N00174.AR.001956
NSWC INDIAN HEAD
5090.3a

VALIDATED DATA PACKAGE, 76687, NSWC INDIAN HEAD MD
7/15/2015
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

July 15, 2015

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

Attn: Ed Corack

Title: Report of Data: Case 76687

Project: CTO JU11 112G02622 NSF Indian Head, MD

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

Dear Mr. Corack:

Four water and one soil samples were received June 18, 2015, at 3.0°C and 3.5°C. Written results for the requested analyses are provided on this July 15, 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.

The Corrosivity and Ignitability analyses weres subcontracted to ALS Environmental

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: 83

Sample receipt information

ARF: 76687

Project: CTO JU11 112G02622 NSF Indian Head, MD

Sample Receipt Information:

The samples were received on June 18, 2015, at 3.0C and 3.5°C. The samples were assigned Analytical Request Form (ARF) number 76687. The sample numbers and requested analyses were compared to the chain of custody. No exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
S67-MW021-061715	AZ17907	WATER	06/17/15	06/18/15
S67-MW020-061715	AZ17908	WATER	06/17/15	06/18/15
S67-MW025-061715	AZ17909	WATER	06/17/15	06/18/15
S67-AQIDW-061715	AZ17910	WATER	06/17/15	06/18/15
S67-SOIDW-061715	AZ17911	SOIL	06/17/15	06/18/15

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 samples were extracted according to EPA method 3510C. The soil sample was leached according to EPA method 1311 and the leachate was extracted according to EPA method 3510C. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS. All holding times were met.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. In the 150623A TCLP LCS, one analyte recovered below its lower control limit. In the 150624B TCLP LCS, one analyte recovered above its lower control limit. All other LCS acceptance criteria were met.

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

Method blanks

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

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. In the 150624B TCLP LCS, one surrogate recovered above its 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 problem was encountered. All data generated are acceptable.

EPA Method 8270D-SIM
Polynuclear Aromatic Hydrocarbons

Sample Preparation and Analysis Information:

The water samples were extracted according to EPA method 3510C. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS with selective ion monitoring. All holding times were met.

Manual integrations were performed in accordance with APPL's SOP. Phenanthrene, anthracene, fluoranthene, and Benzo(b) fluoranthene were manually integrated in the second source standard. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. 2-Methylnaphthalene recovered below the 45% lower control limit, but within the marginal exceedance limits, in the LCS. All other 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 blank.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. All 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 samples were analyzed with guidance from RSK-175. The samples were 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 analytical exception is noted. All data generated are acceptable.

EPA Method 6850

Perchlorate by LC-Mass Spec

Sample Preparation and Analysis Information:

The water 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 and the samples. 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 blank.

Spikes:

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

The Interference Check Sample (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 analytical exception is noted.

EPA Method 8330B
Energetics

Sample Preparation:

The water samples were extracted according to EPA method 3535. 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. Nitroglycerin was manually integrated in the LCS. 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 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 blank.

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 other analytical problem was encountered. The data generated are acceptable.

EPA Methods 6010C and 7470A
Total, Dissolved, and TCLP Metals

Digestion and Analysis Information:

The water samples were digested according to EPA methods 3010A and 7470A. The soil sample was leached according to EPA method 1311 and the leachate was digested according to EPA method 3010A and 7470A.

The samples were analyzed according to EPA method 6010C using a Perkin Elmer Optima 5300DV and according to EPA methods 7470A 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.

Blanks:

Lithium was detected above one half the LOQ in both the total and dissolved method blanks. The lithium detections in the samples were greater than ten times the blank hit. No other target metal was detected above one half the LOQ in the method blanks.

Spikes:

Laboratory Control Spikes (LCS), Matrix Spikes (MS/MSD), Post-Digestion Spikes (PDS), and Dilution Tests (DT) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. Samples S67-AQIDW-061715 and S67-SOIDW-061715 were designated by the laboratory for MS/MSD. All MS/MSD, DT and PDS acceptance criteria were met.

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 samples were prepared and analyzed according to the methods.

The samples were analyzed for Anions according to EPA method 300.0 using a Dionex DX500. The samples were analyzed for TOC according to SW846 9060 using a Tekmar Apollo 9000. The nitrate dilution for sample S67-MW025-061715 was analyzed more than 48 hours after collection. The initial dilution was with in hold time. All other holding times were met.

Quality Control/Assurance

Spike Recovery

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

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

Method blanks

For the EPA 300.0 CCBs on 6/18/15 and 6/19/15, there were detections for chloride, which were 10 times less than all sample detections. No other target analyte was detected one-half the limit of quantitation (LOQ) in the method blank.

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 other analytical exception was noted. The data generated are acceptable.

SHEALY **Chain of Custody Record**

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

76687 3.0 3.5

Number 07447

Client: Tetra Tech	Report to Contact: Ed Corack	Sampler (Printed Name): Jacob Birkett
Address: 5700 Lakewright Dr. Suite 309	Telephone No. / Fax No. / Email: 757-466-4908	Waybill No.: FedEx 8744-3758-5910
City: Norfolk / State: VA / Zip Code: 23502	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH	Quote No. / Page: 1 of 1
Project Name: NSF-Indian Head Site CJ		
Project Number: CTO-Jv11 112G02623	P.O Number	

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Energetics	PAHs, Phthalates	Total Metals	Diss. Metals	Perchlorate	Methane	TOC	Anions	TCLP Metals	TCLP SVOCs	Ignit, Cores	TCLP, Metals, TCLP, SVOCs, Ignit	Remarks / Cooler ID
Number of Containers									2	2	1	1	1	1	1	1	1	3	1	4	
Bottle (See Instructions on back)									G	H	F	F	C	A	E	C	H	H	I	M	
Preservative									1	1	4	4	1	5	3	1	1	1	1	1	
S67-MW021-061715	6-17-15	1000	G	X					X	X	X	X	X	X	X	X					
S67-MW020-061715	6-17-15	1010	G	X					X	X	X	X	X								
S67-MW025-061715	6-17-15	1140	G	X					X	X	X	X	X	X	X	X					
S67-AQIDW-061715	6-17-15	1250	C	X													X	X	X		
S67-SCIDW-061715	6-17-15	1300	C				X													X	

Lot No.

Turn Around Time Required (Prior lab approval required for expedited TAT): ☒ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	6-17-15	1600	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by	6/18/15	10:00

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

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: 76687

Sample ID: S67-MW021-061715

APPL ID: AZ17907

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	60.7	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	56.2	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	42.2	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	65.7	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	30.5	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	83.4	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y133
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:29 AM
APPL-F1-SC-NoMC-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: 76687

Sample ID: S67-MW020-061715

APPL ID: AZ17908

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	67.8	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.0	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	38.5	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	57.6	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	28.0	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	64.3	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y134
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:29 AM
APPL-F1-SC-NoMC-REG MDLs

EPA 8270D WATER

Tetra Tech
5700 Lake Wright Dr, Ste 309
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Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76687

Sample ID: S67-MW025-061715

APPL ID: AZ17909

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	62.2	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.2	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	43.6	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	66.8	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	31.2	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	77.5	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y135
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:29 AM
APPL-F1-SC-NoMC-REG MDLs

TCLP Semivolatile 8270D

Tetra Tech
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APPL Inc.
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Clovis, CA 93611

Attn: Ed Corack
Project: CTO JU11 112G02622 NSF Indian Head
Sample ID: S67-AQIDW-061715
Sample Collection Date: 6/17/2015

ARF: 76687
APPL ID: AZ17910
QCG: #TCLPS-150623A-198746

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D/	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/23/2015	7/7/2015
EPA 8270D/	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/23/2015	7/7/2015
EPA 8270D/	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2,4,6-TRIBROMOPHEN	84.2	40-125			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2-FLUORBIPHENYL (S)	76.3	50-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2-FLUOROPHENOL (S)	42.7	20-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: NITROBENZENE-D5 (S)	73.7	40-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: PHENOL (S)	31.5	10-115			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: TERPHENYL-D14 (S)	96.2	50-135			%	6/23/2015	7/7/2015

Quant Method: Y625TCLP.M
Run #: 0625Y136
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 4:28:34 PM
APPL-F1-SC-NoMC-REG MDLs

TCLP Semivolatile 8270D

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: 76687

Sample ID: S67-SOIDW-061715

APPL ID: AZ17911

Sample Collection Date: 6/17/2015

QCG: #TCLPS-150624B-198745

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D/	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/25/2015	6/30/2015
EPA 8270D/	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/25/2015	6/30/2015
EPA 8270D/	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2,4,6-TRIBROMOPHEN	103	40-125			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2-FLUORBIPHENYL (S)	103	50-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2-FLUOROPHENOL (S)	82.5	20-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: NITROBENZENE-D5 (S)	109	40-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: PHENOL (S)	60.7	10-115			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: TERPHENYL-D14 (S)	104	50-135			%	6/25/2015	6/30/2015

Quant Method: Y625TCLP.M
Run #: 0625Y051
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 4:28:34 PM
APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8270D WATER

Blank Name/QCG: **150623W-17818 - 198680**
Batch ID: #87DJU-150623A

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	6/23/2015	7/7/2015
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	71.5	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	62.8	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	37.9	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	63.2	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	25.7	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	83.6	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 9:55:45 AM

Method Blank
TCLP Semivolatile 8270D

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150623W-17910 - 198746**
Batch ID: #TCLPS-150623A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/23/2015	7/7/2015
BLANK	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/23/2015	7/7/2015
BLANK	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/23/2015	7/7/2015
BLANK	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/23/2015	7/7/2015
BLANK	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/23/2015	7/7/2015
BLANK	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	89.4	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	78.5	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	47.3	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	79.0	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	32.0	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	105	50-135			%	6/23/2015	7/7/2015

Quant Method: Y625TCLP.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 4:29:39 PM

Method Blank
TCLP Semivolatile 8270D

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150624S-17911 - 198745**
Batch ID: #TCLPS-150624B

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
BLANK	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/25/2015	6/30/2015
BLANK	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/25/2015	6/30/2015
BLANK	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
BLANK	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/25/2015	6/30/2015
BLANK	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/25/2015	6/30/2015
BLANK	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/25/2015	6/30/2015
BLANK	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/25/2015	6/30/2015
BLANK	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
BLANK	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/25/2015	6/30/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	103	40-125			%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	104	50-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUOROPHENO	66.9	20-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: NITROBENZENE-	106	40-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: PHENOL (S)	45.0	10-115			%	6/25/2015	6/30/2015
BLANK	SURROGATE: TERPHENYL-D14	108	50-135			%	6/25/2015	6/30/2015

Quant Method: Y625TCLP.M
Run #: 0625Y049
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recoveries
EPA 8270D WATER

APPL ID: **150623W-17818 LCS - 198680**
Batch ID: #87DJU-150623A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BIS (2-ETHYLHEXYL) PHTHALATE	50.0	29.9	30.8	59.8	61.6	40-125	3.0	30
BUTYL BENZYL PHTHALATE	50.0	33.4	34.6	66.8	69.2	45-115	3.5	30
DI-N-BUTYL PHTHALATE	50.0	31.9	32.0	63.8	64.0	55-115	0.31	30
DI-N-OCTYL PHTHALATE	50.0	29.5	30.3	59.0	60.6	35-135	2.7	30
DIETHYL PHTHALATE	50.0	28.8	29.2	57.6	58.4	40-120	1.4	30
DIMETHYL PHTHALATE	50.0	28.6	29.6	57.2	59.2	25-125	3.4	30
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	118	122	59.0	61.0	40-125		
SURROGATE: 2-FLUORBIPHENYL (S)	100	55.4	55.4	55.4	55.4	50-110		
SURROGATE: 2-FLUOROPHENOL (S)	200	80.2	82.9	40.1	41.5	20-110		
SURROGATE: NITROBENZENE-D5 (S)	100	57.6	59.6	57.6	59.6	40-110		
SURROGATE: PHENOL (S)	200	55.3	55.2	27.6	27.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	100	67.9	71.5	67.9	71.5	50-135		

Comments: _____

Primary	SPK	DUP
Quant Method :	Y0625TT.M	Y0625TT.M
Extraction Date :	6/23/2015	6/23/2015
Analysis Date :	7/7/2015	7/7/2015
Instrument :	Yoda	Yoda
Run :	0625Y125	0625Y126
Initials :	DA	

Laboratory Control Spike Recovery
TCLP Semivolatile 8270D

APPL ID: **150623W-17910 LCS - 198746**
Batch ID: #TCLPS-150623A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	15.3	30.6	30-100
2,4,5-TRICHLOROPHENOL	50.0	35.6	71.2	50-110
2,4,6-TRICHLOROPHENOL	50.0	33.5	67.0	50-115
2,4-DNT	50.0	34.6	69.2	50-120
2-METHYLPHENOL	50.0	32.7	65.4	40-110
4-METHYLPHENOL	100	61.4	61.4	30-110
HEXACHLOROBENZENE	50.0	35.5	71.0	50-110
HEXACHLOROBUTADIENE	50.0	11.4	22.8 #	25-105
HEXACHLOROETHANE	50.0	16.0	32.0	30-95
NITROBENZENE	50.0	34.1	68.2	45-110
PENTACHLOROPHENOL	50.0	36.1	72.2	40-115
PHENOL	50.0	17.0	34.0	10-115
PYRIDINE	50.0	26.3	52.6	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	148	74.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	69.3	69.3	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	100	50.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	72.0	72.0	40-110
SURROGATE: PHENOL (S)	200	68.9	34.5	10-115
SURROGATE: TERPHENYL-D14 (S)	100	84.8	84.8	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/23/2015
Analysis Date :	7/7/2015
Instrument :	Yoda
Run :	0625Y125
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery

TCLP Semivolatile 8270D

APPL ID: **150625S-17911 LCS - 198745**
Batch ID: #TCLPS-150624B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	43.4	86.8	30-100
2,4,5-TRICHLOROPHENOL	50.0	51.3	103	50-110
2,4,6-TRICHLOROPHENOL	50.0	49.8	99.6	50-115
2,4-DNT	50.0	51.1	102	50-120
2-METHYLPHENOL	50.0	45.5	91.0	40-110
4-METHYLPHENOL	100	84.3	84.3	30-110
HEXACHLOROBENZENE	50.0	51.6	103	50-110
HEXACHLOROBUTADIENE	50.0	41.9	83.8	25-105
HEXACHLOROETHANE	50.0	40.8	81.6	30-95
NITROBENZENE	50.0	55.5	111 #	45-110
PENTACHLOROPHENOL	50.0	55.3	111	40-115
PHENOL	50.0	25.0	50.0	10-115
PYRIDINE	50.0	29.6	59.2	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	221	111	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	103	103	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	154	77.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	112	112 #	40-110
SURROGATE: PHENOL (S)	200	94.7	47.4	10-115
SURROGATE: TERPHENYL-D14 (S)	100	106	106	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/25/2015
Analysis Date :	6/30/2015
Instrument :	Yoda
Run :	0625Y050
Initials :	DA

Printed: 7/10/2015 4:29:17 PM
APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

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
150623A-BLK	Blank	40-125	71.5		50-110	62.8	
150623A-LCS	Lab Control Spike	40-125	59.0		50-110	55.4	
150623A-LCSD	Lab Control SpikeD	40-125	61.0		50-110	55.4	
AZ17907	S67-MW021-061715	40-125	60.7		50-110	56.2	
AZ17908	S67-MW020-061715	40-125	67.8		50-110	63.0	
AZ17909	S67-MW025-061715	40-125	62.2		50-110	63.2	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	20-110	37.9		40-110	63.2	
150623A-LCS	Lab Control Spike	20-110	40.1		40-110	57.6	
150623A-LCSD	Lab Control SpikeD	20-110	41.5		40-110	59.6	
AZ17907	S67-MW021-061715	20-110	42.2		40-110	65.7	
AZ17908	S67-MW020-061715	20-110	38.5		40-110	57.6	
AZ17909	S67-MW025-061715	20-110	43.6		40-110	66.8	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	10-115	25.7		50-135	83.6	
150623A-LCS	Lab Control Spike	10-115	27.6		50-135	67.9	
150623A-LCSD	Lab Control SpikeD	10-115	27.6		50-135	71.5	
AZ17907	S67-MW021-061715	10-115	30.5		50-135	83.4	
AZ17908	S67-MW020-061715	10-115	28.0		50-135	64.3	
AZ17909	S67-MW025-061715	10-115	31.2		50-135	77.5	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

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
150623A-BLK	Blank	40-125	89.4		50-110	78.5	
150623A-LCS	Lab Control Spike	40-125	74.0		50-110	69.3	
AZ17910	S67-AQIDW-061715	40-125	84.2		50-110	76.3	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	20-110	47.3		40-110	79.0	
150623A-LCS	Lab Control Spike	20-110	50.0		40-110	72.0	
AZ17910	S67-AQIDW-061715	20-110	42.7		40-110	73.7	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	10-115	32.0		50-135	105	
150623A-LCS	Lab Control Spike	10-115	34.5		50-135	84.8	
AZ17910	S67-AQIDW-061715	10-115	31.5		50-135	96.2	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

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
150624B-BLK	Blank	40-125	103		50-110	104	
150624B-LCS	Lab Control Spike	40-125	111		50-110	103	
AZ17911	S67-SOIDW-061715	40-125	103		50-110	103	

Comments: Batch: #TCLPS-150624B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150624B-BLK	Blank	20-110	66.9		40-110	106	
150624B-LCS	Lab Control Spike	20-110	77.0		40-110	112	*
AZ17911	S67-SOIDW-061715	20-110	82.5		40-110	109	

Comments: Batch: #TCLPS-150624B

* = Recovery outside of Control Limits on QC Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150624B-BLK	Blank	10-115	45.0		50-135	108	
150624B-LCS	Lab Control Spike	10-115	47.4		50-135	106	
AZ17911	S67-SOIDW-061715	10-115	60.7		50-135	104	

Comments: Batch: #TCLPS-150624B

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

Blank ID: 150623A-BLK Time Analyzed: 1621

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-BLK	Blank	0625Y124	7/7/2015 1621
150623A-LCS	Lab Control Spike	0625Y125	7/7/2015 1650
150623A-LCSD	Lab Control SpikeD	0625Y126	7/7/2015 1720
AZ17907	S67-MW021-061715	0625Y133	7/7/2015 2050
AZ17908	S67-MW020-061715	0625Y134	7/7/2015 2119
AZ17909	S67-MW025-061715	0625Y135	7/7/2015 2149

Comments: Batch: #87DJU-150623A

EPA 8270D/TC

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

Blank ID: 150623A-BLK Time Analyzed: 1621

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-BLK	Blank	0625Y124	7/7/2015 1621
150623A-LCS	Lab Control Spike	0625Y125	7/7/2015 1650
AZ17910	S67-AQIDW-061715	0625Y136	7/7/2015 2219

Comments: Batch: #TCLPS-150623A

EPA 8270D/TC

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

Blank ID: 150624B-BLK Time Analyzed: 1710

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624B-BLK	Blank	0625Y049	6/30/2015 1710
150624B-LCS	Lab Control Spike	0625Y050	6/30/2015 1740
AZ17911	S67-SOIDW-061715	0625Y051	6/30/2015 1809

Comments: Batch: #TCLPS-150624B

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-MW021-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17907
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	53.6	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	63.6	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	68.1	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L145
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-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-MW020-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17908
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	54.1	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	57.8	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	67.1	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L146
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-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-MW025-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17909
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	50.0	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	54.0	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	70.2	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L147
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-REG MDLs

Method Blank

EPA 8270D LL WATER DODv3

Blank Name/QCG: **150619W-17817 - 198588**
Batch ID: #SIMDD-150619A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	2-METHYLNAPHTHALENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	ACENAPHTHENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	ACENAPHTHYLENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	ANTHRACENE	Not detected	0.2	0.05	ug/L	06/19/15	07/02/15
BLANK	BENZ (A) ANTHRACENE	Not detected	0.2	0.07	ug/L	06/19/15	07/02/15
BLANK	BENZO (A) PYRENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (B) FLUORANTHENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (G,H,I) PERYLENE	Not detected	0.2	0.08	ug/L	06/19/15	07/02/15
BLANK	BENZO (K) FLUORANTHENE	Not detected	0.2	0.07	ug/L	06/19/15	07/02/15
BLANK	CHRYSENE	Not detected	0.2	0.05	ug/L	06/19/15	07/02/15
BLANK	DIBENZ (A,H) ANTHRACENE	Not detected	0.2	0.05	ug/L	06/19/15	07/02/15
BLANK	FLUORANTHENE	Not detected	0.2	0.08	ug/L	06/19/15	07/02/15
BLANK	FLUORENE	Not detected	0.2	0.06	ug/L	06/19/15	07/02/15
BLANK	INDENO (1,2,3-CD) PYRENE	Not detected	0.2	0.07	ug/L	06/19/15	07/02/15
BLANK	NAPHTHALENE	Not detected	0.2	0.05	ug/L	06/19/15	07/02/15
BLANK	PHENANTHRENE	Not detected	0.2	0.07	ug/L	06/19/15	07/02/15
BLANK	PYRENE	Not detected	0.2	0.08	ug/L	06/19/15	07/02/15
BLANK	SURROGATE: 2-FLUORBIPHENYL (S)	54.3	50-110		%	06/19/15	07/02/15
BLANK	SURROGATE: NITROBENZENE-D5 (S	73.1	40-110		%	06/19/15	07/02/15
BLANK	SURROGATE: TERPHENYL-D14 (S)	75.3	50-135		%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L137
Instrument: Linus
Sequence: L150629
Initials: MA

GC SC-Blank-REG MDLs
Printed: 07/10/15 9:34:26 AM

Laboratory Control Spike Recovery

EPA 8270D LL WATER DODv3

APPL ID: **150619W-17817 LCS - 198588**
Batch ID: #SIMDD-150619A

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	1.90	38.0 #	45-105
ACENAPHTHENE	5.00	2.27	45.4	45-110
ACENAPHTHYLENE	5.00	2.50	50.0	50-105
ANTHRACENE	5.00	2.86	57.2	55-110
BENZ (A) ANTHRACENE	5.00	3.26	65.2	55-110
BENZO (A) PYRENE	5.00	3.43	68.6	55-110
BENZO (B) FLUORANTHENE	5.00	3.07	61.4	45-120
BENZO (G,H,I) PERYLENE	5.00	2.90	58.0	40-125
BENZO (K) FLUORANTHENE	5.00	2.87	57.4	45-125
CHRYSENE	5.00	3.02	60.4	55-110
DIBENZ (A,H) ANTHRACENE	5.00	3.09	61.8	40-125
FLUORANTHENE	5.00	3.02	60.4	55-115
FLUORENE	5.00	2.61	52.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	3.36	67.2	45-125
NAPHTHALENE	5.00	2.09	41.8	40-100
PHENANTHRENE	5.00	2.97	59.4	50-115
PYRENE	5.00	3.04	60.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.37	54.8	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.61	64.4	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	1.84	73.6	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	P0629.M
Extraction Date :	06/19/15
Analysis Date :	07/02/15
Instrument :	Linus
Run :	0629L138
Initials :	MA

Printed: 07/10/15 9:34:26 AM
APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150619A-BLK	Blank	50-110	54.3		40-110	73.1	
150619A-LCS	Lab Control Spike	50-110	54.8		40-110	64.4	
AZ17907	S67-MW021-061715	50-110	53.6		40-110	63.6	
AZ17908	S67-MW020-061715	50-110	54.1		40-110	57.8	
AZ17909	S67-MW025-061715	50-110	50.0		40-110	54.0	

Comments: Batch: #SIMDD-150619A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150619A-BLK	Blank	50-135	75.3				
150619A-LCS	Lab Control Spike	50-135	73.6				
AZ17907	S67-MW021-061715	50-135	68.1				
AZ17908	S67-MW020-061715	50-135	67.1				
AZ17909	S67-MW025-061715	50-135	70.2				

Comments: Batch: #SIMDD-150619A

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

Blank ID: 150619A-BLK Time Analyzed: 1243

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150619A-BLK	Blank	0629L137	07/02/15 1243
150619A-LCS	Lab Control Spike	0629L138	07/02/15 1310
AZ17907	S67-MW021-061715	0629L145	07/02/15 1619
AZ17908	S67-MW020-061715	0629L146	07/02/15 1646
AZ17909	S67-MW025-061715	0629L147	07/02/15 1713

Comments: Batch: #SIMDD-150619A

RSK 175

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: 76687

Sample ID: S67-MW021-061715

APPL ID: AZ17907

Sample Collection Date: 06/17/15

QCG: #RSK-150624A-198396

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	06/24/15	06/24/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
RSK 175	METHANE	7.1	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method:	402RSK.M
Run #:	0624F035
Instrument:	Frodo
Sequence:	150624
Dilution Factor:	1
Initials:	SD

Printed: 06/25/15 4:39:55 PM
APPL-F1-SC-NoMC-REG MDLs

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-MW025-061715

Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687

APPL ID: AZ17909

QCG: #RSK-150624A-198396

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	06/24/15	06/24/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
RSK 175	METHANE	0.45 U	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method:	402RSK.M
Run #:	0624F036
Instrument:	Frodo
Sequence:	150624
Dilution Factor:	1
Initials:	SD

Printed: 06/25/15 4:39:55 PM

APPL-F1-SC-NoMC-REG MDLs

Method Blank
RSK 175

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150624W-17694 - 198396**
Batch ID: #RSK-150624A

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	06/24/15	06/24/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method: 402RSK.M
Run #: 0624F008
Instrument: Frodo
Sequence: 150624
Initials: SD

GC SC-Blank-REG MDLs
Printed: 06/25/15 4:39:59 PM

Laboratory Control Spike Recovery

RSK 175

APPL ID: **150624W-17694 LCS - 198396**
Batch ID: #RSK-150624A

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	26.0	104	70-130
ETHENE	23.3	21.4	91.8	70-130
METHANE	13.3	14.6	110	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	06/24/15
Analysis Date :	06/24/15
Instrument :	Frodo
Run :	0624F006
Initials :	SD

Printed: 06/25/15 4:39:51 PM
APPL Standard LCS

RSK 175

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Frodo

Blank ID: 150624A-BLK Time Analyzed: 0944

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624A-LCS	Lab Control Spike	0624F006	06/24/15 0904
150624A-BLK	Blank	0624F008	06/24/15 0944
AZ17907	S67-MW021-061715	0624F035	06/24/15 1523
AZ17909	S67-MW025-061715	0624F036	06/24/15 1529

Comments: Batch: #RSK-150624A

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-MW021-061715
Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687
APPL ID: AZ17907
QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	0.25 J	0.60	0.400	0.200	ug/L	06/23/15	06/28/15

J = Estimated value.

Quant Method:	QTLMFL2
Run #:	T627_023.d
Instrument:	AGIL_6460
Sequence:	TQ062715
Dilution Factor:	1
Initials:	RP

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APPL-F1-SC-NoMC-REG MDLs

Perchlorate

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-MW020-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17908
QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	31	6.00	4.000	2.000	ug/L	06/23/15	07/05/15

Quant Method:	QTLMFL2
Run #:	T705_022.d
Instrument:	AGIL_6460
Sequence:	TQ070515
Dilution Factor:	10
Initials:	MP

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APPL-F1-SC-NoMC-REG MDLs

Perchlorate

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-MW025-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17909
QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	700	60.00	40.000	20.000	ug/L	06/23/15	07/05/15

Quant Method:	QTLMFL2
Run #:	T705_024.d
Instrument:	AGIL_6460
Sequence:	TQ070515
Dilution Factor:	100
Initials:	MP

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APPL-F1-SC-NoMC-REG MDLs

Method Blank
Perchlorate

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150623W-17823 - 198538**
Batch ID: #6850-150623A

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	06/23/15	06/27/15

Quant Method: QTLMFL2
Run #: T627_007.d
Instrument: AGIL_6460
Sequence: TQ062715
Initials: RP

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150623W-17823 LCS - 198538**
Batch ID: #6850-150623A

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	0.616	103	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	06/23/15
Analysis Date :	06/27/15
Instrument :	AGIL_6460
Run :	T627_005.d
Initials :	RP

Printed: 07/10/15 2:25:40 PM
APPL Standard LCS

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/27/15

Matrix: WATER Instrument: AGIL_6460

Blank ID: 150623A-BLK Time Analyzed: 1923

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-LCS	Lab Control Spike	T627_005.d	06/27/15 1846
150623A-BLK	Blank	T627_007.d	06/27/15 1923
AZ17907	S67-MW021-061715	T627_023.d	06/28/15 0021
AZ17908	S67-MW020-061715	T705_022.d	07/05/15 1938
AZ17909	S67-MW025-061715	T705_024.d	07/05/15 2016

Comments: Batch: #6850-150623A

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-MW021-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17907
QCG: #83BJU11W-150622-19843

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	06/22/15	06/24/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	89.5	70-130			%	06/22/15	06/24/15

Quant Method:	STE2_150522.M
Run #:	0624_000007
Instrument:	Statler
Sequence:	150624
Dilution Factor:	1
Initials:	MP

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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

ARF: 76687

Sample ID: S67-MW020-061715

APPL ID: AZ17908

Sample Collection Date: 06/17/15

QCG: #83BJU11W-150622-19843

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	06/22/15	06/28/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/28/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/28/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/28/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/28/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/28/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	86.1	70-130			%	06/22/15	06/28/15

Quant Method: W150627.M
Run #: 0627_000053
Instrument: Waldorf
Sequence: 150627
Dilution Factor: 1
Initials: MP

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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

ARF: 76687

Sample ID: S67-MW025-061715

APPL ID: AZ17909

Sample Collection Date: 06/17/15

QCG: #83BJU11W-150622-19843

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	06/22/15	06/24/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	92.0	70-130			%	06/22/15	06/24/15

Quant Method:	STE2_150522.M
Run #:	0624_000009
Instrument:	Statler
Sequence:	150624
Dilution Factor:	1
Initials:	MP

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APPL-F1-SC-NoMC-REG MDLs

Method Blank
EPA 8330B WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150622W-17907 - 198432**
Batch ID: #83BJU11W-150622

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	06/22/15	06/24/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
BLANK	SURROGATE: 1,2-DINITROBENZ	92.2	70-130			%	06/22/15	06/24/15

Quant Method: STE2_15052
Run #: 0624_00000
Instrument: Statler
Sequence: 150624
Initials: MP

GC SC-Blank-REG MDLs
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Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150622W-17907 LCS - 198432**
Batch ID: #83BJU11W-150622

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	7.17	89.6	60-135
2,6-DINITROTOLUENE	8.00	7.15	89.4	60-135
HMX	8.00	7.64	95.5	80-115
NITROGLYCERIN	8.00	7.11	88.9	70-130
RDX	8.00	7.24	90.5	50-160
TETRYL	8.00	7.70	96.3	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	7.06	88.3	70-130

Comments: _____

Primary	SPK
Quant Method :	W150627.M
Extraction Date :	06/22/15
Analysis Date :	06/28/15
Instrument :	Waldorf
Run :	0627_000032
Initials :	MP

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APPL Standard LCS

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Statler

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150622-BLK	Blank	70-130	92.2				
AZ17907	S67-MW021-061715	70-130	89.5				
AZ17909	S67-MW025-061715	70-130	92.0				
150622-LCS	Lab Control Spike	70-130	88.3				
AZ17908	S67-MW020-061715	70-130	86.1				

Comments: Batch: #83BJU11W-15062

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Statler

Blank ID: 150622-BLK Time Analyzed: 1439

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150622-BLK	Blank	0624_000006	06/24/15 1439
AZ17907	S67-MW021-061715	0624_000007	06/24/15 1519
AZ17909	S67-MW025-061715	0624_000009	06/24/15 1638
150622-LCS	Lab Control Spike	0627_000032	06/28/15 0752
AZ17908	S67-MW020-061715	0627_000053	06/28/15 2040

Comments: Batch: #83BJU11W-15062

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-MW021-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17907

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	976	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	206	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	8.6	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	41.6J	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	130J	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	211	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	10.1	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	29.8J	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

J = Estimated value.

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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-MW020-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17908

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	6020	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	265	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	39.1	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	185	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	5750	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	267	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	45.3	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	187	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

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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-MW025-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17909

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	258J	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	469	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	14.6	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	191	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	212J	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	481	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	17.4	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	202	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

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-AQIDW-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17910

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/TCLP	ARSENIC (AS)	25.00 U	50.0	25.00	25.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	BARIUM (BA)	173	50.0	20.00	7.50	ug/L	10	07/07/15	07/08/15
6010C/TCLP	CADMIUM (CD)	10.00 U	50.0	10.00	5.10	ug/L	10	07/07/15	07/08/15
6010C/TCLP	CHROMIUM (CR)	20.00 U	50.0	20.00	14.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	LEAD (PB)	20.00 U	50.0	20.00	16.00	ug/L	10	07/07/15	07/08/15
7470A/TCLP	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	1	07/08/15	07/09/15
6010C/TCLP	SELENIUM (SE)	50.00 U	50.0	50.00	32.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	SILVER (AG)	7.50 U	10.0	7.50	2.50	ug/L	10	07/07/15	07/08/15

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-SOIDW-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17911

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/TCLP	ARSENIC (AS)	25.00U	50.0	25.00	25.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	BARIUM (BA)	383	50.0	20.00	7.50	ug/L	10	06/24/15	06/24/15
6010C/TCLP	CADMIUM (CD)	7.7J	50.0	10.00	5.10	ug/L	10	06/24/15	06/24/15
6010C/TCLP	CHROMIUM (CR)	20.00U	50.0	20.00	14.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	LEAD (PB)	255	50.0	20.00	16.00	ug/L	10	06/24/15	06/24/15
7470A/TCLP	MERCURY (HG)	0.15U	0.2	0.15	0.06	ug/L	1	06/24/15	06/24/15
6010C/TCLP	SELENIUM (SE)	50.00U	50.0	50.00	32.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	SILVER (AG)	7.50U	10.0	7.50	2.50	ug/L	10	06/24/15	06/24/15

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

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)	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	LITHIUM (LI)	0.67 J	1.0	0.80	0.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ZINC (ZN)	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ALUMINUM (AL) (DI	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	LITHIUM (LI) (DISSO	0.53 J	1.0	0.80	0.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	ZINC (ZN) (DISSOL	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	07/08/15	07/09/15	#TCLPG-150708A-AZ17910
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	BARIUM (BA)	2.00 U	50.0	2.00	0.75	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CHROMIUM (CR)	2.00 U	50.0	2.00	1.37	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SILVER (AG)	0.78 J	10.0	0.75	0.25	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	06/24/15	06/24/15	#TCLPG-150624A-AZ17911
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	BARIUM (BA)	19.6 J	50.0	2.00	0.75	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CHROMIUM (CR)	2.0 J	50.0	2.00	1.37	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SILVER (AG)	0.65 J	10.0	0.75	0.25	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911

J = Estimated value.

Metals SC-Blank-REG MDLs
Printed: 07/13/15 4:58:00 PM

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	1790	89.5	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	BORON (B) (DISSOLVED)	250	233	93.2	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	105	105	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	472	94.4	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ALUMINUM (AL)	2000	2150	108	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	BORON (B)	250	235	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	LITHIUM (LI)	100.0	93.3	93.3	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	ZINC (ZN)	500	470	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694

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	ARSENIC (AS)	250	256	102	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	BARIUM (BA)	250	264	106	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CADMIUM (CD)	50.0	51.7	103	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CHROMIUM (CR)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	LEAD (PB)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SELENIUM (SE)	250	247	98.8	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SILVER (AG)	100.0	98.4	98.4	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 7470A	MERCURY (HG)	4.00	3.6	90.0	80-120	07/08/15	07/09/15	#TCLPG-150708A-AZ17910

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	ARSENIC (AS)	250	263	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	BARIUM (BA)	250	262	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CADMIUM (CD)	50.0	53.5	107	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CHROMIUM (CR)	250	250	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	LEAD (PB)	250	251	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SELENIUM (SE)	250	264	106	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SILVER (AG)	100.0	101	101	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 7470A	MERCURY (HG)	4.00	3.8	95.0	80-120	06/24/15	06/24/15	#TCLPG-150624A-AZ17911

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150707W-17910 MS - 198709**

Sample ID: AZ17910

Client ID: S67-AQIDW-061715

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 6010C	ARSENIC (AS)	250	1.8	272	262	108	104	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	BARIUM (BA)	250	173	448	432	110	104	3.6	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CADMIUM (CD)	50.0	0.50	53.2	51.1	105	101	4.0	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CHROMIUM (CR)	250	1.9	270	261	107	104	3.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	LEAD (PB)	250	1.2	273	263	109	105	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SELENIUM (SE)	250	1.5	254	248	101	98.6	2.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SILVER (AG)	100.0	0.94	99.5	96.5	98.6	95.6	3.1	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 7470A	MERCURY (HG)	4.00	ND	3.6	3.6	90.0	90.0	0.0	15	80-120	07/08/15	07/09/15	07/08/15	07/09/15	198716	AZ17910

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150624S-17911 MS - 198346**

Sample ID: AZ17911

Client ID: S67-SOIDW-061715

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 6010C	ARSENIC (AS)	250	ND	264	256	106	102	3.1	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	BARIUM (BA)	250	383	637	618	102	94.0	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CADMIUM (CD)	50.0	7.7	58.6	56.6	102	97.8	3.5	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CHROMIUM (CR)	250	ND	248	241	99.2	96.4	2.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	LEAD (PB)	250	255	514	499	104	97.6	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SELENIUM (SE)	250	ND	260	255	104	102	1.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SILVER (AG)	100.0	ND	101	97.7	101	97.7	3.3	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 7470A	MERCURY (HG)	4.00	ND	3.7	3.6	92.5	90.0	2.7	15	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198323	AZ17911

Comments: _____

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/06/15

Matrix: WATER Instrument: Jules

Blank ID: 150701A1-BLK Time Analyzed: 1222

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ17908	S67-MW020-061715	150706A	07/06/15 1827
AZ17907	S67-MW021-061715	150706A	07/06/15 1821
150701A1-LCS	Lab Control Spike	150706A	07/06/15 1227
150701A1-BLK	Blank	150706A	07/06/15 1222
AZ17909	S67-MW025-061715	150706A	07/06/15 1833

Comments: Batch: #61CJU-150701A1

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/10/15

Matrix: WATER Instrument: Jules

Blank ID: 150701A2-BLK Time Analyzed: 1002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150701A2-BLK	Blank	150710A	07/10/15 1002
AZ17909	S67-MW025-061715	150710A	07/10/15 1027
150701A2-LCS	Lab Control Spike	150710A	07/10/15 1008
AZ17908	S67-MW020-061715	150710A	07/10/15 1021
AZ17907	S67-MW021-061715	150710A	07/10/15 1014

Comments: Batch: #61CJU-150701A2

6010C/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: SOIL Instrument: Phoebe

Blank ID: 150624A-BLK Time Analyzed: 1409

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624A-MSD	Matrix SpikeD	150623A	06/24/15 1453
150624A-MS	Matrix Spike	150623A	06/24/15 1446
150624A-LCS	Lab Control Spike	150623A	06/24/15 1416
AZ17911	S67-SOIDW-061715	150623A	06/24/15 1423
150624A-BLK	Blank	150623A	06/24/15 1409

Comments: Batch: #TCLPM-150624A

6010C/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/08/15

Matrix: WATER Instrument: Phoebe

Blank ID: 150707A-BLK Time Analyzed: 1257

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150707A-LCS	Lab Control Spike	150708A	07/08/15 1302
150707A-MSD	Matrix SpikeD	150708A	07/08/15 1335
150707A-MS	Matrix Spike	150708A	07/08/15 1329
150707A-BLK	Blank	150708A	07/08/15 1257
AZ17910	S67-AQIDW-061715	150708A	07/08/15 1309

Comments: Batch: #TCLPM-150707A

7470A/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: SOIL Instrument: Freddie

Blank ID: 150624A-BLK Time Analyzed: 1452

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ17911	S67-SOIDW-061715	150624W	06/24/15 1456
150624A-BLK	Blank	150624W	06/24/15 1452
150624A-LCS	Lab Control Spike	150624W	06/24/15 1454
150624A-MS	Matrix Spike	150624W	06/24/15 1458
150624A-MSD	Matrix SpikeD	150624W	06/24/15 1501

Comments: Batch: #TCLPG-150624A

7470A/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150708A-BLK Time Analyzed: 1135

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150708A-LCS	Lab Control Spike	150709W	07/09/15 1138
150708A-MS	Matrix Spike	150709W	07/09/15 1146
150708A-MSD	Matrix SpikeD	150709W	07/09/15 1148
AZ17910	S67-AQIDW-061715	150709W	07/09/15 1144
150708A-BLK	Blank	150709W	07/09/15 1135

Comments: Batch: #TCLPG-150708A

Printed: 07/13/15 11:51:23 AM
Form 4, Blank Summary

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-MW021-061715

Sample Collection Date: 06/17/15

APPL ID: AZ17907

ARF: 76687

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	134	10.0	2.00	0.80	mg/L	10	06/19/15	06/19/15
EPA 300.0	NITRATE	0.77	0.5	0.18	0.04	mg/L	1	06/18/15	06/18/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	06/18/15	06/18/15
EPA 300.0	SULFATE	6.7	1.0	0.20	0.09	mg/L	1	06/18/15	06/18/15
SW846 9060	TOTAL ORGANIC CARBON	0.14 J	0.5	0.35	0.13	mg/L	1	07/01/15	07/01/15

J = Estimated value.

Printed: 07/13/15 3:47:26 PM

APPL-F1-SC-NoMC-REG MDLs

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-MW025-061715

Sample Collection Date: 06/17/15

APPL ID: AZ17909

ARF: 76687

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	91.7	2.0	0.40	0.16	mg/L	2	06/19/15	06/19/15
EPA 300.0	NITRATE	42.7	0.5	0.36	0.08	mg/L	2	06/19/15	06/19/15
EPA 300.0	SULFATE	121	10.0	2.00	0.90	mg/L	10	06/19/15	06/19/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	06/18/15	06/18/15
SW846 9060	TOTAL ORGANIC CARBON	0.35 U	0.5	0.35	0.13	mg/L	1	07/01/15	07/01/15

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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	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	CHLORIDE	1.4	1.0	0.20	0.08	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	07/01/15	07/01/15	#906-150701A-AZ17694

Wetlab SC-Blank-REG MDLs
Printed: 07/13/15 3:47:30 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	18.9	94.5	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.9	99.1	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	SULFATE	20.0	19.6	98.0	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.0	95.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	9.98	9.27	92.9	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	20.0	18.8	94.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
SW846 906	TOTAL ORGANIC CARBON	10.00	10.2	102	90-110	07/01/15	07/01/15	#906-150701A-AZ17694

Comments: _____

EPA 300.0

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/18/15

Matrix: WATER Instrument: Dionex

Blank ID: 150618B1-BLK Time Analyzed: 1424

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150618B1-BLK	Blank	39	06/18/15 1424
150618B1-LCS	Lab Control Spike	40	06/18/15 1435
AZ17907	S67-MW021-061715	43	06/18/15 1507
AZ17909	S67-MW025-061715	44	06/18/15 1517

Comments: Batch: #300W-150618B1

EPA 300.0

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/19/15

Matrix: WATER Instrument: Dionex

Blank ID: 150619B1-BLK Time Analyzed: 1737

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150619B1-BLK	Blank	37	06/19/15 1737
150619B1-LCS	Lab Control Spike	38	06/19/15 1747
AZ17907	S67-MW021-061715	43	06/19/15 1840
AZ17909	S67-MW025-061715	44	06/19/15 1851
AZ17909	S67-MW025-061715	45	06/19/15 1902

Comments: Batch: #300WD-150619B1

SW846 9060

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/01/15

Matrix: WATER Instrument: Tekmar

Blank ID: 150701A-BLK Time Analyzed: 1323

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ17907	S67-MW021-061715	11	07/01/15 1733
AZ17909	S67-MW025-061715	12	07/01/15 1759
150701A-BLK	Blank	2	07/01/15 1323
150701A-LCS	Lab Control Spike	3	07/01/15 1352

Comments: Batch: #906-150701A

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

July 15, 2015

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

Attn: Ed Corack

Title: Report of Data: Case 76687

Project: CTO JU11 112G02622 NSF Indian Head, MD

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

Dear Mr. Corack:

Four water and one soil samples were received June 18, 2015, at 3.0°C and 3.5°C. Written results for the requested analyses are provided on this July 15, 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.

The Corrosivity and Ignitability analyses weres subcontracted to ALS Environmental

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: 1000

Data Validation Package
for
CTO JU11 112G02622 NSF Indian Head
ARF 76687
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ALS Environmental Reports

SAMPLE RECEIPT INFORMATION

Sample receipt information

ARF: 76687

Project: CTO JU11 112G02622 NSF Indian Head, MD

Sample Receipt Information:

The samples were received on June 18, 2015, at 3.0C and 3.5°C. The samples were assigned Analytical Request Form (ARF) number 76687. The sample numbers and requested analyses were compared to the chain of custody. No exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
S67-MW021-061715	AZ17907	WATER	06/17/15	06/18/15
S67-MW020-061715	AZ17908	WATER	06/17/15	06/18/15
S67-MW025-061715	AZ17909	WATER	06/17/15	06/18/15
S67-AQIDW-061715	AZ17910	WATER	06/17/15	06/18/15
S67-SOIDW-061715	AZ17911	SOIL	06/17/15	06/18/15

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 samples were extracted according to EPA method 3510C. The soil sample was leached according to EPA method 1311 and the leachate was extracted according to EPA method 3510C. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS. All holding times were met.

Quality Control/Assurance

Spike Recovery

Laboratory Control Spikes (LCS) were used for quality assurance. In the 150623A TCLP LCS, one analyte recovered below its lower control limit. In the 150624B TCLP LCS, one analyte recovered above its lower control limit. All other LCS acceptance criteria were met.

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

Method blanks

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

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. In the 150624B TCLP LCS, one surrogate recovered above its 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 problem was encountered. All data generated are acceptable.

EPA Method 8270D-SIM
Polynuclear Aromatic Hydrocarbons

Sample Preparation and Analysis Information:

The water samples were extracted according to EPA method 3510C. The samples were analyzed according to EPA Method 8270D using an Agilent GC/MS with selective ion monitoring. All holding times were met.

Manual integrations were performed in accordance with APPL's SOP. Phenanthrene, anthracene, fluoranthene, and Benzo(b) fluoranthene were manually integrated in the second source standard. Chromatograms of before and after manual integration are enclosed.

Quality Control/Assurance

Spike Recovery

A Laboratory Control Spike (LCS) was used for quality assurance. 2-Methylnaphthalene recovered below the 45% lower control limit, but within the marginal exceedance limits, in the LCS. All other 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 blank.

Surrogates

Surrogate recoveries are summarized on Form 2 & 8. All 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 samples were analyzed with guidance from RSK-175. The samples were 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 analytical exception is noted. All data generated are acceptable.

EPA Method 6850

Perchlorate by LC-Mass Spec

Sample Preparation and Analysis Information:

The water 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 and the samples. 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 blank.

Spikes:

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

The Interference Check Sample (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 analytical exception is noted.

EPA Method 8330B
Energetics

Sample Preparation:

The water samples were extracted according to EPA method 3535. 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. Nitroglycerin was manually integrated in the LCS. 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 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 blank.

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 other analytical problem was encountered. The data generated are acceptable.

EPA Methods 6010C and 7470A
Total, Dissolved, and TCLP Metals

Digestion and Analysis Information:

The water samples were digested according to EPA methods 3010A and 7470A. The soil sample was leached according to EPA method 1311 and the leachate was digested according to EPA method 3010A and 7470A.

The samples were analyzed according to EPA method 6010C using a Perkin Elmer Optima 5300DV and according to EPA methods 7470A 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.

Blanks:

Lithium was detected above one half the LOQ in both the total and dissolved method blanks. The lithium detections in the samples were greater than ten times the blank hit. No other target metal was detected above one half the LOQ in the method blanks.

Spikes:

Laboratory Control Spikes (LCS), Matrix Spikes (MS/MSD), Post-Digestion Spikes (PDS), and Dilution Tests (DT) were used for quality assurance. All LCS acceptance criteria were met.

No sample was designated by the client for MS/MSD analysis. Samples S67-AQIDW-061715 and S67-SOIDW-061715 were designated by the laboratory for MS/MSD. All MS/MSD, DT and PDS acceptance criteria were met.

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 samples were prepared and analyzed according to the methods.

The samples were analyzed for Anions according to EPA method 300.0 using a Dionex DX500. The samples were analyzed for TOC according to SW846 9060 using a Tekmar Apollo 9000. The nitrate dilution for sample S67-MW025-061715 was analyzed more than 48 hours after collection. The initial dilution was with in hold time. All other holding times were met.

Quality Control/Assurance

Spike Recovery

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

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

Method blanks

For the EPA 300.0 CCBs on 6/18/15 and 6/19/15, there were detections for chloride, which were 10 times less than all sample detections. No other target analyte was detected one-half the limit of quantitation (LOQ) in the method blank.

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 other analytical exception was noted. The data generated are acceptable.

