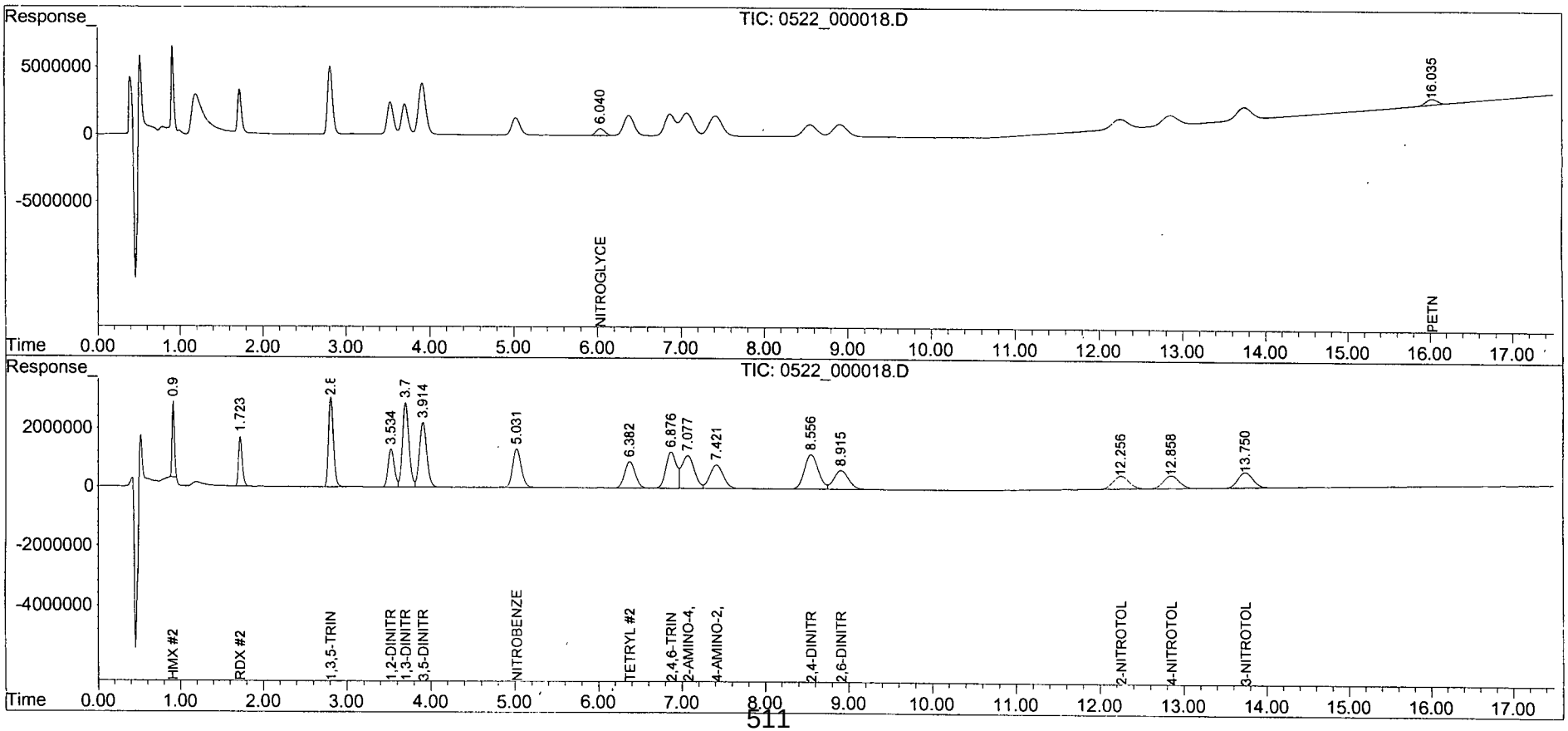
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:57:54
Operator : MP
Sample : 8330CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 8388 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:50:59 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

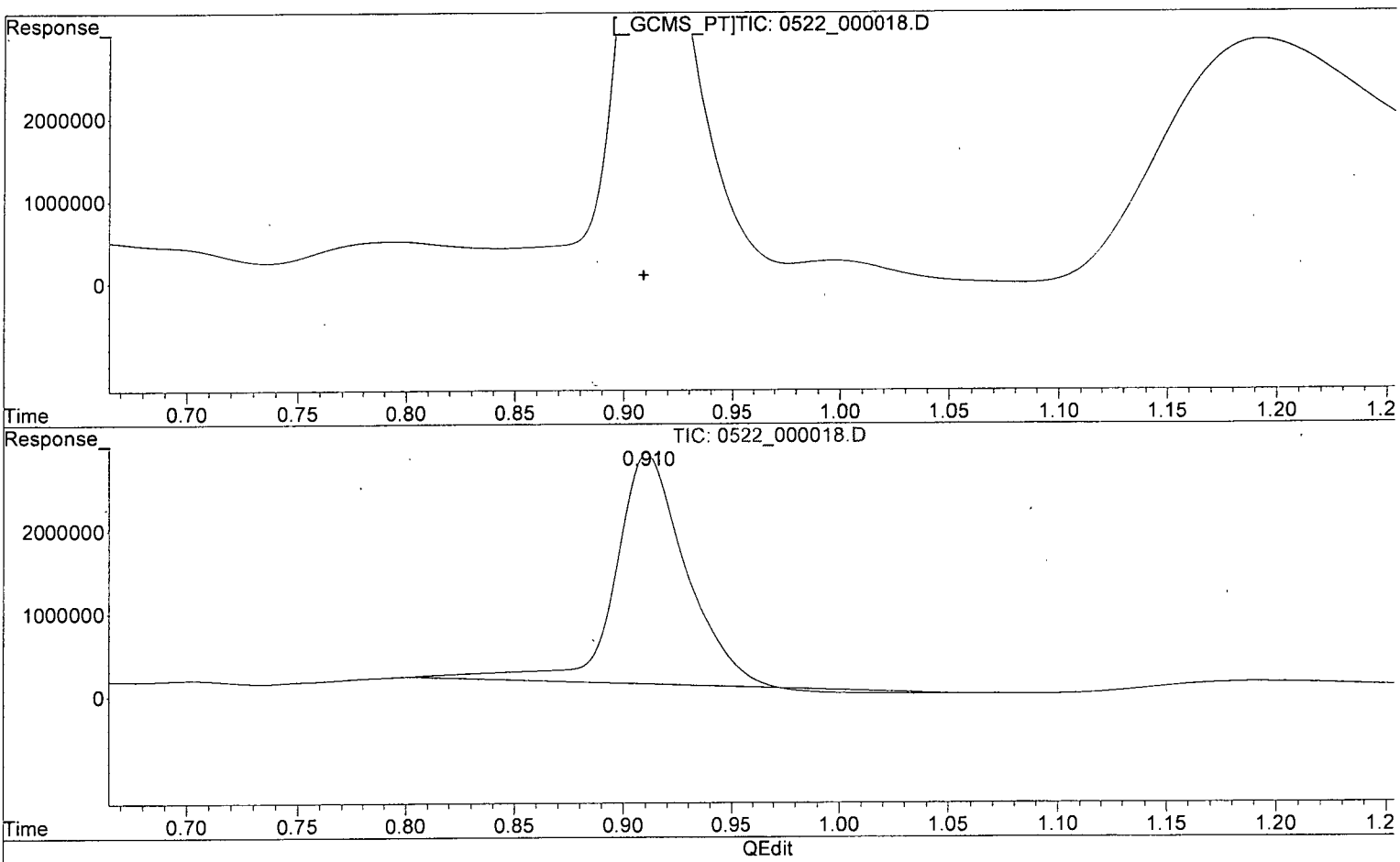


Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:57:54
Operator : MP
Sample : 8330CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 8388 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:28 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.912min 105.179 ppb

response 2768218

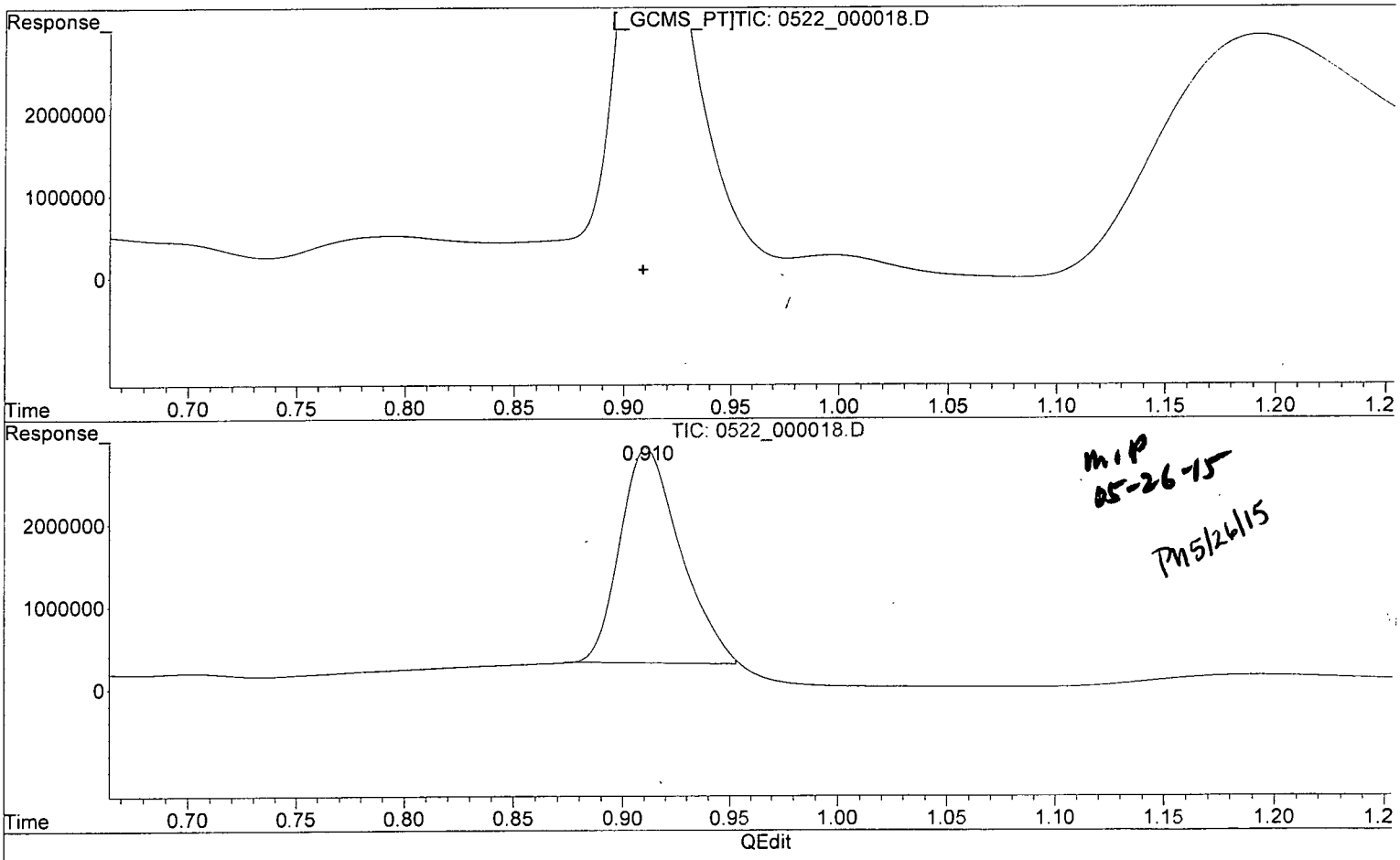
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:57:54
Operator : MP
Sample : 8330CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 8388 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:28 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



MP 05-26-15

PM 5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

0.910min 99.027 ppb m

response 2606306

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:25:25
Operator : MP
Sample : 8330CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 8389 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:31 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.529	0	2607917	N.D.	191.386	#
	Spiked Amount 62.500			Recovery	=	0.00%	306.22%	
	Target Compounds							
1)	TM HMX	0.000	0.909	0	5406170	N.D.	205.408	#
2)	TM RDX	0.000	1.721	0	3423178	N.D.	195.456	#
3)	TM 1,3,5-TRI...	0.000	2.809	0	6223860	N.D.	196.754	#
5)	TM 1,3-DINIT...	0.000	3.702	0	5850290	N.D.	193.581	#
6)	TM 3,5-DINIT...	0.000	3.910	0	4462918	N.D.	185.340	#
7)	TM NITROBENZENE	0.000	5.028	0	2671122	N.D.	193.157	#
8)	TM NITROGLYC...	6.037	6.033	1064367	21764	190.988	NoCal	#
9)	TM TETRYL	6.378	6.378	3008528	1827851	NoCal	174.392	#
10)	TM 2,4,6-TRI...	6.872	6.872	3234786	2503048	NoCal	191.740	#
11)	TM 2-AMINO-4...	7.073	7.073	3375410	2244726	NoCal	180.913	#
12)	TM 4-AMINO-2...	7.417	7.418	2998380	1617102	NoCal	177.818	#
13)	TM 2,4-DINIT...	8.555	8.555	1746281	2373610	NoCal	187.375	#
14)	TM 2,6-DINIT...	8.916	8.915	1810737	1305146	NoCal	185.055	#
15)	TM 2-NITROTO...	0.000	12.265	0	891016	N.D.	180.082	#
16)	TM 4-NITROTO...	0.000	12.863	0	887417	N.D.	179.350	#
17)	TM 3-NITROTO...	0.000	13.754	0	1067793	N.D.	181.596	#
18)	TM PETN	16.029	0.000	862296	0	187.444	N.D.	#

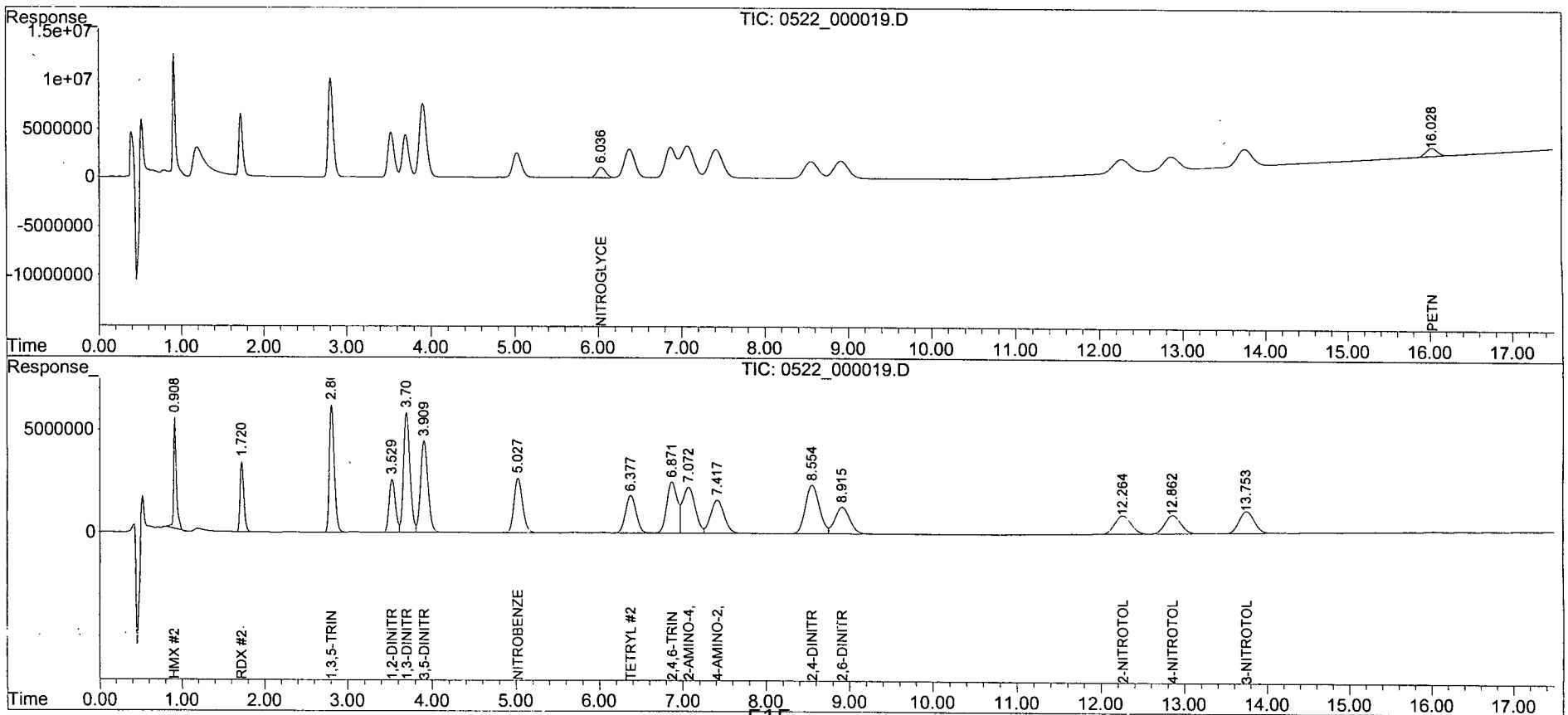
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:25:25
Operator : MP
Sample : 8330CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 8389 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:31 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:52:55
Operator : MP
Sample : 8330CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 8390 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:49:26 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.532	0	6536750	N.D.	479.710	#
	Spiked Amount 62.500			Recovery	=	0.00%	767.54%	
	Target Compounds							
1)	TM HMX	0.000	0.912	0	13093933	N.D.	497.507	#
2)	TM RDX	0.000	1.725	0	8556770	N.D.	488.573	#
3)	TM 1,3,5-TRI...	0.000	2.813	0	15539688	N.D.	491.253	#
5)	TM 1,3-DINIT...	0.000	3.704	0	14653448	N.D.	484.870	#
6)	TM 3,5-DINIT...	0.000	3.912	0	11178554	N.D.	464.233	#
7)	TM NITROBENZENE	0.000	5.028	0	6683911	N.D.	483.335	#
8)	TM NITROGLYC...	6.034	6.029	2604059	52764	467.267m	NoCal	#
9)	TM TETRYL	6.376	6.376	7486113	4607535	NoCal	439.597	#
10)	TM 2,4,6-TRI...	6.870	6.870	8029656	6252449	NoCal	478.954	#
11)	TM 2-AMINO-4...	7.070	7.069	8405544	5619907	NoCal	452.935	#
12)	TM 4-AMINO-2...	7.414	7.414	7453750	4039281	NoCal	444.164	#
13)	TM 2,4-DINIT...	8.549	8.549	4361031	5949145	NoCal	469.632	#
14)	TM 2,6-DINIT...	8.910	8.909	4509069	3261676	NoCal	462.468	#
15)	TM 2-NITROTO...	0.000	12.261	0	2225219	N.D.	449.736	#
16)	TM 4-NITROTO...	0.000	12.859	0	2224626	N.D.	449.605	#
17)	TM 3-NITROTO...	0.000	13.751	0	2675829	N.D.	455.070	#
18)	TM PETN	16.025	0.000	2135884	0	464.294	N.D.	#

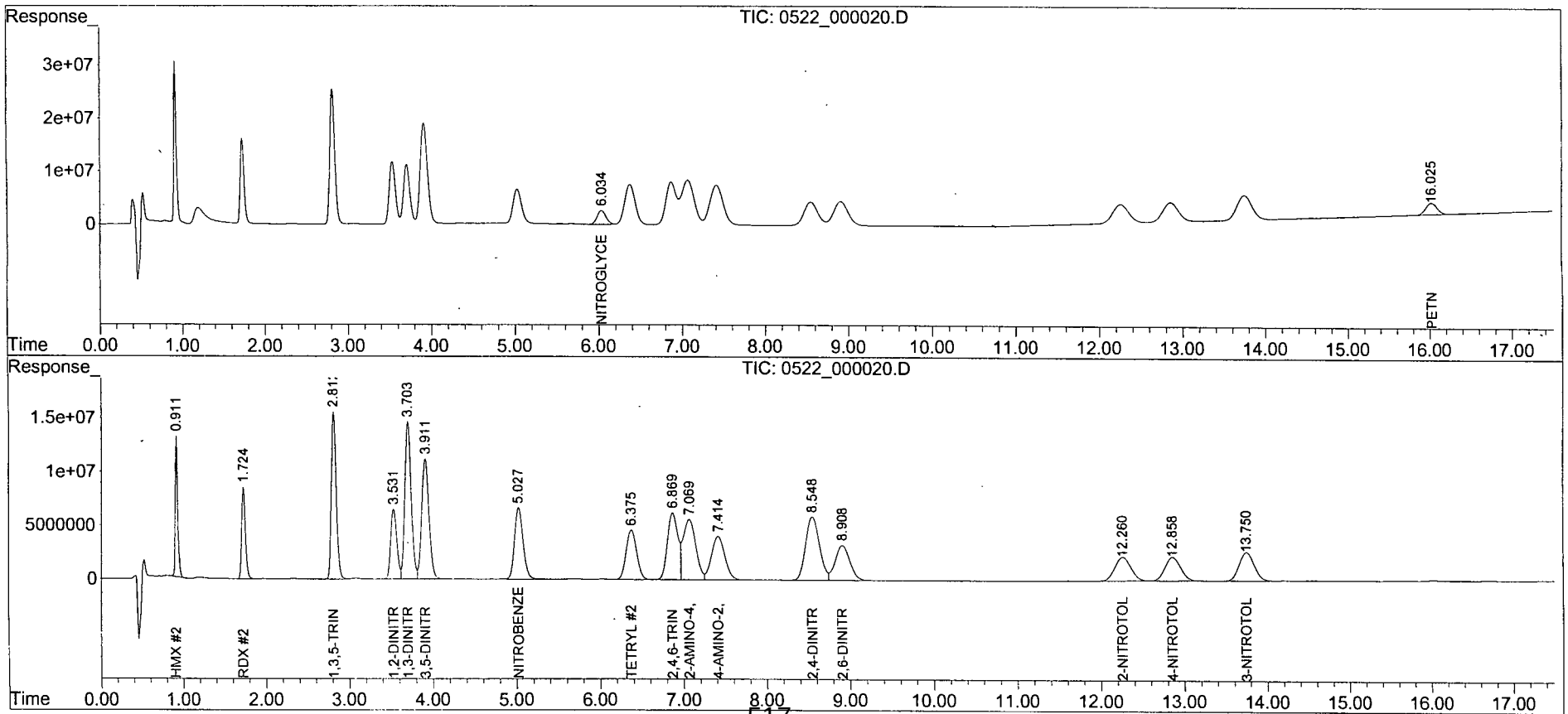
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:52:55
Operator : MP
Sample : 8330CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 8390 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:49:26 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



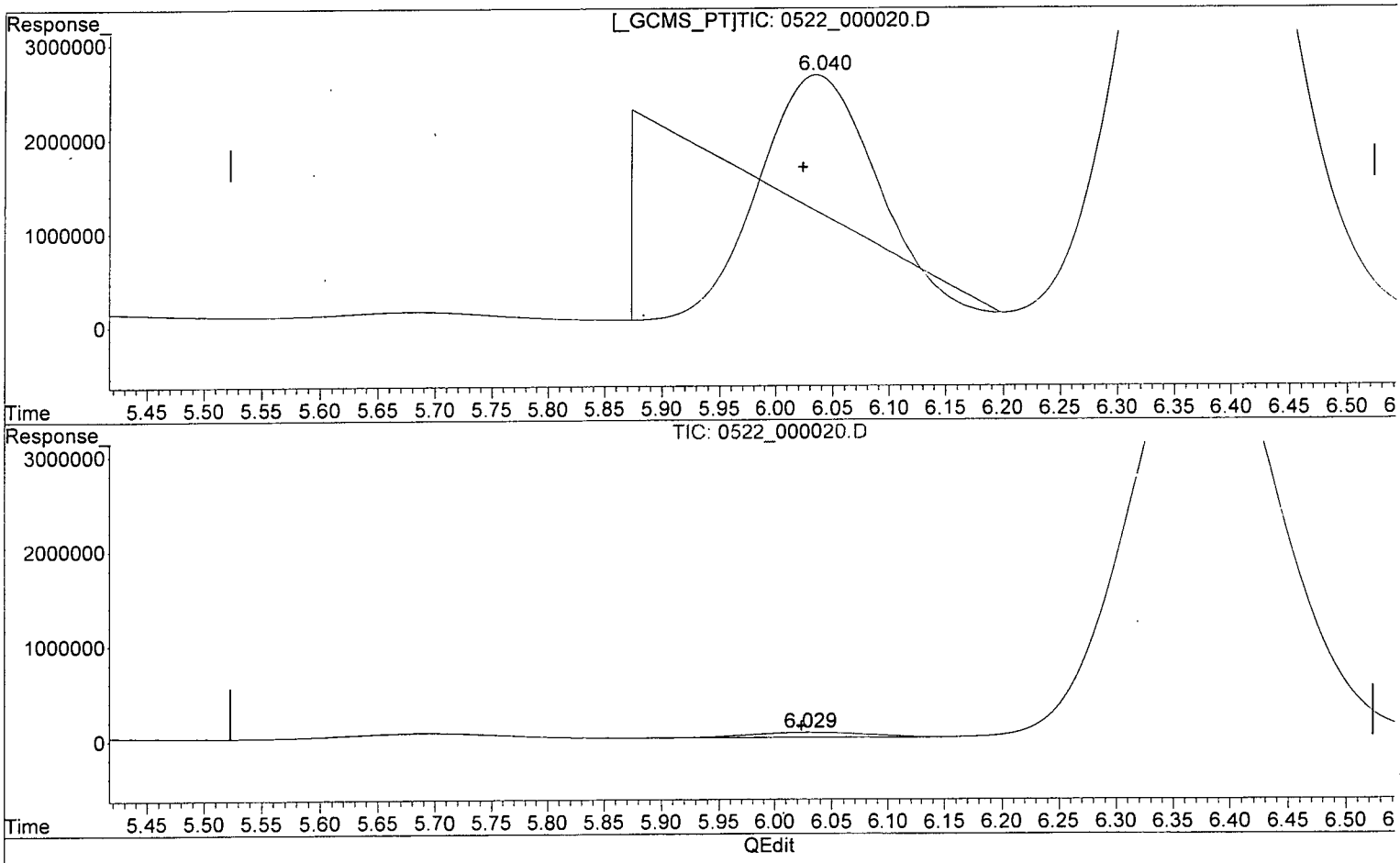
W150522.M Sat May 23 08:49:51 2015 WALDORF Page: 2

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:52:55
Operator : MP
Sample : 8330CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 8390 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:34 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.035min 258.894 ppb

response 1442806

(8) NITROGLYCERIN #2 (TM)

6.029min 0.000 ppb

response 52764

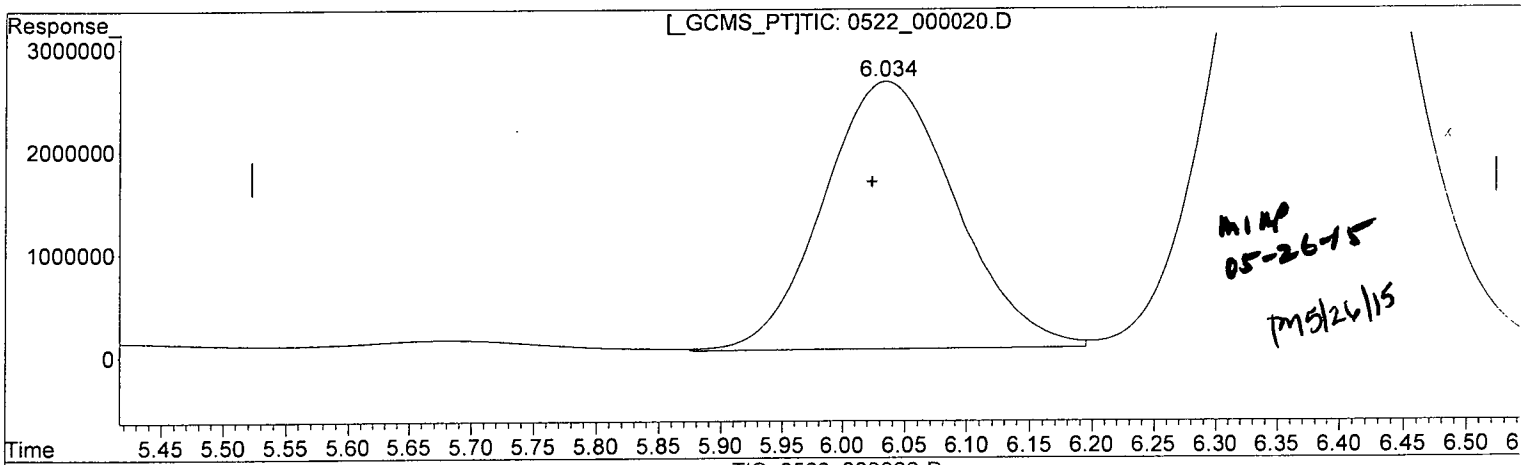
(+) = Expected Retention Time

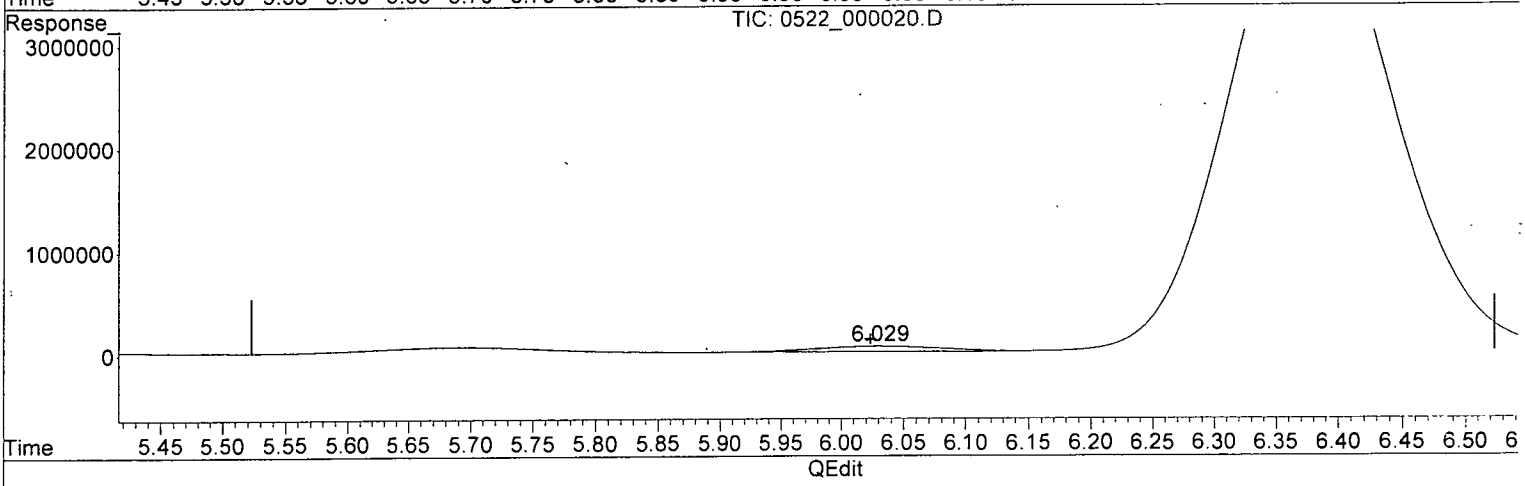
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:52:55
Operator : MP
Sample : 8330CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 8390 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:34 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





(8) NITROGLYCERIN (TM)

6.034min 467.267 ppb m

response 2604059

(8) NITROGLYCERIN #2 (TM)

6.029min 0.000 ppb

response 52764

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:20:26
Operator : MP
Sample : 8330CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 8391 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:48:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.526	0	13063722	N.D.	958.702	#
	Spiked Amount 62.500			Recovery	=	0.00%	1533.92%	
	Target Compounds							
1)	TM HMX	0.000	0.910	0	25565755	N.D.	971.376	#
2)	TM RDX	0.000	1.721	0	16944805	N.D.	967.511	#
3)	TM 1,3,5-TRI...	0.000	2.808	0	30884999	N.D.	976.362	#
5)	TM 1,3-DINIT...	0.000	3.698	0	29294479	N.D.	969.330	#
6)	TM 3,5-DINIT...	0.000	3.906	0	22350043	N.D.	928.174	#
7)	TM NITROBENZENE	0.000	5.019	0	13349299	N.D.	965.330	#
8)	TM NITROGLYC...	6.023	6.020	5146871	112765	923.543m	NoCal	#
9)	TM TETRYL	6.365	6.365	14825795	9135558	NoCal	871.607	#
10)	TM 2,4,6-TRI...	6.859	6.859	16022681	12472012	NoCal	955.390	#
11)	TM 2-AMINO-4...	7.059	7.059	16751362	11202296	NoCal	902.846	#
12)	TM 4-AMINO-2...	7.403	7.403	14857900	8042665	NoCal	884.380	#
13)	TM 2,4-DINIT...	8.536	8.536	8720715	11903150	NoCal	939.648	#
14)	TM 2,6-DINIT...	8.897	8.897	8992506	6508725	NoCal	922.862	#
15)	TM 2-NITROTO...	0.000	12.251	0	4418487	N.D.	893.014	#
16)	TM 4-NITROTO...	0.000	12.850	0	4422161	N.D.	893.736	#
17)	TM 3-NITROTO...	0.000	13.745	0	5340802	N.D.	908.293	#
18)	TM PETN	16.021	0.000	4272602	0	928.769	N.D.	#

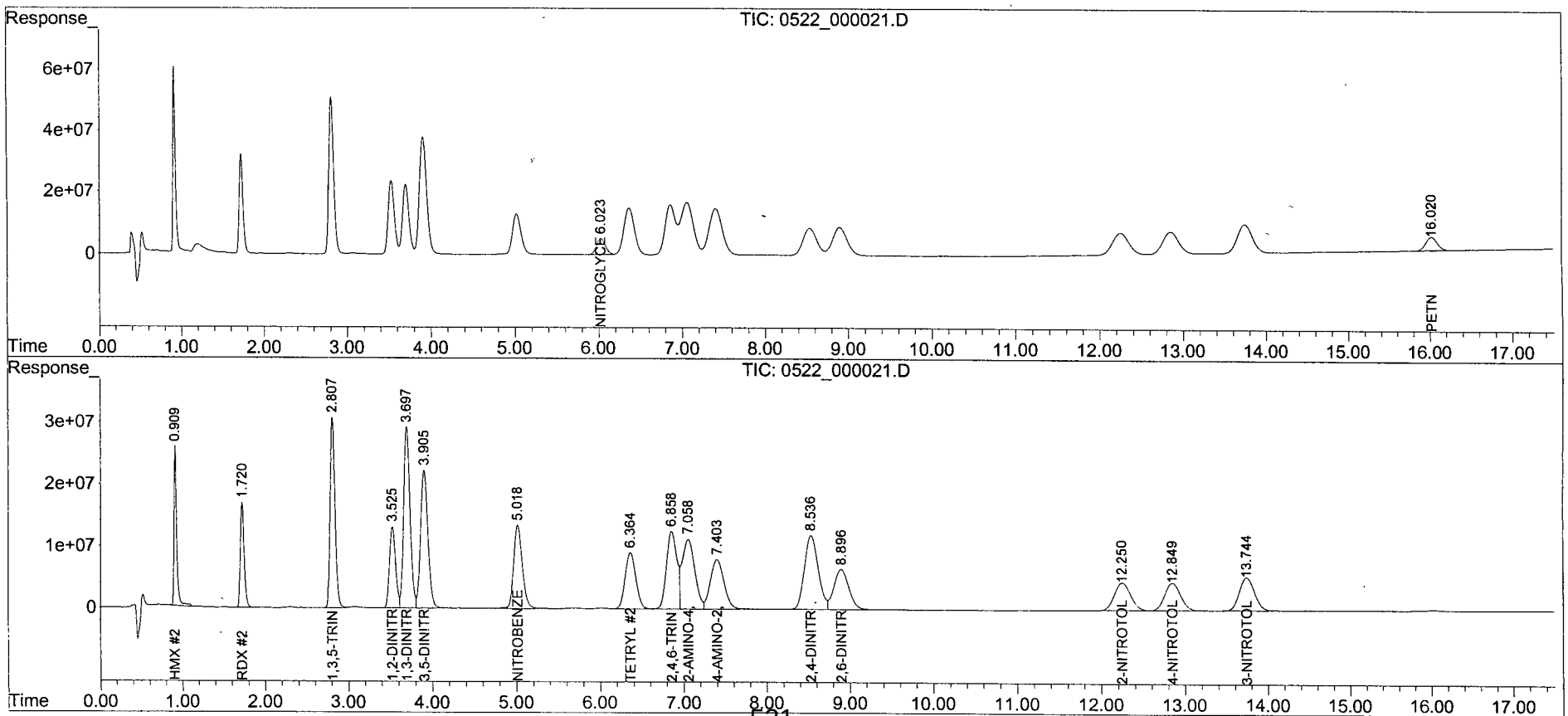
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:20:26
Operator : MP
Sample : 8330CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 8391 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:48:19 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

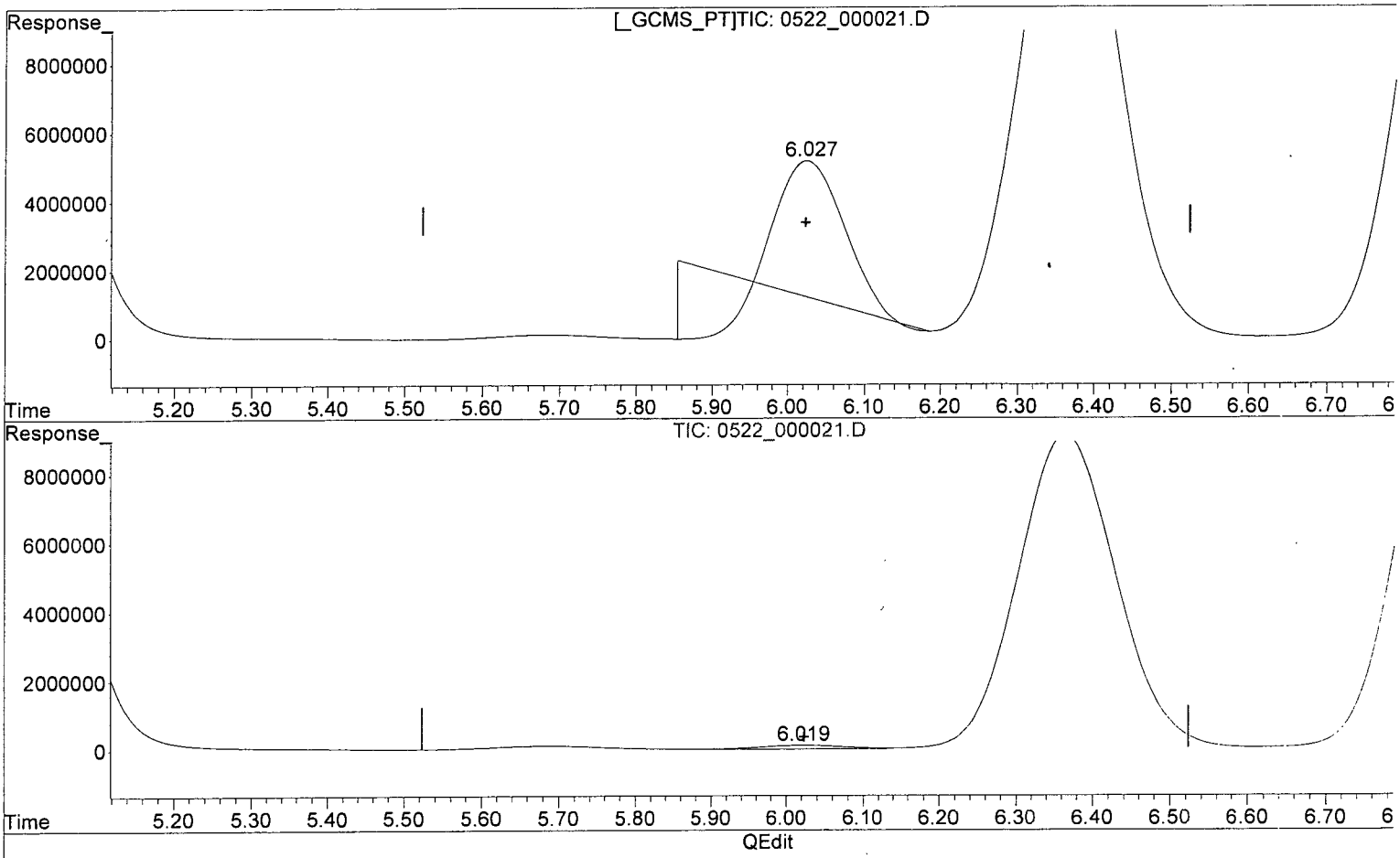


Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:20:26
Operator : MP
Sample : 8330CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 8391 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:37 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.024min 711.081 ppb

response 3962825

(8) NITROGLYCERIN #2 (TM)

6.020min 0.000 ppb

response 112765

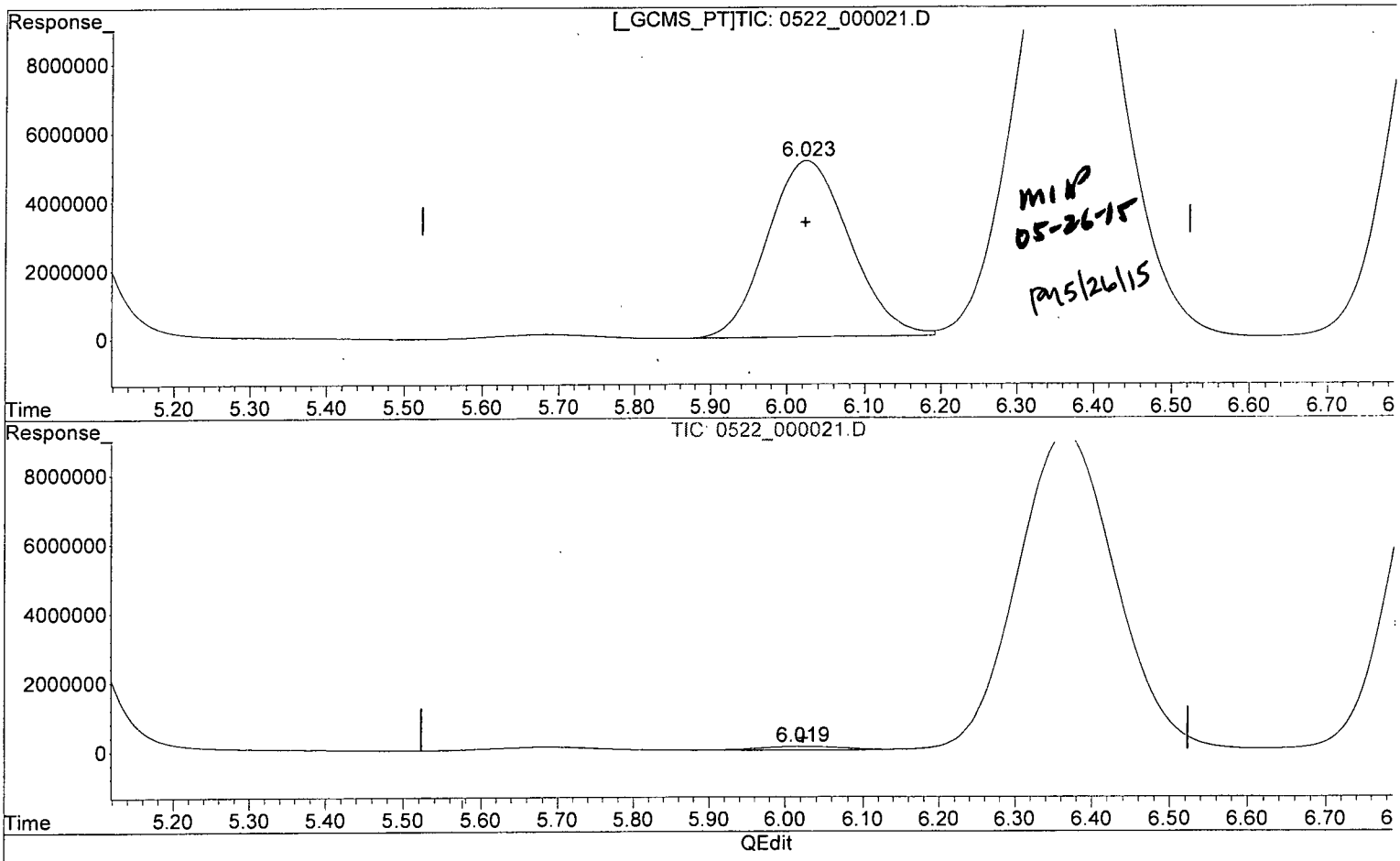
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:20:26
Operator : MP
Sample : 8330CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 8391 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:37 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.023min 923.543 ppb m

response 5146871

(8) NITROGLYCERIN #2 (TM)

6.020min 0.000 ppb

response 112765

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:47:57
Operator : MP
Sample : 8330MXA 2.0 PPM 05/22/15
Misc :
ALS Vial : 8392 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0m
m 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.528	0	26699791	N.D.	1959.407	#
	Spiked Amount 62.500			Recovery	=	0.00%	3135.05%	
	Target Compounds							
1)	TM HMX	0.000	0.909	0	51125746	N.D.	1942.533	#
2)	TM RDX	0.000	1.720	0	34296475	N.D.	1958.254	#
3)	TM 1,3,5-TRI...	0.000	2.808	0	62386918	N.D.	1972.226	#
5)	TM 1,3-DINIT...	0.000	3.700	0	59642142	N.D.	1973.509	#
6)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
7)	TM NITROBENZENE	0.000	5.022	0	27219378	N.D.	1968.320	#
8)	TM NITROGLYC...	5.993	5.988	-1131123	58860	N.D.	NoCal	
9)	TM TETRYL	6.370	6.370	31034512	18949650	NoCal	1807.952	#
10)	TM 2,4,6-TRI...	6.862	6.863	32706593	25443124	NoCal	1949.012	#
11)	TM 2-AMINO-4...	7.061	7.061	34245322	22905847	NoCal	1846.090	#
12)	TM 4-AMINO-2...	7.407	7.407	30318468	16364377	NoCal	1799.445	#
13)	TM 2,4-DINIT...	8.539	8.539	17785609	24299263	NoCal	1918.211	#
14)	TM 2,6-DINIT...	8.901	8.901	18336089	13284430	NoCal	1883.578	#
15)	TM 2-NITROTO...	0.000	12.247	0	9046766	N.D.	1828.429	#
16)	TM 4-NITROTO...	0.000	12.843	0	9037848	N.D.	1826.583	#
17)	TM 3-NITROTO...	0.000	13.739	0	10916758	N.D.	1856.579	#
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.	

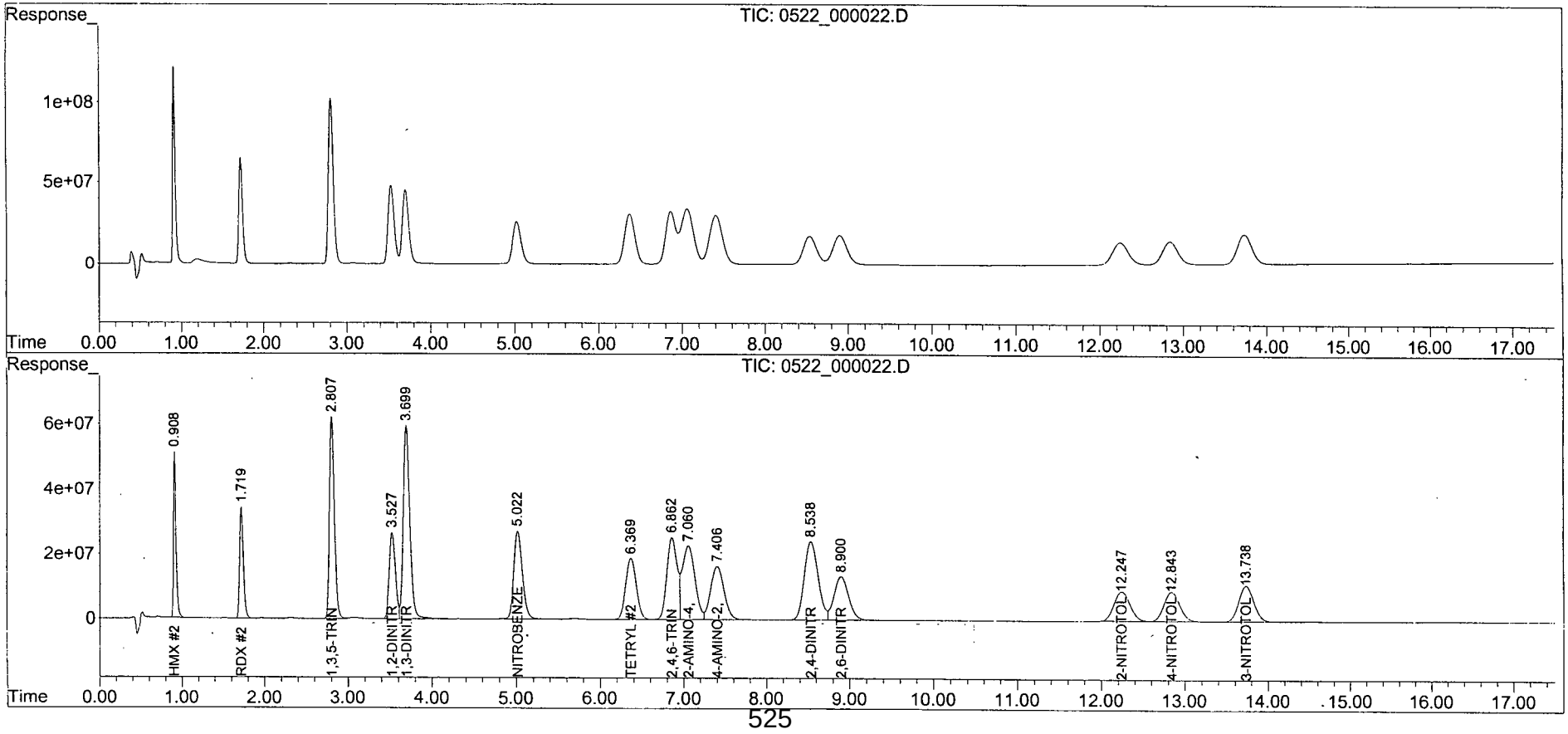
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:47:57
Operator : MP
Sample : 8330MXA 2.0 PPM 05/22/15
Misc :
ALS Vial : 8392 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:46:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



W150522.M Sat May 23 08:47:52 2015 WALDORF Page: 2

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000023.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:15:27
Operator : MP
Sample : 8330MXB 2.0 PPM 05/22/15
Misc :
ALS Vial : 8448 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:47:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0m
m 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1)	TM HMX	0.000	0.000	0	0	N.D.	N.D.
2)	TM RDX	0.000	0.000	0	0	N.D.	N.D.
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6)	TM 3,5-DINIT...	0.000	3.909	0	44937660	N.D.	1866.213 #
7)	TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
8)	TM NITROGLYC...	6.030	6.030	10501636	195853	1884.391	NoCal #
9)	TM TETRYL	0.000	0.000	0	0	N.D.	N.D.
10)	TM 2,4,6-TRI...	6.930	0.000	43283	0	NoCal	N.D.
11)	TM 2-AMINO-4...	7.080	0.000	15932	0	NoCal	N.D.
12)	TM 4-AMINO-2...	7.392	0.000	17692	0	NoCal	N.D.
13)	TM 2,4-DINIT...	8.533	0.000	10405	0	NoCal	N.D.
14)	TM 2,6-DINIT...	8.895	0.000	14327	0	NoCal	N.D.
15)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16)	TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18)	TM PETN	16.008	0.000	8729316	0	1897.559	N.D. #

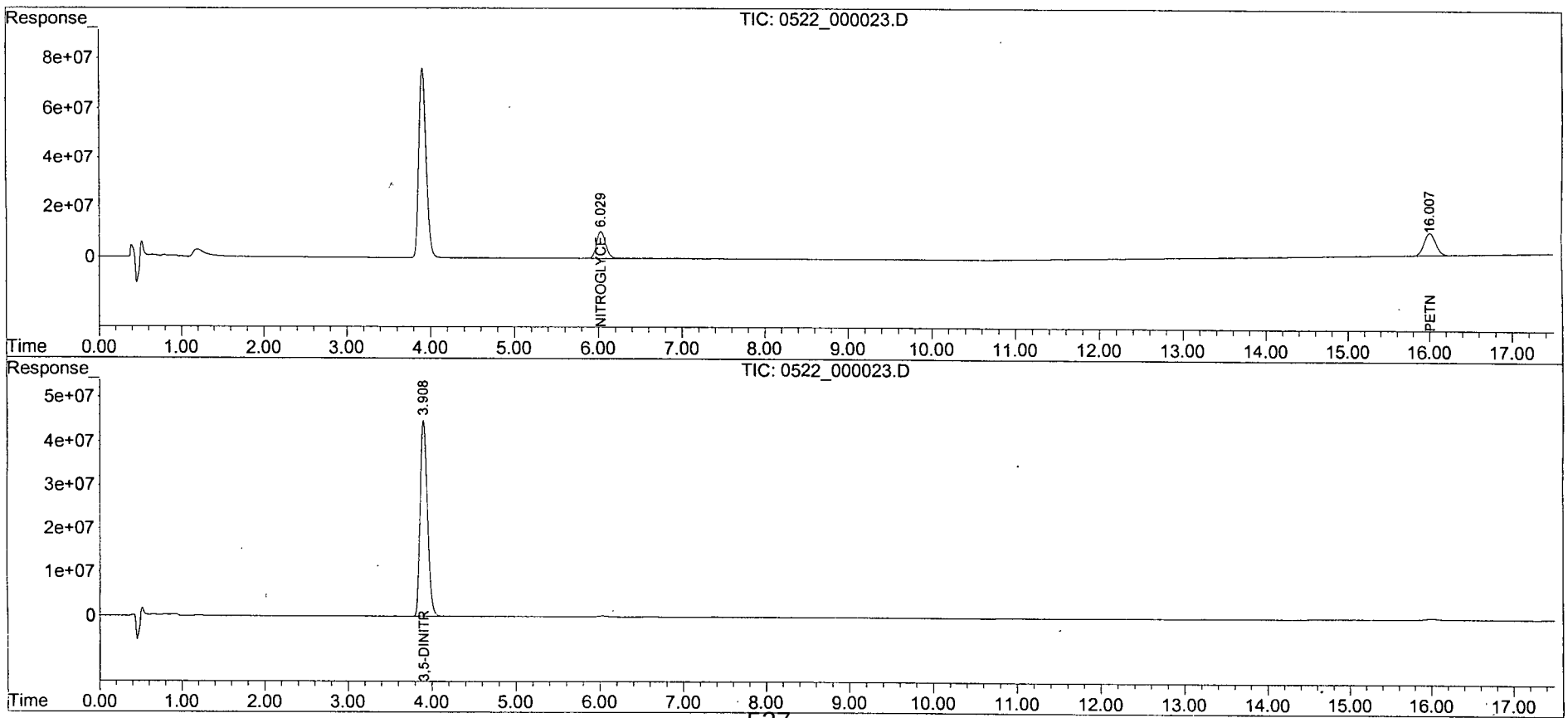
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000023.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:15:27
Operator : MP
Sample : 8330MXB 2.0 PPM 05/22/15
Misc :
ALS Vial : 8448 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 08:47:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Mon May 18 09:47:14 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 22-May-2015, 21:37:58
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0522_000026-27.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	NITROGLYCERIN	131	133	1.4	TM	
2	TM	PETN	101	106	4.5	TM	
3		Signal #2					
4	TM	HMX	649	626	3.6	TM	
5	TM	RDX	426	425	0.10	TM	
6	TM	1,3,5-TRINITROBENZENE	774	720	6.9	TM	
7	S	1,2-DINITROBENZENE	323	342	5.8	S	
8	TM	1,3-DINITROBENZENE	729	738	1.3	TM	
9	TM	3,5-DINITROANILINE	556	588	5.8	TM	
10	TM	NITROBENZENE	334	336	0.73	TM	
11	TM	2,4,6-TRINITROTOLUENE	313	318	1.6	TM	
12	TM	2-AMINO-4,6-DINITROTOLUEN	281	262	6.7	TM	
13	TM	4-AMINO-2,6-DINITROTOLUEN	202	218	7.9	TM	
14	TM	2,4-DINITROTOLUENE	295	312	5.7	TM	
15	TM	2,6-DINITROTOLUENE	163	169	3.9	TM	
16	TM	2-NITROTOLUENE	112	114	1.8	TM	
17	TM	4-NITROTOLUENE	111	113	2.0	TM	
18	TM	3-NITROTOLUENE	132	140	5.6	TM	
19	TM	TETRYL	229	245	7.1	TM	
20							
21							
22							
23							
24							
25							
26							
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29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:37:58
Operator : MP
Sample : 8330_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 8449 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:09:58 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

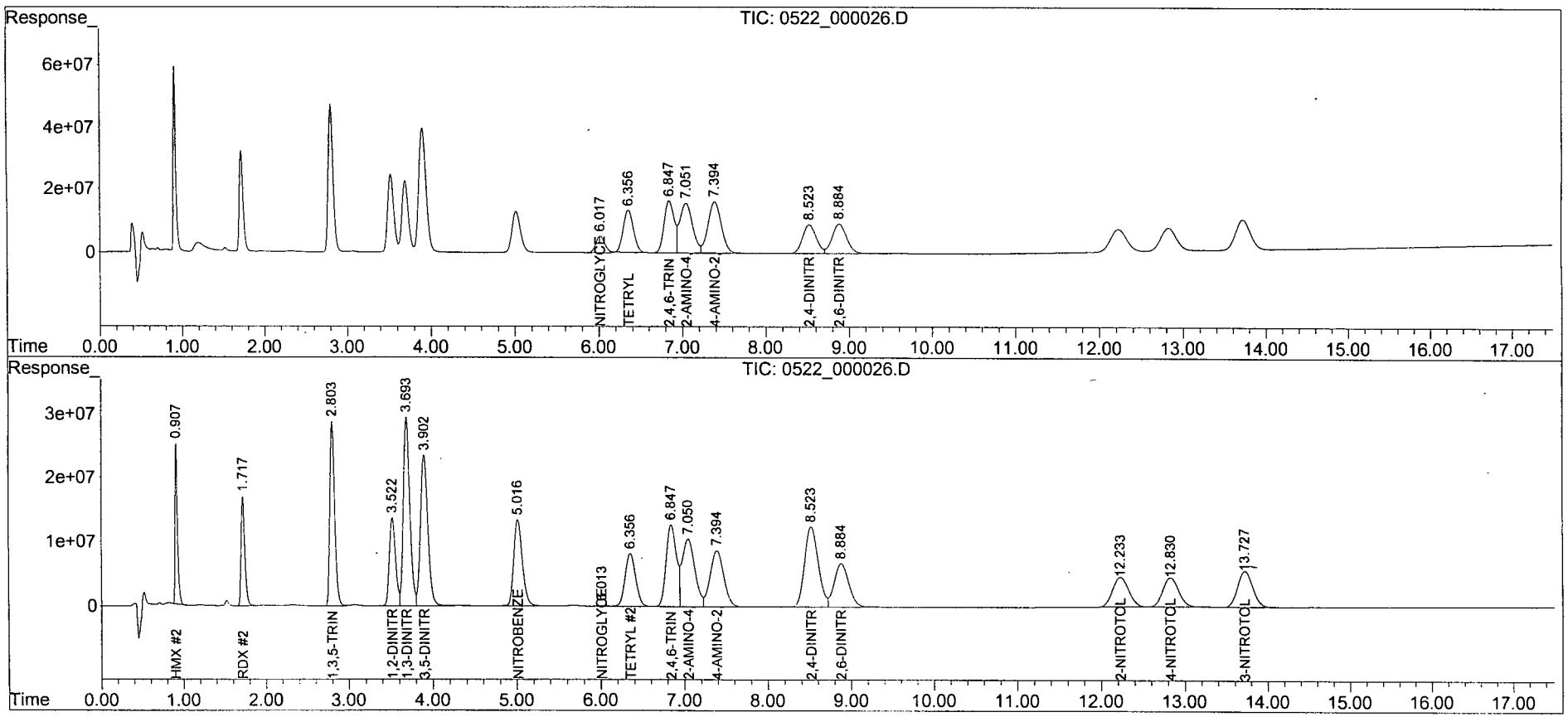
	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.523	0	13686166	N.D.	1057.681	#
	Spiked Amount 62.500			Recovery	=	0.00%	1692.29%	
	Target Compounds							
1)	TM HMX	0.000	0.909	0	25046700	N.D.	964.148	#
2)	TM RDX	0.000	1.718	0	17015404	N.D.	999.040	#
3)	TM 1,3,5-TRI...	0.000	2.804	0	28816272	N.D.	931.072	#
5)	TM 1,3-DINIT...	0.000	3.694	0	29521663	N.D.	1012.793	#
6)	TM 3,5-DINIT...	0.000	3.902	0	23531862	N.D.	1058.480	#
7)	TM NITROBENZENE	0.000	5.017	0	13449297	N.D.	1007.346	#
8)	TM NITROGLYC...	6.017	6.014	5329290	133108	1013.653m	1252.663	
9)	TM TETRYL	6.357	6.357	13306833	8224915	859.217	898.255	
10)	TM 2,4,6-TRI...	6.848	6.848	16398781	12711220	1144.544	1015.917	
11)	TM 2-AMINO-4...	7.051	7.051	15700744	10493610	1032.426	933.290	
12)	TM 4-AMINO-2...	7.394	7.394	16165189	8739257	1181.397	1079.454	
13)	TM 2,4-DINIT...	8.524	8.524	9095826	12483512	1103.768	1057.219	
14)	TM 2,6-DINIT...	8.885	8.885	9342247	6759755	1113.774	1039.487	
15)	TM 2-NITROTO...	0.000	12.234	0	4563295	N.D.	1017.803	#
16)	TM 4-NITROTO...	0.000	12.831	0	4522887	N.D.	1019.826	#
17)	TM 3-NITROTO...	0.000	13.728	0	5592648	N.D.	1056.099	#
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:37:58
Operator : MP
Sample : 8330_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 8449 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:09:58 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



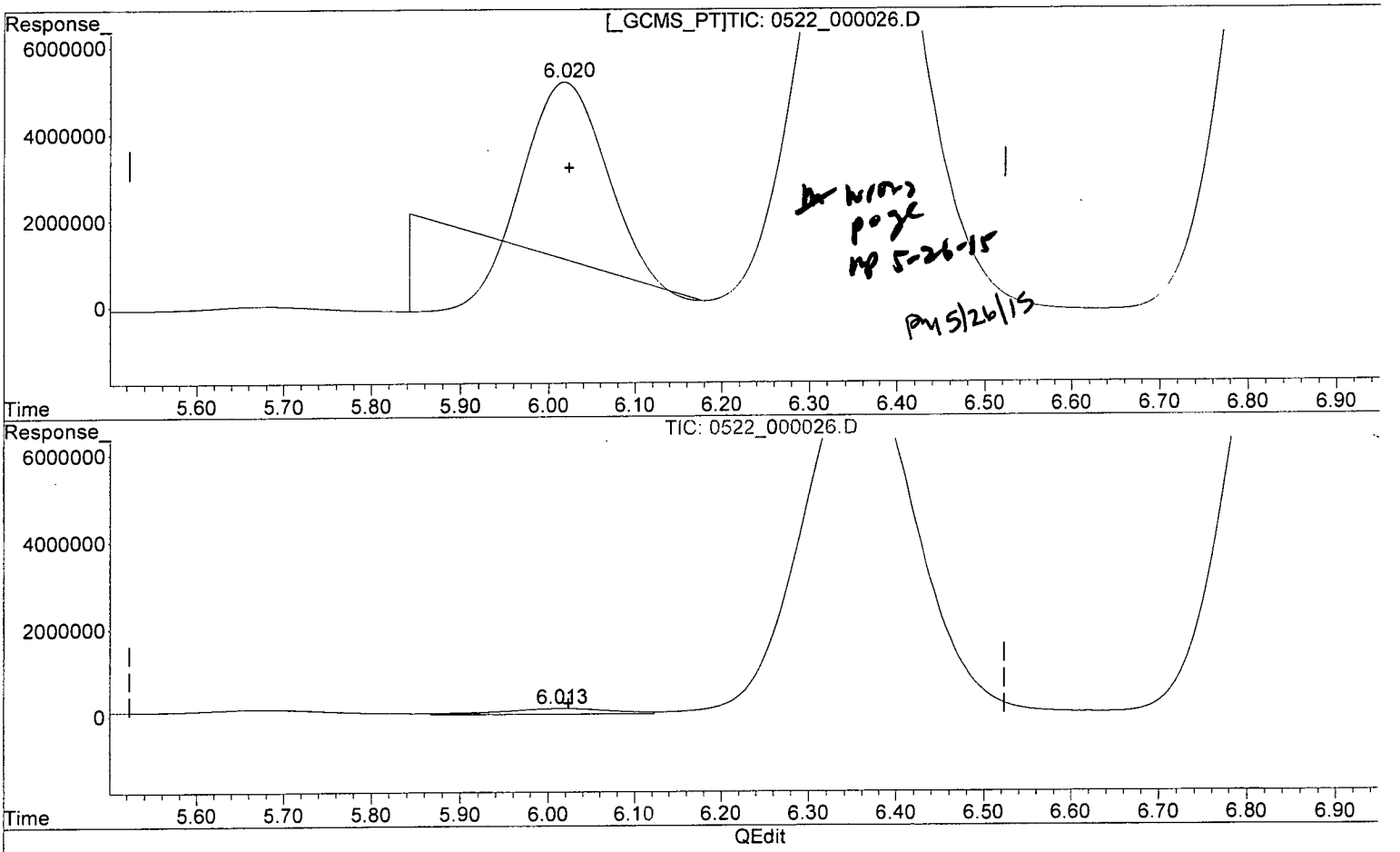
530

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:37:58
Operator : MP
Sample : 8330_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 8449 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:08:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.018min 780.047 ppb

response 4101103

(8) NITROGLYCERIN #2 (TM)

6.014min 1252.663 ppb

response 133108

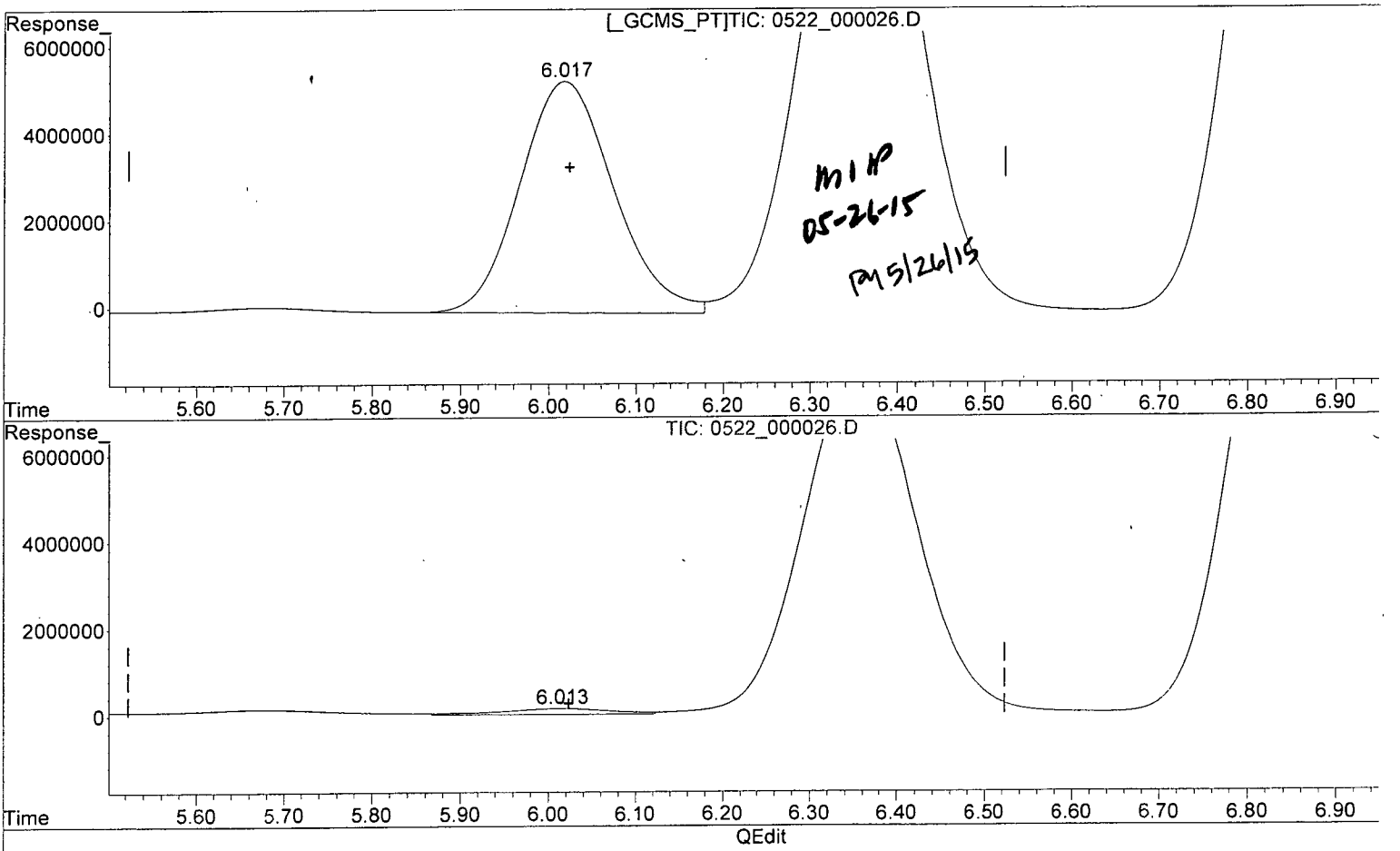
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:37:58
Operator : MP
Sample : 8330_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 8449 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:08:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0



(8) NITROGLYCERIN (TM)

6.017min 1013.653 ppb m

response 5329290

(8) NITROGLYCERIN #2 (TM)

6.014min 1252.663 ppb

response 133108

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000027.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:05:29
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/51
Misc :
ALS Vial : 8450 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:09:04 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1) TM	HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM	RDX	0.000	0.000	0	0	N.D.	N.D.
3) TM	1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM	1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM	3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
7) TM	NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
8) TM	NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM	TETRYL	6.363	6.363	16063827	9806270	1037.235	1070.957
10) TM	2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
11) TM	2-AMINO-4...	0.000	0.000	0	0	N.D. d	N.D. d
12) TM	4-AMINO-2...	0.000	0.000	0	0	N.D. d	N.D. d
13) TM	2,4-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM	2,6-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM	2-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
16) TM	4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17) TM	3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18) TM	PETN	15.990	0.000	4238463	0	1044.738	N.D. #

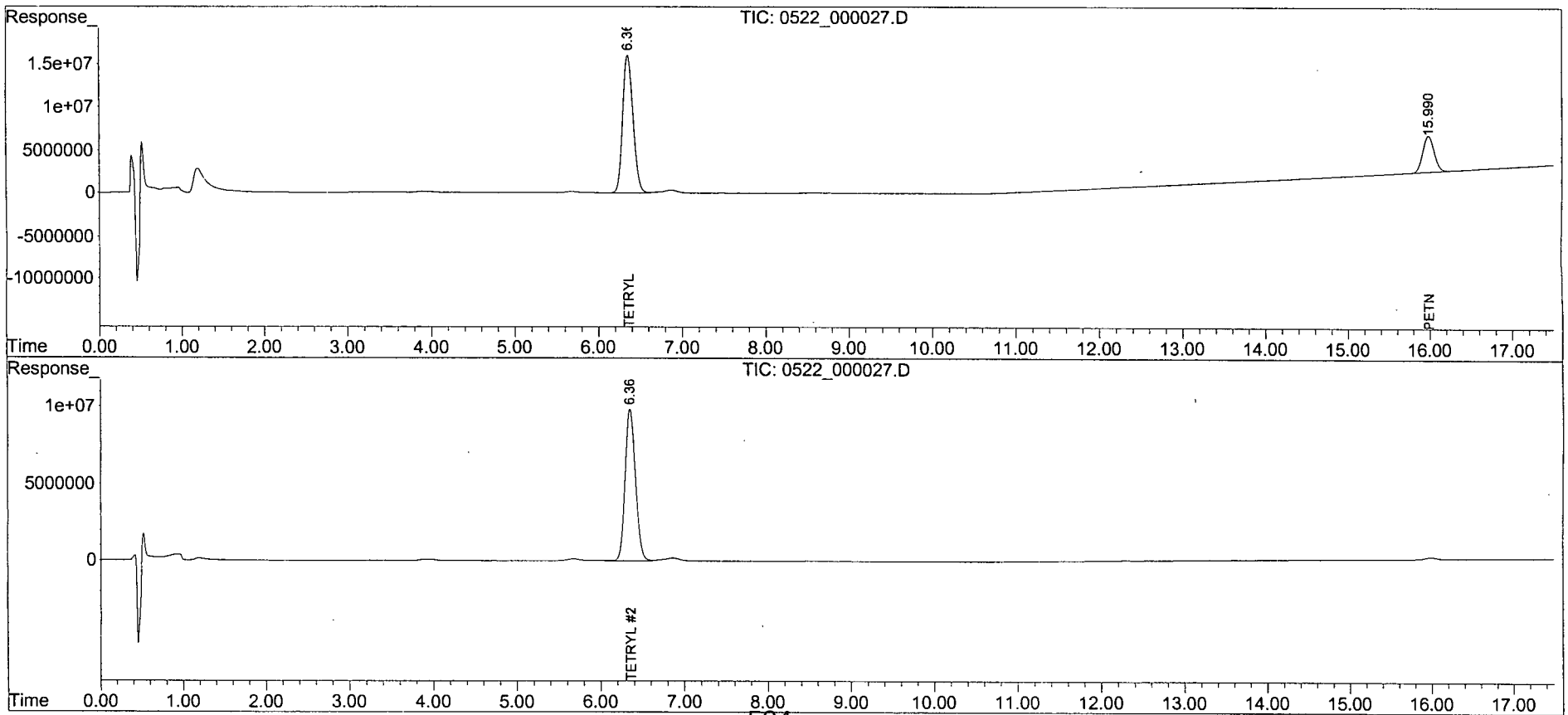
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000027.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:05:29
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/51
Misc :
ALS Vial : 8450 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:09:04 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:07:30 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 7647
Date Analyzed: 23-May-2015, 01:30:34
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0522_000033.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	131	130	0.92	TM	
2	TM	PETN	101	106	4.6	TM	
3		Signal #2					
4	TM	HMX	649	644	0.84	TM	
5	TM	RDX	426	425	0.18	TM	
6	TM	1,3,5-TRINITROBENZENE	774	766	1.0	TM	
7	S	1,2-DINITROBENZENE	323	325	0.47	S	
8	TM	1,3-DINITROBENZENE	729	730	0.12	TM	
9	TM	3,5-DINITROANILINE	556	555	0.15	TM	
10	TM	NITROBENZENE	334	332	0.56	TM	
11	TM	TETRYL	229	228	0.20	TM	
12	TM	2,4,6-TRINITROTOLUENE	313	307	1.7	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	281	277	1.4	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	202	200	1.1	TM	
15	TM	2,4-DINITROTOLUENE	295	296	0.30	TM	
16	TM	2,6-DINITROTOLUENE	163	163	0.01	TM	
17	TM	2-NITROTOLUENE	112	112	0.38	TM	
18	TM	4-NITROTOLUENE	111	111	0.50	TM	
19	TM	3-NITROTOLUENE	132	134	0.85	TM	
20							
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:30:34
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:16:57 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.548	0	13000155	N.D.	1004.666	#
	Spiked Amount 62.500			Recovery	=	0.00%	1607.47%	
	Target Compounds							
1)	TM HMX	0.000	0.913	0	25759206	N.D.	991.575	#
2)	TM RDX	0.000	1.729	0	17000506	N.D.	998.165	#
3)	TM 1,3,5-TRI...	0.000	2.822	0	30627796	N.D.	989.604	#
5)	TM 1,3-DINIT...	0.000	3.719	0	29184124	N.D.	1001.213	#
6)	TM 3,5-DINIT...	0.000	3.937	0	22199354	N.D.	998.542	#
7)	TM NITROBENZENE	0.000	5.045	0	13276068	N.D.	994.371	#
8)	TM NITROGLYC...	6.053	6.050	5208959	127634	990.765	NoCal	#
9)	TM TETRYL	6.415	6.415	14986876	9137953	NoCal	997.969	#
10)	TM 2,4,6-TRI...	6.902	6.902	15808899	12299342	NoCal	982.998	#
11)	TM 2-AMINO-4...	7.122	7.121	16632435	11084506	NoCal	985.844	#
12)	TM 4-AMINO-2...	7.466	7.466	14842242	8006806	NoCal	988.983	#
13)	TM 2,4-DINIT...	8.594	8.593	8667615	11843183	NoCal	1002.990	#
14)	TM 2,6-DINIT...	8.955	8.955	8970845	6503631	NoCal	1000.101	#
15)	TM 2-NITROTO...	0.000	12.297	0	4466561	N.D.	996.227	#
16)	TM 4-NITROTO...	0.000	12.893	0	4457032	N.D.	1004.977	#
17)	TM 3-NITROTO...	0.000	13.783	0	5340662	N.D.	1008.514	#
18)	TM PETN	16.038	0.000	4243715	0	1046.033	N.D.	#

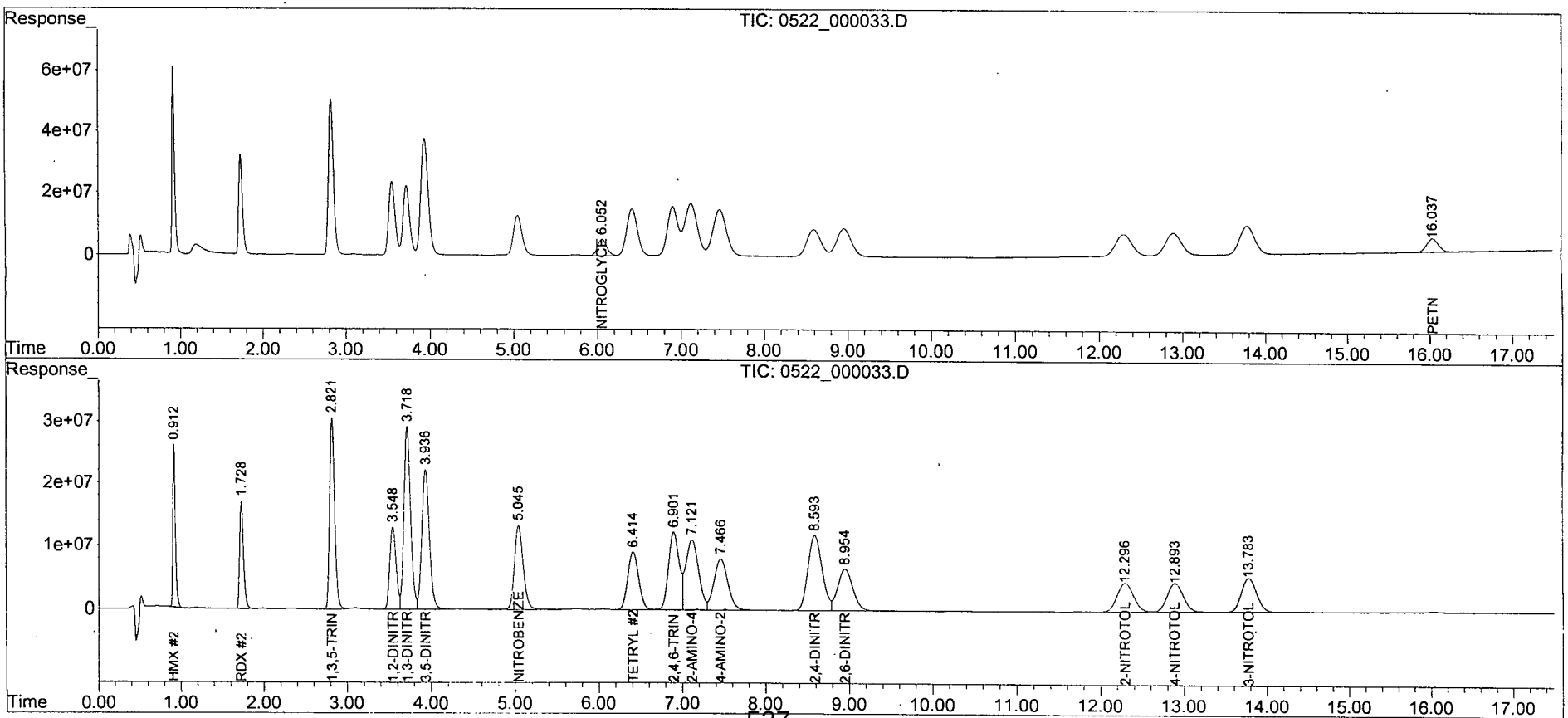
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:30:34
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:16:57 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 23-May-2015, 08:13:14
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0522_000044.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	131	131	0.25	TM	
2	TM	PETN	101	107	5.1	TM	
3		Signal #2					
4	TM	HMX	649	644	0.81	TM	
5	TM	RDX	426	425	0.26	TM	
6	TM	1,3,5-TRINITROBENZENE	774	768	0.78	TM	
7	S	1,2-DINITROBENZENE	323	326	0.72	S	
8	TM	1,3-DINITROBENZENE	729	730	0.19	TM	
9	TM	3,5-DINITROANILINE	556	555	0.22	TM	
10	TM	NITROBENZENE	334	327	2.0	TM	
11	TM	TETRYL	229	230	0.49	TM	
12	TM	2,4,6-TRINITROTOLUENE	313	309	1.1	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	281	278	1.0	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	202	201	0.66	TM	
15	TM	2,4-DINITROTOLUENE	295	297	0.60	TM	
16	TM	2,6-DINITROTOLUENE	163	163	0.32	TM	
17	TM	2-NITROTOLUENE	112	110	2.2	TM	
18	TM	4-NITROTOLUENE	111	110	0.46	TM	
19	TM	3-NITROTOLUENE	132	132	0.46	TM	
20							
21							
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000044.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 08:13:14
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.551	0	13033262	N.D.	1007.224	#
	Spiked Amount 62.500			Recovery	=	0.00%	1611.56%	
	Target Compounds							
1)	TM HMX	0.000	0.913	0	25766714	N.D.	991.864	#
2)	TM RDX	0.000	1.731	0	16987352	N.D.	997.393	#
3)	TM 1,3,5-TRI...	0.000	2.824	0	30707028	N.D.	992.164	#
5)	TM 1,3-DINIT...	0.000	3.721	0	29203547	N.D.	1001.879	#
6)	TM 3,5-DINIT...	0.000	3.940	0	22182417	N.D.	997.781	#
7)	TM NITROBENZENE	0.000	5.048	0	13078148	N.D.	979.547	#
8)	TM NITROGLYC...	6.054	6.051	5244498	110802	997.525	NoCal	#
9)	TM TETRYL	6.418	6.418	15123905	9201676	NoCal	1004.929	#
10)	TM 2,4,6-TRI...	6.901	6.901	15976632	12376178	NoCal	989.139	#
11)	TM 2-AMINO-4...	7.121	7.121	16781376	11131401	NoCal	990.015	#
12)	TM 4-AMINO-2...	7.465	7.465	14971759	8042355	NoCal	993.374	#
13)	TM 2,4-DINIT...	8.589	8.589	8718482	11878656	NoCal	1005.994	#
14)	TM 2,6-DINIT...	8.950	8.950	8997170	6524085	NoCal	1003.246	#
15)	TM 2-NITROTO...	0.000	12.291	0	4383143	N.D.	977.622	#
16)	TM 4-NITROTO...	0.000	12.888	0	4414548	N.D.	995.397	#
17)	TM 3-NITROTO...	0.000	13.778	0	5271169	N.D.	995.392	#
18)	TM PETN	16.034	0.000	4263867	0	1051.000	N.D.	#

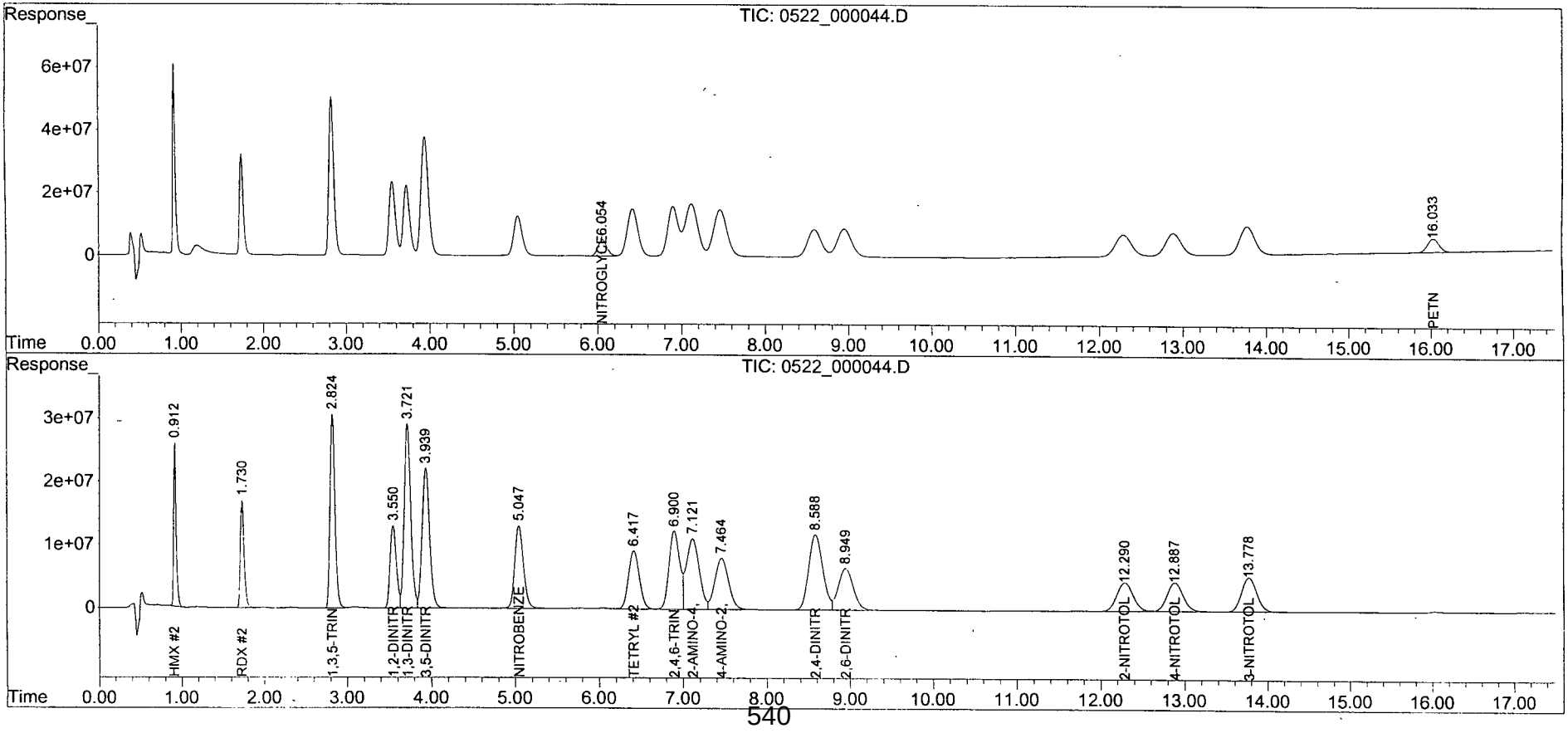
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000044.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 08:13:14
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



W150522.M Sat May 23 09:20:52 2015 WALDORF Page: 2

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 16447
Date Analyzed: 23-May-2015, 17:25:54
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0522_000059.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	131	129	2.0	TM	
2	TM	PETN	101	105	3.6	TM	
3		Signal #2					
4	TM	HMX	649	648	0.20	TM	
5	TM	RDX	426	424	0.51	TM	
6	TM	1,3,5-TRINITROBENZENE	774	762	1.5	TM	
7	S	1,2-DINITROBENZENE	323	324	0.04	S	
8	TM	1,3-DINITROBENZENE	729	723	0.72	TM	
9	TM	3,5-DINITROANILINE	556	550	0.97	TM	
10	TM	NITROBENZENE	334	315	5.5	TM	
11	TM	TETRYL	229	224	2.1	TM	
12	TM	2,4,6-TRINITROTOLUENE	313	305	2.4	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	281	277	1.4	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	202	199	1.8	TM	
15	TM	2,4-DINITROTOLUENE	295	292	1.0	TM	
16	TM	2,6-DINITROTOLUENE	163	160	1.3	TM	
17	TM	2-NITROTOLUENE	112	104	7.4	TM	
18	TM	4-NITROTOLUENE	111	106	4.2	TM	
19	TM	3-NITROTOLUENE	132	126	4.6	TM	
20							
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 17:25:54
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:50:44 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	3.533	0	12945069	N.D.	1000.409 #
Spiked Amount 62.500			Recovery =		0.00%	1600.65%
Target Compounds						
1) TM HMX	0.000	0.907	0	25927371	N.D.	998.049 #
2) TM RDX	0.000	1.721	0	16944784	N.D.	994.893 #
3) TM 1,3,5-TRI...	0.000	2.814	0	30478139	N.D.	984.768 #
5) TM 1,3-DINIT...	0.000	3.706	0	28937562	N.D.	992.754 #
6) TM 3,5-DINIT...	0.000	3.915	0	22016827	N.D.	990.332 #
7) TM NITROBENZENE	0.000	5.029	0	12613342	N.D.	944.733 #
8) TM NITROGLYC...	6.040	0.000	5153242	0	980.168	N.D. d#
9) TM TETRYL	6.386	6.385	14745789	8968494	NoCal	979.462 #
10) TM 2,4,6-TRI...	6.880	6.880	15758872	12212506	NoCal	976.058 #
11) TM 2-AMINO-4...	7.078	7.078	16626480	11087756	NoCal	986.133 #
12) TM 4-AMINO-2...	7.423	7.423	14701202	7947388	NoCal	981.644 #
13) TM 2,4-DINIT...	8.560	8.560	8601896	11688477	NoCal	989.888 #
14) TM 2,6-DINIT...	8.919	8.919	8886920	6418681	NoCal	987.038 #
15) TM 2-NITROTO...	0.000	12.260	0	4151380	N.D.	925.929 #
16) TM 4-NITROTO...	0.000	12.857	0	4249833	N.D.	958.257 #
17) TM 3-NITROTO...	0.000	13.748	0	5051798	N.D.	953.966 #
18) TM PETN	16.028	0.000	4204550	0	1036.379	N.D. #

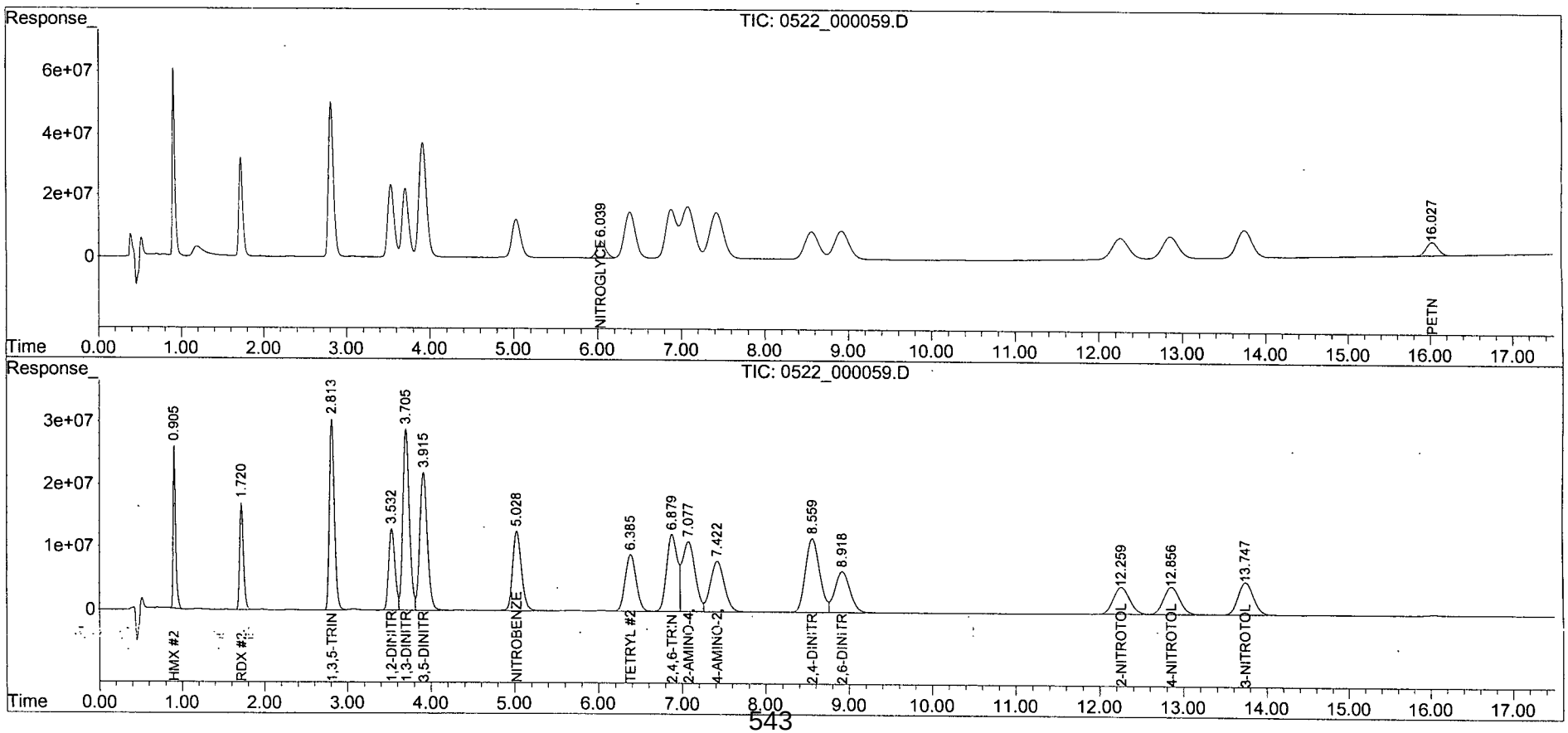
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 17:25:54
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/22/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:50:44 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



W150522.M Sun May 24 12:51:03 2015 WALDORF Page: 2

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 16447
Date Analyzed: 27-May-2015, 09:56:50
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0527_000004.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	131	134	1.8	TM	
2	TM	PETN	101	114	12	TM	
3		Signal #2					
4	TM	HMX	649	670	3.1	TM	
5	TM	RDX	426	437	2.6	TM	
6	TM	1,3,5-TRINITROBENZENE	774	763	1.3	TM	
7	S	1,2-DINITROBENZENE	323	324	0.15	S	
8	TM	1,3-DINITROBENZENE	729	714	2.1	TM	
9	TM	3,5-DINITROANILINE	556	593	6.6	TM	
10	TM	NITROBENZENE	334	339	1.7	TM	
11	TM	TETRYL	229	255	11	TM	
12	TM	2,4,6-TRINITROTOLUENE	313	316	0.98	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	281	292	3.8	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	202	194	4.3	TM	
15	TM	2,4-DINITROTOLUENE	295	294	0.34	TM	
16	TM	2,6-DINITROTOLUENE	163	161	0.66	TM	
17	TM	2-NITROTOLUENE	112	111	0.61	TM	
18	TM	4-NITROTOLUENE	111	110	0.97	TM	
19	TM	3-NITROTOLUENE	132	134	1.3	TM	
20							
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:27:37 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.515	0	12959748	N.D.	1001.543	#
	Spiked Amount 62.500			Recovery =		0.00%	1602.47%	
	Target Compounds							
1)	TM HMX	0.000	0.908	0	26794525	N.D.	1031.429	#
2)	TM RDX	0.000	1.717	0	17469719	N.D.	1025.714	#
3)	TM 1,3,5-TRI...	0.000	2.804	0	30539072	N.D.	986.737	#
5)	TM 1,3-DINIT...	0.000	3.689	0	28541662	N.D.	979.172	#
6)	TM 3,5-DINIT...	0.000	3.889	0	23702850	N.D.	1066.171	#
7)	TM NITROBENZENE	0.000	5.004	0	13579115	N.D.	1017.069	#
8)	TM NITROGLYC...	6.015	6.012	5349647	120254	1017.525m	NoCal	#
9)	TM TETRYL	6.340	6.340	16527056	10208951	NoCal	1114.934	#
10)	TM 2,4,6-TRI...	6.842	6.842	16189779	12634251	NoCal	1009.765	#
11)	TM 2-AMINO-4...	7.015	7.013	17354745	11672006	NoCal	1038.095	#
12)	TM 4-AMINO-2...	7.359	7.359	14293670	7746727	NoCal	956.859	#
13)	TM 2,4-DINIT...	8.504	8.504	8591519	11767739	NoCal	996.601	#
14)	TM 2,6-DINIT...	8.861	8.860	8918809	6459735	NoCal	993.351	#
15)	TM 2-NITROTO...	0.000	12.196	0	4456291	N.D.	993.937m	#
16)	TM 4-NITROTO...	0.000	12.798	0	4392049	N.D.	990.324	#
17)	TM 3-NITROTO...	0.000	13.692	0	5366686	N.D.	1013.429	#
18)	TM PETN	15.994	0.000	4549714	0	1121.458	N.D.	#

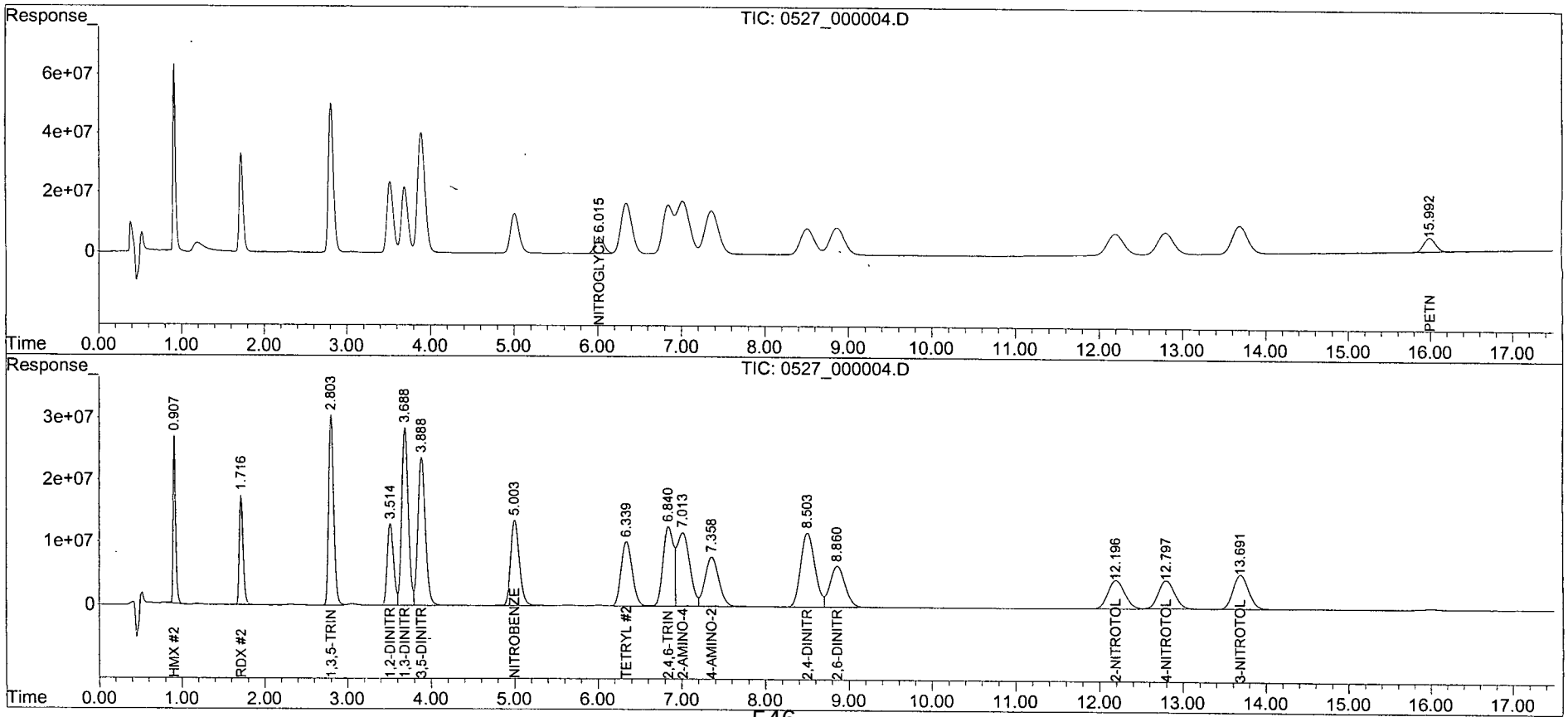
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:27:37 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

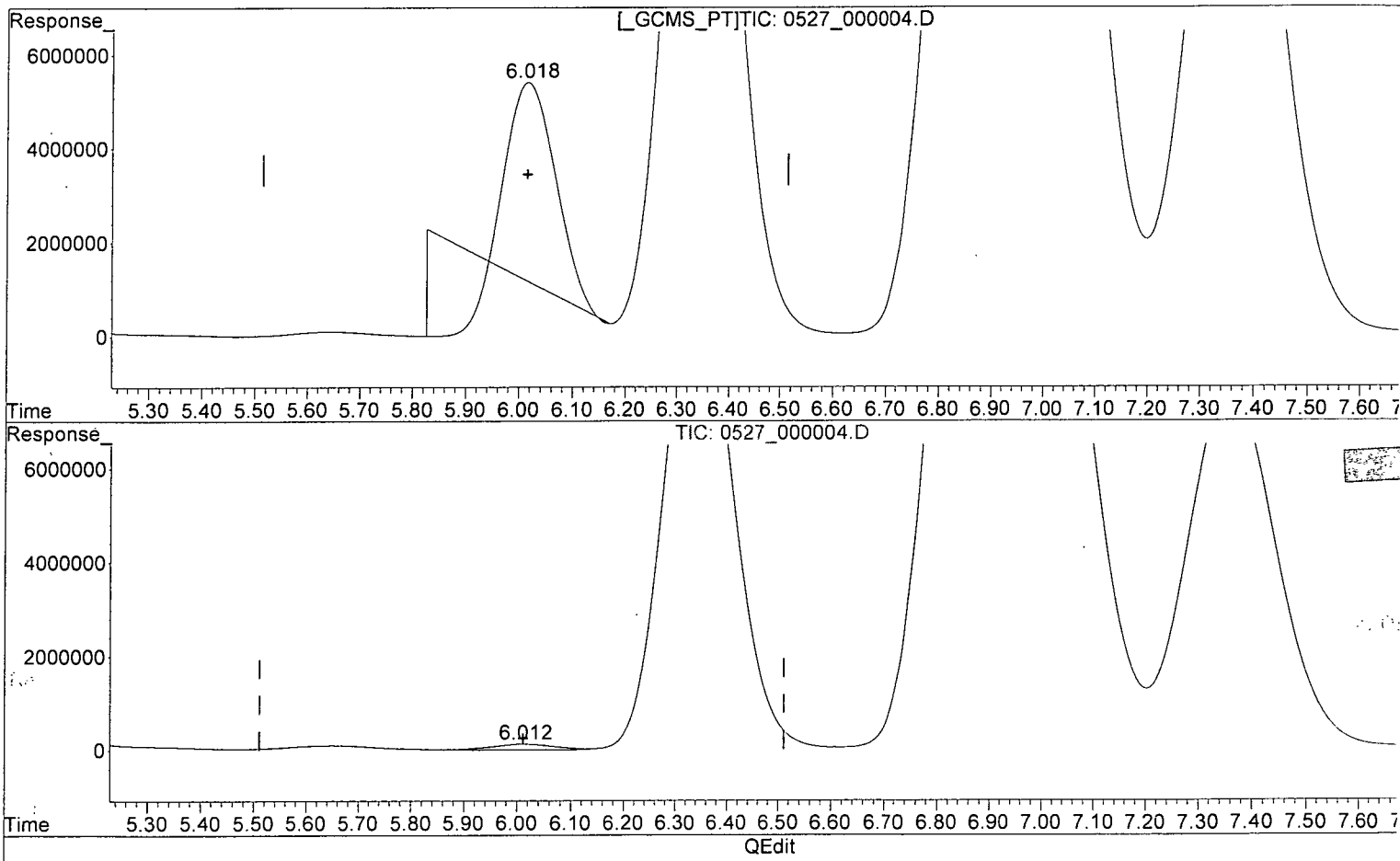


Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:25:32 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r



(8) NITROGLYCERIN (TM)

6.016min 805.748 ppb

response 4236228

(8) NITROGLYCERIN #2 (TM)

6.012min 0.000 ppb

response 120254

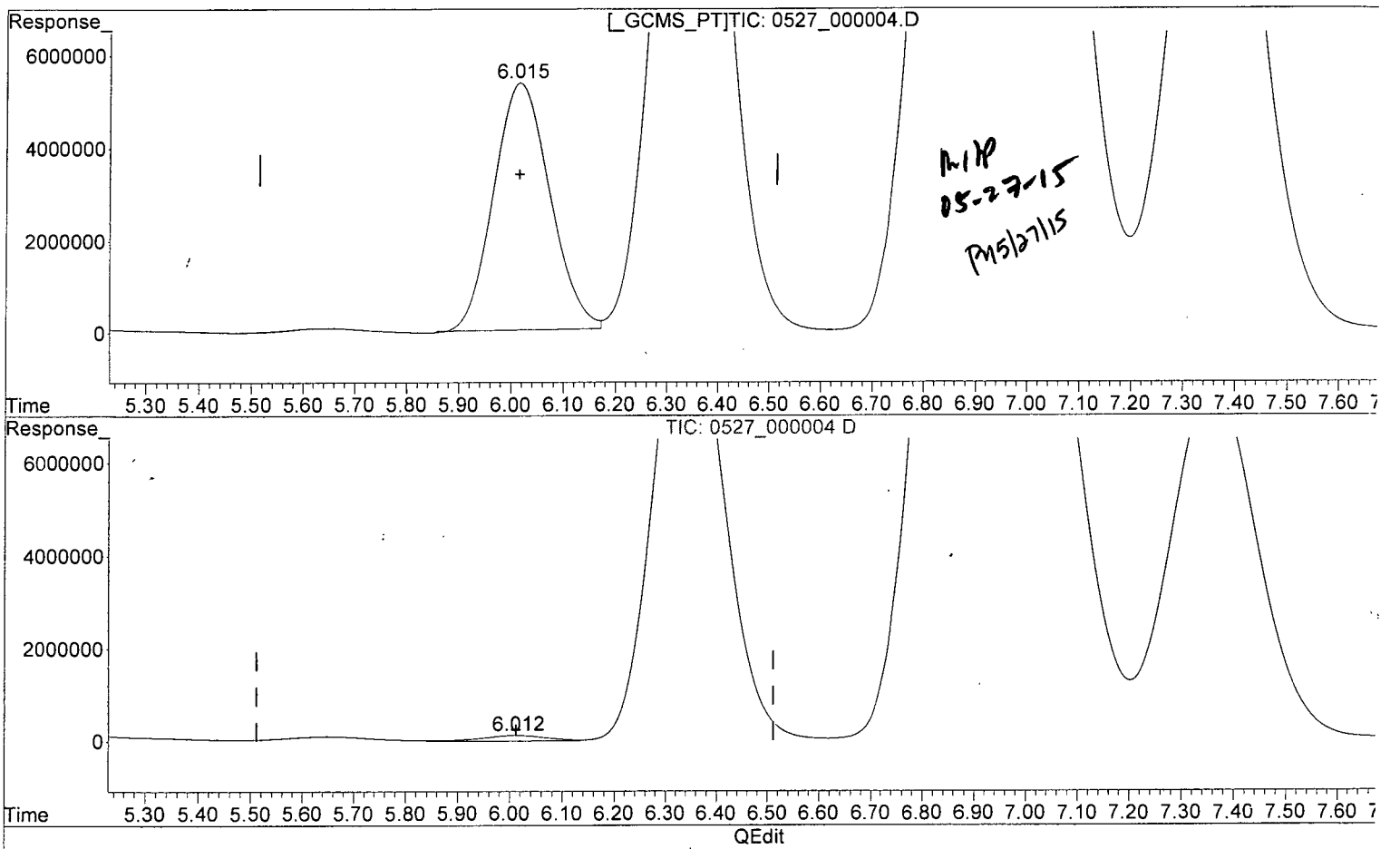
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:25:32 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r



(8) NITROGLYCERIN (TM)

6.015min 1017.525 ppb m

response 5349647

(8) NITROGLYCERIN #2 (TM)

6.012min 0.000 ppb

response 120254

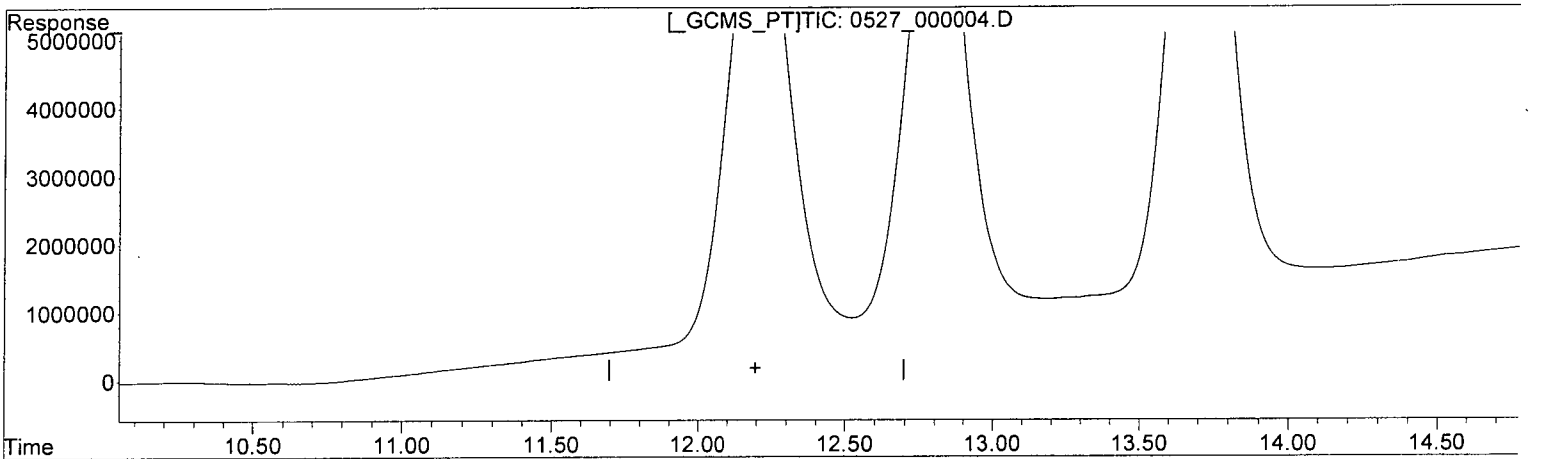
(+) = Expected Retention Time

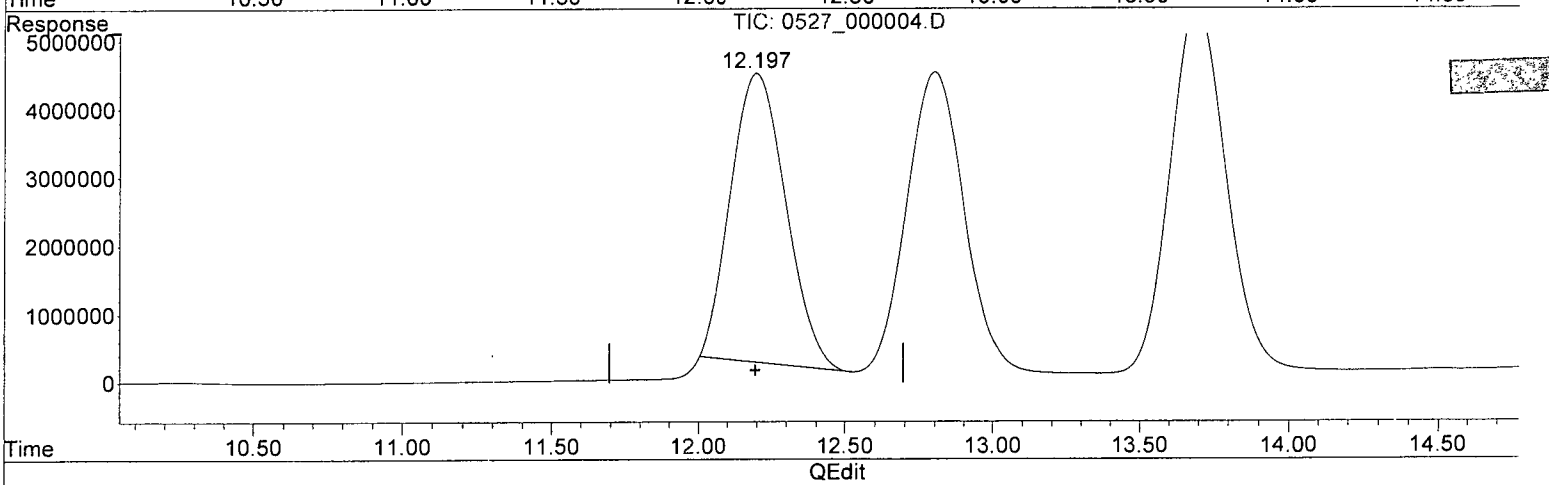
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:25:32 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.197min 941.732 ppb

response 4222231

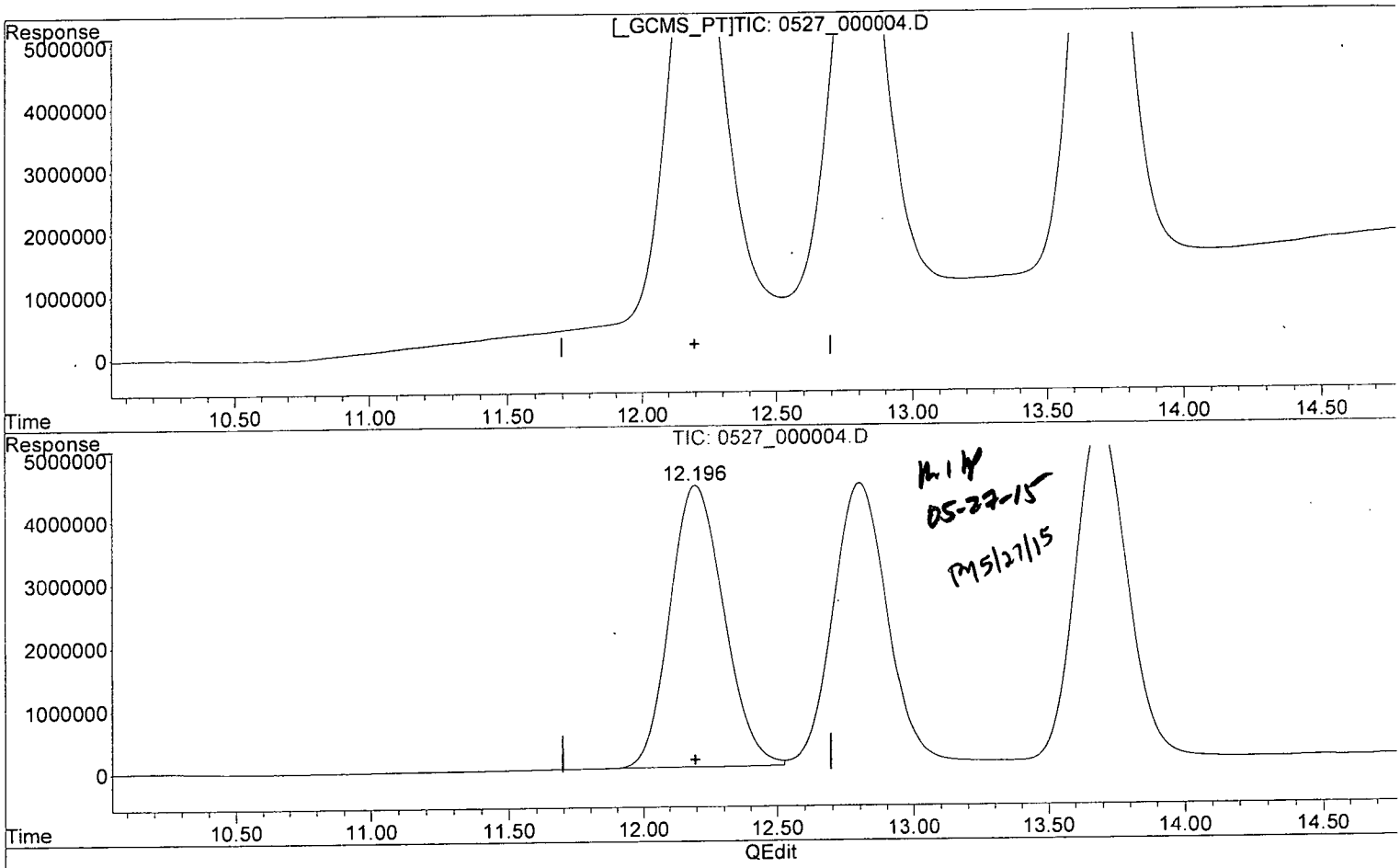
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 09:56:50
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 10:25:32 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Wed May 27 10:25:17 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r



(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.196min 993.937 ppb m

response 4456291

(+) = Expected Retention Time

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 27-May-2015, 13:32:00
Instrument: Waldorf
Initial Cal. Date: 05/22/15
Data File: 0527_000010.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	NITROGLYCERIN	131	136	3.5	TM	
2	TM	PETN	101	116	14	TM	
3		Signal #2					
4	TM	HMX	649	675	3.9	TM	
5	TM	RDX	426	441	3.6	TM	
6	TM	1,3,5-TRINITROBENZENE	774	774	0.03	TM	
7	S	1,2-DINITROBENZENE	323	330	2.0	S	
8	TM	1,3-DINITROBENZENE	729	723	0.82	TM	
9	TM	3,5-DINITROANILINE	556	603	8.5	TM	
10	TM	NITROBENZENE	334	340	2.0	TM	
11	TM	TETRYL	229	258	13	TM	
12	TM	2,4,6-TRINITROTOLUENE	313	323	3.2	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	281	298	6.1	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	202	198	2.1	TM	
15	TM	2,4-DINITROTOLUENE	295	300	1.6	TM	
16	TM	2,6-DINITROTOLUENE	163	164	1.1	TM	
17	TM	2-NITROTOLUENE	112	112	0.16	TM	
18	TM	4-NITROTOLUENE	111	111	0.13	TM	
19	TM	3-NITROTOLUENE	132	135	2.0	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:06:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0m
m 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
System Monitoring Compounds							
4) S 1,2-DINIT...	0.000	3.521	0	13195942	N.D.	1019.796	#
Spiked Amount 62.500			Recovery	=	0.00%	1631.67%	
Target Compounds							
1) TM HMX	0.000	0.910	0	26988461	N.D.	1038.894	#
2) TM RDX	0.000	1.719	0	17639544	N.D.	1035.685	#
3) TM 1,3,5-TRI...	0.000	2.808	0	30960229	N.D.	1000.345	#
5) TM 1,3-DINIT...	0.000	3.695	0	28909330	N.D.	991.786	#
6) TM 3,5-DINIT...	0.000	3.895	0	24112119	N.D.	1084.580	#
7) TM NITROBENZENE	0.000	5.011	0	13614576	N.D.	1019.725	#
8) TM NITROGLYC...	6.022	6.021	5441109	110759	1034.921m	NoCal	#
9) TM TETRYL	6.351	6.351	16837528	10321812	NoCal	1127.260	#
10) TM 2,4,6-TRI...	6.853	6.853	16541249	12912945	NoCal	1032.039	#
11) TM 2-AMINO-4...	7.028	7.027	17710950	11932196	NoCal	1061.236	#
12) TM 4-AMINO-2...	7.372	7.373	14581816	7925994	NoCal	979.001	#
13) TM 2,4-DINIT...	8.518	8.518	8756008	11999986	NoCal	1016.269	#
14) TM 2,6-DINIT...	8.876	8.875	9081214	6572382	NoCal	1010.673	#
15) TM 2-NITROTO...	0.000	12.212	0	4476139	N.D.	998.364m	#
16) TM 4-NITROTO...	0.000	12.813	0	4440537	N.D.	1001.257	#
17) TM 3-NITROTO...	0.000	13.707	0	5401768	N.D.	1020.053	#
18) TM PETN	16.006	0.000	4644650	0	1144.859	N.D.	#

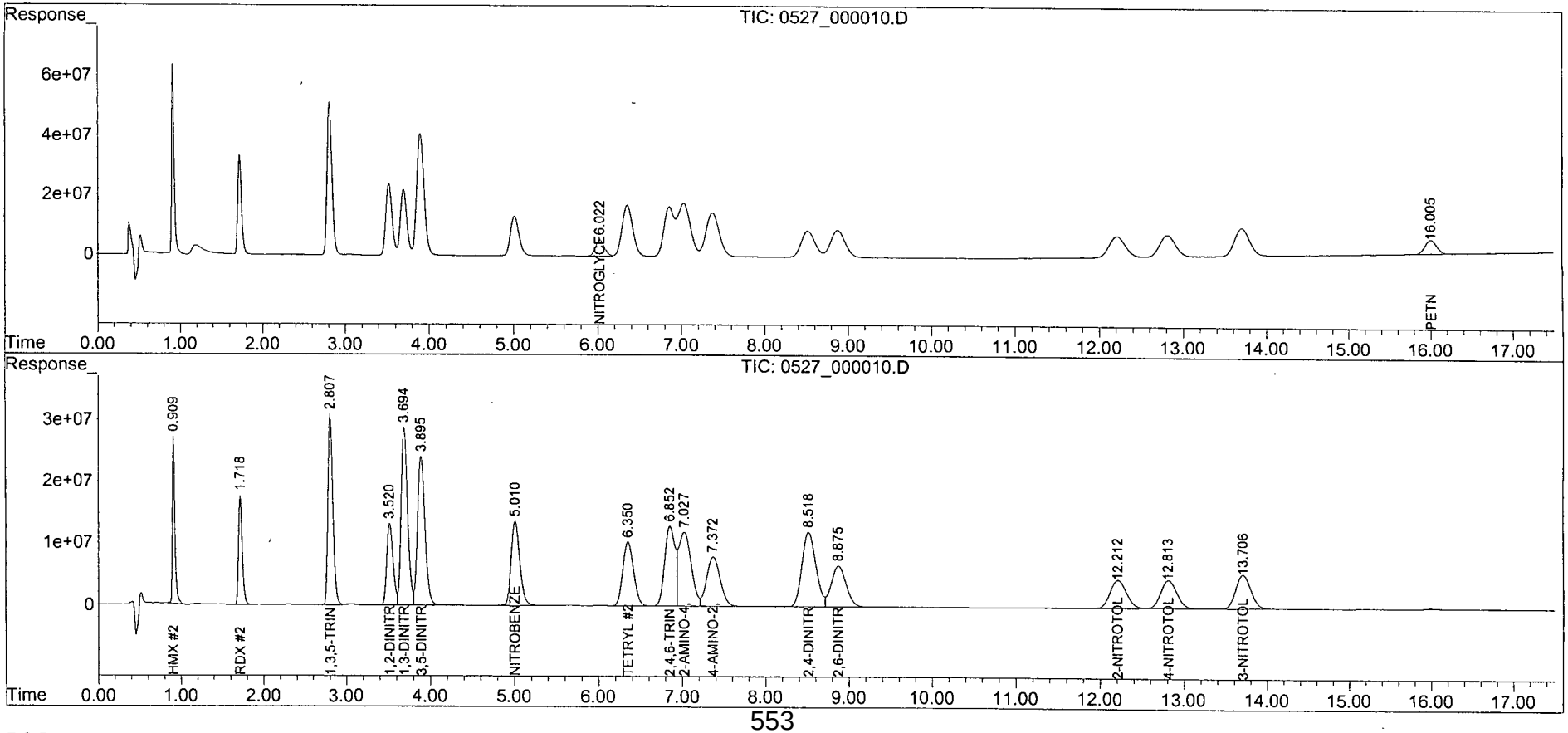
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:06:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



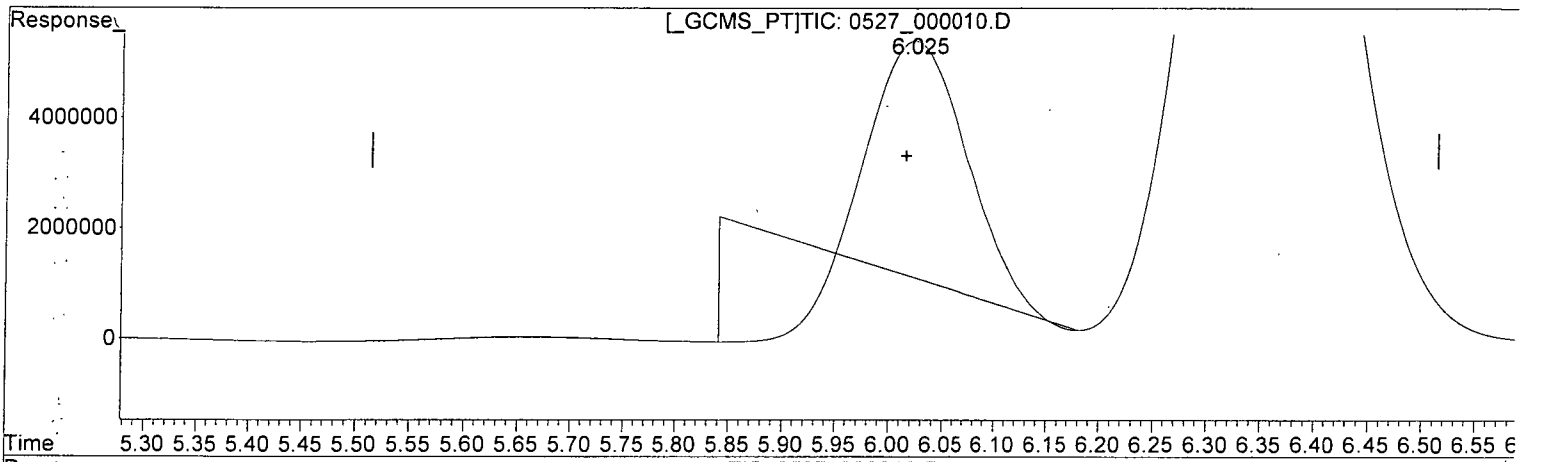
W150522.M Wed May 27 14:07:01 2015 WALDORF Page: 2

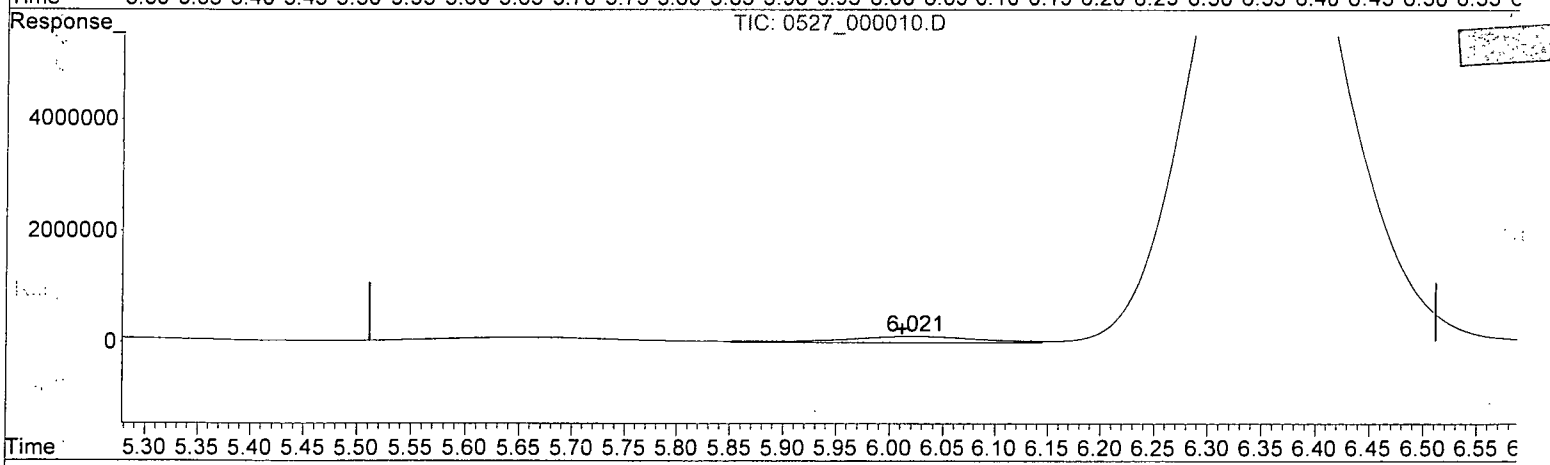
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:05:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





(8) NITROGLYCERIN (TM)

6.023min 815.117 ppb

response 4285488

(8) NITROGLYCERIN #2 (TM)

6.021min 0.000 ppb

response 110759

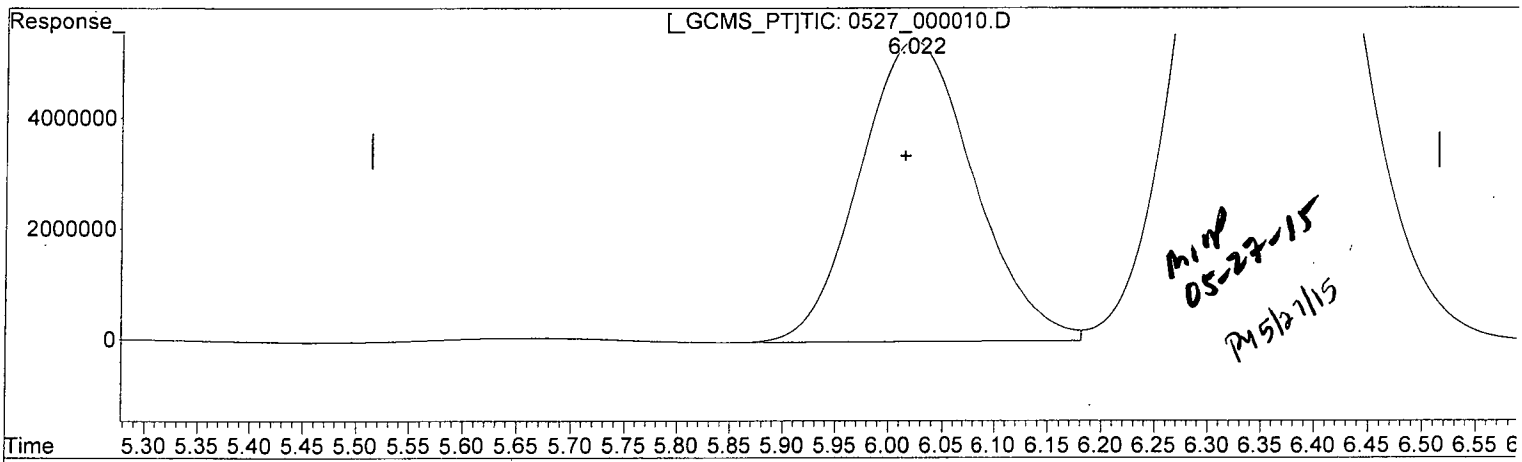
(+) = Expected Retention Time

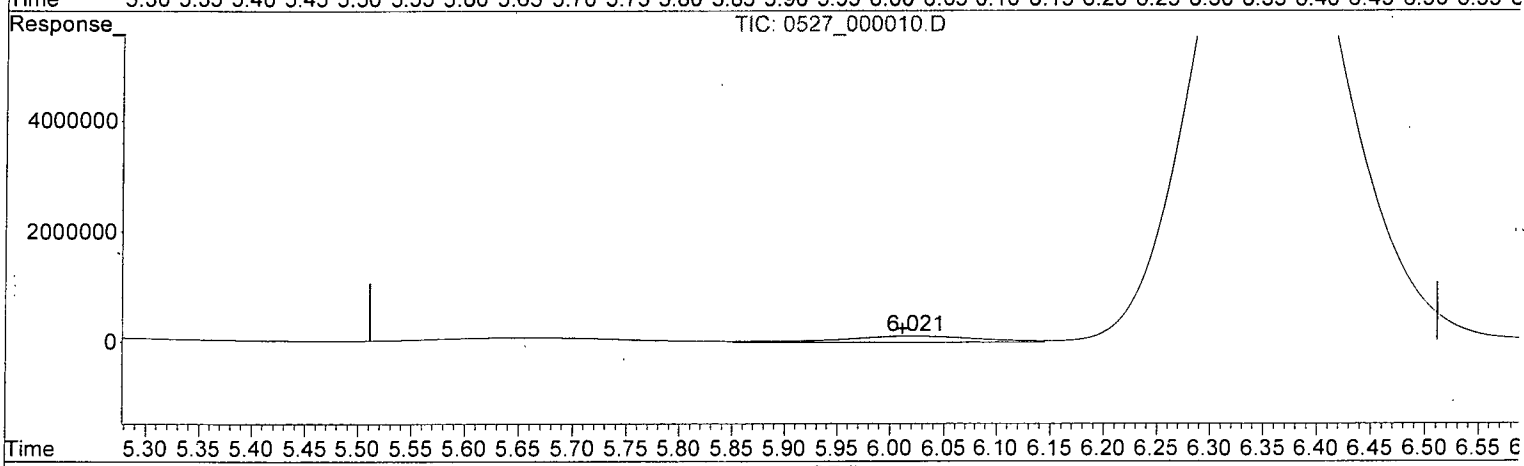
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:05:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





QEdit

(8) NITROGLYCERIN (TM)

6.022min 1034.921 ppb m

response 5441109

(8) NITROGLYCERIN #2 (TM)

6.021min 0.000 ppb

response 110759

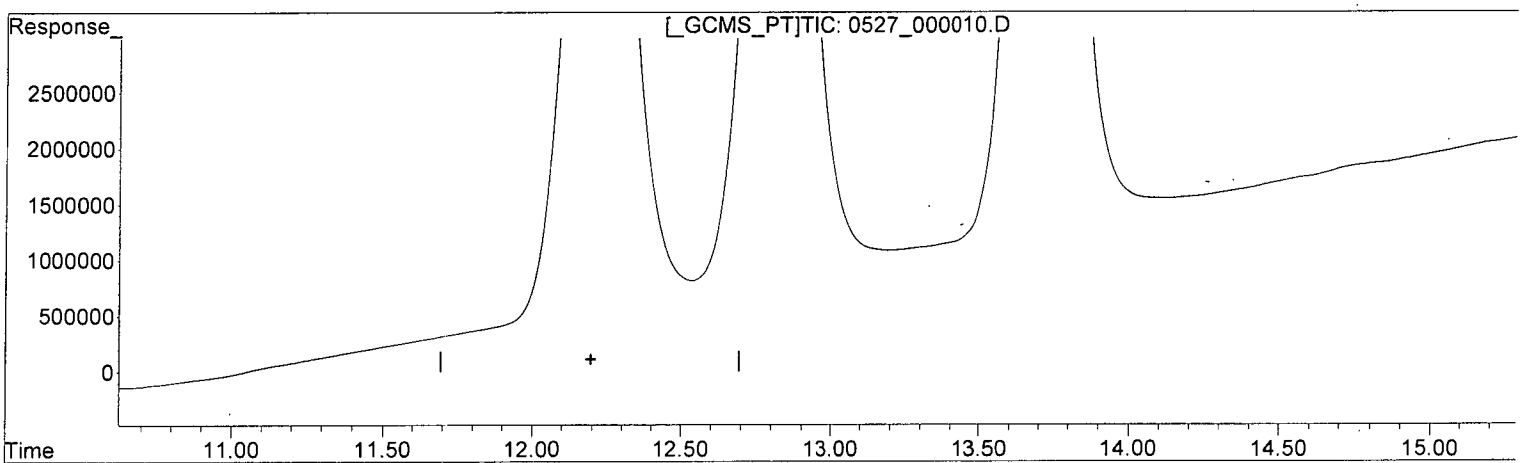
(+) = Expected Retention Time

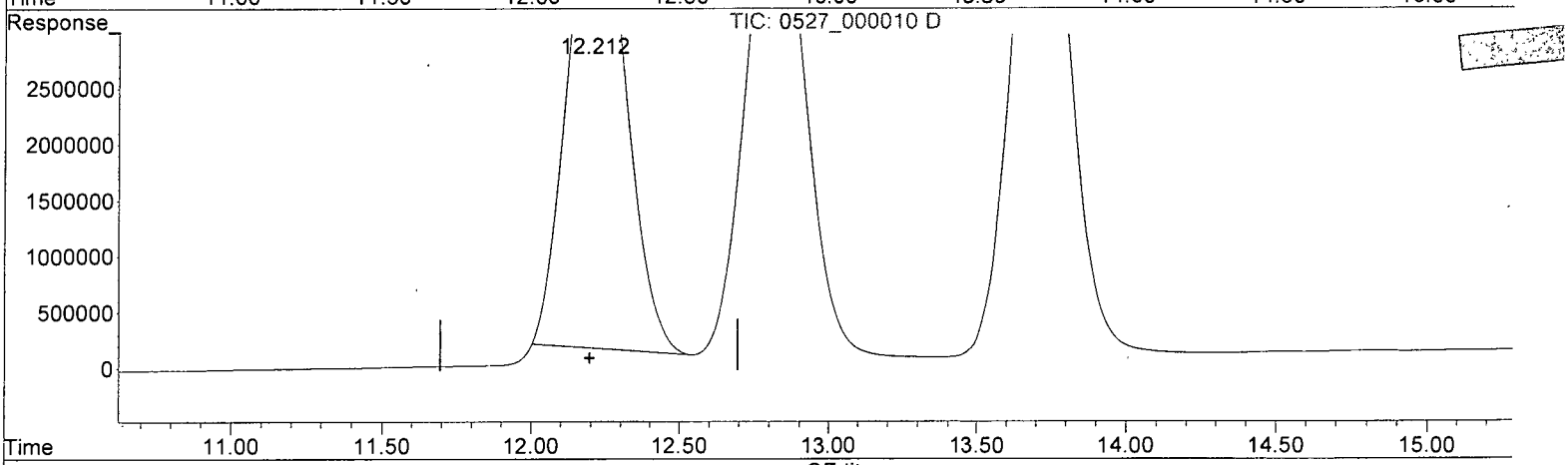
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:05:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





QEdit

(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.213min 967.755 ppb

response 4338907

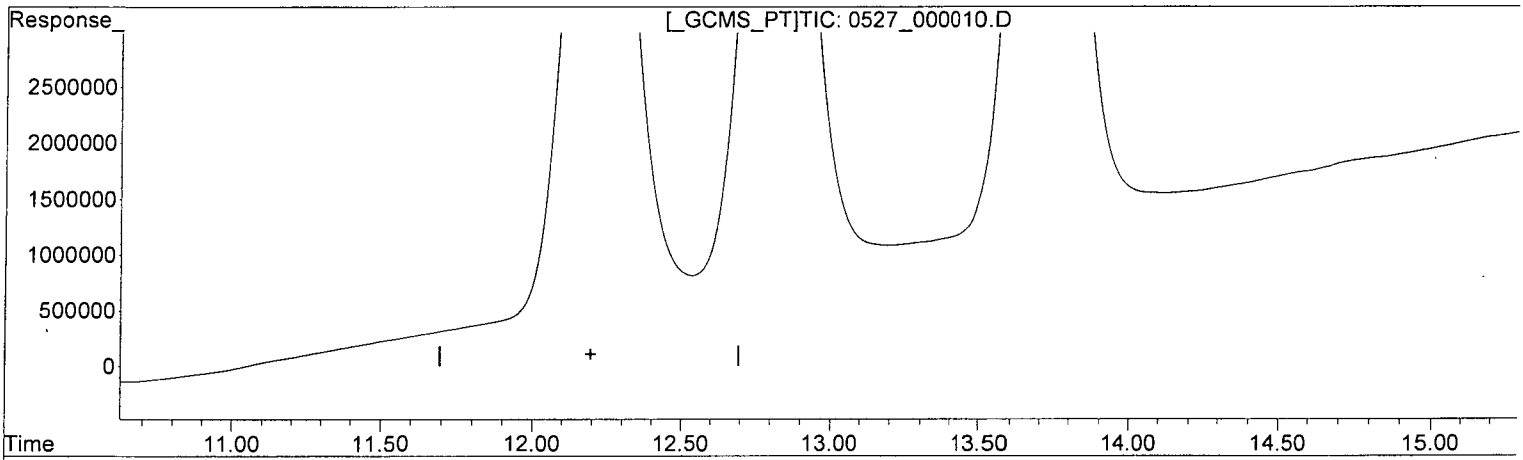
(+) = Expected Retention Time

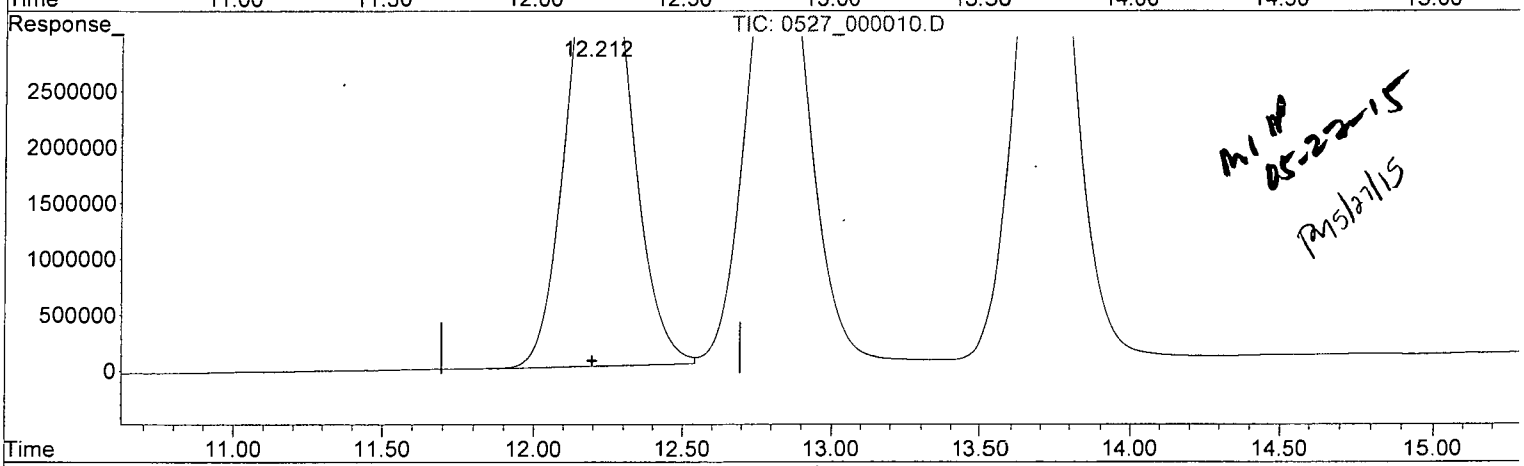
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 13:32:00
Operator : MP
Sample : 8330_CCV 1.0 PPM 05/27/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:05:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0r





MP 05-27-15
PM 5/27/15

(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.212min 998.364 ppb m

response 4476139

(+) = Expected Retention Time

Initial Calibration

Lab Name: APPL, Inc. SDG No: 76447

Case No: Initial Cal. Date: 05/22/15

Matrix: Instrument: Statler Initials: MP

0522_000010.D 0522_000012.D 0522_000014.D 0522_000016.D 0522_000018.D 0522_000020.D 0522_000022.D 0522_000024.D 0522_000026.D

		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	
####	TM	NITROGLYCERIN		20.8	18.0	18.1	17.8	18.4	18.4	18.3	18.5		18.55	5.0	TM
####	TM	PETN			17.5	15.7	17.4	18.9	19.1	19.0	19.3		18.15	7.2	TM
####		Signal #2													
####	TM	HMX #2	40.3	42.0	46.4	46.8	46.8	48.8	48.8	47.9	48.6		46.27	6.7	TM
####	TM	RDX #2	38.4	40.4	38.6	40.0	39.6	40.9	40.3	39.6	40.1		39.77	2.1	TM
####	TM	1,3,5-TRINITROBENZENE #2	98.9	96.4	98.4	97.8	95.8	98.9	98.3	97.4	99.2		97.91	1.2	TM
####	S	1,2-DINITROBENZENE #2	46.4	43.2	44.9	43.7	42.6	46.2	44.0	43.3	44.3		44.29	2.9	S
####	TM	1,3-DINITROBENZENE #2	86.5	96.4	98.9	96.6	95.6	101	97.8	97.0	99.5		96.56	4.3	TM
####	TM	NITROBENZENE #2	57.2	50.2	53.4	53.1	55.0	56.0	54.7	53.7	54.7		54.22	3.7	TM
####	TM	2,4,6-TRINITROTOLUENE #2		48.9	50.9	49.7	49.6	51.4	50.2	49.8	51.2		50.21	1.8	TM
####	TM	TETRYL #2		35.9	39.1	36.0	36.2	36.4	36.1	36.4	36.3		36.56	2.8	TM
####	TM	2,6-DINITROTOLUENE #2	31.2	26.8	30.6	29.7	29.7	30.8	29.9	30.3	31.0		30.00	4.4	TM
####	TM	2,4-DINITROTOLUENE #2	47.8	51.9	51.1	51.9	51.6	53.3	52.0	52.3	53.5		51.72	3.2	TM
####	TM	2-NITROTOLUENE #2		21.5	21.4	20.6	21.0	21.5	20.8	21.0	21.4		21.16	1.5	TM
####	TM	4-NITROTOLUENE #2			16.3	18.1	18.6	18.9	18.4	18.5	18.9		18.26	4.9	TM
####	TM	3,5-DINITROANILINE #2	37.6	43.2	41.6	41.2	41.3	42.3	42.1	41.3	41.4		41.34	3.7	TM
####	TM	3-NITROTOLUENE #2		22.8	23.9	24.0	23.1	22.9	22.2	22.0	22.4		22.92	3.3	TM
####	TM	4-AMINO-2,6-DINITROTOLUENE #2		33.3	38.0	35.5	34.3	34.1	32.9	32.4	32.8		34.16	5.4	TM
####	TM	2-AMINO-4,6-DINITROTOLUENE #2		38.8	45.9	44.8	43.1	44.3	42.6	42.0	42.4		42.99	5.0	TM
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Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:11:18 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	8.113	0	9274	N.D.	4.396m#
	Spiked Amount 62.500			Recovery	=	0.00%	7.03%
	Target Compounds						
1) TM	HMX	0.000	4.080	0	8051	N.D.	3.829m#
2) TM	RDX	0.000	6.415	0	7675	N.D.	4.144m#
3) TM	1,3,5-TRI...	0.000	6.754	0	19781	N.D.	4.426m#
5) TM	1,3-DINIT...	0.000	8.432	0	17298	N.D.	3.846m#
6) TM	NITROBENZENE	0.000	9.166	0	11437	N.D.	4.465m#
7) TM	2,4,6-TRI...	0.000	11.443	0	7160	N.D.	2.820 #
8) TM	NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM	TETRYL	11.981	12.005	7668	6007	NoCal	3.647 #
10) TM	2,6-DINIT...	0.000	13.440	0	6231	N.D.	4.218m#
11) TM	2,4-DINIT...	0.000	14.078	0	9567	N.D.	3.797m#
12) TM	2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM	4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
14) TM	3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
15) TM	3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM	4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM	2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

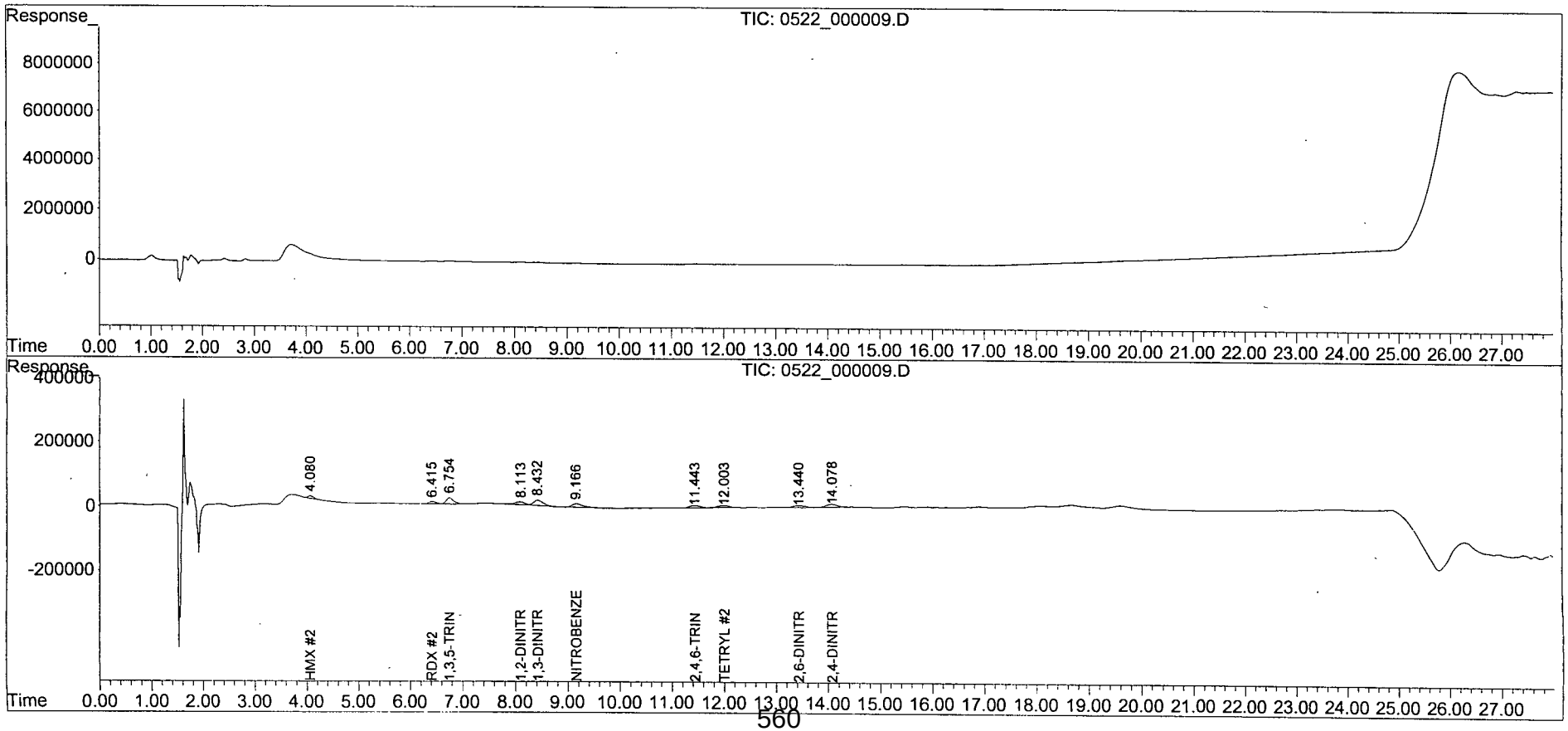
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:11:18 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



STE2_150522.M Sat May 23 10:11:45 2015 WALDORF

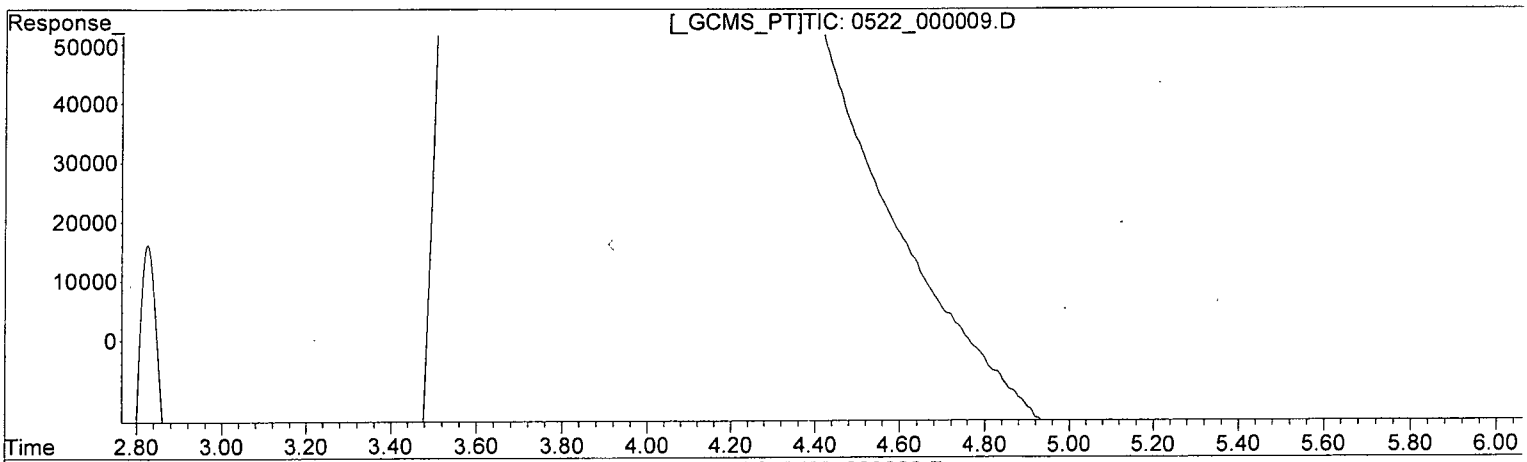
Page: 2

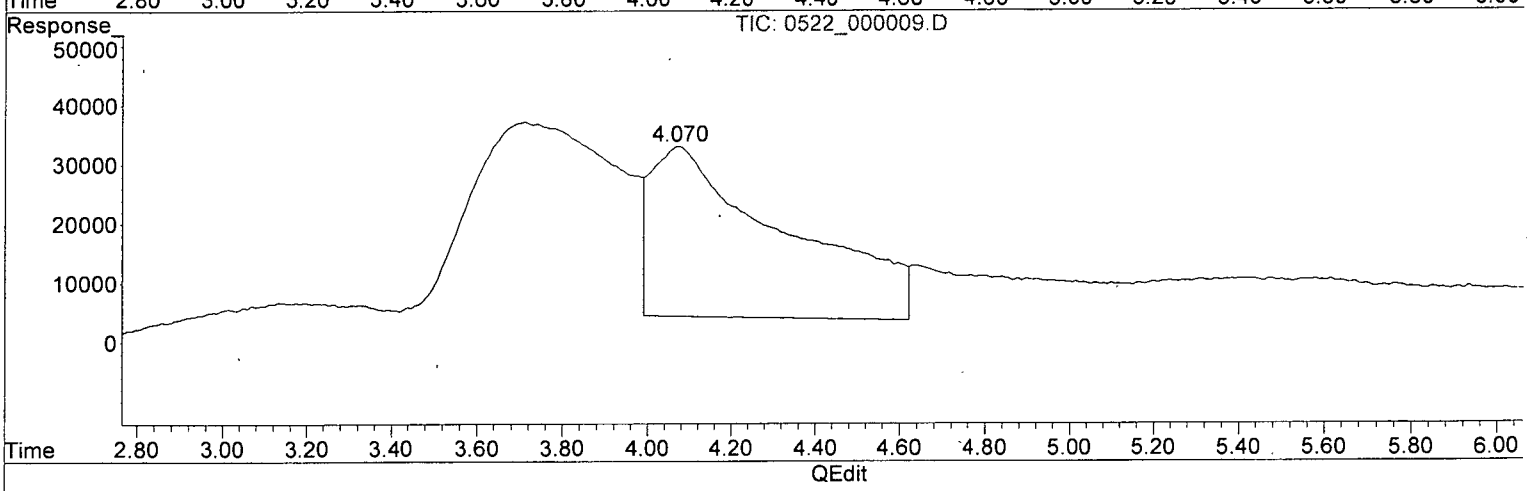
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.074min 13.606 ppb

response 28611

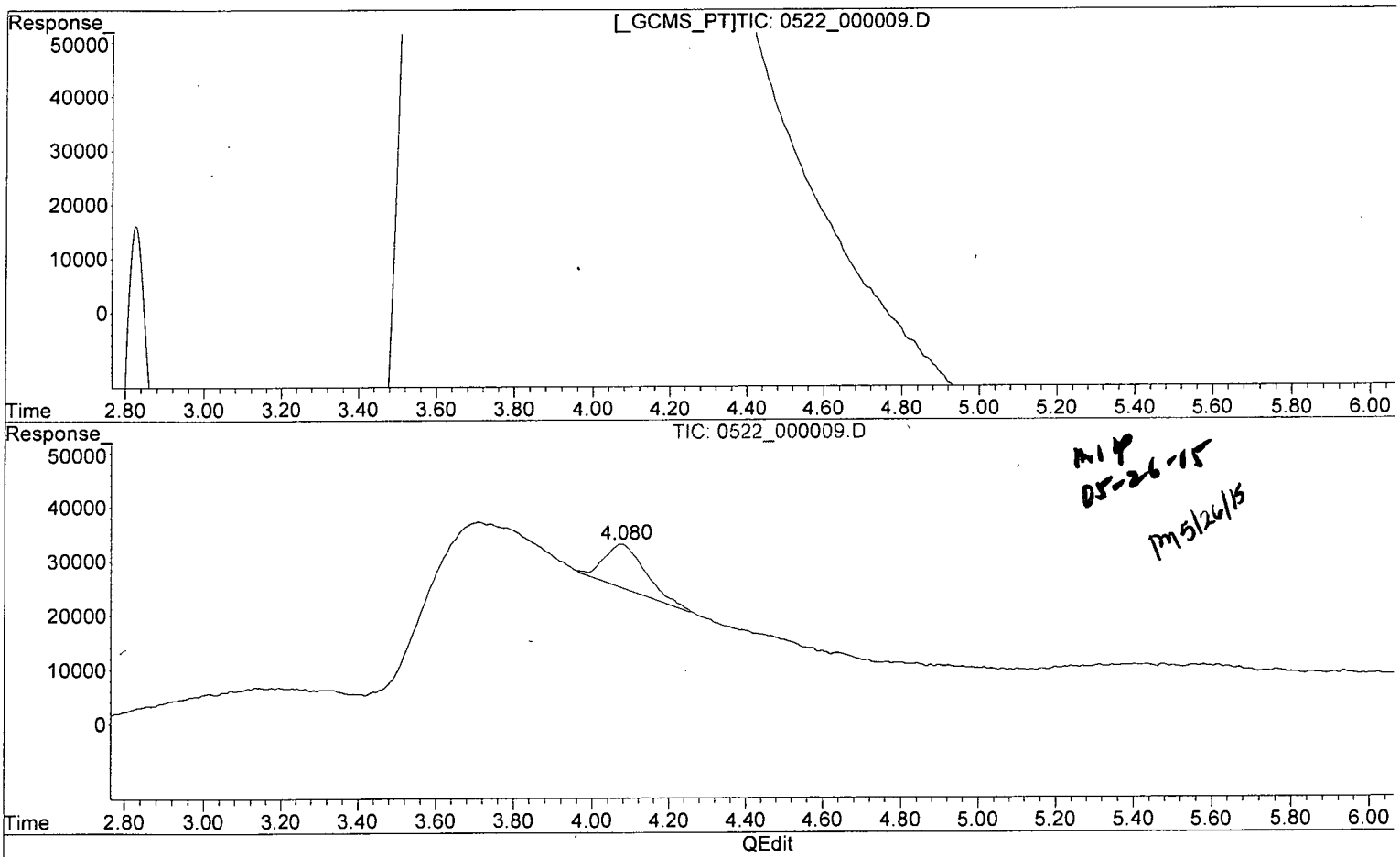
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.080min 3.829 ppb m

response 8051

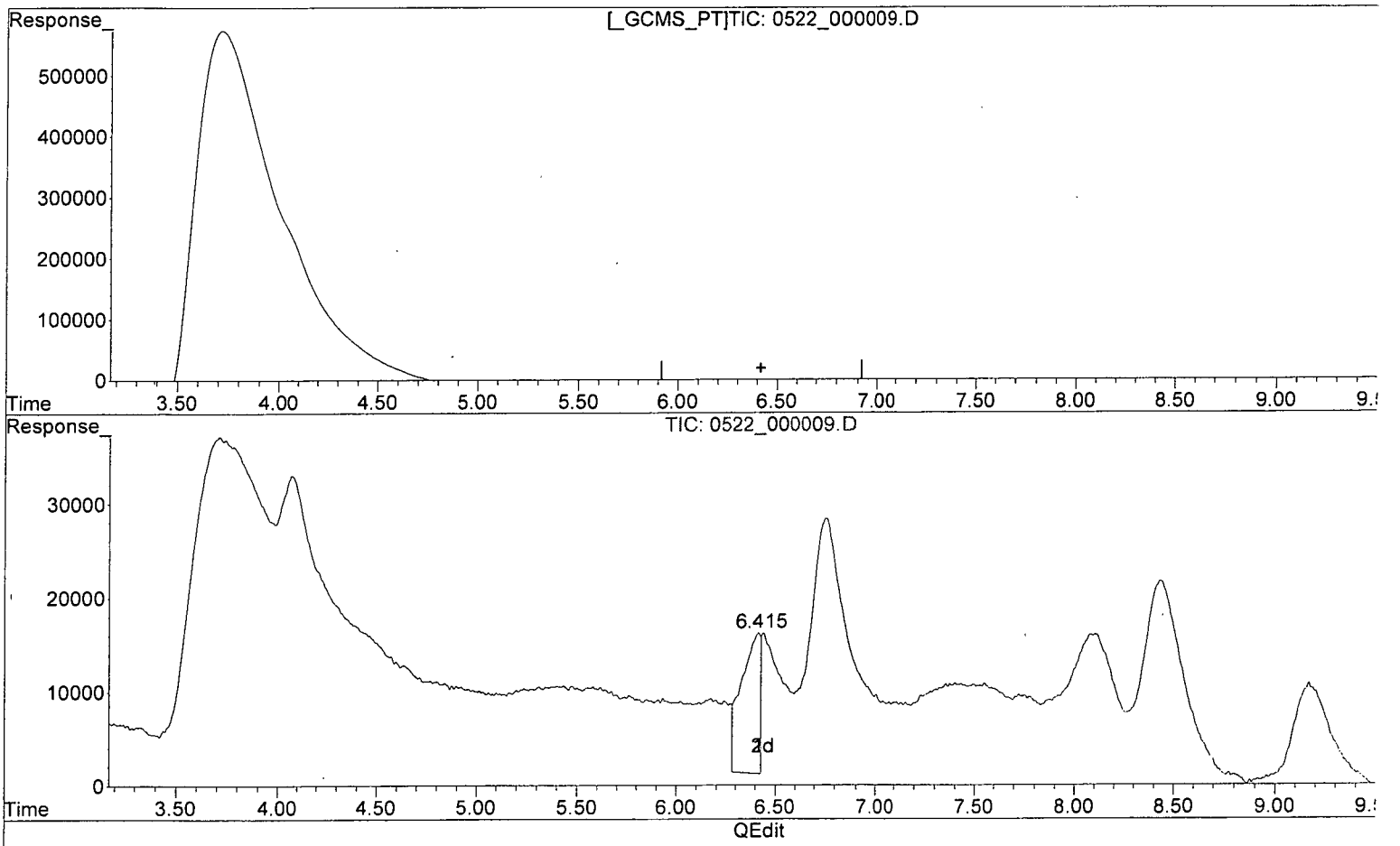
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.415min 8.101 ppb

response 15004

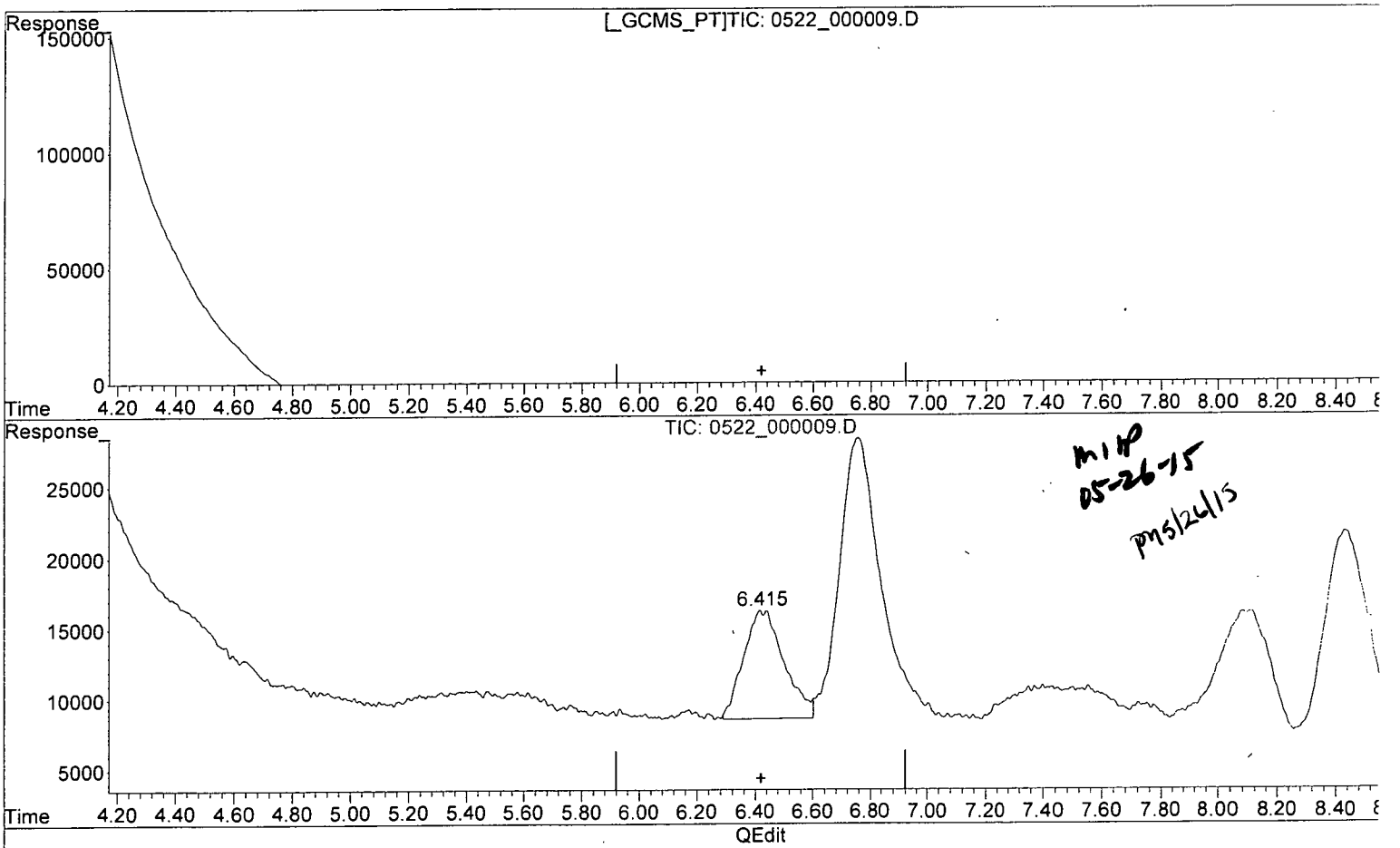
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MP 05-26-15 pm5/26/15