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 76687

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 # 07447
RAD Screen (Y/N): Y pH (Y/N): Y
Turn Around Type: STD

Received by: RBP
Date Received: 06/18/15 Time: 10:00
Delivered by: FEDEX
Shuttle Custody Seals (Y/N): Y Time Zone: -4
Chest Temp(s): 3.0°C, 3.5°C
Color: VOA,F-Pk,R-OrYel,SUB
Samples Chilled until Placed in Refrig/Freezer: Y
Project Manager: Cynthia Clark
QC Report Type: DVP4/LEDD/MD
Due Date: 07/09/15

Comments:
login to ed.corack@ amy.thomson@ & tobrena.sedlmyer@tetratech.com.
Rush results to Ed; 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://lsg.applications.tetratech.com/LEDDChecker2010/
EDD: email confirm to ed.corack@ amy.thomson@ & tobrena.sedlmyer@tetratech.com
Guidance: DOD QSM v4.2: DOD Forms, LOD Database
RSK: report Methane only; corrosivity/ignitability in water & soil sub to ALS-Kelso

Sample Distribution:
GC: 3-$87DJU11W, 3-$SIMDDODW, 2-$TCLPSDOD
Extractions: 3-_HPL6850, 3-_MWE3535, 5-_SEP004, 3-_SEP004S, 2-_TCLP827
VOA: 2-$RSK
LCMS: 3-$6850, 3-$83BJU11W
Metals: 3-$61CJU11W2(Al,B,Li,Zn), 3-$61CJU11WD2(Al,B,Li,Zn), 2-$TCLPGDOD(As,Ba,Cd,Cr,Pb,Se,Ag), 2-$TCLPMDOD(As,Ba,Cd,Cr,Pb,Se,Ag)
Wetlab: 2-$300W(NO2,NO3,CL,SO4), 2-$300WD(CL,SO4), 2-$906
Other: 3-_M3010, 3-_M3010F, 2-_M3010TCLP, 2-_M7470TCLP, 2-SUB-CASWA

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-MW021-061715	AZ17907W	06/17/15 10:00	$300W(NO2,NO3,CL,SO4), $300WD(CL,SO4), $61CJU11W2(Al,B,Li,Zn), $61CJU11WD2(Al,B,Li,Zn), $6850, $83BJU11W, $87DJU11W, $906, $RSK, $SIMDDODW -- Li spike
2.	S67-MW020-061715	AZ17908W	06/17/15 10:10	$61CJU11W2(Al,B,Li,Zn), $61CJU11WD2(Al,B,Li,Zn), $6850, $83BJU11W, $87DJU11W, $SIMDDODW -- Li spike

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -4 UTC

3.	S67-MW025-061715	AZ17909W	06/17/15	11:40	$300W(NO2,NO3,CL,SO4), $300WD(CL,SO4), $61CJU11W2(Al,B,Li,Zn), $61CJU11WD2(Al,B,Li,Zn), $6850, $83BJU11W, $87DJU11W, $906, $RSK, $SIMDDODW -- Li spike
4.	S67-AQIDW-061715	AZ17910W	06/17/15	12:50	$TCLPGDOD(As,Ba,Cd,Cr,Pb,Se,Ag), $TCLPMDOD(As,Ba,Cd,Cr,Pb,Se,Ag), $TCLPSDOD, SUB-CASWA
5.	S67-SOIDW-061715	AZ17911S	06/17/15	13:00	$TCLPGDOD(As,Ba,Cd,Cr,Pb,Se,Ag), $TCLPMDOD(As,Ba,Cd,Cr,Pb,Se,Ag), $TCLPSDOD, SUB-CASWA

APPL Sample Receipt Form

ARF# **76687**

Sample	Container Type	Count	pH
AZ17907	[4] PL 125mL	2	na
	[6] PL 500mL - HNO3	2	1.7
	[13] VOAs - HCL	1	na
	[17] Amber Liter	2	na
	[30] Amber 250mL - H2SO4	1	1.7
	[40] 500mL Amber, unprsrvd	2	na
AZ17908	[4] PL 125mL	1	na
	[6] PL 500mL - HNO3	2	1.7
	[17] Amber Liter	2	na
	[40] 500mL Amber, unprsrvd	2	na
AZ17909	[4] PL 125mL	2	na
	[6] PL 500mL - HNO3	2	1.7
	[13] VOAs - HCL	1	na
	[17] Amber Liter	2	na
	[30] Amber 250mL - H2SO4	1	1.7
	[40] 500mL Amber, unprsrvd	2	na
AZ17910	[17] Amber Liter	5	na
AZ17911	[20] 4oz Jar	4	na

Sample	Container Type	Count	pH

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 07447

76687 3.0 3.5

Client	Report to Contact	Sampler (Printed Name)	Quote No.
Tetra Tech	Ed Corack	Jacob Birkett	
Address	**Telephone No. / Fax No. / Email**	**Waybill No.**	**Page**
5700 Lakewright Dr. Suite 309	757-466-4908	FedEx 8744-3758-5910	1 of 1
City / State / Zip Code	**Preservative**		
Norfolk / VA / 23502	1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		
Project Name			
NSF-Indian Head Site CJ			
Project Number	**P.O Number**		
CTO-JU11 112G02622			

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: Energetics	PAHs, Phthalates	Total Metals	Diss. Metals	Perchlorate	Methane	TOC	Anions	TCLP Metals	TCLP SVOCs	Ign'd, Coros	TCLP, Metals, TCLP, SVOCs, Ignit
Number of Containers									2	2	1	1	1	1	1	1	1	3	1	4
Bottle (See Instructions on back)									G	I	F	F	C	A	E	C	H	H	I	M
Preservative									1	1	4	4	1	5	3	1	1	1	1	1
S67-MW021-061715	6-17-15	1000	G	X					X	X	X	X	X	X	X	X				
S67-MW020-061715	6-17-15	1010	G	X					X	X	X	X	X							
S67-MW025-061715	6-17-15	1140	G	X					X	X	X	X	X	X	X	X				
S67-AQIDW-061715	6-17-15	1250	C	X													X	X	X	
S67-SCIDW-061715	6-17-15	1300	C				X													X

Turn Around Time Required (Prior lab approval required for expedited TAT)
☒ Standard ☐ Rush (Please Specify)

Sample Disposal
☐ Return to Client ☒ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	6-17-15	1600	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by	6/18/15	10:00

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

COOLER RECEIPT FORM ARF: 76687

1) Project: CTO JU11 112G02622 NSF Indian Head Date Received: 06/18/15

2) Coolers: Number of Coolers: 2

3) YES Were custody seals present and intact?
How many? 4 Name/Date on seal? See below

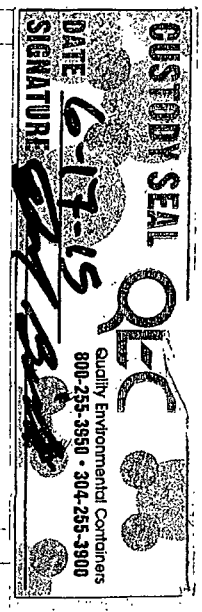
4) YES Was there a shipping slip? Carrier name: FEDEX

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: 3.5 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) NA 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 container?

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

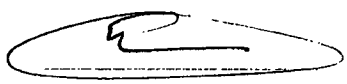
21) NA Was the pH of sodium hydroxide preserved samples for Cyanide > 12 and Sulfide >9?

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:

Note: Sample S67-AQIDW-061715 - Received all 5 containers amber liter, no plastic bottle.

Personnel receiving samples: YL Second reviewer: 

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 WATER

Blank Name/QCG: **150623W-17818 - 198680**
Batch ID: #87DJU-150623A

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	6/23/2015	7/7/2015
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	71.5	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	62.8	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	37.9	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	63.2	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	25.7	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	83.6	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 9:55:46 AM

Method Blank
TCLP Semivolatile 8270D

Blank Name/QCG: **150623W-17910 - 198746**
Batch ID: #TCLPS-150623A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/23/2015	7/7/2015
BLANK	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/23/2015	7/7/2015
BLANK	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/23/2015	7/7/2015
BLANK	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/23/2015	7/7/2015
BLANK	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/23/2015	7/7/2015
BLANK	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	89.4	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	78.5	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	47.3	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	79.0	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	32.0	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	105	50-135			%	6/23/2015	7/7/2015

Quant Method: Y625TCLP.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 4:29:35 PM

Method Blank
TCLP Semivolatile 8270D

Blank Name/QCG: **150624S-17911 - 198745**
Batch ID: #TCLPS-150624B

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
BLANK	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/25/2015	6/30/2015
BLANK	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/25/2015	6/30/2015
BLANK	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
BLANK	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/25/2015	6/30/2015
BLANK	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/25/2015	6/30/2015
BLANK	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/25/2015	6/30/2015
BLANK	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/25/2015	6/30/2015
BLANK	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
BLANK	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/25/2015	6/30/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	103	40-125			%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	104	50-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUOROPHENO	66.9	20-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: NITROBENZENE-	106	40-110			%	6/25/2015	6/30/2015
BLANK	SURROGATE: PHENOL (S)	45.0	10-115			%	6/25/2015	6/30/2015
BLANK	SURROGATE: TERPHENYL-D14	108	50-135			%	6/25/2015	6/30/2015

Quant Method: Y625TCLP.M
Run #: 0625Y049
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 4:29:33 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

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
150623A-BLK	Blank	40-125	71.5		50-110	62.8	
150623A-LCS	Lab Control Spike	40-125	59.0		50-110	55.4	
150623A-LCSD	Lab Control SpikeD	40-125	61.0		50-110	55.4	
AZ17907	S67-MW021-061715	40-125	60.7		50-110	56.2	
AZ17908	S67-MW020-061715	40-125	67.8		50-110	63.0	
AZ17909	S67-MW025-061715	40-125	62.2		50-110	63.2	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	20-110	37.9		40-110	63.2	
150623A-LCS	Lab Control Spike	20-110	40.1		40-110	57.6	
150623A-LCSD	Lab Control SpikeD	20-110	41.5		40-110	59.6	
AZ17907	S67-MW021-061715	20-110	42.2		40-110	65.7	
AZ17908	S67-MW020-061715	20-110	38.5		40-110	57.6	
AZ17909	S67-MW025-061715	20-110	43.6		40-110	66.8	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	10-115	25.7		50-135	83.6	
150623A-LCS	Lab Control Spike	10-115	27.6		50-135	67.9	
150623A-LCSD	Lab Control SpikeD	10-115	27.6		50-135	71.5	
AZ17907	S67-MW021-061715	10-115	30.5		50-135	83.4	
AZ17908	S67-MW020-061715	10-115	28.0		50-135	64.3	
AZ17909	S67-MW025-061715	10-115	31.2		50-135	77.5	

Comments: Batch: #87DJU-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

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
150623A-BLK	Blank	40-125	89.4		50-110	78.5	
150623A-LCS	Lab Control Spike	40-125	74.0		50-110	69.3	
AZ17910	S67-AQIDW-061715	40-125	84.2		50-110	76.3	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	20-110	47.3		40-110	79.0	
150623A-LCS	Lab Control Spike	20-110	50.0		40-110	72.0	
AZ17910	S67-AQIDW-061715	20-110	42.7		40-110	73.7	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150623A-BLK	Blank	10-115	32.0		50-135	105	
150623A-LCS	Lab Control Spike	10-115	34.5		50-135	84.8	
AZ17910	S67-AQIDW-061715	10-115	31.5		50-135	96.2	

Comments: Batch: #TCLPS-150623A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

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
150624B-BLK	Blank	40-125	103		50-110	104	
150624B-LCS	Lab Control Spike	40-125	111		50-110	103	
AZ17911	S67-SOIDW-061715	40-125	103		50-110	103	

Comments: Batch: #TCLPS-150624B

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: 2-FLUOROPHENOL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150624B-BLK	Blank	20-110	66.9		40-110	106	
150624B-LCS	Lab Control Spike	20-110	77.0		40-110	112	*
AZ17911	S67-SOIDW-061715	20-110	82.5		40-110	109	

Comments: Batch: #TCLPS-150624B

* = Recovery outside of Control Limits on QC Sample.

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

APPL ID.	Client Sample No.	SURROGATE: PHENOL (S)			SURROGATE: TERPHENYL-D14 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150624B-BLK	Blank	10-115	45.0		50-135	108	
150624B-LCS	Lab Control Spike	10-115	47.4		50-135	106	
AZ17911	S67-SOIDW-061715	10-115	60.7		50-135	104	

Comments: Batch: #TCLPS-150624B

Laboratory Control Spike Recoveries
EPA 8270D WATER

APPL ID: **150623W-17818 LCS - 198680**
Batch ID: #87DJU-150623A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
BIS (2-ETHYLHEXYL) PHTHALATE	50.0	29.9	30.8	59.8	61.6	40-125	3.0	30
BUTYL BENZYL PHTHALATE	50.0	33.4	34.6	66.8	69.2	45-115	3.5	30
DI-N-BUTYL PHTHALATE	50.0	31.9	32.0	63.8	64.0	55-115	0.31	30
DI-N-OCTYL PHTHALATE	50.0	29.5	30.3	59.0	60.6	35-135	2.7	30
DIETHYL PHTHALATE	50.0	28.8	29.2	57.6	58.4	40-120	1.4	30
DIMETHYL PHTHALATE	50.0	28.6	29.6	57.2	59.2	25-125	3.4	30
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	118	122	59.0	61.0	40-125		
SURROGATE: 2-FLUORBIPHENYL (S)	100	55.4	55.4	55.4	55.4	50-110		
SURROGATE: 2-FLUOROPHENOL (S)	200	80.2	82.9	40.1	41.5	20-110		
SURROGATE: NITROBENZENE-D5 (S)	100	57.6	59.6	57.6	59.6	40-110		
SURROGATE: PHENOL (S)	200	55.3	55.2	27.6	27.6	10-115		
SURROGATE: TERPHENYL-D14 (S)	100	67.9	71.5	67.9	71.5	50-135		

Comments: _____

Primary	SPK	DUP
Quant Method :	Y0625TT.M	Y0625TT.M
Extraction Date :	6/23/2015	6/23/2015
Analysis Date :	7/7/2015	7/7/2015
Instrument :	Yoda	Yoda
Run :	0625Y125	0625Y126
Initials :	DA	

Printed: 7/10/2015 9:55:37 AM
APPL Standard LCSD

Laboratory Control Spike Recovery
TCLP Semivolatile 8270D

APPL ID: **150623W-17910 LCS - 198746**
Batch ID: #TCLPS-150623A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	15.3	30.6	30-100
2,4,5-TRICHLOROPHENOL	50.0	35.6	71.2	50-110
2,4,6-TRICHLOROPHENOL	50.0	33.5	67.0	50-115
2,4-DNT	50.0	34.6	69.2	50-120
2-METHYLPHENOL	50.0	32.7	65.4	40-110
4-METHYLPHENOL	100	61.4	61.4	30-110
HEXACHLOROBENZENE	50.0	35.5	71.0	50-110
HEXACHLOROBUTADIENE	50.0	11.4	22.8 #	25-105
HEXACHLOROETHANE	50.0	16.0	32.0	30-95
NITROBENZENE	50.0	34.1	68.2	45-110
PENTACHLOROPHENOL	50.0	36.1	72.2	40-115
PHENOL	50.0	17.0	34.0	10-115
PYRIDINE	50.0	26.3	52.6	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	148	74.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	69.3	69.3	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	100	50.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	72.0	72.0	40-110
SURROGATE: PHENOL (S)	200	68.9	34.5	10-115
SURROGATE: TERPHENYL-D14 (S)	100	84.8	84.8	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/23/2015
Analysis Date :	7/7/2015
Instrument :	Yoda
Run :	0625Y125
Initials :	DA

Printed: 7/10/2015 4:48:53 PM
APPL Standard LCS

Laboratory Control Spike Recovery
TCLP Semivolatile 8270D

APPL ID: **150625S-17911 LCS - 198745**
Batch ID: #TCLPS-150624B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	43.4	86.8	30-100
2,4,5-TRICHLOROPHENOL	50.0	51.3	103	50-110
2,4,6-TRICHLOROPHENOL	50.0	49.8	99.6	50-115
2,4-DNT	50.0	51.1	102	50-120
2-METHYLPHENOL	50.0	45.5	91.0	40-110
4-METHYLPHENOL	100	84.3	84.3	30-110
HEXACHLOROBENZENE	50.0	51.6	103	50-110
HEXACHLOROBUTADIENE	50.0	41.9	83.8	25-105
HEXACHLOROETHANE	50.0	40.8	81.6	30-95
NITROBENZENE	50.0	55.5	111 #	45-110
PENTACHLOROPHENOL	50.0	55.3	111	40-115
PHENOL	50.0	25.0	50.0	10-115
PYRIDINE	50.0	29.6	59.2	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	221	111	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	103	103	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	154	77.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	112	112 #	40-110
SURROGATE: PHENOL (S)	200	94.7	47.4	10-115
SURROGATE: TERPHENYL-D14 (S)	100	106	106	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/25/2015
Analysis Date :	6/30/2015
Instrument :	Yoda
Run :	0625Y050
Initials :	DA

Printed: 7/10/2015 4:29:17 PM
APPL Standard LCS

EPA 8270D

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

Blank ID: 150623A-BLK Time Analyzed: 1621

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-BLK	Blank	0625Y124	7/7/2015 1621
150623A-LCS	Lab Control Spike	0625Y125	7/7/2015 1650
150623A-LCSD	Lab Control SpikeD	0625Y126	7/7/2015 1720
AZ17907	S67-MW021-061715	0625Y133	7/7/2015 2050
AZ17908	S67-MW020-061715	0625Y134	7/7/2015 2119
AZ17909	S67-MW025-061715	0625Y135	7/7/2015 2149

Comments: Batch: #87DJU-150623A

Printed: 7/10/2015 9:55:33 AM

Form 4, Blank Summary

EPA 8270D/TC

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 7/7/2015

Matrix: WATER Instrument: Yoda

Blank ID: 150623A-BLK Time Analyzed: 1621

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-BLK	Blank	0625Y124	7/7/2015 1621
150623A-LCS	Lab Control Spike	0625Y125	7/7/2015 1650
AZ17910	S67-AQIDW-061715	0625Y136	7/7/2015 2219

Comments: Batch: #TCLPS-150623A

EPA 8270D/TC

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 6/30/2015

Matrix: SOIL Instrument: Yoda

Blank ID: 150624B-BLK Time Analyzed: 1710

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624B-BLK	Blank	0625Y049	6/30/2015 1710
150624B-LCS	Lab Control Spike	0625Y050	6/30/2015 1740
AZ17911	S67-SOIDW-061715	0625Y051	6/30/2015 1809

Comments: Batch: #TCLPS-150624B

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: ~~0625Y001.D~~ 76687
Matrix: Soil rp 7-15-15
ID: SV Tune 5/14/15

rp 7-15-15
SDG No: ~~Yoda~~ 76687
Date Analyzed: 6/25/2015
Instrument: Yoda
Time Analyzed: 10:01

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		5ug/ml SVOC 06/25/15	0625Y002.D	6/25/2015 10:20
2		10ug/ml SVOC 06/25/1	0625Y003.D	6/25/2015 10:49
3		20ug/ml SVOC 06/25/1	0625Y004.D	6/25/2015 11:18
4		40ug/ml SVOC 06/25/1	0625Y005.D	6/25/2015 11:48
5		50ug/ml SVOC 06/25/1	0625Y006.D	6/25/2015 12:17
6		60ug/ml SVOC 06/25/1	0625Y007.D	6/25/2015 12:47
7		80ug/ml SVOC 06/25/1	0625Y008.D	6/25/2015 13:17
8		100ug/ml SVOC 06/25/	0625Y009.D	6/25/2015 13:46
9		50ug/ml SVOC SS 06/2	0625Y010.D	6/25/2015 14:15
10				
11				
12				
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14				
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16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	32.3
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.3
127	40 - 60% of mass 198	46.7
197	0 - 1.4% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	29.2
365	1 - 100% of mass 198	3.5
441	0.01 - 100% of mass 443	77.0
442	50 - 150% of mass 198	104.5
443	17 - 23% of mass 442	19.0

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: ~~0625Y114.D~~ 76687
Matrix: Water mp 7-15-15
ID: SV TUNE 5/14/15

mp 7-15-15
SDG No: ~~Yoda~~ 76687
Date Analyzed: 7/7/2015
Instrument: Yoda
Time Analyzed: 9:27

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV 50ug/ml SVOC 07/	0625Y122.D	7/7/2015 14:20
2				
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10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	33.3
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.2
127	40 - 60% of mass 198	47.6
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	27.2
365	1 - 100% of mass 198	3.3
441	0.01 - 100% of mass 443	75.7
442	40 - 150% of mass 198	93.3
443	17 - 23% of mass 442	19.0

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76687
Matrix: Water
ID: TUNE 5/14/15

SDG No: 76687
Date Analyzed: 6/30/2015
Instrument: Yoda
Time Analyzed: 10:15

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV 50ug/ml SVOC 06/	0625Y037.D	6/30/2015 10:33
2	Blank	150624B BLK 1/1000	0625Y049.D	6/30/2015 17:10
3	Lab Control Spike	150624B LCS-1 1/1000	0625Y050.D	6/30/2015 17:40
4	S67-SOIDW-061715	AZ17911S01 1/980	0625Y051.D	6/30/2015 18:09
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22				

m/e		
51	29.95 - 60.04% of mass 198	34.9
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.4
127	40 - 60% of mass 198	49.5
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	28.5
365	1 - 100% of mass 198	3.5
441	0.01 - 100% of mass 443	74.9
442	40 - 150% of mass 198	112.4
443	17 - 23% of mass 442	19.0

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76687
Matrix: Water
ID: SV TUNE 5/14/15

SDG No: 76687
Date Analyzed: 7/7/2015
Instrument: Yoda
Time Analyzed: 15:59

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	150623A BLK 1/1000	0625Y124.D	7/7/2015 16:21
2	Lab Control Spike	150623A LCS-1 1/1000	0625Y125.D	7/7/2015 16:50
3	Lab Control SpikeD	150623A LCSD-1 1/100	0625Y126.D	7/7/2015 17:20
4	S67-MW021-061715	AZ17907W07 1/860	0625Y133.D	7/7/2015 20:50
5	S67-MW020-061715	AZ17908W04 1/1040	0625Y134.D	7/7/2015 21:19
6	S67-MW025-061715	AZ17909W07 1/900	0625Y135.D	7/7/2015 21:49
7	S67-AQIDW-061715	AZ17910W01 1/1040	0625Y136.D	7/7/2015 22:19
8				
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20				
21				
22				

m/e		
51	29.95 - 60.04% of mass 198	38.3
68	0 - 2% of mass 69	0.0
70	0 - 2% of mass 69	0.4
127	40 - 60% of mass 198	51.0
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	26.8
365	1 - 100% of mass 198	3.3
441	0.01 - 100% of mass 443	74.4
442	40 - 150% of mass 198	101.1
443	17 - 23% of mass 442	18.9

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	609828	5.33	2766350	6.76	1666410	8.78
	UPPER LIMIT	1219656	5.83	5532700	7.26	3332820	9.28
	LOWER LIMIT	304914	4.83	1383175	6.26	833205	8.28
	SAMPLE NO.						
01	50ug/ml SVOC SS 06/25	527215	5.33	2396380	6.76	1479580	8.78
02	CCV 50ug/ml SVOC 07/	662751	5.32	2995880	6.76	1688380	8.78
03	150623A BLK 1/1000	674308	5.32	2834290	6.75	1489740	8.77
04	150623A LCS-1 1/1000	682453	5.32	3038250	6.75	1714730	8.77
05	150623A LCSD-1 1/100	687519	5.32	3035270	6.76	1707250	8.77
06	AZ17907W07 1/860	805870	5.32	3423350	6.75	2014110	8.77
07	AZ17908W04 1/1040	777191	5.32	3509360	6.75	1779400	8.77
08	AZ17909W07 1/900	745407	5.32	3176250	6.75	1759900	8.77
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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.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	2970620	10.52	2670450	13.61	1615430	15.44
	UPPER LIMIT	5941240	11.02	5340900	14.11	3230860	15.94
	LOWER LIMIT	1485310	10.02	1335225	13.11	807715	14.94
	SAMPLE NO.						
01	50ug/ml SVOC SS 06/25	2611830	10.52	2318530	13.61	1410320	15.43
02	CCV 50ug/ml SVOC 07/	2737130	10.51	2072800	13.61	1238560	15.43
03	150623A BLK 1/1000	2536970	10.51	1871500	13.60	1118510	15.42
04	150623A LCS-1 1/1000	2785460	10.51	2100930	13.60	1287560	15.42
05	150623A LCSD-1 1/100	2760610	10.51	2107980	13.61	1292720	15.42
06	AZ17907W07 1/860	3350070	10.51	2490860	13.60	1512000	15.42
07	AZ17908W04 1/1040	3353350	10.51	2664670	13.60	1417230	15.42
08	AZ17909W07 1/900	2956270	10.51	2144890	13.60	1349560	15.42
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AREA UPPER LIMIT = +100% of internal standard area.
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8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	609828	5.33	2766350	6.76	1666410	8.78
	UPPER LIMIT	1219656	5.83	5532700	7.26	3332820	9.28
	LOWER LIMIT	304914	4.83	1383175	6.26	833205	8.28
	SAMPLE NO.						
01	CCV 50ug/ml SVOC 06/	708053	5.32	3151520	6.76	1795300	8.77
02	150624B BLK 1/1000	751837	5.32	3304370	6.75	1837700	8.77
03	150624B LCS-1 1/1000	646877	5.33	2870630	6.76	1640930	8.77
04	AZ17911S01 1/980	726027	5.32	3150900	6.75	1733790	8.77
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INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	2970620	10.52	2670450	13.61	1615430	15.44
	UPPER LIMIT	5941240	11.02	5340900	14.11	3230860	15.94
	LOWER LIMIT	1485310	10.02	1335225	13.11	807715	14.94
	SAMPLE NO.						
01	CCV 50ug/ml SVOC 06/	2868580	10.51	2183850	13.61	1202900	15.42
02	150624B BLK 1/1000	3074170	10.51	2286960	13.60	1435170	15.42
03	150624B LCS-1 1/1000	2634540	10.51	2316510	13.61	1624450	15.43
04	AZ17911S01 1/980	2893610	10.51	2346830	13.60	1616080	15.42
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8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	609828	5.33	2766350	6.76	1666410	8.78
	UPPER LIMIT	1219656	5.83	5532700	7.26	3332820	9.28
	LOWER LIMIT	304914	4.83	1383175	6.26	833205	8.28
	SAMPLE NO.						
01	50ug/ml SVOC SS 06/2	527215	5.33	2396380	6.76	1479580	8.78
02	CCV 50ug/ml SVOC 06/	708053	5.32	3151520	6.76	1795300	8.77
03	150623A BLK 1/1000	674308	5.32	2834290	6.75	1489740	8.77
04	150623A LCS-1 1/1000	682453	5.32	3038250	6.75	1714730	8.77
05	AZ17910W01 1/1040	693919	5.32	2957300	6.75	1613400	8.77
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8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0625Y006.D Date Analyzed: 06/25/15

Instrument ID: Yoda Time Analyzed: 12:17

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	2970620	10.52	2670450	13.61	1615430	15.44
	UPPER LIMIT	5941240	11.02	5340900	14.11	3230860	15.94
	LOWER LIMIT	1485310	10.02	1335225	13.11	807715	14.94
	SAMPLE NO.						
01	50ug/ml SVOC SS 06/2	2611830	10.52	2318530	13.61	1410320	15.43
02	CCV 50ug/ml SVOC 06/	2868580	10.51	2183850	13.61	1202900	15.42
03	150623A BLK 1/1000	2536970	10.51	1871500	13.60	1118510	15.42
04	150623A LCS-1 1/1000	2785460	10.51	2100930	13.60	1287560	15.42
05	AZ17910W01 1/1040	2698380	10.51	2067650	13.60	1325440	15.42
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* Values outside of QC limits.

EPA METHOD 8270D
Semivolatile Organic Compounds
Sample Data

APPL, INC.

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: 76687

Sample ID: S67-MW021-061715

APPL ID: AZ17907

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	60.7	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	56.2	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	42.2	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	65.7	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	30.5	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	83.4	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y133
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:28 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y133.D Vial: 33
Acq On : 7 Jul 15 20:50 Operator: MA
Sample : AZ17907W07 1/860 Inst : Yoda
Misc : water Multiplr: 1.16

Quant Time: Jul 9 8:52 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	805870	40.00	ppb	-0.01
7) Napthalene-D8(IS)	6.75	136	3423348	40.00	ppb	-0.01
13) Acenaphthene-D10(IS)	8.77	164	2014113	40.00	ppb	-0.01
23) Phenanthrene-D10(IS)	10.51	188	3350065	40.00	ppb	-0.01
27) Chrysene-D12(IS)	13.60	240	2490857	40.00	ppb	-0.01
32) Perylene-D12(IS)	15.42	264	1512000	40.00	ppb	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.78	112	2431577	98.10	ppb	-0.02
Spiked Amount 232.558			Recovery =	42.182%		
3) Phenol-D6 (S)	4.90	99	2172358	70.96	ppb	-0.01
Spiked Amount 232.558			Recovery =	30.512%		
8) Nitrobenzene-D5(S)	5.94	82	2205026	76.40	ppb	-0.01
Spiked Amount 116.279			Recovery =	65.704%		
16) 2-Fluorobiphenyl(S)	7.99	172	3843574	65.34	ppb	-0.01
Spiked Amount 116.279			Recovery =	56.195%		
22) 2,4,6-Tribromophenol(S)	9.70	330	805130	141.13	ppb	0.00
Spiked Amount 232.558			Recovery =	60.684%		
28) Terphenyl-D14(S)	12.38	244	5232645	96.98	ppb	0.00
Spiked Amount 116.279			Recovery =	83.399%		
Target Compounds						Qvalue
17) Dimethyl phthalate	8.45	163	36116	0.55	ppb	98
21) Diethyl phthalate	9.28	149	3088	0.05	ppb	99

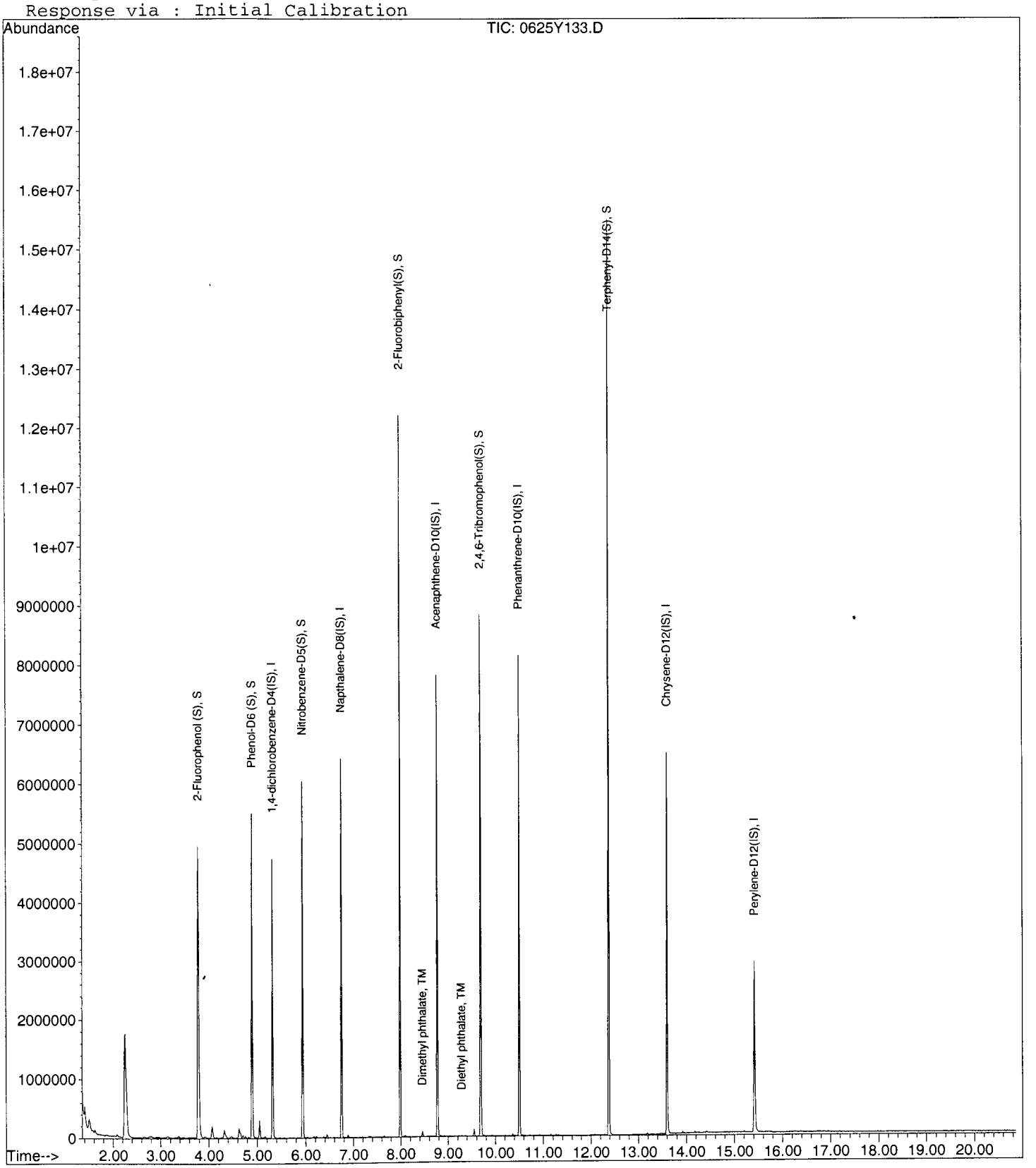
(#) = qualifier out of range (m) = manual integration

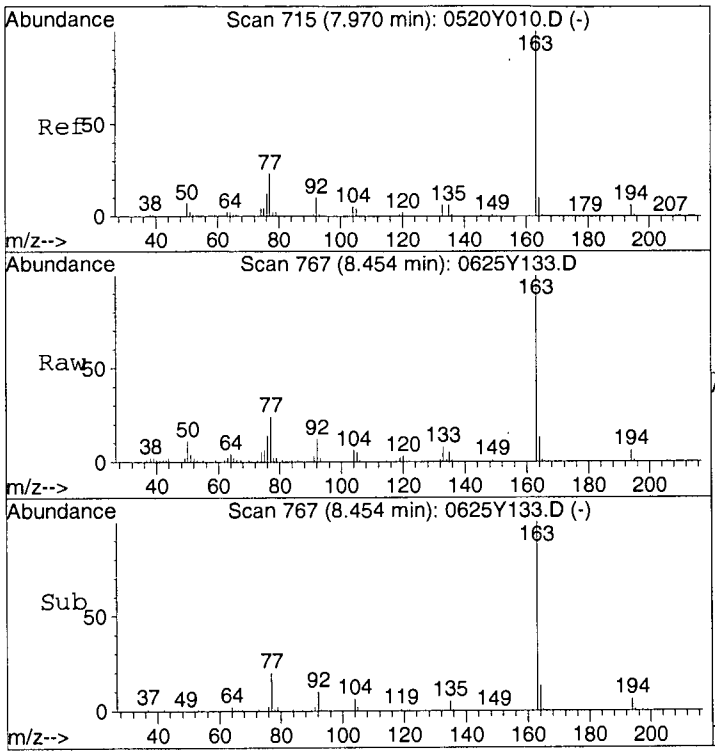
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y133.D Vial: 33
Acq On : 7 Jul 15 20:50 Operator: MA
Sample : AZ17907W07 1/860 Inst : Yoda
Misc : water Multiplr: 1.16

Quant Time: Jul 9 8:52 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration

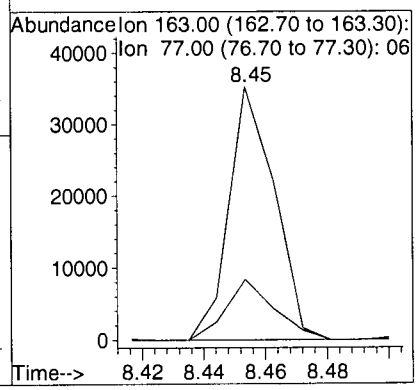


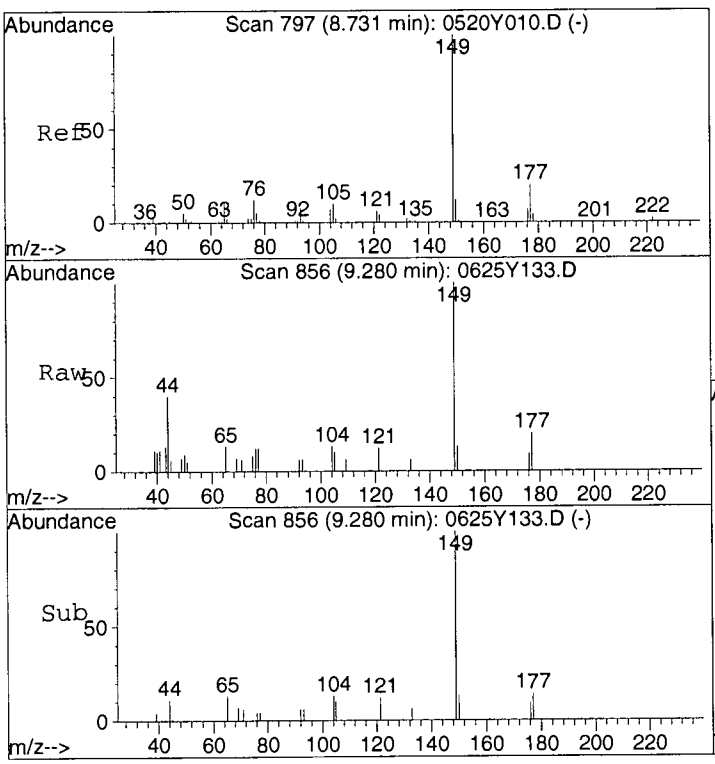


#17
Dimethyl phthalate
Concen: 0.55 ppb
RT: 8.45 min Scan# 767
Delta R.T. -0.02 min
Lab File: 0625Y133.D
Acq: 7 Jul 15 20:50

Tgt Ion:163 Resp: 36116

Ion	Ratio	Lower	Upper
163	100		
77	23.8	16.0	29.6

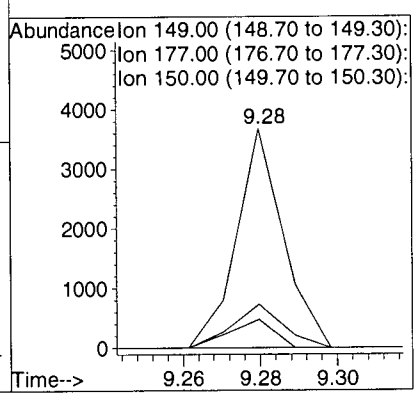




#21
Diethyl phthalate
Concen: 0.05 ppb
RT: 9.28 min Scan# 856
Delta R.T. -0.02 min
Lab File: 0625Y133.D
Acq: 7 Jul 15 20:50

Tgt Ion:149 Resp: 3088

Ion	Ratio	Lower	Upper
149	100		
177	20.1	14.1	26.1
150	13.2	8.5	15.7



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: 76687

Sample ID: S67-MW020-061715

APPL ID: AZ17908

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	67.8	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.0	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	38.5	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	57.6	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	28.0	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	64.3	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y134
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:29 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y134.D Vial: 34
Acq On : 7 Jul 15 21:19 Operator: MA
Sample : AZ17908W04 1/1040 Inst : Yoda
Misc : water Multiplr: 0.96

Quant Time: Jul 9 8:53 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	777191	40.00	ppb	-0.01
7) Napthalene-D8(IS)	6.75	136	3509355	40.00	ppb	-0.01
13) Acenaphthene-D10(IS)	8.77	164	1779397	40.00	ppb	-0.01
23) Phenanthrene-D10(IS)	10.51	188	3353349	40.00	ppb	-0.01
27) Chrysene-D12(IS)	13.60	240	2664671	40.00	ppb	-0.01
32) Perylene-D12(IS)	15.42	264	1417228	40.00	ppb	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.79	112	2142208	74.10	ppb	-0.01
Spiked Amount 192.308			Recovery =	38.534%		
3) Phenol-D6 (S)	4.90	99	1924378	53.90	ppb	-0.01
Spiked Amount 192.308			Recovery =	28.026%		
8) Nitrobenzene-D5(S)	5.94	82	1982882	55.42	ppb	-0.01
Spiked Amount 96.154			Recovery =	57.637%		
16) 2-Fluorobiphenyl(S)	7.99	172	3806165	60.57	ppb	-0.01
Spiked Amount 96.154			Recovery =	62.989%		
22) 2,4,6-Tribromophenol(S)	9.70	330	794347	130.32	ppb	0.00
Spiked Amount 192.308			Recovery =	67.768%		
28) Terphenyl-D14(S)	12.38	244	4315843	61.83	ppb	0.00
Spiked Amount 96.154			Recovery =	64.300%		
Target Compounds						Qvalue
17) Dimethyl phthalate	8.45	163	55493	0.80	ppb	100
21) Diethyl phthalate	9.28	149	3485	0.05	ppb	97

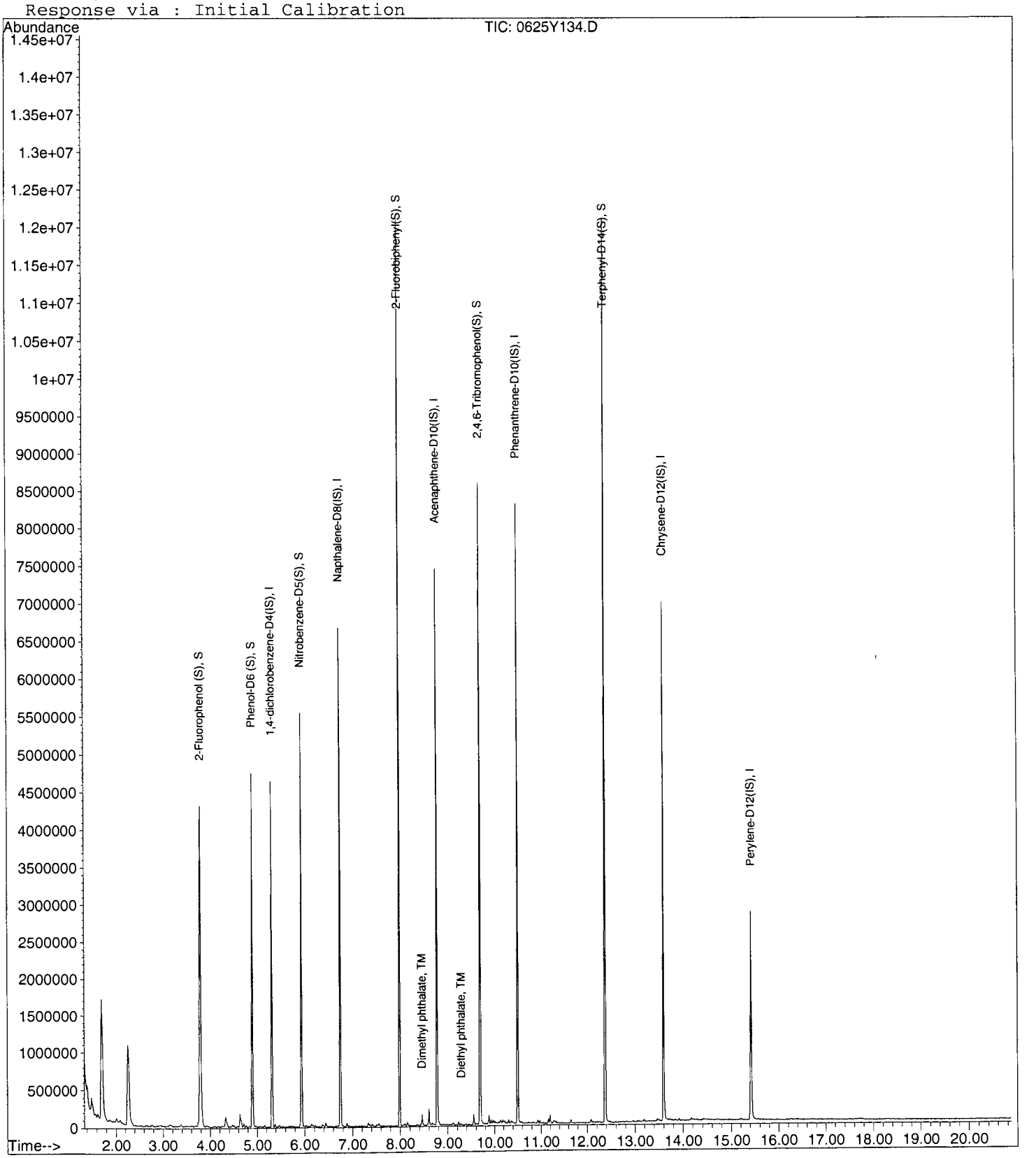
(#) = qualifier out of range (m) = manual integration

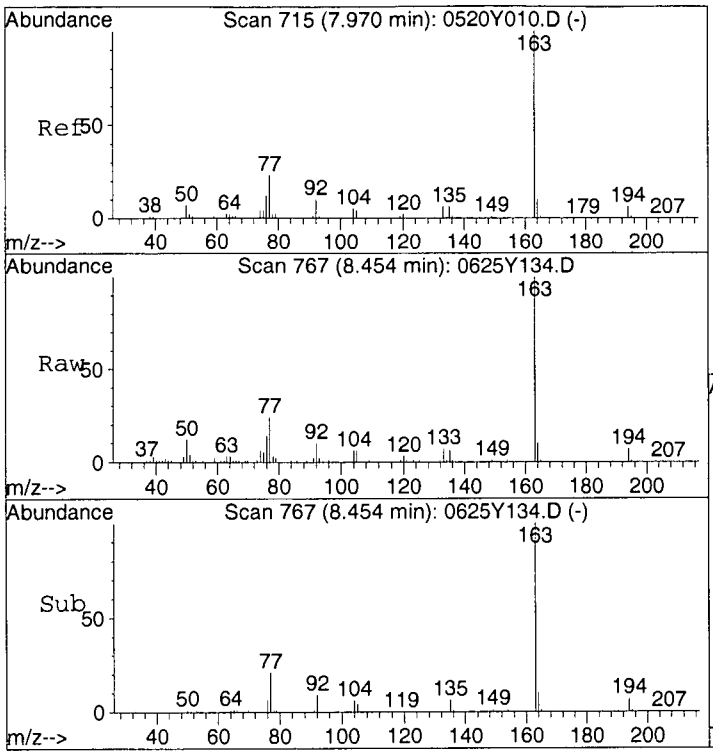
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y134.D Vial: 34
Acq On : 7 Jul 15 21:19 Operator: MA
Sample : AZ17908W04 1/1040 Inst : Yoda
Misc : water Multiplr: 0.96

Quant Time: Jul 9 8:53 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration

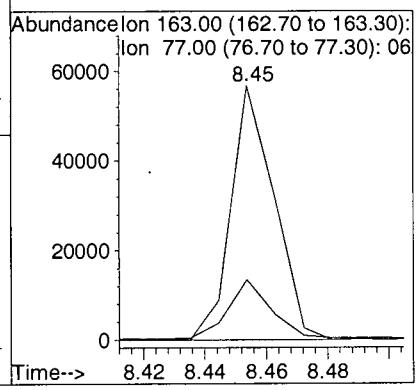


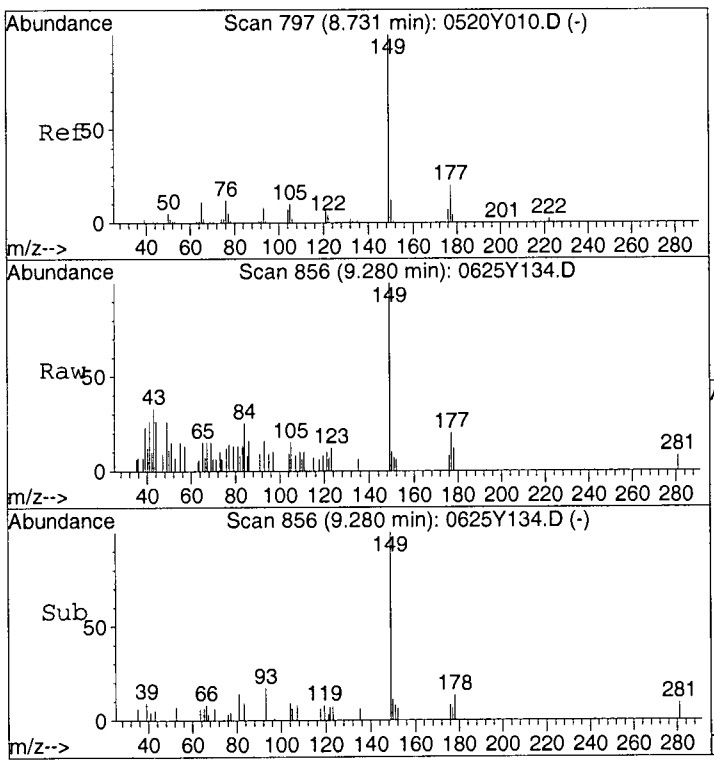


#17
Dimethyl phthalate
Concen: 0.80 ppb
RT: 8.45 min Scan# 767
Delta R.T. -0.02 min
Lab File: 0625Y134.D
Acq: 7 Jul 15 21:19

Tgt Ion:163 Resp: 55493

Ion	Ratio	Lower	Upper
163	100		
77	23.0	16.0	29.6

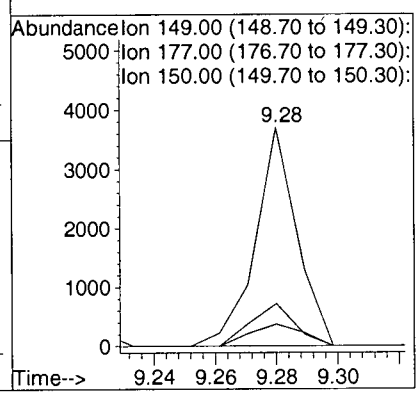




#21
Diethyl phthalate
Concen: 0.05 ppb
RT: 9.28 min Scan# 856
Delta R.T. -0.02 min
Lab File: 0625Y134.D
Acq: 7 Jul 15 21:19

Tgt Ion:149 Resp: 3485

Ion	Ratio	Lower	Upper
149	100		
177	19.5	14.1	26.1
150	10.0	8.5	15.7



EPA 8270D WATER

Tetra Tech
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APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76687

Sample ID: S67-MW025-061715

APPL ID: AZ17909

Sample Collection Date: 6/17/2015

QCG: #87DJU-150623A-198680

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	6/23/2015	7/7/2015
EPA 8270D	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
EPA 8270D	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
EPA 8270D	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2,4,6-TRIBROMOPHEN	62.2	40-125			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUORBIPHENYL (S)	63.2	50-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: 2-FLUOROPHENOL (S)	43.6	20-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: NITROBENZENE-D5 (S)	66.8	40-110			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: PHENOL (S)	31.2	10-115			%	6/23/2015	7/7/2015
EPA 8270D	SURROGATE: TERPHENYL-D14 (S)	77.5	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y135
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 9:55:29 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y135.D Vial: 35
Acq On : 7 Jul 15 21:49 Operator: MA
Sample : AZ17909W07 1/900 Inst : Yoda
Misc : water Multiplr: 1.11

Quant Time: Jul 9 8:57 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	745407	40.00	ppb		-0.01
7) Napthalene-D8(IS)	6.75	136	3176253	40.00	ppb		-0.01
13) Acenaphthene-D10(IS)	8.77	164	1759904	40.00	ppb		-0.01
23) Phenanthrene-D10(IS)	10.51	188	2956274	40.00	ppb		-0.01
27) Chrysene-D12(IS)	13.60	240	2144886	40.00	ppb		-0.01
32) Perylene-D12(IS)	15.42	264	1349560	40.00	ppb		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.79	112	2322453	96.79	ppb		-0.01
Spiked Amount 222.222			Recovery =	43.557%			
3) Phenol-D6 (S)	4.90	99	2055045	69.35	ppb		-0.01
Spiked Amount 222.222			Recovery =	31.205%			
8) Nitrobenzene-D5(S)	5.94	82	2079014	74.19	ppb		-0.01
Spiked Amount 111.111			Recovery =	66.768%			
16) 2-Fluorobiphenyl(S)	7.99	172	3778900	70.26	ppb		-0.01
Spiked Amount 111.111			Recovery =	63.230%			
22) 2,4,6-Tribromophenol(S)	9.70	330	721236	138.25	ppb		0.00
Spiked Amount 222.222			Recovery =	62.213%			
28) Terphenyl-D14(S)	12.38	244	4186834	86.10	ppb		0.00
Spiked Amount 111.111			Recovery =	77.495%			
Target Compounds							Qvalue
17) Dimethyl phthalate	8.45	163	27070	0.45	ppb		100
25) Pentachlorophenol	10.26	266	1942	-2.18	ppb	#	1

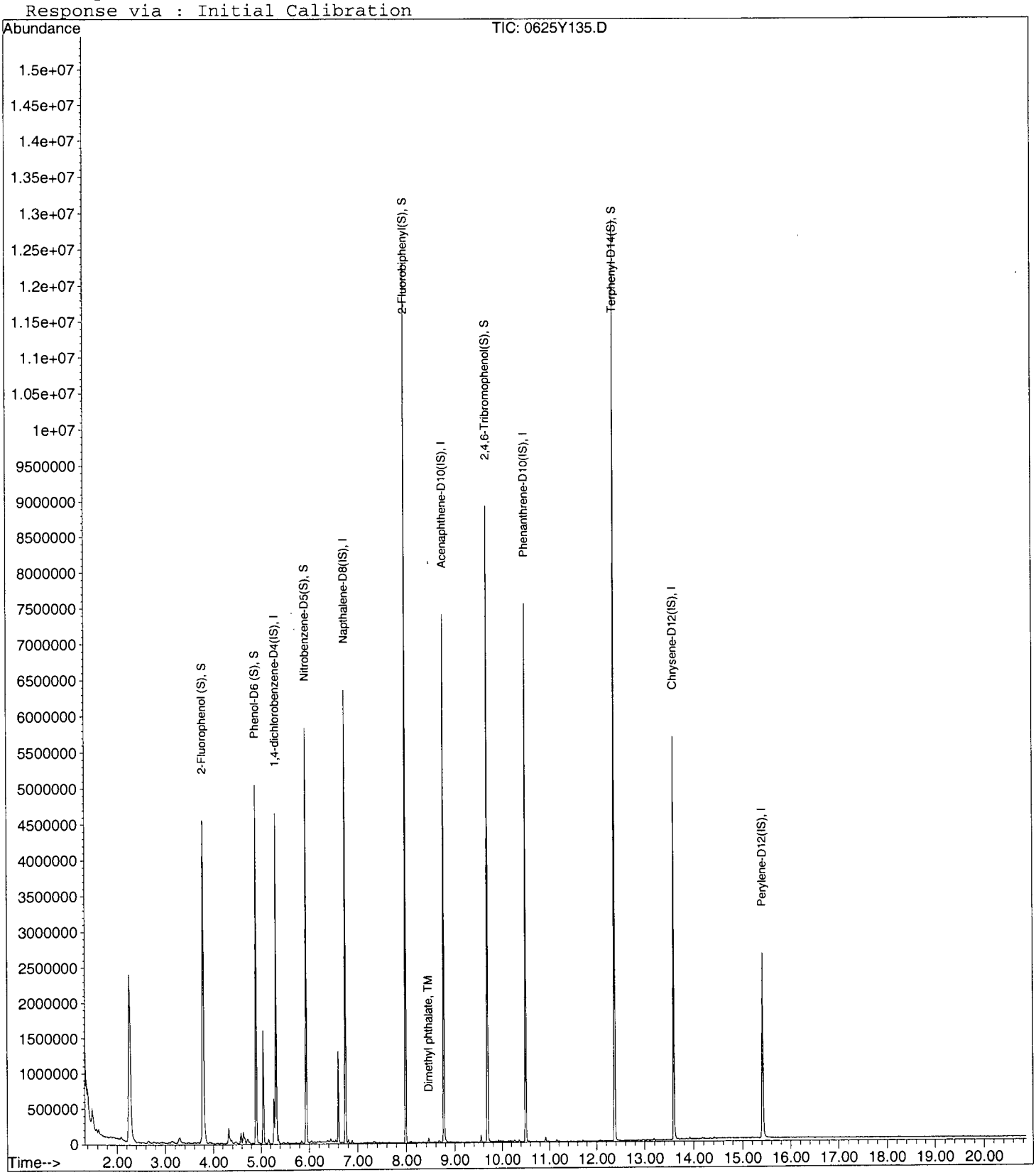
(#) = qualifier out of range (m) = manual integration

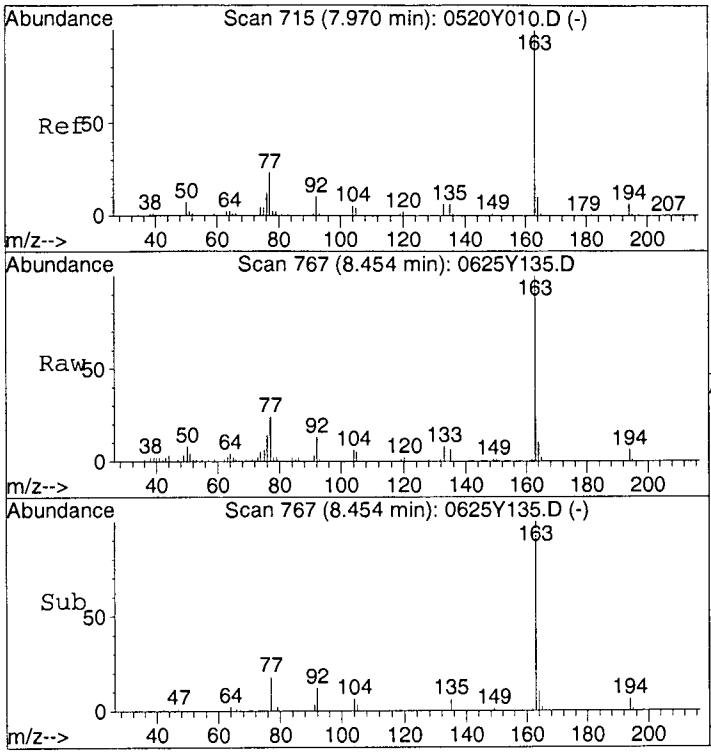
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y135.D Vial: 35
Acq On : 7 Jul 15 21:49 Operator: MA
Sample : AZ17909W07 1/900 Inst : Yoda
Misc : water Multiplr: 1.11

Quant Time: Jul 9 8:57 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration

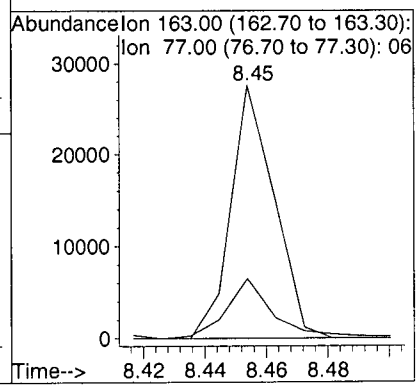




#17
Dimethyl phthalate
Concen: 0.45 ppb
RT: 8.45 min Scan# 767
Delta R.T. -0.02 min
Lab File: 0625Y135.D
Acq: 7 Jul 15 21:49

Tgt Ion:163 Resp: 27070

Ion	Ratio	Lower	Upper
163	100		
77	22.6	16.0	29.6



TCLP Semivolatile 8270D

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Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

ARF: 76687

Sample ID: S67-AQIDW-061715

APPL ID: AZ17910

Sample Collection Date: 6/17/2015

QCG: #TCLPS-150623A-198746

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D/	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/23/2015	7/7/2015
EPA 8270D/	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/23/2015	7/7/2015
EPA 8270D/	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/23/2015	7/7/2015
EPA 8270D/	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2,4,6-TRIBROMOPHEN	84.2	40-125			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2-FLUORBIPHENYL (S)	76.3	50-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: 2-FLUOROPHENOL (S)	42.7	20-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: NITROBENZENE-D5 (S)	73.7	40-110			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: PHENOL (S)	31.5	10-115			%	6/23/2015	7/7/2015
EPA 8270D/	SURROGATE: TERPHENYL-D14 (S)	96.2	50-135			%	6/23/2015	7/7/2015

Quant Method: Y625TCLP.M
Run #: 0625Y136
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 4:28:39 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y136.D Vial: 36
Acq On : 7 Jul 15 22:19 Operator: MA
Sample : AZ17910W01 1/1040 Inst : Yoda
Misc : water Multiplr: 0.96

Quant Time: Jul 10 15:47 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	693919	50.00	ppb	-0.01
10) Napthalene-D8(IS)	6.75	136	2957295	50.00	ppb	-0.01
14) Acenaphthene-D10(IS)	8.77	164	1613397	50.00	ppb	-0.01
20) Phenanthrene-D10(IS)	10.51	188	2698378	50.00	ppb	-0.01
23) Chrysene-D12(IS)	13.60	240	2067646	50.00	ppb	-0.01
25) Perylene-D12(IS)	15.42	264	1325438	50.00	ppb	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol (S)	3.78	112	1694587	82.07	ppb	-0.02
Spiked Amount 192.308			Recovery =	42.674%		
4) Phenol-D6 (S)	4.90	99	1551471	60.55	ppb	-0.01
Spiked Amount 192.308			Recovery =	31.486%		
11) Nitrobenzene-D5(S)	5.94	82	1709739	70.88	ppb	-0.01
Spiked Amount 96.154			Recovery =	73.718%		
17) 2-Fluorobiphenyl(S)	7.99	172	3344080	73.36	ppb	-0.01
Spiked Amount 96.154			Recovery =	76.294%		
19) 2,4,6-Tribromophenol(S)	9.70	330	715488	161.83	ppb	0.00
Spiked Amount 192.308			Recovery =	84.152%		
24) Terphenyl-D14(S)	12.38	244	4010222	92.55	ppb	0.00
Spiked Amount 96.154			Recovery =	96.248%		

Target Compounds			Qvalue
2) Pyridine	0.00	52	N.D.
5) Phenol	0.00	94	N.D. d
6) 1,4-DCB	0.00	146	N.D.
7) 2-Methylphenol	0.00	108	N.D. d
8) 3&4-Methylphenol	0.00	107	N.D. d
9) Hexachloroethane	0.00	117	N.D. d
12) Nitrobenzene	0.00	77	N.D. d
13) Hexachlorobutadiene	0.00	225	N.D.
15) 2,4,6-Trichlorophenol	0.00	196	N.D.
16) 2,4,5-Trichlorophenol	0.00	196	N.D.
18) 2,4-DNT	0.00	165	N.D. d
21) Hexachlorobenzene	0.00	284	N.D.
22) Pentachlorophenol	0.00	266	N.D.

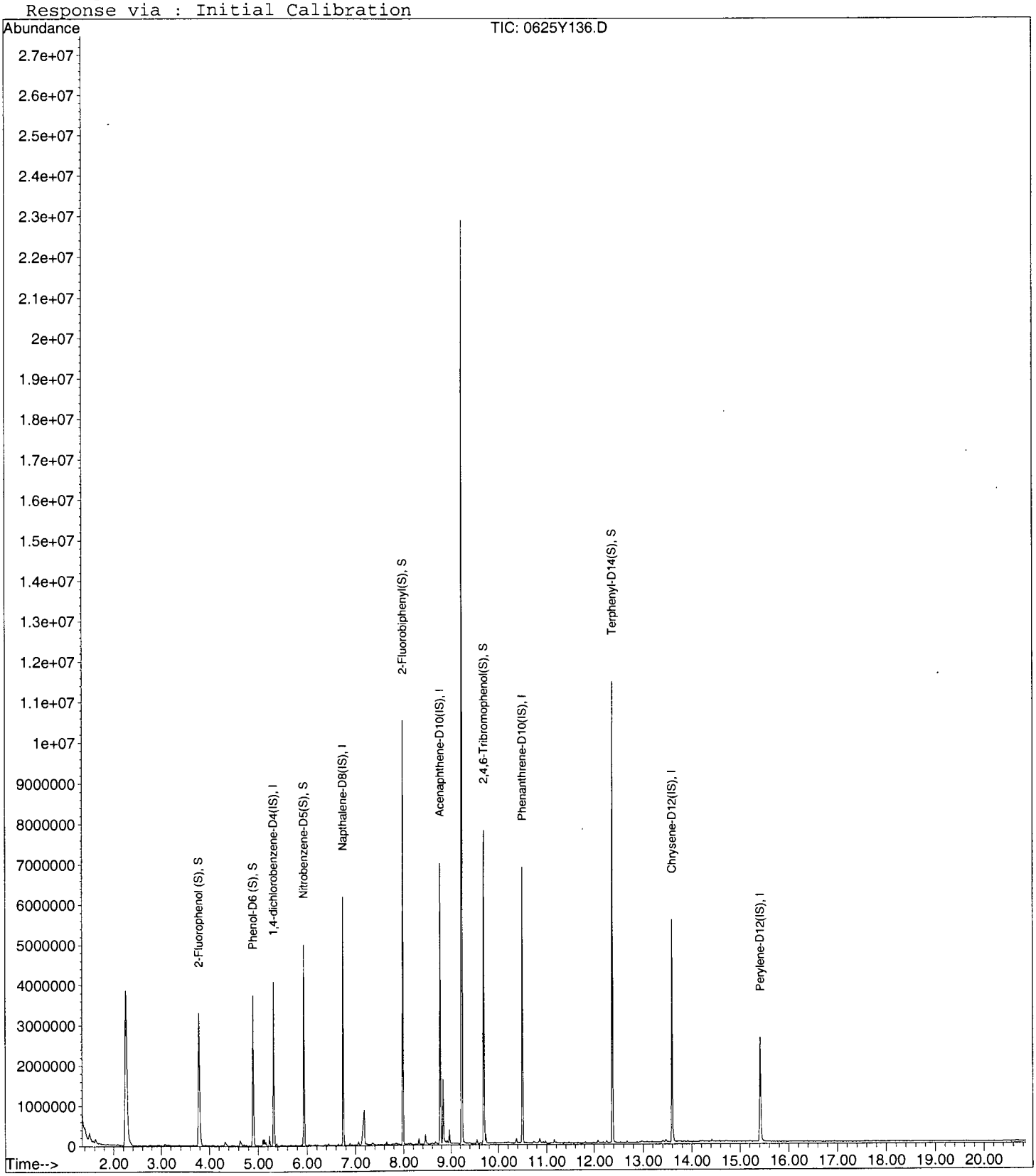
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y136.D Vial: 36
Acq On : 7 Jul 15 22:19 Operator: MA
Sample : AZ17910W01 1/1040 Inst : Yoda
Misc : water Multiplr: 0.96

Quant Time: Jul 10 15:47 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



TCLP Semivolatile 8270D

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-SOIDW-061715
Sample Collection Date: 6/17/2015

ARF: 76687
APPL ID: AZ17911
QCG: #TCLPS-150624B-198745

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8270D/	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/25/2015	6/30/2015
EPA 8270D/	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/25/2015	6/30/2015
EPA 8270D/	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/25/2015	6/30/2015
EPA 8270D/	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2,4,6-TRIBROMOPHEN	103	40-125			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2-FLUORBIPHENYL (S)	103	50-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: 2-FLUOROPHENOL (S)	82.5	20-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: NITROBENZENE-D5 (S)	109	40-110			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: PHENOL (S)	60.7	10-115			%	6/25/2015	6/30/2015
EPA 8270D/	SURROGATE: TERPHENYL-D14 (S)	104	50-135			%	6/25/2015	6/30/2015

Quant Method: Y625TCLP.M
Run #: 0625Y051
Instrument: Yoda
Sequence: Y150625
Dilution Factor: 1
Initials: DA

Printed: 7/10/2015 4:28:39 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y051.D Vial: 51
Acq On : 30 Jun 15 18:09 Operator: MA
Sample : AZ17911S01 1/980 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:22 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	726027	50.00	ppb	0.00
10) Napthalene-D8(IS)	6.75	136	3150898	50.00	ppb	0.00
14) Acenaphthene-D10(IS)	8.77	164	1733788	50.00	ppb	0.00
20) Phenanthrene-D10(IS)	10.51	188	2893608	50.00	ppb	0.00
23) Chrysene-D12(IS)	13.60	240	2346831	50.00	ppb	0.00
25) Perylene-D12(IS)	15.42	264	1616078	50.00	ppb	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol (S)	3.79	112	3427334	164.99	ppb	0.00
Spiked Amount 200.000			Recovery =	82.493%		
4) Phenol-D6 (S)	4.90	99	3106753	121.47	ppb	0.00
Spiked Amount 200.000			Recovery =	60.735%		
11) Nitrobenzene-D5(S)	5.94	82	2699604	109.25	ppb	0.00
Spiked Amount 100.000			Recovery =	109.246%		
17) 2-Fluorobiphenyl(S)	7.99	172	4841802	102.79	ppb	0.00
Spiked Amount 100.000			Recovery =	102.794%		
19) 2,4,6-Tribromophenol(S)	9.70	330	938964	205.53	ppb	0.00
Spiked Amount 200.000			Recovery =	102.767%		
24) Terphenyl-D14(S)	12.38	244	4918911	104.01	ppb	0.00
Spiked Amount 100.000			Recovery =	104.012%		

Target Compounds				Qvalue
2) Pyridine	0.00	52	N.D. d	
5) Phenol	0.00	94	N.D. d	
6) 1,4-DCB	0.00	146	N.D.	
7) 2-Methylphenol	0.00	108	N.D. d	
8) 3&4-Methylphenol	0.00	107	N.D. d	
9) Hexachloroethane	0.00	117	N.D. d	
12) Nitrobenzene	0.00	77	N.D. d	
13) Hexachlorobutadiene	0.00	225	N.D.	
15) 2,4,6-Trichlorophenol	0.00	196	N.D. d	
16) 2,4,5-Trichlorophenol	0.00	196	N.D. d	
18) 2,4-DNT	0.00	165	N.D. d	
21) Hexachlorobenzene	0.00	284	N.D.	
22) Pentachlorophenol	0.00	266	N.D.	

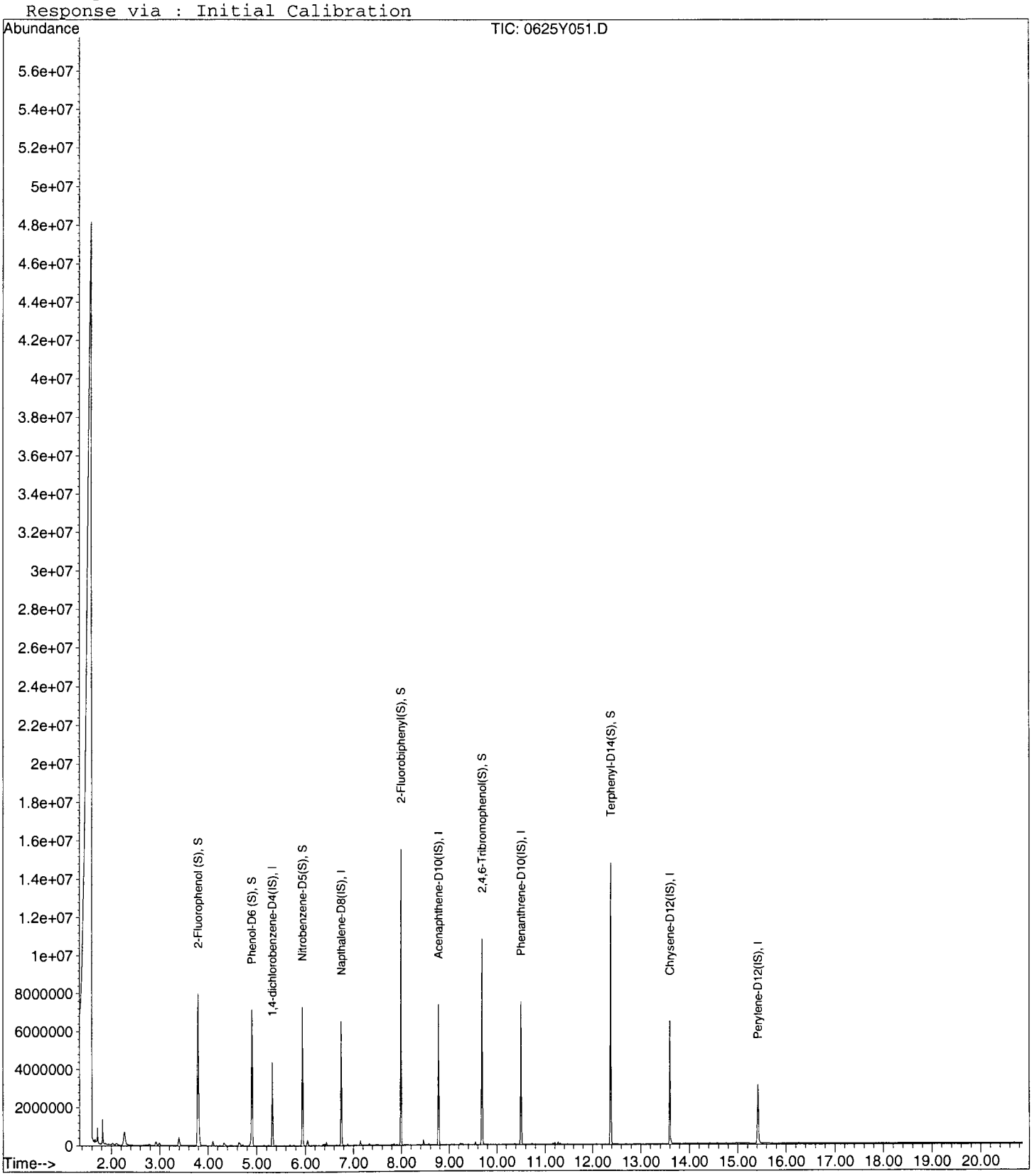
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y051.D Vial: 51
Acq On : 30 Jun 15 18:09 Operator: MA
Sample : AZ17911S01 1/980 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:22 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 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: 76687
Case No: Initial Cal. Date: 6/25/2015
Matrix: Instrument: Yoda
Initials: DA

		Compound	0625Y002.D 5	0625Y003.D 10	0625Y004.D 20	0625Y005.D 40	0625Y006.D 50	0625Y007.D 60	0625Y008.D 80	0625Y009.D 100			Avg	%RSD		
1	I	1,4-dichlorobenzene-D4(IS)														
2	S	2-Fluorophenol (S)	1.412	1.494	1.491	1.350	1.387	1.346	1.324	1.641			1.4	7.4	S	
3	S	Phenol-D6 (S)		1.879	1.862	1.663	1.743	1.700	1.687	1.835			1.8	5.1	S	
4	*TM	Phenol	2.075	2.283	2.241	2.127	2.193	2.114	2.124	2.355			2.2	4.4	*TM	
5	*TM	1,4-DCB	1.828	1.886	1.769	1.697	1.744	1.657	1.657	2.230			1.8	10	*TM	
6	**TM	n-Nitrosodi-n-propylamine	1.362	1.659	1.640	1.602	1.671	1.604					1.6	7.2	**TM	
7	I	Napthalene-D8(IS)														
8	S	Nitrobenzene-D5(S)	0.3641	0.4119	0.4000	0.3556	0.3939	0.3897	0.3879	0.4340			0.39	6.4	S	
9	*TM	2-Nitrophenol	0.1759	0.2106	0.1990	0.1983	0.2102	0.2034	0.2033	0.2487			0.21	9.8	*TM	
10	*TM	2,4-Dichlorophenol	0.3100	0.3611	0.3335	0.3052	0.3282	0.3185	0.3210				0.33	5.7	*TM	
11	*TM	Hexachlorobutadiene	0.1877	0.2214	0.1916	0.1872	0.1881	0.1860	0.1867	0.2199			0.20	7.8	*TM	
12	*TM	4-Chloro-3-methylphenol	0.3025	0.3610	0.3520	0.3035	0.3328	0.3259	0.3651	0.3985			0.34	9.6	*TM	
13	I	Acenaphthene-D10(IS)														
14	**TMQ	Hexachlorocyclopentadiene	0.2362	0.3407	0.3722	0.3408	0.3699	0.3758	0.3801	0.4528			0.36	17	**TMQ	0.995
15	*TM	2,4,6-Trichlorophenol	0.4074	0.4431	0.4310	0.4164	0.4123	0.3965	0.3967	0.4594			0.42	5.3	*TM	
16	S	2-Fluorobiphenyl(S)	1.378	1.462	1.457	1.229	1.295	1.285	1.269	1.491			1.4	7.5	S	
17	TM	Dimethyl phthalate	1.399	1.632	1.532	1.367	1.484	1.465	1.444	1.717			1.5	7.9	TM	
18	*TM	Acenaphthene	1.651	1.718	1.698	1.579	1.593	1.578	1.560	1.883			1.7	6.5	*TM	
19	**TMQ	2,4-Dinitrophenol	0.0528	0.1144	0.1547	0.1785	0.1995	0.2023	0.2096	0.2524			0.17	37	**TMQ	0.996
20	**TM	4-Nitrophenol	0.2432	0.3032	0.3255	0.3137	0.3162	0.3165	0.2838	0.3351			0.30	9.6	**TM	
21	TM	Diethyl phthalate	1.287	1.583	1.500	1.340	1.450	1.434	1.386	1.646			1.5	8.3	TM	
22	S	2,4,6-Tribromophenol(S)		0.1326	0.1493	0.1103	0.1224	0.1217	0.1382	0.1479			0.13	11	S	
23	I	Phenanthrene-D10(IS)														
24	*TM	n-Nitrosodiphenylamine	1.149	1.210	1.251	1.079	1.112	1.104	1.140	1.254			1.2	5.8	*TM	
25	*TMQ	Pentachlorophenol	0.1096	0.1410	0.1607	0.1333	0.1409	0.1342	0.1441	0.1523			0.14	11	*TMQ	0.997
26	TM	Di-n-butylphthalate	0.9477	1.316	1.327	1.449	1.408	1.379	1.225	1.257			1.3	12	TM	
27	I	Chrysene-D12(IS)														
28	S	Terphenyl-D14(S)	1.022	1.065	1.020	0.9371	0.9490	0.9400	0.9663	1.162			1.0	7.7	S	
29	TM	Butyl benzylphthalate	0.4334	0.6529	0.6661	0.6555	0.6896	0.6900	0.6766				0.64	14	TM	
30	TML	Bis (2-ethylhexyl) phthalate	0.6298	0.9586	0.9839	0.9907	1.094	1.079	1.004	1.170			0.99	16	TML	0.990
31	*TML	Di-n-octylphthalate	0.8904	1.455	1.306	1.569	1.687	1.635	1.545	1.555			1.5	18	*TML	0.996
32	I	Perylene-D12(IS)														
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y002.D Vial: 2
Acq On : 25 Jun 15 10:20 Operator: MA
Sample : 5ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	374815	40.00 ppb		0.00
7) Napthalene-D8(IS)	6.76	136	1635357	40.00 ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	919003	40.00 ppb		0.00
23) Phenanthrene-D10(IS)	10.51	188	1633980	40.00 ppb		-0.01
27) Chrysene-D12(IS)	13.61	240	1384055	40.00 ppb		0.00
32) Perylene-D12(IS)	15.43	264	783250	40.00 ppb		-0.01
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.79	112	132355	9.87 ppb		-0.01
Spiked Amount 200.000			Recovery =	4.937%		
3) Phenol-D6 (S)	4.89	99	164231	8.83 ppb		-0.02
Spiked Amount 200.000			Recovery =	4.417%		
8) Nitrobenzene-D5(S)	5.94	82	74425	4.64 ppb		-0.01
Spiked Amount 100.000			Recovery =	4.642%		
16) 2-Fluorobiphenyl(S)	7.99	172	158297	0.98 ppb		-0.01
Spiked Amount 100.000			Recovery =	0.977%		
22) 2,4,6-Tribromophenol(S)	9.69	330	25662	-933.47 ppb		-0.02
Spiked Amount 200.000			Recovery =	-466.737%		
28) Terphenyl-D14(S)	12.38	244	176767	5.07 ppb		0.00
Spiked Amount 100.000			Recovery =	5.070%		
Target Compounds						Qvalue
4) Phenol	4.91	94	97230	4.74 ppb		98
5) 1,4-DCB	5.51	146	85640	5.05 ppb		97
6) n-Nitrosodi-n-propylamine	5.77	43	63798	5.02 ppb	#	63
9) 2-Nitrophenol	6.32	139	35965	4.27 ppb		92
10) 2,4-Dichlorophenol	6.84	162	63361	7.00 ppb		100
11) Hexachlorobutadiene	6.91	225	38369	4.79 ppb		98
12) 4-Chloro-3-methylphenol	7.38	107	61840	4.41 ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	27129	231.98 ppb	#	94
15) 2,4,6-Trichlorophenol	7.89	196	46802	0.96 ppb		96
17) Dimethyl phthalate	8.46	163	160696	0.93 ppb		93
18) Acenaphthene	8.11	154	189715	0.98 ppb	#	45
19) 2,4-Dinitrophenol	8.84	184	6070	178.01 ppb	#	20
20) 4-Nitrophenol	8.90	65	27938	0.86 ppb	#	1
21) Diethyl phthalate	9.29	149	147800	0.90 ppb		94
24) n-Nitrosodiphenylamine	10.79	167	234652	4.94 ppb		99
25) Pentachlorophenol	10.28	266	22384	2.53 ppb		93
26) Di-n-butylphthalate	11.21	149	193565	3.68 ppb		99
29) Butyl benzylphthalate	12.97	149	74989	3.29 ppb	#	91
30) Bis (2-ethylhexyl) phthala	13.64	149	108951	3.18 ppb		100
31) Di-n-octylphthalate	14.40	149	154039	3.06 ppb		98

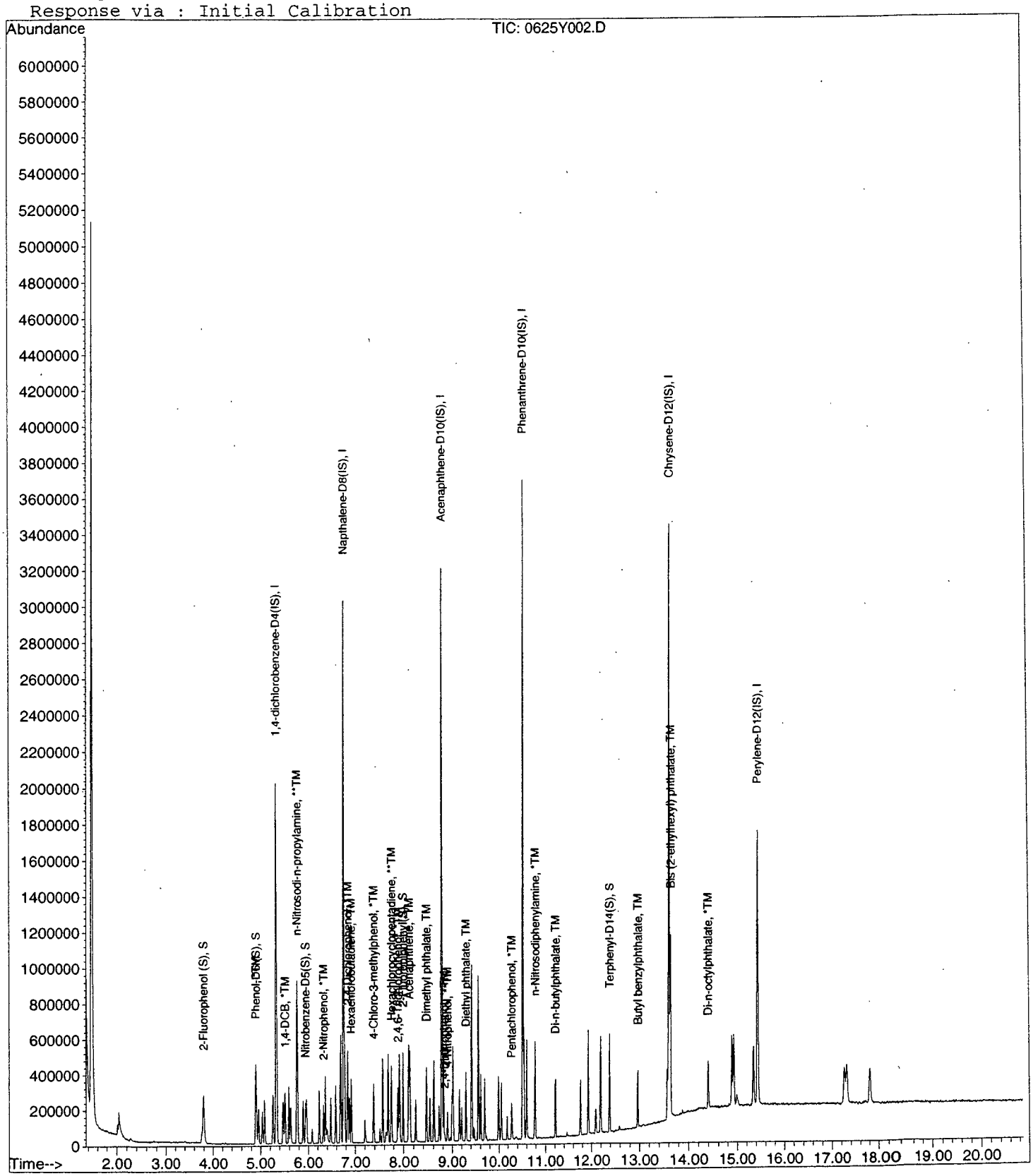
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y002.D Vial: 2
Acq On : 25 Jun 15 10:20 Operator: MA
Sample : 5ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y003.D Vial: 3
Acq On : 25 Jun 15 10:49 Operator: MA
Sample : 10ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	528824	40.00 ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2306770	40.00 ppb		0.00
13) Acenaphthene-D10(IS)	8.77	164	1379093	40.00 ppb		-0.01
23) Phenanthrene-D10(IS)	10.51	188	2458159	40.00 ppb		0.00
27) Chrysene-D12(IS)	13.61	240	2168959	40.00 ppb		0.00
32) Perylene-D12(IS)	15.43	264	1291581	40.00 ppb		0.00
System Monitoring Compounds						
2) 2-Fluorophenol (S)	3.80	112	394974	20.88 ppb		0.00
Spiked Amount 200.000			Recovery =	10.442%		
3) Phenol-D6 (S)	4.89	99	496803	18.94 ppb		-0.02
Spiked Amount 200.000			Recovery =	9.469%		
8) Nitrobenzene-D5(S)	5.94	82	237511	10.50 ppb		0.00
Spiked Amount 100.000			Recovery =	10.503%		
16) 2-Fluorobiphenyl(S)	7.99	172	504184	2.07 ppb		0.00
Spiked Amount 100.000			Recovery =	2.073%		
22) 2,4,6-Tribromophenol(S)	9.69	330	91409	-866.72 ppb		-0.02
Spiked Amount 200.000			Recovery =	-433.361%		
28) Terphenyl-D14(S)	12.38	244	577347	10.57 ppb		0.00
Spiked Amount 100.000			Recovery =	10.568%		
Target Compounds						Qvalue
4) Phenol	4.91	94	301842	10.43 ppb		97
5) 1,4-DCB	5.51	146	249281	10.43 ppb		96
6) n-Nitrosodi-n-propylamine	5.77	43	219343	12.24 ppb	#	60
9) 2-Nitrophenol	6.32	139	121443	10.21 ppb		97
10) 2,4-Dichlorophenol	6.84	162	208265	12.75 ppb		99
11) Hexachlorobutadiene	6.92	225	127696	11.29 ppb		99
12) 4-Chloro-3-methylphenol	7.38	107	208174	10.53 ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	117452	227.85 ppb		98
15) 2,4,6-Trichlorophenol	7.89	196	152768	2.08 ppb		96
17) Dimethyl phthalate	8.47	163	562588	2.17 ppb		91
18) Acenaphthene	8.11	154	592385	2.03 ppb	#	46
19) 2,4-Dinitrophenol	8.85	184	39437	176.12 ppb	#	31
20) 4-Nitrophenol	8.90	65	104542	2.13 ppb	#	1
21) Diethyl phthalate	9.29	149	545881	2.22 ppb		95
24) n-Nitrosodiphenylamine	10.79	167	743880	10.41 ppb		98
25) Pentachlorophenol	10.28	266	86664	9.73 ppb		98
26) Di-n-butylphthalate	11.20	149	808863	10.21 ppb	#	96
29) Butyl benzylphthalate	12.97	149	354030	9.92 ppb	#	82
30) Bis (2-ethylhexyl) phthala	13.64	149	519782	9.69 ppb		97
31) Di-n-octylphthalate	14.39	149	789192	10.00 ppb		99

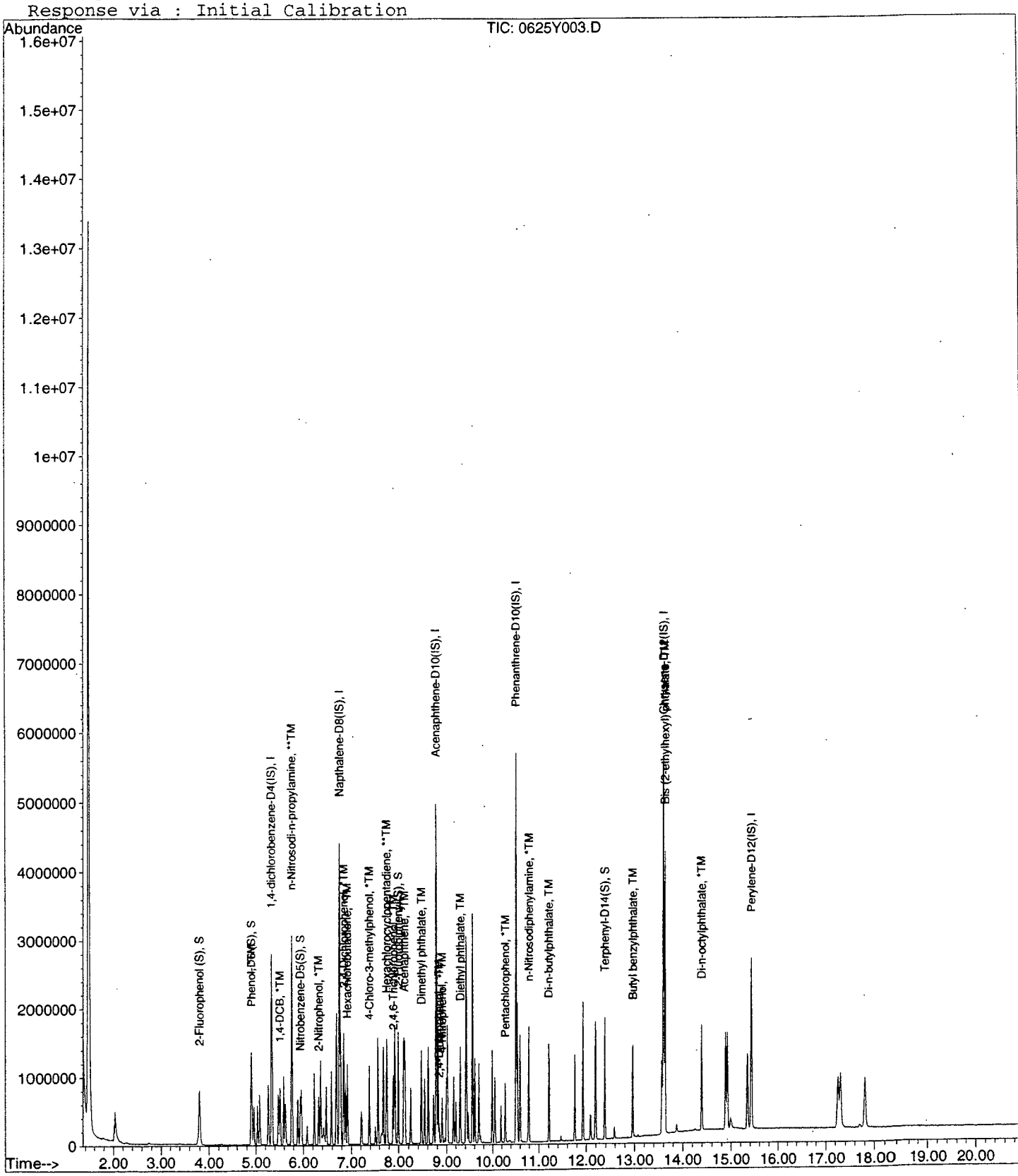
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y003.D Vial: 3
Acq On : 25 Jun 15 10:49 Operator: MA
Sample : 10ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y004.D Vial: 4
Acq On : 25 Jun 15 11:18 Operator: MA
Sample : 20ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	565564	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2611003	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1485951	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	2692269	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.61	240	2902146	40.00	ppb		0.00
32) Perylene-D12(IS)	15.43	264	1395233	40.00	ppb		-0.01
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.79	112	843384	41.69	ppb		-0.01
Spiked Amount 200.000			Recovery = 20.847%				
3) Phenol-D6 (S)	4.90	99	1053280	37.54	ppb		-0.01
Spiked Amount 200.000			Recovery = 18.772%				
8) Nitrobenzene-D5(S)	5.94	82	522153	20.40	ppb		-0.01
Spiked Amount 100.000			Recovery = 20.399%				
16) 2-Fluorobiphenyl(S)	8.00	172	1082350	4.13	ppb		0.00
Spiked Amount 100.000			Recovery = 4.130%				
22) 2,4,6-Tribromophenol(S)	9.70	330	221887	-722.21	ppb		-0.01
Spiked Amount 200.000			Recovery = -361.106%				
28) Terphenyl-D14(S)	12.38	244	1479468	20.24	ppb		0.00
Spiked Amount 100.000			Recovery = 20.238%				
Target Compounds							Qvalue
4) Phenol	4.92	94	633780	20.48	ppb		99
5) 1,4-DCB	5.51	146	500226	19.56	ppb		97
6) n-Nitrosodi-n-propylamine	5.77	43	463695	24.20	ppb	#	52
9) 2-Nitrophenol	6.32	139	259778	19.30	ppb		91
10) 2,4-Dichlorophenol	6.85	162	435376	21.29	ppb		98
11) Hexachlorobutadiene	6.91	225	250142	19.54	ppb		94
12) 4-Chloro-3-methylphenol	7.38	107	459578	20.55	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	276554	220.03	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	320242	4.05	ppb		97
17) Dimethyl phthalate	8.46	163	1138270	4.08	ppb		97
18) Acenaphthene	8.11	154	1261757	4.02	ppb	#	45
19) 2,4-Dinitrophenol	8.84	184	114943	171.80	ppb	#	65
20) 4-Nitrophenol	8.90	65	241857	4.58	ppb	#	1
21) Diethyl phthalate	9.29	149	1114405	4.20	ppb		98
24) n-Nitrosodiphenylamine	10.78	167	1684527	21.53	ppb		99
25) Pentachlorophenol	10.28	266	216337	23.95	ppb		99
26) Di-n-butylphthalate	11.21	149	1786907	20.60	ppb		99
29) Butyl benzylphthalate	12.97	149	966580	20.24	ppb	#	82
30) Bis (2-ethylhexyl) phthala	13.63	149	1427696	19.90	ppb		97
31) Di-n-octylphthalate	14.40	149	1895156	17.95	ppb		99

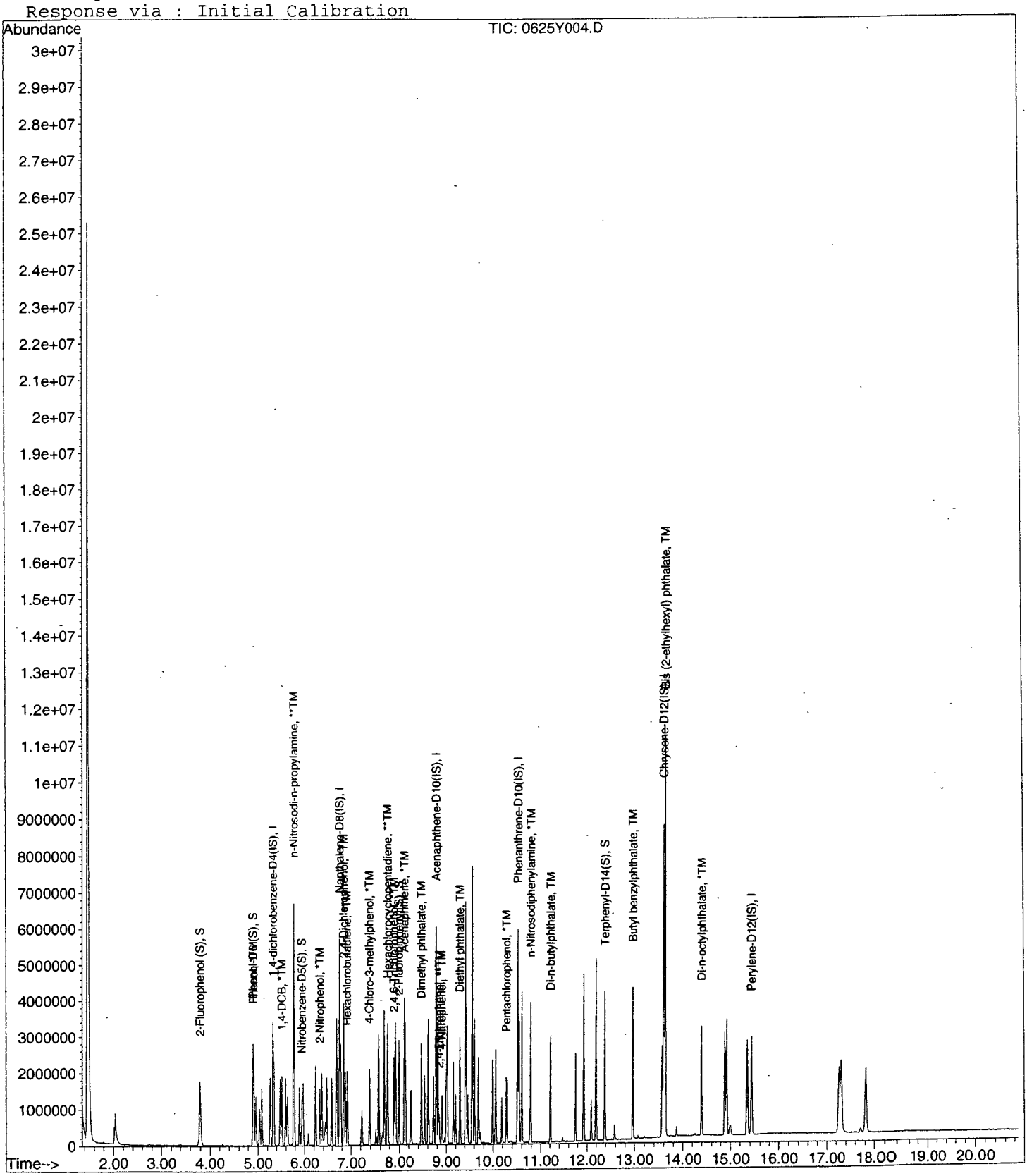
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y004.D Vial: 4
Acq On : 25 Jun 15 11:18 Operator: MA
Sample : 20ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y005.D Vial: 5
Acq On : 25 Jun 15 11:48 Operator: MA
Sample : 40ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	583381	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2765570	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1647595	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	2810482	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.61	240	3130339	40.00	ppb		0.00
32) Perylene-D12(IS)	15.43	264	1826270	40.00	ppb		-0.01
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.80	112	1574807	75.48	ppb		0.00
Spiked Amount 200.000			Recovery =	37.738%			
3) Phenol-D6 (S)	4.91	99	1940410	67.05	ppb		0.00
Spiked Amount 200.000			Recovery =	33.526%			
8) Nitrobenzene-D5(S)	5.95	82	983387	36.27	ppb		0.00
Spiked Amount 100.000			Recovery =	36.272%			
16) 2-Fluorobiphenyl(S)	8.00	172	2024504	6.97	ppb		0.00
Spiked Amount 100.000			Recovery =	6.968%			
22) 2,4,6-Tribromophenol(S)	9.70	330	363318	-598.32	ppb		-0.01
Spiked Amount 200.000			Recovery =	-299.161%			
28) Terphenyl-D14(S)	12.38	244	2933457	37.20	ppb		0.00
Spiked Amount 100.000			Recovery =	37.203%			
Target Compounds							Qvalue
4) Phenol	4.92	94	1240819	38.86	ppb		94
5) 1,4-DCB	5.51	146	990273	37.55	ppb		96
6) n-Nitrosodi-n-propylamine	5.78	43	934316	47.28	ppb	#	57
9) 2-Nitrophenol	6.32	139	548349	38.47	ppb		87
10) 2,4-Dichlorophenol	6.85	162	843998	36.76	ppb		99
11) Hexachlorobutadiene	6.92	225	517662	38.19	ppb		97
12) 4-Chloro-3-methylphenol	7.39	107	839397	35.43	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	561435	207.03	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	686114	7.82	ppb		94
17) Dimethyl phthalate	8.47	163	2251681	7.27	ppb		89
18) Acenaphthene	8.11	154	2601744	7.47	ppb	#	45
19) 2,4-Dinitrophenol	8.84	184	294172	5.30	ppb		86
20) 4-Nitrophenol	8.91	65	516777	8.83	ppb	#	1
21) Diethyl phthalate	9.30	149	2208043	7.51	ppb		97
24) n-Nitrosodiphenylamine	10.79	167	3033005	37.13	ppb		99
25) Pentachlorophenol	10.28	266	374560	39.44	ppb		96
26) Di-n-butylphthalate	11.21	149	4073660	44.99	ppb		99
29) Butyl benzylphthalate	12.97	149	2051914	39.84	ppb		88
30) Bis (2-ethylhexyl) phthala	13.64	149	3101174	40.08	ppb		98
31) Di-n-octylphthalate	14.40	149	4911038	43.12	ppb		100