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.415min 4.144 ppb m

response 7675

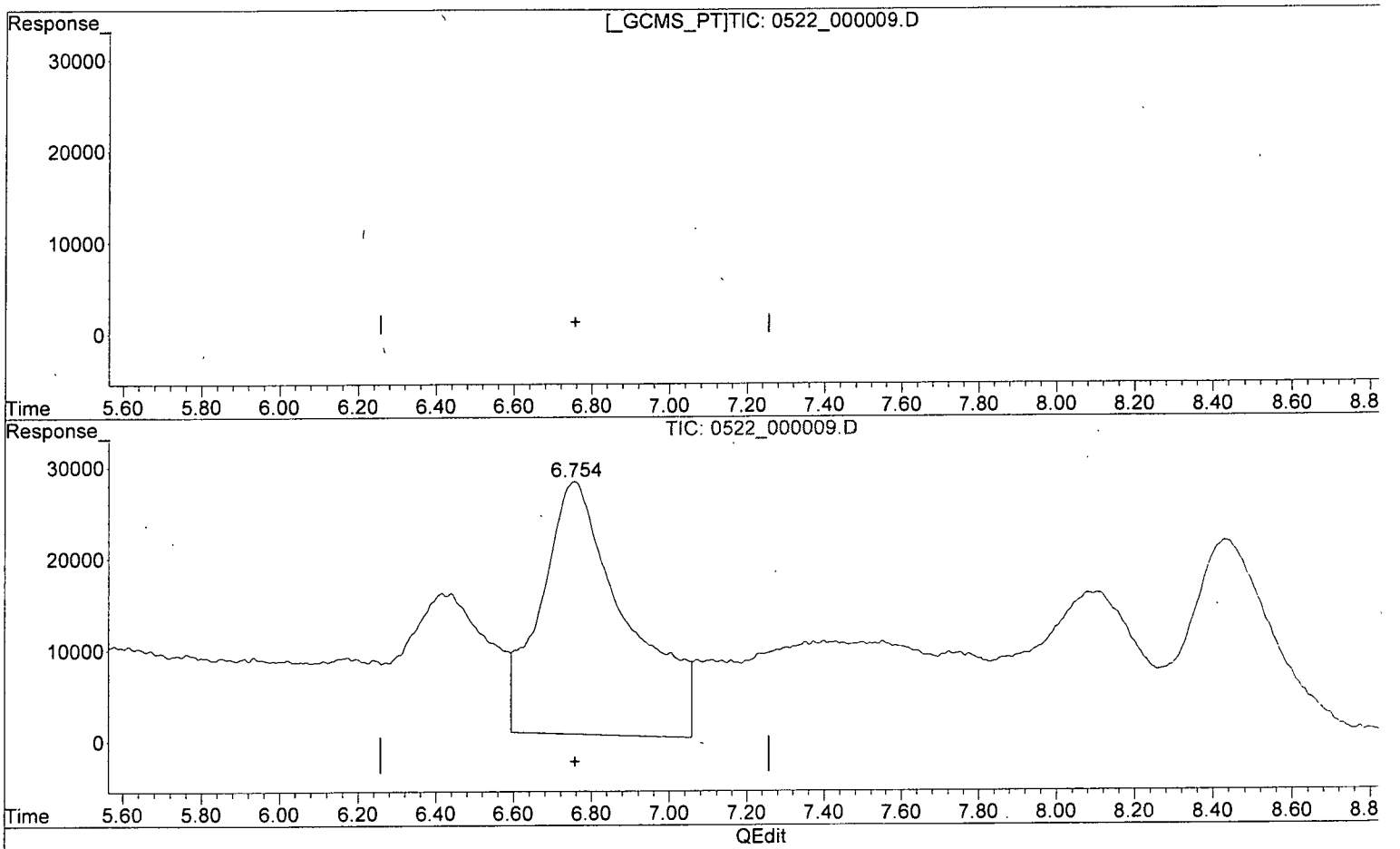
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.756min 6.174 ppb

response 27597

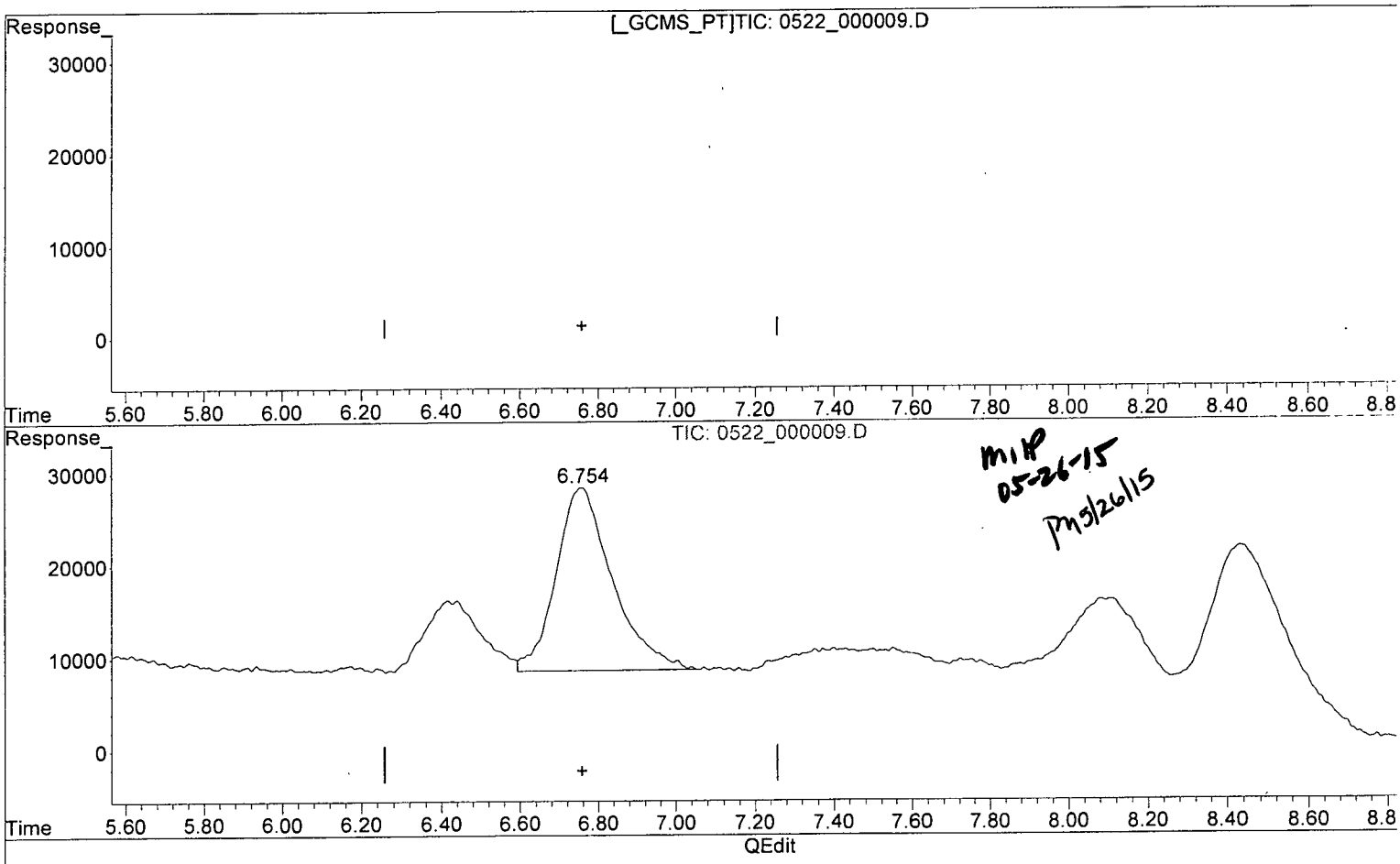
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.754min 4.426 ppb m

response 19781

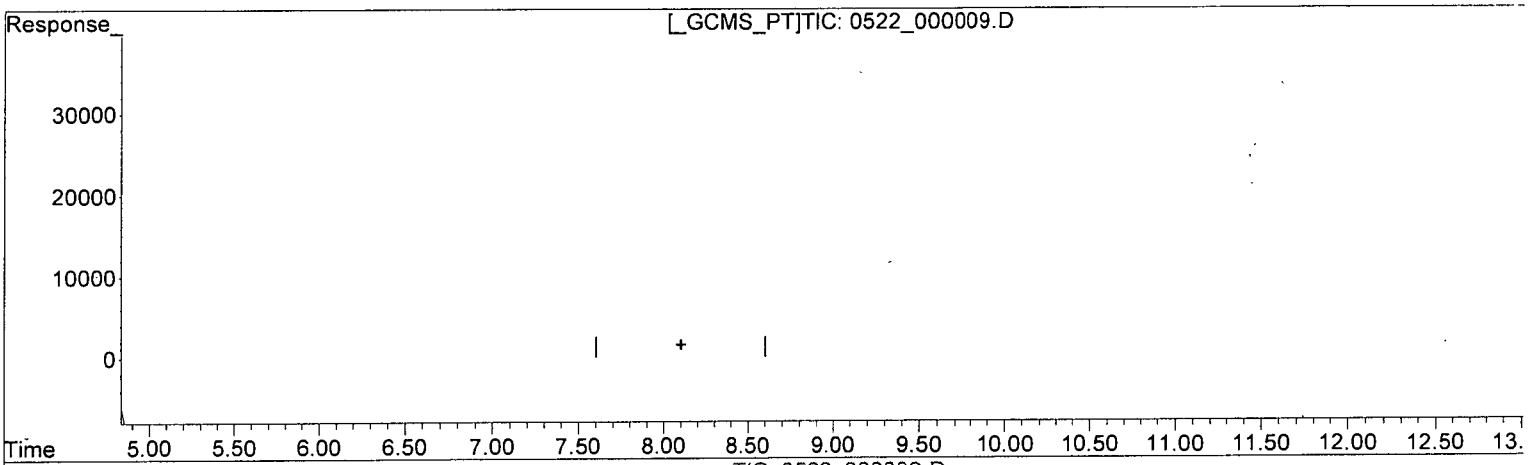
(+) = Expected Retention Time

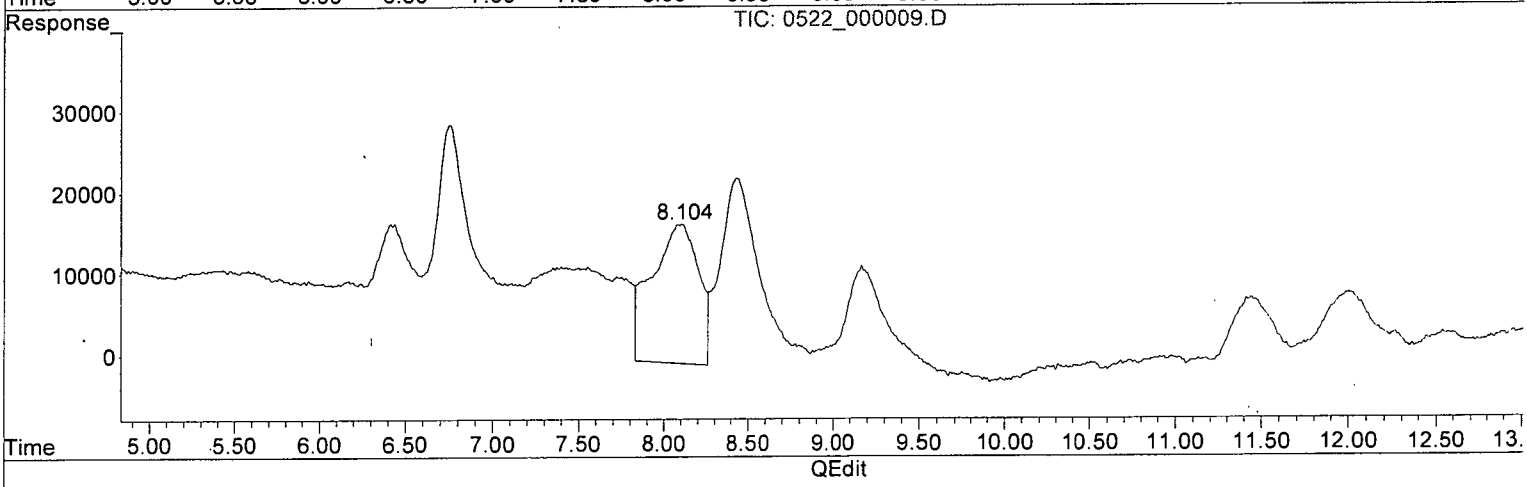
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.106min 8.094 ppb

response 17077

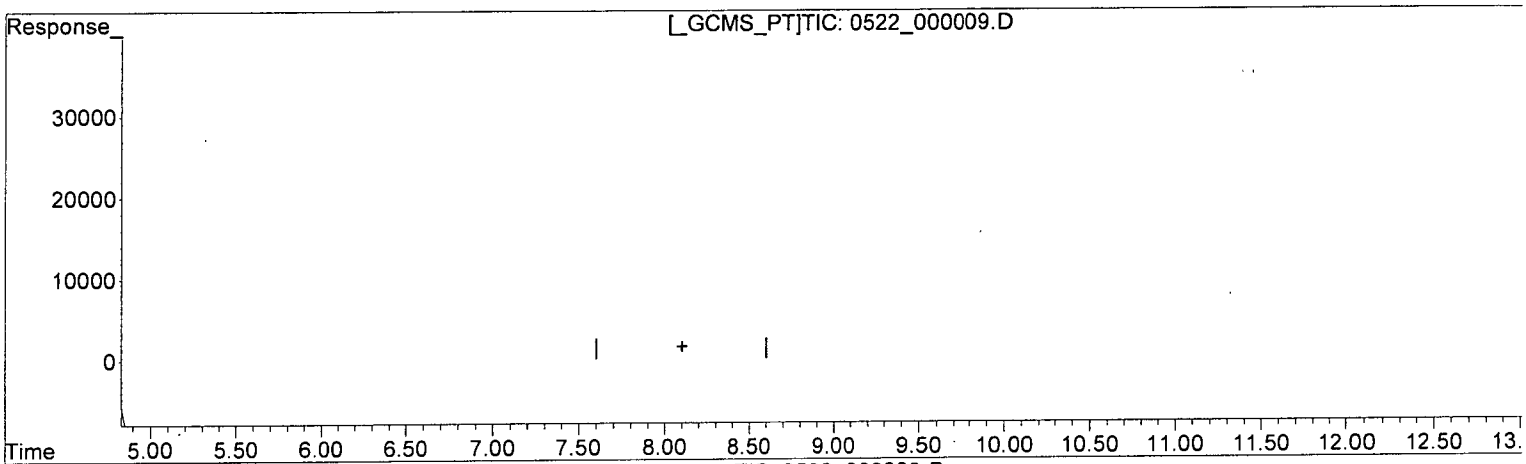
(+) = Expected Retention Time

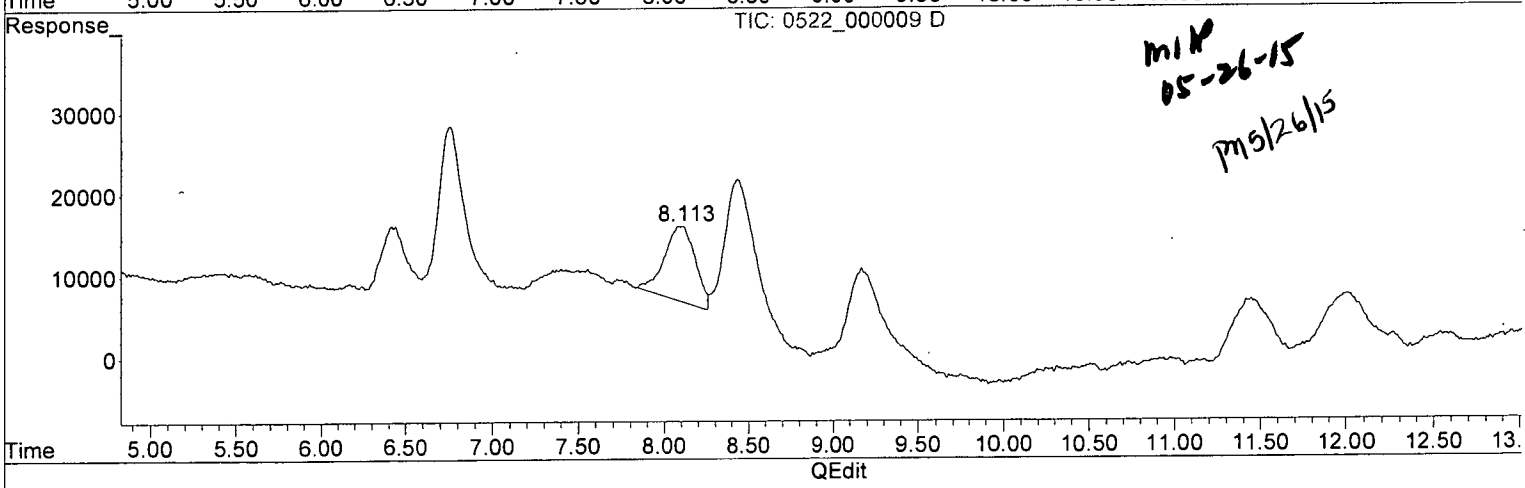
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





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ML 5/26/15

(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.113min 4.396 ppb m

response 9274

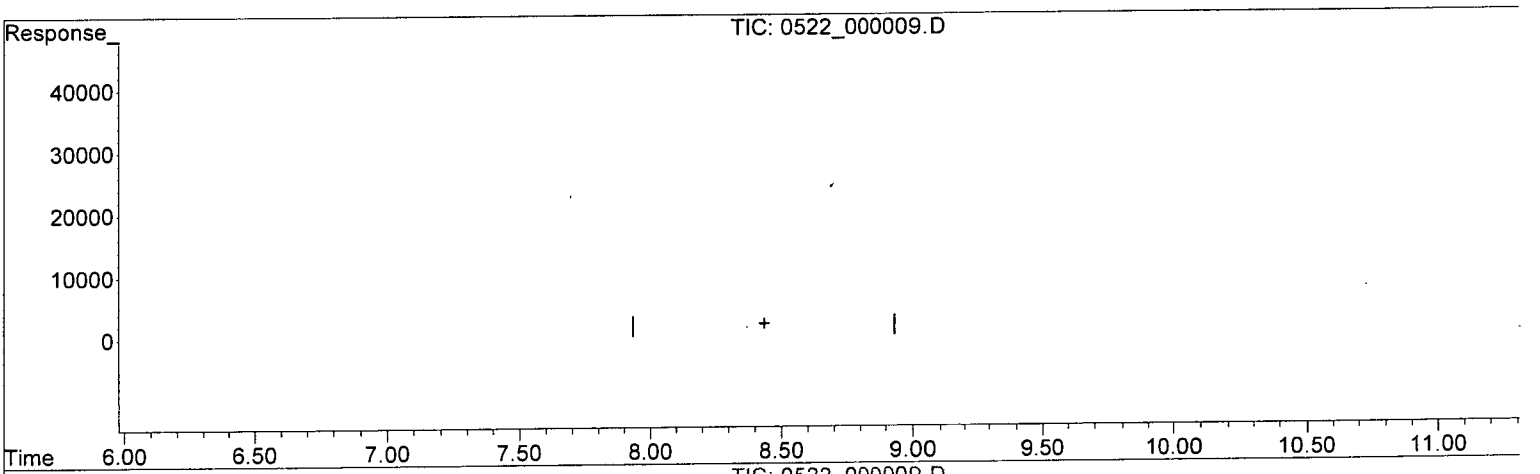
(+) = Expected Retention Time

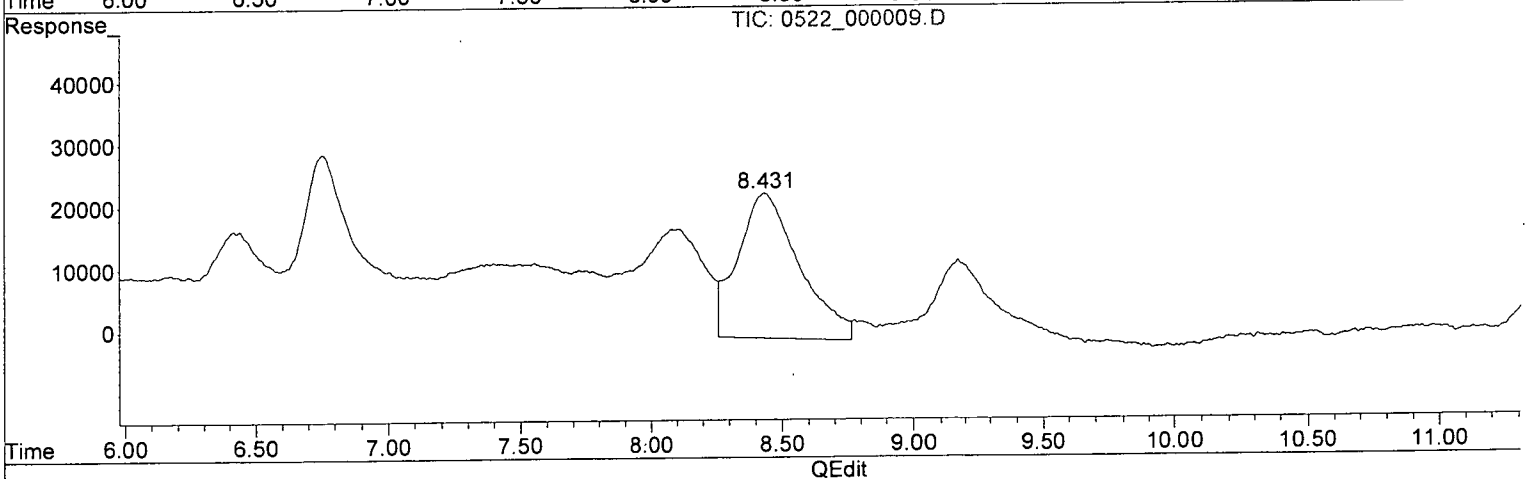
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.434min 5.153 ppb

response 23173

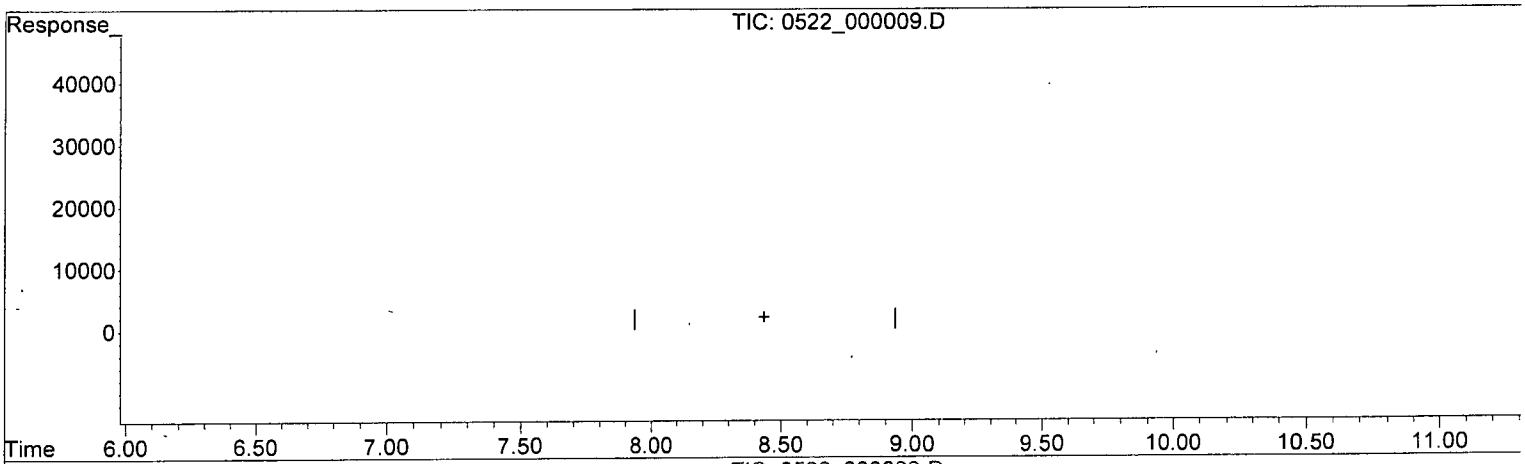
(+) = Expected Retention Time

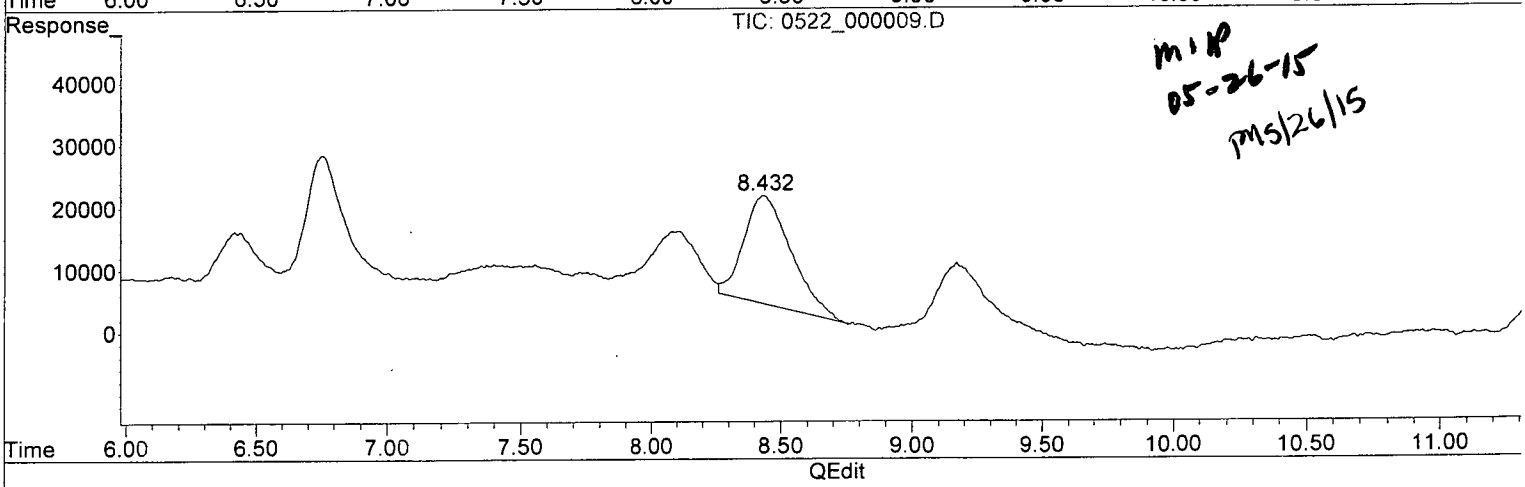
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





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(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.432min 3.846 ppb m

response 17298

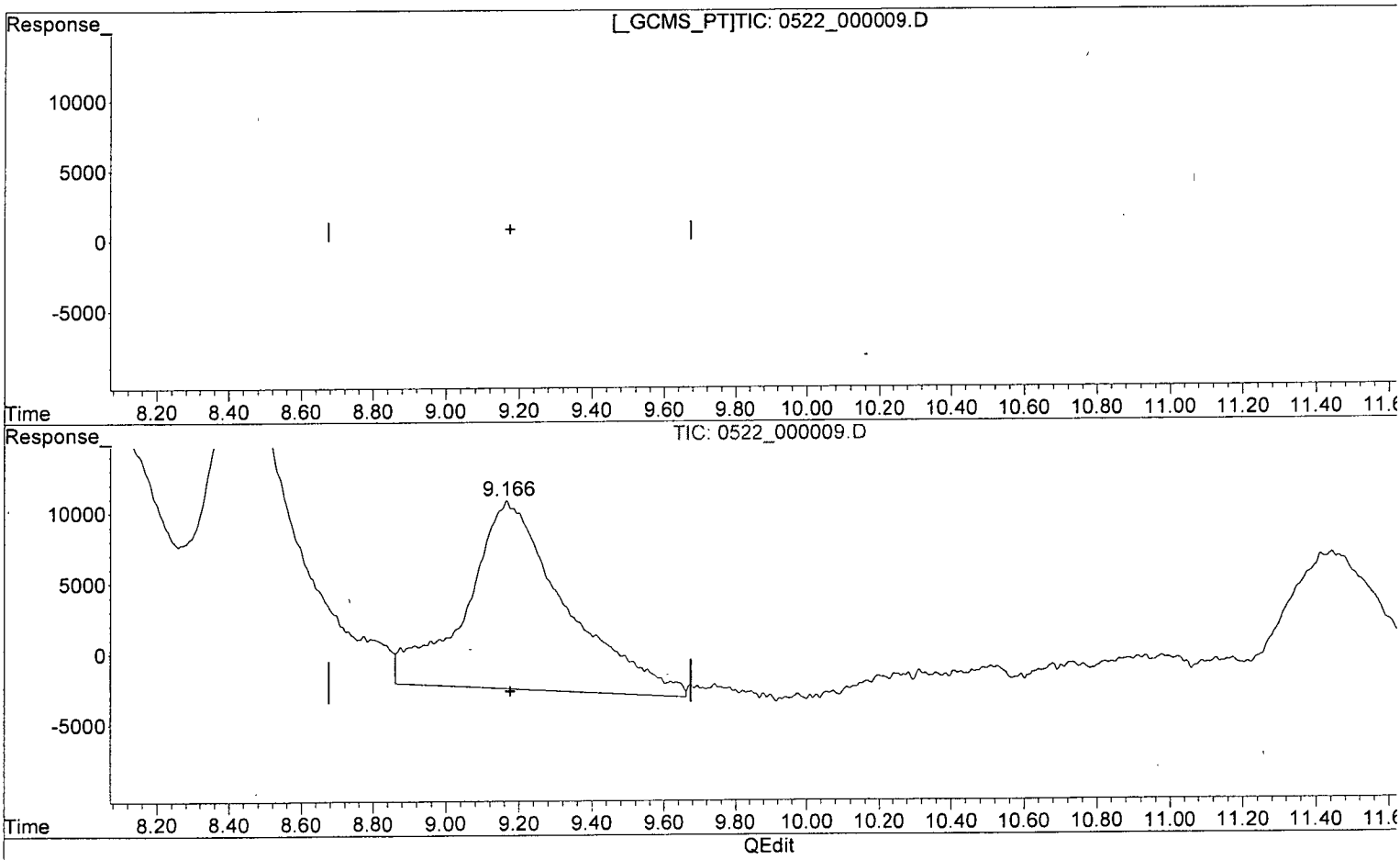
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.167min 5.196 ppb

response 13311

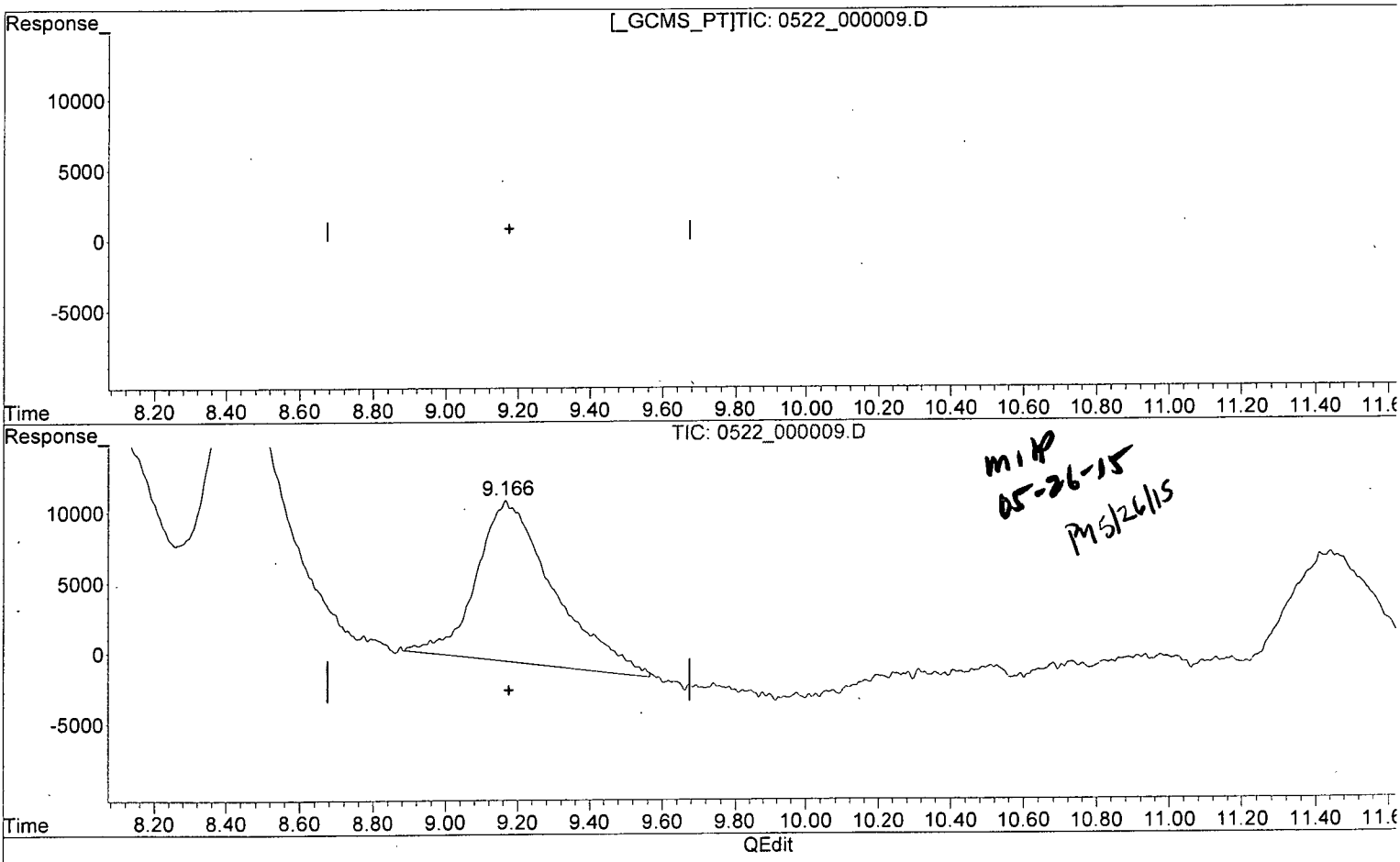
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.166min 4.465 ppb m

response 11437

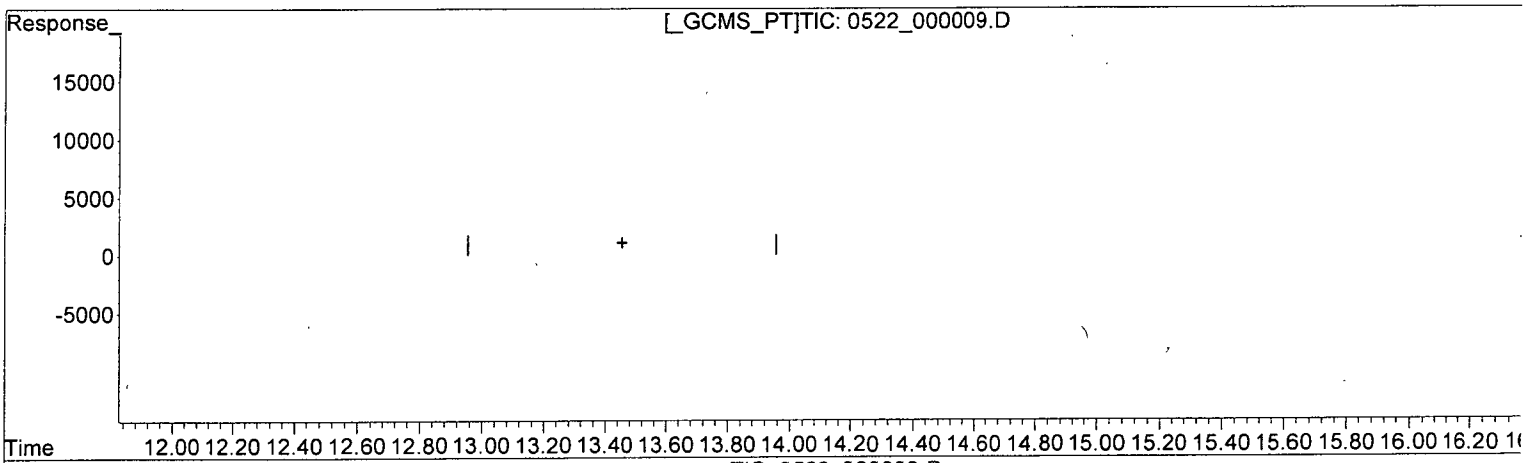
(+) = Expected Retention Time

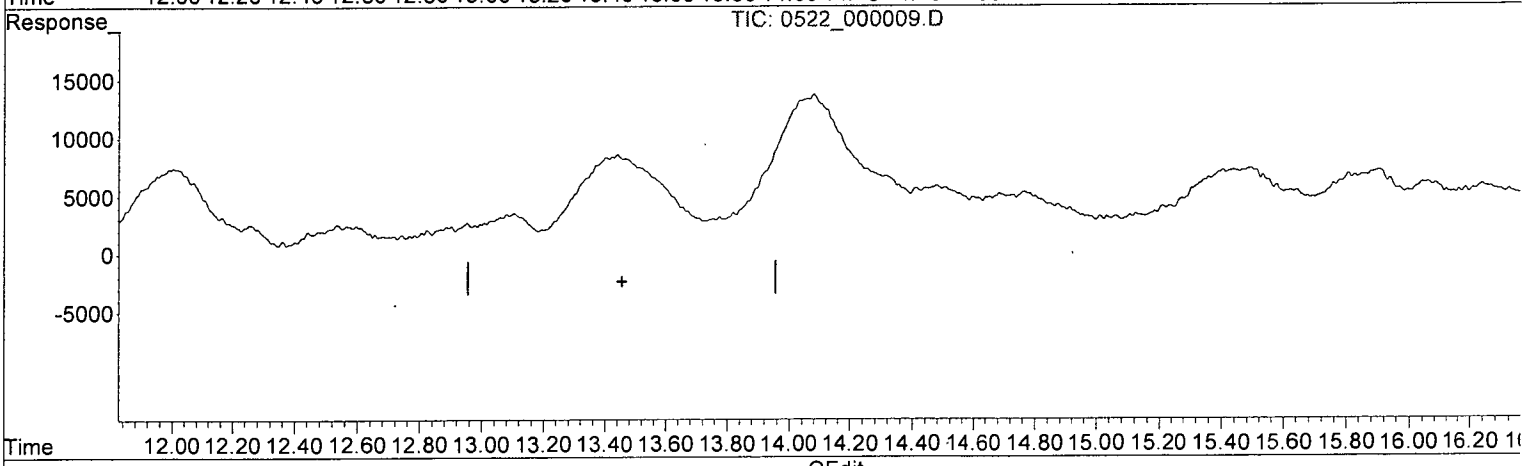
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





QEdit

(10) 2,6-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(10) 2,6-DINITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

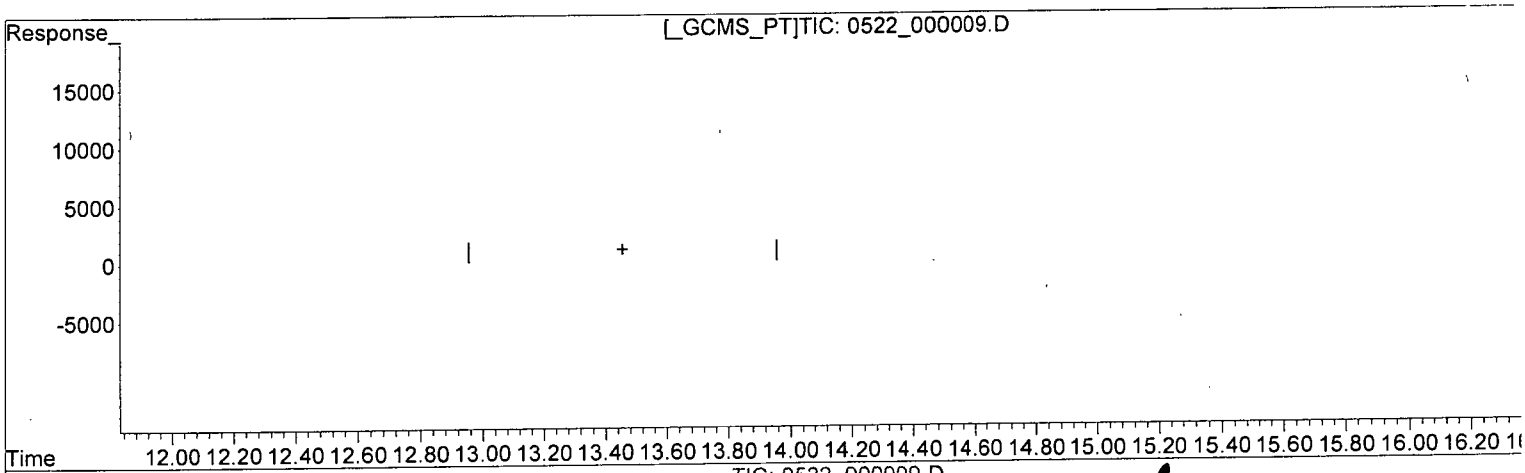
(+) = Expected Retention Time

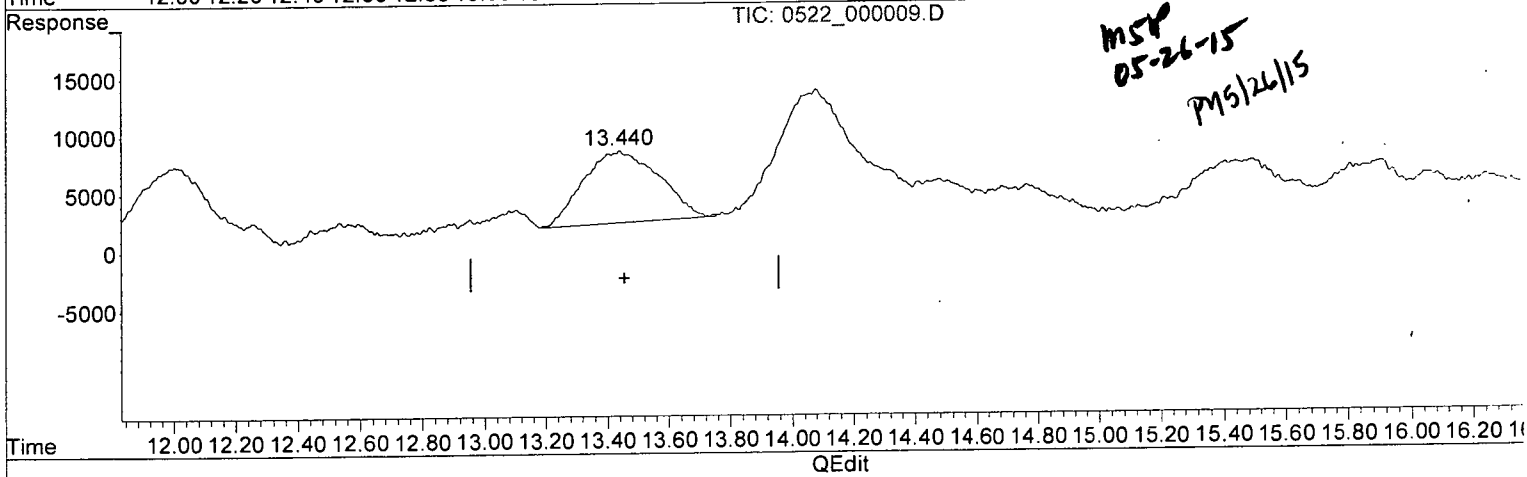
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





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(10) 2,6-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(10) 2,6-DINITROTOLUENE #2 (TM)

13.440min 4.218 ppb m

response 6231

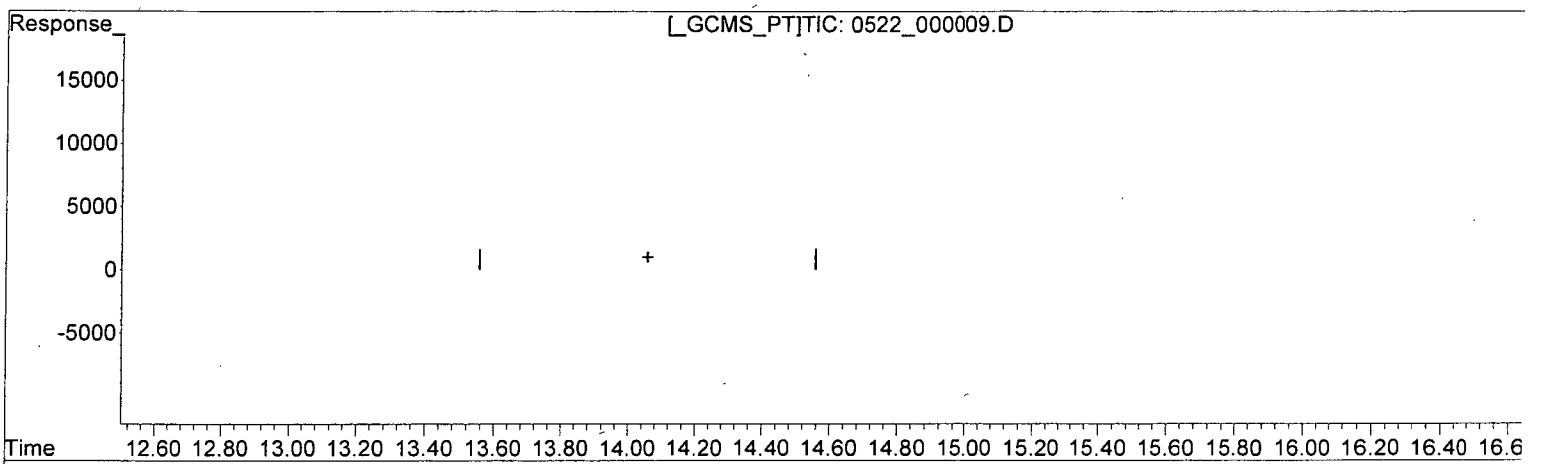
(+) = Expected Retention Time

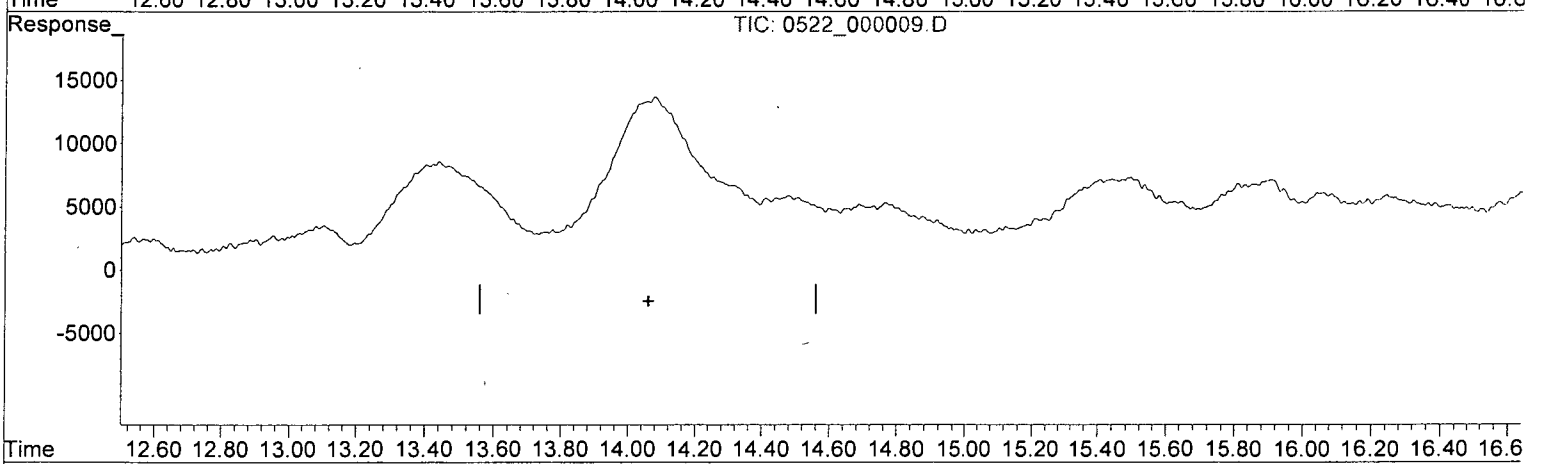
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(11) 2,4-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(11) 2,4-DINITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

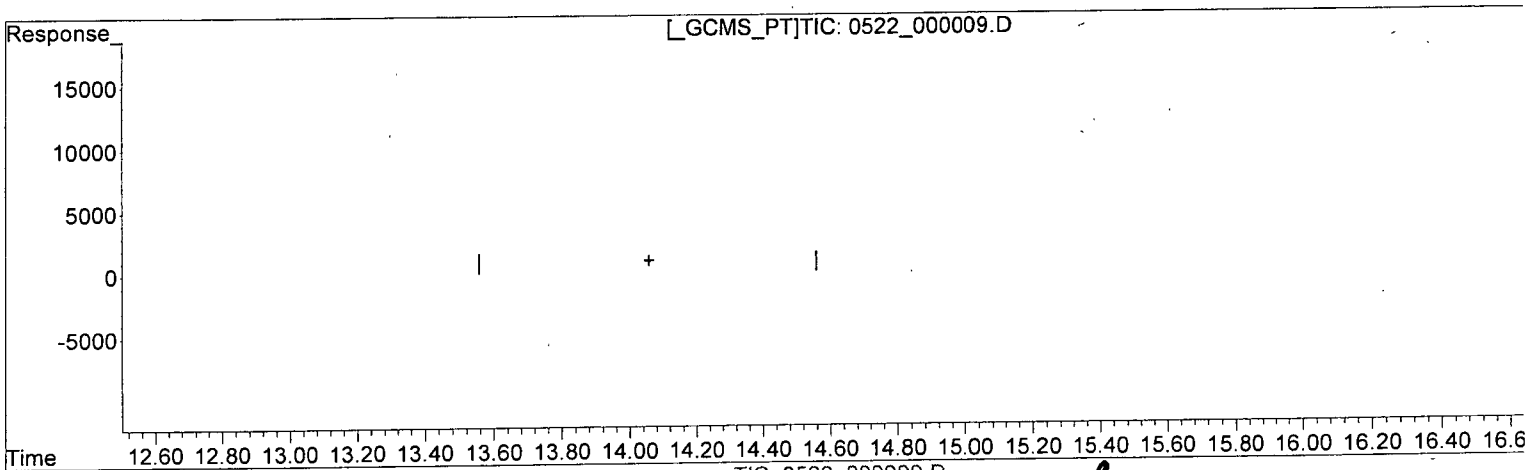
(+) = Expected Retention Time

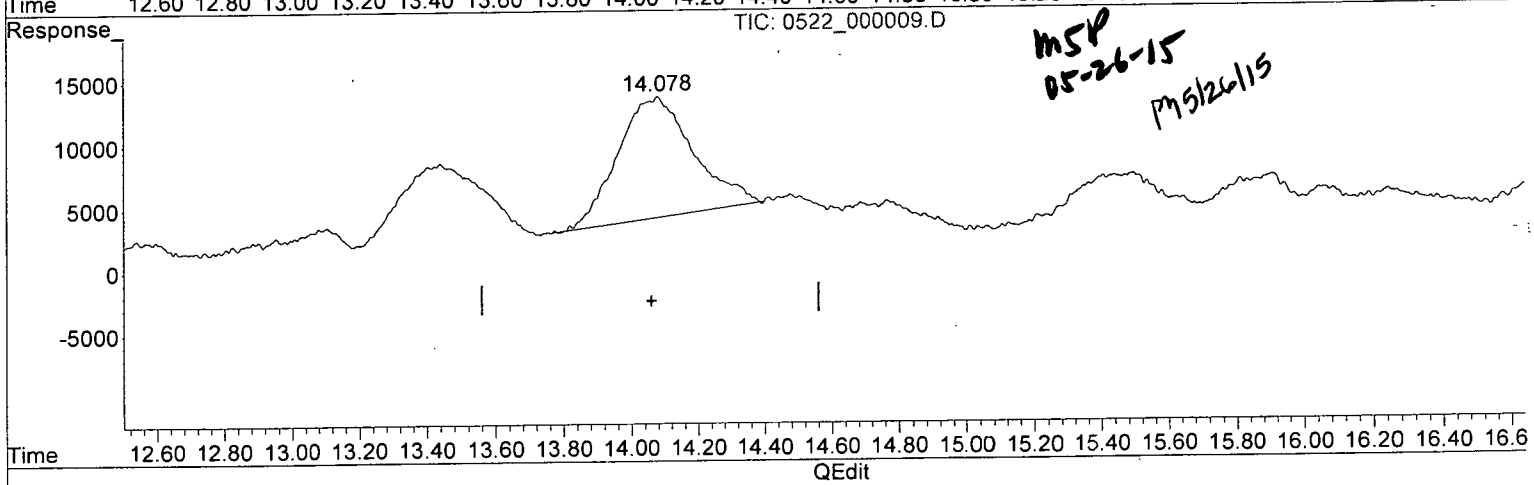
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:13:08
Operator : MP
Sample : 8330MXA_CB 0.005 PPM 05/22/15
Misc :
ALS Vial : 4224 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:29:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





MSP 05-26-15 PM 5/26/15

(11) 2,4-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(11) 2,4-DINITROTOLUENE #2 (TM)

14.078min 3.797 ppb m

response 9567

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:52:39
Operator : MP
Sample : 8330MXB_CV 0.005 PPM 05/22/15
Misc :
ALS Vial : 4225 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:07:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1) TM	HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM	RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM	1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM	1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM	NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM	2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM	NITROGLYC...	0.000	12.058	0	885	N.D. d	NoCal
9) TM	TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM	2,6-DINIT...	13.254	0.000	538	0	NoCal	N.D.
11) TM	2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM	2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM	4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
14) TM	3,5-DINIT...	0.000	16.553	0	7523	N.D.	3.769m#
15) TM	3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM	4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM	2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

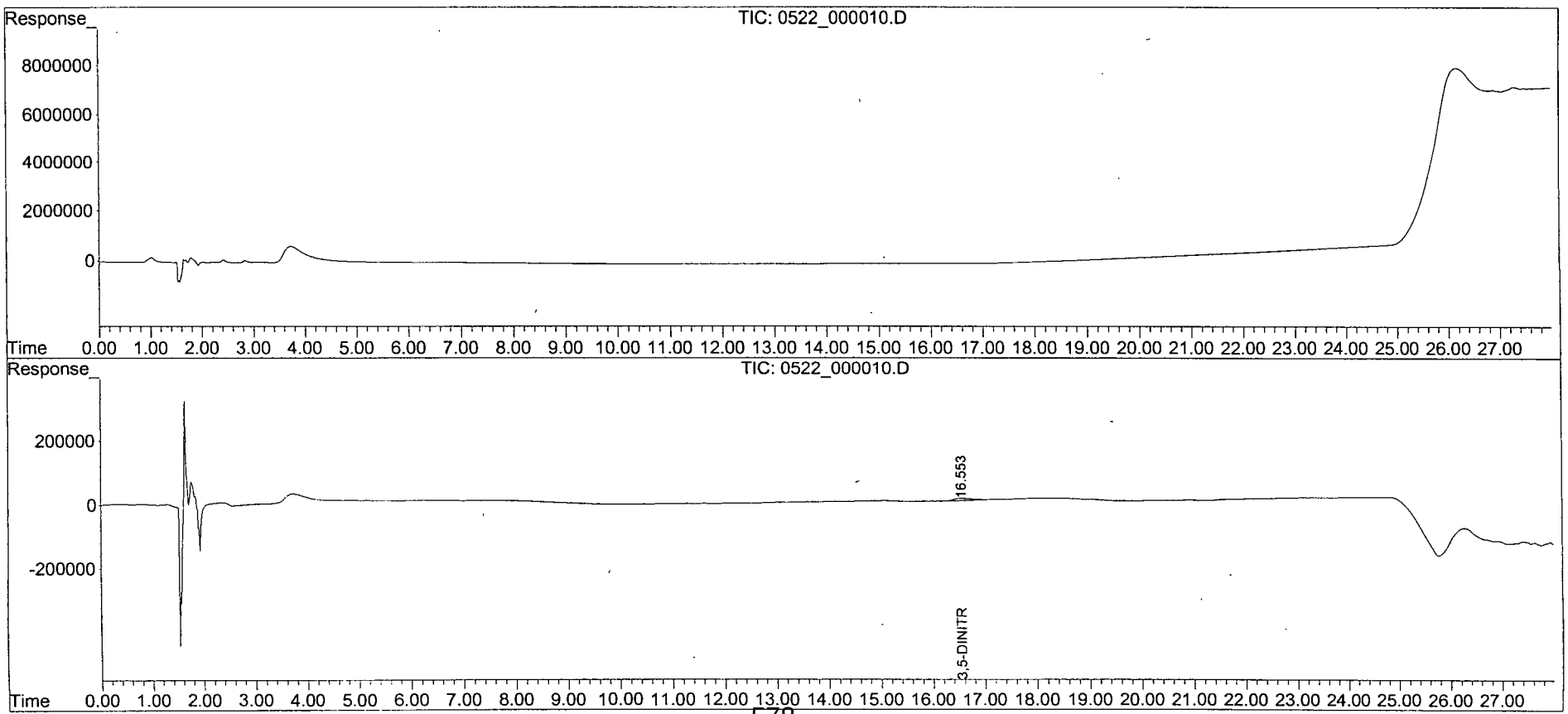
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:52:39
Operator : MP
Sample : 8330MXB_CV 0.005 PPM 05/22/15
Misc :
ALS Vial : 4225 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:07:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

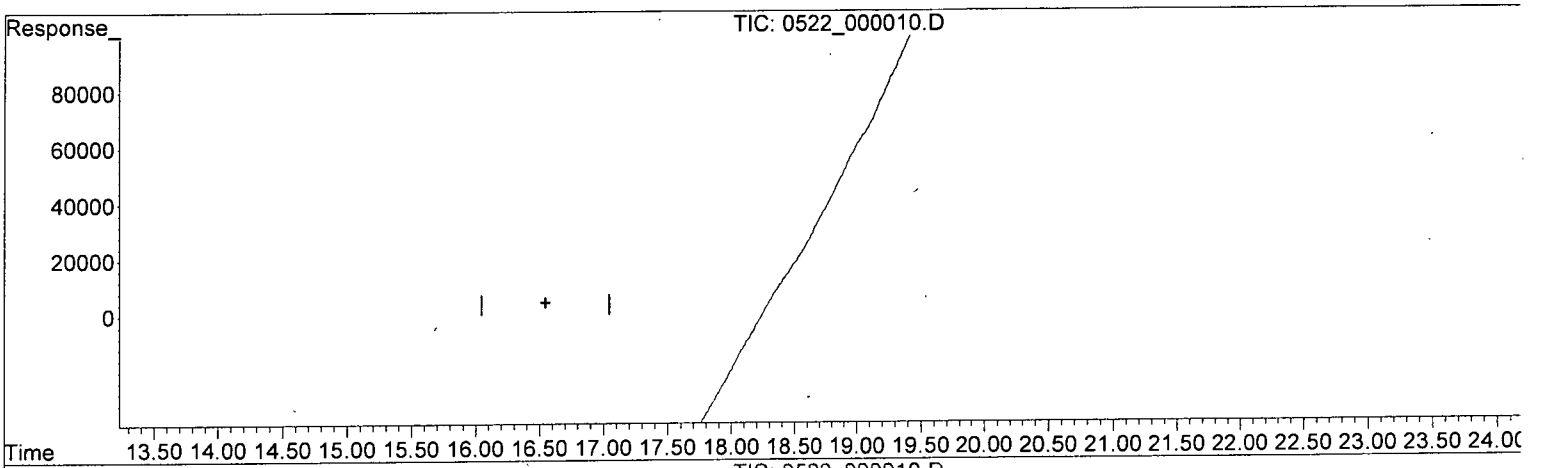


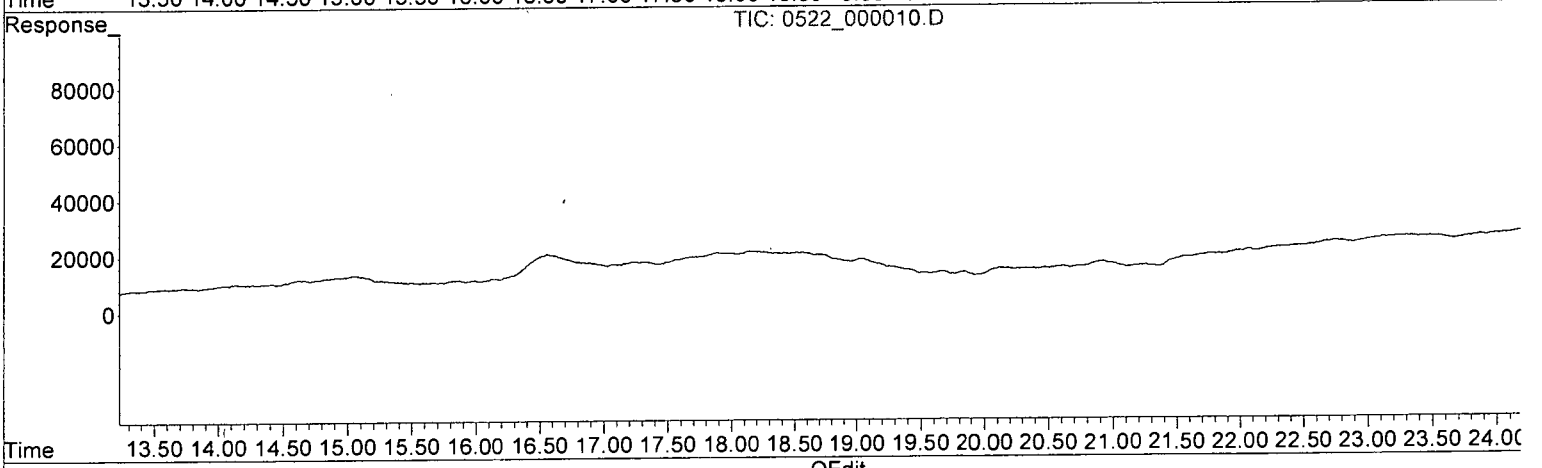
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000010.D
Signal(s) : Signal #1: DAD1B.ch , Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:52:39
Operator : MP
Sample : 8330MXB_CV 0.005 PPM 05/22/15
Misc :
ALS Vial : 4225 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:02 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

0.000min 0.000 ppb

response 0

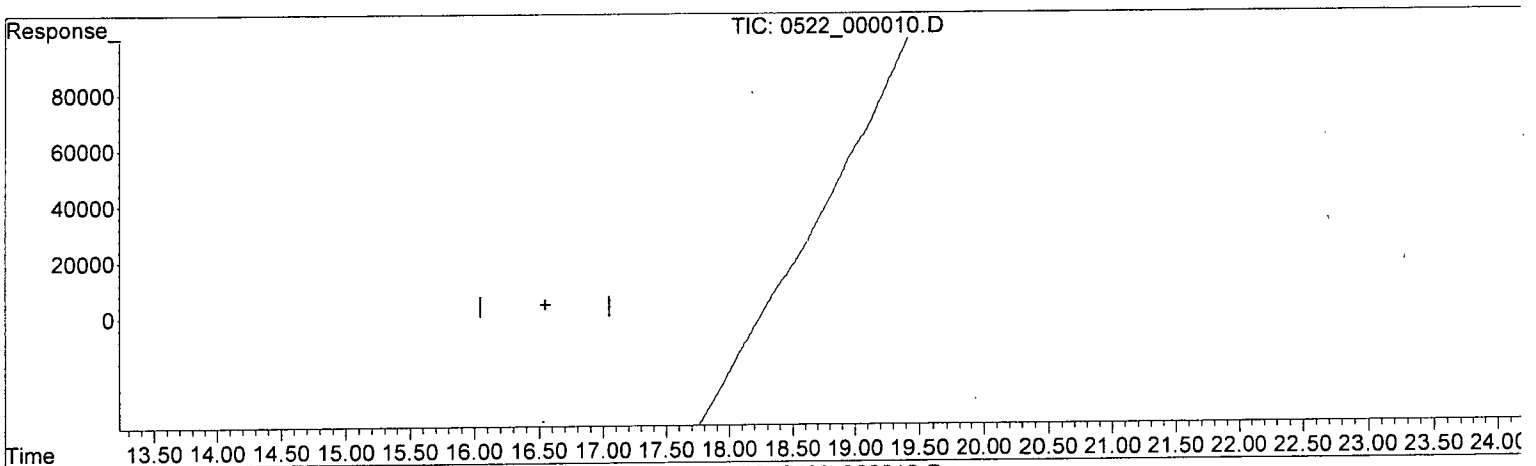
(+) = Expected Retention Time

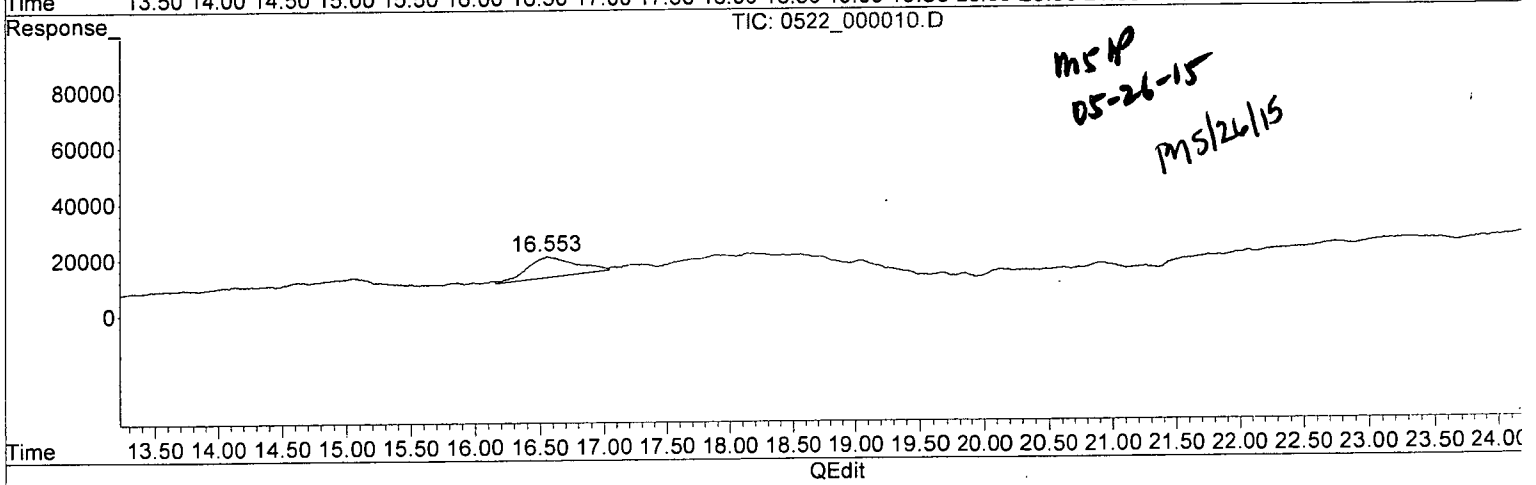
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 14:52:39
Operator : MP
Sample : 8330MXB_CV 0.005 PPM 05/22/15
Misc :
ALS Vial : 4225 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:02 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MSP 05-26-15 MS/26/15

(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

16.553min 3.769 ppb m

response 7523

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:06:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	8.102	0	17296	N.D.	8.198m#
	Spiked Amount 62.500			Recovery	=	0.00%	13.12%
	Target Compounds						
1) TM	HMX	0.000	4.082	0	16807	N.D.	7.993m#
2) TM	RDX	0.000	6.417	0	16148	N.D.	8.719m#
3) TM	1,3,5-TRI...	0.000	6.753	0	38559	N.D.	8.627m#
5) TM	1,3-DINIT...	0.000	8.433	0	38569	N.D.	8.576m#
6) TM	NITROBENZENE	0.000	9.177	0	20086	N.D.	7.841m#
7) TM	2,4,6-TRI...	0.000	11.450	0	19541	N.D.	7.697 #
8) TM	NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM	TETRYL	11.986	11.978	13853	14357	NoCal	8.715 #
10) TM	2,6-DINIT...	13.457	13.467	21588	10727	NoCal	7.263m#
11) TM	2,4-DINIT...	0.000	14.062	0	20758	N.D.	8.239m#
12) TM	2-NITROTO...	0.000	15.468	0	8585	N.D.	8.142m#
13) TM	4-NITROTO...	0.000	16.858	0	4467	N.D.	5.100m#
14) TM	3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
15) TM	3-NITROTO...	0.000	18.086	0	9136	N.D.	8.544m#
16) TM	4-AMINO-2...	0.000	18.658	0	13310	N.D.	9.500m#
17) TM	2-AMINO-4...	0.000	19.621	0	15539	N.D.	7.623 #
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

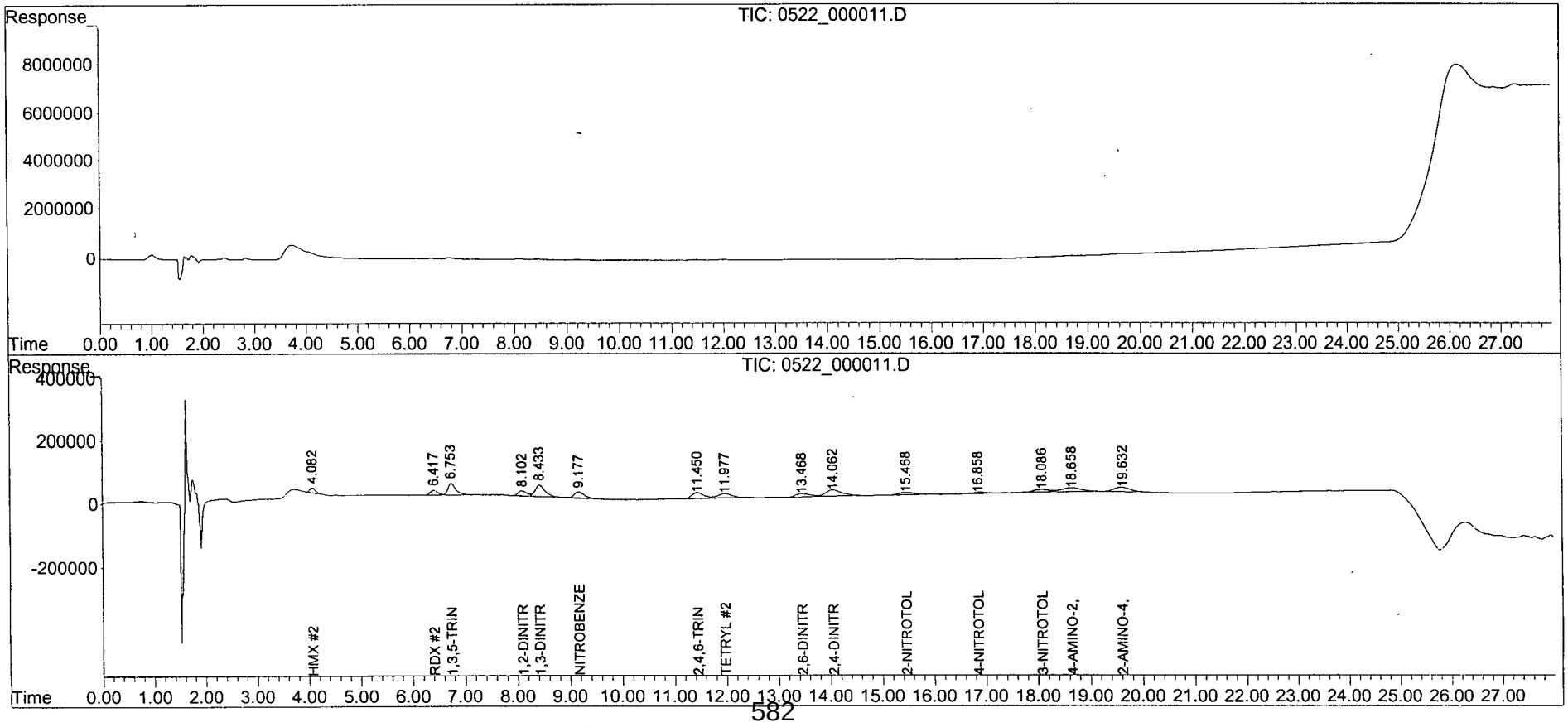
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:06:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

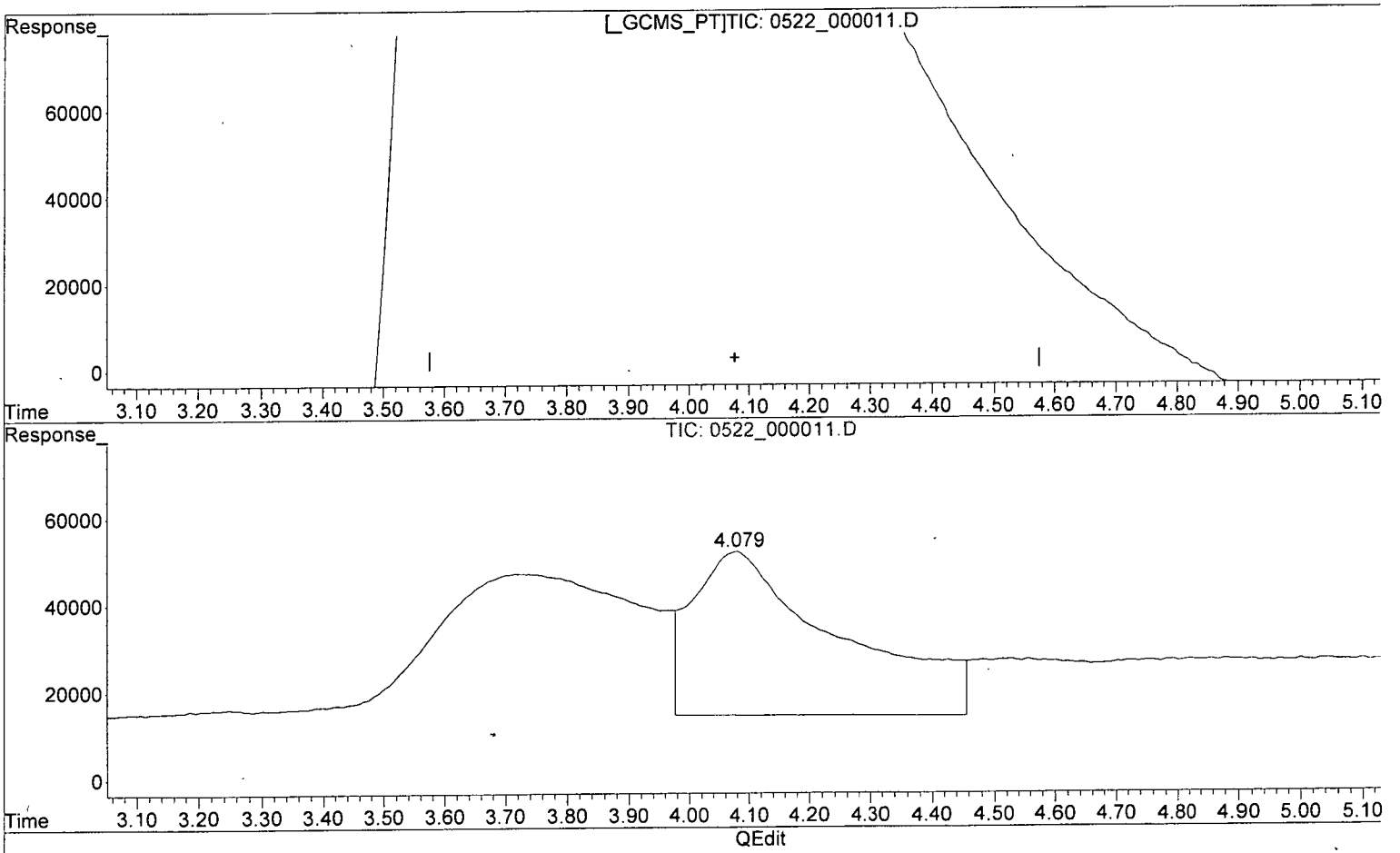


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.078min 17.847 ppb

response 37530

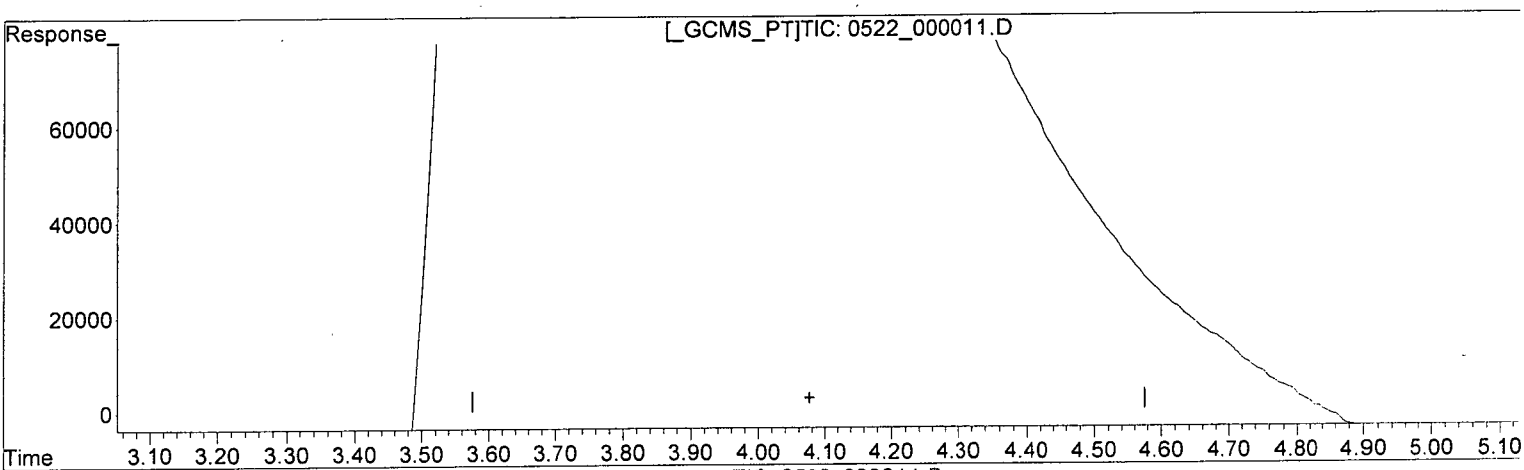
(+) = Expected Retention Time

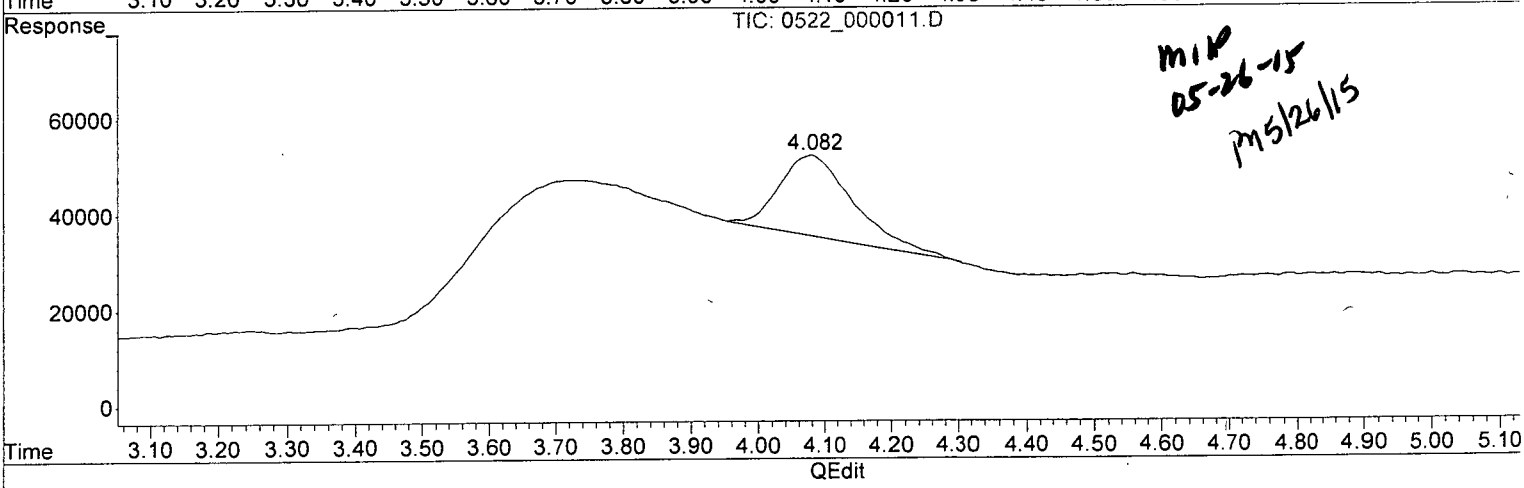
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MLP 05-26-15 jm5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.082min 7.993 ppb m

response 16807

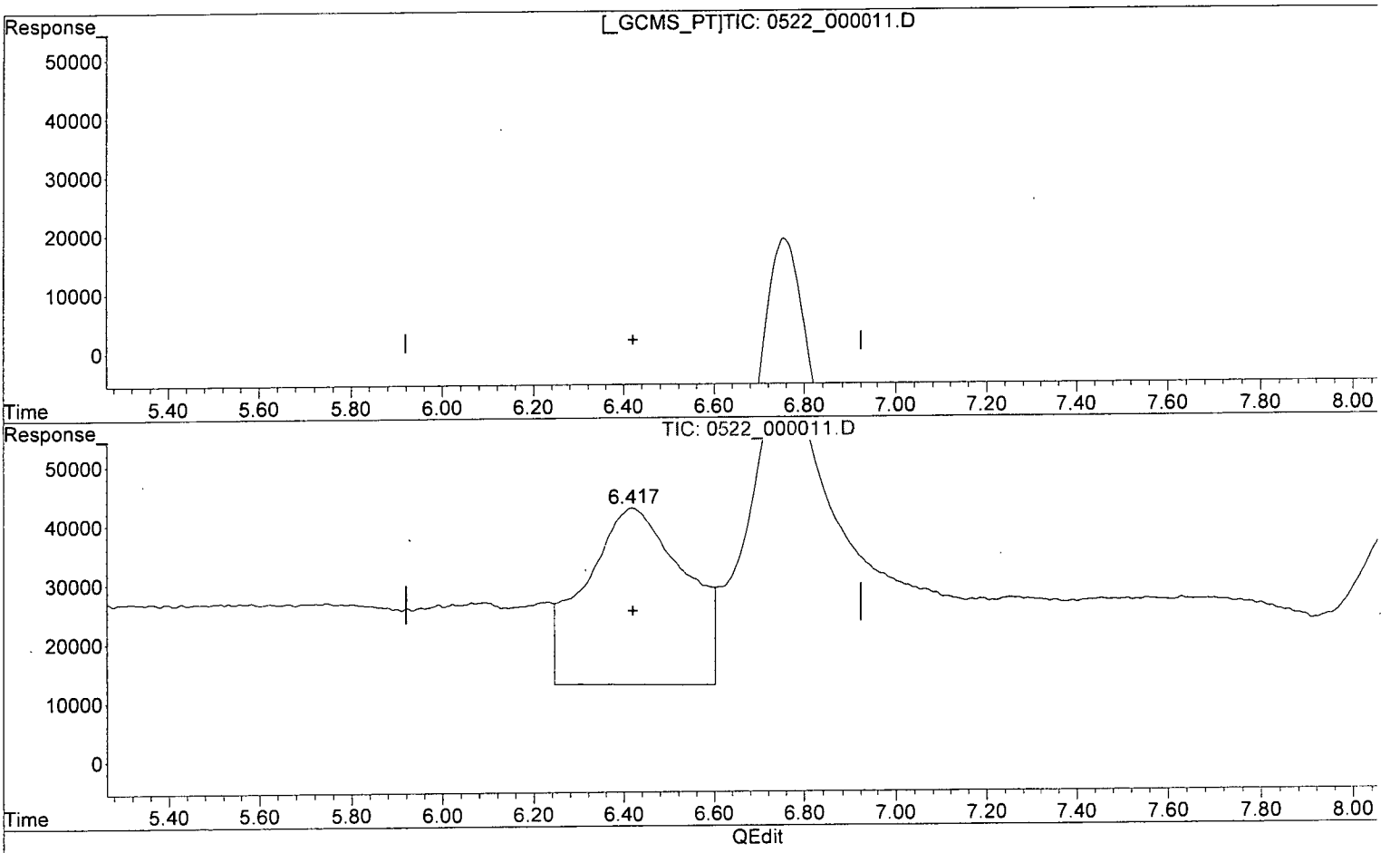
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.418min 16.136 ppb

response 29887

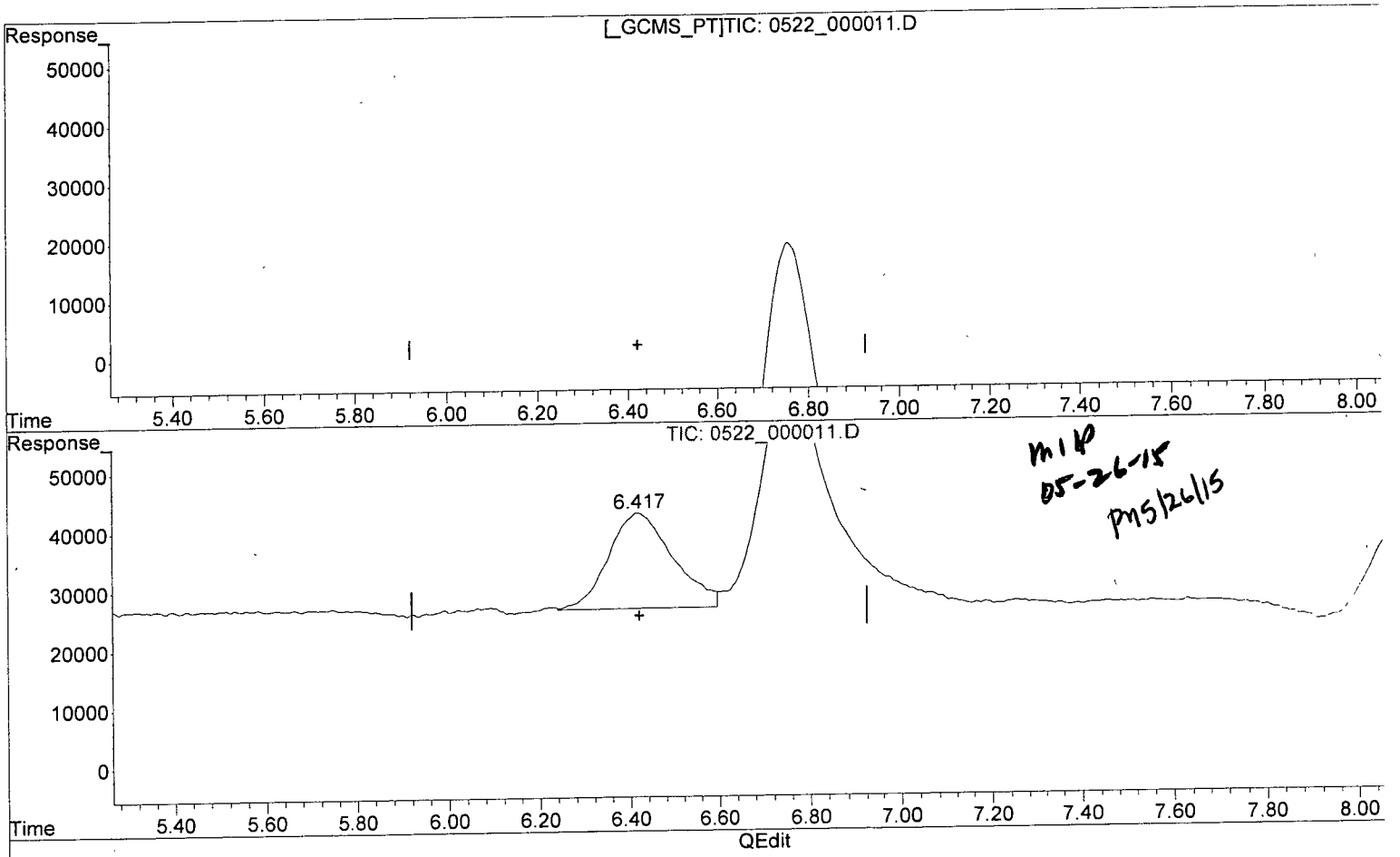
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.417min 8.719 ppb m

response 16148

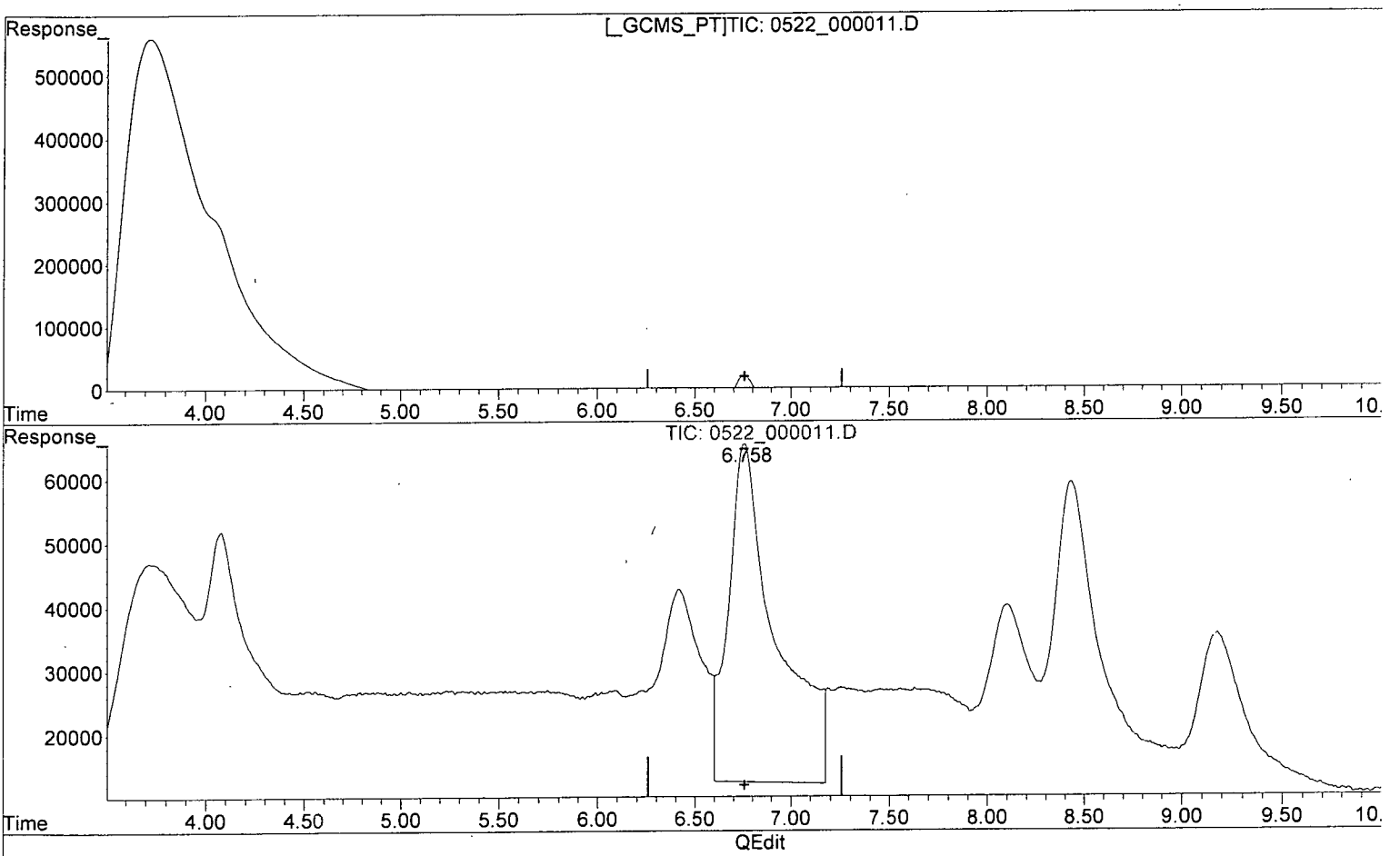
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.757min 11.817 ppb

response 52819

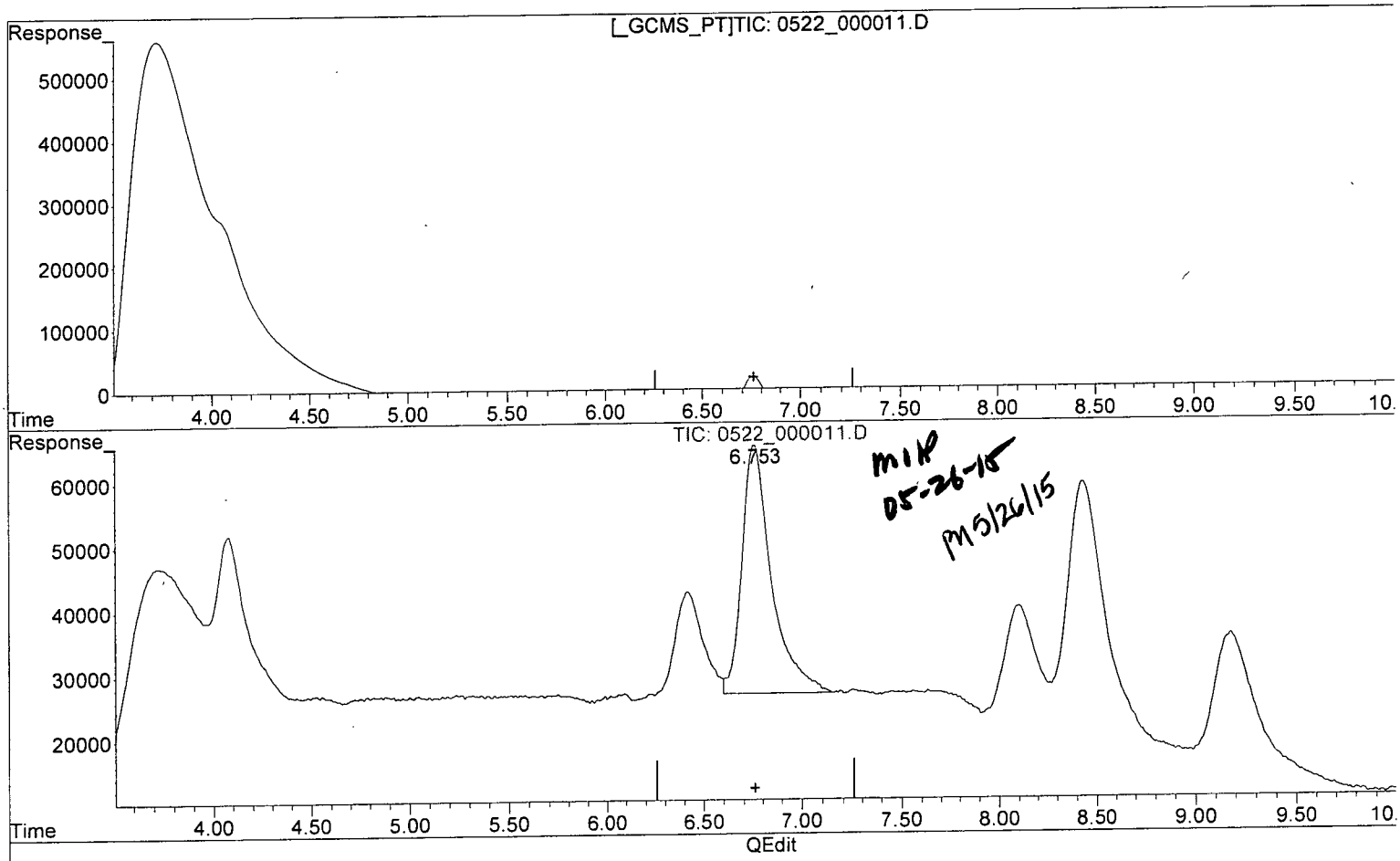
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.753min 8.627 ppb m

response 38559

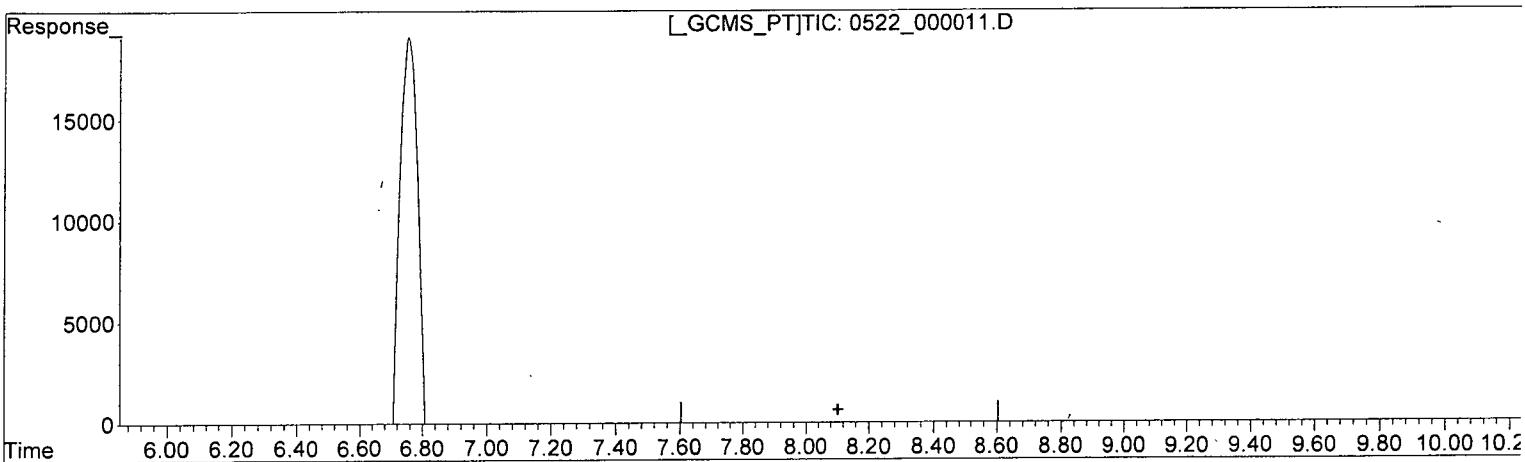
(+) = Expected Retention Time

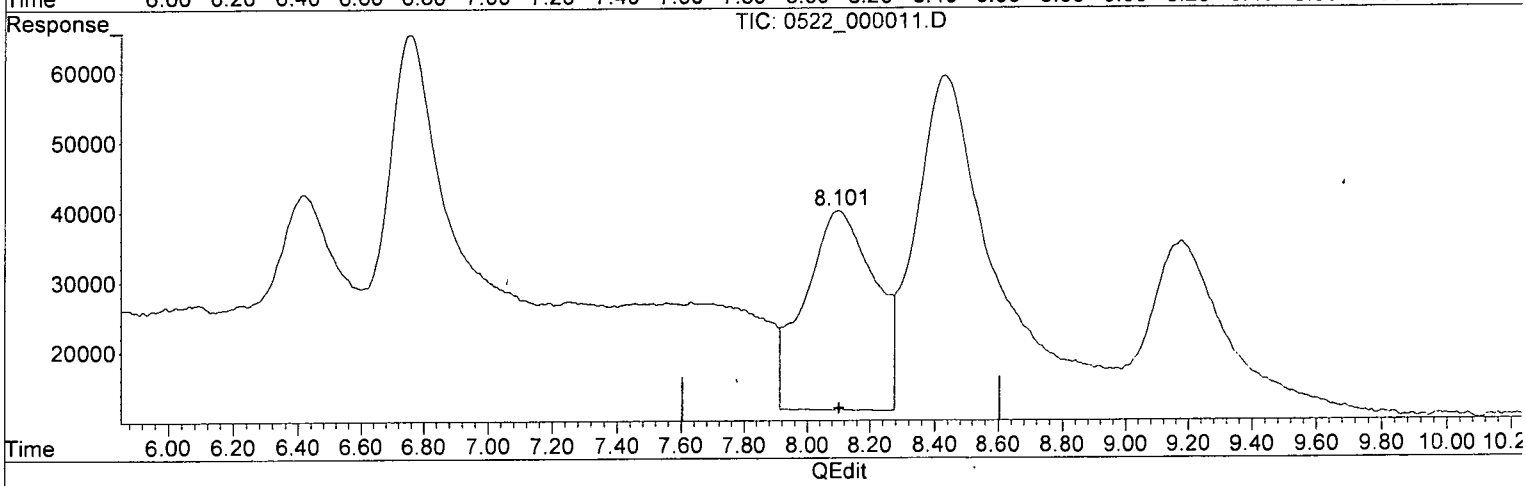
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.101min 13.504 ppb

response 28490

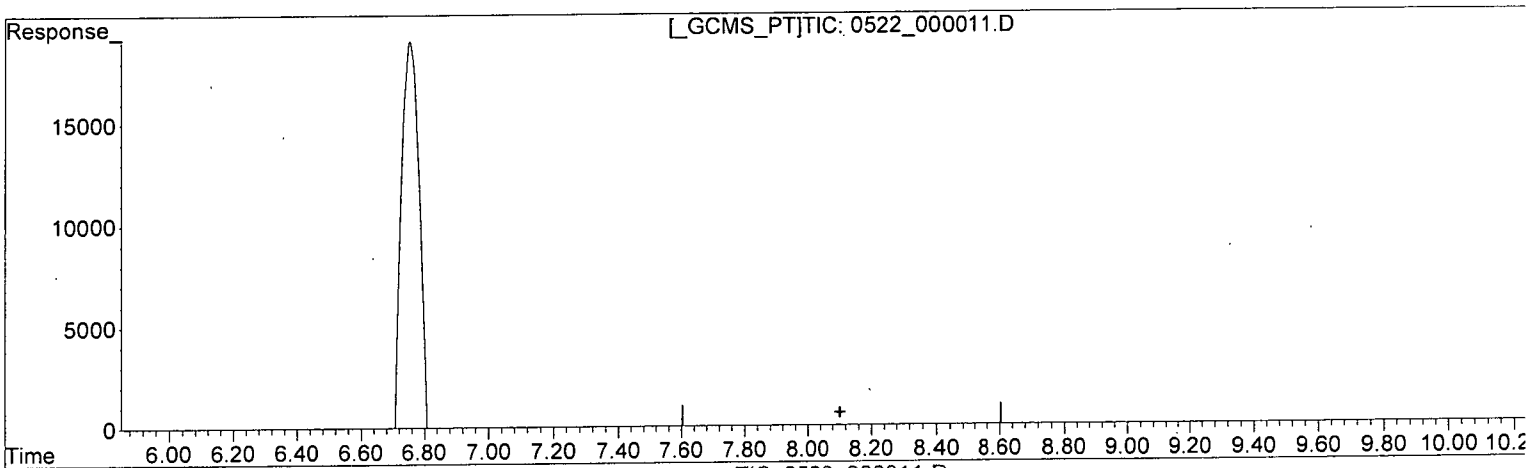
(+) = Expected Retention Time

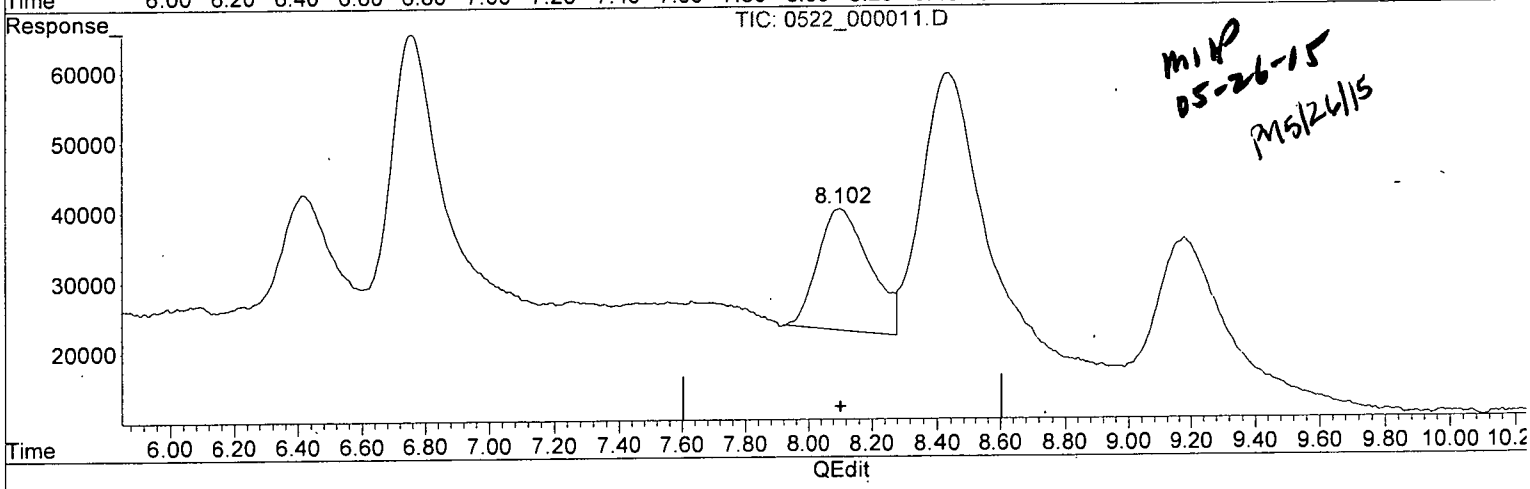
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MLP 05-26-15 5/26/15

(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.102min 8.198 ppb m

response 17296

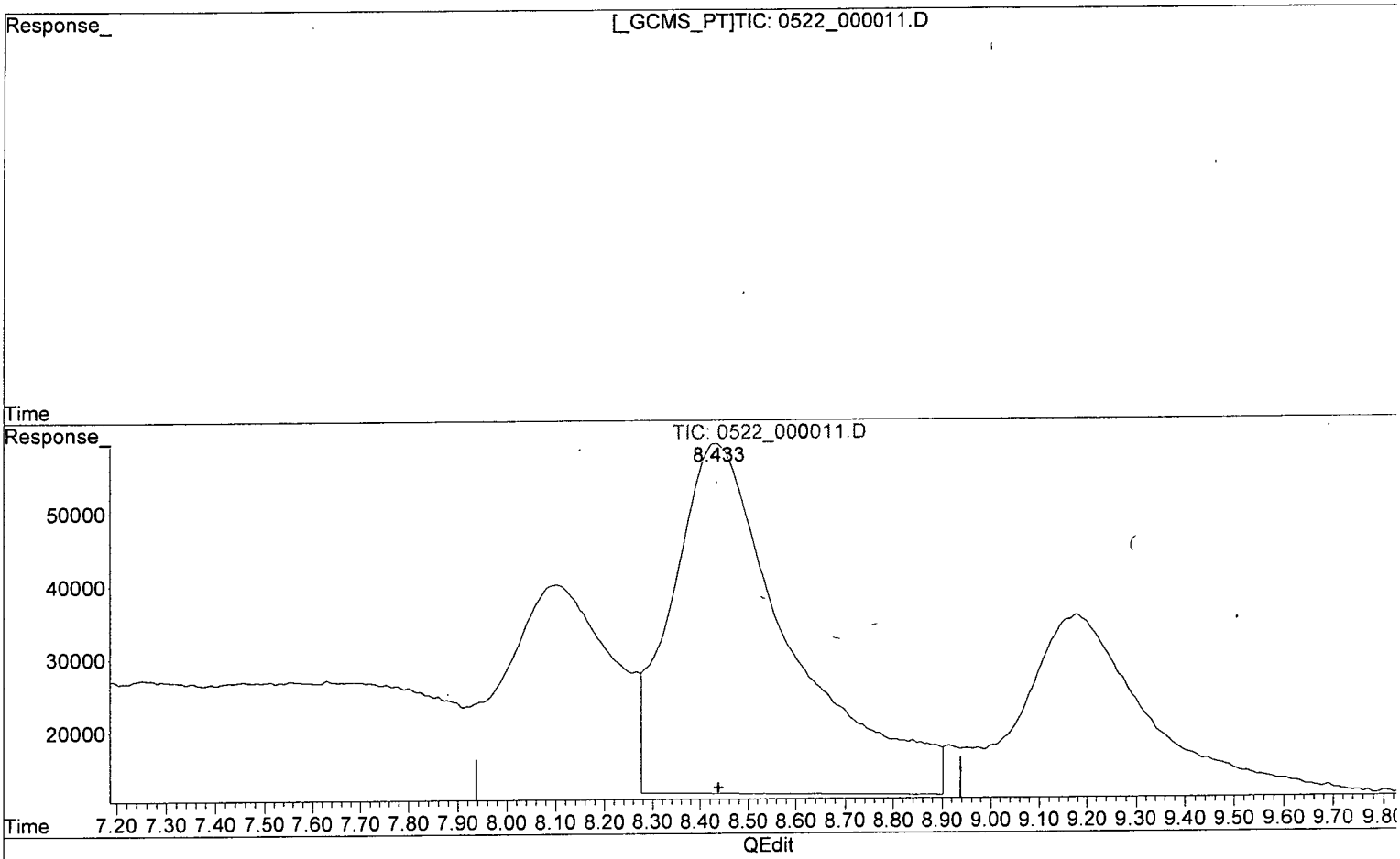
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.431min 10.647 ppb

response 47884

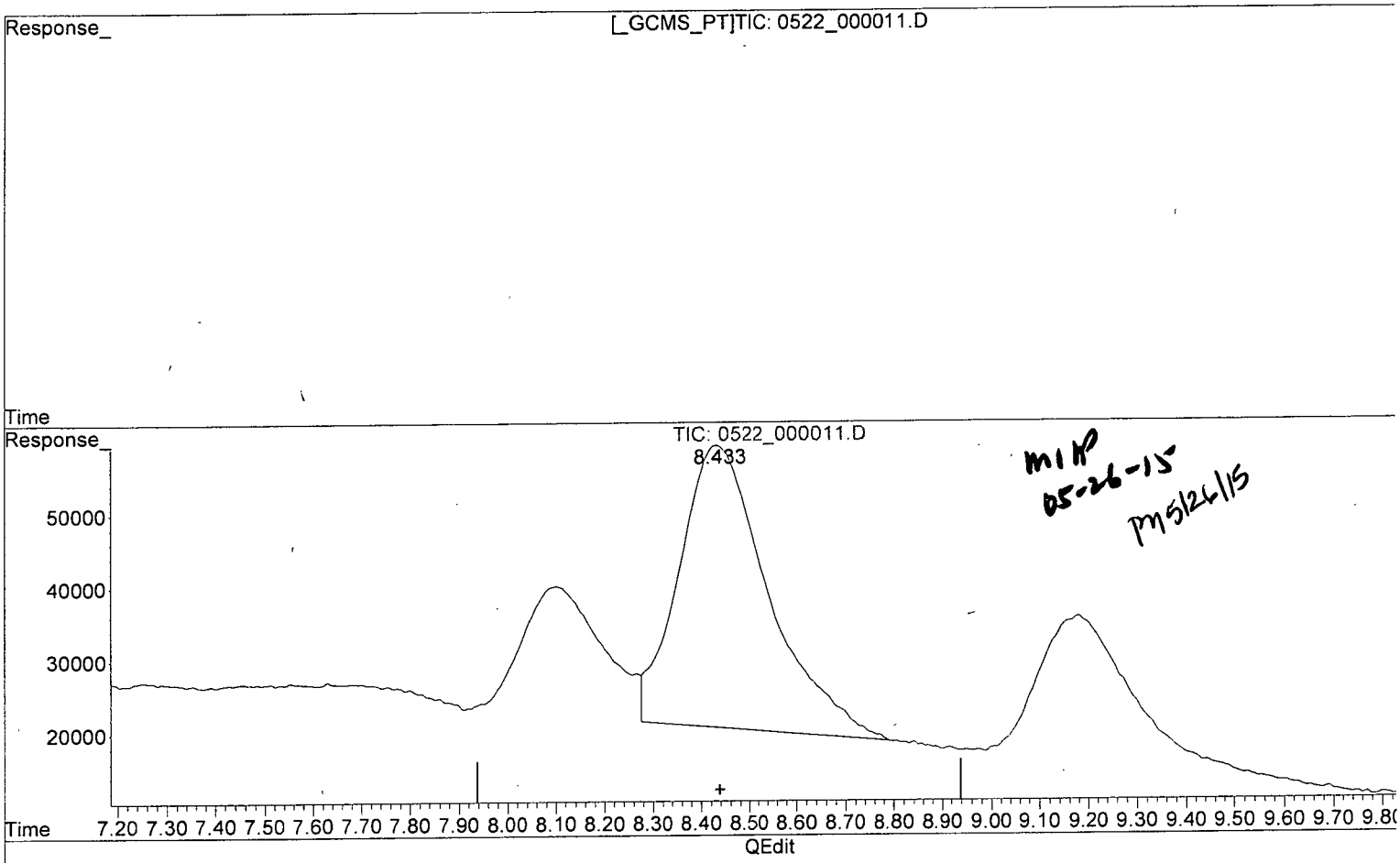
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.433min 8.576 ppb m

response 38569

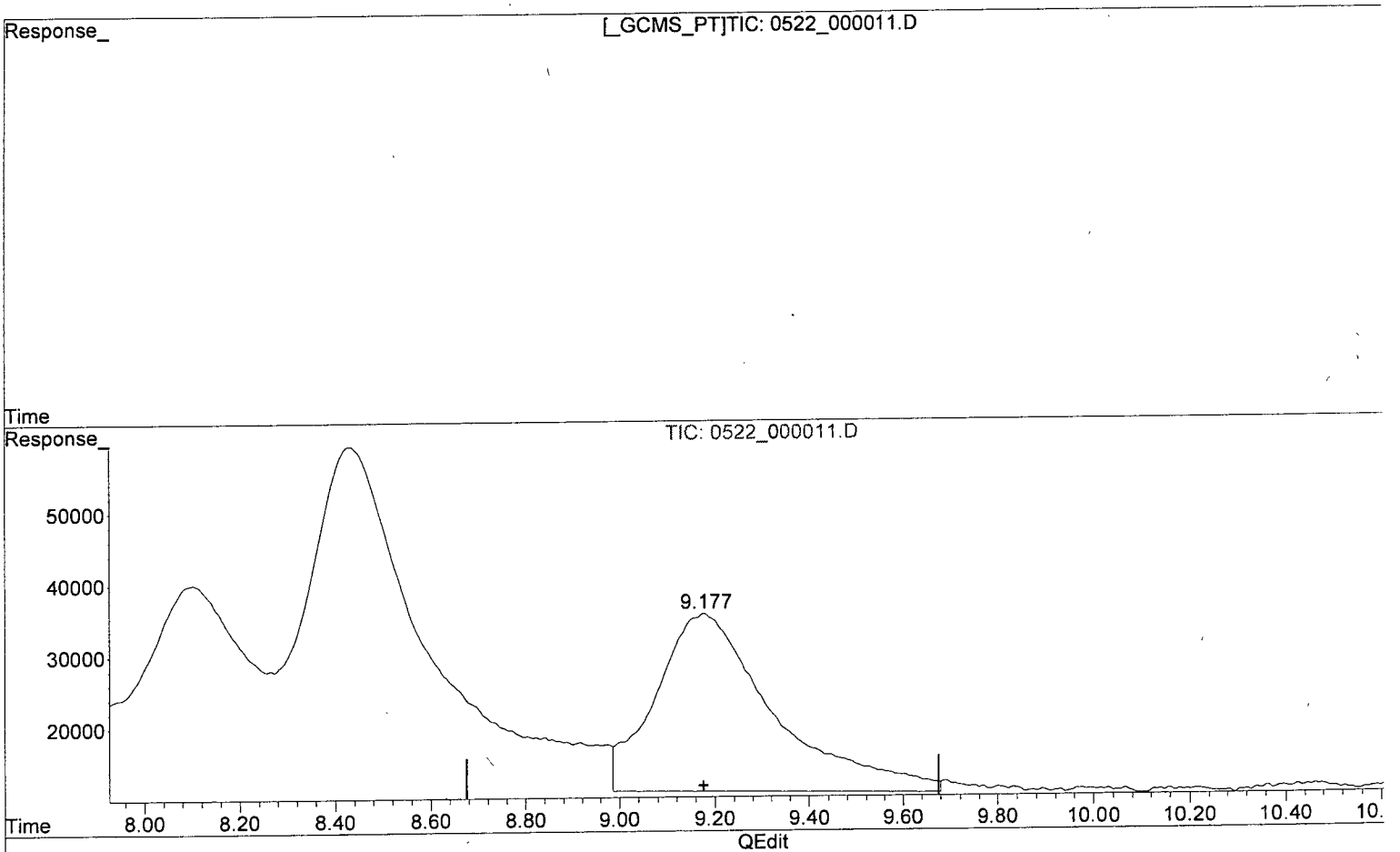
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.178min 9.671 ppb

response 24773

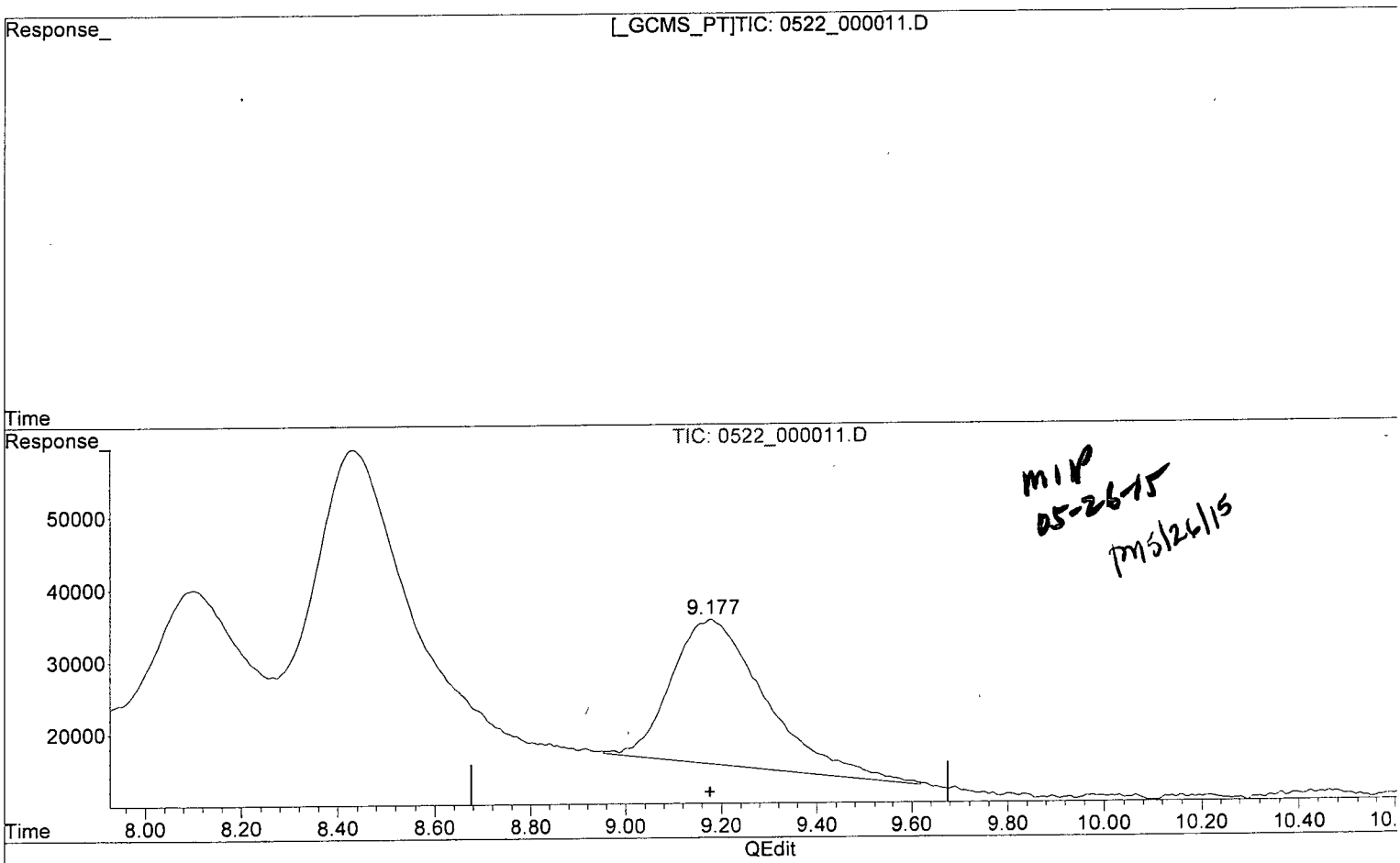
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.177min 7.841 ppb m

response 20086

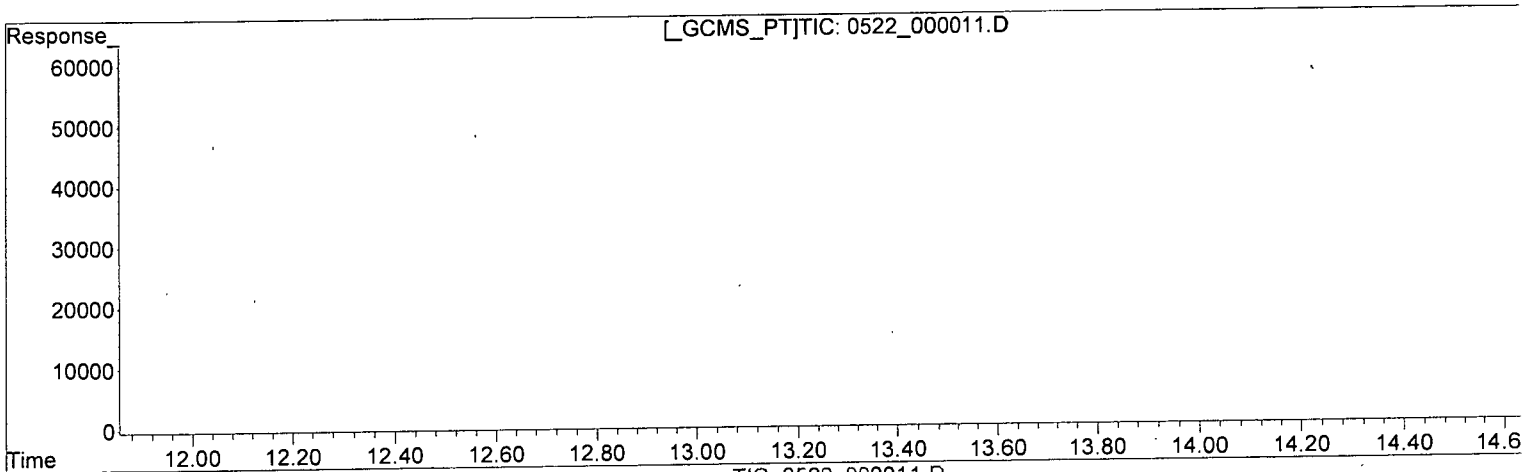
(+) = Expected Retention Time

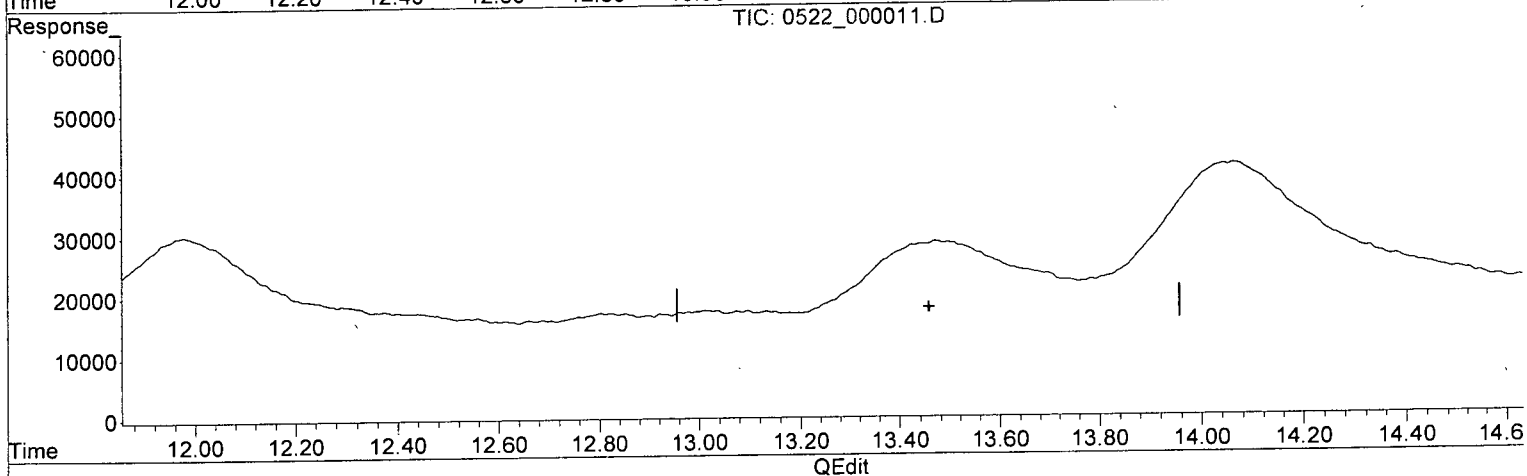
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-ı





QEdit

(10) 2,6-DINITROTOLUENE (TM)

13.457min 0.000 ppb

response 21588

(10) 2,6-DINITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

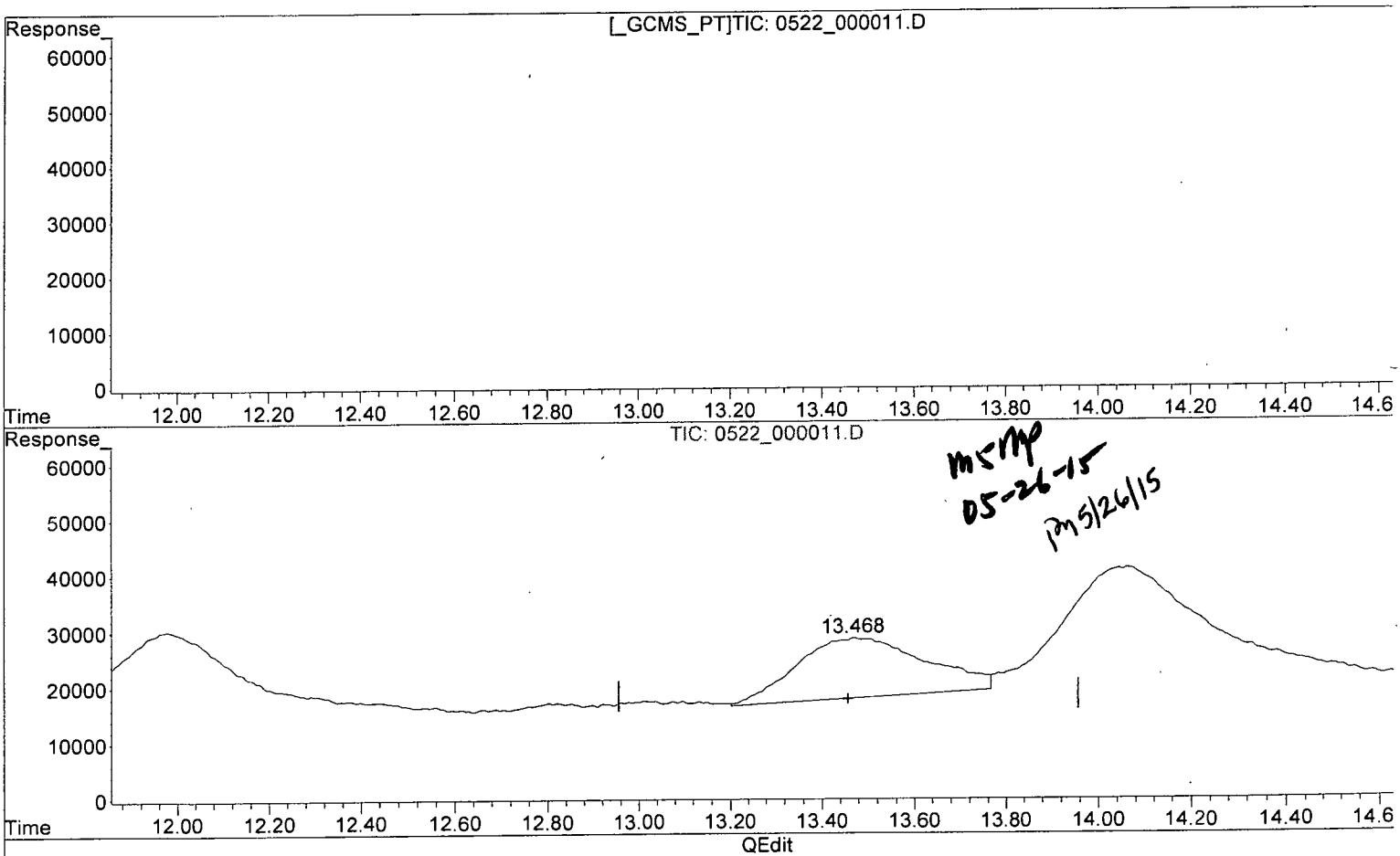
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(10) 2,6-DINITROTOLUENE (TM)

13.457min 0.000 ppb

response 21588

(10) 2,6-DINITROTOLUENE #2 (TM)

13.467min 7.263 ppb m

response 10727

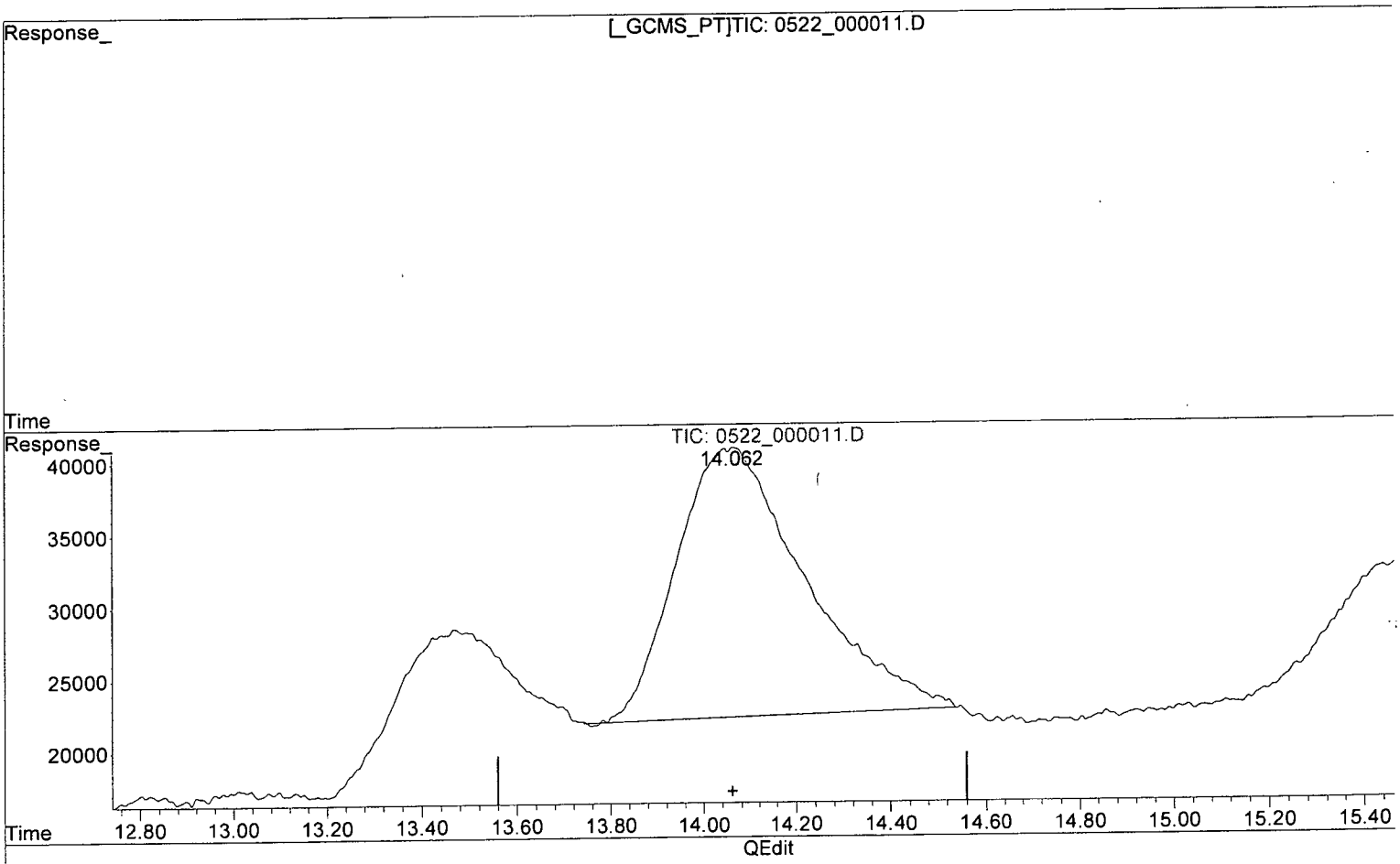
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(11) 2,4-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(11) 2,4-DINITROTOLUENE #2 (TM)

14.065min 7.394 ppb

response 18629

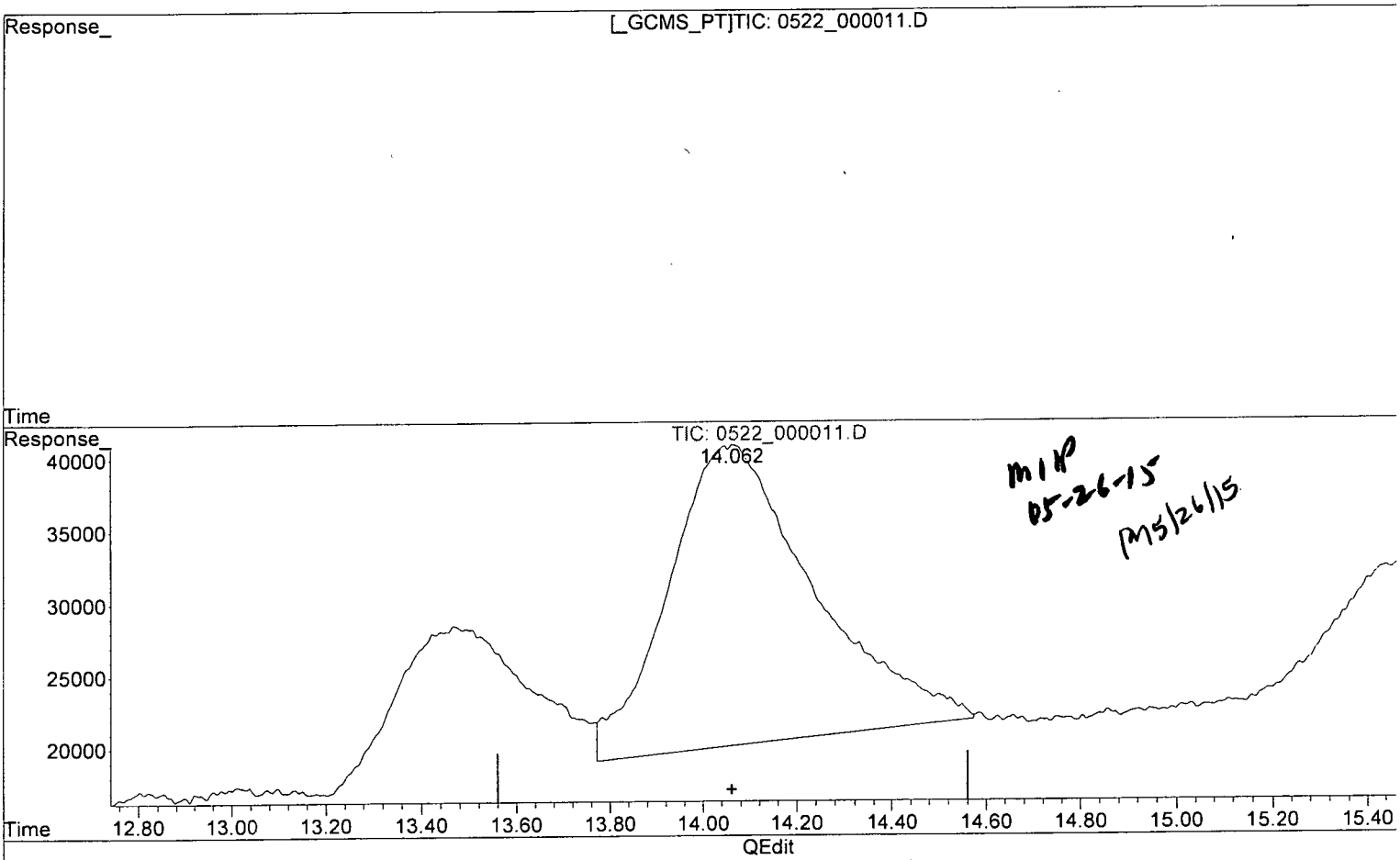
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MHP 05-26-15 M5/26/15

(11) 2,4-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(11) 2,4-DINITROTOLUENE #2 (TM)

14.062min 8.239 ppb m

response 20758

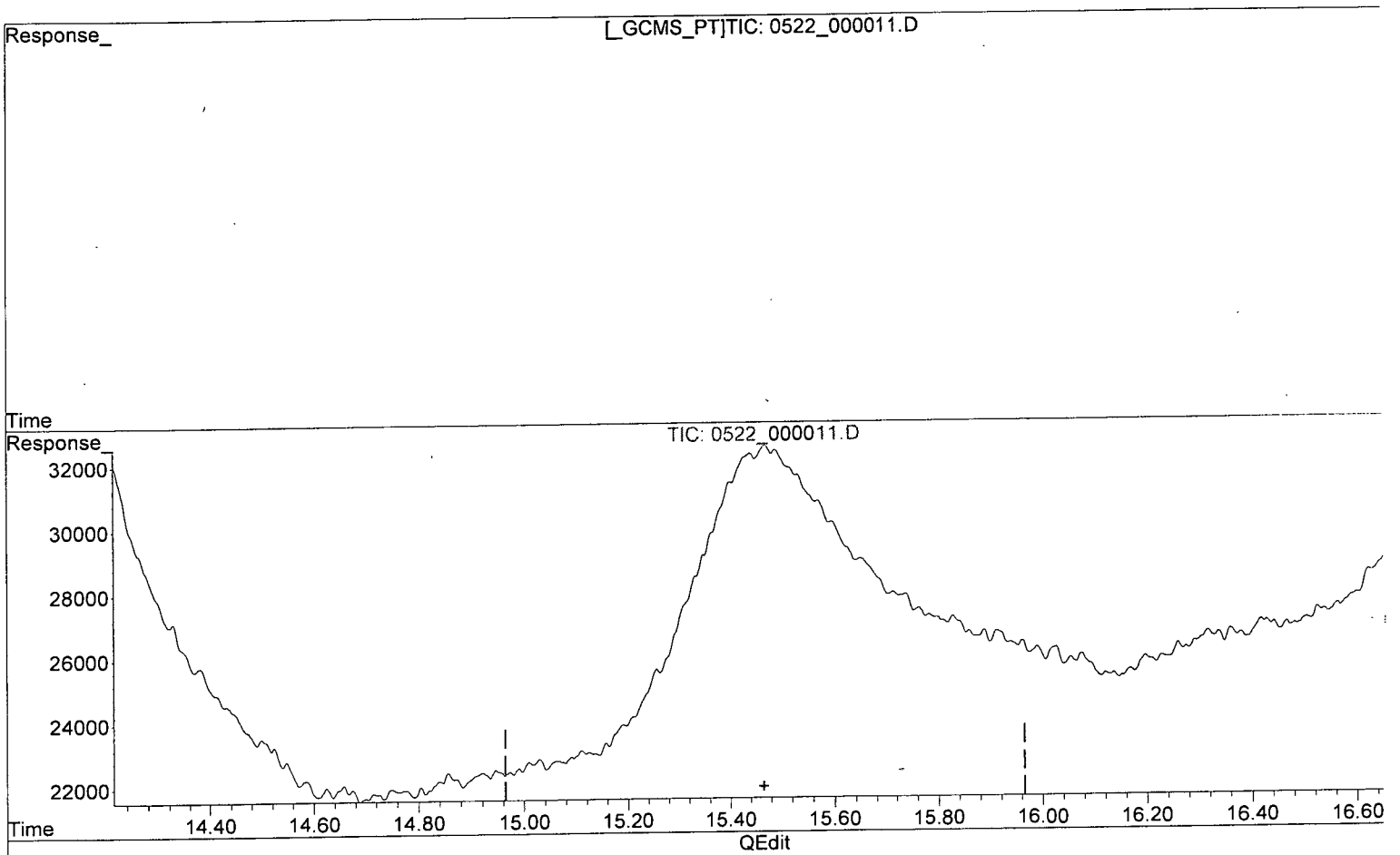
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

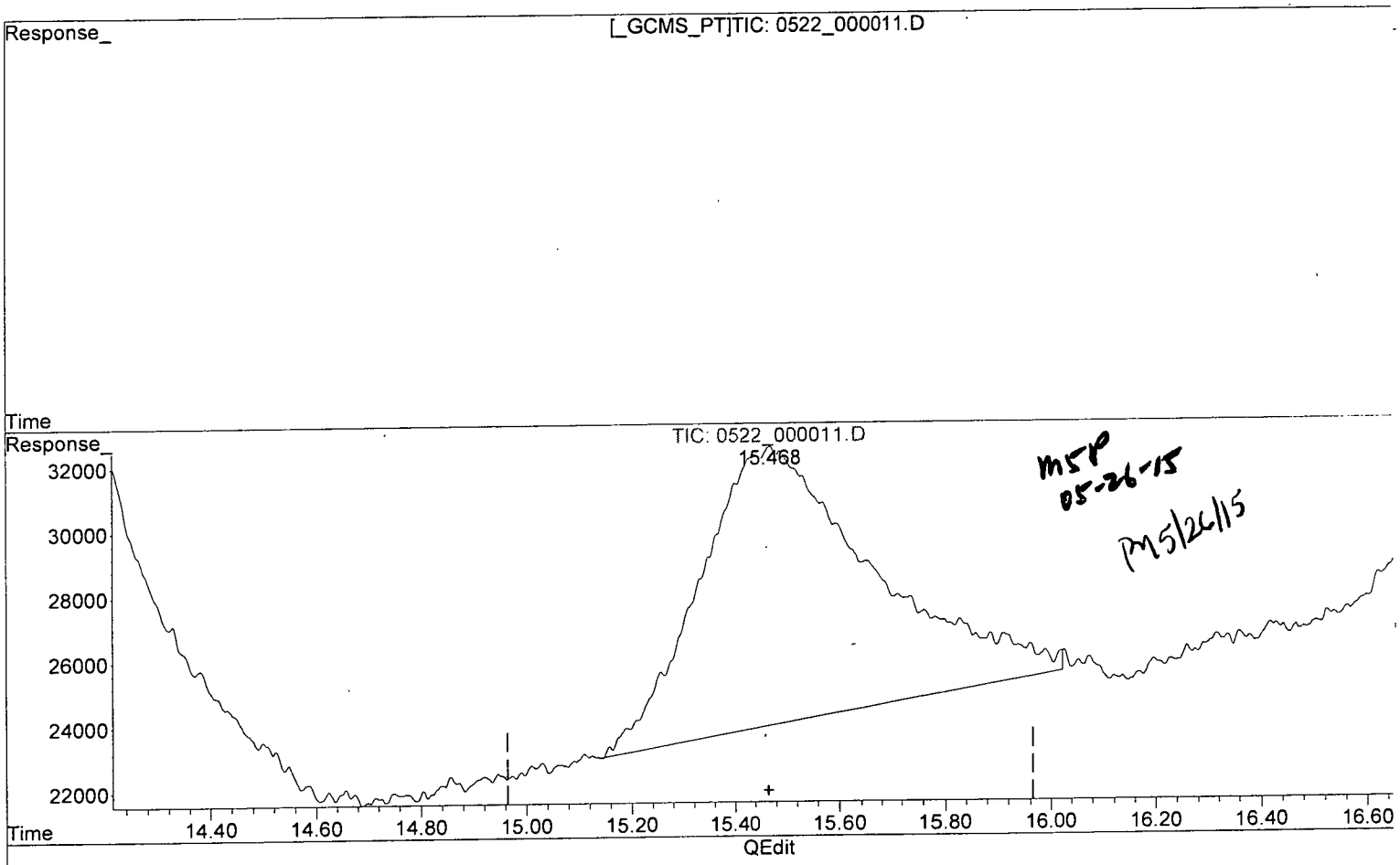
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

15.468min 8.142 ppb m

response 8585

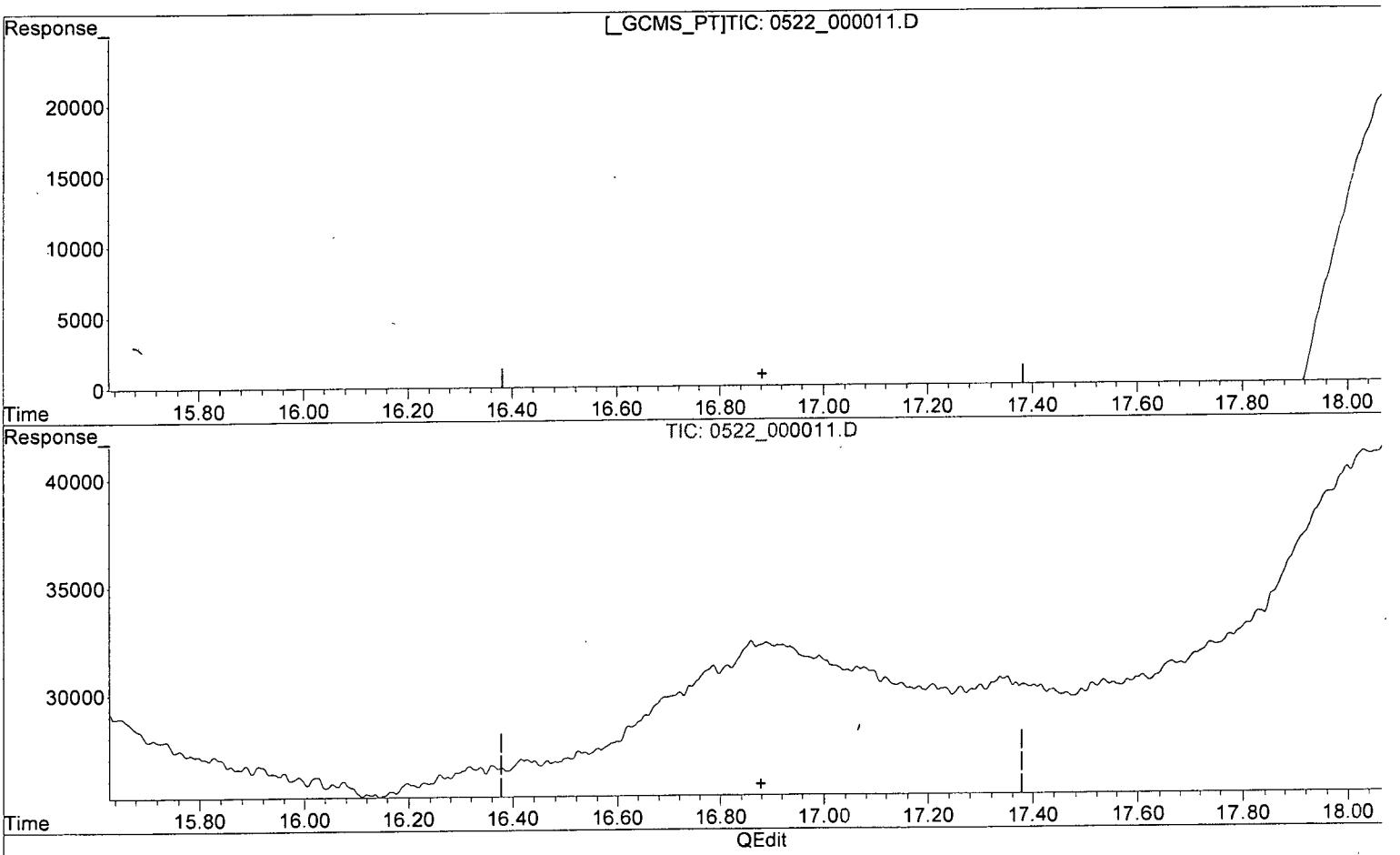
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(13) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(13) 4-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

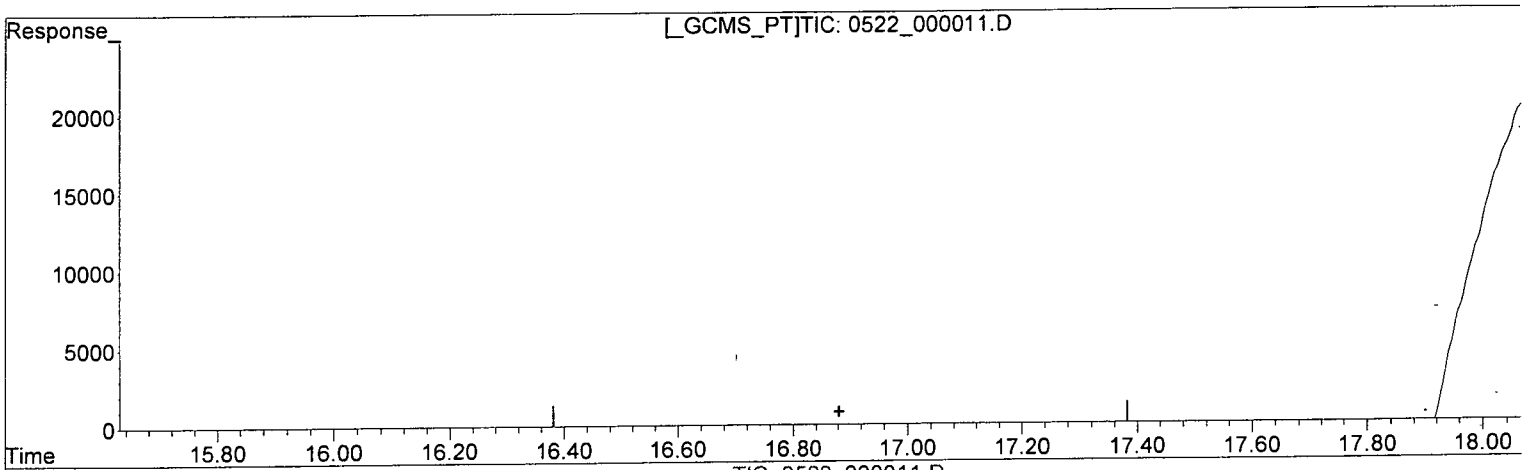
(+) = Expected Retention Time

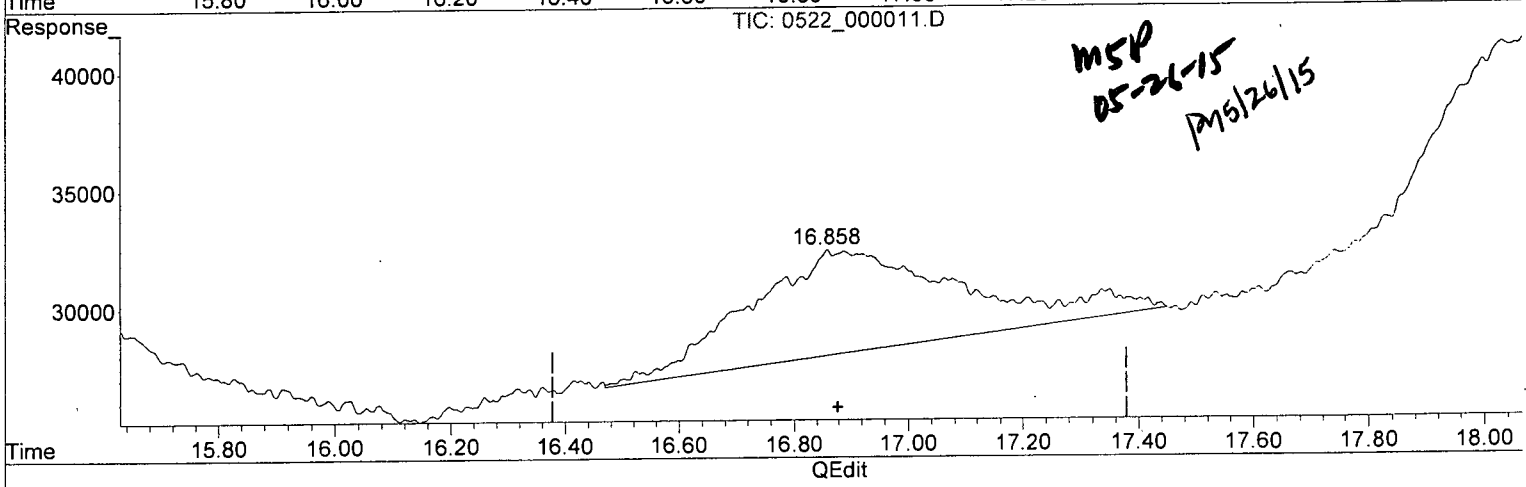
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





(13) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(13) 4-NITROTOLUENE #2 (TM)

16.858min 5.100 ppb m

response 4467

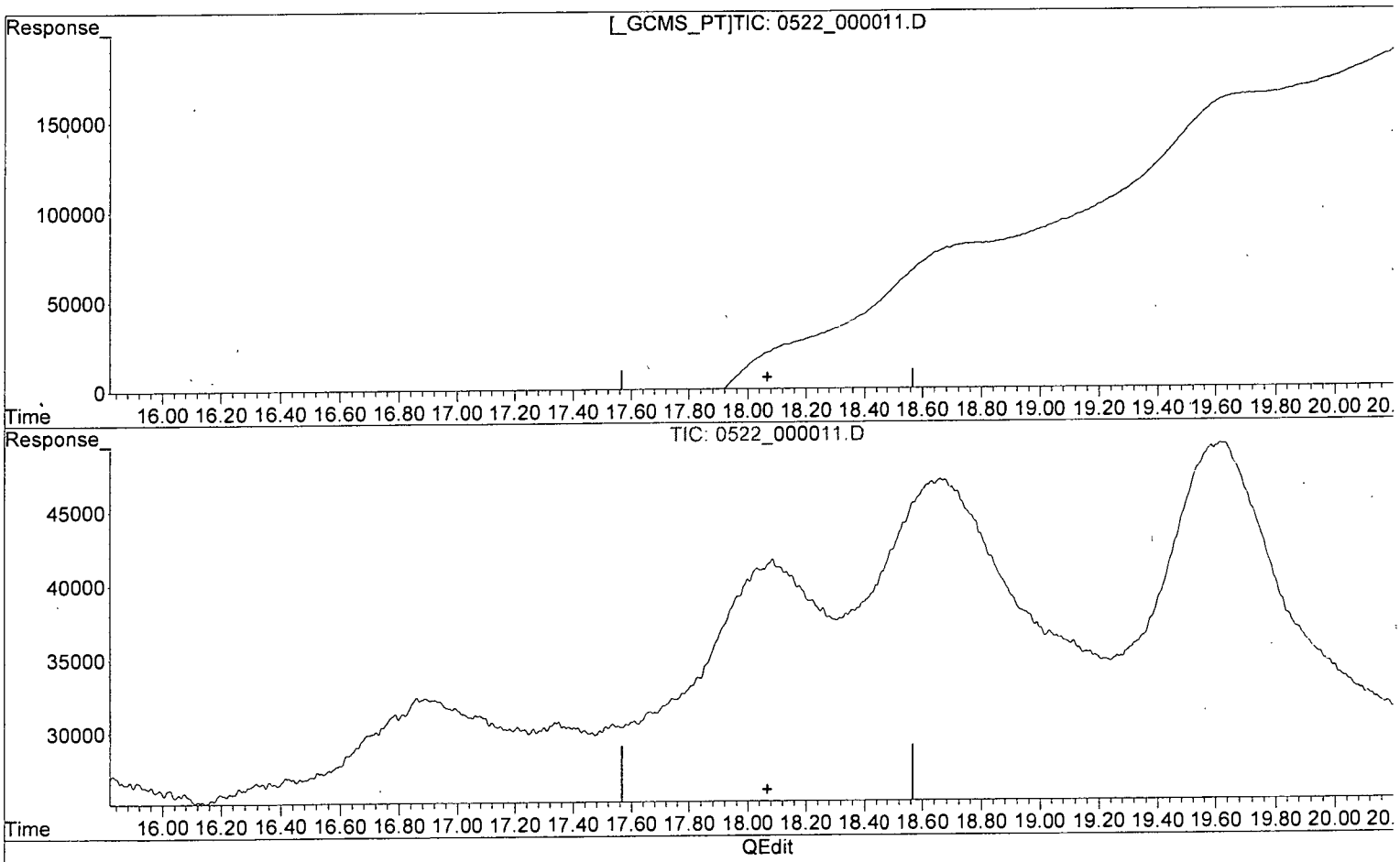
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(15) 3-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 3-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