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

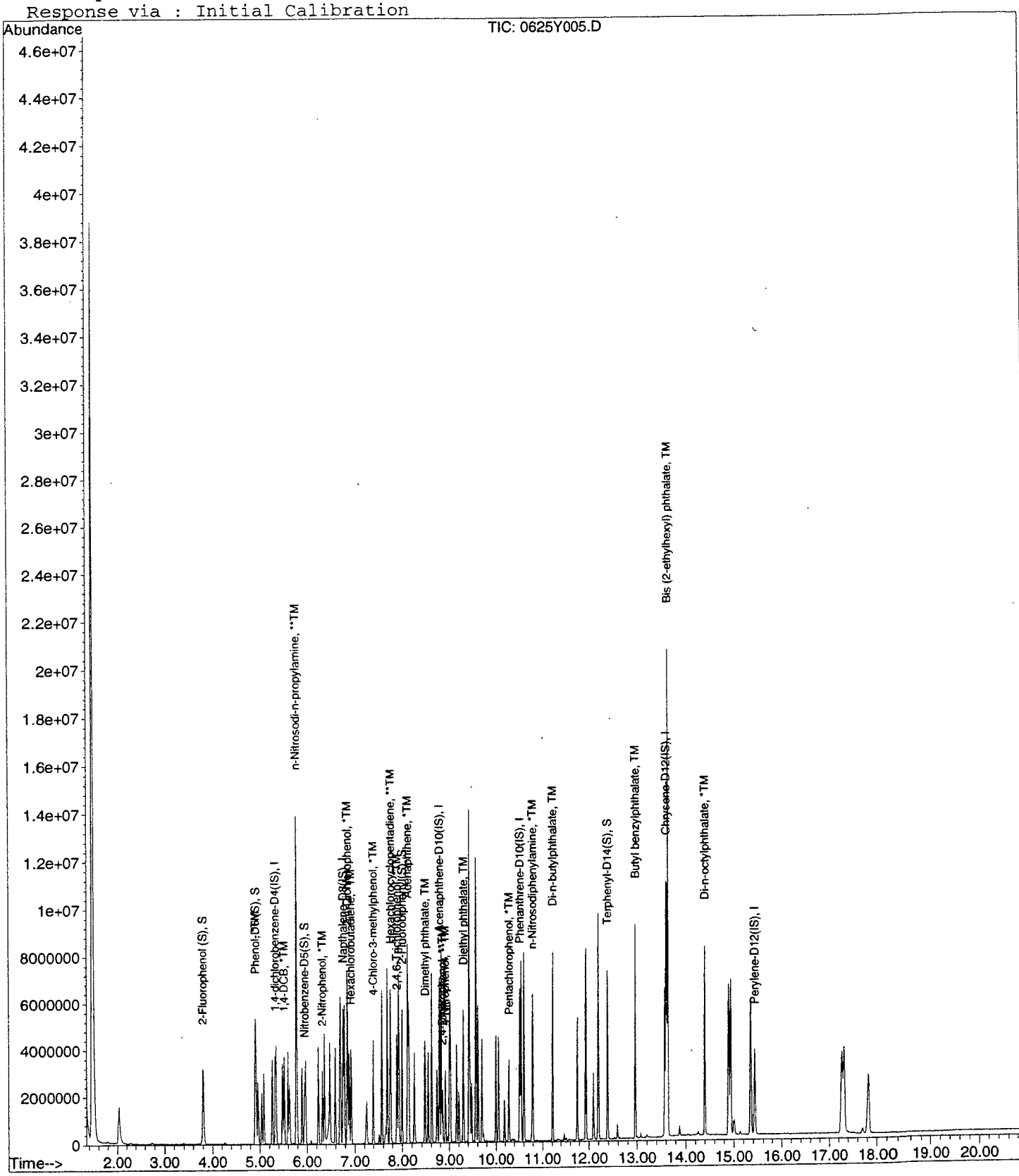
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y005.D
Acq On : 25 Jun 15 11:48
Sample : 40ug/ml SVOC 06/25/15
Misc :

Vial: 5
Operator: MA
Inst : Yoda
Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y006.D
Acq On : 25 Jun 15 12:17
Sample : 50ug/ml SVOC 06/25/15
Misc :

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

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	609828	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2766351	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1666409	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	2970623	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.61	240	2670451	40.00	ppb		0.00
32) Perylene-D12(IS)	15.44	264	1615433	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.80	112	2114212	96.93	ppb		0.00
Spiked Amount 200.000			Recovery =	48.467%			
3) Phenol-D6 (S)	4.91	99	2656861	87.83	ppb		0.00
Spiked Amount 200.000			Recovery =	43.913%			
8) Nitrobenzene-D5(S)	5.95	82	1362243	50.23	ppb		0.00
Spiked Amount 100.000			Recovery =	50.232%			
16) 2-Fluorobiphenyl(S)	8.00	172	2698423	9.18	ppb		0.00
Spiked Amount 100.000			Recovery =	9.182%			
22) 2,4,6-Tribromophenol(S)	9.70	330	509830	-449.65	ppb		-0.01
Spiked Amount 200.000			Recovery =	-224.827%			
28) Terphenyl-D14(S)	12.38	244	3167681	47.09	ppb		0.00
Spiked Amount 100.000			Recovery =	47.092%			
Target Compounds							Qvalue
4) Phenol	4.92	94	1672051	50.10	ppb		89
5) 1,4-DCB	5.51	146	1329315	48.21	ppb		98
6) n-Nitrosodi-n-propylamine	5.78	43	1274117	61.68	ppb	#	50
9) 2-Nitrophenol	6.32	139	726835	50.98	ppb		86
10) 2,4-Dichlorophenol	6.85	162	1134982	48.50	ppb		99
11) Hexachlorobutadiene	6.91	225	650571	47.98	ppb		100
12) 4-Chloro-3-methylphenol	7.39	107	1150964	48.57	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	770474	195.69	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	858736	9.68	ppb		96
17) Dimethyl phthalate	8.47	163	3090809	9.87	ppb		92
18) Acenaphthene	8.11	154	3317714	9.42	ppb	#	45
19) 2,4-Dinitrophenol	8.85	184	415580	12.89	ppb		95
20) 4-Nitrophenol	8.91	65	658599	11.12	ppb	#	1
21) Diethyl phthalate	9.30	149	3020468	10.16	ppb		97
24) n-Nitrosodiphenylamine	10.80	167	4129593	47.83	ppb		98
25) Pentachlorophenol	10.28	266	523329	51.24	ppb		97
26) Di-n-butylphthalate	11.21	149	5226832	54.62	ppb		99
29) Butyl benzylphthalate	12.97	149	2302051	52.39	ppb		96
30) Bis (2-ethylhexyl) phthala	13.64	149	3653270	55.34	ppb		99
31) Di-n-octylphthalate	14.40	149	5630536	57.96	ppb		100

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

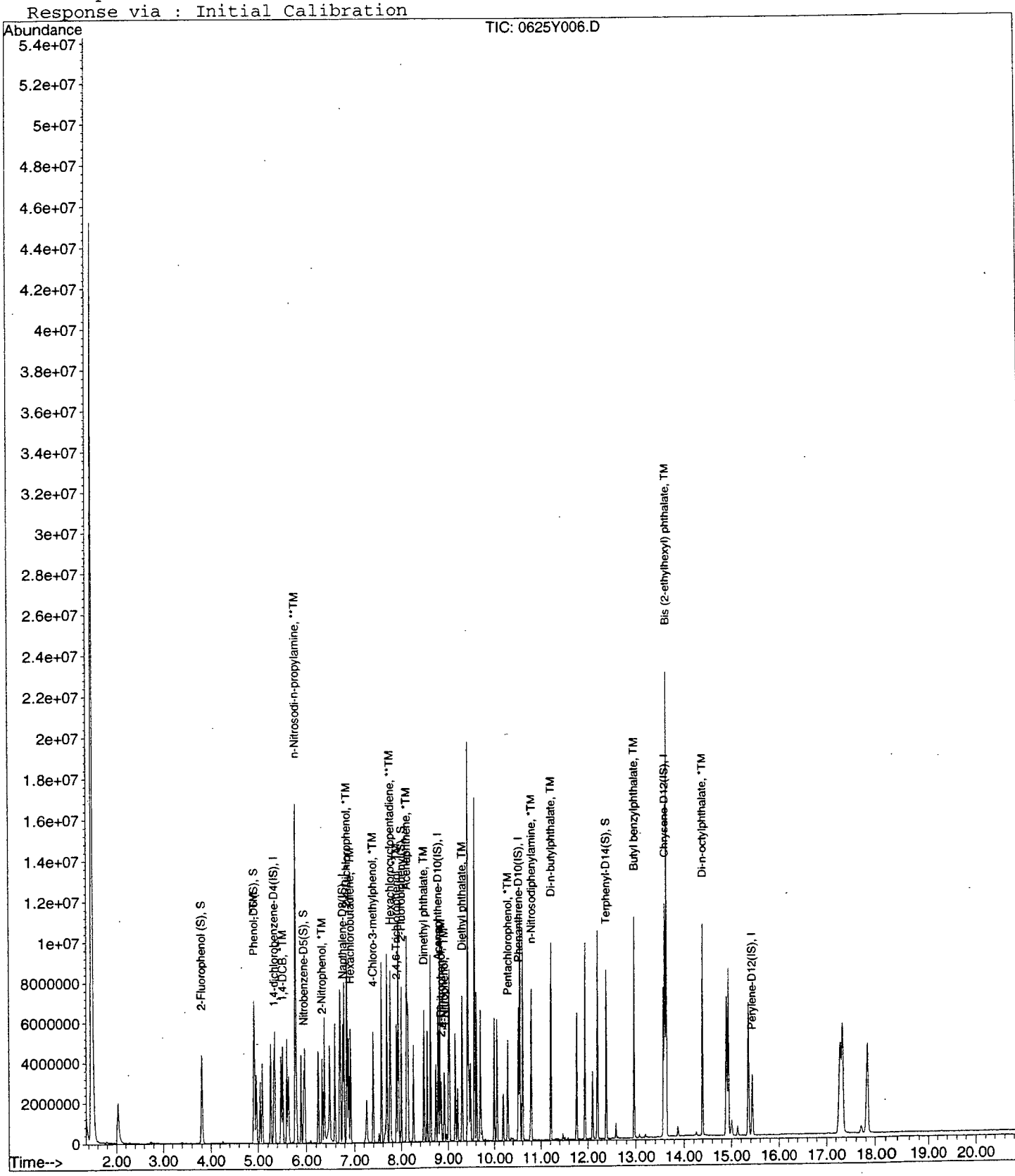
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y006.D
Acq On : 25 Jun 15 12:17
Sample : 50ug/ml SVOC 06/25/15
Misc :

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

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y007.D Vial: 7
Acq On : 25 Jun 15 12:47 Operator: MA
Sample : 60ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	601640	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2694275	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1581668	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.51	188	2815609	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.62	240	2516681	40.00	ppb		0.00
32) Perylene-D12(IS)	15.44	264	1477528	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.80	112	2430102	112.93	ppb		0.00
Spiked Amount 200.000			Recovery =	56.467%			
3) Phenol-D6 (S)	4.91	99	3068413	102.81	ppb		0.00
Spiked Amount 200.000			Recovery =	51.406%			
8) Nitrobenzene-D5(S)	5.95	82	1575085	59.63	ppb		0.00
Spiked Amount 100.000			Recovery =	59.634%			
16) 2-Fluorobiphenyl(S)	8.00	172	3049071	10.93	ppb		0.00
Spiked Amount 100.000			Recovery =	10.931%			
22) 2,4,6-Tribromophenol(S)	9.71	330	577317	-346.87	ppb		0.00
Spiked Amount 200.000			Recovery =	-173.438%			
28) Terphenyl-D14(S)	12.39	244	3548625	55.98	ppb		0.00
Spiked Amount 100.000			Recovery =	55.978%			
Target Compounds							Qvalue
4) Phenol	4.93	94	1907643	57.94	ppb		96
5) 1,4-DCB	5.51	146	1495159	54.97	ppb		96
6) n-Nitrosodi-n-propylamine	5.78	43	1447101	71.00	ppb	#	41
9) 2-Nitrophenol	6.33	139	821936	59.19	ppb		93
10) 2,4-Dichlorophenol	6.85	162	1287316	56.04	ppb		98
11) Hexachlorobutadiene	6.92	225	751800	56.92	ppb		100
12) 4-Chloro-3-methylphenol	7.40	107	1316991	57.06	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	891613	185.21	ppb		98
15) 2,4,6-Trichlorophenol	7.90	196	940599	11.17	ppb		98
17) Dimethyl phthalate	8.47	163	3475794	11.70	ppb		99
18) Acenaphthene	8.12	154	3744572	11.20	ppb	#	45
19) 2,4-Dinitrophenol	8.85	184	479917	19.29	ppb		90
20) 4-Nitrophenol	8.92	65	750945	13.36	ppb	#	1
21) Diethyl phthalate	9.30	149	3402060	12.06	ppb		98
24) n-Nitrosodiphenylamine	10.79	167	4664691	57.00	ppb		97
25) Pentachlorophenol	10.28	266	566813	57.87	ppb		97
26) Di-n-butylphthalate	11.21	149	5822735	64.20	ppb		99
29) Butyl benzylphthalate	12.97	149	2604788	62.90	ppb		99
30) Bis (2-ethylhexyl) phthala	13.63	149	4073531	65.48	ppb		98
31) Di-n-octylphthalate	14.40	149	6171088	67.40	ppb		100

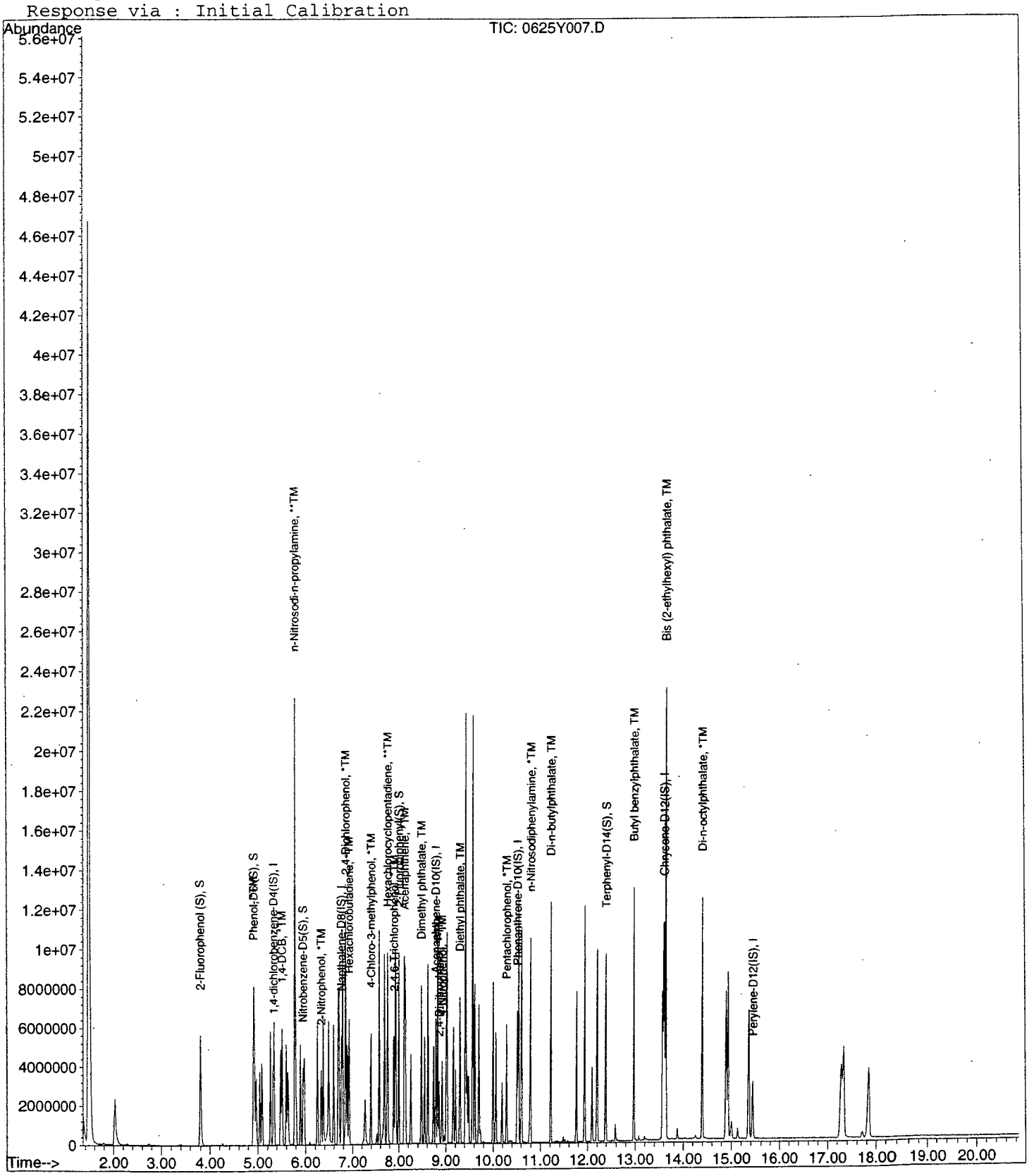
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y007.D Vial: 7
Acq On : 25 Jun 15 12:47 Operator: MA
Sample : 60ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y008.D Vial: 8
Acq On : 25 Jun 15 13:17 Operator: MA
Sample : 80ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	585601	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2633251	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	2018267	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	3502423	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.62	240	3228762	40.00	ppb		0.01
32) Perylene-D12(IS)	15.44	264	1967252	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.81	112	3100990	148.06	ppb		0.00
Spiked Amount 200.000			Recovery =	74.029%			
3) Phenol-D6 (S)	4.91	99	3951716	136.03	ppb		0.00
Spiked Amount 200.000			Recovery =	68.017%			
8) Nitrobenzene-D5(S)	5.95	82	2042916	79.14	ppb		0.00
Spiked Amount 100.000			Recovery =	79.138%			
16) 2-Fluorobiphenyl(S)	8.00	172	5121772	14.39	ppb		0.00
Spiked Amount 100.000			Recovery =	14.390%			
22) 2,4,6-Tribromophenol(S)	9.71	330	1115546	-20.20	ppb		0.00
Spiked Amount 200.000			Recovery =	-10.100%			
28) Terphenyl-D14(S)	12.39	244	6240151	76.73	ppb		0.01
Spiked Amount 100.000			Recovery =	76.727%			
Target Compounds							Qvalue
4) Phenol	4.93	94	2488178	77.64	ppb		96
5) 1,4-DCB	5.51	146	1941047	73.31	ppb		96
6) n-Nitrosodi-n-propylamine	5.81	43	484139	24.41	ppb		76
9) 2-Nitrophenol	6.32	139	1070628	78.88	ppb		83
10) 2,4-Dichlorophenol	6.85	162	1690433	74.37	ppb		98
11) Hexachlorobutadiene	6.92	225	983005	76.16	ppb		97
12) 4-Chloro-3-methylphenol	7.40	107	1922889	85.24	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	1534268	19.53	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	1601316	14.90	ppb		95
17) Dimethyl phthalate	8.48	163	5828813	15.37	ppb		92
18) Acenaphthene	8.11	154	6297274	14.76	ppb	#	44
19) 2,4-Dinitrophenol	8.86	184	846105	35.78	ppb	#	54
20) 4-Nitrophenol	8.92	65	1145710	15.97	ppb	#	1
21) Diethyl phthalate	9.30	149	5596364	15.54	ppb		98
24) n-Nitrosodiphenylamine	10.80	167	7986382	78.46	ppb		97
25) Pentachlorophenol	10.29	266	1009292	79.49	ppb		96
26) Di-n-butylphthalate	11.21	149	8577803	76.03	ppb	#	94
29) Butyl benzylphthalate	12.97	149	4369254	82.24	ppb		89
30) Bis (2-ethylhexyl) phthala	13.64	149	6482624	81.23	ppb		98
31) Di-n-octylphthalate	14.40	149	9977415	84.94	ppb		96

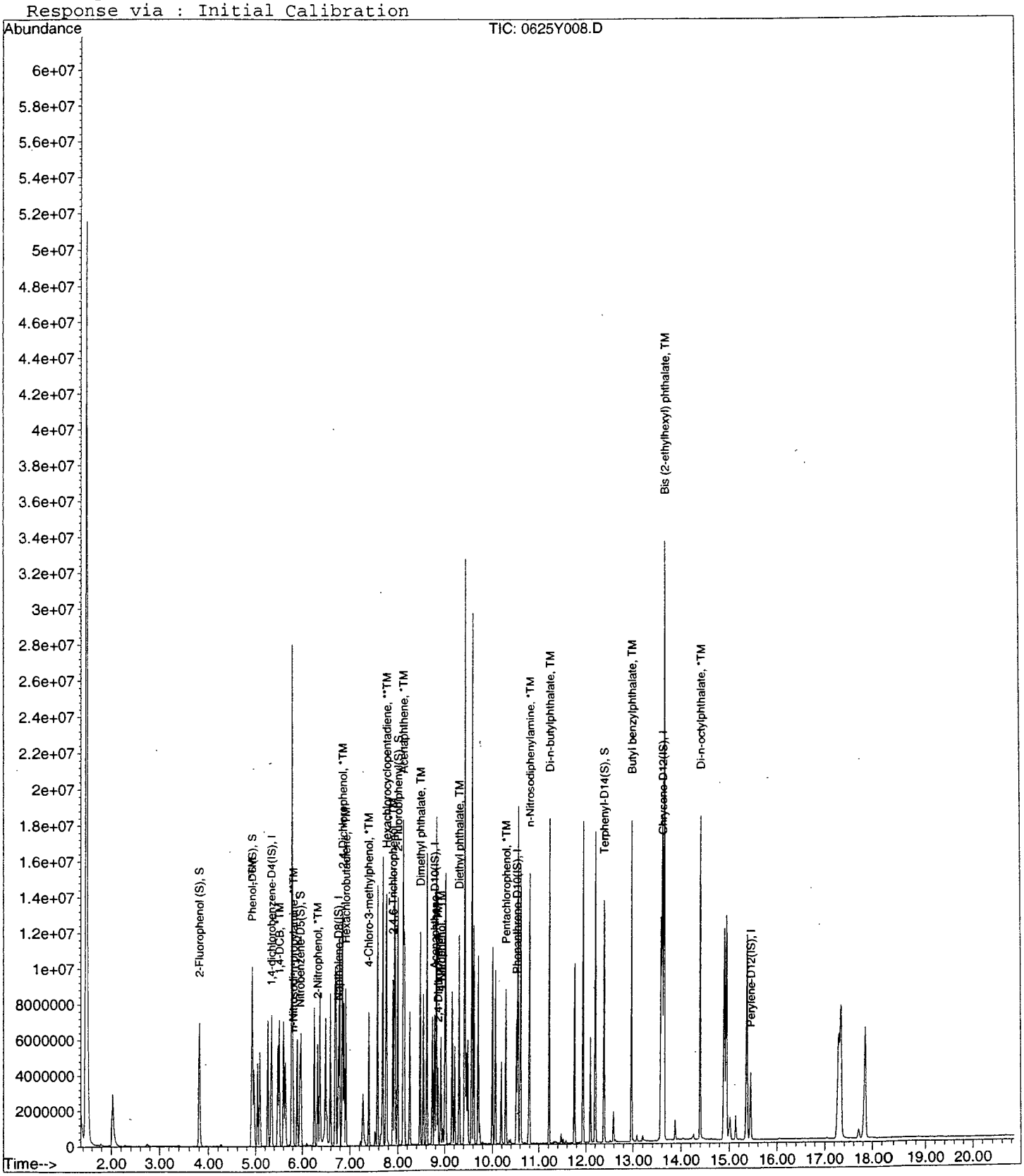
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y008.D Vial: 8
Acq On : 25 Jun 15 13:17 Operator: MA
Sample : 80ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y009.D Vial: 9
Acq On : 25 Jun 15 13:46 Operator: MA
Sample : 100ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:27:46 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	578387	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2941160	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1793012	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	3057652	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.62	240	2873875	40.00	ppb		0.00
32) Perylene-D12(IS)	15.44	264	1751745	40.00	ppb		0.00
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.81	112	4745115	229.38	ppb		0.00
Spiked Amount 200.000			Recovery =	114.692%			
3) Phenol-D6 (S)	4.92	99	5305705	184.92	ppb		0.00
Spiked Amount 200.000			Recovery =	92.461%			
8) Nitrobenzene-D5(S)	5.95	82	3191024	110.67	ppb		0.00
Spiked Amount 100.000			Recovery =	110.673%			
16) 2-Fluorobiphenyl(S)	8.00	172	6685387	21.14	ppb		0.00
Spiked Amount 100.000			Recovery =	21.143%			
22) 2,4,6-Tribromophenol(S)	9.71	330	1325500	304.41	ppb		0.00
Spiked Amount 200.000			Recovery =	152.206%			
28) Terphenyl-D14(S)	12.39	244	8348732	115.33	ppb		0.00
Spiked Amount 100.000			Recovery =	115.330%			
Target Compounds							Qvalue
4) Phenol	4.94	94	3404562	107.56	ppb		96
5) 1,4-DCB	5.51	146	3224233	123.30	ppb		96
6) n-Nitrosodi-n-propylamine	5.82	43	1286625	65.67	ppb		86
9) 2-Nitrophenol	6.33	139	1828429	120.62	ppb		93
10) 2,4-Dichlorophenol	6.85	162	2781398	108.30	ppb		98
11) Hexachlorobutadiene	6.92	225	1616602	112.13	ppb		100
12) 4-Chloro-3-methylphenol	7.40	107	2929794	116.28	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	2029826	-40.00	ppb		100
15) 2,4,6-Trichlorophenol	7.90	196	2059378	21.57	ppb		99
17) Dimethyl phthalate	8.48	163	7696552	22.85	ppb		96
18) Acenaphthene	8.12	154	8439960	22.26	ppb	#	44
19) 2,4-Dinitrophenol	8.86	184	1131277	-40.00	ppb		77
20) 4-Nitrophenol	8.93	65	1502210	23.58	ppb	#	1
21) Diethyl phthalate	9.31	149	7376309	23.06	ppb		96
24) n-Nitrosodiphenylamine	10.80	167	9584603	107.85	ppb		99
25) Pentachlorophenol	10.29	266	1163958	100.66	ppb		96
26) Di-n-butylphthalate	11.21	149	9608564	97.55	ppb	#	85
29) Butyl benzylphthalate	12.97	149	5755956	121.72	ppb		94
30) Bis (2-ethylhexyl) phthala	13.64	149	8403536	118.30	ppb		97
31) Di-n-octylphthalate	14.40	149	11168866	106.82	ppb	#	83

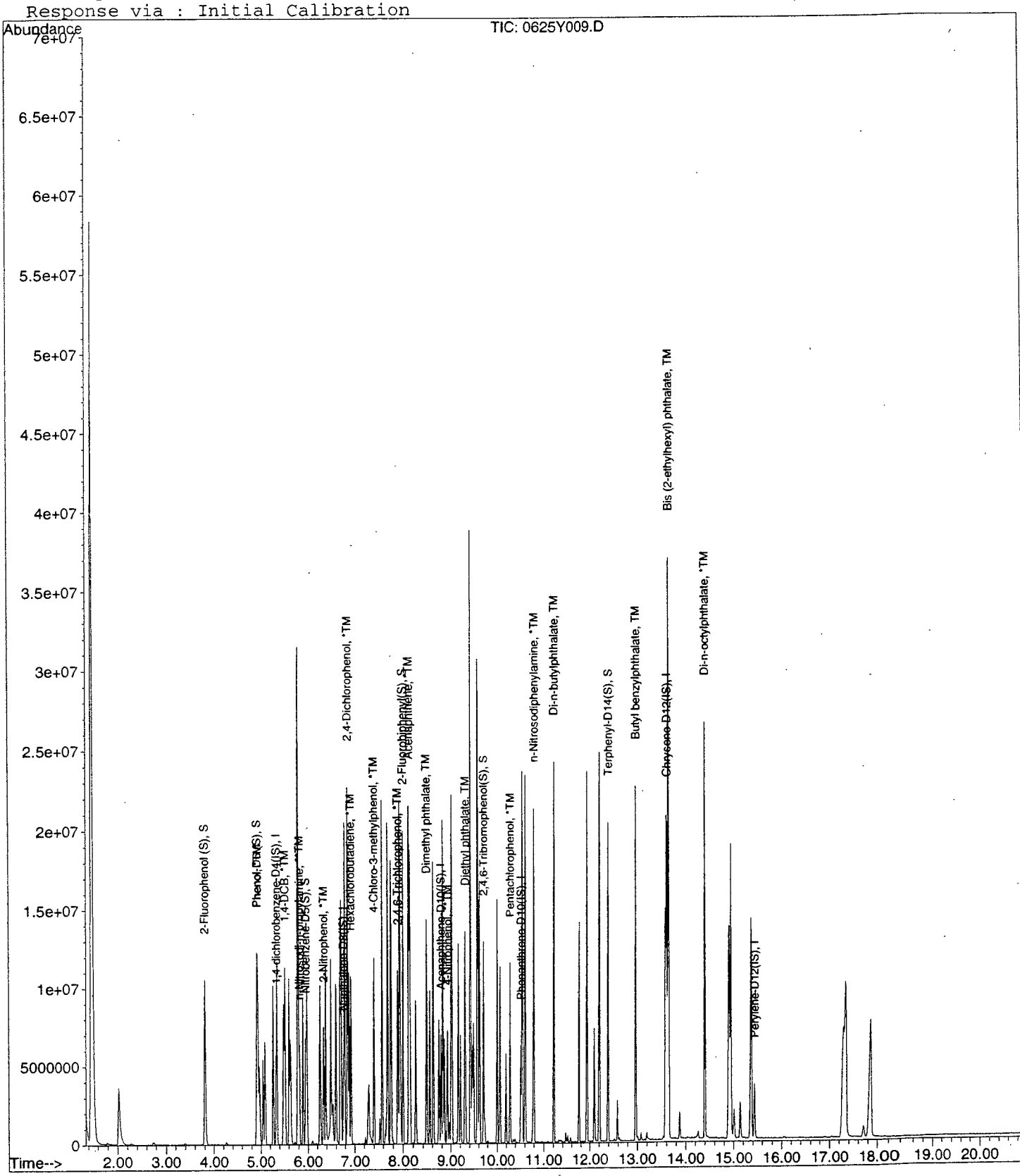
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y009.D Vial: 9
Acq On : 25 Jun 15 13:46 Operator: MA
Sample : 100ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:28 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Form 7

Second Source Calibration

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

SDG No: 76687
Date Analyzed: 6/25/2015
Instrument: Yoda
Initial Cal. Date: 6/25/2015
Data File: 0625Y010.D

		Compound	MEAN	CCRF	%D		%Drift
1	*TM	Phenol	2.189	2.158	1.4	*TM	
2	*TM	1,4-DCB	1.808	1.986	9.8	*TM	
3	**TM	n-Nitrosodi-n-propylamine	1.590	1.675	5.4	**TM	
4	*TM	2-Nitrophenol	0.2062	0.2115	2.6	*TM	
5	*TM	2,4-Dichlorophenol	0.3254	0.3349	2.9	*TM	
6	*TM	Hexachlorobutadiene	0.1961	0.2221	13	*TM	
7	*TM	4-Chloro-3-methylphenol	0.3427	0.3303	3.6	*TM	
8	**TMQ	Hexachlorocyclopentadiene	0.3586	0.3652	1.9	**TMQ	2.1
9	*TM	2,4,6-Trichlorophenol	0.4204	0.3843	8.6	*TM	
10	TM	Dimethyl phthalate	1.505	1.441	4.3	TM	
11	*TM	Acenaphthene	1.658	1.566	5.5	*TM	
12	**TMQ	2,4-Dinitrophenol	0.1705	0.1982	16	**TMQ	3.7
13	**TM	4-Nitrophenol	0.3047	0.3084	1.2	**TM	
14	TM	Diethyl phthalate	1.453	1.394	4.0	TM	
15	*TM	n-Nitrosodiphenylamine	1.163	1.070	7.9	*TM	
16	*TMQ	Pentachlorophenol	0.1395	0.1363	2.3	*TMQ	0.62
17	TM	Di-n-butylphthalate	1.289	1.281	0.60	TM	
18	TM	Butyl benzylphthalate	0.6377	0.6752	5.9	TM	
19	TML	Bis (2-ethylhexyl) phthalate	0.9887	1.056	6.8	TML	1.4
20	*TML	Di-n-octylphthalate	1.455	1.551	6.5	*TML	0.81
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.5		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y010.D Vial: 10
Acq On : 25 Jun 15 14:15 Operator: MA
Sample : 50ug/ml SVOC SS 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:38 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	527215	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.76	136	2396377	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1479584	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.52	188	2611827	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.61	240	2318530	40.00	ppb		0.00
32) Perylene-D12(IS)	15.43	264	1410315	40.00	ppb		-0.01
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)	5.89	82	189689	8.07	ppb		-0.06
Spiked Amount 100.000			Recovery =	8.075%			
16) 2-Fluorobiphenyl(S)	7.99	172	276	0.01	ppb		-0.01
Spiked Amount 100.000			Recovery =	0.005%			
22) 2,4,6-Tribromophenol(S)	0.00	330	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
28) Terphenyl-D14(S)	12.38	244	929	0.02	ppb		0.00
Spiked Amount 100.000			Recovery =	0.016%			
Target Compounds							Qvalue
4) Phenol	4.92	94	1422102	49.29	ppb		98
5) 1,4-DCB	5.51	146	1308807	54.91	ppb		96
6) n-Nitrosodi-n-propylamine	5.78	43	1103775	52.69	ppb	#	52
9) 2-Nitrophenol	6.32	139	633541	51.29	ppb		86
10) 2,4-Dichlorophenol	6.85	162	1003114	51.46	ppb		99
11) Hexachlorobutadiene	6.92	225	665148	56.62	ppb		97
12) 4-Chloro-3-methylphenol	7.39	107	989268	48.19	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	675501	51.04	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	710720	45.71	ppb		93
17) Dimethyl phthalate	8.47	163	2664754	47.87	ppb		93
18) Acenaphthene	8.11	154	2896022	47.23	ppb	#	45
19) 2,4-Dinitrophenol	8.84	184	366554	51.87	ppb		98
20) 4-Nitrophenol	8.91	65	570380	50.61	ppb	#	1
21) Diethyl phthalate	9.30	149	2578941	47.98	ppb		98
24) n-Nitrosodiphenylamine	10.79	167	3494220	46.03	ppb		99
25) Pentachlorophenol	10.28	266	445083	49.69	ppb		97
26) Di-n-butylphthalate	11.21	149	4181496	49.70	ppb		99
29) Butyl benzylphthalate	12.97	149	1956724	52.93	ppb		92
30) Bis (2-ethylhexyl) phthala	13.63	149	3060275	49.31	ppb		99
31) Di-n-octylphthalate	14.40	149	4493654	49.60	ppb		99

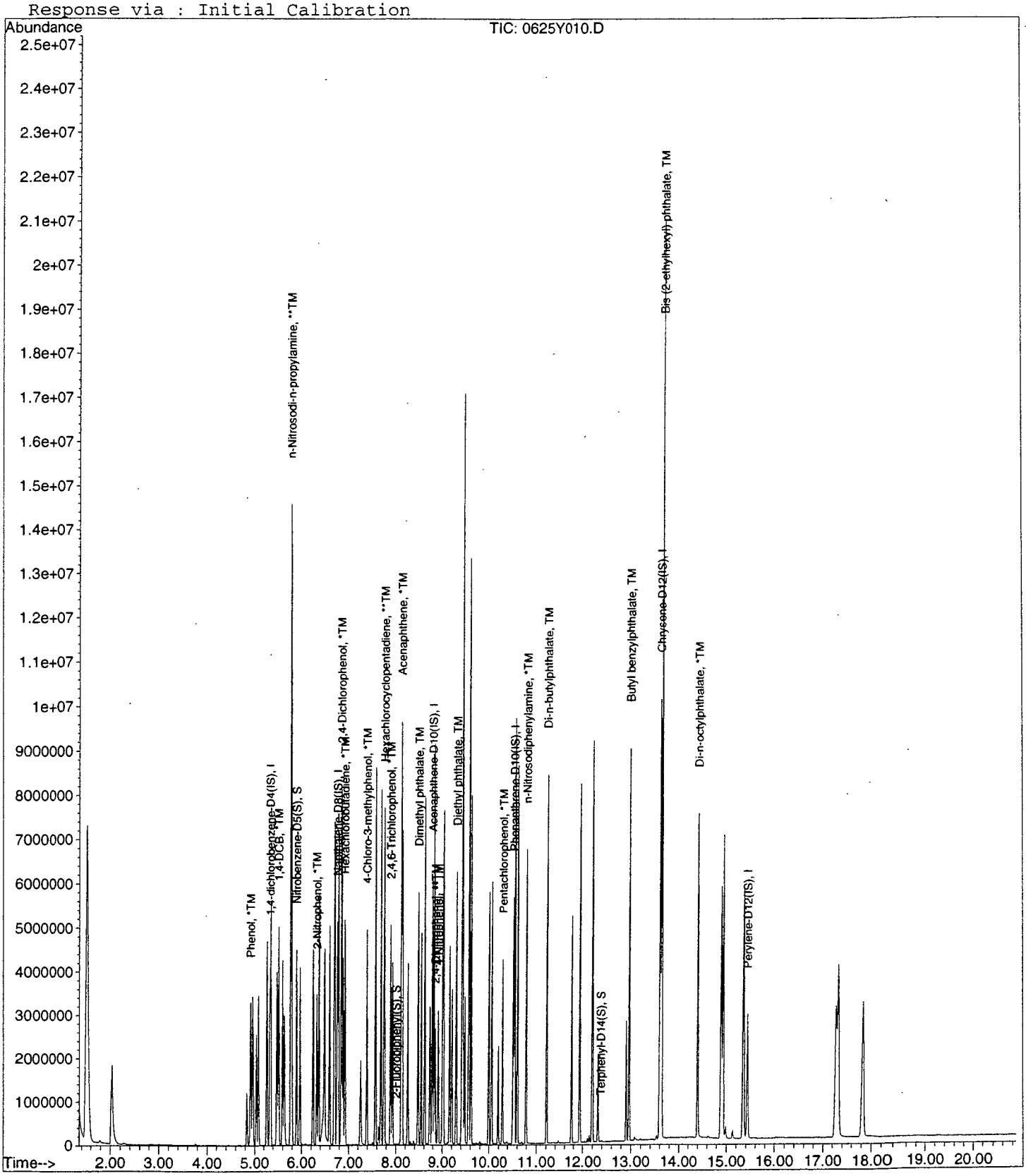
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y010.D Vial: 10
Acq On : 25 Jun 15 14:15 Operator: MA
Sample : 50ug/ml SVOC SS 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 2 13:38 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 76687
Date Analyzed: 7 Jul 15 14:20
Instrument: Yoda
Initial Cal. Date: 6/25/2015
Data File: 0625Y122.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	S	2-Fluorophenol (S)	1.431	1.424	0.46	S	
3	S	Phenol-D6 (S)	1.767	1.781	0.78	S	
4	*TM	Phenol	2.189	2.240	2.3	*TM	
5	*TM	1,4-DCB	1.808	1.740	3.8	*TM	
6	**TM	n-Nitrosodi-n-propylamine	1.590	1.700	7.0	**TM	
7	I	Napthalene-D8(IS)	ISTD			I	
8	S	Nitrobenzene-D5(S)	0.3921	0.4035	2.9	S	
9	*TM	2-Nitrophenol	0.2062	0.2043	0.89	*TM	
10	*TM	2,4-Dichlorophenol	0.3254	0.3118	4.2	*TM	
11	*TM	Hexachlorobutadiene	0.1961	0.1835	6.4	*TM	
12	*TM	4-Chloro-3-methylphenol	0.3427	0.3062	11	*TM	
13	I	Acenaphthene-D10(IS)	ISTD			I	
14	**TMQ	Hexachlorocyclopentadiene	0.3586	0.3939	9.9	**TMQ	8.5
15	*TM	2,4,6-Trichlorophenol	0.4204	0.3870	7.9	*TM	
16	S	2-Fluorobiphenyl(S)	1.358	1.268	6.6	S	
17	TM	Dimethyl phthalate	1.505	1.365	9.3	TM	
18	*TM	Acenaphthene	1.658	1.577	4.9	*TM	
19	**TMQ	2,4-Dinitrophenol	0.1705	0.1807	6.0	**TMQ	3.3
20	**TM	4-Nitrophenol	0.3047	0.2765	9.2	**TM	
21	TM	Diethyl phthalate	1.453	1.324	8.9	TM	
22	S	2,4,6-Tribromophenol(S)	0.1317	0.1129	14	S	
23	I	Phenanthrene-D10(IS)	ISTD			I	
24	*TM	n-Nitrosodiphenylamine	1.163	1.073	7.7	*TM	
25	*TMQ	Pentachlorophenol	0.1395	0.1270	9.0	*TMQ	6.9
26	TM	Di-n-butylphthalate	1.289	1.336	3.7	TM	
27	I	Chrysene-D12(IS)	ISTD			I	
28	S	Terphenyl-D14(S)	1.008	1.003	0.45	S	
29	TM	Butyl benzylphthalate	0.6377	0.6880	7.9	TM	
30	TML	Bis (2-ethylhexyl) phthalate	0.9887	0.9852	0.36	TML	7.6
31	*TML	Di-n-octylphthalate	1.455	1.467	0.78	*TML	6.0
32	I	Perylene-D12(IS)	ISTD			I	
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.6		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y122.D Vial: 22
Acq On : 7 Jul 15 14:20 Operator: MA
Sample : CCV 50ug/ml SVOC 07/07/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 8 13:14 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	662751	40.00	ppb		-0.01
7) Napthalene-D8(IS)	6.76	136	2995875	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.78	164	1688384	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.51	188	2737131	40.00	ppb		-0.01
27) Chrysene-D12(IS)	13.61	240	2072797	40.00	ppb		0.00
32) Perylene-D12(IS)	15.43	264	1238556	40.00	ppb		-0.01
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.79	112	2359438	99.54	ppb		-0.01
Spiked Amount 200.000			Recovery =	49.770%			
3) Phenol-D6 (S)	4.91	99	2950601	100.78	ppb		0.00
Spiked Amount 200.000			Recovery =	50.392%			
8) Nitrobenzene-D5(S)	5.95	82	1510959	51.45	ppb		0.00
Spiked Amount 100.000			Recovery =	51.447%			
16) 2-Fluorobiphenyl(S)	7.99	172	2677130	46.69	ppb		-0.01
Spiked Amount 100.000			Recovery =	46.692%			
22) 2,4,6-Tribromophenol(S)	9.70	330	476716	85.73	ppb		0.00
Spiked Amount 200.000			Recovery =	42.863%			
28) Terphenyl-D14(S)	12.38	244	2598909	49.78	ppb		0.00
Spiked Amount 100.000			Recovery =	49.776%			
Target Compounds							Qvalue
4) Phenol	4.93	94	1855758	51.16	ppb		97
5) 1,4-DCB	5.50	146	1441180	48.10	ppb		94
6) n-Nitrosodi-n-propylamine	5.78	43	1408610	53.49	ppb	#	57
9) 2-Nitrophenol	6.32	139	765213	49.56	ppb		92
10) 2,4-Dichlorophenol	6.85	162	1167460	47.91	ppb		98
11) Hexachlorobutadiene	6.91	225	687029	46.78	ppb		98
12) 4-Chloro-3-methylphenol	7.40	107	1146842	44.69	ppb	#	1
14) Hexachlorocyclopentadiene	7.75	237	831308	54.27	ppb		100
15) 2,4,6-Trichlorophenol	7.89	196	816661	46.03	ppb		95
17) Dimethyl phthalate	8.46	163	2881409	45.36	ppb		97
18) Acenaphthene	8.11	154	3328503	47.57	ppb	#	45
19) 2,4-Dinitrophenol	8.84	184	381434	48.37	ppb		99
20) 4-Nitrophenol	8.92	65	583502	45.38	ppb	#	1
21) Diethyl phthalate	9.29	149	2794989	45.56	ppb		98
24) n-Nitrosodiphenylamine	10.79	167	3670033	46.13	ppb		99
25) Pentachlorophenol	10.28	266	434592	46.53	ppb		97
26) Di-n-butylphthalate	11.20	149	4570765	51.84	ppb		99
29) Butyl benzylphthalate	12.96	149	1782534	53.94	ppb		94
30) Bis (2-ethylhexyl) phthala	13.63	149	2552579	46.20	ppb	#	94
31) Di-n-octylphthalate	14.38	149	3800037	46.98	ppb		100

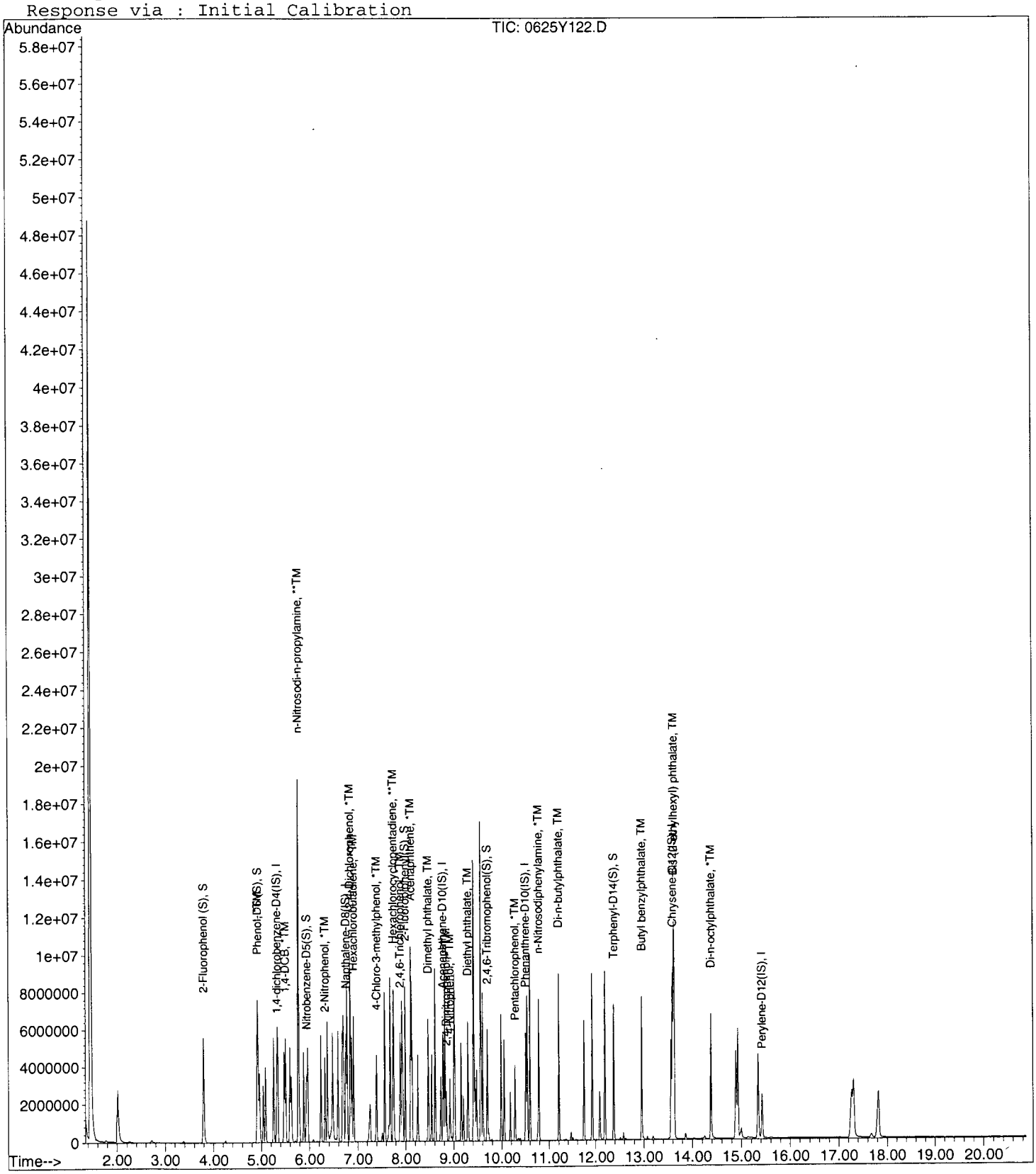
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y122.D Vial: 22
Acq On : 7 Jul 15 14:20 Operator: MA
Sample : CCV 50ug/ml SVOC 07/07/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 8 13:14 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 6/25/2015
Matrix: Instrument: Yoda Initials:

			0625Y002 D	0625Y003.D	0625Y004 D	0625Y005.D	0625Y006 D	0625Y007.D	0625Y008 D	0625Y009 D						
		Compound	5	10	20	40	50	60	80	100			Avg	%RSD		
1	I	1,4-dichlorobenzene-D4(IS)														
2	TM	Pyridine	1.376	1.436	1.223	1.221	1.311	1.224	1.190	1.223			1.3	7.0	TM	
3	S	2-Fluorophenol (S)	1.766	1.867	1.864	1.687	1.733	1.683	1.655	2.051			1.8	7.4	S	
4	S	Phenol-D6 (S)		2.349	2.328	2.079	2.178	2.125	2.109	2.293			2.2	5.1	S	
5	*TM	Phenol	2.594	2.854	2.802	2.659	2.742	2.642	2.656	2.943			2.7	4.4	*TM	
6	*TM	1,4-DCB	2.441	2.524	2.383	2.264	2.339	2.226	2.202	2.666			2.4	6.7	*TM	
7	TM	2-Methylphenol	1.805	2.037	1.922	1.810	1.892	1.826	1.791	2.454			1.9	11	TM	
8	TM	3&4-Methylphenol	2.132	2.409	2.362	2.296	2.419	2.342	2.380	3.067			2.4	11	TM	
9	TM	Hexachloroethane	0.8160	0.9736	0.9264	0.8776	0.9161	0.8740	0.8830	1.129			0.92	10	TM	
10	I	Napthalene-D8(IS)														
11	S	Nitrobenzene-D5(S)	0.4551	0.5148	0.5000	0.4445	0.4924	0.4872	0.4849	0.5425			0.49	6.4	S	
12	TM	Nitrobenzene	0.5244	0.6009	0.5551	0.5108	0.5538	0.5428	0.5375	0.6182			0.56	6.6	TM	
13	*TM	Hexachlorobutadiene	0.2346	0.2768	0.2395	0.2340	0.2352	0.2325	0.2333	0.2748			0.25	7.8	*TM	
14	I	Acenaphthene-D10(IS)														
15	*TM	2,4,6-Trichlorophenol	0.5093	0.5539	0.5388	0.5205	0.5153	0.4956	0.4959	0.5743			0.53	5.3	*TM	
16	TM	2,4,5-Trichlorophenol	0.5197	0.5751	0.5817	0.5075	0.5136	0.5172	0.4996	0.6017			0.54	7.4	TM	
17	S	2-Fluorobiphenyl(S)	1.722	1.828	1.821	1.536	1.619	1.606	1.586	1.864			1.7	7.5	S	
18	TM	2,4-DNT	0.4358	0.5760	0.6154	0.5964	0.5650	0.5728	0.5647	0.6597			0.57	11	TM	
19	S	2,4,6-Tribromophenol(S)		0.1657	0.1867	0.1378	0.1530	0.1521	0.1727	0.1848			0.16	11	S	
20	I	Phenanthrene-D10(IS)														
21	TM	Hexachlorobenzene	0.2449	0.2583	0.2758	0.2167	0.2326	0.2296	0.2485	0.2516			0.24	7.5	TM	
22	*TM	Pentachlorophenol	0.1370	0.1763	0.2009	0.1666	0.1762	0.1678	0.1801	0.1903			0.17	11	*TM	
23	I	Chrysene-D12(IS)														
24	S	Terphenyl-D14(S)	1.277	1.331	1.274	1.171	1.186	1.175	1.208	1.453			1.3	7.7	S	
25	I	Perylene-D12(IS)														
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y002.D Vial: 2
Acq On : 25 Jun 15 10:20 Operator: MA
Sample : 5ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	374815	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	1635357	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	919003	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	1633980	50.00	ppb		-0.01
23) Chrysene-D12(IS)	13.61	240	1384055	50.00	ppb		-0.01
25) Perylene-D12(IS)	15.43	264	783250	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.79	112	132355	13.98	ppb		-0.01
Spiked Amount 200.000			Recovery =	6.993%			
4) Phenol-D6 (S)	4.89	99	164231	12.45	ppb		-0.03
Spiked Amount 200.000			Recovery =	6.226%			
11) Nitrobenzene-D5(S)	5.94	82	74425	6.21	ppb		-0.03
Spiked Amount 100.000			Recovery =	6.209%			
17) 2-Fluorobiphenyl(S)	7.99	172	158297	6.57	ppb		-0.01
Spiked Amount 100.000			Recovery =	6.572%			
19) 2,4,6-Tribromophenol(S)	9.69	330	25662	17.28	ppb		-0.02
Spiked Amount 200.000			Recovery =	8.638%			
24) Terphenyl-D14(S)	12.38	244	176767	7.37	ppb		-0.01
Spiked Amount 100.000			Recovery =	7.367%			
Target Compounds							Qvalue
2) Pyridine	2.04	52	51573	17.04	ppb		82
5) Phenol	4.91	94	97230	6.64	ppb		94
6) 1,4-DCB	5.35	146	91474	6.99	ppb		91
7) 2-Methylphenol	5.59	108	67664	6.70	ppb		98
8) 3&4-Methylphenol	5.76	107	159794	13.27	ppb	#	69
9) Hexachloroethane	5.89	117	30585	6.43	ppb	#	76
12) Nitrobenzene	5.96	77	85764	5.03	ppb	#	88
13) Hexachlorobutadiene	6.91	225	38369	7.36	ppb		98
15) 2,4,6-Trichlorophenol	7.89	196	46802	7.61	ppb		92
16) 2,4,5-Trichlorophenol	7.93	196	47762	7.76	ppb		97
18) 2,4-DNT	8.99	165	40048	5.20	ppb		94
21) Hexachlorobenzene	10.05	284	40011	6.66	ppb		88
22) Pentachlorophenol	10.28	266	22384	19.13	ppb		98

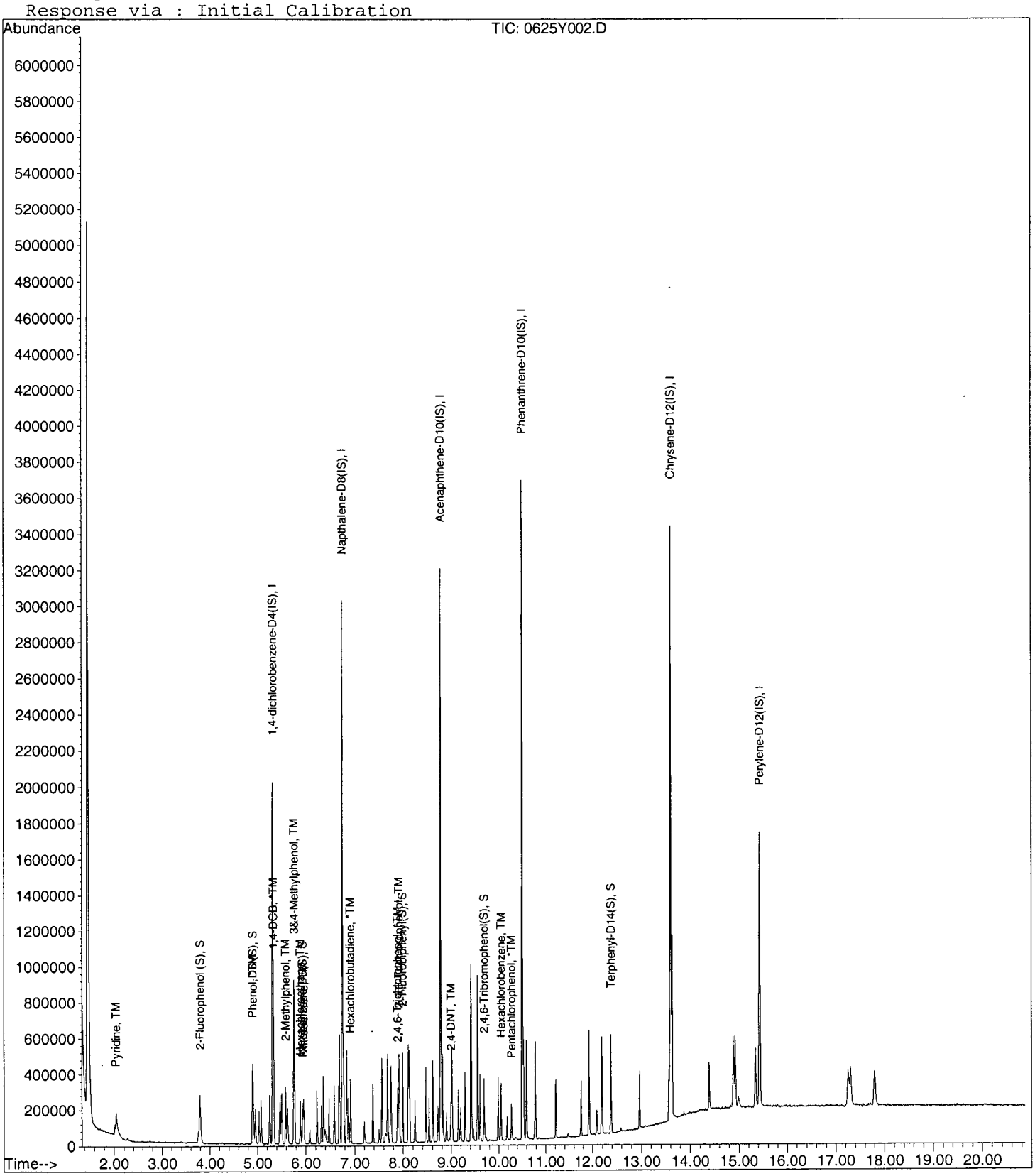
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y002.D Vial: 2
Acq On : 25 Jun 15 10:20 Operator: MA
Sample : 5ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y003.D Vial: 3
Acq On : 25 Jun 15 10:49 Operator: MA
Sample : 10ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	528824	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2306770	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.77	164	1379093	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	2458159	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	2168959	50.00	ppb		0.00
25) Perylene-D12(IS)	15.43	264	1291581	50.00	ppb		0.00
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.80	112	394974	29.58	ppb		0.00
Spiked Amount 200.000			Recovery =	14.790%			
4) Phenol-D6 (S)	4.89	99	496803	27.06	ppb		-0.03
Spiked Amount 200.000			Recovery =	13.532%			
11) Nitrobenzene-D5(S)	5.94	82	237511	14.05	ppb		-0.03
Spiked Amount 100.000			Recovery =	14.047%			
17) 2-Fluorobiphenyl(S)	7.99	172	504184	13.95	ppb		0.00
Spiked Amount 100.000			Recovery =	13.949%			
19) 2,4,6-Tribromophenol(S)	9.69	330	91409	34.20	ppb		-0.02
Spiked Amount 200.000			Recovery =	17.103%			
24) Terphenyl-D14(S)	12.38	244	577347	15.35	ppb		0.00
Spiked Amount 100.000			Recovery =	15.354%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	151878	35.57	ppb		79
5) Phenol	4.91	94	301842	14.60	ppb		94
6) 1,4-DCB	5.35	146	266953	14.45	ppb		95
7) 2-Methylphenol	5.59	108	215406	15.12	ppb		99
8) 3&4-Methylphenol	5.76	107	509642	30.00	ppb	#	71
9) Hexachloroethane	5.88	117	102969	15.34	ppb		95
12) Nitrobenzene	5.96	77	277216	11.53	ppb	#	87
13) Hexachlorobutadiene	6.92	225	127696	17.36	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	152768	16.55	ppb		93
16) 2,4,5-Trichlorophenol	7.93	196	158612	17.18	ppb		95
18) 2,4-DNT	8.99	165	158871	13.75	ppb		97
21) Hexachlorobenzene	10.05	284	126983	14.05	ppb	#	84
22) Pentachlorophenol	10.28	266	86664	38.93	ppb		96

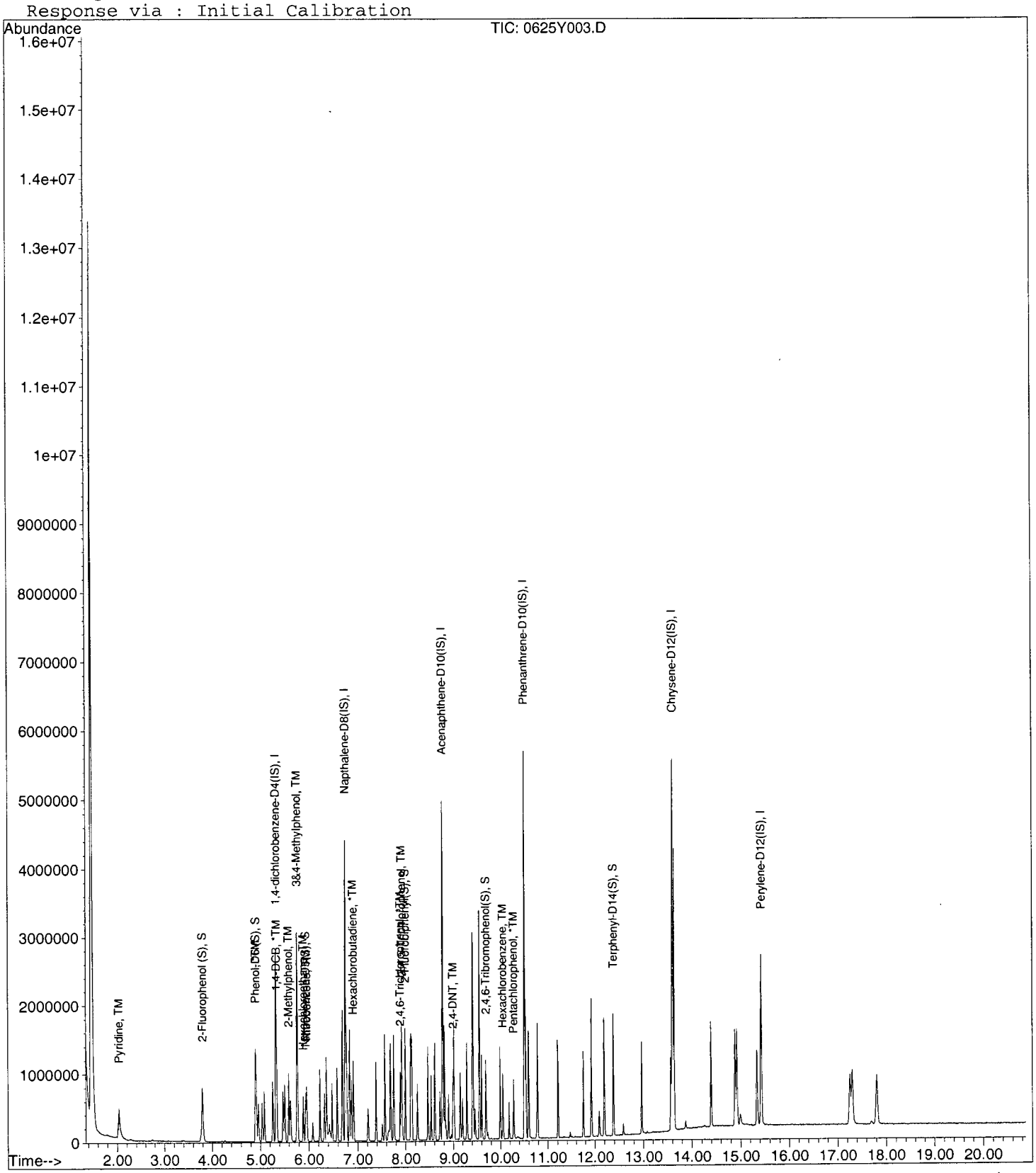
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y003.D Vial: 3
Acq On : 25 Jun 15 10:49 Operator: MA
Sample : 10ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y004.D Vial: 4
Acq On : 25 Jun 15 11:18 Operator: MA
Sample : 20ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	565564	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2611003	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1485951	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	2692269	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	2902146	50.00	ppb		-0.01
25) Perylene-D12(IS)	15.43	264	1395233	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.79	112	843384	59.06	ppb		-0.01
Spiked Amount 200.000			Recovery =	29.529%			
4) Phenol-D6 (S)	4.90	99	1053280	53.97	ppb		-0.02
Spiked Amount 200.000			Recovery =	26.983%			
11) Nitrobenzene-D5(S)	5.94	82	522153	27.28	ppb		-0.03
Spiked Amount 100.000			Recovery =	27.284%			
17) 2-Fluorobiphenyl(S)	8.00	172	1082350	27.79	ppb		0.00
Spiked Amount 100.000			Recovery =	27.792%			
19) 2,4,6-Tribromophenol(S)	9.70	330	221887	70.85	ppb		-0.01
Spiked Amount 200.000			Recovery =	35.427%			
24) Terphenyl-D14(S)	12.38	244	1479468	29.41	ppb		-0.01
Spiked Amount 100.000			Recovery =	29.406%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	276760	60.61	ppb		85
5) Phenol	4.92	94	633780	28.67	ppb		95
6) 1,4-DCB	5.34	146	539123	27.29	ppb		98
7) 2-Methylphenol	5.60	108	434817	28.53	ppb		98
8) 3&4-Methylphenol	5.76	107	1068649	58.82	ppb	#	82
9) Hexachloroethane	5.89	117	209565	29.19	ppb		87
12) Nitrobenzene	5.97	77	579791	21.30	ppb		90
13) Hexachlorobutadiene	6.91	225	250142	30.04	ppb		94
15) 2,4,6-Trichlorophenol	7.89	196	320242	32.20	ppb		96
16) 2,4,5-Trichlorophenol	7.93	196	345741	34.76	ppb	#	96
18) 2,4-DNT	8.99	165	365761	29.38	ppb		85
21) Hexachlorobenzene	10.05	284	296976	30.00	ppb		91
22) Pentachlorophenol	10.28	266	216337	76.11	ppb		97

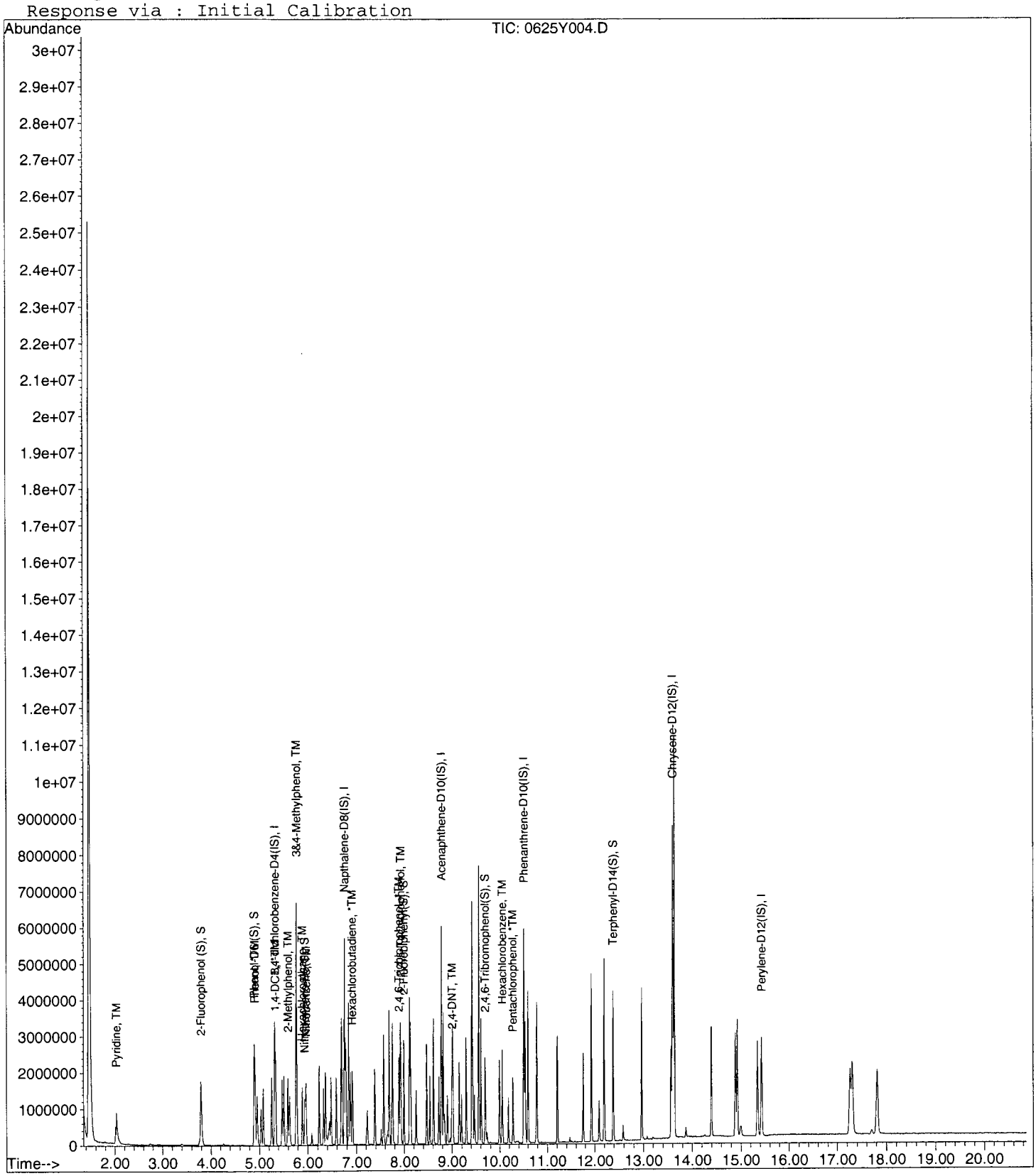
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y004.D Vial: 4
Acq On : 25 Jun 15 11:18 Operator: MA
Sample : 20ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y005.D Vial: 5
Acq On : 25 Jun 15 11:48 Operator: MA
Sample : 40ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	583381	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2765570	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1647595	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	2810482	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	3130339	50.00	ppb		-0.01
25) Perylene-D12(IS)	15.43	264	1826270	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.80	112	1574807	106.91	ppb		0.00
Spiked Amount 200.000			Recovery =	53.454%			
4) Phenol-D6 (S)	4.91	99	1940410	96.64	ppb		-0.01
Spiked Amount 200.000			Recovery =	48.318%			
11) Nitrobenzene-D5(S)	5.95	82	983387	48.51	ppb		-0.02
Spiked Amount 100.000			Recovery =	48.513%			
17) 2-Fluorobiphenyl(S)	8.00	172	2024504	46.88	ppb		0.00
Spiked Amount 100.000			Recovery =	46.884%			
19) 2,4,6-Tribromophenol(S)	9.70	330	363318	102.27	ppb		-0.01
Spiked Amount 200.000			Recovery =	51.136%			
24) Terphenyl-D14(S)	12.38	244	2933457	54.05	ppb		-0.01
Spiked Amount 100.000			Recovery =	54.055%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	570032	121.02	ppb		86
5) Phenol	4.92	94	1240819	54.41	ppb		90
6) 1,4-DCB	5.35	146	1056393	51.84	ppb		96
7) 2-Methylphenol	5.60	108	844541	53.73	ppb		98
8) 3&4-Methylphenol	5.77	107	2143453	114.37	ppb	#	66
9) Hexachloroethane	5.89	117	409577	55.31	ppb		89
12) Nitrobenzene	5.97	77	1130179	39.20	ppb		89
13) Hexachlorobutadiene	6.92	225	517662	58.70	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	686114	62.22	ppb		95
16) 2,4,5-Trichlorophenol	7.94	196	668902	60.66	ppb		98
18) 2,4-DNT	9.00	165	786156	56.96	ppb		96
21) Hexachlorobenzene	10.05	284	487313	47.15	ppb		92
22) Pentachlorophenol	10.28	266	374560	114.51	ppb		98

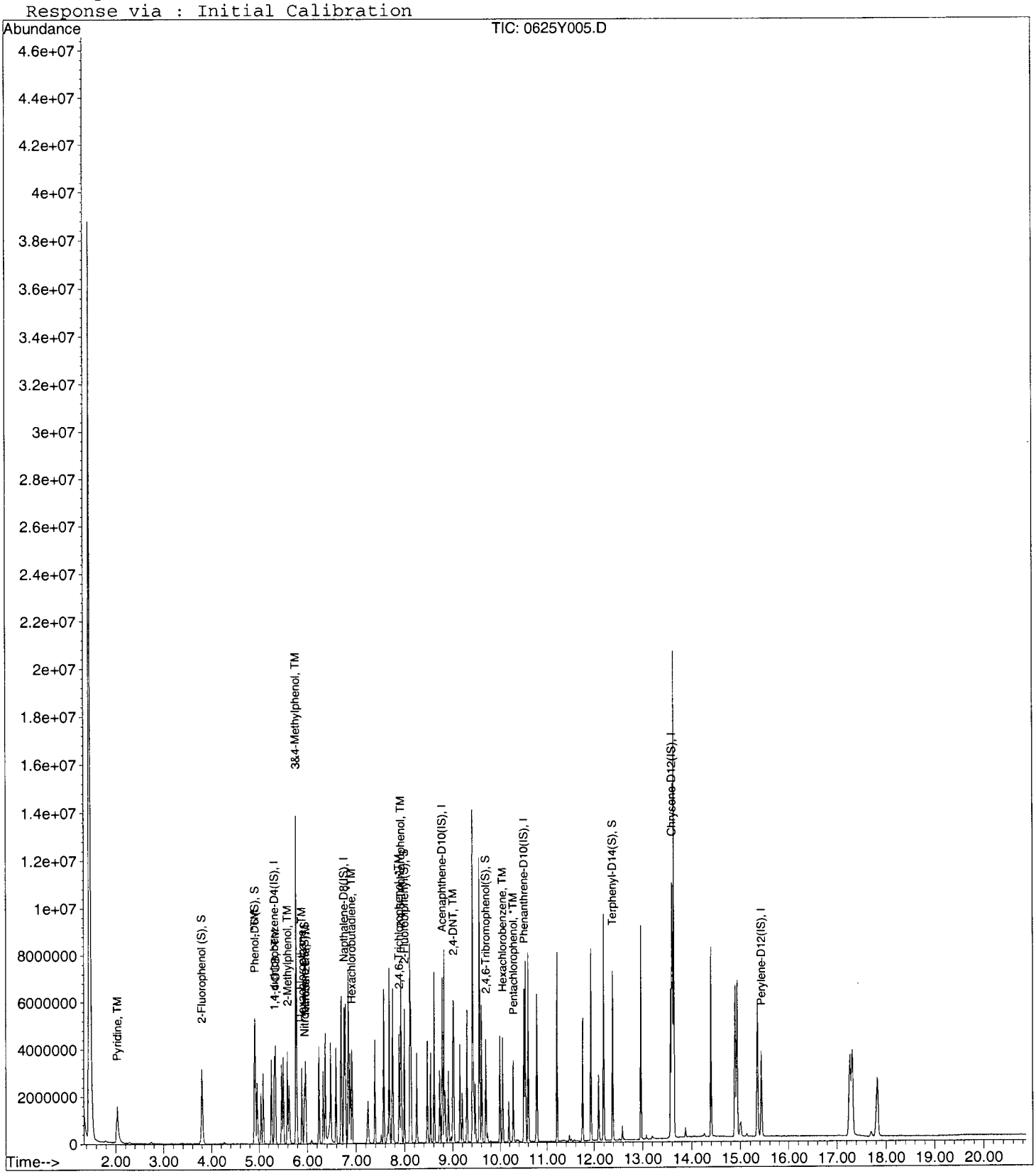
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y005.D Vial: 5
Acq On : 25 Jun 15 11:48 Operator: MA
Sample : 40ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y006.D Vial: 6
Acq On : 25 Jun 15 12:17 Operator: MA
Sample : 50ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	609828	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2766351	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1666409	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	2970623	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	2670451	50.00	ppb		0.00
25) Perylene-D12(IS)	15.44	264	1615433	50.00	ppb		0.00
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.80	112	2114212	137.30	ppb		0.00
Spiked Amount 200.000			Recovery =	68.650%			
4) Phenol-D6 (S)	4.91	99	2656861	126.68	ppb		0.00
Spiked Amount 200.000			Recovery =	63.339%			
11) Nitrobenzene-D5(S)	5.95	82	1362243	67.18	ppb		-0.02
Spiked Amount 100.000			Recovery =	67.183%			
17) 2-Fluorobiphenyl(S)	8.00	172	2698423	61.79	ppb		0.00
Spiked Amount 100.000			Recovery =	61.786%			
19) 2,4,6-Tribromophenol(S)	9.70	330	509830	139.98	ppb		0.00
Spiked Amount 200.000			Recovery =	69.988%			
24) Terphenyl-D14(S)	12.38	244	3167681	68.42	ppb		0.00
Spiked Amount 100.000			Recovery =	68.423%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	799234	162.33	ppb		88
5) Phenol	4.92	94	1672051	70.14	ppb		85
6) 1,4-DCB	5.35	146	1426398	66.96	ppb		98
7) 2-Methylphenol	5.60	108	1154035	70.23	ppb		99
8) 3&4-Methylphenol	5.77	107	2950752	150.62	ppb	#	68
9) Hexachloroethane	5.89	117	558650	72.16	ppb		87
12) Nitrobenzene	5.97	77	1531948	53.11	ppb	#	88
13) Hexachlorobutadiene	6.91	225	650571	73.75	ppb		100
15) 2,4,6-Trichlorophenol	7.89	196	858736	76.99	ppb		99
16) 2,4,5-Trichlorophenol	7.94	196	855926	76.74	ppb		100
18) 2,4-DNT	9.00	165	941530	67.45	ppb		93
21) Hexachlorobenzene	10.05	284	691092	63.27	ppb		90
22) Pentachlorophenol	10.28	266	523329	142.68	ppb		98

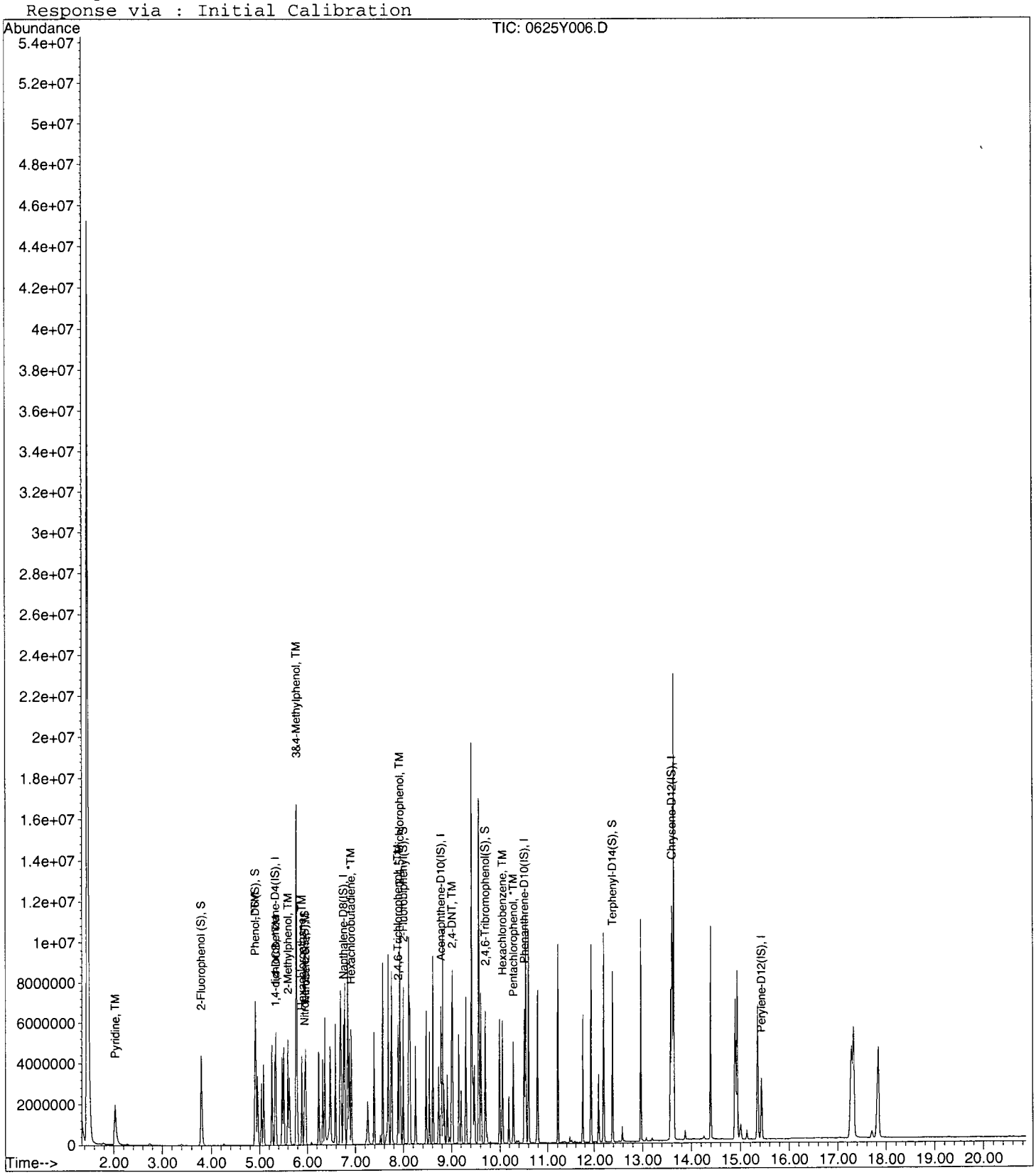
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y006.D Vial: 6
Acq On : 25 Jun 15 12:17 Operator: MA
Sample : 50ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y007.D Vial: 7
Acq On : 25 Jun 15 12:47 Operator: MA
Sample : 60ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	601640	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2694275	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1581668	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	2815609	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.62	240	2516681	50.00	ppb		0.00
25) Perylene-D12(IS)	15.44	264	1477528	50.00	ppb		0.00
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.80	112	2430102	159.96	ppb		0.00
Spiked Amount 200.000			Recovery =	79.981%			
4) Phenol-D6 (S)	4.91	99	3068413	148.35	ppb		-0.01
Spiked Amount 200.000			Recovery =	74.173%			
11) Nitrobenzene-D5(S)	5.95	82	1575085	79.76	ppb		-0.02
Spiked Amount 100.000			Recovery =	79.759%			
17) 2-Fluorobiphenyl(S)	8.00	172	3049071	73.55	ppb		0.00
Spiked Amount 100.000			Recovery =	73.555%			
19) 2,4,6-Tribromophenol(S)	9.71	330	577317	166.04	ppb		0.00
Spiked Amount 200.000			Recovery =	83.021%			
24) Terphenyl-D14(S)	12.39	244	3548625	81.33	ppb		0.00
Spiked Amount 100.000			Recovery =	81.335%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	883942	181.97	ppb		86
5) Phenol	4.93	94	1907643	81.11	ppb		93
6) 1,4-DCB	5.34	146	1607125	76.47	ppb		96
7) 2-Methylphenol	5.59	108	1318302	81.32	ppb		100
8) 3&4-Methylphenol	5.78	107	3382190	174.99	ppb	#	59
9) Hexachloroethane	5.89	117	631030	82.62	ppb		96
12) Nitrobenzene	5.98	77	1755031	62.48	ppb		90
13) Hexachlorobutadiene	6.92	225	751800	87.51	ppb		100
15) 2,4,6-Trichlorophenol	7.90	196	940599	88.85	ppb		95
16) 2,4,5-Trichlorophenol	7.93	196	981738	92.74	ppb	#	95
18) 2,4-DNT	9.01	165	1087096	82.05	ppb		97
21) Hexachlorobenzene	10.06	284	775837	74.94	ppb	#	84
22) Pentachlorophenol	10.28	266	566813	158.21	ppb		98

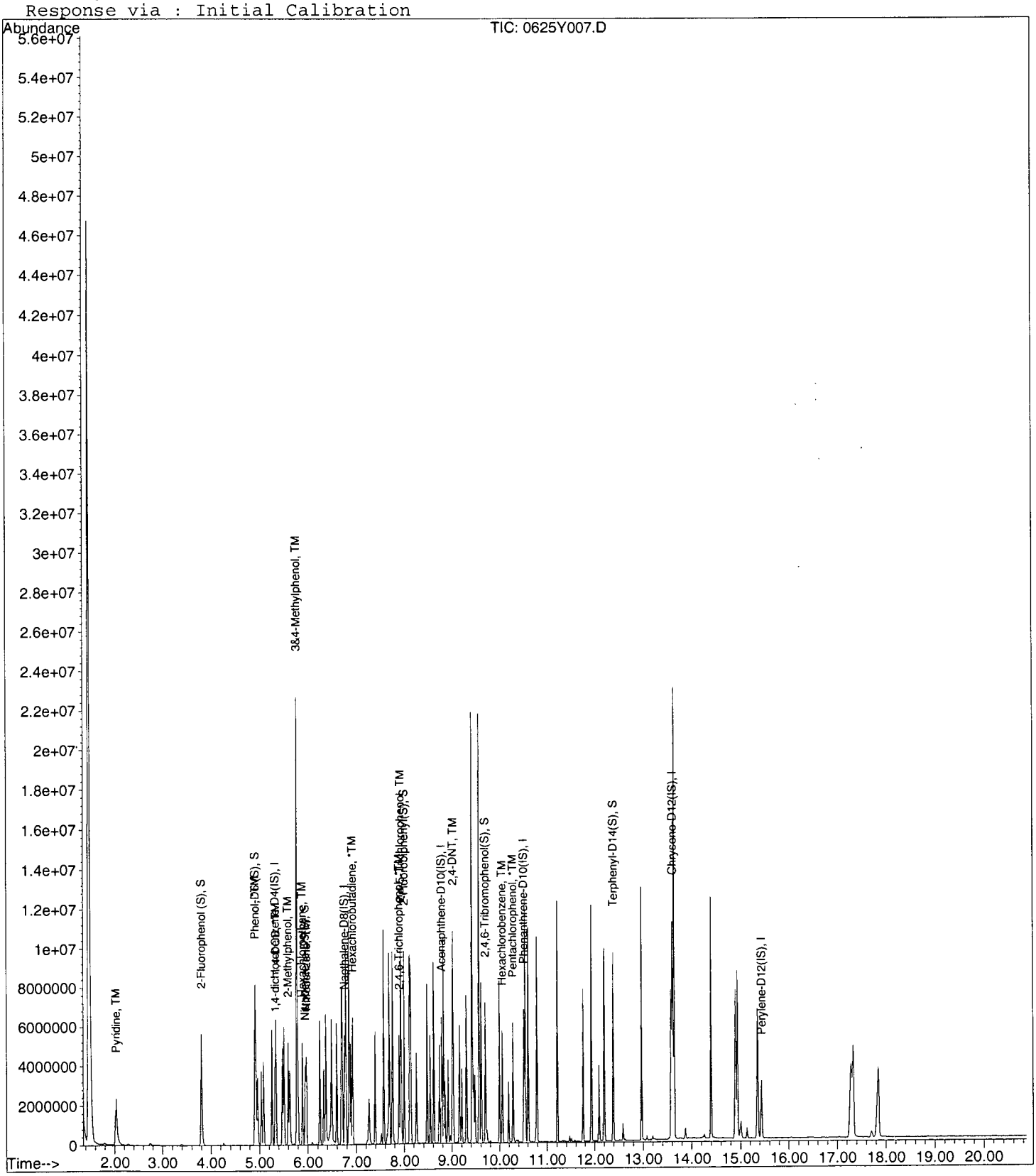
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y007.D Vial: 7
Acq On : 25 Jun 15 12:47 Operator: MA
Sample : 60ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y008.D Vial: 8
Acq On : 25 Jun 15 13:17 Operator: MA
Sample : 80ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	585601	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2633251	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	2018267	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	3502423	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.62	240	3228762	50.00	ppb		0.00
25) Perylene-D12(IS)	15.44	264	1967252	50.00	ppb		0.00
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.81	112	3100990	209.71	ppb		0.00
Spiked Amount 200.000			Recovery =	104.858%			
4) Phenol-D6 (S)	4.91	99	3951716	196.39	ppb		0.00
Spiked Amount 200.000			Recovery =	98.194%			
11) Nitrobenzene-D5(S)	5.95	82	2042916	105.85	ppb		-0.02
Spiked Amount 100.000			Recovery =	105.846%			
17) 2-Fluorobiphenyl(S)	8.00	172	5121772	96.83	ppb		0.00
Spiked Amount 100.000			Recovery =	96.828%			
19) 2,4,6-Tribromophenol(S)	9.71	330	1115546	248.89	ppb		0.00
Spiked Amount 200.000			Recovery =	124.444%			
24) Terphenyl-D14(S)	12.39	244	6240151	111.48	ppb		0.00
Spiked Amount 100.000			Recovery =	111.482%			
Target Compounds							Qvalue
2) Pyridine	2.02	52	1114920	235.81	ppb		82
5) Phenol	4.93	94	2488178	108.69	ppb		92
6) 1,4-DCB	5.35	146	2063304	100.86	ppb		98
7) 2-Methylphenol	5.60	108	1678332	106.37	ppb		97
8) 3&4-Methylphenol	5.78	107	4459998	237.08	ppb	#	58
9) Hexachloroethane	5.90	117	827361	111.30	ppb		85
12) Nitrobenzene	5.97	77	2264666	82.49	ppb	#	85
13) Hexachlorobutadiene	6.92	225	983005	117.07	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	1601316	118.54	ppb		98
16) 2,4,5-Trichlorophenol	7.94	196	1613398	119.43	ppb	#	97
18) 2,4-DNT	9.01	165	1823537	107.86	ppb		96
21) Hexachlorobenzene	10.05	284	1392722	108.14	ppb		97
22) Pentachlorophenol	10.29	266	1009292	207.57	ppb		99

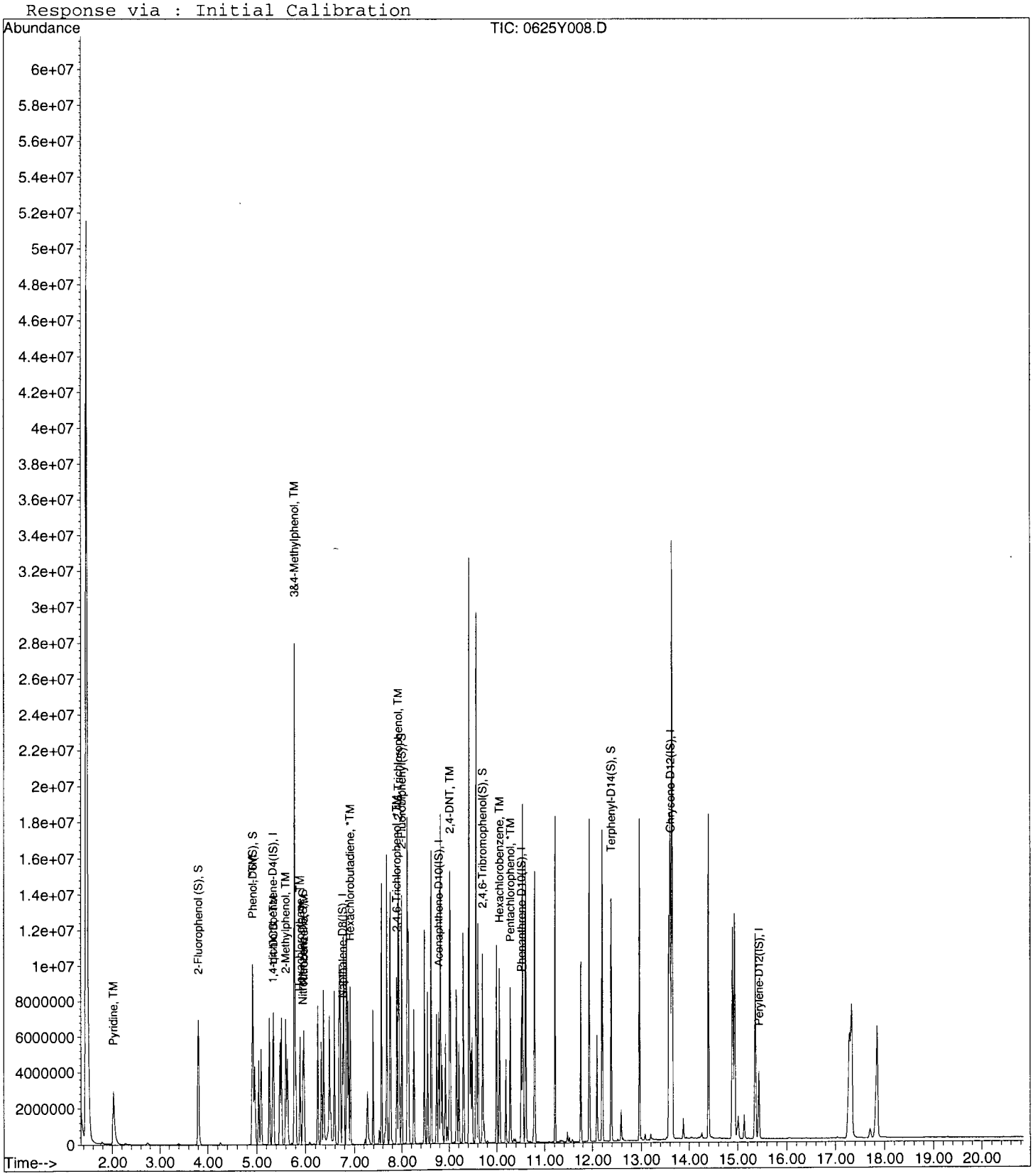
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y008.D Vial: 8
Acq On : 25 Jun 15 13:17 Operator: MA
Sample : 80ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y009.D Vial: 9
Acq On : 25 Jun 15 13:46 Operator: MA
Sample : 100ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:13:26 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	578387	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2941160	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1793012	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	3057652	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.62	240	2873875	50.00	ppb		0.00
25) Perylene-D12(IS)	15.44	264	1751745	50.00	ppb		0.00
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.81	112	4745115	324.91	ppb		0.00
Spiked Amount 200.000			Recovery =	162.453%			
4) Phenol-D6 (S)	4.92	99	5305705	267.08	ppb		0.00
Spiked Amount 200.000			Recovery =	133.540%			
11) Nitrobenzene-D5(S)	5.95	82	3191024	148.02	ppb		-0.02
Spiked Amount 100.000			Recovery =	148.022%			
17) 2-Fluorobiphenyl(S)	8.00	172	6685387	142.27	ppb		0.00
Spiked Amount 100.000			Recovery =	142.267%			
19) 2,4,6-Tribromophenol(S)	9.71	330	1325500	331.21	ppb		0.00
Spiked Amount 200.000			Recovery =	165.606%			
24) Terphenyl-D14(S)	12.39	244	8348732	167.57	ppb		0.00
Spiked Amount 100.000			Recovery =	167.570%			
Target Compounds							Qvalue
2) Pyridine	2.02	52	1414521	302.91	ppb		82
5) Phenol	4.94	94	3404562	150.57	ppb		92
6) 1,4-DCB	5.35	146	3084048	152.64	ppb		97
7) 2-Methylphenol	5.61	108	2838334	182.13	ppb		97
8) 3&4-Methylphenol	5.79	107	7096513	381.93	ppb	#	65
9) Hexachloroethane	5.89	117	1306500	177.94	ppb		85
12) Nitrobenzene	5.98	77	3636209	118.58	ppb		94
13) Hexachlorobutadiene	6.92	225	1616602	172.37	ppb		100
15) 2,4,6-Trichlorophenol	7.90	196	2059378	171.60	ppb		96
16) 2,4,5-Trichlorophenol	7.95	196	2157761	179.80	ppb		99
18) 2,4-DNT	9.01	165	2365696	157.51	ppb		100
21) Hexachlorobenzene	10.06	284	1538746	136.86	ppb		88
22) Pentachlorophenol	10.29	266	1163958	254.53	ppb		98

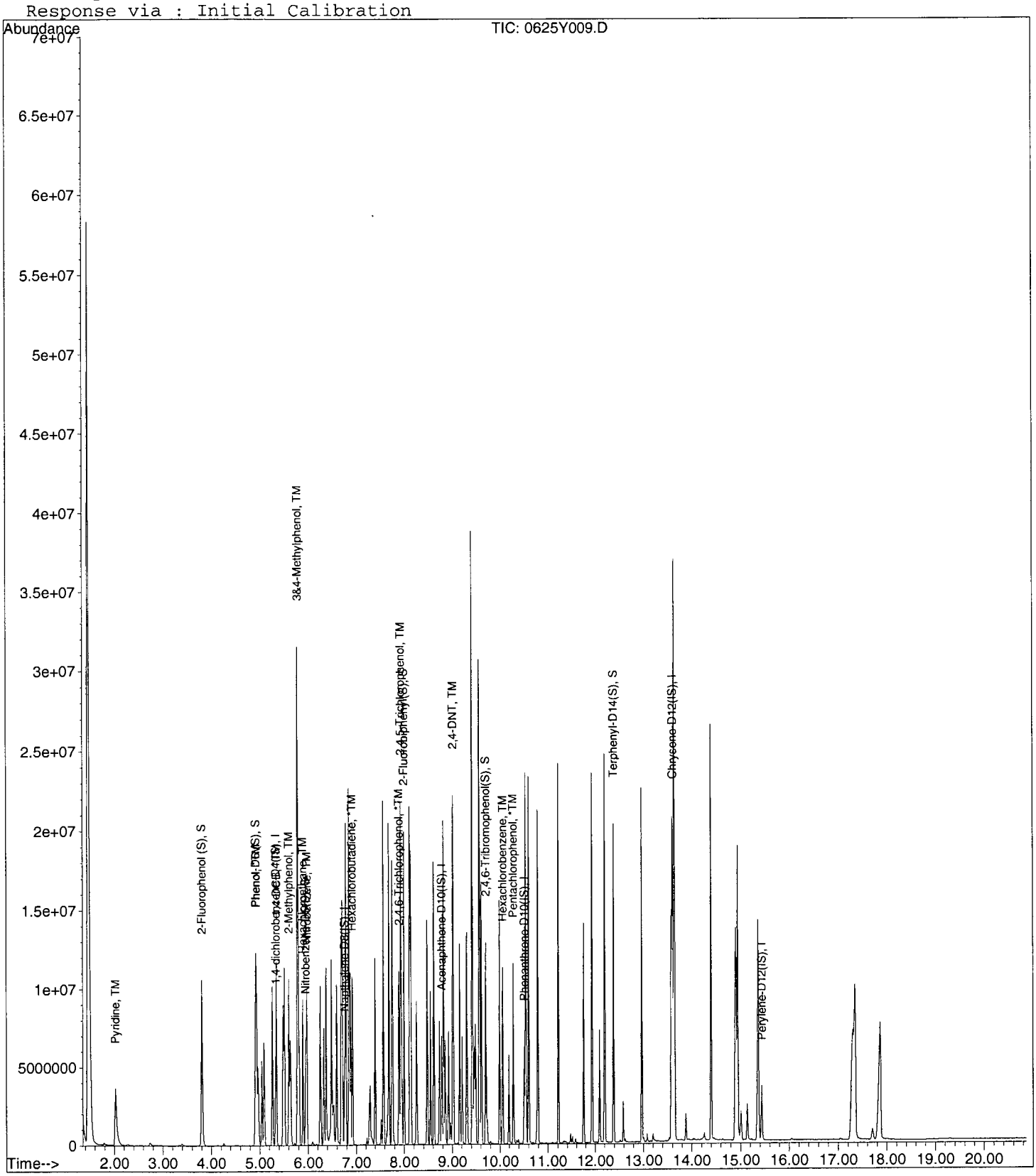
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y009.D Vial: 9
Acq On : 25 Jun 15 13:46 Operator: MA
Sample : 100ug/ml SVOC 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 15:17 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:

Case No: Date Analyzed: 6/25/2015

Matrix: Instrument: Yoda

Initial Cal. Date: 6/25/2015

Data File: 0625Y010.D

		Compound	MEAN	CCRF	%D	%Drift	
1	TM	Pyridine	1.276	1.278	0.19	TM	
2	*TM	Phenol	2.736	2.697	1.4	*TM	
3	*TM	1,4-DCB	2.381	2.687	13	*TM	
4	TM	2-Methylphenol	1.942	1.862	4.1	TM	
5	TM	3&4-Methylphenol	2.426	2.412	0.58	TM	
6	TM	Hexachloroethane	0.9245	1.043	13	TM	
7	TM	Nitrobenzene	0.5554	0.5811	4.6	TM	
8	*TM	Hexachlorobutadiene	0.2451	0.2776	13	*TM	
9	*TM	2,4,6-Trichlorophenol	0.5254	0.4804	8.6	*TM	
10	TM	2,4,5-Trichlorophenol	0.5395	0.5032	6.7	TM	
11	TM	2,4-DNT	0.5732	0.5823	1.6	TM	
12	TM	Hexachlorobenzene	0.2448	0.2487	1.6	TM	
13	*TM	Pentachlorophenol	0.1744	0.1704	2.3	*TM	
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
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29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.4		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y010.D Vial: 10
Acq On : 25 Jun 15 14:15 Operator: MA
Sample : 50ug/ml SVOC SS 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 16:00 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	527215	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2396377	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1479584	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.52	188	2611827	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	2318530	50.00	ppb		0.00
25) Perylene-D12(IS)	15.43	264	1410315	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	0.00	112	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
4) Phenol-D6 (S)	0.00	99	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
11) Nitrobenzene-D5(S)	5.89	82	189689	10.09	ppb		-0.06
Spiked Amount 100.000			Recovery =	10.093%			
17) 2-Fluorobiphenyl(S)	7.99	172	276	0.01	ppb		-0.01
Spiked Amount 100.000			Recovery =	0.007%			
19) 2,4,6-Tribromophenol(S)	0.00	330	0	0.00	ppb		
Spiked Amount 200.000			Recovery =	0.000%			
24) Terphenyl-D14(S)	12.38	244	929	0.02	ppb		0.00
Spiked Amount 100.000			Recovery =	0.020%			
Target Compounds							Qvalue
2) Pyridine	2.03	52	673785	62.62	ppb		89
5) Phenol	4.92	94	1422102	61.61	ppb		95
6) 1,4-DCB	5.34	146	1416644	70.55	ppb		97
7) 2-Methylphenol	5.60	108	981701	59.92	ppb		99
8) 3&4-Methylphenol	5.77	107	2543143	124.27	ppb	#	66
9) Hexachloroethane	5.89	117	549858	70.51	ppb		90
12) Nitrobenzene	5.97	77	1392462	65.38	ppb	#	89
13) Hexachlorobutadiene	6.92	225	665148	70.78	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	710720	57.14	ppb		97
16) 2,4,5-Trichlorophenol	7.93	196	744549	58.29	ppb		96
18) 2,4-DNT	9.00	165	861495	63.49	ppb		90
21) Hexachlorobenzene	10.05	284	649534	63.50	ppb		87
22) Pentachlorophenol	10.28	266	445083	62.11	ppb		98

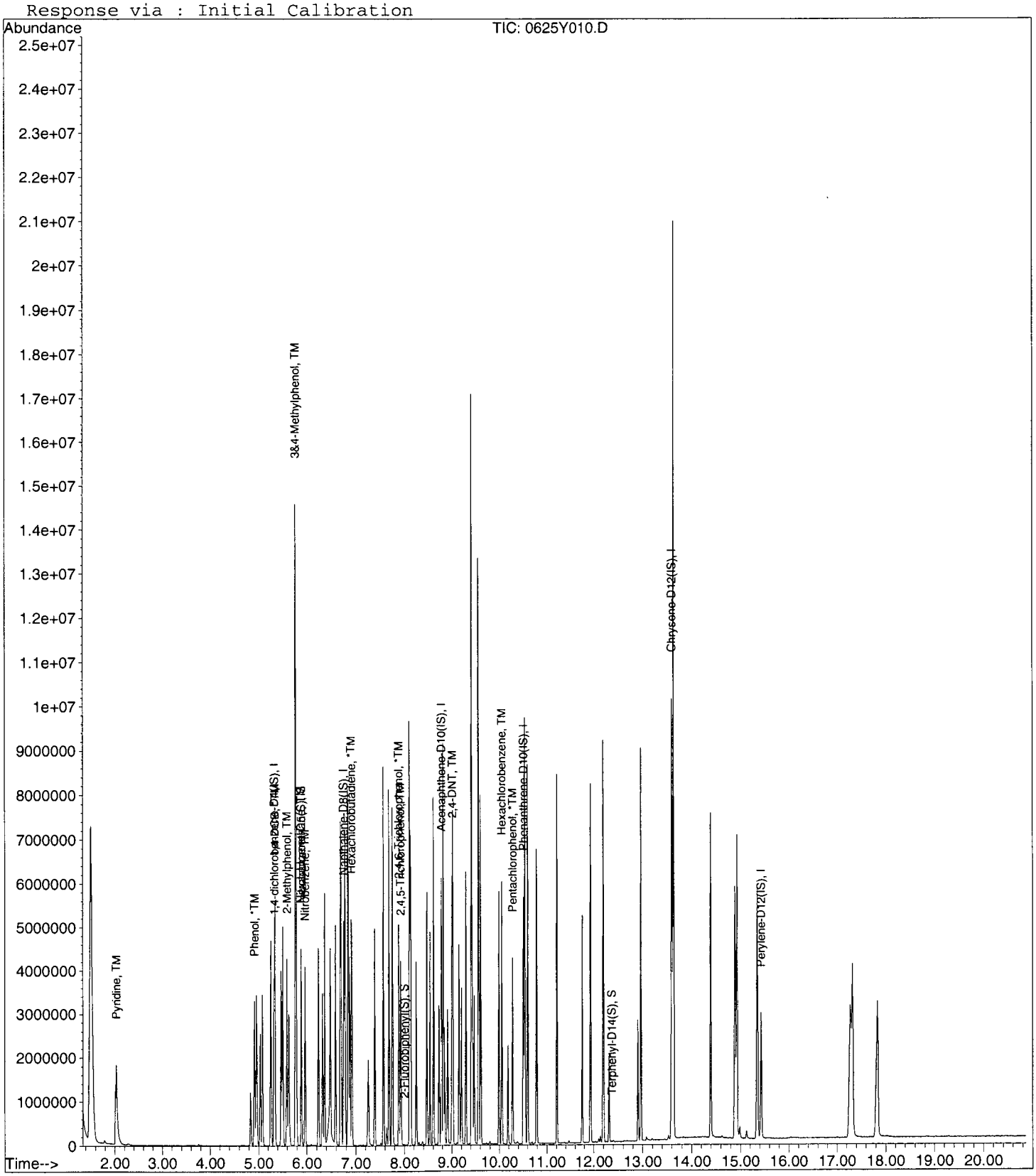
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y010.D Vial: 10
Acq On : 25 Jun 15 14:15 Operator: MA
Sample : 50ug/ml SVOC SS 06/25/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 16:00 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 6/30/2015
Instrument: Yoda
Initial Cal. Date: 6/25/2015
Data File: 0625Y037.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	Pyridine	1.276	1.201	5.8	TM	
3	S	2-Fluorophenol (S)	1.788	1.933	8.1	S	
4	S	Phenol-D6 (S)	2.209	2.458	11	S	
5	*TM	Phenol	2.736	3.008	9.9	*TM	
6	*TM	1,4-DCB	2.381	2.428	2.0	*TM	
7	TM	2-Methylphenol	1.942	1.982	2.1	TM	
8	TM	3&4-Methylphenol	2.426	2.603	7.3	TM	
9	TM	Hexachloroethane	0.9245	0.9810	6.1	TM	
10	I	Napthalene-D8(IS)	ISTD			I	
11	S	Nitrobenzene-D5(S)	0.4902	0.5633	15	S	
12	TM	Nitrobenzene	0.5554	0.6065	9.2	TM	
13	*TM	Hexachlorobutadiene	0.2451	0.2422	1.2	*TM	
14	I	Acenaphthene-D10(IS)	ISTD			I	
15	*TM	2,4,6-Trichlorophenol	0.5254	0.4973	5.4	*TM	
16	TM	2,4,5-Trichlorophenol	0.5395	0.5326	1.3	TM	
17	S	2-Fluorobiphenyl(S)	1.698	1.736	2.2	S	
18	TM	2,4-DNT	0.5732	0.5352	6.6	TM	
19	S	2,4,6-Tribromophenol(S)	0.1647	0.1559	5.3	S	
20	I	Phenanthrene-D10(IS)	ISTD			I	
21	TM	Hexachlorobenzene	0.2448	0.2394	2.2	TM	
22	*TM	Pentachlorophenol	0.1744	0.1674	4.0	*TM	
23	I	Chrysene-D12(IS)	ISTD			I	
24	S	Terphenyl-D14(S)	1.259	1.334	5.9	S	
25	I	Perylene-D12(IS)	ISTD			I	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			5.8		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y037.D Vial: 37
Acq On : 30 Jun 15 10:33 Operator: MA
Sample : CCV 50ug/ml SVOC 06/30/15 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: Jul 10 16:11 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:01:42 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	708053	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	3151523	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.77	164	1795296	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	2868576	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.61	240	2183848	50.00	ppb		0.00
25) Perylene-D12(IS)	15.42	264	1202904	50.00	ppb		-0.02
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.80	112	2736759	135.09	ppb		0.00
Spiked Amount 200.000			Recovery =	67.543%			
4) Phenol-D6 (S)	4.91	99	3481009	139.71	ppb		0.00
Spiked Amount 200.000			Recovery =	69.857%			
11) Nitrobenzene-D5(S)	5.94	82	1775145	71.82	ppb		0.00
Spiked Amount 100.000			Recovery =	71.821%			
17) 2-Fluorobiphenyl(S)	7.99	172	3116019	63.89	ppb		0.00
Spiked Amount 100.000			Recovery =	63.888%			
19) 2,4,6-Tribromophenol(S)	9.70	330	559691	118.32	ppb		0.00
Spiked Amount 200.000			Recovery =	59.158%			
24) Terphenyl-D14(S)	12.38	244	2913720	66.21	ppb		0.00
Spiked Amount 100.000			Recovery =	66.210%			
Target Compounds							Qvalue
2) Pyridine	2.01	52	850413	58.85	ppb		86
5) Phenol	4.93	94	2129937	68.71	ppb		96
6) 1,4-DCB	5.34	146	1718880	63.74	ppb		96
7) 2-Methylphenol	5.60	108	1403457	63.79	ppb		97
8) 3&4-Methylphenol	5.77	107	3686320	134.12	ppb	#	59
9) Hexachloroethane	5.89	117	694571	66.32	ppb		94
12) Nitrobenzene	5.97	77	1911482	68.25	ppb	#	89
13) Hexachlorobutadiene	6.92	225	763293	61.76	ppb		99
15) 2,4,6-Trichlorophenol	7.89	196	892737	59.15	ppb		98
16) 2,4,5-Trichlorophenol	7.94	196	956185	61.70	ppb		99
18) 2,4-DNT	9.00	165	960829	58.35	ppb		90
21) Hexachlorobenzene	10.05	284	686862	61.14	ppb		92
22) Pentachlorophenol	10.29	266	480333	60.01	ppb		97

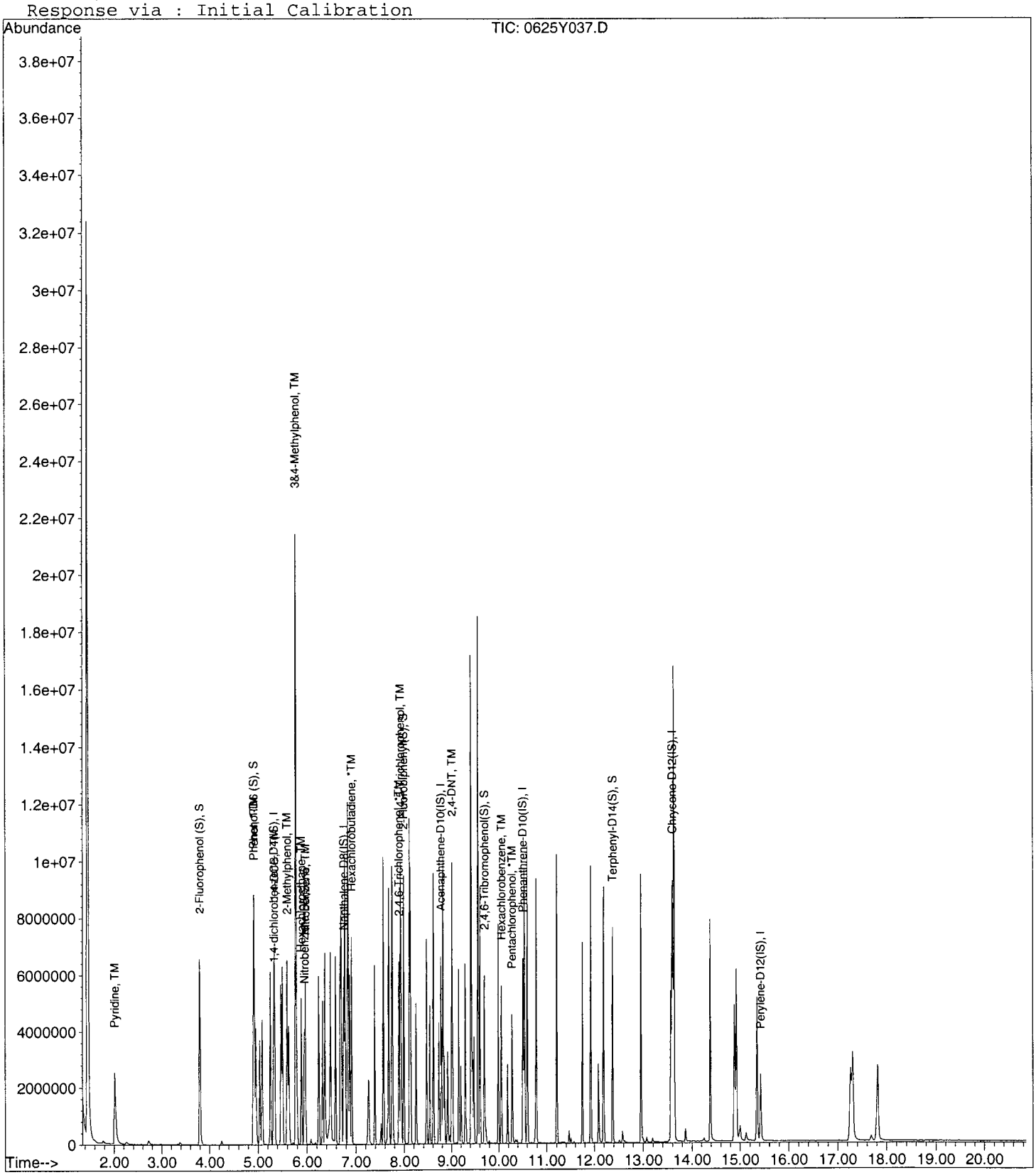
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y037.D Vial: 37
Acq On : 30 Jun 15 10:33 Operator: MA
Sample : CCV 50ug/ml SVOC 06/30/15 Inst : Yoda
Misc : soil Multiplr: 1.00

Quant Time: Jul 10 16:11 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 7 Jul 15 14:20
Instrument: Yoda
Initial Cal. Date: 6/25/2015
Data File: 0625Y122.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	1,4-dichlorobenzene-D4(IS)	ISTD			I	
2	TM	Pyridine	1.276	1.313	2.9	TM	
3	S	2-Fluorophenol (S)	1.788	1.780	0.46	S	
4	S	Phenol-D6 (S)	2.209	2.226	0.78	S	
5	*TM	Phenol	2.736	2.800	2.3	*TM	
6	*TM	1,4-DCB	2.381	2.320	2.6	*TM	
7	TM	2-Methylphenol	1.942	1.822	6.2	TM	
8	TM	3&4-Methylphenol	2.426	2.370	2.3	TM	
9	TM	Hexachloroethane	0.9245	0.9264	0.20	TM	
10	I	Napthalene-D8(IS)	ISTD			I	
11	S	Nitrobenzene-D5(S)	0.4902	0.5043	2.9	S	
12	TM	Nitrobenzene	0.5554	0.5521	0.60	TM	
13	*TM	Hexachlorobutadiene	0.2451	0.2293	6.4	*TM	
14	I	Acenaphthene-D10(IS)	ISTD			I	
15	*TM	2,4,6-Trichlorophenol	0.5254	0.4837	7.9	*TM	
16	TM	2,4,5-Trichlorophenol	0.5395	0.5090	5.6	TM	
17	S	2-Fluorobiphenyl(S)	1.698	1.586	6.6	S	
18	TM	2,4-DNT	0.5732	0.5147	10	TM	
19	S	2,4,6-Tribromophenol(S)	0.1647	0.1412	14	S	
20	I	Phenanthrene-D10(IS)	ISTD			I	
21	TM	Hexachlorobenzene	0.2448	0.2248	8.1	TM	
22	*TM	Pentachlorophenol	0.1744	0.1588	9.0	*TM	
23	I	Chrysene-D12(IS)	ISTD			I	
24	S	Terphenyl-D14(S)	1.259	1.254	0.45	S	
25	I	Perylene-D12(IS)	ISTD			I	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			4.7		

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y122.D Vial: 22
Acq On : 7 Jul 15 14:20 Operator: MA
Sample : CCV 50ug/ml SVOC 07/07/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 16:15 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	662751	50.00	ppb		-0.01
10) Napthalene-D8(IS)	6.76	136	2995875	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.78	164	1688384	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	2737131	50.00	ppb		-0.01
23) Chrysene-D12(IS)	13.61	240	2072797	50.00	ppb		0.00
25) Perylene-D12(IS)	15.43	264	1238556	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.79	112	2359438	124.42	ppb		-0.01
Spiked Amount 200.000			Recovery =	62.212%			
4) Phenol-D6 (S)	4.91	99	2950601	125.98	ppb		0.00
Spiked Amount 200.000			Recovery =	62.990%			
11) Nitrobenzene-D5(S)	5.95	82	1510959	64.31	ppb		0.00
Spiked Amount 100.000			Recovery =	64.308%			
17) 2-Fluorobiphenyl(S)	7.99	172	2677130	58.37	ppb		-0.01
Spiked Amount 100.000			Recovery =	58.366%			
19) 2,4,6-Tribromophenol(S)	9.70	330	476716	107.16	ppb		0.00
Spiked Amount 200.000			Recovery =	53.579%			
24) Terphenyl-D14(S)	12.38	244	2598909	62.22	ppb		0.00
Spiked Amount 100.000			Recovery =	62.220%			
Target Compounds							Qvalue
2) Pyridine	2.01	52	870085	64.33	ppb		86
5) Phenol	4.93	94	1855758	63.95	ppb		93
6) 1,4-DCB	5.34	146	1537367	60.90	ppb		95
7) 2-Methylphenol	5.60	108	1207206	58.62	ppb		99
8) 3&4-Methylphenol	5.78	107	3142065	122.14	ppb	#	58
9) Hexachloroethane	5.88	117	613953	62.63	ppb		96
12) Nitrobenzene	5.97	77	1654081	62.13	ppb		90
13) Hexachlorobutadiene	6.91	225	687029	58.48	ppb		98
15) 2,4,6-Trichlorophenol	7.89	196	816661	57.53	ppb		99
16) 2,4,5-Trichlorophenol	7.94	196	859452	58.97	ppb		99
18) 2,4-DNT	9.00	165	868931	56.11	ppb		90
21) Hexachlorobenzene	10.05	284	615358	57.41	ppb		96
22) Pentachlorophenol	10.28	266	434592	56.90	ppb		98

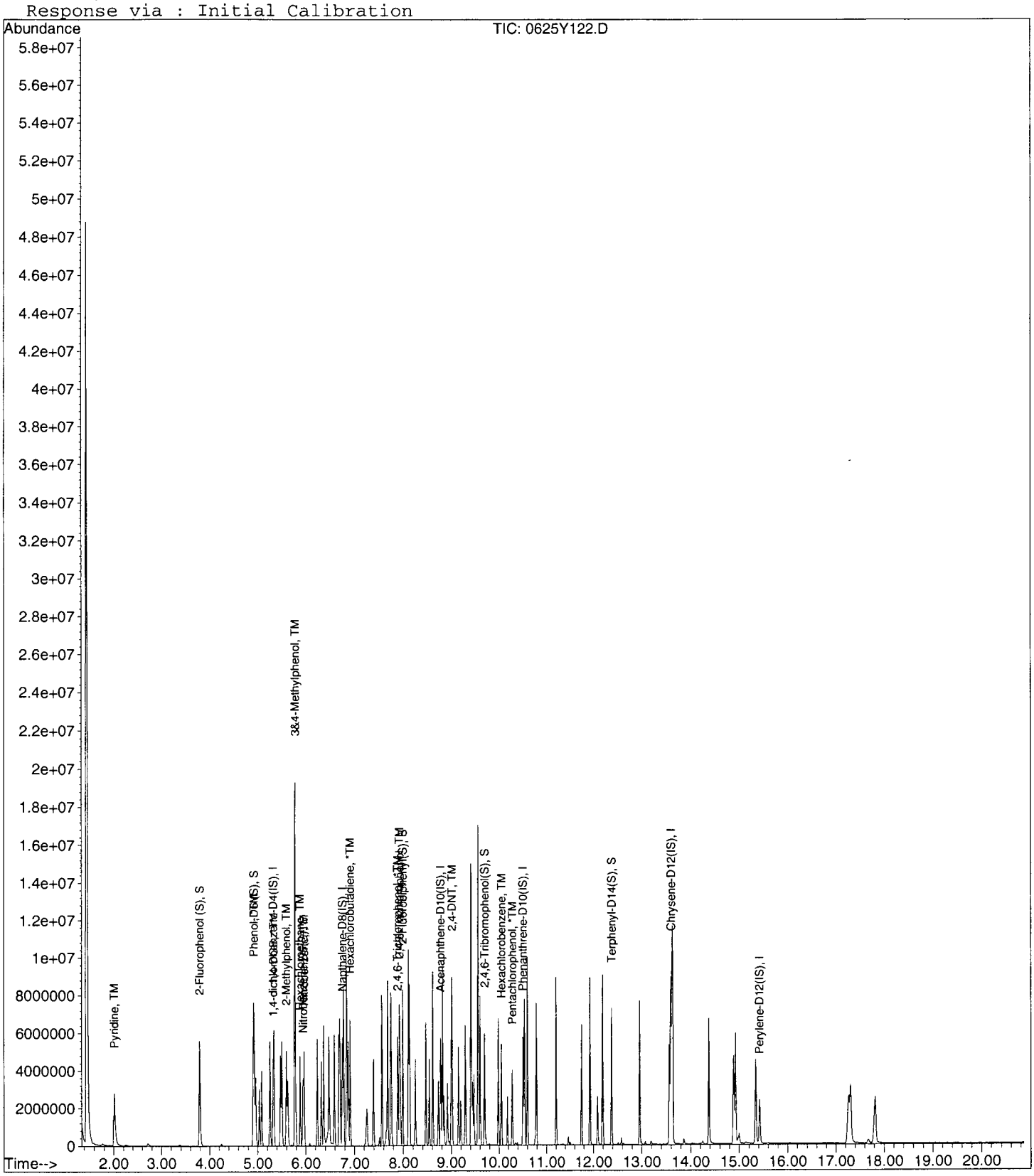
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y122.D Vial: 22
Acq On : 7 Jul 15 14:20 Operator: MA
Sample : CCV 50ug/ml SVOC 07/07/15 Inst : Yoda
Misc : Multiplr: 1.00

Quant Time: Jul 10 16:15 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



EPA METHOD 8270D
Semivolatile Organic Compounds
Raw Data

APPL, INC.

Method Blank
EPA 8270D WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150623W-17818 - 198680**
Batch ID: #87DJU-150623A

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	6/23/2015	7/7/2015
BLANK	BUTYL BENZYL PHTHALATE	5.00 U	10.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-BUTYL PHTHALATE	5.00 U	10.0	5.00	3.20	ug/L	6/23/2015	7/7/2015
BLANK	DI-N-OCTYL PHTHALATE	5.00 U	10.0	5.00	2.60	ug/L	6/23/2015	7/7/2015
BLANK	DIETHYL PHTHALATE	5.00 U	10.0	5.00	3.00	ug/L	6/23/2015	7/7/2015
BLANK	DIMETHYL PHTHALATE	5.00 U	10.0	5.00	2.90	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	71.5	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	62.8	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	37.9	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	63.2	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	25.7	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	83.6	50-135			%	6/23/2015	7/7/2015

Quant Method: Y0625TT.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 9:55:47 AM

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y124.D Vial: 24
Acq On : 7 Jul 15 16:21 Operator: MA
Sample : 150623A BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:16 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	674308	40.00	ppb		-0.01
7) Napthalene-D8(IS)	6.75	136	2834287	40.00	ppb		-0.01
13) Acenaphthene-D10(IS)	8.77	164	1489735	40.00	ppb		-0.01
23) Phenanthrene-D10(IS)	10.51	188	2536966	40.00	ppb		-0.01
27) Chrysene-D12(IS)	13.60	240	1871497	40.00	ppb		-0.01
32) Perylene-D12(IS)	15.42	264	1118510	40.00	ppb		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.78	112	1826118	75.72	ppb		-0.02
Spiked Amount 200.000			Recovery =	37.860%			
3) Phenol-D6 (S)	4.90	99	1530929	51.40	ppb		-0.01
Spiked Amount 200.000			Recovery =	25.698%			
8) Nitrobenzene-D5(S)	5.94	82	1756857	63.23	ppb		-0.01
Spiked Amount 100.000			Recovery =	63.230%			
16) 2-Fluorobiphenyl(S)	7.99	172	3176280	62.79	ppb		-0.01
Spiked Amount 100.000			Recovery =	62.785%			
22) 2,4,6-Tribromophenol(S)	9.70	330	701917	143.05	ppb		0.00
Spiked Amount 200.000			Recovery =	71.527%			
28) Terphenyl-D14(S)	12.38	244	3941288	83.61	ppb		0.00
Spiked Amount 100.000			Recovery =	83.606%			
Target Compounds							Qvalue
17) Dimethyl phthalate	8.45	163	14911	0.27	ppb		99
21) Diethyl phthalate	9.28	149	2929	0.05	ppb		94
25) Pentachlorophenol	10.28	266	544	-2.12	ppb	#	55

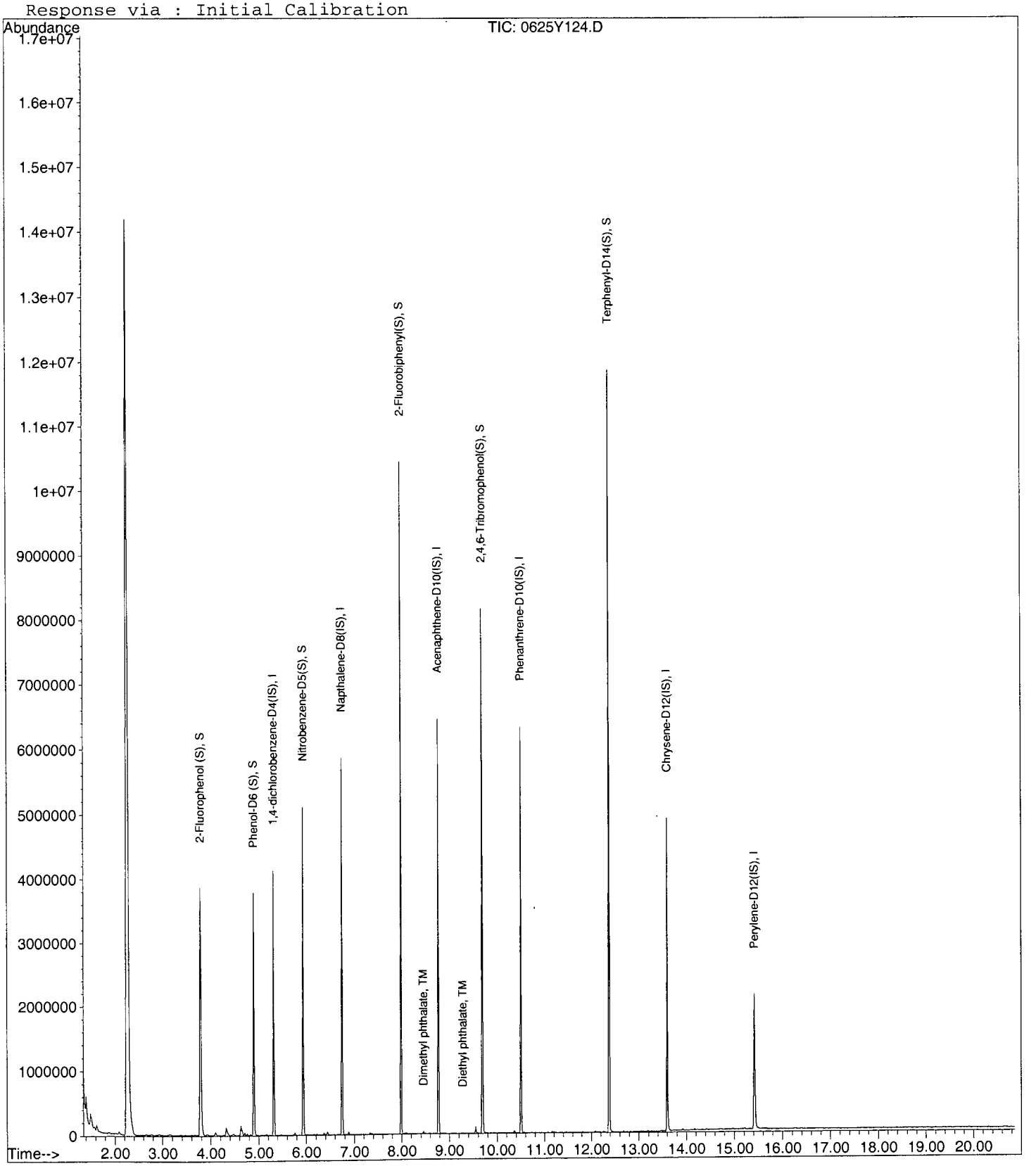
(#) = qualifier out of range (m) = manual integration

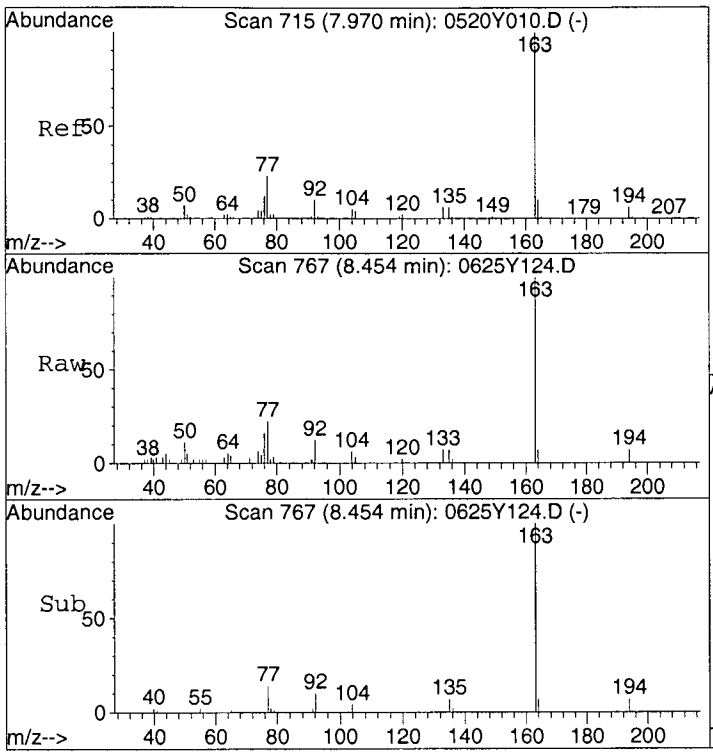
Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y124.D Vial: 24
Acq On : 7 Jul 15 16:21 Operator: MA
Sample : 150623A BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:16 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration

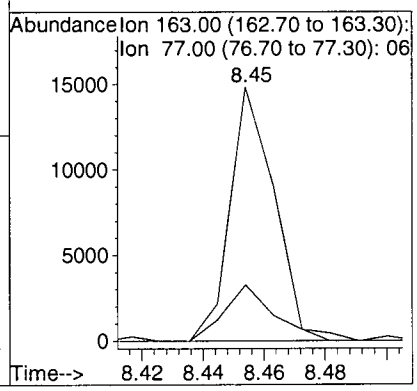


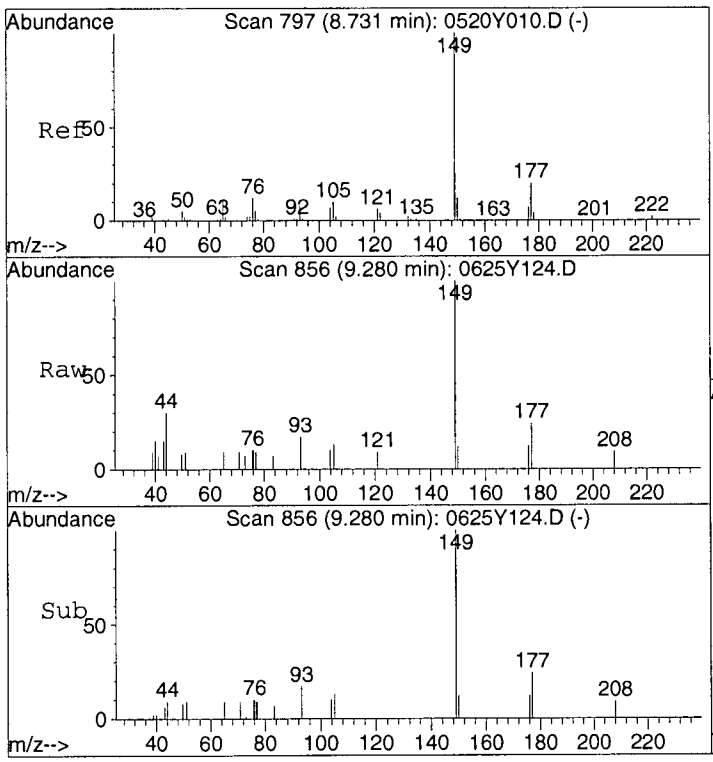


#17
Dimethyl phthalate
Concen: 0.27 ppb
RT: 8.45 min Scan# 767
Delta R.T. -0.02 min
Lab File: 0625Y124.D
Acq: 7 Jul 15 16:21

Tgt Ion:163 Resp: 14911

Ion	Ratio	Lower	Upper
163	100		
77	22.1	16.0	29.6

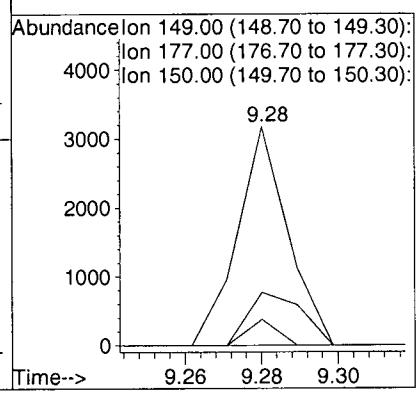




#21
Diethyl phthalate
Concen: 0.05 ppb
RT: 9.28 min Scan# 856
Delta R.T. -0.02 min
Lab File: 0625Y124.D
Acq: 7 Jul 15 16:21

Tgt Ion:149 Resp: 2929

Ion	Ratio	Lower	Upper
149	100		
177	24.2	14.1	26.1
150	11.9	8.5	15.7



Method Blank
TCLP Semivolatile 8270D

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150623W-17910 - 198746**
Batch ID: #TCLPS-150623A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	2,4,5-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.30	ug/L	6/23/2015	7/7/2015
BLANK	2,4,6-TRICHLOROPHENOL	5.00 U	10.0	5.00	2.50	ug/L	6/23/2015	7/7/2015
BLANK	2,4-DNT	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	2-METHYLPHENOL	5.00 U	10.0	5.00	1.90	ug/L	6/23/2015	7/7/2015
BLANK	4-METHYLPHENOL	5.00 U	10.0	5.00	1.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBENZENE	5.00 U	10.0	5.00	2.70	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROBUTADIENE	5.00 U	10.0	5.00	0.90	ug/L	6/23/2015	7/7/2015
BLANK	HEXACHLOROETHANE	5.00 U	10.0	5.00	0.80	ug/L	6/23/2015	7/7/2015
BLANK	NITROBENZENE	5.00 U	10.0	5.00	2.10	ug/L	6/23/2015	7/7/2015
BLANK	PENTACHLOROPHENOL	5.00 U	50.0	5.00	2.80	ug/L	6/23/2015	7/7/2015
BLANK	PHENOL	5.00 U	10.0	5.00	1.00	ug/L	6/23/2015	7/7/2015
BLANK	PYRIDINE	5.00 U	15.0	5.00	5.00	ug/L	6/23/2015	7/7/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOP	89.4	40-125			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUORBIPHENY	78.5	50-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: 2-FLUOROPHENO	47.3	20-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: NITROBENZENE-	79.0	40-110			%	6/23/2015	7/7/2015
BLANK	SURROGATE: PHENOL (S)	32.0	10-115			%	6/23/2015	7/7/2015
BLANK	SURROGATE: TERPHENYL-D14	105	50-135			%	6/23/2015	7/7/2015

Quant Method: Y625TCLP.M
Run #: 0625Y124
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 4:29:33 PM

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y124.D Vial: 24
Acq On : 7 Jul 15 16:21 Operator: MA
Sample : 150623A BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:46 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	674308	50.00	ppb	-0.01
10) Napthalene-D8(IS)	6.75	136	2834287	50.00	ppb	-0.01
14) Acenaphthene-D10(IS)	8.77	164	1489735	50.00	ppb	-0.01
20) Phenanthrene-D10(IS)	10.51	188	2536966	50.00	ppb	-0.01
23) Chrysene-D12(IS)	13.60	240	1871497	50.00	ppb	-0.01
25) Perylene-D12(IS)	15.42	264	1118510	50.00	ppb	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol (S)	3.78	112	1826118	94.65	ppb	-0.02
Spiked Amount 200.000			Recovery =	47.325%		
4) Phenol-D6 (S)	4.90	99	1530929	63.96	ppb	-0.01
Spiked Amount 200.000			Recovery =	31.981%		
11) Nitrobenzene-D5(S)	5.94	82	1756857	79.04	ppb	-0.01
Spiked Amount 100.000			Recovery =	79.037%		
17) 2-Fluorobiphenyl(S)	7.99	172	3176280	78.48	ppb	-0.01
Spiked Amount 100.000			Recovery =	78.482%		
19) 2,4,6-Tribromophenol(S)	9.70	330	701917	178.82	ppb	0.00
Spiked Amount 200.000			Recovery =	89.409%		
24) Terphenyl-D14(S)	12.38	244	3941288	104.51	ppb	0.00
Spiked Amount 100.000			Recovery =	104.507%		

Target Compounds				Qvalue
2) Pyridine	0.00	52	N.D.	
5) Phenol	0.00	94	N.D.	d
6) 1,4-DCB	0.00	146	N.D.	
7) 2-Methylphenol	0.00	108	N.D.	d
8) 3&4-Methylphenol	0.00	107	N.D.	d
9) Hexachloroethane	0.00	117	N.D.	
12) Nitrobenzene	0.00	77	N.D.	d
13) Hexachlorobutadiene	0.00	225	N.D.	
15) 2,4,6-Trichlorophenol	0.00	196	N.D.	
16) 2,4,5-Trichlorophenol	0.00	196	N.D.	
18) 2,4-DNT	0.00	165	N.D.	d
21) Hexachlorobenzene	0.00	284	N.D.	
22) Pentachlorophenol	0.00	266	N.D.	d

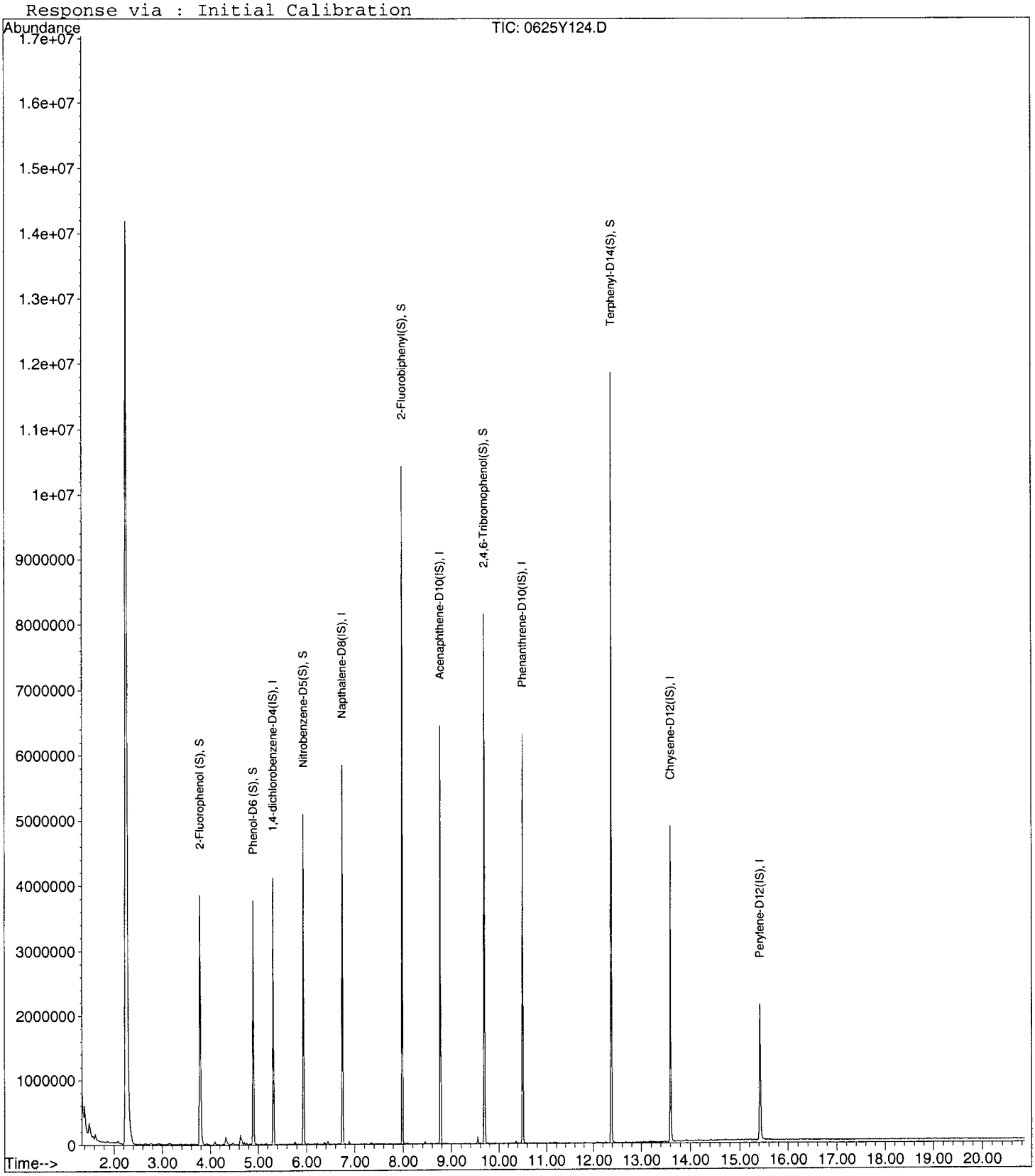
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y124.D Vial: 24
Acq On : 7 Jul 15 16:21 Operator: MA
Sample : 150623A BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:46 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



Method Blank
TCLP Semivolatile 8270D

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150624S-17911 - 198745**
Batch ID: #TCLPS-150624B

Sample Type	Analyte	Result	PQL	MDL	Units	Extraction Date	Analysis Date
BLANK	1,4-DCB	Not detected	10.0	1.00	ug/L	6/25/2015	6/30/2015
BLANK	2,4,5-TRICHLOROPHENOL	Not detected	10.0	2.30	ug/L	6/25/2015	6/30/2015
BLANK	2,4,6-TRICHLOROPHENOL	Not detected	10.0	2.50	ug/L	6/25/2015	6/30/2015
BLANK	2,4-DNT	Not detected	10.0	2.70	ug/L	6/25/2015	6/30/2015
BLANK	2-METHYLPHENOL	Not detected	10.0	1.90	ug/L	6/25/2015	6/30/2015
BLANK	4-METHYLPHENOL	Not detected	10.0	1.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBENZENE	Not detected	10.0	2.70	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROBUTADIENE	Not detected	10.0	0.90	ug/L	6/25/2015	6/30/2015
BLANK	HEXACHLOROETHANE	Not detected	10.0	0.80	ug/L	6/25/2015	6/30/2015
BLANK	NITROBENZENE	Not detected	10.0	2.10	ug/L	6/25/2015	6/30/2015
BLANK	PENTACHLOROPHENOL	Not detected	50.0	2.80	ug/L	6/25/2015	6/30/2015
BLANK	PHENOL	Not detected	10.0	1.00	ug/L	6/25/2015	6/30/2015
BLANK	PYRIDINE	Not detected	15.0	5.00	ug/L	6/25/2015	6/30/2015
BLANK	SURROGATE: 2,4,6-TRIBROMOPHEN	103	40-125		%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUORBIPHENYL (S)	104	50-110		%	6/25/2015	6/30/2015
BLANK	SURROGATE: 2-FLUOROPHENOL (S)	66.9	20-110		%	6/25/2015	6/30/2015
BLANK	SURROGATE: NITROBENZENE-D5 (S	106	40-110		%	6/25/2015	6/30/2015
BLANK	SURROGATE: PHENOL (S)	45.0	10-115		%	6/25/2015	6/30/2015
BLANK	SURROGATE: TERPHENYL-D14 (S)	108	50-135		%	6/25/2015	6/30/2015

Quant Method: Y625TCLP.M
Run #: 0625Y049
Instrument: Yoda
Sequence: Y150625
Initials: DA

GC SC-Blank-REG MDLs
Printed: 7/10/2015 3:29:18 PM

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y049.D Vial: 49
Acq On : 30 Jun 15 17:10 Operator: MA
Sample : 150624B BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 17:55 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	751837	50.00	ppb	-0.01
10) Napthalene-D8(IS)	6.75	136	3304374	50.00	ppb	0.00
14) Acenaphthene-D10(IS)	8.77	164	1837704	50.00	ppb	-0.01
20) Phenanthrene-D10(IS)	10.51	188	3074168	50.00	ppb	-0.01
23) Chrysene-D12(IS)	13.60	240	2286964	50.00	ppb	-0.01
25) Perylene-D12(IS)	15.42	264	1435173	50.00	ppb	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol (S)	3.79	112	2880260	133.89	ppb	-0.01
Spiked Amount 200.000			Recovery =	66.946%		
4) Phenol-D6 (S)	4.90	99	2391881	90.04	ppb	-0.01
Spiked Amount 200.000			Recovery =	45.022%		
11) Nitrobenzene-D5(S)	5.94	82	2753469	106.25	ppb	-0.01
Spiked Amount 100.000			Recovery =	106.250%		
17) 2-Fluorobiphenyl(S)	7.99	172	5196222	104.08	ppb	-0.01
Spiked Amount 100.000			Recovery =	104.081%		
19) 2,4,6-Tribromophenol(S)	9.70	330	994466	205.37	ppb	0.00
Spiked Amount 200.000			Recovery =	102.687%		
24) Terphenyl-D14(S)	12.38	244	4964321	107.72	ppb	0.00
Spiked Amount 100.000			Recovery =	107.721%		

Target Compounds				Qvalue
2) Pyridine	0.00	52	N.D. d	
5) Phenol	0.00	94	N.D. d	
6) 1,4-DCB	0.00	146	N.D.	
7) 2-Methylphenol	0.00	108	N.D. d	
8) 3&4-Methylphenol	0.00	107	N.D. d	
9) Hexachloroethane	0.00	117	N.D.	
12) Nitrobenzene	0.00	77	N.D. d	
13) Hexachlorobutadiene	0.00	225	N.D.	
15) 2,4,6-Trichlorophenol	0.00	196	N.D. d	
16) 2,4,5-Trichlorophenol	0.00	196	N.D. d	
18) 2,4-DNT	0.00	165	N.D. d	
21) Hexachlorobenzene	0.00	284	N.D.	
22) Pentachlorophenol	0.00	266	N.D. d	