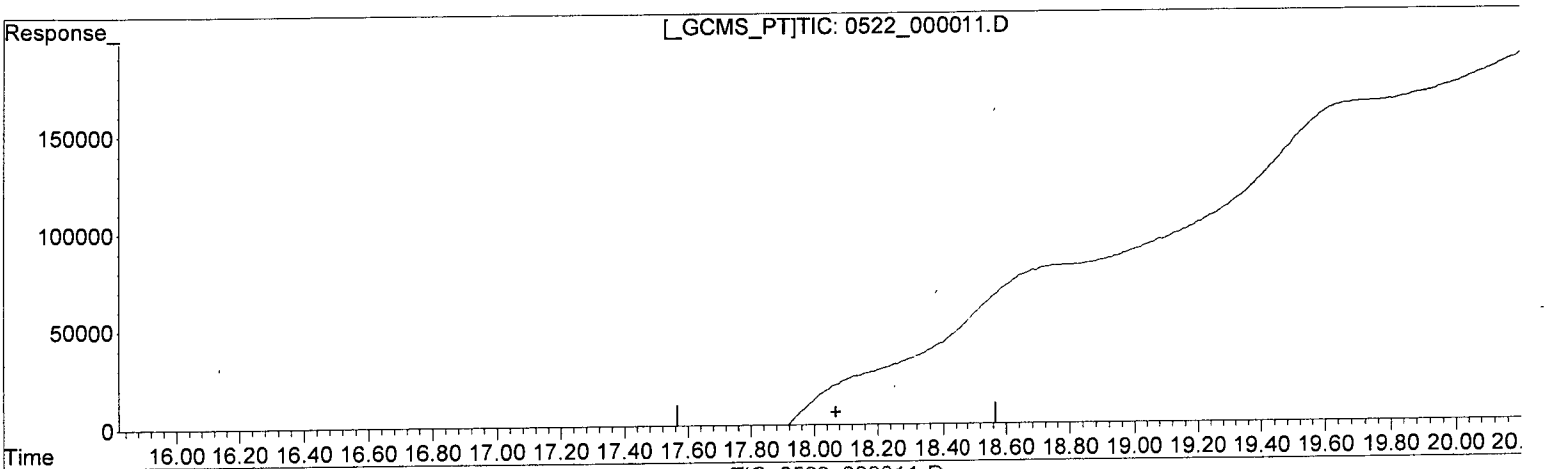
(+) = Expected Retention Time

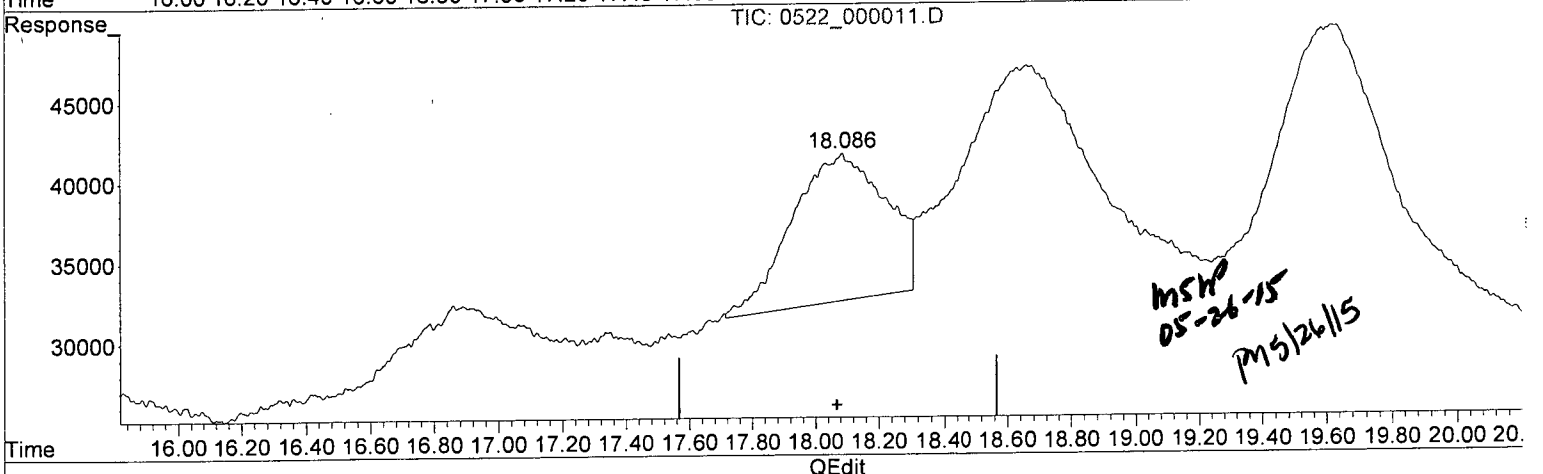
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(15) 3-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 3-NITROTOLUENE #2 (TM)

18.086min 8.544 ppb m

response 9136

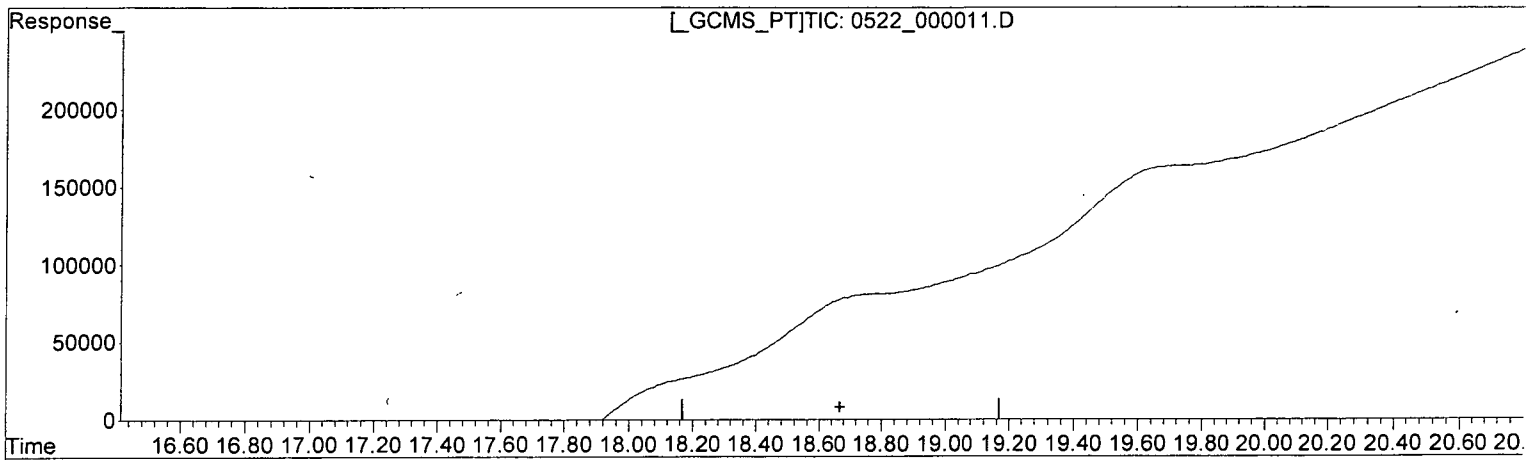
(+) = Expected Retention Time

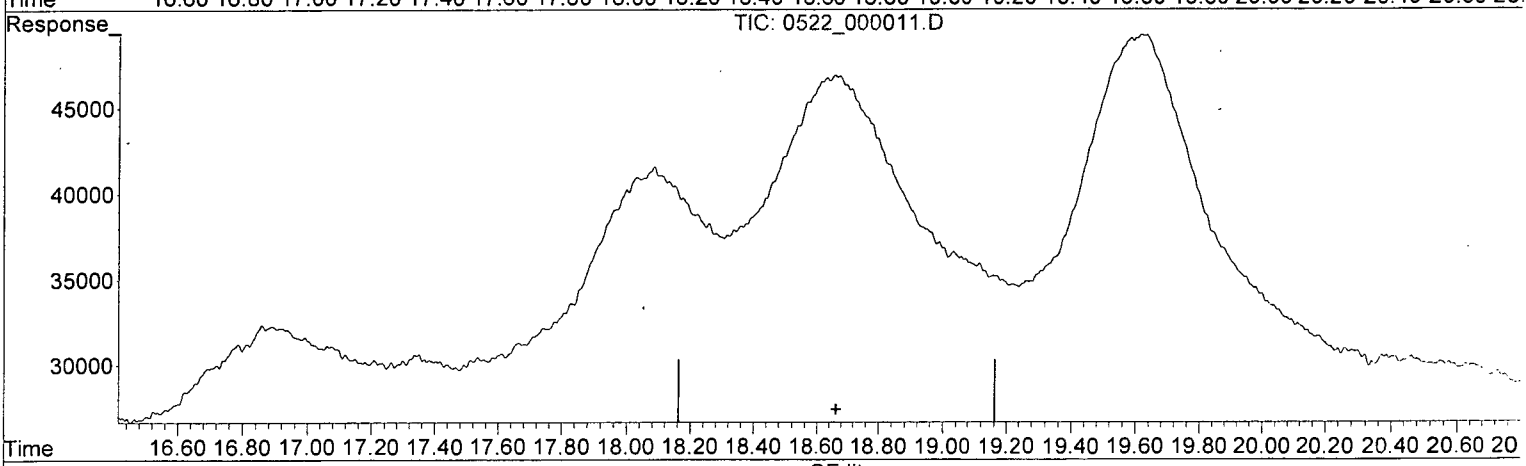
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(16) 4-AMINO-2,6-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(16) 4-AMINO-2,6-DINITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

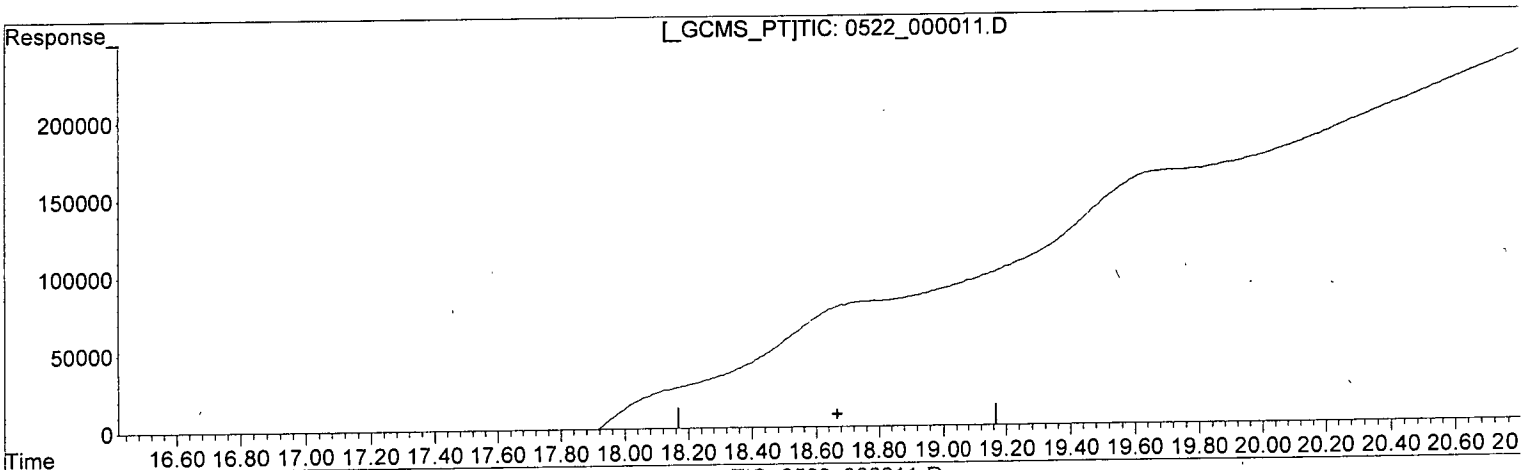
(+) = Expected Retention Time

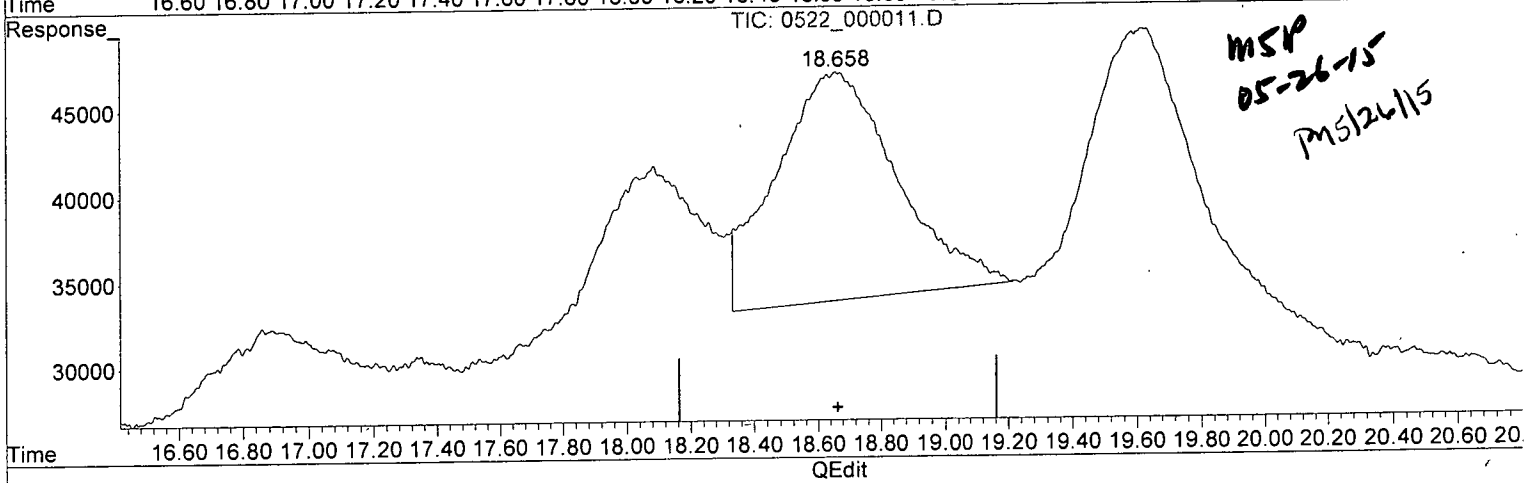
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 15:32:10
Operator : MP
Sample : 8330MXA_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4226 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:05 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MSP 05-26-15 PM 5/26/15

(16) 4-AMINO-2,6-DINITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(16) 4-AMINO-2,6-DINITROTOLUENE #2 (TM)

18.658min 9.500 ppb m

response 13310

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:11:42
Operator : MP
Sample : 8330MXB_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4227 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:03:03 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1) TM	HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM	RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM	1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM	1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM	NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM	2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM	NITROGLYC...	12.069	12.012	8300	427	9.114	NoCal #
9) TM	TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM	2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM	2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM	2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM	4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM	3,5-DINIT...	0.000	16.538	0	17290	N.D.	8.662m#
15) TM	3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM	4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM	2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

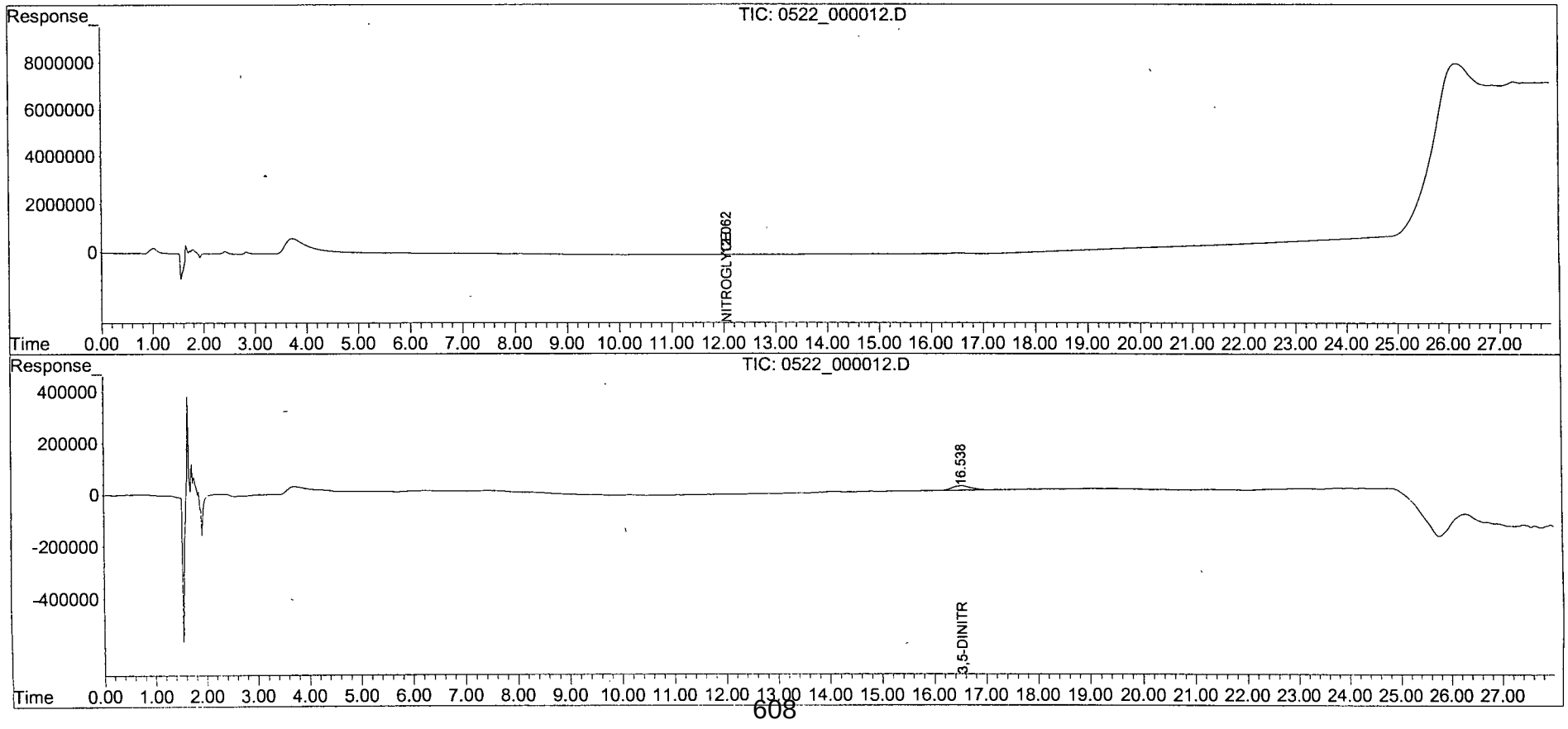
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:11:42
Operator : MP
Sample : 8330MXB_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4227 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:03:03 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

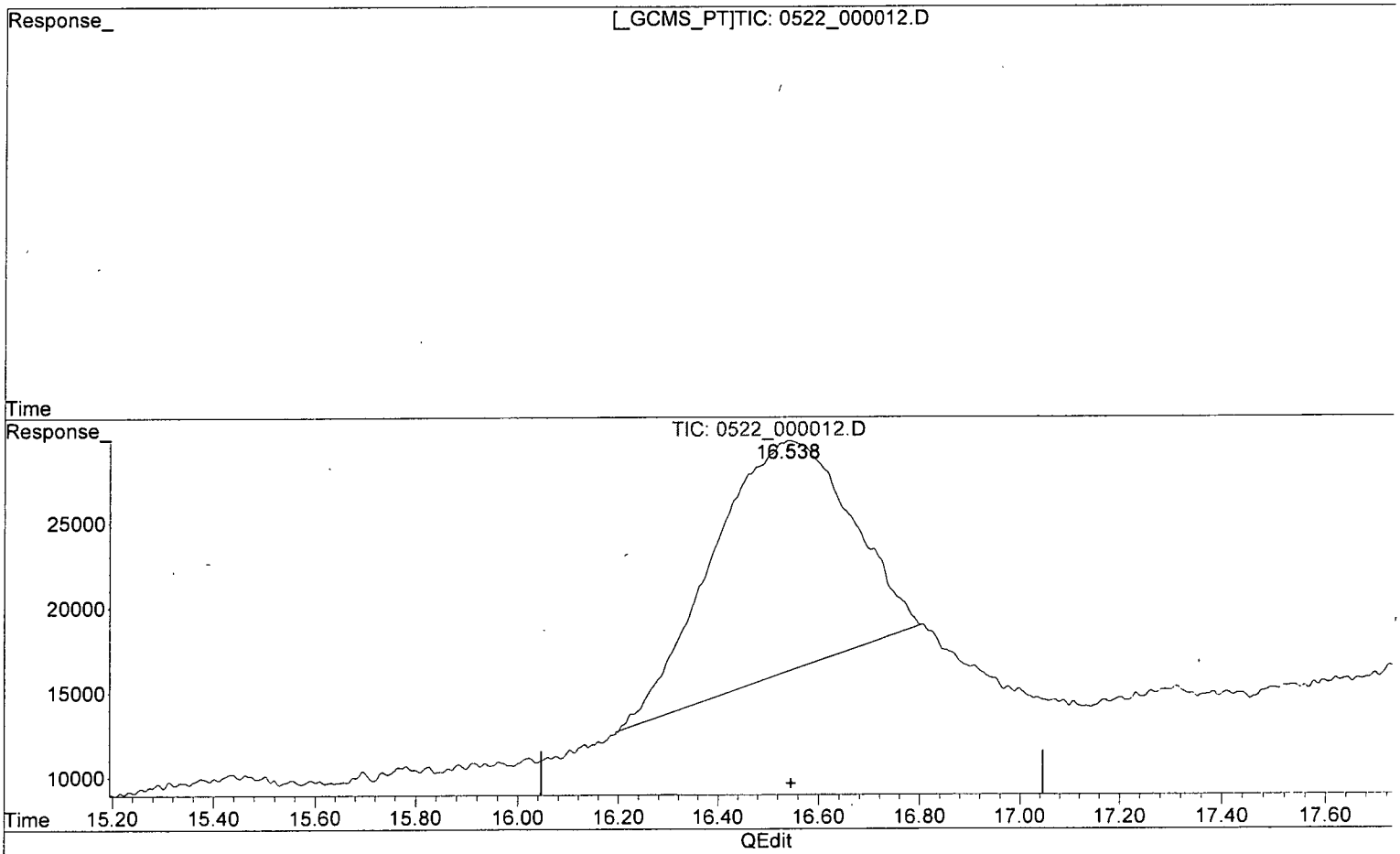


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:11:42
Operator : MP
Sample : 8330MXB_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4227 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:08 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

16.542min 6.767 ppb

response 13506

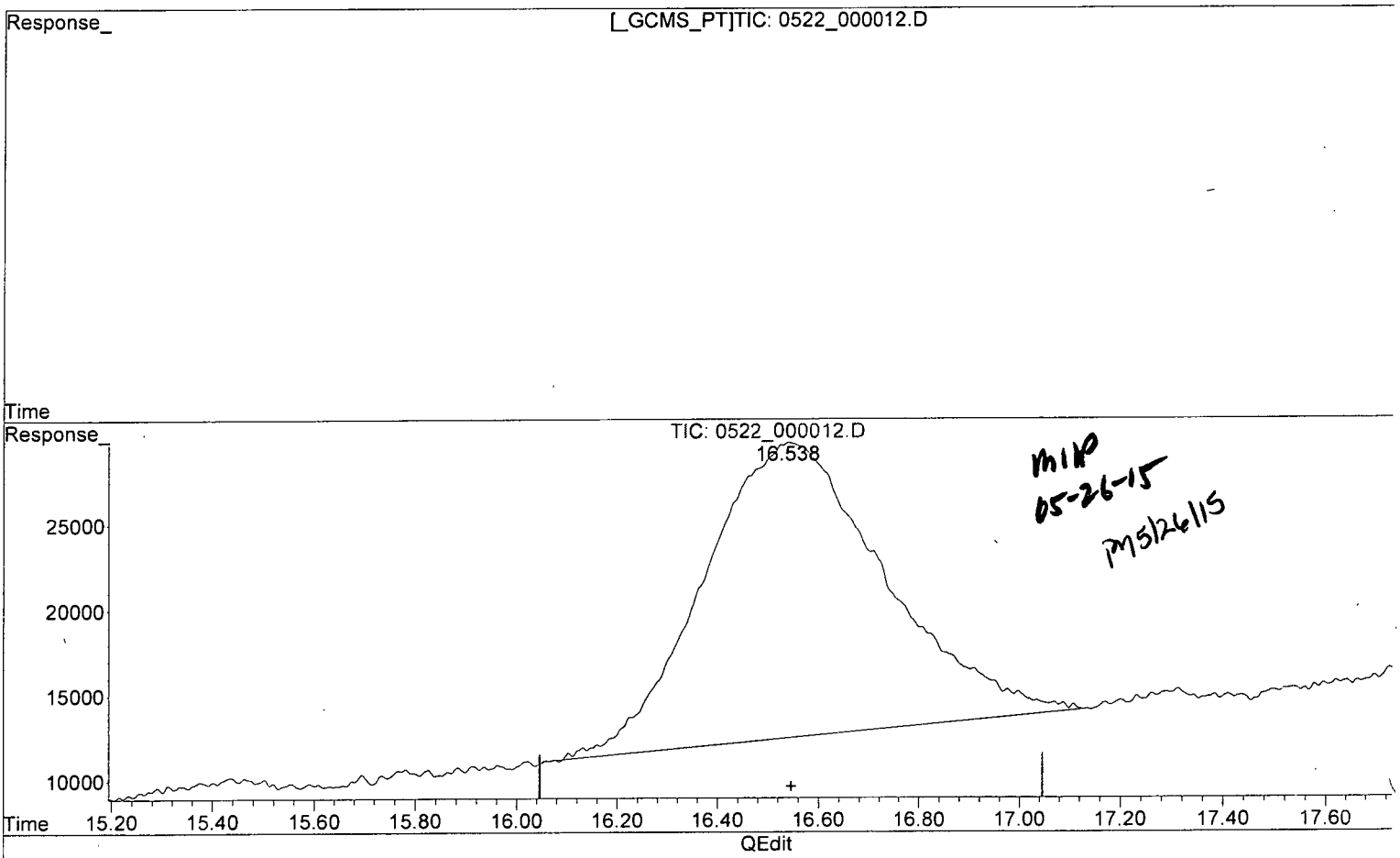
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:11:42
Operator : MP
Sample : 8330MXB_CB 0.010 PPM 05/22/15
Misc :
ALS Vial : 4227 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:08 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

16.538min 8.662 ppb m

response 17290

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:50:55 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	8.097	0	35930	N.D.	17.030m#
	Spiked Amount 62.500			Recovery	=	0.00%	27.25%
	Target Compounds						
1)	TM HMX	0.000	4.078	0	37138	N.D.	17.661m#
2)	TM RDX	0.000	6.420	0	30890	N.D.	16.678m#
3)	TM 1,3,5-TRI...	0.000	6.758	0	78697	N.D.	17.607m#
5)	TM 1,3-DINIT...	0.000	8.432	0	79097	N.D.	17.588m#
6)	TM NITROBENZENE	0.000	9.169	0	42712	N.D.	16.674m#
7)	TM 2,4,6-TRI...	0.000	11.447	0	40720	N.D.	16.040 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.979	11.969	25584	31272	NoCal	18.984 #
10)	TM 2,6-DINIT...	13.451	13.456	39681	24473	NoCal	16.568 #
11)	TM 2,4-DINIT...	0.000	14.055	0	40841	N.D.	16.210 #
12)	TM 2-NITROTO...	0.000	15.476	0	17127	N.D.	16.245m#
13)	TM 4-NITROTO...	0.000	16.897	0	13066	N.D.	14.919 #
14)	TM 3,5-DINIT...	0.000	16.897f	0	13066	N.D.	6.546 #
15)	TM 3-NITROTO...	0.000	18.069	0	19154	N.D.	17.914 #
16)	TM 4-AMINO-2...	0.000	18.648	0	30398	N.D.	21.698 #
17)	TM 2-AMINO-4...	0.000	19.600	0	36708	N.D.	18.007 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

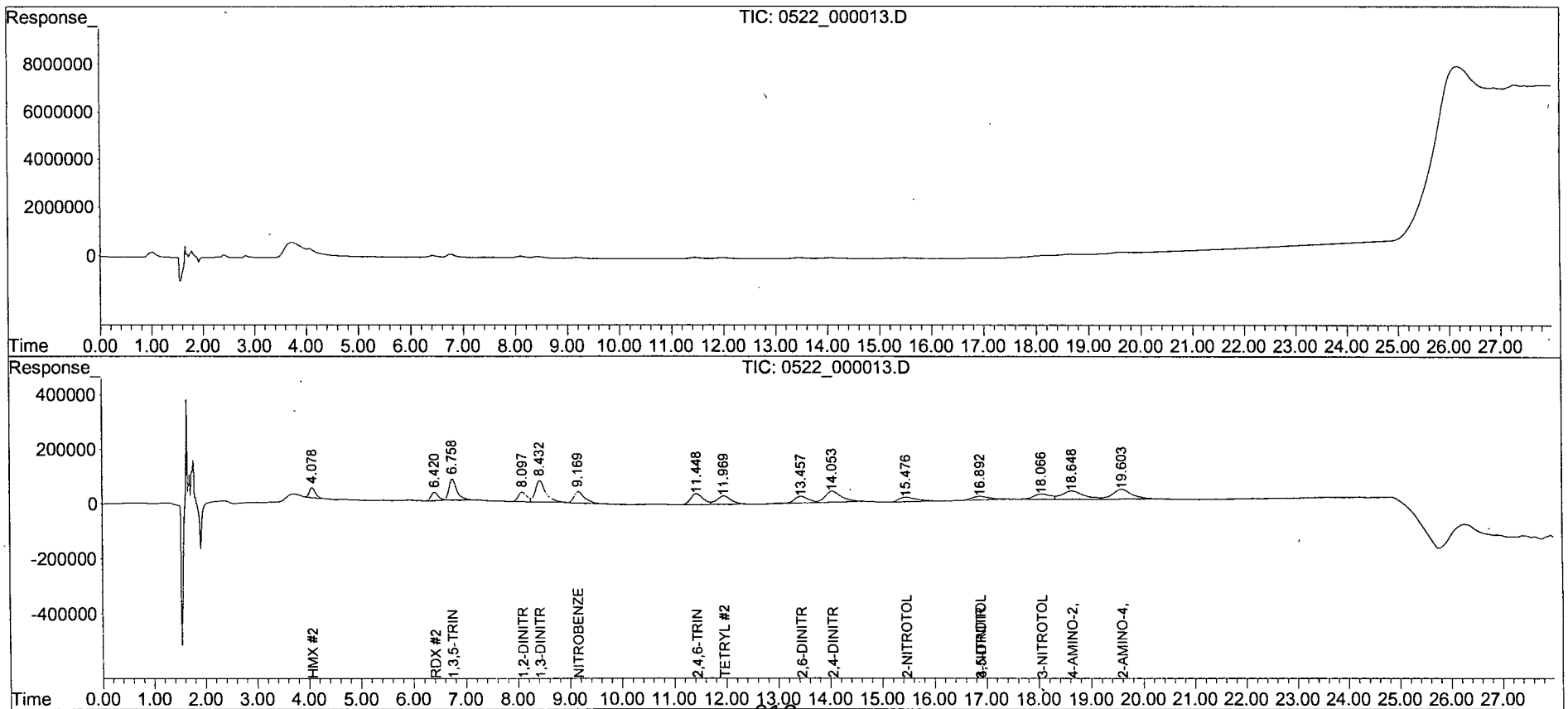
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:50:55 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

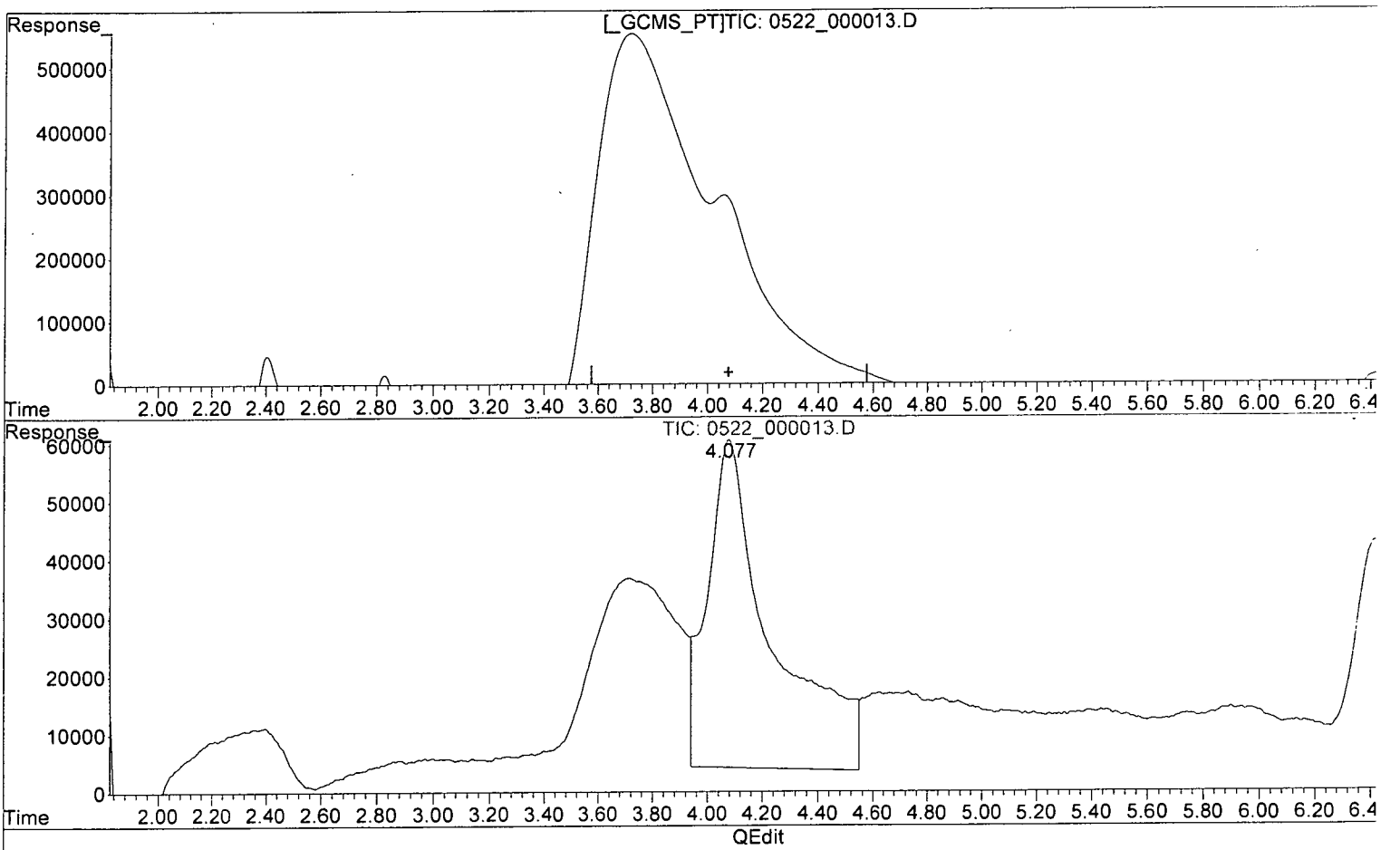


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 26.787 ppb

response 56329

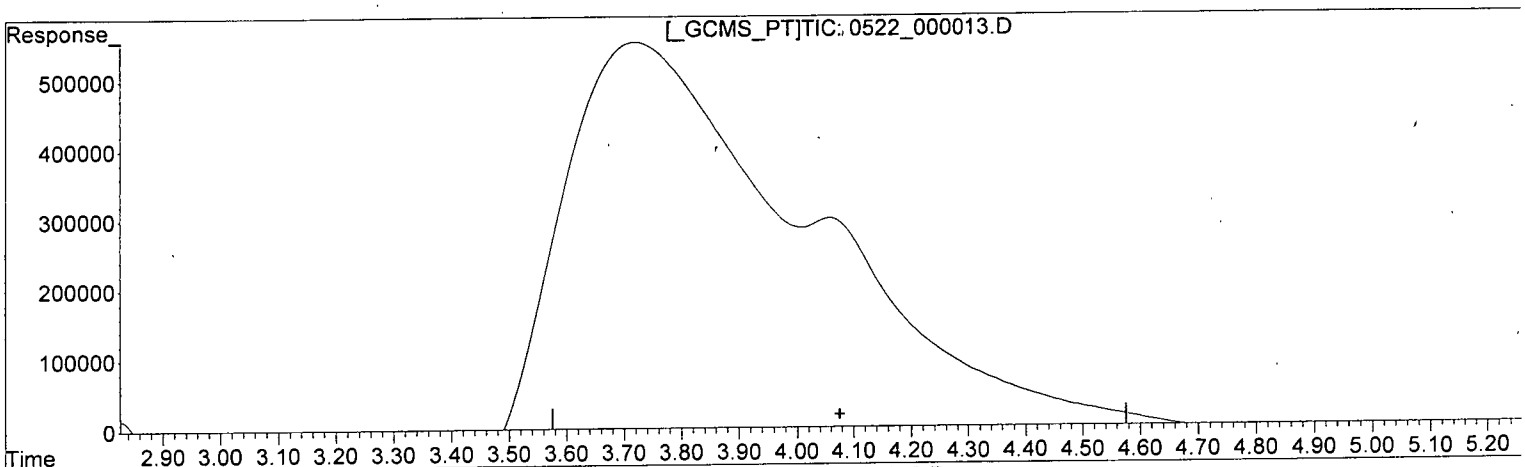
(+) = Expected Retention Time

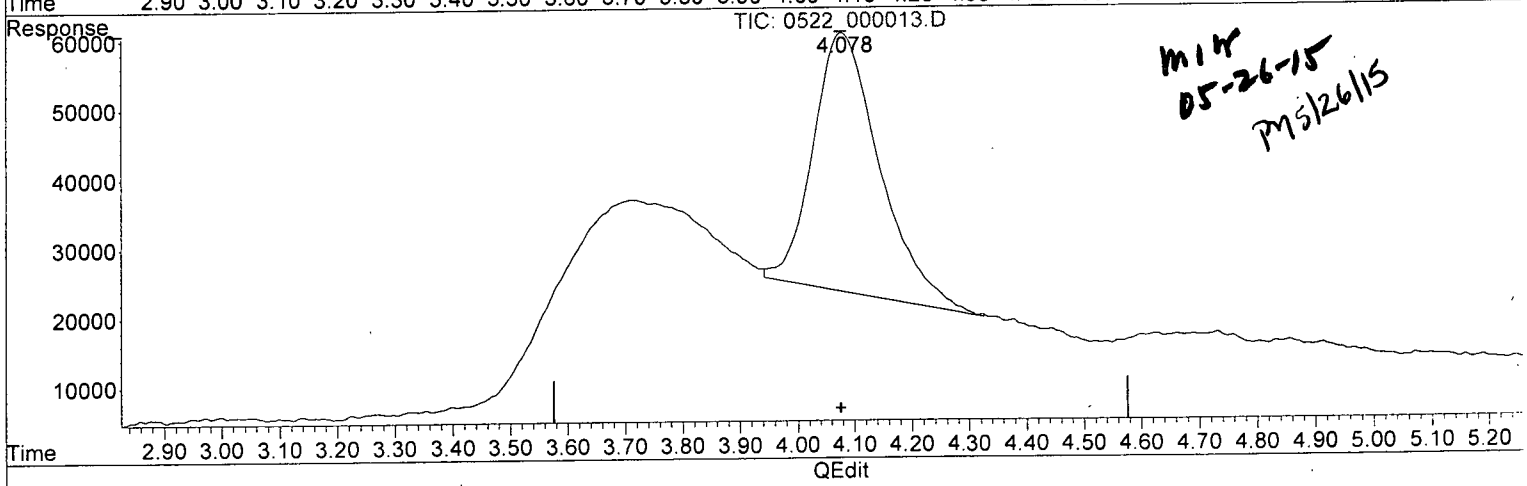
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MW 05-26-15 PM 5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.078min 17.661 ppb m

response 37138

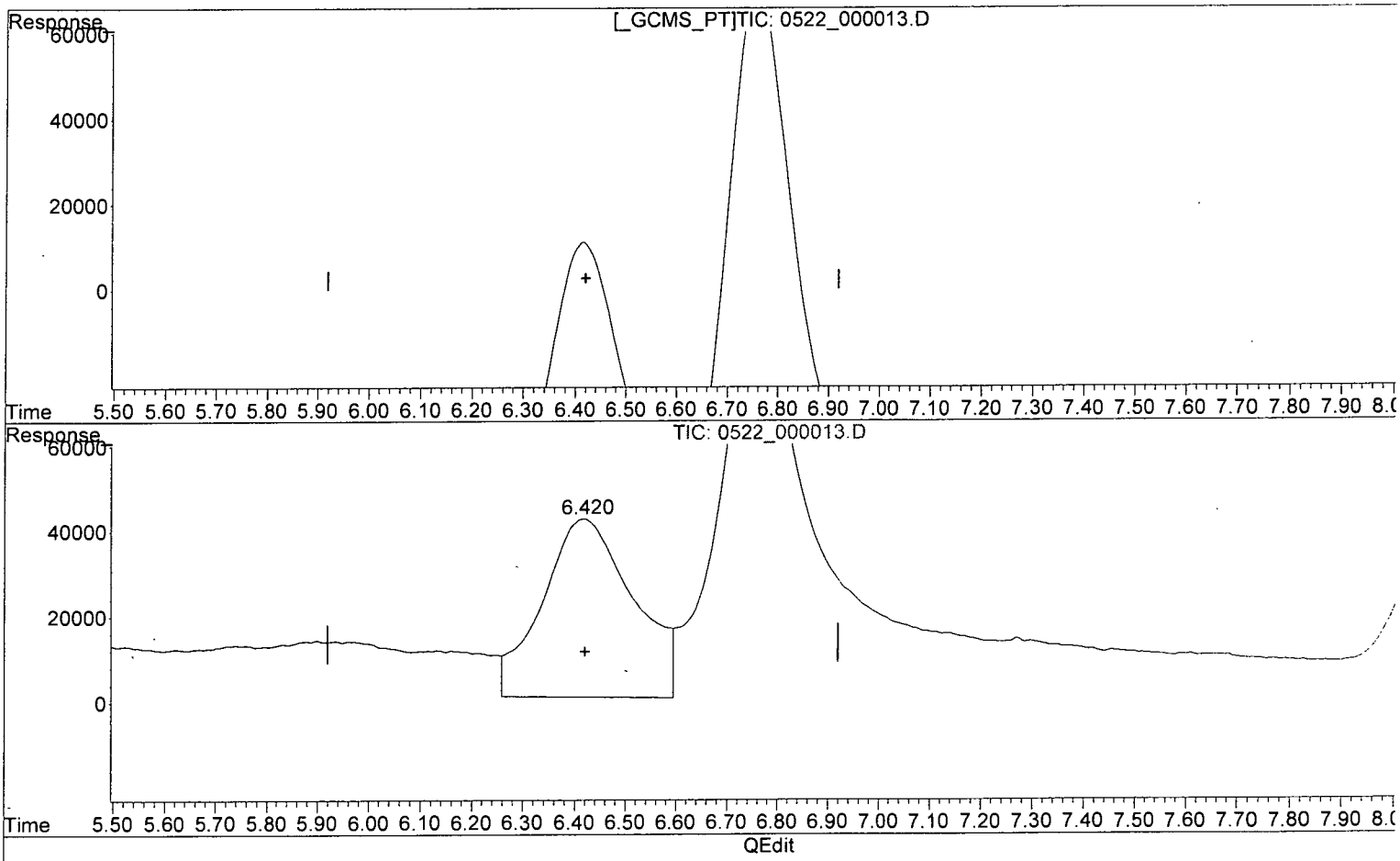
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.418min 22.479 ppb

response 41634

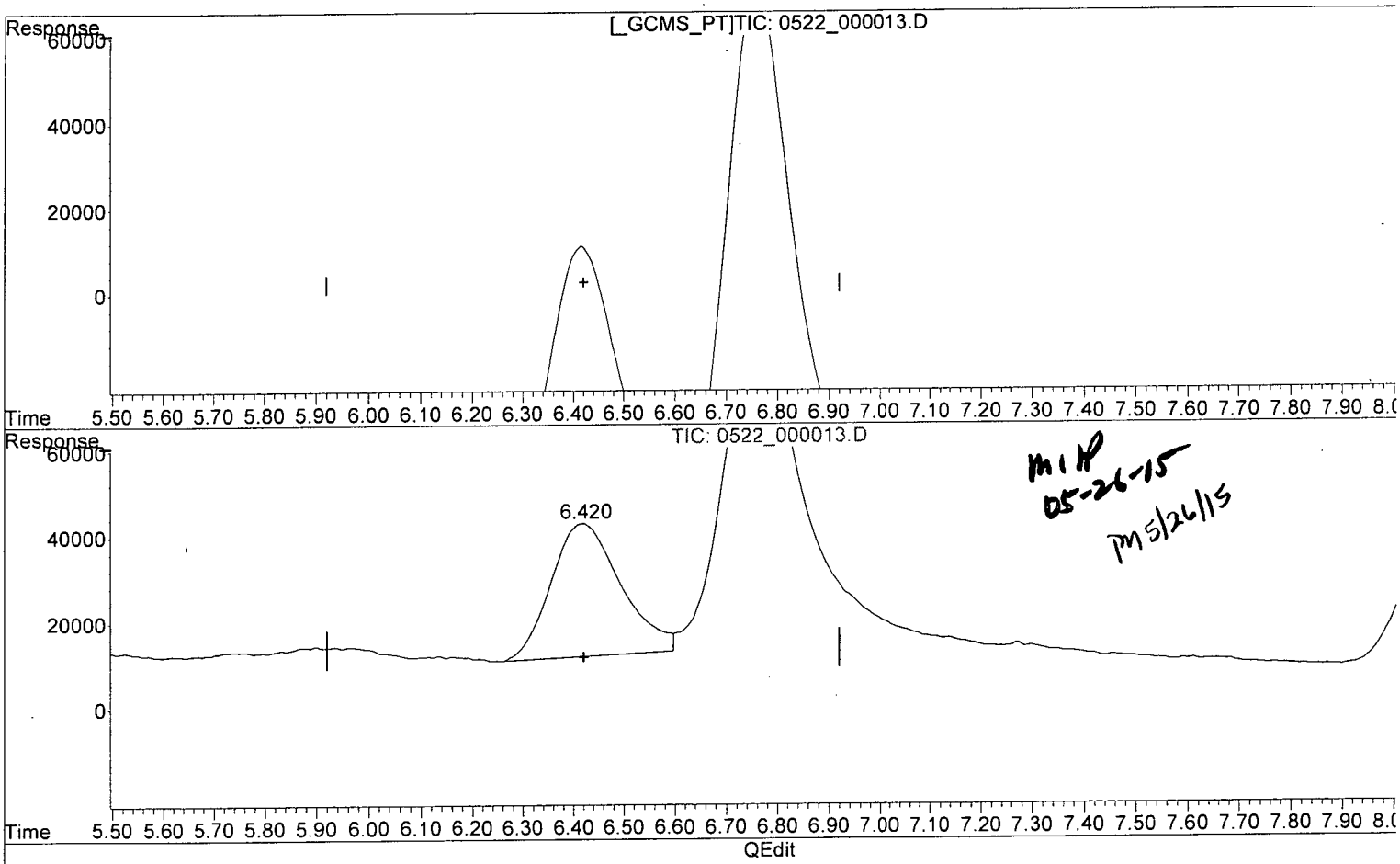
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.420min 16.678 ppb m

response 30890

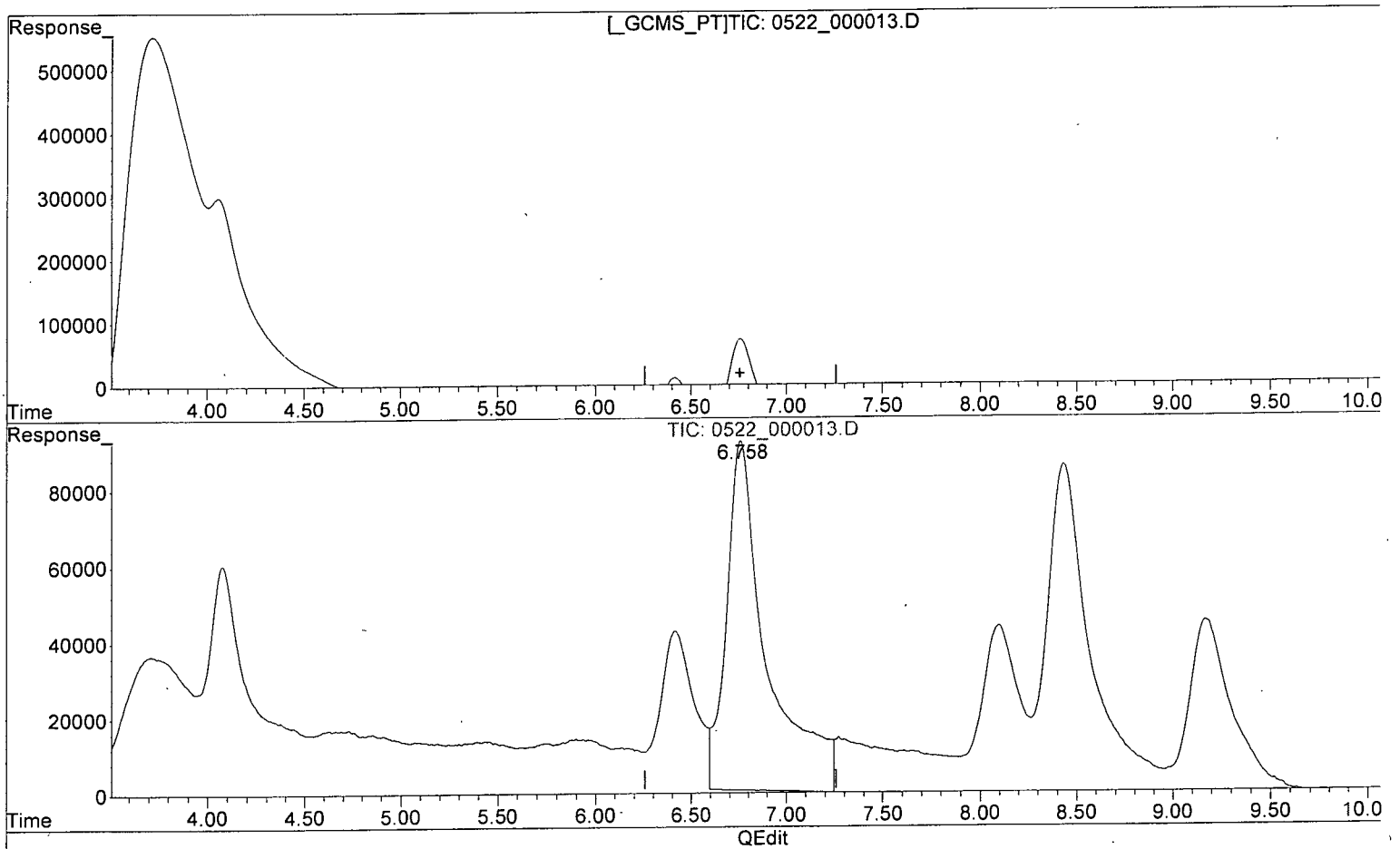
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.759min 20.535 ppb

response 91787

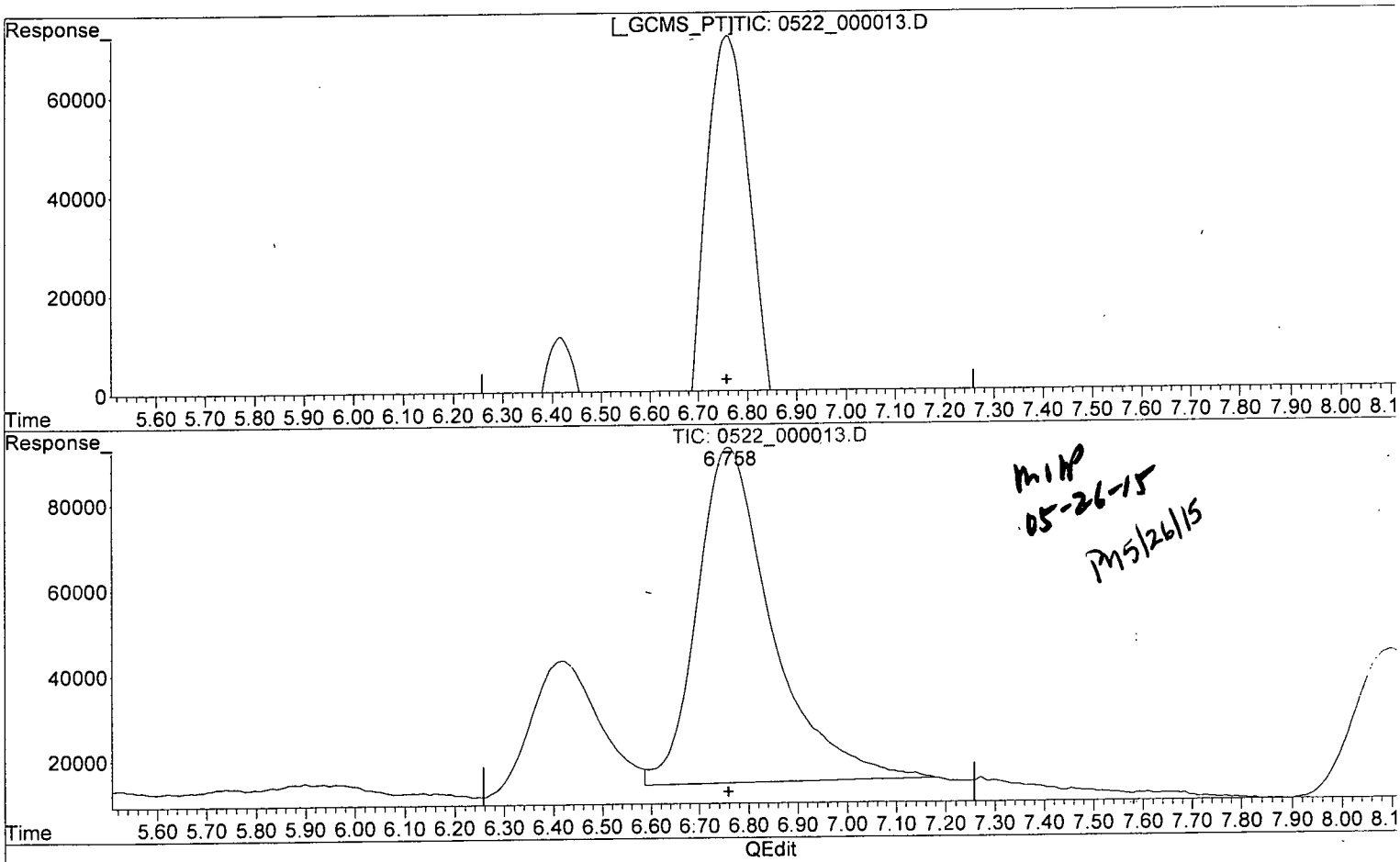
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



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(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.758min 17.607 ppb m

response 78697

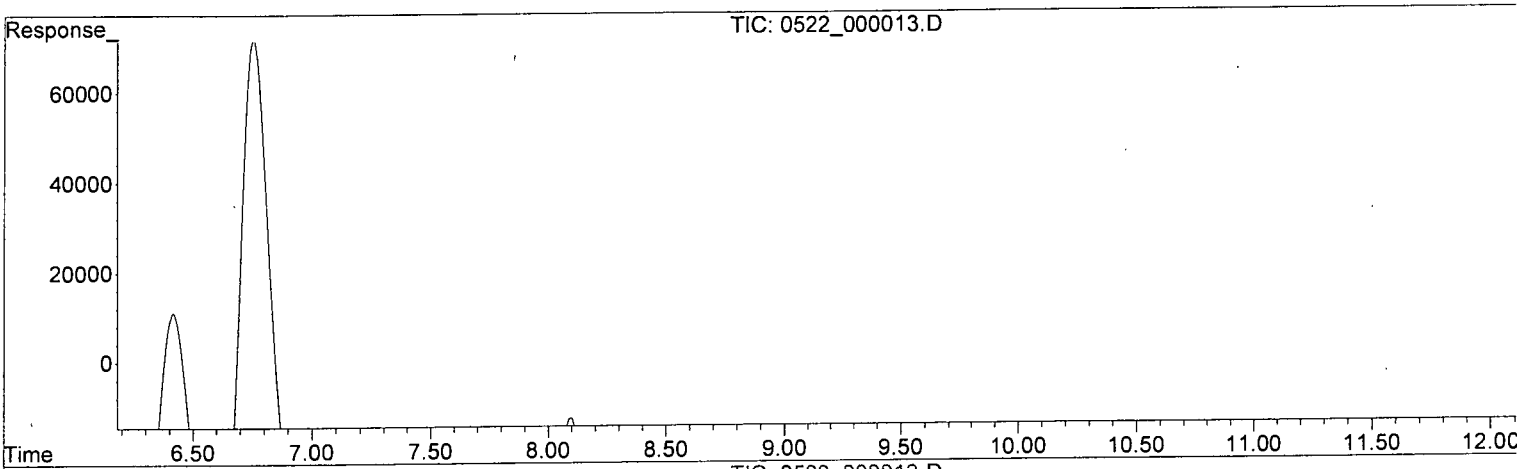
(+) = Expected Retention Time

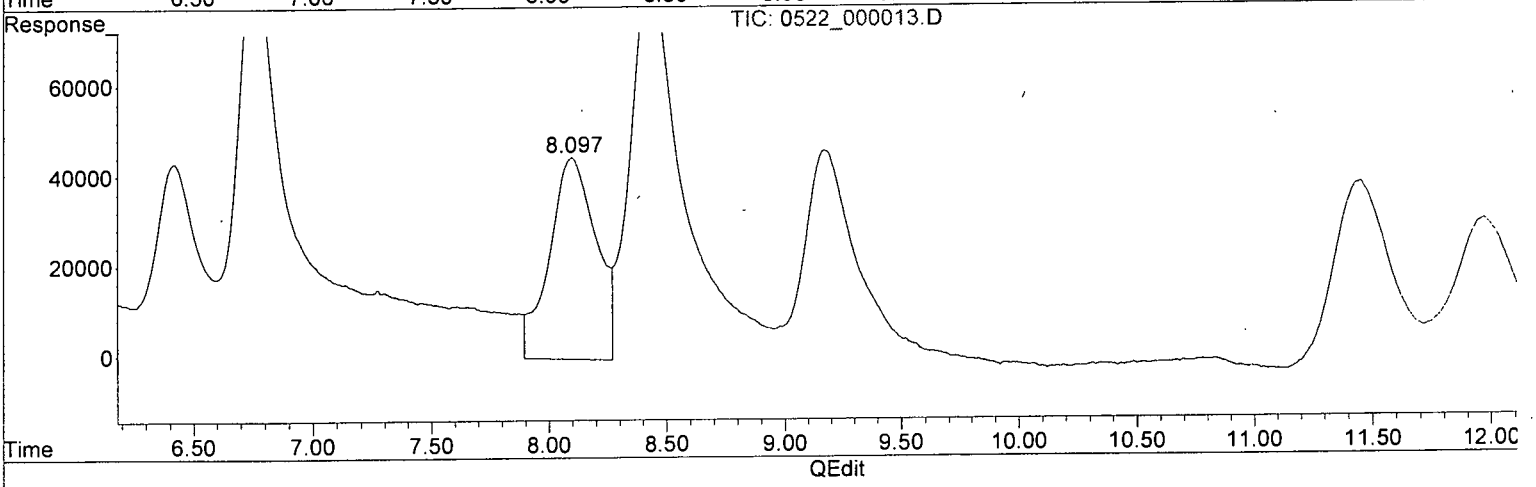
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.098min 21.218 ppb

response 44767

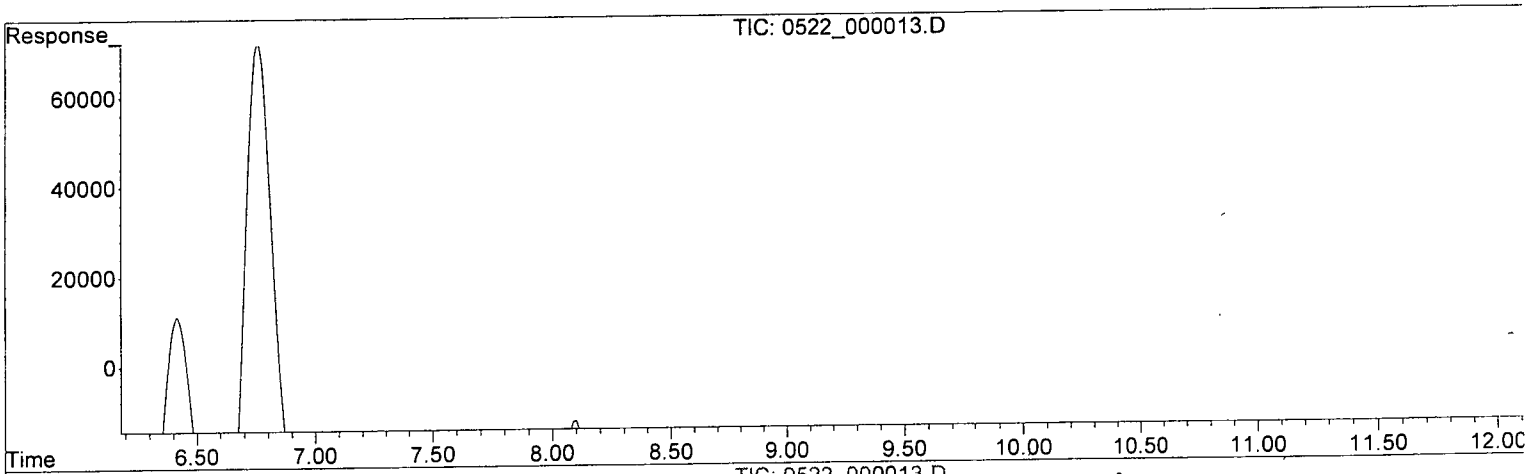
(+) = Expected Retention Time

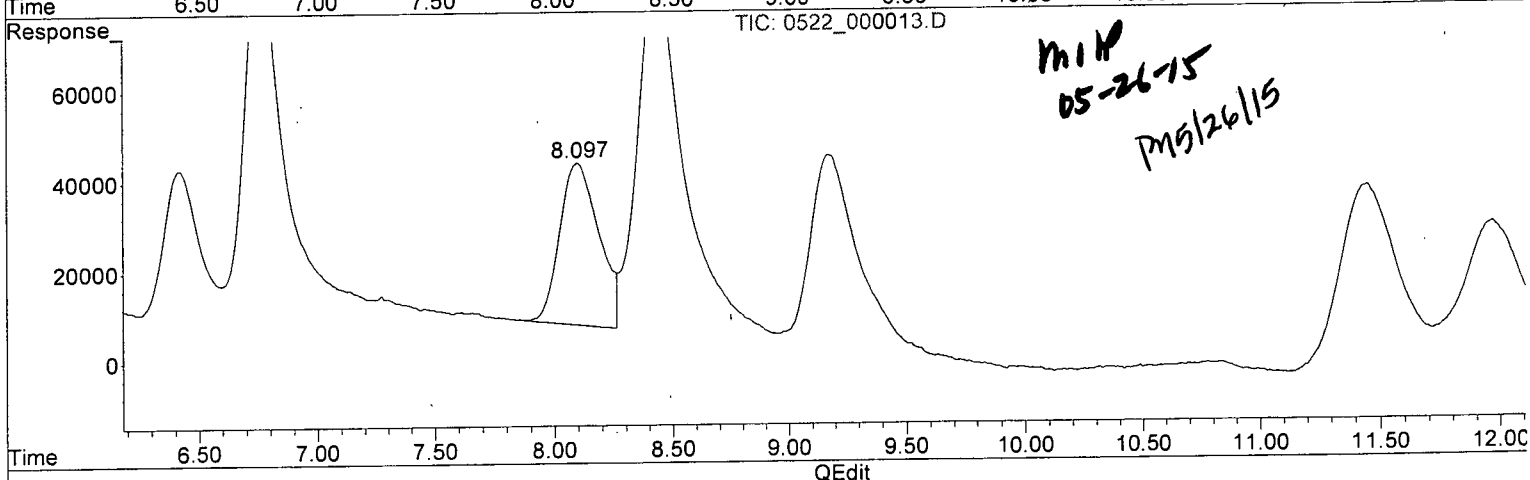
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





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(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.097min 17.030 ppb m

response 35930

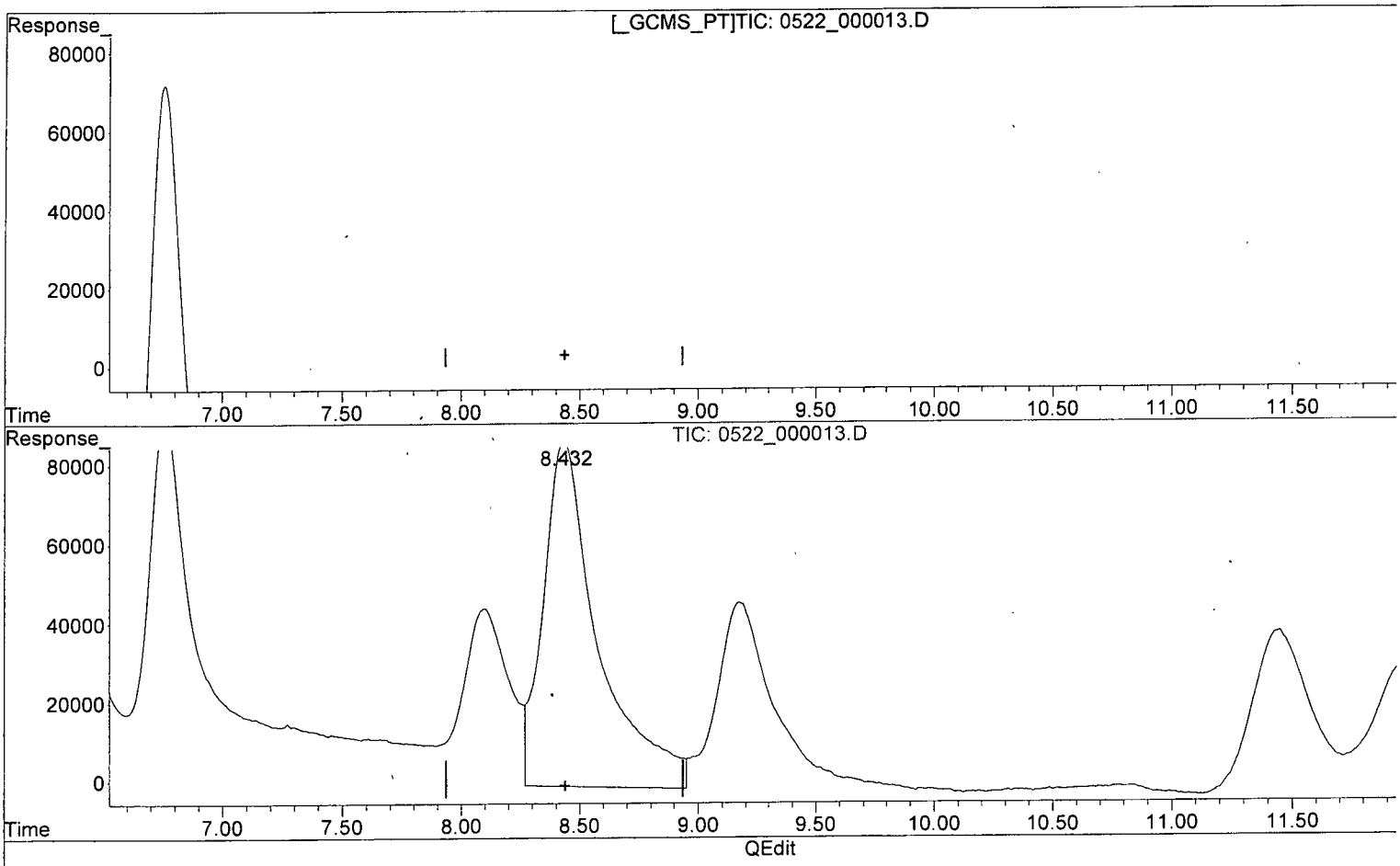
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.433min 19.439 ppb

response 87423

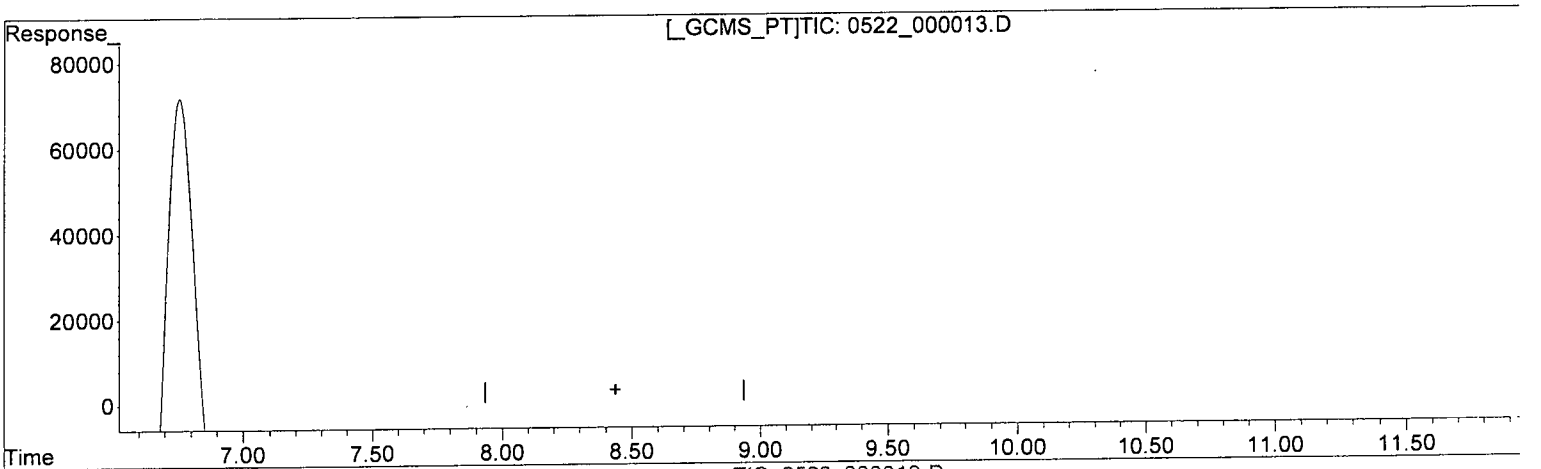
(+) = Expected Retention Time

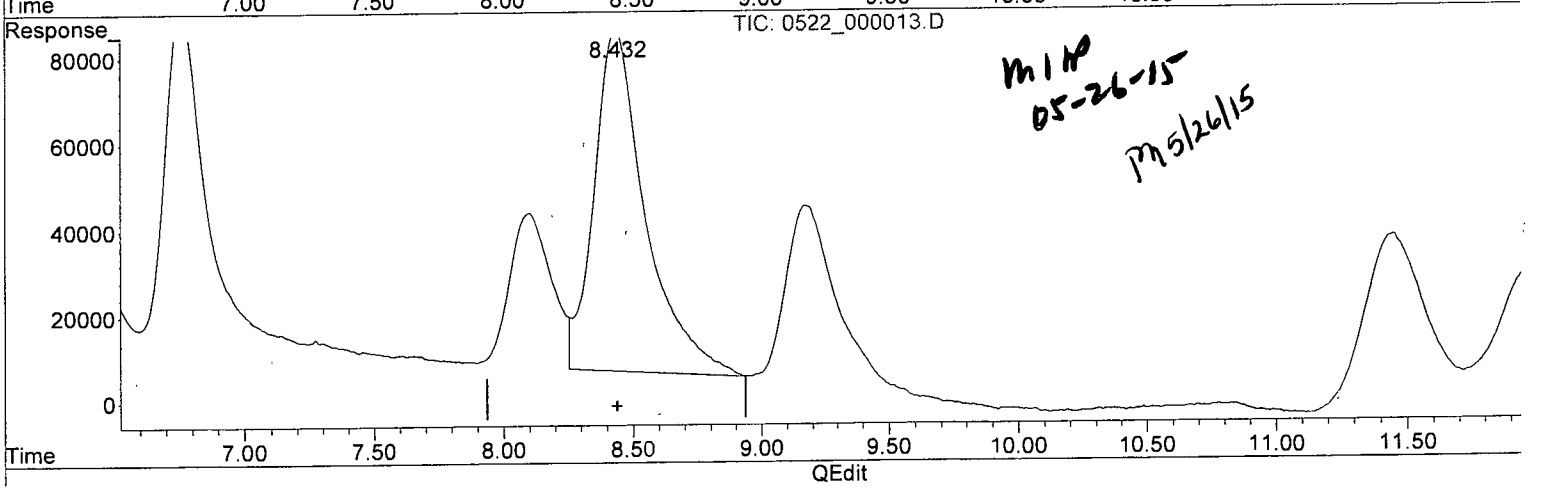
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





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(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.432min 17.588 ppb m

response 79097

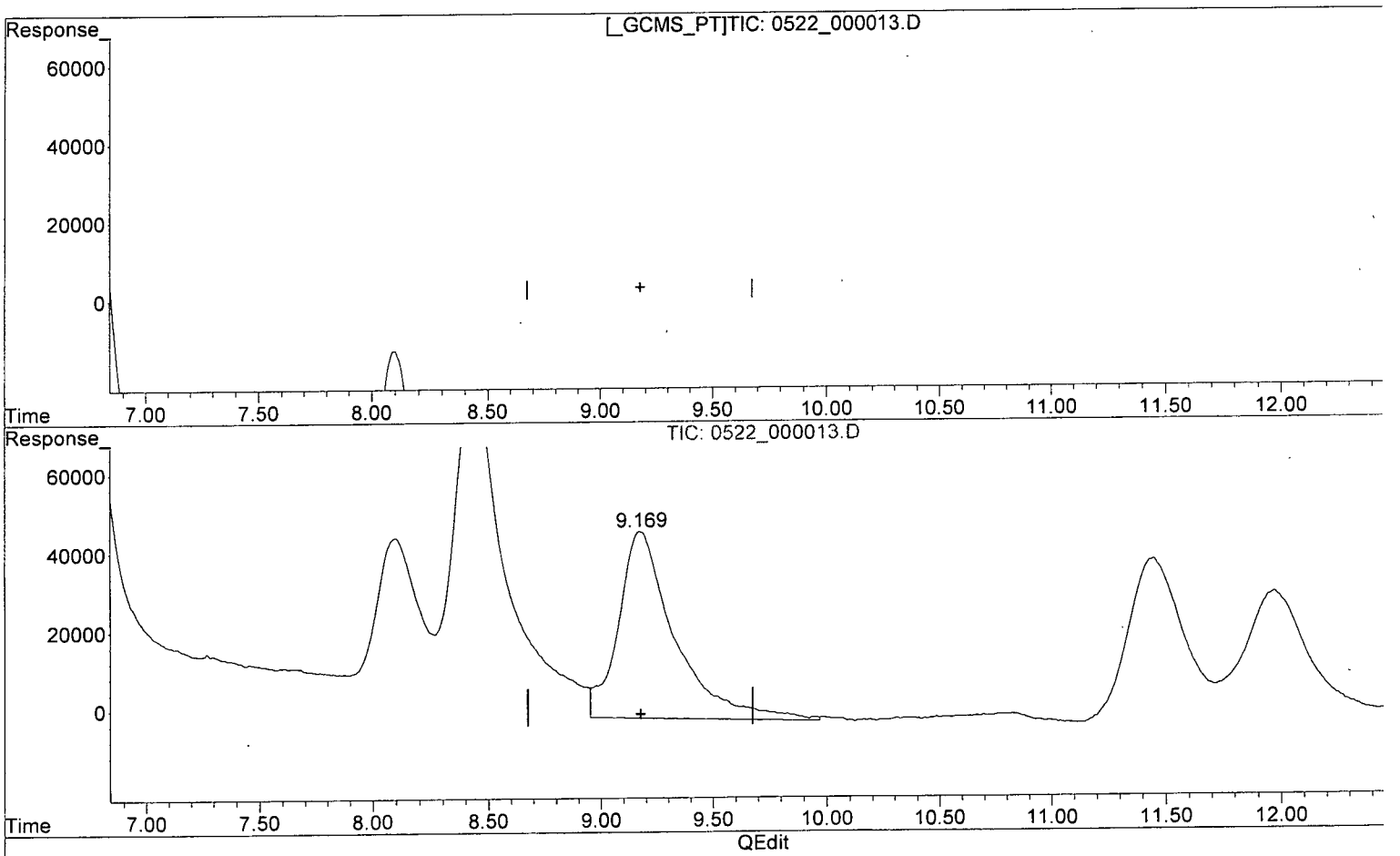
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.171min 18.468 ppb

response 47307

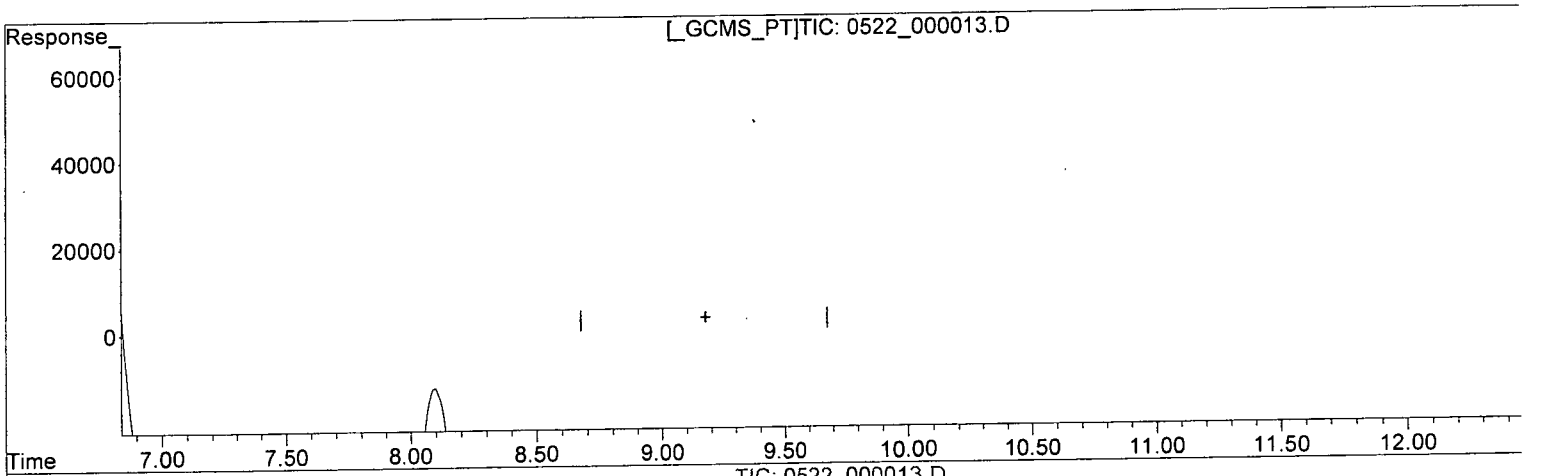
(+) = Expected Retention Time

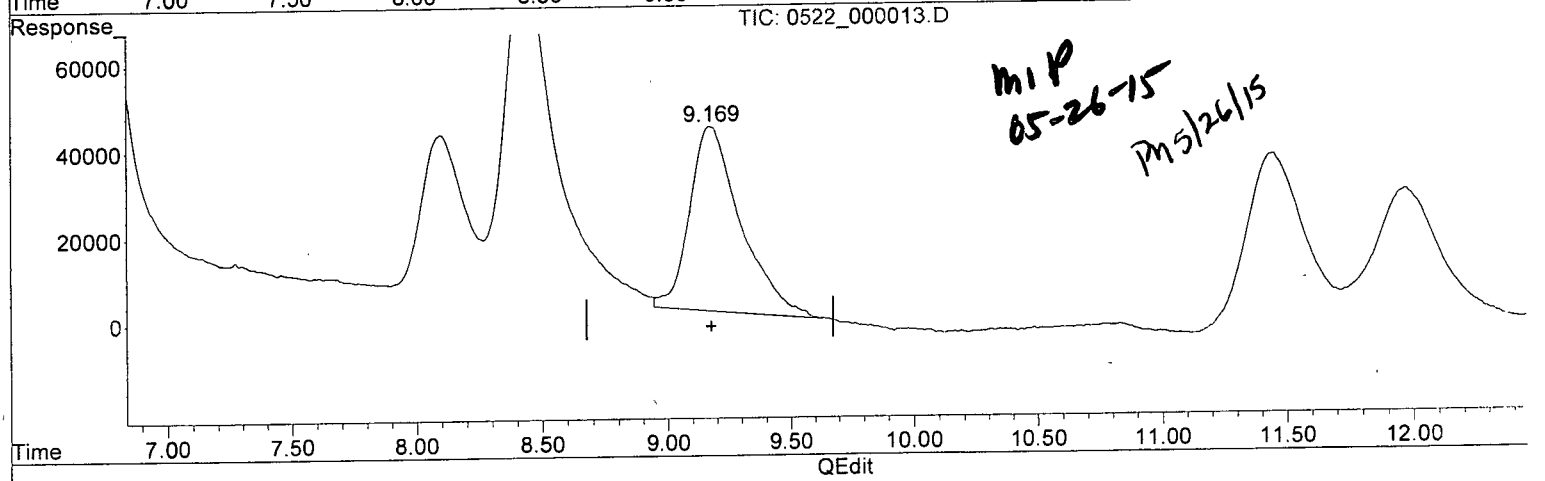
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.169min 16.674 ppb m

response 42712

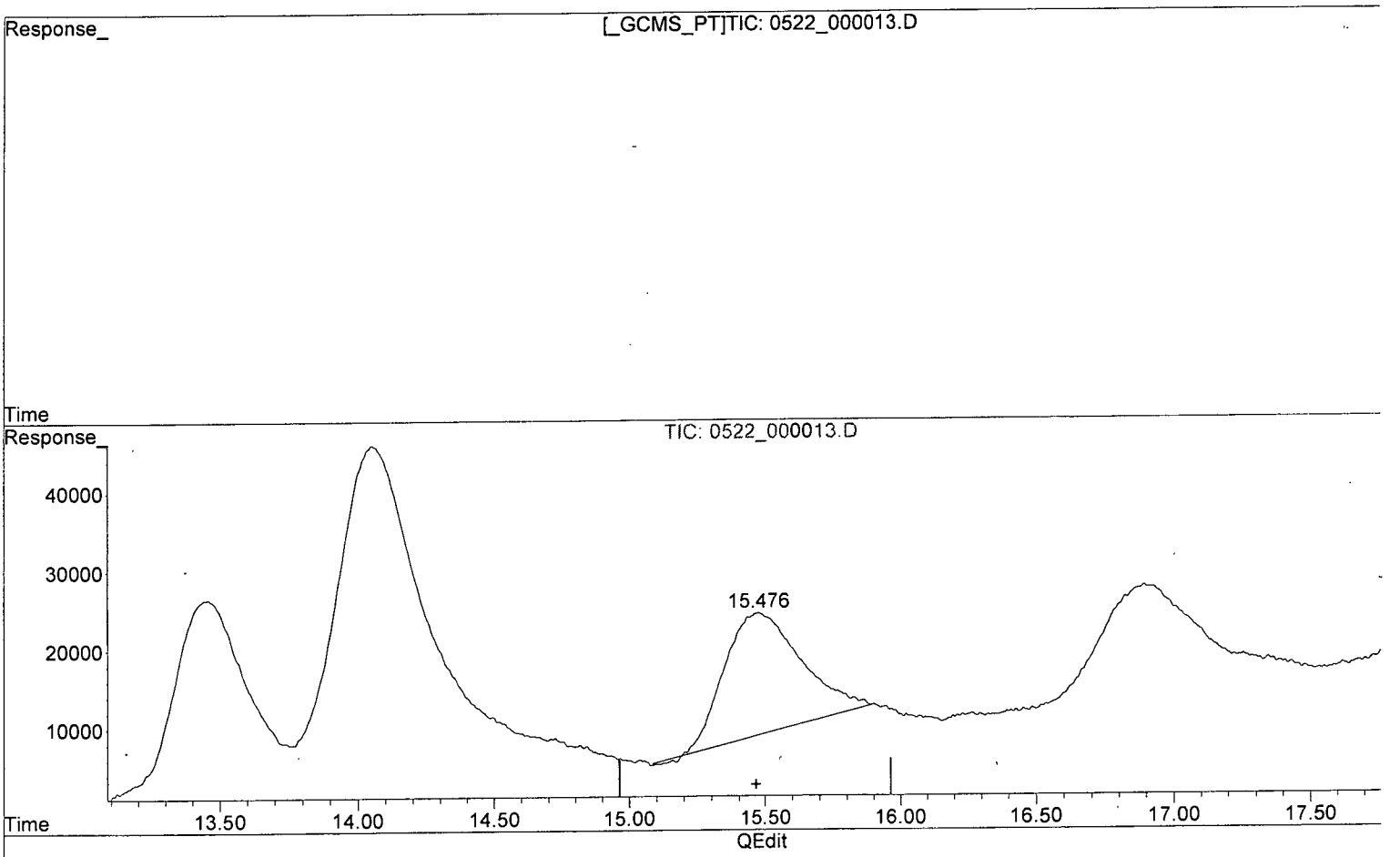
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

15.474min 14.676 ppb

response 15473

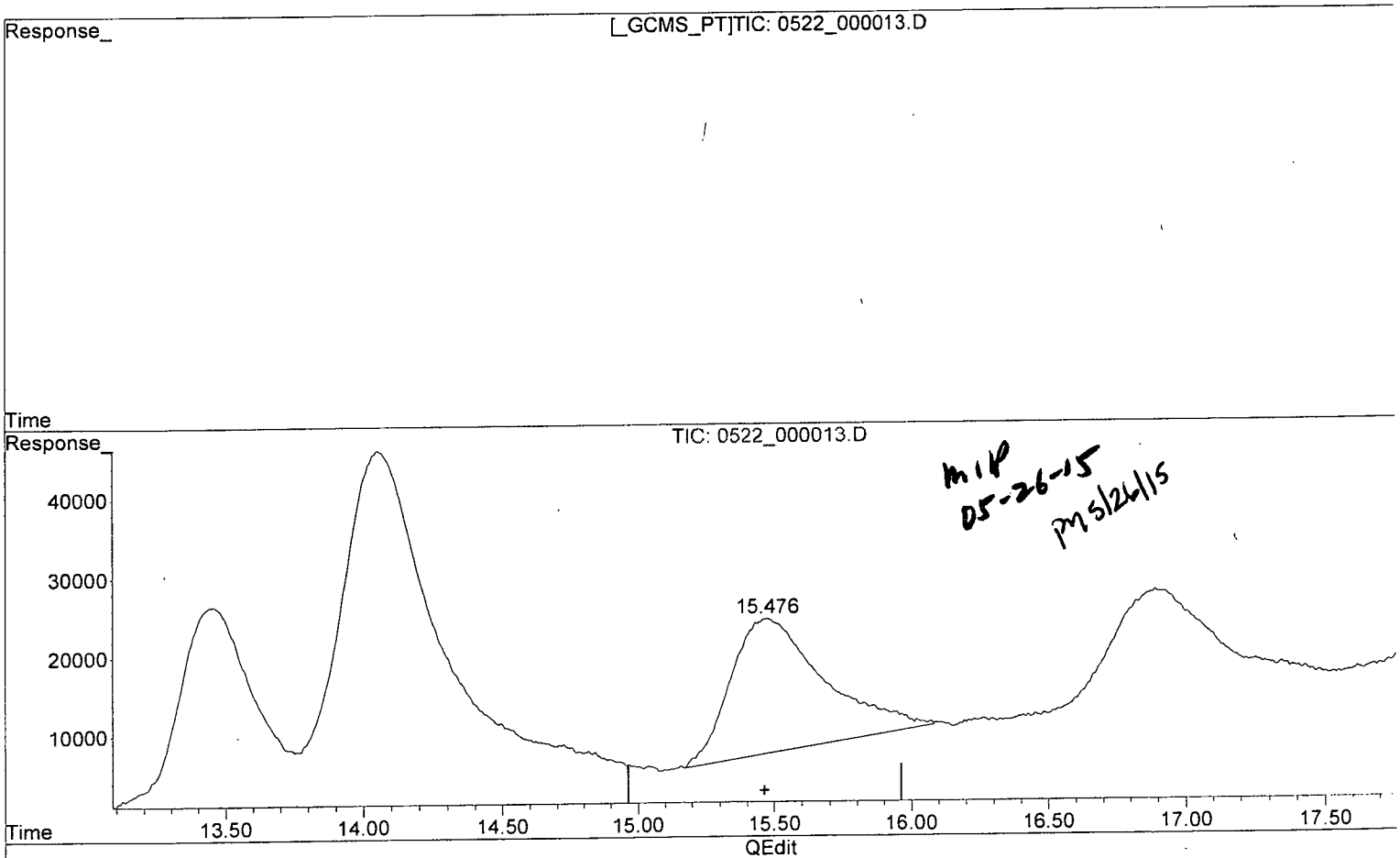
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000013.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 16:51:12
Operator : MP
Sample : 8330MXA_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4228 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



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(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

15.476min 16.245 ppb m

response 17127

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:47:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.062	0.000	14397	0	15.809	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.542	0	33313	N.D.	16.689m#
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.763	0.000	14034	0	15.381m	N.D. #

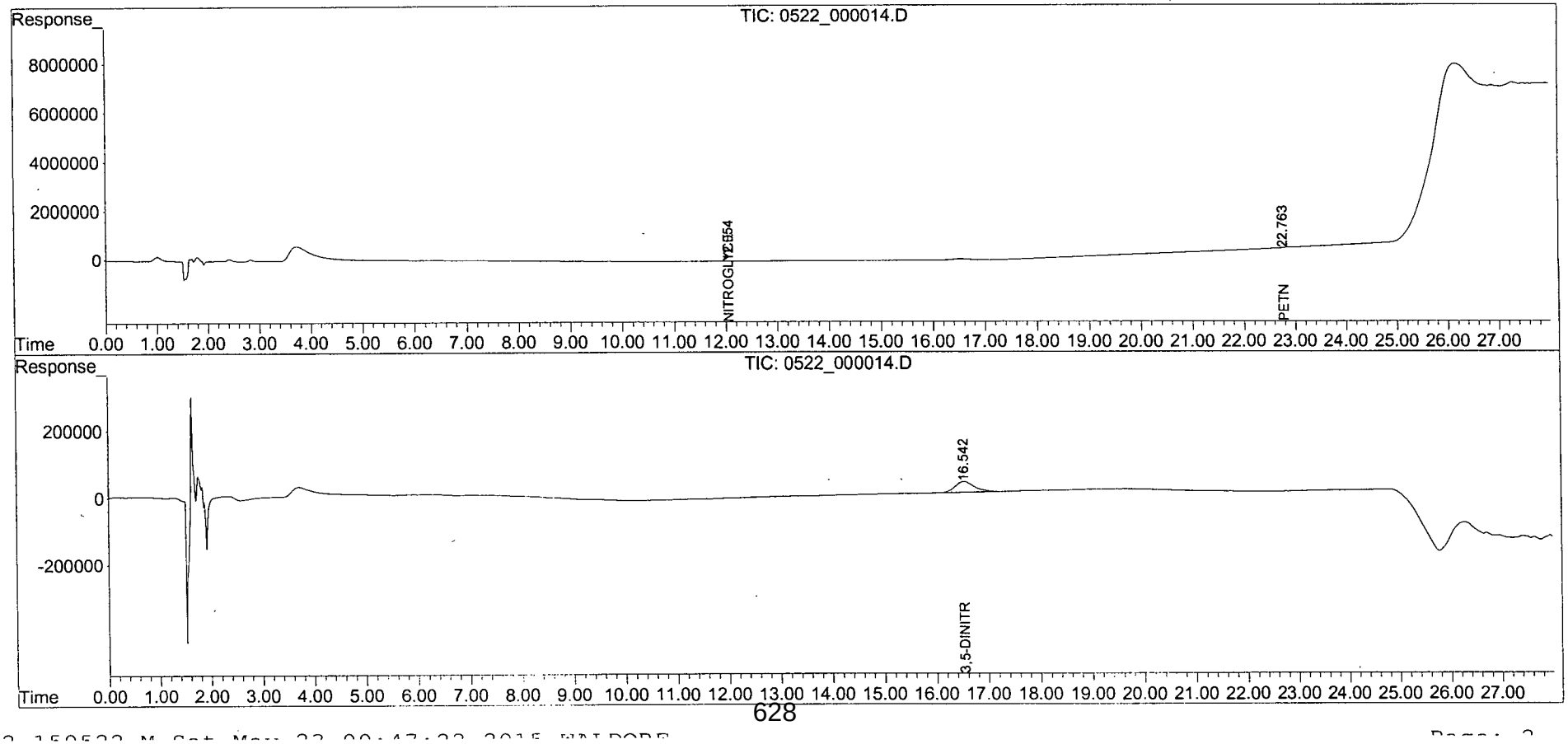
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:47:11 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

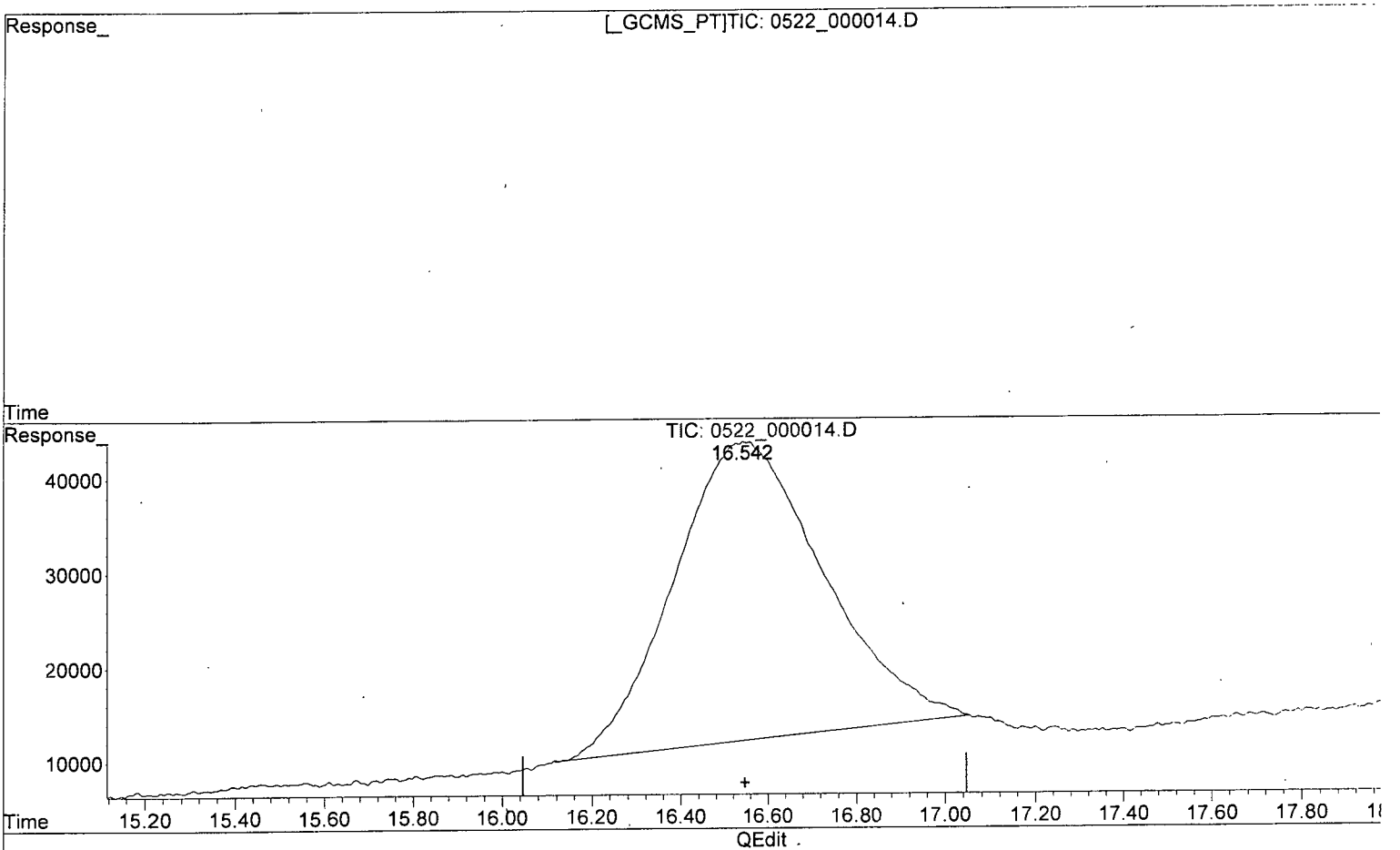


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:14 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

16.546min 15.824 ppb

response 31586

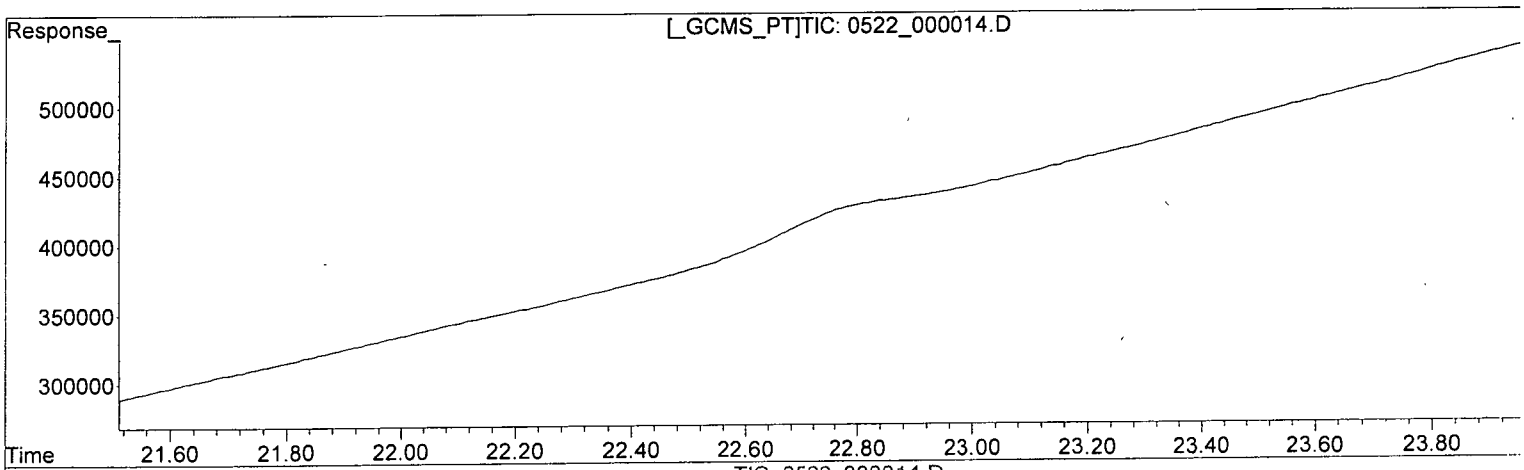
(+) = Expected Retention Time

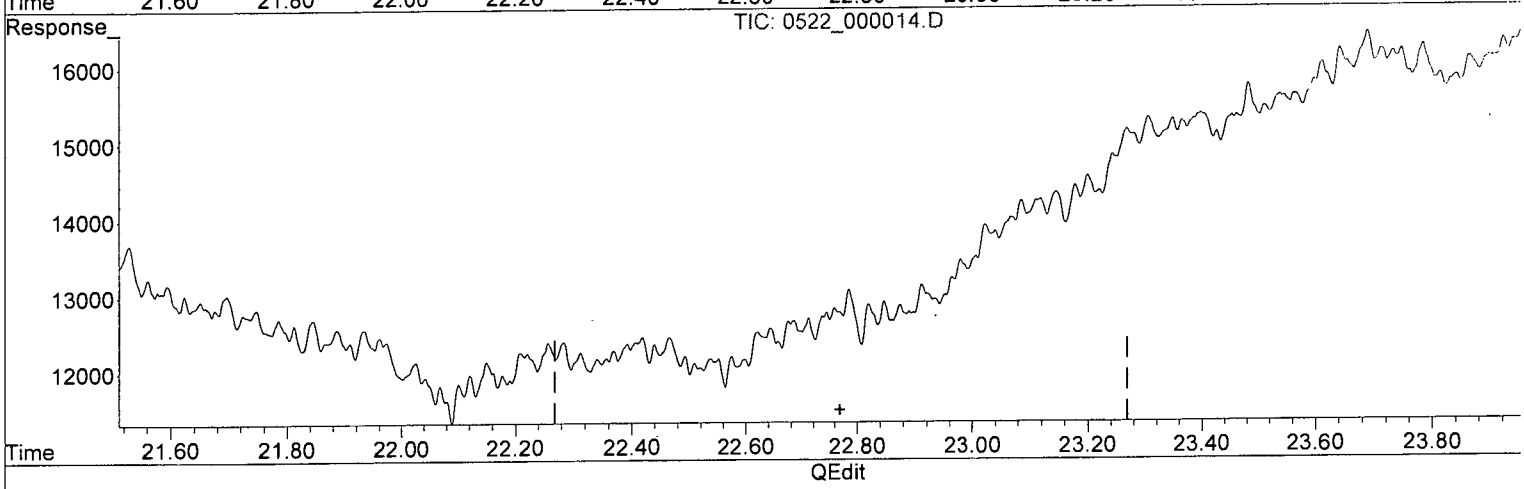
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:14 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





(18) PETN (TM)

0.000min 0.000 ppb

response 0

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

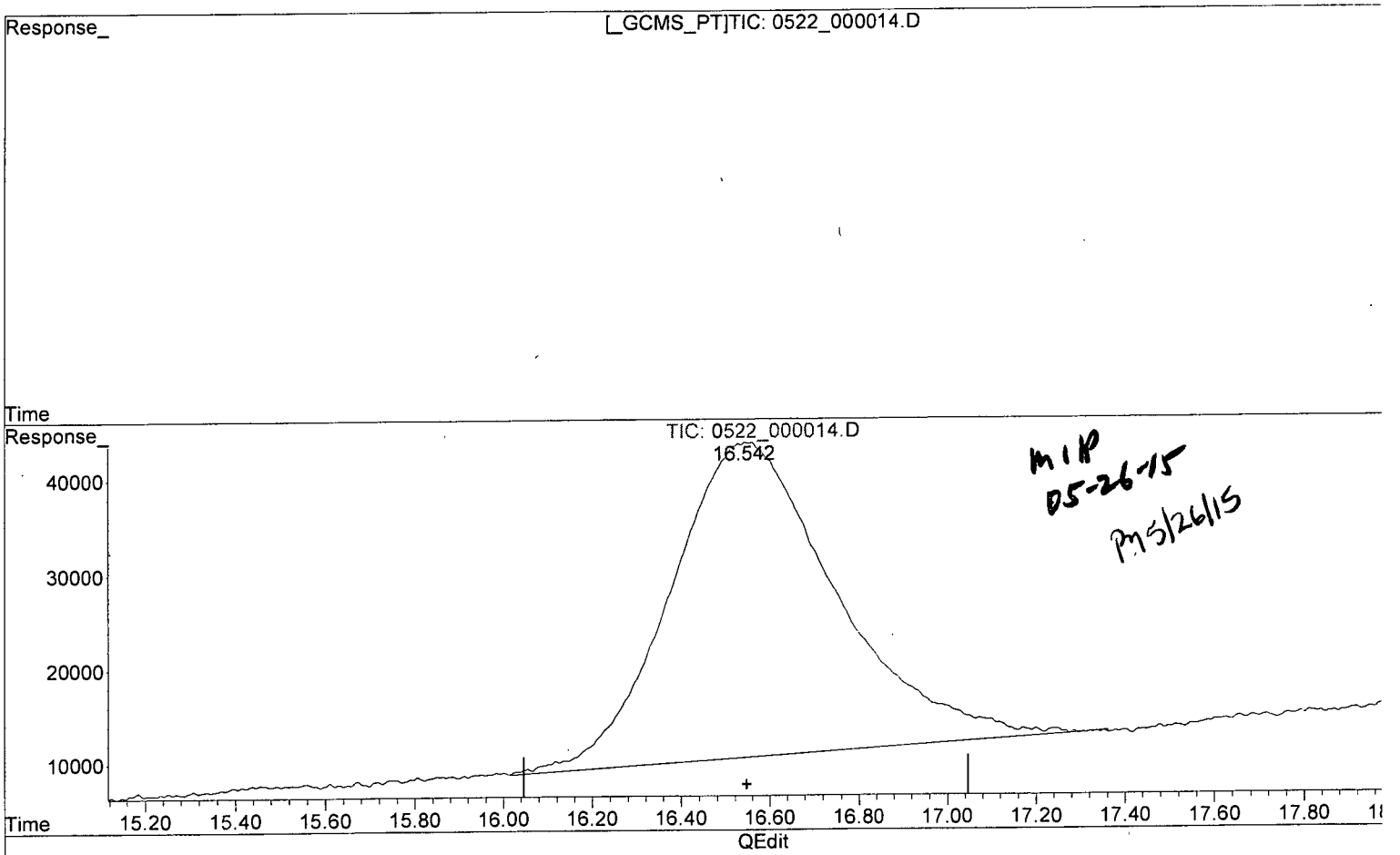
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:14 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(14) 3,5-DINITROANILINE (TM)

0.000min 0.000 ppb

response 0

(14) 3,5-DINITROANILINE #2 (TM)

16.542min 16.689 ppb m

response 33313

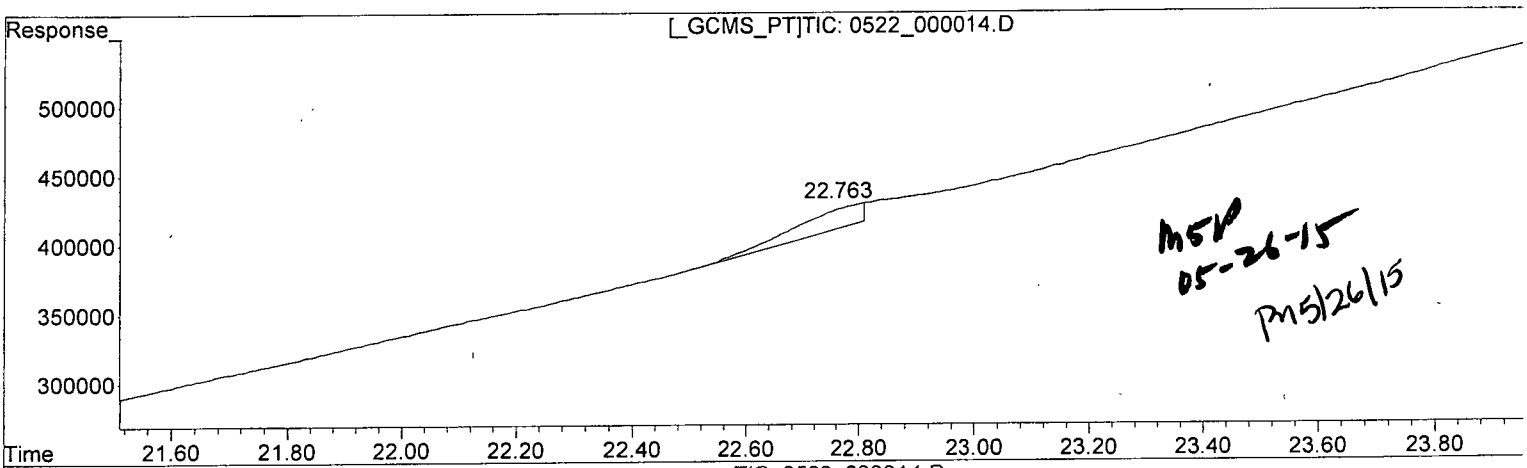
(+) = Expected Retention Time

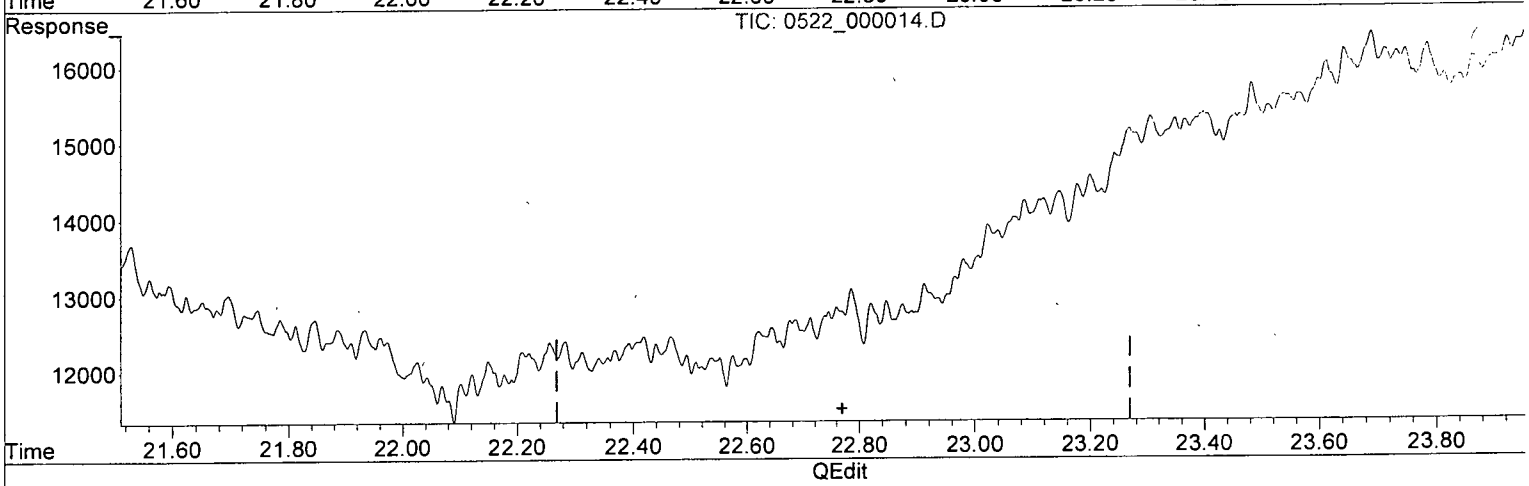
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000014.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 17:30:43
Operator : MP
Sample : 8330MXB_CB 0.020 PPM 05/22/15
Misc :
ALS Vial : 4229 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:14 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(18) PETN (TM)

22.763min 15.381 ppb m

response 14034

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:46:09 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4) S	1,2-DINIT...	0.000	8.092	0	87334	N.D.	41.395m#
Spiked Amount	62.500			Recovery	=	0.00%	66.23%
	Target Compounds						
1) TM	HMX	0.000	4.077	0	93606	N.D.	44.514m#
2) TM	RDX	0.000	6.412	0	80036	N.D.	43.213m#
3) TM	1,3,5-TRI...	0.000	6.752	0	195589	N.D.	43.759m#
5) TM	1,3-DINIT...	0.000	8.429	0	193271	N.D.	42.975m#
6) TM	NITROBENZENE	0.000	9.168	0	106151	N.D.	41.438m#
7) TM	2,4,6-TRI...	0.000	11.440	0	99469	N.D.	39.181 #
8) TM	NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM	TETRYL	11.972	11.971	64180	71983	NoCal	43.697 #
10) TM	2,6-DINIT...	13.446	13.444	94573	59327	NoCal	40.165 #
11) TM	2,4-DINIT...	0.000	14.052	0	103731	N.D.	41.171 #
12) TM	2-NITROTO...	0.000	15.459	0	41226	N.D.	39.102 #
13) TM	4-NITROTO...	0.000	16.870	0	36293	N.D.	41.440 #
14) TM	3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM	3-NITROTO...	0.000	18.065	0	48059	N.D.	44.948 #
16) TM	4-AMINO-2...	0.000	18.644	0	71020	N.D.	50.694 #
17) TM	2-AMINO-4...	0.000	19.600	0	89551	N.D.	43.931 #
18) TM	PETN	0.000	0.000	0	0	N.D.	N.D.

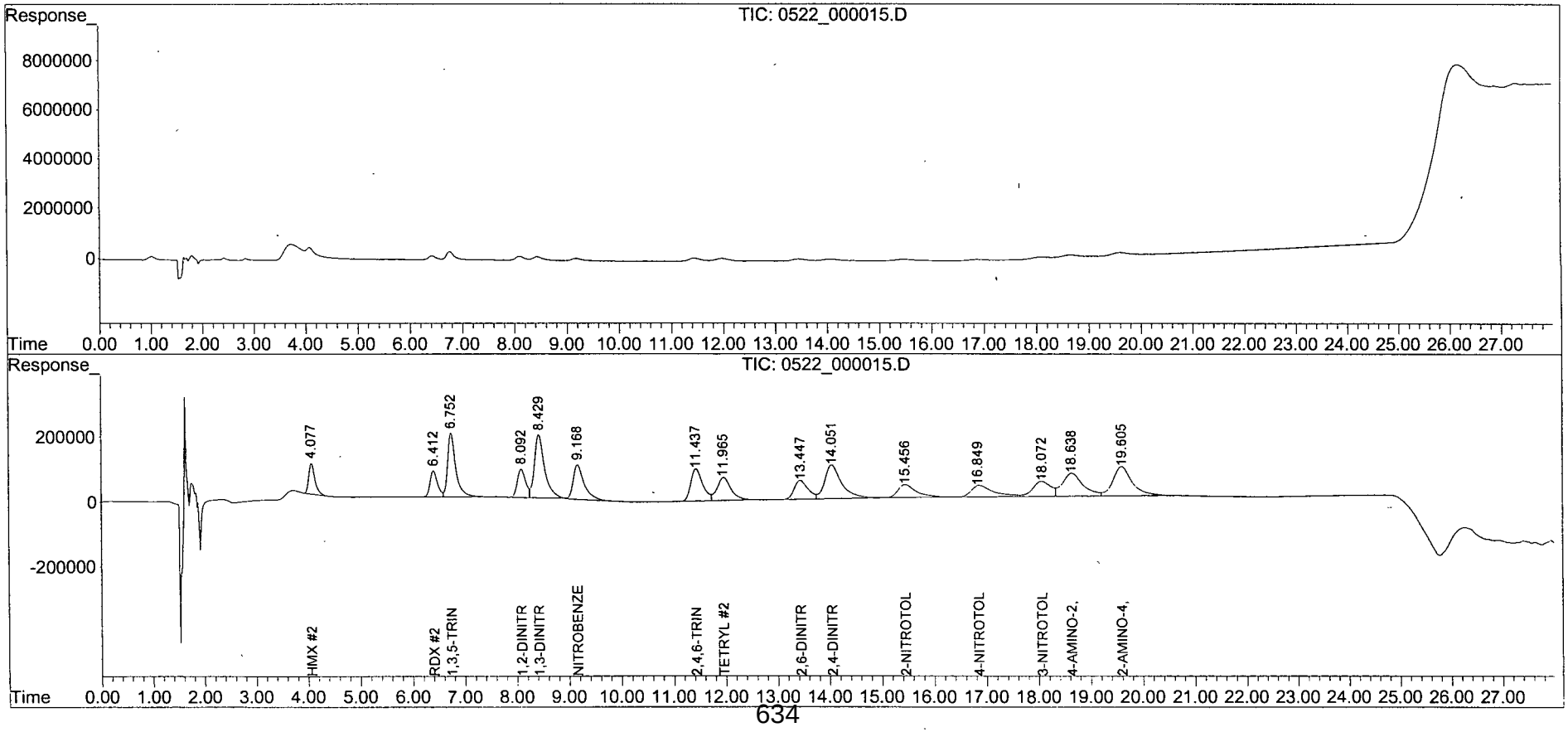
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:46:09 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

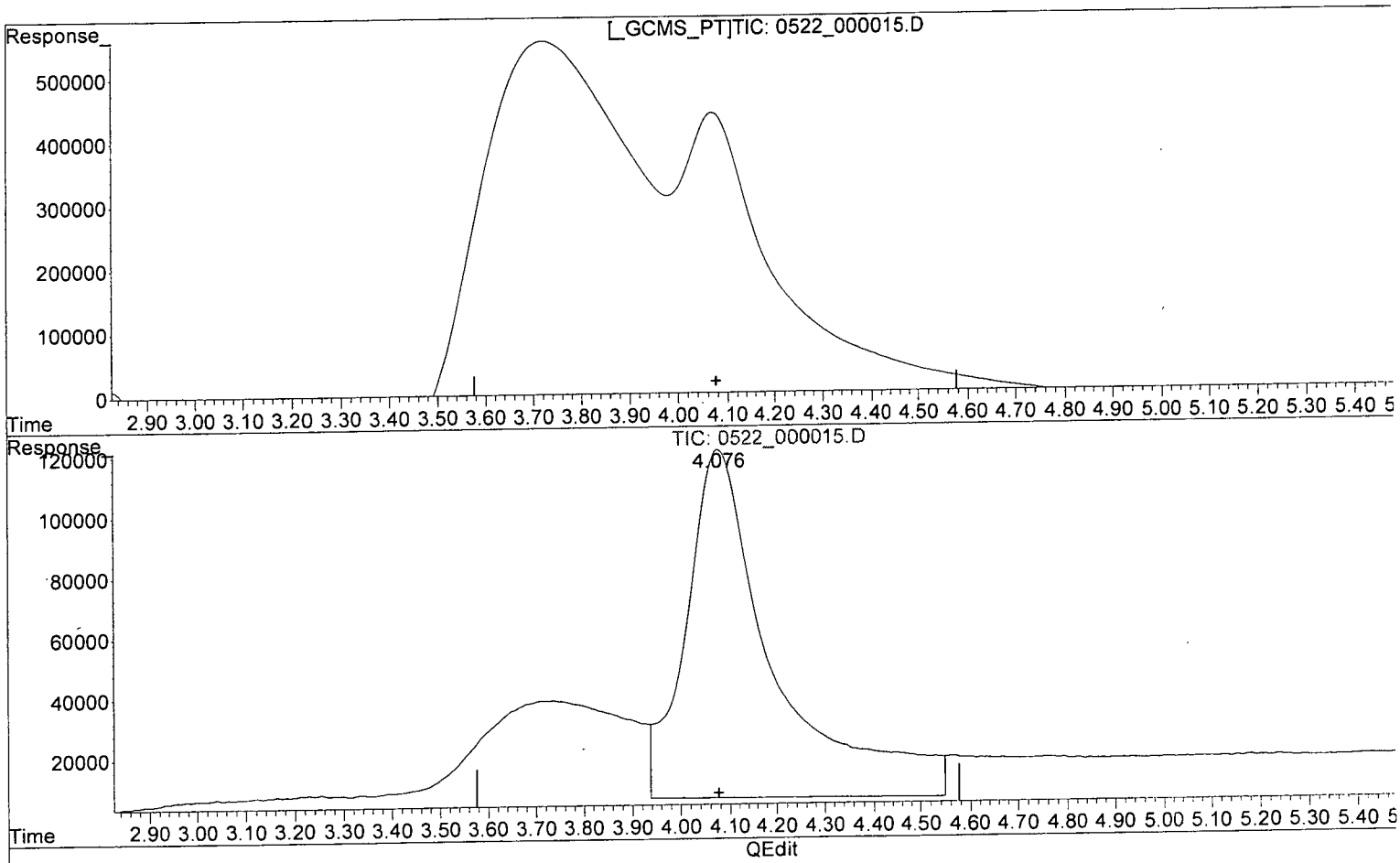


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 54.675 ppb

response 114973

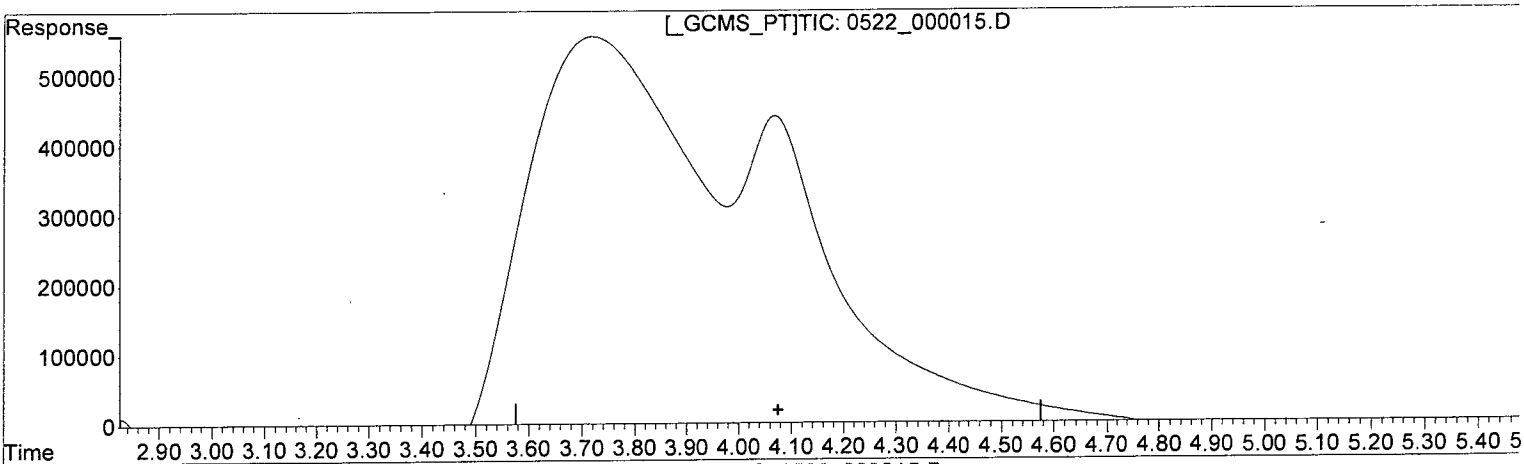
(+) = Expected Retention Time

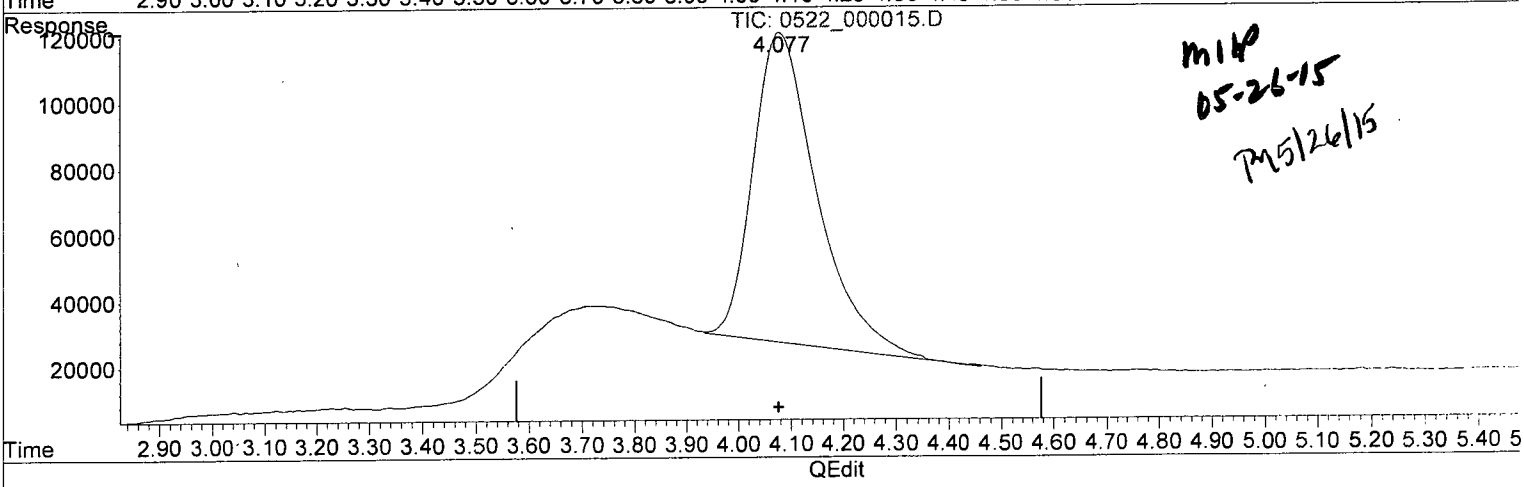
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





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QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 44.514 ppb m

response 93606

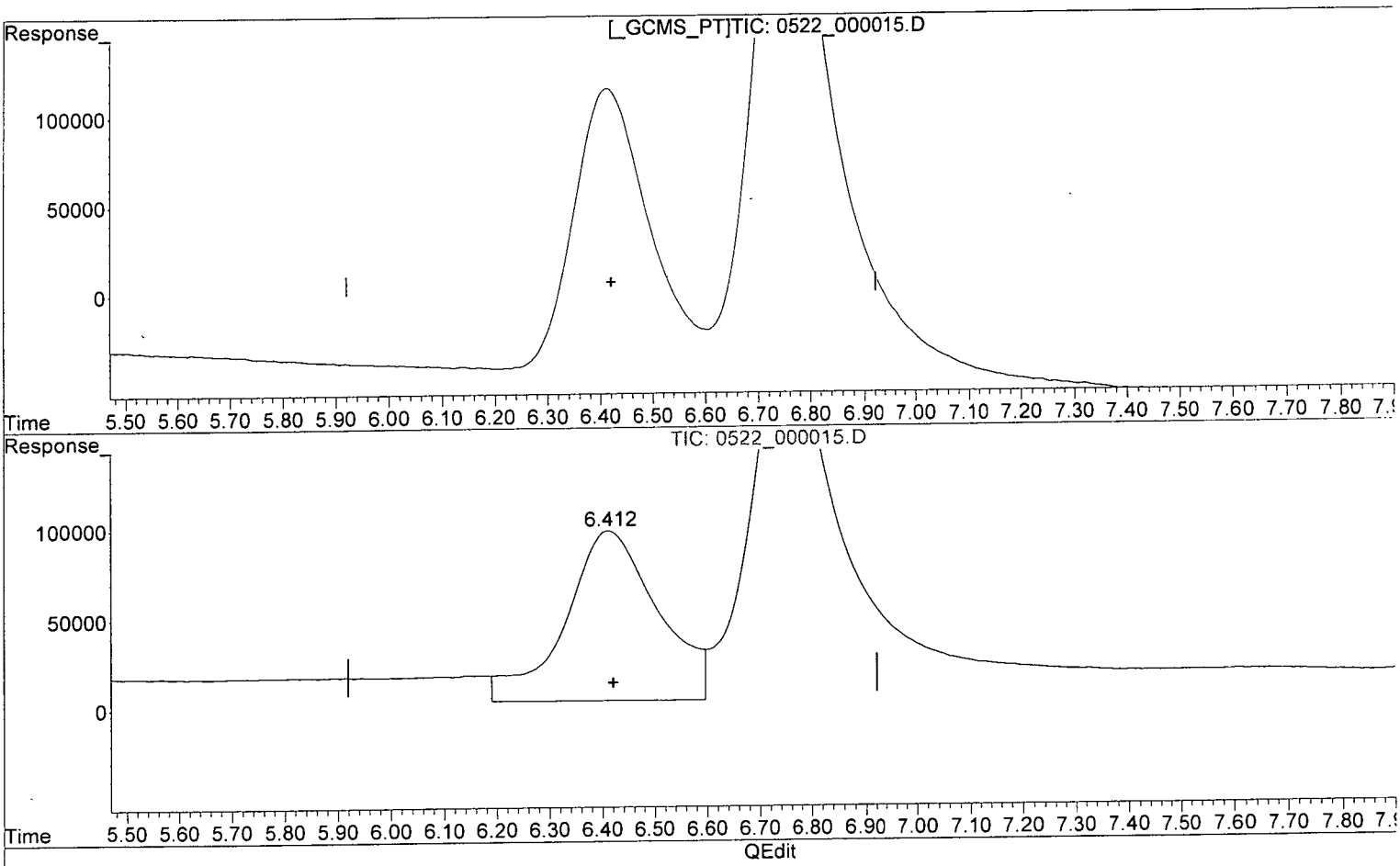
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.412min 51.095 ppb

response 94635

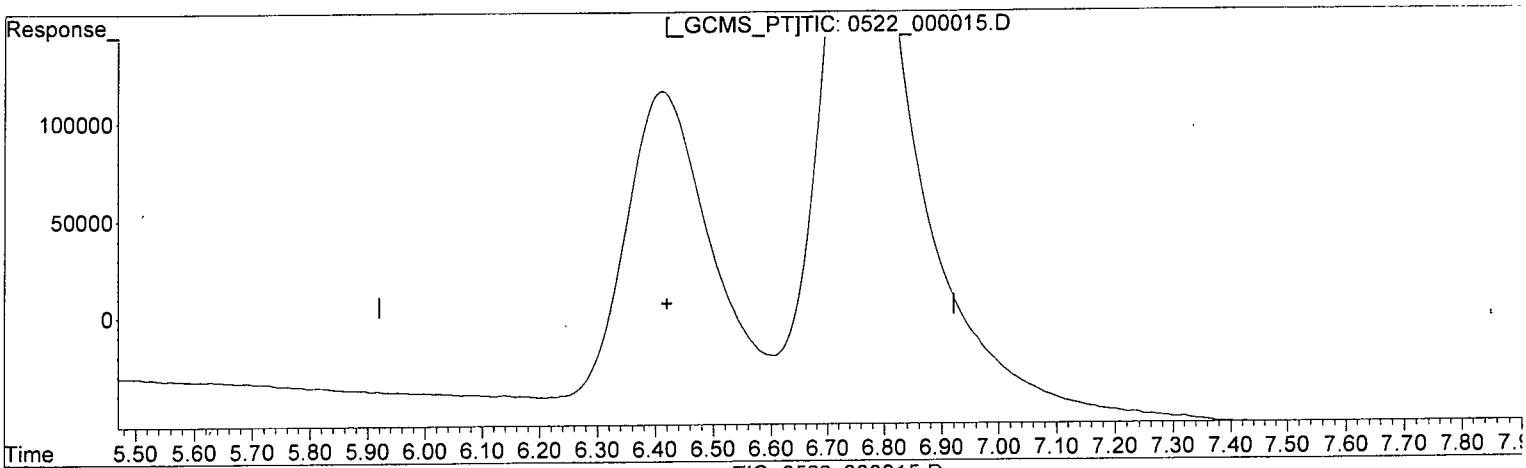
(+) = Expected Retention Time

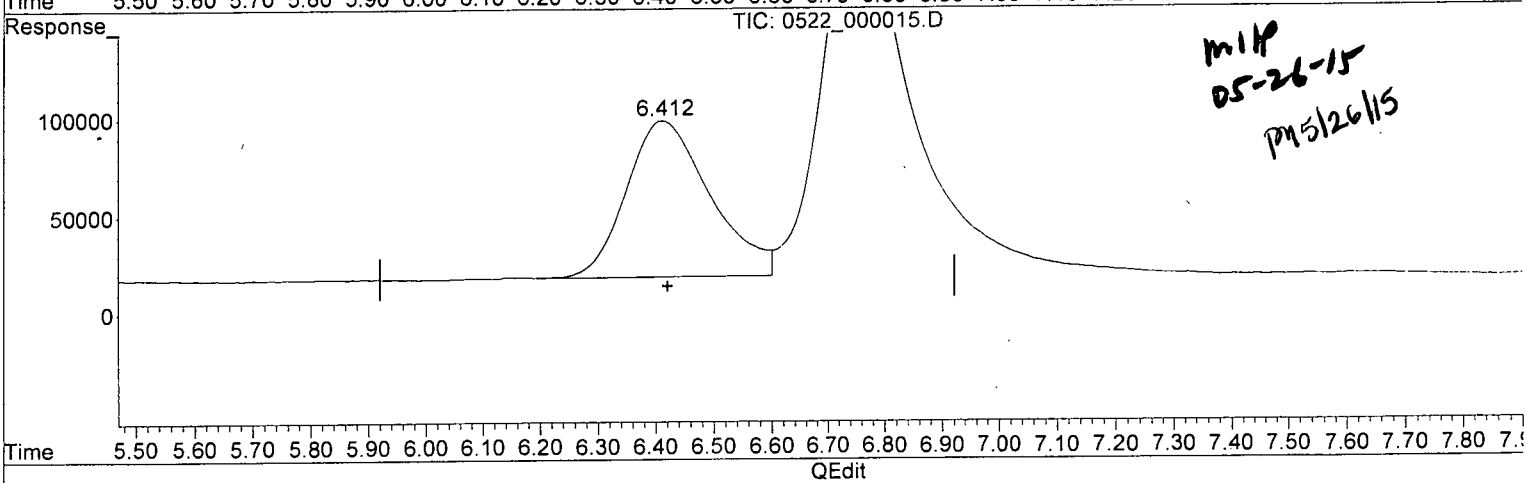
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





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(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.412min 43.213 ppb m

response 80036

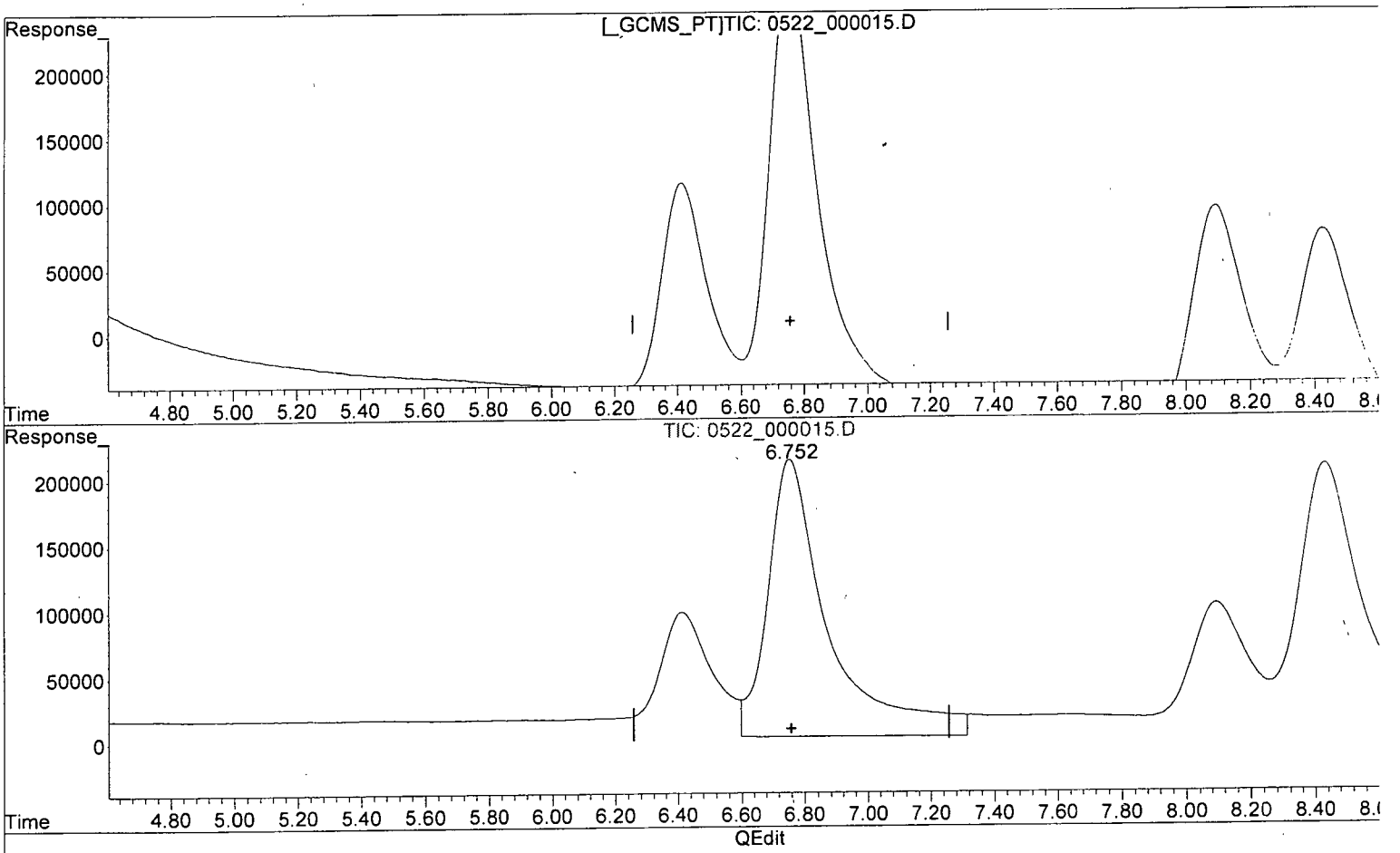
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.753min 47.022 ppb

response 210176

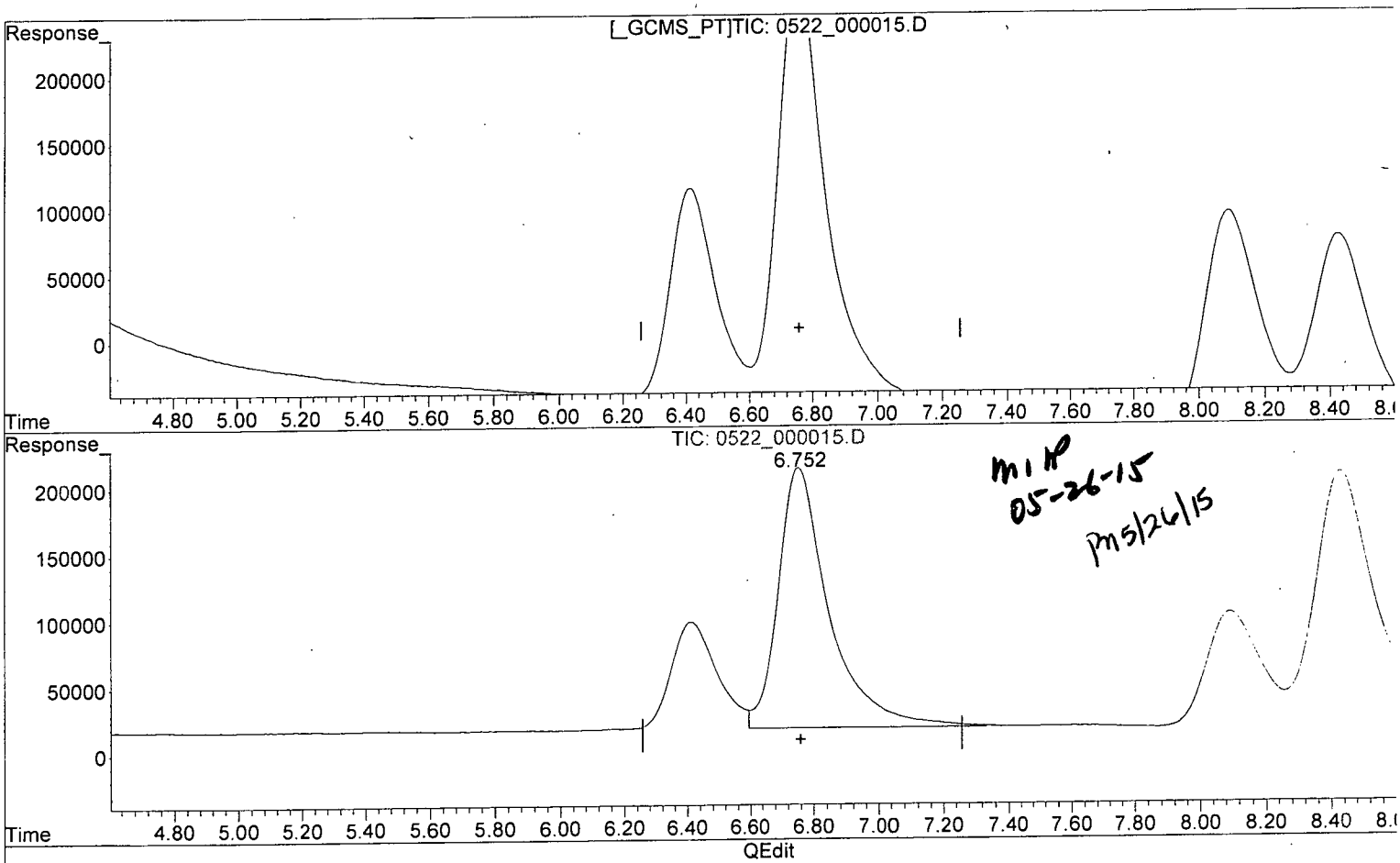
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.752min 43.759 ppb m

response 195589

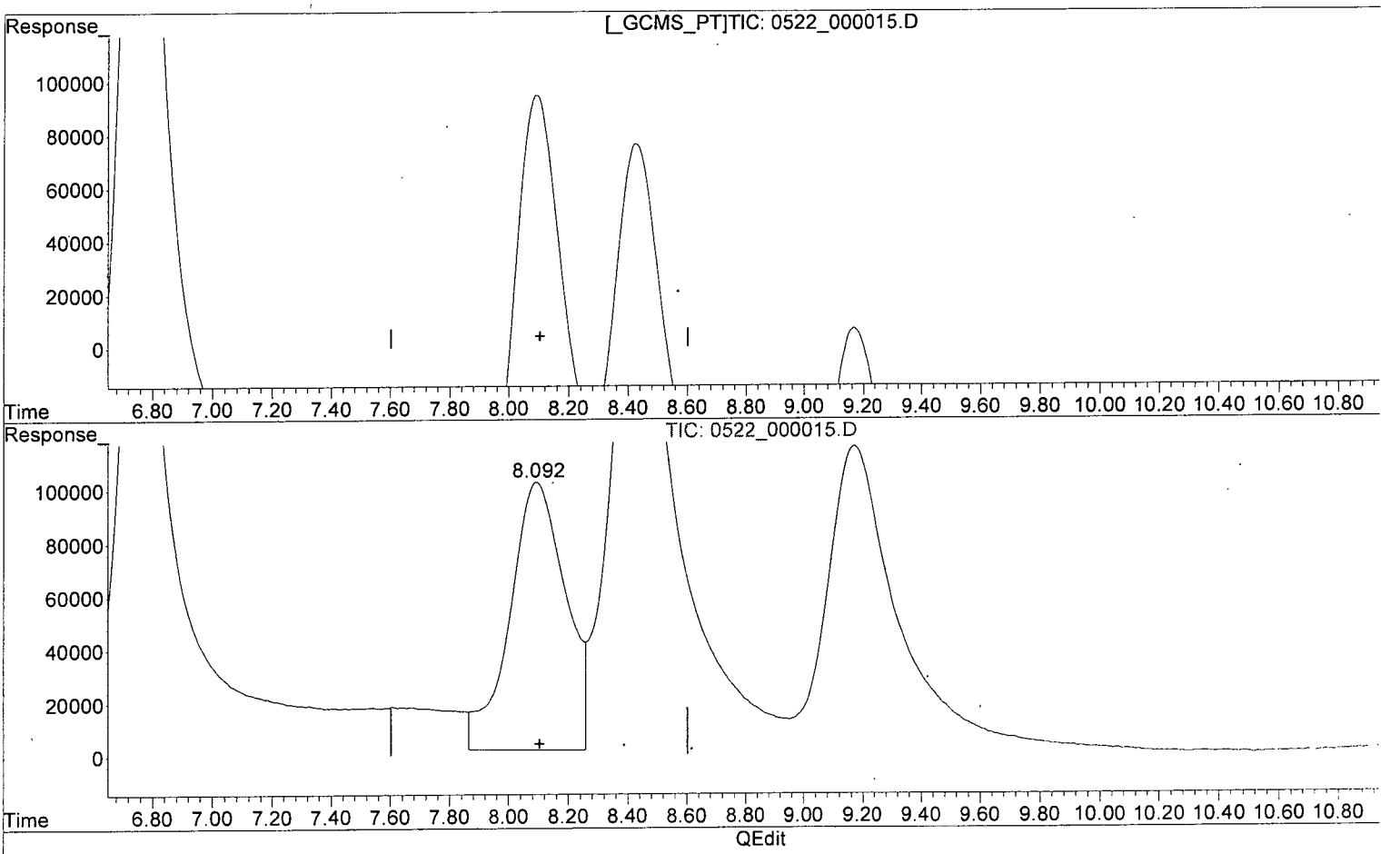
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.093min 47.687 ppb

response 100611

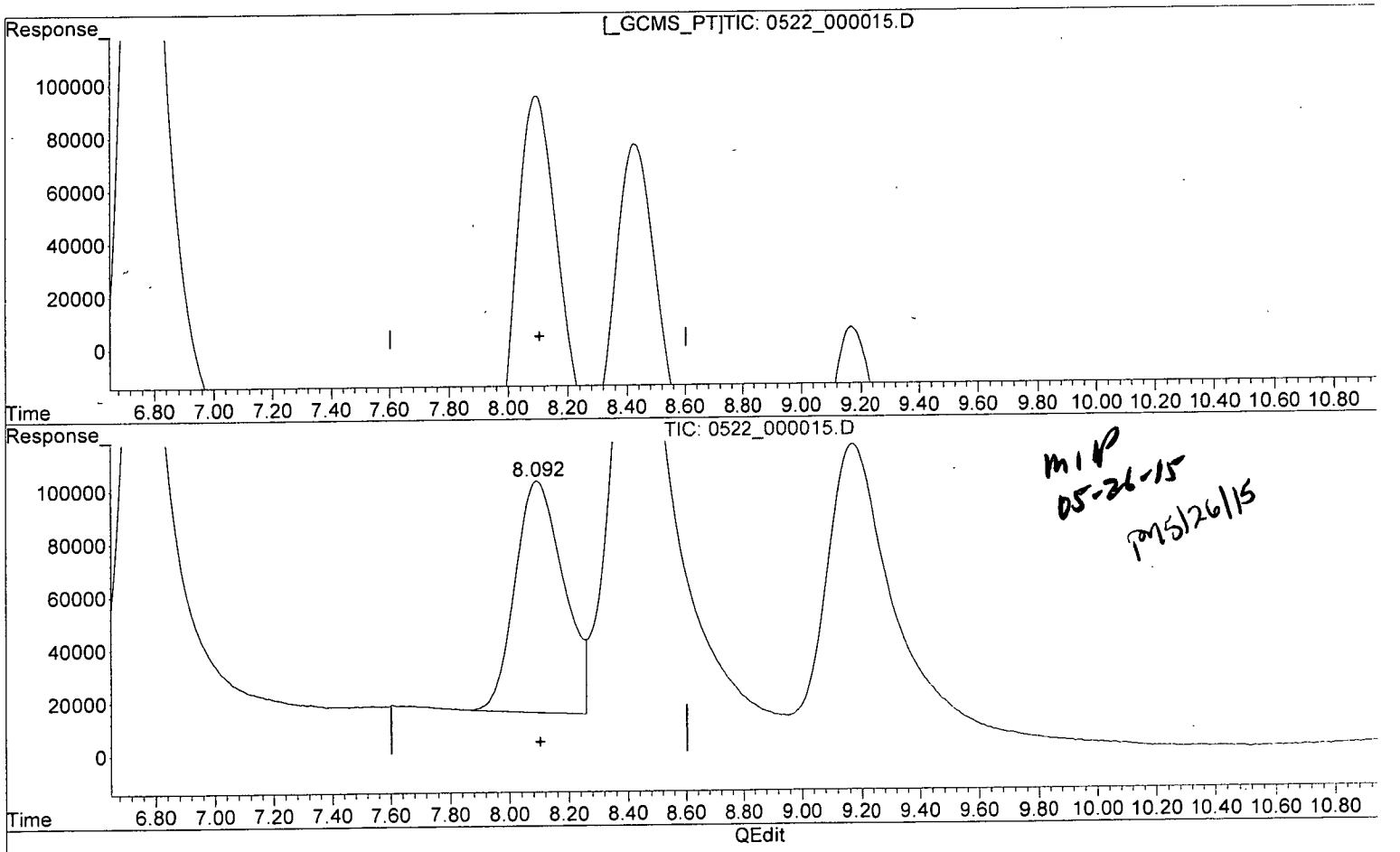
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



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(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.092min 41.395 ppb m

response 87334

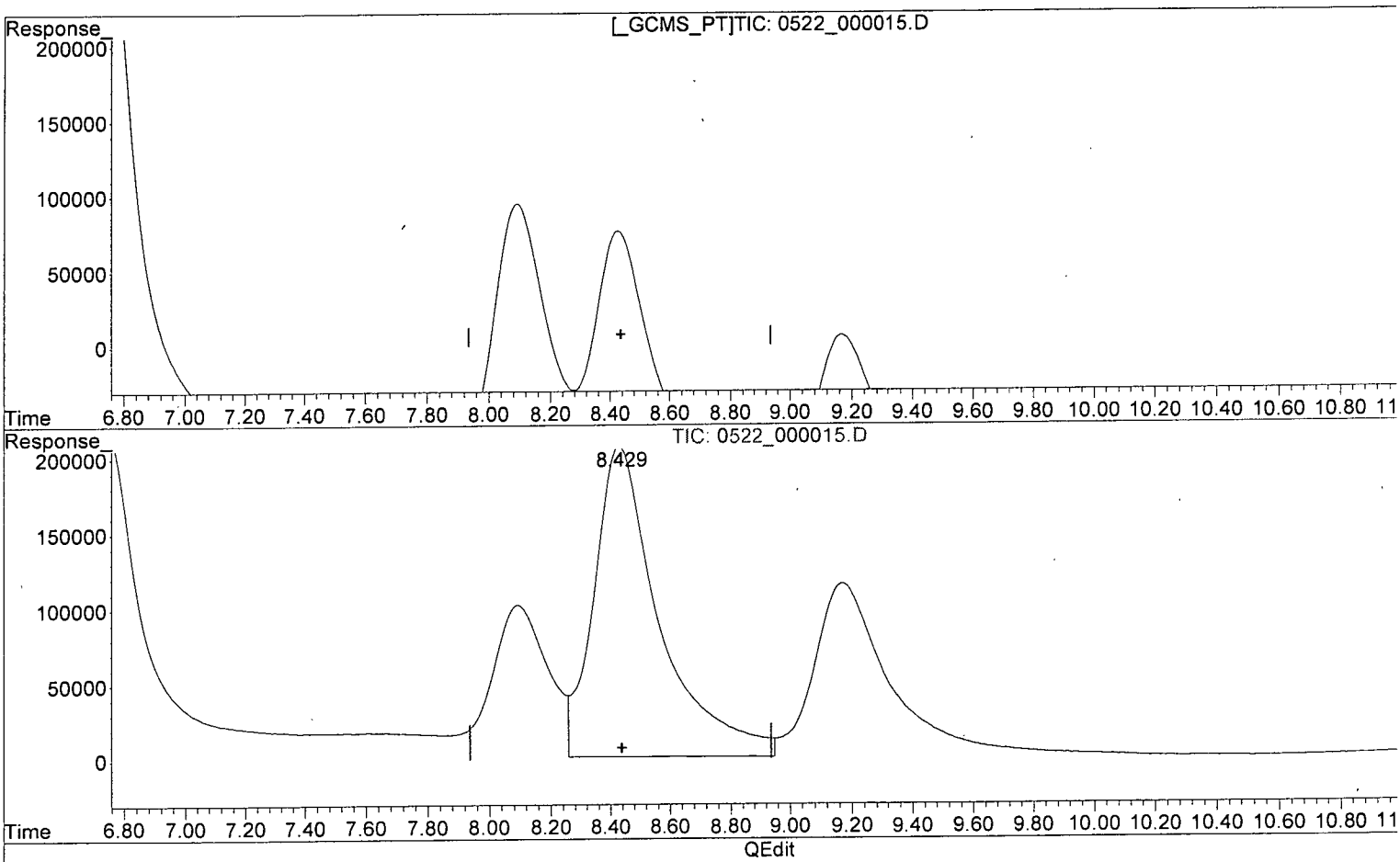
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.429min 45.755 ppb

response 205777

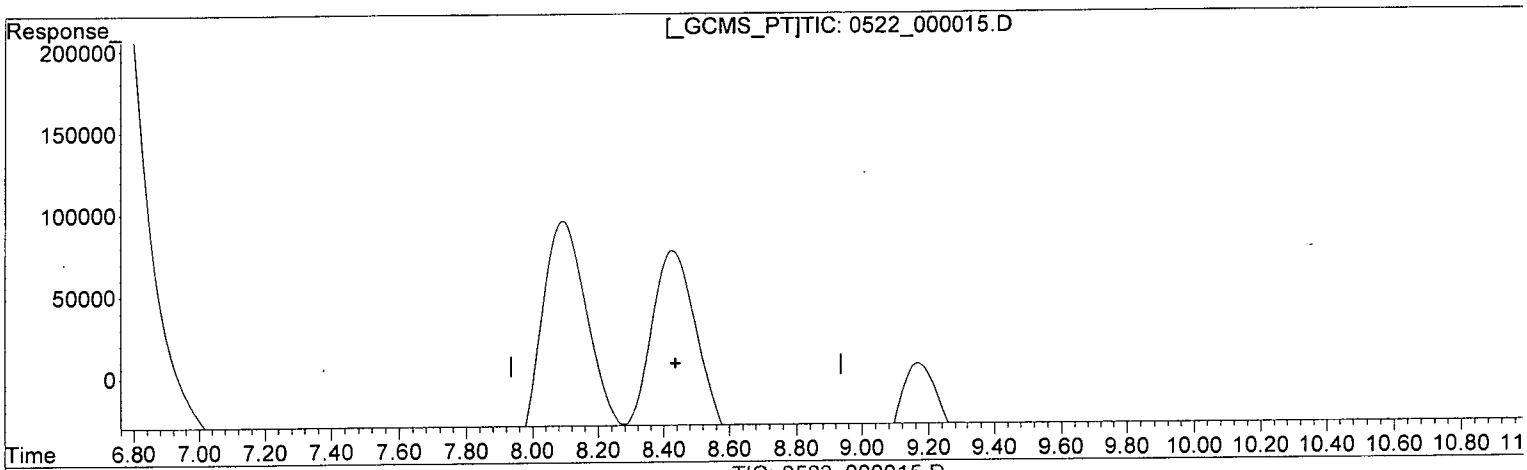
(+) = Expected Retention Time

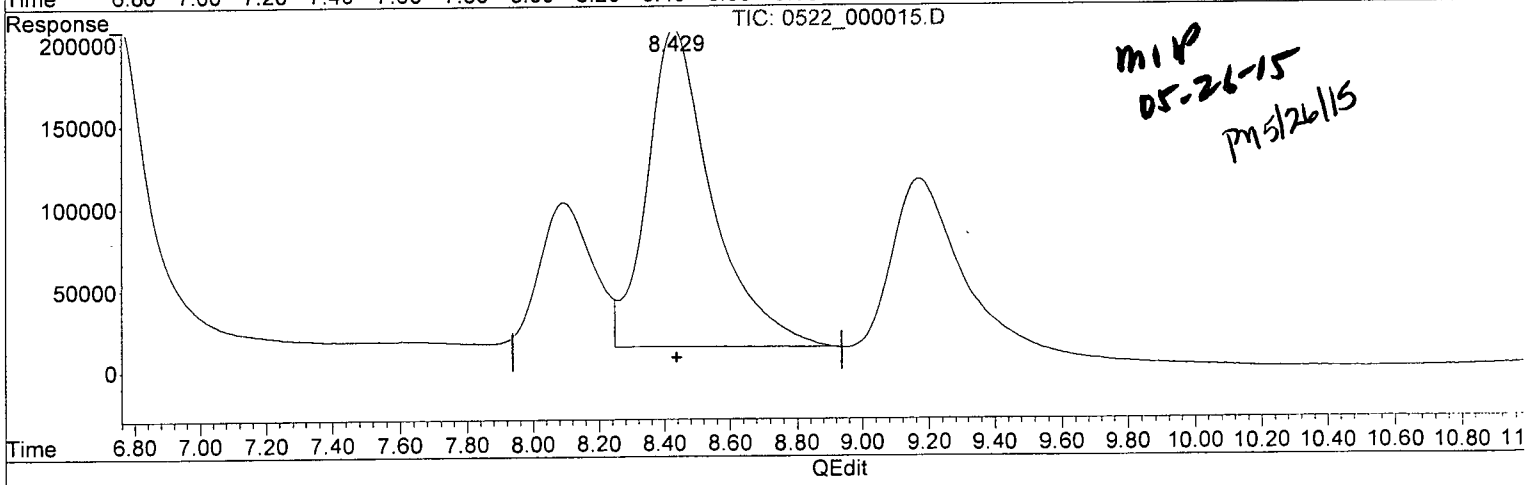
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





MIP 05-26-15 pm 5/26/15

(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.429min 42.975 ppb m

response 193271

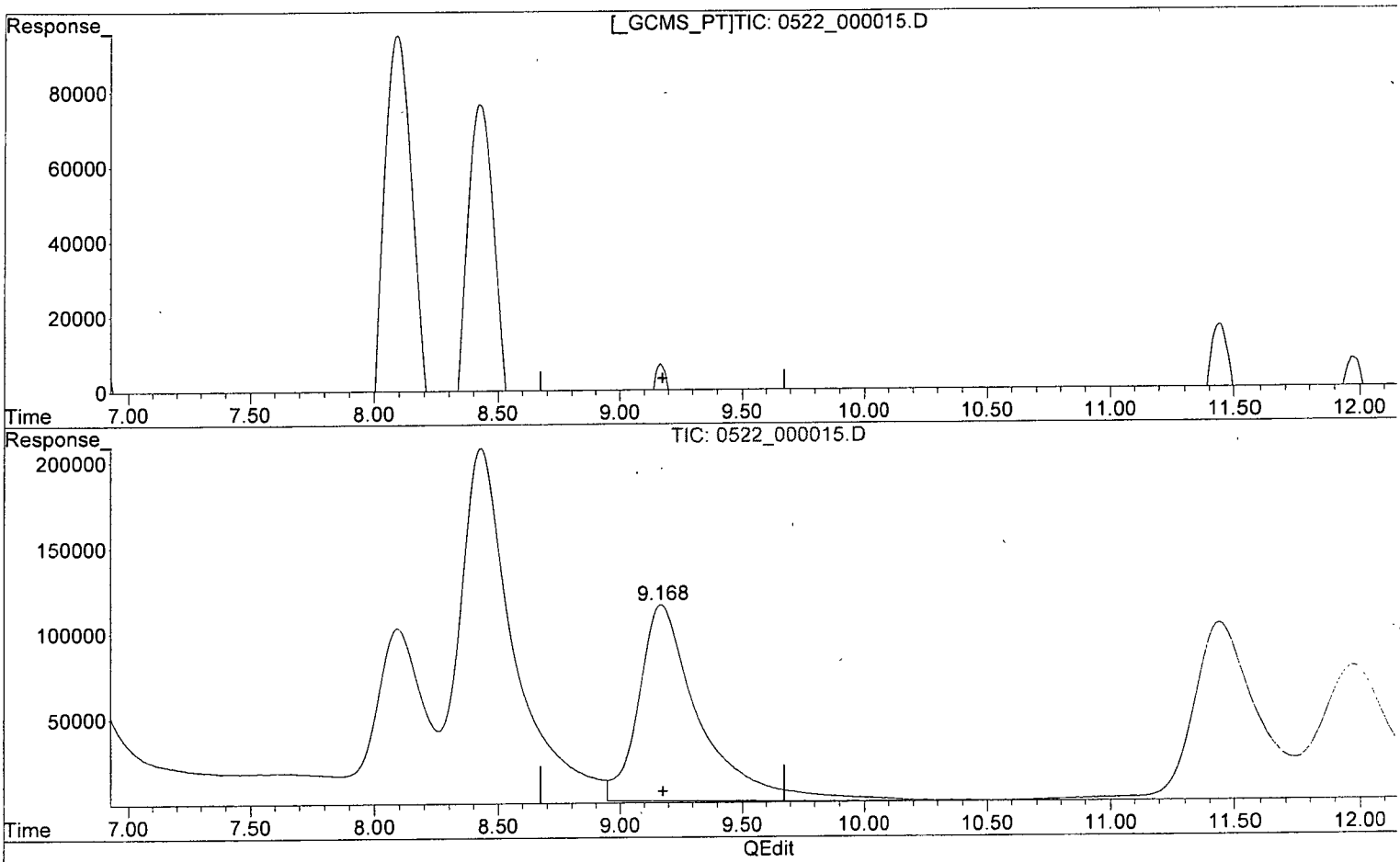
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.169min 44.660 ppb

response 114402

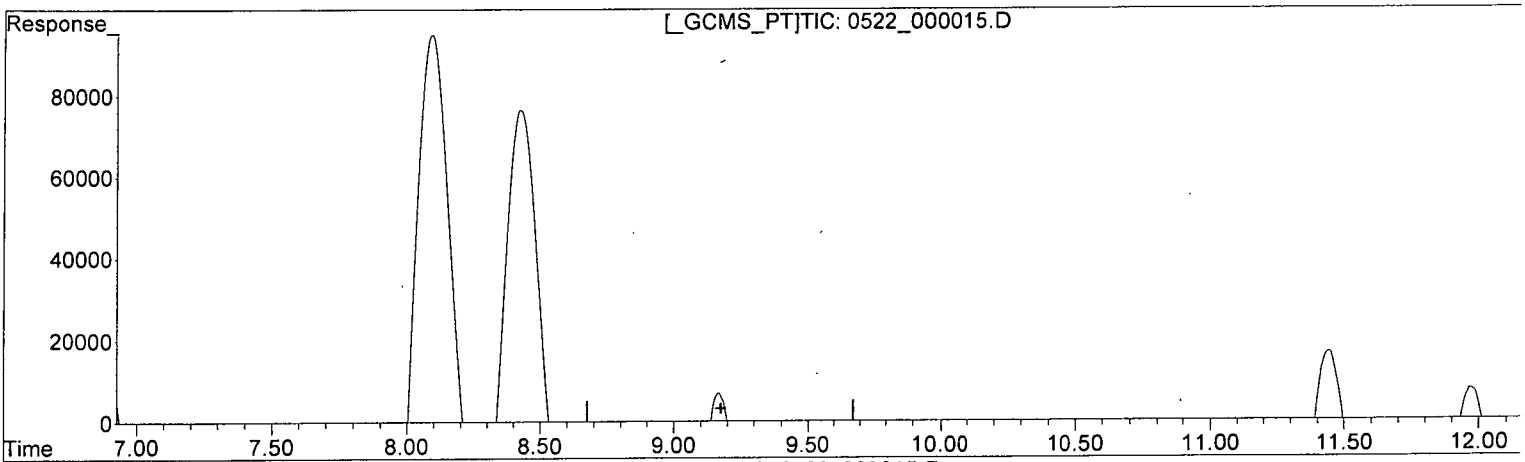
(+) = Expected Retention Time

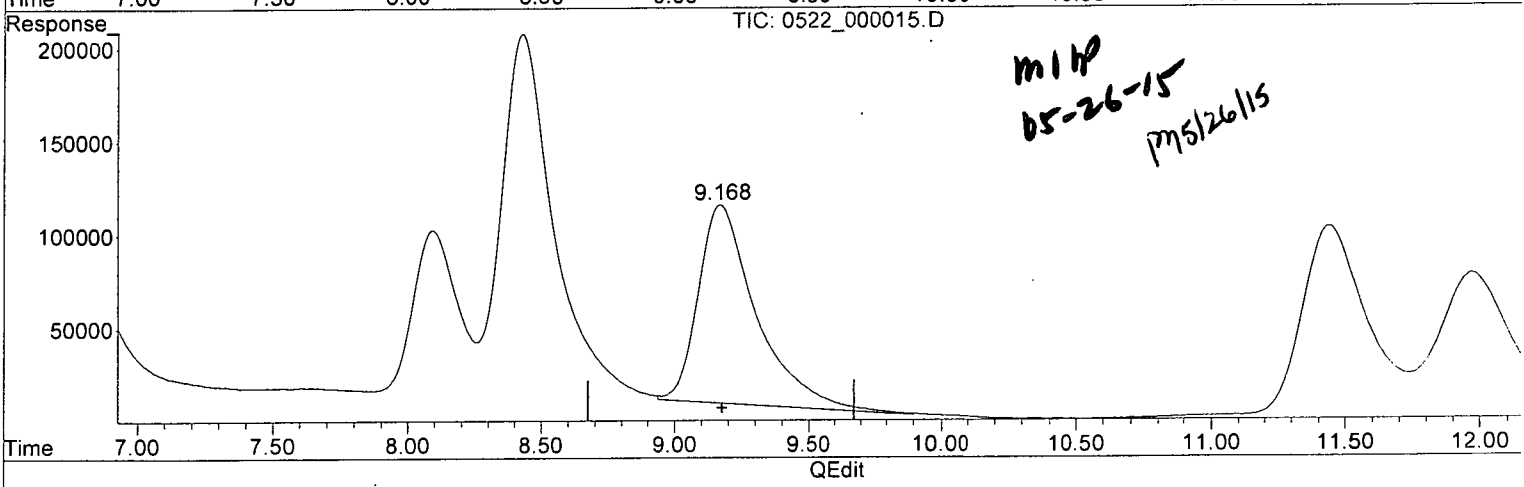
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:10:14
Operator : MP
Sample : 8330MXA_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4230 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