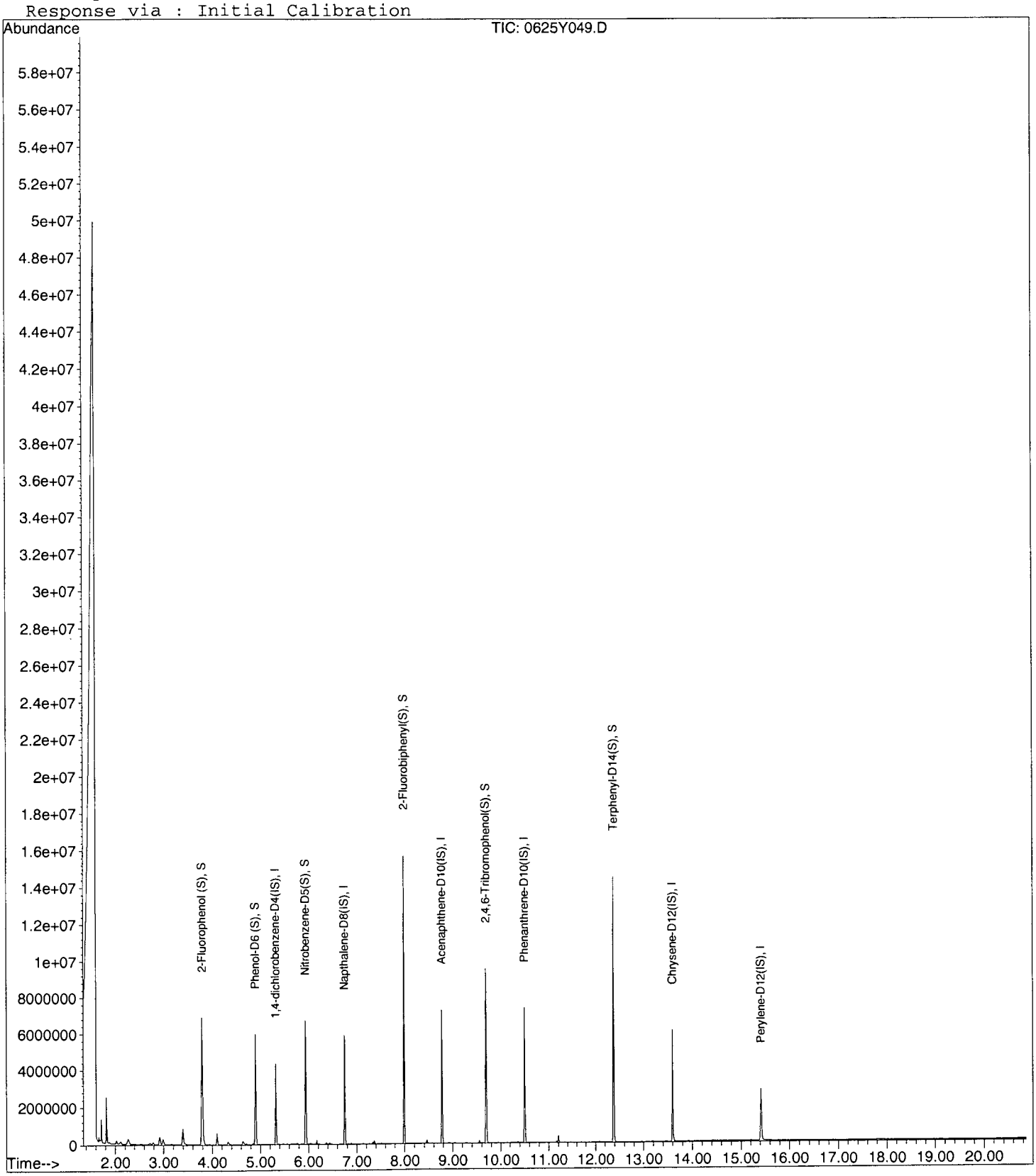
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y049.D Vial: 49
Acq On : 30 Jun 15 17:10 Operator: MA
Sample : 150624B BLK 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 17:55 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D WATER

APPL ID: **150623W-17818 LCS - 198680**
Batch ID: #87DJU-150623A

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	29.9	59.8	40-125
BUTYL BENZYL PHTHALATE	50.0	33.4	66.8	45-115
DI-N-BUTYL PHTHALATE	50.0	31.9	63.8	55-115
DI-N-OCTYL PHTHALATE	50.0	29.5	59.0	35-135
DIETHYL PHTHALATE	50.0	28.8	57.6	40-120
DIMETHYL PHTHALATE	50.0	28.6	57.2	25-125
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	118	59.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	55.4	55.4	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	80.2	40.1	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	57.6	57.6	40-110
SURROGATE: PHENOL (S)	200	55.3	27.6	10-115
SURROGATE: TERPHENYL-D14 (S)	100	67.9	67.9	50-135

Comments: _____

Primary	SPK
Quant Method :	Y0625TT.M
Extraction Date :	6/23/2015
Analysis Date :	7/7/2015
Instrument :	Yoda
Run :	0625Y125
Initials :	DA

Printed: 7/10/2015 9:56:03 AM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y125.D Vial: 25
Acq On : 7 Jul 15 16:50 Operator: MA
Sample : 150623A LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:35 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	682453	40.00	ppb		0.00
7) Napthalene-D8(IS)	6.75	136	3038247	40.00	ppb		0.00
13) Acenaphthene-D10(IS)	8.77	164	1714729	40.00	ppb		0.00
23) Phenanthrene-D10(IS)	10.51	188	2785461	40.00	ppb		0.00
27) Chrysene-D12(IS)	13.60	240	2100927	40.00	ppb		0.00
32) Perylene-D12(IS)	15.42	264	1287560	40.00	ppb		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.79	112	1958425	80.24	ppb		-0.02
Spiked Amount 200.000			Recovery =	40.118%			
3) Phenol-D6 (S)	4.90	99	1667208	55.30	ppb		0.00
Spiked Amount 200.000			Recovery =	27.652%			
8) Nitrobenzene-D5(S)	5.94	82	1714473	57.56	ppb		0.00
Spiked Amount 100.000			Recovery =	57.562%			
16) 2-Fluorobiphenyl(S)	7.99	172	3228037	55.44	ppb		0.00
Spiked Amount 100.000			Recovery =	55.436%			
22) 2,4,6-Tribromophenol(S)	9.70	330	667598	118.21	ppb		0.00
Spiked Amount 200.000			Recovery =	59.103%			
28) Terphenyl-D14(S)	12.38	244	3590738	67.85	ppb		0.00
Spiked Amount 100.000			Recovery =	67.852%			
Target Compounds							Qvalue
4) Phenol	4.92	94	509372	13.64	ppb		96
5) 1,4-DCB	5.51	146	388440	12.59	ppb		96
6) n-Nitrosodi-n-propylamine	5.77	43	816331	30.10	ppb	#	60
9) 2-Nitrophenol	6.31	139	430509	27.49	ppb		84
10) 2,4-Dichlorophenol	6.84	162	676294	27.37	ppb		99
11) Hexachlorobutadiene	6.92	225	132764	8.91	ppb		100
12) 4-Chloro-3-methylphenol	7.38	107	728773	28.00	ppb	#	1
14) Hexachlorocyclopentadiene	7.74	237	202195	14.47	ppb		98
15) 2,4,6-Trichlorophenol	7.89	196	483584	26.84	ppb		99
17) Dimethyl phthalate	8.47	163	1844786	28.60	ppb		91
18) Acenaphthene	8.10	154	1631919	22.97	ppb	#	46
19) 2,4-Dinitrophenol	8.85	184	230991	32.40	ppb		92
20) 4-Nitrophenol	8.91	65	171213	13.11	ppb	#	1
21) Diethyl phthalate	9.29	149	1793119	28.78	ppb		95
24) n-Nitrosodiphenylamine	10.79	167	2352179	29.05	ppb		99
25) Pentachlorophenol	10.28	266	269541	28.88	ppb		95
26) Di-n-butylphthalate	11.20	149	2858518	31.86	ppb	#	97
29) Butyl benzylphthalate	12.95	149	1118576	33.39	ppb		94
30) Bis (2-ethylhexyl) phthala	13.62	149	1611656	29.92	ppb		98
31) Di-n-octylphthalate	14.37	149	2386670	29.55	ppb		99

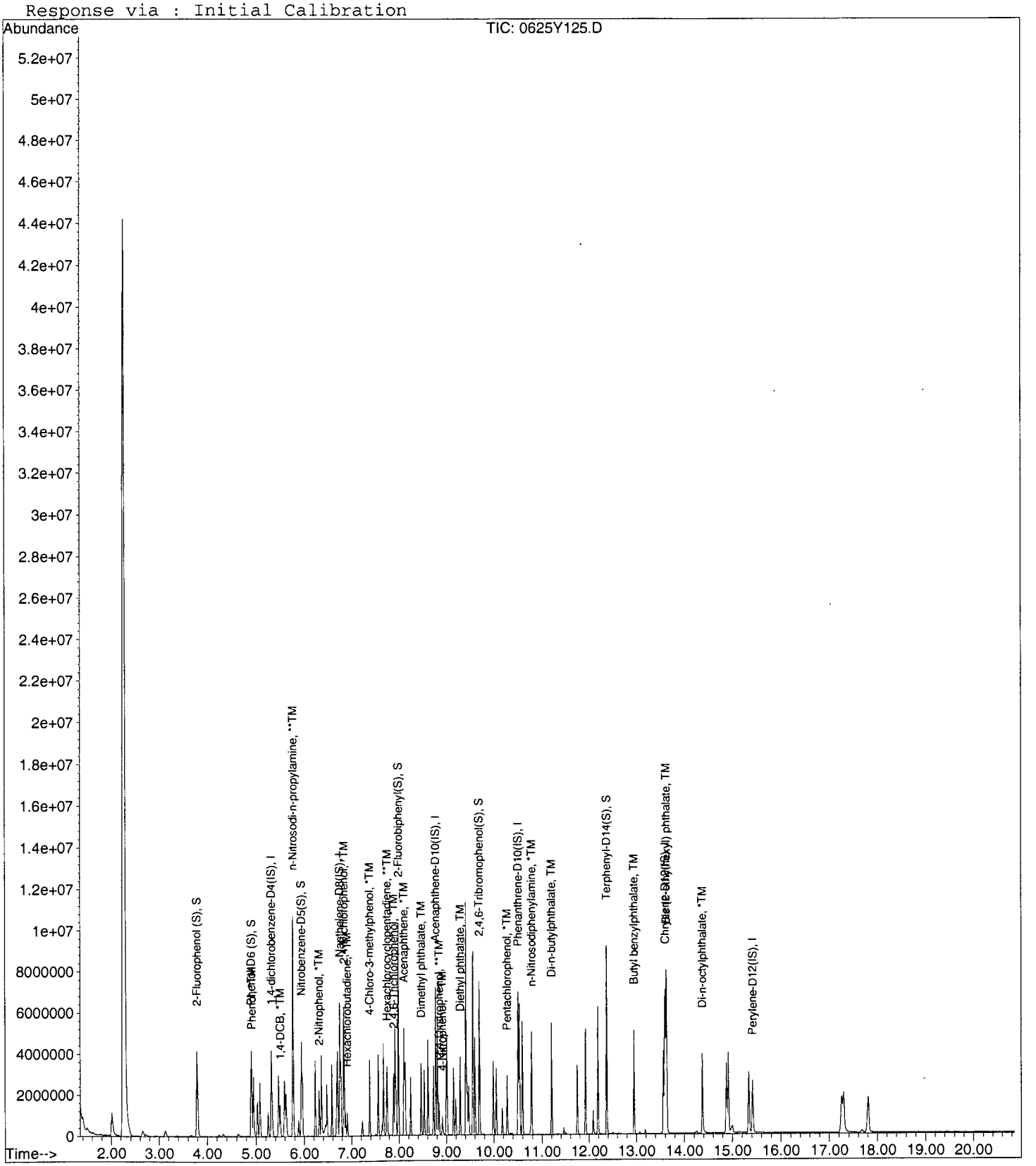
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y125.D Vial: 25
Acq On : 7 Jul 15 16:50 Operator: MA
Sample : 150623A LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:35 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y126.D Vial: 26
Acq On : 7 Jul 15 17:20 Operator: MA
Sample : 150623A LCSD-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:35 2015 Quant Results File: Y0625TT.RES

Quant Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	687519	40.00000	ppb		-0.01
7) Napthalene-D8(IS)	6.76	136	3035266	40.00000	ppb		0.00
13) Acenaphthene-D10(IS)	8.77	164	1707252	40.00000	ppb		-0.01
23) Phenanthrene-D10(IS)	10.51	188	2760609	40.00000	ppb		-0.01
27) Chrysene-D12(IS)	13.61	240	2107978	40.00000	ppb		0.00
32) Perylene-D12(IS)	15.42	264	1292715	40.00000	ppb		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol (S)	3.79	112	2038126	82.88579	ppb		-0.01
Spiked Amount 200.000			Recovery =	41.443%			
3) Phenol-D6 (S)	4.90	99	1675582	55.17136	ppb		0.00
Spiked Amount 200.000			Recovery =	27.586%			
8) Nitrobenzene-D5(S)	5.94	82	1774853	59.64781	ppb		-0.01
Spiked Amount 100.000			Recovery =	59.648%			
16) 2-Fluorobiphenyl(S)	7.99	172	3210396	55.37446	ppb		-0.01
Spiked Amount 100.000			Recovery =	55.374%			
22) 2,4,6-Tribromophenol(S)	9.70	330	685704	121.94410	ppb		0.00
Spiked Amount 200.000			Recovery =	60.972%			
28) Terphenyl-D14(S)	12.38	244	3794105	71.45484	ppb		0.00
Spiked Amount 100.000			Recovery =	71.455%			
Target Compounds							Qvalue
4) Phenol	4.92	94	508344	13.51034	ppb		96
5) 1,4-DCB	5.50	146	419478	13.49516	ppb		94
6) n-Nitrosodi-n-propylamine	5.77	43	839202	30.71697	ppb	#	53
9) 2-Nitrophenol	6.32	139	448847	28.69113	ppb		97
10) 2,4-Dichlorophenol	6.84	162	691977	28.02815	ppb		97
11) Hexachlorobutadiene	6.91	225	129844	8.72703	ppb		100
12) 4-Chloro-3-methylphenol	7.39	107	739503	28.44010	ppb	#	1
14) Hexachlorocyclopentadiene	7.74	237	183037	13.04309	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	501010	27.92515	ppb		98
17) Dimethyl phthalate	8.46	163	1902115	29.61362	ppb		96
18) Acenaphthene	8.10	154	1636924	23.13681	ppb	#	46
19) 2,4-Dinitrophenol	8.84	184	250999	34.70679	ppb		98
20) 4-Nitrophenol	8.91	65	176259	13.55507	ppb	#	1
21) Diethyl phthalate	9.29	149	1812484	29.22108	ppb		95
24) n-Nitrosodiphenylamine	10.79	167	2402683	29.94589	ppb		99
25) Pentachlorophenol	10.28	266	282455	30.51844	ppb		97
26) Di-n-butylphthalate	11.20	149	2848608	32.03150	ppb		98
29) Butyl benzylphthalate	12.96	149	1163032	34.60500	ppb	#	89
30) Bis (2-ethylhexyl) phthala	13.63	149	1667600	30.76325	ppb	#	95
31) Di-n-octylphthalate	14.38	149	2461664	30.34296	ppb		99

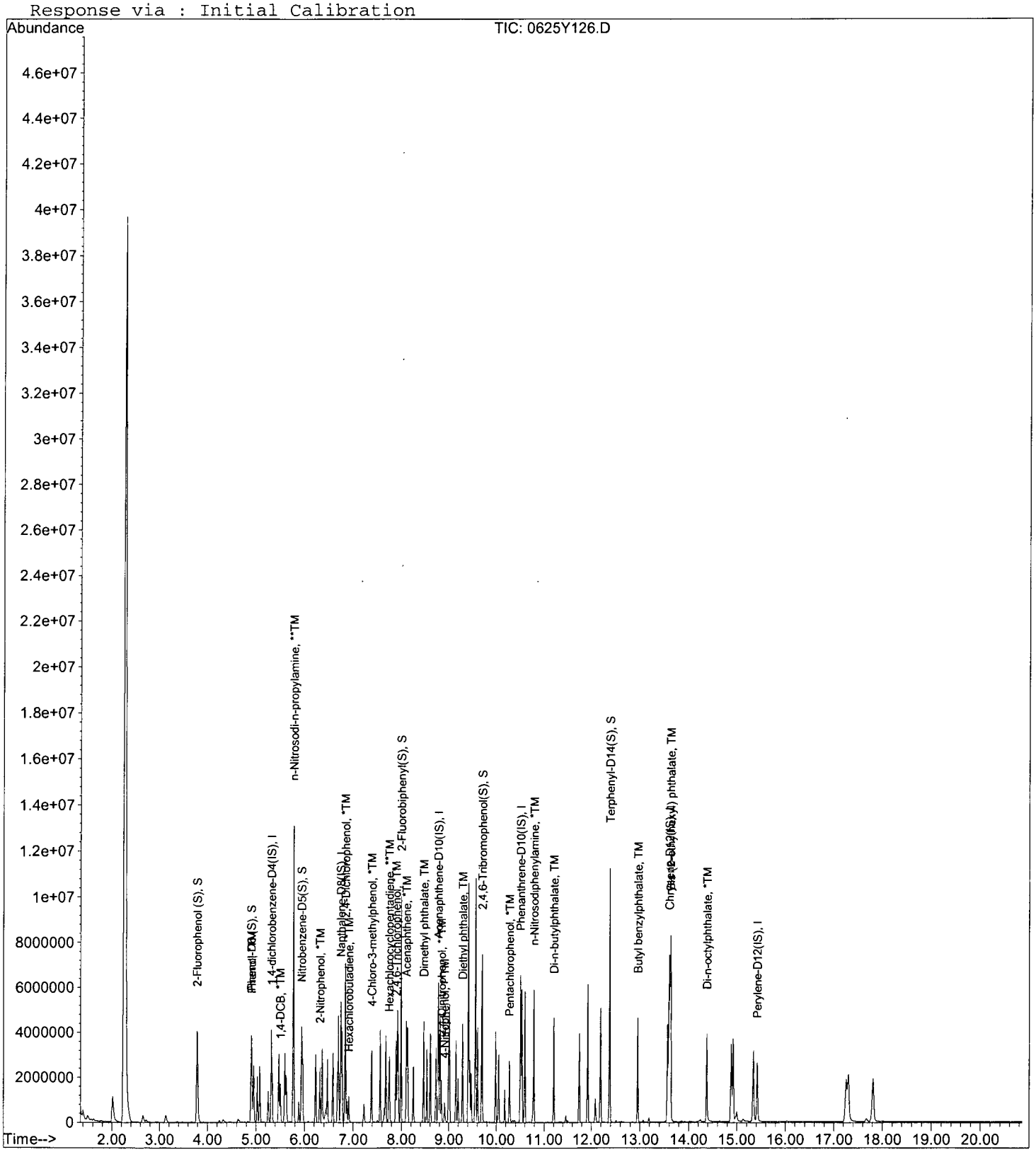
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y126.D Vial: 26
Acq On : 7 Jul 15 17:20 Operator: MA
Sample : 150623A LCSD-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 8 13:35 2015 Quant Results File: Y0625TT.RES

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Jul 02 13:38:00 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
TCLP Semivolatile 8270D

APPL ID: **150625S-17911 LCS - 198745**
Batch ID: #TCLPS-150624B

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	43.4	86.8	30-100
2,4,5-TRICHLOROPHENOL	50.0	51.3	103	50-110
2,4,6-TRICHLOROPHENOL	50.0	49.8	99.6	50-115
2,4-DNT	50.0	51.1	102	50-120
2-METHYLPHENOL	50.0	45.5	91.0	40-110
4-METHYLPHENOL	100	84.3	84.3	30-110
HEXACHLOROBENZENE	50.0	51.6	103	50-110
HEXACHLOROBUTADIENE	50.0	41.9	83.8	25-105
HEXACHLOROETHANE	50.0	40.8	81.6	30-95
NITROBENZENE	50.0	55.5	111 #	45-110
PENTACHLOROPHENOL	50.0	55.3	111	40-115
PHENOL	50.0	25.0	50.0	10-115
PYRIDINE	50.0	29.6	59.2	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	221	111	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	103	103	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	154	77.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	112	112 #	40-110
SURROGATE: PHENOL (S)	200	94.7	47.4	10-115
SURROGATE: TERPHENYL-D14 (S)	100	106	106	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/25/2015
Analysis Date :	6/30/2015
Instrument :	Yoda
Run :	0625Y050
Initials :	DA

Printed: 7/10/2015 3:29:06 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y050.D Vial: 50
Acq On : 30 Jun 15 17:40 Operator: MA
Sample : 150624B LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:21 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.33	152	646877	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.76	136	2870629	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.77	164	1640933	50.00	ppb		-0.01
20) Phenanthrene-D10(IS)	10.51	188	2634536	50.00	ppb		-0.01
23) Chrysene-D12(IS)	13.61	240	2316506	50.00	ppb		0.00
25) Perylene-D12(IS)	15.43	264	1624445	50.00	ppb		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.79	112	2842781	153.59	ppb		-0.01
Spiked Amount 200.000			Recovery =	76.796%			
4) Phenol-D6 (S)	4.91	99	2163073	94.70	ppb		0.00
Spiked Amount 200.000			Recovery =	47.348%			
11) Nitrobenzene-D5(S)	5.95	82	2531732	112.46	ppb		0.00
Spiked Amount 100.000			Recovery =	112.455%			
17) 2-Fluorobiphenyl(S)	7.99	172	4602958	103.25	ppb		-0.01
Spiked Amount 100.000			Recovery =	103.253%			
19) 2,4,6-Tribromophenol(S)	9.70	330	954579	220.78	ppb		0.00
Spiked Amount 200.000			Recovery =	110.388%			
24) Terphenyl-D14(S)	12.38	244	4946037	105.96	ppb		0.00
Spiked Amount 100.000			Recovery =	105.955%			
Target Compounds							Qvalue
2) Pyridine	2.06	52	391437	29.65	ppb		92
5) Phenol	4.92	94	707607	24.98	ppb		92
6) 1,4-DCB	5.34	146	1068919	43.38	ppb		99
7) 2-Methylphenol	5.60	108	915154	45.53	ppb		100
8) 3&4-Methylphenol	5.77	107	2117418	84.33	ppb	#	58
9) Hexachloroethane	5.88	117	390416	40.80	ppb		94
12) Nitrobenzene	5.97	77	1416767	55.53	ppb	#	88
13) Hexachlorobutadiene	6.91	225	471980	41.93	ppb		97
15) 2,4,6-Trichlorophenol	7.89	196	687665	49.85	ppb		97
16) 2,4,5-Trichlorophenol	7.94	196	727292	51.34	ppb		97
18) 2,4-DNT	9.00	165	769633	51.14	ppb		99
21) Hexachlorobenzene	10.05	284	531983	51.56	ppb		90
22) Pentachlorophenol	10.28	266	396351	55.30	ppb		98

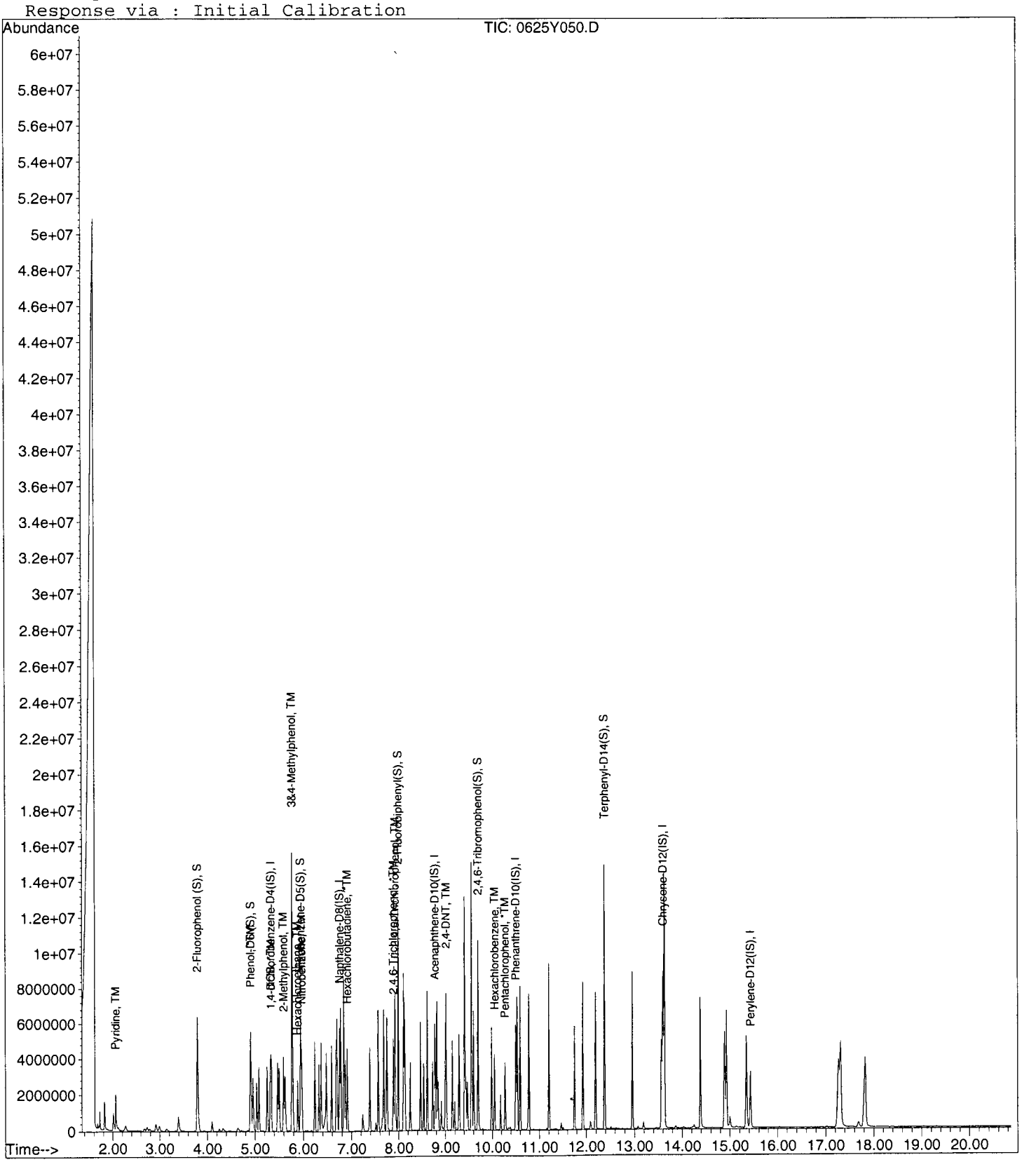
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y050.D Vial: 50
Acq On : 30 Jun 15 17:40 Operator: MA
Sample : 150624B LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 15:21 2015 Quant Results File: Y625TCLP.RES

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
TCLP Semivolatile 8270D

APPL ID: **150623W-17910 LCS - 198746**
Batch ID: #TCLPS-150623A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,4-DCB	50.0	15.3	30.6	30-100
2,4,5-TRICHLOROPHENOL	50.0	35.6	71.2	50-110
2,4,6-TRICHLOROPHENOL	50.0	33.5	67.0	50-115
2,4-DNT	50.0	34.6	69.2	50-120
2-METHYLPHENOL	50.0	32.7	65.4	40-110
4-METHYLPHENOL	100	61.4	61.4	30-110
HEXACHLOROBENZENE	50.0	35.5	71.0	50-110
HEXACHLOROBUTADIENE	50.0	11.4	22.8 #	25-105
HEXACHLOROETHANE	50.0	16.0	32.0	30-95
NITROBENZENE	50.0	34.1	68.2	45-110
PENTACHLOROPHENOL	50.0	36.1	72.2	40-115
PHENOL	50.0	17.0	34.0	10-115
PYRIDINE	50.0	26.3	52.6	48-108
SURROGATE: 2,4,6-TRIBROMOPHENOL	200	148	74.0	40-125
SURROGATE: 2-FLUORBIPHENYL (S)	100	69.3	69.3	50-110
SURROGATE: 2-FLUOROPHENOL (S)	200	100	50.0	20-110
SURROGATE: NITROBENZENE-D5 (S)	100	72.0	72.0	40-110
SURROGATE: PHENOL (S)	200	68.9	34.5	10-115
SURROGATE: TERPHENYL-D14 (S)	100	84.8	84.8	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	Y625TCLP.M
Extraction Date :	6/23/2015
Analysis Date :	7/7/2015
Instrument :	Yoda
Run :	0625Y125
Initials :	DA

Printed: 7/10/2015 4:48:53 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\YODA\DATA\Y150625\0625Y125.D Vial: 25
Acq On : 7 Jul 15 16:50 Operator: MA
Sample : 150623A LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 16:40 2015 Quant Results File: Y625TCLP.RES

Quant Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 15:19:31 2015
Response via : Initial Calibration
DataAcq Meth : SVOC416

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-dichlorobenzene-D4(IS)	5.32	152	682453	50.00	ppb		0.00
10) Napthalene-D8(IS)	6.75	136	3038247	50.00	ppb		0.00
14) Acenaphthene-D10(IS)	8.77	164	1714729	50.00	ppb		0.00
20) Phenanthrene-D10(IS)	10.51	188	2785461	50.00	ppb		0.00
23) Chrysene-D12(IS)	13.60	240	2100927	50.00	ppb		0.00
25) Perylene-D12(IS)	15.42	264	1287560	50.00	ppb		-0.02
System Monitoring Compounds							
3) 2-Fluorophenol (S)	3.79	112	1958425	100.29	ppb		-0.02
Spiked Amount 200.000			Recovery =	50.148%			
4) Phenol-D6 (S)	4.90	99	1667208	68.90	ppb		0.00
Spiked Amount 200.000			Recovery =	34.451%			
11) Nitrobenzene-D5(S)	5.94	82	1714473	71.95	ppb		0.00
Spiked Amount 100.000			Recovery =	71.953%			
17) 2-Fluorobiphenyl(S)	7.99	172	3228037	69.29	ppb		0.00
Spiked Amount 100.000			Recovery =	69.295%			
19) 2,4,6-Tribromophenol(S)	9.70	330	667598	147.76	ppb		0.00
Spiked Amount 200.000			Recovery =	73.879%			
24) Terphenyl-D14(S)	12.38	244	3590738	84.81	ppb		0.00
Spiked Amount 100.000			Recovery =	84.815%			
Target Compounds							Qvalue
2) Pyridine	2.01	52	366410	26.31	ppb		81
5) Phenol	4.92	94	509372	17.05	ppb		100
6) 1,4-DCB	5.34	146	397053	15.27	ppb		96
7) 2-Methylphenol	5.60	108	694138	32.73	ppb		99
8) 3&4-Methylphenol	5.77	107	1627197	61.43	ppb	#	62
9) Hexachloroethane	5.89	117	161152	15.96	ppb		89
12) Nitrobenzene	5.96	77	920057	34.07	ppb	#	87
13) Hexachlorobutadiene	6.92	225	135339	11.36	ppb		100
15) 2,4,6-Trichlorophenol	7.89	196	483584	33.55	ppb		95
16) 2,4,5-Trichlorophenol	7.93	196	527662	35.65	ppb		99
18) 2,4-DNT	9.00	165	544537	34.63	ppb		93
21) Hexachlorobenzene	10.04	284	387100	35.49	ppb		86
22) Pentachlorophenol	10.28	266	269541	36.10	ppb		100

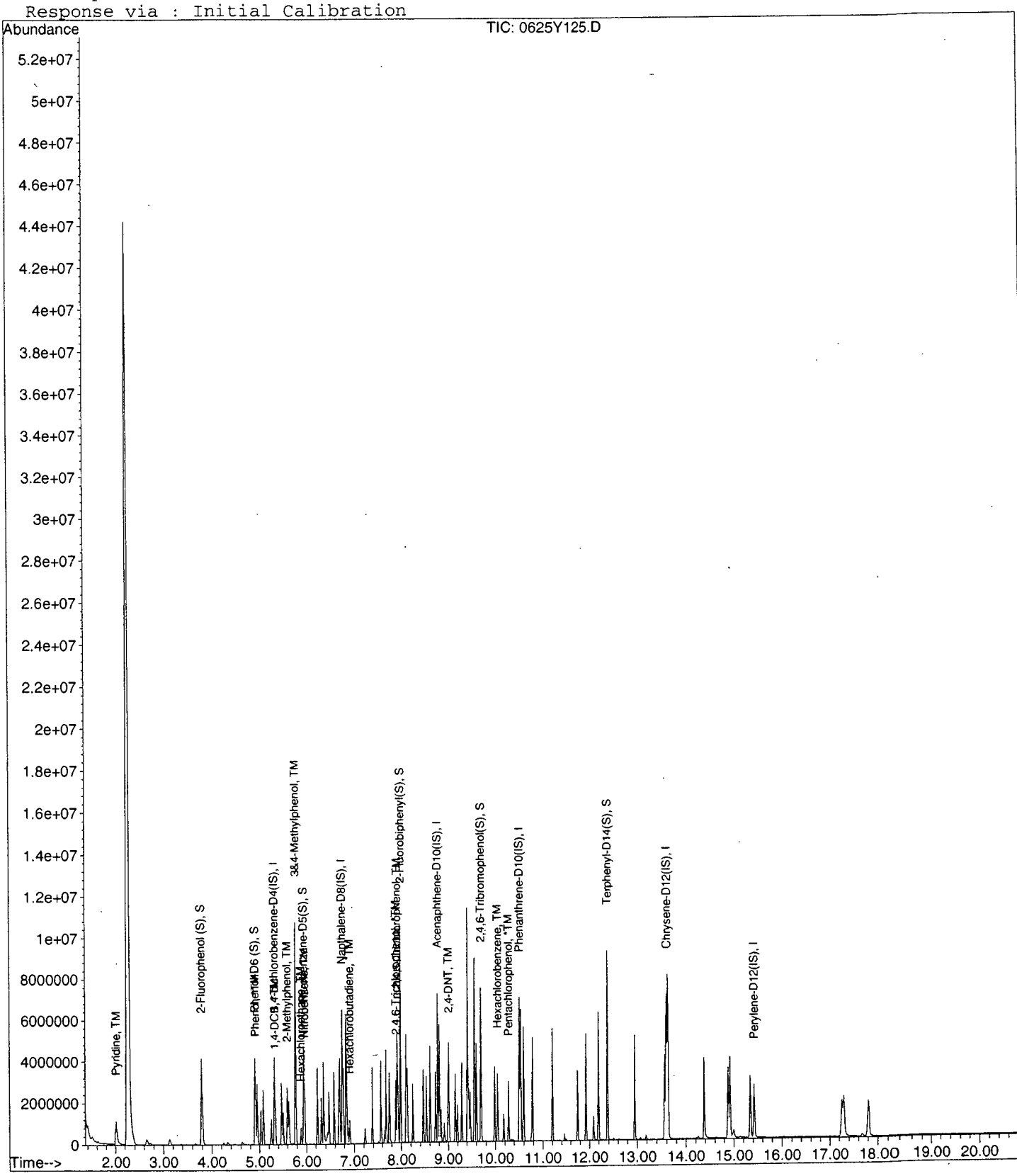
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\YODA\DATA\Y150625\0625Y125.D Vial: 25
Acq On : 7 Jul 15 16:50 Operator: MA
Sample : 150623A LCS-1 1/1000 Inst : Yoda
Misc : water Multiplr: 1.00

Quant Time: Jul 10 16:40 2015 Quant Results File: Y625TCLP.RES

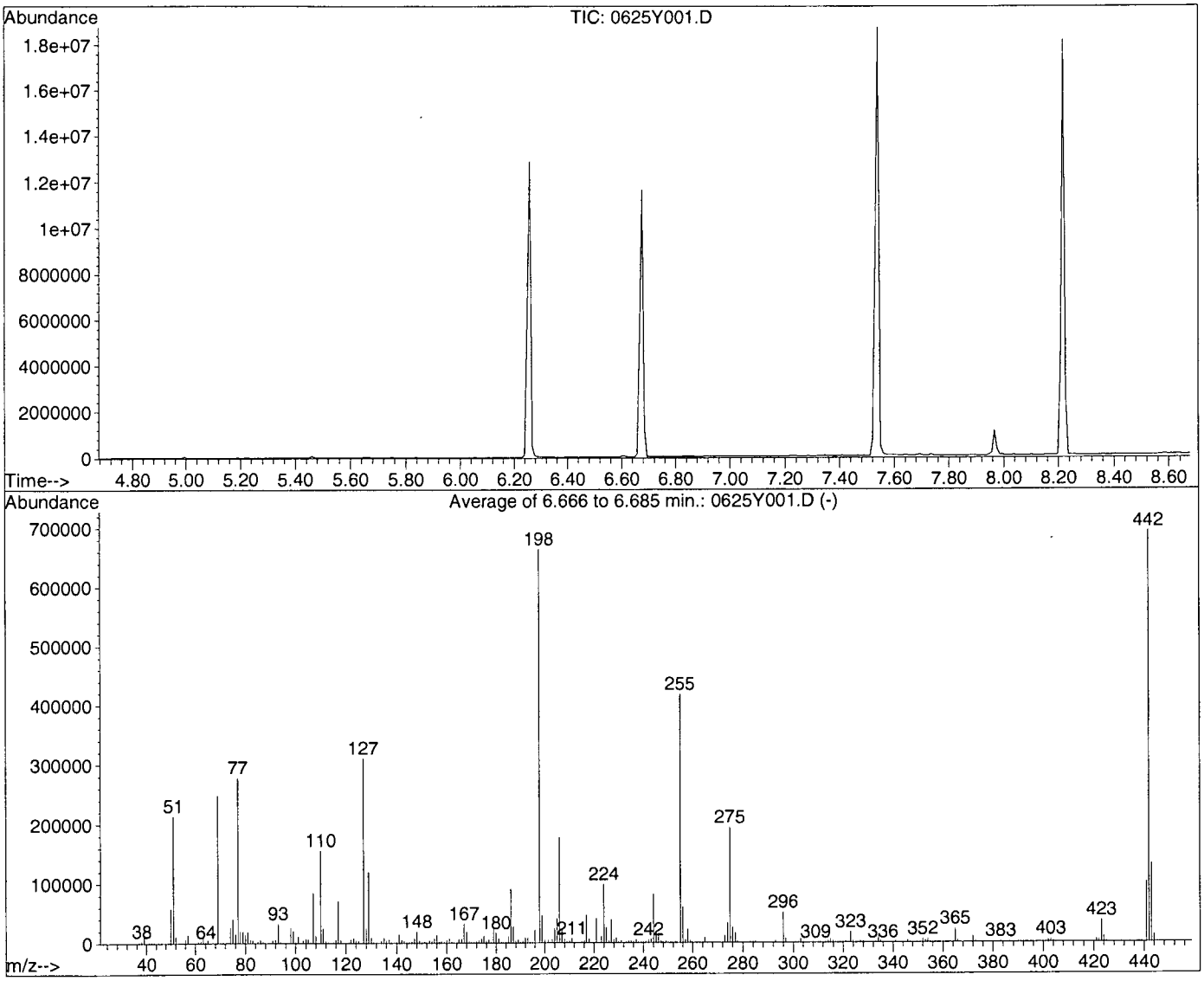
Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C
Last Update : Fri Jul 10 16:12:39 2015
Response via : Initial Calibration



DFTPP

Data File : M:\YODA\DATA\Y150625\0625Y001.D Vial: 1
Acq On : 25 Jun 15 10:01 Operator: MA
Sample : SV Tune 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150625\Y0625A.M (RTE Integrator)
Title : EPA 8270C



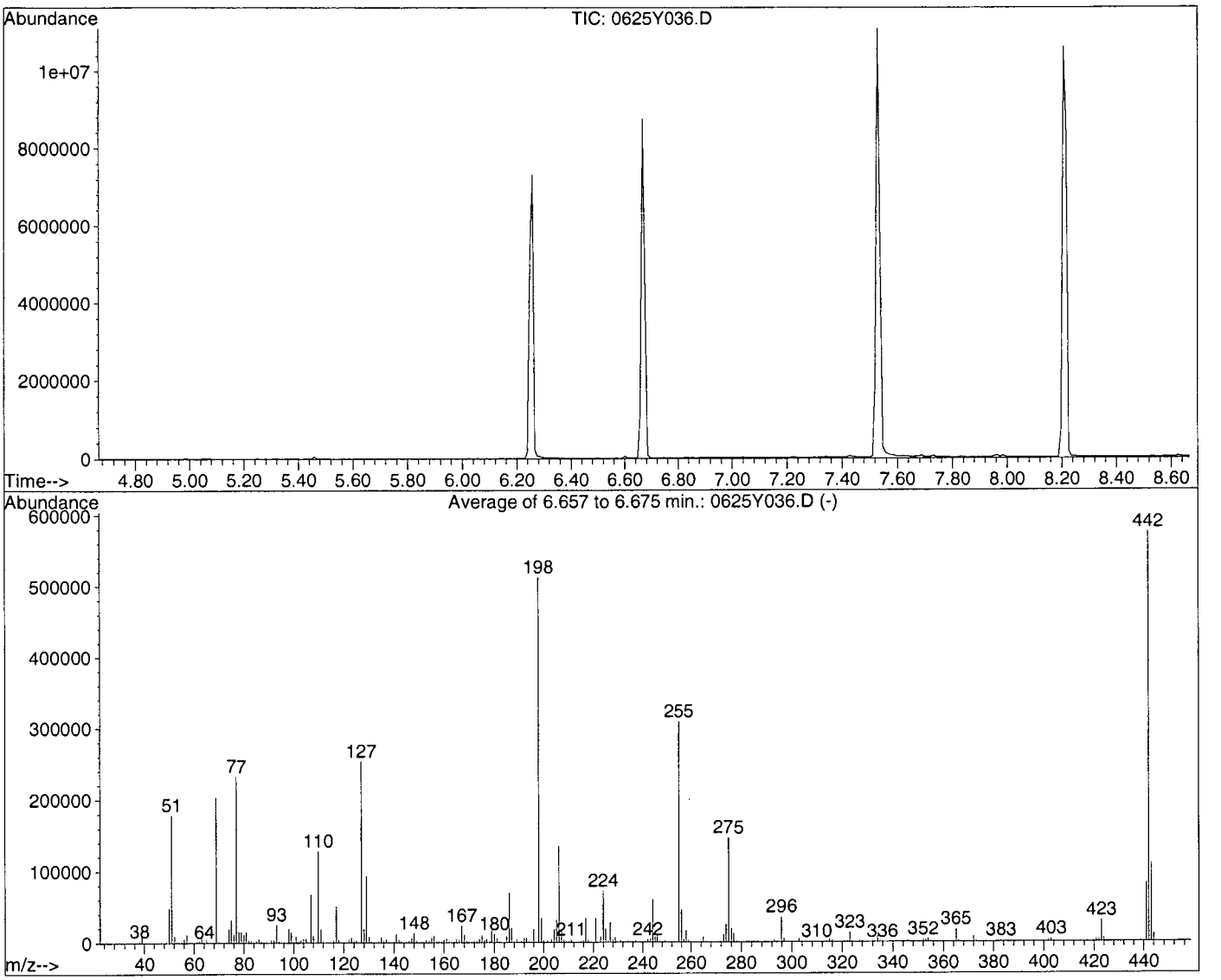
AutoFind: Scans 332, 333, 334; Background Corrected with Scan 329

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.3	214274	PASS
68	69	0.00	2	0.0	108	PASS
70	69	0.00	2	0.3	868	PASS
127	198	40	60	46.7	310460	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	664293	PASS
199	198	5	9	6.9	45726	PASS
275	198	10	30	29.2	193880	PASS
365	198	1	100	3.5	22928	PASS
441	443	0.01	100	77.0	101226	PASS
442	198	50	150	104.5	694019	PASS
443	442	17	23	19.0	131530	PASS

DFTPP

Data File : M:\YODA\DATA\Y150625\0625Y036.D Vial: 36
Acq On : 30 Jun 15 10:15 Operator: MA
Sample : TUNE 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150625\Y625TCLP.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 331, 332, 333; Background Corrected with Scan 329

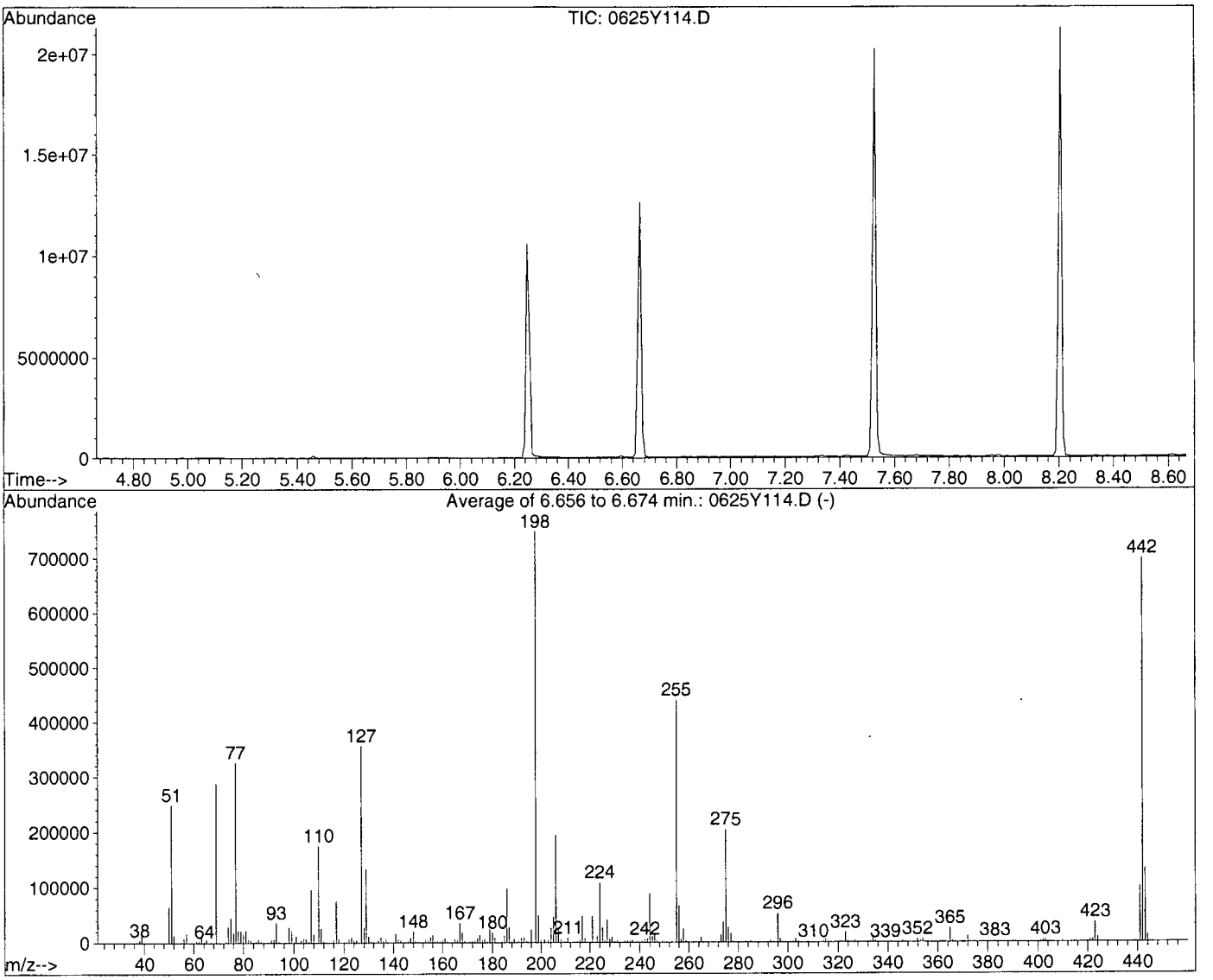
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.9	178824	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	901	PASS
127	198	40	60	49.5	253459	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	512395	PASS
199	198	5	9	6.7	34266	PASS
275	198	10	30	28.5	146271	PASS
365	198	1	100	3.5	17727	PASS
441	443	0.01	100	74.9	81992	PASS
442	198	40	150	112.4	575756	PASS
443	442	17	23	19.0	109418	PASS

0625Y036.D Y625TCLP.M Fri Jul 10 15:58:35 2015

DFTPP

Data File : M:\YODA\DATA\Y150625\0625Y114.D Vial: 14
Acq On : 7 Jul 15 9:27 Operator: MA
Sample : SV TUNE 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C