MHP 05-26-15 pm5/26/15

(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.168min 41.438 ppb m

response 106151

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:49:46
Operator : MP
Sample : 8330MXB_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4231 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:43:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update: Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.066	0.000	36214	0	39.765	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.543	0	82461	N.D.	41.312 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.806	0.000	31484	0	34.504m	N.D. #

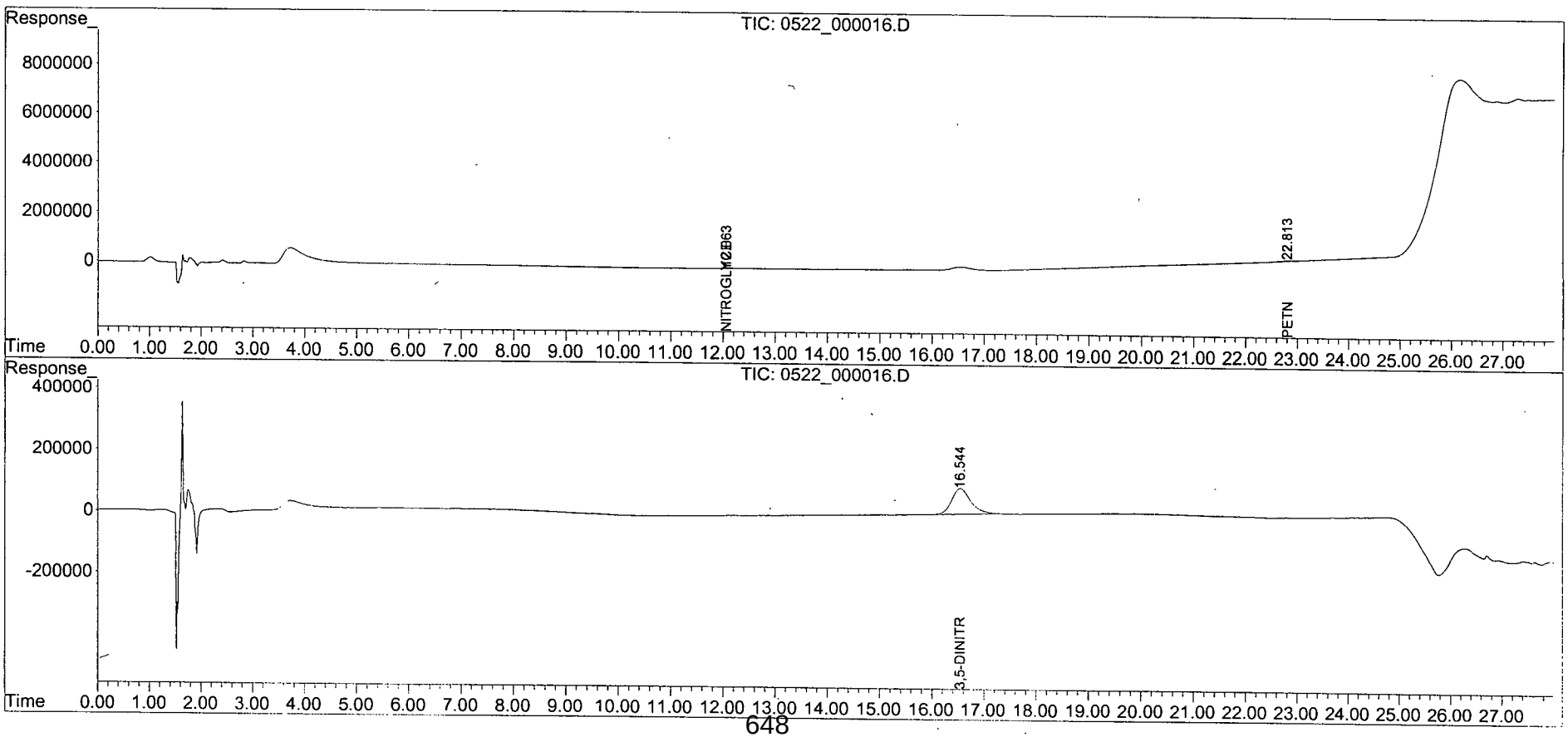
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:49:46
Operator : MP
Sample : 8330MXB_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4231 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:43:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

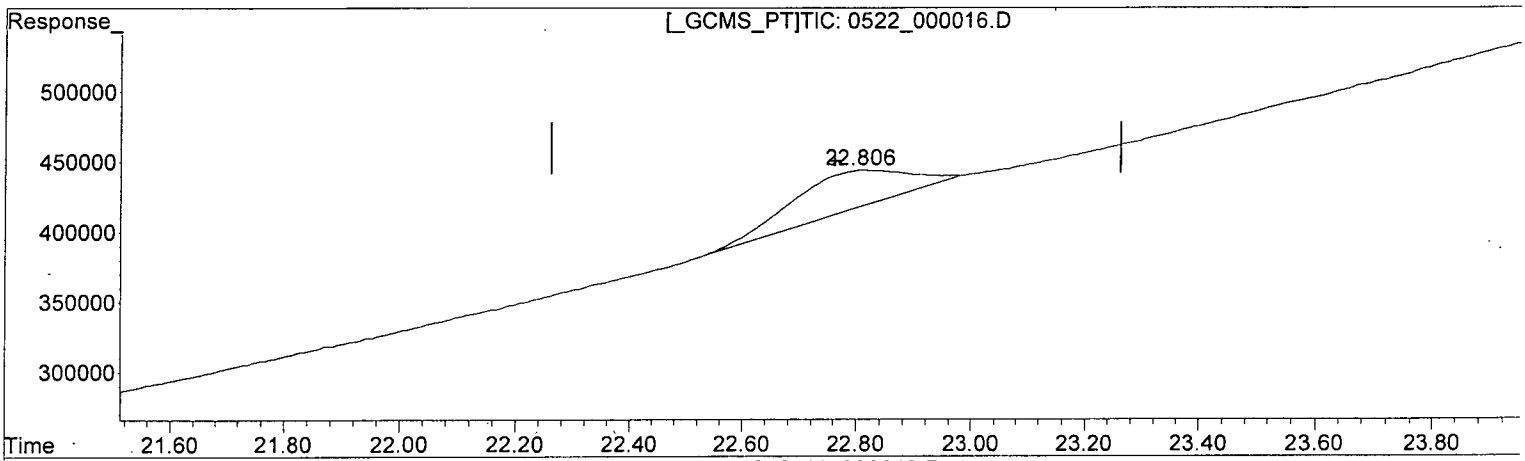


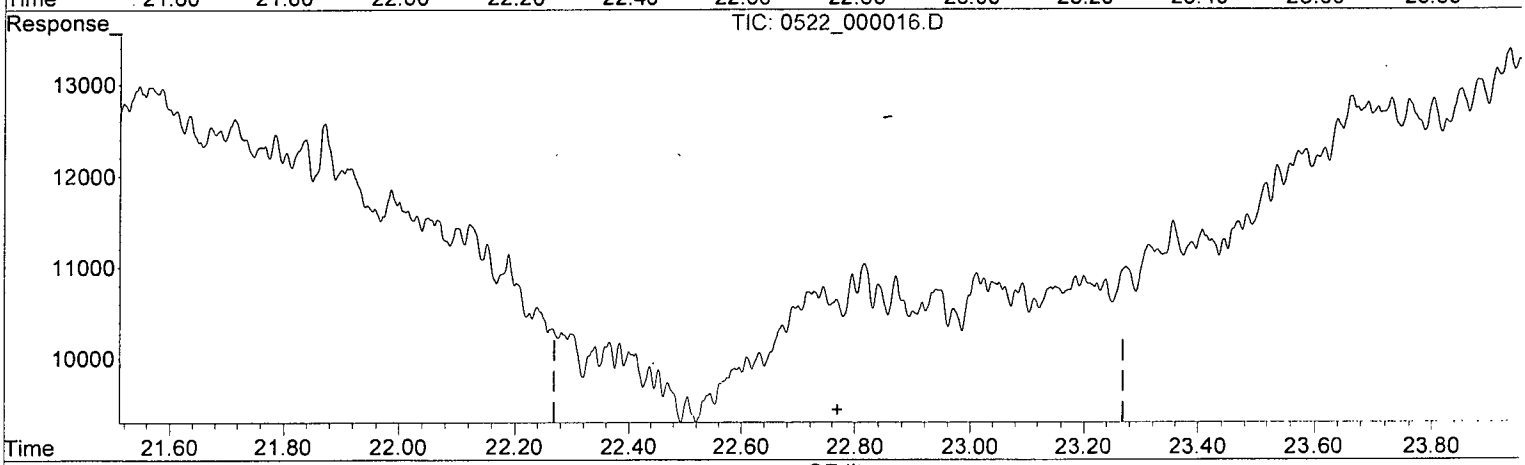
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:49:46
Operator : MP
Sample : 8330MXB_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4231 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:20 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





QEdit

(18) PETN (TM)

22.821min 26.079 ppb

response 23796

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

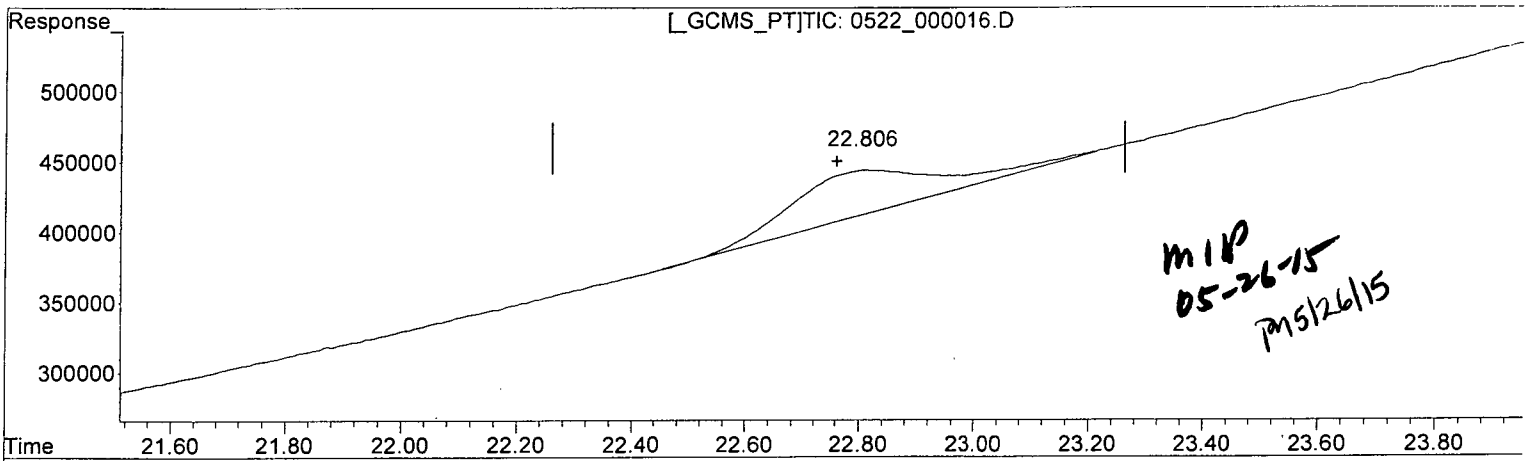
(+) = Expected Retention Time

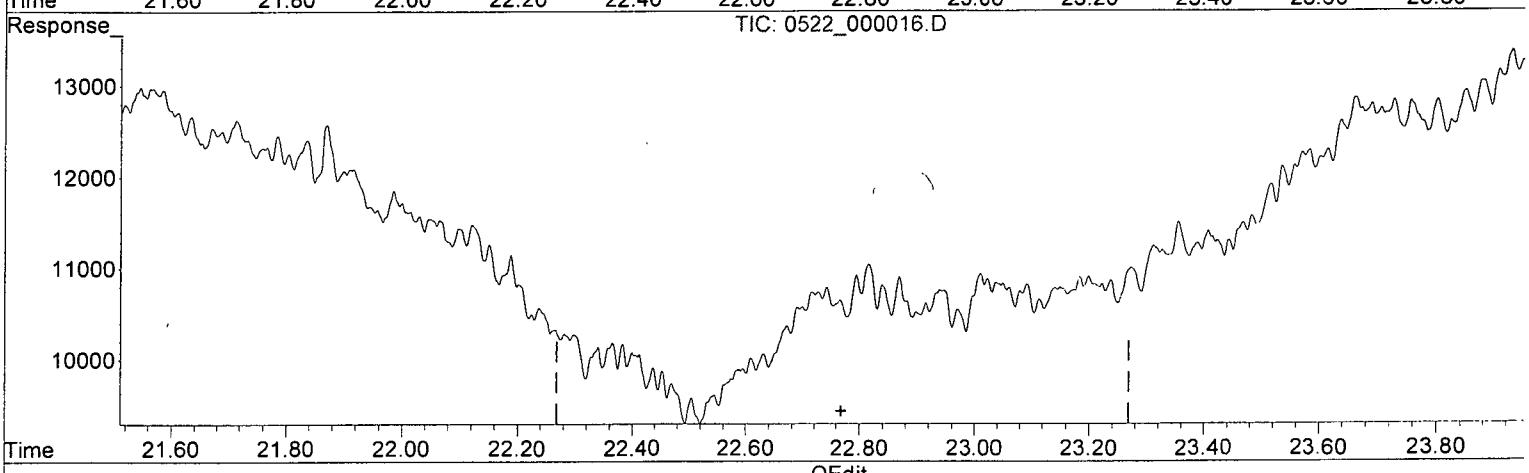
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 18:49:46
Operator : MP
Sample : 8330MXB_CB 0.050 PPM 05/22/15
Misc :
ALS Vial : 4231 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:20 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(18) PETN (TM)

22.806min 34.504 ppb m

response 31484

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:42:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	8.096	0	170391	N.D.	80.762m#
Spiked Amount 62.500			Recovery	=	0.00%	129.22%
Target Compounds						
1) TM HMX	0.000	4.078	0	187333	N.D.	89.085m#
2) TM RDX	0.000	6.416	0	158283	N.D.	85.460m#
3) TM 1,3,5-TRI...	0.000	6.754	0	383111	N.D.	85.713m#
5) TM 1,3-DINIT...	0.000	8.432	0	382410	N.D.	85.031m#
6) TM NITROBENZENE	0.000	9.173	0	220159	N.D.	85.944 #
7) TM 2,4,6-TRI...	0.000	11.447	0	198494	N.D.	78.187 #
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM TETRYL	11.982	11.980	121440	144767	NoCal	87.881 #
10) TM 2,6-DINIT...	13.453	13.452	184036	118801	NoCal	80.430 #
11) TM 2,4-DINIT...	0.000	14.059	0	206563	N.D.	81.985 #
12) TM 2-NITROTO...	0.000	15.467	0	84122	N.D.	79.789 #
13) TM 4-NITROTO...	0.000	16.888	0	74548	N.D.	85.119 #
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM 3-NITROTO...	0.000	18.071	0	92548	N.D.	86.556 #
16) TM 4-AMINO-2...	0.000	18.658	0	137010	N.D.	97.797 #
17) TM 2-AMINO-4...	0.000	19.613	0	172579	N.D.	84.662 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

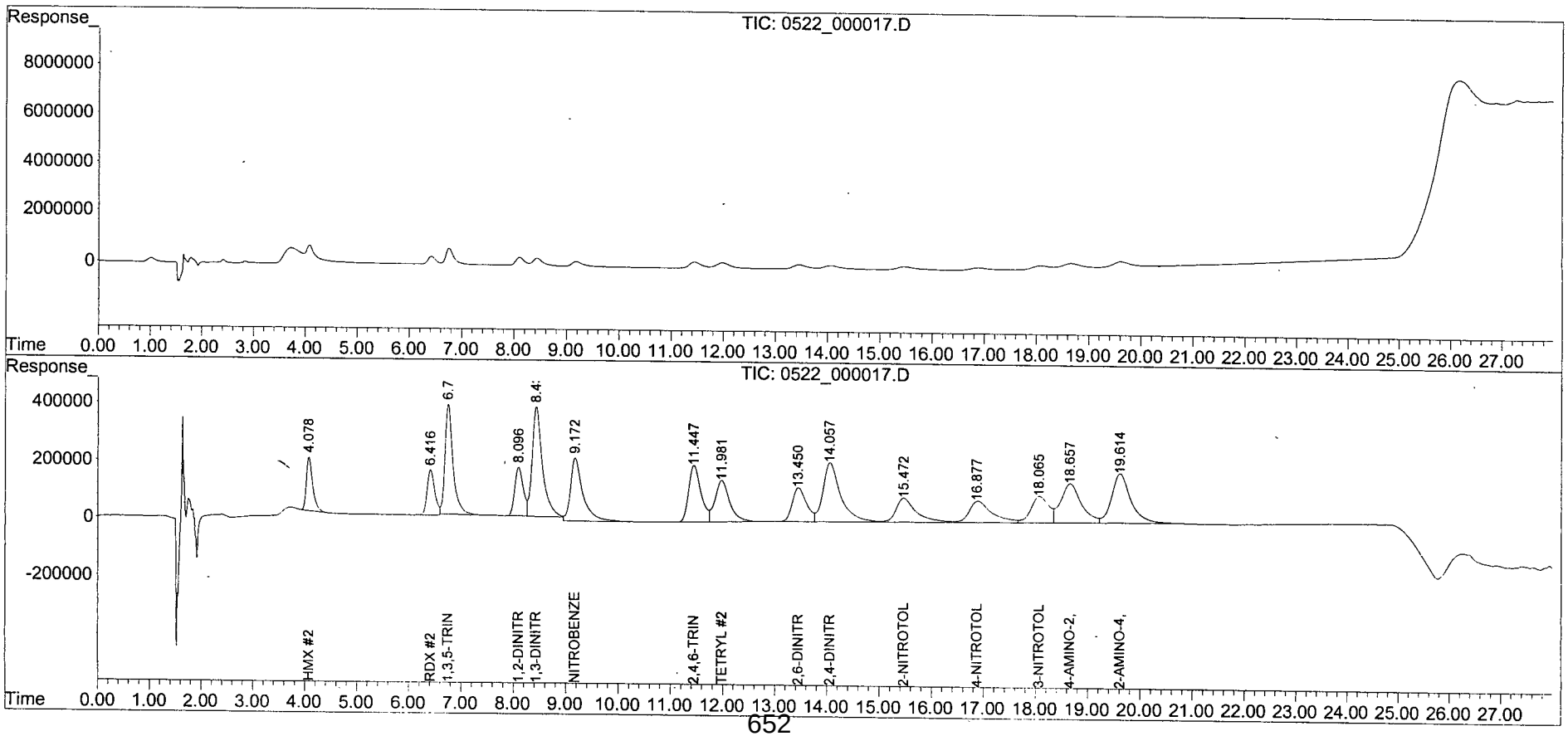
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:42:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



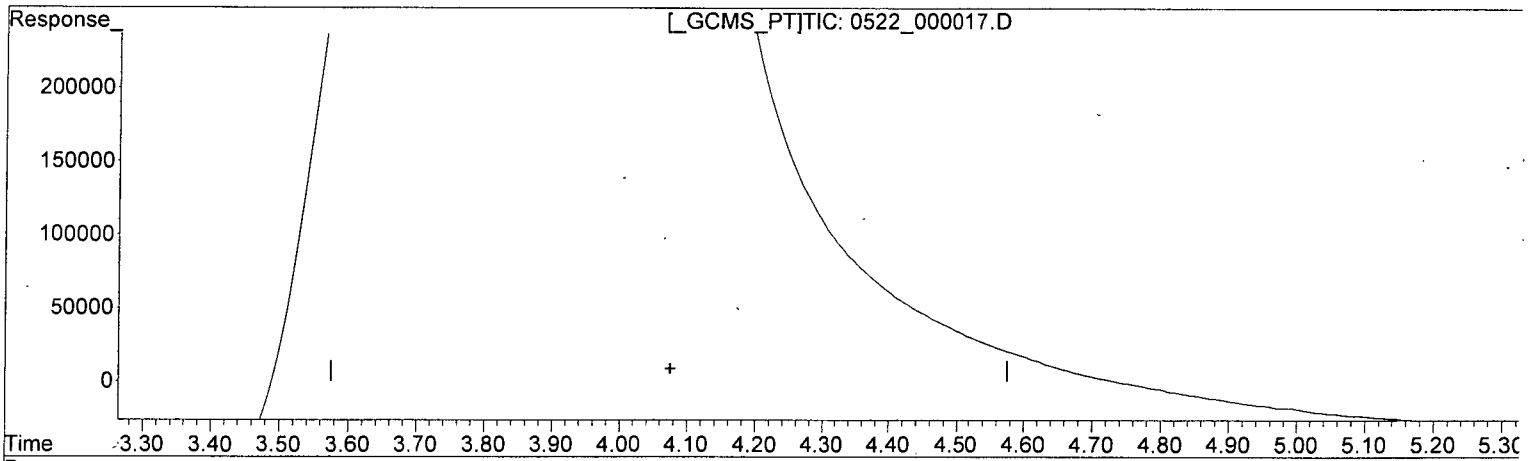
STE2_150522_M Sat May 23 09:42:14 2015 WALDORF Page: 2

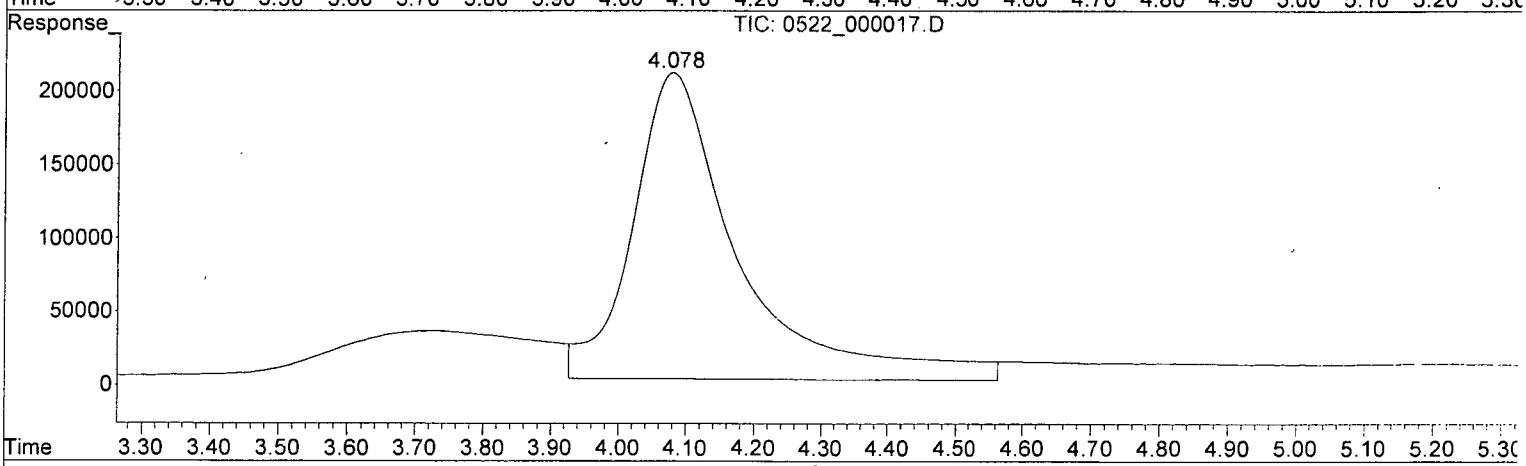
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.079min 98.980 ppb

response 208141

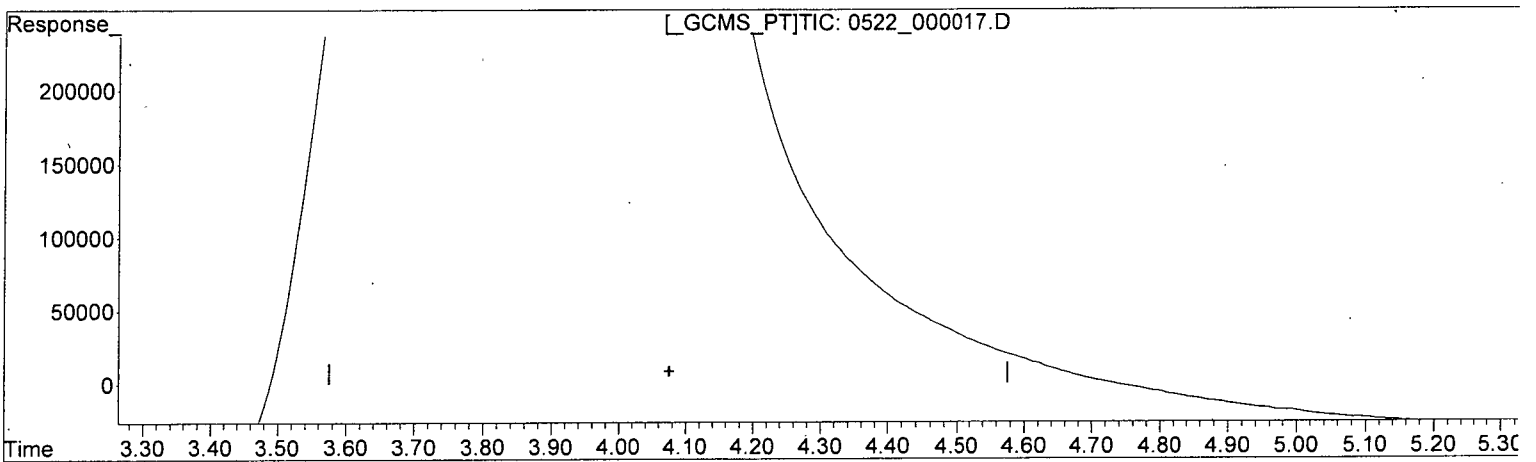
(+) = Expected Retention Time

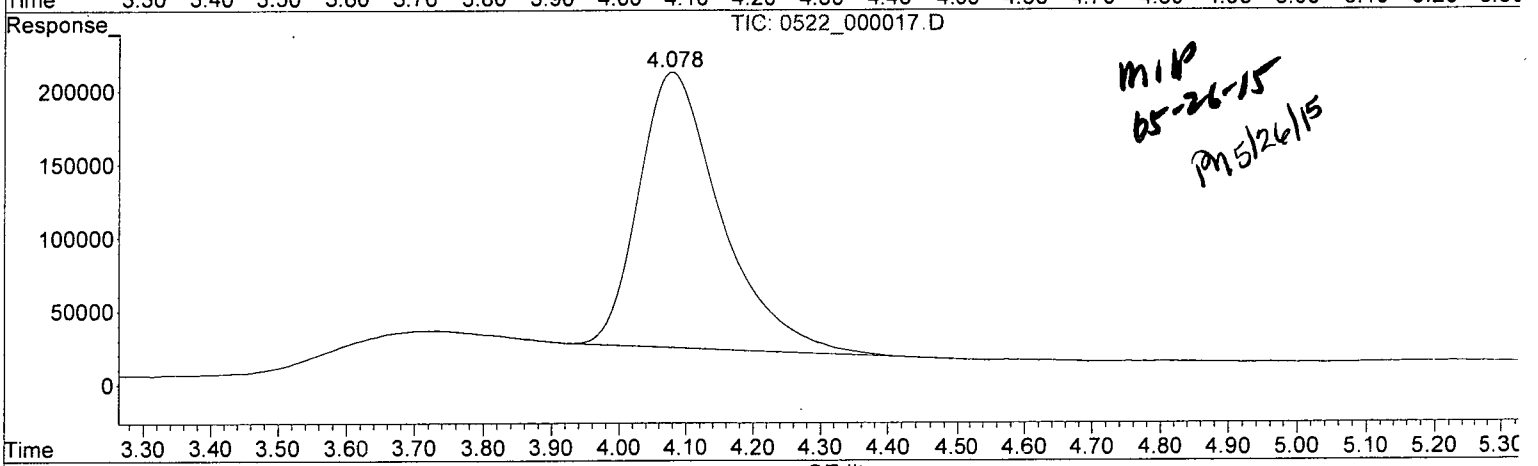
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





MLP 05-26-15 pm 5/26/15

QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.078min 89.085 ppb m

response 187333

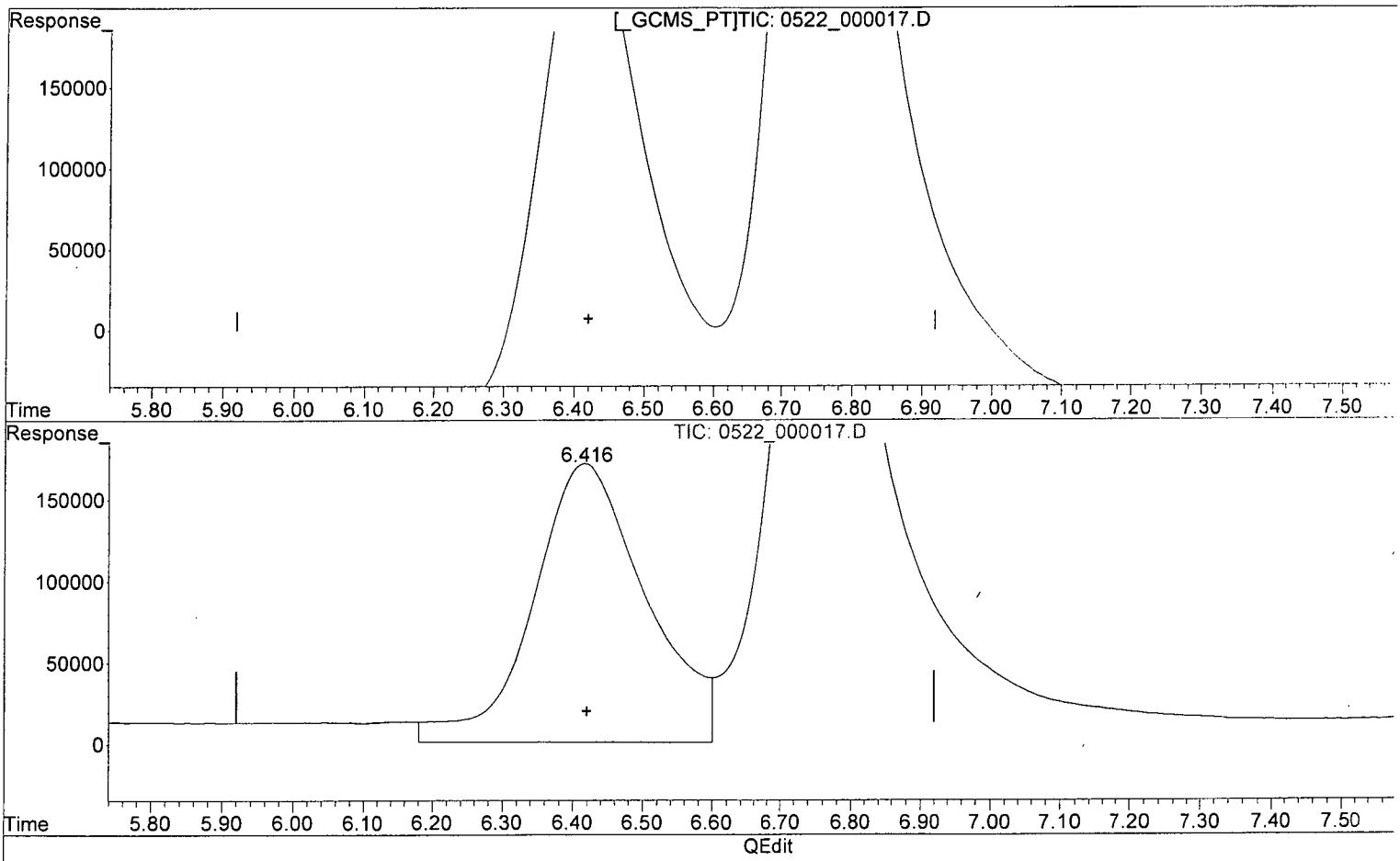
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



QEdit

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.417min 92.221 ppb

response 170806

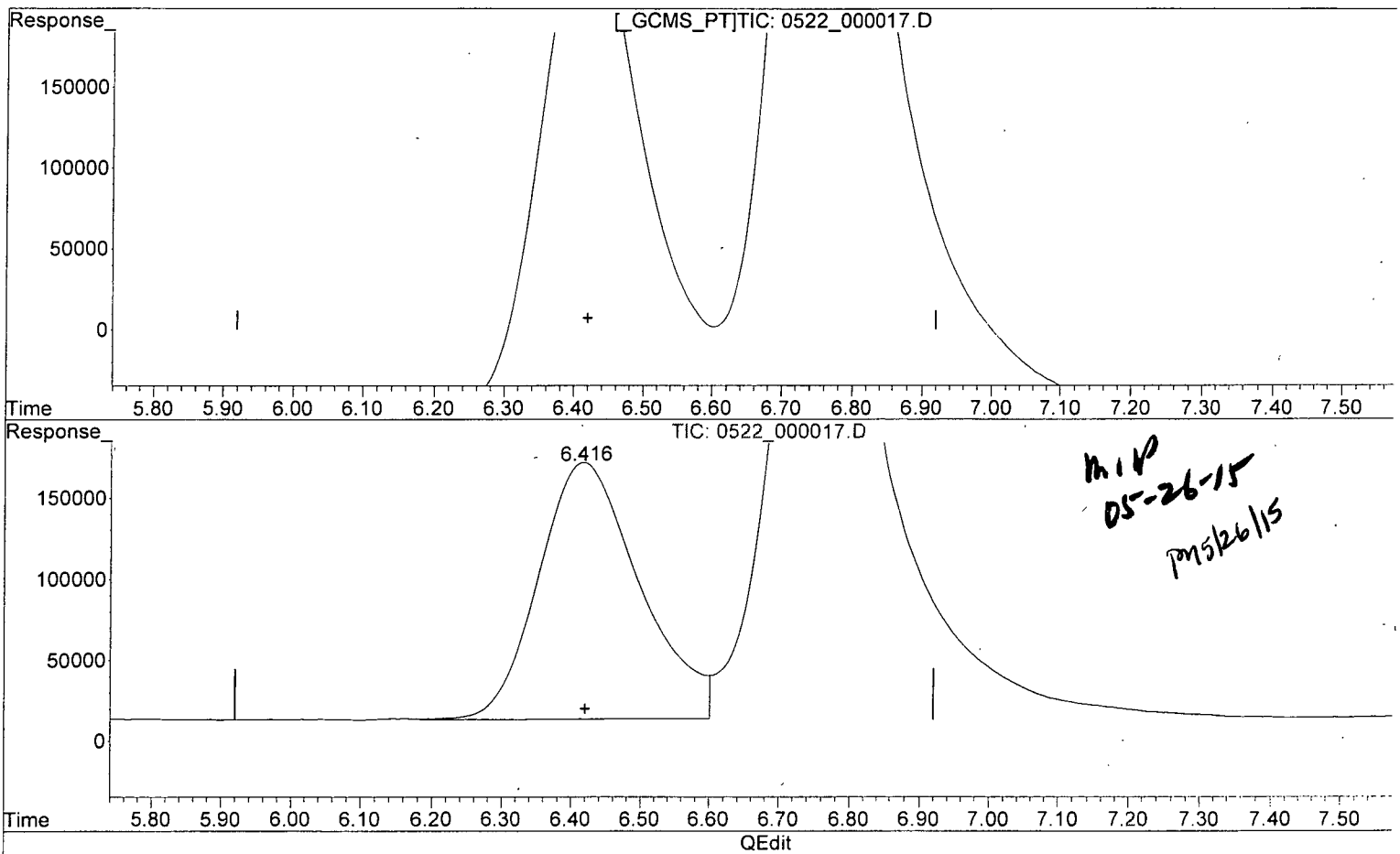
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MP 05-26-15 pm 5/26/15

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.416min 85.460 ppb m

response 158283

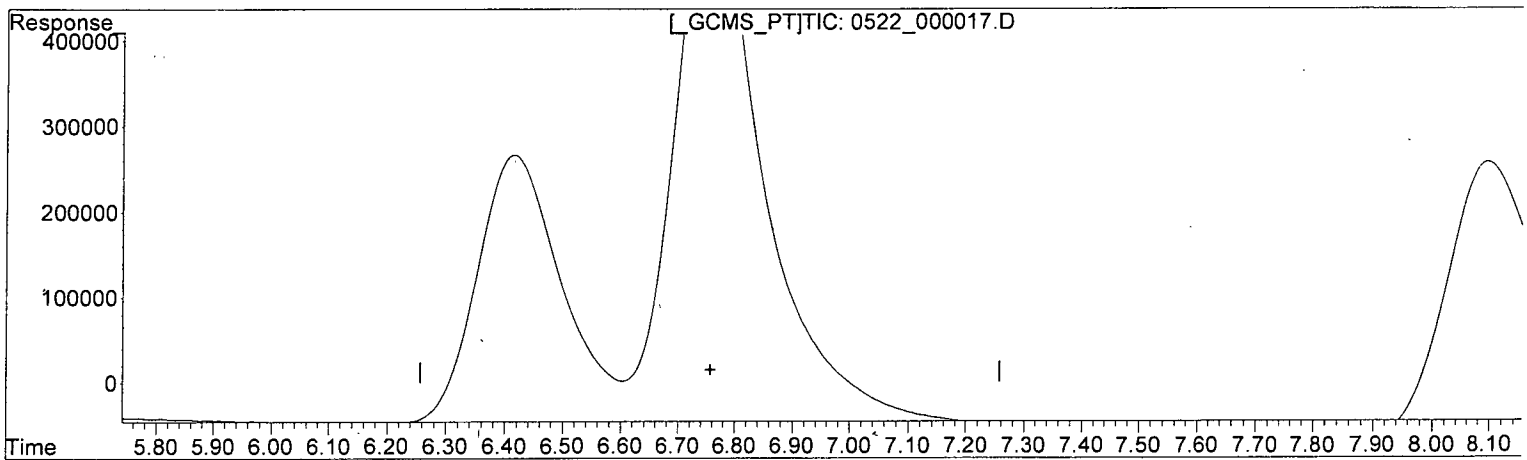
(+) = Expected Retention Time

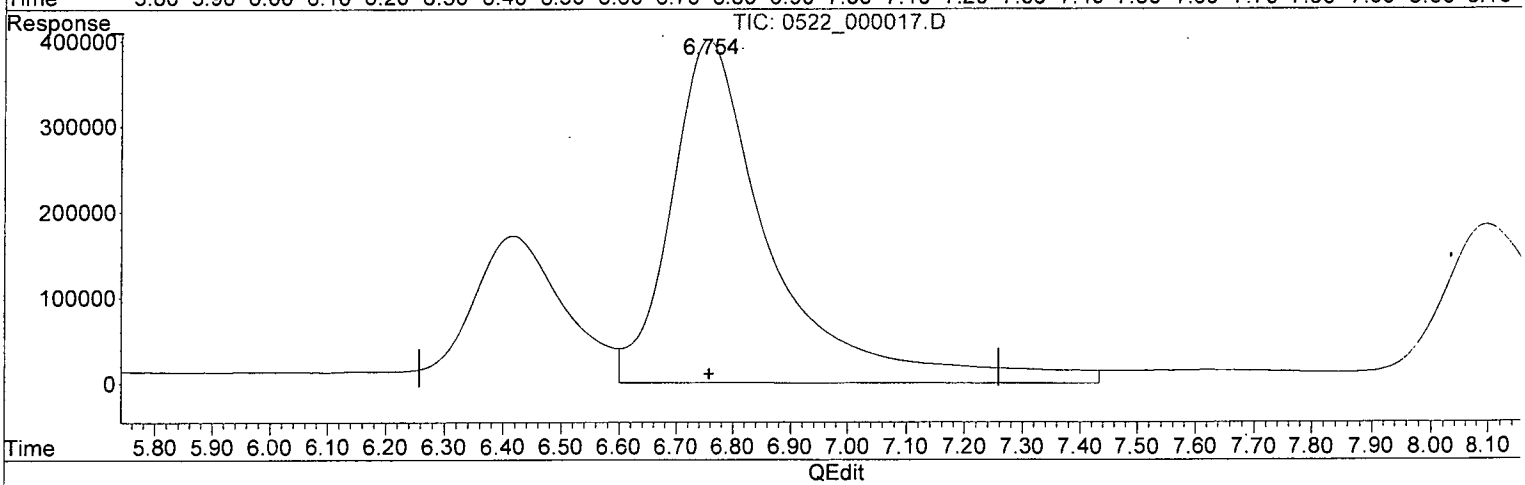
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.755min 89.469 ppb

response 399898

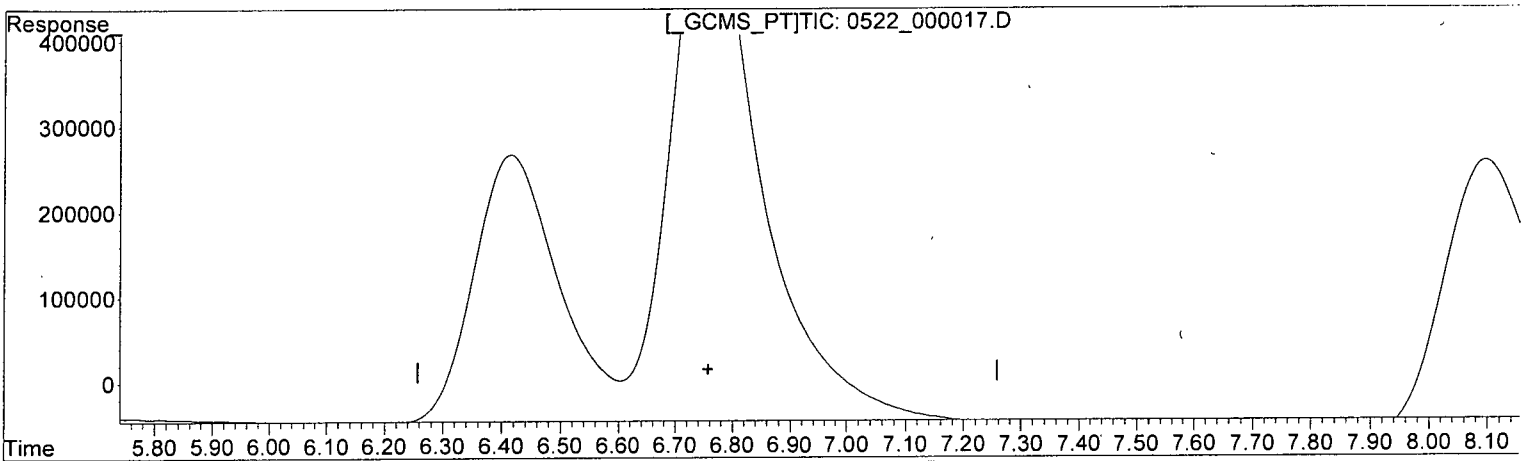
(+) = Expected Retention Time

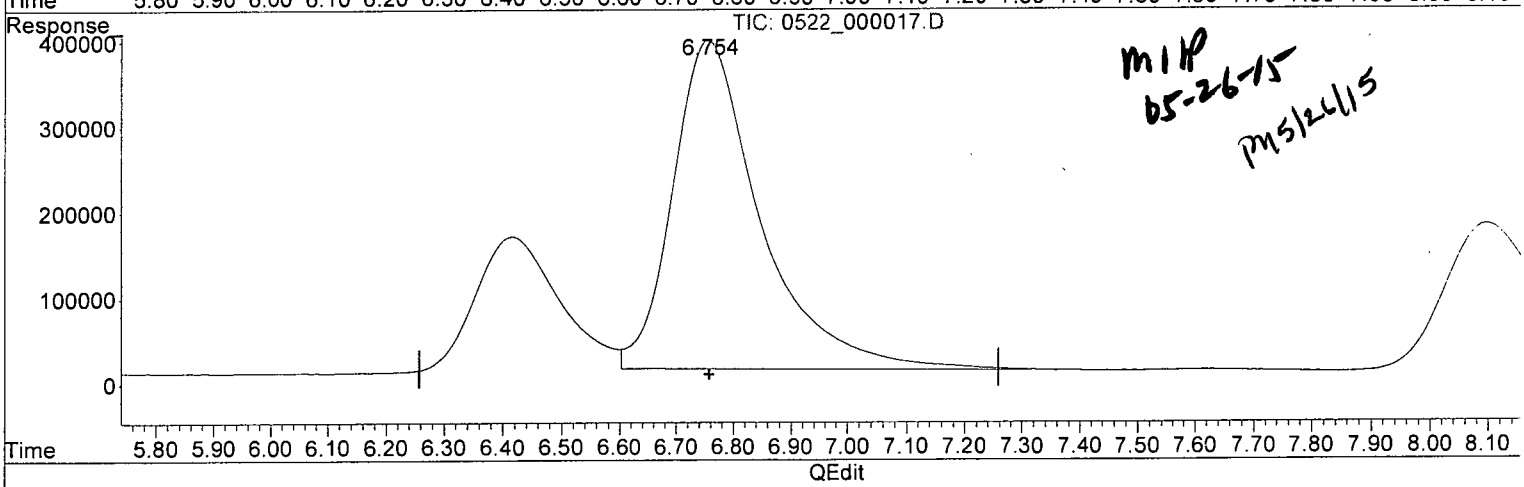
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





MIP
05-26-15
PM 5/26/15

(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.754min 85.713 ppb m

response 383111

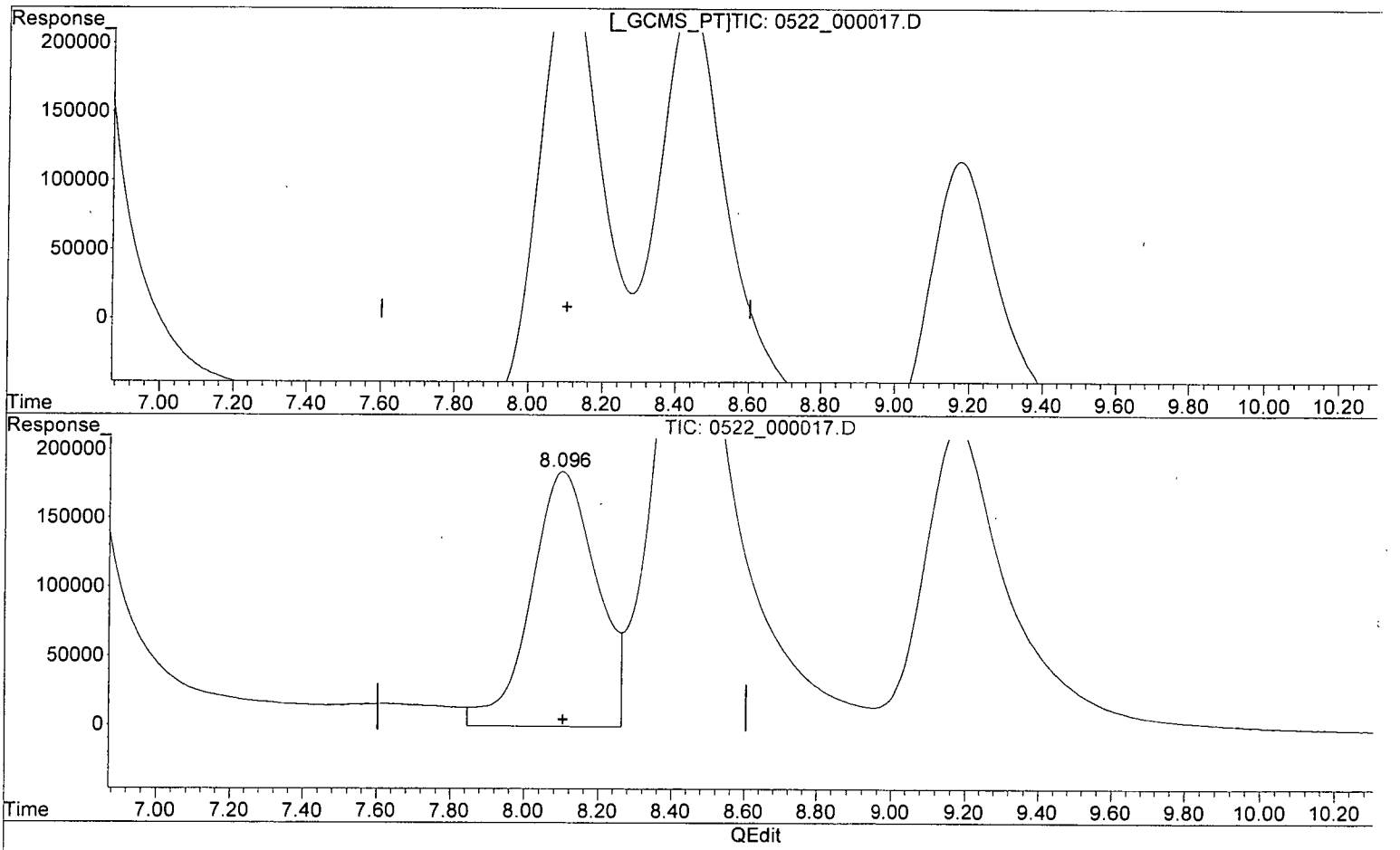
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.097min 87.674 ppb

response 184974

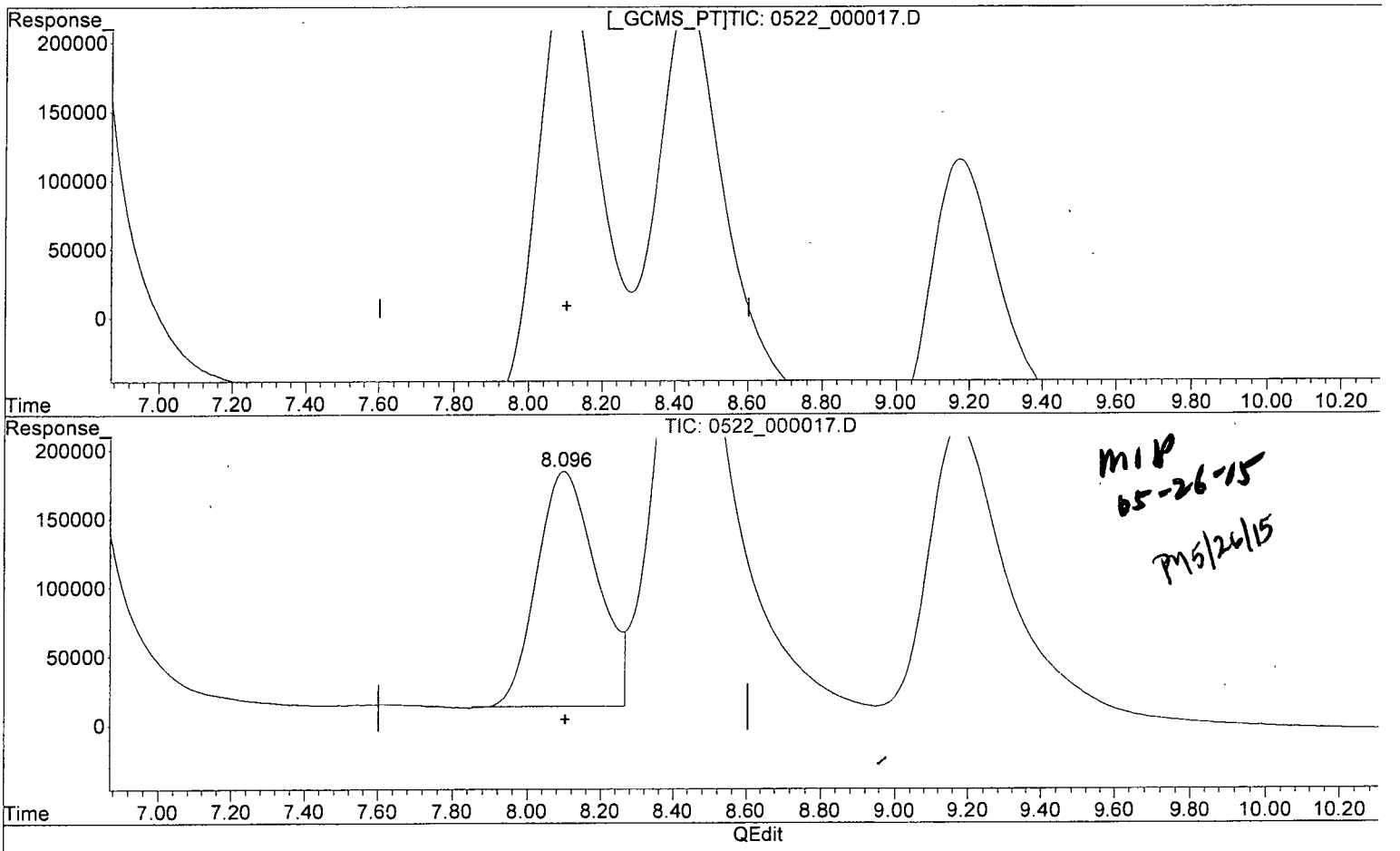
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(4) 1,2-DINITROBENZENE (S)

0.000min 0.000 ppb

response 0

(4) 1,2-DINITROBENZENE #2 (S)

8.096min 80.762 ppb m

response 170391

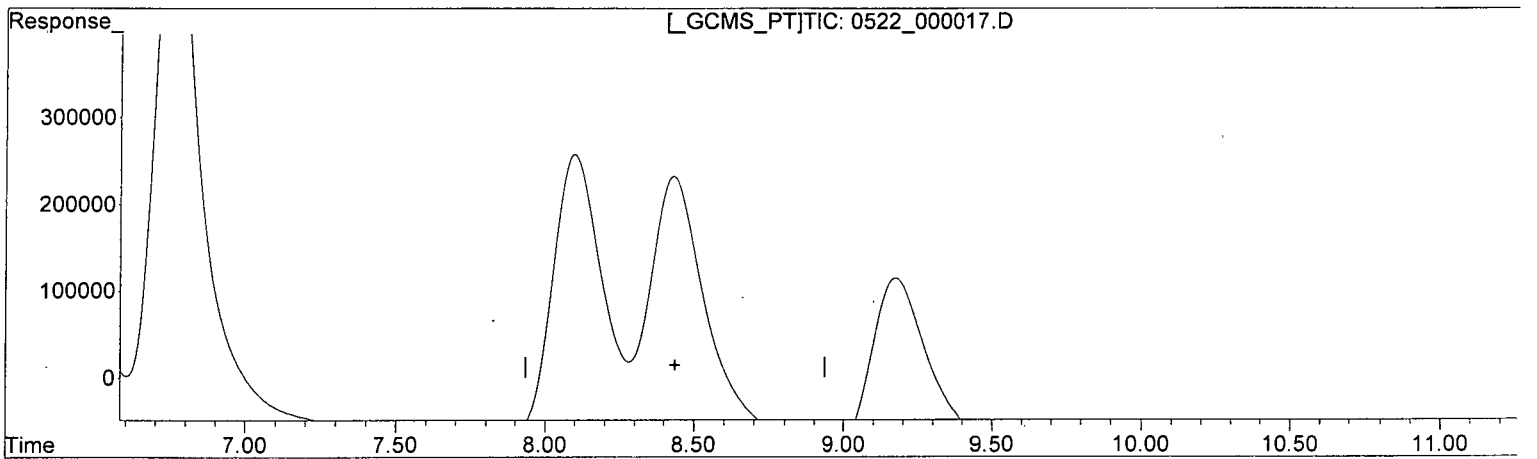
(+) = Expected Retention Time

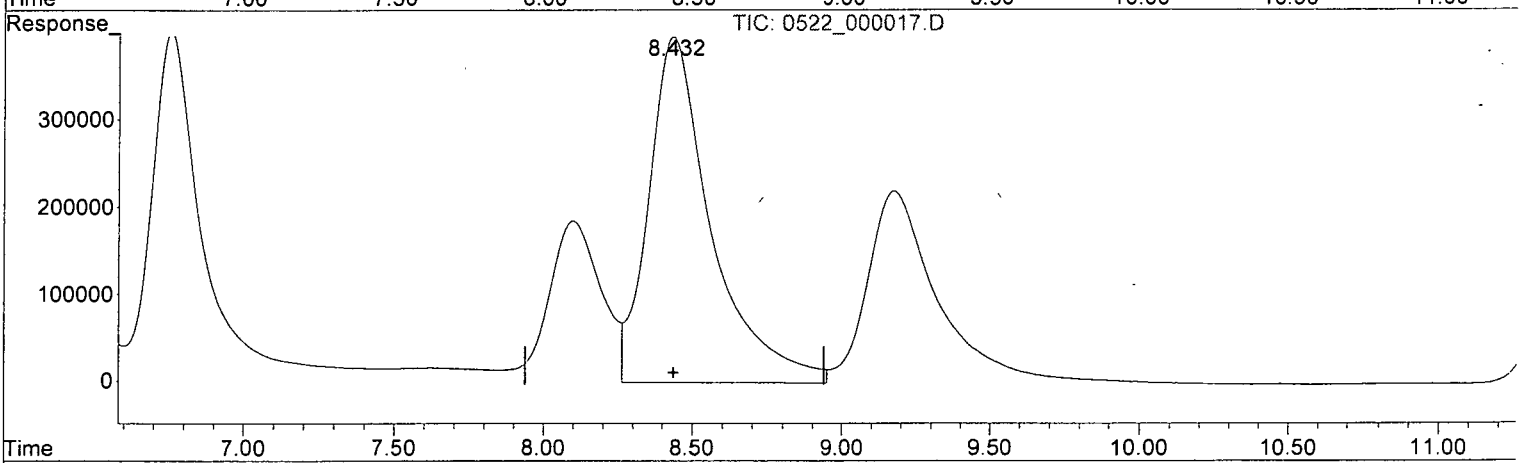
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.433min 88.015 ppb

response 395834

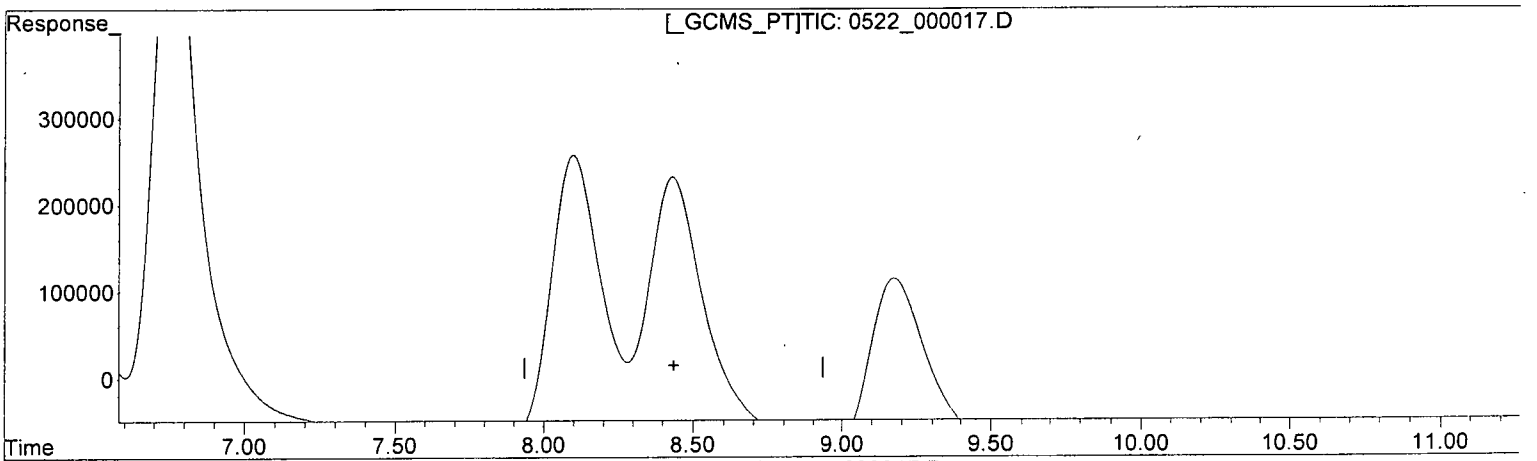
(+) = Expected Retention Time

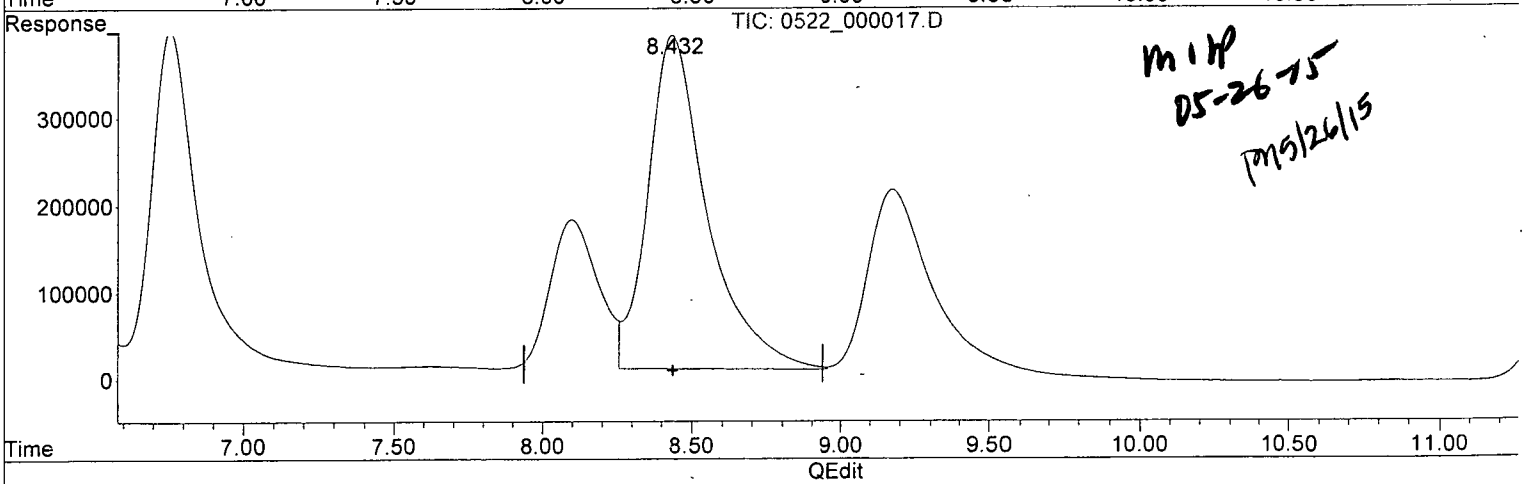
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000017.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 19:29:17
Operator : MP
Sample : 8330MXA_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4232 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:23 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MHP 05-26-15 5/26/15

(5) 1,3-DINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(5) 1,3-DINITROBENZENE #2 (TM)

8.432min 85.031 ppb m

response 382410

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:08:48
Operator : MP
Sample : 8330MXB_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4288 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:40:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.070	0.000	71317	0	78.310	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.571	0	165081	N.D.	82.703 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.803	0.000	69644	0	76.325m	N.D. #

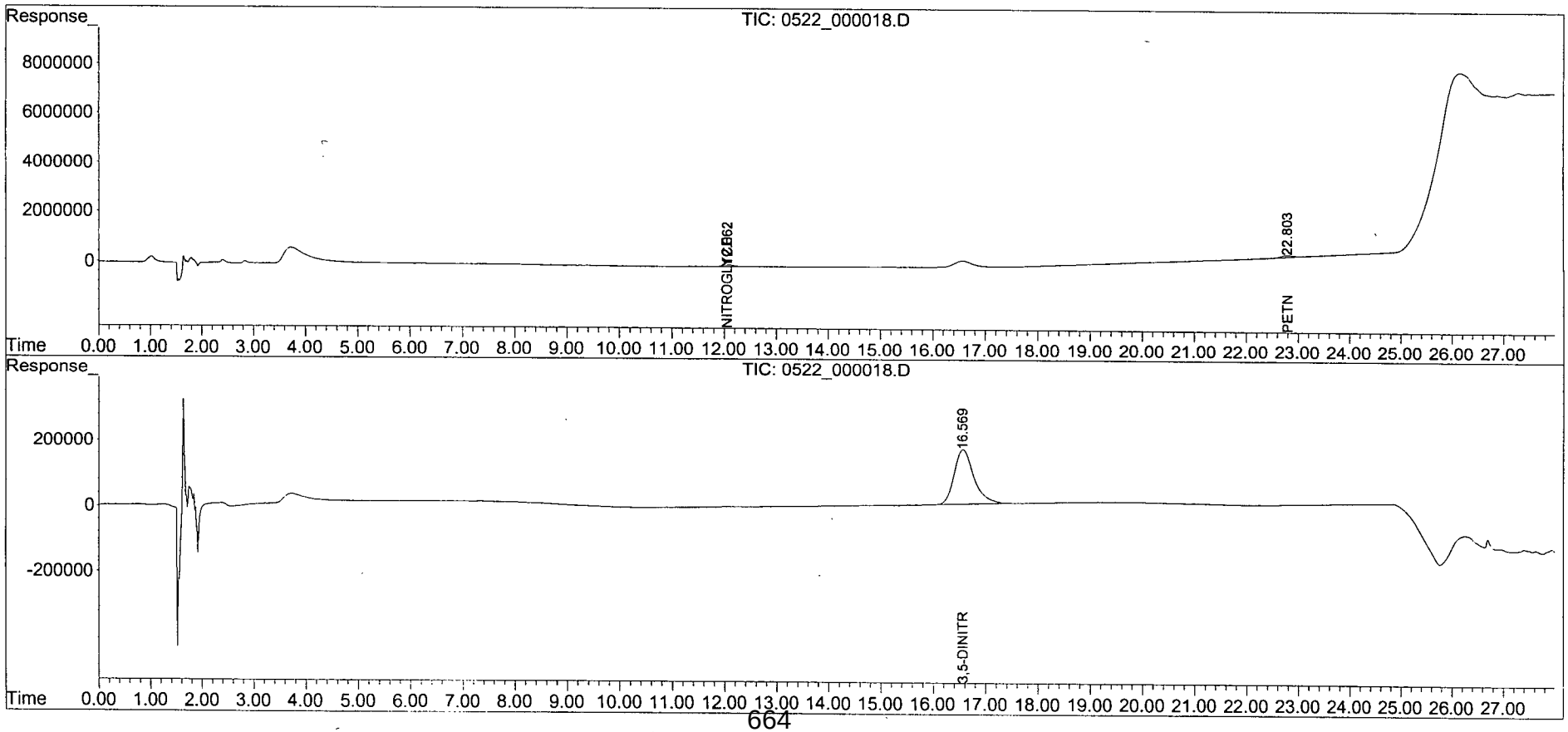
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:08:48
Operator : MP
Sample : 8330MXB_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4288 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:40:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

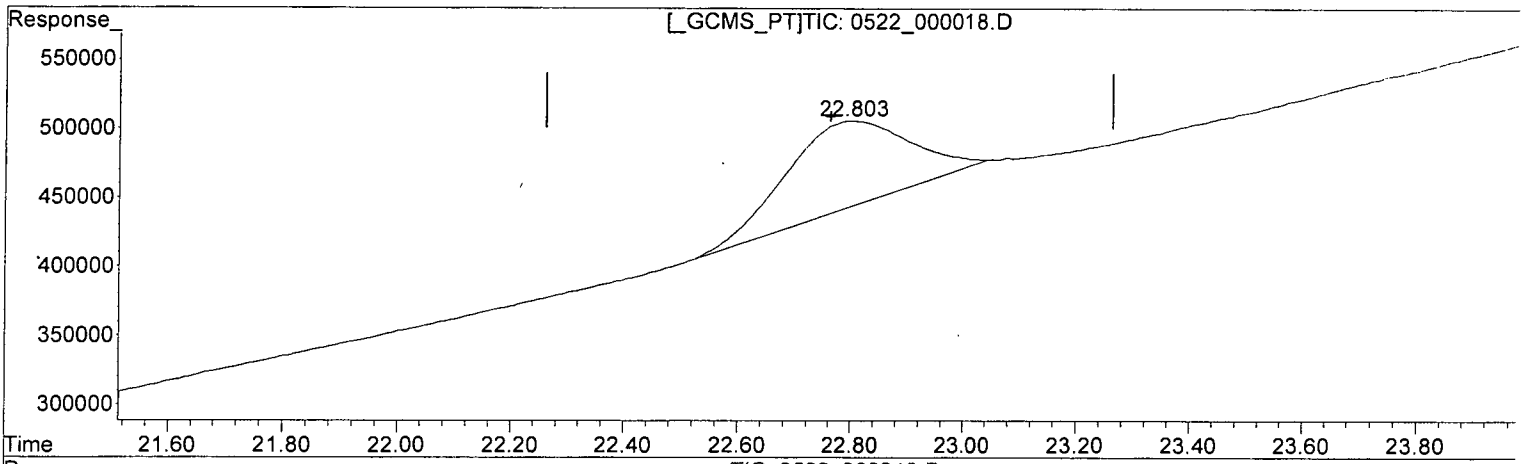


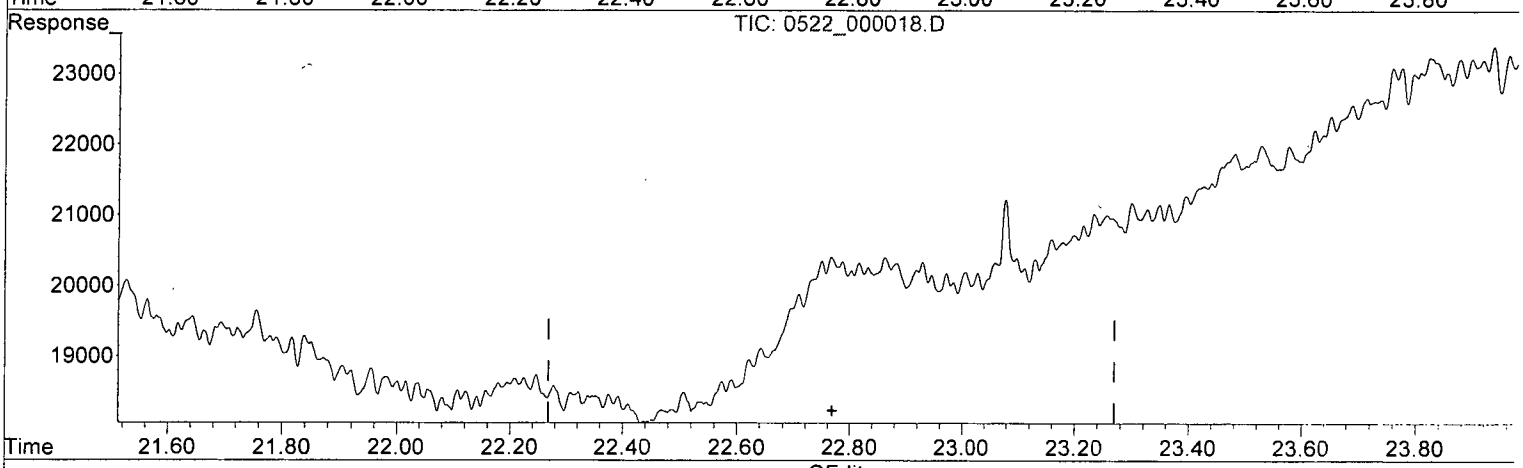
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:08:48
Operator : MP
Sample : 8330MXB_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4288 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:26 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





QEdit

(18) PETN (TM)

22.803min 67.152 ppb

response 61273

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

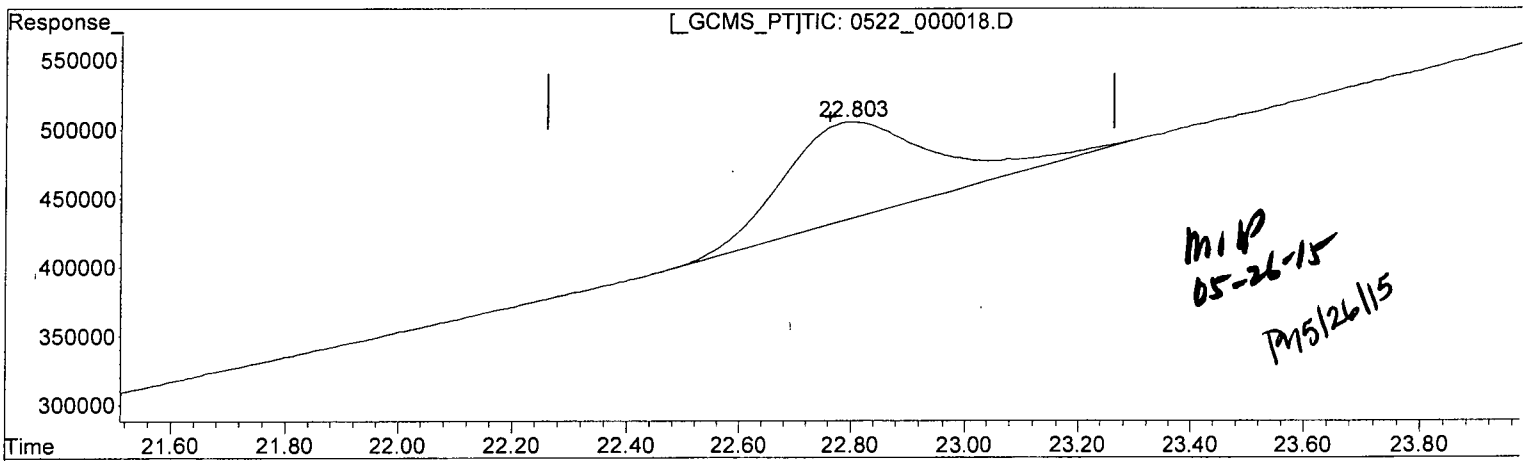
(+) = Expected Retention Time

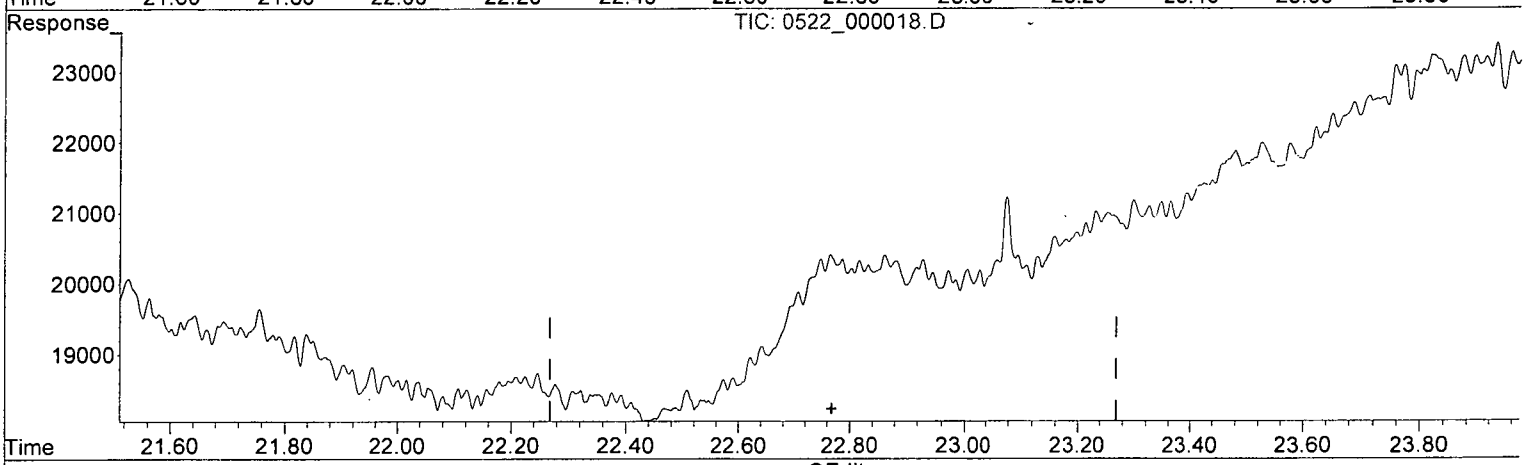
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000018.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:08:48
Operator : MP
Sample : 8330MXB_CB 0.10 PPM 05/22/15
Misc :
ALS Vial : 4288 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:26 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(18) PETN (TM)

22.803min 76.325 ppb m

response 69644

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:39:49 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	8.109	0	369362	N.D.	175.070 #
	Spiked Amount 62.500			Recovery	=	0.00%	280.11%
	Target Compounds						
1)	TM HMX	0.000	4.082	0	390500	N.D.	185.700m#
2)	TM RDX	0.000	6.425	0	327561	N.D.	176.857m#
3)	TM 1,3,5-TRI...	0.000	6.764	0	791378	N.D.	177.055m#
5)	TM 1,3-DINIT...	0.000	8.444	0	805920	N.D.	179.200 #
6)	TM NITROBENZENE	0.000	9.184	0	448189	N.D.	174.961 #
7)	TM 2,4,6-TRI...	0.000	11.459	0	411367	N.D.	162.038 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.994	11.993	302328	291196	NoCal	176.771 #
10)	TM 2,6-DINIT...	0.000	13.467	0	246741	N.D.	167.047 #
11)	TM 2,4-DINIT...	0.000	14.072	0	426389	N.D.	169.233 #
12)	TM 2-NITROTO...	0.000	15.478	0	171906	N.D.	163.051 #
13)	TM 4-NITROTO...	0.000	16.897	0	151010	N.D.	172.424 #
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15)	TM 3-NITROTO...	0.000	18.081	0	182896	N.D.	171.055 #
16)	TM 4-AMINO-2...	0.000	18.671	0	272848	N.D.	194.758 #
17)	TM 2-AMINO-4...	0.000	19.625	0	354480	N.D.	173.896 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

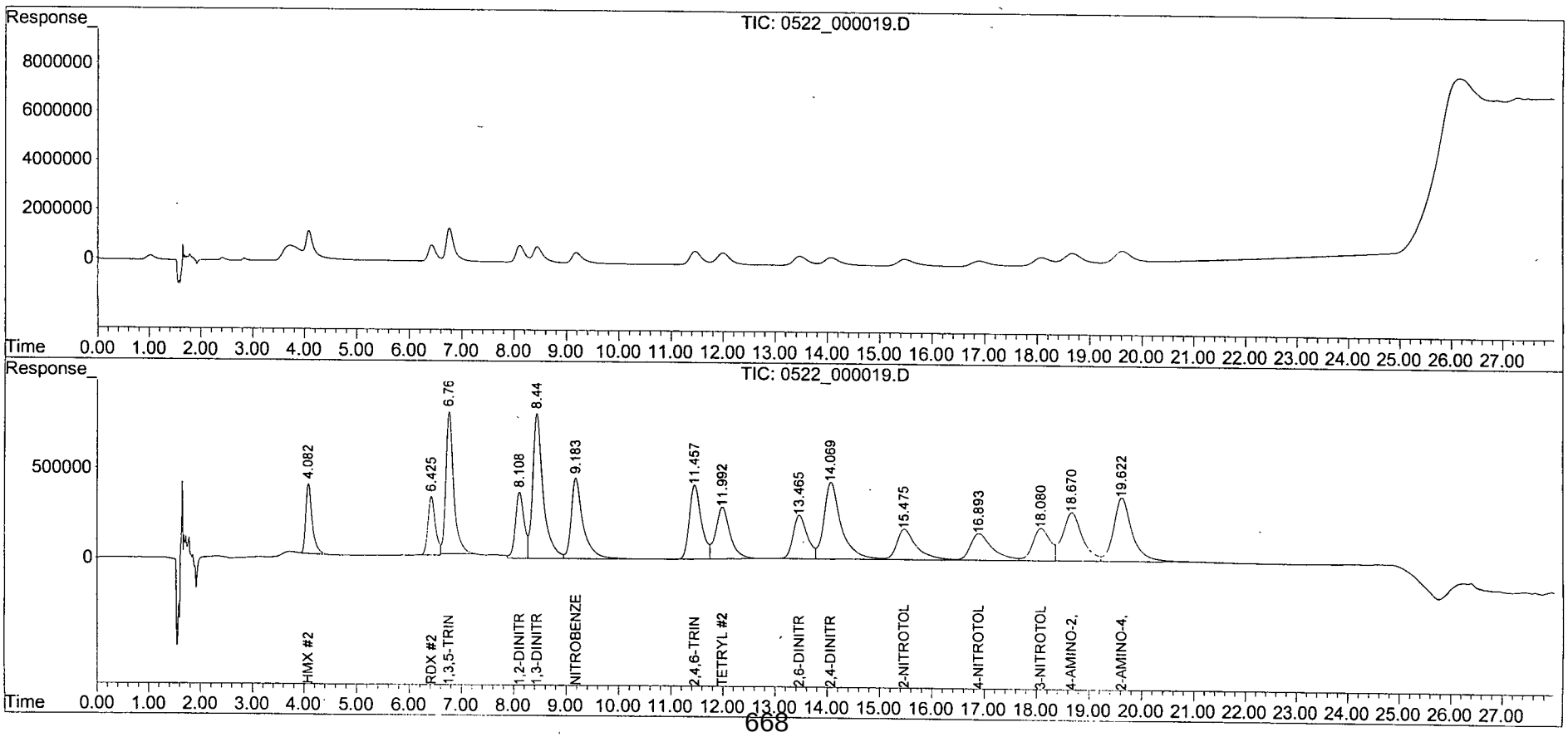
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:39:49 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



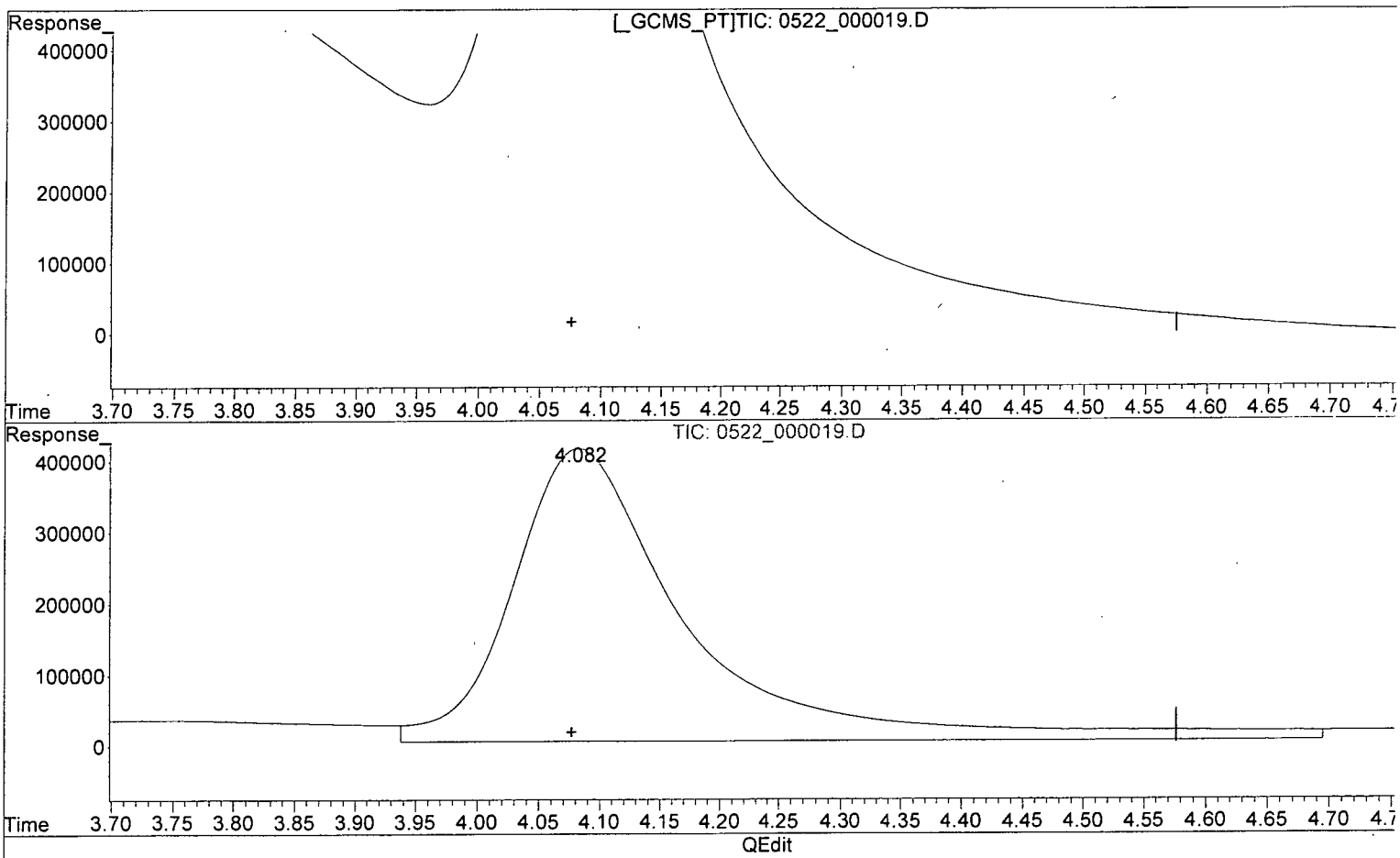
STE2.150522.M Sat May 23 09:40:11 2015 WALDORF

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.083min 195.469 ppb

response 411042

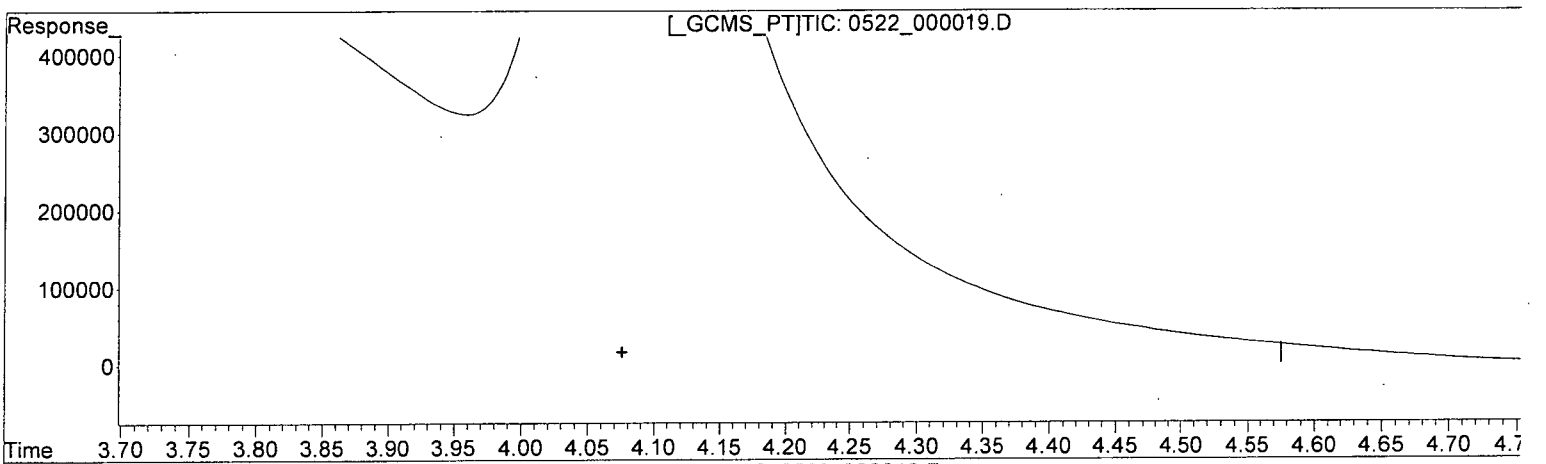
(+) = Expected Retention Time

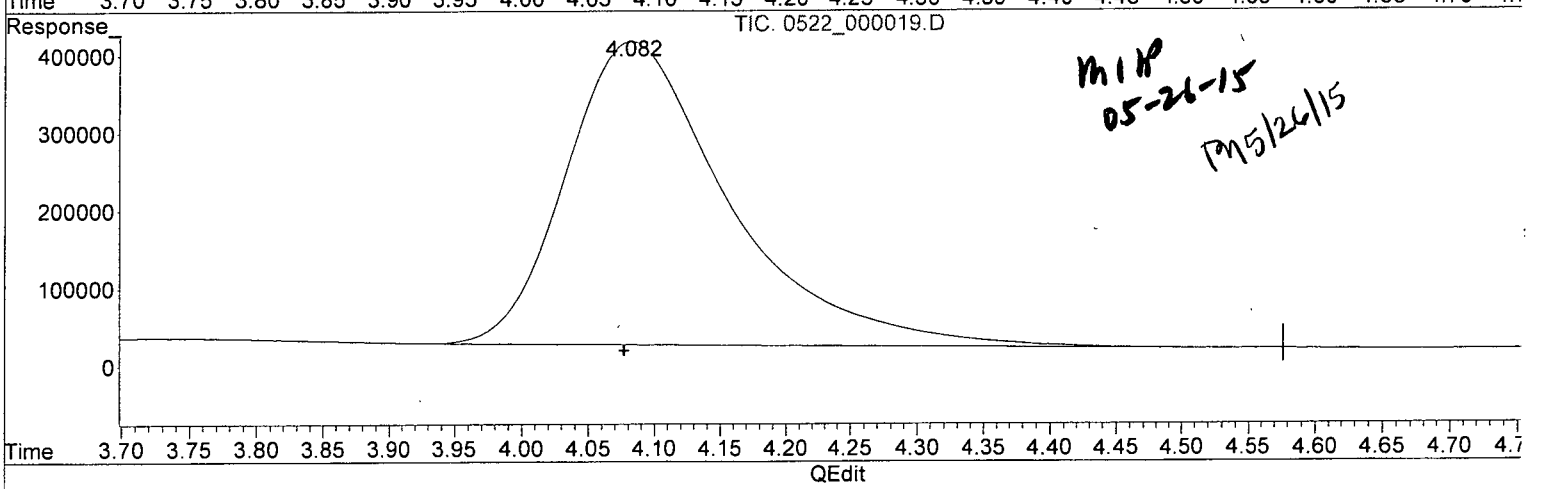
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MHP 05-26-15
[M5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.082min 185.700 ppb m

response 390500

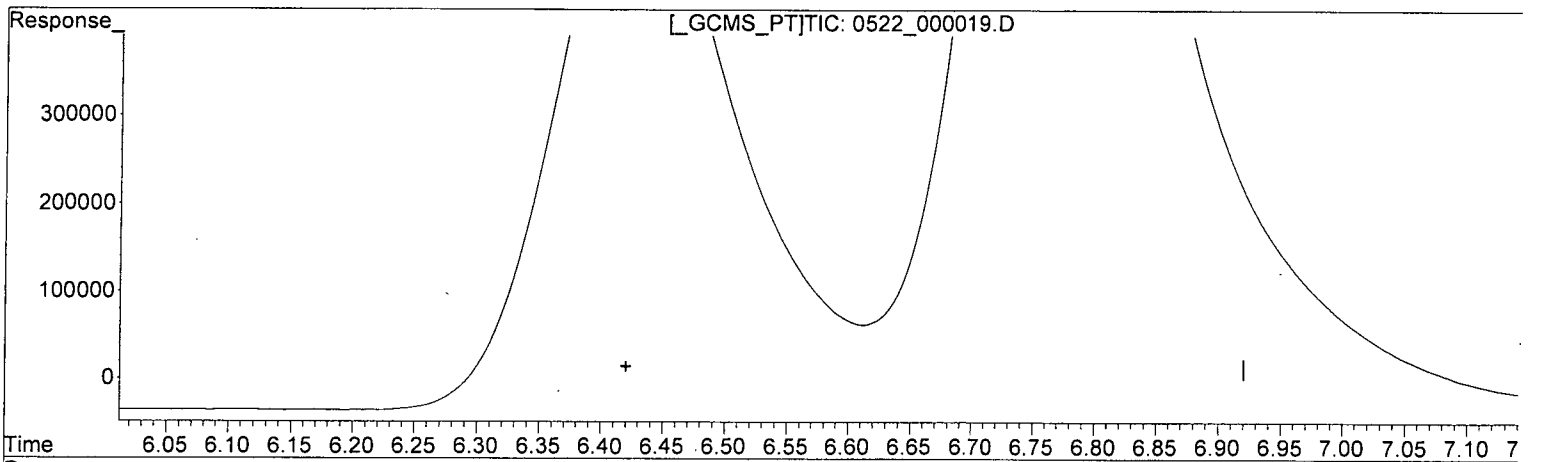
(+) = Expected Retention Time

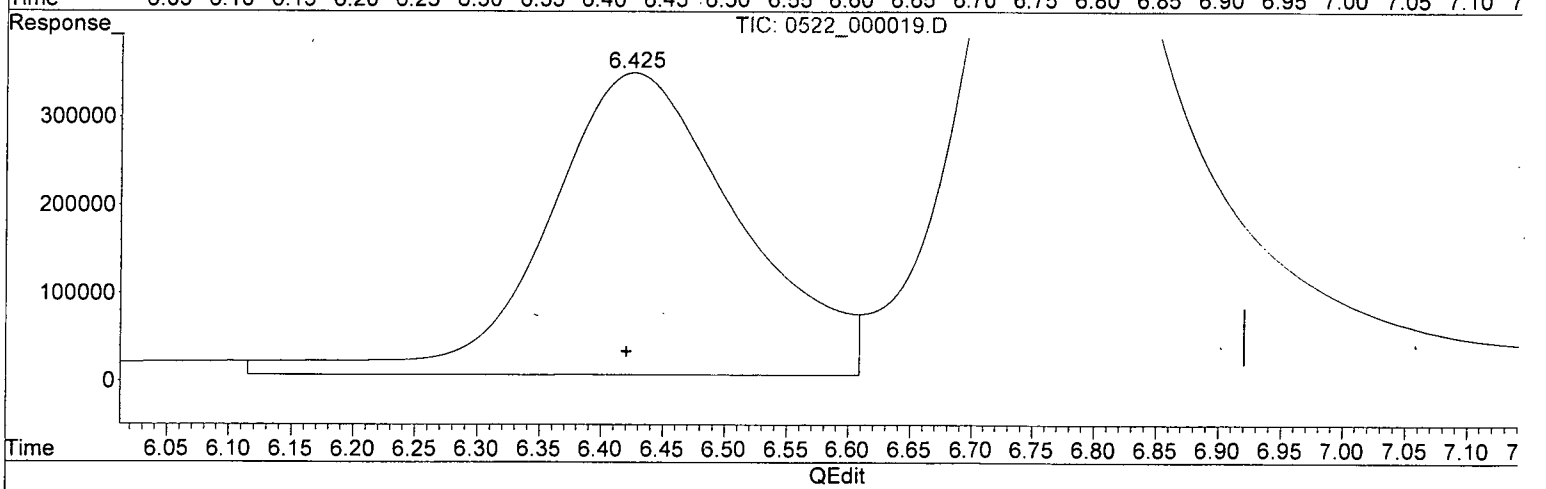
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-I





QEdit

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.426min 185.202 ppb

response 343017

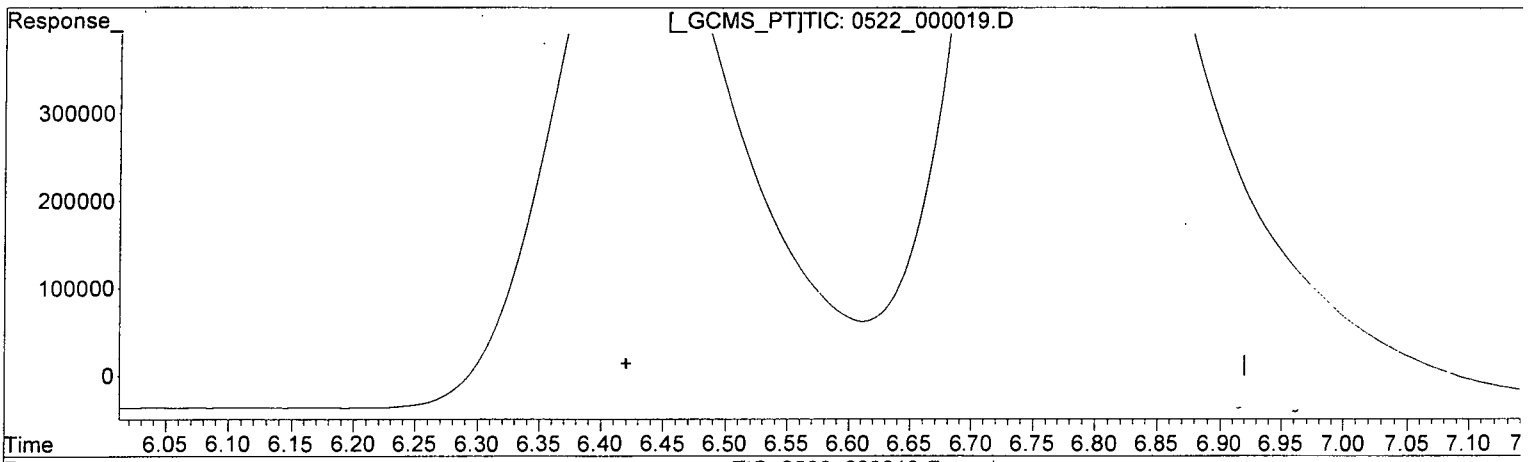
(+) = Expected Retention Time

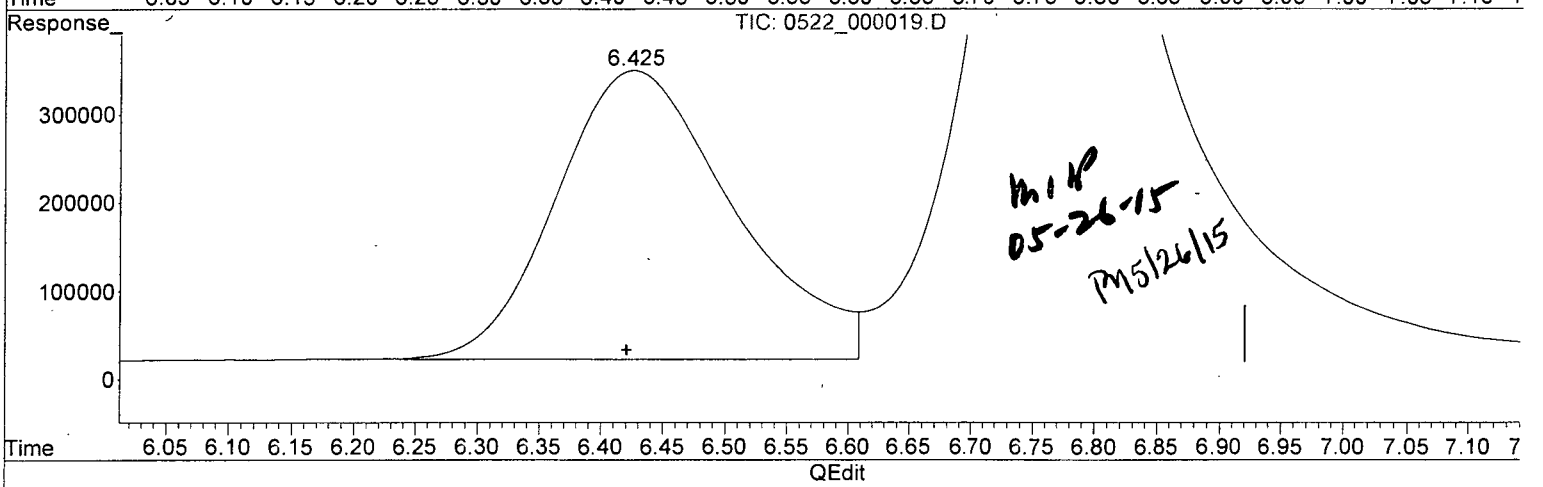
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





MHP 05-26-15 PM 5/26/15

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.425min 176.857 ppb m

response 327561

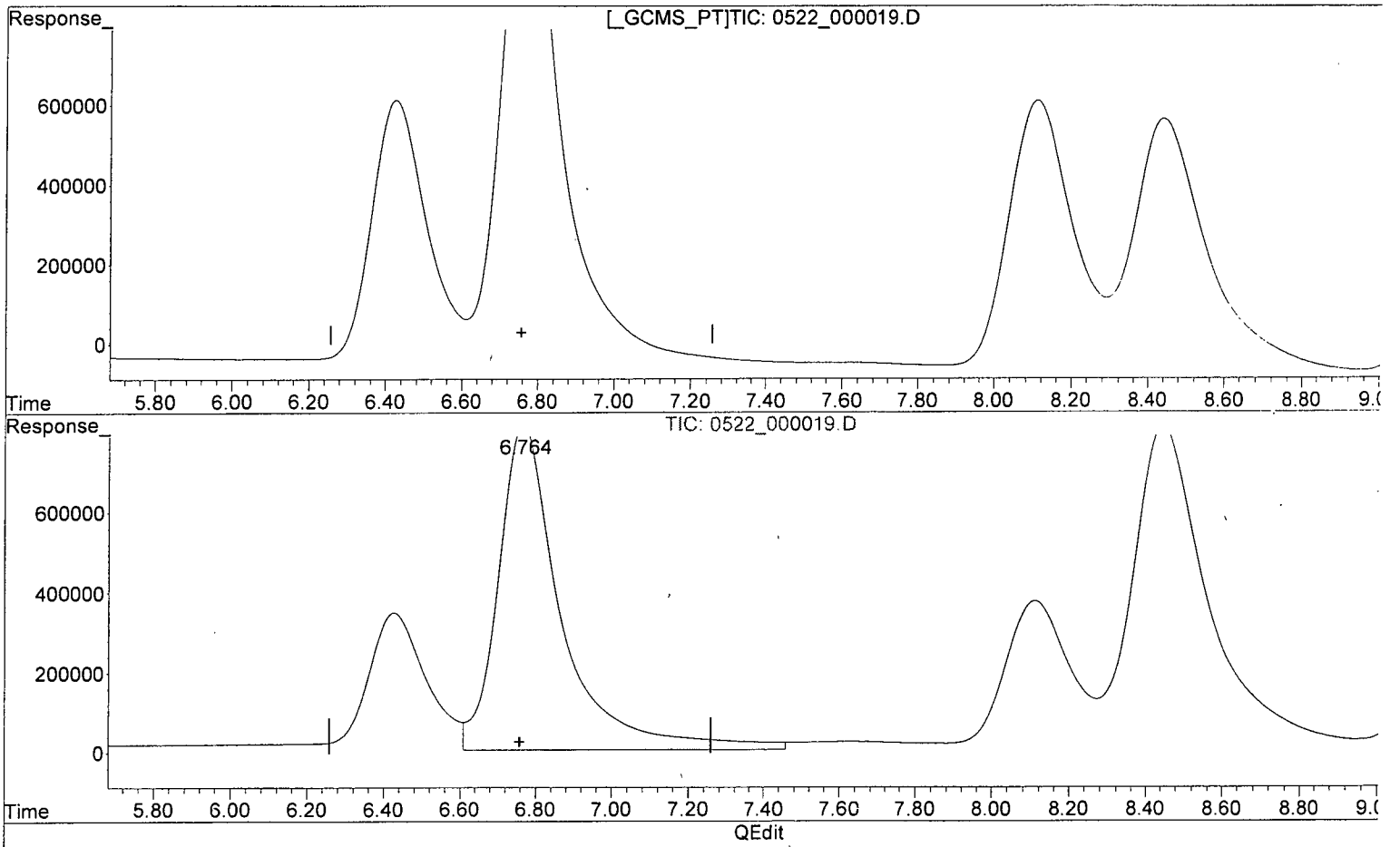
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.765min 182.230 ppb

response 814511

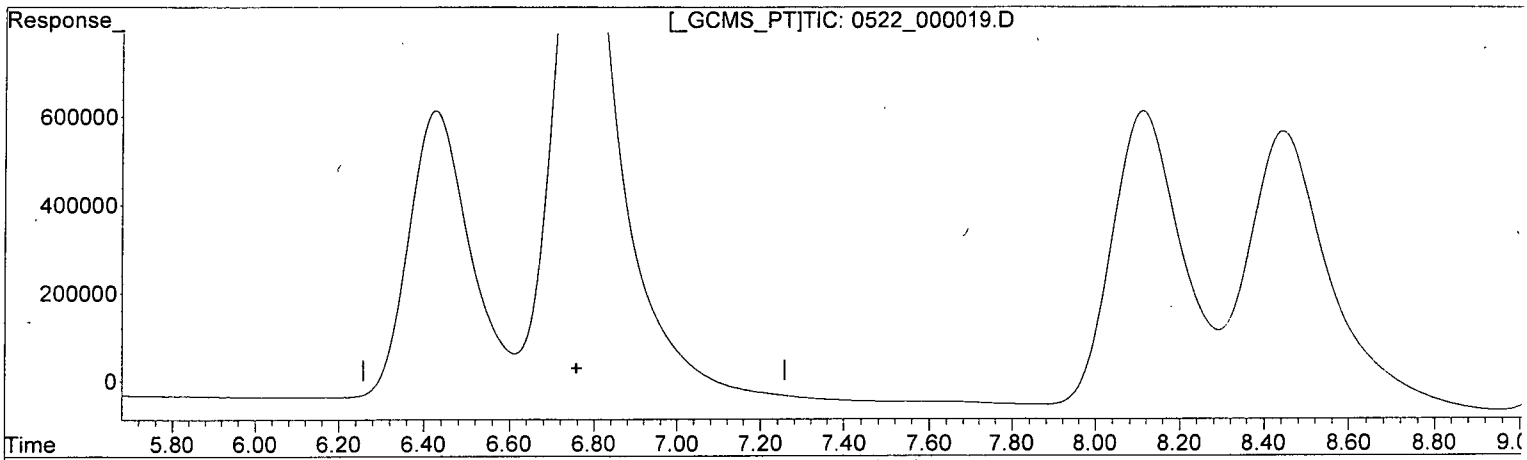
(+) = Expected Retention Time

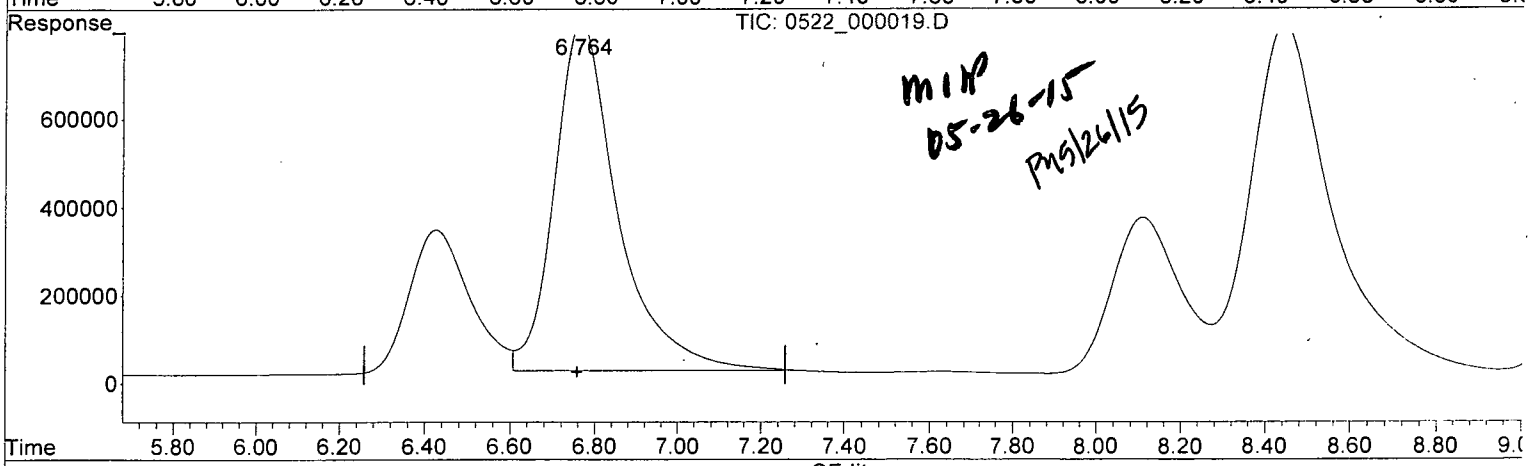
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000019.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 20:48:19
Operator : MP
Sample : 8330MXA_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4289 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:29 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





MHP 05-26-15 PMS/26/15

(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.764min 177.055 ppb m

response 791378

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:27:50
Operator : MP
Sample : 8330MXB_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4290 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:37:53 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.049	0.000	147567	0	162.036	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.545	0	338483	N.D.	169.574 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.768	0.000	151578	0	166.120m	N.D. #

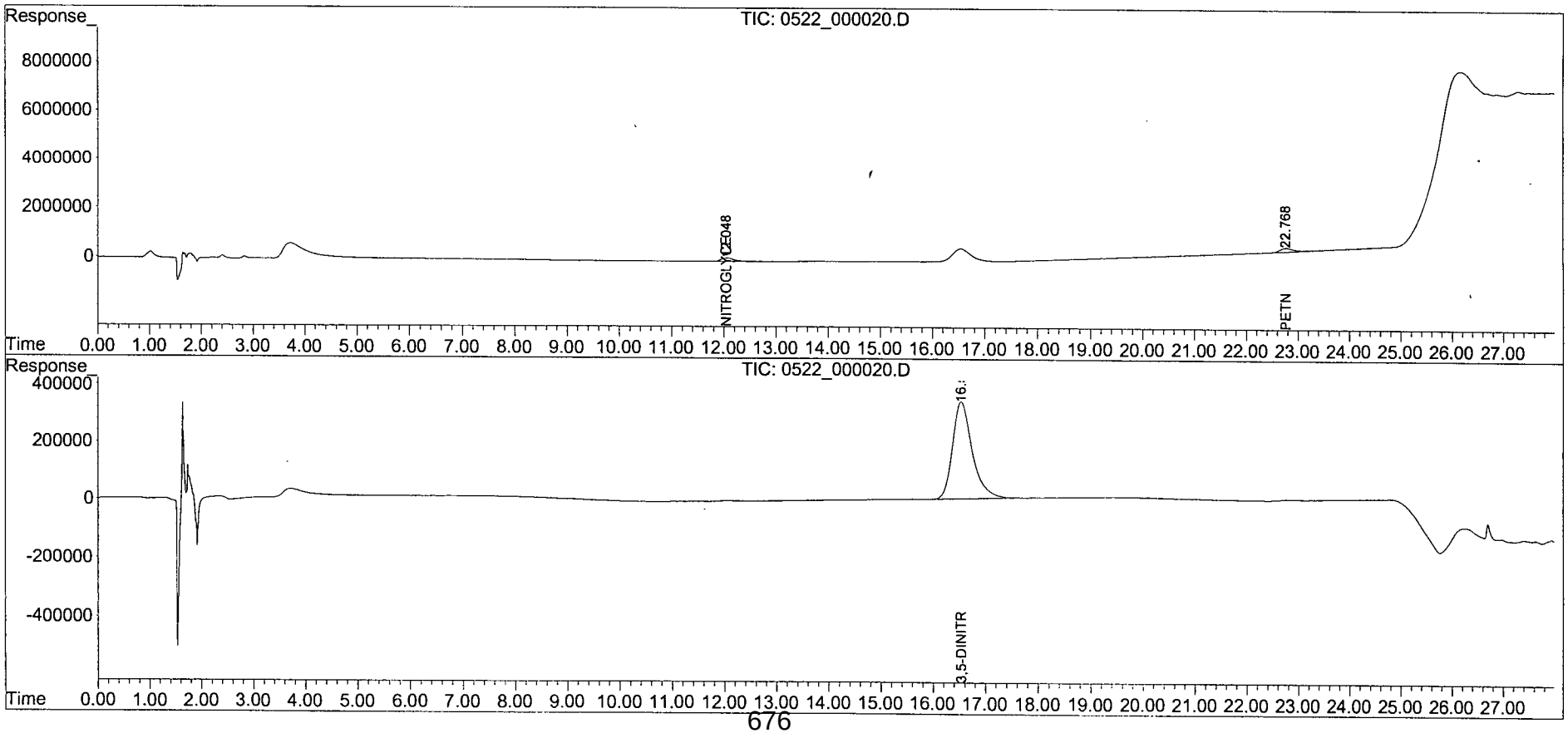
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:27:50
Operator : MP
Sample : 8330MXB_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4290 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:37:53 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

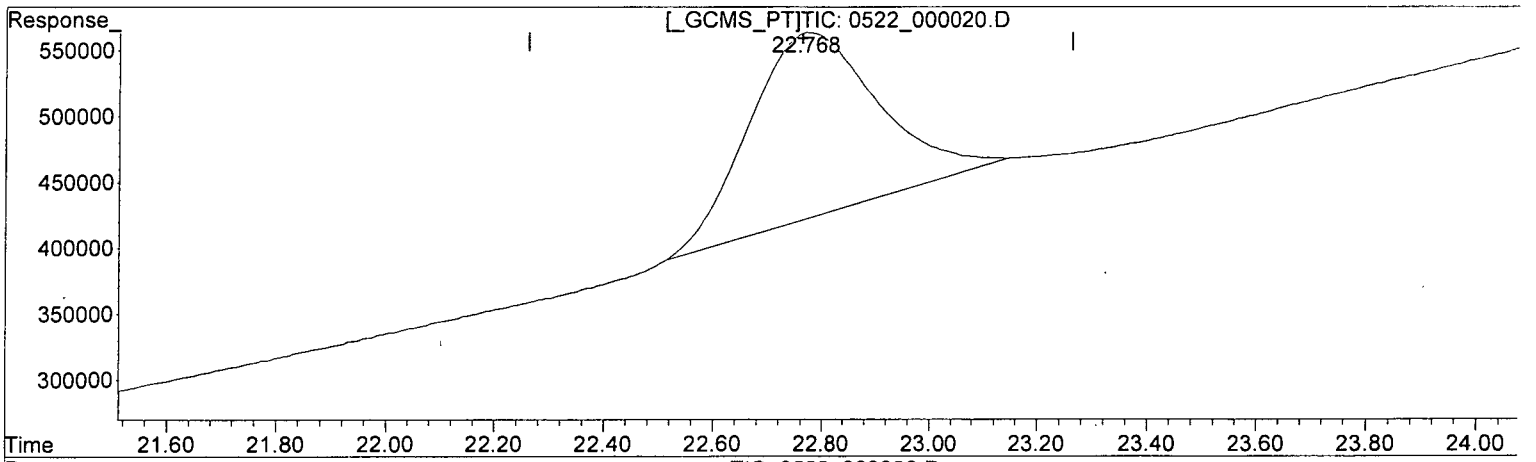


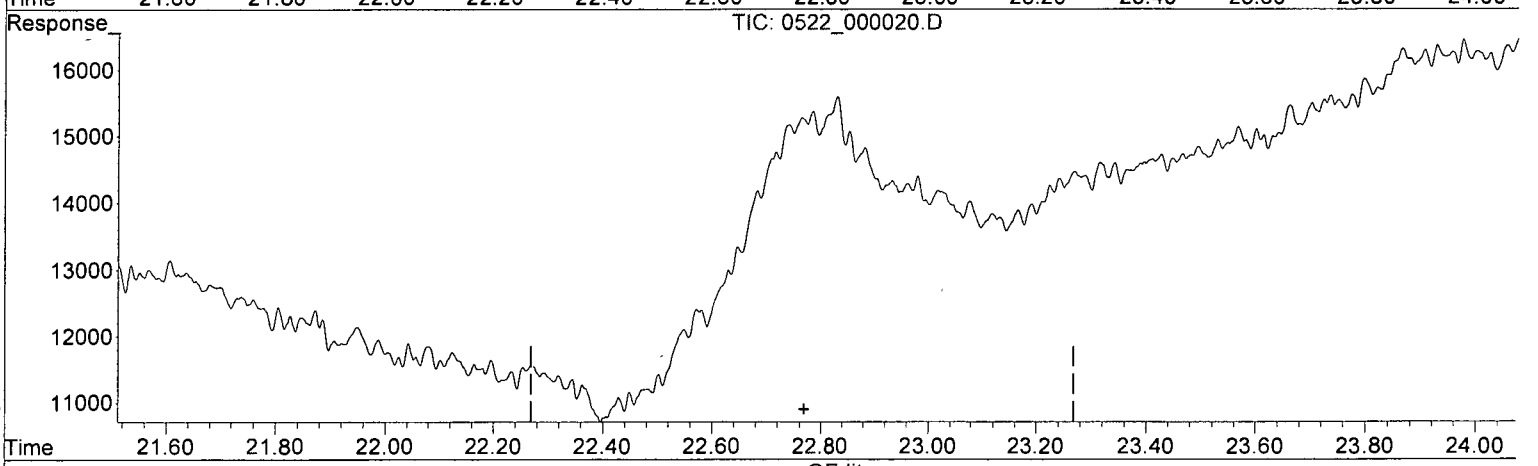
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:27:50
Operator : MP
Sample : 8330MXB_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4290 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:32 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(18) PETN (TM)

22.776min 154.013 ppb

response 140531

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

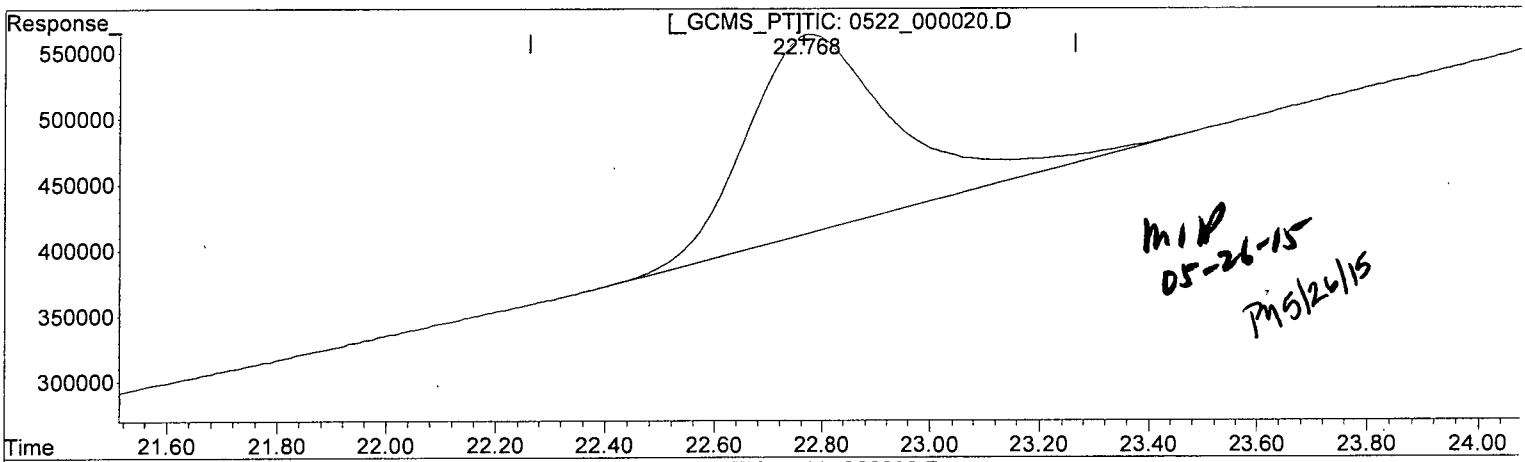
(+) = Expected Retention Time

Quantitation Report (Qedit)

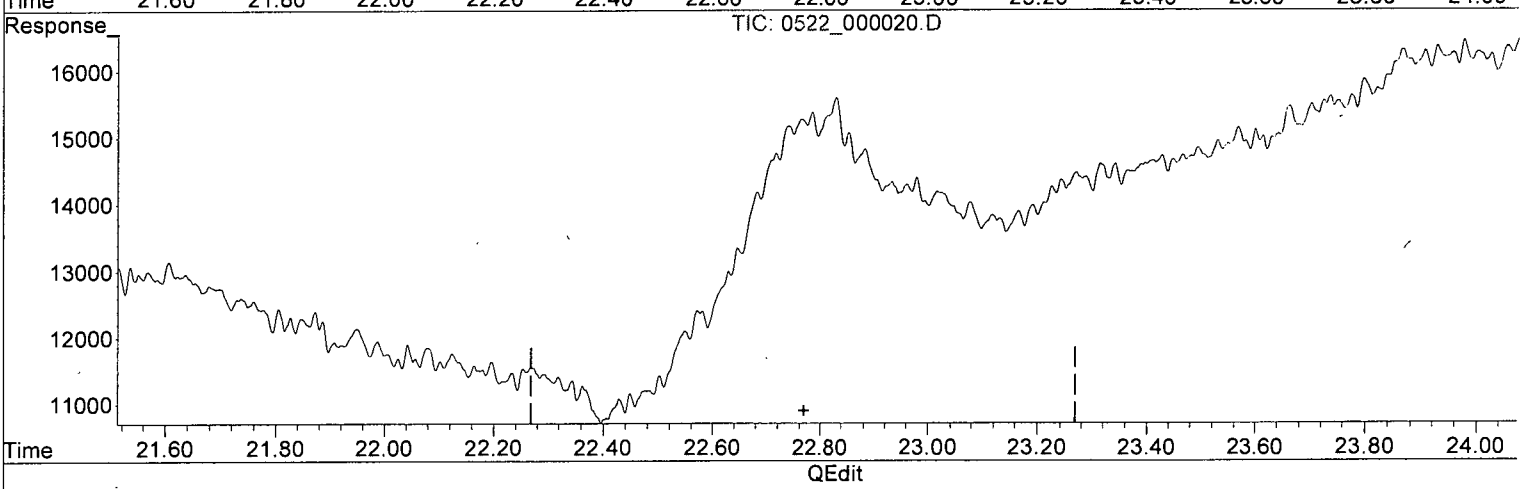
Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:27:50
Operator : MP
Sample : 8330MXB_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4290 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:32 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MP 05-26-15 PM 5/26/15



QEdit

(18) PETN (TM)

22.768min 166.120 ppb m

response 151578

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:07:21
Operator : MP
Sample : 8330MXA_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4291 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:36:44 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	8.105	0	879728	N.D.	416.972 #
	Spiked Amount 62.500			Recovery =		0.00%	667.16%
	Target Compounds						
1)	TM HMX	0.000	4.078	0	976770	N.D.	464.498 #
2)	TM RDX	0.000	6.421	0	806821	N.D.	435.619 #
3)	TM 1,3,5-TRI...	0.000	6.759	0	1966354	N.D.	439.931 #
5)	TM 1,3-DINIT...	0.000	8.439	0	1956143	N.D.	434.957 #
6)	TM NITROBENZENE	0.000	9.178	0	1093580	N.D.	426.904 #
7)	TM 2,4,6-TRI...	0.000	11.450	0	1003936	N.D.	395.451 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.986	11.985	592326	722593	NoCal	438.651 #
10)	TM 2,6-DINIT...	13.458	13.457	927172	598770	NoCal	405.376 #
11)	TM 2,4-DINIT...	0.000	14.061	0	1040938	N.D.	413.147 #
12)	TM 2-NITROTO...	0.000	15.466	0	416863	N.D.	395.391 #
13)	TM 4-NITROTO...	0.000	16.881	0	367088	N.D.	419.141 #
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15)	TM 3-NITROTO...	0.000	18.068	0	443247	N.D.	414.550 #
16)	TM 4-AMINO-2...	0.000	18.667	0	657332	N.D.	469.201 #
17)	TM 2-AMINO-4...	0.000	19.622	0	851433	N.D.	417.685 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

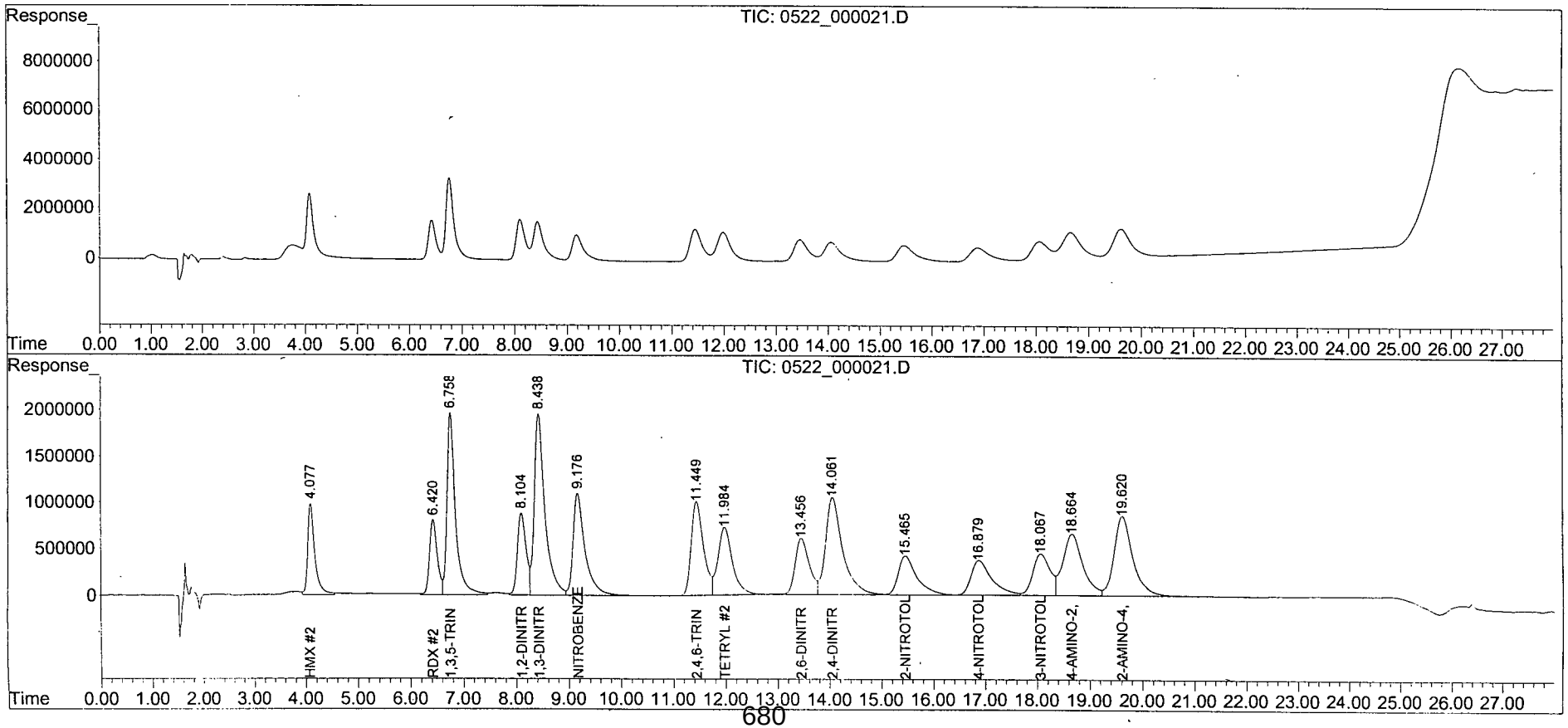
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000021.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:07:21
Operator : MP
Sample : 8330MXA_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4291 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:36:44 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:46:51
Operator : MP
Sample : 8330MXB_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4292 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:35:42 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1)	TM HMX	0.000	0.000	0	0	N.D.	N.D.
2)	TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6)	TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7)	TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8)	TM NITROGLYC...	12.050	0.000	368668	0	404.817	N.D. d#
9)	TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10)	TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11)	TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13)	TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14)	TM 3,5-DINIT...	0.000	16.548	0	841116	N.D.	421.385 #
15)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16)	TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17)	TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18)	TM PETN	22.762	0.000	382271	0	418.944m	N.D. #

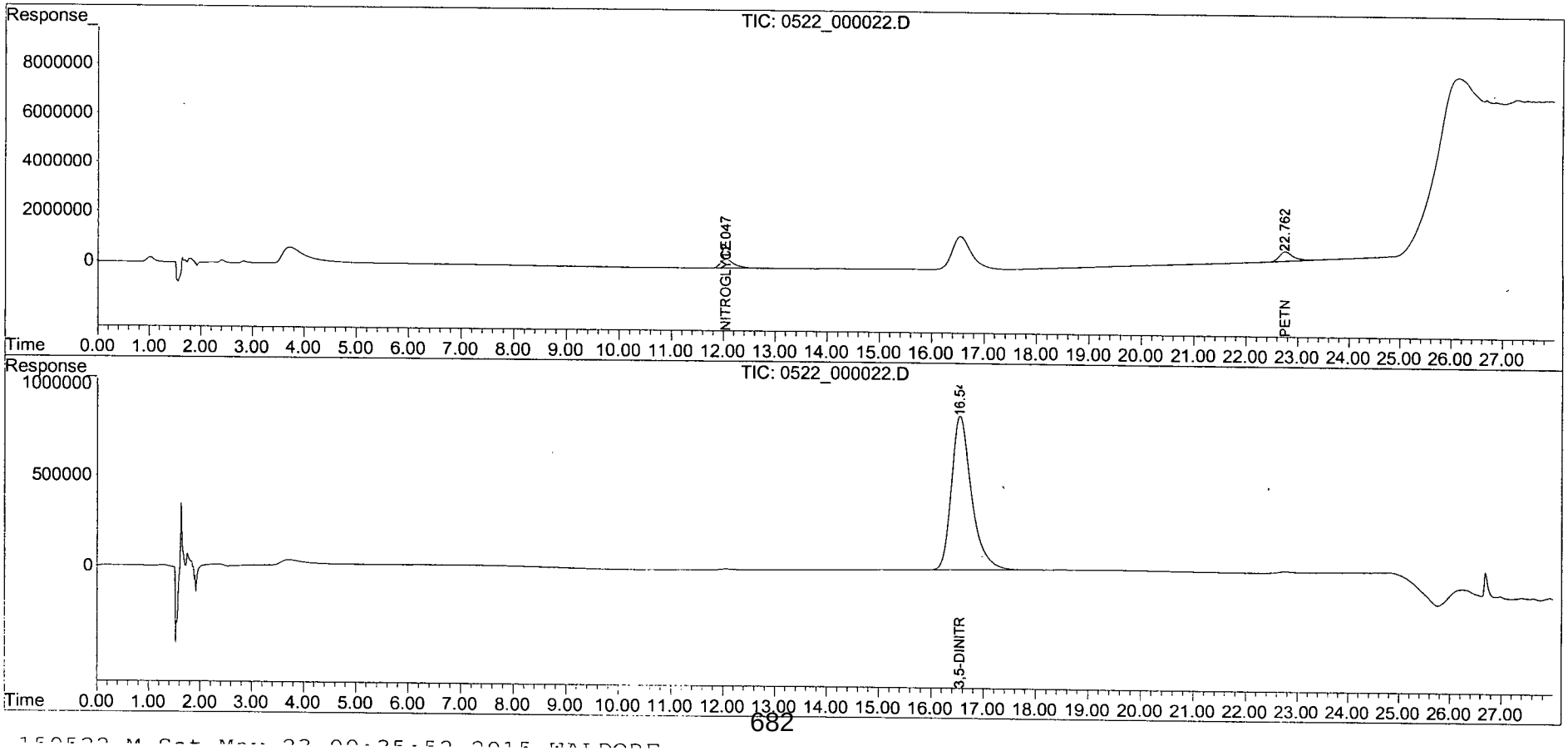
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:46:51
Operator : MP
Sample : 8330MXB_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4292 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:35:42 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

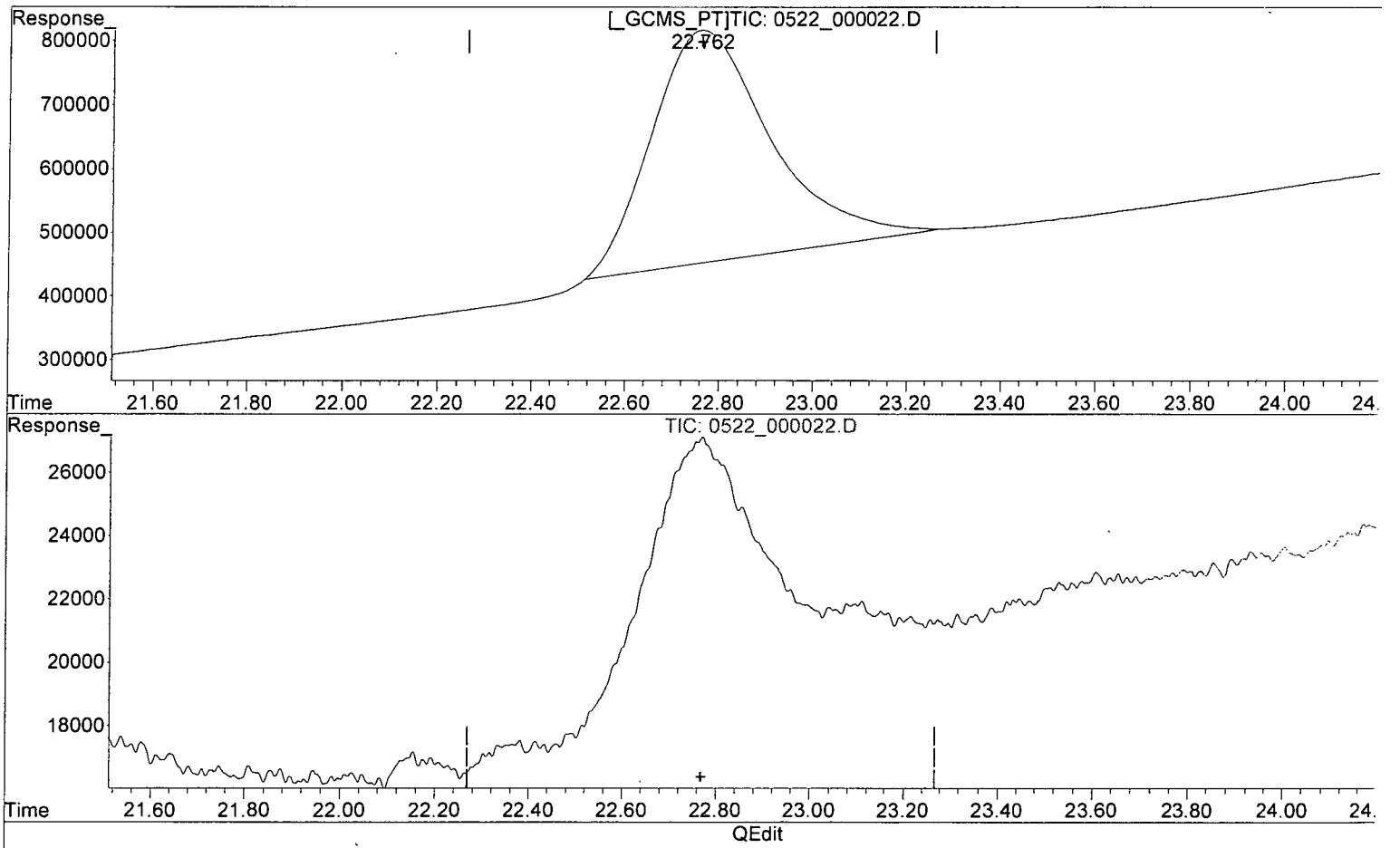


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:46:51
Operator : MP
Sample : 8330MXB_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4292 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(18) PETN (TM)

22.763min 398.817 ppb

response 363907

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

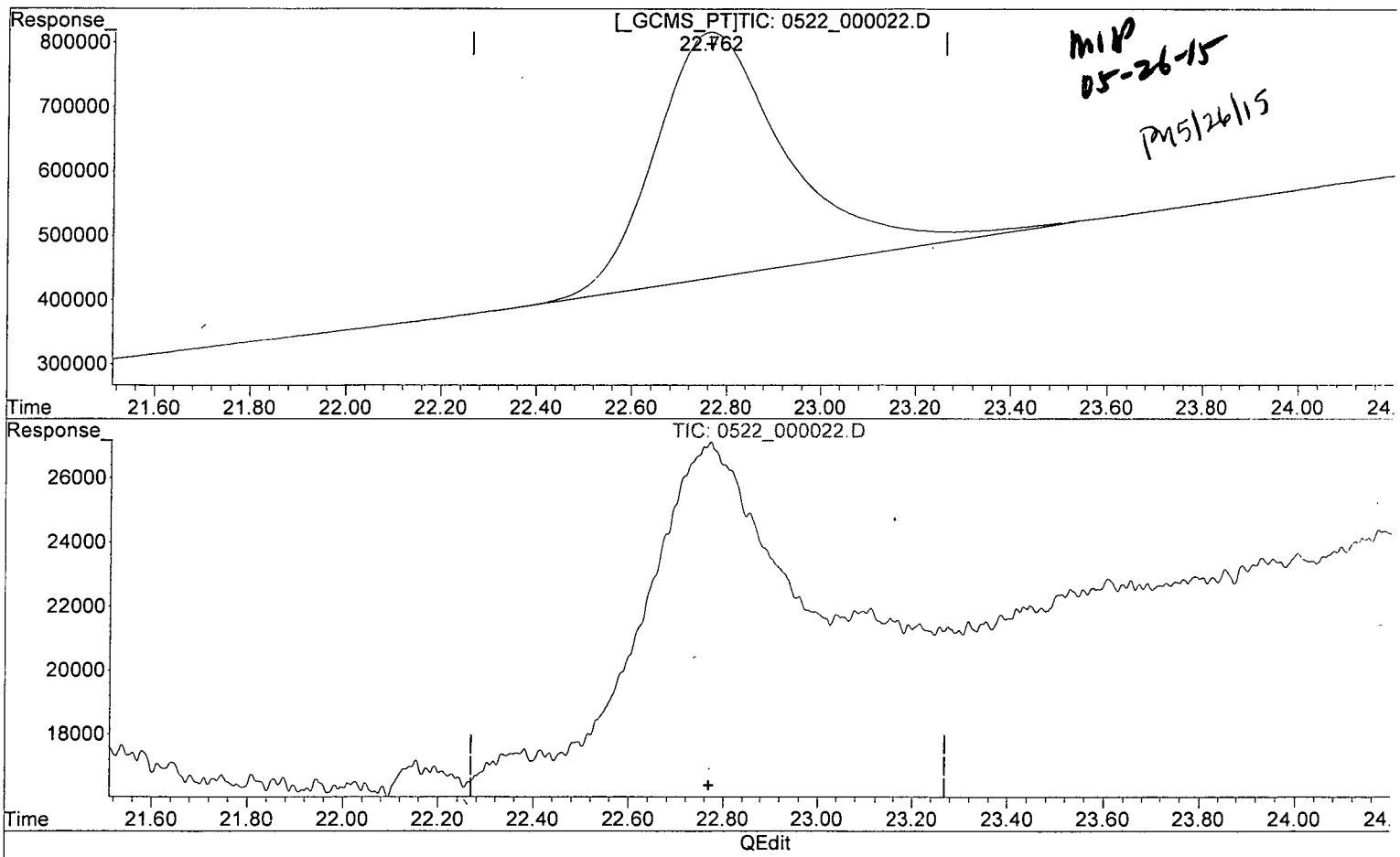
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000022.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 22:46:51
Operator : MP
Sample : 8330MXB_CB 0.50 PPM 05/22/15
Misc :
ALS Vial : 4292 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:38 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-ı



(18) PETN (TM)

22.762min 418.944 ppb m

response 382271

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000023.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 23:26:22
Operator : MP
Sample : 8330MXA_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4293 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:34:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	8.103	0	1733160	N.D.	821.480 #
Spiked Amount 62.500			Recovery	=	0.00%	1314.37%
Target Compounds						
1) TM HMX	0.000	4.076	0	1915374	N.D.	910.846 #
2) TM RDX	0.000	6.419	0	1584395	N.D.	855.448 #
3) TM 1,3,5-TRI...	0.000	6.755	0	3897389	N.D.	871.960 #
5) TM 1,3-DINIT...	0.000	8.437	0	3879893	N.D.	862.711 #
6) TM NITROBENZENE	0.000	9.177	0	2146298	N.D.	837.857 #
7) TM 2,4,6-TRI...	0.000	11.454	0	1991874	N.D.	784.599 #
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM TETRYL	11.994	11.993	1524497	1456381	NoCal	884.099 #
10) TM 2,6-DINIT...	13.465	13.464	1616524	1211988	NoCal	820.534 #
11) TM 2,4-DINIT...	0.000	14.067	0	2092031	N.D.	830.325 #
12) TM 2-NITROTO...	0.000	15.472	0	841920	N.D.	798.554 #
13) TM 4-NITROTO...	0.000	16.885	0	741632	N.D.	846.795 #
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM 3-NITROTO...	0.000	18.073	0	881637	N.D.	824.558 #
16) TM 4-AMINO-2...	0.000	18.677	0	1297906	N.D.	926.440 #
17) TM 2-AMINO-4...	0.000	19.631	0	1678327	N.D.	823.332 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

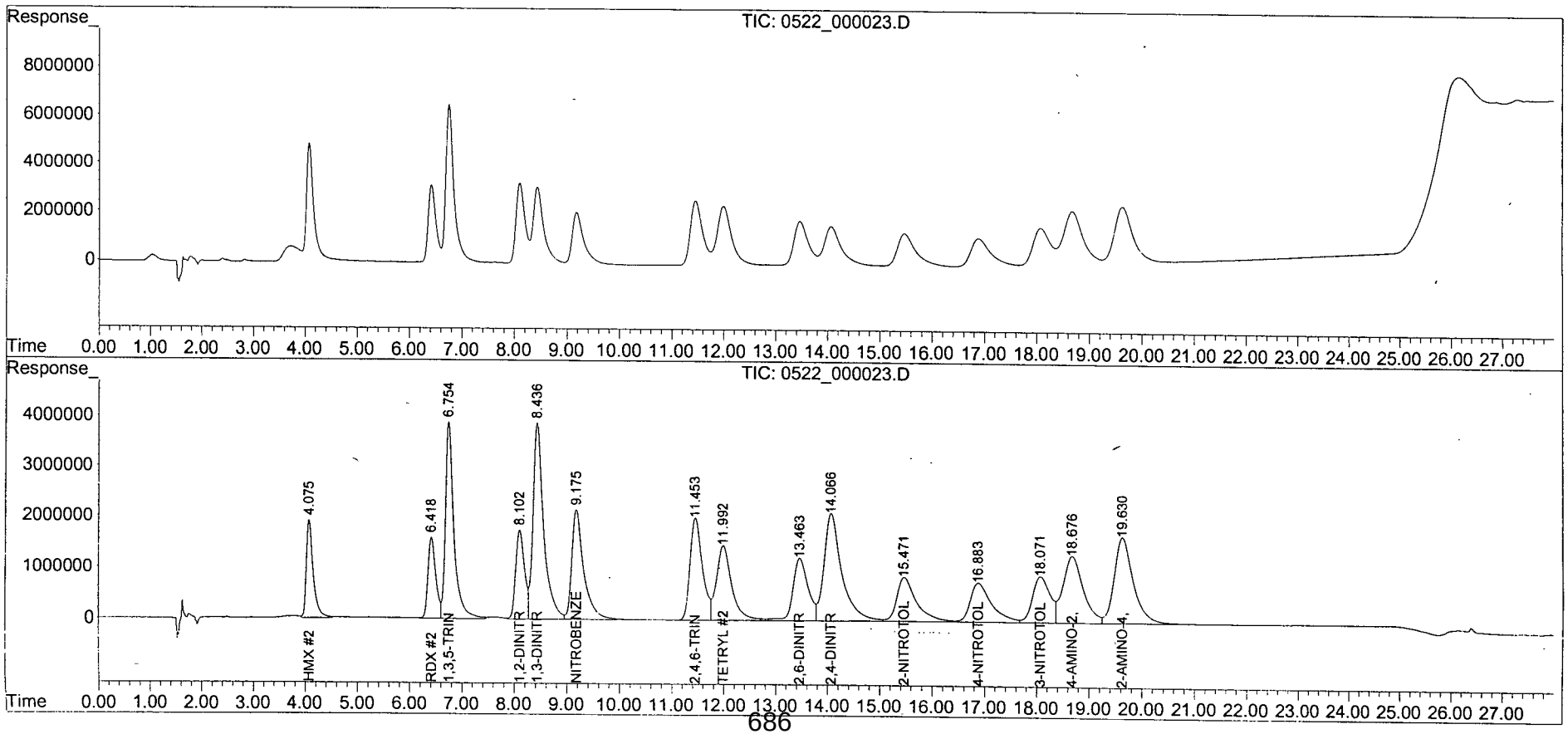
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000023.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 23:26:22
Operator : MP
Sample : 8330MXA_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4293 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:34:17 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



STE2_150522.M Sat May 23 09:35:14 2015 WALDORF Page: 2

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000024.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:05:53
Operator : MP
Sample : 8330MXB_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4294 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:33:30 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery =		0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.057	12.058	732317	11067	804.122	NoCal #
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.552	0	1652281	N.D.	827.765 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.770	22.770	761676	14524	834.745m	NoCal #

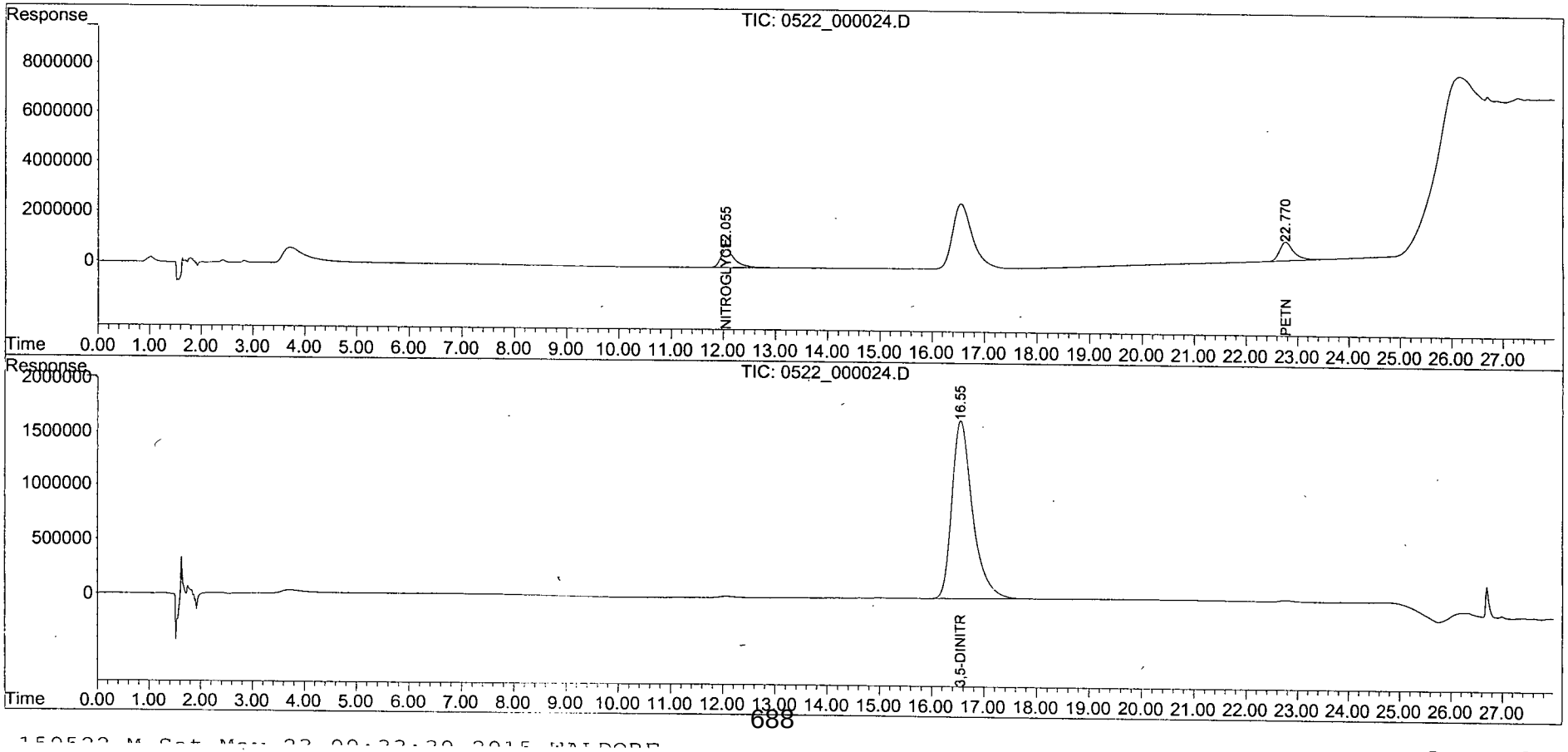
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000024.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:05:53
Operator : MP
Sample : 8330MXB_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4294 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:33:30 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

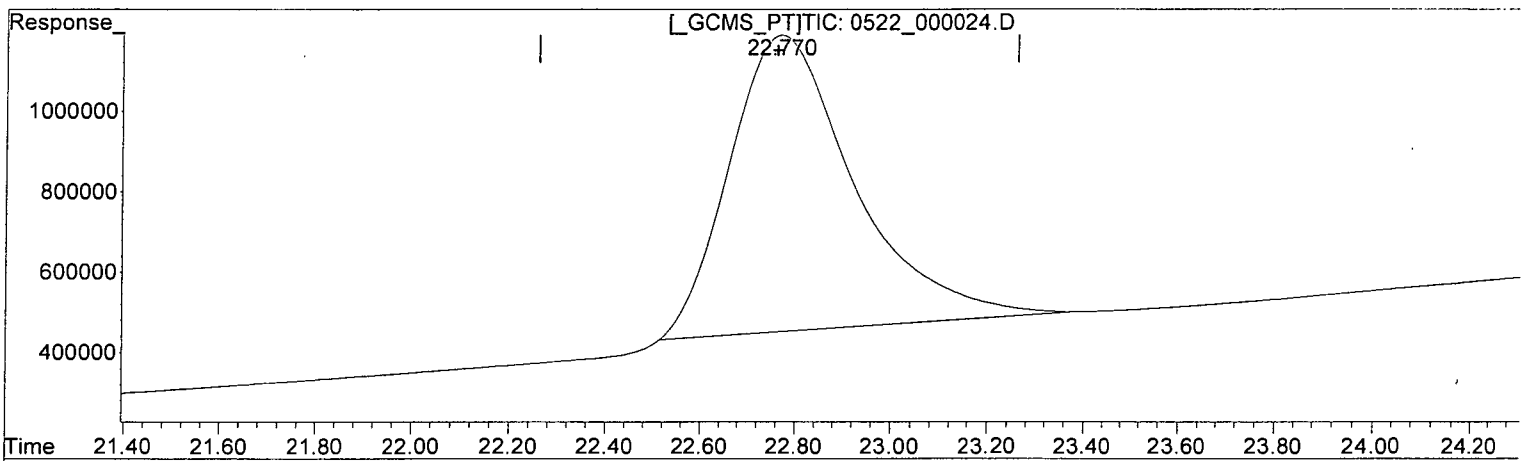


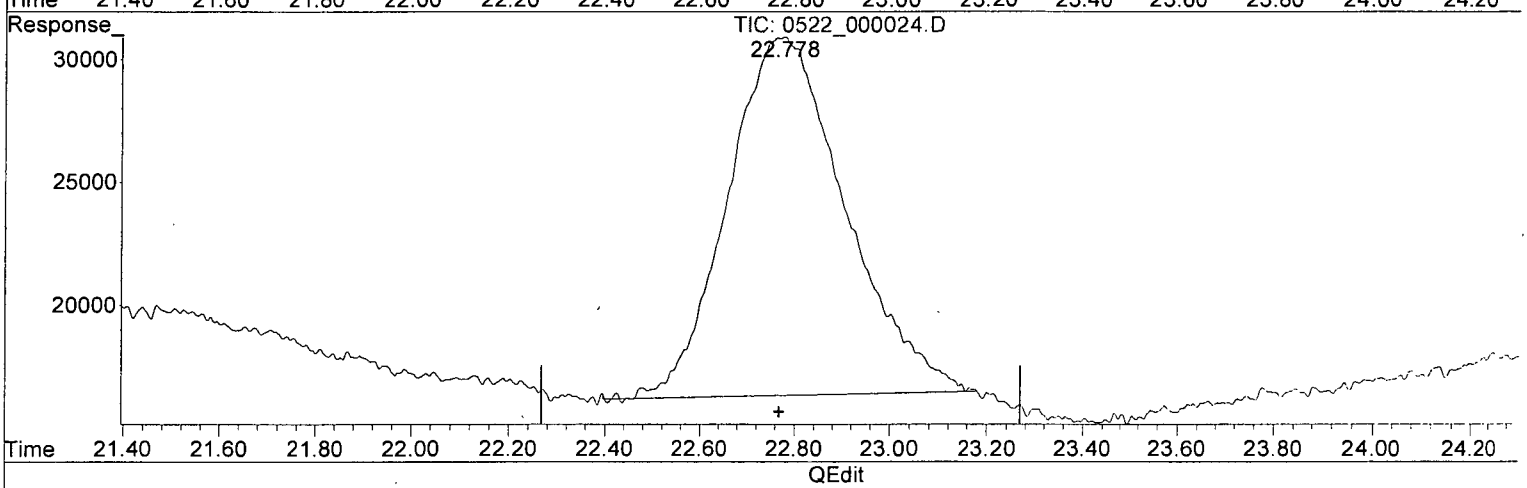
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000024.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:05:53
Operator : MP
Sample : 8330MXB_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4294 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:44 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





QEdit

(18) PETN (TM)

22.770min 806.856 ppb

response 736228

(18) PETN #2 (TM)

22.770min 0.000 ppb

response 14524

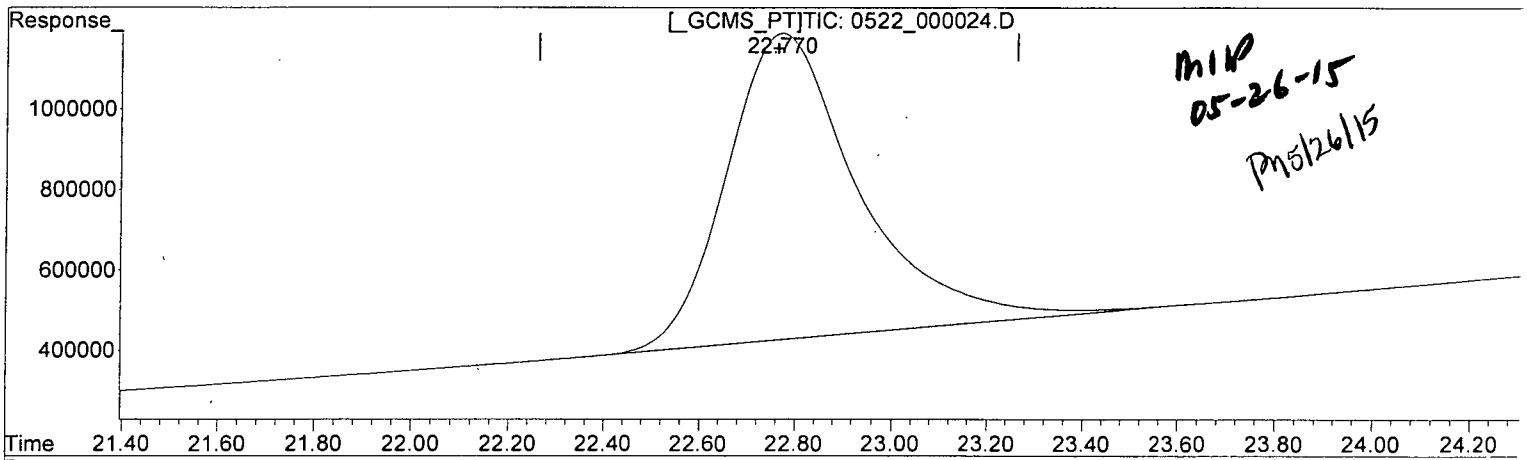
(+) = Expected Retention Time

Quantitation Report (Qedit)

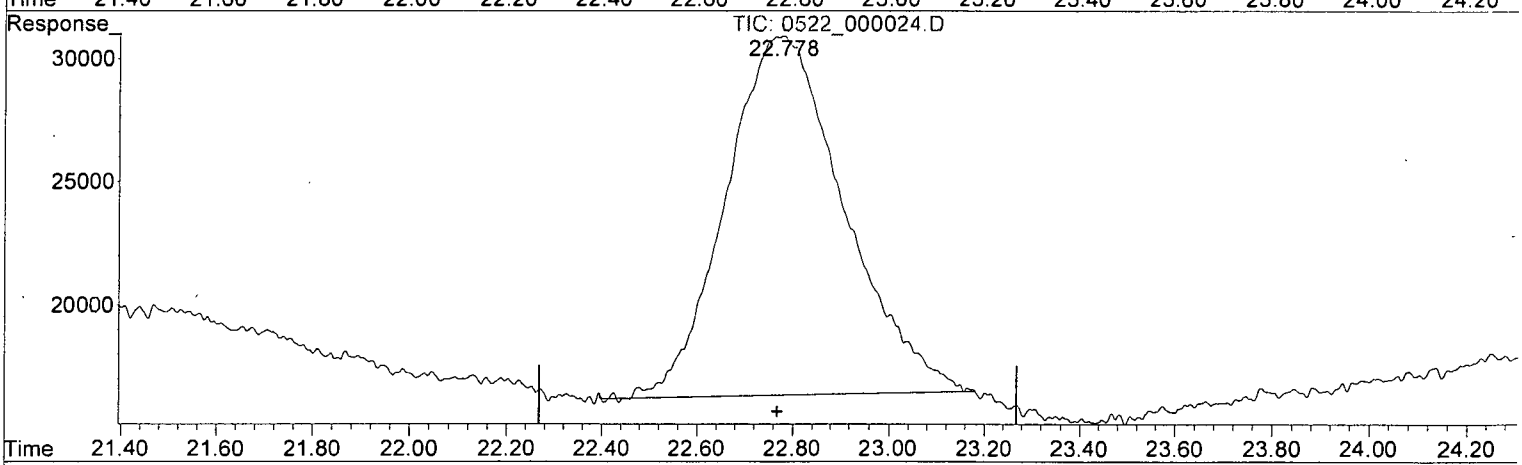
Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000024.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:05:53
Operator : MP
Sample : 8330MXB_CB 1.0 PPM 05/22/15
Misc :
ALS Vial : 4294 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:44 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MIP 05-26-15 PM 5/26/15



QEdit

(18) PETN (TM)

22.770min 834.745 ppb m

response 761676

(18) PETN #2 (TM)

22.770min 0.000 ppb

response 14524

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000025.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:45:24
Operator : MP
Sample : 8330MXA_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4295 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:32:47 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	8.102	0	3543855	N.D.	1679.710 #
	Spiked Amount 62.500			Recovery	=	0.00%	2687.54%
	Target Compounds						
1)	TM HMX	0.000	4.070	0	3887061	N.D.	1848.472 #
2)	TM RDX	0.000	6.417	0	3207829	N.D.	1731.975 #
3)	TM 1,3,5-TRI...	0.000	6.755	0	7939225	N.D.	1776.238 #
5)	TM 1,3-DINIT...	0.000	8.437	0	7959675	N.D.	1769.868 #
6)	TM NITROBENZENE	0.000	9.174	0	4377753	N.D.	1708.958 #
7)	TM 2,4,6-TRI...	0.000	11.451	0	4093556	N.D.	1612.453 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.989	11.988	3002965	2907952	NoCal	1765.277 #
10)	TM 2,6-DINIT...	13.461	13.460	3322547	2479312	NoCal	1678.531 #
11)	TM 2,4-DINIT...	0.000	14.063	0	4282975	N.D.	1699.909 #
12)	TM 2-NITROTO...	0.000	15.467	0	1710462	N.D.	1622.358 #
13)	TM 4-NITROTO...	0.000	16.876	0	1514123	N.D.	1728.826 #
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15)	TM 3-NITROTO...	0.000	18.066	0	1790750	N.D.	1674.813 #
16)	TM 4-AMINO-2...	0.000	18.668	0	2625200	N.D.	1873.858 #
17)	TM 2-AMINO-4...	0.000	19.623	0	3392979	N.D.	1664.484 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

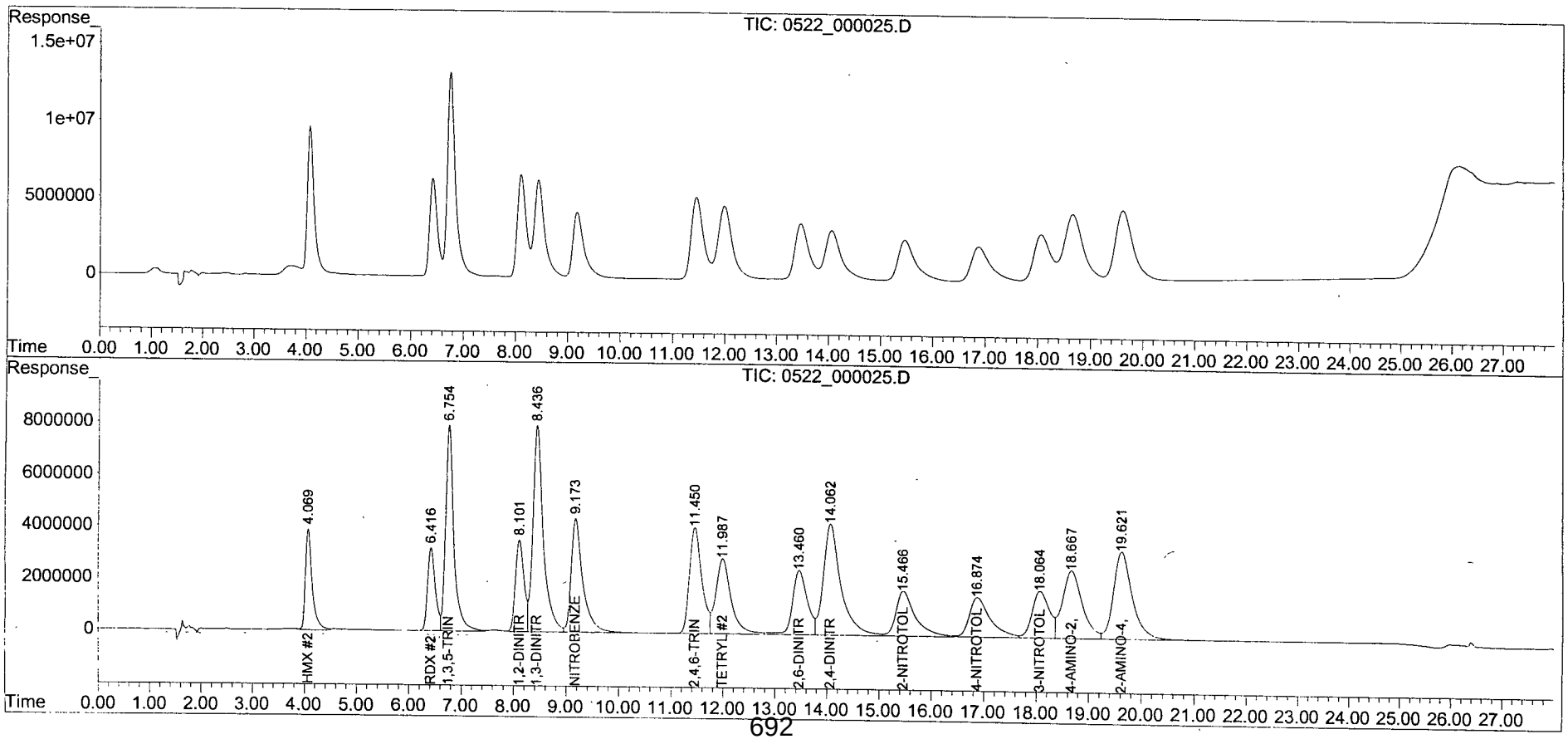
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000025.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 00:45:24
Operator : MP
Sample : 8330MXA_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4295 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:32:47 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:24:56
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4296 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:31:36 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 62.500			Recovery	=	0.00%	0.00%
	Target Compounds						
1)	TM HMX	0.000	0.000	0	0	N.D.	N.D.
2)	TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6)	TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7)	TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8)	TM NITROGLYC...	12.061	0.000	1482681	0	1628.060	N.D. d#
9)	TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10)	TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11)	TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13)	TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14)	TM 3,5-DINIT...	0.000	16.541	0	3311418	N.D.	1658.965 #
15)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16)	TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17)	TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18)	TM PETN	22.767	22.769	1542843	30238	1690.853m	NoCal #

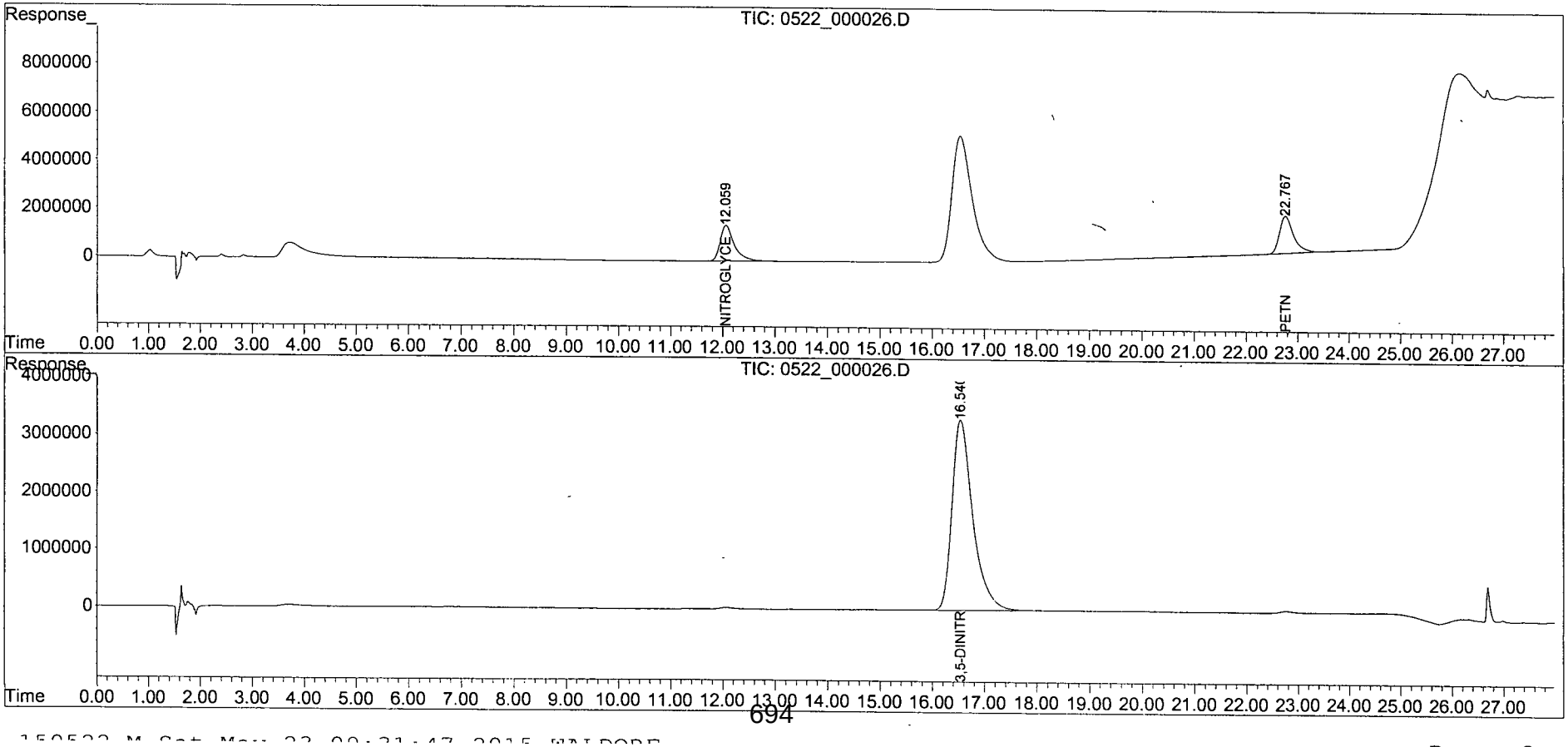
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:24:56
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4296 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:31:36 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

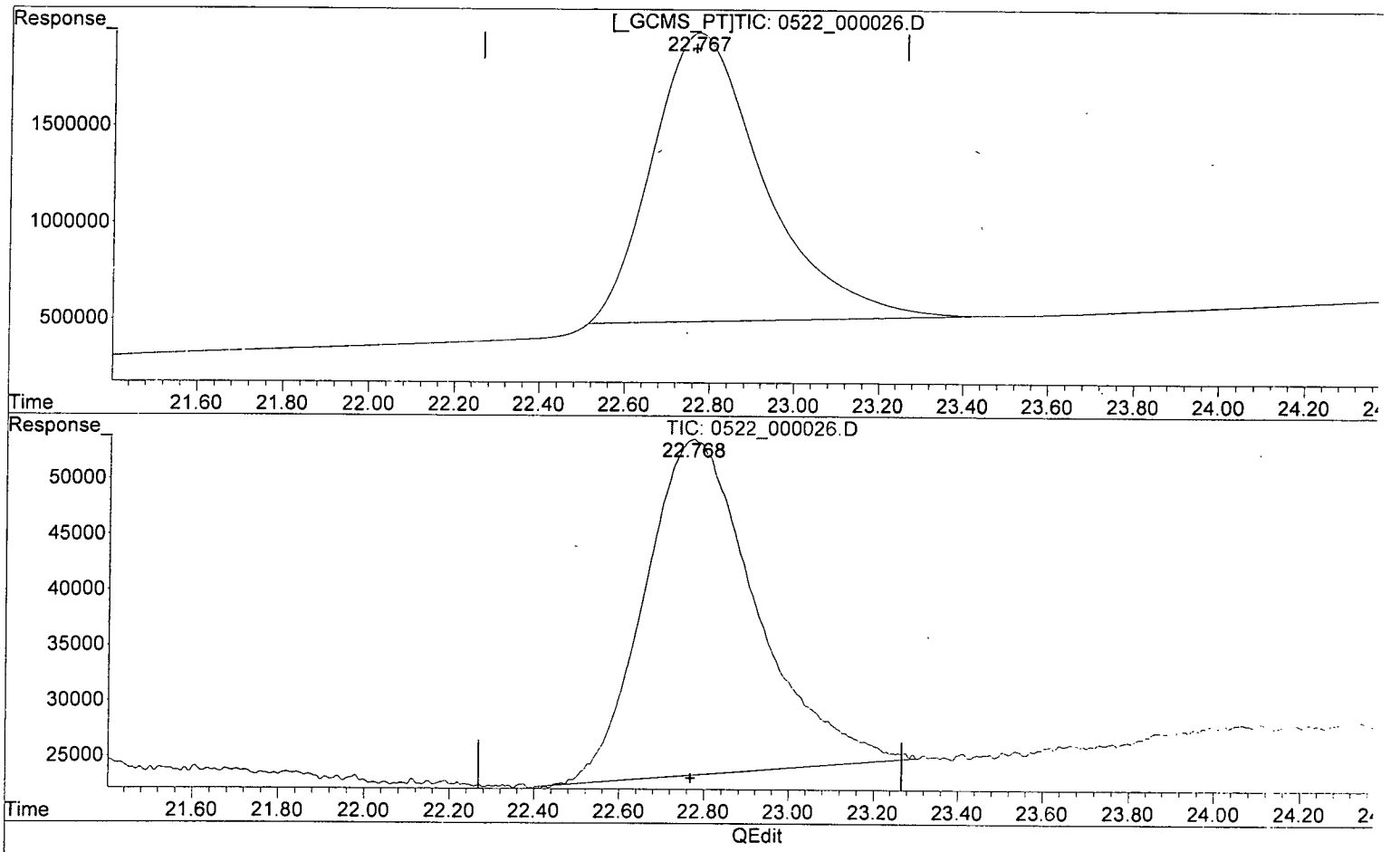


Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:24:56
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4296 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ



(18) PETN (TM)

22.769min 1638.003 ppb

response 1494619

(18) PETN #2 (TM)

22.769min 0.000 ppb

response 30238

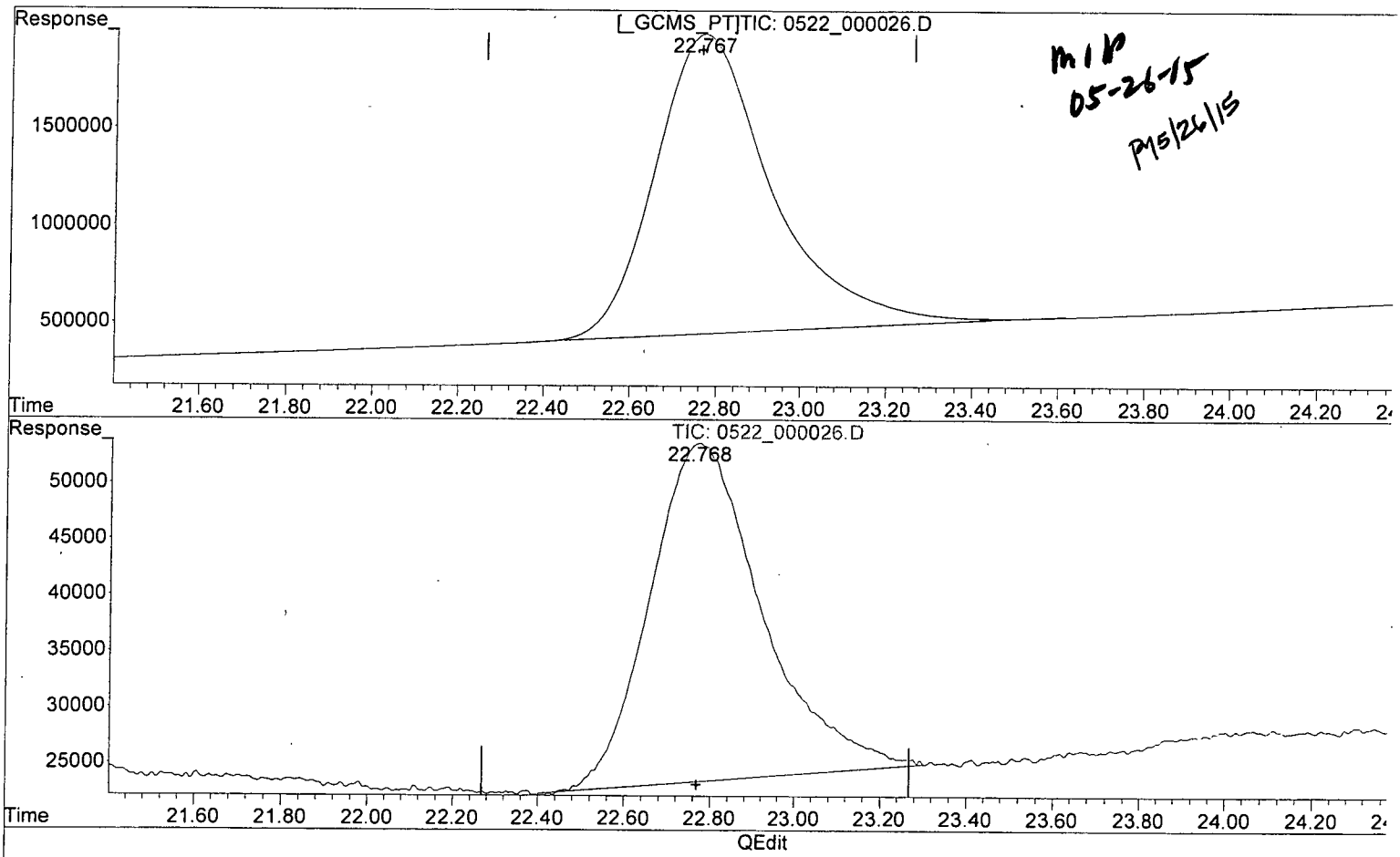
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000026.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:24:56
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 05/22/15
Misc :
ALS Vial : 4296 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:30:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Fri May 15 08:45:00 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



(18) PETN (TM)

22.767min 1690.853 ppb m

response 1542843

(18) PETN #2 (TM)

22.769min 0.000 ppb

response 30238

(+) = Expected Retention Time

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 23-May-2015, 04:42:30
Instrument: Statler
Initial Cal. Date: 05/22/15
Data File: 0522_000031-33.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	18.6	18.4	0.69	TM	
2	TM	PETN	18.2	18.5	1.9	TM	
3		Signal #2					
4	TM	HMX	46.3	47.1	1.8	TM	
5	TM	RDX	39.8	39.8	0.03	TM	
6	TM	1,3-DINITROBENZENE	96.6	94.7	1.9	TM	
7	TM	NITROBENZENE	54.2	53.8	0.71	TM	
8	TM	2,4-DINITROTOLUENE	51.7	53.0	2.4	TM	
9	TM	3,5-DINITROANILINE	41.3	42.8	3.6	TM	
10	TM	3-NITROTOLUENE	22.9	22.8	0.74	TM	
11	TM	4-AMINO-2,6-DINITROTOLUEN	34.2	34.3	0.55	TM	
12	TM	1,3,5-TRINITROBENZENE	97.9	89.7	8.4	TM	
13	S	1,2-DINITROBENZENE	44.3	44.5	0.48	S	
14	TM	2,4,6-TRINITROTOLUENE	50.2	49.8	0.83	TM	
15	TM	2,6-DINITROTOLUENE	30.0	31.8	6.1	TM	
16	TM	2-NITROTOLUENE	21.2	21.7	2.8	TM	
17	TM	4-NITROTOLUENE	18.3	18.5	1.6	TM	
18	TM	2-AMINO-4,6-DINITROTOLUEN	43.0	38.7	10	TM	
19	TM	TETRYL	36.6	32.0	12	TM	
20							
21							
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39							
40							

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000031.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 04:42:30
Operator : MP
Sample : 8330MXA_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4352 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:23:15 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D.	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	4.073	0	1883754	N.D.	1017.745 #
2) TM RDX	0.000	6.415	0	1590397	N.D.	999.716 #
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM 1,3-DINIT...	0.000	8.427	0	3787591	N.D.	980.606 #
6) TM NITROBENZENE	0.000	9.161	0	2153367	N.D.	992.865 #
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D.	N.D. d
8) TM NITROGLYC...	12.040	0.000	736934	0	993.140	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	14.047	0	2118885	N.D.	1024.231 #
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.551	0	1712548	N.D.	1035.686 #
15) TM 3-NITROTO...	0.000	18.047	0	910222	N.D.	992.617 #
16) TM 4-AMINO-2...	0.000	18.671	0	1373815	N.D.	1005.467 #
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

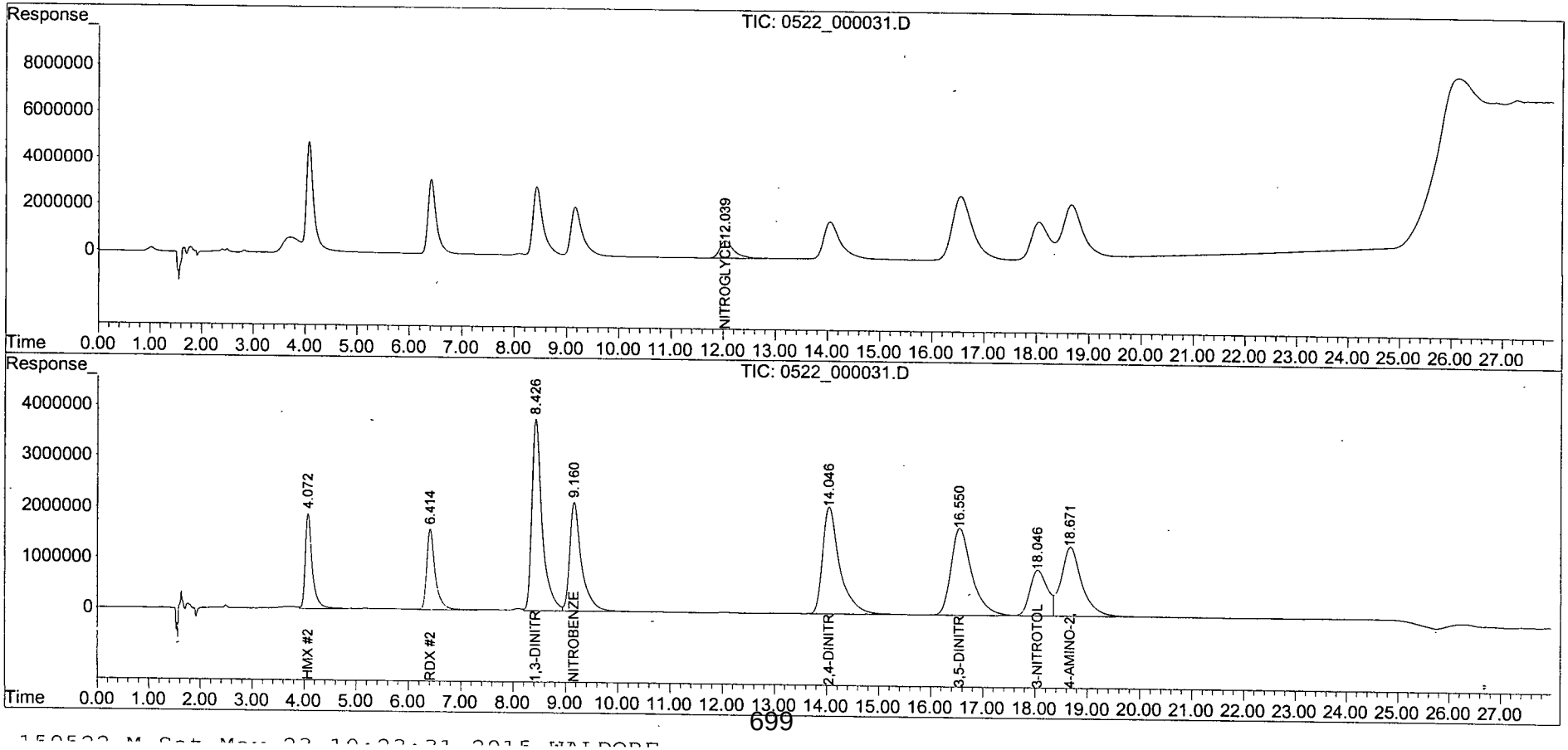
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000031.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 04:42:30
Operator : MP
Sample : 8330MXA_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4352 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:23:15 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



STE2_150522.M Sat May 23 10:23:31 2015 WALDORF

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000032.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 05:22:00
Operator : MP
Sample : 8330MXB_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4353 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:24:52 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	8.108	0	1779983	N.D.	1004.829 #
Spiked Amount 62.500			Recovery	=	0.00%	1607.73%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D.	N.D. d
3) TM 1,3,5-TRI...	0.000	6.758	0	3587912	N.D.	916.157 #
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D. d
7) TM 2,4,6-TRI...	0.000	11.451	0	1991880	N.D.	991.740 #
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	13.467	0	1273233	N.D.	1061.031 #
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	15.471	0	869951	N.D.	1027.863 #
13) TM 4-NITROTO...	0.000	16.886	0	741713	N.D.	1015.531 #
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	19.659	0	1547413	N.D.	899.911 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

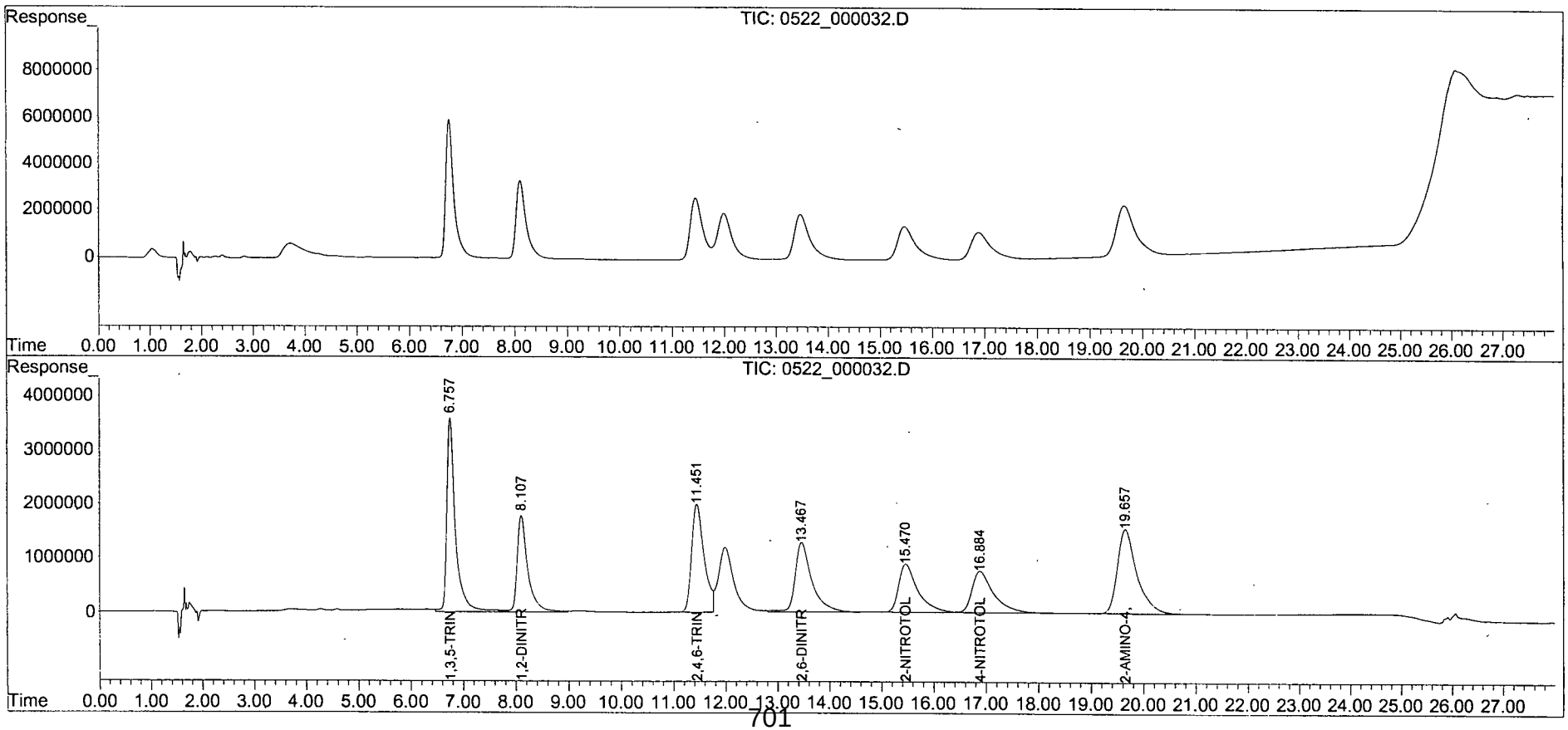
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000032.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 05:22:00
Operator : MP
Sample : 8330MXB_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4353 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:24:52 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



STE2 150522 M Sat May 23 10:25:03 2015 WALDORF Page: 2

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 06:01:31
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4354 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:26:04 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 62.500			Recovery =		0.00%	0.00%
	Target Compounds						
1)	TM HMX	0.000	0.000	0	0	N.D.	N.D.
2)	TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6)	TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7)	TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	0.000	12.005	0	1280291	N.D. d	875.551
10)	TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11)	TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12)	TM 2-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
13)	TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
15)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16)	TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17)	TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18)	TM PETN	22.767	0.000	739734	0	1018.644m	N.D. #

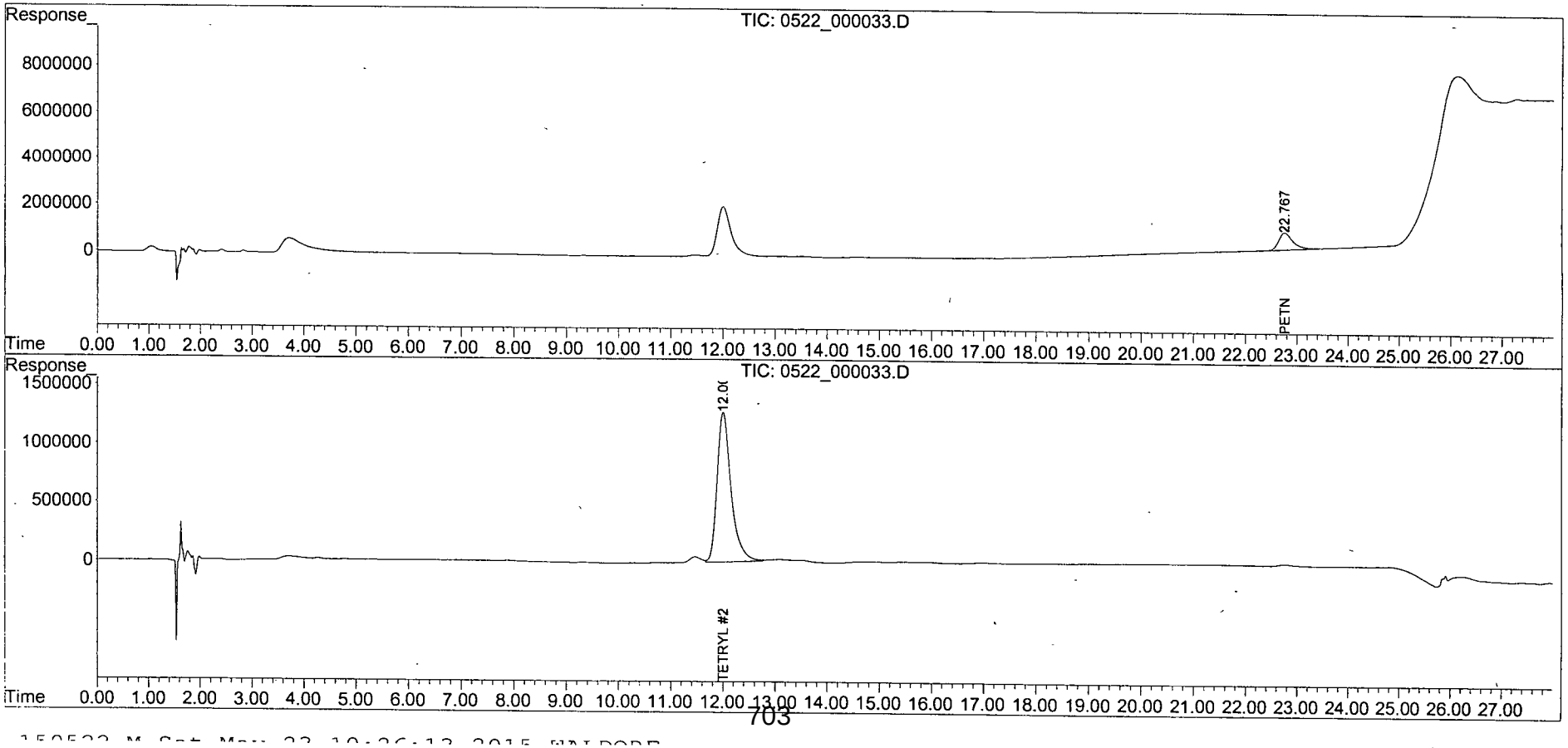
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 06:01:31
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4354 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:26:04 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

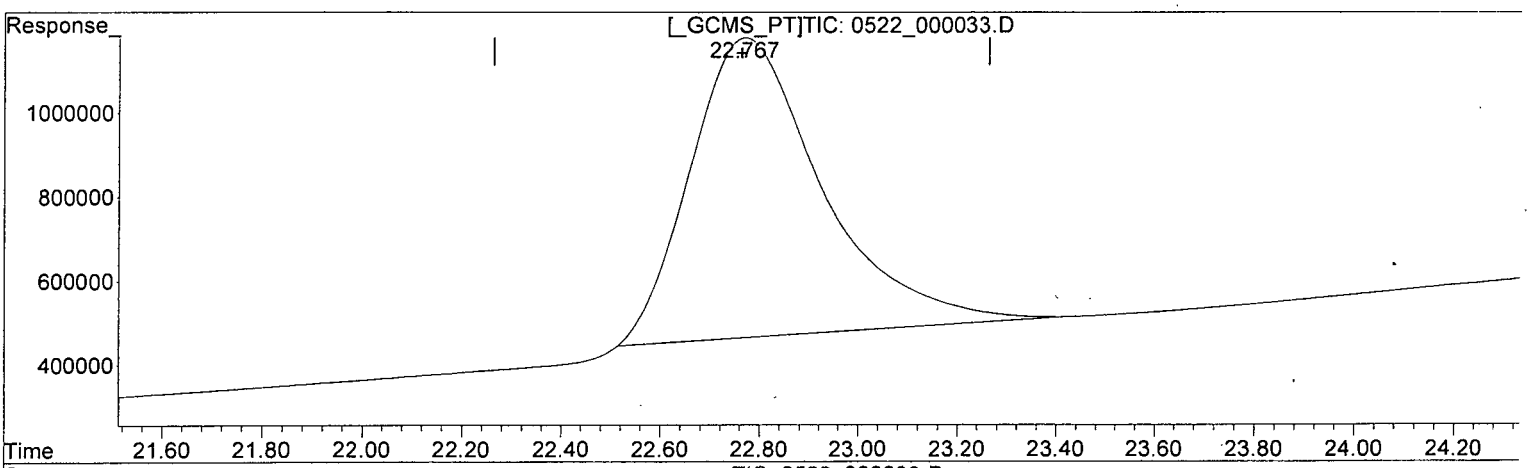


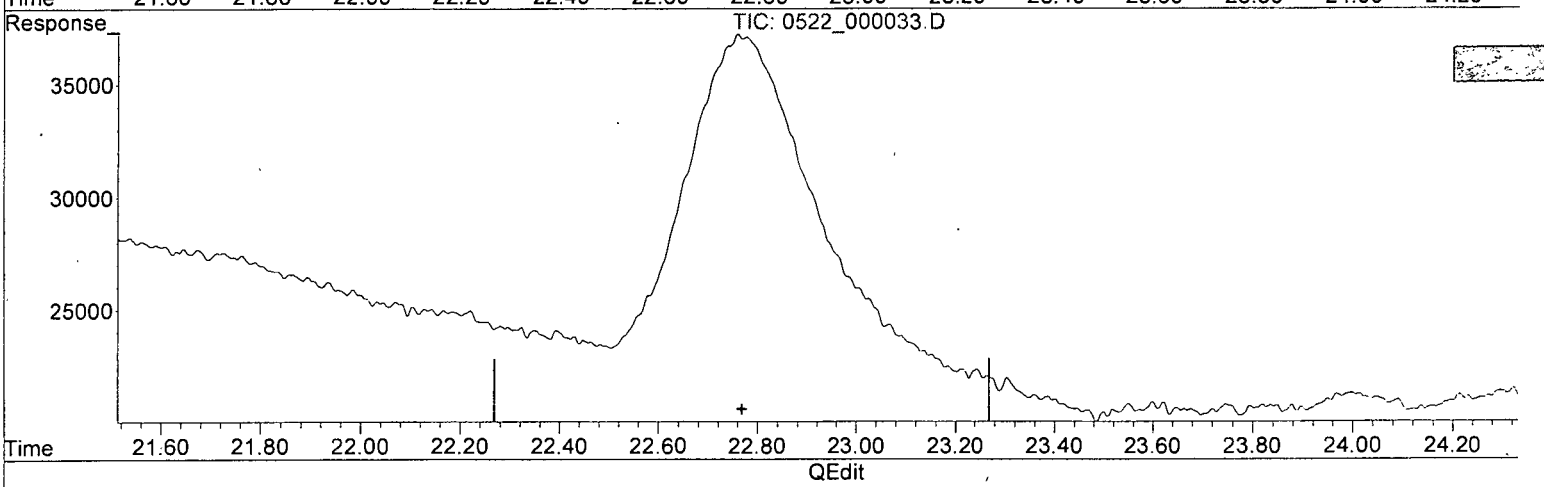
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 06:01:31
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4354 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:22:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r





QEdit

(18) PETN (TM)

22.769min 982.640 ppb

response 713587

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

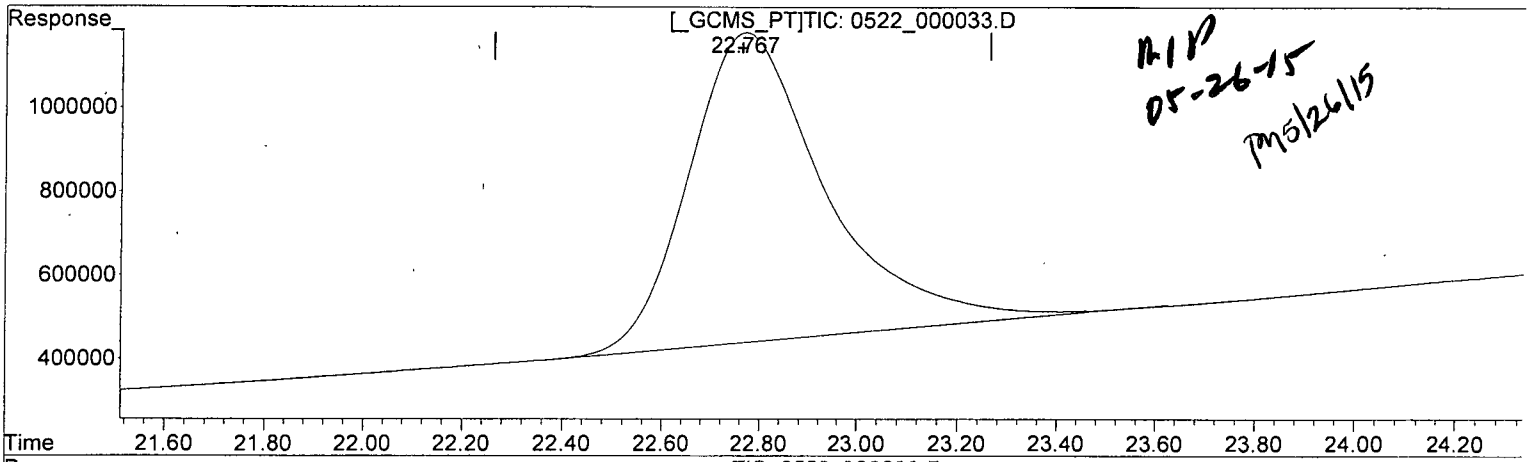
(+) = Expected Retention Time

Quantitation Report (Qedit)

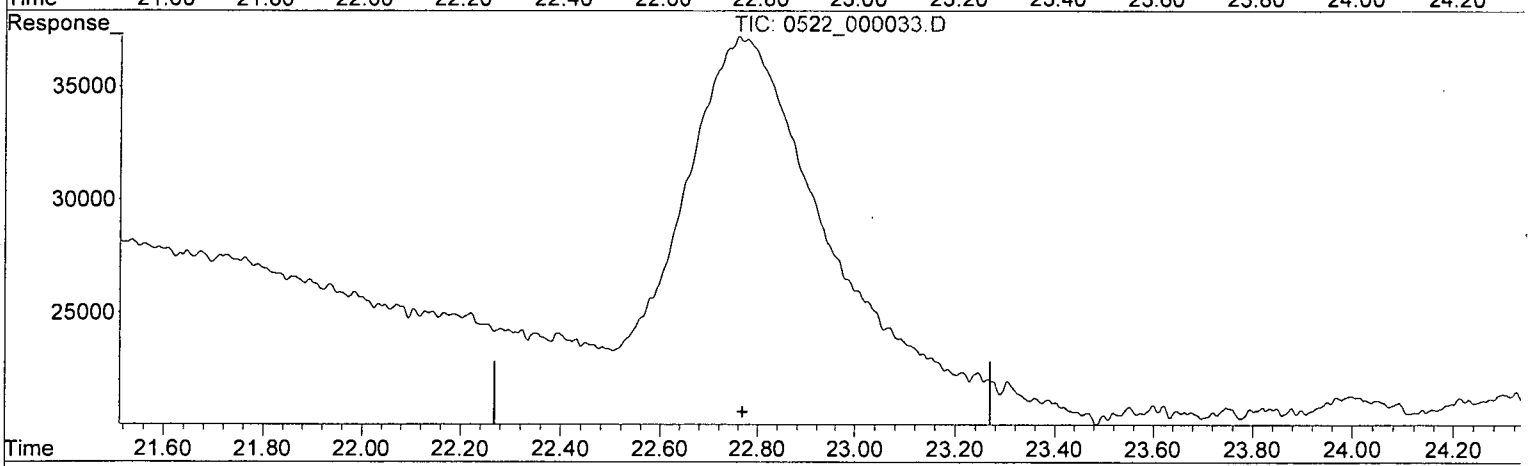
Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000033.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 06:01:31
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 05/22/15
Misc :
ALS Vial : 4354 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 10:22:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:19:47 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-



MP 05-26-15 PM 5/26/15



(18) PETN (TM)

22.767min 1018.644 ppb m

response 739734

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

(+) = Expected Retention Time

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76447
Date Analyzed: 23-May-2015, 13:17:33
Instrument: Statler
Initial Cal. Date: 05/22/15
Data File: 0522_000045-46.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	18.6	18.2	2.0	TM	
2	TM	PETN	18.2	18.9	4.0	TM	
3		Signal #2					
4	TM	3,5-DINITROANILINE	41.3	41.5	0.34	TM	
5	TM	3,5-DINITROANILINE	41.3385	41.4789	4.6	TM	
6	TM	PETN	0	0	0.12	TM	
7	TM	1,3,5-TRINITROBENZENE	97.9	97.3	0.57	TM	
8	S	1,2-DINITROBENZENE	44.3	43.1	2.7	S	
9	TM	1,3-DINITROBENZENE	96.6	96.8	0.27	TM	
10	TM	NITROBENZENE	54.2	53.4	1.5	TM	
11	TM	2,4,6-TRINITROTOLUENE	50.2	50.1	0.22	TM	
12	TM	TETRYL	36.6	36.4	0.36	TM	
13	TM	2,6-DINITROTOLUENE	30.0	30.3	1.2	TM	
14	TM	2,4-DINITROTOLUENE	51.7	52.6	1.7	TM	
15	TM	2-NITROTOLUENE	21.2	21.1	0.50	TM	
16	TM	4-NITROTOLUENE	18.3	18.5	1.3	TM	
17	TM	3-NITROTOLUENE	22.9	21.8	5.1	TM	
18	TM	4-AMINO-2,6-DINITROTOLUEN	34.2	32.7	4.2	TM	
19	TM	2-AMINO-4,6-DINITROTOLUEN	43.0	41.6	3.2	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000045.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 12:38:04
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8519 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:36:34 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	8.087	0	1724096	N.D.	973.280 #
	Spiked Amount 62.500			Recovery	=	0.00%	1557.25%
	Target Compounds						
1)	TM HMX	0.000	4.067	0	1936972	N.D.	1046.498 #
2)	TM RDX	0.000	6.405	0	1588929	N.D.	998.793 #
3)	TM 1,3,5-TRI...	0.000	6.750	0	3893917	N.D.	994.294 #
5)	TM 1,3-DINIT...	0.000	8.424	0	3873015	N.D.	1002.722 #
6)	TM NITROBENZENE	0.000	9.164	0	2136822	N.D.	985.237 #
7)	TM 2,4,6-TRI...	0.000	11.436	0	2004065	N.D.	997.806 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.960	11.958	1232217	1456979	NoCal	996.382 #
10)	TM 2,6-DINIT...	13.441	13.440	1813176	1213830	NoCal	1011.528 #
11)	TM 2,4-DINIT...	0.000	14.041	0	2103448	N.D.	1016.769 #
12)	TM 2-NITROTO...	0.000	15.451	0	842106	N.D.	994.964 #
13)	TM 4-NITROTO...	0.000	16.861	0	739531	N.D.	1012.544 #
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15)	TM 3-NITROTO...	0.000	18.051	0	870504	N.D.	949.304 #
16)	TM 4-AMINO-2...	0.000	18.616	0	1308595	N.D.	957.734 #
17)	TM 2-AMINO-4...	0.000	19.576	0	1664693	N.D.	968.116 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

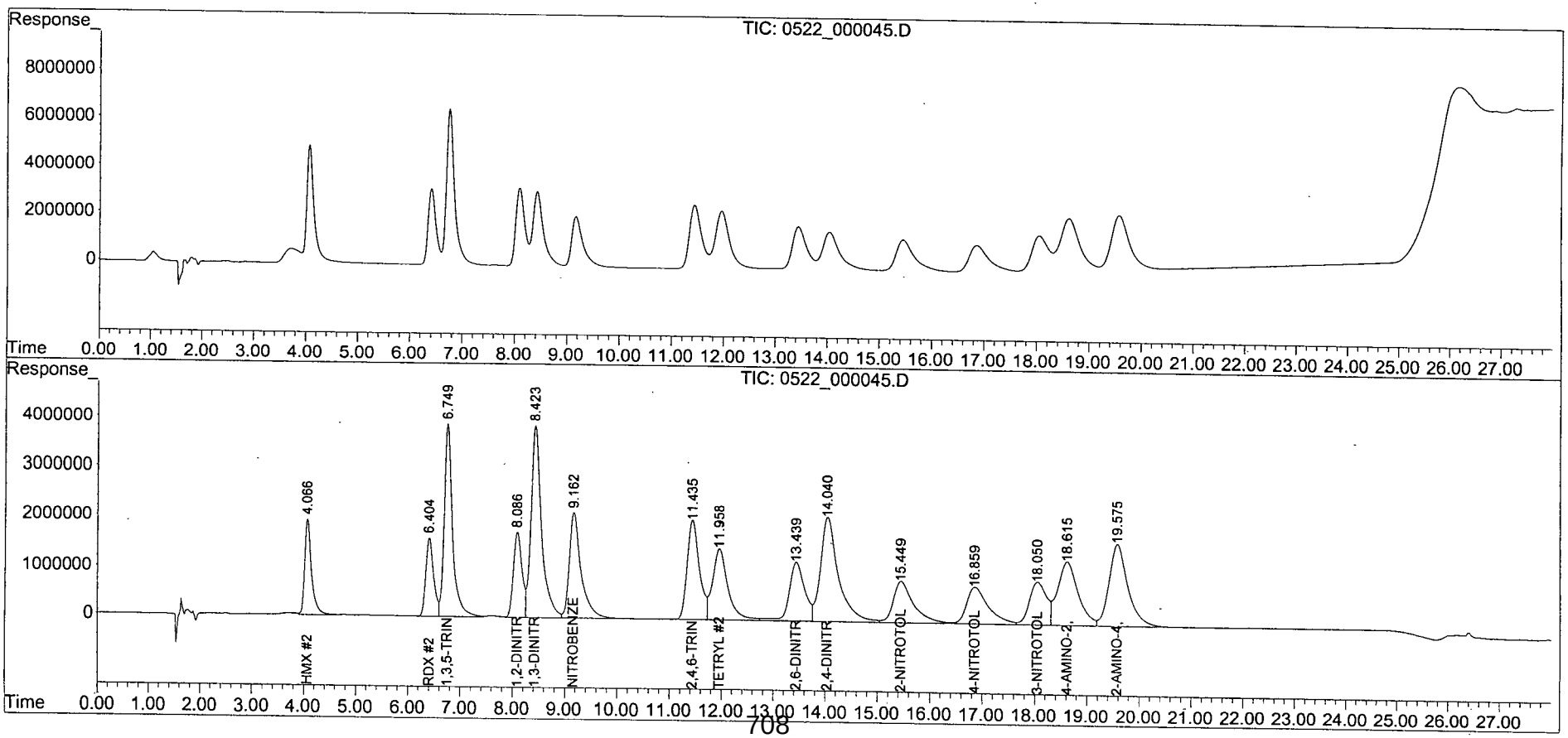
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000045.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 12:38:04
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8519 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:36:34 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



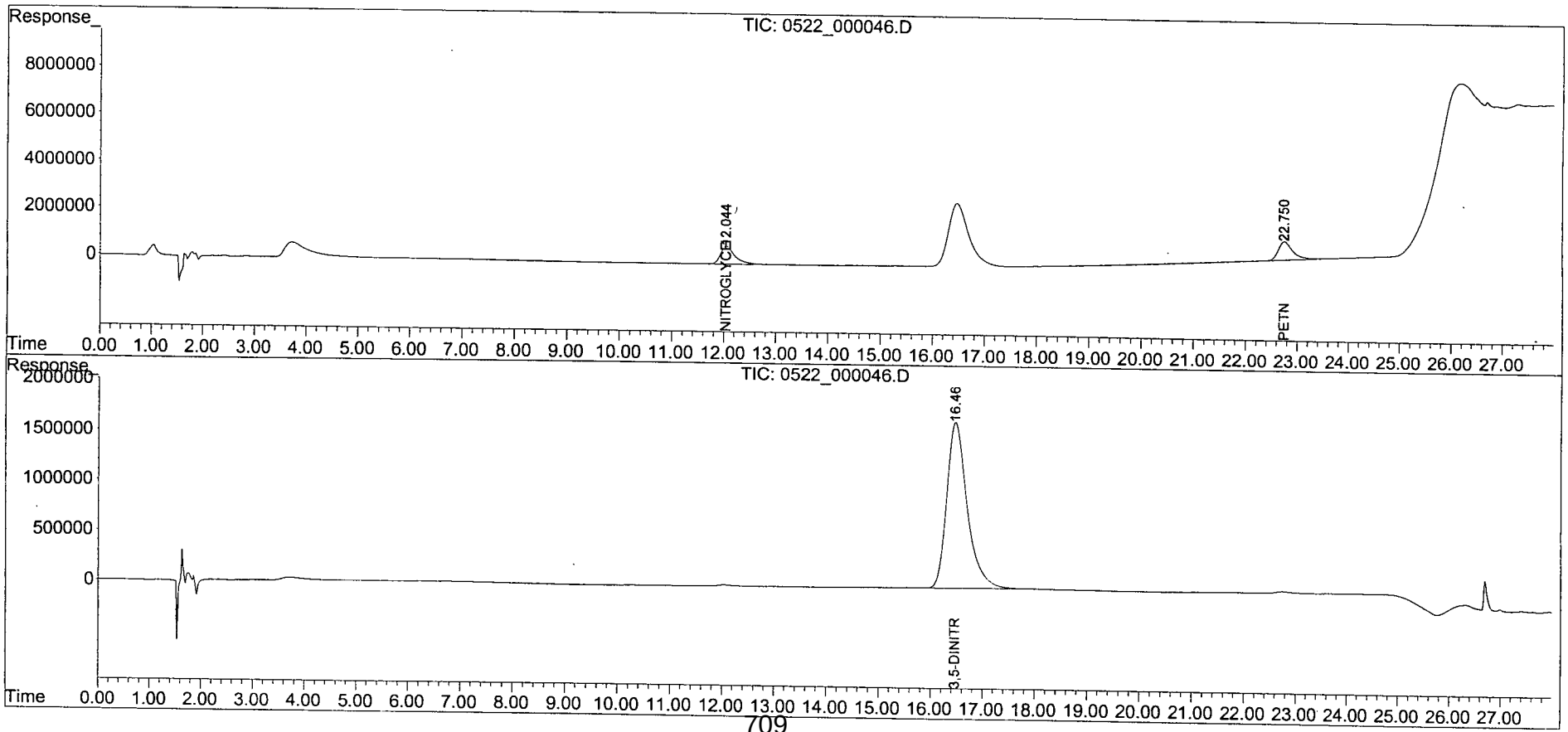
STE2 150522 M Sat May 23 13:36:52 2015 WALDORF

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000046.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:17:33
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:56:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000046.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:17:33
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:56:59 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery	=	0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.045	0.000	727189	0	980.007	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.467	0	1659154	N.D.	1003.395 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.750	22.752	754897	15215	1039.526m	NoCal #

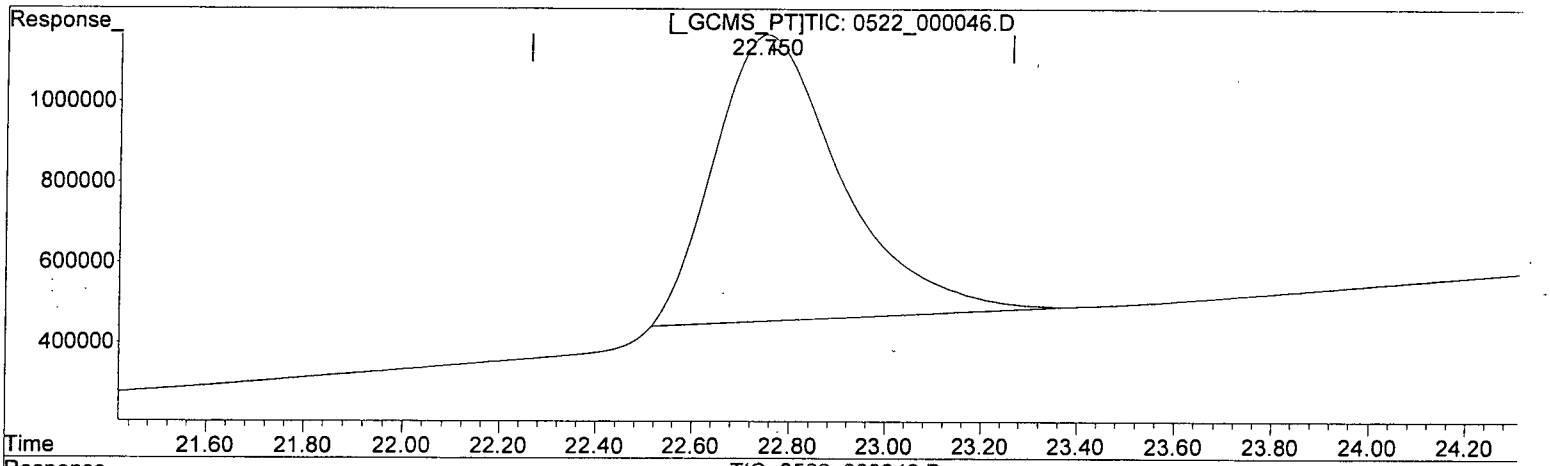
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

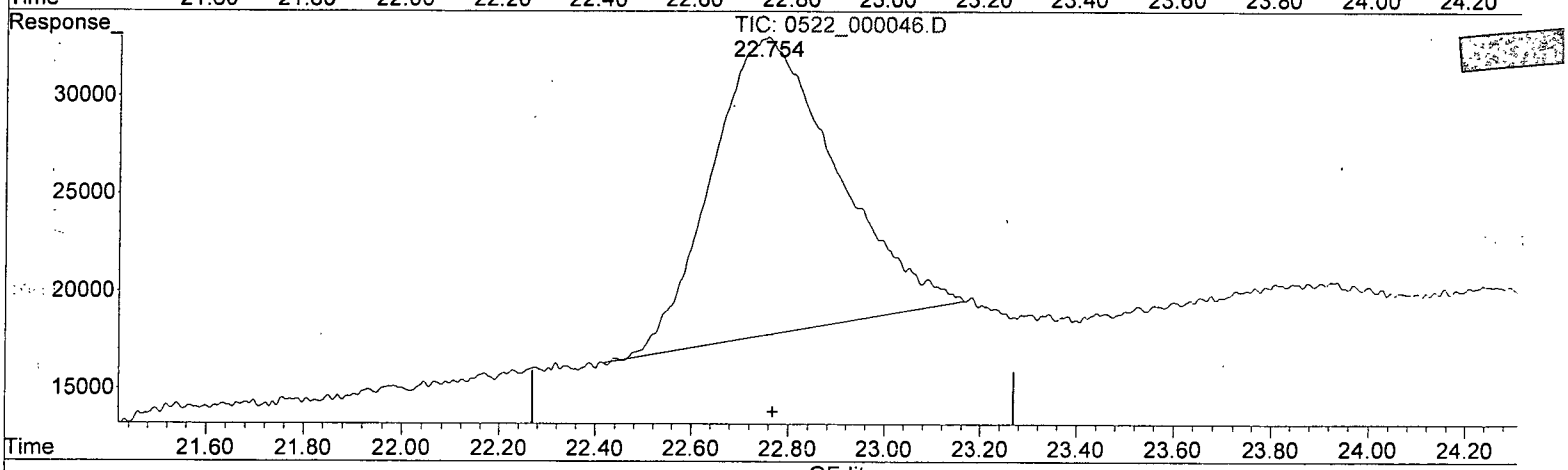
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000046.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:17:33
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:56:32 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(18) PETN (TM)

22.751min 980.901 ppb

response 712325

(18) PETN #2 (TM)

22.752min 0.000 ppb

response 15215

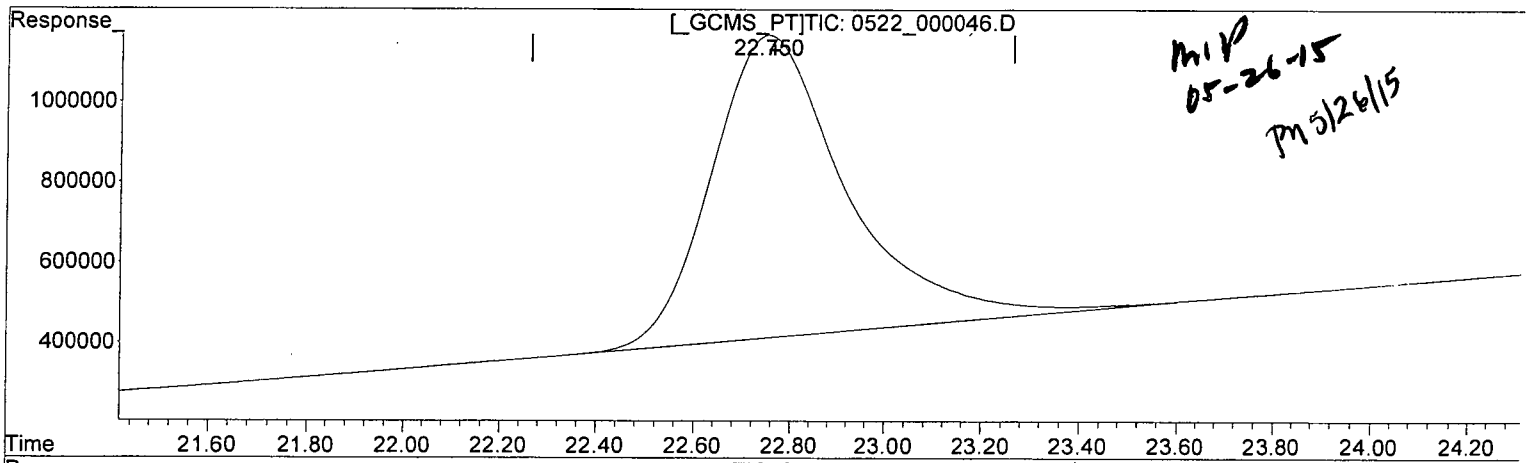
(+) = Expected Retention Time

Quantitation Report (Qedit)

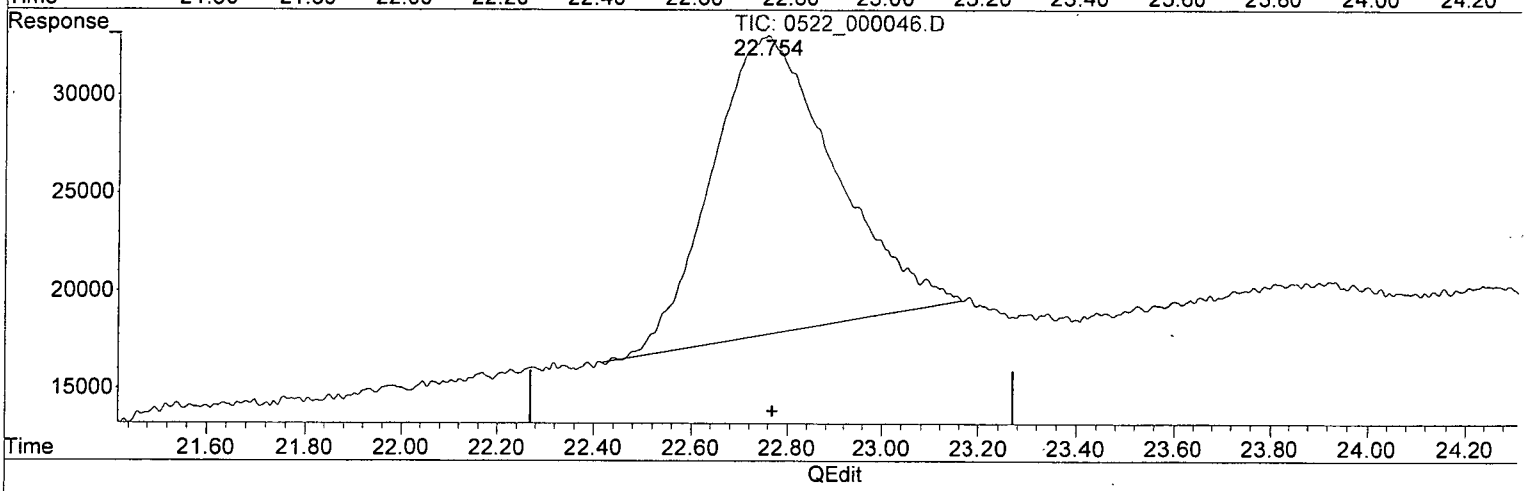
Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000046.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:17:33
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 13:56:32 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-r



MP 05-26-15 pm 5/26/15



(18) PETN (TM)

22.750min 1039.526 ppb m

response 754897

(18) PETN #2 (TM)

22.752min 0.000 ppb

response 15215

(+) = Expected Retention Time

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix:

SDG No: 76441
Date Analyzed: 23-May-2015, 21:51:19
Instrument: Statler
Initial Cal. Date: 05/22/15
Data File: 0522_000058-59.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	18.6	18.0	2.8	TM	
2	TM	PETN	18.2	18.8	3.4	TM	
3		Signal #2					
4	TM	3,5-DINITROANILINE	41.3	41.1	0.51	TM	
5	TM	HMX	46.3	48.3	4.3	TM	
6	TM	RDX	39.8	39.6	0.49	TM	
7	TM	1,3,5-TRINITROBENZENE	97.9	97.1	0.82	TM	
8	S	1,2-DINITROBENZENE	44.3	42.9	3.1	S	
9	TM	1,3-DINITROBENZENE	96.6	96.4	0.13	TM	
10	TM	NITROBENZENE	54.2	52.5	3.3	TM	
11	TM	2,4,6-TRINITROTOLUENE	50.2	50.1	0.30	TM	
12	TM	TETRYL	36.6	36.6	0.14	TM	
13	TM	2,6-DINITROTOLUENE	30.0	30.4	1.3	TM	
14	TM	2,4-DINITROTOLUENE	51.7	52.6	1.8	TM	
15	TM	2-NITROTOLUENE	21.2	20.8	1.9	TM	
16	TM	4-NITROTOLUENE	18.3	18.6	1.7	TM	
17	TM	3-NITROTOLUENE	22.9	21.8	4.9	TM	
18	TM	4-AMINO-2,6-DINITROTOLUEN	34.2	33.0	3.5	TM	
19	TM	2-AMINO-4,6-DINITROTOLUEN	43.0	41.8	2.8	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000058.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:11:50
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8519 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:42:46 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

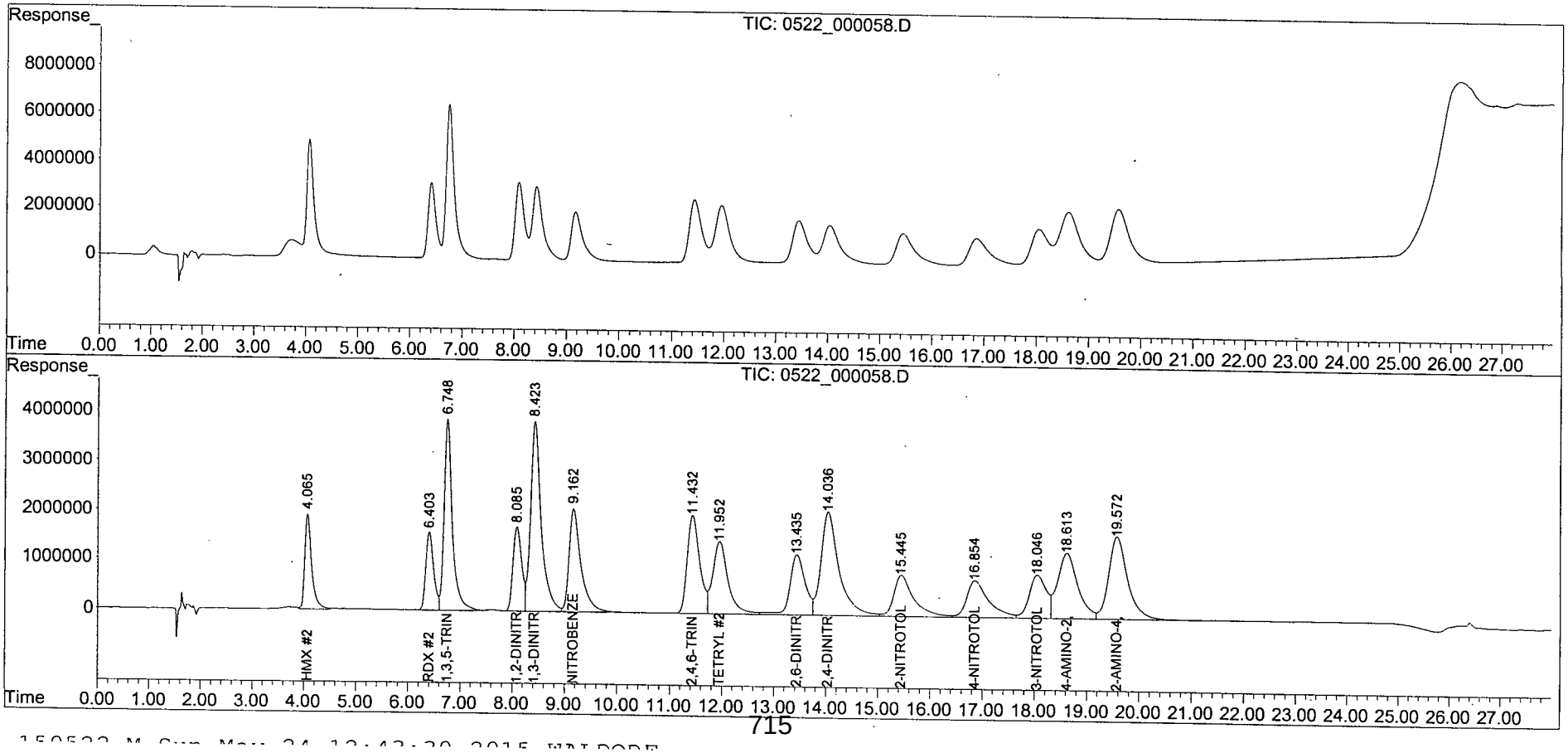
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	8.086	0	1715928	N.D.	968.669 #
Spiked Amount 62.500			Recovery	=	0.00%	1549.87%
Target Compounds						
1) TM HMX	0.000	4.065	0	1930177	N.D.	1042.827 #
2) TM RDX	0.000	6.403	0	1583001	N.D.	995.067 #
3) TM 1,3,5-TRI...	0.000	6.749	0	3884253	N.D.	991.826 #
5) TM 1,3-DINIT...	0.000	8.424	0	3857480	N.D.	998.700 #
6) TM NITROBENZENE	0.000	9.163	0	2098329	N.D.	967.488 #
7) TM 2,4,6-TRI...	0.000	11.433	0	2002440	N.D.	996.997 #
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM TETRYL	11.954	11.953	1251814	1464384	NoCal	1001.446 #
10) TM 2,6-DINIT...	13.437	13.436	1805332	1215356	NoCal	1012.800 #
11) TM 2,4-DINIT...	0.000	14.037	0	2105648	N.D.	1017.832 #
12) TM 2-NITROTO...	0.000	15.446	0	830345	N.D.	981.068 #
13) TM 4-NITROTO...	0.000	16.856	0	743016	N.D.	1017.315 #
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
15) TM 3-NITROTO...	0.000	18.047	0	872020	N.D.	950.957 #
16) TM 4-AMINO-2...	0.000	18.613	0	1318850	N.D.	965.239 #
17) TM 2-AMINO-4...	0.000	19.573	0	1671131	N.D.	971.861 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000058.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:11:50
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8519 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:42:46 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:51:19
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:41:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
Spiked Amount 62.500			Recovery =		0.00%	0.00%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D. d	N.D. d
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
6) TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
8) TM NITROGLYC...	12.049	12.057	721486	11670	972.321	NoCal #
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D. d	N.D. d
14) TM 3,5-DINIT...	0.000	16.497	0	1645103	N.D.	994.898 #
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	22.753	22.751	750797	15401	1033.879m	NoCal #

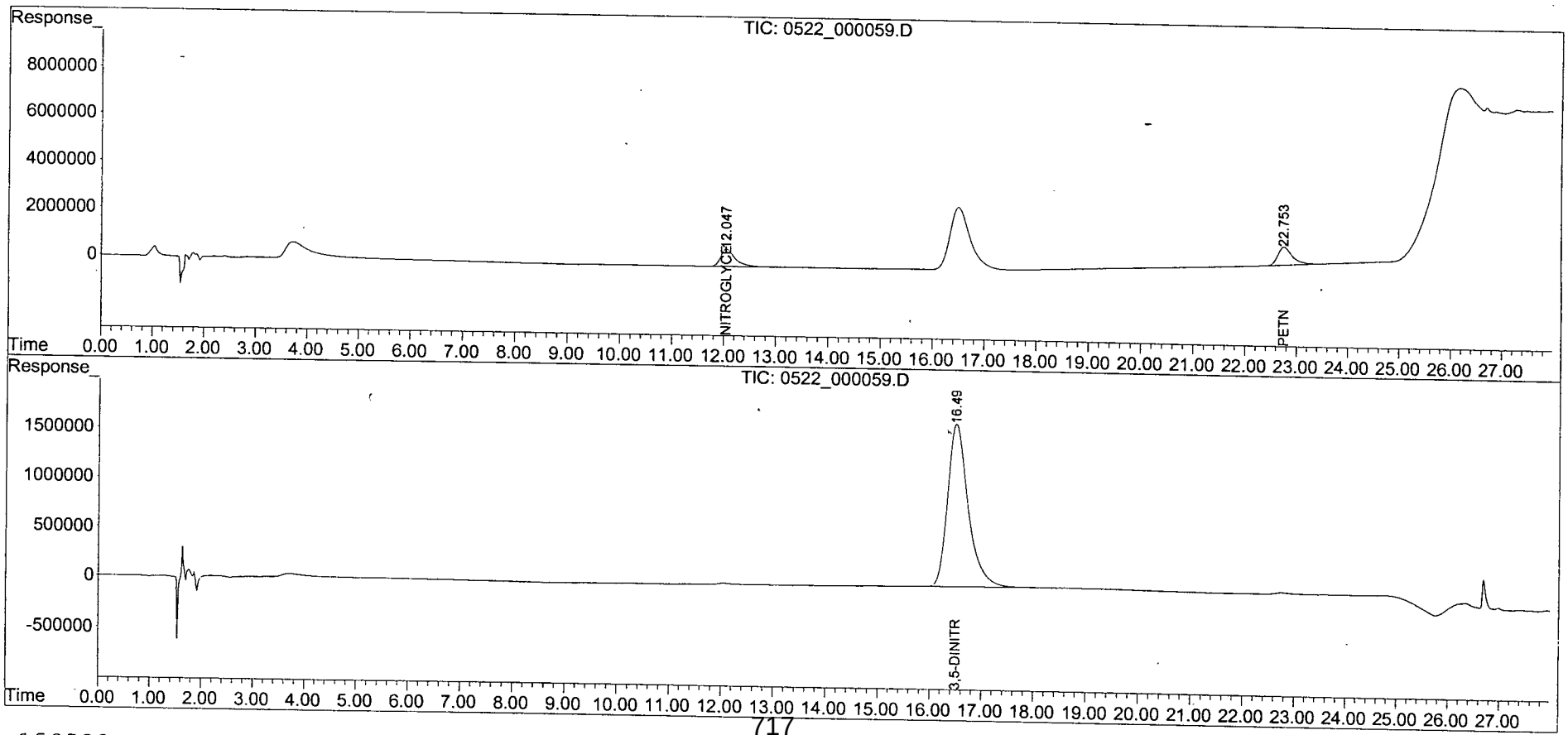
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:51:19
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:41:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

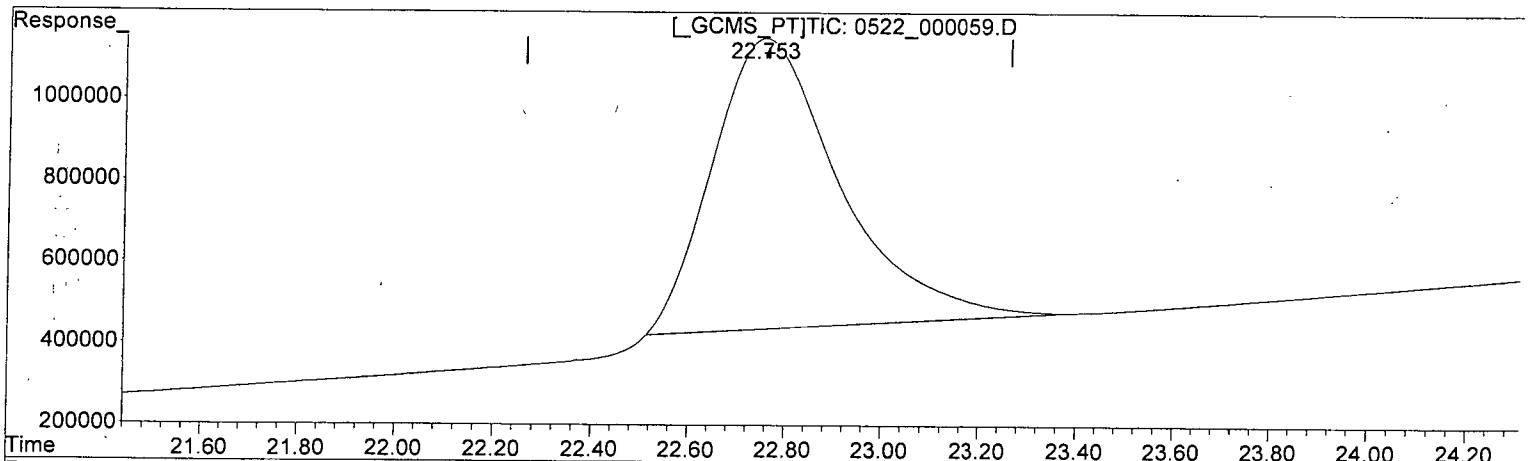


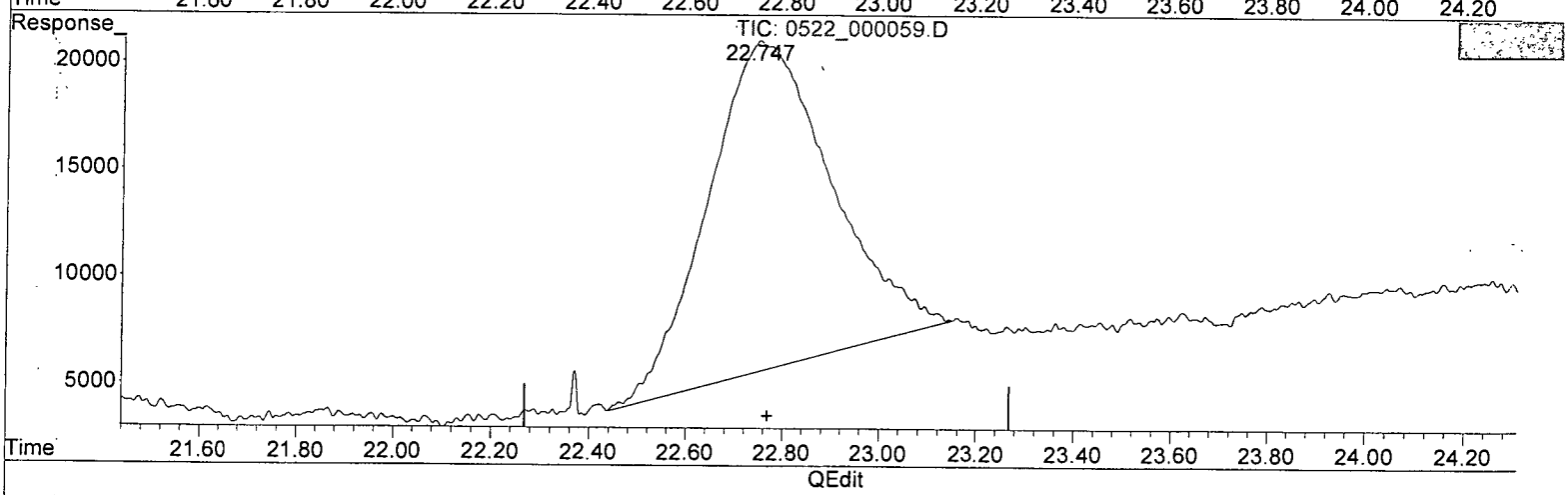
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:51:19
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:41:27 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(18) PETN (TM)

22.756min 982.680 ppb

response 713616

(18) PETN #2 (TM)

22.751min 0.000 ppb

response 15401

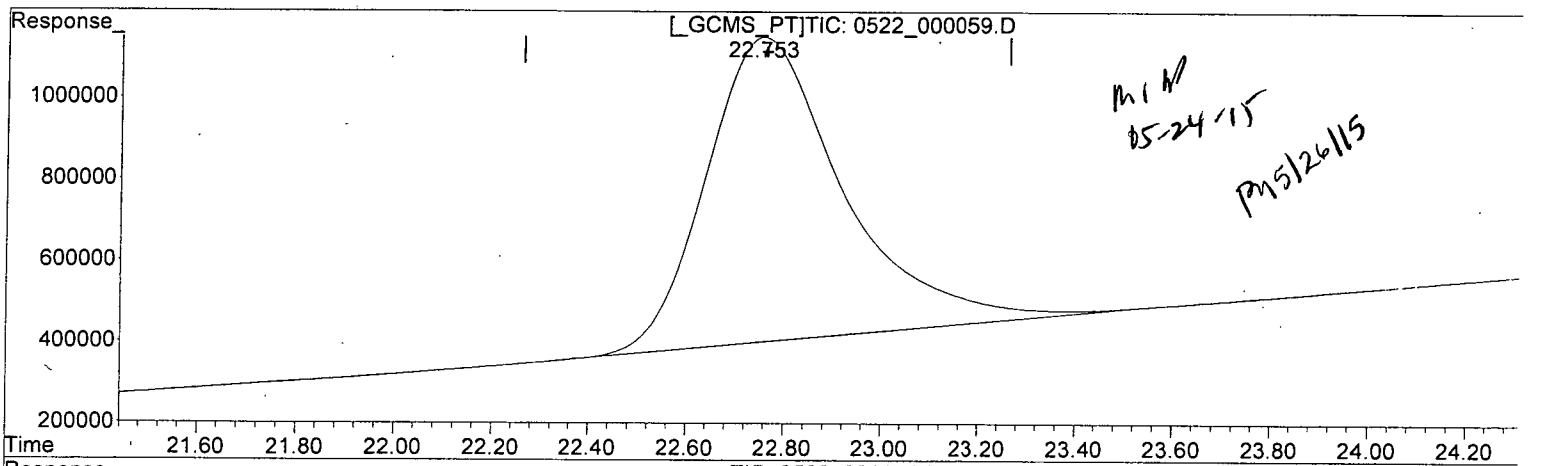
(+) = Expected Retention Time

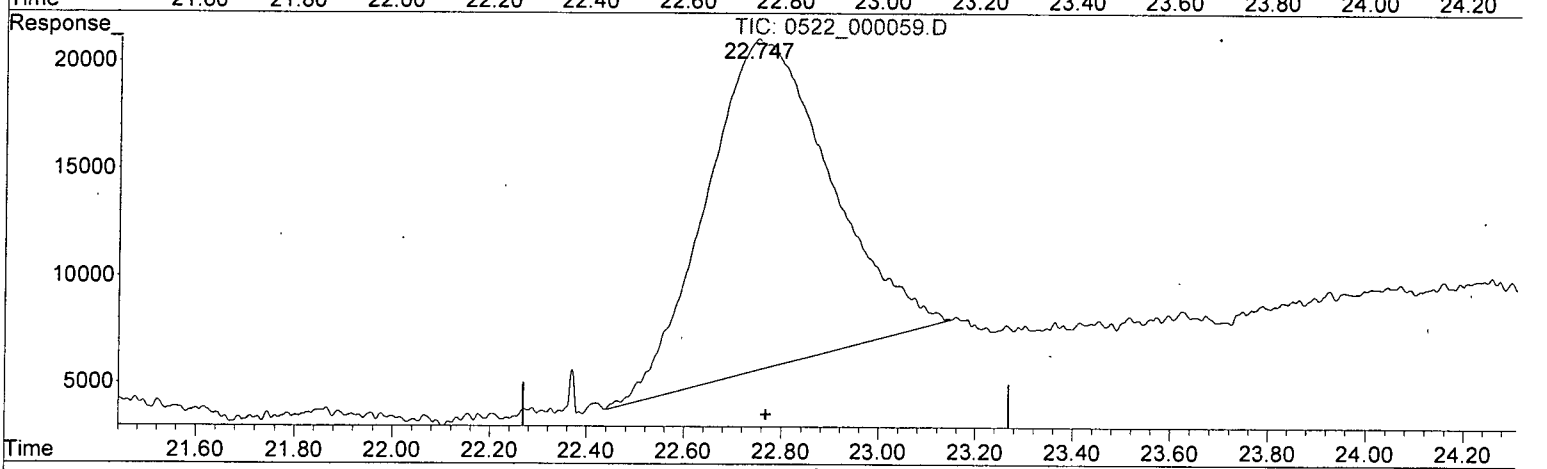
Quantitation Report (Qedit)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000059.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 21:51:19
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 05/23/15
Misc :
ALS Vial : 8520 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 24 12:41:27 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-µ





QEdit

(18) PETN (TM)

22.753min 1033.879 ppb m

response 750797

(18) PETN #2 (TM)

22.751min 0.000 ppb

response 15401

(+) = Expected Retention Time

EPA 8330
EXPLOSIVES

Raw Data

APPL, INC.

Method Blank
EPA 8330B WATER

Blank Name/QCG: **150519W-16334 - 197306**
Batch ID: #83BJU-150519A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	2,4-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	05/19/15	05/23/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	05/19/15	05/23/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	05/19/15	05/23/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	05/19/15	05/23/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	05/19/15	05/23/15
BLANK	SURROGATE: 1,2-DINITROBENZ	89.5	70-130			%	05/19/15	05/23/15

Quant Method: W150522.M
Run #: 0522_000035
Instrument: Waldorf
Sequence: 150522
Initials: MP

GC SC-Blank-REG MDLs
Printed: 05/26/15 9:19:51 AM

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000035.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 02:35:40
Operator : MP
Sample : 150519ABLKW 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4097 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:04 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.551	0	723610	N.D.	0.895	#
	Spiked Amount 1.000			Recovery	=	0.00%	89.50%	
	Target Compounds							
1)	TM HMX	0.000	0.000	0	0	N.D.	N.D.	
2)	TM RDX	0.000	0.000	0	0	N.D.	N.D.	
3)	TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.	
5)	TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
6)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
7)	TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.	
8)	TM NITROGLYC...	5.971	5.959	59220	23754	0.180	NoCal	#
9)	TM TETRYL	6.430	0.000	9218	0	NoCal	N.D.	
10)	TM 2,4,6-TRI...	6.882	0.000	8924	0	NoCal	N.D.	
11)	TM 2-AMINO-4...	7.143	0.000	15207	0	NoCal	N.D.	
12)	TM 4-AMINO-2...	7.519	0.000	9774	0	NoCal	N.D.	
13)	TM 2,4-DINIT...	8.602	0.000	15781	0	NoCal	N.D.	
14)	TM 2,6-DINIT...	8.971	0.000	7993	0	NoCal	N.D.	
15)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
16)	TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
17)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

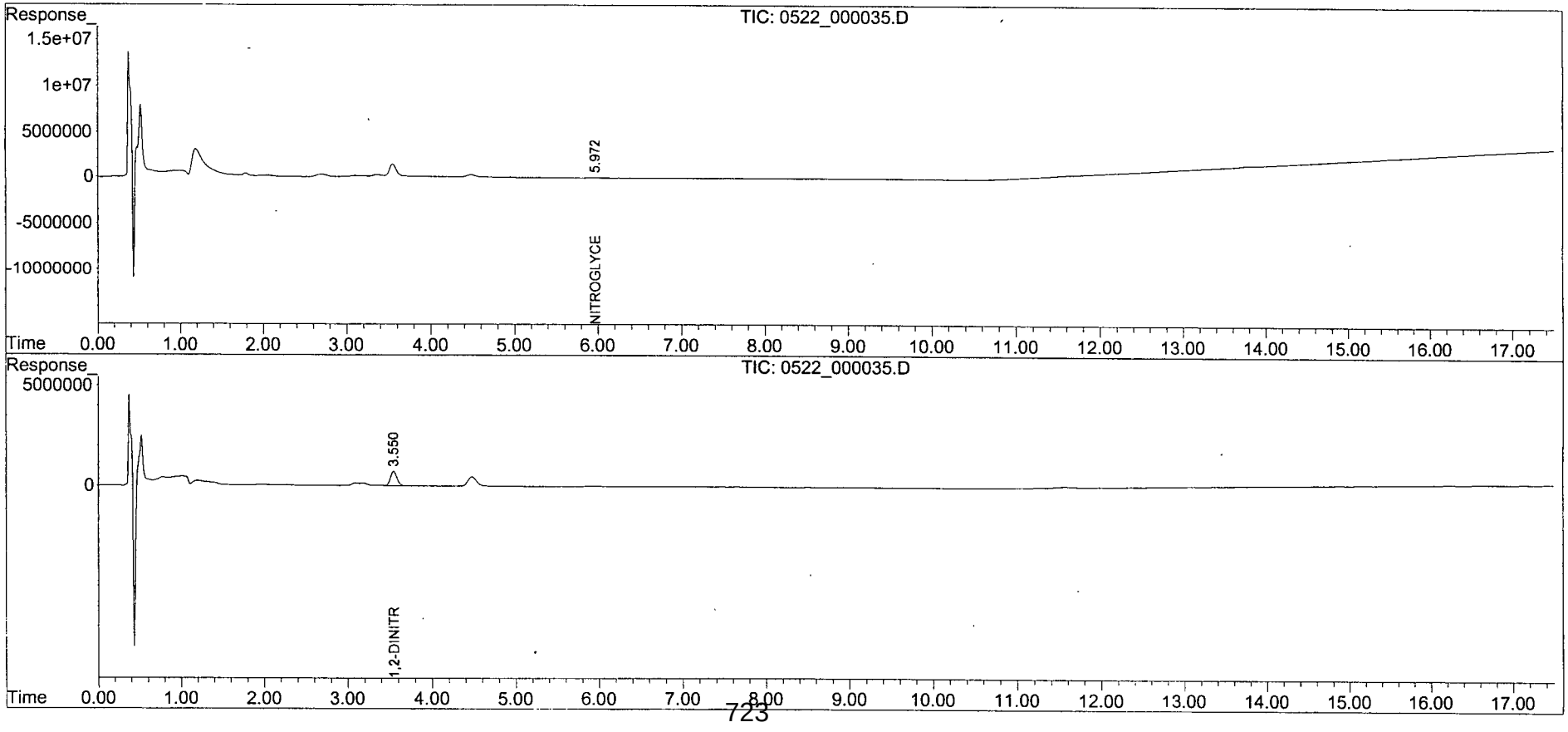
MP
05-26-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000035.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 02:35:40
Operator : MP
Sample : 150519ABLKW 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4097 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:04 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000047.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:57:04
Operator : MP
Sample : 150519ABLKW 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4096 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 26 08:32:55 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
System Monitoring Compounds							
4) S 1,2-DINIT...	0.000	8.089	0	95973	N.D.	0.867	#
Spiked Amount 1.000			Recovery =		0.00%	86.70%	
Target Compounds							
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.	
2) TM RDX	0.000	0.000	0	0	N.D.	N.D.	
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	NT N.D.	d
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
6) TM NITROBENZENE	0.000	0.000	0	0	N.D.	NT N.D.	d
7) TM 2,4,6-TRI...	0.000	0.000	0	0	N.D.	NT N.D.	d
8) TM NITROGLYC...	0.000	12.045	0	464	N.D.	NoCal	
9) TM TETRYL	0.000	0.000	0	0	N.D.	CDL N.D.	d
10) TM 2,6-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
11) TM 2,4-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
12) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
13) TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
15) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.	
16) TM 4-AMINO-2...	0.000	0.000	0	0	N.D.	N.D.	
17) TM 2-AMINO-4...	0.000	0.000	0	0	N.D.	N.D.	
18) TM PETN	0.000	0.000	0	0	N.D. d	NT N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

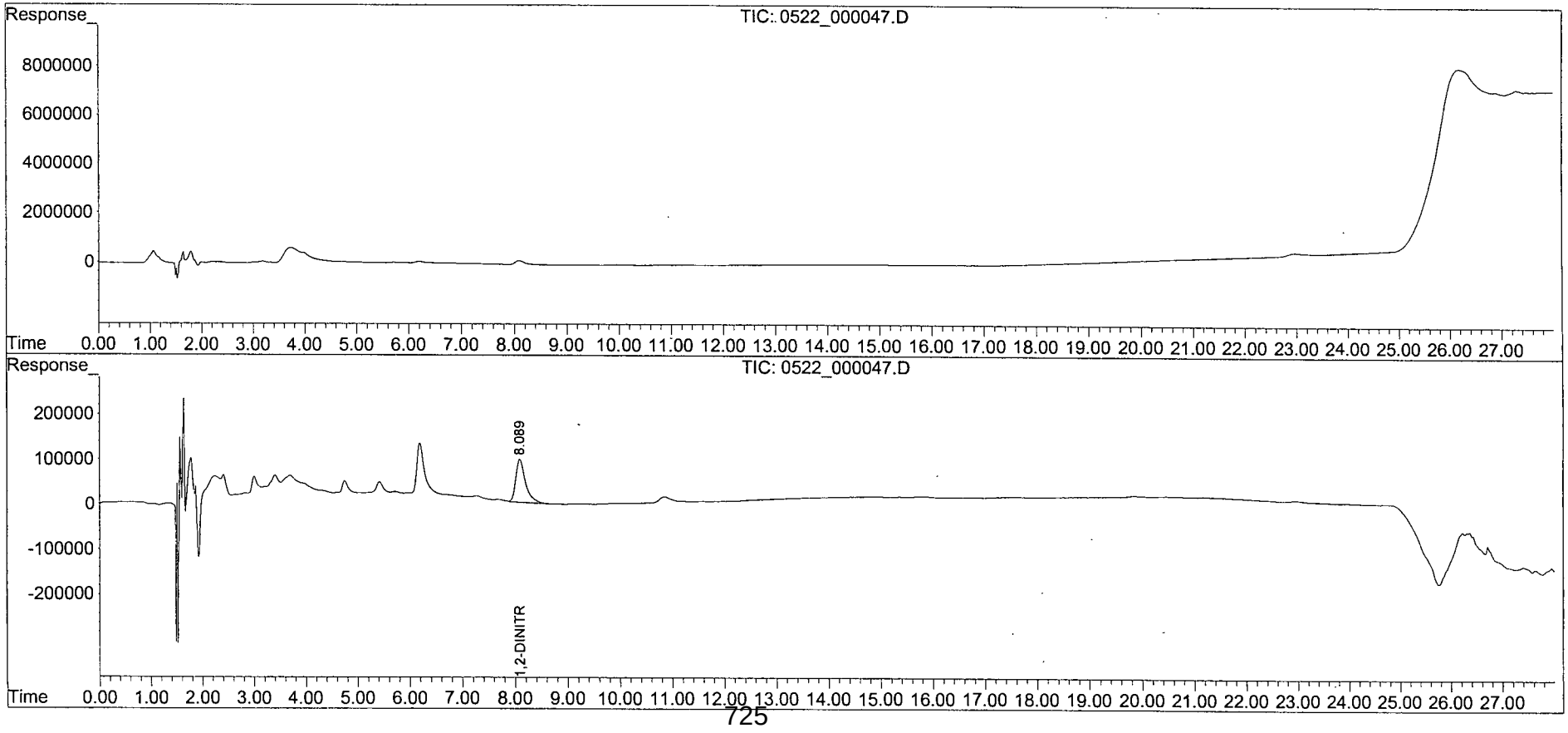
MP
05-26-15

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000047.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 13:57:04
Operator : MP
Sample : 150519ABLKW 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4096 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 26 08:32:55 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150522\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Sat May 23 10:29:51 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-micron



Method Blank

EPA 8330B EXPLOSIVES-SOIL

Blank Name/QCG: **150526S-16400 - 197385**
Batch ID: #833BS-150526A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,3,5-TRINITROBENZENE	0.200 U	0.50	0.200	0.079	mg/kg	05/26/15	05/27/15
BLANK	1,3-DINITROBENZENE	0.200 U	0.45	0.200	0.063	mg/kg	05/26/15	05/27/15
BLANK	2,4,6-TRINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,4-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.083	mg/kg	05/26/15	05/27/15
BLANK	2-AMINO-4,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	2-NITROTOLUENE	0.200 U	0.50	0.200	0.066	mg/kg	05/26/15	05/27/15
BLANK	3,5-DNA	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	3-NITROTOLUENE	0.200 U	0.50	0.200	0.071	mg/kg	05/26/15	05/27/15
BLANK	4-AMINO-2,6-DINITROTOLUENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	4-NITROTOLUENE	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	HMX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	NITROBENZENE	0.200 U	0.50	0.200	0.075	mg/kg	05/26/15	05/27/15
BLANK	NITROGLYCERIN	0.200 U	0.50	0.200	0.085	mg/kg	05/26/15	05/27/15
BLANK	PETN	1.000 U	2.50	1.000	0.579	mg/kg	05/26/15	05/27/15
BLANK	RDX	0.200 U	0.50	0.200	0.080	mg/kg	05/26/15	05/27/15
BLANK	TETRYL	0.200 U	0.50	0.200	0.091	mg/kg	05/26/15	05/27/15
BLANK	SURROGATE: 1,2-DINITROBENZ	95.0	70-130			%	05/26/15	05/27/15

Quant Method: W150522.M
Run #: 0527_006006
Instrument: Waldorf
Sequence: 150527
Initials: MP

GC SC-Blank-REG MDLs
Printed: 05/27/15 2:21:43 PM

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 11:01:56
Operator : MP
Sample : 150526ABLKS 7.968 DF 05/26/15
Misc : Soil
ALS Vial : 4097 Sample Multiplier: 7.96813

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:09:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	3.517	0	922169	N.D.	567.858 #
Spiked Amount 597.610			Recovery	=	0.00%	95.02%
Target Compounds						
1) TM HMX	0.000	0.000	0	0	N.D.	N.D.
2) TM RDX	0.000	0.000	0	0	N.D.	N.D.
3) TM 1,3,5-TRI...	0.000	0.000	0	0	N.D.	N.D.
5) TM 1,3-DINIT...	0.000	0.000	0	0	N.D.	N.D.
6) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
7) TM NITROBENZENE	0.000	0.000	0	0	N.D.	N.D.
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d<DL	N.D.
9) TM TETRYL	6.312	0.000	8853	0	NoCal	N.D.
10) TM 2,4,6-TRI...	6.843	0.000	11795	0	NoCal	N.D.
11) TM 2-AMINO-4...	7.049	0.000	5338	0	NoCal	N.D.
12) TM 4-AMINO-2...	7.383	0.000	16154	0	NoCal	N.D.
13) TM 2,4-DINIT...	8.540	0.000	15928	0	NoCal	N.D.
14) TM 2,6-DINIT...	8.804	0.000	22327	0	NoCal	N.D.
15) TM 2-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
16) TM 4-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
17) TM 3-NITROTO...	0.000	0.000	0	0	N.D.	N.D.
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

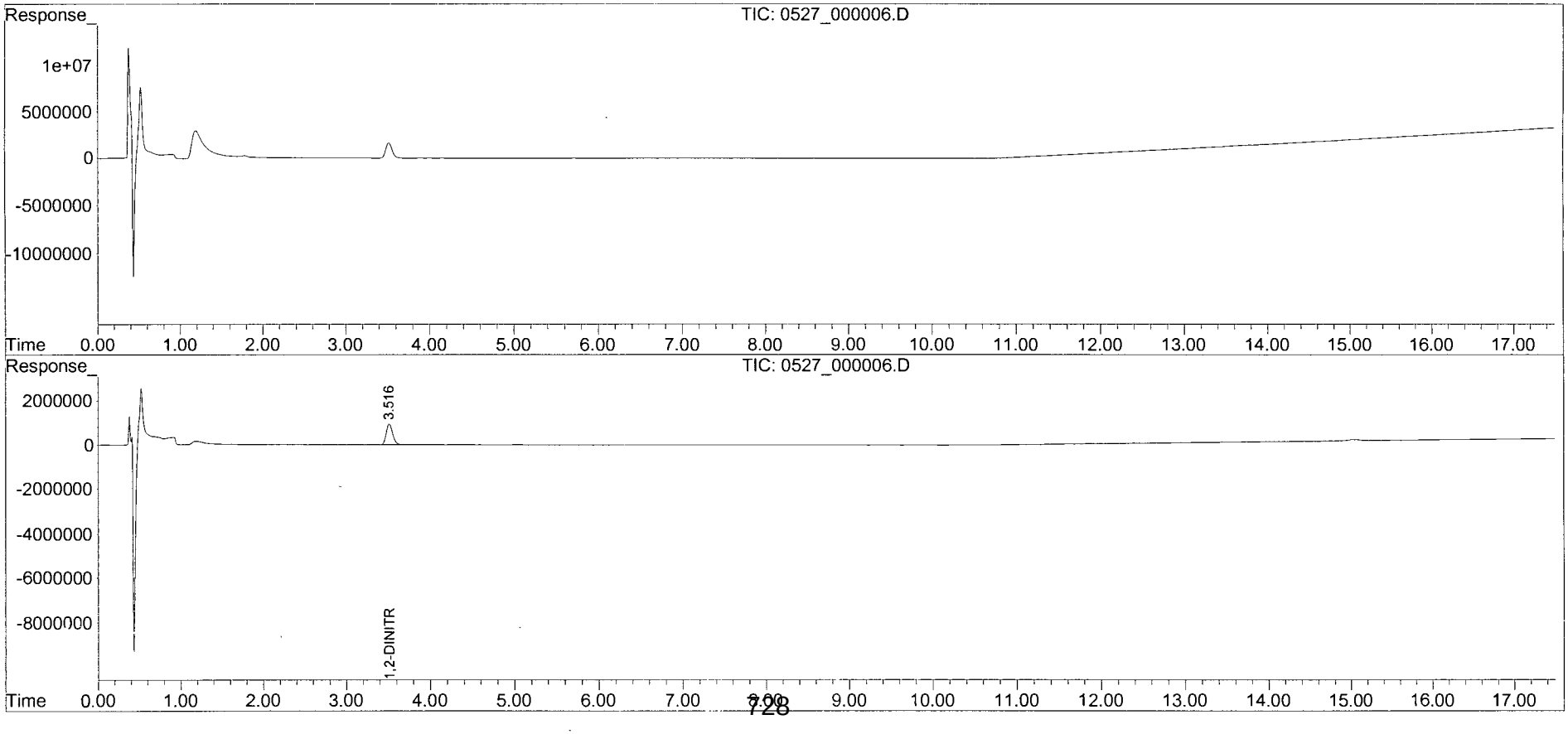
MP
05-27-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 11:01:56
Operator : MP
Sample : 150526ABLKS 7.968 DF 05/26/15
Misc : Soil
ALS Vial : 4097 Sample Multiplier: 7.96813

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 14:09:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150519W-16334 LCS - 197306**
Batch ID: #83BJU-150519A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
2,4-DINITROTOLUENE	8.00	6.72	84.0	60-135
2,6-DINITROTOLUENE	8.00	6.73	84.1	60-135
HMX	8.00	6.98	87.3	80-115
NITROGLYCERIN	8.00	6.96	87.0	70-130
RDX	8.00	6.66	83.3	50-160
TETRYL	8.00	6.67	83.4	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	6.73	84.1	70-130

Comments: _____

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/19/15
Analysis Date :	05/23/15
Instrument :	Waldorf
Run :	0522_000034
Initials :	MP

Printed: 05/26/15 9:19:54 AM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000034.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:58:09
Operator : MP
Sample : 150519ALCS-1 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4096 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:19:45 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
4) S 1,2-DINIT...	0.000	3.547	0	5443459	N.D.	6.731 #
Spiked Amount 1.000			Recovery	=	0.00%	673.10%
Target Compounds						
1) TM HMX	0.000	0.918	0	11327366	N.D.	6.977 #
2) TM RDX	0.000	1.731	0	7086978	N.D.	6.658 #
3) TM 1,3,5-TRI...	0.000	2.823	0	12693964	N.D.	6.562 #
5) TM 1,3-DINIT...	0.000	3.717	0	11903059	N.D.	6.534 #
6) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
7) TM NITROBENZENE	0.000	5.042	0	5270455	N.D.	6.316 #
8) TM NITROGLYC...	6.054	6.046	2288327	59739	6.964	NoCal #
9) TM TETRYL	6.414	6.414	6258632	3816676	NoCal	6.669 #
10) TM 2,4,6-TRI...	6.899	6.899	6946111	5345157	NoCal	6.835 #
11) TM 2-AMINO-4...	7.115	7.115	6863236	4562867	NoCal	6.493 #
12) TM 4-AMINO-2...	7.460	7.460	5709571	3078908	NoCal	6.085 #
13) TM 2,4-DINIT...	8.590	8.590	3623245	4959890	NoCal	6.721 #
14) TM 2,6-DINIT...	8.951	8.951	3779583	2733524	NoCal	6.726 #
15) TM 2-NITROTO...	0.000	12.297	0	1760034	N.D.	6.281 #
16) TM 4-NITROTO...	0.000	12.895	0	1796717	N.D.	6.482 #
17) TM 3-NITROTO...	0.000	13.783	0	2143651	N.D.	6.477 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Algorithm check

HMX

$\frac{11327366}{649.5\ (40)} \times 0.016\ DF = 6.976$

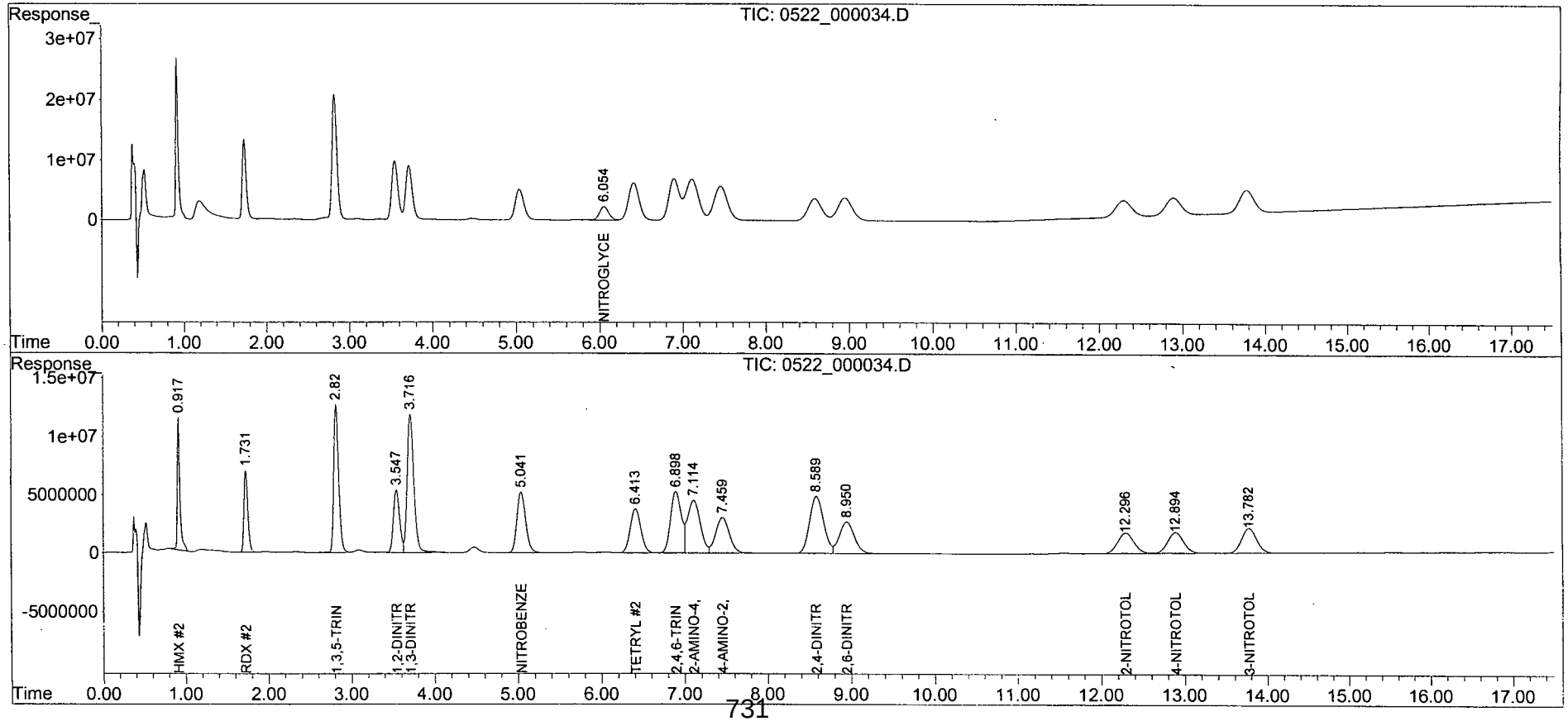
✓ MP 05-26-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150522\
Data File : 0522_000034.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 23-May-2015, 01:58:09
Operator : MP
Sample : 150519ALCS-1 0.016 DF 05/19/15
Misc : Water
ALS Vial : 4096 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 23 09:20:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150522\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:19:45 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron



Laboratory Control Spike Recovery
EPA 8330B EXPLOSIVES-SOIL

APPL ID: **150526S-16400 LCS - 197385**
Batch ID: #833BS-150526A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits
1,3,5-TRINITROBENZENE	1.99	1.79	89.9	75-125
1,3-DINITROBENZENE	1.99	1.76	88.4	80-125
2,4,6-TRINITROTOLUENE	1.99	1.85	93.0	55-140
2,4-DINITROTOLUENE	1.99	1.81	91.0	80-125
2,6-DINITROTOLUENE	1.99	1.82	91.5	80-120
2-AMINO-4,6-DINITROTOLUENE	1.99	1.88	94.5	80-125
2-NITROTOLUENE	1.99	1.80	90.5	80-125
3,5-DNA	1.99	1.82	91.5	70-130
3-NITROTOLUENE	1.99	1.85	93.0	75-120
4-AMINO-2,6-DINITROTOLUENE	1.99	1.74	87.4	80-125
4-NITROTOLUENE	1.99	1.81	91.0	75-125
HMX	1.99	1.94	97.5	75-125
NITROBENZENE	1.99	1.82	91.5	75-125
NITROGLYCERIN	1.99	1.82	91.5	68-131
PETN	1.99	1.90	95.5	69-132
RDX	1.99	1.82	91.5	70-135
TETRYL	1.99	2.01	101	10-150
SURROGATE: 1,2-DINITROBENZENE (S	1.99	1.81	91.0	70-130

Comments:

Primary	SPK
Quant Method :	W150522.M
Extraction Date :	05/26/15
Analysis Date :	05/27/15
Instrument :	Waldorf
Run :	0527_000005
Initials :	MP

Printed: 05/27/15 2:21:45 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 10:24:26
Operator : MP
Sample : 150526ALCS-1 7.952 DF 05/26/15
Misc : Soil
ALS Vial : 4096 Sample Multiplier: 7.95229

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 11:16:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
4)	S 1,2-DINIT...	0.000	3.514	0	2946534	N.D.	1810.826 #
	Spiked Amount 596.421			Recovery =		0.00%	303.62%
	Target Compounds						
1)	TM HMX	0.000	0.913	0	6330718	N.D.	1937.931 #
2)	TM RDX	0.000	1.718	0	3887332	N.D.	1815.032 #
3)	TM 1,3,5-TRI...	0.000	2.804	0	6956008	N.D.	1787.302 #
5)	TM 1,3-DINIT...	0.000	3.688	0	6455371	N.D.	1761.137 #
6)	TM 3,5-DINIT...	0.000	3.886	0	5082717	N.D.	1818.086 #
7)	TM NITROBENZENE	0.000	5.004	0	3055427	N.D.	1819.882 #
8)	TM NITROGLYC...	6.022	6.016	1202462	29988	1818.795	NoCal #
9)	TM TETRYL	6.344	6.344	3788157	2319397	NoCal	2014.353 #
10)	TM 2,4,6-TRI...	6.843	6.843	3754458	2910298	NoCal	1849.697 #
11)	TM 2-AMINO-4...	7.012	7.011	3960394	2651071	NoCal	1875.017 #
12)	TM 4-AMINO-2...	7.356	7.356	3275100	1773578	NoCal	1742.096 #
13)	TM 2,4-DINIT...	8.503	8.503	1973254	2693386	NoCal	1813.923 #
14)	TM 2,6-DINIT...	8.859	8.859	2069029	1485901	NoCal	1817.064 #
15)	TM 2-NITROTO...	0.000	12.198	0	1017028	N.D.	1803.890m#
16)	TM 4-NITROTO...	0.000	12.804	0	1008915	N.D.	1809.077 #
17)	TM 3-NITROTO...	0.000	13.698	0	1233123	N.D.	1851.763 #
18)	TM PETN	16.006	0.000	970186	0	1901.719	N.D. #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

MP 05-27-15

Algorithm Check

Nitroglycerin

$\frac{1202462}{131.4 \quad (40)} \times 7.95229 = 1819.32$

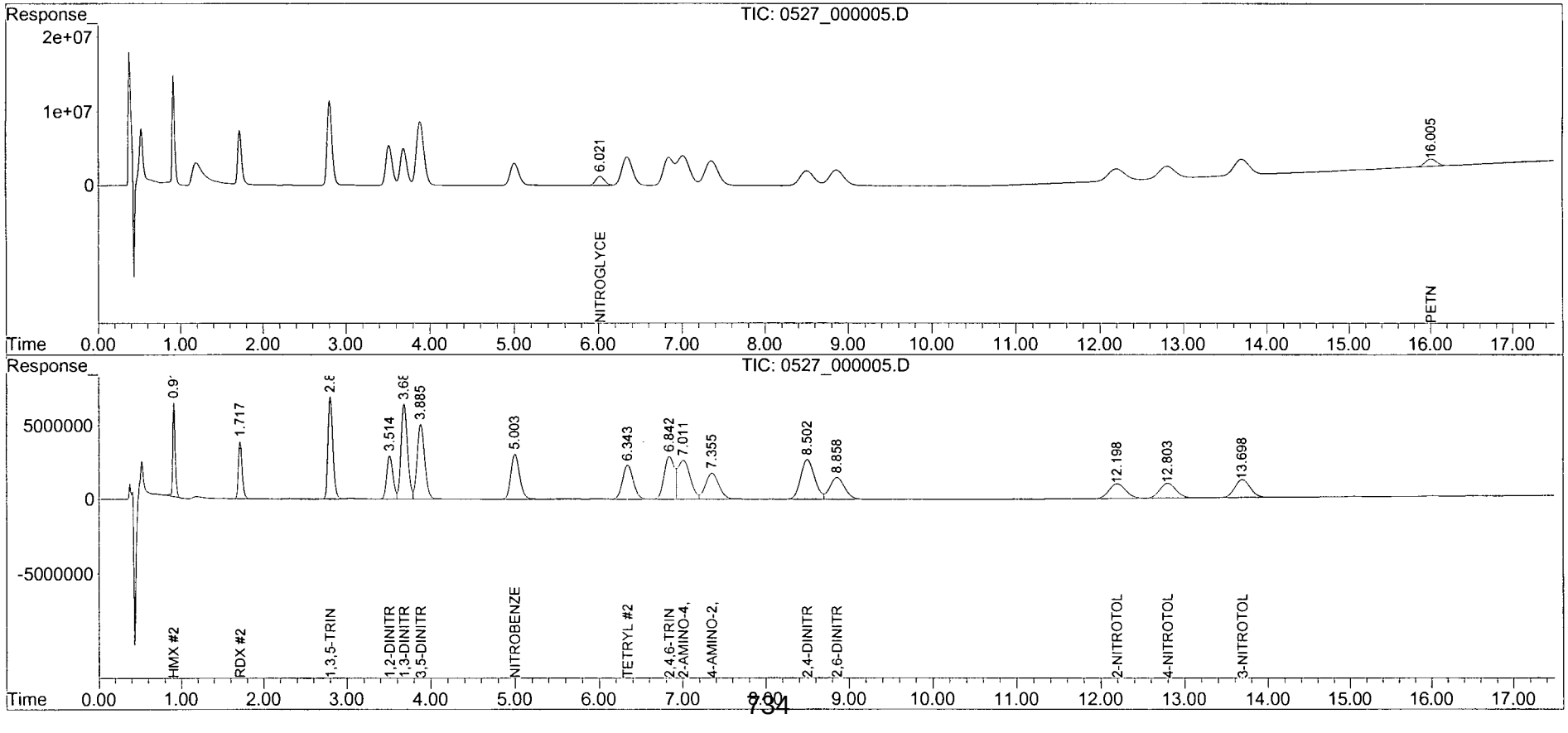
✓ MP 05-27-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 10:24:26
Operator : MP
Sample : 150526ALCS-1 7.952 DF 05/26/15
Misc : Soil
ALS Vial : 4096 Sample Multiplier: 7.95229

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 11:16:22 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0mm 1.8-micron

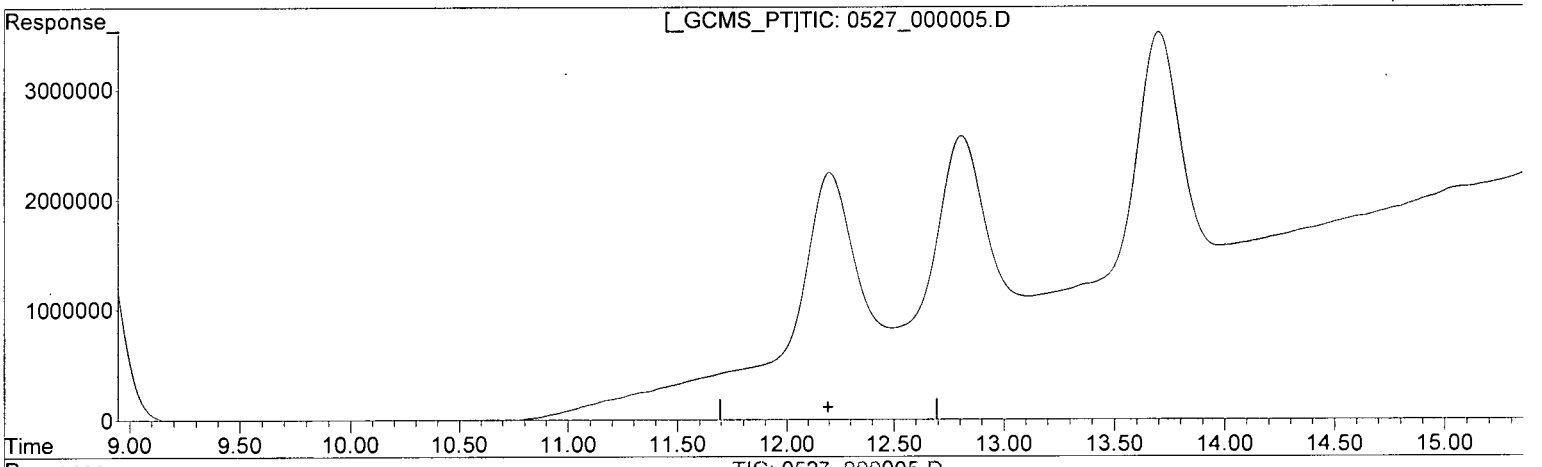


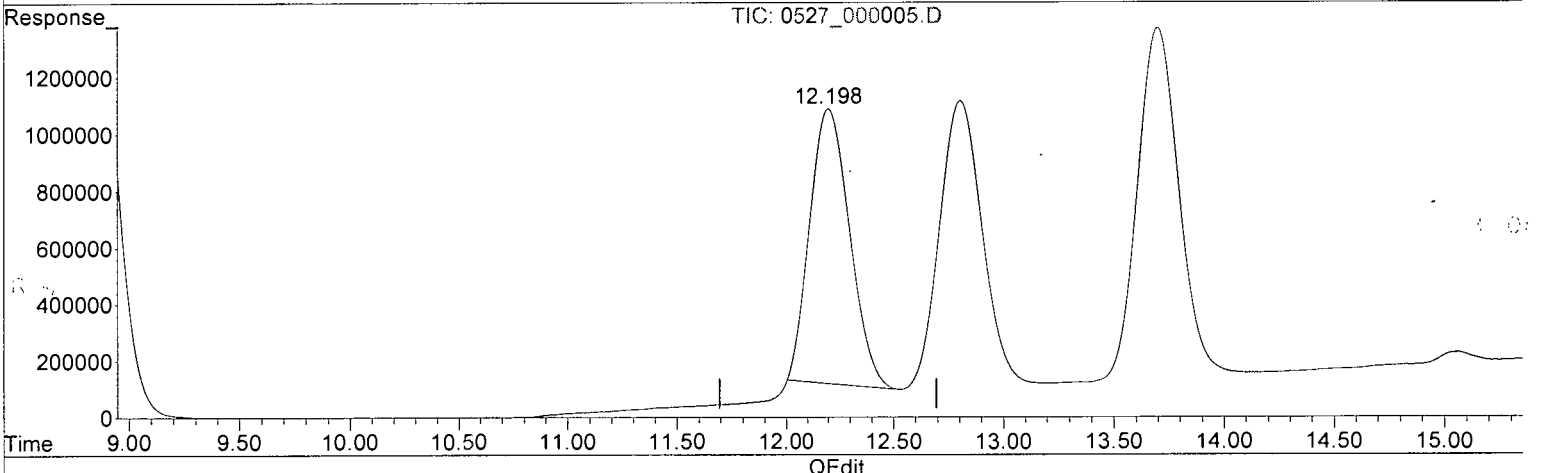
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 10:24:26
Operator : MP
Sample : 150526ALCS-1 7.952 DF 05/26/15
Misc : Soil
ALS Vial : 4096 Sample Multiplier: 7.95229

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 11:14:23 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





QEdit

(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.199min 1717.548 ppb

response 968348

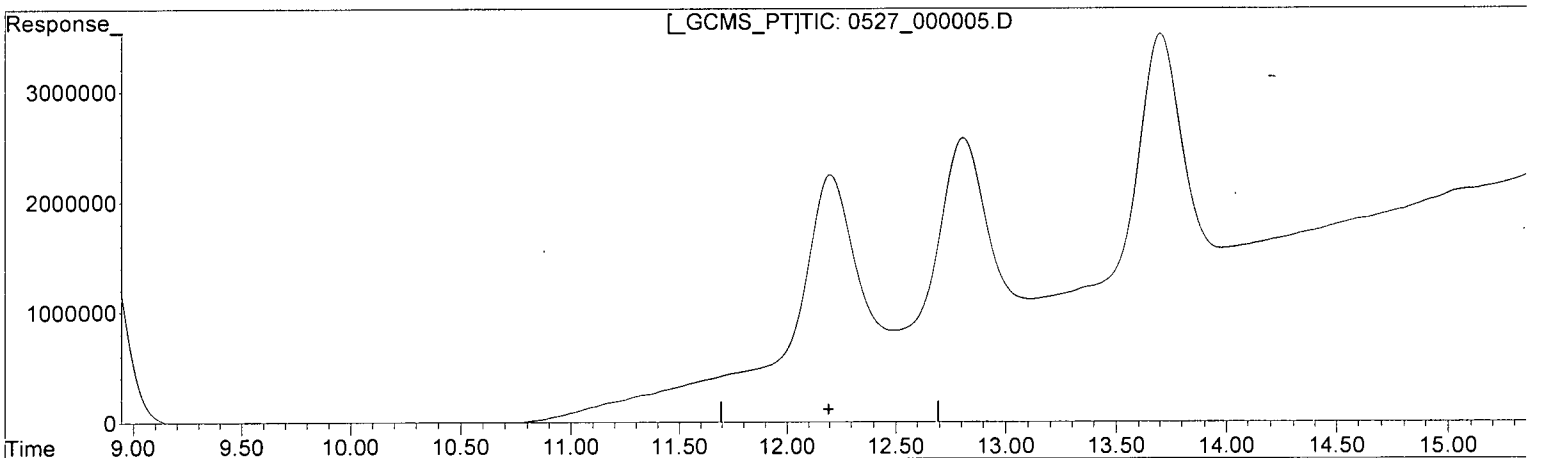
(+) = Expected Retention Time

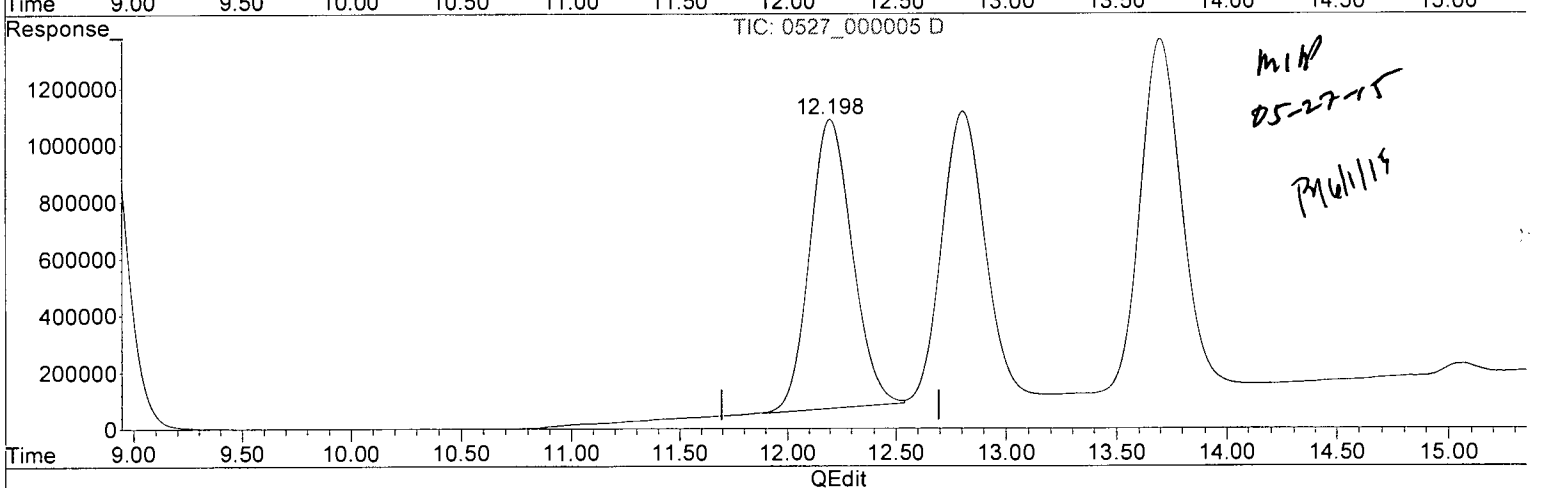
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150522\150527\
Data File : 0527_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-May-2015, 10:24:26
Operator : MP
Sample : 150526ALCS-1 7.952 DF 05/26/15
Misc : Soil
ALS Vial : 4096 Sample Multiplier: 7.95229

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: May 27 11:14:23 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150522\150527\W150522.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sat May 23 09:16:20 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : ZORBAX Extend-C18 Signal #2 Info : ZORBAX Extend-C18 100x3.0





MH 05-27-15

(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.198min 1803.890 ppb m

response 1017028

(+) = Expected Retention Time

LCMS Standard Prep Log #103 Page 13

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT#	DATE	INITIALS
Tetryl_SS 1000 ug/mL							8-29-13	MP
Tetryl 1000 ug/mL Absolute Lot# 112310-32716								
I broke open the vial and transferred to								
6x amber 1.8mL Injection vial →								
Tetryl_SS 1000 ug/mL							08-29-13	
Tetryl_SS 10 ug/mL								
Tetryl_SS	1000	08-29-13	0.10	10.0	10.0	1:1 ACN/MeOH DG445/52292	08-29-13	MP

WALDORF 08/31/13

8330_CB 1:1 1.0 PPM									MP
8330_MX-A	10.0 ppm	07/01/13	0.10 ml	1.0 mL	1.0 ppm	1:1ACN_DG445/MEOH_52292	08/31/13	MP	
8330_MX-B	10.0 ppm	07/01/13							8/31/13
8330_CB 1:1 0.1 PPM									
8330_CB 1:1 1.0 PPM	1.0 ppm	08/31/13	0.10 ml	1.0 mL	0.10 ppm	1:1ACN_DG445/MEOH_52292	08/31/13	MP	
8330CB 0.005 PPM									
8330_CB 1:1	0.1 PPM	08/31/13	0.05 ML	1.0 mL	0.005 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.010 PPM									
8330_CB 1:1	0.1 PPM	08/31/13	0.10 ML	1.0 mL	0.010 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.020 PPM									
8330_CB 1:1	0.1 PPM	08/31/13	0.20 ML	1.0 mL	0.020 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.05 PPM									
8330_CB 1:1	1.0 PPM	08/31/13	0.05 ML	1.0 mL	0.05 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.10 PPM									
8330_CB 1:1	1.0 PPM	08/31/13	0.10 ML	1.0 mL	0.10 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.20 PPM									
8330_CB 1:1	1.0 PPM	08/31/13	0.20 ML	1.0 mL	0.20 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330CB 0.50 PPM									
8330MXA	10.0 PPM	07/01/13	0.05 ML	1.0 mL	0.50 PPM	1 : 1 : 6 ACN : MeOH : MILLIPORE DG445/52292	08/31/13	MP	
8330MXB	10.0 PPM	07/01/13							

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL. EN. LOT #	DATE INITIALS

NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: JL 12-19-13

1668_SS_GC 500 ng/ml 10/30/13:

PCB_CONG_2ND_SOURCE_STOCK 10 ug/ml 05/30/13 took 0.005 ml and added to ~~0.950~~ ml 1668_ICL 100 ng/ml 10/27/13:
0.095 JL

1668_SS_GC 50 ng/ml 10/30/13:

1668_SS_GC 500 ng/ml 10/30/13 took 0.010 ml and added to 0.090 ml 1668_ICL 100 ng/ml 10/27/13

	1,2-DNB Surr 5.0 ug/ml					09-03-13	N
1,2-DNB	1000	10-30-13	0.10	20.0	5.0	1:1 ACN Meoh	12-23-13
	PA_Int Std 0.10 ug/ml						
4-Nitrophenol	10.0	8-15-13	0.20	20	0.10	ACN/DI509	12-26-13 N
	Ash Std 20 ug/ml						
8321MX29-8	400	11-20-13	0.250	5.0	20	Methanol/	12-26-13 N
8321MX10-4	1000	8-29-13	0.100				
8321MX6-7	1000	9-27-13	0.100				
Isoxaben	1058	10-8-13	0.0945				
8141 Surr	1000	9-5-13	0.100				

8330MXA-SS 100 ug/ml 12-27-13 N

8330MX-A 100 ug/ml Absolute Part #95093 Lot # 121311-30132 I broke open the vial and transferred to an amber 1.8 ml injection vial → 8330MXA_SS 100 ug/ml 12-27-13

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066

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE / INITIALS
8330MX-B-SS 100 ug/ml						4 N 12-27-13	12-27-13 HP
8330MX-B 100 ug/ml Absolute Part #95090, Lot # ~~121311~~ 051412-30759, I broke open the vial and transferred to an amber 1.8ml injection vial → 8330MXB-SS 100 ug/ml 12-27-13							
Ash std 0.40 DF							
Ash std	20	12-26-13	0.80	2.0	0.40 DF	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1
Ash std 0.20 DF							
Ash std	20	12-26-13	0.40	2.0	0.20 DF	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1
Ash std 0.10 DF							
Ash std	20	12-26-13	0.20	2.0	0.10	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1
Ash std 0.08 DF							
Ash std	20	12-26-13	0.160	2.0	0.08	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1
(Prepared 2 portions)							
Ash std 0.06 DF							
Ash std	20	12-26-13	0.120	2.0	0.06	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1
Ash std 0.04 DF							
Ash std	20	12-26-13	0.080	2.0	0.04	Methanol/53206	12-30-13 HP
HPLCIS	100	7-12-13	0.020	1	1.0	1	1

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008 STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE / INITIALS
1,2-DNB	1000 ug/mL						04-23-14 H

I broke open the vial labeled to the left and transferred to an amber 1.8 mL injection vial → 1,2-DNB 1000 ug/mL 04-23-14

1,2-Dinitrobenzene
Solution, 1,000 mg/L, 1 mL
018886-01
Lot # 216681 | Storage <10 Degrees C | Expiry 10/25/16
Solv: Acetonitrile
READ only, not to scale. Made in the USA

1,2-Dinitrobenzene
Lot #: 216681 - 33241
Rec: 1/8/14 MFR exp. 10/25/16

1,2-DNB	100 ug/mL							H
1,2-DNB	1000	04-23-14	1.0	10.0	100	1:1 ACN/MeOH 02-19-14		04-23-14

MX-8330R	1000 ug/mL							H 04-23-14

AccuStandard
M-8330-R
Method 8330 - Explosives by HPLC
1000 µg/mL in MeOH:AcCN (1:1)
Lot: 211111132-01
Exp: Jun 6,2015
14 comps.
HIGHLY FLAMMABLE

Method 8330 - Explosives
Lot #: 211111132-01 - 33138
Rec: 11/18/13 MFR exp. 6/6/15

R LABORATORY USE ONLY
NING: This product contains nicals known to the State of Califor use cancer and birth defects or oth oductive harm.
STORAGE Freeze (<-10° C)
2 Danger

I broke open the vial labeled above and transferred to an amber 1.8 mL injection vial → MX-8330R 1000 ug/mL 04-23-14

MX-8330	100 ug/mL							H
MX-8330R	1000	04-23-14	1.0	10.0	100	1:1 ACN/MeOH 02-19-14		04-23-14

1,2-DNB	5.0 ug/mL							H
1,2-DNB	100	04-23-14	0.50	10.0	5.0	1:1 ACN/MeOH 02-19-14		04-23-14

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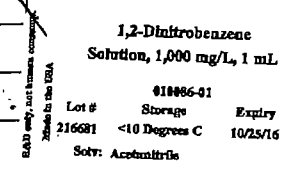
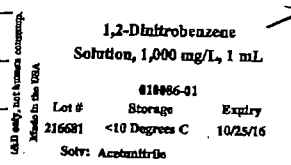
023

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS
	8321 TS 0.005 DF						
8321 TS	0.10 DF 06-12-14	0.10	2.0	0.005	MeOH/ACN	53235	06-12-14 P
HPLCFS	100 03-17-14	0.020	1	1.0	1	1	1
	8321 TS 0.0025 DF						
8321 TS	0.10 DF 06-12-14	0.050	2.0	0.0025	MeOH/ACN	53235	06-12-14 P
HPLCFS	100 03-17-14	0.020	1	1.0	1	1	1
	1,2-DNB 100 ug/mL						06-12-14 P



1,2-Dinitrobenzene
Lot #: 216681 - 33233
Rec: 1/8/14 MFR exp. 10/25/16



1,2-Dinitrobenzene
Lot #: 216681 - 33234
Rec: 1/8/14 MFR exp. 10/25/16

I broke open the 2 vials labeled above. I took 1.00ml from each vial and diluted to 20.0ml 1:1 ACN MeOH 02-19-14. I labeled this solution 1,2-DNB 100ug/mL 06-12-14

I combined the remaining balance of HP 06-12-14 the 2 vials above and transferred to one amber 1.8ml injection vial. I labeled this solution 1,2-DNB 1000ug/mL 06-12-14

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025

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIALS
PETN	1000 ug/ml						06-12-14

I broke open the vial labeled to the left and transferred to an 8ml Amber vial

→ PETN 1000ug/ml 06-12-14

S-12837A4-5ML Exp 2/28/2015

CHEM SERVICE
PO BOX 599, WEST CHESTER, PA 19381 800-452-9994

Pentaerythritol tetranitrate Solution

Lot: 2416400

Pentaerythritol tetranitrate
Lot #: 2416400 - 33320
Rec: 2/20/14 MFR exp. 2/28/15

1000ug/ml In Acetonitrile
FLAMMABLE-POISON-LACHRYMATOR

PETN 100 ug/ml

PETN	1000	06-12-14	1.0	10.0	100	1:1 ACN/MeOH	06-12-14	

8321 MX6-7 500 ug/ml 06-12-14

o2si smart solutions

Custom Pesticide Solution, 6-7, 500 mg/L, 5 x 2 ml

130287-01-05
Made in USA
Lot No: 160093
Exp: 6/1/2013
Date Opened: _____

Storage: </= -10 Degrees C
Custom Pesticide Solution 6-7
Lot #: 160093 - 26674
Rec: 6/7/10 MFR exp. 06/01/13

I broke open the vial labeled above and transferred to an amber 1.8ml injection vial → 8321 MX6-7 500 ug/ml (to be QC'd)

8321 MX6-7 20 ug/ml 06-12-14

8321 MX6-7	50.0	06-12-14	0.080	2.0	20	MeOH/53235		

8321 MX6-7 0.02 DF (OLD)

8321 MX6-7	20	06-12-14	0.040	2.0	0.02	MeOH/53235	06-12-14	
MRCS	100	03-17-14	0.020	1	1.0	1	1	

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037

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT#	INITIAL
Spinosad	1000	04-14-14	0.075	1.0	100	Methanol/53235	kp 07-14-14
Sp.nosad	500	07-14-14	0.10	1.0	50	Methanol/53235	kp 07-14-14
Sp.nosad	200	07-14-14	0.10	1.0	20	Methanol/53235	kp 07-14-14
Sp.nosad	100	07-14-14	0.10	1.0	10	Methanol/53235	07-14-14 kp
Picric Acid	10	04-16-14	0.160	8.0	2.0	ACN/DI509	07-15-14 kp
Picric Acid	2.0	07-15-14	0.80	8.0	0.2	ACN/DI509	07-15-14 kp
HPLCFS	1000	04-22-14	0.20	200	1.0	Meoh/53235	07-15-14 kp
HPLCFS	1000	07-15-14	1.0	10.0	100	Meoh/53235	07-15-14 kp
tetryl ss	1000	08-29-13	0.10	1.0	100	1:1 ACN/Meoh 02-19-14	07-01-14 kp

HPLCFS 1000 mg/L 07-15-14 kp

I broke open the vial labelled to the left and transferred to an amber 1.8 ml syringe Vial → HPLCFS 100 mg/L 07-15-14

HPLCFS 1000 mg/L

Custom 8321 Internal Standard Pesticide Mix, 4-8, 1,000 mg/L, 5 x 1 ml
130285-01-05
Lot # 209160 | Storage ≤ -10 Degrees C | Expiry 5/20/15
Solv: M-t-BE
R&D only, not for human consumption
Made in the USA

Custom 8321 Internal Std Mix 4-8
Lot #: 209160 - 32460
Rec: 5/29/13 MFR exp. 5/20/15

HPLCFS 100 mg/L

Tetryl ss 100 mg/L

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045

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS
8321V	0.2 ug/mL						
8321V	2.0	08-05-14	0.20	2.0	0.2	MeOH/53235	8-05-14 M
8321VFS	100	7-31-14	0.020	1	1.0	1	1
8321V	0.1 ug/mL						
8321V	2.0	8-5-14	0.10	2.0	0.10	MeOH/53235	8-05-14 M
8321VFS	100	7-31-14	0.020	1	1.0	1	1
MX-8330R	1000 ug/mL						08-06-14 M

AccuStandard®
M-8330-R
Method 8330 - Explosives by HPLC
1000 µg/mL in MeOH:AcCN (1:1)
Lot: 211111132-01
Exp: Jun 6,2015
14 comps.
HIGHLY FLAMMABLE

Method 8330 - Explosives
Lot #: 211111132-01 - 33139
Rec: 11/18/13 MFR exp. 6/6/15

ABORATORY USE ONLY
IG: This product contains
Is known to the State of Californ
cancer and birth defects or oth
ctive harm.
STORAGE Freeze (<-10° C)
2 Danger

I broke open the vial labeled above and transferred to an amber 1.8ml injection vial → MX-8330R 1000 ug/mL 08-06-14

1,2-DNB 1000 ug/mL 08-06-14 M

1,2-Dinitrobenzene
Solution, 1,000 mg/L, 1 mL
010606-01
Lot # 216681 | Storage <10 Degrees C | Expiry 10/25/16
Solv: Acetonitrile
R&D only, not human consump. Made in the USA

1,2-Dinitrobenzene
Lot #: 216681 - 33235
Rec: 1/8/14 MFR exp. 10/25/16

I broke open the vial labeled to the left and transferred to an amber 1.8ml injection vial → 1,2-DNB 1000 ug/mL 08-06-14

3,5-DNA 1000 ug/mL 08-06-14

3,5-Dinitroaniline (3,5-DNA) Solution, 1000 mg/L, 1 ml
010612-04
Lot # 199709 | Storage ≤ -10 Degrees C | Expiry 11/21/15
Solv: Acetonitrile
R&D only, not human consump. Made in the USA

3,5-Dinitroaniline
Lot #: 199709 - 33122
Rec: 11/15/13 MFR exp. 11/21/15

I broke open the vial labeled to the left and transferred to an amber 1.8ml injection vial → 3,5-DNA 1000 ug/mL 08-06-14

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046

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOL'N LOT #	INITIALS
Nitroglycerin 1000 µg/mL							08-06-14 HP

AccuStandard
M-8330-ADD-1-10X
Nitroglycerin
1000 µg/mL in EtOH:MeOH (97:3)
Lot: 213031341
Exp May 9, 2015
Nitroglycerin
Lot #: 213031341 - 33129
Rec: 11/18/13 MFR exp. 5/9/15
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
STORAGE Refrig (0-5° C)
2 Danger

I broke open the vial labeled above and transferred to an amber 1.8mL injection vial → Nitroglycerin 1000 µg/mL 08-06-14

PETN 1000 µg/mL 08-06-14 HP

AccuStandard® 125 Market St. · New Haven, CT 06513 · USA
M-8330-ADD-2-10X
PETN
1000 µg/mL in Methanol
Lot: 213081209
Exp Aug 14, 2015
PETN
Lot #: 213081209 - 33135
Rec: 11/18/13 MFR exp. 8/14/15
HIGHLY FLAMMABLE
FOR LABORATORY USE ONLY
STORAGE Refrig (0-5° C)
2 Danger

I broke open the vial labeled above and transferred to an amber 1.8mL injection vial → PETN 1000 µg/mL 08-06-14

	8330 MIX A 10 µg/mL							N
MX-8330	1000	08-06-14	0.20	20	10.0	1:1 ACN/MeOH		08-06-14
1,2-DNB	1000	08-06-14	0.20	"	"	"	07-02-14	"
	8330 MIX-B 10 µg/mL							N
Nitroglycerin	1000	8-6-14	0.20	20	10.0	1:1 ACN/MeOH		08-06-14
3,5-DNA	1000	08-06-14	"	"	"	"	07-02-14	"
PETN	1000	08-06-14	"	"	"	"		"

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047

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE INITIALS
PETN 55 100 ng/mL							
PETN	1000	06-12-14	0.10	1.0	100	1:1 ACN/MeOH 07-02-14	08-06-14 AP
8321 Surr 20 ng/mL							AP
Isotope	1024	03-10-14	0.195	10.0	20	MeOH/53235	08-07-14
8141 Surr	1000	07-31-14	0.20	〃	〃	〃	〃
8321 TS_spk 1 DF							
8321MXB-7	1000	06-12-14	0.10	5.0	20	MeOH/53235	08-07-14 AP

AP 08-06-14

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	08/06/14
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	08/06/14
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	08/06/14
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	08/06/14
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0 050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	08/06/14

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048 STANDARD

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS
							080614 MP
8330MXA_CB 0.50 PPM 8330MXA	10.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 1.0 PPM 8330MXA	10.0	08/06/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	08/06/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXA_SS 1.0 PPM 8330MXA_SS	100	12/27/13	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	08/06/14
8330MXB_SS 1.0 PPM 8330MXB_SS	100	12/27/13	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	08/06/14
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 07/01/14	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	08/06/14

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DATE INITIALS

6-14

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330_CB(1:1) 1.0 PPM							
8330MXA	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH	08/06/14
8330MXB	10.0	08/06/14				02/19/14	
8330_CB(1:1) 0.1 PPM							
8330_CB(1:1)	1.0	08/06/14	0.100	1	0.1	1:1 ACN/MEOH	08/06/14
						02/19/14	
8330_CB 0.005 PPM							
8330_CB(1:1)	0.1	08/06/14	0.050	1	0.005	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.010 PPM							
8330_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.020 PPM							
8330_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.050 PPM							
8330_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.10 PPM							
8330_CB(1:1)	1.0	08/06/14	0.100	1.00	0.10	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.20 PPM							
8330_CB(1:1)	1.0	08/06/14	0.20	1.00	0.20	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_CB 0.50 PPM							
8330MXA	10.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN	08/06/14
8330MXB	10.0	08/06/14	0.050			MEOH: MILLIPORE	
8330_CB 1.0 PPM							
8330MXA	10.0	08/06/14	0.100	1.00	1.000	1:1:6_ACN	08/06/14
8330MXB	10.0	08/06/14	0.100			MEOH: MILLIPORE	
8330MXA_CB 2.0 PPM							
8330MXA_CB	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330MXB_CB 2.0 PPM							
8330MXB_CB	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN	08/06/14
						MEOH: MILLIPORE	
8330_SS 1.0 PPM							
8330MXA_SS	100	12/27/13	0.010	1.00	1.0	1:1:6_ACN	08/06/14
8330MXB_SS	100	12/27/13	0.010			MEOH: MILLIPORE	
PETN_TET_SS 1.0 PPM							
PETN_SS	100	08/06/14	0.01	1.00	1.0	1:1:6_ACN	08/06/14
TETRYL_SS	100	07/01/14	0.01			MEOH: MILLIPORE	

DATE INITIALS

08-06-14

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'VENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	09/05/14
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	09/05/14
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	09/05/14
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	09/05/14
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	08/06/14	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 0.50 PPM 8330MXA	10.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 1.0 PPM 8330MXA	10.0	08/06/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	09/05/14
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	09/05/14

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SOL'N. 059 Date

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	LOT #	INITIALS
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	09/05/14	M
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	08/06/14	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	08/06/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	08/06/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXA_SS 1.0 PPM 8330MXA_SS	100	12/27/13	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
8330MXB_SS 1.0 PPM 8330MXB_SS	100	12/27/13	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	09/05/14	
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 07/01/14	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	09/05/14	

09/05/14

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIAL
	CC_Carb sph 2.0 ug/mL						
832L_SS	100	11-03-14	0.200	10.0	2.0	MeOH/54115	12-12-14 MP
	HPLC_IS 1.0 ug/mL						
HPLCES	100	10-02-14	2.0	200	1.0	MeOH/54115	12-15-14 MP
	HPLCESAQ 1.0 ug/mL				12-16-14		
HPLCES	100	10-02-14	1.0	100	1.0	Milliporewater	12-16-14 MP
	Carb sph 10 ug/mL						
832LMX29-8	400	09-22-14	0.050	2.0	10	MeOH/54115	12-17-14 MP
	832L_surr 10 ug/mL						
Isoxaben	1024	03-10-14	0.025	3.0	10.0	MeOH/54115	12-17-14 MP
8141_surr	1000	10-30-14	0.030	〃	〃	〃	〃
	832L_surr 20 ug/mL						
Isoxaben	1024	03-10-14	0.195	10.0	20	MeOH/54115	12-17-14 MP
8141_surr	1000	~~10-30-14~~ 12-03-14 MP 12-17-14	0.200	〃	〃	〃	〃
	PETN 100 ug/mL				07-02-14		
PETN	1000	08-06-14	0.50	5.0	100	1:1 ACN/MeOH	12-19-14 MP
	Nitroglycerin 100 ug/mL						
Nitroglycerin	1000	02-25-14	0.50	5.0	100	1:1 ACN/MeOH	12-19-14 MP
	83TS_stock						
832LMX6-7	1000	09-25-14	0.050	10.0	5.0	MeOH/54115	12-22-14 MP
Isoxaben	1024	03-10-14	0.098	〃	10	〃	〃
8141_surr	1000	12-03-14	0.100	〃	〃	〃	〃

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL. EN. LOT #	DATE INITIALS
83TS/sph/surr 100 DF					HPLCFS 1 ug/ml		
8321TS sp	20	09-25-14	0.10	1.0	10 DF	~~[illegible]~~ HP 12-22-14	12-22-14 HP
8321 Surr	20	12-18-14	0.10	1	1		
83TS sph/surr 10DF	12-22-14	0.10	1.0	100DF	HPLCFS 1 ug/ml		12-22-14 HP

Tehryl SS 1000 ug/ml 12-23-14
Tehryl 1000 ug/ml Absolute Lot 112310-33879, I broke open the vial and transferred to an amber 1.8 ml injection vial → Tehryl SS 1000 ug/ml 12-23-14

1:1 ACN/Meoh 12-23-14 HP
I took 0.250 ml Methanol Lot 54115 and added 0.250 ml Acetonitrile Lot DK902. HP

1,2-DNB 1000 ug/ml 12-23-14
I broke open the vial labeled to the left and transferred to an amber 1.8 ml injection vial → 1,2,DNB 1000 ug/ml 12-23-14

1,2-Dinitrobenzene Solution, 1,000 mg/L, 1 mL
010086-01
Lot # 227342 Storage <10 Degrees C Expiry 3/May/2017
Solv: Acetonitrile
R&D only, not human consump. Made in the USA
1,2-Dinitrobenzene
Lot #: 227342 - 34120
Rec: 10/6/14 MFR exp. 5/3/17

3,5-DNA 1000 ug/ml 12-23-14
I broke open the vial labeled to the left and transferred to an amber 1.8 ml injection vial → 3,5-DNA 1000 ug/ml 12-23-14

3,5-Dinitroaniline (3,5-DNA) Solution, 1000 mg/L, 1 ml
010612-04
Lot # 199709 Storage ≤ -10 Degrees C Expiry 11/21/15
Solv: Acetonitrile
R&D only, not human consump. Made in the USA
3,5-Dinitroaniline
Lot #: 199709 - 33124
Rec: 11/15/13 MFR exp. 11/21/15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT/ LOT #	INITIA
	8330 MX-A 10.0 ug/mL						N
MX-8330A	1000	08-06-14	0.10	10.0	10.0	1:1 ACN/MeOH	12-23-14
1,2-DNB	1000	12-23-14	〃	〃	〃	12-23-14	
	8330 MX-B 10.0 ug/mL						N
Nitroglycerin	1000	08-06-14	0.10	10.0	10.0	1:1 ACN/MeOH	12-23-14
3,5-DNA	1000	12-23-14	〃	〃	〃	12-23-14	〃
PETN	1000	06-12-14	〃	〃	〃		〃
	Tetryl-ss 100 ug/mL						N
Tetryl-ss	1000	12-23-14	0.10	1.0	10.0	1:1 ACN/MeOH	12-23-14
						12-23-14	

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	12/23/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	12/23/14
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	12/23/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	12/23/14
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	12/23/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	12/23/14
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	12/23/14	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	12/23/14
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	12/23/14	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	12/23/14	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	12/23/14	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	12/23/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	12/23/14	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	12/23/14	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	12/23/14
8330MXA_CB 0.50 PPM 8330MXA	10.0	12/23/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	12/23/14

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE / INITIALS
PETN	1000 ug/ml					M	12-29-14

S-12837A4-5ML Exp 4/30/2015
CIL PO BOX 509 Pentaerythritol tetranitrate
Lot #: 2377700 - 34516
Pentaeryth Rec: 12/16/14 MFR exp. 4/30/15
Lot: 2677700
1000ug/ml In Acetonitrile
FLAMMABLE-POISON-LACHRYMATOR

I broke open the vial labeled to the left and transferred to a amber 8ml vial → PETN 1000ug/ml 12-29-14

	PETN 100 ug/ml								M
PETN	1000	12-29-14	0.5	5.0	100	1:1 ACN/MeOH	07-2-14	12-29-14	
	PGDN spike 10 ug/ml								M
PGDNA	100	10-27-14	0.10	1.0	10.0	1:1 ACN/MeOH	7-2-14	01-06-15	
	PGDN spike 1.0 ug/ml								M
PGDN spk	10	01-06-15	0.10	1.0	1.0	1:1 ACN/MeOH	7-2-14	01-06-15	
	Nitroglycerin 100 ug/ml								M
Nitroglycerin	1000	08-06-14	0.50	5.0	100	1:1 ACN/MeOH	12-23-14	01-06-15	
	8330 MXA spk 10 ug/ml								M
MX-8330 spk	100	09-17-14	0.150	1.5	10.0	1:1 ACN/MeOH	12-23-14	01-06-15	
	8330 MXA spk 1.0 ug/ml								M
8330 MXA spk	10.0	01-06-15	0.150	1.5	1.0	1:1 ACN/MeOH	12-23-14	01-06-15	

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	INITIALS
8321PA_SS 0.10 DF							
Picric Acid_SS	1.0	11-17-14	0.20	2.0	0.10	ACN/DK902	01-13-15
4-Nitrophenol	10	01-13-15	0.020	1	0.10	1	1
MX8330 Sph 100ug/mL							
MX-8330A	1000	08-06-14	0.80	8.0	10.0	1:1 ACN/MeOH	01-15-15
1,2-DNB	1000	12-23-14	0.80	1	1	12-23-14	
Tetryl_SS 100ug/mL							
Tetryl_SS	1000	12-23-14	0.10	1.0	100	1:1 ACN/MeOH	01-15-15
						12-23-14	

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	12/23/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	01/15/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	01/15/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	01/15/15
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	12/23/14	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	01/15/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	01/15/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	01/15/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	01/15/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	01/15/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0 020 PPM 8330MXA_CB(1:1)	0.1	01/15/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	01/15/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	01/15/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	01/15/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	12/23/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	01/15/15

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE / INITIALS
8330MXA_CB 1.0 PPM 8330MXA	10.0	12/23/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	12/23/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	01/15/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	01/15/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	01/15/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	01/15/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	01/15/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	01/15/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	12/23/14	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	12/23/14	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	12/23/14	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXA_SS 1.0 PPM 8330MXA_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	01/15/15
8330MXB_SS 1.0 PPM 8330MXB_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	01/15/15
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 01/15/15	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	01/15/15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOVENT/LOT	DATE/IN
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	03/12/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	03/12/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	03/12/15
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	03/12/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	03/12/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	03/12/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	03/12/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	03/12/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	03/12/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	03/12/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	03/12/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	03/12/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	03/12/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	03/12/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	03/12/15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIALS
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	03/12/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	03/12/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	03/12/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	03/12/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	03/12/15 03/12/15
8330MXA_SS 1.0 PPM 8330MXA_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	03/12/15
8330MXB_SS 1.0 PPM 8330MXB_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	03/12/15
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 01/15/15	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	03/12/15

HP HP

PETN_SS 100 08-06-14 the Solution was QC'd on 03-13-15 on Stetler, Data File 0312_D00047.D HP 03-16-15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL. ENT. / LOT #	DATE / INITIALS
Scav_spk 30 ug/ml (5ml)							
Hexahydro-1,3,5-tris(hydroxyethyl) triazine							
1180	03-18-15	0.127	5.0	3.0	MeOH/54115	03-19-15	
2,2'-thiodiethanol							
1030	03-19-15	0.146					
2-(1,3-Dithiazinan-5-yl) ethanol							
525	03-11-15	0.286					
Scav spk 3.0 ug/ml 5ml							
Scav spk 30	03-19-15	0.50	5.0	3.0	MeOH/54115	03-19-15	

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	03/17/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	03/17/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	03/17/15
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 07/02/14	03/17/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	03/17/15	0.100	1.0	0.1	1:1 ACN/MEOH 07/02/14	03/17/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	03/17/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	03/17/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	03/17/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	03/17/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	03/17/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	03/17/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/17/15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOL'N LOT #	DATE / INITIALS
8330MXA_CB 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	03/17/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	03/17/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	03/17/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	03/17/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	03/17/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	03/17/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXA_SS 1.0 PPM 8330MXA_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	03/17/15
8330MXB_SS 1.0 PPM 8330MXB_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	03/17/15
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 01/15/15	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	03/17/15

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS

PER_IS 0.005 µg/ml 04-20-15: JH
02SI $^{18}O_4$ Perchlorate 100 µg/L 04-21-
Lot 1059192-33479 took 0.050 ml
and added to 0.950 ml Laboratory
Source DI_H2O.
NOTE: Repeated the above process
four times in order to prepare
2 - 2ml vials that were
full. The above was performed
as dated. JH

8330 MX-A_SS 100 ug/ml 04-21-15 JP
8330 MixA, 100 ug/ml, Absolute
Lot #103014-34464, I broke the vial
open and transferred to an amber
1.8 ml injection vial
→ 8330 MX-A_SS 100 ug/ml 04-21-15

8330 MXB_SS 100 ug/ml 04-21-15 JP
8330 MixB, 100 ug/ml, Absolute
Lot #103014-34467, I broke the vial
open and transferred to an amber
1.8 ml injection vial →
8330 MX-B_SS 100 ug/ml 04-21-15

Tetryl_SS 100 ug/ml 03-05-15 P
Tetryl(SS) 1000 12-23-14 0.10 1.0 100 1:1 ACN/MeOH 04-22-15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE/ INITIALS

1,2-DNB 1000 ug/mL 04-22-15 MP

I broke open the vial labeled to the left and transferred to an amber 1.8ml injection vial → 1,2-DNB 1000 ug/mL 04-22-15

1,2-Dinitrobenzene Solution, 1,000 mg/L, 1 mL
010086-01
Lot # 227342 Storage <10 Degrees C Expiry 3/May/2017
Solv: Acetonitrile
1,2-Dinitrobenzene
Lot #: 227342 - 34115
Rec: 10/6/14 MFR exp. 5/3/17

1,2-DNB 100 ug/mL 03/05/15

1,2-DNB 1000 04-22-15 1.0 10 100 1:1 ACN/MeOH 04-22-15 MP

Standard prep performed as dated, documented here 04-22-15 MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	04/21/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	04/21/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	04/21/15
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	04/21/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	03/17/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	04/21/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	04/21/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	04/21/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	04/21/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	04/21/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	04/21/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	04/21/15

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Standard prep performed as dated, Documented here 04-22-15 MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE / INITIALS
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	04/21/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	04/21/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	04/21/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	04/21/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	04/21/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	04/21/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	04/21/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXA_SS 1.0 PPM 8330MXA_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	04/21/15
8330MXB_SS 1.0 PPM 8330MXB_SS	100	10/01/14	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	04/21/15
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	08/06/14 04/22/15	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	04/22/15

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STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE / INITIALS
Scav Spk 30 ug/mL								
Hexahydro-1,3,5-trishydroxyethyltriazine								HP
	1010	04-10-15	0.594	20	30	ACN/DMSO	4	04-23-15
2,2'-Thiodiethanol								
	1090	04-10-15	0.550	20	"			
2-(1,3,5-Dithiazinan-5-yl) ethanol								
	1020	04-10-15	0.588	1	—			—
Scav Surr 30 ug/mL								
1,3,5-Trimethylhexahydro-1,3,5-triazine								HP
	1077	04-17-15	0.557	20	30	ACN/DMSO	4	04-23-15
PETN SS 100 ug/mL								3-5-15
PETN	1000	06-09-14	0.10	1.0	100	1:1 ACN/water		04-28-15 HP
Tetryl SS 100 ug/mL								3-5-15
Tetryl SS	1000	12-22-14	0.10	1.0	100	1:1 ACN/MeOH		04-28-15 HP
8330mXA-SS 100 ug/mL								04-28-15 HP
8330mX-A 100 ug/mL Absolute lot 103014-34465, I broke open the vial and transferred to an amber 1.8 ml injection vial → 8330mX-A SS 100 ug/mL								04-28-15
8330mXB-SS 100 ug/mL								04-28-15 HP
8330mXB 100 ug/mL Absolute lot 103014-34468, I broke open the vial and transferred to an amber 1.8 ml injection vial → 8330mXB-SS 100 ug/mL								04-28-15

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STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT / LOT #	DATE / INITIALS
PETN_SS	1000 µg/mL							

AccuStandard® 125 Market Street • New Haven, CT 06513 • USA

M-8330-ADD-2-10X
PETN
1000 µg/mL in Methanol
Lot: 214091329
Exp: Sep 18, 2016

PETN
Lot #: 214091329 - 34515
Rec: 12/16/14 MFR exp. 9/18/16

1 comp(s)
HIGHLY FLAMMABLE

FOR LABORATORY USE ONLY
H225 H320 H315 H311 H332 H301 P338 P360 P331 P404 P262 P202 P264 P284 P280

Storage: Refrig (0-5° C)
2-Danger

04-28-15 HP

I broke open the vial labeled above and transferred to an amber 1.8 mL injection vial → PETN_SS 1000 µg/mL 4-28-15

PETN_SS 100 µg/mL 3-5-15 HP

PETN_SS	1000	04-28-15	0.10	1.0	100	1:1 ACN/MeOH	4-28-15

Gloss weight Comparison 04-28-15 HP
Balance ID: Mettler AT-200 #J-28448

Tare-Weight	Balance reading
20 g	20.0000
1 g	1.0002
100 mg	0.1000
20 mg	~~0.0020~~ 0.0020 HP 4-28-15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT/ LOT #	DATE/ INITIALS
Standard Prep performed as Dated, documented here 05-01-15							MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	04/27/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	04/27/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	04/27/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	04/27/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	04/27/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.020 PPM 8330MXB_CB(1:1)	0.1	04/27/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.050 PPM 8330MXB_CB(1:1)	1.0	04/27/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.10 PPM 8330MXB_CB(1:1)	1.0	04/27/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.20 PPM 8330MXB_CB(1:1)	1.0	04/27/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 0.50 PPM 8330MXB_CB	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 1.0 PPM 8330MXB_CB	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_CB 2.0 PPM 8330MXB_CB	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	04/27/15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT/ LOT#	DATE/ INITIALS
Standard Prep performed as Dated, documented here 05-01-15							MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MXA_SS 1.0 PPM 8330MXA_SS	100	04/28/15	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	04/27/15
8330MXB_SS 1.0 PPM 8330MXB_SS	100	04/28/15	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	04/27/15
PETN_TET_SS 1.0 PPM PETN_SS TETRYL_SS	100 100	04/28/15 04/28/15	0.01 0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	04/29/15
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	04/28/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	04/28/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	04/28/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	04/28/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	04/28/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	04/28/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	04/28/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	04/28/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	04/28/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	03/05/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 1.0 PPM 8330MXA	10.0	03/05/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	04/28/15
8330MXA_CB 2.0 PPM 8330MXA_CB 2.0 PPM	10.0	03/05/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	04/28/15

_MWE3535

Organic Extraction Worksheet

Method	EPA Method 3535A	Extraction Set	150519A	Extraction Method	MWE3535	Units	mL

Spiked ID 1	8330 100ppm STK 5-5-15 exp 11-5-15		Surrogate ID 1	1,2 DNB SURROGATE 5PPM 4-2-15 exp 8-2-15	
Spiked ID 2	Nitroglyerin 100ppm 3-31-15 exp 9-30-15		Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NA	
Spiked ID 7			Ext. Start Time:	05/19/15 10:30	
Spiked ID 8			Ext. End Time:	05/19/15 13:52	
			GC Requires Extract By:		

pH1	2	05/19/15 9:50:00 AM	Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 05/19/15 10:15:00 AM **Witnessed By:** DL **Date** 05/19/15 10:15:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150519A Blk				0.100	1 equip	500	2ML	2	05/19/15 10:30	
2	150519A LCS-1		0.040	1/2	NA	NA equip	500	2ML	2	05/19/15 10:30	
3	AZ16334	AZ16334W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
4	AZ16335	AZ16335W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
5	AZ16336	AZ16336W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
6	AZ16337	AZ16337W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
7	AZ16338	AZ16338W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
8	AZ16339	AZ16339W07			0.100	1 equip	490	2ML	2	05/19/15 10:30	76424
9	AZ16340	AZ16340W07			0.100	1 equip	475	2ML	2	05/19/15 10:30	76424
10	AZ16341	AZ16341W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
11	AZ16342	AZ16342W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76424
12	AZ16343	AZ16343W02			0.100	1 equip	475	2ML	2	05/19/15 10:30	76424
13	AZ16403	AZ16403W07			0.100	1 equip	500	2ML	2	05/19/15 10:30	76447

NP 05-19-15

Solvent and Lot#	
Acetonitrile	DM 394
Cartridge Sorbent Lot	S311-032
Serial No	512616
Sodium Bisulfate	234615
PH Strip	HC 431579

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	NP
Date	05-19-15
Time	1530
Refrigerator	Brown

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/19/15 1:51:12 PM

Reviewed By: NP **Date** 05-19-15

05/19/15 3:28:35 PM

Ext_ID 76847818

_MSE018

Organic Extraction Worksheet

Method	Explosives Soil Extraction 8330B	Extraction Set	150526A	Extraction Method	MSE018	Units	mL

Spiked ID 1	8330 100ppm STK 5-5-15 exp 11-5-15		Surrogate ID 1	1,2-DNB STK 100 PPM 4-22-15 exp 10-22-15	
Spiked ID 2	Nitroglyerin 100ppm 3-31-15 exp 9-30-15		Surrogate ID 2		
Spiked ID 3	PETN 100ppm 4-2-15 exp 10-2-15		Surrogate ID 3		
Spiked ID 4	3,5 DNA 100ppm 5-5-15 exp 11-5-15		Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NA	
Spiked ID 7			Ext. Start Time:	05/26/15 13:16	
Spiked ID 8			Ext. End Time:	05/27/15 7:16	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 05/26/15 1:10:00 PM **Witnessed By:** DC **Date** 05/26/15 1:10:00 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150526A Blk				0.060	1 equip	10.04g	20mLs	NA	05/26/15 13:16	
2	150526A LCS-1		0.200	1-4	NA	NA equip	10.06g	20mLs	NA	05/26/15 13:16	
3	AZ16400	AZ16400S01			0.060	1 equip	10.01g	20mLs	NA	05/26/15 13:16	76447
4	AZ16401	AZ16401S01			0.060	1 equip	10.10g	20mLs	NA	05/26/15 13:16	76447
5	AZ16402	AZ16402S01			0.060	1 equip	10.13g	20mLs	NA	05/26/15 13:16	76447

NP 05-27-15

olvent and Lot#	
cctonitrile	DM 394
ilica Sand	041913

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	NP
Date	05-27-15
Time	0815
Refrigerator	BROWN

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	05/27/15 7:43:47 AM

Reviewed By: NP **Date** 05-27-15

Injection Log

Directory: Z:\WALDORF\CHEM32\2\DATA\150522\150522

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0522_000014.D		8330CB 0.005 PPM 05/22/15		5/22/15 16:07
2	0	0522_000015.D		8330CB 0.010 PPM 05/22/15		5/22/15 16:35
3	0	0522_000016.D		8330CB 0.020 PPM 05/22/15		5/22/15 17:02
4	0	0522_000017.D		8330CB 0.050 PPM 05/22/15		5/22/15 17:30
5	0	0522_000018.D		8330CB 0.10 PPM 05/22/15		5/22/15 17:57
6	0	0522_000019.D		8330CB 0.20 PPM 05/22/15		5/22/15 18:25
7	0	0522_000020.D		8330CB 0.50 PPM 05/22/15		5/22/15 18:52
8	0	0522_000021.D		8330CB 1.0 PPM 05/22/15		5/22/15 19:20
9	0	0522_000022.D		8330MXA 2.0 PPM 05/22/15		5/22/15 19:47
10	0	0522_000023.D		8330MXB 2.0 PPM 05/22/15		5/22/15 20:15
11	0	0522_000024.D		8330CB 0.005 PPM 05/22/15		5/22/15 20:42
12	0	0522_000025.D		8330CB 0.010 PPM 05/22/15		5/22/15 21:10
13	0	0522_000026.D		8330_SS 1.0 PPM 05/22/15		5/22/15 21:37
14	0	0522_000027.D		PETN_TETRYL_SS 1.0 PPM 05/22/51		5/22/15 22:05
15	0	0522_000033.D		8330_CCV 1.0 PPM 05/22/15		5/23/15 1:30
16	0	0522_000034.D	0.016	150519ALCS-1 0.016 DF 05/19/15	Water	5/23/15 1:58
17	0	0522_000035.D	0.016	150519ABLKW 0.016 DF 05/19/15	Water	5/23/15 2:35
18	0	0522_000044.D		8330_CCV 1.0 PPM 05/22/15		5/23/15 8:13
19	0	0522_000047.D	0.016	AZ16403W07 0.016 DF 05/19/15	Water	5/23/15 9:55
20	0	0522_000059.D		8330_CCV 1.0 PPM 05/22/15		5/23/15 17:25

Injection Log

Directory: Z:\WALDORF\CHEM32\2\DATA\150522\150527

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0527_000004.D		8330_CCV 1.0 PPM 05/27/15		5/27/15 9:56
2	0	0527_000005.D	7.95229	150526ALCS-1 7.952 DF 05/26/15	Soil	5/27/15 10:24
3	0	0527_000006.D	7.96813	150526ABLKS 7.968 DF 05/26/15	Soil	5/27/15 11:01
4	0	0527_000007.D	7.99201	AZ16400S01 7.992 DF 05/26/15	Soil	5/27/15 11:39
5	0	0527_000008.D	7.92079	AZ16401S01 7.921 DF 05/26/15	Soil	5/27/15 12:16
6	0	0527_000009.D	7.89733	AZ16402S01 7.897 DF 05/26/15	Soil	5/27/15 12:54
7	0	0527_000010.D		8330_CCV 1.0 PPM 05/27/15		5/27/15 13:32

Injection Log

Directory: Z:\STATLER\CHEM32\1\DATA\150522\150522

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0522_000009.D		8330MXA_CB 0.005 PPM 05/22/15		5/22/15 14:13
2	0	0522_000010.D		8330MXB_CV 0.005 PPM 05/22/15		5/22/15 14:52
3	0	0522_000011.D		8330MXA_CB 0.010 PPM 05/22/15		5/22/15 15:32
4	0	0522_000012.D		8330MXB_CB 0.010 PPM 05/22/15		5/22/15 16:11
5	0	0522_000013.D		8330MXA_CB 0.020 PPM 05/22/15		5/22/15 16:51
6	0	0522_000014.D		8330MXB_CB 0.020 PPM 05/22/15		5/22/15 17:30
7	0	0522_000015.D		8330MXA_CB 0.050 PPM 05/22/15		5/22/15 18:10
8	0	0522_000016.D		8330MXB_CB 0.050 PPM 05/22/15		5/22/15 18:49
9	0	0522_000017.D		8330MXA_CB 0.10 PPM 05/22/15		5/22/15 19:29
10	0	0522_000018.D		8330MXB_CB 0.10 PPM 05/22/15		5/22/15 20:08
11	0	0522_000019.D		8330MXA_CB 0.20 PPM 05/22/15		5/22/15 20:48
12	0	0522_000020.D		8330MXB_CB 0.20 PPM 05/22/15		5/22/15 21:27
13	0	0522_000021.D		8330MXA_CB 0.50 PPM 05/22/15		5/22/15 22:07
14	0	0522_000022.D		8330MXB_CB 0.50 PPM 05/22/15		5/22/15 22:46
15	0	0522_000023.D		8330MXA_CB 1.0 PPM 05/22/15		5/22/15 23:26
16	0	0522_000024.D		8330MXB_CB 1.0 PPM 05/22/15		5/23/15 0:05
17	0	0522_000025.D		8330MXA_CB 2.0 PPM 05/22/15		5/23/15 0:45
18	0	0522_000026.D		8330MXB_CB 2.0 PPM 05/22/15		5/23/15 1:24
19	0	0522_000031.D		8330MXA_SS 1.0 PPM 05/22/15		5/23/15 4:42
20	0	0522_000032.D		8330MXB_SS 1.0 PPM 05/22/15		5/23/15 5:22
21	0	0522_000033.D		PETN_TETRYL_SS 1.0 PPM 05/22/15		5/23/15 6:01
22	0	0522_000045.D		8330MXA_CCV 1.0 PPM 05/23/15		5/23/15 12:38
23	0	0522_000046.D		8330MXB_CCV 1.0 PPM 05/23/15		5/23/15 13:17
24	0	0522_000047.D	0.016	150519ABLKW 0.016 DF 05/19/15	Water	5/23/15 13:57
25	0	0522_000058.D		8330MXA_CCV 1.0 PPM 05/23/15		5/23/15 21:11
26	0	0522_000059.D		8330MXB_CCV 1.0 PPM 05/23/15		5/23/15 21:51

METALS

METALS

QC Summary

APPL, INC.

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	4.00 U	50.0	4.00	1.98	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ANTIMONY (SB)	0.60 U	2.0	0.60	0.35	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ARSENIC (AS)	0.80 U	2.5	0.80	0.65	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BARIUM (BA)	0.40 U	2.0	0.40	0.07	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BERYLLIUM (BE)	0.20 U	0.5	0.20	0.04	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BORON (B)	4.00 U	5.0	4.00	1.55	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CADMIUM (CD)	0.20 U	0.5	0.20	0.05	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CALCIUM (CA)	20.0 U	100	20.0	12.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CHROMIUM (CR)	0.40 U	3.5	0.40	0.14	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COBALT (CO)	0.30 U	1.0	0.30	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COPPER (CU)	0.40 U	5.0	0.40	0.21	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	IRON (FE)	4.00 U	80.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LEAD (PB)	0.80 U	0.9	0.80	0.25	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LITHIUM (LI)	0.500 U	0.67	0.500	0.250	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MAGNESIUM (MG)	4.00 U	30.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MANGANESE (MN)	0.40 U	4.5	0.40	0.13	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	NICKEL (NI)	0.40 U	4.0	0.40	0.11	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	POTASSIUM (K)	50.0 U	300	50.0	40.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SELENIUM (SE)	1.00 U	3.0	1.00	0.85	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SILVER (AG)	0.20 U	1.5	0.20	0.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SODIUM (NA)	50.0 U	500	50.0	45.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	THALLIUM (TL)	1.20 U	3.0	1.20	0.62	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	VANADIUM (V)	0.40 U	2.0	0.40	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ZINC (ZN)	4.00 U	8.0	4.00	1.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
7471	MERCURY (HG)	0.04 U	0.1	0.04	0.02	mg/Kg	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

Metals SC-Blank-REG MDLs
Printed: 06/24/15 11:55:32 AM

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ANTIMONY (SB)	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ARSENIC (AS)	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BARIUM (BA)	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BERYLLIUM (BE)	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CADMIUM (CD)	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CALCIUM (CA)	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CHROMIUM (CR)	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COBALT (CO)	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COPPER (CU)	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	IRON (FE)	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LEAD (PB)	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LITHIUM (LI)	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MAGNESIUM (MG)	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MANGANESE (MN)	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	NICKEL (NI)	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	POTASSIUM (K)	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SELENIUM (SE)	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SILVER (AG)	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SODIUM (NA)	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	THALLIUM (TL)	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	VANADIUM (V)	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ZINC (ZN)	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Metals SC-Blank-REG MDLs
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METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL) (DI	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ANTIMONY (SB) (DI	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ARSENIC (AS) (DIS	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BARIUM (BA) (DISS	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BERYLLIUM (BE) (D	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CADMIUM (CD) (DIS	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CALCIUM (CA) (DIS	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CHROMIUM (CR) (D	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COBALT (CO) (DISS	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COPPER (CU) (DIS	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	IRON (FE) (DISSOL	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LEAD (PB) (DISSOL	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LITHIUM (LI) (DISSO	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MAGNESIUM (MG) (	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MANGANESE (MN) (	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	NICKEL (NI) (DISSO	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	POTASSIUM (K) (DI	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SELENIUM (SE) (DI	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SILVER (AG) (DISS	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SODIUM (NA) (DISS	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	THALLIUM (TL) (DIS	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	VANADIUM (V) (DIS	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ZINC (ZN) (DISSOL	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Metals SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	200	186	93.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ANTIMONY (SB)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ARSENIC (AS)	25.0	22.9	91.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BARIUM (BA)	25.0	23.2	92.8	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BERYLLIUM (BE)	5.00	4.9	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BORON (B)	25.0	23.8	95.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CADMIUM (CD)	5.00	4.7	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CALCIUM (CA)	2500	2350	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CHROMIUM (CR)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COBALT (CO)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COPPER (CU)	25.0	24.6	98.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	IRON (FE)	100.0	91.3	91.3	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LEAD (PB)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LITHIUM (LI)	10.00	10.2	102	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MAGNESIUM (MG)	2500	2330	93.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MANGANESE (MN)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	NICKEL (NI)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	POTASSIUM (K)	500	462	92.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SELENIUM (SE)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	10.00	9.7	97.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SODIUM (NA)	2500	2520	101	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	THALLIUM (TL)	25.0	21.8	87.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	VANADIUM (V)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ZINC (ZN)	50.0	46.7	93.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 7471	MERCURY (HG)	0.667	0.65	97.5	80-120	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	2000	2020	101	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ANTIMONY (SB)	250	238	95.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ARSENIC (AS)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BARIUM (BA)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BERYLLIUM (BE)	50.0	48.6	97.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BORON (B)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CADMIUM (CD)	50.0	49.5	99.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CALCIUM (CA)	25000	25800	103	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CHROMIUM (CR)	250	260	104	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COBALT (CO)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COPPER (CU)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	IRON (FE)	1000	987	98.7	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LEAD (PB)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LITHIUM (LI)	100.0	94.5	94.5	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MAGNESIUM (MG)	25000	25100	100	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MANGANESE (MN)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	NICKEL (NI)	250	244	97.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	POTASSIUM (K)	5000	4940	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SELENIUM (SE)	250	234	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	100.0	93.6	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SODIUM (NA)	25000	28700	115	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	THALLIUM (TL)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	VANADIUM (V)	250	262	105	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ZINC (ZN)	500	480	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL) (DISSOLVED)	2000	1840	92.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ANTIMONY (SB) (DISSOLVED)	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ARSENIC (AS) (DISSOLVED)	250	228	91.2	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BARIUM (BA) (DISSOLVED)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BERYLLIUM (BE) (DISSOLVED)	50.0	47.3	94.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BORON (B) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CADMIUM (CD) (DISSOLVED)	50.0	48.0	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CALCIUM (CA) (DISSOLVED)	25000	23400	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CHROMIUM (CR) (DISSOLVED)	250	252	101	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COBALT (CO) (DISSOLVED)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COPPER (CU) (DISSOLVED)	250	235	94.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	IRON (FE) (DISSOLVED)	1000	957	95.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LEAD (PB) (DISSOLVED)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	92.7	92.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MAGNESIUM (MG) (DISSOLVED)	25000	22900	91.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MANGANESE (MN) (DISSOLVED	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	NICKEL (NI) (DISSOLVED)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	POTASSIUM (K) (DISSOLVED)	5000	4550	91.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SELENIUM (SE) (DISSOLVED)	250	227	90.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG) (DISSOLVED)	100.0	91.3	91.3	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SODIUM (NA) (DISSOLVED)	25000	26600	106	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	THALLIUM (TL) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	VANADIUM (V) (DISSOLVED)	250	255	102	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	468	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150603S-16402 MS - 197677**

Sample ID: AZ16402

Client ID: S67-TP002-0203

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/Kg	Matrix Res mg/Kg	SPK Res mg/Kg	DUP Res mg/Kg	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7471	MERCURY (HG)	0.586	0.86	1.4	1.3	92.2	75.1 #	7.4	20	80-120	06/03/15	06/03/15	06/03/15	06/03/15	197677	AZ16402

= Recovery is outside QC limits.

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

6010C/3050B^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/12/15

Matrix: SOIL Instrument: Jules

Blank ID: 150604A-BLK Time Analyzed: 1426

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150604A-LCS	Lab Control Spike	150612A	06/12/15 1432
AZ16402	S67-TP002-0203	150612A	06/12/15 1454
AZ16401	S67-TP002-0001	150612A	06/12/15 1446
150604A-BLK	Blank	150612A	06/12/15 1426
AZ16402	S67-TP002-0203	150612A	06/12/15 1836
AZ16401	S67-TP002-0001	150612A	06/12/15 1829
AZ16400	S67-TP001-0203	150612A	06/12/15 1439
AZ16402	S67-TP002-0203	150615A	06/15/15 2320

Comments: Batch: #61C14-150604A

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/04/15

Matrix: WATER Instrument: Jules

Blank ID: 150526A1-BLK Time Analyzed: 1700

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A1-LCS	Lab Control Spike	150604A	06/04/15 1707
150526A1-BLK	Blank	150604A	06/04/15 1700
AZ16403	S67-MW015-051415	150604A	06/04/15 1725

Comments: Batch: #61C14-150526A1

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/04/15

Matrix: WATER Instrument: Jules

Blank ID: 150526A-BLK Time Analyzed: 1712

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150526A-LCS	Lab Control Spike	150604A	06/04/15 1719
150526A-BLK	Blank	150604A	06/04/15 1712
AZ16403	S67-MW015-051415	150604A	06/04/15 1730

Comments: Batch: #61C14-150526A

Printed: 06/24/15 11:53:59 AM

Form 4, Blank Summary

7471/7471

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/03/15

Matrix: SOIL Instrument: Freddie

Blank ID: 150603B-BLK Time Analyzed: 1457

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150603B-MSD	Matrix SpikeD	150603S	06/03/15 1525
150603B-MS	Matrix Spike	150603S	06/03/15 1523
150603B-LCS	Lab Control Spike	150603S	06/03/15 1500
AZ16402	S67-TP002-0203	150603S	06/03/15 1521
AZ16401	S67-TP002-0001	150603S	06/03/15 1519
AZ16400	S67-TP001-0203	150603S	06/03/15 1517
150603B-BLK	Blank	150603S	06/03/15 1457

Comments: Batch: #HGDOD-150603B

7470A/7470A

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150608A-BLK Time Analyzed: 0951

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150608A-MSD	Matrix SpikeD	150609W	06/09/15 1005
150608A-MS	Matrix Spike	150609W	06/09/15 1003
150608A-LCS	Lab Control Spike	150609W	06/09/15 0953
AZ16403	S67-MW015-051415	150609W	06/09/15 1001
150608A-BLK	Blank	150609W	06/09/15 0951

Comments: Batch: #HGDOD-150608A

7470A/7470A

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 06/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150608A-BLK Time Analyzed: 0951

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150608A-MSD	Matrix SpikeD	150609W	06/09/15 1005
150608A-MS	Matrix Spike	150609W	06/09/15 1003
150608A-LCS	Lab Control Spike	150609W	06/09/15 0953
AZ16403	S67-MW015-051415	150609W	06/09/15 1001
150608A-BLK	Blank	150609W	06/09/15 0951

Comments: Batch: #HGDOD-150608A

METALS

Sample Data

APPL, INC.

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP001-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16400

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 33.0 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	50700	1490.0	119.00	59.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	18.00 U	60.0	18.00	10.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	29.3 J	75.0	24.00	19.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	1020	60.0	12.00	2.10	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	6.4 J	15.0	6.00	1.20	mg/kg	20	06/04/15	06/12/15
6010C/3050B	BORON (B)	108 J	149.0	119.00	46.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	9.9 J	15.0	6.00	1.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	84500	2990	597.0	358.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	11.8 J	104.0	12.00	4.20	mg/kg	20	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	7.8 J	30.0	9.00	3.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	4700	149.0	12.00	6.30	mg/kg	20	06/04/15	06/12/15
6010C/3050B	IRON (FE)	34000	2390.0	119.00	104.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LEAD (PB)	1570	27.0	24.00	7.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	25.2	20.00	15.000	7.500	mg/kg	20	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	24200	896.0	119.00	104.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	3150	134.0	12.00	3.90	mg/kg	20	06/04/15	06/12/15
7471/7471	MERCURY (HG)	0.06 U	0.1	0.06	0.03	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	7.3 J	119.0	12.00	3.30	mg/kg	20	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	2450 J	8960	1490.0	1190.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	30.00 U	90.0	30.00	25.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	15.1 J	45.0	6.00	4.50	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	1490.0 U	14900	1490.0	1340.0	mg/kg	20	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	36.00 U	90.0	36.00	19.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	36.9 J	60.0	12.00	3.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	1470	239.0	119.00	34.00	mg/kg	20	06/04/15	06/12/15

J = Estimated value.

Printed: 06/24/15 11:55:30 AM

PL-F1-SC-MCRes/MCPQL-REG MDLs

Sequence No.: 13
Sample ID: AZ16400S02-1/20
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 1.05 g
Dilution: 20X
Wash Time:

Autosampler Location: 77
Date Collected: 06/12/15 2:39:57 PM
Data Type: Reprocessed on 06/15/15 10:35:55 AM
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16400S02-1/20

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	240307.5	118.3	%	0.64				0.54%
Y Radial	16330.6	124.5	%	0.66				0.53%
Ag 338.289†	857.3	5.278	ug/L	0.0918	10.05	mg/kg	0.175	1.74%
Al 308.215†	20325.9	17840	ug/L	128.10	33990	mg/kg	244.00	0.72%
As 188.979†	54.9	10.31	ug/L	1.476	19.63	mg/kg	2.811	14.32%
B 249.677†	301.3	38.11	ug/L	0.321	72.59	mg/kg	0.612	0.84%
Ba 233.527†	134261.9	359.7	ug/L	1.42	685.2	mg/kg	2.70	0.39%
Be 313.107†	7350.9	2.274	ug/L	0.0179	4.332	mg/kg	0.0340	0.79%
Ca 315.887†	383351.2	29710	ug/L	170.34	56600	mg/kg	324.46	0.57%
Cd 214.440†	923.5	3.490	ug/L	0.0140	6.647	mg/kg	0.0266	0.40%
Co 228.616†	498.6	2.715	ug/L	0.0842	5.171	mg/kg	0.1604	3.10%
Cr 267.716†	362.1	4.136	ug/L	0.0331	7.878	mg/kg	0.0631	0.80%
Cu 327.393†	292879.2	1655	ug/L	10.07	3152	mg/kg	19.18	0.61%
Fe 273.955†	809215.3	11980	ug/L	48.67	22820	mg/kg	92.70	0.41%
K 766.490†	5041.3	860.1	ug/L	7.09	1638	mg/kg	13.51	0.82%
Mg 285.213†	120755.7	8518	ug/L	59.64	16230	mg/kg	113.61	0.70%
Mn 257.610†	77944.0	1108	ug/L	7.33	2110	mg/kg	13.96	0.66%
Mo 202.031†	41.6	1.649	ug/L	0.1391	3.140	mg/kg	0.2649	8.43%
Na 589.592†	2220.2	382.2	ug/L	1.76	728.1	mg/kg	3.36	0.46%
Ni 231.604†	103.2	2.595	ug/L	0.1276	4.943	mg/kg	0.2430	4.92%
P 213.617†	-468.0	-162.2	ug/L	6.26	-308.9	mg/kg	11.93	3.86%
Pb 220.353†	3031.8	552.7	ug/L	4.65	1053	mg/kg	8.86	0.84%
Sb 206.836†	4.7	0.736	ug/L	1.1029	1.403	mg/kg	2.1007	149.78%
Se 196.026†	-17.3	-2.213	ug/L	1.4994	-4.215	mg/kg	2.8561	67.77%
Sn 189.927†	5.0	1.018	ug/L	0.5142	1.939	mg/kg	0.9795	50.52%
Sr 421.552†	27542.1	81.78	ug/L	0.704	155.8	mg/kg	1.34	0.86%
Ti 337.279†	39034.1	1227	ug/L	9.32	2337	mg/kg	17.76	0.76%
Tl 190.801†	-23.3	-4.657	ug/L	0.7715	-8.870	mg/kg	1.4696	16.57%
V 292.402†	1212.4	12.95	ug/L	0.090	24.67	mg/kg	0.171	0.69%
Zn 206.200†	41518.8	517.7	ug/L	2.12	986.2	mg/kg	4.04	0.41%
Li 670.784	136910.8	8.863	ug/L	0.0256	16.88	mg/kg	0.049	0.29%

Due to high I.S. recovery in the DF1 and DF5 injections, the DF20 was used to report all analytes. See raw data for DF1 & DF5 subsequent pages.

ge 6-22-15

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0001
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16401

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 7.8 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	4240	54.0	4.30	2.10	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	2.1 J	2.2	0.65	0.38	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	35.2	2.7	0.87	0.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	53.0	2.2	0.43	0.08	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	0.18 J	0.5	0.22	0.04	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BORON (B)	87.00 U	108.0	87.00	34.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	0.22 U	0.5	0.22	0.05	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	2380	108	22.0	13.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	18.2	3.8	0.43	0.15	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	6.4	1.1	0.33	0.11	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	96.6	5.4	0.43	0.23	mg/kg	1	06/04/15	06/12/15
6010C/3050B	IRON (FE)	50500	1740.0	87.00	76.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LEAD (PB)	465	20.0	17.00	5.40	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	4.0	0.73	0.540	0.270	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	1570	33.0	4.30	3.80	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	70.4	4.9	0.43	0.14	mg/kg	1	06/04/15	06/12/15
7471/7471	MERCURY (HG)	0.04 U	0.1	0.04	0.02	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	41.4	4.3	0.43	0.12	mg/kg	1	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	433	325	54.0	43.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	2.9 J	3.3	1.10	0.92	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	0.66 J	1.6	0.22	0.16	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	88.1 J	542	54.0	49.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	1.30 U	3.3	1.30	0.67	mg/kg	1	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	18.4	2.2	0.43	0.11	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	128	8.7	4.30	1.20	mg/kg	1	06/04/15	06/12/15

J = Estimated value.

Printed: 06/24/15 11:55:30 AM

PL-F1-SC-MCRes/MCPQL-REG MDLs

Sequence No.: 44
Sample ID: AZ16401S02
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 1.02 g
Dilution:
Wash Time:

Autosampler Location: 62
Date Collected: 06/12/15 6:29:00 PM
Data Type: Reprocessed on 06/15/15 10:36:30 AM

Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16401S02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	232519.5	114.4	%	0.92				0.80%
Y Radial	16488.0	125.7	%	1.29				1.03%
Ag 338.289†	1005.3	6.189	ug/L	0.2065	0.607	mg/kg	0.0202	3.34%
Al 308.215†	45426.4	39900	ug/L	984.74	3912	mg/kg	96.54	2.47%
As 188.979†	1285.7	331.2	ug/L	1.16	32.47	mg/kg	0.114	0.35%
B 249.677†	-29681.7	-94.30	ug/L	5.884	-9.245	mg/kg	0.5769	6.24%
Ba 233.527†	192895.7	498.2	ug/L	1.22	48.85	mg/kg	0.119	0.24%
Be 313.107†	5577.0	1.725	ug/L	0.0092	0.169	mg/kg	0.0009	0.53%
Ca 315.887†	287640.7	22290	ug/L	504.32	2185	mg/kg	49.44	2.26%
Cd 214.440†	5134.2	-1.656	ug/L	0.1653	-0.162	mg/kg	0.0162	9.98%
Co 228.616†	6170.2	59.84	ug/L	0.504	5.866	mg/kg	0.0494	0.84%
Cr 267.716†	13416.2	171.2	ug/L	1.05	16.78	mg/kg	0.103	0.61%
Cu 327.393†	158779.1	908.8	ug/L	25.77	89.10	mg/kg	2.527	2.84%
Fe 273.955†	23831145.1	352800	ug/L	2871.27	34590	mg/kg	281.50	0.81%
K 766.490†	24695.2	4074	ug/L	101.97	399.4	mg/kg	10.00	2.50%
Mg 285.213†	205982.5	14800	ug/L	338.93	1451	mg/kg	33.23	2.29%
Mn 257.610†	46495.8	662.4	ug/L	15.48	64.94	mg/kg	1.517	2.34%
Mo 202.031†	-17.4	5.637	ug/L	1.1603	0.553	mg/kg	0.1138	20.58%
Na 589.592†	4825.1	828.0	ug/L	27.03	81.17	mg/kg	2.650	3.26%
Ni 231.604†	16513.8	390.0	ug/L	2.24	38.24	mg/kg	0.220	0.57%
P 213.617†	1769.5	613.2	ug/L	1.39	60.12	mg/kg	0.136	0.23%
Pb 220.353†	19656.3	3520	ug/L	16.84	345.1	mg/kg	1.65	0.48%
Sb 206.836†	121.6	19.20	ug/L	0.708	1.883	mg/kg	0.0694	3.69%
Se 196.026†	-294.9	27.17	ug/L	2.974	2.664	mg/kg	0.2916	10.94%
Sn 189.927†	476.0	96.83	ug/L	1.476	9.493	mg/kg	0.1447	1.52%
Sr 421.552†	32227.7	95.87	ug/L	2.402	9.399	mg/kg	0.2355	2.51%
Ti 337.279†	38177.5	1199	ug/L	28.20	117.6	mg/kg	2.76	2.35%
Tl 190.801†	-6.8	-1.350	ug/L	1.0286	-0.132	mg/kg	0.1008	76.20%
V 292.402†	16258.2	173.7	ug/L	1.07	17.03	mg/kg	0.105	0.62%
Zn 206.200†	97966.5	1206	ug/L	4.54	118.3	mg/kg	0.44	0.38%
Li 670.784	575232.3	37.24	ug/L	0.211	3.651	mg/kg	0.0207	0.57%

Sequence No.: 14
Sample ID: AZ16401S02-1/20
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 1.02 g
Dilution: 20X
Wash Time:

Autosampler Location: 78
Date Collected: 06/12/15 2:46:59 PM
Data Type: Reprocessed on 06/15/15 10:35:56 AM

Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16401S02-1/20

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	205941.9	101.4	%	0.47				0.46%
Y Radial	13664.3	104.1	%	0.47				0.45%
Ag 338.289†	118.0	0.727	ug/L	0.0870	1.425	mg/kg	0.1707	11.98%
Al 308.215†	2701.7	2373	ug/L	20.86	4653	mg/kg	40.89	0.88%
As 188.979†	75.2	19.81	ug/L	0.527	38.83	mg/kg	1.034	2.66%
B 249.677†	-1769.8	1.191	ug/L	0.5311	2.335	mg/kg	1.0413	44.60%
Ba 233.527†	11117.1	28.52	ug/L	0.043	55.93	mg/kg	0.084	0.15%
Be 313.107†	253.3	0.078	ug/L	0.0028	0.154	mg/kg	0.0055	3.56%
Ca 315.887†	17355.9	1345	ug/L	1.85	2637	mg/kg	3.63	0.14%
Cd 214.440†	313.5	-0.252	ug/L	0.0622	-0.494	mg/kg	0.1220	24.71%
Co 228.616†	392.4	3.779	ug/L	0.0656	7.409	mg/kg	0.1286	1.74%
Cr 267.716†	783.2	9.979	ug/L	0.0911	19.57	mg/kg	0.179	0.91%
Cu 327.393†	8858.1	50.84	ug/L	0.354	99.70	mg/kg	0.694	0.70%
Fe 273.955†	1606527.0	23780	ug/L	144.86	46640	mg/kg	284.04	0.61%
K 766.490†	1566.4	257.7	ug/L	2.40	505.2	mg/kg	4.70	0.93%
Mg 285.213†	12423.0	894.9	ug/L	1.89	1755	mg/kg	3.70	0.21%
Mn 257.610†	2910.2	41.47	ug/L	0.228	81.31	mg/kg	0.447	0.55%
Mo 202.031†	12.4	0.820	ug/L	0.1276	1.608	mg/kg	0.2501	15.56%
Na 589.592†	222.8	38.06	ug/L	3.136	74.63	mg/kg	6.149	8.24%
Ni 231.604†	1018.1	24.09	ug/L	0.274	47.23	mg/kg	0.537	1.14%
P 213.617†	110.8	38.38	ug/L	1.333	75.25	mg/kg	2.613	3.47%
Pb 220.353†	1224.2	218.9	ug/L	0.41	429.2	mg/kg	0.81	0.19%
Sb 206.836†	5.4	0.846	ug/L	0.7770	1.659	mg/kg	1.5236	91.86%
Se 196.026†	-25.1	-0.086	ug/L	2.2757	-0.168	mg/kg	4.4621	>999.9%
Sn 189.927†	31.9	6.488	ug/L	0.4138	12.72	mg/kg	0.811	6.38%
Sr 421.552†	2232.6	6.650	ug/L	0.0760	13.04	mg/kg	0.149	1.14%
Ti 337.279†	2379.2	74.73	ug/L	0.738	146.5	mg/kg	1.45	0.99%
Tl 190.801†	-4.8	-0.953	ug/L	0.5055	-1.868	mg/kg	0.9912	53.05%
V 292.402†	935.5	9.994	ug/L	0.0364	19.60	mg/kg	0.071	0.36%
Zn 206.200†	6175.9	75.95	ug/L	0.544	148.9	mg/kg	1.07	0.72%
Li 670.784	25822.5	1.672	ug/L	0.0030	3.278	mg/kg	0.0058	0.18%

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-TP002-0203
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16402

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
(Solid Concentrations and Limits have been adjusted to reflect 26.2 Percent Moisture.)									
6010C/3050B	ALUMINUM (AL)	1440	68.0	5.40	2.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ANTIMONY (SB)	4.9	2.7	0.81	0.47	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ARSENIC (AS)	102	3.4	1.10	0.88	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BARIUM (BA)	118	2.7	0.54	0.10	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BERYLLIUM (BE)	0.27 U	0.7	0.27	0.05	mg/kg	1	06/04/15	06/12/15
6010C/3050B	BORON (B)	108.00 U	136.0	108.00	42.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	CADMIUM (CD)	23.3	0.7	0.27	0.07	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CALCIUM (CA)	232	136	27.0	16.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	CHROMIUM (CR)	12.5	4.7	0.54	0.19	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COBALT (CO)	79.4	1.4	0.41	0.14	mg/kg	1	06/04/15	06/12/15
6010C/3050B	COPPER (CU)	1500	136.0	11.00	5.70	mg/kg	20	06/04/15	06/12/15
6010C/3050B	IRON (FE)	425000	21700.0	1080.00	949.00	mg/kg	200	06/04/15	06/15/15
6010C/3050B	LEAD (PB)	2680	24.0	22.00	6.80	mg/kg	20	06/04/15	06/12/15
6010C/3050B	LITHIUM (LI)	0.91	0.91	0.680	0.340	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MAGNESIUM (MG)	710	41.0	5.40	4.70	mg/kg	1	06/04/15	06/12/15
6010C/3050B	MANGANESE (MN)	43.2	6.1	0.54	0.18	mg/kg	1	06/04/15	06/12/15
7471/7471	MERCURY (HG)	1.2	0.1	0.05	0.03	mg/Kg	1	06/03/15	06/03/15
6010C/3050B	NICKEL (NI)	26.4	5.4	0.54	0.15	mg/kg	1	06/04/15	06/12/15
6010C/3050B	POTASSIUM (K)	1710	407	68.0	54.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SELENIUM (SE)	30.1 J	81.0	27.00	23.00	mg/kg	20	06/04/15	06/12/15
6010C/3050B	SILVER (AG)	30.8	2.0	0.27	0.20	mg/kg	1	06/04/15	06/12/15
6010C/3050B	SODIUM (NA)	286 J	678	68.0	61.0	mg/kg	1	06/04/15	06/12/15
6010C/3050B	THALLIUM (TL)	7.6	4.1	1.60	0.84	mg/kg	1	06/04/15	06/12/15
6010C/3050B	VANADIUM (V)	92.8	2.7	0.54	0.14	mg/kg	1	06/04/15	06/12/15
6010C/3050B	ZINC (ZN)	1540	217.0	108.00	31.00	mg/kg	20	06/04/15	06/12/15

J = Estimated value.

Printed: 06/24/15 11:55:30 AM

PL-F1-SC-MCRes/MCPQL-REG MDLs

Sequence No.: 45
Sample ID: AZ16402S02
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.97 g
Dilution:
Wash Time:

Autosampler Location: 63
Date Collected: 06/12/15 6:36:09 PM
Data Type: Reprocessed on 06/15/15 10:36:31 AM
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16402S02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	178418.0	87.81	%	0.300				0.34%
Y Radial	13042.9	99.41	%	1.133				1.14%
Ag 338.289†	35798.5	220.4	ug/L	0.57	22.72	mg/kg	0.059	0.26%
Al 308.215†	11614.9	10250	ug/L	248.12	1056	mg/kg	25.58	2.42%
As 188.979†	3277.0	728.1	ug/L	3.31	75.06	mg/kg	0.342	0.46%
B 249.677†	-230721.1	-7523	ug/L	10.90	-775.5	mg/kg	1.12	0.14%
Ba 233.527†	314126.1	843.8	ug/L	0.74	86.99	mg/kg	0.076	0.09%
Be 313.107†	-1110.0	-0.343	ug/L	0.0178	-0.035	mg/kg	0.0018	5.17%
Ca 315.887†	21387.7	1655	ug/L	37.00	170.6	mg/kg	3.81	2.24%
Cd 214.440†	40776.8	166.8	ug/L	0.79	17.20	mg/kg	0.081	0.47%
Co 228.616†	49946.7	568.5	ug/L	2.13	58.61	mg/kg	0.220	0.37%
Cr 267.716†	6895.2	88.77	ug/L	0.843	9.151	mg/kg	0.0869	0.95%
Cu 327.393†	2021585.8	11410	ug/L	15.99	1176	mg/kg	1.65	0.14%
Fe 273.955†	Saturated3							
K 766.490†	70535.0	12260	ug/L	279.46	1264	mg/kg	28.81	2.28%
Mg 285.213†	72098.2	5080	ug/L	110.58	523.7	mg/kg	11.40	2.18%
Mn 257.610†	21764.4	309.3	ug/L	5.51	31.89	mg/kg	0.568	1.78%
Mo 202.031†	1676.8	55.92	ug/L	2.457	5.765	mg/kg	0.2533	4.39%
Na 589.592†	11849.2	2044	ug/L	50.78	210.7	mg/kg	5.24	2.48%
Ni 231.604†	8241.2	189.2	ug/L	1.34	19.51	mg/kg	0.138	0.71%
P 213.617†	-6936.3	-2404	ug/L	8.92	-247.8	mg/kg	0.92	0.37%
Pb 220.353†	98214.9	17860	ug/L	59.97	1841	mg/kg	6.18	0.34%
Sb 206.836†	221.1	34.90	ug/L	5.440	3.598	mg/kg	0.5609	15.59%
Se 196.026†	-2115.1	-778.2	ug/L	10.26	-80.23	mg/kg	1.058	1.32%
Sn 189.927†	410.8	83.56	ug/L	1.772	8.614	mg/kg	0.1827	2.12%
Sr 421.552†	17476.7	52.57	ug/L	1.206	5.420	mg/kg	0.1243	2.29%
Ti 337.279†	124497.8	3913	ug/L	85.75	403.5	mg/kg	8.84	2.19%
Tl 190.801†	273.0	54.52	ug/L	2.298	5.621	mg/kg	0.2369	4.21%
V 292.402†	62223.5	664.7	ug/L	1.73	68.53	mg/kg	0.178	0.26%
Zn 206.200†	802451.7	10010	ug/L	24.41	1032	mg/kg	2.52	0.24%
Li 670.784	100483.9	6.505	ug/L	0.0423	0.671	mg/kg	0.0044	0.65%

Sequence No.: 15
Sample ID: AZ16402S02-1/20
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.97 g
Dilution: 20X
Wash Time:

Autosampler Location: 79
Date Collected: 06/12/15 2:54:16 PM
Data Type: Reprocessed on 06/15/15 10:35:57 AM

Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16402S02-1/20

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	204687.0	100.7	%	0.99				0.98%
Y Radial	13860.4	105.6	%	0.63				0.60%
Ag 338.289†	1788.2	11.01	ug/L	0.297	22.70	mg/kg	0.612	2.70%
Al 308.215†	557.6	491.1	ug/L	5.29	1012	mg/kg	10.90	1.08%
As 188.979†	149.8	53.19	ug/L	1.317	109.7	mg/kg	2.72	2.48%
B 249.677†	-11034.0	-2.140	ug/L	2.0274	-4.412	mg/kg	4.1803	94.74%
Ba 233.527†	15868.3	34.58	ug/L	0.212	71.30	mg/kg	0.437	0.61%
Be 313.107†	-139.8	-0.043	ug/L	0.0043	-0.089	mg/kg	0.0089	9.93%
Ca 315.887†	1139.5	85.81	ug/L	1.568	176.9	mg/kg	3.23	1.83%
Cd 214.440†	2116.9	-0.946	ug/L	0.0602	-1.950	mg/kg	0.1242	6.37%
Co 228.616†	2709.4	27.35	ug/L	0.297	56.40	mg/kg	0.613	1.09%
Cr 267.716†	323.6	3.561	ug/L	0.1031	7.343	mg/kg	0.2127	2.90%
Cu 327.393†	94282.4	536.8	ug/L	3.47	1107	mg/kg	7.16	0.65%
Fe 273.955†	9740483.3	144200	ug/L	1459.45	297300	mg/kg	3009.18	1.01%
K 766.490†	3569.1	535.2	ug/L	6.54	1104	mg/kg	13.48	1.22%
Mg 285.213†	3583.1	371.7	ug/L	1.38	766.3	mg/kg	2.85	0.37%
Mn 257.610†	1135.3	16.92	ug/L	0.129	34.88	mg/kg	0.266	0.76%
Mo 202.031†	82.4	5.208	ug/L	0.0954	10.74	mg/kg	0.197	1.83%
Na 589.592†	498.8	85.34	ug/L	1.997	176.0	mg/kg	4.12	2.34%
Ni 231.604†	393.8	11.95	ug/L	0.166	24.65	mg/kg	0.341	1.38%
P 213.617†	-437.8	-151.7	ug/L	2.31	-312.8	mg/kg	4.77	1.52%
Pb 220.353†	5435.7	962.1	ug/L	12.02	1984	mg/kg	24.79	1.25%
Sb 206.836†	6.4	1.006	ug/L	0.0896	2.074	mg/kg	0.1847	8.91%
Se 196.026†	-120.9	10.76	ug/L	4.149	22.18	mg/kg	8.554	38.56%
Sn 189.927†	21.9	4.459	ug/L	0.5728	9.194	mg/kg	1.1810	12.85%
Sr 421.552†	997.3	2.871	ug/L	0.0188	5.919	mg/kg	0.0387	0.65%
Ti 337.279†	6312.4	198.1	ug/L	0.72	408.6	mg/kg	1.47	0.36%
Tl 190.801†	7.2	1.432	ug/L	1.0916	2.953	mg/kg	2.2506	76.21%
V 292.402†	3141.4	33.56	ug/L	0.422	69.19	mg/kg	0.871	1.26%
Zn 206.200†	44942.2	553.1	ug/L	3.73	1140	mg/kg	7.69	0.67%
Li 670.784	9435.5	0.611	ug/L	0.0096	1.259	mg/kg	0.0198	1.57%

Sequence No.: 53
Sample ID: AZ16402S02-1/200
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.97 g
Dilution: 200X
Wash Time:

Autosampler Location: 38
Date Collected: 06/15/15 11:20:38 PM
Data Type: Reprocessed on 06/17/15 10:40:47 AM
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: AZ16402S02-1/200

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	220268.7	106.2	%	0.61				0.57%
Y Radial	16063.7	116.2	%	2.70				2.32%
Ag 338.289†	418.5	2.503	ug/L	0.1650	51.61	mg/kg	3.403	6.59%
Al 308.215†	-9.5	-7.799	ug/L	7.2403	-160.8	mg/kg	149.28	92.84%
As 188.979†	22.2	6.576	ug/L	0.6032	135.6	mg/kg	12.44	9.17%
B 249.677†	-372.4	26.10	ug/L	0.237	538.2	mg/kg	4.88	0.91%
Ba 233.527†	1856.9	3.836	ug/L	0.0264	79.10	mg/kg	0.545	0.69%
Be 313.107†	272.6	0.079	ug/L	0.0123	1.623	mg/kg	0.2546	15.69%
Ca 315.887†	597.6	40.75	ug/L	0.407	840.3	mg/kg	8.40	1.00%
Cd 214.440†	-150.4	-1.567	ug/L	0.0325	-32.31	mg/kg	0.670	2.07%
Co 228.616†	391.6	3.802	ug/L	0.0546	78.39	mg/kg	1.125	1.44%
Cr 267.716†	-20.6	-0.316	ug/L	0.0989	-6.508	mg/kg	2.0393	31.33%
Cu 327.393†	10600.3	59.89	ug/L	0.443	1235	mg/kg	9.13	0.74%
Fe 273.955†	1096119.8	15200	ug/L	59.67	313500	mg/kg	1230.25	0.39%
K 766.490†	1322.5	219.4	ug/L	18.51	4523	mg/kg	381.55	8.44%
Mg 285.213†	435.9	40.75	ug/L	1.479	840.2	mg/kg	30.49	3.63%
Mn 257.610†	147.0	1.984	ug/L	0.0579	40.90	mg/kg	1.194	2.92%
Mo 202.031†	86.9	2.948	ug/L	0.1241	60.79	mg/kg	2.558	4.21%
Na 589.592†	3556.1	792.7	ug/L	125.15	16340	mg/kg	2580.51	15.79%
Ni 231.604†	82.4	2.076	ug/L	0.2736	42.81	mg/kg	5.641	13.18%
P 213.617†	-60.2	-19.01	ug/L	0.526	-392.0	mg/kg	10.84	2.76%
Pb 220.353†	373.5	55.62	ug/L	1.873	1147	mg/kg	38.61	3.37%
Sb 206.836†	-61.8	-9.071	ug/L	0.7147	-187.0	mg/kg	14.74	7.88%
Se 196.026†	-12.0	1.689	ug/L	1.8235	34.82	mg/kg	37.598	107.99%
Sn 189.927†	4.2	0.780	ug/L	0.3163	16.08	mg/kg	6.523	40.57%
Sr 421.552†	235.5	1.014	ug/L	0.0430	20.91	mg/kg	0.887	4.24%
Ti 337.279†	663.4	19.23	ug/L	0.607	396.5	mg/kg	12.52	3.16%
Tl 190.801†	3.0	0.500	ug/L	0.9733	10.31	mg/kg	20.067	194.58%
V 292.402†	157.3	1.561	ug/L	0.0285	32.18	mg/kg	0.588	1.83%
Zn 206.200†	4570.3	51.85	ug/L	0.141	1069	mg/kg	2.91	0.27%
Li 670.784	13210.0	0.935	ug/L	0.0224	19.27	mg/kg	0.461	2.39%

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: AZ16403

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL) (DISSOLVE	286 J	300	80.0	27.4	ug/L	1	05/26/15	06/04/15
6010C/3010A	ANTIMONY (SB) (DISSOLVE	5.00 U	20.0	5.00	2.90	ug/L	1	05/26/15	06/04/15
6010C/3010A	ARSENIC (AS) (DISSOLVED)	10.00 U	25.0	10.00	4.30	ug/L	1	05/26/15	06/04/15
6010C/3010A	BARIUM (BA) (DISSOLVED)	107	10.0	4.00	0.75	ug/L	1	05/26/15	06/04/15
6010C/3010A	BERYLLIUM (BE) (DISSOLV	1.00 U	2.0	1.00	0.45	ug/L	1	05/26/15	06/04/15
6010C/3010A	BORON (B) (DISSOLVED)	40.00 U	50.0	40.00	29.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	CADMIUM (CD) (DISSOLVE	3.00 U	5.0	3.00	0.51	ug/L	1	05/26/15	06/04/15
6010C/3010A	CALCIUM (CA) (DISSOLVED	5620	1000	75.0	27.5	ug/L	1	05/26/15	06/04/15
6010C/3010A	CHROMIUM (CR) (DISSOLV	4.00 U	15.0	4.00	1.37	ug/L	1	05/26/15	06/04/15
6010C/3010A	COBALT (CO) (DISSOLVED)	2.8 J	15.0	3.00	0.63	ug/L	1	05/26/15	06/04/15
6010C/3010A	COPPER (CU) (DISSOLVED)	4.00 U	15.0	4.00	1.71	ug/L	1	05/26/15	06/04/15
6010C/3010A	IRON (FE) (DISSOLVED)	593	100	25.0	21.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	LEAD (PB) (DISSOLVED)	1.9 J	15.0	4.00	1.58	ug/L	1	05/26/15	06/04/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	4.6	1.0	0.80	0.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	MAGNESIUM (MG) (DISSOL	2190	500	30.0	12.9	ug/L	1	05/26/15	06/04/15
6010C/3010A	MANGANESE (MN) (DISSOL	24.3	10.0	4.00	1.23	ug/L	1	05/26/15	06/04/15
7470A/7470A	MERCURY (HG) (DISSOLVE	0.15 U	0.2	0.15	0.06	ug/L	1	06/08/15	06/09/15
6010C/3010A	NICKEL (NI) (DISSOLVED)	5.2 J	40.0	3.00	0.42	ug/L	1	05/26/15	06/04/15
6010C/3010A	POTASSIUM (K) (DISSOLVE	736 J	3000	500.0	220.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	SELENIUM (SE) (DISSOLVE	10.00 U	22.0	10.00	4.60	ug/L	1	05/26/15	06/04/15
6010C/3010A	SILVER (AG) (DISSOLVED)	0.90 U	15.0	0.90	0.85	ug/L	1	05/26/15	06/04/15
6010C/3010A	SODIUM (NA) (DISSOLVED)	17000	5000	500.0	111.1	ug/L	1	05/26/15	06/04/15
6010C/3010A	THALLIUM (TL) (DISSOLVED	10.00 U	40.0	10.00	4.80	ug/L	1	05/26/15	06/04/15
6010C/3010A	VANADIUM (V) (DISSOLVED	4.00 U	15.0	4.00	0.97	ug/L	1	05/26/15	06/04/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	82.9 J	150	20.0	13.7	ug/L	1	05/26/15	06/04/15

J = Estimated value.

Printed: 06/24/15 11:54:09 AM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 17
Sample ID: AZ16403W12 D
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 79
Date Collected: 06/04/15 5:30:41 PM
Data Type: Reprocessed on 06/11/15 4:12:30 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ16403W12 D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	282196.6	102.4	%	0.19				0.19%
Y Radial	19966.5	106.5	%	2.52				2.37%
Ag 338.289†	90.2	0.437	ug/L	0.2098	0.437	ug/L	0.2098	47.98%
Al 308.215†	481.8	286.2	ug/L	11.98	286.2	ug/L	11.98	4.19%
As 188.979†	23.2	2.910	ug/L	0.4111	2.910	ug/L	0.4111	14.12%
B 249.677†	914.2	21.87	ug/L	0.089	21.87	ug/L	0.089	0.41%
Ba 233.527†	55060.2	106.9	ug/L	0.11	106.9	ug/L	0.11	0.10%
Be 313.107†	918.9	0.193	ug/L	0.0047	0.193	ug/L	0.0047	2.42%
Ca 315.887†	113184.0	5620	ug/L	208.71	5620	ug/L	208.71	3.71%
Cd 214.440†	103.6	0.338	ug/L	0.0224	0.338	ug/L	0.0224	6.62%
Co 228.616†	360.6	2.774	ug/L	0.0267	2.774	ug/L	0.0267	0.96%
Cr 267.716†	88.4	0.850	ug/L	0.0753	0.850	ug/L	0.0753	8.86%
Cu 327.393†	55.5	0.238	ug/L	0.0696	0.238	ug/L	0.0696	29.28%
Fe 273.955†	59470.8	593.0	ug/L	0.26	593.0	ug/L	0.26	0.04%
K 766.490†	4899.6	735.7	ug/L	21.63	735.7	ug/L	21.63	2.94%
Mg 285.213†	47346.0	2194	ug/L	80.29	2194	ug/L	80.29	3.66%
Mn 257.610†	2660.8	24.25	ug/L	0.694	24.25	ug/L	0.694	2.86%
Mo 202.031†	16.3	0.422	ug/L	0.2611	0.422	ug/L	0.2611	61.93%
Na 589.592†	57662.3	17000	ug/L	676.11	17000	ug/L	676.11	3.98%
Ni 231.604†	320.6	5.173	ug/L	0.1223	5.173	ug/L	0.1223	2.36%
P 213.617†	20.5	4.637	ug/L	1.2027	4.637	ug/L	1.2027	25.93%
Pb 220.353†	18.0	1.916	ug/L	0.3423	1.916	ug/L	0.3423	17.86%
Sb 206.836†	-1.0	-0.098	ug/L	0.3811	-0.098	ug/L	0.3811	389.35%
Se 196.026†	-1.4	-0.284	ug/L	0.3756	-0.284	ug/L	0.3756	132.26%
Sn 189.927†	4.2	0.620	ug/L	0.2597	0.620	ug/L	0.2597	41.91%
Sr 421.552†	10022.3	90.96	ug/L	3.300	90.96	ug/L	3.300	3.63%
Ti 337.279†	103.0	2.050	ug/L	0.2127	2.050	ug/L	0.2127	10.38%
Tl 190.801†	0.3	0.034	ug/L	0.5576	0.034	ug/L	0.5576	>999.9%
V 292.402†	101.8	0.723	ug/L	0.0214	0.723	ug/L	0.0214	2.96%
Zn 206.200†	9162.6	82.88	ug/L	0.051	82.88	ug/L	0.051	0.06%
Li 670.784	83045.8	4.629	ug/L	0.0248	4.629	ug/L	0.0248	0.54%

Metals Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-MW015-051415
Sample Collection Date: 05/14/15

ARF: 76447
APPL ID: 'AZ16403

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	204 J	300	80.0	27.4	ug/L	1	05/26/15	06/04/15
6010C/3010A	ANTIMONY (SB)	5.00 U	20.0	5.00	2.90	ug/L	1	05/26/15	06/04/15
6010C/3010A	ARSENIC (AS)	10.00 U	25.0	10.00	4.30	ug/L	1	05/26/15	06/04/15
6010C/3010A	BARIUM (BA)	131	10.0	4.00	0.75	ug/L	1	05/26/15	06/04/15
6010C/3010A	BERYLLIUM (BE)	1.00 U	2.0	1.00	0.45	ug/L	1	05/26/15	06/04/15
6010C/3010A	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	CADMIUM (CD)	3.00 U	5.0	3.00	0.51	ug/L	1	05/26/15	06/04/15
6010C/3010A	CALCIUM (CA)	6220	1000	75.0	27.5	ug/L	1	05/26/15	06/04/15
6010C/3010A	CHROMIUM (CR)	4.00 U	15.0	4.00	1.37	ug/L	1	05/26/15	06/04/15
6010C/3010A	COBALT (CO)	3.1 J	15.0	3.00	0.63	ug/L	1	05/26/15	06/04/15
6010C/3010A	COPPER (CU)	4.00 U	15.0	4.00	1.71	ug/L	1	05/26/15	06/04/15
6010C/3010A	IRON (FE)	379	100	25.0	21.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	LEAD (PB)	2.7 J	15.0	4.00	1.58	ug/L	1	05/26/15	06/04/15
6010C/3010A	LITHIUM (LI)	5.3	1.0	0.80	0.40	ug/L	1	05/26/15	06/04/15
6010C/3010A	MAGNESIUM (MG)	2530	500	30.0	12.9	ug/L	1	05/26/15	06/04/15
6010C/3010A	MANGANESE (MN)	26.3	10.0	4.00	1.23	ug/L	1	05/26/15	06/04/15
6010C/3010A	NICKEL (NI)	6.0 J	40.0	3.00	0.42	ug/L	1	05/26/15	06/04/15
6010C/3010A	POTASSIUM (K)	758 J	3000	500.0	220.0	ug/L	1	05/26/15	06/04/15
6010C/3010A	SELENIUM (SE)	10.00 U	22.0	10.00	4.60	ug/L	1	05/26/15	06/04/15
6010C/3010A	SILVER (AG)	0.90 U	15.0	0.90	0.85	ug/L	1	05/26/15	06/04/15
6010C/3010A	SODIUM (NA)	17800	5000	500.0	111.1	ug/L	1	05/26/15	06/04/15
6010C/3010A	THALLIUM (TL)	10.00 U	40.0	10.00	4.80	ug/L	1	05/26/15	06/04/15
6010C/3010A	VANADIUM (V)	4.00 U	15.0	4.00	0.97	ug/L	1	05/26/15	06/04/15
6010C/3010A	ZINC (ZN)	97.2 J	150	20.0	13.7	ug/L	1	05/26/15	06/04/15
7470A/7470A	MERCURY (HG) (DISSOLVE	0.15 U	0.2	0.15	0.06	ug/L	1	06/08/15	06/09/15

J = Estimated value.

Printed: 06/24/15 11:54:52 AM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 16
Sample ID: AZ16403W11
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 60
Date Collected: 06/04/15 5:25:02 PM
Data Type: Reprocessed on 06/11/15 4:12:29 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ16403W11

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	256946.9	93.27	%	11.448				12.27%
Y Radial	19866.0	105.9	%	7.07				6.68%
Ag 338.289†	39.4	0.191	ug/L	0.7837	0.191	ug/L	0.7837	409.71%
Al 308.215†	343.6	203.8	ug/L	21.46	203.8	ug/L	21.46	10.53%
As 188.979†	15.0	1.639	ug/L	1.6845	1.639	ug/L	1.6845	102.76%
B 249.677†	1187.8	27.07	ug/L	4.026	27.07	ug/L	4.026	14.87%
Ba 233.527†	67414.5	131.0	ug/L	17.98	131.0	ug/L	17.98	13.73%
Be 313.107†	1350.3	0.284	ug/L	0.1069	0.284	ug/L	0.1069	37.66%
Ca 315.887†	125327.3	6223	ug/L	489.02	6223	ug/L	489.02	7.86%
Cd 214.440†	149.9	0.490	ug/L	0.0776	0.490	ug/L	0.0776	15.83%
Co 228.616†	402.8	3.110	ug/L	0.0953	3.110	ug/L	0.0953	3.06%
Cr 267.716†	58.2	0.567	ug/L	0.0875	0.567	ug/L	0.0875	15.42%
Cu 327.393†	197.5	0.860	ug/L	0.6792	0.860	ug/L	0.6792	78.95%
Fe 273.955†	38051.1	379.3	ug/L	54.53	379.3	ug/L	54.53	14.37%
K 766.490†	5049.0	758.0	ug/L	55.17	758.0	ug/L	55.17	7.28%
Mg 285.213†	54661.9	2532	ug/L	169.80	2532	ug/L	169.80	6.71%
Mn 257.610†	2882.6	26.25	ug/L	1.946	26.25	ug/L	1.946	7.41%
Mo 202.031†	1.1	0.047	ug/L	0.4031	0.047	ug/L	0.4031	849.64%
Na 589.592†	60333.5	17790	ug/L	1456.86	17790	ug/L	1456.86	8.19%
Ni 231.604†	373.9	6.026	ug/L	0.4135	6.026	ug/L	0.4135	6.86%
P 213.617†	8.8	1.982	ug/L	3.3578	1.982	ug/L	3.3578	169.39%
Pb 220.353†	25.3	2.669	ug/L	0.7448	2.669	ug/L	0.7448	27.91%
Sb 206.836†	3.4	0.324	ug/L	1.2767	0.324	ug/L	1.2767	393.75%
Se 196.026†	4.8	1.361	ug/L	0.2604	1.361	ug/L	0.2604	19.14%
Sn 189.927†	12.3	1.790	ug/L	0.9855	1.790	ug/L	0.9855	55.04%
Sr 421.552†	10410.3	94.47	ug/L	7.832	94.47	ug/L	7.832	8.29%
Ti 337.279†	15.4	0.268	ug/L	0.3282	0.268	ug/L	0.3282	122.28%
Tl 190.801†	0.5	0.051	ug/L	1.0509	0.051	ug/L	1.0509	>999.9%
V 292.402†	36.8	0.261	ug/L	0.0144	0.261	ug/L	0.0144	5.52%
Zn 206.200†	10753.6	97.23	ug/L	13.600	97.23	ug/L	13.600	13.99%
Li 670.784	95533.6	5.325	ug/L	0.0383	5.325	ug/L	0.0383	0.72%

METALS

Calibration Data

APPL, INC.

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/04/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 16:00	%R(1)	True CCV1	Found 16:49	%R(1)	True CCV2	Found 17:37	%R(1)	
Silver (Ag)	250	241.6	96.6	250	252	101	187.5	190	101	P
Aluminum (Al)	12500	11640	93.1	10000	9995	100	7500	6951	92.7	P
Arsenic (As)	500	453.8	90.8	500	488.1	97.6	375.5	369.3	98.3	P
Boron (B)	500	501.7	100	500	539.1	108	375	396.5	106	P
Barium (Ba)	500	487.6	97.5	500	500.9	100	375.5	379.1	101	P
Beryllium (Be)	500	483.6	96.7	500	500.9	100	375.5	374.8	99.8	P
Calcium (Ca)	12500	12430	99.4	25000	25020	100	18750	17140	91.4	P
Cadmium (Cd)	500	494.9	99.0	500	501	100	375.5	374.5	99.7	P
Cobalt (Co)	500	487	97.4	500	519.5	104	375.5	377.3	100	P
Chromium (Cr)	500	477.5	95.5	500	514.1	103	375.5	372.5	99.2	P
Copper (Cu)	500	484.9	97.0	500	500.4	100	375.5	381.3	102	P
Iron (Fe)	12500	12060	96.5	10000	10100	101	7500	7600	101	P
Potassium (K)	12500	11560	92.5	10000	10050	101	7500	7095	94.6	P
Lithium (Li)	250	251.8	101	250	246	98.4	187.5	192.4	103	P
Magnesium (Mg)	12500	12270	98.2	25000	25450	102	18750	17650	94.1	P
Manganese (Mn)	500	471.2	94.2	500	501.5	100	375.5	350.6	93.4	P
Sodium (Na)	12500	11570	92.6	12500	13680	109	9375	11190	119	*
Nickel (Ni)	500	500	100	500	497.1	99.4	375.5	380.5	101	P
Lead (Pb)	500	496.9	99.4	500	500.3	100	375.5	381.1	101	P
Antimony (Sb)	500	477.1	95.4	500	490.1	98.0	375.5	376.7	100	P
Selenium (Se)	500	481.1	96.2	500	504.8	101	375	380.1	101	P
Thallium (Tl)	500	500.2	100	500	505.5	101	375.5	387.8	103	P
Vanadium (V)	500	483.6	96.7	500	496.9	99.4	375.5	375.3	99.9	P
Zinc (Zn)	500	494.9	99.0	500	507.7	102	375	378.4	101	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/04/15

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
	16:14		16:54		17:57				17:12		
Silver (Ag)	15.00	U	15.00	U	15.00	U			15.00	U	P
Aluminum (Al)	300.00	U	300.00	U	300.00	U			300.00	U	P
Arsenic (As)	25.00	U	25.00	U	25.00	U			25.00	U	P
Boron (B)	50.00	U	50.00	U	50.00	U			50.00	U	P
Barium (Ba)	10.00	U	10.00	U	10.00	U			10.00	U	P
Beryllium (Be)	2.00	U	2.00	U	2.00	U			2.00	U	P
Calcium (Ca)	1000.00	U	1000.00	U	1000.00	U			1000.00	U	P
Cadmium (Cd)	5.00	U	5.00	U	5.00	U			5.00	U	P
Cobalt (Co)	15.00	U	15.00	U	15.00	U			15.00	U	P
Chromium (Cr)	15.00	U	15.00	U	15.00	U			15.00	U	P
Copper (Cu)	15.00	U	15.00	U	15.00	U			15.00	U	P
Iron (Fe)	100.00	U	100.00	U	100.00	U			100.00	U	P
Potassium (K)	3000.00	U	3000.00	U	3000.00	U			3000.00	U	P
Lithium (Li)	.41	J	.42	J	.41	J			1.00	U	P
Magnesium (Mg)	500.00	U	500.00	U	500.00	U			500.00	U	P
Manganese (Mn)	10.00	U	10.00	U	10.00	U			10.00	U	P
Sodium (Na)	5000.00	U	5000.00	U	5000.00	U			5000.00	U	P
Nickel (Ni)	40.00	U	40.00	U	40.00	U			40.00	U	P
Lead (Pb)	15.00	U	15.00	U	15.00	U			15.00	U	P
Antimony (Sb)	20.00	U	20.00	U	20.00	U			20.00	U	P
Selenium (Se)	22.00	U	22.00	U	22.00	U			22.00	U	P
Thallium (Tl)	40.00	U	40.00	U	40.00	U			40.00	U	P
Vanadium (V)	15.00	U	15.00	U	15.00	U			15.00	U	P
Zinc (Zn)	150.00	U	150.00	U	150.00	U			150.00	U	P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76447 SDG: 76447
ICP ID Number: Jules ICS Source: Environmental Express

Analysis Date: 06/04/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 16:27	Sol AB 16:39	%R(1)
Silver (Ag)		500	-0.272	488.1	97.6
Aluminum (Al)	100000	100000	92880	90030	90.0
Arsenic (As)		250	0.51	199.7	79.9
Boron (B)			6.758	7.337	
Barium (Ba)		250	-0.645	234.3	93.7
Beryllium (Be)		250	0.023	226.6	90.6
Calcium (Ca)	100000	100000	97090	93240	93.2
Cadmium (Cd)		500	-1.439	457.8	91.6
Cobalt (Co)		250	-1.39	235.5	94.2
Chromium (Cr)		250	-0.291	241.5	96.6
Copper (Cu)		250	0.101	241.7	96.7
Iron (Fe)	100000	100000	91930	92500	92.5
Potassium (K)			-67.48	-61.86	
Lithium (Li)		0	0.348	0.197	
Magnesium (Mg)	100000	100000	93510	89470	89.5
Manganese (Mn)		250	2.924	223.9	89.6
Sodium (Na)			-26.63	-27.7	
Nickel (Ni)		500	0.862	461.2	92.2
Lead (Pb)		500	-0.983	461.7	92.3
Antimony (Sb)		250	-2.318	217	86.8
Selenium (Se)		250	-2.488	236.6	94.6
Thallium (Tl)		250	-3.811	225.3	90.1
Vanadium (V)		250	1.4	236.8	94.7
Zinc (Zn)		500	-2.622	454.7	90.9

(1) Control Limits: Metals 80-120

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150604A6010
Results Library (original): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 1
Sample ID: CalBlk 150604RJS I:JL O:R Date Collected: 06/04/15 3:38:49 PM
Analyst: Data Type: Reprocessed on 06/11/15 4:12:12 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:
Wash Time:

Mean Data: CalBlk 150604RJS I:JL O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	275496.1	1224.97	0.44%	100.0	%
Y Radial	18750.6	33.16	0.18%	100.0	%
Ag 338.289†	-258.3	61.21	23.70%	[0.00]	ug/L
Al 308.215†	170.8	8.98	5.26%	[0.00]	ug/L
As 188.979†	-63.3	1.93	3.05%	[0.00]	ug/L
B 249.677†	32.3	4.20	13.02%	[0.00]	ug/L
Ba 233.527†	-209.2	9.27	4.43%	[0.00]	ug/L
Be 313.107†	2424.8	30.17	1.24%	[0.00]	ug/L
Ca 315.887†	-1037.0	8.85	0.85%	[0.00]	ug/L
Cd 214.440†	109.6	5.96	5.43%	[0.00]	ug/L
Co 228.616†	-306.8	5.11	1.66%	[0.00]	ug/L
Cr 267.716†	62.8	1.98	3.16%	[0.00]	ug/L
Cu 327.393†	-1026.4	67.82	6.61%	[0.00]	ug/L
Fe 273.955†	1460.0	60.26	4.13%	[0.00]	ug/L
K 766.490†	-999.1	48.67	4.87%	[0.00]	ug/L
Mg 285.213†	118.2	9.35	7.91%	[0.00]	ug/L
Mn 257.610†	13.0	4.48	34.47%	[0.00]	ug/L
Mo 202.031†	-119.5	10.27	8.59%	[0.00]	ug/L
Na 589.592†	93.7	77.20	82.38%	[0.00]	ug/L
Ni 231.604†	-185.2	6.51	3.52%	[0.00]	ug/L
P 213.617†	42.7	0.92	2.15%	[0.00]	ug/L
Pb 220.353†	38.6	1.50	3.88%	[0.00]	ug/L
Sb 206.836†	34.1	4.91	14.42%	[0.00]	ug/L
Se 196.026†	24.7	1.64	6.65%	[0.00]	ug/L
Sn 189.927†	-1.0	1.89	192.67%	[0.00]	ug/L
Sr 421.552†	-28.5	14.72	51.57%	[0.00]	ug/L
Ti 337.279†	-40.9	14.77	36.13%	[0.00]	ug/L
Tl 190.801†	-46.8	3.80	8.12%	[0.00]	ug/L
V 292.402†	10.7	4.27	39.98%	[0.00]	ug/L
Zn 206.200†	191.9	20.83	10.85%	[0.00]	ug/L
Li 670.784	4367.8	73.21	1.68%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150604RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 06/04/15 3:43:52 PM
Data Type: Reprocessed on 06/11/15 4:12:14 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150604RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	275833.6	3748.93	1.36%	100.1	%
Y Radial	19373.4	1280.54	6.61%	103.3	%
Ag 338.289†	1126.8	34.81	3.09%	[0.5]	ug/L
Al 308.215†	354.9	39.77	11.21%	[50]	ug/L
As 188.979†	73.4	4.52	6.15%	[2]	ug/L
B 249.677†	1532.1	27.18	1.77%	[25]	ug/L
Ba 233.527†	6554.8	437.50	6.67%	[1.5]	ug/L
Be 313.107†	45861.3	502.56	1.10%	[1]	ug/L
Ca 315.887†	10029.3	624.26	6.22%	[50]	ug/L
Cd 214.440†	4221.3	52.07	1.23%	[0.25]	ug/L
Co 228.616†	1559.9	18.05	1.16%	[2.5]	ug/L
Cr 267.716†	1253.7	18.20	1.45%	[0.5]	ug/L
Cu 327.393†	2309.4	33.32	1.44%	[2.5]	ug/L
Fe 273.955†	20935.6	199.73	0.95%	[25]	ug/L
K 766.490†	3987.9	285.19	7.15%	[500]	ug/L
Mg 285.213†	10255.3	694.26	6.77%	[25]	ug/L
Mn 257.610†	1203.3	80.28	6.67%	[1]	ug/L
Mo 202.031†	447.1	9.41	2.10%	[1]	ug/L
Na 589.592†	2171.1	113.28	5.22%	[500]	ug/L
Ni 231.604†	749.7	12.12	1.62%	[1]	ug/L
P 213.617†	238.5	9.80	4.11%	[12.5]	ug/L
Pb 220.353†	113.5	2.78	2.45%	[1.5]	ug/L
Sb 206.836†	115.9	6.21	5.36%	[2]	ug/L
Se 196.026†	40.5	7.47	18.44%	[2]	ug/L
Sn 189.927†	76.5	3.30	4.31%	[3]	ug/L
Sr 421.552†	1215.4	40.59	3.34%	[1]	ug/L
Ti 337.279†	550.3	40.88	7.43%	[2.5]	ug/L
Tl 190.801†	114.7	3.81	3.32%	[2]	ug/L
V 292.402†	1666.4	20.09	1.21%	[0.5]	ug/L
Zn 206.200†	2057.6	32.82	1.60%	[25]	ug/L
Li 670.784	60593.2	128.10	0.21%	[5]	ug/L

Sequence No.: 3
Sample ID: STD 2 150604RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/04/15 3:48:56 PM
Data Type: Reprocessed on 06/11/15 4:12:15 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150604RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	259113.9	737.63	0.28%	94.05	%
Y Radial	17931.6	48.90	0.27%	95.63	%
Ag 338.289†	50454.9	52.90	0.10%	[250]	ug/L
Al 308.215†	16263.8	42.58	0.26%	[10000]	ug/L
As 188.979†	3348.9	24.21	0.72%	[500]	ug/L
B 249.677†	22810.5	147.98	0.65%	[500]	ug/L
Ba 233.527†	253131.4	299.14	0.12%	[500]	ug/L
Be 313.107†	2340434.3	4251.74	0.18%	[500]	ug/L
Ca 315.887†	493830.0	1961.33	0.40%	[25000]	ug/L
Cd 214.440†	173101.4	207.13	0.12%	[500]	ug/L
Co 228.616†	65612.7	295.65	0.45%	[500]	ug/L
Cr 267.716†	54127.1	342.75	0.63%	[500]	ug/L
Cu 327.393†	107240.7	214.14	0.20%	[500]	ug/L
Fe 273.955†	990794.0	882.67	0.09%	[10000]	ug/L
K 766.490†	62773.6	91.26	0.15%	[10000]	ug/L
Mg 285.213†	532708.3	2837.24	0.53%	[25000]	ug/L
Mn 257.610†	53381.5	98.07	0.18%	[500]	ug/L
Mo 202.031†	19900.0	92.90	0.47%	[500]	ug/L
Na 589.592†	41713.0	159.03	0.38%	[12500]	ug/L
Ni 231.604†	30585.7	172.48	0.56%	[500]	ug/L
P 213.617†	10710.2	56.41	0.53%	[2500]	ug/L
Pb 220.353†	5125.5	27.61	0.54%	[500]	ug/L
Sb 206.836†	5072.4	15.58	0.31%	[500]	ug/L
Se 196.026†	1711.0	11.85	0.69%	[500]	ug/L
Sn 189.927†	3361.7	12.76	0.38%	[500]	ug/L
Sr 421.552†	54673.4	127.70	0.23%	[500]	ug/L
Ti 337.279†	24123.4	42.32	0.18%	[500]	ug/L
Tl 190.801†	4727.3	45.75	0.97%	[500]	ug/L
V 292.402†	68881.9	184.46	0.27%	[500]	ug/L
Zn 206.200†	57255.6	195.21	0.34%	[500]	ug/L
Li 670.784	4218501.9	16962.65	0.40%	[250]	ug/L

Sequence No.: 4
Sample ID: STD 3 150604RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 4
Date Collected: 06/04/15 3:52:48 PM
Data Type: Reprocessed on 06/11/15 4:12:16 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150604RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	253219.0	1382.60	0.55%	91.91	%
Y Radial	17656.7	53.79	0.30%	94.17	%
Ag 338.289†	103662.7	199.86	0.19%	[500]	ug/L
Al 308.215†	33831.1	203.83	0.60%	[20000]	ug/L
As 188.979†	6958.7	77.12	1.11%	[1000]	ug/L
B 249.677†	45997.7	90.55	0.20%	[1000]	ug/L
Ba 233.527†	516796.9	419.40	0.08%	[1000]	ug/L
Be 313.107†	4777744.1	7450.66	0.16%	[1000]	ug/L
Ca 315.887†	1011461.6	5736.61	0.57%	[50000]	ug/L
Cd 214.440†	350394.0	477.15	0.14%	[1000]	ug/L
Co 228.616†	126691.4	275.05	0.22%	[1000]	ug/L
Cr 267.716†	105910.8	101.54	0.10%	[1000]	ug/L
Cu 327.393†	221192.9	528.03	0.24%	[1000]	ug/L
Fe 273.955†	2010692.2	2288.70	0.11%	[20000]	ug/L
K 766.490†	131498.6	552.80	0.42%	[20000]	ug/L
Mg 285.213†	1082993.5	6873.26	0.63%	[50000]	ug/L
Mn 257.610†	110285.7	502.28	0.46%	[1000]	ug/L
Mo 202.031†	41368.9	218.21	0.53%	[1000]	ug/L
Na 589.592†	85100.3	437.54	0.51%	[25000]	ug/L
Ni 231.604†	62753.6	336.61	0.54%	[1000]	ug/L
P 213.617†	22282.3	137.52	0.62%	[5000]	ug/L
Pb 220.353†	10385.7	61.13	0.59%	[1000]	ug/L
Sb 206.836†	10436.8	52.33	0.50%	[1000]	ug/L
Se 196.026†	3550.0	48.04	1.35%	[1000]	ug/L
Sn 189.927†	6884.9	36.91	0.54%	[1000]	ug/L
Sr 421.552†	110057.0	822.28	0.75%	[1000]	ug/L
Ti 337.279†	49565.5	238.19	0.48%	[1000]	ug/L
Tl 190.801†	9483.2	85.54	0.90%	[1000]	ug/L
V 292.402†	141534.9	263.91	0.19%	[1000]	ug/L
Zn 206.200†	110402.8	208.78	0.19%	[1000]	ug/L
Li 670.784	9103140.7	34304.68	0.38%	[500]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	206.2	0.00000	0.999904	
Al 308.215	3	Lin Thru 0	0.0	1.679	0.00000	0.999853	
As 188.979	3	Lin Thru 0	0.0	6.907	0.00000	0.999856	
B 249.677	3	Lin Thru 0	0.0	45.93	0.00000	0.999967	
Ba 233.527	3	Lin Thru 0	0.0	514.7	0.00000	0.999916	
Be 313.107	3	Lin Thru 0	0.0	4758	0.00000	0.999937	
Ca 315.887	3	Lin Thru 0	0.0	20.13	0.00000	0.999923	
Cd 214.440	3	Lin Thru 0	0.0	349.6	0.00000	0.999933	
Co 228.616	3	Lin Thru 0	0.0	127.6	0.00000	0.999861	
Cr 267.716	3	Lin Thru 0	0.0	106.4	0.00000	0.999910	
Cu 327.393	3	Lin Thru 0	0.0	219.9	0.00000	0.999900	
Fe 273.955	3	Lin Thru 0	0.0	100.2	0.00000	0.999949	
K 766.490	3	Lin Thru 0	0.0	6.516	0.00000	0.999821	
Mg 285.213	3	Lin Thru 0	0.0	21.59	0.00000	0.999946	
Mn 257.610	3	Lin Thru 0	0.0	109.6	0.00000	0.999878	
Mo 202.031	3	Lin Thru 0	0.0	41.06	0.00000	0.999844	
Na 589.592	3	Lin Thru 0	0.0	3.391	0.00000	0.999956	
Ni 231.604	3	Lin Thru 0	0.0	62.44	0.00000	0.999900	
P 213.617	3	Lin Thru 0	0.0	4.422	0.00000	0.999851	
Pb 220.353	3	Lin Thru 0	0.0	10.36	0.00000	0.999951	
Sb 206.836	3	Lin Thru 0	0.0	10.38	0.00000	0.999903	
Se 196.026	3	Lin Thru 0	0.0	3.524	0.00000	0.999858	

Sn 189.927	3	Lin Thru 0	0.0	6.853	0.00000	0.999929
Sr 421.552	3	Lin Thru 0	0.0	109.9	0.00000	0.999956
Ti 337.279	3	Lin Thru 0	0.0	49.30	0.00000	0.999913
Tl 190.801	3	Lin Thru 0	0.0	9.478	0.00000	0.999958
V 292.402	3	Lin Thru 0	0.0	140.8	0.00000	0.999891
Zn 206.200	3	Lin Thru 0	0.0	111.2	0.00000	0.999874
Li 670.784	3	Lin Thru 0	0.0	17940	0.00000	0.999555

Sequence No.: 5
Sample ID: ICV 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/04/15 4:00:54 PM
Data Type: Reprocessed on 06/11/15 4:12:17 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	260618.0	94.60	%	1.833				1.94%
Y Radial	18352.4	97.88	%	0.584				0.60%
Ag 338.289†	49833.7	241.6	ug/L	5.00	241.6	ug/L	5.00	2.07%
QC value within limits for Ag 338.289 Recovery = 96.66%								
Al 308.215†	19501.0	11640	ug/L	31.03	11640	ug/L	31.03	0.27%
QC value within limits for Al 308.215 Recovery = 93.13%								
As 188.979†	3155.8	453.8	ug/L	9.51	453.8	ug/L	9.51	2.10%
QC value within limits for As 188.979 Recovery = 90.77%								
B 249.677†	21176.3	501.7	ug/L	10.19	501.7	ug/L	10.19	2.03%
QC value within limits for B 249.677 Recovery = 100.33%								
Ba 233.527†	251148.5	487.6	ug/L	9.41	487.6	ug/L	9.41	1.93%
QC value within limits for Ba 233.527 Recovery = 97.51%								
Be 313.107†	2301385.4	483.6	ug/L	9.39	483.6	ug/L	9.39	1.94%
QC value within limits for Be 313.107 Recovery = 96.73%								
Ca 315.887†	250408.0	12430	ug/L	42.41	12430	ug/L	42.41	0.34%
QC value within limits for Ca 315.887 Recovery = 99.46%								
Cd 214.440†	172982.8	494.9	ug/L	9.52	494.9	ug/L	9.52	1.92%
QC value within limits for Cd 214.440 Recovery = 98.98%								
Co 228.616†	62148.5	487.0	ug/L	9.25	487.0	ug/L	9.25	1.90%
QC value within limits for Co 228.616 Recovery = 97.41%								
Cr 267.716†	50805.4	477.5	ug/L	9.60	477.5	ug/L	9.60	2.01%
QC value within limits for Cr 267.716 Recovery = 95.51%								
Cu 327.393†	106280.8	484.9	ug/L	9.19	484.9	ug/L	9.19	1.89%
QC value within limits for Cu 327.393 Recovery = 96.97%								
Fe 273.955†	1213071.1	12060	ug/L	236.23	12060	ug/L	236.23	1.96%
QC value within limits for Fe 273.955 Recovery = 96.50%								
K 766.490†	75476.9	11560	ug/L	29.01	11560	ug/L	29.01	0.25%
QC value within limits for K 766.490 Recovery = 92.47%								
Mg 285.213†	264691.6	12270	ug/L	38.50	12270	ug/L	38.50	0.31%
QC value within limits for Mg 285.213 Recovery = 98.16%								
Mn 257.610†	51604.1	471.2	ug/L	2.42	471.2	ug/L	2.42	0.51%
QC value within limits for Mn 257.610 Recovery = 94.24%								
Mo 202.031†	19678.0	479.8	ug/L	9.87	479.8	ug/L	9.87	2.06%
QC value within limits for Mo 202.031 Recovery = 95.97%								
Na 589.592†	39284.7	11570	ug/L	76.10	11570	ug/L	76.10	0.66%
QC value within limits for Na 589.592 Recovery = 92.56%								
Ni 231.604†	31277.7	500.0	ug/L	10.13	500.0	ug/L	10.13	2.03%
QC value within limits for Ni 231.604 Recovery = 100.00%								
P 213.617†	10141.8	2293	ug/L	52.61	2293	ug/L	52.61	2.29%
QC value within limits for P 213.617 Recovery = 91.74%								
Pb 220.353†	5128.7	496.9	ug/L	9.53	496.9	ug/L	9.53	1.92%
QC value within limits for Pb 220.353 Recovery = 99.39%								
Sb 206.836†	4951.7	477.1	ug/L	10.75	477.1	ug/L	10.75	2.25%
QC value within limits for Sb 206.836 Recovery = 95.42%								
Se 196.026†	1682.5	481.1	ug/L	10.91	481.1	ug/L	10.91	2.27%
QC value within limits for Se 196.026 Recovery = 96.22%								
Sn 189.927†	1727.6	252.1	ug/L	6.77	252.1	ug/L	6.77	2.69%
QC value within limits for Sn 189.927 Recovery = 100.84%								
Sr 421.552†	51764.1	470.5	ug/L	1.57	470.5	ug/L	1.57	0.33%
QC value within limits for Sr 421.552 Recovery = 94.09%								
Ti 337.279†	23013.1	466.6	ug/L	2.55	466.6	ug/L	2.55	0.55%
QC value within limits for Ti 337.279 Recovery = 93.32%								
Tl 190.801†	4741.0	500.2	ug/L	10.52	500.2	ug/L	10.52	2.10%
QC value within limits for Tl 190.801 Recovery = 100.05%								
V 292.402†	68087.1	483.6	ug/L	9.29	483.6	ug/L	9.29	1.92%
QC value within limits for V 292.402 Recovery = 96.73%								
Zn 206.200†	54391.8	494.9	ug/L	9.48	494.9	ug/L	9.48	1.91%
QC value within limits for Zn 206.200 Recovery = 98.99%								

Li 670.784	4517840.3	251.8 ug/L	0.91	251.8 ug/L	0.91	0.36%

QC value within limits for Li 670.784 Recovery = 100.74%
All analyte(s) passed QC.

Sequence No.: 6
Sample ID: ICB 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/04/15 4:14:41 PM
Data Type: Reprocessed on 06/11/15 4:12:18 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	270761.7	98.28	%	0.127				0.13%
Y Radial	18417.6	98.22	%	0.484				0.49%
Ag 338.289†	59.0	0.286	ug/L	0.2225	0.286	ug/L	0.2225	77.80%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-9.0	-5.368	ug/L	2.2512	-5.368	ug/L	2.2512	41.94%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	5.0	0.716	ug/L	0.4739	0.716	ug/L	0.4739	66.23%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	102.9	2.227	ug/L	0.1094	2.227	ug/L	0.1094	4.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.1	0.020	ug/L	0.0201	0.020	ug/L	0.0201	102.19%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	42.1	0.009	ug/L	0.0033	0.009	ug/L	0.0033	37.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	53.7	2.668	ug/L	1.0089	2.668	ug/L	1.0089	37.82%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-30.7	-0.088	ug/L	0.0538	-0.088	ug/L	0.0538	61.42%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	6.9	0.055	ug/L	0.0319	0.055	ug/L	0.0319	58.23%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.1	-0.029	ug/L	0.0236	-0.029	ug/L	0.0236	81.89%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-367.4	-1.671	ug/L	0.0678	-1.671	ug/L	0.0678	4.05%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-423.2	-4.218	ug/L	0.0402	-4.218	ug/L	0.0402	0.95%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-69.3	-10.61	ug/L	17.664	-10.61	ug/L	17.664	166.48%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	19.6	0.903	ug/L	0.3876	0.903	ug/L	0.3876	42.92%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	8.1	0.074	ug/L	0.0705	0.074	ug/L	0.0705	95.25%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.0	0.366	ug/L	0.2262	0.366	ug/L	0.2262	61.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-101.7	-29.98	ug/L	5.211	-29.98	ug/L	5.211	17.38%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	7.6	0.121	ug/L	0.1840	0.121	ug/L	0.1840	152.27%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-7.8	-1.769	ug/L	0.5459	-1.769	ug/L	0.5459	30.86%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-3.8	-0.365	ug/L	0.3841	-0.365	ug/L	0.3841	105.33%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-11.6	-1.118	ug/L	0.4100	-1.118	ug/L	0.4100	36.67%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.4	-0.674	ug/L	0.2509	-0.674	ug/L	0.2509	37.24%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	15.6	2.283	ug/L	0.6444	2.283	ug/L	0.6444	28.22%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	0.4	0.004	ug/L	0.1129	0.004	ug/L	0.1129	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	9.1	0.185	ug/L	0.2052	0.185	ug/L	0.2052	110.77%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	5.7	0.605	ug/L	0.2712	0.605	ug/L	0.2712	44.84%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-4.4	-0.032	ug/L	0.0216	-0.032	ug/L	0.0216	68.60%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-86.3	-0.777	ug/L	0.1308	-0.777	ug/L	0.1308	16.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	7450.6	0.415 ug/L	0.0071	0.415 ug/L	0.0071	1.70%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 7
Sample ID: LLICV 150604RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 06/04/15 4:21:00 PM
Data Type: Reprocessed on 06/11/15 4:12:19 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: LLICV 150604RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	275567.8	100.0	%	0.37				0.37%
Y Radial	19114.6	101.9	%	4.91				4.82%
Ag 338.289†	1056.5	5.123	ug/L	0.2335	5.123	ug/L	0.2335	4.56%
QC value greater than the upper limit for Ag 338.289 Recovery = 1024.61%								
Al 308.215†	357.0	213.2	ug/L	10.23	213.2	ug/L	10.23	4.80%
QC value greater than the upper limit for Al 308.215 Recovery = 426.44%								
As 188.979†	75.8	10.88	ug/L	0.581	10.88	ug/L	0.581	5.34%
QC value greater than the upper limit for As 188.979 Recovery = 543.77%								
B 249.677†	1598.7	35.48	ug/L	0.204	35.48	ug/L	0.204	0.57%
QC value greater than the upper limit for B 249.677 Recovery = 141.92%								
Ba 233.527†	6278.0	12.19	ug/L	0.099	12.19	ug/L	0.099	0.81%
QC value greater than the upper limit for Ba 233.527 Recovery = 812.86%								
Be 313.107†	46235.4	9.717	ug/L	0.0228	9.717	ug/L	0.0228	0.23%
QC value greater than the upper limit for Be 313.107 Recovery = 971.66%								
Ca 315.887†	10231.9	508.0	ug/L	21.30	508.0	ug/L	21.30	4.19%
QC value greater than the upper limit for Ca 315.887 Recovery = 1016.04%								
Cd 214.440†	4213.6	12.06	ug/L	0.110	12.06	ug/L	0.110	0.91%
QC value greater than the upper limit for Cd 214.440 Recovery = 4825.60%								
Co 228.616†	1579.2	12.37	ug/L	0.079	12.37	ug/L	0.079	0.64%
QC value greater than the upper limit for Co 228.616 Recovery = 494.99%								
Cr 267.716†	1262.2	11.86	ug/L	0.051	11.86	ug/L	0.051	0.43%
QC value greater than the upper limit for Cr 267.716 Recovery = 2372.86%								
Cu 327.393†	2031.4	9.267	ug/L	0.1665	9.267	ug/L	0.1665	1.80%
QC value greater than the upper limit for Cu 327.393 Recovery = 370.66%								
Fe 273.955†	20580.0	204.3	ug/L	0.42	204.3	ug/L	0.42	0.21%
QC value greater than the upper limit for Fe 273.955 Recovery = 817.32%								
K 766.490†	4068.5	623.5	ug/L	30.70	623.5	ug/L	30.70	4.92%
QC value greater than the upper limit for K 766.490 Recovery = 124.70%								
Mg 285.213†	10516.0	487.2	ug/L	22.67	487.2	ug/L	22.67	4.65%
QC value greater than the upper limit for Mg 285.213 Recovery = 1948.88%								
Mn 257.610†	1239.4	11.30	ug/L	0.549	11.30	ug/L	0.549	4.85%
QC value greater than the upper limit for Mn 257.610 Recovery = 1130.46%								
Mo 202.031†	460.7	11.23	ug/L	0.128	11.23	ug/L	0.128	1.14%
QC value greater than the upper limit for Mo 202.031 Recovery = 224.65%								
Na 589.592†	2146.2	632.2	ug/L	32.51	632.2	ug/L	32.51	5.14%
QC value greater than the upper limit for Na 589.592 Recovery = 126.44%								
Ni 231.604†	756.2	12.09	ug/L	0.118	12.09	ug/L	0.118	0.98%
QC value greater than the upper limit for Ni 231.604 Recovery = 1208.61%								
P 213.617†	227.4	51.41	ug/L	0.750	51.41	ug/L	0.750	1.46%
QC value greater than the upper limit for P 213.617 Recovery = 205.65%								
Pb 220.353†	110.3	10.70	ug/L	0.587	10.70	ug/L	0.587	5.49%
QC value greater than the upper limit for Pb 220.353 Recovery = 713.58%								
Sb 206.836†	109.6	10.56	ug/L	0.873	10.56	ug/L	0.873	8.27%
QC value greater than the upper limit for Sb 206.836 Recovery = 528.05%								
Se 196.026†	39.5	11.26	ug/L	0.956	11.26	ug/L	0.956	8.49%
QC value greater than the upper limit for Se 196.026 Recovery = 563.07%								
Sn 189.927†	84.9	12.39	ug/L	0.335	12.39	ug/L	0.335	2.71%
QC value greater than the upper limit for Sn 189.927 Recovery = 412.87%								
Sr 421.552†	1228.5	11.16	ug/L	0.689	11.16	ug/L	0.689	6.18%
QC value greater than the upper limit for Sr 421.552 Recovery = 1115.75%								
Ti 337.279†	559.9	11.35	ug/L	0.467	11.35	ug/L	0.467	4.12%
QC value greater than the upper limit for Ti 337.279 Recovery = 226.94%								
Tl 190.801†	116.4	12.28	ug/L	0.352	12.28	ug/L	0.352	2.87%
QC value greater than the upper limit for Tl 190.801 Recovery = 306.97%								
V 292.402†	1661.3	11.80	ug/L	0.056	11.80	ug/L	0.056	0.47%
QC value greater than the upper limit for V 292.402 Recovery = 2360.13%								
Zn 206.200†	2053.4	18.64	ug/L	0.074	18.64	ug/L	0.074	0.39%
QC value less than the lower limit for Zn 206.200 Recovery = 74.55%								

Li 670.784 65422.0 3.647 ug/L 0.0106 3.647 ug/L 0.0106 0.29%
QC value less than the lower limit for Li 670.784 Recovery = 72.94%
QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICSA 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 6
Date Collected: 06/04/15 4:27:21 PM
Data Type: Reprocessed on 06/11/15 4:12:20 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	255225.8	92.64	%	0.684				0.74%
Y Radial	18032.8	96.17	%	0.555				0.58%
Ag 338.289†	-56.0	-0.272	ug/L	0.1208	-0.272	ug/L	0.1208	44.43%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	155907.0	92880	ug/L	328.56	92880	ug/L	328.56	0.35%
QC value within limits for Al 308.215 Recovery = 92.88%								
As 188.979†	2.0	0.510	ug/L	1.4526	0.510	ug/L	1.4526	284.94%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-14231.2	6.758	ug/L	0.6564	6.758	ug/L	0.6564	9.71%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2338.8	-0.645	ug/L	0.0178	-0.645	ug/L	0.0178	2.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	111.0	0.023	ug/L	0.0007	0.023	ug/L	0.0007	2.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1954840.7	97090	ug/L	320.54	97090	ug/L	320.54	0.33%
QC value within limits for Ca 315.887 Recovery = 97.09%								
Cd 214.440†	764.0	-1.439	ug/L	0.0465	-1.439	ug/L	0.0465	3.23%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	166.8	-1.390	ug/L	0.0438	-1.390	ug/L	0.0438	3.15%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	58.8	-0.291	ug/L	0.1427	-0.291	ug/L	0.1427	49.07%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-985.0	0.101	ug/L	0.0181	0.101	ug/L	0.0181	17.83%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	9216497.4	91930	ug/L	153.45	91930	ug/L	153.45	0.17%
QC value within limits for Fe 273.955 Recovery = 91.93%								
K 766.490†	147.1	-67.48	ug/L	18.012	-67.48	ug/L	18.012	26.69%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	2017252.4	93510	ug/L	219.45	93510	ug/L	219.45	0.23%
QC value within limits for Mg 285.213 Recovery = 93.51%								
Mn 257.610†	147.8	2.924	ug/L	0.1346	2.924	ug/L	0.1346	4.60%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-60.2	-0.140	ug/L	0.3650	-0.140	ug/L	0.3650	259.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-51.8	-26.63	ug/L	11.297	-26.63	ug/L	11.297	42.42%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-88.1	0.862	ug/L	0.1101	0.862	ug/L	0.1101	12.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-130.6	-29.54	ug/L	1.877	-29.54	ug/L	1.877	6.35%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-45.5	-0.983	ug/L	0.9603	-0.983	ug/L	0.9603	97.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-24.1	-2.318	ug/L	0.5780	-2.318	ug/L	0.5780	24.94%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-136.1	-2.488	ug/L	1.9591	-2.488	ug/L	1.9591	78.74%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	21.2	3.092	ug/L	0.3198	3.092	ug/L	0.3198	10.35%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	30.2	-3.523	ug/L	0.0853	-3.523	ug/L	0.0853	2.42%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	64.8	-0.298	ug/L	0.6224	-0.298	ug/L	0.6224	208.88%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-36.1	-3.811	ug/L	1.0703	-3.811	ug/L	1.0703	28.08%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	197.1	1.400	ug/L	0.0671	1.400	ug/L	0.0671	4.79%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-221.3	-2.622	ug/L	0.0970	-2.622	ug/L	0.0970	3.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	6248.6	0.348 ug/L	0.0079	0.348 ug/L	0.0079	2.26%

All analyte(s) passed QC.

Li 670.784	3529.9	0.197 ug/L	0.0083	0.197 ug/L	0.0083	4.22%

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSAB 150604RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 7
Date Collected: 06/04/15 4:39:23 PM
Data Type: Reprocessed on 06/11/15 4:12:22 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150604RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	254110.9	92.24	%	1.584				1.72%
Y Radial	19411.1	103.5	%	14.54				14.05%
Ag 338.289†	100655.9	488.1	ug/L	7.31	488.1	ug/L	7.31	1.50%
QC value within limits for Ag 338.289 Recovery = 97.62%								
Al 308.215†	151098.9	90030	ug/L	12309.95	90030	ug/L	12309.95	13.67%
QC value within limits for Al 308.215 Recovery = 90.03%								
As 188.979†	1384.9	199.7	ug/L	2.04	199.7	ug/L	2.04	1.02%
QC value less than the lower limit for As 188.979 Recovery = 79.88%								
B 249.677†	-14282.8	7.337	ug/L	2.0950	7.337	ug/L	2.0950	28.55%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	123186.0	234.3	ug/L	3.59	234.3	ug/L	3.59	1.53%
QC value within limits for Ba 233.527 Recovery = 93.71%								
Be 313.107†	1078122.2	226.6	ug/L	3.51	226.6	ug/L	3.51	1.55%
QC value within limits for Be 313.107 Recovery = 90.63%								
Ca 315.887†	1877432.1	93240	ug/L	12728.86	93240	ug/L	12728.86	13.65%
QC value within limits for Ca 315.887 Recovery = 93.24%								
Cd 214.440†	161267.4	457.8	ug/L	7.54	457.8	ug/L	7.54	1.65%
QC value within limits for Cd 214.440 Recovery = 91.56%								
Co 228.616†	30314.7	235.5	ug/L	3.82	235.5	ug/L	3.82	1.62%
QC value within limits for Co 228.616 Recovery = 94.20%								
Cr 267.716†	25770.2	241.5	ug/L	4.11	241.5	ug/L	4.11	1.70%
QC value within limits for Cr 267.716 Recovery = 96.60%								
Cu 327.393†	52156.1	241.7	ug/L	3.76	241.7	ug/L	3.76	1.56%
QC value within limits for Cu 327.393 Recovery = 96.69%								
Fe 273.955†	9274680.8	92500	ug/L	1324.36	92500	ug/L	1324.36	1.43%
QC value within limits for Fe 273.955 Recovery = 92.50%								
K 766.490†	187.7	-61.86	ug/L	27.012	-61.86	ug/L	27.012	43.67%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1929973.9	89470	ug/L	12143.39	89470	ug/L	12143.39	13.57%
QC value within limits for Mg 285.213 Recovery = 89.47%								
Mn 257.610†	24343.0	223.9	ug/L	31.94	223.9	ug/L	31.94	14.26%
QC value within limits for Mn 257.610 Recovery = 89.58%								
Mo 202.031†	9302.6	228.1	ug/L	3.15	228.1	ug/L	3.15	1.38%
QC value within limits for Mo 202.031 Recovery = 91.25%								
Na 589.592†	-53.4	-27.70	ug/L	19.821	-27.70	ug/L	19.821	71.56%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	28688.5	461.2	ug/L	8.04	461.2	ug/L	8.04	1.74%
QC value within limits for Ni 231.604 Recovery = 92.24%								
P 213.617†	-74.3	-16.81	ug/L	1.125	-16.81	ug/L	1.125	6.69%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	4749.2	461.7	ug/L	8.87	461.7	ug/L	8.87	1.92%
QC value within limits for Pb 220.353 Recovery = 92.35%								
Sb 206.836†	2252.5	217.0	ug/L	3.23	217.0	ug/L	3.23	1.49%
QC value within limits for Sb 206.836 Recovery = 86.81%								
Se 196.026†	707.9	236.6	ug/L	6.34	236.6	ug/L	6.34	2.68%
QC value within limits for Se 196.026 Recovery = 94.66%								
Sn 189.927†	17.1	2.494	ug/L	0.9171	2.494	ug/L	0.9171	36.77%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	31.6	-3.364	ug/L	0.5448	-3.364	ug/L	0.5448	16.20%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	75.2	0.018	ug/L	0.3969	0.018	ug/L	0.3969	>999.9%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2135.1	225.3	ug/L	3.26	225.3	ug/L	3.26	1.45%
QC value within limits for Tl 190.801 Recovery = 90.11%								
V 292.402†	33340.3	236.8	ug/L	3.77	236.8	ug/L	3.77	1.59%
QC value within limits for V 292.402 Recovery = 94.73%								
Zn 206.200†	50355.2	454.7	ug/L	6.82	454.7	ug/L	6.82	1.50%
QC value within limits for Zn 206.200 Recovery = 90.94%								

Sequence No.: 10
Sample ID: CCV1 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/04/15 4:49:21 PM
Data Type: Reprocessed on 06/11/15 4:12:23 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	260438.8	94.53	%	0.498				0.53%
Y Radial	18189.1	97.01	%	0.391				0.40%
Ag 338.289†	51960.2	252.0	ug/L	2.21	252.0	ug/L	2.21	0.88%
QC value within limits for Ag 338.289 Recovery = 100.78%								
Al 308.215†	16737.1	9995	ug/L	43.67	9995	ug/L	43.67	0.44%
QC value within limits for Al 308.215 Recovery = 99.95%								
As 188.979†	3403.7	488.1	ug/L	4.05	488.1	ug/L	4.05	0.83%
QC value within limits for As 188.979 Recovery = 97.63%								
B 249.677†	23228.9	539.1	ug/L	8.31	539.1	ug/L	8.31	1.54%
QC value within limits for B 249.677 Recovery = 107.82%								
Ba 233.527†	257977.2	500.9	ug/L	3.76	500.9	ug/L	3.76	0.75%
QC value within limits for Ba 233.527 Recovery = 100.19%								
Be 313.107†	2383721.1	500.9	ug/L	4.26	500.9	ug/L	4.26	0.85%
QC value within limits for Be 313.107 Recovery = 100.19%								
Ca 315.887†	503815.0	25020	ug/L	194.74	25020	ug/L	194.74	0.78%
QC value within limits for Ca 315.887 Recovery = 100.07%								
Cd 214.440†	175014.0	501.0	ug/L	3.26	501.0	ug/L	3.26	0.65%
QC value within limits for Cd 214.440 Recovery = 100.20%								
Co 228.616†	66294.5	519.5	ug/L	6.24	519.5	ug/L	6.24	1.20%
QC value within limits for Co 228.616 Recovery = 103.90%								
Cr 267.716†	54706.8	514.1	ug/L	6.44	514.1	ug/L	6.44	1.25%
QC value within limits for Cr 267.716 Recovery = 102.83%								
Cu 327.393†	109719.3	500.4	ug/L	4.69	500.4	ug/L	4.69	0.94%
QC value within limits for Cu 327.393 Recovery = 100.08%								
Fe 273.955†	1015983.8	10100	ug/L	75.70	10100	ug/L	75.70	0.75%
QC value within limits for Fe 273.955 Recovery = 100.95%								
K 766.490†	65653.1	10050	ug/L	11.07	10050	ug/L	11.07	0.11%
QC value within limits for K 766.490 Recovery = 100.49%								
Mg 285.213†	549358.6	25450	ug/L	229.97	25450	ug/L	229.97	0.90%
QC value within limits for Mg 285.213 Recovery = 101.82%								
Mn 257.610†	54992.7	501.5	ug/L	1.73	501.5	ug/L	1.73	0.35%
QC value within limits for Mn 257.610 Recovery = 100.29%								
Mo 202.031†	20267.9	494.2	ug/L	6.88	494.2	ug/L	6.88	1.39%
QC value within limits for Mo 202.031 Recovery = 98.83%								
Na 589.592†	46421.0	13680	ug/L	70.18	13680	ug/L	70.18	0.51%
QC value within limits for Na 589.592 Recovery = 109.41%								
Ni 231.604†	31098.4	497.1	ug/L	5.16	497.1	ug/L	5.16	1.04%
QC value within limits for Ni 231.604 Recovery = 99.42%								
P 213.617†	10873.1	2459	ug/L	35.01	2459	ug/L	35.01	1.42%
QC value within limits for P 213.617 Recovery = 98.35%								
Pb 220.353†	5157.7	500.3	ug/L	5.98	500.3	ug/L	5.98	1.19%
QC value within limits for Pb 220.353 Recovery = 100.05%								
Sb 206.836†	5086.6	490.1	ug/L	5.74	490.1	ug/L	5.74	1.17%
QC value within limits for Sb 206.836 Recovery = 98.02%								
Se 196.026†	1770.3	504.8	ug/L	1.13	504.8	ug/L	1.13	0.22%
QC value within limits for Se 196.026 Recovery = 100.95%								
Sn 189.927†	3432.0	500.8	ug/L	4.74	500.8	ug/L	4.74	0.95%
QC value within limits for Sn 189.927 Recovery = 100.16%								
Sr 421.552†	65424.7	594.3	ug/L	4.73	594.3	ug/L	4.73	0.80%
QC value greater than the upper limit for Sr 421.552 Recovery = 118.85%								
Ti 337.279†	24489.5	496.4	ug/L	1.83	496.4	ug/L	1.83	0.37%
QC value within limits for Ti 337.279 Recovery = 99.27%								
Tl 190.801†	4791.2	505.5	ug/L	5.24	505.5	ug/L	5.24	1.04%
QC value within limits for Tl 190.801 Recovery = 101.11%								
V 292.402†	69951.5	496.9	ug/L	4.81	496.9	ug/L	4.81	0.97%
QC value within limits for V 292.402 Recovery = 99.38%								
Zn 206.200†	55688.1	507.7	ug/L	2.41	507.7	ug/L	2.41	0.48%
QC value within limits for Zn 206.200 Recovery = 101.54%								

Li 670.784	4413618.5	246.0 ug/L	1.66	246.0 ug/L	1.66	0.67%

QC value within limits for Li 670.784 Recovery = 98.41%
QC Failed. Continue with analysis.

Sequence No.: 11
Sample ID: CCB 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/04/15 4:54:24 PM
Data Type: Reprocessed on 06/11/15 4:12:24 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	270901.9	98.33	%	0.923				0.94%
Y Radial	19365.8	103.3	%	7.07				6.84%
Ag 338.289†	88.4	0.429	ug/L	0.1129	0.429	ug/L	0.1129	26.35%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-21.2	-12.68	ug/L	4.880	-12.68	ug/L	4.880	38.48%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.8	0.552	ug/L	0.9398	0.552	ug/L	0.9398	170.32%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	146.1	3.191	ug/L	0.1768	3.191	ug/L	0.1768	5.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.9	0.015	ug/L	0.0097	0.015	ug/L	0.0097	65.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	248.7	0.052	ug/L	0.0082	0.052	ug/L	0.0082	15.74%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	103.5	5.143	ug/L	2.2947	5.143	ug/L	2.2947	44.61%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-34.5	-0.099	ug/L	0.0394	-0.099	ug/L	0.0394	39.86%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	23.9	0.189	ug/L	0.0761	0.189	ug/L	0.0761	40.21%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-6.4	-0.061	ug/L	0.0169	-0.061	ug/L	0.0169	27.99%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-445.0	-2.023	ug/L	0.2032	-2.023	ug/L	0.2032	10.05%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	262.8	2.632	ug/L	0.2542	2.632	ug/L	0.2542	9.66%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-11.3	-1.696	ug/L	16.0233	-1.696	ug/L	16.0233	944.96%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	33.2	1.542	ug/L	0.5586	1.542	ug/L	0.5586	36.22%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	2.6	0.023	ug/L	0.0589	0.023	ug/L	0.0589	252.39%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	27.4	0.667	ug/L	0.2308	0.667	ug/L	0.2308	34.60%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-111.0	-32.73	ug/L	7.772	-32.73	ug/L	7.772	23.75%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-1.5	-0.024	ug/L	0.0161	-0.024	ug/L	0.0161	67.02%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-9.6	-2.165	ug/L	0.3863	-2.165	ug/L	0.3863	17.84%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-8.0	-0.775	ug/L	0.1650	-0.775	ug/L	0.1650	21.28%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-6.0	-0.575	ug/L	0.4555	-0.575	ug/L	0.4555	79.27%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.6	-0.176	ug/L	1.6102	-0.176	ug/L	1.6102	916.73%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	20.3	2.968	ug/L	0.3662	2.968	ug/L	0.3662	12.34%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-2.0	-0.019	ug/L	0.0765	-0.019	ug/L	0.0765	409.39%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	11.9	0.241	ug/L	0.1214	0.241	ug/L	0.1214	50.44%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	8.9	0.939	ug/L	0.3772	0.939	ug/L	0.3772	40.18%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-18.1	-0.129	ug/L	0.0702	-0.129	ug/L	0.0702	54.57%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-87.3	-0.786	ug/L	0.0676	-0.786	ug/L	0.0676	8.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	7514.0	0.419 ug/L	0.0009	0.419 ug/L	0.0009	0.23%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 18
Sample ID: CCV2 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 06/04/15 5:37:00 PM
Data Type: Reprocessed on 06/11/15 4:12:31 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	265267.1	96.29	%	0.169				0.18%
Y Radial	20257.7	108.0	%	5.36				4.96%
Ag 338.289†	39185.1	190.0	ug/L	0.48	190.0	ug/L	0.48	0.25%
QC value within limits for Ag 338.289 Recovery = 101.34%								
Al 308.215†	11637.1	6951	ug/L	370.25	6951	ug/L	370.25	5.33%
QC value within limits for Al 308.215 Recovery = 92.68%								
As 188.979†	2573.7	369.3	ug/L	0.31	369.3	ug/L	0.31	0.08%
QC value within limits for As 188.979 Recovery = 98.48%								
B 249.677†	17050.5	396.5	ug/L	1.64	396.5	ug/L	1.64	0.41%
QC value within limits for B 249.677 Recovery = 105.72%								
Ba 233.527†	195215.7	379.1	ug/L	0.67	379.1	ug/L	0.67	0.18%
QC value within limits for Ba 233.527 Recovery = 101.08%								
Be 313.107†	1783466.7	374.8	ug/L	0.66	374.8	ug/L	0.66	0.18%
QC value within limits for Be 313.107 Recovery = 99.95%								
Ca 315.887†	345257.8	17140	ug/L	918.23	17140	ug/L	918.23	5.36%
QC value within limits for Ca 315.887 Recovery = 91.44%								
Cd 214.440†	130840.7	374.5	ug/L	0.58	374.5	ug/L	0.58	0.16%
QC value within limits for Cd 214.440 Recovery = 99.87%								
Co 228.616†	48138.8	377.3	ug/L	0.23	377.3	ug/L	0.23	0.06%
QC value within limits for Co 228.616 Recovery = 100.61%								
Cr 267.716†	39638.7	372.5	ug/L	0.62	372.5	ug/L	0.62	0.17%
QC value within limits for Cr 267.716 Recovery = 99.35%								
Cu 327.393†	83625.2	381.3	ug/L	0.27	381.3	ug/L	0.27	0.07%
QC value within limits for Cu 327.393 Recovery = 101.69%								
Fe 273.955†	764812.8	7600	ug/L	7.89	7600	ug/L	7.89	0.10%
QC value within limits for Fe 273.955 Recovery = 101.33%								
K 766.490†	46364.3	7095	ug/L	391.42	7095	ug/L	391.42	5.52%
QC value within limits for K 766.490 Recovery = 94.60%								
Mg 285.213†	380941.7	17650	ug/L	956.28	17650	ug/L	956.28	5.42%
QC value within limits for Mg 285.213 Recovery = 94.14%								
Mn 257.610†	38448.3	350.6	ug/L	18.84	350.6	ug/L	18.84	5.37%
QC value within limits for Mn 257.610 Recovery = 93.50%								
Mo 202.031†	15412.7	375.8	ug/L	1.12	375.8	ug/L	1.12	0.30%
QC value within limits for Mo 202.031 Recovery = 100.21%								
Na 589.592†	37975.8	11190	ug/L	651.47	11190	ug/L	651.47	5.82%
QC value greater than the upper limit for Na 589.592 Recovery = 119.35%								
Ni 231.604†	23800.3	380.5	ug/L	0.74	380.5	ug/L	0.74	0.19%
QC value within limits for Ni 231.604 Recovery = 101.46%								
P 213.617†	8260.0	1868	ug/L	1.35	1868	ug/L	1.35	0.07%
QC value within limits for P 213.617 Recovery = 99.62%								
Pb 220.353†	3930.5	381.1	ug/L	0.54	381.1	ug/L	0.54	0.14%
QC value within limits for Pb 220.353 Recovery = 101.61%								
Sb 206.836†	3909.5	376.7	ug/L	1.39	376.7	ug/L	1.39	0.37%
QC value within limits for Sb 206.836 Recovery = 100.45%								
Se 196.026†	1332.9	380.1	ug/L	2.25	380.1	ug/L	2.25	0.59%
QC value within limits for Se 196.026 Recovery = 101.36%								
Sn 189.927†	2584.8	377.2	ug/L	1.56	377.2	ug/L	1.56	0.41%
QC value within limits for Sn 189.927 Recovery = 100.58%								
Sr 421.552†	59164.9	537.6	ug/L	30.86	537.6	ug/L	30.86	5.74%
QC value greater than the upper limit for Sr 421.552 Recovery = 143.36%								
Ti 337.279†	17256.0	349.8	ug/L	18.33	349.8	ug/L	18.33	5.24%
QC value within limits for Ti 337.279 Recovery = 93.27%								
Tl 190.801†	3675.1	387.8	ug/L	1.95	387.8	ug/L	1.95	0.50%
QC value within limits for Tl 190.801 Recovery = 103.40%								
V 292.402†	52835.6	375.3	ug/L	0.64	375.3	ug/L	0.64	0.17%
QC value within limits for V 292.402 Recovery = 100.08%								
Zn 206.200†	41524.2	378.4	ug/L	0.88	378.4	ug/L	0.88	0.23%
QC value within limits for Zn 206.200 Recovery = 100.90%								

Li 670.784	3451676.2	192.4 ug/L	0.81	192.4 ug/L	0.81	0.42%

QC value within limits for Li 670.784 Recovery = 102.62%
QC Failed. Continue with analysis.

Sequence No.: 19
Sample ID: CCB 150604RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/04/15 5:57:09 PM
Data Type: Reprocessed on 06/11/15 4:12:32 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150604RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	276268.3	100.3	%	0.80				0.80%
Y Radial	19438.8	103.7	%	5.15				4.97%
Ag 338.289†	63.9	0.310	ug/L	0.4039	0.310	ug/L	0.4039	130.40%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-20.1	-12.00	ug/L	3.178	-12.00	ug/L	3.178	26.49%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.3	0.183	ug/L	0.4284	0.183	ug/L	0.4284	233.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.5	2.922	ug/L	0.4346	2.922	ug/L	0.4346	14.87%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	42.3	0.082	ug/L	0.0204	0.082	ug/L	0.0204	24.92%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	21.1	0.004	ug/L	0.0069	0.004	ug/L	0.0069	154.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	220.4	10.95	ug/L	2.315	10.95	ug/L	2.315	21.15%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-84.9	-0.243	ug/L	0.0171	-0.243	ug/L	0.0171	7.04%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	38.7	0.305	ug/L	0.0628	0.305	ug/L	0.0628	20.60%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.0	-0.047	ug/L	0.1699	-0.047	ug/L	0.1699	362.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-545.1	-2.479	ug/L	0.0997	-2.479	ug/L	0.0997	4.02%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-195.2	-1.934	ug/L	0.9117	-1.934	ug/L	0.9117	47.14%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	45.2	6.955	ug/L	14.9563	6.955	ug/L	14.9563	215.03%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	37.9	1.752	ug/L	0.3312	1.752	ug/L	0.3312	18.90%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	9.6	0.088	ug/L	0.0872	0.088	ug/L	0.0872	99.51%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	29.7	0.722	ug/L	0.1127	0.722	ug/L	0.1127	15.60%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-59.1	-17.43	ug/L	9.551	-17.43	ug/L	9.551	54.81%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	17.8	0.284	ug/L	0.0827	0.284	ug/L	0.0827	29.10%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-16.3	-3.693	ug/L	0.5168	-3.693	ug/L	0.5168	14.00%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-8.3	-0.799	ug/L	0.1532	-0.799	ug/L	0.1532	19.19%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-7.2	-0.694	ug/L	0.5079	-0.694	ug/L	0.5079	73.23%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.3	-0.937	ug/L	1.8050	-0.937	ug/L	1.8050	192.55%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	19.7	2.879	ug/L	0.1536	2.879	ug/L	0.1536	5.33%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	5.6	0.051	ug/L	0.0350	0.051	ug/L	0.0350	69.05%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	20.7	0.421	ug/L	0.1258	0.421	ug/L	0.1258	29.90%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	5.4	0.569	ug/L	0.6573	0.569	ug/L	0.6573	115.49%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-23.3	-0.166	ug/L	0.0050	-0.166	ug/L	0.0050	3.00%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-112.2	-1.009	ug/L	0.1112	-1.009	ug/L	0.1112	11.02%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	7420.0	0.414 ug/L	0.0096	0.414 ug/L	0.0096	2.33%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No: 76447 SDG: 76447
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 06/12/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:26	%R(1)	True CCV1	Found 13:57	%R(1)	True CCV2	Found 15:02	%R(1)	
Silver (Ag)	250	251.7	101	250	248.7	99.5	187.5	187.4	99.9	P
Aluminum (Al)	12500	12560	100	10000	9912	99.1	7500	7411	98.8	P
Arsenic (As)	500	452.2	90.4	500	494.1	98.8	375	366.6	97.8	P
Boron (B)	500	526.1	105	500	514	103	375	393.7	105	P
Barium (Ba)	500	502.4	100	500	498.5	99.7	375	374.7	99.9	P
Beryllium (Be)	500	497.7	99.5	500	496	99.2	375	368.7	98.3	P
Calcium (Ca)	12500	13090	105	25000	25280	101	18750	18550	98.9	P
Cadmium (Cd)	500	508.5	102	500	501.8	100	375	378.3	101	P
Cobalt (Co)	500	505.2	101	500	500.7	100	375	396.2	106	P
Chromium (Cr)	500	508.6	102	500	499.5	99.9	375	372	99.2	P
Copper (Cu)	500	510	102	500	496.9	99.4	375	373	99.5	P
Iron (Fe)	12500	12570	101	10000	10020	100	7500	7545	101	P
Potassium (K)	12500	12500	100	10000	9976	99.8	7500	7425	99.0	P
Lithium (Li)	250	270	108	250	239.5	95.8	187.5	177.8	94.8	P
Magnesium (Mg)	12500	12830	103	25000	25490	102	18750	18690	99.7	P
Manganese (Mn)	500	507.1	101	500	501.2	100	375	378.7	101	P
Sodium (Na)	12500	12780	102	12500	13040	104	9375	9903	106	P
Nickel (Ni)	500	519	104	500	504.5	101	375	377.9	101	P
Lead (Pb)	500	522.4	104	500	499	99.8	375	368	98.1	P
Antimony (Sb)	500	513.4	103	500	493.8	98.8	375	364.8	97.3	P
Selenium (Se)	500	516.3	103	500	503.1	101	375	374.3	99.8	P
Thallium (Tl)	500	517	103	500	493.3	98.7	375	357.8	95.4	P
Vanadium (V)	500	497.5	99.5	500	491.5	98.3	375	366.4	97.7	P
Zinc (Zn)	500	521.6	104	500	507.3	101	375	396.2	106	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No: 76447 SDG: 76447
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 06/12/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:26	%R(1)	True CCV2	Found 18:09	%R(1)	True CCV1	Found 18:42	%R(1)	
Silver (Ag)	250	251.7	101	187.5	187.5	100	250	253	101	P
Aluminum (Al)	12500	12560	100	7500	7483	99.8	10000	10180	102	P
Arsenic (As)	500	452.2	90.4	375	368	98.1	500	513.5	103	P
Boron (B)	500	526.1	105	375	396.6	106	500	521.3	104	P
Barium (Ba)	500	502.4	100	375	376	100	500	517	103	P
Beryllium (Be)	500	497.7	99.5	375	372.3	99.3	500	516	103	P
Calcium (Ca)	12500	13090	105	18750	18600	99.2	25000	26410	106	P
Cadmium (Cd)	500	508.5	102	375	377.9	101	500	526.2	105	P
Cobalt (Co)	500	505.2	101	375	396.1	106	500	521.2	104	P
Chromium (Cr)	500	508.6	102	375	370.5	98.8	500	486.7	97.3	P
Copper (Cu)	500	510	102	375	372	99.2	500	508.8	102	P
Iron (Fe)	12500	12570	101	7500	7548	101	10000	10430	104	P
Potassium (K)	12500	12500	100	7500	7323	97.6	10000	10020	100	P
Lithium (Li)	250	270	108	187.5	172.3	91.9	250	258.8	104	P
Magnesium (Mg)	12500	12830	103	18750	18770	100	25000	25980	104	P
Manganese (Mn)	500	507.1	101	375	377.7	101	500	515.7	103	P
Sodium (Na)	12500	12780	102	9375	9176	97.9	12500	12490	99.9	P
Nickel (Ni)	500	519	104	375	377	101	500	525.9	105	P
Lead (Pb)	500	522.4	104	375	378.7	101	500	539.9	108	P
Antimony (Sb)	500	513.4	103	375	376.8	100	500	534.9	107	P
Selenium (Se)	500	516.3	103	375	373.6	99.6	500	523.3	105	P
Thallium (Tl)	500	517	103	375	379.2	101	500	533.2	107	P
Vanadium (V)	500	497.5	99.5	375	373.2	99.5	500	508.7	102	P
Zinc (Zn)	500	521.6	104	375	391.3	104	500	536.1	107	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

Analysis Date: 06/12/15

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
	13:37		14:08		15:08		18:15		14:26		
Silver (Ag)	15.00	U	15.00	U	15.00	U	15.00	U	1.50	U	P
Aluminum (Al)	500.00	U	500.00	U	500.00	U	500.00	U	50.00	U	P
Arsenic (As)	25.00	U	25.00	U	25.00	U	25.00	U	2.50	U	P
Boron (B)	50.00	U	50.00	U	50.00	U	50.00	U	5.00	U	P
Barium (Ba)	20.00	U	20.00	U	20.00	U	20.00	U	2.00	U	P
Beryllium (Be)	5.00	U	5.00	U	5.00	U	5.00	U	.50	U	P
Calcium (Ca)	1000.00	U	1000.00	U	1000.00	U	1000.00	U	100.00	U	P
Cadmium (Cd)	5.00	U	5.00	U	5.00	U	5.00	U	.50	U	P
Cobalt (Co)	10.00	U	10.00	U	10.00	U	10.00	U	1.00	U	P
Chromium (Cr)	35.00	U	35.00	U	35.00	U	35.00	U	3.50	U	P
Copper (Cu)	50.00	U	2.90	J	2.49	J	50.00	U	5.00	U	P
Iron (Fe)	800.00	U	800.00	U	800.00	U	800.00	U	80.00	U	P
Potassium (K)	3000.00	U	3000.00	U	3000.00	U	3000.00	U	300.00	U	P
Lithium (Li)	6.70	U	6.70	U	6.70	U	6.70	U	.67	U	P
Magnesium (Mg)	300.00	U	300.00	U	300.00	U	300.00	U	30.00	U	P
Manganese (Mn)	45.00	U	45.00	U	45.00	U	45.00	U	4.50	U	P
Sodium (Na)	5000.00	U	5000.00	U	5000.00	U	5000.00	U	500.00	U	P
Nickel (Ni)	40.00	U	40.00	U	40.00	U	40.00	U	4.00	U	P
Lead (Pb)	9.00	U	9.00	U	9.00	U	9.00	U	.90	U	P
Antimony (Sb)	20.00	U	20.00	U	20.00	U	20.00	U	2.00	U	P
Selenium (Se)	30.00	U	30.00	U	30.00	U	30.00	U	3.00	U	P
Thallium (Tl)	30.00	U	30.00	U	30.00	U	30.00	U	3.00	U	P
Vanadium (V)	20.00	U	20.00	U	20.00	U	20.00	U	2.00	U	P
Zinc (Zn)	80.00	U	80.00	U	80.00	U	80.00	U	8.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

Analysis Date: 06/12/15

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
	13:37		18:52						14:26		
Silver (Ag)	15.00	U	15.00	U					1.50	U	P
Aluminum (Al)	500.00	U	500.00	U					50.00	U	P
Arsenic (As)	25.00	U	25.00	U					2.50	U	P
Boron (B)	50.00	U	50.00	U					5.00	U	P
Barium (Ba)	20.00	U	20.00	U					2.00	U	P
Beryllium (Be)	5.00	U	5.00	U					.50	U	P
Calcium (Ca)	1000.00	U	1000.00	U					100.00	U	P
Cadmium (Cd)	5.00	U	5.00	U					.50	U	P
Cobalt (Co)	10.00	U	10.00	U					1.00	U	P
Chromium (Cr)	35.00	U	35.00	U					3.50	U	P
Copper (Cu)	50.00	U	2.77	J					5.00	U	P
Iron (Fe)	800.00	U	36.90	J					80.00	U	P
Potassium (K)	3000.00	U	3000.00	U					300.00	U	P
Lithium (Li)	6.70	U	6.70	U					.67	U	P
Magnesium (Mg)	300.00	U	300.00	U					30.00	U	P
Manganese (Mn)	45.00	U	45.00	U					4.50	U	P
Sodium (Na)	5000.00	U	5000.00	U					500.00	U	P
Nickel (Ni)	40.00	U	40.00	U					4.00	U	P
Lead (Pb)	9.00	U	9.00	U					.90	U	P
Antimony (Sb)	20.00	U	20.00	U					2.00	U	P
Selenium (Se)	30.00	U	30.00	U					3.00	U	P
Thallium (Tl)	30.00	U	30.00	U					3.00	U	P
Vanadium (V)	20.00	U	20.00	U					2.00	U	P
Zinc (Zn)	80.00	U	80.00	U					8.00	U	P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76447 SDG: 76447
ICP ID Number: Jules ICS Source: Environmental Express

Analysis Date: 06/12/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 13:43	Sol AB 13:50	%R(1)
Silver (Ag)		500	0.444	510.4	102
Aluminum (Al)	100000	100000	100300	99840	99.8
Arsenic (As)		250	4.187	226.6	90.6
Boron (B)			-14.65	-15.98	
Barium (Ba)		250	-1.139	245.7	98.3
Beryllium (Be)		250	0.085	241.1	96.4
Calcium (Ca)	100000	100000	103800	103400	103
Cadmium (Cd)		500	-0.289	487.8	97.6
Cobalt (Co)		250	-1.494	249.1	99.6
Chromium (Cr)		250	0.132	242	96.8
Copper (Cu)		250	0.706	251.2	100
Iron (Fe)	100000	100000	98980	98220	98.2
Potassium (K)			-66.61	-78.19	
Lithium (Li)		0	0.8	0.68	
Magnesium (Mg)	100000	100000	100000	100400	100
Manganese (Mn)		250	-0.054	247.8	99.1
Sodium (Na)			16.24	0.906	
Nickel (Ni)		500	0.249	485	97.0
Lead (Pb)		500	-1.144	489.2	97.8
Antimony (Sb)		250	-0.536	253.5	101
Selenium (Se)		250	-3.945	239.6	95.8
Thallium (Tl)		250	-6.502	231.4	92.6
Vanadium (V)		250	0.424	260.2	104
Zinc (Zn)		500	0.999	485.9	97.2

(1) Control Limits: Metals 80-120

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150612A6010
Results Library (original): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 1
Sample ID: CalBlk 150612RJS I:JL O:R Date Collected: 06/12/15 12:56:41 PM
Analyst: Data Type: Reprocessed on 06/15/15 10:35:40 AM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:
Wash Time:

Mean Data: CalBlk 150612RJS I:JL O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	203189.8	528.51	0.26%	100.0	%
Y Radial	13119.9	152.02	1.16%	100.0	%
Ag 338.289†	-58.7	52.66	89.65%	[0.00]	ug/L
Al 308.215†	71.0	5.32	7.49%	[0.00]	ug/L
As 188.979†	-76.5	4.42	5.78%	[0.00]	ug/L
B 249.677†	49.2	9.52	19.36%	[0.00]	ug/L
Ba 233.527†	-54.1	6.40	11.84%	[0.00]	ug/L
Be 313.107†	2142.9	12.43	0.58%	[0.00]	ug/L
Ca 315.887†	-306.4	16.52	5.39%	[0.00]	ug/L
Cd 214.440†	-389.3	13.59	3.49%	[0.00]	ug/L
Co 228.616†	-225.7	1.70	0.75%	[0.00]	ug/L
Cr 267.716†	27.6	9.11	33.04%	[0.00]	ug/L
Cu 327.393†	-1695.6	55.62	3.28%	[0.00]	ug/L
Fe 273.955†	-25.0	4.12	16.51%	[0.00]	ug/L
K 766.490†	-793.3	122.41	15.43%	[0.00]	ug/L
Mg 285.213†	82.5	16.38	19.86%	[0.00]	ug/L
Mn 257.610†	-67.5	5.40	8.01%	[0.00]	ug/L
Mo 202.031†	-76.5	3.57	4.67%	[0.00]	ug/L
Na 589.592†	390.3	32.76	8.39%	[0.00]	ug/L
Ni 231.604†	-145.8	8.82	6.05%	[0.00]	ug/L
P 213.617†	-70.3	4.21	6.00%	[0.00]	ug/L
Pb 220.353†	25.2	5.67	22.49%	[0.00]	ug/L
Sb 206.836†	-9.4	7.34	78.01%	[0.00]	ug/L
Se 196.026†	17.2	1.37	7.97%	[0.00]	ug/L
Sn 189.927†	0.7	0.53	77.76%	[0.00]	ug/L
Sr 421.552†	-57.6	26.79	46.54%	[0.00]	ug/L
Ti 337.279†	-36.1	7.84	21.72%	[0.00]	ug/L
Tl 190.801†	-10.8	2.57	23.88%	[0.00]	ug/L
V 292.402†	-143.3	6.85	4.78%	[0.00]	ug/L
Zn 206.200†	360.2	24.31	6.75%	[0.00]	ug/L
Li 670.784	4402.2	42.58	0.97%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150612RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 06/12/15 1:02:53 PM
Data Type: Reprocessed on 06/15/15 10:35:42 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150612RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	204890.8	1033.91	0.50%	100.8	%
Y Radial	13852.4	50.05	0.36%	105.6	%
Ag 338.289†	943.9	19.23	2.04%	[0.5]	ug/L
Al 308.215†	274.5	2.69	0.98%	[50]	ug/L
As 188.979†	53.8	6.12	11.36%	[2]	ug/L
B 249.677†	1112.2	18.97	1.71%	[25]	ug/L
Ba 233.527†	4520.4	18.72	0.41%	[1.5]	ug/L
Be 313.107†	34091.0	157.69	0.46%	[1]	ug/L
Ca 315.887†	7316.1	11.53	0.16%	[50]	ug/L
Cd 214.440†	2646.1	16.52	0.62%	[0.25]	ug/L
Co 228.616†	1152.3	4.27	0.37%	[2.5]	ug/L
Cr 267.716†	800.6	7.59	0.95%	[0.5]	ug/L
Cu 327.393†	2201.8	41.05	1.86%	[2.5]	ug/L
Fe 273.955†	15428.0	61.25	0.40%	[25]	ug/L
K 766.490†	3978.3	57.45	1.44%	[500]	ug/L
Mg 285.213†	7438.0	10.16	0.14%	[25]	ug/L
Mn 257.610†	796.5	3.59	0.45%	[1]	ug/L
Mo 202.031†	337.4	3.03	0.90%	[1]	ug/L
Na 589.592†	4283.1	60.29	1.41%	[500]	ug/L
Ni 231.604†	486.6	8.37	1.72%	[1]	ug/L
P 213.617†	178.4	1.56	0.87%	[12.5]	ug/L
Pb 220.353†	65.7	5.01	7.63%	[1.5]	ug/L
Sb 206.836†	70.2	5.98	8.52%	[2]	ug/L
Se 196.026†	28.3	8.55	30.26%	[2]	ug/L
Sn 189.927†	64.0	1.97	3.08%	[3]	ug/L
Sr 421.552†	3541.9	36.02	1.02%	[1]	ug/L
Ti 337.279†	401.8	8.54	2.13%	[2.5]	ug/L
Tl 190.801†	66.8	7.25	10.84%	[2]	ug/L
V 292.402†	1022.4	8.88	0.87%	[0.5]	ug/L
Zn 206.200†	2876.2	22.01	0.77%	[25]	ug/L
Li 670.784	52749.1	275.23	0.52%	[5]	ug/L

Sequence No.: 3
Sample ID: STD 2 150612RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/12/15 1:09:07 PM
Data Type: Reprocessed on 06/15/15 10:35:43 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150612RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	194907.2	898.33	0.46%	95.92	%
Y Radial	13937.3	868.97	6.23%	106.2	%
Ag 338.289†	40195.1	144.36	0.36%	[250]	ug/L
Al 308.215†	10912.3	637.90	5.85%	[10000]	ug/L
As 188.979†	2243.3	24.96	1.11%	[500]	ug/L
B 249.677†	15089.9	90.81	0.60%	[500]	ug/L
Ba 233.527†	185331.6	600.96	0.32%	[500]	ug/L
Be 313.107†	1605818.8	3121.77	0.19%	[500]	ug/L
Ca 315.887†	313240.7	17959.45	5.73%	[25000]	ug/L
Cd 214.440†	122579.4	317.91	0.26%	[500]	ug/L
Co 228.616†	43316.8	196.51	0.45%	[500]	ug/L
Cr 267.716†	38777.0	318.42	0.82%	[500]	ug/L
Cu 327.393†	87449.0	378.93	0.43%	[500]	ug/L
Fe 273.955†	675336.8	2347.57	0.35%	[10000]	ug/L
K 766.490†	54597.7	2935.00	5.38%	[10000]	ug/L
Mg 285.213†	346008.2	19459.49	5.62%	[25000]	ug/L
Mn 257.610†	33896.6	1946.96	5.74%	[500]	ug/L
Mo 202.031†	15278.1	142.03	0.93%	[500]	ug/L
Na 589.592†	69357.2	3914.69	5.64%	[12500]	ug/L
Ni 231.604†	21743.8	151.61	0.70%	[500]	ug/L
P 213.617†	7124.8	61.35	0.86%	[2500]	ug/L
Pb 220.353†	2766.8	27.88	1.01%	[500]	ug/L
Sb 206.836†	3128.4	26.08	0.83%	[500]	ug/L
Se 196.026†	1351.3	16.09	1.19%	[500]	ug/L
Sn 189.927†	2452.2	21.03	0.86%	[500]	ug/L
Sr 421.552†	158921.9	10051.03	6.32%	[500]	ug/L
Ti 337.279†	15315.6	864.82	5.65%	[500]	ug/L
Tl 190.801†	2541.8	23.48	0.92%	[500]	ug/L
V 292.402†	46344.3	19.23	0.04%	[500]	ug/L
Zn 206.200†	39707.0	170.01	0.43%	[500]	ug/L
Li 670.784	3579783.9	5361.54	0.15%	[250]	ug/L

Sequence No.: 4
Sample ID: STD 3 150612RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 4
Date Collected: 06/12/15 1:14:56 PM
Data Type: Reprocessed on 06/15/15 10:35:44 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150612RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	191152.4	1013.95	0.53%	94.08	%
Y Radial	13187.3	99.13	0.75%	100.5	%
Ag 338.289†	81421.3	181.41	0.22%	[500]	ug/L
Al 308.215†	23011.1	124.86	0.54%	[20000]	ug/L
As 188.979†	4501.3	39.48	0.88%	[1000]	ug/L
B 249.677†	30803.2	114.76	0.37%	[1000]	ug/L
Ba 233.527†	373030.4	710.79	0.19%	[1000]	ug/L
Be 313.107†	3237526.3	7010.12	0.22%	[1000]	ug/L
Ca 315.887†	649688.6	9682.27	1.49%	[50000]	ug/L
Cd 214.440†	245591.7	513.49	0.21%	[1000]	ug/L
Co 228.616†	86546.9	118.57	0.14%	[1000]	ug/L
Cr 267.716†	77566.9	609.11	0.79%	[1000]	ug/L
Cu 327.393†	177878.9	377.27	0.21%	[1000]	ug/L
Fe 273.955†	1350904.7	2292.67	0.17%	[20000]	ug/L
K 766.490†	116281.5	610.12	0.52%	[20000]	ug/L
Mg 285.213†	714101.7	11476.54	1.61%	[50000]	ug/L
Mn 257.610†	70989.9	303.61	0.43%	[1000]	ug/L
Mo 202.031†	30787.3	243.98	0.79%	[1000]	ug/L
Na 589.592†	145163.6	2576.54	1.77%	[25000]	ug/L
Ni 231.604†	43000.1	347.49	0.81%	[1000]	ug/L
P 213.617†	14473.8	158.00	1.09%	[5000]	ug/L
Pb 220.353†	5487.3	49.25	0.90%	[1000]	ug/L
Sb 206.836†	6352.2	56.77	0.89%	[1000]	ug/L
Se 196.026†	2722.1	36.30	1.33%	[1000]	ug/L
Sn 189.927†	4918.7	42.91	0.87%	[1000]	ug/L
Sr 421.552†	335696.1	6119.90	1.82%	[1000]	ug/L
Ti 337.279†	32105.7	146.46	0.46%	[1000]	ug/L
Tl 190.801†	4988.8	72.43	1.45%	[1000]	ug/L
V 292.402†	93838.1	229.65	0.24%	[1000]	ug/L
Zn 206.200†	80342.1	132.88	0.17%	[1000]	ug/L
Li 670.784	7865167.1	27046.04	0.34%	[500]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	162.4	0.00000	0.999942	
Al 308.215	3	Lin Thru 0	0.0	1.139	0.00000	0.999746	
As 188.979	3	Lin Thru 0	0.0	4.498	0.00000	0.999959	
B 249.677	3	Lin Thru 0	0.0	30.69	0.00000	0.999916	
Ba 233.527	3	Lin Thru 0	0.0	372.6	0.00000	0.999952	
Be 313.107	3	Lin Thru 0	0.0	3232	0.00000	0.999958	
Ca 315.887	3	Lin Thru 0	0.0	12.90	0.00000	0.999854	
Cd 214.440	3	Lin Thru 0	0.0	245.5	0.00000	0.999955	
Co 228.616	3	Lin Thru 0	0.0	86.57	0.00000	0.999953	
Cr 267.716	3	Lin Thru 0	0.0	77.56	0.00000	0.999961	
Cu 327.393	3	Lin Thru 0	0.0	177.3	0.00000	0.999938	
Fe 273.955	3	Lin Thru 0	0.0	67.54	0.00000	0.999959	
K 766.490	3	Lin Thru 0	0.0	5.744	0.00000	0.999659	
Mg 285.213	3	Lin Thru 0	0.0	14.19	0.00000	0.999883	
Mn 257.610	3	Lin Thru 0	0.0	70.35	0.00000	0.999792	
Mo 202.031	3	Lin Thru 0	0.0	30.74	0.00000	0.999956	
Na 589.592	3	Lin Thru 0	0.0	5.756	0.00000	0.999801	
Ni 231.604	3	Lin Thru 0	0.0	43.10	0.00000	0.999947	
P 213.617	3	Lin Thru 0	0.0	2.886	0.00000	0.999942	
Pb 220.353	3	Lin Thru 0	0.0	5.497	0.00000	0.999951	
Sb 206.836	3	Lin Thru 0	0.0	6.333	0.00000	0.999949	
Se 196.026	3	Lin Thru 0	0.0	2.718	0.00000	0.999968	

Sn 189.927	3	Lin Thru 0	0.0	4.916	0.00000	0.999959
Sr 421.552	3	Lin Thru 0	0.0	332.1	0.00000	0.999732
Ti 337.279	3	Lin Thru 0	0.0	31.81	0.00000	0.999787
Tl 190.801	3	Lin Thru 0	0.0	5.008	0.00000	0.999920
V 292.402	3	Lin Thru 0	0.0	93.61	0.00000	0.999944
Zn 206.200	3	Lin Thru 0	0.0	80.17	0.00000	0.999942
Li 670.784	3	Lin Thru 0	0.0	15450	0.00000	0.999329

Sequence No.: 5
Sample ID: ICV 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/12/15 1:26:55 PM
Data Type: Reprocessed on 06/15/15 10:35:45 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	198221.1	97.55	%	0.412				0.42%
Y Radial	13541.2	103.2	%	0.44				0.42%
Ag 338.289†	40879.3	251.7	ug/L	1.97	251.7	ug/L	1.97	0.78%
QC value within limits for Ag 338.289 Recovery = 100.67%								
Al 308.215†	14275.1	12560	ug/L	87.68	12560	ug/L	87.68	0.70%
QC value within limits for Al 308.215 Recovery = 100.48%								
As 188.979†	2048.9	452.2	ug/L	1.21	452.2	ug/L	1.21	0.27%
QC value within limits for As 188.979 Recovery = 90.45%								
B 249.677†	15235.4	526.1	ug/L	2.54	526.1	ug/L	2.54	0.48%
QC value within limits for B 249.677 Recovery = 105.22%								
Ba 233.527†	187349.3	502.4	ug/L	2.65	502.4	ug/L	2.65	0.53%
QC value within limits for Ba 233.527 Recovery = 100.49%								
Be 313.107†	1608761.8	497.7	ug/L	2.85	497.7	ug/L	2.85	0.57%
QC value within limits for Be 313.107 Recovery = 99.54%								
Ca 315.887†	168882.4	13090	ug/L	93.26	13090	ug/L	93.26	0.71%
QC value within limits for Ca 315.887 Recovery = 104.69%								
Cd 214.440†	124828.9	508.5	ug/L	3.31	508.5	ug/L	3.31	0.65%
QC value within limits for Cd 214.440 Recovery = 101.71%								
Co 228.616†	43742.4	505.2	ug/L	2.75	505.2	ug/L	2.75	0.54%
QC value within limits for Co 228.616 Recovery = 101.05%								
Cr 267.716†	39456.0	508.6	ug/L	1.16	508.6	ug/L	1.16	0.23%
QC value within limits for Cr 267.716 Recovery = 101.73%								
Cu 327.393†	90221.9	510.0	ug/L	3.18	510.0	ug/L	3.18	0.62%
QC value within limits for Cu 327.393 Recovery = 102.00%								
Fe 273.955†	851818.9	12570	ug/L	68.01	12570	ug/L	68.01	0.54%
QC value within limits for Fe 273.955 Recovery = 100.58%								
K 766.490†	71945.5	12500	ug/L	104.35	12500	ug/L	104.35	0.83%
QC value within limits for K 766.490 Recovery = 99.98%								
Mg 285.213†	181963.9	12830	ug/L	110.07	12830	ug/L	110.07	0.86%
QC value within limits for Mg 285.213 Recovery = 102.64%								
Mn 257.610†	35702.1	507.1	ug/L	3.94	507.1	ug/L	3.94	0.78%
QC value within limits for Mn 257.610 Recovery = 101.43%								
Mo 202.031†	15306.4	498.5	ug/L	1.12	498.5	ug/L	1.12	0.22%
QC value within limits for Mo 202.031 Recovery = 99.69%								
Na 589.592†	73647.9	12780	ug/L	105.16	12780	ug/L	105.16	0.82%
QC value within limits for Na 589.592 Recovery = 102.23%								
Ni 231.604†	22407.8	519.0	ug/L	1.21	519.0	ug/L	1.21	0.23%
QC value within limits for Ni 231.604 Recovery = 103.79%								
P 213.617†	7296.7	2528	ug/L	5.19	2528	ug/L	5.19	0.21%
QC value within limits for P 213.617 Recovery = 101.14%								
Pb 220.353†	2856.2	522.4	ug/L	1.51	522.4	ug/L	1.51	0.29%
QC value within limits for Pb 220.353 Recovery = 104.49%								
Sb 206.836†	3251.4	513.4	ug/L	2.31	513.4	ug/L	2.31	0.45%
QC value within limits for Sb 206.836 Recovery = 102.68%								
Se 196.026†	1393.0	516.3	ug/L	4.57	516.3	ug/L	4.57	0.89%
QC value within limits for Se 196.026 Recovery = 103.26%								
Sn 189.927†	1276.9	259.7	ug/L	0.85	259.7	ug/L	0.85	0.33%
QC value within limits for Sn 189.927 Recovery = 103.90%								
Sr 421.552†	168575.7	507.0	ug/L	5.99	507.0	ug/L	5.99	1.18%
QC value within limits for Sr 421.552 Recovery = 101.41%								
Ti 337.279†	16192.4	508.8	ug/L	4.23	508.8	ug/L	4.23	0.83%
QC value within limits for Ti 337.279 Recovery = 101.76%								
Tl 190.801†	2588.9	517.0	ug/L	1.63	517.0	ug/L	1.63	0.32%
QC value within limits for Tl 190.801 Recovery = 103.39%								
V 292.402†	46569.4	497.5	ug/L	2.57	497.5	ug/L	2.57	0.52%
QC value within limits for V 292.402 Recovery = 99.50%								
Zn 206.200†	41321.5	521.6	ug/L	3.58	521.6	ug/L	3.58	0.69%
QC value within limits for Zn 206.200 Recovery = 104.33%								

Li 670.784	4171413.8	270.0 ug/L	0.59	270.0 ug/L	0.59	0.22%

QC value within limits for Li 670.784 Recovery = 108.01%
All analyte(s) passed QC.

Sequence No.: 6
Sample ID: ICB 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/12/15 1:37:16 PM
Data Type: Reprocessed on 06/15/15 10:35:46 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	203764.6	100.3	%	0.62				0.62%
Y Radial	13522.8	103.1	%	1.76				1.70%
Ag 338.289†	-17.6	-0.108	ug/L	0.2167	-0.108	ug/L	0.2167	200.30%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-6.2	-5.449	ug/L	2.3760	-5.449	ug/L	2.3760	43.60%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	8.4	1.874	ug/L	0.4645	1.874	ug/L	0.4645	24.79%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.3	1.737	ug/L	0.2490	1.737	ug/L	0.2490	14.33%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	20.4	0.054	ug/L	0.0346	0.054	ug/L	0.0346	63.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.6	-0.004	ug/L	0.0077	-0.004	ug/L	0.0077	216.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	37.8	2.926	ug/L	0.4883	2.926	ug/L	0.4883	16.69%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	20.3	0.083	ug/L	0.0437	0.083	ug/L	0.0437	52.67%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	25.4	0.297	ug/L	0.1260	0.297	ug/L	0.1260	42.44%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.3	0.030	ug/L	0.0621	0.030	ug/L	0.0621	209.05%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	355.8	2.007	ug/L	0.3076	2.007	ug/L	0.3076	15.33%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	10.0	0.144	ug/L	0.0501	0.144	ug/L	0.0501	34.71%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	87.9	15.30	ug/L	5.424	15.30	ug/L	5.424	35.45%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	10.9	0.764	ug/L	0.6707	0.764	ug/L	0.6707	87.80%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	14.5	0.206	ug/L	0.1536	0.206	ug/L	0.1536	74.54%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	21.7	0.704	ug/L	0.1130	0.704	ug/L	0.1130	16.05%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-1.1	-0.216	ug/L	7.9269	-0.216	ug/L	7.9269	>999.9%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-6.8	-0.157	ug/L	0.1739	-0.157	ug/L	0.1739	111.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-0.2	-0.057	ug/L	0.8573	-0.057	ug/L	0.8573	>999.9%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	5.4	0.988	ug/L	0.1708	0.988	ug/L	0.1708	17.29%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	19.3	3.048	ug/L	1.3894	3.048	ug/L	1.3894	45.59%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-5.9	-2.169	ug/L	1.5180	-2.169	ug/L	1.5180	69.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.376	ug/L	0.2443	0.376	ug/L	0.2443	65.04%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	9.2	0.028	ug/L	0.1189	0.028	ug/L	0.1189	431.52%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-8.4	-0.264	ug/L	0.3711	-0.264	ug/L	0.3711	140.64%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-3.5	-0.695	ug/L	0.3654	-0.695	ug/L	0.3654	52.57%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	2.2	0.023	ug/L	0.1010	0.023	ug/L	0.1010	432.20%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-160.0	-1.994	ug/L	0.0861	-1.994	ug/L	0.0861	4.32%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	6972.4	0.451 ug/L	0.0049	0.451 ug/L	0.0049	1.08%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICSA 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 6
Date Collected: 06/12/15 1:43:23 PM
Data Type: Reprocessed on 06/15/15 10:35:48 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	192595.2	94.79	%	0.213				0.22%
Y Radial	13405.4	102.2	%	0.47				0.46%
Ag 338.289†	72.1	0.444	ug/L	0.2262	0.444	ug/L	0.2262	50.96%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	114220.9	100300	ug/L	167.75	100300	ug/L	167.75	0.17%
QC value within limits for Al 308.215 Recovery = 100.30%								
As 188.979†	17.4	4.187	ug/L	0.9747	4.187	ug/L	0.9747	23.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-7841.4	-14.65	ug/L	2.213	-14.65	ug/L	2.213	15.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1657.2	-1.139	ug/L	0.0993	-1.139	ug/L	0.0993	8.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	275.6	0.085	ug/L	0.0039	0.085	ug/L	0.0039	4.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1339315.2	103800	ug/L	143.50	103800	ug/L	143.50	0.14%
QC value within limits for Ca 315.887 Recovery = 103.81%								
Cd 214.440†	887.6	-0.289	ug/L	0.0610	-0.289	ug/L	0.0610	21.09%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	122.0	-1.494	ug/L	0.1772	-1.494	ug/L	0.1772	11.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	80.6	0.132	ug/L	0.1067	0.132	ug/L	0.1067	81.07%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-126.0	0.706	ug/L	0.0899	0.706	ug/L	0.0899	12.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	6685686.8	98980	ug/L	994.25	98980	ug/L	994.25	1.00%
QC value within limits for Fe 273.955 Recovery = 98.98%								
K 766.490†	174.7	-66.61	ug/L	8.198	-66.61	ug/L	8.198	12.31%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1418866.1	100000	ug/L	167.24	100000	ug/L	167.24	0.17%
QC value within limits for Mg 285.213 Recovery = 100.05%								
Mn 257.610†	229.9	-0.054	ug/L	0.0995	-0.054	ug/L	0.0995	182.73%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-67.5	-0.766	ug/L	0.3582	-0.766	ug/L	0.3582	46.74%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	164.0	16.24	ug/L	1.644	16.24	ug/L	1.644	10.12%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-94.6	0.249	ug/L	0.1407	0.249	ug/L	0.1407	56.46%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-107.2	-37.16	ug/L	2.779	-37.16	ug/L	2.779	7.48%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-61.0	-1.144	ug/L	0.4191	-1.144	ug/L	0.4191	36.64%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.4	-0.536	ug/L	2.0189	-0.536	ug/L	2.0189	376.45%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-116.5	-3.945	ug/L	3.2533	-3.945	ug/L	3.2533	82.47%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	10.2	2.078	ug/L	0.4659	2.078	ug/L	0.4659	22.42%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	242.1	-3.333	ug/L	0.0960	-3.333	ug/L	0.0960	2.88%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	40.2	-0.464	ug/L	0.5299	-0.464	ug/L	0.5299	114.08%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-32.6	-6.502	ug/L	0.7702	-6.502	ug/L	0.7702	11.85%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	39.6	0.424	ug/L	0.1746	0.424	ug/L	0.1746	41.23%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	136.6	0.999	ug/L	0.2773	0.999	ug/L	0.2773	27.74%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Sequence No.: 8
Sample ID: ICSAB 150612RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 7
Date Collected: 06/12/15 1:50:38 PM
Data Type: Reprocessed on 06/15/15 10:35:49 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150612RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	193304.1	95.13	%	0.108				0.11%
Y Radial	13514.7	103.0	%	0.33				0.32%
Ag 338.289†	82900.8	510.4	ug/L	0.43	510.4	ug/L	0.43	0.08%
QC value within limits for Ag 338.289 Recovery = 102.07%								
Al 308.215†	113679.6	99840	ug/L	892.65	99840	ug/L	892.65	0.89%
QC value within limits for Al 308.215 Recovery = 99.84%								
As 188.979†	1025.8	226.6	ug/L	1.41	226.6	ug/L	1.41	0.62%
QC value within limits for As 188.979 Recovery = 90.65%								
B 249.677†	-7810.8	-15.98	ug/L	0.719	-15.98	ug/L	0.719	4.50%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	93542.8	245.7	ug/L	0.27	245.7	ug/L	0.27	0.11%
QC value within limits for Ba 233.527 Recovery = 98.28%								
Be 313.107†	779442.1	241.1	ug/L	0.66	241.1	ug/L	0.66	0.27%
QC value within limits for Be 313.107 Recovery = 96.45%								
Ca 315.887†	1334439.2	103400	ug/L	995.46	103400	ug/L	995.46	0.96%
QC value within limits for Ca 315.887 Recovery = 103.43%								
Cd 214.440†	120649.0	487.8	ug/L	0.03	487.8	ug/L	0.03	0.01%
QC value within limits for Cd 214.440 Recovery = 97.56%								
Co 228.616†	21754.7	249.1	ug/L	0.50	249.1	ug/L	0.50	0.20%
QC value within limits for Co 228.616 Recovery = 99.63%								
Cr 267.716†	18838.5	242.0	ug/L	0.58	242.0	ug/L	0.58	0.24%
QC value within limits for Cr 267.716 Recovery = 96.81%								
Cu 327.393†	44317.9	251.2	ug/L	0.52	251.2	ug/L	0.52	0.21%
QC value within limits for Cu 327.393 Recovery = 100.47%								
Fe 273.955†	6635958.9	98220	ug/L	478.84	98220	ug/L	478.84	0.49%
QC value within limits for Fe 273.955 Recovery = 98.22%								
K 766.490†	112.9	-78.19	ug/L	1.867	-78.19	ug/L	1.867	2.39%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1424460.8	100400	ug/L	940.93	100400	ug/L	940.93	0.94%
QC value within limits for Mg 285.213 Recovery = 100.44%								
Mn 257.610†	17668.8	247.8	ug/L	0.89	247.8	ug/L	0.89	0.36%
QC value within limits for Mn 257.610 Recovery = 99.13%								
Mo 202.031†	7311.9	239.5	ug/L	0.84	239.5	ug/L	0.84	0.35%
QC value within limits for Mo 202.031 Recovery = 95.79%								
Na 589.592†	80.9	0.906	ug/L	3.7326	0.906	ug/L	3.7326	411.77%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	20824.2	485.0	ug/L	1.16	485.0	ug/L	1.16	0.24%
QC value within limits for Ni 231.604 Recovery = 97.00%								
P 213.617†	-188.6	-65.34	ug/L	2.060	-65.34	ug/L	2.060	3.15%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	2629.3	489.2	ug/L	0.23	489.2	ug/L	0.23	0.05%
QC value within limits for Pb 220.353 Recovery = 97.84%								
Sb 206.836†	1605.5	253.5	ug/L	2.54	253.5	ug/L	2.54	1.00%
QC value within limits for Sb 206.836 Recovery = 101.40%								
Se 196.026†	547.9	239.6	ug/L	2.83	239.6	ug/L	2.83	1.18%
QC value within limits for Se 196.026 Recovery = 95.83%								
Sn 189.927†	12.2	2.485	ug/L	0.8254	2.485	ug/L	0.8254	33.21%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	227.6	-3.362	ug/L	0.0533	-3.362	ug/L	0.0533	1.59%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	53.5	-0.002	ug/L	0.8743	-0.002	ug/L	0.8743	>999.9%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	1158.9	231.4	ug/L	2.91	231.4	ug/L	2.91	1.26%
QC value within limits for Tl 190.801 Recovery = 92.56%								
V 292.402†	24361.0	260.2	ug/L	0.78	260.2	ug/L	0.78	0.30%
QC value within limits for V 292.402 Recovery = 104.10%								
Zn 206.200†	38791.0	485.9	ug/L	0.65	485.9	ug/L	0.65	0.13%
QC value within limits for Zn 206.200 Recovery = 97.18%								

Li 670.784	12357.5	0.800 ug/L	0.0075	0.800 ug/L	0.0075	0.94%

All analyte(s) passed QC.

Li 670.784	10500.4	0.680 ug/L	0.0084	0.680 ug/L	0.0084	1.23%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCV1 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/12/15 1:57:55 PM
Data Type: Reprocessed on 06/15/15 10:35:50 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	196666.0	96.79	%	0.901				0.93%
Y Radial	13673.1	104.2	%	1.07				1.03%
Ag 338.289†	40400.1	248.7	ug/L	0.31	248.7	ug/L	0.31	0.12%
QC value within limits for Ag 338.289 Recovery = 99.49%								
Al 308.215†	11261.2	9912	ug/L	21.87	9912	ug/L	21.87	0.22%
QC value within limits for Al 308.215 Recovery = 99.12%								
As 188.979†	2244.3	494.1	ug/L	5.03	494.1	ug/L	5.03	1.02%
QC value within limits for As 188.979 Recovery = 98.83%								
B 249.677†	15066.1	514.0	ug/L	1.37	514.0	ug/L	1.37	0.27%
QC value within limits for B 249.677 Recovery = 102.80%								
Ba 233.527†	185829.9	498.5	ug/L	0.70	498.5	ug/L	0.70	0.14%
QC value within limits for Ba 233.527 Recovery = 99.70%								
Be 313.107†	1603170.7	496.0	ug/L	1.13	496.0	ug/L	1.13	0.23%
QC value within limits for Be 313.107 Recovery = 99.19%								
Ca 315.887†	326256.5	25280	ug/L	58.88	25280	ug/L	58.88	0.23%
QC value within limits for Ca 315.887 Recovery = 101.14%								
Cd 214.440†	123109.2	501.8	ug/L	1.06	501.8	ug/L	1.06	0.21%
QC value within limits for Cd 214.440 Recovery = 100.36%								
Co 228.616†	43345.9	500.7	ug/L	0.26	500.7	ug/L	0.26	0.05%
QC value within limits for Co 228.616 Recovery = 100.14%								
Cr 267.716†	38750.0	499.5	ug/L	5.07	499.5	ug/L	5.07	1.02%
QC value within limits for Cr 267.716 Recovery = 99.89%								
Cu 327.393†	87914.3	496.9	ug/L	0.34	496.9	ug/L	0.34	0.07%
QC value within limits for Cu 327.393 Recovery = 99.37%								
Fe 273.955†	679215.5	10020	ug/L	14.34	10020	ug/L	14.34	0.14%
QC value within limits for Fe 273.955 Recovery = 100.17%								
K 766.490†	57450.9	9976	ug/L	12.01	9976	ug/L	12.01	0.12%
QC value within limits for K 766.490 Recovery = 99.76%								
Mg 285.213†	361673.8	25490	ug/L	32.23	25490	ug/L	32.23	0.13%
QC value within limits for Mg 285.213 Recovery = 101.96%								
Mn 257.610†	35323.3	501.2	ug/L	1.13	501.2	ug/L	1.13	0.23%
QC value within limits for Mn 257.610 Recovery = 100.24%								
Mo 202.031†	15312.5	498.6	ug/L	5.42	498.6	ug/L	5.42	1.09%
QC value within limits for Mo 202.031 Recovery = 99.72%								
Na 589.592†	75142.8	13040	ug/L	16.44	13040	ug/L	16.44	0.13%
QC value within limits for Na 589.592 Recovery = 104.33%								
Ni 231.604†	21781.0	504.5	ug/L	5.56	504.5	ug/L	5.56	1.10%
QC value within limits for Ni 231.604 Recovery = 100.89%								
P 213.617†	7141.6	2475	ug/L	25.48	2475	ug/L	25.48	1.03%
QC value within limits for P 213.617 Recovery = 98.99%								
Pb 220.353†	2726.3	499.0	ug/L	3.62	499.0	ug/L	3.62	0.73%
QC value within limits for Pb 220.353 Recovery = 99.80%								
Sb 206.836†	3127.5	493.8	ug/L	7.05	493.8	ug/L	7.05	1.43%
QC value within limits for Sb 206.836 Recovery = 98.77%								
Se 196.026†	1361.0	503.1	ug/L	2.25	503.1	ug/L	2.25	0.45%
QC value within limits for Se 196.026 Recovery = 100.63%								
Sn 189.927†	2444.1	497.2	ug/L	5.37	497.2	ug/L	5.37	1.08%
QC value within limits for Sn 189.927 Recovery = 99.44%								
Sr 421.552†	172227.0	517.6	ug/L	7.39	517.6	ug/L	7.39	1.43%
QC value within limits for Sr 421.552 Recovery = 103.52%								
Ti 337.279†	15853.9	498.0	ug/L	0.55	498.0	ug/L	0.55	0.11%
QC value within limits for Ti 337.279 Recovery = 99.60%								
Tl 190.801†	2470.5	493.3	ug/L	5.09	493.3	ug/L	5.09	1.03%
QC value within limits for Tl 190.801 Recovery = 98.66%								
V 292.402†	46009.2	491.5	ug/L	0.94	491.5	ug/L	0.94	0.19%
QC value within limits for V 292.402 Recovery = 98.30%								
Zn 206.200†	40133.1	507.3	ug/L	1.15	507.3	ug/L	1.15	0.23%
QC value within limits for Zn 206.200 Recovery = 101.47%								

Li 670.784	3699085.7	239.5 ug/L	1.69	239.5 ug/L	1.69	0.70%

QC value within limits for Li 670.784 Recovery = 95.78%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCB 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/12/15 2:08:21 PM
Data Type: Reprocessed on 06/15/15 10:35:52 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	201570.0	99.20	%	0.306				0.31%
Y Radial	13406.6	102.2	%	0.72				0.70%
Ag 338.289†	7.1	0.044	ug/L	0.3282	0.044	ug/L	0.3282	750.40%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	1.0	0.867	ug/L	3.1476	0.867	ug/L	3.1476	363.18%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.7	0.154	ug/L	0.4866	0.154	ug/L	0.4866	316.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	49.6	1.625	ug/L	0.3203	1.625	ug/L	0.3203	19.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.1	0.029	ug/L	0.0250	0.029	ug/L	0.0250	85.05%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	19.2	0.006	ug/L	0.0040	0.006	ug/L	0.0040	66.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	4.8	0.368	ug/L	0.4727	0.368	ug/L	0.4727	128.45%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	5.0	0.020	ug/L	0.0452	0.020	ug/L	0.0452	221.61%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	19.2	0.225	ug/L	0.0730	0.225	ug/L	0.0730	32.51%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-8.8	-0.114	ug/L	0.0288	-0.114	ug/L	0.0288	25.22%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	514.9	2.904	ug/L	0.2729	2.904	ug/L	0.2729	9.40%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	246.5	3.645	ug/L	0.1853	3.645	ug/L	0.1853	5.09%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	76.4	13.31	ug/L	6.004	13.31	ug/L	6.004	45.12%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	33.5	2.363	ug/L	0.1032	2.363	ug/L	0.1032	4.37%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	6.3	0.090	ug/L	0.1210	0.090	ug/L	0.1210	134.27%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	21.9	0.712	ug/L	0.3509	0.712	ug/L	0.3509	49.24%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-86.2	-14.99	ug/L	7.261	-14.99	ug/L	7.261	48.44%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-0.6	-0.014	ug/L	0.1787	-0.014	ug/L	0.1787	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-1.8	-0.633	ug/L	0.6876	-0.633	ug/L	0.6876	108.58%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	10.6	1.933	ug/L	0.7715	1.933	ug/L	0.7715	39.91%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	16.2	2.558	ug/L	0.2095	2.558	ug/L	0.2095	8.19%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.1	0.052	ug/L	1.5842	0.052	ug/L	1.5842	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	4.5	0.920	ug/L	0.2370	0.920	ug/L	0.2370	25.76%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	9.2	0.028	ug/L	0.0583	0.028	ug/L	0.0583	211.00%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-8.9	-0.280	ug/L	0.4424	-0.280	ug/L	0.4424	157.95%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-5.7	-1.134	ug/L	1.1790	-1.134	ug/L	1.1790	103.98%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	3.7	0.040	ug/L	0.1010	0.040	ug/L	0.1010	254.92%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-77.5	-0.968	ug/L	0.1197	-0.968	ug/L	0.1197	12.37%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	10445.0	0.676 ug/L	0.0036	0.676 ug/L	0.0036	0.53%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCV2 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 06/12/15 3:02:20 PM
Data Type: Reprocessed on 06/15/15 10:35:58 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	197040.2	96.97	%	0.764				0.79%
Y Radial	13458.3	102.6	%	0.71				0.69%
Ag 338.289†	30443.7	187.4	ug/L	0.46	187.4	ug/L	0.46	0.24%
QC value within limits for Ag 338.289 Recovery = 99.96%								
Al 308.215†	8419.1	7411	ug/L	12.24	7411	ug/L	12.24	0.17%
QC value within limits for Al 308.215 Recovery = 98.81%								
As 188.979†	1665.0	366.6	ug/L	1.73	366.6	ug/L	1.73	0.47%
QC value within limits for As 188.979 Recovery = 97.76%								
B 249.677†	11551.7	393.7	ug/L	3.38	393.7	ug/L	3.38	0.86%
QC value within limits for B 249.677 Recovery = 104.99%								
Ba 233.527†	139695.7	374.7	ug/L	1.72	374.7	ug/L	1.72	0.46%
QC value within limits for Ba 233.527 Recovery = 99.93%								
Be 313.107†	1191780.5	368.7	ug/L	1.61	368.7	ug/L	1.61	0.44%
QC value within limits for Be 313.107 Recovery = 98.32%								
Ca 315.887†	239380.1	18550	ug/L	46.58	18550	ug/L	46.58	0.25%
QC value within limits for Ca 315.887 Recovery = 98.94%								
Cd 214.440†	92822.9	378.3	ug/L	1.55	378.3	ug/L	1.55	0.41%
QC value within limits for Cd 214.440 Recovery = 100.89%								
Co 228.616†	34296.5	396.2	ug/L	2.16	396.2	ug/L	2.16	0.55%
QC value within limits for Co 228.616 Recovery = 105.64%								
Cr 267.716†	28864.3	372.0	ug/L	2.44	372.0	ug/L	2.44	0.66%
QC value within limits for Cr 267.716 Recovery = 99.21%								
Cu 327.393†	65996.1	373.0	ug/L	1.65	373.0	ug/L	1.65	0.44%
QC value within limits for Cu 327.393 Recovery = 99.46%								
Fe 273.955†	511606.2	7545	ug/L	32.76	7545	ug/L	32.76	0.43%
QC value within limits for Fe 273.955 Recovery = 100.60%								
K 766.490†	42763.6	7425	ug/L	28.72	7425	ug/L	28.72	0.39%
QC value within limits for K 766.490 Recovery = 99.00%								
Mg 285.213†	265189.0	18690	ug/L	68.04	18690	ug/L	68.04	0.36%
QC value within limits for Mg 285.213 Recovery = 99.68%								
Mn 257.610†	26690.8	378.7	ug/L	1.33	378.7	ug/L	1.33	0.35%
QC value within limits for Mn 257.610 Recovery = 101.00%								
Mo 202.031†	11441.2	372.5	ug/L	2.70	372.5	ug/L	2.70	0.73%
QC value within limits for Mo 202.031 Recovery = 99.34%								
Na 589.592†	57060.6	9903	ug/L	43.74	9903	ug/L	43.74	0.44%
QC value within limits for Na 589.592 Recovery = 105.64%								
Ni 231.604†	16316.1	377.9	ug/L	2.31	377.9	ug/L	2.31	0.61%
QC value within limits for Ni 231.604 Recovery = 100.76%								
P 213.617†	5293.7	1834	ug/L	11.61	1834	ug/L	11.61	0.63%
QC value within limits for P 213.617 Recovery = 97.83%								
Pb 220.353†	2010.8	368.0	ug/L	2.67	368.0	ug/L	2.67	0.73%
QC value within limits for Pb 220.353 Recovery = 98.14%								
Sb 206.836†	2310.7	364.8	ug/L	4.79	364.8	ug/L	4.79	1.31%
QC value within limits for Sb 206.836 Recovery = 97.29%								
Se 196.026†	1012.5	374.3	ug/L	3.08	374.3	ug/L	3.08	0.82%
QC value within limits for Se 196.026 Recovery = 99.82%								
Sn 189.927†	1828.4	371.9	ug/L	2.60	371.9	ug/L	2.60	0.70%
QC value within limits for Sn 189.927 Recovery = 99.18%								
Sr 421.552†	135390.4	406.9	ug/L	1.52	406.9	ug/L	1.52	0.37%
QC value within limits for Sr 421.552 Recovery = 108.51%								
Ti 337.279†	11929.0	374.7	ug/L	2.41	374.7	ug/L	2.41	0.64%
QC value within limits for Ti 337.279 Recovery = 99.93%								
Tl 190.801†	1791.6	357.8	ug/L	3.79	357.8	ug/L	3.79	1.06%
QC value within limits for Tl 190.801 Recovery = 95.40%								
V 292.402†	34297.6	366.4	ug/L	1.61	366.4	ug/L	1.61	0.44%
QC value within limits for V 292.402 Recovery = 97.70%								
Zn 206.200†	31364.9	396.2	ug/L	2.72	396.2	ug/L	2.72	0.69%
QC value within limits for Zn 206.200 Recovery = 105.66%								

Li 670.784	2746954.8	177.8 ug/L	1.14	177.8 ug/L	1.14	0.64%

QC value within limits for Li 670.784 Recovery = 94.84%
All analyte(s) passed QC.

Sequence No.: 17
Sample ID: CCB 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/12/15 3:08:06 PM
Data Type: Reprocessed on 06/15/15 10:36:00 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	202559.0	99.69	%	1.040				1.04%
Y Radial	13530.5	103.1	%	2.38				2.31%
Ag 338.289†	62.8	0.387	ug/L	0.2586	0.387	ug/L	0.2586	66.87%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-10.9	-9.555	ug/L	3.8011	-9.555	ug/L	3.8011	39.78%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	4.6	1.027	ug/L	1.2153	1.027	ug/L	1.2153	118.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	69.5	2.277	ug/L	0.3500	2.277	ug/L	0.3500	15.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	35.0	0.094	ug/L	0.0752	0.094	ug/L	0.0752	80.37%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-38.6	-0.012	ug/L	0.0014	-0.012	ug/L	0.0014	11.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	214.6	16.64	ug/L	0.715	16.64	ug/L	0.715	4.30%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-3.2	-0.013	ug/L	0.0209	-0.013	ug/L	0.0209	160.00%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	23.2	0.272	ug/L	0.0460	0.272	ug/L	0.0460	16.94%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.8	-0.075	ug/L	0.1051	-0.075	ug/L	0.1051	140.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	440.9	2.487	ug/L	0.4427	2.487	ug/L	0.4427	17.80%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	290.2	4.285	ug/L	0.1823	4.285	ug/L	0.1823	4.25%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	67.4	11.74	ug/L	7.958	11.74	ug/L	7.958	67.79%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	19.6	1.386	ug/L	0.1971	1.386	ug/L	0.1971	14.22%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	8.4	0.119	ug/L	0.1413	0.119	ug/L	0.1413	118.66%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	25.4	0.825	ug/L	0.2616	0.825	ug/L	0.2616	31.70%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-79.6	-13.84	ug/L	3.000	-13.84	ug/L	3.000	21.67%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-0.9	-0.019	ug/L	0.1615	-0.019	ug/L	0.1615	833.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-2.5	-0.877	ug/L	2.0817	-0.877	ug/L	2.0817	237.41%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	1.8	0.335	ug/L	0.3554	0.335	ug/L	0.3554	106.14%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	19.0	2.994	ug/L	0.6523	2.994	ug/L	0.6523	21.79%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.3	0.118	ug/L	1.5842	0.118	ug/L	1.5842	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.8	0.372	ug/L	0.3129	0.372	ug/L	0.3129	84.08%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	1.3	0.003	ug/L	0.0910	0.003	ug/L	0.0910	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-11.1	-0.350	ug/L	0.0882	-0.350	ug/L	0.0882	25.19%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-7.1	-1.410	ug/L	0.5719	-1.410	ug/L	0.5719	40.55%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	13.7	0.146	ug/L	0.1282	0.146	ug/L	0.1282	87.77%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-99.3	-1.239	ug/L	0.1839	-1.239	ug/L	0.1839	14.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	2895.2	0.187 ug/L	0.0035	0.187 ug/L	0.0035	1.87%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 41
Sample ID: CCV2 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 06/12/15 6:09:43 PM
Data Type: Reprocessed on 06/15/15 10:36:26 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	198590.9	97.74	%	0.317				0.32%
Y Radial	13579.7	103.5	%	0.98				0.94%
Ag 338.289†	30458.4	187.5	ug/L	0.41	187.5	ug/L	0.41	0.22%
QC value within limits for Ag 338.289 Recovery = 100.01%								
Al 308.215†	8500.8	7483	ug/L	25.28	7483	ug/L	25.28	0.34%
QC value within limits for Al 308.215 Recovery = 99.77%								
As 188.979†	1671.2	368.0	ug/L	1.84	368.0	ug/L	1.84	0.50%
QC value within limits for As 188.979 Recovery = 98.13%								
B 249.677†	11641.2	396.6	ug/L	2.10	396.6	ug/L	2.10	0.53%
QC value within limits for B 249.677 Recovery = 105.77%								
Ba 233.527†	140168.8	376.0	ug/L	0.85	376.0	ug/L	0.85	0.23%
QC value within limits for Ba 233.527 Recovery = 100.27%								
Be 313.107†	1203367.1	372.3	ug/L	0.57	372.3	ug/L	0.57	0.15%
QC value within limits for Be 313.107 Recovery = 99.28%								
Ca 315.887†	239991.8	18600	ug/L	226.62	18600	ug/L	226.62	1.22%
QC value within limits for Ca 315.887 Recovery = 99.20%								
Cd 214.440†	92715.2	377.9	ug/L	0.43	377.9	ug/L	0.43	0.11%
QC value within limits for Cd 214.440 Recovery = 100.77%								
Co 228.616†	34295.7	396.1	ug/L	1.64	396.1	ug/L	1.64	0.41%
QC value within limits for Co 228.616 Recovery = 105.64%								
Cr 267.716†	28740.8	370.5	ug/L	1.67	370.5	ug/L	1.67	0.45%
QC value within limits for Cr 267.716 Recovery = 98.79%								
Cu 327.393†	65815.6	372.0	ug/L	1.14	372.0	ug/L	1.14	0.31%
QC value within limits for Cu 327.393 Recovery = 99.19%								
Fe 273.955†	511853.3	7548	ug/L	13.42	7548	ug/L	13.42	0.18%
QC value within limits for Fe 273.955 Recovery = 100.64%								
K 766.490†	42173.8	7323	ug/L	73.33	7323	ug/L	73.33	1.00%
QC value within limits for K 766.490 Recovery = 97.64%								
Mg 285.213†	266301.7	18770	ug/L	229.12	18770	ug/L	229.12	1.22%
QC value within limits for Mg 285.213 Recovery = 100.10%								
Mn 257.610†	26619.3	377.7	ug/L	1.28	377.7	ug/L	1.28	0.34%
QC value within limits for Mn 257.610 Recovery = 100.72%								
Mo 202.031†	11391.3	370.9	ug/L	1.99	370.9	ug/L	1.99	0.54%
QC value within limits for Mo 202.031 Recovery = 98.91%								
Na 589.592†	52873.4	9176	ug/L	95.74	9176	ug/L	95.74	1.04%
QC value within limits for Na 589.592 Recovery = 97.88%								
Ni 231.604†	16278.2	377.0	ug/L	1.13	377.0	ug/L	1.13	0.30%
QC value within limits for Ni 231.604 Recovery = 100.53%								
P 213.617†	5321.7	1844	ug/L	7.15	1844	ug/L	7.15	0.39%
QC value within limits for P 213.617 Recovery = 98.35%								
Pb 220.353†	2069.3	378.7	ug/L	1.50	378.7	ug/L	1.50	0.40%
QC value within limits for Pb 220.353 Recovery = 100.99%								
Sb 206.836†	2386.5	376.8	ug/L	2.80	376.8	ug/L	2.80	0.74%
QC value within limits for Sb 206.836 Recovery = 100.48%								
Se 196.026†	1010.5	373.6	ug/L	3.45	373.6	ug/L	3.45	0.92%
QC value within limits for Se 196.026 Recovery = 99.63%								
Sn 189.927†	1828.1	371.9	ug/L	1.35	371.9	ug/L	1.35	0.36%
QC value within limits for Sn 189.927 Recovery = 99.17%								
Sr 421.552†	122559.2	368.3	ug/L	4.53	368.3	ug/L	4.53	1.23%
QC value within limits for Sr 421.552 Recovery = 98.21%								
Ti 337.279†	11987.2	376.6	ug/L	1.98	376.6	ug/L	1.98	0.52%
QC value within limits for Ti 337.279 Recovery = 100.42%								
Tl 190.801†	1899.2	379.2	ug/L	1.84	379.2	ug/L	1.84	0.48%
QC value within limits for Tl 190.801 Recovery = 101.13%								
V 292.402†	34938.0	373.2	ug/L	0.39	373.2	ug/L	0.39	0.10%
QC value within limits for V 292.402 Recovery = 99.53%								
Zn 206.200†	30975.9	391.3	ug/L	1.89	391.3	ug/L	1.89	0.48%
QC value within limits for Zn 206.200 Recovery = 104.36%								

Li 670.784	2661627.0	172.3 ug/L	0.46	172.3 ug/L	0.46	0.27%

QC value within limits for Li 670.784 Recovery = 91.89%
All analyte(s) passed QC.

Sequence No.: 42
Sample ID: CCB 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/12/15 6:15:30 PM
Data Type: Reprocessed on 06/15/15 10:36:27 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	207661.3	102.2	%	1.27				1.24%
Y Radial	13594.4	103.6	%	1.27				1.23%
Ag 338.289†	44.7	0.275	ug/L	0.4986	0.275	ug/L	0.4986	181.03%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-2.7	-2.408	ug/L	4.4693	-2.408	ug/L	4.4693	185.60%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.8	0.829	ug/L	0.2837	0.829	ug/L	0.2837	34.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	59.0	1.934	ug/L	0.1920	1.934	ug/L	0.1920	9.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.9	0.037	ug/L	0.0277	0.037	ug/L	0.0277	74.79%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-22.7	-0.007	ug/L	0.0090	-0.007	ug/L	0.0090	128.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	159.7	12.38	ug/L	1.194	12.38	ug/L	1.194	9.65%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	55.2	0.225	ug/L	0.0471	0.225	ug/L	0.0471	20.96%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	22.7	0.265	ug/L	0.0313	0.265	ug/L	0.0313	11.82%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.7	-0.009	ug/L	0.0937	-0.009	ug/L	0.0937	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	244.0	1.376	ug/L	0.3283	1.376	ug/L	0.3283	23.86%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	264.2	3.897	ug/L	0.3683	3.897	ug/L	0.3683	9.45%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	0.3	0.070	ug/L	7.4403	0.070	ug/L	7.4403	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	13.8	0.979	ug/L	0.5340	0.979	ug/L	0.5340	54.53%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	10.3	0.146	ug/L	0.1348	0.146	ug/L	0.1348	92.21%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	22.3	0.725	ug/L	0.1946	0.725	ug/L	0.1946	26.85%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-103.6	-18.00	ug/L	8.596	-18.00	ug/L	8.596	47.75%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	1.2	0.028	ug/L	0.1347	0.028	ug/L	0.1347	481.55%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	4.2	1.440	ug/L	1.1521	1.440	ug/L	1.1521	80.00%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	5.1	0.936	ug/L	0.9729	0.936	ug/L	0.9729	103.93%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	20.8	3.278	ug/L	1.1927	3.278	ug/L	1.1927	36.38%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.0	-0.746	ug/L	1.0624	-0.746	ug/L	1.0624	142.50%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.4	0.290	ug/L	0.4141	0.290	ug/L	0.4141	142.93%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	21.7	0.065	ug/L	0.0294	0.065	ug/L	0.0294	45.44%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-9.8	-0.309	ug/L	0.3208	-0.309	ug/L	0.3208	103.99%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.1	-0.018	ug/L	1.1307	-0.018	ug/L	1.1307	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	16.9	0.181	ug/L	0.0698	0.181	ug/L	0.0698	38.57%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-149.8	-1.869	ug/L	0.1571	-1.869	ug/L	0.1571	8.41%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	1605.3	0.104 ug/L	0.0046	0.104 ug/L	0.0046	4.45%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 46
Sample ID: CCV1 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/12/15 6:42:29 PM
Data Type: Reprocessed on 06/15/15 10:36:32 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	201952.1	99.39	%	0.521				0.52%
Y Radial	14001.2	106.7	%	1.24				1.16%
Ag 338.289†	41094.9	253.0	ug/L	1.23	253.0	ug/L	1.23	0.49%
QC value within limits for Ag 338.289 Recovery = 101.20%								
Al 308.215†	11562.1	10180	ug/L	145.64	10180	ug/L	145.64	1.43%
QC value within limits for Al 308.215 Recovery = 101.77%								
As 188.979†	2332.1	513.5	ug/L	4.91	513.5	ug/L	4.91	0.96%
QC value within limits for As 188.979 Recovery = 102.70%								
B 249.677†	15262.4	521.3	ug/L	3.53	521.3	ug/L	3.53	0.68%
QC value within limits for B 249.677 Recovery = 104.26%								
Ba 233.527†	192717.5	517.0	ug/L	2.64	517.0	ug/L	2.64	0.51%
QC value within limits for Ba 233.527 Recovery = 103.39%								
Be 313.107†	1667850.8	516.0	ug/L	2.98	516.0	ug/L	2.98	0.58%
QC value within limits for Be 313.107 Recovery = 103.20%								
Ca 315.887†	340830.6	26410	ug/L	370.82	26410	ug/L	370.82	1.40%
QC value within limits for Ca 315.887 Recovery = 105.66%								
Cd 214.440†	129103.1	526.2	ug/L	2.61	526.2	ug/L	2.61	0.50%
QC value within limits for Cd 214.440 Recovery = 105.24%								
Co 228.616†	45117.9	521.2	ug/L	1.89	521.2	ug/L	1.89	0.36%
QC value within limits for Co 228.616 Recovery = 104.24%								
Cr 267.716†	37757.1	486.7	ug/L	2.31	486.7	ug/L	2.31	0.47%
QC value within limits for Cr 267.716 Recovery = 97.33%								
Cu 327.393†	90020.5	508.8	ug/L	2.68	508.8	ug/L	2.68	0.53%
QC value within limits for Cu 327.393 Recovery = 101.75%								
Fe 273.955†	706895.5	10430	ug/L	55.58	10430	ug/L	55.58	0.53%
QC value within limits for Fe 273.955 Recovery = 104.25%								
K 766.490†	57693.8	10020	ug/L	143.16	10020	ug/L	143.16	1.43%
QC value within limits for K 766.490 Recovery = 100.18%								
Mg 285.213†	368629.2	25980	ug/L	374.63	25980	ug/L	374.63	1.44%
QC value within limits for Mg 285.213 Recovery = 103.92%								
Mn 257.610†	36347.7	515.7	ug/L	7.38	515.7	ug/L	7.38	1.43%
QC value within limits for Mn 257.610 Recovery = 103.15%								
Mo 202.031†	15807.1	514.7	ug/L	3.77	514.7	ug/L	3.77	0.73%
QC value within limits for Mo 202.031 Recovery = 102.94%								
Na 589.592†	71983.7	12490	ug/L	161.52	12490	ug/L	161.52	1.29%
QC value within limits for Na 589.592 Recovery = 99.94%								
Ni 231.604†	22708.5	525.9	ug/L	3.45	525.9	ug/L	3.45	0.66%
QC value within limits for Ni 231.604 Recovery = 105.19%								
P 213.617†	7549.5	2616	ug/L	24.92	2616	ug/L	24.92	0.95%
QC value within limits for P 213.617 Recovery = 104.64%								
Pb 220.353†	2950.7	539.9	ug/L	5.90	539.9	ug/L	5.90	1.09%
QC value within limits for Pb 220.353 Recovery = 107.98%								
Sb 206.836†	3387.4	534.9	ug/L	4.49	534.9	ug/L	4.49	0.84%
QC value within limits for Sb 206.836 Recovery = 106.97%								
Se 196.026†	1415.6	523.3	ug/L	3.72	523.3	ug/L	3.72	0.71%
QC value within limits for Se 196.026 Recovery = 104.67%								
Sn 189.927†	2506.2	509.8	ug/L	2.96	509.8	ug/L	2.96	0.58%
QC value within limits for Sn 189.927 Recovery = 101.96%								
Sr 421.552†	164814.3	495.2	ug/L	11.24	495.2	ug/L	11.24	2.27%
QC value within limits for Sr 421.552 Recovery = 99.04%								
Ti 337.279†	16201.6	508.9	ug/L	7.52	508.9	ug/L	7.52	1.48%
QC value within limits for Ti 337.279 Recovery = 101.79%								
Tl 190.801†	2670.2	533.2	ug/L	4.19	533.2	ug/L	4.19	0.79%
QC value within limits for Tl 190.801 Recovery = 106.64%								
V 292.402†	47618.5	508.7	ug/L	3.31	508.7	ug/L	3.31	0.65%
QC value within limits for V 292.402 Recovery = 101.74%								
Zn 206.200†	42448.9	536.1	ug/L	2.84	536.1	ug/L	2.84	0.53%
QC value within limits for Zn 206.200 Recovery = 107.21%								

Li 670.784	3998270.6	258.8 ug/L	0.21	258.8 ug/L	0.21	0.08%

QC value within limits for Li 670.784 Recovery = 103.53%

All analyte(s) passed QC.

Sequence No.: 47
Sample ID: CCB 150612RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/12/15 6:52:57 PM
Data Type: Reprocessed on 06/15/15 10:36:33 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150612RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	212621.7	104.6	%	0.16				0.15%
Y Radial	14379.0	109.6	%	0.12				0.11%
Ag 338.289†	42.5	0.262	ug/L	0.3889	0.262	ug/L	0.3889	148.62%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	3.7	3.226	ug/L	2.6978	3.226	ug/L	2.6978	83.64%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	7.5	1.669	ug/L	1.0256	1.669	ug/L	1.0256	61.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	49.9	1.717	ug/L	0.3064	1.717	ug/L	0.3064	17.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.7	0.019	ug/L	0.0209	0.019	ug/L	0.0209	112.03%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-11.3	-0.003	ug/L	0.0034	-0.003	ug/L	0.0034	98.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	-27.5	-2.127	ug/L	0.8683	-2.127	ug/L	0.8683	40.82%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	72.0	0.291	ug/L	0.0096	0.291	ug/L	0.0096	3.29%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	22.1	0.256	ug/L	0.0952	0.256	ug/L	0.0952	37.15%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.9	-0.064	ug/L	0.1275	-0.064	ug/L	0.1275	199.13%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	490.4	2.768	ug/L	0.3387	2.768	ug/L	0.3387	12.24%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	2492.2	36.89	ug/L	0.177	36.89	ug/L	0.177	0.48%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-28.2	-4.922	ug/L	9.4452	-4.922	ug/L	9.4452	191.89%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	-16.1	-1.100	ug/L	0.5598	-1.100	ug/L	0.5598	50.91%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	12.4	0.177	ug/L	0.0886	0.177	ug/L	0.0886	50.08%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.8	0.515	ug/L	0.0555	0.515	ug/L	0.0555	10.76%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-133.3	-23.15	ug/L	6.407	-23.15	ug/L	6.407	27.68%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	4.2	0.098	ug/L	0.1660	0.098	ug/L	0.1660	169.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	10.9	3.775	ug/L	2.1322	3.775	ug/L	2.1322	56.49%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	3.3	0.603	ug/L	0.9076	0.603	ug/L	0.9076	150.48%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.2	0.815	ug/L	0.2460	0.815	ug/L	0.2460	30.18%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.0	0.753	ug/L	1.8075	0.753	ug/L	1.8075	239.94%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.4	-0.091	ug/L	0.3720	-0.091	ug/L	0.3720	407.02%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	20.3	0.061	ug/L	0.0437	0.061	ug/L	0.0437	71.51%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	2.9	0.092	ug/L	0.2220	0.092	ug/L	0.2220	241.30%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-6.3	-1.256	ug/L	1.2337	-1.256	ug/L	1.2337	98.18%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	15.3	0.163	ug/L	0.0368	0.163	ug/L	0.0368	22.56%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	15.1	0.186	ug/L	0.1454	0.186	ug/L	0.1454	78.38%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	222.0	0.014 ug/L	0.0014	0.014 ug/L	0.0014	9.87%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No: 76447 SDG: 76447
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 06/15/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 17:07	%R(1)	True CCV1	Found 17:37	%R(1)	True CCV2	Found 23:02	%R(1)	
Iron (Fe)	12500	12710	102	10000	10040	100	7500	7475	99.7	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/15/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 17:07	%R(1)	True CCV1	Found 23:38	%R(1)	True	Found	%R(1)	
Iron (Fe)	12500	12710	102	10000	9988	99.9				P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

Analysis Date: 06/15/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C			C		
	17:17		17:43		23:14		23:50						
Iron (Fe)	800.00	U	800.00	U	800.00	U	800.00	U					P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76447 SDG: 76447
ICP ID Number: Jules ICS Source: Environmental Express

Analysis Date: 06/15/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 17:23	Sol AB 17:30	%R(1)
Aluminum (Al)	100000	100000	100600	99150	99.2
Calcium (Ca)	100000	100000	102600	101500	102
Iron (Fe)	100000	100000	99110	100600	101
Magnesium (Mg)	100000	100000	98700	97840	97.8

(1) Control Limits: Metals 80-120

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150615A6010
Results Library (original): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 1
Sample ID: CalBlk 150615RJS I:JL O:R Date Collected: 06/15/15 4:43:47 PM
Analyst: Data Type: Reprocessed on 06/17/15 10:39:49 AM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:
Wash Time:

Mean Data: CalBlk 150615RJS I:JL O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	207422.4	598.28	0.29%	100.0	%
Y Radial	13828.0	530.51	3.84%	100.0	%
Ag 338.289†	-192.1	59.02	30.72%	[0.00]	ug/L
Al 308.215†	86.2	8.41	9.76%	[0.00]	ug/L
As 188.979†	-80.0	3.02	3.78%	[0.00]	ug/L
B 249.677†	103.7	4.14	3.99%	[0.00]	ug/L
Ba 233.527†	-77.1	6.31	8.18%	[0.00]	ug/L
Be 313.107†	2152.4	27.30	1.27%	[0.00]	ug/L
Ca 315.887†	-460.5	14.24	3.09%	[0.00]	ug/L
Cd 214.440†	-136.9	24.88	18.17%	[0.00]	ug/L
Co 228.616†	-249.1	3.24	1.30%	[0.00]	ug/L
Cr 267.716†	50.2	12.76	25.43%	[0.00]	ug/L
Cu 327.393†	-1250.7	42.00	3.36%	[0.00]	ug/L
Fe 273.955†	952.1	121.37	12.75%	[0.00]	ug/L
K 766.490†	-1029.0	2.76	0.27%	[0.00]	ug/L
Mg 285.213†	77.2	6.01	7.79%	[0.00]	ug/L
Mn 257.610†	-72.7	5.14	7.07%	[0.00]	ug/L
Mo 202.031†	-73.5	3.27	4.45%	[0.00]	ug/L
Na 589.592†	289.7	31.90	11.01%	[0.00]	ug/L
Ni 231.604†	-164.8	4.95	3.00%	[0.00]	ug/L
P 213.617†	-50.3	3.28	6.53%	[0.00]	ug/L
Pb 220.353†	47.8	3.40	7.13%	[0.00]	ug/L
Sb 206.836†	46.6	8.75	18.78%	[0.00]	ug/L
Se 196.026†	13.0	3.97	30.55%	[0.00]	ug/L
Sn 189.927†	8.7	1.11	12.69%	[0.00]	ug/L
Sr 421.552†	-47.9	14.74	30.78%	[0.00]	ug/L
Ti 337.279†	-44.0	2.01	4.58%	[0.00]	ug/L
Tl 190.801†	-17.1	3.91	22.91%	[0.00]	ug/L
V 292.402†	-92.8	6.03	6.50%	[0.00]	ug/L
Zn 206.200†	870.9	68.90	7.91%	[0.00]	ug/L
Li 670.784	6282.8	38.69	0.62%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150615RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 06/15/15 4:50:01 PM
Data Type: Reprocessed on 06/17/15 10:39:50 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150615RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	214588.2	1627.01	0.76%	103.5	%
Y Radial	14051.8	23.99	0.17%	101.6	%
Ag 338.289†	1038.3	59.55	5.74%	[0.5]	ug/L
Al 308.215†	310.5	2.68	0.86%	[50]	ug/L
As 188.979†	60.7	9.59	15.80%	[2]	ug/L
B 249.677†	1106.6	5.38	0.49%	[25]	ug/L
Ba 233.527†	4855.9	34.68	0.71%	[1.5]	ug/L
Be 313.107†	36684.1	33.58	0.09%	[1]	ug/L
Ca 315.887†	12592.7	17.62	0.14%	[50]	ug/L
Cd 214.440†	2747.1	13.91	0.51%	[0.25]	ug/L
Co 228.616†	1245.6	5.99	0.48%	[2.5]	ug/L
Cr 267.716†	834.2	8.74	1.05%	[0.5]	ug/L
Cu 327.393†	1848.9	37.78	2.04%	[2.5]	ug/L
Fe 273.955†	15804.0	66.88	0.42%	[25]	ug/L
K 766.490†	3867.3	106.21	2.75%	[500]	ug/L
Mg 285.213†	8111.1	4.60	0.06%	[25]	ug/L
Mn 257.610†	856.2	9.82	1.15%	[1]	ug/L
Mo 202.031†	333.5	5.18	1.55%	[1]	ug/L
Na 589.592†	3258.9	12.78	0.39%	[500]	ug/L
Ni 231.604†	521.8	4.67	0.89%	[1]	ug/L
P 213.617†	190.1	2.00	1.05%	[12.5]	ug/L
Pb 220.353†	60.9	3.85	6.31%	[1.5]	ug/L
Sb 206.836†	34.9	6.25	17.91%	[2]	ug/L
Se 196.026†	38.2	6.72	17.59%	[2]	ug/L
Sn 189.927†	61.8	2.06	3.33%	[3]	ug/L
Sr 421.552†	2419.1	10.84	0.45%	[1]	ug/L
Ti 337.279†	432.2	11.56	2.68%	[2.5]	ug/L
Tl 190.801†	71.9	4.43	6.16%	[2]	ug/L
V 292.402†	1094.0	16.71	1.53%	[0.5]	ug/L
Zn 206.200†	3448.8	24.25	0.70%	[25]	ug/L
Li 670.784	48029.3	234.23	0.49%	[5]	ug/L

Sequence No.: 3
Sample ID: STD 2 150615RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/15/15 4:56:15 PM
Data Type: Reprocessed on 06/17/15 10:39:51 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150615RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	204966.6	1422.72	0.69%	98.82	%
Y Radial	13669.6	34.35	0.25%	98.85	%
Ag 338.289†	41415.5	351.98	0.85%	[250]	ug/L
Al 308.215†	12281.8	4.88	0.04%	[10000]	ug/L
As 188.979†	2440.8	25.47	1.04%	[500]	ug/L
B 249.677†	15797.9	39.71	0.25%	[500]	ug/L
Ba 233.527†	197521.3	1311.90	0.66%	[500]	ug/L
Be 313.107†	1726772.0	11337.50	0.66%	[500]	ug/L
Ca 315.887†	364767.2	843.57	0.23%	[25000]	ug/L
Cd 214.440†	134490.3	932.18	0.69%	[500]	ug/L
Co 228.616†	46707.5	351.67	0.75%	[500]	ug/L
Cr 267.716†	41341.7	386.55	0.94%	[500]	ug/L
Cu 327.393†	88254.5	619.26	0.70%	[500]	ug/L
Fe 273.955†	722128.0	4599.06	0.64%	[10000]	ug/L
K 766.490†	56299.8	58.35	0.10%	[10000]	ug/L
Mg 285.213†	390936.5	621.78	0.16%	[25000]	ug/L
Mn 257.610†	38402.6	42.15	0.11%	[500]	ug/L
Mo 202.031†	16112.1	144.10	0.89%	[500]	ug/L
Na 589.592†	55121.7	96.49	0.18%	[12500]	ug/L
Ni 231.604†	23332.3	221.80	0.95%	[500]	ug/L
P 213.617†	7811.4	77.06	0.99%	[2500]	ug/L
Pb 220.353†	3212.6	25.55	0.80%	[500]	ug/L
Sb 206.836†	3358.8	14.99	0.45%	[500]	ug/L
Se 196.026†	1450.0	15.77	1.09%	[500]	ug/L
Sn 189.927†	2681.4	26.26	0.98%	[500]	ug/L
Sr 421.552†	111501.6	509.82	0.46%	[500]	ug/L
Ti 337.279†	17102.4	29.03	0.17%	[500]	ug/L
Tl 190.801†	2984.5	35.99	1.21%	[500]	ug/L
V 292.402†	50101.4	349.19	0.70%	[500]	ug/L
Zn 206.200†	43193.2	288.31	0.67%	[500]	ug/L
Li 670.784	3322352.1	17316.43	0.52%	[250]	ug/L

Sequence No.: 4
Sample ID: STD 3 150615RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 4
Date Collected: 06/15/15 5:02:04 PM
Data Type: Reprocessed on 06/17/15 10:39:52 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150615RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	200408.4	697.24	0.35%	96.62	%
Y Radial	13613.7	209.37	1.54%	98.45	%
Ag 338.289†	83787.7	390.36	0.47%	[500]	ug/L
Al 308.215†	24978.1	92.48	0.37%	[20000]	ug/L
As 188.979†	4949.9	60.65	1.23%	[1000]	ug/L
B 249.677†	32259.6	126.04	0.39%	[1000]	ug/L
Ba 233.527†	396763.4	1646.73	0.42%	[1000]	ug/L
Be 313.107†	3465178.2	15992.57	0.46%	[1000]	ug/L
Ca 315.887†	726328.2	11140.72	1.53%	[50000]	ug/L
Cd 214.440†	268344.9	1267.07	0.47%	[1000]	ug/L
Co 228.616†	93018.3	423.83	0.46%	[1000]	ug/L
Cr 267.716†	82718.3	581.19	0.70%	[1000]	ug/L
Cu 327.393†	179027.9	672.71	0.38%	[1000]	ug/L
Fe 273.955†	1441170.3	6083.11	0.42%	[20000]	ug/L
K 766.490†	116121.8	443.35	0.38%	[20000]	ug/L
Mg 285.213†	771015.4	12041.93	1.56%	[50000]	ug/L
Mn 257.610†	77475.6	298.34	0.39%	[1000]	ug/L
Mo 202.031†	32426.7	221.93	0.68%	[1000]	ug/L
Na 589.592†	112559.6	2129.64	1.89%	[25000]	ug/L
Ni 231.604†	46147.2	368.10	0.80%	[1000]	ug/L
P 213.617†	15873.5	127.89	0.81%	[5000]	ug/L
Pb 220.353†	6382.4	53.94	0.85%	[1000]	ug/L
Sb 206.836†	6841.3	73.06	1.07%	[1000]	ug/L
Se 196.026†	2914.0	22.54	0.77%	[1000]	ug/L
Sn 189.927†	5396.5	31.20	0.58%	[1000]	ug/L
Sr 421.552†	230166.5	4362.95	1.90%	[1000]	ug/L
Ti 337.279†	34506.9	83.31	0.24%	[1000]	ug/L
Tl 190.801†	5889.5	44.80	0.76%	[1000]	ug/L
V 292.402†	100920.0	478.07	0.47%	[1000]	ug/L
Zn 206.200†	86928.2	345.37	0.40%	[1000]	ug/L
Li 670.784	7172518.2	12086.50	0.17%	[500]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	167.2	0.00000	0.999937	
Al 308.215	3	Lin Thru 0	0.0	1.245	0.00000	0.999938	
As 188.979	3	Lin Thru 0	0.0	4.936	0.00000	0.999942	
B 249.677	3	Lin Thru 0	0.0	32.13	0.00000	0.999930	
Ba 233.527	3	Lin Thru 0	0.0	396.4	0.00000	0.999952	
Be 313.107	3	Lin Thru 0	0.0	3463	0.00000	0.999962	
Ca 315.887	3	Lin Thru 0	0.0	14.54	0.00000	0.999892	
Cd 214.440	3	Lin Thru 0	0.0	268.5	0.00000	0.999960	
Co 228.616	3	Lin Thru 0	0.0	93.10	0.00000	0.999951	
Cr 267.716	3	Lin Thru 0	0.0	82.71	0.00000	0.999963	
Cu 327.393	3	Lin Thru 0	0.0	178.5	0.00000	0.999959	
Fe 273.955	3	Lin Thru 0	0.0	72.09	0.00000	0.999962	
K 766.490	3	Lin Thru 0	0.0	5.772	0.00000	0.999897	
Mg 285.213	3	Lin Thru 0	0.0	15.46	0.00000	0.999944	
Mn 257.610	3	Lin Thru 0	0.0	77.34	0.00000	0.999953	
Mo 202.031	3	Lin Thru 0	0.0	32.39	0.00000	0.999962	
Na 589.592	3	Lin Thru 0	0.0	4.485	0.00000	0.999933	
Ni 231.604	3	Lin Thru 0	0.0	46.25	0.00000	0.999948	
P 213.617	3	Lin Thru 0	0.0	3.165	0.00000	0.999944	
Pb 220.353	3	Lin Thru 0	0.0	6.391	0.00000	0.999971	
Sb 206.836	3	Lin Thru 0	0.0	6.817	0.00000	0.999970	
Se 196.026	3	Lin Thru 0	0.0	2.911	0.00000	0.999949	

Sn 189.927	3	Lin Thru 0	0.0	5.390	0.00000	0.999968
Sr 421.552	3	Lin Thru 0	0.0	228.7	0.00000	0.999885
Ti 337.279	3	Lin Thru 0	0.0	34.45	0.00000	0.999953
Tl 190.801	3	Lin Thru 0	0.0	5.905	0.00000	0.999944
V 292.402	3	Lin Thru 0	0.0	100.8	0.00000	0.999953
Zn 206.200	3	Lin Thru 0	0.0	86.85	0.00000	0.999910
Li 670.784	3	Lin Thru 0	0.0	14130	0.00000	0.999550

Sequence No.: 5
Sample ID: ICV 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/15/15 5:07:14 PM
Data Type: Reprocessed on 06/17/15 10:39:53 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	203988.7	98.34	%	0.066				0.07%
Y Radial	13517.4	97.75	%	0.419				0.43%
Ag 338.289†	42547.9	254.5	ug/L	0.82	254.5	ug/L	0.82	0.32%
QC value within limits for Ag 338.289 Recovery = 101.79%								
Al 308.215†	15603.7	12560	ug/L	46.11	12560	ug/L	46.11	0.37%
QC value within limits for Al 308.215 Recovery = 100.48%								
As 188.979†	2379.9	478.9	ug/L	0.93	478.9	ug/L	0.93	0.19%
QC value within limits for As 188.979 Recovery = 95.78%								
B 249.677†	15950.3	526.3	ug/L	1.40	526.3	ug/L	1.40	0.27%
QC value within limits for B 249.677 Recovery = 105.25%								
Ba 233.527†	200887.5	506.3	ug/L	1.47	506.3	ug/L	1.47	0.29%
QC value within limits for Ba 233.527 Recovery = 101.26%								
Be 313.107†	1748297.7	504.9	ug/L	1.33	504.9	ug/L	1.33	0.26%
QC value within limits for Be 313.107 Recovery = 100.97%								
Ca 315.887†	191216.2	13150	ug/L	44.07	13150	ug/L	44.07	0.34%
QC value within limits for Ca 315.887 Recovery = 105.17%								
Cd 214.440†	137925.5	513.8	ug/L	1.14	513.8	ug/L	1.14	0.22%
QC value within limits for Cd 214.440 Recovery = 102.76%								
Co 228.616†	47669.3	512.0	ug/L	1.51	512.0	ug/L	1.51	0.30%
QC value within limits for Co 228.616 Recovery = 102.39%								
Cr 267.716†	39958.1	483.0	ug/L	1.71	483.0	ug/L	1.71	0.35%
QC value within limits for Cr 267.716 Recovery = 96.61%								
Cu 327.393†	91929.5	516.0	ug/L	1.36	516.0	ug/L	1.36	0.26%
QC value within limits for Cu 327.393 Recovery = 103.21%								
Fe 273.955†	918883.0	12710	ug/L	34.90	12710	ug/L	34.90	0.27%
QC value within limits for Fe 273.955 Recovery = 101.65%								
K 766.490†	72573.1	12550	ug/L	43.40	12550	ug/L	43.40	0.35%
QC value within limits for K 766.490 Recovery = 100.38%								
Mg 285.213†	199741.0	12930	ug/L	38.42	12930	ug/L	38.42	0.30%
QC value within limits for Mg 285.213 Recovery = 103.41%								
Mn 257.610†	39103.1	505.2	ug/L	2.06	505.2	ug/L	2.06	0.41%
QC value within limits for Mn 257.610 Recovery = 101.05%								
Mo 202.031†	16172.5	499.9	ug/L	0.58	499.9	ug/L	0.58	0.12%
QC value within limits for Mo 202.031 Recovery = 99.98%								
Na 589.592†	57548.0	12820	ug/L	31.18	12820	ug/L	31.18	0.24%
QC value within limits for Na 589.592 Recovery = 102.53%								
Ni 231.604†	24204.5	522.4	ug/L	0.38	522.4	ug/L	0.38	0.07%
QC value within limits for Ni 231.604 Recovery = 104.47%								
P 213.617†	8013.7	2532	ug/L	1.33	2532	ug/L	1.33	0.05%
QC value within limits for P 213.617 Recovery = 101.29%								
Pb 220.353†	3321.1	522.4	ug/L	1.40	522.4	ug/L	1.40	0.27%
QC value within limits for Pb 220.353 Recovery = 104.48%								
Sb 206.836†	3773.5	553.6	ug/L	4.99	553.6	ug/L	4.99	0.90%
QC value greater than the upper limit for Sb 206.836 Recovery = 110.72%								
Se 196.026†	1492.6	516.6	ug/L	1.68	516.6	ug/L	1.68	0.32%
QC value within limits for Se 196.026 Recovery = 103.32%								
Sn 189.927†	1389.6	257.8	ug/L	1.09	257.8	ug/L	1.09	0.42%
QC value within limits for Sn 189.927 Recovery = 103.12%								
Sr 421.552†	116192.6	507.5	ug/L	3.85	507.5	ug/L	3.85	0.76%
QC value within limits for Sr 421.552 Recovery = 101.49%								
Ti 337.279†	17463.4	506.8	ug/L	0.81	506.8	ug/L	0.81	0.16%
QC value within limits for Ti 337.279 Recovery = 101.35%								
Tl 190.801†	3046.4	515.9	ug/L	0.95	515.9	ug/L	0.95	0.18%
QC value within limits for Tl 190.801 Recovery = 103.17%								
V 292.402†	50765.7	503.7	ug/L	1.86	503.7	ug/L	1.86	0.37%
QC value within limits for V 292.402 Recovery = 100.75%								
Zn 206.200†	45430.6	529.1	ug/L	2.14	529.1	ug/L	2.14	0.40%
QC value within limits for Zn 206.200 Recovery = 105.81%								

Li 670.784	4079260.6	288.6 ug/L	2.68	288.6 ug/L	2.68	0.93%

QC value greater than the upper limit for Li 670.784 Recovery = 115.45%
QC Failed. Continue with analysis.

Sequence No.: 6 Autosampler Location: 1
Sample ID: ICB 150615RJS I:JL O:RJS Date Collected: 06/15/15 5:17:38 PM
Analyst: Data Type: Reprocessed on 06/17/15 10:39:54 AM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:
Wash Time:

Mean Data: ICB 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	208110.1	100.3	%	0.17				0.17%
Y Radial	13621.3	98.51	%	0.404				0.41%
Ag 338.289†	128.2	0.767	ug/L	0.5596	0.767	ug/L	0.5596	73.00%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-1.0	-0.848	ug/L	4.8057	-0.848	ug/L	4.8057	566.82%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	10.8	2.174	ug/L	1.0695	2.174	ug/L	1.0695	49.19%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	68.5	2.130	ug/L	0.2238	2.130	ug/L	0.2238	10.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-0.1	-0.000	ug/L	0.0699	-0.000	ug/L	0.0699	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	25.5	0.007	ug/L	0.0019	0.007	ug/L	0.0019	25.82%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	11.6	0.793	ug/L	1.3503	0.793	ug/L	1.3503	170.36%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	71.4	0.267	ug/L	0.1285	0.267	ug/L	0.1285	48.19%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	9.2	0.101	ug/L	0.0982	0.101	ug/L	0.0982	96.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.5	-0.055	ug/L	0.0841	-0.055	ug/L	0.0841	152.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	313.3	1.754	ug/L	0.2433	1.754	ug/L	0.2433	13.87%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-95.7	-1.327	ug/L	1.2402	-1.327	ug/L	1.2402	93.44%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	13.5	2.316	ug/L	13.3158	2.316	ug/L	13.3158	574.86%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1.0	0.061	ug/L	0.1354	0.061	ug/L	0.1354	221.31%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	0.4	0.005	ug/L	0.1093	0.005	ug/L	0.1093	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	18.6	0.575	ug/L	0.0658	0.575	ug/L	0.0658	11.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	149.4	33.31	ug/L	5.472	33.31	ug/L	5.472	16.43%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-0.8	-0.019	ug/L	0.1011	-0.019	ug/L	0.1011	530.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	1.0	0.325	ug/L	0.7012	0.325	ug/L	0.7012	216.06%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	4.9	0.763	ug/L	0.1607	0.763	ug/L	0.1607	21.06%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-26.1	-3.828	ug/L	0.9236	-3.828	ug/L	0.9236	24.13%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	7.3	2.500	ug/L	2.3417	2.500	ug/L	2.3417	93.68%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-0.3	-0.047	ug/L	0.3789	-0.047	ug/L	0.3789	814.56%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-20.4	-0.089	ug/L	0.1193	-0.089	ug/L	0.1193	133.55%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-4.5	-0.132	ug/L	0.3435	-0.132	ug/L	0.3435	260.79%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	18.8	3.177	ug/L	0.3188	3.177	ug/L	0.3188	10.03%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	0.4	0.004	ug/L	0.0181	0.004	ug/L	0.0181	500.20%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	8.3	0.096	ug/L	0.7705	0.096	ug/L	0.7705	798.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	3499.8	0.248 ug/L	0.0068	0.248 ug/L	0.0068	2.76%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICSA 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 6
Date Collected: 06/15/15 5:23:33 PM
Data Type: Reprocessed on 06/17/15 10:39:56 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	197759.0	95.34	%	0.504				0.53%
Y Radial	13387.3	96.81	%	0.808				0.83%
Ag 338.289†	38.6	0.231	ug/L	0.0990	0.231	ug/L	0.0990	42.89%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	125179.8	100600	ug/L	702.70	100600	ug/L	702.70	0.70%
QC value within limits for Al 308.215 Recovery = 100.56%								
As 188.979†	12.6	2.986	ug/L	1.3809	2.986	ug/L	1.3809	46.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-9020.9	-39.50	ug/L	2.397	-39.50	ug/L	2.397	6.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1954.8	-0.662	ug/L	0.0522	-0.662	ug/L	0.0522	7.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	283.6	0.082	ug/L	0.0047	0.082	ug/L	0.0047	5.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1491930.9	102600	ug/L	735.73	102600	ug/L	735.73	0.72%
QC value within limits for Ca 315.887 Recovery = 102.61%								
Cd 214.440†	754.8	-1.112	ug/L	0.0956	-1.112	ug/L	0.0956	8.60%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	135.3	-1.451	ug/L	0.1066	-1.451	ug/L	0.1066	7.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	81.9	0.091	ug/L	0.0753	0.091	ug/L	0.0753	82.64%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-627.8	-2.090	ug/L	0.1641	-2.090	ug/L	0.1641	7.85%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	7144984.2	99110	ug/L	972.39	99110	ug/L	972.39	0.98%
QC value within limits for Fe 273.955 Recovery = 99.11%								
K 766.490†	264.1	-51.36	ug/L	3.230	-51.36	ug/L	3.230	6.29%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1524927.2	98700	ug/L	685.61	98700	ug/L	685.61	0.69%
QC value within limits for Mg 285.213 Recovery = 98.70%								
Mn 257.610†	228.3	-0.312	ug/L	0.2373	-0.312	ug/L	0.2373	76.01%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-76.6	-0.931	ug/L	0.2789	-0.931	ug/L	0.2789	29.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	282.7	50.76	ug/L	3.601	50.76	ug/L	3.601	7.09%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-96.9	0.343	ug/L	0.2295	0.343	ug/L	0.2295	66.86%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-125.1	-39.54	ug/L	1.165	-39.54	ug/L	1.165	2.95%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-88.7	-3.921	ug/L	0.9536	-3.921	ug/L	0.9536	24.32%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-64.6	-9.476	ug/L	1.3125	-9.476	ug/L	1.3125	13.85%
QC value less than the lower limit for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-119.0	-1.870	ug/L	5.4733	-1.870	ug/L	5.4733	292.61%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.9	0.727	ug/L	0.3913	0.727	ug/L	0.3913	53.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	180.0	-3.228	ug/L	0.2604	-3.228	ug/L	0.2604	8.07%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	74.8	0.465	ug/L	1.2448	0.465	ug/L	1.2448	267.86%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-25.6	-4.328	ug/L	0.4418	-4.328	ug/L	0.4418	10.21%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	72.4	0.719	ug/L	0.1462	0.719	ug/L	0.1462	20.34%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	100.7	0.393	ug/L	0.1549	0.393	ug/L	0.1549	39.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	819.9	0.058 ug/L	0.0036	0.058 ug/L	0.0036	6.27%

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICSAB 150615RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 7
Date Collected: 06/15/15 5:30:49 PM
Data Type: Reprocessed on 06/17/15 10:39:57 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150615RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	194815.1	93.92	%	0.445				0.47%
Y Radial	13556.3	98.04	%	1.452				1.48%
Ag 338.289†	86952.5	520.1	ug/L	1.67	520.1	ug/L	1.67	0.32%
QC value within limits for Ag 338.289 Recovery = 104.01%								
Al 308.215†	123403.0	99150	ug/L	1239.31	99150	ug/L	1239.31	1.25%
QC value within limits for Al 308.215 Recovery = 99.15%								
As 188.979†	1221.7	246.6	ug/L	0.76	246.6	ug/L	0.76	0.31%
QC value within limits for As 188.979 Recovery = 98.64%								
B 249.677†	-9257.9	-43.63	ug/L	0.359	-43.63	ug/L	0.359	0.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	101417.1	250.3	ug/L	0.50	250.3	ug/L	0.50	0.20%
QC value within limits for Ba 233.527 Recovery = 100.13%								
Be 313.107†	860031.1	248.4	ug/L	0.60	248.4	ug/L	0.60	0.24%
QC value within limits for Be 313.107 Recovery = 99.34%								
Ca 315.887†	1476404.2	101500	ug/L	1337.63	101500	ug/L	1337.63	1.32%
QC value within limits for Ca 315.887 Recovery = 101.54%								
Cd 214.440†	133739.9	494.3	ug/L	1.27	494.3	ug/L	1.27	0.26%
QC value within limits for Cd 214.440 Recovery = 98.86%								
Co 228.616†	23652.6	251.8	ug/L	1.59	251.8	ug/L	1.59	0.63%
QC value within limits for Co 228.616 Recovery = 100.71%								
Cr 267.716†	20131.7	242.6	ug/L	1.64	242.6	ug/L	1.64	0.68%
QC value within limits for Cr 267.716 Recovery = 97.03%								
Cu 327.393†	47917.3	269.7	ug/L	1.69	269.7	ug/L	1.69	0.63%
QC value within limits for Cu 327.393 Recovery = 107.88%								
Fe 273.955†	7252991.4	100600	ug/L	279.19	100600	ug/L	279.19	0.28%
QC value within limits for Fe 273.955 Recovery = 100.58%								
K 766.490†	169.8	-69.53	ug/L	17.191	-69.53	ug/L	17.191	24.73%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1511700.7	97840	ug/L	1349.32	97840	ug/L	1349.32	1.38%
QC value within limits for Mg 285.213 Recovery = 97.84%								
Mn 257.610†	19390.6	247.5	ug/L	1.18	247.5	ug/L	1.18	0.48%
QC value within limits for Mn 257.610 Recovery = 99.01%								
Mo 202.031†	7776.1	241.8	ug/L	1.53	241.8	ug/L	1.53	0.63%
QC value within limits for Mo 202.031 Recovery = 96.71%								
Na 589.592†	122.3	14.20	ug/L	7.830	14.20	ug/L	7.830	55.13%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	22509.3	488.5	ug/L	3.01	488.5	ug/L	3.01	0.62%
QC value within limits for Ni 231.604 Recovery = 97.71%								
P 213.617†	-189.9	-60.02	ug/L	3.224	-60.02	ug/L	3.224	5.37%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	3072.7	490.9	ug/L	5.44	490.9	ug/L	5.44	1.11%
QC value within limits for Pb 220.353 Recovery = 98.19%								
Sb 206.836†	1783.9	261.7	ug/L	3.82	261.7	ug/L	3.82	1.46%
QC value within limits for Sb 206.836 Recovery = 104.68%								
Se 196.026†	609.3	248.2	ug/L	3.08	248.2	ug/L	3.08	1.24%
QC value within limits for Se 196.026 Recovery = 99.29%								
Sn 189.927†	3.3	0.613	ug/L	1.0113	0.613	ug/L	1.0113	164.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	134.9	-3.387	ug/L	0.2072	-3.387	ug/L	0.2072	6.12%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	30.1	-0.777	ug/L	0.4672	-0.777	ug/L	0.4672	60.15%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	1383.6	234.3	ug/L	2.77	234.3	ug/L	2.77	1.18%
QC value within limits for Tl 190.801 Recovery = 93.72%								
V 292.402†	26567.3	263.6	ug/L	1.10	263.6	ug/L	1.10	0.42%
QC value within limits for V 292.402 Recovery = 105.45%								
Zn 206.200†	44699.6	516.6	ug/L	2.70	516.6	ug/L	2.70	0.52%
QC value within limits for Zn 206.200 Recovery = 103.31%								

Li 670.784	50.9	0.004 ug/L	0.0050	0.004 ug/L	0.0050	139.20%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCV1 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/15/15 5:37:09 PM
Data Type: Reprocessed on 06/17/15 10:39:58 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	204635.2	98.66	%	0.606				0.61%
Y Radial	13741.4	99.37	%	2.232				2.25%
Ag 338.289†	41631.5	249.0	ug/L	2.13	249.0	ug/L	2.13	0.86%
QC value within limits for Ag 338.289 Recovery = 99.60%								
Al 308.215†	12212.9	9834	ug/L	134.33	9834	ug/L	134.33	1.37%
QC value within limits for Al 308.215 Recovery = 98.34%								
As 188.979†	2445.5	490.7	ug/L	3.28	490.7	ug/L	3.28	0.67%
QC value within limits for As 188.979 Recovery = 98.13%								
B 249.677†	15779.3	514.1	ug/L	5.46	514.1	ug/L	5.46	1.06%
QC value within limits for B 249.677 Recovery = 102.83%								
Ba 233.527†	198148.1	499.5	ug/L	4.28	499.5	ug/L	4.28	0.86%
QC value within limits for Ba 233.527 Recovery = 99.91%								
Be 313.107†	1731621.8	500.1	ug/L	4.13	500.1	ug/L	4.13	0.83%
QC value within limits for Be 313.107 Recovery = 100.01%								
Ca 315.887†	367480.6	25270	ug/L	369.81	25270	ug/L	369.81	1.46%
QC value within limits for Ca 315.887 Recovery = 101.08%								
Cd 214.440†	135657.4	505.6	ug/L	4.13	505.6	ug/L	4.13	0.82%
QC value within limits for Cd 214.440 Recovery = 101.12%								
Co 228.616†	46882.6	503.6	ug/L	3.90	503.6	ug/L	3.90	0.77%
QC value within limits for Co 228.616 Recovery = 100.71%								
Cr 267.716†	39184.8	473.6	ug/L	3.99	473.6	ug/L	3.99	0.84%
QC value within limits for Cr 267.716 Recovery = 94.73%								
Cu 327.393†	88615.4	497.3	ug/L	4.87	497.3	ug/L	4.87	0.98%
QC value within limits for Cu 327.393 Recovery = 99.47%								
Fe 273.955†	726981.6	10040	ug/L	79.91	10040	ug/L	79.91	0.80%
QC value within limits for Fe 273.955 Recovery = 100.45%								
K 766.490†	56931.9	9838	ug/L	145.59	9838	ug/L	145.59	1.48%
QC value within limits for K 766.490 Recovery = 98.38%								
Mg 285.213†	390419.1	25260	ug/L	378.88	25260	ug/L	378.88	1.50%
QC value within limits for Mg 285.213 Recovery = 101.02%								
Mn 257.610†	38467.3	496.5	ug/L	7.79	496.5	ug/L	7.79	1.57%
QC value within limits for Mn 257.610 Recovery = 99.29%								
Mo 202.031†	16180.4	500.1	ug/L	2.34	500.1	ug/L	2.34	0.47%
QC value within limits for Mo 202.031 Recovery = 100.02%								
Na 589.592†	58168.3	12960	ug/L	189.26	12960	ug/L	189.26	1.46%
QC value within limits for Na 589.592 Recovery = 103.66%								
Ni 231.604†	23443.0	505.9	ug/L	2.34	505.9	ug/L	2.34	0.46%
QC value within limits for Ni 231.604 Recovery = 101.19%								
P 213.617†	7813.4	2469	ug/L	7.60	2469	ug/L	7.60	0.31%
QC value within limits for P 213.617 Recovery = 98.76%								
Pb 220.353†	3185.6	501.4	ug/L	3.91	501.4	ug/L	3.91	0.78%
QC value within limits for Pb 220.353 Recovery = 100.29%								
Sb 206.836†	3345.6	490.8	ug/L	4.15	490.8	ug/L	4.15	0.84%
QC value within limits for Sb 206.836 Recovery = 98.16%								
Se 196.026†	1451.1	500.9	ug/L	5.82	500.9	ug/L	5.82	1.16%
QC value within limits for Se 196.026 Recovery = 100.18%								
Sn 189.927†	2680.9	497.4	ug/L	3.19	497.4	ug/L	3.19	0.64%
QC value within limits for Sn 189.927 Recovery = 99.48%								
Sr 421.552†	117605.3	513.2	ug/L	14.44	513.2	ug/L	14.44	2.81%
QC value within limits for Sr 421.552 Recovery = 102.63%								
Ti 337.279†	16994.9	493.0	ug/L	7.27	493.0	ug/L	7.27	1.48%
QC value within limits for Ti 337.279 Recovery = 98.60%								
Tl 190.801†	2946.3	498.9	ug/L	5.14	498.9	ug/L	5.14	1.03%
QC value within limits for Tl 190.801 Recovery = 99.78%								
V 292.402†	49948.7	495.6	ug/L	4.40	495.6	ug/L	4.40	0.89%
QC value within limits for V 292.402 Recovery = 99.13%								
Zn 206.200†	43829.1	511.1	ug/L	4.17	511.1	ug/L	4.17	0.82%
QC value within limits for Zn 206.200 Recovery = 102.23%								

Li 670.784	3381573.5	239.3 ug/L	0.20	239.3 ug/L	0.20	0.08%

QC value within limits for Li 670.784 Recovery = 95.70%
All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCB 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/15/15 5:43:00 PM
Data Type: Reprocessed on 06/17/15 10:39:59 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	210626.6	101.5	%	0.34				0.34%
Y Radial	13907.7	100.6	%	0.64				0.63%
Ag 338.289†	77.4	0.463	ug/L	0.4797	0.463	ug/L	0.4797	103.61%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-2.4	-1.922	ug/L	9.3789	-1.922	ug/L	9.3789	488.03%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.6	0.726	ug/L	0.7381	0.726	ug/L	0.7381	101.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	42.1	1.309	ug/L	0.4763	1.309	ug/L	0.4763	36.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	23.0	0.058	ug/L	0.0286	0.058	ug/L	0.0286	49.44%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	26.4	0.008	ug/L	0.0044	0.008	ug/L	0.0044	57.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	50.2	3.453	ug/L	0.7068	3.453	ug/L	0.7068	20.47%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	88.9	0.332	ug/L	0.0696	0.332	ug/L	0.0696	20.99%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	12.0	0.132	ug/L	0.0966	0.132	ug/L	0.0966	73.34%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.5	-0.042	ug/L	0.1117	-0.042	ug/L	0.1117	264.52%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	254.7	1.426	ug/L	0.2839	1.426	ug/L	0.2839	19.92%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-62.5	-0.864	ug/L	0.4658	-0.864	ug/L	0.4658	53.94%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-19.6	-3.407	ug/L	10.5505	-3.407	ug/L	10.5505	309.69%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	6.1	0.396	ug/L	0.1726	0.396	ug/L	0.1726	43.64%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-0.9	-0.012	ug/L	0.0919	-0.012	ug/L	0.0919	793.10%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	23.2	0.716	ug/L	0.3643	0.716	ug/L	0.3643	50.88%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	6.6	1.464	ug/L	9.4003	1.464	ug/L	9.4003	641.91%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	7.5	0.162	ug/L	0.1775	0.162	ug/L	0.1775	109.44%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-4.5	-1.436	ug/L	0.6162	-1.436	ug/L	0.6162	42.91%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	4.8	0.750	ug/L	0.2678	0.750	ug/L	0.2678	35.68%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-19.0	-2.781	ug/L	0.5700	-2.781	ug/L	0.5700	20.50%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	4.5	1.553	ug/L	0.7487	1.553	ug/L	0.7487	48.21%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-2.1	-0.398	ug/L	0.2500	-0.398	ug/L	0.2500	62.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-9.5	-0.042	ug/L	0.0459	-0.042	ug/L	0.0459	110.45%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-10.1	-0.292	ug/L	0.0576	-0.292	ug/L	0.0576	19.70%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	6.4	1.085	ug/L	0.8360	1.085	ug/L	0.8360	77.06%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-4.2	-0.042	ug/L	0.0535	-0.042	ug/L	0.0535	126.94%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-8.7	-0.100	ug/L	0.6957	-0.100	ug/L	0.6957	692.73%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	1749.5	0.124 ug/L	0.0130	0.124 ug/L	0.0130	10.53%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 51
Sample ID: CCV2 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 06/15/15 11:02:35 PM
Data Type: Reprocessed on 06/17/15 10:40:45 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	219905.8	106.0	%	0.05				0.05%
Y Radial	15603.5	112.8	%	0.73				0.65%
Ag 338.289†	32765.5	196.0	ug/L	0.70	196.0	ug/L	0.70	0.35%
QC value within limits for Ag 338.289 Recovery = 104.52%								
Al 308.215†	8289.5	6670	ug/L	73.06	6670	ug/L	73.06	1.10%
QC value less than the lower limit for Al 308.215 Recovery = 88.94%								
As 188.979†	1722.1	345.5	ug/L	0.55	345.5	ug/L	0.55	0.16%
QC value within limits for As 188.979 Recovery = 92.13%								
B 249.677†	12710.3	412.8	ug/L	1.71	412.8	ug/L	1.71	0.42%
QC value within limits for B 249.677 Recovery = 110.09%								
Ba 233.527†	143706.1	362.2	ug/L	0.17	362.2	ug/L	0.17	0.05%
QC value within limits for Ba 233.527 Recovery = 96.59%								
Be 313.107†	1141094.7	329.5	ug/L	0.83	329.5	ug/L	0.83	0.25%
QC value less than the lower limit for Be 313.107 Recovery = 87.87%								
Ca 315.887†	262062.2	18020	ug/L	186.29	18020	ug/L	186.29	1.03%
QC value within limits for Ca 315.887 Recovery = 96.10%								
Cd 214.440†	98557.2	367.4	ug/L	0.59	367.4	ug/L	0.59	0.16%
QC value within limits for Cd 214.440 Recovery = 97.96%								
Co 228.616†	33171.9	356.3	ug/L	0.29	356.3	ug/L	0.29	0.08%
QC value within limits for Co 228.616 Recovery = 95.01%								
Cr 267.716†	28476.7	344.1	ug/L	0.92	344.1	ug/L	0.92	0.27%
QC value within limits for Cr 267.716 Recovery = 91.77%								
Cu 327.393†	69616.5	390.7	ug/L	1.33	390.7	ug/L	1.33	0.34%
QC value within limits for Cu 327.393 Recovery = 104.17%								
Fe 273.955†	540662.1	7475	ug/L	9.57	7475	ug/L	9.57	0.13%
QC value within limits for Fe 273.955 Recovery = 99.67%								
K 766.490†	54526.1	9416	ug/L	91.07	9416	ug/L	91.07	0.97%
QC value greater than the upper limit for K 766.490 Recovery = 125.55%								
Mg 285.213†	293856.2	19010	ug/L	192.66	19010	ug/L	192.66	1.01%
QC value within limits for Mg 285.213 Recovery = 101.38%								
Mn 257.610†	28846.1	372.3	ug/L	4.13	372.3	ug/L	4.13	1.11%
QC value within limits for Mn 257.610 Recovery = 99.28%								
Mo 202.031†	12148.6	375.5	ug/L	1.23	375.5	ug/L	1.23	0.33%
QC value within limits for Mo 202.031 Recovery = 100.12%								
Na 589.592†	102869.4	22930	ug/L	207.87	22930	ug/L	207.87	0.91%
QC value greater than the upper limit for Na 589.592 Recovery = 244.55%								
Ni 231.604†	17396.5	375.6	ug/L	1.37	375.6	ug/L	1.37	0.36%
QC value within limits for Ni 231.604 Recovery = 100.16%								
P 213.617†	5443.4	1720	ug/L	5.05	1720	ug/L	5.05	0.29%
QC value within limits for P 213.617 Recovery = 91.73%								
Pb 220.353†	1573.9	248.4	ug/L	0.92	248.4	ug/L	0.92	0.37%
QC value less than the lower limit for Pb 220.353 Recovery = 66.24%								
Sb 206.836†	2197.6	322.4	ug/L	1.58	322.4	ug/L	1.58	0.49%
QC value less than the lower limit for Sb 206.836 Recovery = 85.97%								
Se 196.026†	1114.9	384.9	ug/L	4.07	384.9	ug/L	4.07	1.06%
QC value within limits for Se 196.026 Recovery = 102.64%								
Sn 189.927†	1861.1	345.3	ug/L	0.95	345.3	ug/L	0.95	0.28%
QC value within limits for Sn 189.927 Recovery = 92.08%								
Sr 421.552†	248951.2	1088	ug/L	5.30	1088	ug/L	5.30	0.49%
QC value greater than the upper limit for Sr 421.552 Recovery = 290.05%								
Ti 337.279†	12848.1	372.7	ug/L	4.04	372.7	ug/L	4.04	1.08%
QC value within limits for Ti 337.279 Recovery = 99.39%								
Tl 190.801†	944.7	160.0	ug/L	1.21	160.0	ug/L	1.21	0.76%
QC value less than the lower limit for Tl 190.801 Recovery = 42.66%								
V 292.402†	30734.8	305.0	ug/L	1.14	305.0	ug/L	1.14	0.38%
QC value less than the lower limit for V 292.402 Recovery = 81.33%								
Zn 206.200†	34386.4	400.9	ug/L	1.60	400.9	ug/L	1.60	0.40%
QC value within limits for Zn 206.200 Recovery = 106.92%								

Li 670.784 3735559.5 264.3 ug/L 1.46 264.3 ug/L 1.46 0.55%
QC value greater than the upper limit for Li 670.784 Recovery = 140.96%
QC Failed. Continue with analysis.

Sequence No.: 52
Sample ID: CCB 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 06/15/15 11:14:28 PM
Data Type: Reprocessed on 06/17/15 10:40:46 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	230392.5	111.1	%	1.10				0.99%
Y Radial	15866.6	114.7	%	0.90				0.79%
Ag 338.289†	189.2	1.131	ug/L	0.0910	1.131	ug/L	0.0910	8.04%
QC value greater than the upper limit for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-57.2	-46.18	ug/L	2.448	-46.18	ug/L	2.448	5.30%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	11.6	2.339	ug/L	0.8498	2.339	ug/L	0.8498	36.34%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	530.4	16.49	ug/L	0.758	16.49	ug/L	0.758	4.60%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	197.4	0.496	ug/L	0.0323	0.496	ug/L	0.0323	6.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	142.7	0.041	ug/L	0.0057	0.041	ug/L	0.0057	13.71%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	514.0	35.28	ug/L	2.195	35.28	ug/L	2.195	6.22%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-376.1	-1.398	ug/L	0.0486	-1.398	ug/L	0.0486	3.48%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	131.8	1.423	ug/L	0.0617	1.423	ug/L	0.0617	4.34%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-61.2	-0.742	ug/L	0.0773	-0.742	ug/L	0.0773	10.42%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	560.7	3.140	ug/L	0.2077	3.140	ug/L	0.2077	6.62%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-528.5	-7.259	ug/L	0.1850	-7.259	ug/L	0.1850	2.55%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	808.3	139.4	ug/L	10.13	139.4	ug/L	10.13	7.27%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	75.8	4.883	ug/L	1.8268	4.883	ug/L	1.8268	37.41%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	19.2	0.249	ug/L	0.0271	0.249	ug/L	0.0271	10.89%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	87.0	2.686	ug/L	0.1711	2.686	ug/L	0.1711	6.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	3150.7	702.4	ug/L	25.16	702.4	ug/L	25.16	3.58%
QC value greater than the upper limit for Na 589.592 Recovery = Not calculated								
Ni 231.604†	45.6	0.983	ug/L	0.2236	0.983	ug/L	0.2236	22.74%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-1.1	-0.340	ug/L	1.0759	-0.340	ug/L	1.0759	316.37%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-50.7	-7.924	ug/L	0.1947	-7.924	ug/L	0.1947	2.46%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-60.6	-8.884	ug/L	0.4542	-8.884	ug/L	0.4542	5.11%
QC value less than the lower limit for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.8	-0.973	ug/L	1.6839	-0.973	ug/L	1.6839	172.98%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1.9	0.354	ug/L	0.5476	0.354	ug/L	0.5476	154.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	89.9	0.392	ug/L	0.0829	0.392	ug/L	0.0829	21.17%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	11.9	0.345	ug/L	0.2152	0.345	ug/L	0.2152	62.34%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	3.7	0.627	ug/L	0.7038	0.627	ug/L	0.7038	112.33%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-104.9	-1.041	ug/L	0.0348	-1.041	ug/L	0.0348	3.34%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-685.6	-7.885	ug/L	0.0202	-7.885	ug/L	0.0202	0.26%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	4953.0	0.350 ug/L	0.0139	0.350 ug/L	0.0139	3.97%

QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 55
Sample ID: CCV1 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 06/15/15 11:38:27 PM
Data Type: Reprocessed on 06/17/15 10:40:50 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	216528.4	104.4	%	0.17				0.17%
Y Radial	15378.4	111.2	%	0.82				0.74%
Ag 338.289†	44035.3	263.4	ug/L	0.83	263.4	ug/L	0.83	0.32%
QC value within limits for Ag 338.289 Recovery = 105.35%								
Al 308.215†	11010.7	8858	ug/L	48.92	8858	ug/L	48.92	0.55%
QC value less than the lower limit for Al 308.215 Recovery = 88.58%								
As 188.979†	2259.3	453.1	ug/L	3.06	453.1	ug/L	3.06	0.68%
QC value within limits for As 188.979 Recovery = 90.63%								
B 249.677†	15577.4	507.9	ug/L	1.60	507.9	ug/L	1.60	0.32%
QC value within limits for B 249.677 Recovery = 101.58%								
Ba 233.527†	190730.1	480.7	ug/L	1.24	480.7	ug/L	1.24	0.26%
QC value within limits for Ba 233.527 Recovery = 96.15%								
Be 313.107†	1504896.2	434.6	ug/L	0.29	434.6	ug/L	0.29	0.07%
QC value less than the lower limit for Be 313.107 Recovery = 86.92%								
Ca 315.887†	354184.0	24350	ug/L	92.61	24350	ug/L	92.61	0.38%
QC value within limits for Ca 315.887 Recovery = 97.42%								
Cd 214.440†	131367.8	489.6	ug/L	1.03	489.6	ug/L	1.03	0.21%
QC value within limits for Cd 214.440 Recovery = 97.93%								
Co 228.616†	43576.1	468.1	ug/L	0.57	468.1	ug/L	0.57	0.12%
QC value within limits for Co 228.616 Recovery = 93.61%								
Cr 267.716†	37761.0	456.3	ug/L	0.36	456.3	ug/L	0.36	0.08%
QC value within limits for Cr 267.716 Recovery = 91.27%								
Cu 327.393†	95333.3	535.0	ug/L	0.56	535.0	ug/L	0.56	0.10%
QC value within limits for Cu 327.393 Recovery = 106.99%								
Fe 273.955†	722306.2	9988	ug/L	18.54	9988	ug/L	18.54	0.19%
QC value within limits for Fe 273.955 Recovery = 99.88%								
K 766.490†	73868.7	12760	ug/L	62.27	12760	ug/L	62.27	0.49%
QC value greater than the upper limit for K 766.490 Recovery = 127.58%								
Mg 285.213†	383014.7	24780	ug/L	155.39	24780	ug/L	155.39	0.63%
QC value within limits for Mg 285.213 Recovery = 99.11%								
Mn 257.610†	38821.1	501.1	ug/L	2.18	501.1	ug/L	2.18	0.43%
QC value within limits for Mn 257.610 Recovery = 100.22%								
Mo 202.031†	16252.5	502.3	ug/L	0.95	502.3	ug/L	0.95	0.19%
QC value within limits for Mo 202.031 Recovery = 100.46%								
Na 589.592†	133943.8	29850	ug/L	127.51	29850	ug/L	127.51	0.43%
QC value greater than the upper limit for Na 589.592 Recovery = 238.81%								
Ni 231.604†	23193.9	500.8	ug/L	1.65	500.8	ug/L	1.65	0.33%
QC value within limits for Ni 231.604 Recovery = 100.16%								
P 213.617†	7205.4	2277	ug/L	7.00	2277	ug/L	7.00	0.31%
QC value within limits for P 213.617 Recovery = 91.07%								
Pb 220.353†	1987.3	313.8	ug/L	1.69	313.8	ug/L	1.69	0.54%
QC value less than the lower limit for Pb 220.353 Recovery = 62.76%								
Sb 206.836†	2914.4	427.5	ug/L	1.23	427.5	ug/L	1.23	0.29%
QC value less than the lower limit for Sb 206.836 Recovery = 85.51%								
Se 196.026†	1498.7	517.4	ug/L	3.72	517.4	ug/L	3.72	0.72%
QC value within limits for Se 196.026 Recovery = 103.48%								
Sn 189.927†	2426.9	450.3	ug/L	2.12	450.3	ug/L	2.12	0.47%
QC value within limits for Sn 189.927 Recovery = 90.05%								
Sr 421.552†	344528.3	1505	ug/L	7.62	1505	ug/L	7.62	0.51%
QC value greater than the upper limit for Sr 421.552 Recovery = 301.06%								
Ti 337.279†	17249.2	500.4	ug/L	2.79	500.4	ug/L	2.79	0.56%
QC value within limits for Ti 337.279 Recovery = 100.08%								
Tl 190.801†	1008.2	170.7	ug/L	2.95	170.7	ug/L	2.95	1.73%
QC value less than the lower limit for Tl 190.801 Recovery = 34.15%								
V 292.402†	39598.7	392.9	ug/L	0.63	392.9	ug/L	0.63	0.16%
QC value less than the lower limit for V 292.402 Recovery = 78.59%								
Zn 206.200†	44369.6	517.5	ug/L	0.93	517.5	ug/L	0.93	0.18%
QC value within limits for Zn 206.200 Recovery = 103.50%								

Li 670.784	5310763.9	375.8 ug/L	2.59	375.8 ug/L	2.59	0.69%

QC value greater than the upper limit for Li 670.784 Recovery = 150.30%
QC Failed. Continue with analysis.

Sequence No.: 56
Sample ID: CCB 150615RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 06/15/15 11:50:18 PM
Data Type: Reprocessed on 06/17/15 10:40:51 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150615RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	225445.4	108.7	%	0.72				0.66%
Y Radial	15780.4	114.1	%	0.84				0.73%
Ag 338.289†	132.6	0.793	ug/L	0.4641	0.793	ug/L	0.4641	58.54%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-61.3	-49.46	ug/L	4.654	-49.46	ug/L	4.654	9.41%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	6.7	1.340	ug/L	0.1156	1.340	ug/L	0.1156	8.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	344.0	10.71	ug/L	0.361	10.71	ug/L	0.361	3.37%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	215.5	0.541	ug/L	0.0433	0.541	ug/L	0.0433	8.01%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	363.1	0.105	ug/L	0.0048	0.105	ug/L	0.0048	4.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	475.5	32.65	ug/L	0.294	32.65	ug/L	0.294	0.90%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-390.8	-1.454	ug/L	0.0510	-1.454	ug/L	0.0510	3.51%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	124.1	1.343	ug/L	0.0466	1.343	ug/L	0.0466	3.47%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-56.3	-0.682	ug/L	0.0215	-0.682	ug/L	0.0215	3.15%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	1691.8	9.476	ug/L	0.1368	9.476	ug/L	0.1368	1.44%
QC value greater than the upper limit for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	99.8	1.463	ug/L	1.0179	1.463	ug/L	1.0179	69.58%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	855.0	147.7	ug/L	11.02	147.7	ug/L	11.02	7.46%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	46.5	2.997	ug/L	1.0599	2.997	ug/L	1.0599	35.36%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	23.5	0.304	ug/L	0.0818	0.304	ug/L	0.0818	26.91%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	101.1	3.122	ug/L	0.1944	3.122	ug/L	0.1944	6.23%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	2136.0	476.2	ug/L	19.42	476.2	ug/L	19.42	4.08%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	49.5	1.067	ug/L	0.1606	1.067	ug/L	0.1606	15.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-0.5	-0.143	ug/L	0.8378	-0.143	ug/L	0.8378	585.65%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-57.0	-8.918	ug/L	0.7395	-8.918	ug/L	0.7395	8.29%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-57.2	-8.387	ug/L	1.1265	-8.387	ug/L	1.1265	13.43%
QC value less than the lower limit for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.4	-0.147	ug/L	1.7077	-0.147	ug/L	1.7077	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.9	0.714	ug/L	0.4396	0.714	ug/L	0.4396	61.54%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	57.4	0.250	ug/L	0.0447	0.250	ug/L	0.0447	17.90%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	8.9	0.259	ug/L	0.2175	0.259	ug/L	0.2175	84.01%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	5.7	0.973	ug/L	1.1924	0.973	ug/L	1.1924	122.60%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-115.2	-1.143	ug/L	0.0438	-1.143	ug/L	0.0438	3.83%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-632.7	-7.279	ug/L	0.0748	-7.279	ug/L	0.0748	1.03%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784 -2812.2 -0.199 ug/L 0.0182 -0.199 ug/L 0.0182 9.14%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No: 76447 SDG: 76447
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 06/03/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 14:45	%R(1)	True CCV1	Found 14:49	%R(1)	True CCV1	Found 15:27	%R(1)	
Mercury (Hg)	4.17	4.257	102	5.208	5.287	102	5.208	5.064	97.2	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/Kg

Analysis Date: 06/03/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	14:47		14:51		15:29				14:57				
Mercury (Hg)	.63	U	.63	U	.63	U			.10	U	P		

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: AA FIMS-MHS

Results Data Set (original): 150603AB-7471
Results Library (original): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb
Results Data Set (reprocessed): 150603AB-7471X
Results Library (reprocessed): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib. Blank
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 06/03/15 2:30:25 PM
Data Type: Reprocessed on 06/03/15 4:21:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: Calib. Blank Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0000	-0.0003	0.0000	2:31:14 PM	Yes
2		[0.00]	0.0001	0.0006	0.0001	2:31:44 PM	Yes
3		[0.00]	-0.0000	0.0000	0.0000	2:32:12 PM	Yes
Mean:		[0.00]	-0.0000				
SD:		0.0000	0.0001				
%RSD:		0.00%	>999.9%				

Auto-zero performed.

Sequence No.: 2
Sample ID: 0.2083333
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 06/03/15 2:32:32 PM
Data Type: Reprocessed on 06/03/15 4:21:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 0.2083333 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.208333]	0.0025	0.0094	0.0025	2:33:21 PM	Yes
2		[0.208333]	0.0024	0.0092	0.0025	2:33:50 PM	Yes
3		[0.208333]	0.0024	0.0092	0.0025	2:34:19 PM	Yes
Mean:		[0.208333]	0.0024				
SD:		0.000000000	.0000				
%RSD:		0.00%	0.92				

Standard number 1 applied. [0.2083333]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Sequence No.: 3
Sample ID: 0.520833
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 06/03/15 2:34:38 PM
Data Type: Reprocessed on 06/03/15 4:21:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 0.520833 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.520833]	0.0060	0.0231	0.0061	2:35:28 PM	Yes
2		[0.520833]	0.0062	0.0240	0.0063	2:35:57 PM	Yes
3		[0.520833]	0.0062	0.0237	0.0062	2:36:25 PM	Yes
Mean:		[0.520833]	0.0061				
SD:		0.000000010	.0001				
%RSD:		0.00%	1.24				

Standard number 2 applied. [0.520833]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Sequence No.: 4
Sample ID: 1.041667
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 06/03/15 2:36:44 PM
Data Type: Reprocessed on 06/03/15 4:21:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1.041667 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.041667]	0.0125	0.0460	0.0126	2:37:35 PM	Yes
2		[1.041667]	0.0126	0.0472	0.0126	2:38:03 PM	Yes
3		[1.041667]	0.0126	0.0467	0.0127	2:38:32 PM	Yes
Mean:		[1.041667]	0.0125				
SD:		0.000000000	.0001				
%RSD:		0.00%	0.48				

Standard number 3 applied. [1.041667]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Sequence No.: 5
Sample ID: 2.083333
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 06/03/15 2:38:52 PM
Data Type: Reprocessed on 06/03/15 4:21:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 2.083333 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.083333]	0.0245	0.0918	0.0246	2:39:42 PM	Yes
2		[2.083333]	0.0243	0.0910	0.0244	2:40:11 PM	Yes
3		[2.083333]	0.0243	0.0897	0.0243	2:40:40 PM	Yes
Mean:		[2.083333]	0.0244				
SD:		0.000000004	.0001				
%RSD:		0.00%	0.61				

Standard number 4 applied. [2.083333]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Sequence No.: 6
Sample ID: 5.208
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 06/03/15 2:41:00 PM
Data Type: Reprocessed on 06/03/15 4:21:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 5.208 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.208]	0.0615	0.2323	0.0616	2:41:51 PM	Yes
2		[5.208]	0.0602	0.2274	0.0603	2:42:19 PM	Yes
3		[5.208]	0.0613	0.2295	0.0614	2:42:48 PM	Yes
Mean:		[5.208]	0.0610				
SD:		0.00000	0.0007				
%RSD:		0.00%	1.13				

Standard number 5 applied. [5.208]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Sequence No.: 7
Sample ID: 10.417
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 06/03/15 2:43:08 PM
Data Type: Reprocessed on 06/03/15 4:21:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 10.417 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.417]	0.1192	0.4512	0.1193	2:43:59 PM	Yes
2		[10.417]	0.1190	0.4487	0.1190	2:44:28 PM	Yes
3		[10.417]	0.1183	0.4453	0.1183	2:44:56 PM	Yes
Mean:		[10.417]	0.1188				
SD:		0.00000	0.0005				
%RSD:		0.00%	0.41				

Standard number 6 applied. [10.417]
Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib. Blank	0.0000	0	0.000	0.00	>999.9%
0.2083333	0.0024	0.2083333	0.212	0.00	0.92
0.520833	0.0061	0.520833	0.534	0.00	1.24
1.041667	0.0125	1.041667	1.093	0.00	0.48
2.083333	0.0244	2.083333	2.122	0.00	0.61
5.208	0.0610	5.208	5.315	0.00	1.13
10.417	0.1188	10.417	10.348	0.00	0.41

Correlation Coef.: 0.999869 Slope: 0.01148 Intercept: 0.00000

==========

Sequence No.: 8
Sample ID: ICV 06/03/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 06/03/15 2:45:17 PM
Data Type: Reprocessed on 06/03/15 4:21:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV 06/03/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.286	4.286	0.0492	0.1842	0.0493	2:46:06 PM	Yes
2	4.247	4.247	0.0488	0.1823	0.0488	2:46:35 PM	Yes
3	4.237	4.237	0.0486	0.1801	0.0487	2:47:04 PM	Yes
Mean:	4.257	4.257	0.0489				
SD:	0.0262	0.0262	0.0003				
%RSD:	0.61%	0.61%	0.61				

QC value within limits for Hg 253.7 Recovery = 102.08%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: ICB 06/03/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/03/15 2:47:23 PM
Data Type: Reprocessed on 06/03/15 4:21:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB 06/03/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0003	0.0001	2:48:13 PM	Yes
2	-0.002	-0.002	-0.0000	-0.0001	0.0000	2:48:41 PM	Yes
3	-0.002	-0.002	-0.0000	-0.0003	0.0000	2:49:10 PM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0021	0.0021	0.0000				
%RSD:	220.80%	220.80%	220.80				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 10
Sample ID: CCV 06/03/15 RE
Analyst:

Autosampler Location: 6
Date Collected: 06/03/15 2:49:29 PM
Data Type: Reprocessed on 06/03/15 4:21:48 PM

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/04/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 11:01	%R(1)	True CCV1	Found 11:05	%R(1)	True CCV1	Found 11:29	%R(1)	
Mercury (Hg)	4	4.279	107	5	5.102	102	5	4.896	97.9	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/04/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	11:03		11:08		11:31				11:10				
Mercury (Hg)	.20	U	.20	U	.20	U			.20	U	P		

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: AA FIMS-MHS

Results Data Set (original): 150603A-7470
Results Library (original): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb
Results Data Set (reprocessed): 150603A-7470XX
Results Library (reprocessed): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib. Blank
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 06/04/15 10:46:37 AM
Data Type: Reprocessed on 06/04/15 3:00:17 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: Calib. Blank Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0000	0.0005	0.0001	10:47:39 AM	Yes
2		[0.00]	-0.0000	0.0006	0.0001	10:48:08 AM	Yes
3		[0.00]	0.0000	0.0010	0.0002	10:48:37 AM	Yes
Mean:		[0.00]	0.0000				
SD:		0.0000	0.0000				
%RSD:		0.00%	>999.9%				

Auto-zero performed.

Sequence No.: 2
Sample ID: 0.2
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 06/04/15 10:48:57 AM
Data Type: Reprocessed on 06/04/15 3:00:17 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 0.2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0013	0.0054	0.0014	10:49:46 AM	Yes
2		[0.2]	0.0013	0.0055	0.0014	10:50:15 AM	Yes
3		[0.2]	0.0013	0.0065	0.0015	10:50:44 AM	Yes
Mean:		[0.2]	0.0013				
SD:		0.000	0.0000				
%RSD:		0.00%	3.53				

Standard number 1 applied. [0.2]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Sequence No.: 3
Sample ID: 0.5
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 06/04/15 10:51:03 AM
Data Type: Reprocessed on 06/04/15 3:00:17 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 0.5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0034	0.0155	0.0035	10:51:53 AM	Yes
2		[0.5]	0.0036	0.0178	0.0037	10:52:22 AM	Yes
3		[0.5]	0.0035	0.0166	0.0036	10:52:51 AM	Yes
Mean:		[0.5]	0.0035				
SD:		0.000	0.0001				
%RSD:		0.00%	2.94				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Sequence No.: 4
Sample ID: 1
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 06/04/15 10:53:10 AM
Data Type: Reprocessed on 06/04/15 3:00:17 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0065	0.0281	0.0066	10:54:00 AM	Yes
2		[1]	0.0065	0.0281	0.0066	10:54:29 AM	Yes
3		[1]	0.0065	0.0279	0.0066	10:54:57 AM	Yes
Mean:		[1]	0.0065				
SD:		0.00	0.0000				
%RSD:		0.00%	0.28				

Standard number 3 applied. [1]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Sequence No.: 5
Sample ID: 2
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 06/04/15 10:55:17 AM
Data Type: Reprocessed on 06/04/15 3:00:17 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0131	0.0545	0.0132	10:56:07 AM	Yes
2		[2]	0.0130	0.0542	0.0131	10:56:36 AM	Yes
3		[2]	0.0131	0.0548	0.0132	10:57:05 AM	Yes
Mean:		[2]	0.0131				
SD:		0.00	0.0001				
%RSD:		0.00%	0.63				

Standard number 4 applied. [2]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Sequence No.: 6
Sample ID: 5
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 06/04/15 10:57:25 AM
Data Type: Reprocessed on 06/04/15 3:00:18 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0335	0.1394	0.0336	10:58:16 AM	Yes
2		[5]	0.0334	0.1382	0.0335	10:58:45 AM	Yes
3		[5]	0.0335	0.1388	0.0336	10:59:14 AM	Yes
Mean:		[5]	0.0335				
SD:		0.00	0.0001				
%RSD:		0.00%	0.20				

Standard number 5 applied. [5]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Sequence No.: 7
Sample ID: 10
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 06/04/15 10:59:34 AM
Data Type: Reprocessed on 06/04/15 3:00:18 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 10 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0637	0.2647	0.0639	11:00:25 AM	Yes
2		[10]	0.0630	0.2610	0.0632	11:00:54 AM	Yes
3		[10]	0.0635	0.2630	0.0636	11:01:23 AM	Yes
Mean:		[10]	0.0634				
SD:		0.00	0.0004				
%RSD:		0.00%	0.56				

Standard number 6 applied. [10]
Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib. Blank	0.0000	0	0.000	0.00	>999.9%
0.2	0.0013	0.2	0.201	0.00	3.53
0.5	0.0035	0.5	0.542	0.00	2.94
1	0.0065	1.0	1.014	0.00	0.28
2	0.0131	2.0	2.034	0.00	0.63
5	0.0335	5.0	5.211	0.00	0.20
10	0.0634	10.0	9.878	0.00	0.56

Correlation Coef.: 0.999566 Slope: 0.00642 Intercept: 0.00000

==========

Sequence No.: 8
Sample ID: ICV 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 06/04/15 11:01:44 AM
Data Type: Reprocessed on 06/04/15 3:00:18 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.303	4.303	0.0276	0.1142	0.0277	11:02:33 AM	Yes
2	4.266	4.266	0.0274	0.1130	0.0275	11:03:02 AM	Yes
3	4.268	4.268	0.0274	0.1130	0.0275	11:03:31 AM	Yes
Mean:	4.279	4.279	0.0275				
SD:	0.0204	0.0204	0.0001				
%RSD:	0.48%	0.48%	0.48				

QC value within limits for Hg 253.7 Recovery = 106.98%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: ICB 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/04/15 11:03:50 AM
Data Type: Reprocessed on 06/04/15 3:00:18 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0000	0.0001	11:04:41 AM	Yes
2	0.009	0.009	0.0001	0.0015	0.0002	11:05:10 AM	Yes
3	0.005	0.005	0.0000	0.0009	0.0002	11:05:39 AM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0102	0.0102	0.0001				
%RSD:	704.66%	704.66%	704.66				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 10
Sample ID: CCV 06/04/15 RE
Analyst:

Autosampler Location: 6
Date Collected: 06/04/15 11:05:58 AM
Data Type: Reprocessed on 06/04/15 3:00:18 PM

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/09/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 9:42	%R(1)	True CCV1	Found 9:46	%R(1)	True CCV1	Found 10:12	%R(1)	
Mercury (Hg)	4	4	100	5	4.972	99.4	5	5.017	100	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/09/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	09:44		09:49		10:14				09:51		
Mercury (Hg)	.20	U	.20	U	.20	U			.20	U	P

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: AA FIMS-MHS

Results Data Set (original): 150609-7470
Results Library (original): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb
Results Data Set (reprocessed): 150609-7470Y
Results Library (reprocessed): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib. Blank Date Collected: 06/09/15 9:15:43 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:42 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: Calib. Blank Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	-0.0001	-0.0000	0.0001	9:16:41 AM	Yes
2		[0.00]	-0.0001	-0.0003	0.0000	9:17:10 AM	Yes
3		[0.00]	-0.0001	-0.0003	0.0000	9:17:39 AM	Yes
Mean:		[0.00]	-0.0001				
SD:		0.0000	0.0000				
%RSD:		0.00%	23.78				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: 0.2 Date Collected: 06/09/15 9:17:58 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:42 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 0.2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0014	0.0057	0.0014	9:18:48 AM	Yes
2		[0.2]	0.0014	0.0059	0.0014	9:19:16 AM	Yes
3		[0.2]	0.0013	0.0055	0.0014	9:19:45 AM	Yes
Mean:		[0.2]	0.0014				
SD:		0.000	0.0000				
%RSD:		0.00%	0.76				

Standard number 1 applied. [0.2]
Correlation Coef.: 0.999912 Slope: 0.00808 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: 0.5 Date Collected: 06/09/15 9:20:04 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:42 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 0.5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0038	0.0189	0.0038	9:20:54 AM	Yes
2		[0.5]	0.0036	0.0161	0.0037	9:21:23 AM	Yes
3		[0.5]	0.0035	0.0149	0.0036	9:21:52 AM	Yes
Mean:		[0.5]	0.0036				
SD:		0.000	0.0001				
%RSD:		0.00%	3.62				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999894 Slope: 0.00808 Intercept: 0.00000

Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 Date Collected: 06/09/15 9:22:11 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:42 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0067	0.0297	0.0068	9:23:01 AM	Yes
2		[1]	0.0068	0.0309	0.0068	9:23:30 AM	Yes
3		[1]	0.0069	0.0320	0.0070	9:23:58 AM	Yes
Mean:		[1]	0.0068				
SD:		0.00	0.0001				
%RSD:		0.00%	1.66				

Standard number 3 applied. [1]
Correlation Coef.: 0.999739 Slope: 0.00808 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 Date Collected: 06/09/15 9:24:18 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:43 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0140	0.0643	0.0141	9:25:08 AM	Yes
2		[2]	0.0138	0.0627	0.0139	9:25:37 AM	Yes
3		[2]	0.0137	0.0606	0.0138	9:26:06 AM	Yes
Mean:		[2]	0.0138				
SD:		0.00	0.0002				
%RSD:		0.00%	1.12				

Standard number 4 applied. [2]
Correlation Coef.: 0.999187 Slope: 0.00805 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 Date Collected: 06/09/15 9:26:26 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:43 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0343	0.1549	0.0344	9:27:16 AM	Yes
2		[5]	0.0341	0.1532	0.0342	9:27:45 AM	Yes
3		[5]	0.0343	0.1549	0.0344	9:28:14 AM	Yes
Mean:		[5]	0.0343				
SD:		0.00	0.0001				
%RSD:		0.00%	0.40				

Standard number 5 applied. [5]
Correlation Coef.: 0.996226 Slope: 0.00781 Intercept: 0.00000

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 Date Collected: 06/09/15 9:28:34 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:43 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 10 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0680	0.3088	0.0680	9:29:25 AM	Yes
2		[10]	0.0674	0.3033	0.0675	9:29:54 AM	Yes
3		[10]	0.0674	0.3027	0.0674	9:30:23 AM	Yes
Mean:		[10]	0.0676				
SD:		0.00	0.0003				
%RSD:		0.00%	0.47				

Standard number 6 applied. [10]
Correlation Coef.: 0.999954 Slope: 0.00678 Intercept: 0.00000

Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib. Blank	0.0000	0	0.000	0.00	23.78
0.2	0.0014	0.2	0.199	0.00	0.76
0.5	0.0036	0.5	0.535	0.00	3.62
1	0.0068	1.0	1.003	0.00	1.66
2	0.0138	2.0	2.041	0.00	1.12
5	0.0343	5.0	5.050	0.00	0.40
10	0.0676	10.0	9.964	0.00	0.47

Correlation Coef.: 0.999954 Slope: 0.00678 Intercept: 0.00000

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Sequence No.: 8 Autosampler Location: 9
Sample ID: ICV 06/09/15 RE Date Collected: 06/09/15 9:42:42 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:43 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICV 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.973	3.973	0.0269	0.1225	0.0270	9:43:32 AM	Yes
2	4.019	4.019	0.0273	0.1226	0.0273	9:44:01 AM	Yes
3	4.007	4.007	0.0272	0.1219	0.0272	9:44:29 AM	Yes
Mean:	4.000	4.000	0.0271				
SD:	0.0242	0.0242	0.0002				
%RSD:	0.60%	0.60%	0.60				

QC value within limits for Hg 253.7 Recovery = 99.99%
All analyte(s) passed QC.

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Sequence No.: 9 Autosampler Location: 1
Sample ID: ICB 06/09/15 RE Date Collected: 06/09/15 9:44:49 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:44 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICB 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	-0.0005	0.0001	9:45:38 AM	Yes
2	-0.003	-0.003	-0.0000	-0.0020	0.0000	9:46:07 AM	Yes
3	0.010	0.010	0.0001	0.0006	0.0001	9:46:36 AM	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.0063	0.0063	0.0000				
%RSD:	176.00%	176.00%	176.00				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 10 Autosampler Location: 6
Sample ID: CCV 06/09/15 RE Date Collected: 06/09/15 9:46:55 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:44 PM

METALS

Raw Data

APPL, INC.

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	4.00 U	50.0	4.00	1.98	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ANTIMONY (SB)	0.60 U	2.0	0.60	0.35	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ARSENIC (AS)	0.80 U	2.5	0.80	0.65	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BARIUM (BA)	0.40 U	2.0	0.40	0.07	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BERYLLIUM (BE)	0.20 U	0.5	0.20	0.04	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	BORON (B)	4.00 U	5.0	4.00	1.55	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CADMIUM (CD)	0.20 U	0.5	0.20	0.05	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CALCIUM (CA)	20.0 U	100	20.0	12.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	CHROMIUM (CR)	0.40 U	3.5	0.40	0.14	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COBALT (CO)	0.30 U	1.0	0.30	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	COPPER (CU)	0.40 U	5.0	0.40	0.21	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	IRON (FE)	4.00 U	80.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LEAD (PB)	0.80 U	0.9	0.80	0.25	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	LITHIUM (LI)	0.500 U	0.67	0.500	0.250	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MAGNESIUM (MG)	4.00 U	30.0	4.00	3.50	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	MANGANESE (MN)	0.40 U	4.5	0.40	0.13	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	NICKEL (NI)	0.40 U	4.0	0.40	0.11	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	POTASSIUM (K)	50.0 U	300	50.0	40.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SELENIUM (SE)	1.00 U	3.0	1.00	0.85	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SILVER (AG)	0.20 U	1.5	0.20	0.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	SODIUM (NA)	50.0 U	500	50.0	45.0	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	THALLIUM (TL)	1.20 U	3.0	1.20	0.62	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	VANADIUM (V)	0.40 U	2.0	0.40	0.10	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
6010C	ZINC (ZN)	4.00 U	8.0	4.00	1.15	mg/kg	06/04/15	06/12/15	#61C14-150604A-AZ16400
7471	MERCURY (HG)	0.04 U	0.1	0.04	0.02	mg/Kg	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

Metals SC-Blank-REG MDLs
Printed: 06/24/15 11:55:31 AM

Sequence No.: 11
Sample ID: 150604A-3050-BLK
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 1 g
Dilution:
Wash Time:

Autosampler Location: 46
Date Collected: 06/12/15 2:26:33 PM
Data Type: Reprocessed on 06/15/15 10:35:53 AM

Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: 150604A-3050-BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	201101.5	98.97	%	0.338				0.34%
Y Radial	13273.3	101.2	%	0.26				0.26%
Ag 338.289†	-25.3	-0.156	ug/L	0.4148	-0.016	mg/kg	0.0415	266.69%
Al 308.215†	-7.1	-6.227	ug/L	4.9362	-0.623	mg/kg	0.4936	79.27%
As 188.979†	0.9	0.188	ug/L	0.7809	0.019	mg/kg	0.0781	414.37%
B 249.677†	16.1	0.538	ug/L	0.0995	0.054	mg/kg	0.0100	18.50%
Ba 233.527†	12.6	0.033	ug/L	0.0438	0.003	mg/kg	0.0044	131.47%
Be 313.107†	-8.0	-0.002	ug/L	0.0034	-0.000	mg/kg	0.0003	135.70%
Ca 315.887†	-53.1	-4.116	ug/L	1.1233	-0.412	mg/kg	0.1123	27.29%
Cd 214.440†	-11.5	-0.047	ug/L	0.0746	-0.005	mg/kg	0.0075	158.57%
Co 228.616†	17.9	0.209	ug/L	0.0301	0.021	mg/kg	0.0030	14.45%
Cr 267.716†	-5.6	-0.072	ug/L	0.0759	-0.007	mg/kg	0.0076	105.27%
Cu 327.393†	273.1	1.541	ug/L	0.2285	0.154	mg/kg	0.0229	14.83%
Fe 273.955†	364.0	5.385	ug/L	0.2300	0.539	mg/kg	0.0230	4.27%
K 766.490†	42.7	7.458	ug/L	11.0152	0.746	mg/kg	1.1015	147.69%
Mg 285.213†	17.9	1.268	ug/L	2.5119	0.127	mg/kg	0.2512	198.13%
Mn 257.610†	19.4	0.276	ug/L	0.1506	0.028	mg/kg	0.0151	54.52%
Mo 202.031†	15.6	0.509	ug/L	0.0328	0.051	mg/kg	0.0033	6.45%
Na 589.592†	-146.3	-25.43	ug/L	2.284	-2.543	mg/kg	0.2284	8.98%
Ni 231.604†	7.2	0.166	ug/L	0.1139	0.017	mg/kg	0.0114	68.65%
P 213.617†	1.1	0.382	ug/L	0.2332	0.038	mg/kg	0.0233	61.06%
Pb 220.353†	2.2	0.404	ug/L	0.6207	0.040	mg/kg	0.0621	153.60%
Sb 206.836†	1.3	0.204	ug/L	0.5113	0.020	mg/kg	0.0511	251.22%
Se 196.026†	1.4	0.506	ug/L	1.4804	0.051	mg/kg	0.1480	292.41%
Sn 189.927†	1.3	0.274	ug/L	0.5410	0.027	mg/kg	0.0541	197.25%
Sr 421.552†	21.5	0.065	ug/L	0.1348	0.006	mg/kg	0.0135	208.04%
Ti 337.279†	-4.7	-0.148	ug/L	0.1134	-0.015	mg/kg	0.0113	76.62%
Tl 190.801†	-1.3	-0.260	ug/L	0.9611	-0.026	mg/kg	0.0961	369.26%
V 292.402†	4.2	0.045	ug/L	0.0815	0.005	mg/kg	0.0081	180.61%
Zn 206.200†	-185.8	-2.319	ug/L	0.1158	-0.232	mg/kg	0.0116	4.99%
Li 670.784	4743.4	0.307	ug/L	0.0056	0.031	mg/kg	0.0006	1.82%

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	200	186	93.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ANTIMONY (SB)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ARSENIC (AS)	25.0	22.9	91.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BARIUM (BA)	25.0	23.2	92.8	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BERYLLIUM (BE)	5.00	4.9	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	BORON (B)	25.0	23.8	95.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CADMIUM (CD)	5.00	4.7	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CALCIUM (CA)	2500	2350	94.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	CHROMIUM (CR)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COBALT (CO)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	COPPER (CU)	25.0	24.6	98.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	IRON (FE)	100.0	91.3	91.3	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LEAD (PB)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	LITHIUM (LI)	10.00	10.2	102	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MAGNESIUM (MG)	2500	2330	93.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	MANGANESE (MN)	25.0	23.4	93.6	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	NICKEL (NI)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	POTASSIUM (K)	500	462	92.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SELENIUM (SE)	25.0	22.6	90.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	10.00	9.7	97.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	SODIUM (NA)	2500	2520	101	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	THALLIUM (TL)	25.0	21.8	87.2	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	VANADIUM (V)	25.0	24.5	98.0	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400
EPA 6010C	ZINC (ZN)	50.0	46.7	93.4	80-120	06/04/15	06/12/15	#61C14-150604A-AZ16400

Comments: _____

Sequence No.: 12
Sample ID: 150604A-3050-LCS
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 1 g
Dilution:
Wash Time:

Autosampler Location: 47
Date Collected: 06/12/15 2:32:48 PM
Data Type: Reprocessed on 06/15/15 10:35:54 AM
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: 150604A-3050-LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	195760.4	96.34	%	0.252				0.26%
Y Radial	13185.6	100.5	%	1.22				1.21%
Ag 338.289†	15744.4	96.93	ug/L	0.436	9.693	mg/kg	0.0436	0.45%
Al 308.215†	2099.0	1855	ug/L	32.77	185.5	mg/kg	3.28	1.77%
As 188.979†	1045.9	228.8	ug/L	1.65	22.88	mg/kg	0.165	0.72%
B 249.677†	7269.4	238.1	ug/L	1.06	23.81	mg/kg	0.106	0.45%
Ba 233.527†	86526.4	232.3	ug/L	0.36	23.23	mg/kg	0.036	0.15%
Be 313.107†	158258.6	48.96	ug/L	0.240	4.896	mg/kg	0.0240	0.49%
Ca 315.887†	302552.0	23450	ug/L	334.88	2345	mg/kg	33.49	1.43%
Cd 214.440†	11383.9	46.90	ug/L	0.256	4.690	mg/kg	0.0256	0.54%
Co 228.616†	20296.0	234.5	ug/L	1.19	23.45	mg/kg	0.119	0.51%
Cr 267.716†	17526.1	225.9	ug/L	0.96	22.59	mg/kg	0.096	0.43%
Cu 327.393†	43526.4	245.8	ug/L	0.28	24.58	mg/kg	0.028	0.12%
Fe 273.955†	63010.9	912.8	ug/L	2.89	91.28	mg/kg	0.289	0.32%
K 766.490†	26693.0	4620	ug/L	64.48	462.0	mg/kg	6.45	1.40%
Mg 285.213†	330722.1	23300	ug/L	346.54	2330	mg/kg	34.65	1.49%
Mn 257.610†	16557.0	234.5	ug/L	3.55	23.45	mg/kg	0.355	1.51%
Mo 202.031†	6913.8	225.1	ug/L	1.01	22.51	mg/kg	0.101	0.45%
Na 589.592†	145289.1	25240	ug/L	309.05	2524	mg/kg	30.90	1.22%
Ni 231.604†	9762.7	226.1	ug/L	0.87	22.61	mg/kg	0.087	0.39%
P 213.617†	5433.7	1883	ug/L	6.58	188.3	mg/kg	0.66	0.35%
Pb 220.353†	1231.8	225.9	ug/L	0.75	22.59	mg/kg	0.075	0.33%
Sb 206.836†	1548.8	244.6	ug/L	1.54	24.46	mg/kg	0.154	0.63%
Se 196.026†	616.3	226.0	ug/L	2.48	22.60	mg/kg	0.248	1.10%
Sn 189.927†	1039.4	211.4	ug/L	1.13	21.14	mg/kg	0.113	0.54%
Sr 421.552†	82429.1	247.3	ug/L	2.91	24.73	mg/kg	0.291	1.18%
Ti 337.279†	7424.9	233.1	ug/L	3.69	23.31	mg/kg	0.369	1.58%
Tl 190.801†	1090.9	217.8	ug/L	0.69	21.78	mg/kg	0.069	0.32%
V 292.402†	22916.8	244.8	ug/L	0.99	24.48	mg/kg	0.099	0.40%
Zn 206.200†	37080.1	466.6	ug/L	0.24	46.66	mg/kg	0.024	0.05%
Li 670.784	1571379.2	101.7	ug/L	1.15	10.17	mg/kg	0.115	1.13%

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/kg	SPK Result mg/kg	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 7471	MERCURY (HG)	0.667	0.65	97.5	80-120	06/03/15	06/03/15	#HGDOD-150603B-AZ16402

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150603S-16402 MS - 197677**

Sample ID: AZ16402

Client ID: S67-TP002-0203

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl mg/Kg	Matrix Res mg/Kg	SPK Res mg/Kg	DUP Res mg/Kg	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7471	MERCURY (HG)	0.586	0.86	1.4	1.3	92.2	75.1 #	7.4	20	80-120	06/03/15	06/03/15	06/03/15	06/03/15	197677	AZ16402

= Recovery is outside QC limits.

Comments: _____

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL)	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ANTIMONY (SB)	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ARSENIC (AS)	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BARIUM (BA)	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BERYLLIUM (BE)	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CADMIUM (CD)	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CALCIUM (CA)	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	CHROMIUM (CR)	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COBALT (CO)	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	COPPER (CU)	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	IRON (FE)	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LEAD (PB)	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	LITHIUM (LI)	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MAGNESIUM (MG)	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	MANGANESE (MN)	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	NICKEL (NI)	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	POTASSIUM (K)	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SELENIUM (SE)	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SILVER (AG)	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	SODIUM (NA)	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	THALLIUM (TL)	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	VANADIUM (V)	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
6010C	ZINC (ZN)	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A1-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Metals SC-Blank-REG MDLs
Printed: 06/24/15 11:54:56 AM

Sequence No.: 12
Sample ID: 150526A-3010-BLK
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 38
Date Collected: 06/04/15 5:00:40 PM
Data Type: Reprocessed on 06/11/15 4:12:25 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150526A-3010-BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	278393.5	101.1	%	0.37				0.37%
Y Radial	19438.7	103.7	%	5.07				4.89%
Ag 338.289†	91.0	0.441	ug/L	0.4978	0.441	ug/L	0.4978	112.85%
Al 308.215†	-14.1	-8.399	ug/L	6.9071	-8.399	ug/L	6.9071	82.24%
As 188.979†	3.6	0.513	ug/L	0.8375	0.513	ug/L	0.8375	163.32%
B 249.677†	65.7	1.440	ug/L	0.3126	1.440	ug/L	0.3126	21.70%
Ba 233.527†	21.8	0.042	ug/L	0.0106	0.042	ug/L	0.0106	25.14%
Be 313.107†	178.6	0.038	ug/L	0.0079	0.038	ug/L	0.0079	20.93%
Ca 315.887†	383.3	19.04	ug/L	3.393	19.04	ug/L	3.393	17.82%
Cd 214.440†	-17.6	-0.050	ug/L	0.0393	-0.050	ug/L	0.0393	77.94%
Co 228.616†	20.0	0.157	ug/L	0.0479	0.157	ug/L	0.0479	30.52%
Cr 267.716†	14.4	0.136	ug/L	0.0611	0.136	ug/L	0.0611	45.09%
Cu 327.393†	-140.0	-0.636	ug/L	0.2197	-0.636	ug/L	0.2197	34.53%
Fe 273.955†	274.1	2.739	ug/L	0.4789	2.739	ug/L	0.4789	17.49%
K 766.490†	-32.9	-5.041	ug/L	4.4371	-5.041	ug/L	4.4371	88.03%
Mg 285.213†	96.3	4.462	ug/L	0.3583	4.462	ug/L	0.3583	8.03%
Mn 257.610†	8.7	0.080	ug/L	0.0655	0.080	ug/L	0.0655	82.27%
Mo 202.031†	9.4	0.230	ug/L	0.2514	0.230	ug/L	0.2514	109.40%
Na 589.592†	-36.0	-10.60	ug/L	6.893	-10.60	ug/L	6.893	65.03%
Ni 231.604†	10.9	0.174	ug/L	0.0832	0.174	ug/L	0.0832	47.89%
P 213.617†	-9.3	-2.106	ug/L	0.6382	-2.106	ug/L	0.6382	30.30%
Pb 220.353†	-8.4	-0.811	ug/L	0.4994	-0.811	ug/L	0.4994	61.59%
Sb 206.836†	0.7	0.069	ug/L	0.2206	0.069	ug/L	0.2206	319.61%
Se 196.026†	1.9	0.533	ug/L	1.1481	0.533	ug/L	1.1481	215.51%
Sn 189.927†	12.4	1.812	ug/L	0.2582	1.812	ug/L	0.2582	14.25%
Sr 421.552†	-5.0	-0.047	ug/L	0.0743	-0.047	ug/L	0.0743	159.16%
Ti 337.279†	6.9	0.141	ug/L	0.2757	0.141	ug/L	0.2757	195.99%
Tl 190.801†	9.5	1.002	ug/L	0.3727	1.002	ug/L	0.3727	37.20%
V 292.402†	-9.1	-0.065	ug/L	0.0446	-0.065	ug/L	0.0446	68.69%
Zn 206.200†	-119.3	-1.072	ug/L	0.0371	-1.072	ug/L	0.0371	3.46%
Li 670.784	3189.6	0.178	ug/L	0.0053	0.178	ug/L	0.0053	2.97%

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL)	2000	2020	101	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ANTIMONY (SB)	250	238	95.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ARSENIC (AS)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BARIUM (BA)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BERYLLIUM (BE)	50.0	48.6	97.2	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	BORON (B)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CADMIUM (CD)	50.0	49.5	99.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CALCIUM (CA)	25000	25800	103	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	CHROMIUM (CR)	250	260	104	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COBALT (CO)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	COPPER (CU)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	IRON (FE)	1000	987	98.7	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LEAD (PB)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	LITHIUM (LI)	100.0	94.5	94.5	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MAGNESIUM (MG)	25000	25100	100	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	MANGANESE (MN)	250	254	102	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	NICKEL (NI)	250	244	97.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	POTASSIUM (K)	5000	4940	98.8	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SELENIUM (SE)	250	234	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG)	100.0	93.6	93.6	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	SODIUM (NA)	25000	28700	115	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	THALLIUM (TL)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	VANADIUM (V)	250	262	105	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 6010C	ZINC (ZN)	500	480	96.0	80-120	05/26/15	06/04/15	#61C14-150526A1-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Sequence No.: 13
Sample ID: 150526A-3010-LCS
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 39
Date Collected: 06/04/15 5:07:02 PM
Data Type: Reprocessed on 06/11/15 4:12:26 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150526A-3010-LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	268312.1	97.39	%	0.331				0.34%
Y Radial	18526.3	98.80	%	0.379				0.38%
Ag 338.289†	19304.8	93.61	ug/L	0.280	93.61	ug/L	0.280	0.30%
Al 308.215†	3365.5	2017	ug/L	18.07	2017	ug/L	18.07	0.90%
As 188.979†	1658.7	236.1	ug/L	0.96	236.1	ug/L	0.96	0.41%
B 249.677†	11209.6	246.4	ug/L	1.81	246.4	ug/L	1.81	0.73%
Ba 233.527†	130422.1	253.5	ug/L	0.52	253.5	ug/L	0.52	0.20%
Be 313.107†	231450.6	48.64	ug/L	0.169	48.64	ug/L	0.169	0.35%
Ca 315.887†	518517.8	25750	ug/L	31.31	25750	ug/L	31.31	0.12%
Cd 214.440†	17080.1	49.45	ug/L	0.250	49.45	ug/L	0.250	0.51%
Co 228.616†	32407.4	254.0	ug/L	1.07	254.0	ug/L	1.07	0.42%
Cr 267.716†	27678.2	260.1	ug/L	1.63	260.1	ug/L	1.63	0.63%
Cu 327.393†	52754.4	240.3	ug/L	1.05	240.3	ug/L	1.05	0.44%
Fe 273.955†	101136.3	987.4	ug/L	2.03	987.4	ug/L	2.03	0.21%
K 766.490†	32403.4	4942	ug/L	19.81	4942	ug/L	19.81	0.40%
Mg 285.213†	541633.2	25090	ug/L	48.15	25090	ug/L	48.15	0.19%
Mn 257.610†	27910.0	253.8	ug/L	0.68	253.8	ug/L	0.68	0.27%
Mo 202.031†	10021.6	244.3	ug/L	1.33	244.3	ug/L	1.33	0.55%
Na 589.592†	97385.5	28710	ug/L	118.10	28710	ug/L	118.10	0.41%
Ni 231.604†	15232.1	243.5	ug/L	1.27	243.5	ug/L	1.27	0.52%
P 213.617†	8586.7	1942	ug/L	9.48	1942	ug/L	9.48	0.49%
Pb 220.353†	2532.5	246.5	ug/L	2.02	246.5	ug/L	2.02	0.82%
Sb 206.836†	2471.2	238.1	ug/L	1.60	238.1	ug/L	1.60	0.67%
Se 196.026†	826.0	233.6	ug/L	1.95	233.6	ug/L	1.95	0.84%
Sn 189.927†	1676.6	244.7	ug/L	1.65	244.7	ug/L	1.65	0.67%
Sr 421.552†	35259.8	319.8	ug/L	2.08	319.8	ug/L	2.08	0.65%
Ti 337.279†	12363.5	250.4	ug/L	1.34	250.4	ug/L	1.34	0.54%
Tl 190.801†	2327.0	245.5	ug/L	0.97	245.5	ug/L	0.97	0.40%
V 292.402†	36812.6	261.5	ug/L	1.11	261.5	ug/L	1.11	0.43%
Zn 206.200†	52829.6	479.7	ug/L	1.80	479.7	ug/L	1.80	0.38%
Li 670.784	1695932.4	94.54	ug/L	0.703	94.54	ug/L	0.703	0.74%

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6010C	ALUMINUM (AL) (DI	80.0 U	300	80.0	27.4	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ANTIMONY (SB) (DI	5.00 U	20.0	5.00	2.90	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ARSENIC (AS) (DIS	10.00 U	25.0	10.00	4.30	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BARIUM (BA) (DISS	4.00 U	10.0	4.00	0.75	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BERYLLIUM (BE) (D	1.00 U	2.0	1.00	0.45	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CADMIUM (CD) (DIS	3.00 U	5.0	3.00	0.51	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CALCIUM (CA) (DIS	75.0 U	1000	75.0	27.5	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	CHROMIUM (CR) (D	4.00 U	15.0	4.00	1.37	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COBALT (CO) (DISS	3.00 U	15.0	3.00	0.63	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	COPPER (CU) (DIS	4.00 U	15.0	4.00	1.71	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	IRON (FE) (DISSOL	25.0 U	100	25.0	21.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LEAD (PB) (DISSOL	4.00 U	15.0	4.00	1.58	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	LITHIUM (LI) (DISSO	0.80 U	1.0	0.80	0.40	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MAGNESIUM (MG) (	30.0 U	500	30.0	12.9	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	MANGANESE (MN) (	4.00 U	10.0	4.00	1.23	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	NICKEL (NI) (DISSO	3.00 U	40.0	3.00	0.42	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	POTASSIUM (K) (DI	500.0 U	3000	500.0	220.0	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SELENIUM (SE) (DI	10.00 U	22.0	10.00	4.60	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SILVER (AG) (DISS	0.90 U	15.0	0.90	0.85	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	SODIUM (NA) (DISS	500.0 U	5000	500.0	111.1	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	THALLIUM (TL) (DIS	10.00 U	40.0	10.00	4.80	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	VANADIUM (V) (DIS	4.00 U	15.0	4.00	0.97	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
6010C	ZINC (ZN) (DISSOL	20.0 U	150	20.0	13.7	ug/L	05/26/15	06/04/15	#61C14-150526A-AZ16403
7470A	MERCURY (HG) (DI	0.15 U	0.2	0.15	0.06	ug/L	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Metals SC-Blank-REG MDLs
Printed: 06/24/15 11:54:15 AM

Sequence No.: 14
Sample ID: 150526A-3010F-BLK
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 40
Date Collected: 06/04/15 5:12:49 PM
Data Type: Reprocessed on 06/11/15 4:12:27 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150526A-3010F-BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	277530.9	100.7	%	0.82				0.82%
Y Radial	19340.4	103.1	%	5.30				5.14%
Ag 338.289†	107.8	0.523	ug/L	0.3638	0.523	ug/L	0.3638	69.59%
Al 308.215†	-10.4	-6.173	ug/L	5.9502	-6.173	ug/L	5.9502	96.40%
As 188.979†	-6.9	-1.007	ug/L	1.4936	-1.007	ug/L	1.4936	148.35%
B 249.677†	82.0	1.782	ug/L	0.2967	1.782	ug/L	0.2967	16.64%
Ba 233.527†	16.3	0.032	ug/L	0.0228	0.032	ug/L	0.0228	71.87%
Be 313.107†	166.8	0.035	ug/L	0.0074	0.035	ug/L	0.0074	21.19%
Ca 315.887†	318.1	15.80	ug/L	2.315	15.80	ug/L	2.315	14.65%
Cd 214.440†	-21.1	-0.060	ug/L	0.0289	-0.060	ug/L	0.0289	48.09%
Co 228.616†	13.2	0.102	ug/L	0.0878	0.102	ug/L	0.0878	86.15%
Cr 267.716†	15.9	0.149	ug/L	0.0650	0.149	ug/L	0.0650	43.51%
Cu 327.393†	89.5	0.408	ug/L	0.5700	0.408	ug/L	0.5700	139.57%
Fe 273.955†	-35.9	-0.353	ug/L	0.0400	-0.353	ug/L	0.0400	11.31%
K 766.490†	9.0	1.372	ug/L	8.1305	1.372	ug/L	8.1305	592.80%
Mg 285.213†	82.3	3.812	ug/L	1.0829	3.812	ug/L	1.0829	28.41%
Mn 257.610†	5.7	0.052	ug/L	0.0369	0.052	ug/L	0.0369	71.43%
Mo 202.031†	-1.4	-0.033	ug/L	0.2321	-0.033	ug/L	0.2321	699.78%
Na 589.592†	26.1	7.686	ug/L	13.4672	7.686	ug/L	13.4672	175.22%
Ni 231.604†	-3.9	-0.063	ug/L	0.2339	-0.063	ug/L	0.2339	369.70%
P 213.617†	-10.6	-2.398	ug/L	0.4105	-2.398	ug/L	0.4105	17.11%
Pb 220.353†	-7.3	-0.711	ug/L	0.4561	-0.711	ug/L	0.4561	64.15%
Sb 206.836†	-8.1	-0.784	ug/L	0.5602	-0.784	ug/L	0.5602	71.44%
Se 196.026†	-1.1	-0.305	ug/L	2.0909	-0.305	ug/L	2.0909	685.89%
Sn 189.927†	9.6	1.404	ug/L	0.3188	1.404	ug/L	0.3188	22.70%
Sr 421.552†	-18.2	-0.166	ug/L	0.1051	-0.166	ug/L	0.1051	63.36%
Ti 337.279†	24.8	0.504	ug/L	0.1138	0.504	ug/L	0.1138	22.59%
Tl 190.801†	5.0	0.525	ug/L	0.1087	0.525	ug/L	0.1087	20.70%
V 292.402†	-8.7	-0.062	ug/L	0.0414	-0.062	ug/L	0.0414	66.76%
Zn 206.200†	-48.4	-0.432	ug/L	0.1406	-0.432	ug/L	0.1406	32.51%
Li 670.784	2796.3	0.156	ug/L	0.0063	0.156	ug/L	0.0063	4.03%

Laboratory Control Spike Recovery
METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	ALUMINUM (AL) (DISSOLVED)	2000	1840	92.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ANTIMONY (SB) (DISSOLVED)	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ARSENIC (AS) (DISSOLVED)	250	228	91.2	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BARIUM (BA) (DISSOLVED)	250	247	98.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BERYLLIUM (BE) (DISSOLVED)	50.0	47.3	94.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	BORON (B) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CADMIUM (CD) (DISSOLVED)	50.0	48.0	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CALCIUM (CA) (DISSOLVED)	25000	23400	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	CHROMIUM (CR) (DISSOLVED)	250	252	101	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COBALT (CO) (DISSOLVED)	250	246	98.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	COPPER (CU) (DISSOLVED)	250	235	94.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	IRON (FE) (DISSOLVED)	1000	957	95.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LEAD (PB) (DISSOLVED)	250	240	96.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	92.7	92.7	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MAGNESIUM (MG) (DISSOLVED)	25000	22900	91.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	MANGANESE (MN) (DISSOLVED	250	231	92.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	NICKEL (NI) (DISSOLVED)	250	236	94.4	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	POTASSIUM (K) (DISSOLVED)	5000	4550	91.0	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SELENIUM (SE) (DISSOLVED)	250	227	90.8	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403

Comments: _____

Laboratory Control Spike Recovery

METALS

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 6010C	SILVER (AG) (DISSOLVED)	100.0	91.3	91.3	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	SODIUM (NA) (DISSOLVED)	25000	26600	106	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	THALLIUM (TL) (DISSOLVED)	250	239	95.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	VANADIUM (V) (DISSOLVED)	250	255	102	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	468	93.6	80-120	05/26/15	06/04/15	#61C14-150526A-AZ16403
EPA 7470A	MERCURY (HG) (DISSOLVED)	4.00	3.5	87.5	80-120	06/08/15	06/09/15	#HGDOD-150608A-AZ16403

Comments: _____

Sequence No.: 15
Sample ID: 150526A-3010F-LCS
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 41
Date Collected: 06/04/15 5:19:11 PM
Data Type: Reprocessed on 06/11/15 4:12:28 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150526A-3010F-LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	268582.7	97.49	%	0.463				0.47%
Y Radial	19803.5	105.6	%	9.84				9.32%
Ag 338.289†	18818.8	91.25	ug/L	0.585	91.25	ug/L	0.585	0.64%
Al 308.215†	3061.4	1836	ug/L	186.29	1836	ug/L	186.29	10.15%
As 188.979†	1600.7	228.0	ug/L	0.17	228.0	ug/L	0.17	0.07%
B 249.677†	10878.2	239.1	ug/L	0.98	239.1	ug/L	0.98	0.41%
Ba 233.527†	126887.7	246.6	ug/L	1.67	246.6	ug/L	1.67	0.68%
Be 313.107†	225067.1	47.30	ug/L	0.323	47.30	ug/L	0.323	0.68%
Ca 315.887†	470632.2	23370	ug/L	2461.92	23370	ug/L	2461.92	10.53%
Cd 214.440†	16578.4	47.98	ug/L	0.195	47.98	ug/L	0.195	0.41%
Co 228.616†	31439.1	246.4	ug/L	1.03	246.4	ug/L	1.03	0.42%
Cr 267.716†	26830.7	252.2	ug/L	1.01	252.2	ug/L	1.01	0.40%
Cu 327.393†	51602.9	235.0	ug/L	2.06	235.0	ug/L	2.06	0.88%
Fe 273.955†	98025.3	957.0	ug/L	6.78	957.0	ug/L	6.78	0.71%
K 766.490†	29824.3	4549	ug/L	471.90	4549	ug/L	471.90	10.37%
Mg 285.213†	493960.6	22880	ug/L	2418.98	22880	ug/L	2418.98	10.57%
Mn 257.610†	25344.8	230.5	ug/L	22.96	230.5	ug/L	22.96	9.96%
Mo 202.031†	9696.3	236.4	ug/L	0.95	236.4	ug/L	0.95	0.40%
Na 589.592†	90154.6	26580	ug/L	2874.09	26580	ug/L	2874.09	10.81%
Ni 231.604†	14787.7	236.4	ug/L	0.55	236.4	ug/L	0.55	0.23%
P 213.617†	8336.1	1885	ug/L	4.75	1885	ug/L	4.75	0.25%
Pb 220.353†	2462.4	239.6	ug/L	1.78	239.6	ug/L	1.78	0.74%
Sb 206.836†	2399.3	231.2	ug/L	1.46	231.2	ug/L	1.46	0.63%
Se 196.026†	801.0	226.6	ug/L	1.64	226.6	ug/L	1.64	0.72%
Sn 189.927†	1634.6	238.5	ug/L	1.02	238.5	ug/L	1.02	0.43%
Sr 421.552†	32920.1	298.6	ug/L	31.79	298.6	ug/L	31.79	10.65%
Ti 337.279†	11306.9	229.0	ug/L	23.44	229.0	ug/L	23.44	10.23%
Tl 190.801†	2262.1	238.7	ug/L	1.39	238.7	ug/L	1.39	0.58%
V 292.402†	35846.1	254.6	ug/L	1.72	254.6	ug/L	1.72	0.68%
Zn 206.200†	51527.0	467.8	ug/L	3.45	467.8	ug/L	3.45	0.74%
Li 670.784	1663688.8	92.74	ug/L	0.440	92.74	ug/L	0.440	0.47%

Matrix Spike Recoveries

METALS

APPL ID: **150608W-16403 MS - 197837**

Sample ID: AZ16403

Client ID: S67-MW015-051415

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
EPA 7470A	MERCURY (HG) (DISS	4.00	0.017	3.5	3.6	87.1	89.6	2.8	20	80-120	06/08/15	06/09/15	06/08/15	06/09/15	197837	AZ16403

Comments: _____

Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/03/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.307	5.307	0.0609	0.2287	0.0610	2:50:20 PM	Yes
2	5.269	5.269	0.0605	0.2273	0.0606	2:50:49 PM	Yes
3	5.284	5.284	0.0607	0.2260	0.0607	2:51:18 PM	Yes
Mean:	5.287	5.287	0.0607				
SD:	0.0190	0.0190	0.0002				
%RSD:	0.36%	0.36%	0.36				

QC value within limits for Hg 253.7 Recovery = 101.51%
All analyte(s) passed QC.

==========

Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB 06/03/15 RE Date Collected: 06/03/15 2:51:38 PM
Analyst: Data Type: Reprocessed on 06/03/15 4:21:48 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/03/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0001	0.0001	2:52:28 PM	Yes
2	0.002	0.002	0.0000	-0.0004	0.0001	2:52:57 PM	Yes
3	0.003	0.003	0.0000	-0.0000	0.0001	2:53:26 PM	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.0009	0.0009	0.0000				
%RSD:	40.71%	40.71%	40.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 12 Autosampler Location: 17
Sample ID: 150603A BLK Date Collected: 06/03/15 2:53:45 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/03/15 4:21:49 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.6 g Initial Sample Vol:
Dilution: Sample Prep Vol: 96 mL

Replicate Data: 150603A BLK Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.004	0.0000	0.0005	0.0001	2:54:34 PM	Yes
2	0.000	0.000	0.0000	0.0000	0.0001	2:55:03 PM	Yes
3	-0.001	-0.006	-0.0001	-0.0015	-0.0000	2:55:32 PM	Yes
Mean:	-0.000	-0.001	-0.0000				
SD:	0.0008	0.0052	0.0001				
%RSD:	785.87%	785.87%	785.87				

==========

Sequence No.: 13 Autosampler Location: 18
Sample ID: 150603A LCS Date Collected: 06/03/15 2:55:51 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/03/15 4:21:49 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.6 g Initial Sample Vol:
Dilution: Sample Prep Vol: 96 mL

Replicate Data: 150603A LCS Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.648	4.053	0.0465	0.1742	0.0466	2:56:40 PM	Yes
2	0.641	4.006	0.0460	0.1712	0.0461	2:57:09 PM	Yes
3	0.647	4.044	0.0464	0.1720	0.0465	2:57:38 PM	Yes

Mean:	0.645	4.034	0.0463
SD:	0.0039	0.0245	0.0003
%RSD:	0.61%	0.61%	0.61

Sequence No.: 14
Sample ID: 150603B BLK
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.6 g
Dilution:

Autosampler Location: 19
Date Collected: 06/03/15 2:57:57 PM
Data Type: Reprocessed on 06/03/15 4:21:49 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: 150603B BLK — Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.004	-0.0000	-0.0003	0.0000	2:58:46 PM	Yes
2	-0.001	-0.005	-0.0001	-0.0006	0.0000	2:59:15 PM	Yes
3	-0.000	-0.000	-0.0000	-0.0002	0.0001	2:59:44 PM	Yes
Mean:	-0.000	-0.003	-0.0000				
SD:	0.0004	0.0023	0.0000				
%RSD:	73.37%	73.37%	73.37				

Sequence No.: 15
Sample ID: 150603B LCS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.6 g
Dilution:

Autosampler Location: 20
Date Collected: 06/03/15 3:00:03 PM
Data Type: Reprocessed on 06/03/15 4:21:49 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: 150603B LCS — Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.659	4.120	0.0473	0.1768	0.0474	3:00:52 PM	Yes
2	0.651	4.068	0.0467	0.1737	0.0468	3:01:21 PM	Yes
3	0.645	4.030	0.0463	0.1709	0.0463	3:01:50 PM	Yes
Mean:	0.652	4.073	0.0468				
SD:	0.0072	0.0449	0.0005				
%RSD:	1.10%	1.10%	1.10				

Sequence No.: 16
Sample ID: AZ16836S04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.61 g
Dilution:

Autosampler Location: 21
Date Collected: 06/03/15 3:02:09 PM
Data Type: Reprocessed on 06/03/15 4:21:49 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16836S04 — Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.130	0.827	0.0095	0.0353	0.0096	3:02:58 PM	Yes
2	0.129	0.820	0.0094	0.0346	0.0095	3:03:27 PM	Yes
3	0.128	0.816	0.0094	0.0347	0.0094	3:03:56 PM	Yes
Mean:	0.129	0.821	0.0094				
SD:	0.0009	0.0055	0.0001				
%RSD:	0.67%	0.67%	0.67				

Sequence No.: 17
Sample ID: AZ16837S04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.66 g
Dilution:

Autosampler Location: 22
Date Collected: 06/03/15 3:04:15 PM
Data Type: Reprocessed on 06/03/15 4:21:49 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16837S04 — Analyte: Hg 253.7

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	mg/kg	ug/L	Signal	Area	Height		Stored
1	0.075	0.518	0.0059	0.0227	0.0060	3:05:05 PM	Yes
2	0.076	0.523	0.0060	0.0226	0.0061	3:05:34 PM	Yes
3	0.074	0.510	0.0059	0.0219	0.0059	3:06:03 PM	Yes
Mean:	0.075	0.517	0.0059				
SD:	0.0010	0.0067	0.0001				
%RSD:	1.30%	1.30%	1.30				

Sequence No.: 18
Sample ID: AZ16838S04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.62 g
Dilution:

Autosampler Location: 23
Date Collected: 06/03/15 3:06:22 PM
Data Type: Reprocessed on 06/03/15 4:21:50 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16838S04 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.055	0.352	0.0040	0.0154	0.0041	3:07:12 PM	Yes
2	0.054	0.351	0.0040	0.0150	0.0041	3:07:41 PM	Yes
3	0.054	0.351	0.0040	0.0147	0.0041	3:08:09 PM	Yes
Mean:	0.054	0.352	0.0040				
SD:	0.0001	0.0009	0.0000				
%RSD:	0.24%	0.24%	0.24				

Sequence No.: 19
Sample ID: AZ16839S04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.6 g
Dilution:

Autosampler Location: 24
Date Collected: 06/03/15 3:08:29 PM
Data Type: Reprocessed on 06/03/15 4:21:50 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16839S04 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.072	0.449	0.0052	0.0190	0.0052	3:09:19 PM	Yes
2	0.072	0.453	0.0052	0.0190	0.0053	3:09:47 PM	Yes
3	0.071	0.446	0.0051	0.0187	0.0052	3:10:16 PM	Yes
Mean:	0.072	0.449	0.0052				
SD:	0.0005	0.0031	0.0000				
%RSD:	0.70%	0.70%	0.70				

Sequence No.: 20
Sample ID: AZ16840S04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.66 g
Dilution:

Autosampler Location: 25
Date Collected: 06/03/15 3:10:36 PM
Data Type: Reprocessed on 06/03/15 4:21:50 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16840S04 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.079	0.547	0.0063	0.0232	0.0063	3:11:26 PM	Yes
2	0.079	0.540	0.0062	0.0228	0.0063	3:11:55 PM	Yes
3	0.079	0.541	0.0062	0.0232	0.0063	3:12:24 PM	Yes
Mean:	0.079	0.543	0.0062				
SD:	0.0005	0.0033	0.0000				
%RSD:	0.61%	0.61%	0.61				

Sequence No.: 21
Sample ID: AZ16840S04 DUP
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.66 g
Dilution:

Autosampler Location: 26
Date Collected: 06/03/15 3:12:44 PM
Data Type: Reprocessed on 06/03/15 4:21:50 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16840S04 DUP Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.090	0.616	0.0071	0.0262	0.0071	3:13:35 PM	Yes
2	0.091	0.626	0.0072	0.0269	0.0073	3:14:04 PM	Yes
3	0.089	0.613	0.0070	0.0258	0.0071	3:14:32 PM	Yes
Mean:	0.090	0.618	0.0071				
SD:	0.0010	0.0066	0.0001				
%RSD:	1.07%	1.07%	1.07				

Sequence No.: 22
Sample ID: AZ16840S04 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.66 g
Dilution:

Autosampler Location: 27
Date Collected: 06/03/15 3:14:52 PM
Data Type: Reprocessed on 06/03/15 4:21:50 PM

Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16840S04 MS Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.714	4.907	0.0563	0.2182	0.0564	3:15:43 PM	Yes
2	0.710	4.881	0.0560	0.2157	0.0561	3:16:12 PM	Yes
3	0.704	4.840	0.0556	0.2126	0.0556	3:16:40 PM	Yes
Mean:	0.709	4.876	0.0560				
SD:	0.0049	0.0339	0.0004				
%RSD:	0.69%	0.69%	0.69				

Sequence No.: 23
Sample ID: AZ16400S01
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.65 g
Dilution:

Autosampler Location: 28
Date Collected: 06/03/15 3:17:01 PM
Data Type: Reprocessed on 06/03/15 4:21:51 PM

Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16400S01 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.000	-0.000	-0.0000	-0.0002	0.0001	3:17:52 PM	Yes
2	-0.000	-0.002	-0.0000	0.0000	0.0000	3:18:21 PM	Yes
3	-0.001	-0.003	-0.0000	-0.0004	0.0000	3:18:50 PM	Yes
Mean:	-0.000	-0.002	-0.0000				
SD:	0.0002	0.0016	0.0000				
%RSD:	87.04%	87.04%	87.04				

Sequence No.: 24
Sample ID: AZ16401S02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.63 g
Dilution:

Autosampler Location: 29
Date Collected: 06/03/15 3:19:10 PM
Data Type: Reprocessed on 06/03/15 4:21:51 PM

Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16401S02 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.017	0.111	0.0013	0.0047	0.0013	3:20:01 PM	Yes
2	0.016	0.106	0.0012	0.0041	0.0013	3:20:30 PM	Yes
3	0.017	0.109	0.0013	0.0045	0.0013	3:20:58 PM	Yes
Mean:	0.017	0.109	0.0012				
SD:	0.0004	0.0029	0.0000				
%RSD:	2.63%	2.63%	2.63				

Sequence No.: 25
Sample ID: AZ16402S02

Autosampler Location: 30
Date Collected: 06/03/15 3:21:19 PM

Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.64 g
Dilution:

Data Type: Reprocessed on 06/03/15 4:21:51 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16402S02 Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.877	5.850	0.0672	0.2412	0.0672	3:22:10 PM	Yes
2	0.871	5.805	0.0666	0.2368	0.0667	3:22:40 PM	Yes
3	0.848	5.651	0.0649	0.2305	0.0649	3:23:08 PM	Yes
Mean:	0.865	5.768	0.0662				
SD:	0.0157	0.1044	0.0012				
%RSD:	1.81%	1.81%	1.81				

==========

Sequence No.: 26
Sample ID: AZ16402S02 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.64 g
Dilution:

Autosampler Location: 31
Date Collected: 06/03/15 3:23:29 PM
Data Type: Reprocessed on 06/03/15 4:21:51 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16402S02 MS Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.364	9.092	0.1044	0.3737	0.1045	3:24:20 PM	Yes
2	1.377	9.180	0.1054	0.3693	0.1055	3:24:49 PM	Yes
3	1.366	9.104	0.1045	0.3730	0.1046	3:25:18 PM	Yes
Mean:	1.369	9.125	0.1048				
SD:	0.0072	0.0478	0.0005				
%RSD:	0.52%	0.52%	0.52				

==========

Sequence No.: 27
Sample ID: AZ16402S02 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: 0.64 g
Dilution:

Autosampler Location: 32
Date Collected: 06/03/15 3:25:39 PM
Data Type: Reprocessed on 06/03/15 4:21:51 PM
Initial Sample Vol:
Sample Prep Vol: 96 mL

Replicate Data: AZ16402S02 MSD Analyte: Hg 253.7

Repl #	SampleConc mg/kg	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.267	8.446	0.0970	0.3485	0.0970	3:26:28 PM	Yes
2	1.271	8.472	0.0973	0.3476	0.0973	3:26:57 PM	Yes
3	1.323	8.822	0.1013	0.3657	0.1014	3:27:26 PM	Yes
Mean:	1.287	8.580	0.0985				
SD:	0.0315	0.2100	0.0024				
%RSD:	2.45%	2.45%	2.45				

==========

Sequence No.: 28
Sample ID: CCV 06/03/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 06/03/15 3:27:45 PM
Data Type: Reprocessed on 06/03/15 4:21:51 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/03/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.103	5.103	0.0586	0.2045	0.0587	3:28:35 PM	Yes
2	5.138	5.138	0.0590	0.2057	0.0591	3:29:04 PM	Yes
3	4.952	4.952	0.0569	0.1979	0.0569	3:29:33 PM	Yes
Mean:	5.064	5.064	0.0581				
SD:	0.0988	0.0988	0.0011				
%RSD:	1.95%	1.95%	1.95				

QC value within limits for Hg 253.7 Recovery = 97.24%
All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 1**
Sample ID: CCB 06/03/15 RE **Date Collected: 06/03/15 3:29:53 PM**
Analyst: **Data Type: Reprocessed on 06/03/15 4:21:52 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 06/03/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	-0.0004	0.0001	3:30:42 PM	Yes
2	0.002	0.002	0.0000	-0.0003	0.0001	3:31:11 PM	Yes
3	0.003	0.003	0.0000	-0.0002	0.0001	3:31:40 PM	Yes
Mean:	0.003	0.003	0.0000				
SD:	0.0008	0.0008	0.0000				
%RSD:	28.18%	28.18%	28.18				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 30 **Autosampler Location: 0**
Sample ID: Rinse **Date Collected: 06/03/15 3:31:59 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/03/15 4:21:52 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: Rinse **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0003	0.0000	3:32:43 PM	Yes
2	-0.003	-0.003	-0.0000	-0.0001	0.0000	3:33:11 PM	Yes
3	-0.000	-0.000	-0.0000	0.0005	0.0001	3:33:40 PM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0020	0.0020	0.0000				
%RSD:	84.41%	84.41%	84.41				

Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.136	5.136	0.0330	0.1352	0.0331	11:06:49 AM	Yes
2	5.101	5.101	0.0327	0.1346	0.0329	11:07:18 AM	Yes
3	5.068	5.068	0.0325	0.1334	0.0327	11:07:47 AM	Yes
Mean:	5.102	5.102	0.0328				
SD:	0.0336	0.0336	0.0002				
%RSD:	0.66%	0.66%	0.66				

QC value within limits for Hg 253.7 Recovery = 102.03%
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB 06/04/15 RE Date Collected: 06/04/15 11:08:07 AM
Analyst: Data Type: Reprocessed on 06/04/15 3:00:19 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	0.0008	0.0001	11:08:57 AM	Yes
2	-0.009	-0.009	-0.0001	0.0000	0.0001	11:09:25 AM	Yes
3	-0.007	-0.007	-0.0000	-0.0001	0.0001	11:09:54 AM	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.0063	0.0063	0.0000				
%RSD:	145.05%	145.05%	145.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 17
Sample ID: 150603A BLK Date Collected: 06/04/15 11:10:13 AM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:19 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150603A BLK Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0002	0.0001	11:11:02 AM	Yes
2	-0.017	-0.017	-0.0001	-0.0012	0.0000	11:11:31 AM	Yes
3	-0.012	-0.012	-0.0001	-0.0004	0.0000	11:12:00 AM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0041	0.0041	0.0000				
%RSD:	32.94%	32.94%	32.94				

Sequence No.: 13 Autosampler Location: 18
Sample ID: 150603A LCS Date Collected: 06/04/15 11:12:19 AM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:19 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150603A LCS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.547	3.547	0.0228	0.0930	0.0229	11:13:09 AM	Yes
2	3.541	3.541	0.0227	0.0929	0.0229	11:13:37 AM	Yes
3	3.529	3.529	0.0227	0.0926	0.0228	11:14:06 AM	Yes

Mean:	3.539	3.539	0.0227
SD:	0.0094	0.0094	0.0001
%RSD:	0.26%	0.26%	0.26

Sequence No.: 14
Sample ID: AZ16403W11
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 06/04/15 11:14:25 AM
Data Type: Reprocessed on 06/04/15 3:00:19 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	0.0003	0.0001	11:15:15 AM	Yes
2	-0.004	-0.004	-0.0000	0.0004	0.0001	11:15:43 AM	Yes
3	0.007	0.007	0.0000	0.0011	0.0002	11:16:12 AM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0054	0.0054	0.0000				
%RSD:	968.49%	968.49%	968.49				

Sequence No.: 15
Sample ID: AZ16403W11 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 06/04/15 11:16:31 AM
Data Type: Reprocessed on 06/04/15 3:00:19 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W11 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.808	3.808	0.0244	0.1000	0.0246	11:17:21 AM	Yes
2	3.805	3.805	0.0244	0.1000	0.0245	11:17:49 AM	Yes
3	3.833	3.833	0.0246	0.1008	0.0247	11:18:18 AM	Yes
Mean:	3.815	3.815	0.0245				
SD:	0.0154	0.0154	0.0001				
%RSD:	0.40%	0.40%	0.40				

Sequence No.: 16
Sample ID: AZ16403W11 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 06/04/15 11:18:37 AM
Data Type: Reprocessed on 06/04/15 3:00:20 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W11 MSD Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.718	3.718	0.0239	0.0992	0.0240	11:19:27 AM	Yes
2	3.691	3.691	0.0237	0.0974	0.0238	11:19:56 AM	Yes
3	3.692	3.692	0.0237	0.0971	0.0238	11:20:25 AM	Yes
Mean:	3.700	3.700	0.0238				
SD:	0.0151	0.0151	0.0001				
%RSD:	0.41%	0.41%	0.41				

Sequence No.: 17
Sample ID: AZ16403W12
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 06/04/15 11:20:44 AM
Data Type: Reprocessed on 06/04/15 3:00:20 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W12 Analyte: Hg 253.7

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	-0.0001	-0.0014	0.0000	11:21:34 AM	Yes
2	0.001	0.001	0.0000	0.0003	0.0001	11:22:03 AM	Yes
3	-0.003	-0.003	-0.0000	0.0002	0.0001	11:22:32 AM	Yes
Mean:	-0.006	-0.006	-0.0000				
SD:	0.0084	0.0084	0.0001				
%RSD:	147.75%	147.75%	147.75				

Sequence No.: 18 **Autosampler Location: 23**
Sample ID: AZ16895W01 **Date Collected: 06/04/15 11:22:52 AM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:20 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: 50X **Sample Prep Vol:**

Replicate Data: AZ16895W01 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.261	-0.005	-0.0000	-0.0002	0.0001	11:23:42 AM	Yes
2	-0.586	-0.012	-0.0001	-0.0008	0.0000	11:24:10 AM	Yes
3	0.302	0.006	0.0000	0.0007	0.0002	11:24:39 AM	Yes
Mean:	-0.181	-0.004	-0.0000				
SD:	0.4495	0.0090	0.0001				
%RSD:	247.71%	247.71%	247.71				

Sequence No.: 19 **Autosampler Location: 24**
Sample ID: AZ16896W01 **Date Collected: 06/04/15 11:24:59 AM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:20 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: 50X **Sample Prep Vol:**

Replicate Data: AZ16896W01 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.054	0.001	0.0000	0.0004	0.0001	11:25:49 AM	Yes
2	-0.157	-0.003	-0.0000	0.0001	0.0001	11:26:18 AM	Yes
3	-0.029	-0.001	-0.0000	0.0000	0.0001	11:26:47 AM	Yes
Mean:	-0.044	-0.001	-0.0000				
SD:	0.1065	0.0021	0.0000				
%RSD:	242.09%	242.09%	242.09				

Sequence No.: 20 **Autosampler Location: 25**
Sample ID: AZ16897W01 **Date Collected: 06/04/15 11:27:07 AM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:20 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: 50X **Sample Prep Vol:**

Replicate Data: AZ16897W01 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.010	0.060	0.0004	0.0024	0.0005	11:27:57 AM	Yes
2	2.164	0.043	0.0003	0.0015	0.0004	11:28:26 AM	Yes
3	2.047	0.041	0.0003	0.0011	0.0004	11:28:55 AM	Yes
Mean:	2.407	0.048	0.0003				
SD:	0.5256	0.0105	0.0001				
%RSD:	21.84%	21.84%	21.84				

Sequence No.: 21 **Autosampler Location: 6**
Sample ID: CCV 06/04/15 RE **Date Collected: 06/04/15 11:29:15 AM**
Analyst: **Data Type: Reprocessed on 06/04/15 3:00:20 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.911	4.911	0.0315	0.1304	0.0317	11:30:05 AM	Yes
2	4.879	4.879	0.0313	0.1292	0.0314	11:30:34 AM	Yes
3	4.897	4.897	0.0314	0.1285	0.0316	11:31:03 AM	Yes
Mean:	4.896	4.896	0.0314				
SD:	0.0162	0.0162	0.0001				
%RSD:	0.33%	0.33%	0.33				

QC value within limits for Hg 253.7 Recovery = 97.92%
All analyte(s) passed QC.

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB 06/04/15 RE Date Collected: 06/04/15 11:31:23 AM
Analyst: Data Type: Reprocessed on 06/04/15 3:00:21 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0002	0.0015	0.0003	11:32:13 AM	Yes
2	0.003	0.003	0.0000	-0.0004	0.0001	11:32:41 AM	Yes
3	-0.003	-0.003	-0.0000	-0.0006	0.0001	11:33:10 AM	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.0149	0.0149	0.0001				
%RSD:	169.38%	169.38%	169.38				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23 Autosampler Location: 0
Sample ID: Rinse Date Collected: 06/04/15 11:33:29 AM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:21 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: Rinse Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	-0.0004	0.0001	11:34:13 AM	Yes
2	-0.005	-0.005	-0.0000	0.0000	0.0001	11:34:42 AM	Yes
3	0.002	0.002	0.0000	0.0001	0.0001	11:35:10 AM	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.0056	0.0056	0.0000				
%RSD:	140.38%	140.38%	140.38				

Sequence No.: 24 Autosampler Location: 6
Sample ID: CCV 06/04/15 RE Date Collected: 06/04/15 1:33:02 PM
Analyst: Data Type: Reprocessed on 06/04/15 3:00:21 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.145	5.145	0.0330	0.1353	0.0332	1:33:52 PM	Yes
2	5.256	5.256	0.0337	0.1396	0.0339	1:34:20 PM	Yes
3	5.281	5.281	0.0339	0.1383	0.0340	1:34:49 PM	Yes
Mean:	5.227	5.227	0.0336				
SD:	0.0726	0.0726	0.0005				
%RSD:	1.39%	1.39%	1.39				

QC value within limits for Hg 253.7 Recovery = 104.55%
All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCB 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/04/15 1:35:09 PM
Data Type: Reprocessed on 06/04/15 3:00:21 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB 06/04/15 RE — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0007	0.0000	1:35:59 PM	Yes
2	0.024	0.024	0.0002	0.0020	0.0003	1:36:28 PM	Yes
3	0.018	0.018	0.0001	0.0015	0.0002	1:36:57 PM	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.0191	0.0191	0.0001				
%RSD:	190.07%	190.07%	190.07				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 26
Sample ID: 150604A BLK
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 06/04/15 1:37:16 PM
Data Type: Reprocessed on 06/04/15 3:00:21 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150604A BLK — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0002	0.0000	1:38:06 PM	Yes
2	0.003	0.003	0.0000	0.0010	0.0001	1:38:35 PM	Yes
3	-0.007	-0.007	-0.0000	0.0003	0.0001	1:39:04 PM	Yes
Mean:	-0.006	-0.006	-0.0000				
SD:	0.0080	0.0080	0.0001				
%RSD:	140.57%	140.57%	140.57				

Sequence No.: 27
Sample ID: 150604A LCS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 06/04/15 1:39:24 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150604A LCS — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.317	4.317	0.0277	0.1115	0.0278	1:40:15 PM	Yes
2	4.265	4.265	0.0274	0.1098	0.0275	1:40:44 PM	Yes
3	4.251	4.251	0.0273	0.1101	0.0274	1:41:12 PM	Yes
Mean:	4.277	4.277	0.0275				
SD:	0.0345	0.0345	0.0002				
%RSD:	0.81%	0.81%	0.81				

Sequence No.: 28
Sample ID: AZ16826W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 06/04/15 1:41:32 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16826W03 — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	0.0008	0.0001	1:42:23 PM	Yes
2	0.008	0.008	0.0001	0.0011	0.0002	1:42:52 PM	Yes
3	-0.002	-0.002	-0.0000	0.0006	0.0001	1:43:21 PM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0067	0.0067	0.0000				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 29
Sample ID: AZ16827W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 06/04/15 1:43:41 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16827W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	0.0007	0.0001	1:44:32 PM	Yes
2	-0.001	-0.001	-0.0000	0.0007	0.0001	1:45:01 PM	Yes
3	-0.003	-0.003	-0.0000	0.0006	0.0001	1:45:30 PM	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.0022	0.0022	0.0000				
%RSD:	65.14%	65.14%	65.14				

Sequence No.: 30
Sample ID: AZ16828W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 06/04/15 1:45:50 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16828W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0001	0.0000	1:46:41 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0006	0.0000	1:47:10 PM	Yes
3	0.003	0.003	0.0000	0.0012	0.0001	1:47:39 PM	Yes
Mean:	-0.008	-0.008	-0.0001				
SD:	0.0098	0.0098	0.0001				
%RSD:	124.57%	124.57%	124.57				

Sequence No.: 31
Sample ID: AZ16829W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 06/04/15 1:48:29 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16829W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0001	-0.0010	0.0000	1:49:20 PM	Yes
2	-0.005	-0.005	-0.0000	-0.0016	0.0001	1:49:49 PM	Yes
3	-0.006	-0.006	-0.0000	0.0002	0.0001	1:50:18 PM	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.0067	0.0067	0.0000				
%RSD:	70.86%	70.86%	70.86				

Sequence No.: 32
Sample ID: AZ16830W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:

Autosampler Location: 32
Date Collected: 06/04/15 1:50:39 PM
Data Type: Reprocessed on 06/04/15 3:00:22 PM

Initial Sample Vol:

Dilution: Sample Prep Vol:

Replicate Data: AZ16830W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0002	0.0000	1:51:28 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0005	0.0000	1:51:56 PM	Yes
3	-0.013	-0.013	-0.0001	-0.0002	0.0000	1:52:26 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0016	0.0016	0.0000				
%RSD:	12.04%	12.04%	12.04				

Sequence No.: 33 Autosampler Location: 33
Sample ID: AZ16831W03 Date Collected: 06/04/15 1:52:44 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:23 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16831W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0000	0.0000	1:53:33 PM	Yes
2	-0.018	-0.018	-0.0001	-0.0005	0.0000	1:54:02 PM	Yes
3	-0.006	-0.006	-0.0000	0.0002	0.0001	1:54:31 PM	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.0060	0.0060	0.0000				
%RSD:	52.44%	52.44%	52.44				

Sequence No.: 34 Autosampler Location: 34
Sample ID: AZ16832W03 Date Collected: 06/04/15 1:54:50 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:23 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16832W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0001	-0.0008	-0.0000	1:55:40 PM	Yes
2	-0.000	-0.000	-0.0000	0.0006	0.0001	1:56:08 PM	Yes
3	-0.003	-0.003	-0.0000	0.0002	0.0001	1:56:37 PM	Yes
Mean:	-0.007	-0.007	-0.0000				
SD:	0.0098	0.0098	0.0001				
%RSD:	135.93%	135.93%	135.93				

Sequence No.: 35 Autosampler Location: 35
Sample ID: AZ16833W03 Date Collected: 06/04/15 1:56:56 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:23 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16833W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0001	0.0000	1:57:45 PM	Yes
2	-0.003	-0.003	-0.0000	0.0004	0.0001	1:58:14 PM	Yes
3	-0.016	-0.016	-0.0001	-0.0021	0.0000	1:58:43 PM	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.0063	0.0063	0.0000				
%RSD:	62.10%	62.10%	62.10				

Sequence No.: 36 Autosampler Location: 36

Sample ID: AZ16834W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Date Collected: 06/04/15 1:59:02 PM
Data Type: Reprocessed on 06/04/15 3:00:23 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16834W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0004	0.0000	1:59:51 PM	Yes
2	-0.010	-0.010	-0.0001	-0.0002	0.0001	2:00:20 PM	Yes
3	-0.010	-0.010	-0.0001	0.0002	0.0001	2:00:49 PM	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.0016	0.0016	0.0000				
%RSD:	13.97%	13.97%	13.97				

Sequence No.: 37
Sample ID: AZ16835W03
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 06/04/15 2:01:08 PM
Data Type: Reprocessed on 06/04/15 3:00:24 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16835W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.023	-0.023	-0.0001	-0.0012	-0.0000	2:01:58 PM	Yes
2	-0.009	-0.009	-0.0001	0.0003	0.0001	2:02:26 PM	Yes
3	-0.006	-0.006	-0.0000	-0.0002	0.0001	2:02:55 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0091	0.0091	0.0001				
%RSD:	70.87%	70.87%	70.87				

Sequence No.: 38
Sample ID: CCV 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 06/04/15 2:03:15 PM
Data Type: Reprocessed on 06/04/15 3:00:24 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.214	5.214	0.0335	0.1341	0.0336	2:04:05 PM	Yes
2	5.201	5.201	0.0334	0.1346	0.0335	2:04:34 PM	Yes
3	5.188	5.188	0.0333	0.1329	0.0334	2:05:02 PM	Yes
Mean:	5.201	5.201	0.0334				
SD:	0.0131	0.0131	0.0001				
%RSD:	0.25%	0.25%	0.25				

QC value within limits for Hg 253.7 Recovery = 104.02%
All analyte(s) passed QC.

Sequence No.: 39
Sample ID: CCB 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/04/15 2:05:23 PM
Data Type: Reprocessed on 06/04/15 3:00:24 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0001	-0.0004	0.0000	2:06:12 PM	Yes
2	-0.010	-0.010	-0.0001	-0.0002	0.0001	2:06:41 PM	Yes
3	-0.018	-0.018	-0.0001	-0.0014	0.0000	2:07:09 PM	Yes

Mean:	-0.014	-0.014	-0.0001
SD:	0.0038	0.0038	0.0000
%RSD:	26.41%	26.41%	26.41

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 40 **Autosampler Location: 38**
Sample ID: AZ16835W03 MS **Date Collected: 06/04/15 2:07:29 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:24 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ16835W03 MS **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.027	4.027	0.0259	0.1028	0.0260	2:08:19 PM	Yes
2	4.024	4.024	0.0258	0.1035	0.0260	2:08:48 PM	Yes
3	4.046	4.046	0.0260	0.1041	0.0261	2:09:16 PM	Yes
Mean:	4.032	4.032	0.0259				
SD:	0.0118	0.0118	0.0001				
%RSD:	0.29%	0.29%	0.29				

Sequence No.: 41 **Autosampler Location: 39**
Sample ID: AZ16835W03 MSD **Date Collected: 06/04/15 2:09:36 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:24 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ16835W03 MSD **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.093	4.093	0.0263	0.1058	0.0264	2:10:26 PM	Yes
2	4.040	4.040	0.0259	0.1038	0.0261	2:10:55 PM	Yes
3	4.050	4.050	0.0260	0.1045	0.0261	2:11:24 PM	Yes
Mean:	4.061	4.061	0.0261				
SD:	0.0281	0.0281	0.0002				
%RSD:	0.69%	0.69%	0.69				

Sequence No.: 42 **Autosampler Location: 39**
Sample ID: AZ16835W03 MSD **Date Collected: 06/04/15 2:09:36 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:25 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ16835W03 MSD **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.093	4.093	0.0263	0.1058	0.0264	2:10:26 PM	Yes
2	4.040	4.040	0.0259	0.1038	0.0261	2:10:55 PM	Yes
3	4.050	4.050	0.0260	0.1045	0.0261	2:11:24 PM	Yes
Mean:	4.061	4.061	0.0261				
SD:	0.0281	0.0281	0.0002				
%RSD:	0.69%	0.69%	0.69				

Sequence No.: 43 **Autosampler Location: 40**
Sample ID: AZ17023W03 **Date Collected: 06/04/15 2:16:28 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/04/15 3:00:25 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ17023W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0000	0.0001	0.0001	2:17:19 PM	Yes
2	-0.012	-0.012	-0.0001	-0.0002	0.0000	2:17:47 PM	Yes
3	-0.009	-0.009	-0.0001	-0.0000	0.0001	2:18:16 PM	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.0020	0.0020	0.0000				
%RSD:	21.52%	21.52%	21.52				

==========

Sequence No.: 44 Autosampler Location: 41
Sample ID: AZ17023W02 FF Date Collected: 06/04/15 2:18:36 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:25 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17023W02 FF Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0001	-0.0011	0.0000	2:19:27 PM	Yes
2	-0.015	-0.015	-0.0001	-0.0006	0.0000	2:19:56 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0005	0.0000	2:20:25 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0023	0.0023	0.0000				
%RSD:	15.17%	15.17%	15.17				

==========

Sequence No.: 45 Autosampler Location: 42
Sample ID: AZ17024W03 Date Collected: 06/04/15 2:20:45 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:25 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17024W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	0.0005	0.0001	2:21:35 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0007	0.0000	2:22:04 PM	Yes
3	-0.018	-0.018	-0.0001	-0.0009	0.0000	2:22:33 PM	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.0069	0.0069	0.0000				
%RSD:	55.80%	55.80%	55.80				

==========

Sequence No.: 46 Autosampler Location: 43
Sample ID: AZ17024W02 FF Date Collected: 06/04/15 2:22:53 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:25 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17024W02 FF Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	0.0007	0.0001	2:23:44 PM	Yes
2	-0.011	-0.011	-0.0001	-0.0005	0.0000	2:24:13 PM	Yes
3	-0.005	-0.005	-0.0000	0.0002	0.0001	2:24:42 PM	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.0073	0.0073	0.0000				
%RSD:	177.30%	177.30%	177.30				

==========

Sequence No.: 47 Autosampler Location: 44
Sample ID: AZ17025W03 Date Collected: 06/04/15 2:25:02 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:25 PM
Logged In Analyst (Original) : chemist_metals

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17025W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0005	0.0000	2:25:53 PM	Yes
2	-0.012	-0.012	-0.0001	-0.0004	0.0000	2:26:22 PM	Yes
3	-0.011	-0.011	-0.0001	-0.0008	0.0000	2:26:51 PM	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.0007	0.0007	0.0000				
%RSD:	6.26%	6.26%	6.26				

Sequence No.: 48 Autosampler Location: 45
Sample ID: AZ17025W02 FF Date Collected: 06/04/15 2:27:11 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:26 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17025W02 FF Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0014	0.0002	2:28:02 PM	Yes
2	0.014	0.014	0.0001	0.0011	0.0002	2:28:30 PM	Yes
3	-0.017	-0.017	-0.0001	-0.0011	0.0000	2:28:59 PM	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.0163	0.0163	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 49 Autosampler Location: 46
Sample ID: AZ17026W03 Date Collected: 06/04/15 2:29:20 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:26 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17026W03 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	-0.0002	0.0001	2:30:11 PM	Yes
2	0.009	0.009	0.0001	0.0012	0.0002	2:30:40 PM	Yes
3	-0.002	-0.002	-0.0000	0.0000	0.0001	2:31:09 PM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0073	0.0073	0.0000				
%RSD:	960.56%	960.56%	960.56				

Sequence No.: 50 Autosampler Location: 47
Sample ID: AZ17026W02 FF Date Collected: 06/04/15 2:31:30 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/04/15 3:00:26 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17026W02 FF Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0006	0.0001	2:32:21 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0011	0.0000	2:32:50 PM	Yes
3	0.003	0.003	0.0000	0.0007	0.0001	2:33:19 PM	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.0095	0.0095	0.0001				
%RSD:	317.55%	317.55%	317.55				

Sequence No.: 51
Sample ID: CCV 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 06/04/15 2:33:40 PM
Data Type: Reprocessed on 06/04/15 3:00:26 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.109	5.109	0.0328	0.1315	0.0329	2:34:31 PM	Yes
2	5.065	5.065	0.0325	0.1289	0.0326	2:35:00 PM	Yes
3	5.126	5.126	0.0329	0.1318	0.0330	2:35:28 PM	Yes
Mean:	5.100	5.100	0.0327				
SD:	0.0311	0.0311	0.0002				
%RSD:	0.61%	0.61%	0.61				

QC value within limits for Hg 253.7 Recovery = 102.00%
All analyte(s) passed QC.

Sequence No.: 52
Sample ID: CCB 06/04/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/04/15 2:35:49 PM
Data Type: Reprocessed on 06/04/15 3:00:27 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB 06/04/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0007	0.0000	2:36:38 PM	Yes
2	-0.008	-0.008	-0.0001	-0.0001	0.0001	2:37:07 PM	Yes
3	-0.001	-0.001	-0.0000	0.0008	0.0001	2:37:35 PM	Yes
Mean:	-0.007	-0.007	-0.0000				
SD:	0.0062	0.0062	0.0000				
%RSD:	83.50%	83.50%	83.50				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 53
Sample ID: Rinse
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 06/04/15 2:37:55 PM
Data Type: Reprocessed on 06/04/15 3:00:27 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: Rinse Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0000	0.0004	0.0001	2:38:38 PM	Yes
2	-0.009	-0.009	-0.0001	0.0003	0.0001	2:39:07 PM	Yes
3	-0.009	-0.009	-0.0001	-0.0002	0.0001	2:39:36 PM	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.0022	0.0022	0.0000				
%RSD:	29.12%	29.12%	29.12				

Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.977	4.977	0.0338	0.1521	0.0338	9:47:46 AM	Yes
2	4.992	4.992	0.0339	0.1534	0.0339	9:48:15 AM	Yes
3	4.947	4.947	0.0336	0.1492	0.0336	9:48:44 AM	Yes
Mean:	4.972	4.972	0.0337				
SD:	0.0227	0.0227	0.0002				
%RSD:	0.46%	0.46%	0.46				

QC value within limits for Hg 253.7 Recovery = 99.44%
All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB 06/09/15 RE Date Collected: 06/09/15 9:49:04 AM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:44 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0000	-0.0008	0.0000	9:49:54 AM	Yes
2	0.011	0.011	0.0001	-0.0000	0.0001	9:50:23 AM	Yes
3	0.014	0.014	0.0001	0.0006	0.0001	9:50:51 AM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0115	0.0115	0.0001				
%RSD:	193.47%	193.47%	193.47				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 17
Sample ID: 150608A BLK 7470 Date Collected: 06/09/15 9:51:11 AM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:44 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150608A BLK 7470 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	-0.0002	0.0000	9:52:00 AM	Yes
2	0.012	0.012	0.0001	0.0002	0.0001	9:52:29 AM	Yes
3	0.029	0.029	0.0002	0.0021	0.0003	9:52:58 AM	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.0150	0.0150	0.0001				
%RSD:	114.20%	114.20%	114.20				

Sequence No.: 13 Autosampler Location: 18
Sample ID: 150608A LCS 7470 Date Collected: 06/09/15 9:53:17 AM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:44 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150608A LCS 7470 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.510	3.510	0.0238	0.1058	0.0239	9:54:06 AM	Yes
2	3.509	3.509	0.0238	0.1070	0.0239	9:54:35 AM	Yes
3	3.532	3.532	0.0240	0.1073	0.0240	9:55:04 AM	Yes

Mean:	3.517	3.517	0.0239
SD:	0.0131	0.0131	0.0001
%RSD:	0.37%	0.37%	0.37

Sequence No.: 14
Sample ID: 150608A BLK 245.1
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 06/09/15 9:55:23 AM
Data Type: Reprocessed on 06/09/15 4:00:45 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150608A BLK 245.1 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0005	0.0000	9:56:12 AM	Yes
2	0.008	0.008	0.0001	0.0006	0.0001	9:56:40 AM	Yes
3	0.013	0.013	0.0001	0.0008	0.0001	9:57:10 AM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0087	0.0087	0.0001				
%RSD:	156.16%	156.16%	156.16				

Sequence No.: 15
Sample ID: 150608A LCS 245.1
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 06/09/15 9:57:29 AM
Data Type: Reprocessed on 06/09/15 4:00:45 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150608A LCS 245.1 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.881	3.881	0.0263	0.1178	0.0264	9:58:18 AM	Yes
2	3.900	3.900	0.0265	0.1179	0.0265	9:58:46 AM	Yes
3	3.903	3.903	0.0265	0.1172	0.0265	9:59:15 AM	Yes
Mean:	3.895	3.895	0.0264				
SD:	0.0120	0.0120	0.0001				
%RSD:	0.31%	0.31%	0.31				

Sequence No.: 16
Sample ID: AZ17150W01
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 06/09/15 9:59:34 AM
Data Type: Reprocessed on 06/09/15 4:00:45 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17150W01 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0001	0.0001	0.0001	10:00:24 AM	Yes
2	0.011	0.011	0.0001	0.0002	0.0001	10:00:53 AM	Yes
3	0.006	0.006	0.0000	-0.0005	0.0001	10:01:22 AM	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.0037	0.0037	0.0000				
%RSD:	37.99%	37.99%	37.99				

Sequence No.: 17
Sample ID: AZ16403W12 FF
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 06/09/15 10:01:41 AM
Data Type: Reprocessed on 06/09/15 4:00:45 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W12 FF Analyte: Hg 253.7

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.016	0.016	0.0001	0.0003	0.0002	10:02:30 AM	Yes
2	0.019	0.019	0.0001	0.0007	0.0002	10:02:59 AM	Yes
3	0.015	0.015	0.0001	0.0005	0.0002	10:03:29 AM	Yes
Mean:	0.017	0.017	0.0001				
SD:	0.0021	0.0021	0.0000				
%RSD:	12.49%	12.49%	12.49				

Sequence No.: 18
Sample ID: AZ16403W12 FF MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 06/09/15 10:03:48 AM
Data Type: Reprocessed on 06/09/15 4:00:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W12 FF MS
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.483	3.483	0.0236	0.1045	0.0237	10:04:38 AM	Yes
2	3.491	3.491	0.0237	0.1037	0.0237	10:05:07 AM	Yes
3	3.485	3.485	0.0236	0.1031	0.0237	10:05:36 AM	Yes
Mean:	3.486	3.486	0.0237				
SD:	0.0043	0.0043	0.0000				
%RSD:	0.12%	0.12%	0.12				

Sequence No.: 19
Sample ID: AZ16403W12 FF MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 06/09/15 10:05:55 AM
Data Type: Reprocessed on 06/09/15 4:00:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16403W12 FF MSD
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.590	3.590	0.0244	0.1079	0.0244	10:06:45 AM	Yes
2	3.544	3.544	0.0240	0.1062	0.0241	10:07:15 AM	Yes
3	3.556	3.556	0.0241	0.1066	0.0242	10:07:43 AM	Yes
Mean:	3.563	3.563	0.0242				
SD:	0.0239	0.0239	0.0002				
%RSD:	0.67%	0.67%	0.67				

Sequence No.: 20
Sample ID: AZ16450M01
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution: 50X

Autosampler Location: 25
Date Collected: 06/09/15 10:08:03 AM
Data Type: Reprocessed on 06/09/15 4:00:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16450M01
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.002	0.020	0.0001	0.0007	0.0002	10:08:53 AM	Yes
2	1.570	0.031	0.0002	0.0017	0.0003	10:09:22 AM	Yes
3	0.097	0.002	0.0000	-0.0021	0.0001	10:09:51 AM	Yes
Mean:	0.890	0.018	0.0001				
SD:	0.7428	0.0149	0.0001				
%RSD:	83.49%	83.49%	83.49				

Sequence No.: 21
Sample ID: AZ16451M01
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution: 50X

Autosampler Location: 26
Date Collected: 06/09/15 10:10:11 AM
Data Type: Reprocessed on 06/09/15 4:00:46 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16451M01 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.899	0.098	0.0007	0.0040	0.0007	10:11:01 AM	Yes
2	4.440	0.089	0.0006	0.0032	0.0007	10:11:30 AM	Yes
3	3.576	0.072	0.0005	0.0015	0.0005	10:11:58 AM	Yes
Mean:	4.305	0.086	0.0006				
SD:	0.6718	0.0134	0.0001				
%RSD:	15.61%	15.61%	15.61				

Sequence No.: 22
Sample ID: CCV 06/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 06/09/15 10:12:19 AM
Data Type: Reprocessed on 06/09/15 4:00:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.044	5.044	0.0342	0.1519	0.0343	10:13:09 AM	Yes
2	5.001	5.001	0.0339	0.1514	0.0340	10:13:38 AM	Yes
3	5.006	5.006	0.0340	0.1512	0.0340	10:14:06 AM	Yes
Mean:	5.017	5.017	0.0340				
SD:	0.0235	0.0235	0.0002				
%RSD:	0.47%	0.47%	0.47				

QC value within limits for Hg 253.7 Recovery = 100.34%
All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCB 06/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 06/09/15 10:14:27 AM
Data Type: Reprocessed on 06/09/15 4:00:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.028	0.028	0.0002	0.0013	0.0002	10:15:16 AM	Yes
2	0.029	0.029	0.0002	0.0011	0.0003	10:15:45 AM	Yes
3	-0.001	-0.001	-0.0000	-0.0007	0.0000	10:16:14 AM	Yes
Mean:	0.019	0.019	0.0001				
SD:	0.0174	0.0174	0.0001				
%RSD:	91.62%	91.62%	91.62				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 24
Sample ID: AZ16658W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 27
Date Collected: 06/09/15 10:16:33 AM
Data Type: Reprocessed on 06/09/15 4:00:47 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16658W02 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0001	0.0001	0.0001	10:17:24 AM	Yes
2	0.021	0.021	0.0001	0.0009	0.0002	10:17:53 AM	Yes
3	0.015	0.015	0.0001	0.0004	0.0002	10:18:21 AM	Yes
Mean:	0.016	0.016	0.0001				
SD:	0.0050	0.0050	0.0000				
%RSD:	31.39%	31.39%	31.39				

Sequence No.: 25
Sample ID: AZ16659W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 06/09/15 10:18:42 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16659W02 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0003	0.0025	0.0004	10:19:33 AM	Yes
2	0.006	0.006	0.0000	0.0002	0.0001	10:20:02 AM	Yes
3	0.006	0.006	0.0000	-0.0001	0.0001	10:20:30 AM	Yes
Mean:	0.019	0.019	0.0001				
SD:	0.0215	0.0215	0.0001				
%RSD:	115.39%	115.39%	115.39				

Sequence No.: 26
Sample ID: AZ16659W02 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 06/09/15 10:20:50 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16659W02 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.012	4.012	0.0272	0.1224	0.0273	10:21:42 AM	Yes
2	3.934	3.934	0.0267	0.1191	0.0267	10:22:10 AM	Yes
3	3.980	3.980	0.0270	0.1201	0.0271	10:22:39 AM	Yes
Mean:	3.975	3.975	0.0270				
SD:	0.0391	0.0391	0.0003				
%RSD:	0.98%	0.98%	0.98				

Sequence No.: 27
Sample ID: AZ16659W02 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 06/09/15 10:23:00 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16659W02 MSD Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.944	3.944	0.0268	0.1193	0.0268	10:23:51 AM	Yes
2	3.910	3.910	0.0265	0.1186	0.0266	10:24:20 AM	Yes
3	3.974	3.974	0.0270	0.1196	0.0270	10:24:49 AM	Yes
Mean:	3.943	3.943	0.0267				
SD:	0.0325	0.0325	0.0002				
%RSD:	0.82%	0.82%	0.82				

Sequence No.: 28
Sample ID: AZ16660W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 06/09/15 10:25:10 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16660W02 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0002	0.0012	0.0003	10:26:01 AM	Yes
2	0.019	0.019	0.0001	0.0005	0.0002	10:26:31 AM	Yes

3	0.026	0.026	0.0002	0.0010	0.0002	10:26:59 AM	Yes
Mean:	0.025	0.025	0.0002				
SD:	0.0051	0.0051	0.0000				
%RSD:	20.60%	20.60%	20.60				

Sequence No.: 29
Sample ID: AZ16891W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 32
Date Collected: 06/09/15 10:27:20 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16891W02
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.022	0.022	0.0002	0.0003	0.0002	10:28:09 AM	Yes
2	0.039	0.039	0.0003	0.0008	0.0003	10:28:38 AM	Yes
3	0.032	0.032	0.0002	0.0011	0.0003	10:29:07 AM	Yes
Mean:	0.031	0.031	0.0002				
SD:	0.0082	0.0082	0.0001				
%RSD:	26.29%	26.29%	26.29				

Sequence No.: 30
Sample ID: AZ16892W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 33
Date Collected: 06/09/15 10:29:25 AM
Data Type: Reprocessed on 06/09/15 4:00:48 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16892W02
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0002	0.0008	0.0002	10:30:15 AM	Yes
2	0.031	0.031	0.0002	0.0014	0.0003	10:30:44 AM	Yes
3	0.040	0.040	0.0003	0.0015	0.0003	10:31:12 AM	Yes
Mean:	0.031	0.031	0.0002				
SD:	0.0086	0.0086	0.0001				
%RSD:	27.45%	27.45%	27.45				

Sequence No.: 31
Sample ID: AZ16893W02
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 34
Date Collected: 06/09/15 10:31:31 AM
Data Type: Reprocessed on 06/09/15 4:00:49 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16893W02
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0003	0.0017	0.0004	10:32:20 AM	Yes
2	0.046	0.046	0.0003	0.0014	0.0004	10:32:49 AM	Yes
3	0.042	0.042	0.0003	0.0021	0.0003	10:33:18 AM	Yes
Mean:	0.044	0.044	0.0003				
SD:	0.0021	0.0021	0.0000				
%RSD:	4.77%	4.77%	4.77				

Sequence No.: 32
Sample ID: AZ16893W02 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 35
Date Collected: 06/09/15 10:33:36 AM
Data Type: Reprocessed on 06/09/15 4:00:49 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16893W02 MS
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.955	3.955	0.0268	0.1209	0.0269	10:34:26 AM	Yes
2	3.918	3.918	0.0266	0.1177	0.0266	10:34:55 AM	Yes
3	3.859	3.859	0.0262	0.1174	0.0262	10:35:24 AM	Yes
Mean:	3.910	3.910	0.0265				
SD:	0.0483	0.0483	0.0003				
%RSD:	1.24%	1.24%	1.24				

Sequence No.: 33 **Autosampler Location: 36**
Sample ID: AZ16893W02 MSD **Date Collected: 06/09/15 10:35:43 AM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:49 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ16893W02 MSD **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.056	4.056	0.0275	0.1233	0.0276	10:36:32 AM	Yes
2	3.971	3.971	0.0269	0.1218	0.0270	10:37:01 AM	Yes
3	4.463	4.463	0.0303	0.1303	0.0303	10:37:30 AM	Yes
Mean:	4.163	4.163	0.0282				
SD:	0.2630	0.2630	0.0018				
%RSD:	6.32%	6.32%	6.32				

Sequence No.: 34 **Autosampler Location: 6**
Sample ID: CCV 06/09/15 RE **Date Collected: 06/09/15 10:37:49 AM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:49 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.426	5.426	0.0368	0.1639	0.0369	10:38:39 AM	Yes
2	5.384	5.384	0.0365	0.1591	0.0366	10:39:08 AM	Yes
3	5.261	5.261	0.0357	0.1504	0.0357	10:39:37 AM	Yes
Mean:	5.357	5.357	0.0363				
SD:	0.0855	0.0855	0.0006				
%RSD:	1.60%	1.60%	1.60				

QC value within limits for Hg 253.7 Recovery = 107.14%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 1**
Sample ID: CCB 06/09/15 RE **Date Collected: 06/09/15 10:39:57 AM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:49 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0002	0.0000	0.0002	10:40:47 AM	Yes
2	0.024	0.024	0.0002	0.0006	0.0002	10:41:16 AM	Yes
3	0.033	0.033	0.0002	0.0014	0.0003	10:41:44 AM	Yes
Mean:	0.027	0.027	0.0002				
SD:	0.0058	0.0058	0.0000				
%RSD:	21.73%	21.73%	21.73				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 0**

Sample ID: Rinse
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Date Collected: 06/09/15 10:42:04 AM
Data Type: Reprocessed on 06/09/15 4:00:50 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: Rinse — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0002	0.0014	0.0002	10:42:47 AM	Yes
2	0.007	0.007	0.0000	-0.0011	0.0001	10:43:16 AM	Yes
3	0.012	0.012	0.0001	-0.0005	0.0001	10:43:45 AM	Yes
Mean:	0.015	0.015	0.0001				
SD:	0.0103	0.0103	0.0001				
%RSD:	68.61%	68.61%	68.61				

Sequence No.: 37
Sample ID: CCV 06/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 06/09/15 1:54:25 PM
Data Type: Reprocessed on 06/09/15 4:00:50 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/09/15 RE — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.911	5.911	0.0401	0.1819	0.0402	1:55:15 PM	Yes
2	5.881	5.881	0.0399	0.1784	0.0399	1:55:44 PM	Yes
Mean:	5.896	5.896	0.0400				
SD:	0.0213	0.0213	0.0001				
%RSD:	0.36%	0.36%	0.36				

QC value greater than the upper limit for Hg 253.7 Recovery = 117.91%
QC Failed. Continue with analysis.

Sequence No.: 38
Sample ID: CCV 06/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 6
Date Collected: 06/09/15 1:56:49 PM
Data Type: Reprocessed on 06/09/15 4:00:50 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 06/09/15 RE — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.970	5.970	0.0405	0.1812	0.0406	1:57:39 PM	Yes

QC value greater than the upper limit for Hg 253.7 Recovery = 119.40%
QC Failed. Continue with analysis.

Sequence No.: 39
Sample ID: Calib. Blank
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 06/09/15 1:58:42 PM
Data Type: Reprocessed on 06/09/15 4:00:50 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: Calib. Blank — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0013	0.0002	1:59:31 PM	Yes
2		[0.00]	0.0001	0.0005	0.0001	2:00:00 PM	Yes
3		[0.00]	0.0001	0.0012	0.0002	2:00:29 PM	Yes
Mean:		[0.00]	0.0001				
SD:		0.0000	0.0000				
%RSD:		0.00%	35.83				

Auto-zero performed.

Sequence No.: 40 Autosampler Location: 2
Sample ID: 0.2 Date Collected: 06/09/15 2:00:48 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:50 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 0.2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0015	0.0079	0.0017	2:01:37 PM	Yes
2		[0.2]	0.0015	0.0072	0.0016	2:02:06 PM	Yes
3		[0.2]	0.0015	0.0074	0.0017	2:02:35 PM	Yes
Mean:		[0.2]	0.0015				
SD:		0.000	0.0000				
%RSD:		0.00%	2.32				

Standard number 1 applied. [0.2]
Correlation Coef.: 0.999951 Slope: 0.00678 Intercept: 0.00000

Sequence No.: 41 Autosampler Location: 3
Sample ID: 0.5 Date Collected: 06/09/15 2:02:55 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:50 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 0.5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0040	0.0185	0.0041	2:03:44 PM	Yes
2		[0.5]	0.0040	0.0183	0.0041	2:04:12 PM	Yes
3		[0.5]	0.0040	0.0181	0.0041	2:04:41 PM	Yes
Mean:		[0.5]	0.0040				
SD:		0.000	0.0000				
%RSD:		0.00%	0.18				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999910 Slope: 0.00679 Intercept: 0.00000

Sequence No.: 42 Autosampler Location: 4
Sample ID: 1 Date Collected: 06/09/15 2:05:01 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:51 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0077	0.0352	0.0079	2:05:50 PM	Yes
2		[1]	0.0077	0.0343	0.0078	2:06:20 PM	Yes
3		[1]	0.0076	0.0339	0.0078	2:06:49 PM	Yes
Mean:		[1]	0.0077				
SD:		0.00	0.0000				
%RSD:		0.00%	0.64				

Standard number 3 applied. [1]
Correlation Coef.: 0.999792 Slope: 0.00679 Intercept: 0.00000

Sequence No.: 43 Autosampler Location: 5
Sample ID: 2 Date Collected: 06/09/15 2:07:08 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:51 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 2 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0164	0.0722	0.0165	2:07:58 PM	Yes
2		[2]	0.0163	0.0714	0.0164	2:08:27 PM	Yes
3		[2]	0.0163	0.0719	0.0165	2:08:56 PM	Yes
Mean:		[2]	0.0163				
SD:		0.00	0.0000				
%RSD:		0.00%	0.27				

Standard number 4 applied. [2]
Correlation Coef.: 0.998727 Slope: 0.00684 Intercept: 0.00000

Sequence No.: 44 Autosampler Location: 6
Sample ID: 5 Date Collected: 06/09/15 2:09:16 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:51 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 5 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0412	0.1813	0.0413	2:10:06 PM	Yes
2		[5]	0.0411	0.1799	0.0412	2:10:35 PM	Yes
3		[5]	0.0411	0.1797	0.0412	2:11:04 PM	Yes
Mean:		[5]	0.0411				
SD:		0.00	0.0001				
%RSD:		0.00%	0.13				

Standard number 5 applied. [5]
Correlation Coef.: 0.993412 Slope: 0.00714 Intercept: 0.00000

Sequence No.: 45 Autosampler Location: 7
Sample ID: 10 Date Collected: 06/09/15 2:11:24 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:51 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 10 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0807	0.3559	0.0809	2:12:15 PM	Yes
2		[10]	0.0805	0.3530	0.0806	2:12:43 PM	Yes
3		[10]	0.0804	0.3517	0.0805	2:13:12 PM	Yes
Mean:		[10]	0.0805				
SD:		0.00	0.0002				
%RSD:		0.00%	0.22				

Standard number 6 applied. [10]
Correlation Coef.: 0.999917 Slope: 0.00808 Intercept: 0.00000

Calibration data for Hg 253.7 Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib. Blank	0.0000	0	0.000	0.00	35.83
0.2	0.0015	0.2	0.185	0.00	2.32
0.5	0.0040	0.5	0.490	0.00	0.18
1	0.0077	1.0	0.949	0.00	0.64
2	0.0163	2.0	2.017	0.00	0.27
5	0.0411	5.0	5.084	0.00	0.13
10	0.0805	10.0	9.959	0.00	0.22

Correlation Coef.: 0.999917 Slope: 0.00808 Intercept: 0.00000

Sequence No.: 46 Autosampler Location: 9
Sample ID: ICV 06/09/15 RE Date Collected: 06/09/15 2:13:33 PM

Analyst: Data Type: Reprocessed on 06/09/15 4:00:51 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICV 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.087	4.087	0.0330	0.1452	0.0332	2:14:22 PM	Yes
2	4.055	4.055	0.0328	0.1433	0.0329	2:14:51 PM	Yes
3	4.054	4.054	0.0328	0.1431	0.0329	2:15:20 PM	Yes
Mean:	4.065	4.065	0.0329				
SD:	0.0187	0.0187	0.0002				
%RSD:	0.46%	0.46%	0.46				

QC value within limits for Hg 253.7 Recovery = 101.63%
All analyte(s) passed QC.

==========

Sequence No.: 47 Autosampler Location: 1
Sample ID: ICB 06/09/15 RE Date Collected: 06/09/15 2:15:39 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICB 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0001	-0.0005	0.0000	2:16:29 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0001	0.0001	2:16:58 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0001	0.0001	2:17:27 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0019	0.0019	0.0000				
%RSD:	12.63%	12.63%	12.63				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 48 Autosampler Location: 6
Sample ID: CCV 06/09/15 RE Date Collected: 06/09/15 2:17:47 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.065	5.065	0.0409	0.1811	0.0411	2:18:37 PM	Yes
2	5.071	5.071	0.0410	0.1808	0.0412	2:19:06 PM	Yes
3	5.080	5.080	0.0411	0.1808	0.0412	2:19:35 PM	Yes
Mean:	5.072	5.072	0.0410				
SD:	0.0073	0.0073	0.0001				
%RSD:	0.14%	0.14%	0.14				

QC value within limits for Hg 253.7 Recovery = 101.44%
All analyte(s) passed QC.

==========

Sequence No.: 49 Autosampler Location: 1
Sample ID: CCB 06/09/15 RE Date Collected: 06/09/15 2:19:55 PM
Analyst: Data Type: Reprocessed on 06/09/15 4:00:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.013	-0.013	-0.0001	-0.0002	0.0001	2:20:45 PM	Yes
2	-0.020	-0.020	-0.0002	-0.0008	0.0000	2:21:13 PM	Yes
3	-0.012	-0.012	-0.0001	-0.0001	0.0001	2:21:42 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0045	0.0045	0.0000				
%RSD:	29.90%	29.90%	29.90				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 50 **Autosampler Location: 17**
Sample ID: 150609A BLK FF **Date Collected: 06/09/15 2:22:02 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:52 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 150609A BLK FF **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0001	-0.0007	0.0000	2:22:51 PM	Yes
2	-0.018	-0.018	-0.0001	-0.0006	0.0000	2:23:20 PM	Yes
3	-0.011	-0.011	-0.0001	0.0002	0.0001	2:23:49 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0038	0.0038	0.0000				
%RSD:	25.20%	25.20%	25.20				

Sequence No.: 51 **Autosampler Location: 18**
Sample ID: 150609A LCS FF **Date Collected: 06/09/15 2:24:08 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:52 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 150609A LCS FF **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.772	3.772	0.0305	0.1354	0.0307	2:24:57 PM	Yes
2	3.734	3.734	0.0302	0.1340	0.0304	2:25:26 PM	Yes
3	3.781	3.781	0.0306	0.1382	0.0307	2:25:55 PM	Yes
Mean:	3.762	3.762	0.0304				
SD:	0.0248	0.0248	0.0002				
%RSD:	0.66%	0.66%	0.66				

Sequence No.: 52 **Autosampler Location: 19**
Sample ID: 150609A BLK **Date Collected: 06/09/15 2:26:14 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:53 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: 150609A BLK **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	-0.0001	0.0001	2:27:04 PM	Yes
2	-0.015	-0.015	-0.0001	-0.0005	0.0000	2:27:32 PM	Yes
3	0.082	0.082	0.0007	0.0095	0.0008	2:28:01 PM	Yes
Mean:	0.017	0.017	0.0001				
SD:	0.0557	0.0557	0.0005				
%RSD:	319.79%	319.79%	319.79				

Sequence No.: 53 **Autosampler Location: 20**
Sample ID: 150609A LCS **Date Collected: 06/09/15 2:28:20 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:53 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**

Dilution: Sample Prep Vol:

Replicate Data: 150609A LCS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.828	3.828	0.0309	0.1382	0.0311	2:29:10 PM	Yes
2	3.788	3.788	0.0306	0.1379	0.0308	2:29:38 PM	Yes
3	3.807	3.807	0.0308	0.1377	0.0309	2:30:07 PM	Yes
Mean:	3.808	3.808	0.0308				
SD:	0.0199	0.0199	0.0002				
%RSD:	0.52%	0.52%	0.52				

==========

Sequence No.: 54 Autosampler Location: 21
Sample ID: AZ16957W11 Date Collected: 06/09/15 2:30:26 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:53 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16957W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0002	0.0018	0.0004	2:31:16 PM	Yes
2	0.021	0.021	0.0002	0.0008	0.0003	2:31:44 PM	Yes
3	0.031	0.031	0.0002	0.0017	0.0004	2:32:13 PM	Yes
Mean:	0.027	0.027	0.0002				
SD:	0.0052	0.0052	0.0000				
%RSD:	19.16%	19.16%	19.16				

==========

Sequence No.: 55 Autosampler Location: 22
Sample ID: AZ16958W11 Date Collected: 06/09/15 2:32:33 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:53 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16958W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0000	0.0001	2:33:22 PM	Yes
2	-0.009	-0.009	-0.0001	0.0004	0.0001	2:33:51 PM	Yes
3	-0.013	-0.013	-0.0001	0.0000	0.0001	2:34:20 PM	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.0019	0.0019	0.0000				
%RSD:	16.44%	16.44%	16.44				

==========

Sequence No.: 56 Autosampler Location: 23
Sample ID: AZ16959W11 Date Collected: 06/09/15 2:34:39 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:54 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16959W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0001	-0.0016	0.0000	2:35:29 PM	Yes
2	-0.012	-0.012	-0.0001	0.0002	0.0001	2:35:58 PM	Yes
3	-0.018	-0.018	-0.0001	-0.0004	0.0000	2:36:27 PM	Yes
Mean:	-0.016	-0.016	-0.0001				
SD:	0.0036	0.0036	0.0000				
%RSD:	22.44%	22.44%	22.44				

==========

Sequence No.: 57 Autosampler Location: 24

Sample ID: AZ16960W11
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Date Collected: 06/09/15 2:36:47 PM
Data Type: Reprocessed on 06/09/15 4:00:54 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16960W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0000	0.0008	0.0002	2:37:37 PM	Yes
2	0.014	0.014	0.0001	0.0015	0.0003	2:38:06 PM	Yes
3	-0.002	-0.002	-0.0000	0.0003	0.0001	2:38:34 PM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0080	0.0080	0.0001				
%RSD:	139.15%	139.15%	139.15				

Sequence No.: 58
Sample ID: AZ16961W11
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 06/09/15 2:38:54 PM
Data Type: Reprocessed on 06/09/15 4:00:54 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16961W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0002	-0.0007	0.0000	2:39:44 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0001	0.0001	2:40:13 PM	Yes
3	-0.012	-0.012	-0.0001	0.0000	0.0001	2:40:42 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0041	0.0041	0.0000				
%RSD:	26.63%	26.63%	26.63				

Sequence No.: 59
Sample ID: AZ16962W11
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 06/09/15 2:41:02 PM
Data Type: Reprocessed on 06/09/15 4:00:54 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16962W11 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0001	-0.0002	0.0000	2:41:53 PM	Yes
2	-0.011	-0.011	-0.0001	0.0001	0.0001	2:42:21 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0002	0.0001	2:42:50 PM	Yes
Mean:	-0.014	-0.014	-0.0001				
SD:	0.0024	0.0024	0.0000				
%RSD:	17.08%	17.08%	17.08				

Sequence No.: 60
Sample ID: AZ16962W11 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 06/09/15 2:43:10 PM
Data Type: Reprocessed on 06/09/15 4:00:54 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16962W11 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.513	3.513	0.0284	0.1286	0.0286	2:44:01 PM	Yes
2	3.476	3.476	0.0281	0.1258	0.0283	2:44:29 PM	Yes
3	3.494	3.494	0.0283	0.1265	0.0284	2:44:58 PM	Yes
Mean:	3.495	3.495	0.0283				
SD:	0.0183	0.0183	0.0001				

%RSD: 0.52% 0.52% 0.52

Sequence No.: 61
Sample ID: AZ16962W11 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 06/09/15 2:45:19 PM
Data Type: Reprocessed on 06/09/15 4:00:55 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16962W11 MSD

Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.474	3.474	0.0281	0.1265	0.0283	2:46:10 PM	Yes
2	3.436	3.436	0.0278	0.1260	0.0279	2:46:39 PM	Yes
3	3.395	3.395	0.0274	0.1232	0.0276	2:47:08 PM	Yes
Mean:	3.435	3.435	0.0278				
SD:	0.0394	0.0394	0.0003				
%RSD:	1.15%	1.15%	1.15				

Sequence No.: 62
Sample ID: AZ16593W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 06/09/15 2:47:28 PM
Data Type: Reprocessed on 06/09/15 4:00:55 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16593W05

Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0001	-0.0008	0.0000	2:48:19 PM	Yes
2	-0.013	-0.013	-0.0001	-0.0001	0.0001	2:48:48 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0001	0.0001	2:49:17 PM	Yes
Mean:	-0.014	-0.014	-0.0001				
SD:	0.0013	0.0013	0.0000				
%RSD:	9.41%	9.41%	9.41				

Sequence No.: 63
Sample ID: AZ16594W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 06/09/15 2:49:37 PM
Data Type: Reprocessed on 06/09/15 4:00:55 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16594W05

Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0001	-0.0001	0.0000	2:50:29 PM	Yes
2	-0.002	-0.002	-0.0000	0.0010	0.0001	2:50:58 PM	Yes
3	-0.013	-0.013	-0.0001	0.0001	0.0001	2:51:27 PM	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.0073	0.0073	0.0001				
%RSD:	70.03%	70.03%	70.03				

Sequence No.: 64
Sample ID: AZ16595W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 06/09/15 2:51:48 PM
Data Type: Reprocessed on 06/09/15 4:00:55 PM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16595W05

Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0001	-0.0000	0.0000	2:52:38 PM	Yes

2	-0.014	-0.014	-0.0001	0.0000	0.0001	2:53:08 PM	Yes
3	-0.013	-0.013	-0.0001	0.0001	0.0001	2:53:36 PM	Yes
Mean:	-0.014	-0.014	-0.0001				
SD:	0.0007	0.0007	0.0000				
%RSD:	5.15%	5.15%	5.15				

Sequence No.: 65 **Autosampler Location: 32**
Sample ID: AZ16596W05 **Date Collected: 06/09/15 2:53:57 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:55 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ16596W05 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0002	0.0001	2:54:46 PM	Yes
2	-0.013	-0.013	-0.0001	0.0001	0.0001	2:55:15 PM	Yes
3	-0.012	-0.012	-0.0001	-0.0000	0.0001	2:55:44 PM	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.0015	0.0015	0.0000				
%RSD:	12.89%	12.89%	12.89				

Sequence No.: 66 **Autosampler Location: 6**
Sample ID: CCV 06/09/15 RE **Date Collected: 06/09/15 2:56:03 PM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:56 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.754	4.754	0.0384	0.1739	0.0386	2:56:53 PM	Yes
2	4.651	4.651	0.0376	0.1707	0.0378	2:57:22 PM	Yes
3	4.627	4.627	0.0374	0.1699	0.0376	2:57:51 PM	Yes
Mean:	4.678	4.678	0.0378				
SD:	0.0674	0.0674	0.0005				
%RSD:	1.44%	1.44%	1.44				

QC value within limits for Hg 253.7 Recovery = 93.55%
All analyte(s) passed QC.

Sequence No.: 67 **Autosampler Location: 1**
Sample ID: CCB 06/09/15 RE **Date Collected: 06/09/15 2:58:11 PM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:56 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0005	0.0001	2:59:01 PM	Yes
2	-0.016	-0.016	-0.0001	-0.0006	0.0000	2:59:30 PM	Yes
3	-0.011	-0.011	-0.0001	0.0001	0.0001	2:59:59 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0024	0.0024	0.0000				
%RSD:	18.54%	18.54%	18.54				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 68 **Autosampler Location: 33**
Sample ID: AZ16597W05 **Date Collected: 06/09/15 3:00:18 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:56 PM**
Logged In Analyst (Original) : chemist_metals

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16597W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	0.0002	0.0001	3:01:07 PM	Yes
2	-0.015	-0.015	-0.0001	-0.0002	0.0000	3:01:36 PM	Yes
3	-0.011	-0.011	-0.0001	0.0004	0.0001	3:02:05 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0021	0.0021	0.0000				
%RSD:	16.16%	16.16%	16.16				

Sequence No.: 69 Autosampler Location: 34
Sample ID: AZ16598W05 Date Collected: 06/09/15 3:02:24 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:56 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16598W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0003	0.0001	3:03:12 PM	Yes
2	-0.017	-0.017	-0.0001	-0.0006	0.0000	3:03:41 PM	Yes
3	-0.013	-0.013	-0.0001	-0.0005	0.0001	3:04:10 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0041	0.0041	0.0000				
%RSD:	31.53%	31.53%	31.53				

Sequence No.: 70 Autosampler Location: 35
Sample ID: AZ16599W05 Date Collected: 06/09/15 3:04:29 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:57 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16599W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0001	0.0001	3:05:19 PM	Yes
2	-0.014	-0.014	-0.0001	-0.0002	0.0001	3:05:47 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0003	0.0001	3:06:16 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0020	0.0020	0.0000				
%RSD:	15.27%	15.27%	15.27				

Sequence No.: 71 Autosampler Location: 36
Sample ID: AZ16600W05 Date Collected: 06/09/15 3:06:35 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/09/15 4:00:57 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ16600W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	-0.0004	0.0001	3:07:24 PM	Yes
2	-0.006	-0.006	-0.0000	0.0004	0.0001	3:07:53 PM	Yes
3	-0.008	-0.008	-0.0001	-0.0001	0.0001	3:08:21 PM	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.0041	0.0041	0.0000				
%RSD:	44.10%	44.10%	44.10				

Sequence No.: 72
Sample ID: AZ16601W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 06/09/15 3:08:41 PM
Data Type: Reprocessed on 06/09/15 4:00:57 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16601W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0000	0.0001	3:09:30 PM	Yes
2	-0.001	-0.001	-0.0000	0.0002	0.0002	3:09:59 PM	Yes
3	-0.003	-0.003	-0.0000	-0.0000	0.0001	3:10:28 PM	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.0028	0.0028	0.0000				
%RSD:	81.25%	81.25%	81.25				

Sequence No.: 73
Sample ID: AZ16602W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 06/09/15 3:10:47 PM
Data Type: Reprocessed on 06/09/15 4:00:57 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16602W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0000	0.0002	0.0001	3:11:37 PM	Yes
2	-0.011	-0.011	-0.0001	-0.0001	0.0001	3:12:06 PM	Yes
3	-0.009	-0.009	-0.0001	-0.0001	0.0001	3:12:35 PM	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.0022	0.0022	0.0000				
%RSD:	26.19%	26.19%	26.19				

Sequence No.: 74
Sample ID: AZ16603W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 06/09/15 3:12:55 PM
Data Type: Reprocessed on 06/09/15 4:00:57 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16603W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0002	0.0001	3:13:45 PM	Yes
2	-0.006	-0.006	-0.0001	0.0003	0.0001	3:14:13 PM	Yes
3	-0.009	-0.009	-0.0001	-0.0001	0.0001	3:14:42 PM	Yes
Mean:	-0.007	-0.007	-0.0001				
SD:	0.0016	0.0016	0.0000				
%RSD:	21.53%	21.53%	21.53				

Sequence No.: 75
Sample ID: AZ16604W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 06/09/15 3:15:02 PM
Data Type: Reprocessed on 06/09/15 4:00:57 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16604W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0001	0.0001	3:15:52 PM	Yes
2	-0.016	-0.016	-0.0001	-0.0006	0.0000	3:16:20 PM	Yes
3	-0.009	-0.009	-0.0001	-0.0003	0.0001	3:16:49 PM	Yes
Mean:	-0.012	-0.012	-0.0001				

SD:	0.0032	0.0032	0.0000
%RSD:	26.39%	26.39%	26.39

Sequence No.: 76
Sample ID: AZ16605W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 06/09/15 3:17:09 PM
Data Type: Reprocessed on 06/09/15 4:00:58 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16605W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0001	0.0001	3:17:59 PM	Yes
2	-0.012	-0.012	-0.0001	-0.0004	0.0001	3:18:28 PM	Yes
3	-0.005	-0.005	-0.0000	0.0002	0.0001	3:18:57 PM	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.0041	0.0041	0.0000				
%RSD:	40.94%	40.94%	40.94				

Sequence No.: 77
Sample ID: AZ16606W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 06/09/15 3:19:17 PM
Data Type: Reprocessed on 06/09/15 4:00:58 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16606W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	-0.0002	0.0001	3:20:07 PM	Yes
2	-0.011	-0.011	-0.0001	-0.0006	0.0001	3:20:36 PM	Yes
3	-0.012	-0.012	-0.0001	-0.0007	0.0001	3:21:05 PM	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.0009	0.0009	0.0000				
%RSD:	7.82%	7.82%	7.82				

Sequence No.: 78
Sample ID: AZ16606W05 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 06/09/15 3:21:25 PM
Data Type: Reprocessed on 06/09/15 4:00:58 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16606W05 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.451	3.451	0.0279	0.1267	0.0281	3:22:16 PM	Yes
2	3.440	3.440	0.0278	0.1259	0.0280	3:22:45 PM	Yes
3	3.386	3.386	0.0274	0.1239	0.0275	3:23:14 PM	Yes
Mean:	3.425	3.425	0.0277				
SD:	0.0349	0.0349	0.0003				
%RSD:	1.02%	1.02%	1.02				

Sequence No.: 79
Sample ID: AZ16606W05 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 06/09/15 3:23:34 PM
Data Type: Reprocessed on 06/09/15 4:00:58 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ16606W05 MSD Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	3.374	3.374	0.0273	0.1239	0.0274	3:24:25 PM	Yes
2	3.326	3.326	0.0269	0.1217	0.0271	3:24:54 PM	Yes
3	3.342	3.342	0.0270	0.1214	0.0272	3:25:22 PM	Yes
Mean:	3.347	3.347	0.0271				
SD:	0.0242	0.0242	0.0002				
%RSD:	0.72%	0.72%	0.72				

==========

Sequence No.: 80 **Autosampler Location: 6**
Sample ID: CCV 06/09/15 RE **Date Collected: 06/09/15 3:44:25 PM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:58 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.757	4.757	0.0385	0.1765	0.0386	3:45:16 PM	Yes
2	4.802	4.802	0.0388	0.1764	0.0390	3:45:45 PM	Yes
3	4.796	4.796	0.0388	0.1750	0.0389	3:46:14 PM	Yes
Mean:	4.785	4.785	0.0387				
SD:	0.0242	0.0242	0.0002				
%RSD:	0.51%	0.51%	0.51				

QC value within limits for Hg 253.7 Recovery = 95.70%
All analyte(s) passed QC.

==========

Sequence No.: 81 **Autosampler Location: 1**
Sample ID: CCB 06/09/15 RE **Date Collected: 06/09/15 3:46:34 PM**
Analyst: **Data Type: Reprocessed on 06/09/15 4:00:59 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 06/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	0.0008	0.0002	3:47:24 PM	Yes
2	-0.009	-0.009	-0.0001	0.0004	0.0001	3:47:53 PM	Yes
3	0.001	0.001	0.0000	0.0009	0.0002	3:48:21 PM	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.0053	0.0053	0.0000				
%RSD:	173.32%	173.32%	173.32				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 82 **Autosampler Location: 0**
Sample ID: Rinse **Date Collected: 06/09/15 3:48:41 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/09/15 4:00:59 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: Rinse **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	0.0004	0.0001	3:49:24 PM	Yes
2	-0.012	-0.012	-0.0001	0.0004	0.0001	3:49:53 PM	Yes
3	-0.013	-0.013	-0.0001	0.0001	0.0001	3:50:22 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0012	0.0012	0.0000				
%RSD:	8.85%	8.85%	8.85				

Mercury Standards

Methods 245.1/7470/7471

Hg STOCK STD 7470A/7471/245.1	Hg STOCK ICV 7470A/7471/245.1
1mL CPI Hg STD Lot # 15B160-35043 conc: 1000ug/mL exp 03/06/2015 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep. Date 05/08/15 Exp. Date 06/05/15	1mL Ultra Sci Hg ICV STD Lot #P00139-32881 conc: 1000ug/mL exp 03/31/19 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep.Date 05/08/15 Exp. Date 06/05/15

Hg WORKING STANDARDS 7470A/7471/245.1				
Hg WORKING STD	1ml 10ug/ml Hg STOCK STD. and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily
Hg WORKING ICV	1ml 10ug/ml Hg STOCK ICV and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily

10% HCL	3% HCl
200 mL of HCL in 2000 mL of DI H2O Prep Date: 06/03/15 Exp Date: 06/03/16 Prepared by: RE Lot# HCL: BDH 4114121 3923	30 mL of HCL in 1000 mL of DI H2O Prep Date: 06/03/15 Exp Date: 06/03/16 Prepared by: RE Lot# HCL: BDH 4114121 3923

1.1% STANNOUS CHLORIDE
11g SnCl2 EMD Lot #B1006939-411 30 mL HCl BDH Lot #4114121 3923 Brought to 1000 mL with DI Water Prep. Date 06/03/15 Exp. Date 06/03/16 By RE

Mercury Standards

Methods 245.1/7470/7471

Hg STOCK STD 7470A/7471/245.1	Hg STOCK ICV 7470A/7471/245.1
1mL CPI Hg STD Lot # 15B160-35043 conc: 1000ug/mL exp 03/06/2015 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep. Date 05/08/15 Exp. Date 06/05/15	1mL Ultra Sci Hg ICV STD Lot #P00139-32881 conc: 1000ug/mL exp 03/31/19 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep.Date 05/08/15 Exp. Date 06/05/15

Hg WORKING STANDARDS 7470A/7471/245.1				
Hg WORKING STD	1ml 10ug/ml Hg STOCK STD. and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily
Hg WORKING ICV	1ml 10ug/ml Hg STOCK ICV and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily

10% HCL	3% HCl
200 mL of HCL in 2000 mL of DI H2O Prep Date: 05/28/15 Exp Date: 05/28/16 Prepared by: RE Lot# HCL: BDH 4114121 3923	30 mL of HCL in 1000 mL of DI H2O Prep Date: 06/04/15 Exp Date: 06/04/16 Prepared by: RE Lot# HCL: BDH 4114121 3923

1.1% STANNOUS CHLORIDE
11g SnCl2 EMD Lot #B1006939-411 30 mL HCl BDH Lot #4114121 3923 Brought to 1000 mL with DI Water Prep. Date 06/04/15 Exp. Date 06/04/16 By RE

Mercury Standards

Methods 245.1/7470/7471

Hg STOCK STD 7470A/7471/245.1	Hg STOCK ICV 7470A/7471/245.1
1mL CPI Hg STD Lot # 15B160-35043 conc: 1000ug/mL exp 03/06/2015 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep. Date 06/08/15 Exp. Date 07/06/15	1mL Ultra Sci Hg ICV STD Lot #P00139-32881 conc: 1000ug/mL exp 03/31/19 and 1mL HNO3 EMD LOT# 99263 3436 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep.Date 06/08/15 Exp. Date 07/06/15

Hg WORKING STANDARDS 7470A/7471/245.1				
Hg WORKING STD	1ml 10ug/ml Hg STOCK STD. and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily
Hg WORKING ICV	1ml 10ug/ml Hg STOCK ICV and 2mL HNO3 EMD LOT#99263 3436 to final vol 200mL with milipore water	05/08/15	exp:	06/05/15 final conc: 50ug/L expires daily

10% HCL	3% HCl
200 mL of HCL in 2000 mL of DI H2O Prep Date: 06/08/15 Exp Date: 06/08/16 Prepared by: RE Lot# HCL: BDH 4114121 3923	30 mL of HCL in 1000 mL of DI H2O Prep Date: 06/09/15 Exp Date: 06/09/16 Prepared by: RE Lot# HCL: BDH 4114121 3923

1.1% STANNOUS CHLORIDE
11g SnCl2 EMD Lot #B1006939-411 30 mL HCl BDH Lot #4114121 3923 Brought to 1000 mL with DI Water Prep. Date 06/09/15 Exp. Date 06/09/16 By RE

Metals Digestion Worksheet

Method Name 3010A Digestion (Field Filter) **Prep Method** M3010F **Set** 150526A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1073180-35017		
Spiked ID 2	LCSW LOT# 1073080-35018		
Spiked ID 3	Li 10mg/L PREP 5-26-15		
Spiked ID 4			
Spiked By	NM	Date:	05/26/15 9:17:00 AM
Witnessed By	SJH	Date:	05/26/15 9:17:00 AM

Starting Temp:	96 c
Ending Temp:	96 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	05/26/15 14:08

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150526A Blk				50mL	50mL	05/26/15 9:17	equip: Modblock2 DISSOLVE
2	150526A LCS		500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
3	AZ16235	AZ16235W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
4	AZ16236	AZ16236W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
5	AZ16287	AZ16287W32			50mL	50mL	05/26/15 9:17	equip: Modblock2
6	AZ16287 MS	AZ16287W32	500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
7	AZ16287 MSD	AZ16287W32	500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
8	AZ16288	AZ16288W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
9	AZ16289	AZ16289W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
10	AZ16290	AZ16290W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
11	AZ16334	AZ16334W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
12	AZ16335	AZ16335W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
13	AZ16336	AZ16336W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
14	AZ16337	AZ16337W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
15	AZ16338	AZ16338W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
16	AZ16339	AZ16339W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
17	AZ16340	AZ16340W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
18	AZ16341	AZ16341W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
19	AZ16342	AZ16342W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
20	AZ16343	AZ16343W05			50mL	50mL	05/26/15 9:17	equip: Modblock2
21	AZ16403	AZ16403W12			50mL	50mL	05/26/15 9:17	equip: Modblock2

Solvent and Lot#
HNO3 J.T.B 99263.3429
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	ROS
Date	6/1/15
Time	1700
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	05/21/15 8:29:10 AM

Reviewed By: ROS **Date:** 6/1/15

Metals Digestion Worksheet

Method Name 3010A Digestion **Prep Method** M3010 **Set** 150526A **Units** mL

Spikes	
Spiked ID 1	LCSW LOT# 1073180-35017
Spiked ID 2	LCSW LOT# 1073080-35018
Spiked ID 3	Li 10mg/L Prep 5-26-15
Spiked ID 4	
Spiked By	NM Date: 05/26/15 9:17:00 AM
Witnessed By	SJH Date: 05/26/15 9:17:00 AM

Starting Temp:	96 c
Ending Temp:	96 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	05/26/15 14:15

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150526A Blk				50mL	50mL	05/26/15 9:17	equip: Modblock2 TOTAL
2	150526A LCS		500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
3	AZ15875	AZ15875W08			50mL	50mL	05/26/15 9:17	equip: Modblock2
4	AZ16235	AZ16235W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
5	AZ16236	AZ16236W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
6	AZ16287	AZ16287W34			50mL	50mL	05/26/15 9:17	equip: Modblock2
7	AZ16287 MS	AZ16287W34	500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
8	AZ16287 MSD	AZ16287W34	500uL	1+2+3	50mL	50mL	05/26/15 9:17	equip: Modblock2
9	AZ16288	AZ16288W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
10	AZ16289	AZ16289W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
11	AZ16290	AZ16290W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
12	AZ16334	AZ16334W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
13	AZ16335	AZ16335W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
14	AZ16336	AZ16336W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
15	AZ16337	AZ16337W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
16	AZ16338	AZ16338W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
17	AZ16339	AZ16339W12			50mL	50mL	05/26/15 9:17	equip: Modblock2
18	AZ16340	AZ16340W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
19	AZ16341	AZ16341W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
20	AZ16342	AZ16342W11			50mL	50mL	05/26/15 9:17	equip: Modblock2
21	AZ16343	AZ16343W04			50mL	50mL	05/26/15 9:17	equip: Modblock2
22	AZ16403	AZ16403W11			50mL	50mL	05/26/15 9:17	equip: Modblock2

Solvent and Lot#
HNO3 J.T.B 99263 3429
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	[illegible]
Date	5/26/15
Time	1700
Moved to	[illegible]

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	05/21/15 8:12:25 AM

Reviewed By: [illegible] **Date:** 5/26/15

_M7470

Mercury Digestion Worksheet

Method Name 7470A Mercury Digestion **Prep Method** M7470 **Set** 150608A **Units** mL

Spikes			
Spiked ID 1	Hg WORKING STANDARD prep 6-8-15		
Spiked ID 2	Hg WORKING ICV prep 6-8-15		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	06/08/15 11:50:00 AM
Witnessed By	RJS	Date:	06/08/15 11:50:00 AM

Starting Temp:	95 c
Ending Temp:	95 c
Temp Type:	Modblock3
End Date/Time	06/08/15 2:00:00 PM

Mercury Calibration

Sample	Spike Amount	Spike ID	Final Volume
0 ppb		1	72.25 ml
0.2 ppb	0.2 ml	1	72.25 ml
0.5 ppb	0.5 ml	1	72.25 ml
1 ppb	1 ml	1	72.25 ml
2 ppb	2 ml	1	72.25 ml
5 ppb	5 ml	1	72.25 ml
5 ppb	5 ml	1	72.25 ml
10 ppb	10 ml	1	72.25 ml
ICV	4 ml	2	72.25 ml

Start Date/Time of Calibration 06/08/15 11:50

Sufficient Vol for Matrix QC:	Yes

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150608A Blk				50mL	72.25mL	06/08/15 11:50	equip: Modblock3
2	150608A LCS		4mL	1	50mL	72.25mL	06/08/15 11:50	equip: Modblock3
3	AZ16403 FF	AZ16403W12			50mL	72.25mL	06/08/15 11:50	equip: Modblock3 DISSOLVE
4	AZ16403 FF MS	AZ16403W12	4mL	1	50mL	72.25mL	06/08/15 11:50	equip: Modblock3 DISSOLVE
5	AZ16403 FF MSD	AZ16403W12	4mL	1	50mL	72.25mL	06/08/15 11:50	equip: Modblock3 DISSOLVE
6	AZ16450	AZ16450M01			500uL	72.25mL	06/08/15 11:50	equip: Modblock3 DF 100
7	AZ16451	AZ16451M01			500uL	72.25mL	06/08/15 11:50	equip: Modblock3 DF 100

Solvent and Lot#
HNO3 EMD 54181 3182
H2SO4 J.T.B 71333 3971
KMnO4 5-20-15
K2s2o8 5-21-15
Decolorizer 5-28-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RE
Date	6/9/15
Time	14:56
Moved to	metals

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	06/08/15 11:29:31 AM

Reviewed By: RE **Date:** 6/9/15

_M7470

Mercury Digestion Worksheet

Method Name 7470A Mercury Digestion **Prep Method** M7470 **Set** 150603A **Units** mL

Spikes			
Spiked ID 1	Hg WORKING STANDARD prep 6-3-15		
Spiked ID 2	Hg WORKING ICV prep 6-3-15		
Spiked ID 3			
Spiked ID 4			
Spiked By	RE	Date:	06/03/15 3:51:00 PM
Witnessed By	NM	Date:	06/03/15 3:51:00 PM

Starting Temp:	91 C
Ending Temp:	91 C
Temp Type:	Modblock3
End Date/Time	06/03/15 5:52:00 PM

Mercury Calibration			
Sample	Spike Amount	Spike ID	Final Volume
0 ppb		1	72.25 ml
0.2 ppb	0.2 ml	1	72.25 ml
0.5 ppb	0.5 ml	1	72.25 ml
1 ppb	1 ml	1	72.25 ml
2 ppb	2 ml	1	72.25 ml
5 ppb	5 ml	1	72.25 ml
5 ppb	5 ml	1	72.25 ml
10 ppb	10 ml	1	72.25 ml
ICV	4 ml	2	72.25 ml

Start Date/Time of Calibration 06/03/15 15:51

Sufficient Vol for Matrix QC:	Yes

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150603A Blk				50mL	72.25mL	06/03/15 15:51	equip: Modblock3
2	150603A LCS		4mL	1	50mL	72.25mL	06/03/15 15:51	equip: Modblock3
3	AZ16403	AZ16403W11			50mL	72.25mL	06/03/15 15:51	equip: Modblock3
4	AZ16403 MS	AZ16403W11	4mL	1	50mL	72.25mL	06/03/15 15:51	equip: Modblock3
5	AZ16403 MSD	AZ16403W11	4mL	1	50mL	72.25mL	06/03/15 15:51	equip: Modblock3
6	AZ16403F	AZ16403W12			50mL	72.25mL	06/03/15 15:51	equip: Modblock3 Dissolved
7	AZ16895	AZ16895W01			1mL	72.25mL	06/03/15 15:51	equip: Modblock3 DF50
8	AZ16896	AZ16896W01			1mL	72.25mL	06/03/15 15:51	equip: Modblock3 DF50
9	AZ16897	AZ16897W01			1mL	72.25mL	06/03/15 15:51	equip: Modblock3 DF50

Solvent and Lot#
HNO3 J.T.B 99263 3436
H2SO4 J.T.B 71333 3971
KMnO4 5-20-15
K2s2o8 5-21-15
Decolorizer 5-28-15

Sample COC Transfer	
Sample prep employee Initials	re
Analyst's initials	RE
Date	6/4/15
Time	9:36
Moved to	Metals

Technician's Initials	
Scanned By	re
Sample Preparation	re
Digestion	re
Bring up to volume	re
Modified	06/03/15 3:24:51 PM

Reviewed By: RE 977 **Date:** 6/4/15

Ext_ID 48013

Metals Digestion Worksheet

Method Name 3050B Digestion **Prep Method** M3050alt **Set** 150604A **Units** mL

Spikes	
Spiked ID 1	LCSW LOT# 1075288-35199
Spiked ID 2	LCSW LOT# 1075395-35200
Spiked ID 3	Li 10mg/L Prep 6-4-15
Spiked ID 4	
Spiked By	NM Date: 06/04/15 9:19:00 AM
Witnessed By	DC Date: 06/04/15 9:19:00 AM

Starting Temp:	94 c
Ending Temp:	94 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	06/04/15 11:30

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150604A Blk				1.00g	100mL	06/04/15 9:19	equip: Modblock4
2	150604A LCS		1mL	1+2+3	1.00g	100mL	06/04/15 9:19	equip: Modblock4
3	AZ16137	AZ16137S01			1.01g	100mL	06/04/15 9:19	equip: Modblock4
4	AZ16137 MS	AZ16137S01	2mL	1+2+3	1.01g	100mL	06/04/15 9:19	equip: Modblock4
5	AZ16137 MSD	AZ16137S01	2mL	1+2+3	1.01g	100mL	06/04/15 9:19	equip: Modblock4
6	AZ16138	AZ16138S01			1.05g	100mL	06/04/15 9:19	equip: Modblock4
7	AZ16139	AZ16139S01			1.02g	100mL	06/04/15 9:19	equip: Modblock4
8	AZ16140	AZ16140S01			1.00g	100mL	06/04/15 9:19	equip: Modblock4
9	AZ16141	AZ16141S01			1.05g	100mL	06/04/15 9:19	equip: Modblock4
10	AZ16198	AZ16198S02			1.00g	100mL	06/04/15 9:19	equip: Modblock4
11	AZ16199	AZ16199S01			1.00g	100mL	06/04/15 9:19	equip: Modblock4
12	AZ16201	AZ16201S02			1.03g	100mL	06/04/15 9:19	equip: Modblock4
13	AZ16202	AZ16202S02			0.98g	100mL	06/04/15 9:19	equip: Modblock4
14	AZ16400	AZ16400S02			1.05g	100mL	06/04/15 9:19	equip: Modblock4
15	AZ16401	AZ16401S02			1.02g	100mL	06/04/15 9:19	equip: Modblock4
16	AZ16402	AZ16402S02			0.97g	100mL	06/04/15 9:19	equip: Modblock4

Solvent and Lot#
1:1 HNO3 NA
HNO3 J.T.B 99263 3436
H2O2 EMD na
HCL BDH 4114121 3925

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RDJ
Date	6/12/15
Time	1230
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	06/04/15 11:01:06 AM

Reviewed By: RDJ **Date:** 6/12/15

Mercury Digestion Worksheet

Method Name 7471A Mercury Digestion **Prep Method** M7471 **Set** 150603B **Units** mL

Spikes			
Spiked ID 1	Hg WORKING STANDARD PREP 6-3-15		
Spiked ID 2	Hg WORKING ICV PREP 6-3-15		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	06/03/15 11:24:00 AM
Witnessed By	RE	Date:	06/03/15 11:24:00 AM

Starting Temp:	97 C
Ending Temp:	97 C
Temp Type:	Modblock3
End Date/Time	06/03/15 12:50:00 PM

Mercury Calibration

Sample	Spike Amount	Spike ID	Final Volume
0 ppb		1	96 ml
0.2083 ppb	0.4 ml	1	96 ml
0.5208 ppb	1 ml	1	96 ml
1.0417 ppb	2 ml	1	96 ml
2.083 ppb	4ml	1	96 ml
5.208 ppb	10 ml	1	96 ml
5.208 ppb	10 ml	1	96 ml
10.417 ppb	20 ml	1	96 ml
ICV	8 ml	2	96 ml

Start Date/Time of Calibration 06/03/15 11:24

Sufficient Vol for Matrix QC:	Yes

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150603B Blk				0.60g	96mL	06/03/15 11:24	equip: Modblock3
2	150603B LCS		8mL	1	0.60g	96mL	06/03/15 11:24	equip: Modblock3
3	AZ16400	AZ16400S01			0.65g	96mL	06/03/15 11:24	equip: Modblock3
4	AZ16401	AZ16401S02			0.63g	96mL	06/03/15 11:24	equip: Modblock3
5	AZ16402	AZ16402S02			0.64g	96mL	06/03/15 11:24	equip: Modblock3
6	AZ16402 MS	AZ16402S02	8mL	1	0.64g	96mL	06/03/15 11:24	equip: Modblock3
7	AZ16402 MSD	AZ16402S02	8mL	1	0.64g	96mL	06/03/15 11:24	equip: Modblock3

Solvent and Lot#
AQUAREGIA 5-7-15
KMnO4 5-20-15
DECOLORIZER 5-28-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RE
Date	6/3/15 16:13 RE 6/3/15
Time	16:13
Moved to	Metals

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	06/03/15 1:32:04 PM

Reviewed By: RE Ext_ID 979 48010 **Date:** 6/3/15

6010 Injection Log

Directory: K:\ICAP JULES\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	04 Jun 2015	15:38	CalBlk 150604RJS I:JL O:R		150604A6010	1.
2	04 Jun 2015	15:43	STD 1 150604RJS I:JL O:RJ		150604A6010	1.
3	04 Jun 2015	15:48	STD 2 150604RJS I:JL O:RJ		150604A6010	1.
4	04 Jun 2015	15:52	STD 3 150604RJS I:JL O:RJ		150604A6010	1.
5	04 Jun 2015	16:00	ICV 150604RJS I:JL O:RJS		150604A6010	1.
6	04 Jun 2015	16:14	ICB 150604RJS I:JL O:RJS		150604A6010	1.
8	04 Jun 2015	16:27	ICSA 150604RJS I:JL O:RJS		150604A6010	1.
9	04 Jun 2015	16:39	ICSAB 150604RJS I:JL O:RJ		150604A6010	1.
10	04 Jun 2015	16:49	CCV1 150604RJS I:JL O:RJS		150604A6010	1.
11	04 Jun 2015	16:54	CCB 150604RJS I:JL O:RJS		150604A6010	1.
12	04 Jun 2015	17:00	150526A-3010-BLK		150604A6010	1.
13	04 Jun 2015	17:07	150526A-3010-LCS		150604A6010	1.
14	04 Jun 2015	17:12	150526A-3010F-BLK		150604A6010	1.
15	04 Jun 2015	17:19	150526A-3010F-LCS		150604A6010	1.
16	04 Jun 2015	17:25	AZ16403W11		150604A6010	1.
17	04 Jun 2015	17:30	AZ16403W12 D		150604A6010	1.
18	04 Jun 2015	17:37	CCV2 150604RJS I:JL O:RJS		150604A6010	1.
19	04 Jun 2015	17:57	CCB 150604RJS I:JL O:RJS		150604A6010	1.

6010 Injection Log

Directory: K:\ICAP JULES\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	12 Jun 2015	12:56	CalBlk 150612RJS I:JL O:R		150612A6010	1.
2	12 Jun 2015	13:02	STD 1 150612RJS I:JL O:RJ		150612A6010	1.
3	12 Jun 2015	13:09	STD 2 150612RJS I:JL O:RJ		150612A6010	1.
4	12 Jun 2015	13:14	STD 3 150612RJS I:JL O:RJ		150612A6010	1.
5	12 Jun 2015	13:26	ICV 150612RJS I:JL O:RJS		150612A6010	1.
6	12 Jun 2015	13:37	ICB 150612RJS I:JL O:RJS		150612A6010	1.
7	12 Jun 2015	13:43	ICSA 150612RJS I:JL O:RJS		150612A6010	1.
8	12 Jun 2015	13:50	ICSAB 150612RJS I:JL O:RJ		150612A6010	1.
9	12 Jun 2015	13:57	CCV1 150612RJS I:JL O:RJS		150612A6010	1.
10	12 Jun 2015	14:08	CCB 150612RJS I:JL O:RJS		150612A6010	1.
11	12 Jun 2015	14:26	150604A-3050-BLK		150612A6010	1.
12	12 Jun 2015	14:32	150604A-3050-LCS		150612A6010	1.
13	12 Jun 2015	14:39	AZ16400S02-1/20		150612A6010	20.
14	12 Jun 2015	14:46	AZ16401S02-1/20		150612A6010	20.
15	12 Jun 2015	14:54	AZ16402S02-1/20		150612A6010	20.
16	12 Jun 2015	15:02	CCV2 150612RJS I:JL O:RJS		150612A6010	1.
17	12 Jun 2015	15:08	CCB 150612RJS I:JL O:RJS		150612A6010	1.
41	12 Jun 2015	18:09	CCV2 150612RJS I:JL O:RJS		150612A6010	1.
42	12 Jun 2015	18:15	CCB 150612RJS I:JL O:RJS		150612A6010	1.
44	12 Jun 2015	18:29	AZ16401S02		150612A6010	1.
45	12 Jun 2015	18:36	AZ16402S02		150612A6010	1.
46	12 Jun 2015	18:42	CCV1 150612RJS I:JL O:RJS		150612A6010	1.
47	12 Jun 2015	18:52	CCB 150612RJS I:JL O:RJS		150612A6010	1.

6010 Injection Log

Directory: K:\ICAP JULES\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	15 Jun 2015	16:43	CalBlk 150615RJS I:JL O:R		150615A6010	1.
2	15 Jun 2015	16:50	STD 1 150615RJS I:JL O:RJ		150615A6010	1.
3	15 Jun 2015	16:56	STD 2 150615RJS I:JL O:RJ		150615A6010	1.
4	15 Jun 2015	17:02	STD 3 150615RJS I:JL O:RJ		150615A6010	1.
5	15 Jun 2015	17:07	ICV 150615RJS I:JL O:RJS		150615A6010	1.
6	15 Jun 2015	17:17	ICB 150615RJS I:JL O:RJS		150615A6010	1.
7	15 Jun 2015	17:23	ICSA 150615RJS I:JL O:RJS		150615A6010	1.
8	15 Jun 2015	17:30	ICSAB 150615RJS I:JL O:RJ		150615A6010	1.
9	15 Jun 2015	17:37	CCV1 150615RJS I:JL O:RJS		150615A6010	1.
10	15 Jun 2015	17:43	CCB 150615RJS I:JL O:RJS		150615A6010	1.
51	15 Jun 2015	23:02	CCV2 150615RJS I:JL O:RJS		150615A6010	1.
52	15 Jun 2015	23:14	CCB 150615RJS I:JL O:RJS		150615A6010	1.
53	15 Jun 2015	23:20	AZ16402S02-1/200		150615A6010	200.
55	15 Jun 2015	23:38	CCV1 150615RJS I:JL O:RJS		150615A6010	1.
56	15 Jun 2015	23:50	CCB 150615RJS I:JL O:RJS		150615A6010	1.

various Injection Log

Directory: K:\FIMS Freddie\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	03 Jun 2015	14:30	Calib. Blank		150603S	1.
2	03 Jun 2015	14:32	0.2083333		150603S	1.
3	03 Jun 2015	14:34	0.520833		150603S	1.
4	03 Jun 2015	14:36	1.041667		150603S	1.
5	03 Jun 2015	14:38	2.083333		150603S	1.
6	03 Jun 2015	14:41	5.208		150603S	1.
7	03 Jun 2015	14:43	10.417		150603S	1.
8	03 Jun 2015	14:45	ICV 06/03/15 RE		150603S	1.
9	03 Jun 2015	14:47	ICB 06/03/15 RE		150603S	1.
10	03 Jun 2015	14:49	CCV 06/03/15 RE		150603S	1.
11	03 Jun 2015	14:51	CCB 06/03/15 RE		150603S	1.
14	03 Jun 2015	14:57	150603B BLK		150603S	1.
15	03 Jun 2015	15:00	150603B LCS		150603S	1.
23	03 Jun 2015	15:17	AZ16400S01		150603S	1.
24	03 Jun 2015	15:19	AZ16401S02		150603S	1.
25	03 Jun 2015	15:21	AZ16402S02		150603S	1.
26	03 Jun 2015	15:23	AZ16402S02 MS		150603S	1.
27	03 Jun 2015	15:25	AZ16402S02 MSD		150603S	1.
28	03 Jun 2015	15:27	CCV 06/03/15 RE		150603S	1.
29	03 Jun 2015	15:29	CCB 06/03/15 RE		150603S	1.

various Injection Log

Directory: K:\FIMS Freddie\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	04 Jun 2015	10:46	Calib. Blank		150604W	1.
2	04 Jun 2015	10:48	0.2		150604W	1.
3	04 Jun 2015	10:51	0.5		150604W	1.
4	04 Jun 2015	10:53	1		150604W	1.
5	04 Jun 2015	10:55	2		150604W	1.
6	04 Jun 2015	10:57	5		150604W	1.
7	04 Jun 2015	10:59	10		150604W	1.
8	04 Jun 2015	11:01	ICV 06/04/15 RE		150604W	1.
9	04 Jun 2015	11:03	ICB 06/04/15 RE		150604W	1.
10	04 Jun 2015	11:05	CCV 06/04/15 RE		150604W	1.
11	04 Jun 2015	11:08	CCB 06/04/15 RE		150604W	1.
12	04 Jun 2015	11:10	150603A BLK		150604W	1.
13	04 Jun 2015	11:12	150603A LCS		150604W	1.
14	04 Jun 2015	11:14	AZ16403W11		150604W	1.
15	04 Jun 2015	11:16	AZ16403W11 MS		150604W	1.
16	04 Jun 2015	11:18	AZ16403W11 MSD		150604W	1.
21	04 Jun 2015	11:29	CCV 06/04/15 RE		150604W	1.
22	04 Jun 2015	11:31	CCB 06/04/15 RE		150604W	1.

various Injection Log

Directory: K:\FIMS Freddie\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	09 Jun 2015	09:15	Calib. Blank		150609W	1.
2	09 Jun 2015	09:17	0.2		150609W	1.
3	09 Jun 2015	09:20	0.5		150609W	1.
4	09 Jun 2015	09:22	1		150609W	1.
5	09 Jun 2015	09:24	2		150609W	1.
6	09 Jun 2015	09:26	5		150609W	1.
7	09 Jun 2015	09:28	10		150609W	1.
8	09 Jun 2015	09:42	ICV 06/09/15 RE		150609W	1.
9	09 Jun 2015	09:44	ICB 06/09/15 RE		150609W	1.
10	09 Jun 2015	09:46	CCV 06/09/15 RE		150609W	1.
11	09 Jun 2015	09:49	CCB 06/09/15 RE		150609W	1.
12	09 Jun 2015	09:51	150608A BLK 7470		150609W	1.
13	09 Jun 2015	09:53	150608A LCS 7470		150609W	1.
17	09 Jun 2015	10:01	AZ16403W12 FF		150609W	1.
18	09 Jun 2015	10:03	AZ16403W12 FF MS		150609W	1.
19	09 Jun 2015	10:05	AZ16403W12 FF MSD		150609W	1.
22	09 Jun 2015	10:12	CCV 06/09/15 RE		150609W	1.
23	09 Jun 2015	10:14	CCB 06/09/15 RE		150609W	1.

INORGANIC ANALYSIS

APPL, INC.

INORGANIC ANALYSIS
QC Summary

APPL, INC.

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.20 U	1.0	0.20	0.08	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	05/19/15	05/19/15	#906-150519A-AZ16287

Wetlab SC-Blank-REG MDLs
Printed: 06/10/15 3:38:27 PM

Laboratory Control Spike Recovery

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	20.0	18.6	93.0	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	22.1	21.6	97.7	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	9.98	9.22	92.4	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	20.0	20.0	100	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 906	TOTAL ORGANIC CARBON	10.00	10.8	108	90-110	05/19/15	05/19/15	#906-150519A-AZ16287

Comments: _____

EPA 300.0

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/15/15

Matrix: WATER Instrument: Dionex

Blank ID: 150515A3-BLK Time Analyzed: 0940

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150515A3-LCS	Lab Control Spike	10	05/15/15 0950
AZ16403	S67-MW015-051415	18	05/15/15 1155
150515A3-BLK	Blank	9	05/15/15 0940

Comments: Batch: #300W-150515A3

SW846 9060

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76447

Case No: 76447 Date Analyzed: 05/19/15

Matrix: WATER Instrument: Tekmar

Blank ID: 150519A-BLK Time Analyzed: 1212

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150519A-BLK	Blank	2	05/19/15 1212
AZ16403	S67-MW015-051415	26	05/19/15 2357
150519A-LCS	Lab Control Spike	3	05/19/15 1244

Comments: Batch: #906-150519A

INORGANIC ANALYSIS
Sample Data

APPL, INC.

Wet Lab Analysis

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

Sample ID: S67-MW015-051415

Sample Collection Date: 05/14/15

APPL ID: AZ16403

ARF: 76447

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	12.3	1.0	0.20	0.08	mg/L	1	05/15/15	05/15/15
EPA 300.0	NITRATE	1.3	0.5	0.18	0.04	mg/L	1	05/15/15	05/15/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	05/15/15	05/15/15
EPA 300.0	SULFATE	32.8	1.0	0.20	0.09	mg/L	1	05/15/15	05/15/15
SW846 9060	TOTAL ORGANIC CARBON	3.2	0.5	0.35	0.13	mg/L	1	05/19/15	05/19/15

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APPL-F1-SC-NoMC-REG MDLs

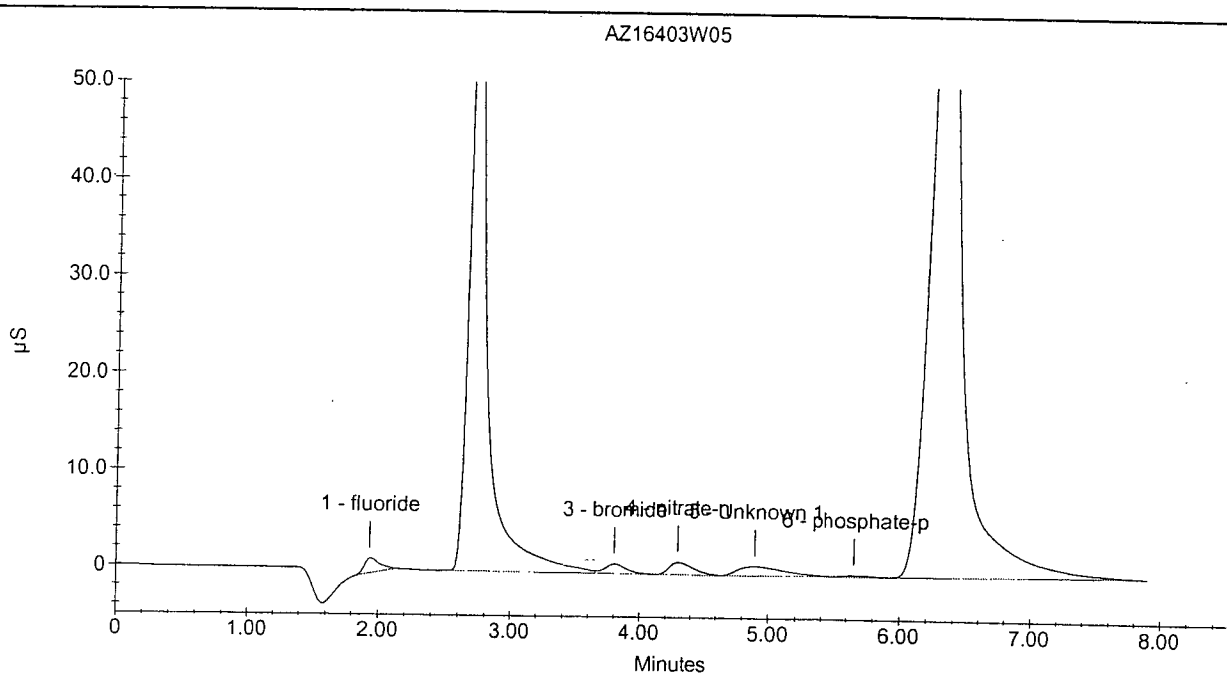
Sample Analysis Report

Sample Name : AZ16403W05
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_018.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150505A.met
Date Time Collected : 5/15/15 11:55:21
System Operator : mm
Injection Number : 18
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.93	fluoride	0.2082	119411	15155
2	2.69	chloride	12.2971	6316681	686197
3	3.80	bromide	0.7338	111755	9978
4	4.29	nitrate-n	0.2973	167925	12604
5	4.89	Unknown 1	0.0000	233006	9725
6	5.65	phosphate-p	-0.1495	22103	1569
7	6.28	sulfate	32.7522	12233656	780233



Wetlab Results

ARF: 76447

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Tetra Tech
5700 Lake Wright Dr, Ste 309
Norfolk, VA 23502

Attn: Ed Corack

Method	Analyte	Result	RL	MDL	Units	Prep Date	Analysis Date
APPL ID: AZ16400	-Client Sample ID: S67-TP001-0203		-Sample Collection Date: 05/14/15			Project: CTO JU11 112G02622 N	
CLP MOIST	MOISTURE	33.0	2.0		%	05/21/15	05/22/15
APPL ID: AZ16401	-Client Sample ID: S67-TP002-0001		-Sample Collection Date: 05/14/15			Project: CTO JU11 112G02622 N	
CLP MOIST	MOISTURE	7.8	2.0		%	05/21/15	05/22/15
APPL ID: AZ16402	-Client Sample ID: S67-TP002-0203		-Sample Collection Date: 05/14/15			Project: CTO JU11 112G02622 N	
CLP MOIST	MOISTURE	26.2	2.0		%	05/21/15	05/22/15

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INORGANIC ANALYSIS
Calibration Data

APPL, INC.

INORGANIC ANALYSES
AUTO CALIBRATION

Analytical Method: 300/9056

Lab Name: APPL, Inc.

Instrument ID: Dionex

Autocal ID: 150505a

Concentration Units (mg/L or mg/kg): mg/L

Analyte	1	2	3	4	5	6	7
	Autocal 11:21	Autocal 11:32	Autocal 11:43	Autocal 11:53	Autocal 12:04	Autocal 12:15	Autocal 12:26
Bromide	13289	120492	484620	1009394	2485414	3656063	5312484
Chloride	93020	430478	2136859	4658363	12647726	18712590	28275015
Fluoride	ND	57622	321944	747949	1627638	2536232	3565505
Nitrate-N	40653	254027	1101996	2269536	6110953	9060782	13407821
Nitrite-N	12996	133908	545677	1140945	2651301	3843357	5501151
Phosphate-P	90339	171940	572832	1002780	2255377	3183589	4524113
Sulfate	67956	291320	1510375	3203589	8790092	12873665	19278033

Comments:

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract:

ARF No: SDG:

Initial Calibration Source: o2si, ULTRA

Continuing Calibration Source: CPI

Analysis Date: 05/05/15

Analyte	Calibration Verification									M
	True ICV	Found 12:47	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
bromide	12.5	12.3745	99.0							
chloride	20	18.7460	93.7							
fluoride	2.5	2.61193	104							
Nitrate(NO3)-N	5	4.90230	98.0							
Nitrite(NO2)-N	3.04	2.93829	96.7							
phosphate-p	5	5.03432	101							
sulfate	20	19.1007	95.5							

(1) Control Limits: 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

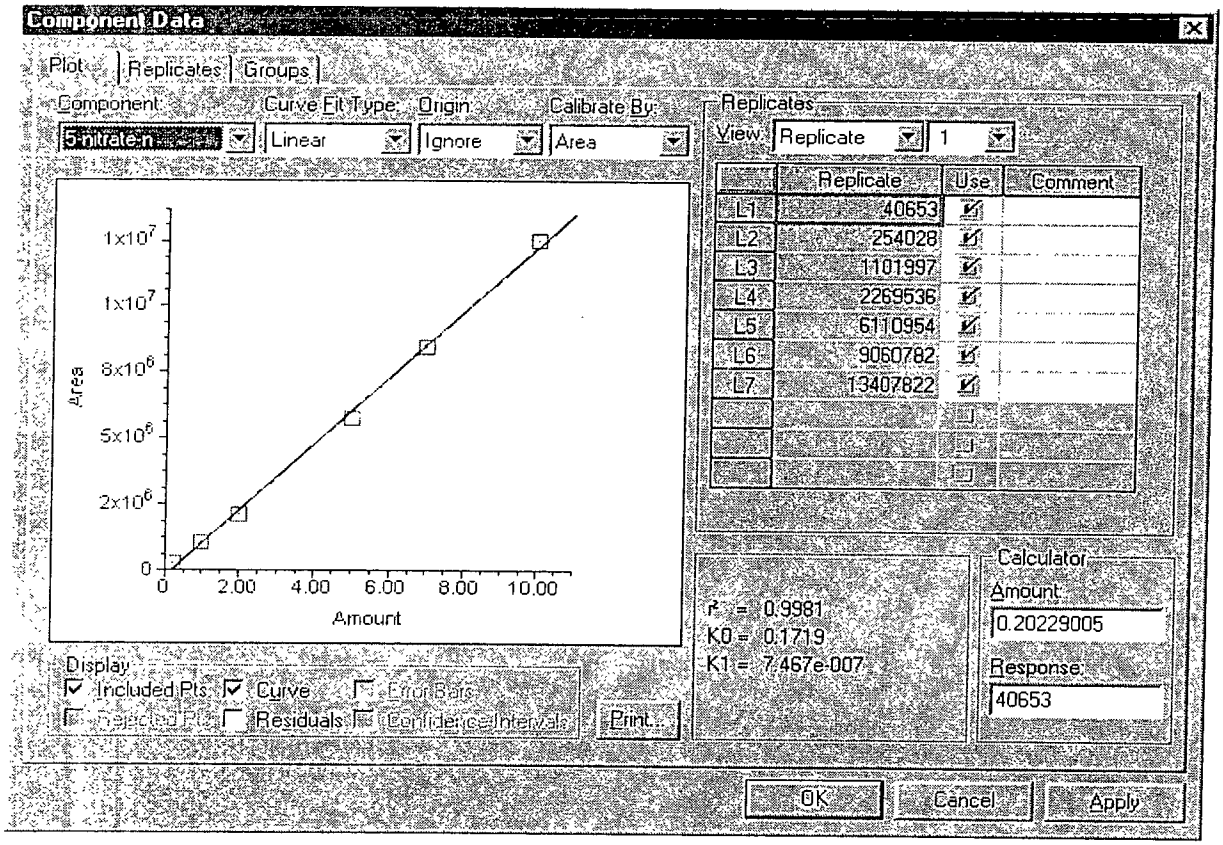
Lab Name: A.P.P.L. INC. Contract:

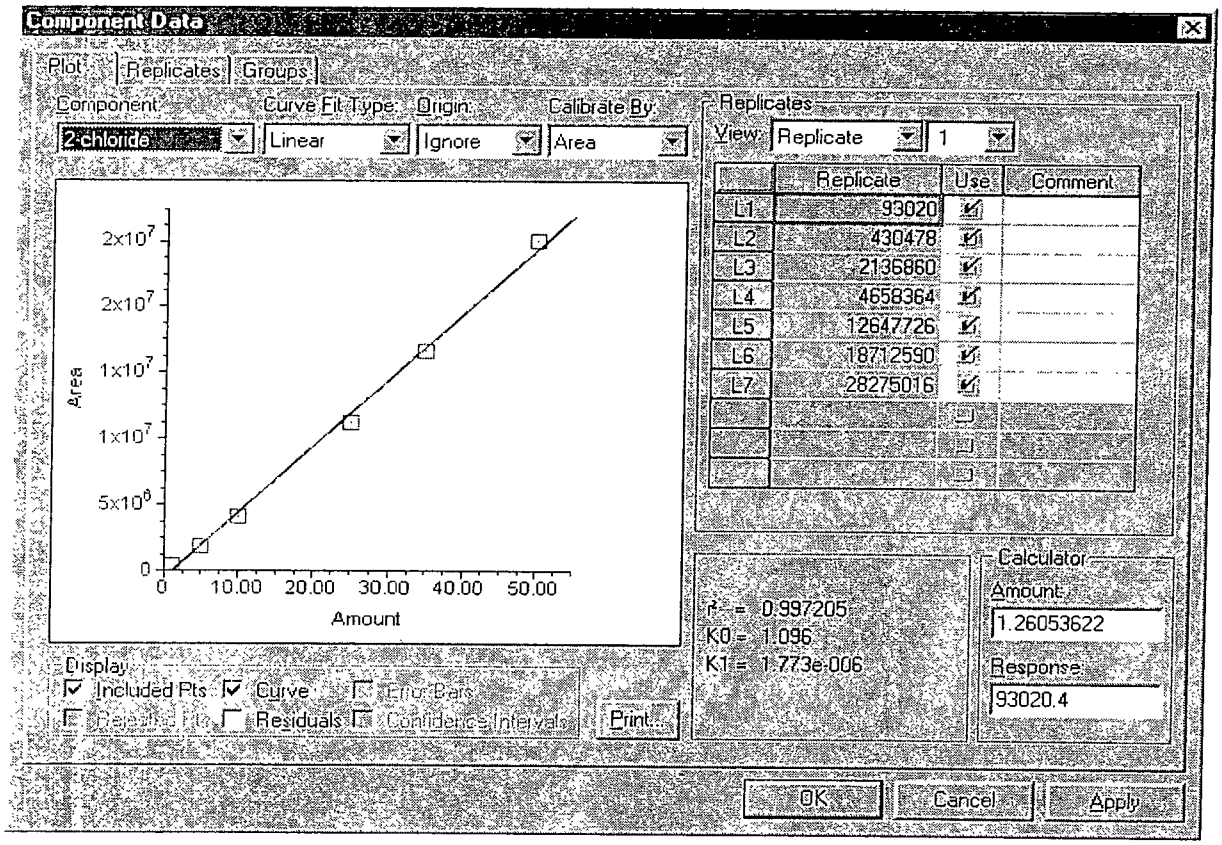
ARF No.: SDG:

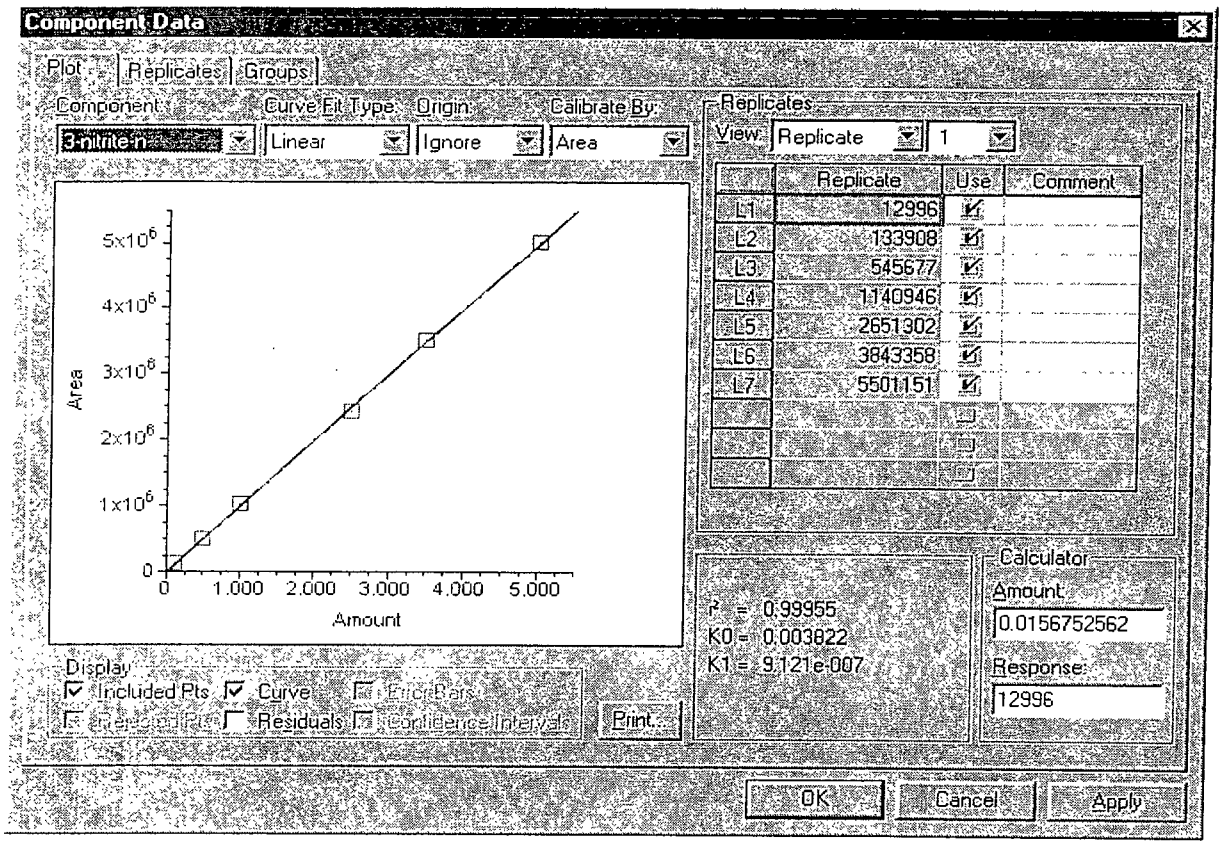
Preparation Blank Matrix (soil/water): water

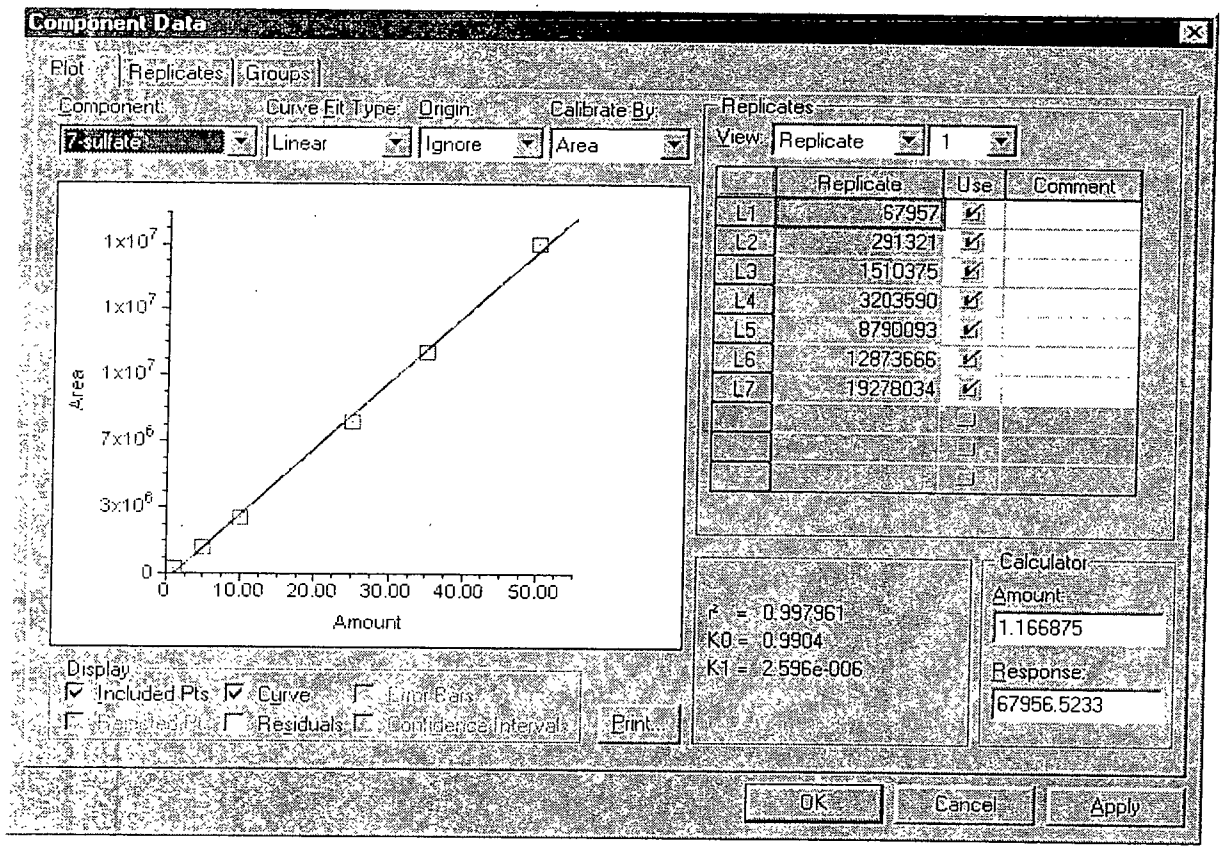
Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB 05/05/15 13:08	C		C		C		C		C	
bromide	.500	U									
chloride	1.000	U									
fluoride	1.000	U									
Nitrate(NO3)-N	.200	U									
Nitrite(NO2)-N	.200	U									
phosphate-p	1.000	U									
sulfate	1.000	U									


Component Data
Plot
Replicates
Groups
Component:
5-nitrate-n
Curve Fit Type:
Linear
Origin:
Ignore
Calibrate By:
Area
1x10^7
1x10^7
8x10^6
5x10^6
2x10^6
0
Area
0
2.00
4.00
6.00
8.00
10.00
Amount
Display
Included Pts
Curve
Error Bars
Rejected Pts
Residuals
Confidence Intervals
Print...
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1 40653
L2 254028
L3 1101997
L4 2269536
L5 6110954
L6 9060782
L7 13407822
r² = 0.9981
K0 = 0.1719
K1 = 7.467e-007
Calculator
Amount:
0.20229005
Response:
40653
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component:
2-chloride
Curve Fit Type:
Linear
Origin:
Ignore
Calibrate By:
Area
Area
Amount
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1 93020
L2 430478
L3 2136860
L4 4658364
L5 12647726
L6 18712590
L7 28275016
r² = 0.997205
K0 = 1.096
K1 = 1.773e-006
Calculator
Amount:
1.26053622
Response:
93020.4
Display
Included Pts
Curve
Error Bars
Residuals
Confidence Intervals
Print...
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component:
3-nitrite-n
Curve Fit Type:
Linear
Origin:
Ignore
Calibrate By:
Area
5x10^6
4x10^6
3x10^6
2x10^6
1x10^6
0
Area
0
1.000
2.000
3.000
4.000
5.000
Amount
Display
Included Pts
Curve
Error Bars
Residuals
Confidence Intervals
Print...
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1 12996
L2 133908
L3 545677
L4 1140946
L5 2651302
L6 3843358
L7 5501151
r² = 0.99955
K0 = 0.003822
K1 = 9.121e-007
Calculator
Amount:
0.0156752562
Response:
12996
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component:
7-sulfate
Curve Fit Type:
Linear
Origin:
Ignore
Calibrate By:
Area
Area
Amount
1x10^7
1x10^7
1x10^7
7x10^6
3x10^6
0
0
10.00
20.00
30.00
40.00
50.00
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1 67957
L2 291321
L3 1510375
L4 3203590
L5 8790093
L6 12873666
L7 19278034
r² = 0.997961
K0 = 0.9904
K1 = 2.596e-006
Calculator
Amount:
1.166875
Response:
67956.5233
Display
Included Pts
Curve
Error Bars
Residuals
Confidence Intervals
Print...
OK
Cancel
Apply

Calibration Update Report

Sample Name : CAL STD #1 05/05/15
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_018.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 11:21:45

Calibration Date : 5/5/15 11:32:07
System Operator : jm
Injection Number : 18

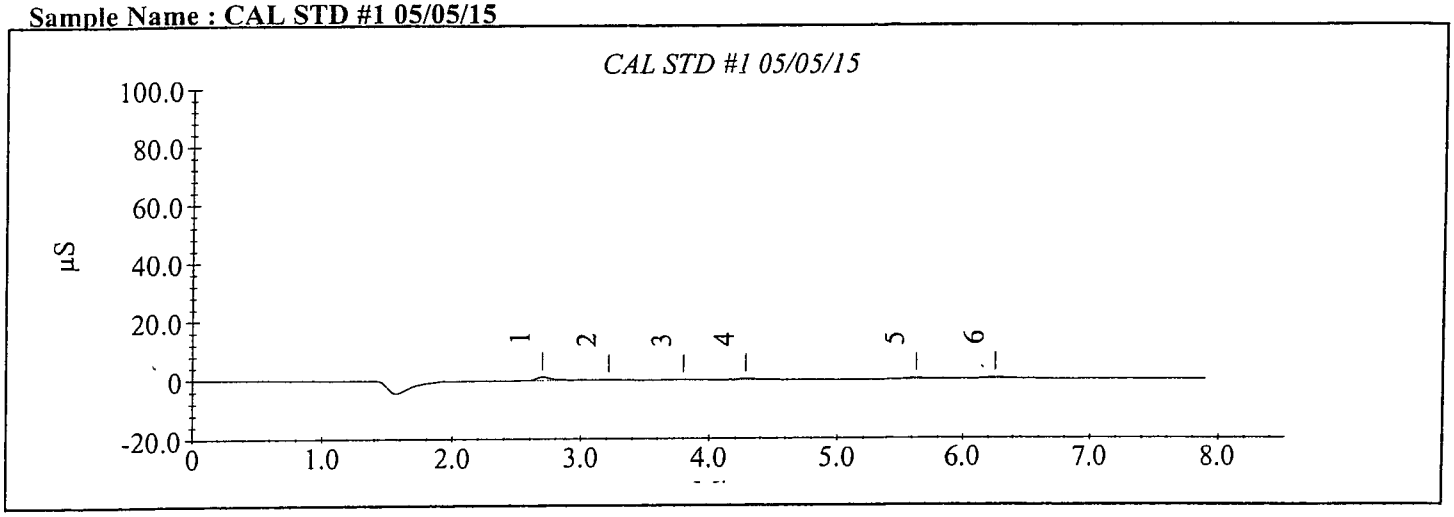
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	2.69	chloride	91791	93020	93020
2	3.21	nitrite-n	11886	12996	12996
3	3.80	bromide	19693	13290	13290
4	4.28	nitrate-n	35537	40653	40653
5	5.63	phosphate-p	105069	90339	90339
6	6.25	sulfate	93864	67957	67957

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	2.69	chloride	0.40	93020	11921	-
2	3.21	nitrite-n	0.04	12996	1617	-
3	3.80	bromide	0.20	13290	1597	-
4	4.28	nitrate-n	0.08	40653	3723	-
5	5.63	phosphate-p	0.08	90339	3739	-
6	6.25	sulfate	0.40	67957	4462	-

Sample Name : CAL STD #1 05/05/15



Calibration Update Report

Sample Name : CAL STD #2
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_019.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 11:32:26

Calibration Date : 5/5/15 11:42:45
System Operator : jm
Injection Number : 19

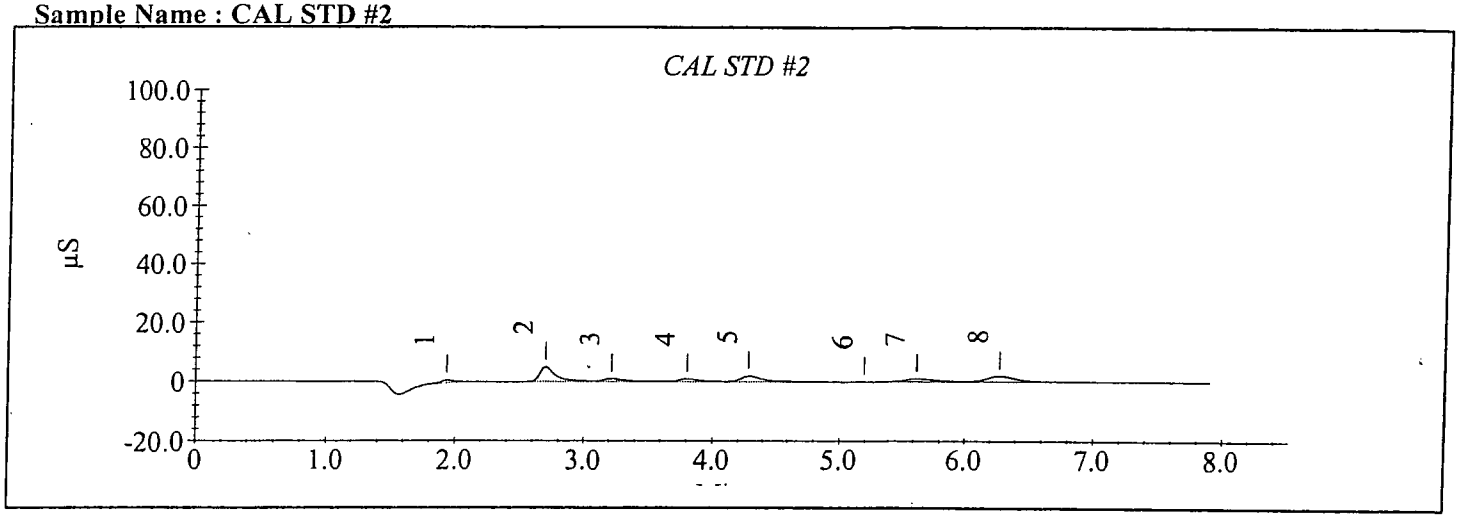
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.93	fluoride	73173	57622	57622
2	2.69	chloride	452132	430478	430478
3	3.21	nitrite-n	78566	133908	133908
4	3.80	bromide	72889	120492	120492
5	4.28	nitrate-n	238307	254028	254028
7	5.61	phosphate-p	194282	171940	171940
8	6.27	sulfate	274204	291321	291321

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.93	fluoride	0.10	57622	8707	
2	2.69	chloride	1.00	430478	49268	
3	3.21	nitrite-n	0.10	133908	10330	
4	3.80	bromide	0.50	120492	9858	
5	4.28	nitrate-n	0.20	254028	18634	
7	5.61	phosphate-p	0.20	171940	9501	
8	6.27	sulfate	1.00	291321	18754	

Sample Name : CAL STD #2



Calibration Update Report

Sample Name : CAL STD #3
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_020.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 11:43:12

Calibration Date : 5/5/15 11:53:31
System Operator : jm
Injection Number : 20

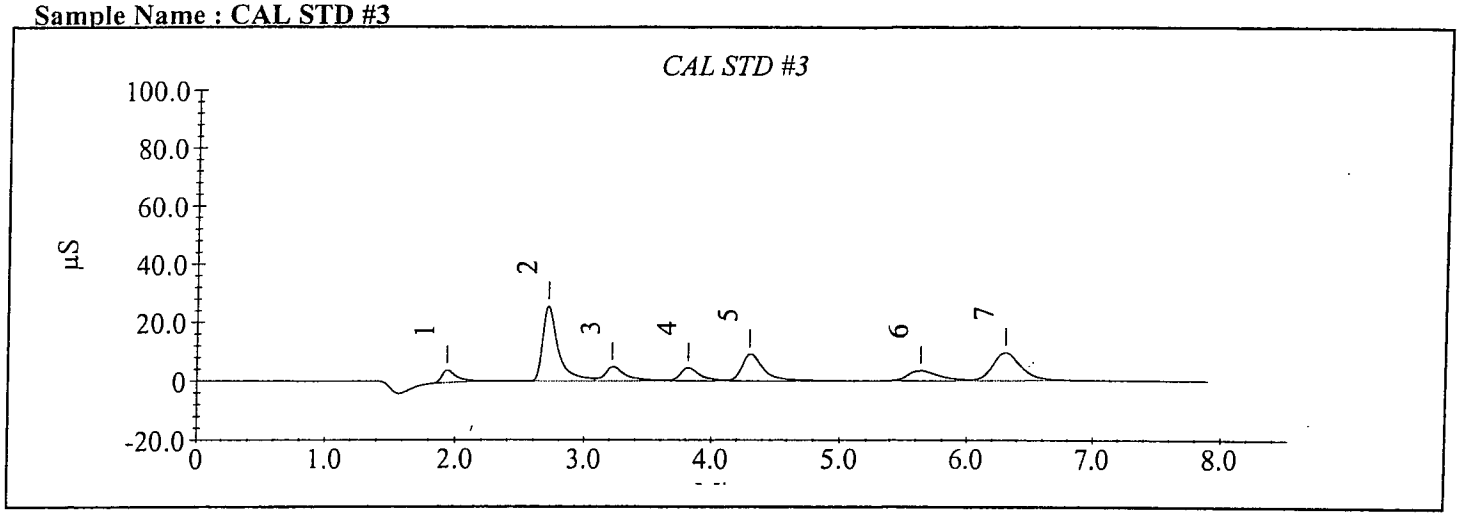
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.93	fluoride	280660	321944	321944
2	2.71	chloride	2198943	2136860	2136860
3	3.21	nitrite-n	453819	545677	545677
4	3.81	bromide	464626	484621	484621
5	4.29	nitrate-n	1088526	1101997	1101997
6	5.63	phosphate-p	528123	572833	572833
7	6.29	sulfate	1271544	1510375	1510375

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.93	fluoride	0.50	321944	42053	
2	2.71	chloride	5.00	2136860	254839	
3	3.21	nitrite-n	0.50	545677	47664	
4	3.81	bromide	2.50	484621	45227	
5	4.29	nitrate-n	1.00	1101997	90440	
6	5.63	phosphate-p	1.00	572833	34464	
7	6.29	sulfate	5.00	1510375	95140	

Sample Name : CAL STD #3



Calibration Update Report

Sample Name : CAL STD #4
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_021.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 11:53:55

Calibration Date : 5/5/15 12:04:13
System Operator : jm
Injection Number : 21

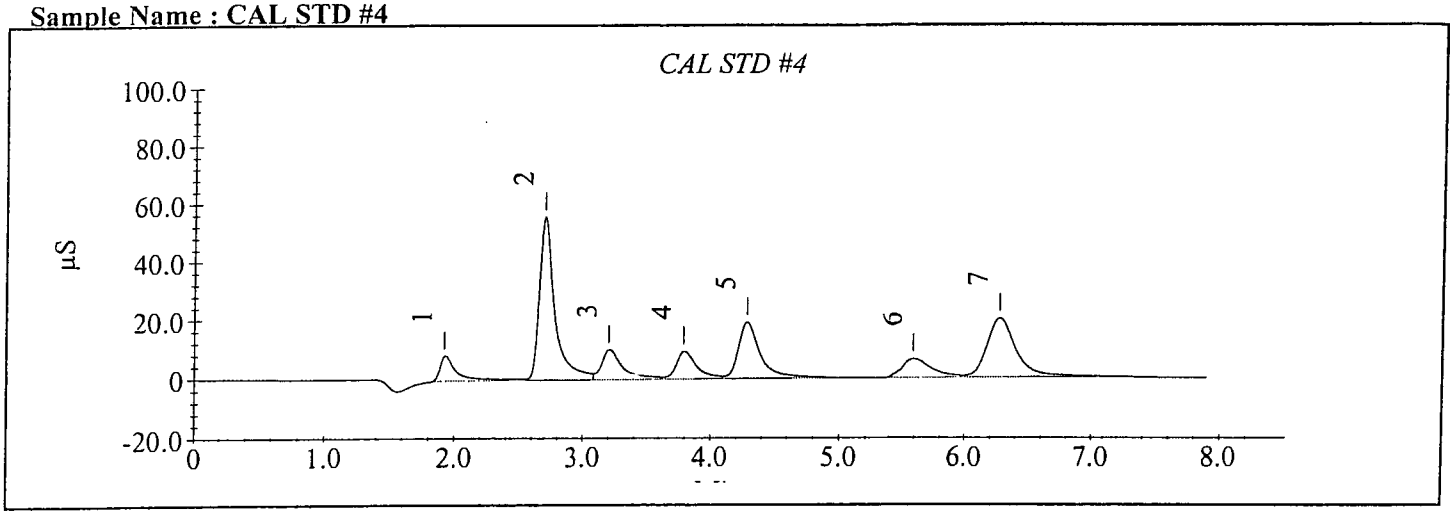
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	593192	747950	747950
2	2.69	chloride	4796237	4658364	4658364
3	3.20	nitrite-n	940138	1140946	1140946
4	3.79	bromide	958653	1009395	1009395
5	4.28	nitrate-n	2225829	2269536	2269536
6	5.59	phosphate-p	1031523	1002780	1002780
7	6.27	sulfate	3354593	3203590	3203590

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	1.00	747950	82586	
2	2.69	chloride	10.00	4658364	557102	
3	3.20	nitrite-n	1.00	1140946	99888	
4	3.79	bromide	5.00	1009395	92600	
5	4.28	nitrate-n	2.00	2269536	190548	
6	5.59	phosphate-p	2.00	1002780	62562	
7	6.27	sulfate	10.00	3203590	199608	

Sample Name : CAL STD #4



Calibration Update Report

Sample Name : CAL STD #5
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_022.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 12:04:36

Calibration Date : 5/5/15 12:14:59
System Operator : jm
Injection Number : 22

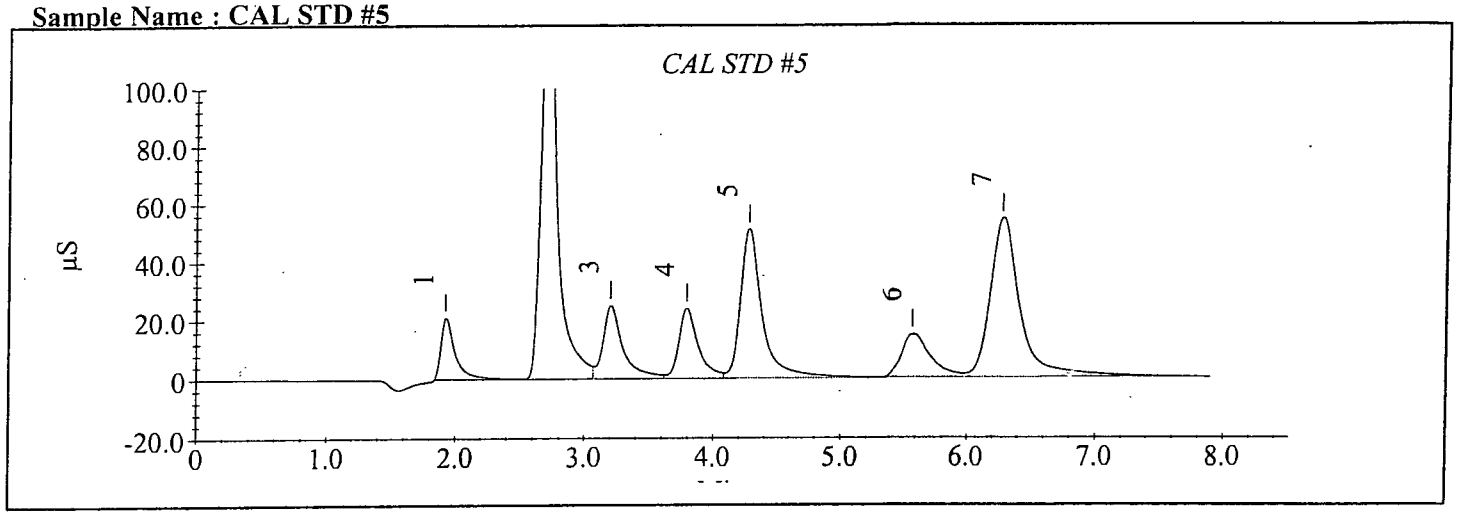
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	1904787	1627638	1627638
2	2.69	chloride	13522747	12647726	12647726
3	3.20	nitrite-n	2509115	2651302	2651302
4	3.79	bromide	2764123	2485415	2485415
5	4.27	nitrate-n	5991999	6110954	6110954
6	5.57	phosphate-p	2372157	2255377	2255377
7	6.27	sulfate	8813646	8790093	8790093

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	2.50	1627638	207780	
2	2.69	chloride	25.00	12647726	1600646	
3	3.20	nitrite-n	2.50	2651302	248604	
4	3.79	bromide	12.50	2485415	238146	
5	4.27	nitrate-n	5.00	6110954	509702	
6	5.57	phosphate-p	5.00	2255377	145786	
7	6.27	sulfate	25.00	8790093	542447	

Sample Name : CAL STD #5



Calibration Update Report

Sample Name : CAL STD #6
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_023.DXD

Method File Name : ...\anions 150505a.met
Schedule File Name : ...\150505a.sch
Date Time Collected : 5/5/15 12:15:21

Calibration Date : 5/5/15 12:25:43
System Operator : jm
Injection Number : 23

Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.93	fluoride	2431852	2536233	2536233
2	2.71	chloride	19578080	18712590	18712590
3	3.21	nitrite-n	3488117	3843358	3843358
4	3.80	bromide	3664999	3656064	3656064
5	4.28	nitrate-n	8937590	9060782	9060782
6	5.60	phosphate-p	3304927	3183590	3183590
7	6.31	sulfate	12960247	12873666	12873666

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.93	fluoride	3.50	2536233	297967	
2	2.71	chloride	35.00	18712590	2307087	
3	3.21	nitrite-n	3.50	3843358	353005	
4	3.80	bromide	17.50	3656064	344145	
5	4.28	nitrate-n	7.00	9060782	743793	
6	5.60	phosphate-p	7.00	3183590	206418	
7	6.31	sulfate	35.00	12873666	804060	

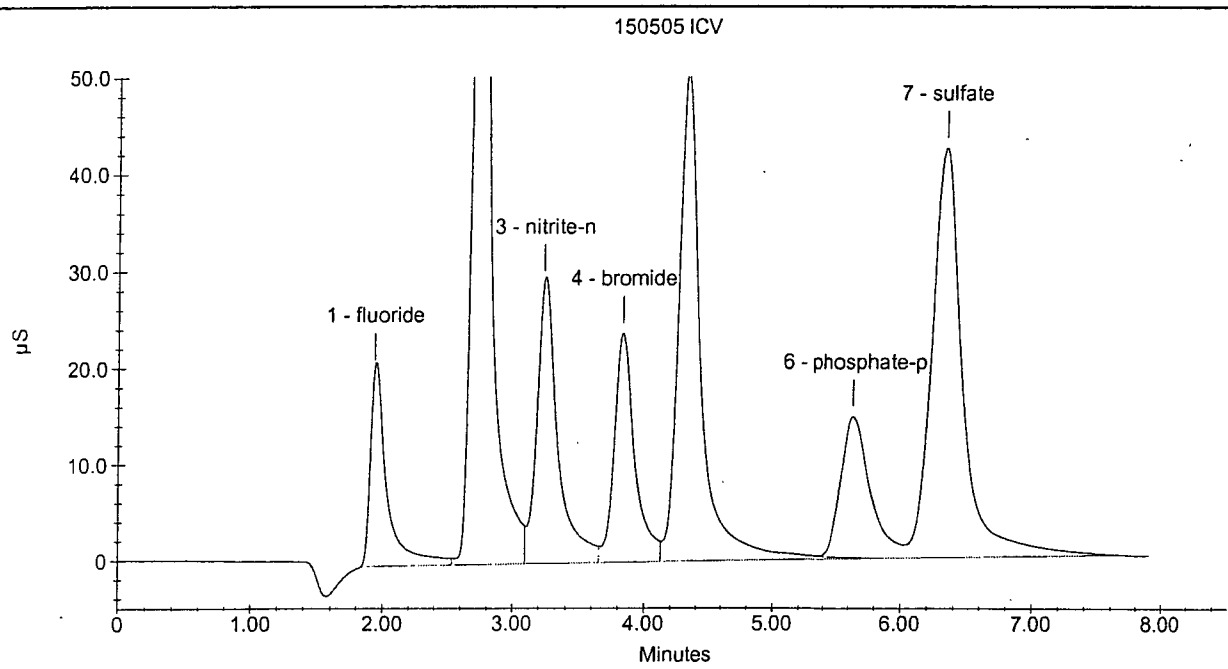
Sample Analysis Report

Sample Name : 150505 ICV
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_026.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150505A.met
Date Time Collected : 5/5/15 12:47:20
System Operator : jm
Injection Number : 26
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.93	fluoride	2.6119	1843295	203891
2	2.72	chloride	18.7460	9953323	1223515
3	3.23	nitrite-n	2.9383	3217392	291923
4	3.83	bromide	12.3745	2577592	237752
5	4.31	nitrate-n	4.9023	6335418	504691
6	5.63	phosphate-p	5.0343	2315308	146529
7	6.32	sulfate	19.1007	6975524	422940



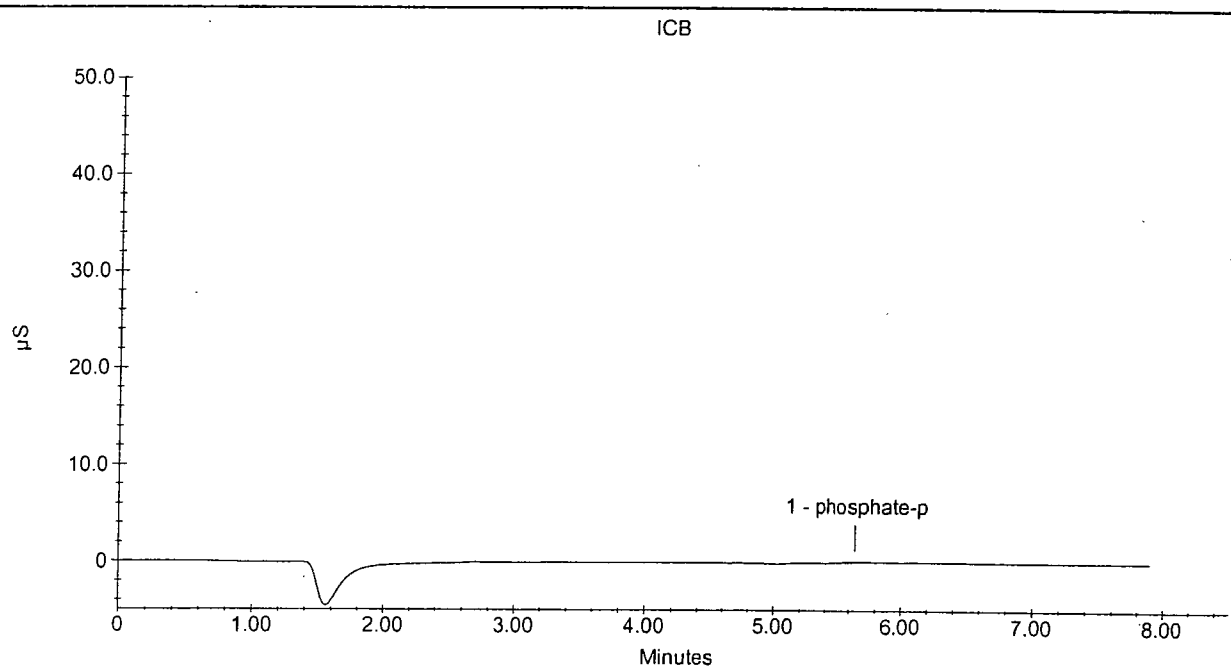
Sample Analysis Report

Sample Name : ICB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150505A\150505a_028.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150505A.met
Date Time Collected : 5/5/15 13:08:38
System Operator : jm
Injection Number : 28
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	5.64	phosphate-p	-0.1252	32840	1298



A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 05/15/15

Analyte	Calibration Verification									M
	True CCV1	Found 9:29	%R(1)	True CCV1	Found 12:16	%R(1)	True	Found	%R(1)	
chloride	25	23.1976	92.8	25	23.3390	93.4				
Nitrate(NO3)	22.1	21.3720	96.7	22.1	21.4266	97.0				
Nitrite(NO2)	8.211	7.89214	96.1	8.211	8.48873	103				
sulfate	25	24.2655	97.1	25	24.0716	96.3				

(1) Control Limits: 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 05/15/15 09:40	C	CCB 05/15/15 12:27	C		C		C		C	
chloride	1.000	U	1.000	U							
Nitrate(NO3)	.500	U	.500	U							
Nitrite(NO2)	.300	U	.300	U							
sulfate	1.000	U	1.000	U							

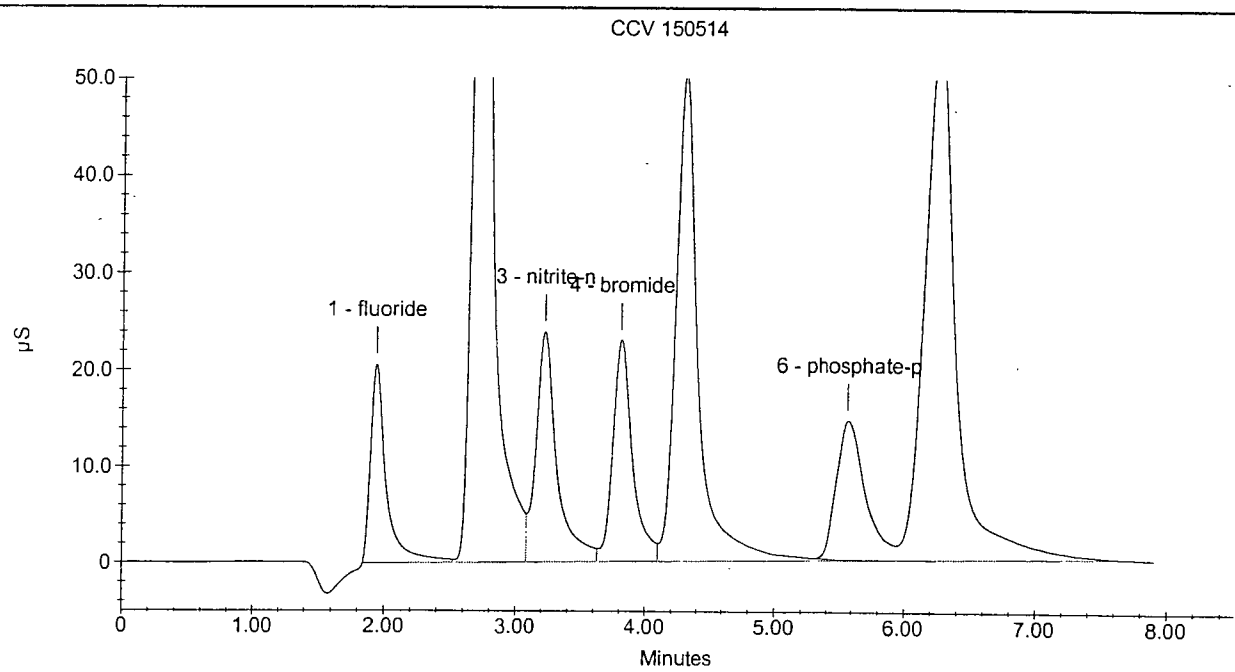
Sample Analysis Report

Sample Name : CCV 150514
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_008.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150505a.met
Date Time Collected : 5/15/15 09:29:41
System Operator : mm
Injection Number : 8
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.93	fluoride	2.3993	1690814	205627
2	2.71	chloride	23.1977	12463679	1537045
3	3.21	nitrite-n	2.4028	2630242	237960
4	3.80	bromide	11.6699	2428322	228686
5	4.28	nitrate-n	4.8259	6233099	501559
6	5.56	phosphate-p	4.8910	2251890	144191
7	6.23	sulfate	24.2656	8964876	544124



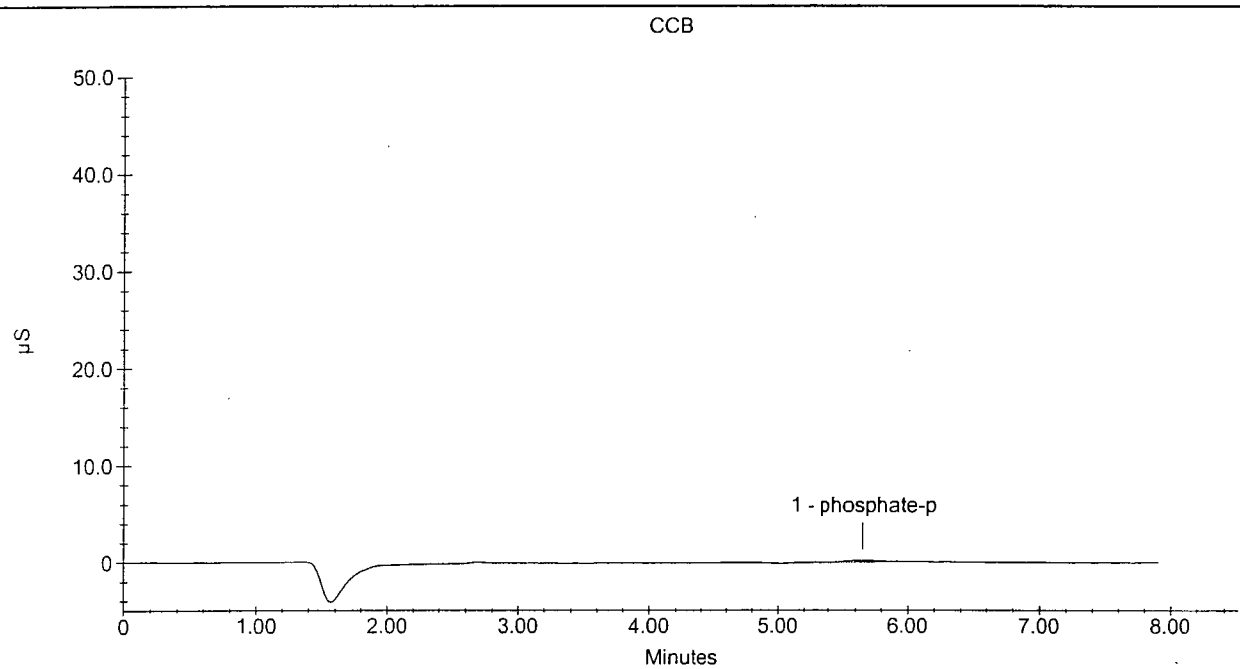
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_009.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150505a.met
Date Time Collected : 5/15/15 09:40:27
System Operator : mm
Injection Number : 9
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	5.65	phosphate-p	-0.0878	49412	1853



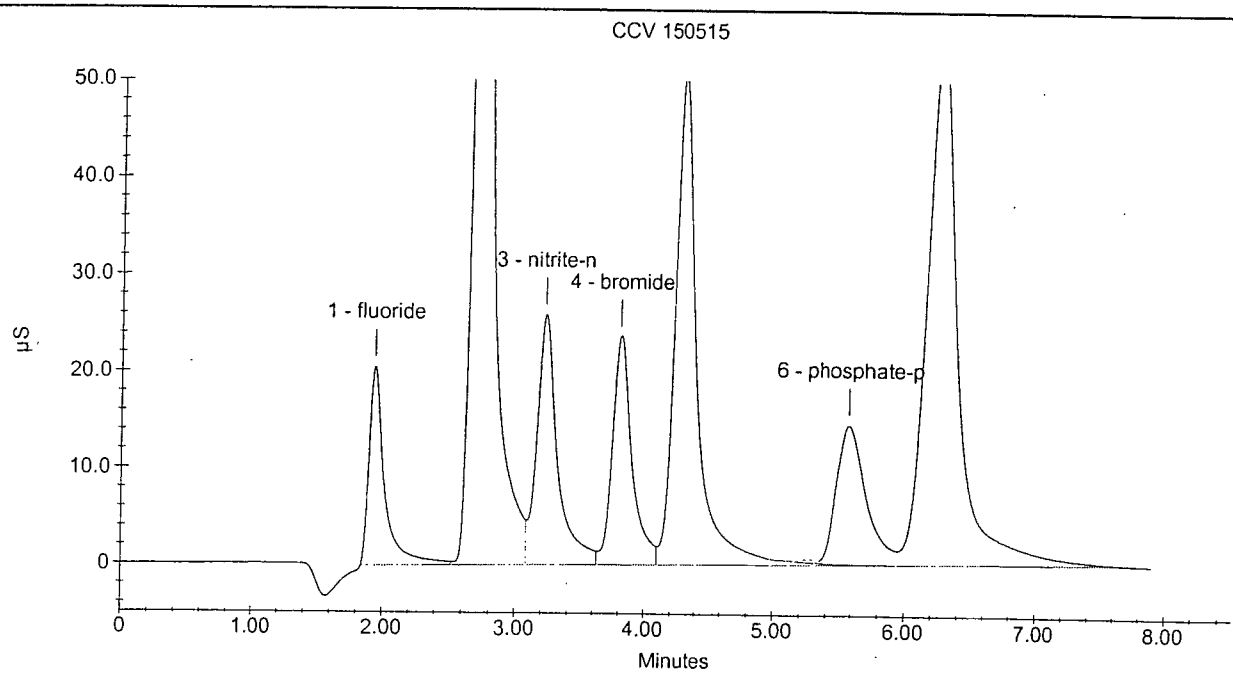
Sample Analysis Report

Sample Name : CCV 150515
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_020.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150505a.met
Date Time Collected : 5/15/15 12:16:48
System Operator : mm
Injection Number : 20
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.93	fluoride	2.4114	1699480	205799
2	2.71	chloride	23.3390	12543395	1543399
3	3.21	nitrite-n	2.5844	2829386	258346
4	3.80	bromide	12.1516	2530360	235809
5	4.28	nitrate-n	4.8382	6249627	504219
6	5.57	phosphate-p	4.8823	2248034	144072
7	6.24	sulfate	24.0716	8890175	541618



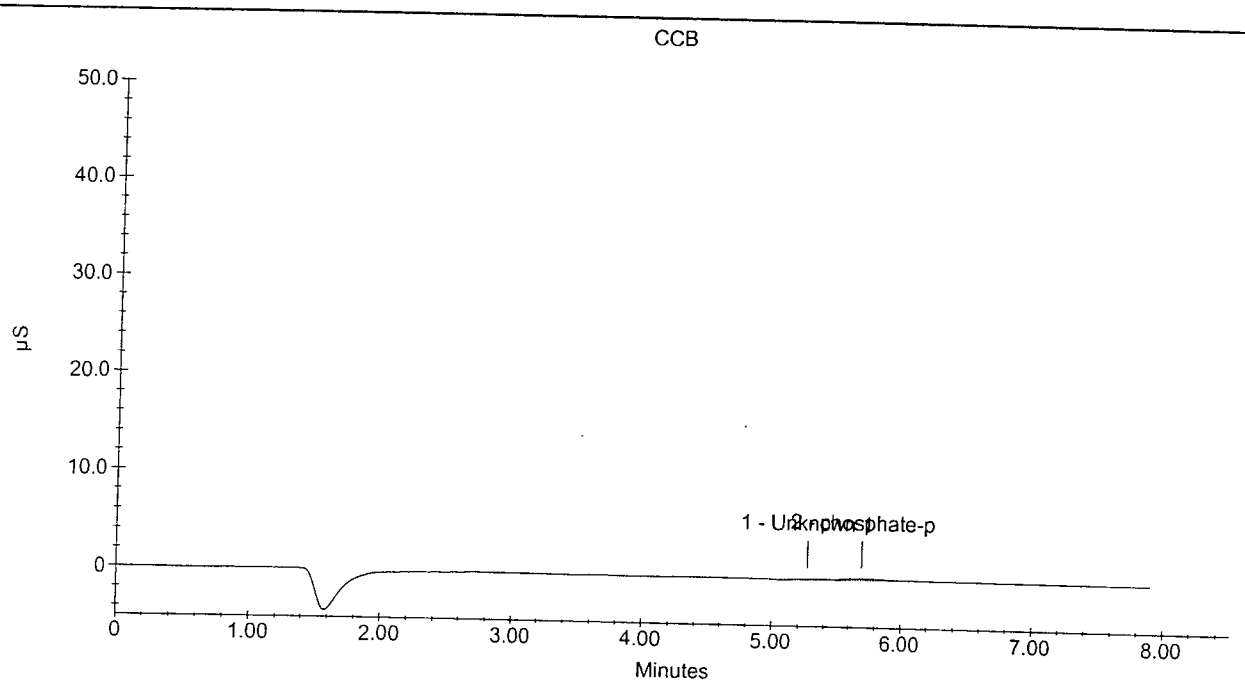
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_021.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150505a.met
Date Time Collected : 5/15/15 12:27:29
System Operator : mm
Injection Number : 21
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	5.27	Unknown 1	0.0000	14684	936
2	5.69	phosphate-p	-0.1367	27763	1543



Calibration Report Print Date/Time: 2015/04/27 12:34:17

Cal. Curve ID: 150416I9
Created: 2015/04/16 12:27
Calibration Factor (m): 1.188e+05
Y Intercept (b): 25904
r-squared: 0.99942

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
DI WATER	8722	0.000	-0.145	Low Sample De	2015/04/16 09:39
autocal1	40725	0.250	0.125		2015/04/16 10:06
autocal2	66312	0.500	0.340		2015/04/16 10:33
autocal3	335127	2.500	2.603		2015/04/16 11:00
autocal4	641779	5.000	5.184		2015/04/16 11:28
autocal5	1555011	12.500	12.871		2015/04/16 11:57
autocal6	2968854	25.000	24.772		2015/04/16 12:26

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract:

ARF No: SDG:

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 04/16/15

Analyte	Calibration Verification									M
	True ICV	Found 12:55	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Total Organic Carbon	10	10.9049	109							

(1) Control Limits: 80-120

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract:

ARF No.: SDG:

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	ICB 04/16/15 13:20	C		C		C		C		C	
Total Organic Carbon	.500	U									

Detailed Analysis Report Print Date/Time: 2015/04/27 12:35:17

Sample ID: DI WATER
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 09:39
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			9562	50.922	50.984	120
2			8727	50.934	50.971	120
3			9546	50.918	50.969	120
4			7053	50.929	50.933	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 8722 Std Dev: 1179 RSD: 13.52

Sample ID: autocal1
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 10:06
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			34919	50.878	51.076	129
2			39616	50.831	51.030	127
3			45484	50.795	50.995	134
4			42881	50.832	51.031	126

<<<Statistics>>> Mean: 40725 Std Dev: 4555 RSD: 11.18

Sample ID: autocal2
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 10:33
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			61013	50.938	51.133	128
2			67808	50.903	51.103	127
3			65207	50.935	51.133	126
4			71219	50.953	51.152	128

<<<Statistics>>> Mean: 66312 Std Dev: 4306 RSD: 6.49

Sample ID: autocal3
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 11:00
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			334533	51.110	51.309	142
2			332663	51.210	51.408	142
3			333205	51.237	51.434	139
4			340106	51.219	51.419	137

<<<Statistics>>> Mean: 335127 Std Dev: 3411 RSD: 1.02

Sample ID: autocal4
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 11:28
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			651092	51.356	51.555	152
2			639616	51.518	51.717	146
3			633158	51.552	51.750	142

4	643250	51.563	51.761	140

<<<Statistics>>> Mean: 641779 Std Dev: 7481 RSD: 1.17

Sample ID: autocal5
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT

Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 11:57
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1564523	51.767	51.966	166
2			1557570	51.983	52.182	158
3			1556986	52.040	52.239	160
4			1540966	52.159	52.358	153

<<<Statistics>>> Mean: 1555011 Std Dev: 9970 RSD: 0.64

Sample ID: autocal6
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT

Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 12:26
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			3001984	52.260	52.457	187
2			2939496	52.837	53.035	159
3			2931188	52.876	53.070	159
4			3002751	52.894	53.089	174

<<<Statistics>>> Mean: 2968855 Std Dev: 38847 RSD: 1.31

Sample ID: ICV
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT

Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 12:55
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.9311	5.4655	687856	51.466	51.662	161
2	10.6882	5.3441	673429	51.577	51.776	143
3	11.1207	5.5603	699118	51.520	51.718	146
4	10.8796	5.4398	684797	51.451	51.650	158

<<<Statistics>>> Mean: 10.9049 Std Dev: 0.1778 RSD: 1.63

Sample ID: ICB
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT

Mode: TOC
Filename: 04160739
Timestamp: 2015/04/16 13:20
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3899	-0.1949	15380	51.046	51.244	105
2	-0.3781	-0.1890	16080	51.038	51.235	104
3	-0.3661	-0.1831	16791	51.044	51.244	105
4	-0.4207	-0.2104	13546	51.076	51.273	102

<<<Statistics>>> Mean: -0.3887 Std Dev: 0.0234 RSD: -6.03

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76447 SDG: 76447

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 05/19/15

Analyte	Calibration Verification									M
	True CCV2	Found 11:47	%R(1)	True CCV1	Found 20:07	%R(1)	True CCV2	Found 0:56	%R(1)	
Total Organic Carbon	5	5.00117	100	10	11.8947	119	5	5.78595	116	

(1) Control Limits: 80-120

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76447 SDG: 76447

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 05/19/15 12:12	C	CCB 05/19/15 20:32	C	CCB 05/20/15 01:21	C		C		C	
Total Organic Carbon	.500	U	.500	U	.500	U					

INORGANIC ANALYSIS
Raw Data

APPL, INC.

WETLAB BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	0.20 U	1.0	0.20	0.08	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	05/19/15	05/19/15	#906-150519A-AZ16287

Wetlab SC-Blank-REG MDLs
Printed: 06/10/15 3:38:28 PM

Laboratory Control Spike Recovery

WETLAB

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Level mg/L	SPK Result mg/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
EPA 300.0	CHLORIDE	20.0	18.6	93.0	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRATE	22.1	21.6	97.7	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	NITRITE	9.98	9.22	92.4	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
EPA 300.0	SULFATE	20.0	20.0	100	90-110	05/15/15	05/15/15	#300W-150515A3-AZ16403
SW846 906	TOTAL ORGANIC CARBON	10.00	10.8	108	90-110	05/19/15	05/19/15	#906-150519A-AZ16287

Comments: _____

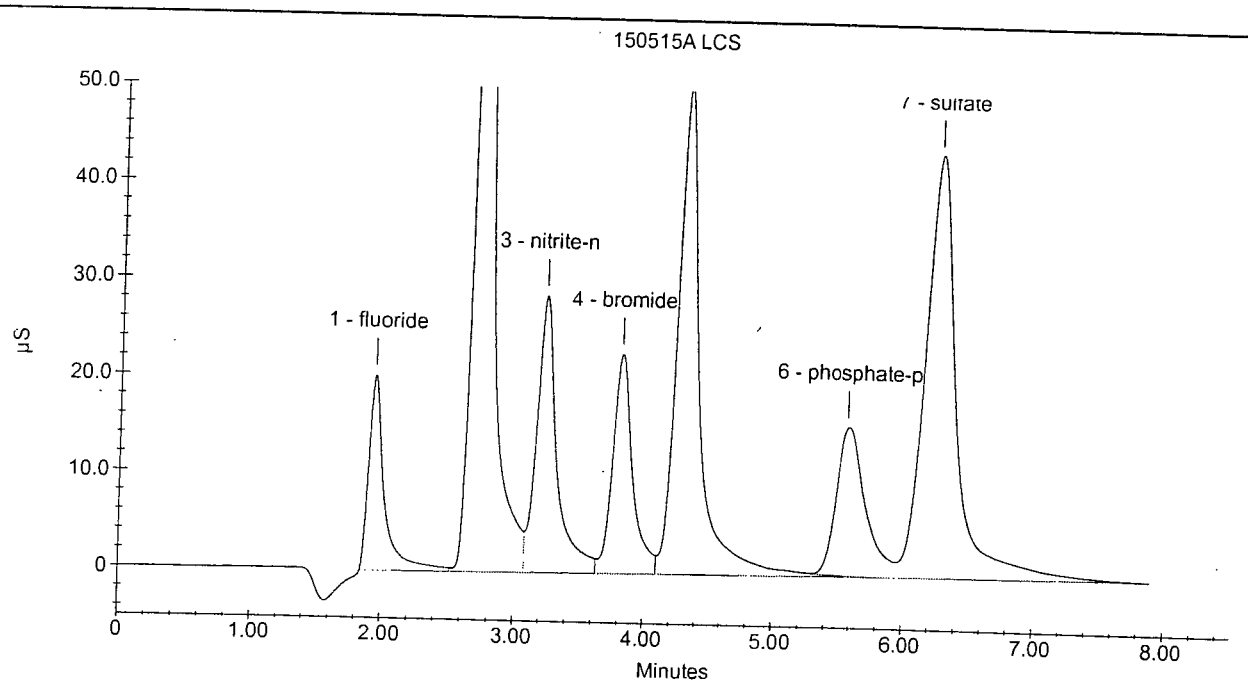
Sample Analysis Report

Sample Name : 150515A LCS
Data File Name : I:\DIONEX\D1ANIONS\DATA\150515A\150515a_010.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150505a.met
Date Time Collected : 5/15/15 09:50:54
System Operator : mm
Injection Number : 10
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.93	fluoride	2.3785	1675849	202163
2	2.69	chloride	18.6197	9882083	1166907
3	3.21	nitrite-n	2.8063	3072655	285552
4	3.80	bromide	11.7347	2442064	226971
5	4.28	nitrate-n	4.8767	6301085	503084
6	5.56	phosphate-p	5.3048	2434971	154035
7	6.23	sulfate	20.0147	7327549	434523



APPL, Inc.

Current Date : 5/15/15
Current Time : 10:01:30

Detailed Analysis Report Print Date/Time: 2015/06/10 15:57:47

Sample ID: CCV2 5PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 05190728
Cal. Curve: 150416I9 Timestamp: 2015/05/19 11:47
Operator ID: DT Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.0535	2.5268	338724	54.288	54.487	189
2	4.8669	2.4335	327639	54.359	54.555	211
3	5.0644	2.5322	339368	54.397	54.596	201
4	5.0199	2.5099	336724	54.432	54.631	206

<<<Statistics>>> Mean: 5.0012 Std Dev: 0.0915 RSD: 1.83

Sample ID: CCB Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 05190728
Cal. Curve: 150416I9 Timestamp: 2015/05/19 12:12
Operator ID: DT Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.2975	-0.1488	20863	54.352	54.551	100
2	-0.3575	-0.1788	17300	54.370	54.567	102
3	-0.3374	-0.1687	18496	54.381	54.579	98
4	-0.3072	-0.1536	20289	54.358	54.557	99

<<<Statistics>>> Mean: -0.3249 Std Dev: 0.0276 RSD: -8.49

Sample ID: 150519A LCS Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 05190728
Cal. Curve: 150416I9 Timestamp: 2015/05/19 12:44
Operator ID: DT Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.6081	5.3041	668673	54.628	54.826	209
2	10.9840	5.4920	690997	54.640	54.838	215
3	10.8977	5.4489	685873	54.610	54.809	218
4	10.8259	5.4130	681610	54.757	54.954	209

<<<Statistics>>> Mean: 10.8289 Std Dev: 0.1608 RSD: 1.48

Sample ID: CCV1 10PPM Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 05190728
Cal. Curve: 150416I9 Timestamp: 2015/05/19 20:07
Operator ID: DT Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.6620	5.8310	731273	56.171	56.370	194
2	11.8685	5.9342	743539	56.166	56.364	194
3	12.2924	6.1462	768721	56.054	56.252	205
4	11.7561	5.8780	736861	56.142	56.341	199

<<<Statistics>>> Mean: 11.8947 Std Dev: 0.2782 RSD: 2.34

Sample ID: CCB Mode: TOC
Method: TOC 0 - 20 ppmC Filename: 05190728
Cal. Curve: 150416I9 Timestamp: 2015/05/19 20:32
Operator ID: DT Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.3570	-0.1785	17329	55.914	56.110	102
2	-0.4159	-0.2080	13831	55.949	56.149	101
3	-0.4115	-0.2057	14097	55.954	56.152	99
4	-0.4100	-0.2050	14183	55.950	56.149	99

<<<Statistics>>> Mean: -0.3986 Std Dev: 0.0278 RSD: -6.99

Sample ID: AZ16403W06
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 05190728
Timestamp: 2015/05/19 23:57
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.2647	1.6324	232465	55.348	55.544	159
2	3.2728	1.6364	232945	55.296	55.492	164
3	3.0351	1.5175	218825	55.258	55.455	164
4	3.2843	1.6421	233628	55.239	55.438	169

<<<Statistics>>> Mean: 3.2142 Std Dev: 0.1197 RSD: 3.72

Sample ID: CCV2 5PPM
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 05190728
Timestamp: 2015/05/20 00:56
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.6840	2.8420	376172	55.170	55.367	180
2	6.0809	3.0405	399750	55.170	55.367	184
3	5.8137	2.9069	383878	55.188	55.387	173
4	5.5652	2.7826	369119	55.180	55.377	183

<<<Statistics>>> Mean: 5.7859 Std Dev: 0.2213 RSD: 3.82

Sample ID: CCB
Method: TOC 0 - 20 ppmC
Cal. Curve: 150416I9
Operator ID: DT
Mode: TOC
Filename: 05190728
Timestamp: 2015/05/20 01:21
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.4493	-0.2246	11849	55.027	55.226	98
2	-0.4366	-0.2183	12603	55.024	55.222	99
3	-0.4995	-0.2497	8867	55.023	55.223	97
4	-0.4229	-0.2114	13418	54.998	55.196	99

<<<Statistics>>> Mean: -0.4521 Std Dev: 0.0334 RSD: -7.39

% Moisture

Batch: QCG 150521-M005685

Method: CLP 4.0

Date: 05/21/15 14:18

Sample	Container	Pan (g)	Pan+Wet (g)	Pan+Dry 1 (g)	Pan+Dry 2 (g)	Moisture (%)	Comments
AZ16499		1.2760 05/21/15 14:18	7.7883 05/21/15 14:19	6.3644	6.3649 05/22/15 07:47	21.857	AZ16499S04
AZ16496		1.2723 05/21/15 14:19	6.3971 05/21/15 14:20	5.3699 05/22/15 07:46	5.3700 05/22/15 07:46	20.042	AZ16496S04
AZ16495		1.2681 05/21/15 14:20	9.0694 05/21/15 14:21	7.6363 05/22/15 07:46	7.6362 05/22/15 07:46	18.371	AZ16495S04
AZ16494		1.2540 05/21/15 14:21	7.2182 05/21/15 14:22	6.1072	6.1074 05/22/15 07:46	18.624	AZ16494S04
AZ16474D		1.2468 05/21/15 14:22	9.4286 05/21/15 14:23	8.6368 05/22/15 07:45	8.6370 05/22/15 07:45	9.675	AZ16474S04
AZ16474		1.2430 05/21/15 14:23	6.4840 05/21/15 14:24	5.9677	5.9686 05/22/15 07:45	9.834	AZ16474S04
AZ16473		1.2406 05/21/15 14:24	8.2928 05/21/15 14:24	7.6391 05/22/15 07:44	7.6392 05/22/15 07:44	9.268	AZ16473S04
AZ16402		1.2423 05/21/15 14:25	6.9947 05/21/15 14:25	5.4867	5.4879 05/22/15 07:44	26.194	AZ16402S01
AZ16401		1.2457 05/21/15 14:25	6.5623 05/21/15 14:26	6.1493 05/22/15 07:43	6.1493 05/22/15 07:43	7.768	AZ16401S01
AZ16400		1.2455 05/21/15 14:26	6.0726 05/21/15 14:27	4.4802 05/22/15 07:43	4.4802	32.989	AZ16400S02

Date/Time InOven@104°C	Date/Time OutOven@104°C	Date/Time InOven@104°C	Date/Time OutOven@104°C
05/21/15 2:19:00 PM			05/22/15 7:47:00 AM

Date	Initials	Balance	Weight	Reading	Lower Limit	Upper Limit	Comments / Is the Bubble Centered?
5/19/15	KDS	Mettler AT200	0.5g	0.5001 g	0.4995	0.5005	yes
		Mettler AT200	1g	1.0003 g	0.9990	1.0010	
		Mettler AT200	20g	19.9999 g	19.9800	20.0200	
		Mettler AT200	50g	49.9995 g	49.9500	50.0500	
		Mettler AT200	100g	99.9988 g	99.9000	100.1000	
		Mettler AT200	150g	149.9983 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	1000.03 g	980.00	1020.00	
		OHAUS ARC120	2kg	2000.07 g	1960.00	2040.00	
5-20-15	CK	Mettler AT200	0.5g	0.4997 g	0.4995	0.5005	yes
		Mettler AT200	1g	0.9996 g	0.9990	1.0010	
		Mettler AT200	20g	19.9996 g	19.9800	20.0200	
		Mettler AT200	50g	49.9991 g	49.9500	50.0500	
		Mettler AT200	100g	99.9984 g	99.9000	100.1000	
		Mettler AT200	150g	149.9978 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	999.97 g	980.00	1020.00	
		OHAUS ARC120	2kg	1999.94 g	1960.00	2040.00	
5-21-15	KDS	Mettler AT200	0.5g	0.4997 g	0.4995	0.5005	yes
		Mettler AT200	1g	1.0002 g	0.9990	1.0010	
		Mettler AT200	20g	20.0000 g	19.9800	20.0200	
		Mettler AT200	50g	49.9993 g	49.9500	50.0500	
		Mettler AT200	100g	99.9983 g	99.9000	100.1000	
		Mettler AT200	150g	149.9977 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.49 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	999.99 g	980.00	1020.00	
		OHAUS ARC120	2kg	1999.95 g	1960.00	2040.00	
5-22-15	KDS	Mettler AT200	0.5g	0.5002 g	0.4995	0.5005	yes.
		Mettler AT200	1g	1.0003 g	0.9990	1.0010	
		Mettler AT200	20g	19.9998 g	19.9800	20.0200	
		Mettler AT200	50g	49.9994 g	49.9500	50.0500	
		Mettler AT200	100g	99.9988 g	99.9000	100.1000	
		Mettler AT200	150g	149.9981 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	99.99 g	98.00	102.00	
		OHAUS ARC120	1kg	1000.01 g	980.00	1020.00	
		OHAUS ARC120	2kg	2000.01 g	1960.00	2040.00	

04/30/15mm exp 05/01/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/01/15 mm	Anion Eluent made as per page 22.
05/01/15 mm exp 05/02/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/04/15mm	Anion Eluent made as per page 22.
05/04/15 mm exp 05/05/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/05/15mm exp 05/06/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/05/15 mm exp-	Anion ICAL stock, curve made as per page 47, ICV made as per page 76.
05/06/15 mm	Anion Eluent made as per page 22.
05/06/15mm exp 05/07/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/07/15 mm exp 05/08/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/08/15 mm exp 05/09/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/11/15 mm exp 05/12/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/12/15mm	Anion Eluent made as per page 22.

METHOD 300 / 9056		ANION STOCK				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
O2SI	F-	1,000	1037642-31166	01/04/14	0.25	5
O2SI	Cl-	5,000	1045796-32404	11/08/14	0.5	50
O2SI	NO2-N	1,000	1040585-31592	04/26/14	0.25	5
Ultra Scientific	Br-	1,000	L00953-31570	09/30/14	1.25	25
O2SI	NO3-N	1,000	1040587-31591	04/26/14	0.5	10
O2SI	PO4-P	1,000	1040570-31590	04/26/14	0.5	10
Ultra Scientific	SO4	5,000	P00075-30305	02/28/14	0.5	50
Brought up with milipore water to Final Volume of:						50

METHOD 300 / 9056				ANION CAL CURVE						
				ICAL #1	ICAL#2	ICAL#3	ICAL #4	ICAL #5	ICAL #6	ICAL #7
ID#	mg/L	Prep Date	EXP. DATE	mL	mL	mL	mL	mL	mL	mL
ANION STOCK	100			0.4	2	10	2	5	7	10
Brought up w/ Milipore Water to final volume of (mL):				100	100	100	10	10	10	na
Final Conc F (mg/L):				0.04	0.1	0.5	1	2.5	3.5	5
Final Conc Cl (mg/L):				0.4	1	5	10	25	35	50
Final Conc NO2-N (mg/L):				0.04	0.1	0.5	1	2.5	3.5	5
Final Conc Br (mg/L):				0.2	0.5	2.5	5	12.5	17.5	25
Final Conc NO3-N (mg/L):				0.08	0.2	1	2	5	7	10
Final Conc PO4-P (mg/L):				0.08	0.2	1	2	5	7	10
Final Conc SO4 (mg/L):				0.4	1	5	10	25	35	50

METHOD 300 / 9056		ANION ICV / LCS				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	12B199-30554	09/30/13	0.125	2.50
CPI	Cl-	1,000	13e314-32692	01/19/15	1.00	20.00
CPI	NO2-N	304	12g112-32702	01/19/15	0.50	3.04
CPI	Br-	1,000	12b205-32027	08/08/14	0.625	12.50
CPI	NO3-N	1,000	13b007-32700	01/19/15	0.25	5.00
CPI	PO4-P	1,000	12g005-32694	01/19/15	0.25	5.00
CPI	SO4	1,000	01/19/15	13e315-32697	1.00	20.00
Brought up with milipore water to Final Volume of:					50	

Date	Initials	Balance	Weight	Reading	Lower Limit	Upper Limit	Comments / Is the Bubble Centered?
5/19/15	KDS	Mettler AT200	0.5g	0.5001 g	0.4995	0.5005	yes
		Mettler AT200	1g	1.0003 g	0.9990	1.0010	
		Mettler AT200	20g	19.9999 g	19.9800	20.0200	
		Mettler AT200	50g	49.9995 g	49.9500	50.0500	
		Mettler AT200	100g	99.9988 g	99.9000	100.1000	
		Mettler AT200	150g	149.9983 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	1000.03 g	980.00	1020.00	
		OHAUS ARC120	2kg	2000.07 g	1960.00	2040.00	
5-20-15	CK	Mettler AT200	0.5g	0.4997 g	0.4995	0.5005	yes
		Mettler AT200	1g	0.9996 g	0.9990	1.0010	
		Mettler AT200	20g	19.9996 g	19.9800	20.0200	
		Mettler AT200	50g	49.9991 g	49.9500	50.0500	
		Mettler AT200	100g	99.9984 g	99.9000	100.1000	
		Mettler AT200	150g	149.9978 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	999.97 g	980.00	1020.00	
		OHAUS ARC120	2kg	1999.94 g	1960.00	2040.00	
5-21-15	KDS	Mettler AT200	0.5g	0.4997 g	0.4995	0.5005	yes
		Mettler AT200	1g	1.0002 g	0.9990	1.0010	
		Mettler AT200	20g	20.0000 g	19.9800	20.0200	
		Mettler AT200	50g	49.9993 g	49.9500	50.0500	
		Mettler AT200	100g	99.9983 g	99.9000	100.1000	
		Mettler AT200	150g	149.9977 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.49 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	100.00 g	98.00	102.00	
		OHAUS ARC120	1kg	999.99 g	980.00	1020.00	
		OHAUS ARC120	2kg	999.95 g	1960.00	2040.00	
5-22-15	KDS	Mettler AT200	0.5g	0.5002 g	0.4995	0.5005	yes.
		Mettler AT200	1g	1.0003 g	0.9990	1.0010	
		Mettler AT200	20g	19.9998 g	19.9800	20.0200	
		Mettler AT200	50g	49.9994 g	49.9500	50.0500	
		Mettler AT200	100g	99.9988 g	99.9000	100.1000	
		Mettler AT200	150g	149.9981 g	149.8500	150.1500	
		OHAUS ARC120	0.1g	0.10 g	0.08	0.12	
		OHAUS ARC120	0.5g	0.50 g	0.48	0.52	
		OHAUS ARC120	1g	1.00 g	0.98	1.02	
		OHAUS ARC120	100g	99.99 g	98.00	102.00	
		OHAUS ARC120	1kg	1000.01 g	980.00	1020.00	
		OHAUS ARC120	2kg	2000.01 g	1960.00	2040.00	

02/16/15 mm
exp 02/17/15

Anion CCV, LCS, MS/MSD made as per page 48.

02/18/15 mm
exp 02/19/15

METHOD 300 / 9056		CCV				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc. (mg/L)
o2si	F	1,000	1053804-33361	8/21/15	0.125	2.5000
o2si	Cl	5,000	1045796-32404	11/8/14	0.250	25.0000
o2si	NO2-N	1,000	1062905-33877	1/10/16	0.125	2.5000
o2si	N03-N	1,000	1057207-33376	8/30/15	0.250	5.0000
ULTRA	Br	1,000	P00939-33356	10/31/16	0.625	12.5000
ULTRA	SO4	5,000	T00419-33562	5/31/16	0.250	25.0000
o2si	PO4-P	1,000	1049001-32799	1/23/15	0.250	5.0000
					Final Volume:	50

MM 02/18/15

02/18/15 mm
exp 02/19/15

METHOD 300 / 9056		LCS/LCSD/MS/MSD				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc. (mg/L)
CPI	F	1,000	13G095-33179	5/27/15	0.125	2.5000
CPI	Cl	1,000	14C245-33633	11/22/15	1.000	20.0000
CPI	NO2-N	304	13J007-33359	8/20/15	0.500	3.0400
CPI	N03-N	1,000	13L102-33632	11/22/15	0.250	5.0000
CPI	Br	1,000	13D142-32699	1/19/15	0.625	12.5000
CPI	SO4	1,000	14G042-33802	1/10/16	1.000	20.0000
CPI	PO4-P	1,000	12G005-32695	1/19/15	0.250	5.0000
					Final Volume:	50

MM 02/18/15

02/19/15 mm
exp 02/20/15

Anion CCV, MS/MSD made as per page 76.

02/19/15 mm

Anion Eluent made as per page 22.

02/20/15 mm
exp 02/21/15

Anion CCV, LCS, MS/MSD made as per page 48/76. 2/20/15 MM

02/23/15 mm
exp 02/24/15

Anion CCV, LCS, MS/MSD made as per page 76.

5/12/15 mm exp 05/13/15	Anion CCV, LCS, MS/MSD made as per page 76.
05/13/15 mm p 05/14/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/14/15mm	Anion Eluent made as per page 22.
5/14/15 mm p 05/15/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/19/15 mm p 05/20/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/20/15 mm	Anion Eluent made as per page 22.
5/20/15 mm p 05/21/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/21/15 mm p 05/22/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/22/15 mm p 05/23/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/26/15 mm	Anion Eluent made as per page 22.
05/26/15 mm p 05/27/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/27/15 mm p 05/28/15	Anion CCV, LCS, MS/MSD made as per page 76.
5/28/15 mm p 05/29/15	Anion CCV, LCS, MS/MSD made as per page 76.

METHOD 5310/9060	TOC CALIBRATION CURVE									
ID#	mg/L	Prep Date	EXP. DATE	mL	mL	mL	mL	mL	mL	mL
TOC INTERMEDIATE 1 STD	100	04/16/15	05/17/15	0	0.5	1	5	10	25	50
Brought up with milipore water to Final Volume of:				50	100	100	100	100	100	100
		Final Conc (mg/L):		0	0.5	1.0	5	10	25	50

METHOD 5310B/9060		TOC INTERMEDIATE 1º STD				
SUPPLIER		mg/L	LOT #	open	EXP.	mL
O2SI	Potassium Hydrogen Phthalate	1,000	1072005	04/10/15	09/03/16	10mL
Brought up with milipore water to Final Volume of:						100mL
			Final Conc (mg/L)			100

METHOD 5310B/9060	TOC CCVS				
	mg/L	Prep Date	EXP.	CCV1	CCV2
TOC INTERMEDIATE 1º STD	100	04/16/15	05/17/15	10	5
Brought up with milipore water to Final Volume of:				100	100
	Final Conc (mg/L)			10	5

METHOD 5310B/9060		TOC INTERMEDIATE 2º STD				
SUPPLIER		mg/L	LOT #	open	EXP.	mL
ULTRA SCI	Potassium Hydrogen Phthalate	1,000	CM-0176	04/10/15	02/28/17	10mL
	Brought up with milipore water to Final Volume of:					100mL
			Final Conc (mg/L)			100

METHOD 5310B/9060	TOC ICV/LCS			
	mg/L	Prep Date	EXP.	ICV/LCS
TOC INTERMEDIATE 2º STD	100	04/16/15	05/17/15	10
Brought up with milipore water to Final Volume of:				100
		Final Conc (mg/L)		10

300/9056 Injection Log

Directory: I:\Dionex\D1Anions\data\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
18	05 May 2015	11:21	CAL STD #1 05/05/15		150505a	1.
19	05 May 2015	11:32	CAL STD #2		150505a	1.
20	05 May 2015	11:43	CAL STD #3		150505a	1.
21	05 May 2015	11:53	CAL STD #4		150505a	1.
22	05 May 2015	12:04	CAL STD #5		150505a	1.
23	05 May 2015	12:15	CAL STD #6		150505a	1.
24	05 May 2015	12:26	CAL STD #7		150505a	1.
26	05 May 2015	12:47	150505 ICV		150505a	1.
28	05 May 2015	13:08	ICB		150505a	1.

300/9056A Injection Log

Directory: I:\Dionex\D1Anions\data\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
8	15 May 2015	09:29	CCV 150514		150515a	1.
9	15 May 2015	09:40	CCB		150515a	1.
10	15 May 2015	09:50	150515A LCS		150515a	1.
18	15 May 2015	11:55	AZ16403W05		150515a	1.
20	15 May 2015	12:16	CCV 150515		150515a	1.
21	15 May 2015	12:27	CCB		150515a	1.

415/9060 Injection Log

Directory: I:\Tekmar\uploadrun\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
	16 Apr 2015	09:39	DI WATER		150416I9-TO	1.
	16 Apr 2015	10:06	autocal1		150416I9-TO	1.
	16 Apr 2015	10:33	autocal2		150416I9-TO	1.
	16 Apr 2015	11:00	autocal3		150416I9-TO	1.
	16 Apr 2015	11:28	autocal4		150416I9-TO	1.
	16 Apr 2015	11:57	autocal5		150416I9-TO	1.
	16 Apr 2015	12:26	autocal6		150416I9-TO	1.
	16 Apr 2015	12:55	ICV		150416I9-TO	1.
	16 Apr 2015	13:20	ICB		150416I9-TO	1.

415/9060 Injection Log

Directory: I:\Tekmar\uploadrun\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	19 May 2015	11:47	CCV2 5PPM		150519A9-T	1.
2	19 May 2015	12:12	CCB		150519A9-T	1.
3	19 May 2015	12:44	150519A LCS		150519A9-T	1.
18	19 May 2015	20:07	CCV1 10PPM		150519A9-T	1.
19	19 May 2015	20:32	CCB		150519A9-T	1.
26	19 May 2015	23:57	AZ16403W06		150519A9-T	1.
28	20 May 2015	00:56	CCV2 5PPM		150519A9-T	1.
29	20 May 2015	01:21	CCB		150519A9-T	1.