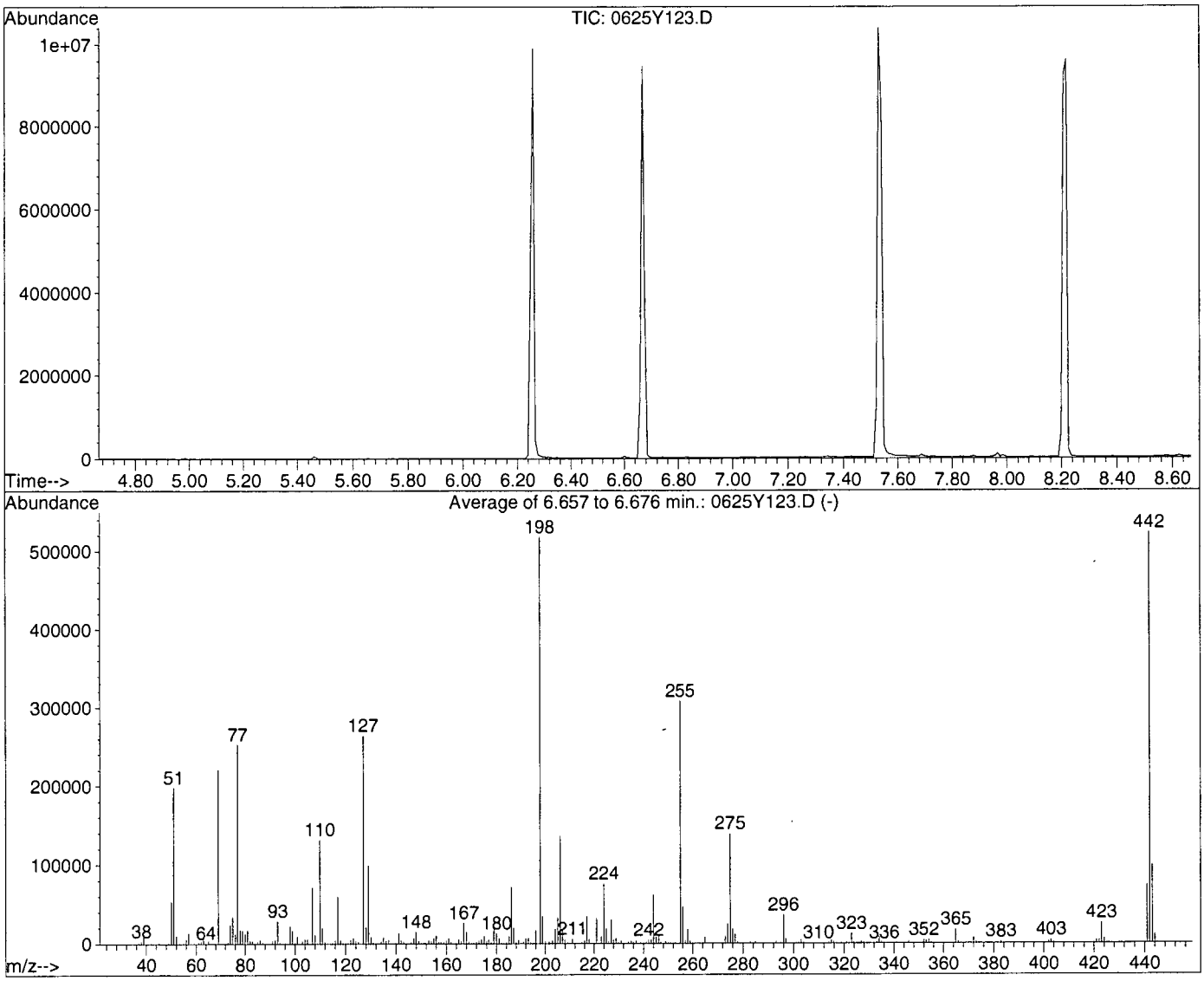


Spectrum Information: Average of 6.656 to 6.674 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.3	249119	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.2	679	PASS
127	198	40	60	47.6	356325	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	748512	PASS
199	198	5	9	6.6	49479	PASS
275	198	10	30	27.2	203867	PASS
365	198	1	100	3.3	24855	PASS
441	443	0.01	100	75.7	100696	PASS
442	198	40	150	93.3	698184	PASS
443	442	17	23	19.0	132965	PASS

Data File : M:\YODA\DATA\Y150625\0625Y123.D Vial: 23
Acq On : 7 Jul 15 15:59 Operator: MA
Sample : SV TUNE 5/14/15 Inst : Yoda
Misc : Multiplr: 1.00

Method : M:\YODA\DATA\Y150625\Y0625TT.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 331, 332, 333; Background Corrected with Scan 329

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	198470	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	971	PASS
127	198	40	60	51.0	264109	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	517816	PASS
199	198	5	9	6.7	34780	PASS
275	198	10	30	26.8	138723	PASS
365	198	1	100	3.3	17203	PASS
441	443	0.01	100	74.4	73569	PASS
442	198	40	150	101.1	523409	PASS
443	442	17	23	18.9	98838	PASS

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 Full Scan Standard Curve

PREP DATE:	06/25/15-L.H.												
8270 Standard Curve													
Exp:	07/02/15					**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	06/25/15	6/25/16	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	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 Full Scan Second Source (SS)						
PREP DATE:	06/25/15-L.H.	EX. 07/02/15				
		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

104

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					
		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 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					
		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 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

8270 BNA Surrogate Stock 6/25/15-L.H. Ex: 6/25/16						
		Conc.				
Supplier	ID #	µg/mL	Lot #	Open Date	Exp.Date	µL
O2SI	110004-17	200/400	242352-34955	5/25/15	5/25/16	1000

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 Full Scan CCV						
PREP DATE:	07/07/15-L.H.					
8270 Continuing Calibration Verification 50ug/ml						
Exp:	07/16/15					**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	248285-35024	06/25/15	6/25/16	25
EM Science	Methylene Chloride		55006	11/06/14		50
Supelco	SV Internal	2000	A10079V-3449	05/21/15	5/21/16	2

_SEP004

Organic Extraction Worksheet

Method	625/8270 Separatory Funnel Extra 3510C	Extraction Set	150624B	Extraction Method	SEP004	Units	mL

Spiked ID 1	8270T Spike 4-27-15 EXP 10-27-15		Surrogate ID 1	8270 Surrogate248398-35196	
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:	06/25/15 11:00	
Spiked ID 8			Ext. End Time:	06/25/15 14:20	
			GC Requires Extract By:	**07/09/15 0:00**	

pH1	2	6/25/15 11:05:00 AM	Water Bath Temp Criteria	76 °C
pH2	14	6/25/15 11:30:00 AM		
pH3				

Spiked By: KY **Date** 06/25/15 **Witnessed By:** CM **Date** 06/25/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150624B Blk				1	1	1000	1	2/1	06/25/15 11:00	Tumble Start time 6/23/15@15:35, temp 25
						equip	E-WB7				
2	150624B LCS-1		0.250	1	1	1	1000	1	2/1	06/25/15 11:00	Tumble End Time 6/24/15@08:00, temp 21
						equip	E-WB7				
3	AZ17911	AZ17911S01			1	1	980	1	2/1	06/25/15 11:00	76687 Fluid # 1 100.00g/1000mL
						equip	E-WB7				

KY 6/25/15

olvent and Lot#	
IC	55006
+1 Sulfuric Acid	6-2-15
cidified Na2SO4	5-20-15
Na2SO4	XE21E
0N NaOH	4-18-15
h strips	HC431579
ilter Paper	400098

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	LH
Date	6/25/15
Time	4:17
Refrigerator	GC-C

	Technician's Initials
Scanned By	KY
Sample Preparation	KY
Extraction	KY
Concentration	DL

Modified	06/25/15 3:34:20 PM

Reviewed By: KY **Date** 6/25/15

6/25/15 3:34:32 PM Ext_ID 158218

_SEP004

Organic Extraction Worksheet

Method	625/8270 Separatory Funnel Extra 3510C	Extraction Set	150623A	Extraction Method	SEP004	Units	mL

Spiked ID 1	8270T Spike 4-27-15 exp 10-27-15		Surrogate ID 1	8270 Surrogate 248398-35192	
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:	06/23/15 11:30	
Spiked ID 8			Ext. End Time:	06/23/15 15:25	
			GC Requires Extract By:	**07/08/15 0:00**	

pH1	2	6/23/15 11:35:00 AM	Water Bath Temp Criteria	78,80 °C
pH2	14	6/23/15 12:50:00 PM		
pH3				

Spiked By: KY **Date** 06/23/15 **Witnessed By:** DC **Date** 06/23/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150623A Blk				1	1 equip	1000 E-WB6	1	2/1	06/23/15 11:30	
2	150623A LCS-1		0.250	1	1	1 equip	1000 E-WB6	1	2/1	06/23/15 11:30	
3	150623A LCSD-1		0.250	1	1	1 equip	1000 E-WB6	1	2/1	06/23/15 11:30	
4	AZ17818	AZ17818W05			1	1 equip	1040 E-WB6	1	2/1	06/23/15 11:30	76674
5	AZ17821	AZ17821W06			1	1 equip	1040 E-WB6	1	2/1	06/23/15 11:30	76674
6	AZ17826	AZ17826W07			1	1 equip	950 E-WB7	1	2/1	06/23/15 11:30	76674
7	AZ17827	AZ17827W05			1	1 equip	950 E-WB7	1	2/1	06/23/15 11:30	76674
8	AZ17828	AZ17828W07			1	1 equip	900 E-WB7	1	2/1	06/23/15 11:30	76674
9	AZ17829	AZ17829W08			1	1 equip	900 E-WB7	1	2/1	06/23/15 11:30	76674
10	AZ17907	AZ17907W07			1	1 equip	860 E-WB7	1	2/1	06/23/15 11:30	76687
11	AZ17908	AZ17908W04			1	1 equip	1040 E-WB7	1	2/1	06/23/15 11:30	76687
12	AZ17909	AZ17909W07			1	1 equip	900 E-WB7	1	2/1	06/23/15 11:30	76687
13	AZ17910	AZ17910W01			1	1 equip	1040 E-WB7	1	2/1	06/23/15 11:30	76687
14	AZ18059	AZ18059W07			1	1 equip	1070 E-WB7	1	2/1	06/23/15 11:30	76713 RUSH 48HRS

KY 6/23/15

olvent and Lot#	
IC	55006
+1 Sulfuric Acid	6-2-15
cidified Na2SO4	5-20-15
.Na2SO4	XE21E
0N NaOH	4-18-15
h strips	HC431579
ilter Paper	400098

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	LH
Date	6/23/15
Time	4:00
Refrigerator	GC-C

	Technician's Initials
Scanned By	KY
Sample Preparation	KY,DC
Extraction	KY,DC
Concentration	IC

Modified	06/23/15 3:27:01 PM

Reviewed By: KY **Date** 6/23/15

Injection Log

Directory: M:\YODA\DATA\Y150625

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0625Y001.D	1	SV Tune 5/14/15		06/25/2015 10:01
2	2	0625Y002.D	1	5ug/ml SVOC 06/25/15		06/25/2015 10:20
3	3	0625Y003.D	1	10ug/ml SVOC 06/25/15		06/25/2015 10:49
4	4	0625Y004.D	1	20ug/ml SVOC 06/25/15		06/25/2015 11:18
5	5	0625Y005.D	1	40ug/ml SVOC 06/25/15		06/25/2015 11:48
6	6	0625Y006.D	1	50ug/ml SVOC 06/25/15		06/25/2015 12:17
7	7	0625Y007.D	1	60ug/ml SVOC 06/25/15		06/25/2015 12:47
8	8	0625Y008.D	1	80ug/ml SVOC 06/25/15		06/25/2015 13:17
9	9	0625Y009.D	1	100ug/ml SVOC 06/25/15		06/25/2015 13:46
10	10	0625Y010.D	1	50ug/ml SVOC SS 06/25/15		06/25/2015 14:15
11	36	0625Y036.D	1	TUNE 5/14/15		06/30/2015 10:15
12	37	0625Y037.D	1	CCV 50ug/ml SVOC 06/30/15	soil	06/30/2015 10:33
13	49	0625Y049.D	1	150624B BLK 1/1000	water	06/30/2015 17:10
14	50	0625Y050.D	1	150624B LCS-1 1/1000	water	06/30/2015 17:40
15	51	0625Y051.D	1	AZ17911S01 1/980	water	06/30/2015 18:09
16	14	0625Y114.D	1	SV TUNE 5/14/15		07/07/2015 09:27
17	22	0625Y122.D	1	CCV 50ug/ml SVOC 07/07/15		07/07/2015 14:20
18	23	0625Y123.D	1	SV TUNE 5/14/15		07/07/2015 15:59
19	24	0625Y124.D	1	150623A BLK 1/1000	water	07/07/2015 16:21
20	25	0625Y125.D	1	150623A LCS-1 1/1000	water	07/07/2015 16:50
21	26	0625Y126.D	1	150623A LCSD-1 1/1000	water	07/07/2015 17:20
22	33	0625Y133.D	1.16279	AZ17907W07 1/860	water	07/07/2015 20:50
23	34	0625Y134.D	0.961538	AZ17908W04 1/1040	water	07/07/2015 21:19
24	35	0625Y135.D	1.11111	AZ17909W07 1/900	water	07/07/2015 21:49
25	36	0625Y136.D	0.961538	AZ17910W01 1/1040	water	07/07/2015 22:19

Injection Log

Directory: M:\YODA\DATA\Y150625

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0625Y001.D	1	SV Tune 5/14/15		06/25/2015 10:01
2	2	0625Y002.D	1	5ug/ml SVOC 06/25/15		06/25/2015 10:20
3	3	0625Y003.D	1	10ug/ml SVOC 06/25/15		06/25/2015 10:49
4	4	0625Y004.D	1	20ug/ml SVOC 06/25/15		06/25/2015 11:18
5	5	0625Y005.D	1	40ug/ml SVOC 06/25/15		06/25/2015 11:48
6	6	0625Y006.D	1	50ug/ml SVOC 06/25/15		06/25/2015 12:17
7	7	0625Y007.D	1	60ug/ml SVOC 06/25/15		06/25/2015 12:47
8	8	0625Y008.D	1	80ug/ml SVOC 06/25/15		06/25/2015 13:17
9	9	0625Y009.D	1	100ug/ml SVOC 06/25/15		06/25/2015 13:46
10	10	0625Y010.D	1	50ug/ml SVOC SS 06/25/15		06/25/2015 14:15
11	36	0625Y036.D	1	TUNE 5/14/15		06/30/2015 10:15
12	37	0625Y037.D	1	CCV 50ug/ml SVOC 06/30/15	soil	06/30/2015 10:33
13	49	0625Y049.D	1	150624B BLK 1/1000	water	06/30/2015 17:10
14	50	0625Y050.D	1	150624B LCS-1 1/1000	water	06/30/2015 17:40
15	51	0625Y051.D	1	AZ17911S01 1/980	water	06/30/2015 18:09
16	14	0625Y114.D	1	SV TUNE 5/14/15		07/07/2015 09:27
17	22	0625Y122.D	1	CCV 50ug/ml SVOC 07/07/15		07/07/2015 14:20
18	23	0625Y123.D	1	SV TUNE 5/14/15		07/07/2015 15:59
19	24	0625Y124.D	1	150623A BLK 1/1000	water	07/07/2015 16:21
20	25	0625Y125.D	1	150623A LCS-1 1/1000	water	07/07/2015 16:50
21	26	0625Y126.D	1	150623A LCSD-1 1/1000	water	07/07/2015 17:20
22	33	0625Y133.D	1.16279	AZ17907W07 1/860	water	07/07/2015 20:50
23	34	0625Y134.D	0.961538	AZ17908W04 1/1040	water	07/07/2015 21:19
24	35	0625Y135.D	1.11111	AZ17909W07 1/900	water	07/07/2015 21:49
25	36	0625Y136.D	0.961538	AZ17910W01 1/1040	water	07/07/2015 22:19

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons

APPL, INC.

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
QC Summary

APPL, INC.

Method Blank

EPA 8270D LL WATER DODv3

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150619W-17817 - 198588**
Batch ID: #SIMDD-150619A

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	06/19/15	07/02/15
BLANK	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	SURROGATE: 2-FLUORBIPHENY	54.3	50-110			%	06/19/15	07/02/15
BLANK	SURROGATE: NITROBENZENE-	73.1	40-110			%	06/19/15	07/02/15
BLANK	SURROGATE: TERPHENYL-D14 (	75.3	50-135			%	06/19/15	07/02/15

Quant Method:P0629.M
Run #:0629L137
Instrument:Linus
Sequence:L150629
Initials:MA

GC SC-Blank-REG MDLs
Printed: 07/06/15 11:00:27 AM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
150619A-BLK	Blank	50-110	54.3		40-110	73.1	
150619A-LCS	Lab Control Spike	50-110	54.8		40-110	64.4	
AZ17907	S67-MW021-061715	50-110	53.6		40-110	63.6	
AZ17908	S67-MW020-061715	50-110	54.1		40-110	57.8	
AZ17909	S67-MW025-061715	50-110	50.0		40-110	54.0	

Comments: Batch: #SIMDD-150619A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150619A-BLK	Blank	50-135	75.3				
150619A-LCS	Lab Control Spike	50-135	73.6				
AZ17907	S67-MW021-061715	50-135	68.1				
AZ17908	S67-MW020-061715	50-135	67.1				
AZ17909	S67-MW025-061715	50-135	70.2				

Comments: Batch: #SIMDD-150619A

Laboratory Control Spike Recovery

EPA 8270D LL WATER DODv3

APPL ID: **150619W-17817 LCS - 198588**
Batch ID: #SIMDD-150619A

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	1.90	38.0 #	45-105
ACENAPHTHENE	5.00	2.27	45.4	45-110
ACENAPHTHYLENE	5.00	2.50	50.0	50-105
ANTHRACENE	5.00	2.86	57.2	55-110
BENZ (A) ANTHRACENE	5.00	3.26	65.2	55-110
BENZO (A) PYRENE	5.00	3.43	68.6	55-110
BENZO (B) FLUORANTHENE	5.00	3.07	61.4	45-120
BENZO (G,H,I) PERYLENE	5.00	2.90	58.0	40-125
BENZO (K) FLUORANTHENE	5.00	2.87	57.4	45-125
CHRYSENE	5.00	3.02	60.4	55-110
DIBENZ (A,H) ANTHRACENE	5.00	3.09	61.8	40-125
FLUORANTHENE	5.00	3.02	60.4	55-115
FLUORENE	5.00	2.61	52.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	3.36	67.2	45-125
NAPHTHALENE	5.00	2.09	41.8	40-100
PHENANTHRENE	5.00	2.97	59.4	50-115
PYRENE	5.00	3.04	60.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.37	54.8	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.61	64.4	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	1.84	73.6	50-135

= Recovery is outside QC limits.

Comments:

Primary	SPK
Quant Method :	P0629.M
Extraction Date :	06/19/15
Analysis Date :	07/02/15
Instrument :	Linus
Run :	0629L138
Initials :	MA

Printed: 07/06/15 11:42:14 AM
APPL Standard LCS

8270D-LL

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/02/15

Matrix: WATER Instrument: Linus

Blank ID: 150619A-BLK Time Analyzed: 1243

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150619A-BLK	Blank	0629L137	07/02/15 1243
150619A-LCS	Lab Control Spike	0629L138	07/02/15 1310
AZ17907	S67-MW021-061715	0629L145	07/02/15 1619
AZ17908	S67-MW020-061715	0629L146	07/02/15 1646
AZ17909	S67-MW025-061715	0629L147	07/02/15 1713

Comments: Batch: #SIMDD-150619A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76687
Matrix: Water
ID: SV Tune 05/14/15

SDG No: 76687
Date Analyzed: 06/29/15
Instrument: Linus
Time Analyzed: 12:12

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		0.1ug/ml PAH 06/29/1	0629L003.D	06/29/15 12:29
2		0.2ug/ml PAH	0629L004.D	06/29/15 12:56
3		0.5ug/ml PAH	0629L005.D	06/29/15 13:23
4		1.0ug/ml PAH	0629L006.D	06/29/15 13:50
5		5.0ug/ml PAH	0629L007.D	06/29/15 14:17
6		10ug/ml PAH	0629L008.D	06/29/15 14:44
7		50ug/ml PAH	0629L009.D	06/29/15 15:12
8		100ug/ml PAH	0629L010.D	06/29/15 15:39
9		5.0ug/ml PAH SS 06/2	0629L012.D	06/29/15 17:28
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	34.9
68	0 - 2.05% of mass 69	1.2
70	0 - 2% of mass 69	0.5
127	39.5 - 60% of mass 198	46.1
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	22.6
365	1 - 100% of mass 198	2.2
441	0.01 - 100% of mass 443	78.4
442	50 - 150% of mass 198	72.4
443	17 - 23% of mass 442	19.8

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 76687
Matrix: Water
ID: SV TUNE 5/14/15

SDG No: 76687
Date Analyzed: 07/02/15
Instrument: Linus
Time Analyzed: 9:44

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV 5.0ug/ml PAH 06/	0629L131.D	07/02/15 10:01
2	Blank	150619A BLK 1/1000	0629L137.D	07/02/15 12:43
3	Lab Control Spike	150619A LCS-1 1/1000	0629L138.D	07/02/15 13:10
4	S67-MW021-061715	AZ17907W08 1/900	0629L145.D	07/02/15 16:19
5	S67-MW020-061715	AZ17908W05 1/940	0629L146.D	07/02/15 16:46
6	S67-MW025-061715	AZ17909W08 1/900	0629L147.D	07/02/15 17:13
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	32.2
68	0 - 2.05% of mass 69	1.6
70	0 - 2% of mass 69	0.5
127	39.5 - 60% of mass 198	45.2
197	0 - 1% of mass 198	0.4
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	6.6
275	10 - 30% of mass 198	23.7
365	1 - 100% of mass 198	2.2
441	0.01 - 100% of mass 443	78.5
442	50 - 150% of mass 198	72.1
443	17 - 23% of mass 442	19.4

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 76687

Lab File ID (Standard): 0629L007.D Date Analyzed: 06/29/15

Instrument ID: Linus Time Analyzed: 14:17

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	6750	6.05	3406	8.10	5719	9.86
	UPPER LIMIT	13500	6.55	6812	8.60	11438	10.36
	LOWER LIMIT	3375	5.55	1703	7.60	2860	9.36
	SAMPLE NO.						
01	CCV 5.0ug/ml PAH 06/3	5843	6.05	3117	8.10	5423	9.85
02	150619A BLK 1/1000	6216	6.05	3057	8.10	5222	9.86
03	150619A LCS-1 1/1000	6493	6.05	3500	8.10	5984	9.86
04	AZ17907W08 1/900	5835	6.05	2975	8.11	5256	9.87
05	AZ17908W05 1/940	6280	6.05	3028	8.10	5330	9.86
06	AZ17909W08 1/900	5951	6.05	2804	8.11	4660	9.87
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.: 76687

Lab File ID (Standard): 0629L007.D Date Analyzed: 06/29/15

Instrument ID: Linus Time Analyzed: 14:17

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

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	6233	13.03	3777	15.66		
	UPPER LIMIT	12466	13.53	7554	16.16		
	LOWER LIMIT	3117	12.53	1889	15.16		
	SAMPLE NO.						
01	CCV 5.0ug/ml PAH 06/3	6042	13.03	3739	15.66		
02	150619A BLK 1/1000	6552	13.04	4200	15.68		
03	150619A LCS-1 1/1000	6639	13.03	4237	15.66		
04	AZ17907W08 1/900	5976	13.06	3685	15.69		
05	AZ17908W05 1/940	6155	13.04	3727	15.68		
06	AZ17909W08 1/900	5191	13.04	3077	15.69		
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.

EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Sample Data

APPL, INC.

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-MW021-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17907
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	53.6	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	63.6	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	68.1	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L145
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L145.D Vial: 45
Acq On : 2 Jul 15 16:19 Operator: MA
Sample : AZ17907W08 1/900 Inst : Linus
Misc : water Multiplr: 1.11

Quant Time: Jul 6 10:28 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	5835	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.11	164	2975	2.50000	ppb	0.01
11) Phenanthrene-D10(IS)	9.87	188	5256	2.50000	ppb	0.01
15) Chrysene-D12(IS)	13.06	240	5976	2.50000	ppb	0.02
21) Perylene-D12(IS)	15.69	264	3685	2.50000	ppb	0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	921	1.76551	ppb	0.01
Spiked Amount 2.778			Recovery = 63.576%			
7) Surrogate Recovery (FBP)	7.31	172	2418	1.48960	ppb	0.00
Spiked Amount 2.778			Recovery = 53.640%			
17) Surrogate Recovery (TPH)	11.73	244	3723	1.89108	ppb	0.00
Spiked Amount 2.778			Recovery = 68.076%			

Target Compounds Qvalue

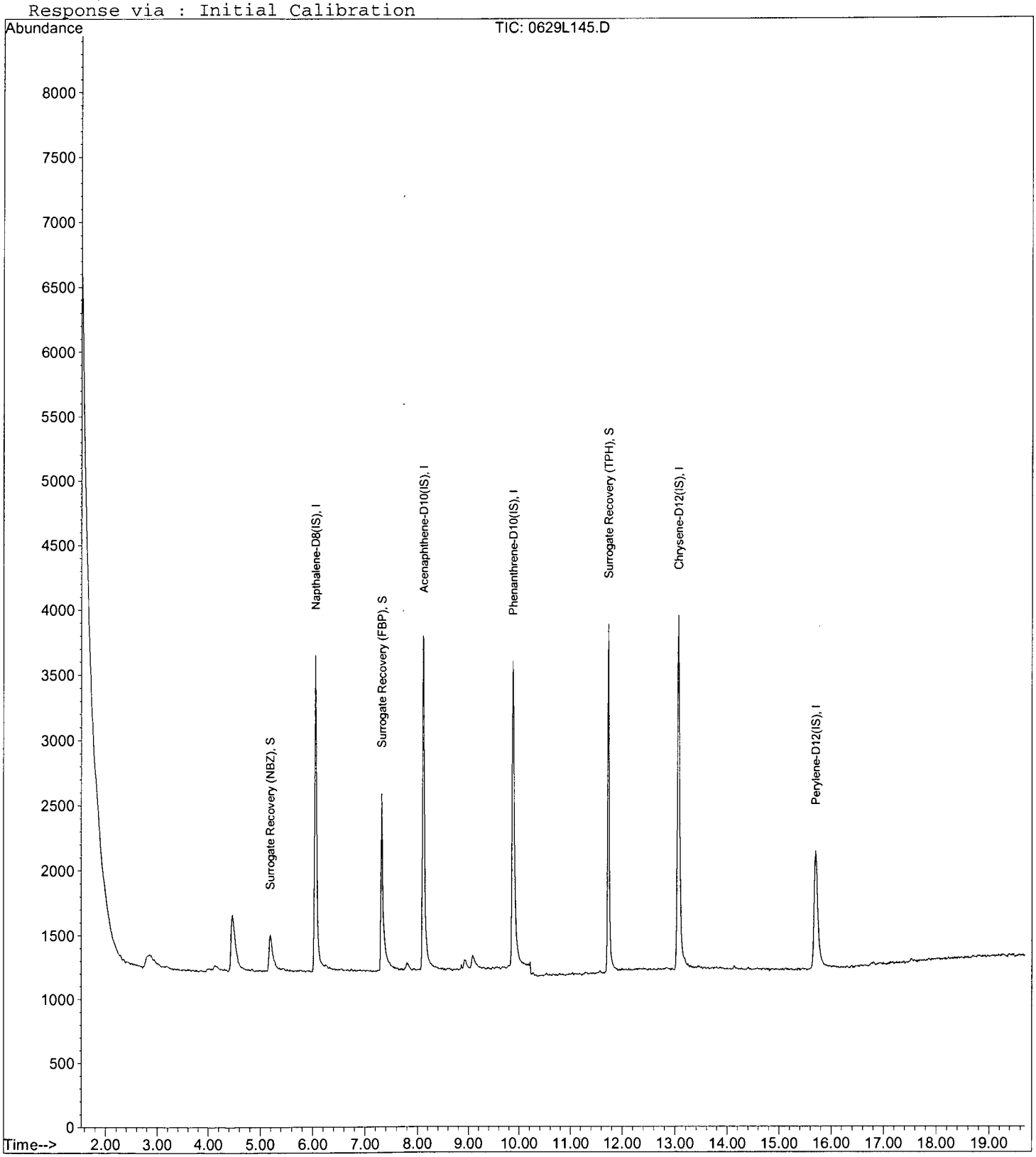
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L145.D Vial: 45
Acq On : 2 Jul 15 16:19 Operator: MA
Sample : AZ17907W08 1/900 Inst : Linus
Misc : water Multiplr: 1.11

Quant Time: Jul 6 10:28 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 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-MW020-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17908
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	54.1	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	57.8	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	67.1	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L146
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L146.D Vial: 46
Acq On : 2 Jul 15 16:46 Operator: MA
Sample : AZ17908W05 1/940 Inst : Linus
Misc : water Multiplr: 1.06

Quant Time: Jul 6 10:29 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6280	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.10	164	3028	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	5330	2.50000	ppb	0.00
15) Chrysene-D12(IS)	13.04	240	6155	2.50000	ppb	0.01
21) Perylene-D12(IS)	15.68	264	3727	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	901	1.53650	ppb	0.01
Spiked Amount 2.660			Recovery = 57.754%			
7) Surrogate Recovery (FBP)	7.31	172	2483	1.43892	ppb	0.00
Spiked Amount 2.660			Recovery = 54.106%			
17) Surrogate Recovery (TPH)	11.71	244	3778	1.78393	ppb	-0.01
Spiked Amount 2.660			Recovery = 67.078%			

Target Compounds	Qvalue

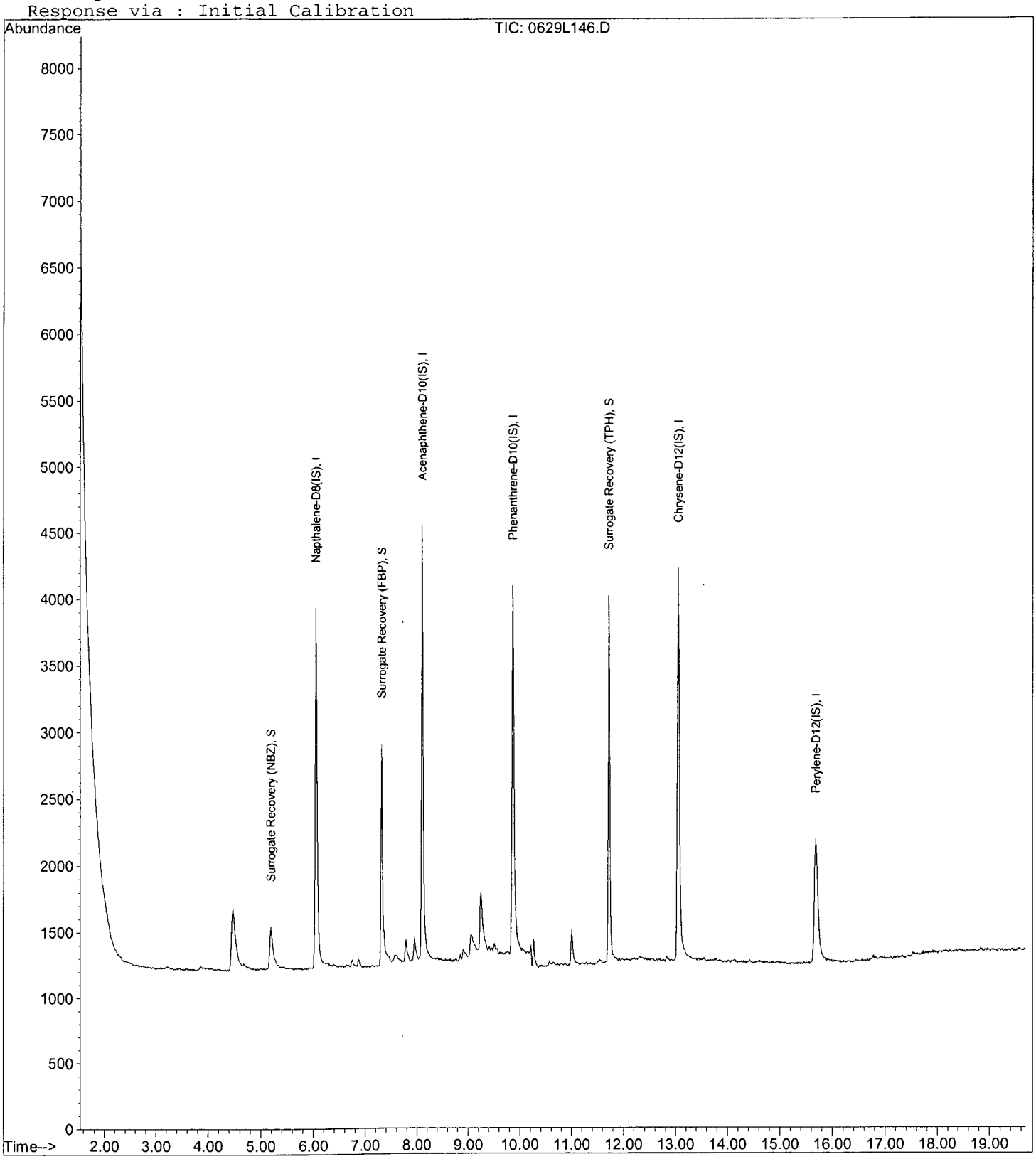
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L146.D Vial: 46
Acq On : 2 Jul 15 16:46 Operator: MA
Sample : AZ17908W05 1/940 Inst : Linus
Misc : water Multiplr: 1.06

Quant Time: Jul 6 10:29 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 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-MW025-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17909
QCG: #SIMDD-150619A-198588

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	06/19/15	07/02/15
8270D-LL	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
8270D-LL	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
8270D-LL	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
8270D-LL	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
8270D-LL	SURROGATE: 2-FLUORBIPHENYL (S)	50.0	50-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: NITROBENZENE-D5 (S)	54.0	40-110			%	06/19/15	07/02/15
8270D-LL	SURROGATE: TERPHENYL-D14 (S)	70.2	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L147
Instrument: Linus
Sequence: L150629
Dilution Factor: 1
Initials: MA

Printed: 07/06/15 11:00:31 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L147.D Vial: 47
Acq On : 2 Jul 15 17:13 Operator: MA
Sample : AZ17909W08 1/900 Inst : Linus
Misc : water Multiplr: 1.11

Quant Time: Jul 6 10:29 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	5951	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.11	164	2804	2.50000 ppb	0.01
11) Phenanthrene-D10(IS)	9.87	188	4660	2.50000 ppb	0.01
15) Chrysene-D12(IS)	13.04	240	5191	2.50000 ppb	0.01
21) Perylene-D12(IS)	15.69	264	3077	2.50000 ppb	0.04
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.19	82	798	1.49991 ppb	0.01
Spiked Amount 2.778			Recovery =	54.000%	
7) Surrogate Recovery (FBP)	7.31	172	2124	1.38828 ppb	0.00
Spiked Amount 2.778			Recovery =	49.968%	
17) Surrogate Recovery (TPH)	11.73	244	3334	1.94959 ppb	0.00
Spiked Amount 2.778			Recovery =	70.200%	
Target Compounds					Qvalue

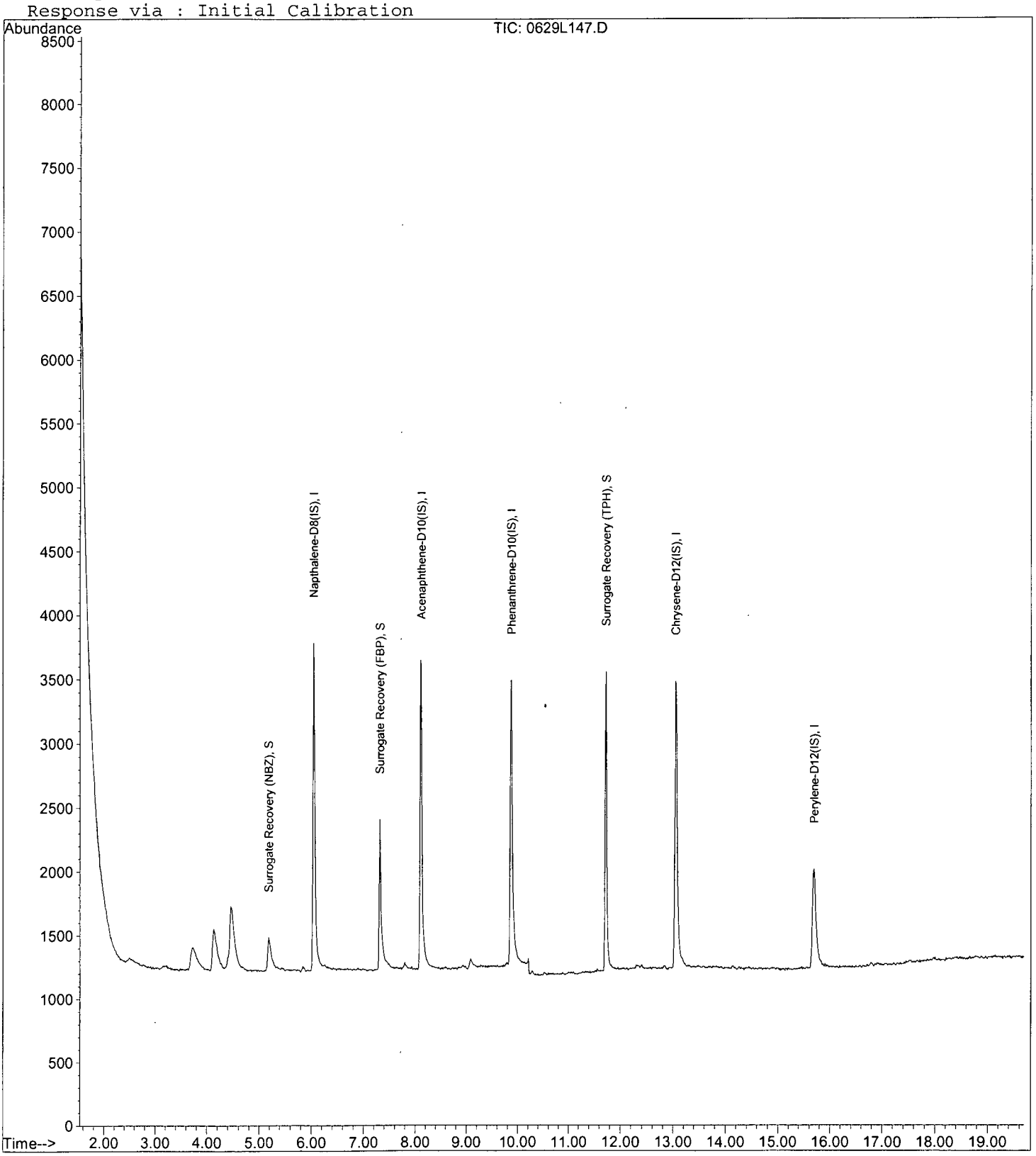
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L147.D Vial: 47
Acq On : 2 Jul 15 17:13 Operator: MA
Sample : AZ17909W08 1/900 Inst : Linus
Misc : water Multiplr: 1.11

Quant Time: Jul 6 10:29 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 76687
Case No: Initial Cal. Date: 06/29/15
Matrix: Instrument: Linus
Initials: MA

		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD		
			0629L003.D	0629L004.D	0629L005.D	0629L006.D	0629L007.D	0629L008.D	0629L009.D	0629L010.D						
1	I	Napthalene-D8(IS)														
2	S	Surrogate Recovery (NBZ)			0.2153	0.2159	0.2325	0.2358	0.3061	0.2843						
3	TM	Naphthalene	1.642	1.427	1.303	1.411	1.378	1.319	1.275	1.150			0.25	15	S	
4	TM	2-Methylnaphthalene	0.9150	0.7773	0.7567	0.8291	0.8720	0.8486	0.8436	0.7709			1.4	11	TM	
5	TM	1-Methylnaphthalene	1.007	1.020	0.9012	0.9581	0.9899	0.9279	0.8553	0.7656			0.83	6.6	TM	
6	I	Acenaphthene-D10(IS)											0.93	9.3	TM	
7	S	Surrogate Recovery (FBP)	1.726	1.466	1.478	1.471	1.470	1.487	1.594	1.433						
8	TM	Acenaphthylene	3.252	2.996	2.657	2.791	2.779	2.694	2.786	2.510			1.5	6.4	S	
9	*TM	Acenaphthene	1.973	1.944	1.648	1.763	1.688	1.619	1.631	1.463			2.8	8.1	TM	
10	TM	Fluorene	2.037	1.911	1.795	1.837	1.778	1.726	1.800	1.624			1.7	10.0	*TM	
11	I	Phenanthrene-D10(IS)											1.8	6.8	TM	
12	TM	Phenanthrene	1.875	1.432	1.426	1.488	1.501	1.486	1.477	1.379						
13	TM	Anthracene	1.892	1.795	1.622	1.558	1.409	1.485	1.465	1.248			1.5	10	TM	
14	*TM	Fluoranthene	2.415	2.103	1.915	1.895	1.803	1.858	1.871	1.697			1.6	13	TM	
15	I	Chrysene-D12(IS)											1.9	11	*TM	
16	TM	Pyrene	2.328	1.994	1.841	1.839	1.760	1.769	1.643	1.481						
17	S	Surrogate Recovery (TPH)	1.167	0.9472	0.8823	0.8857	0.8519	0.8893	0.8951	0.8026			1.8	14	TM	
18	TML	Benz (a) anthracene	1.918	1.231	1.196	1.253	1.350	1.553	1.548				0.92	12	S	
19	TML	Chrysene	2.060	2.072	1.982	1.952	1.618	1.480	1.298	1.210			1.4	18	TML	1.000
20	TM	Indeno (1,2,3-cd) pyrene	1.072	1.743	1.593	1.627	1.634	1.686	1.634	1.503			1.7	21	TML	0.999
21	I	Perylene-D12(IS)											1.6	13	TM	
22	TML	Benzo (b) fluoranthene	1.891	2.434	1.412	1.578	2.196	2.222	2.300	2.158						
23	TML	Benzo (k) fluoranthene	1.263	0.7444	1.510	1.606	1.537	1.501	1.794	1.472			2.0	18	TML	0.999
24	*TM	Benzo (a) pyrene	2.518	2.129	2.081	2.031	2.076	2.143	2.064	1.833			1.4	22	TML	0.991
25	TM	Dibenz (a,h) anthracene	2.982	2.252	2.210	2.264	2.290	2.337	2.257	2.017			2.1	9.1	*TM	
26	TM	Benzo (g,h,i) perylene	3.085	2.472	2.331	2.381	2.309	2.355	2.227	2.001			2.3	12	TM	
27													2.4	13	TM	
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L003.D Vial: 3
Acq On : 29 Jun 15 12:29 Operator: MA
Sample : 0.1ug/ml PAH 06/29/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 13:15 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6257	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.11	164	2737	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.88	188	4307	2.50000 ppb		0.02
15) Chrysene-D12(IS)	13.06	240	4757	2.50000 ppb		0.01
21) Perylene-D12(IS)	15.69	264	2909	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.18	82	46	0.76497 ppb		-0.04
Spiked Amount 2.500			Recovery	= 30.600%		
7) Surrogate Recovery (FBP)	7.31	172	189	0.14110 ppb		0.00
Spiked Amount 2.500			Recovery	= 5.640%		
17) Surrogate Recovery (TPH)	11.74	244	222	0.15006 ppb		0.01
Spiked Amount 2.500			Recovery	= 6.000%		
Target Compounds						Qvalue
3) Naphthalene	6.07	128	411	0.14788 ppb		96
4) 2-Methylnaphthalene	6.89	142	229	0.30463 ppb		99
5) 1-Methylnaphthalene	7.00	142	252	0.12901 ppb		99
8) Acenaphthylene	7.94	152	356	0.14448 ppb		96
9) Acenaphthene	8.15	154	216	0.14080 ppb		93
10) Fluorene	8.77	166	223	0.14166 ppb		93
12) Phenanthrene	9.91	178	323	0.15646 ppb		97
13) Anthracene	9.97	178	326	0.15623 ppb		99
14) Fluoranthene	11.31	202	416	0.15714 ppb		96
16) Pyrene	11.56	202	443	0.15798 ppb		92
18) Benz (a) anthracene	13.04	228	365	0.59840 ppb		95
19) Chrysene	13.08	228	392	0.15289 ppb	#	94
20) Indeno (1,2,3-cd) pyrene	17.93	276	204	0.07543 ppb	#	79
22) Benzo (b) fluoranthene	14.88	252	220	0.53726 ppb		92
23) Benzo (k) fluoranthene	14.91	252	147	-0.21407 ppb	#	52
24) Benzo (a) pyrene	15.46	252	293	0.14221 ppb		91
25) Dibenz (a,h) anthracene	17.96	278	347	0.15430 ppb		92
26) Benzo (g,h,i) perylene	18.46	276	359	0.15672 ppb		95

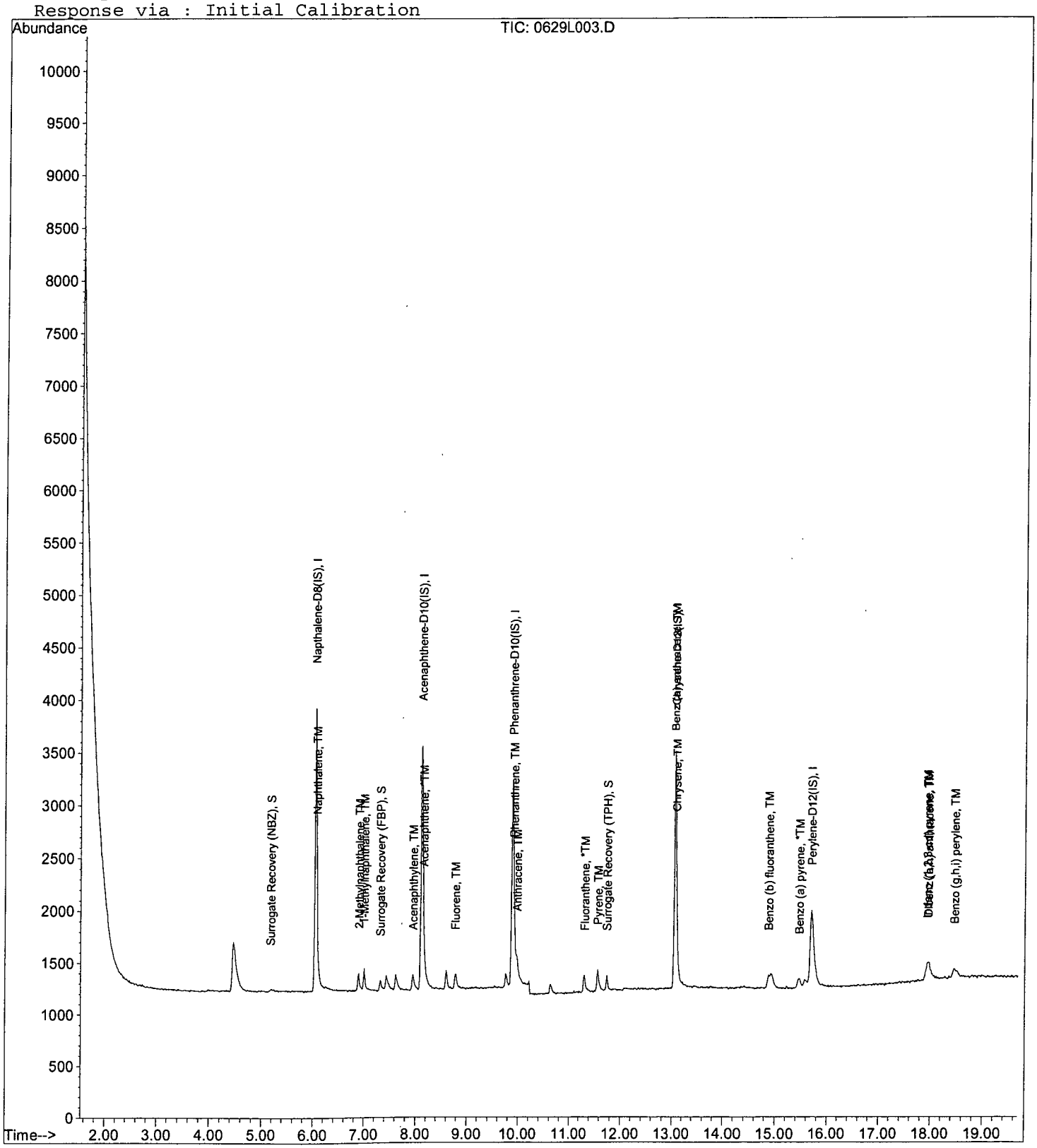
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L003.D Vial: 3
Acq On : 29 Jun 15 12:29 Operator: MA
Sample : 0.1ug/ml PAH 06/29/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 13:15 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L004.D Vial: 4
Acq On : 29 Jun 15 12:56 Operator: MA
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6947	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.11	164	3087	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.87	188	4957	2.50000 ppb		0.01
15) Chrysene-D12(IS)	13.06	240	5292	2.50000 ppb		0.01
21) Perylene-D12(IS)	15.69	264	3241	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	116	0.84102 ppb		-0.02
Spiked Amount 2.500			Recovery = 33.640%			
7) Surrogate Recovery (FBP)	7.31	172	362	0.23961 ppb		0.00
Spiked Amount 2.500			Recovery = 9.600%			
17) Surrogate Recovery (TPH)	11.74	244	401	0.24365 ppb		0.01
Spiked Amount 2.500			Recovery = 9.760%			
Target Compounds						Qvalue
3) Naphthalene	6.07	128	793	0.25699 ppb		98
4) 2-Methylnaphthalene	6.89	142	432	0.38391 ppb		95
5) 1-Methylnaphthalene	7.00	142	567	0.25710 ppb		91
8) Acenaphthylene	7.94	152	740	0.26627 ppb		98
9) Acenaphthene	8.13	154	480	0.27742 ppb		97
10) Fluorene	8.77	166	472	0.26584 ppb		91
12) Phenanthrene	9.91	178	568	0.23906 ppb		97
13) Anthracene	9.97	178	712	0.29648 ppb		97
14) Fluoranthene	11.31	202	834	0.27373 ppb		96
16) Pyrene	11.56	202	844	0.27055 ppb		97
18) Benz (a) anthracene	13.04	228	521	0.63496 ppb		95
19) Chrysene	13.09	228	877	0.30748 ppb		94
20) Indeno (1,2,3-cd) pyrene	17.93	276	738	0.24530 ppb	#	96
22) Benzo (b) fluoranthene	14.93	252	631	0.66881 ppb		98
23) Benzo (k) fluoranthene	14.93	252	193	-0.20156 ppb	#	90
24) Benzo (a) pyrene	15.46	252	552	0.24048 ppb		95
25) Dibenz (a,h) anthracene	17.97	278	584	0.23308 ppb	#	91
26) Benzo (g,h,i) perylene	18.47	276	641	0.25116 ppb		94

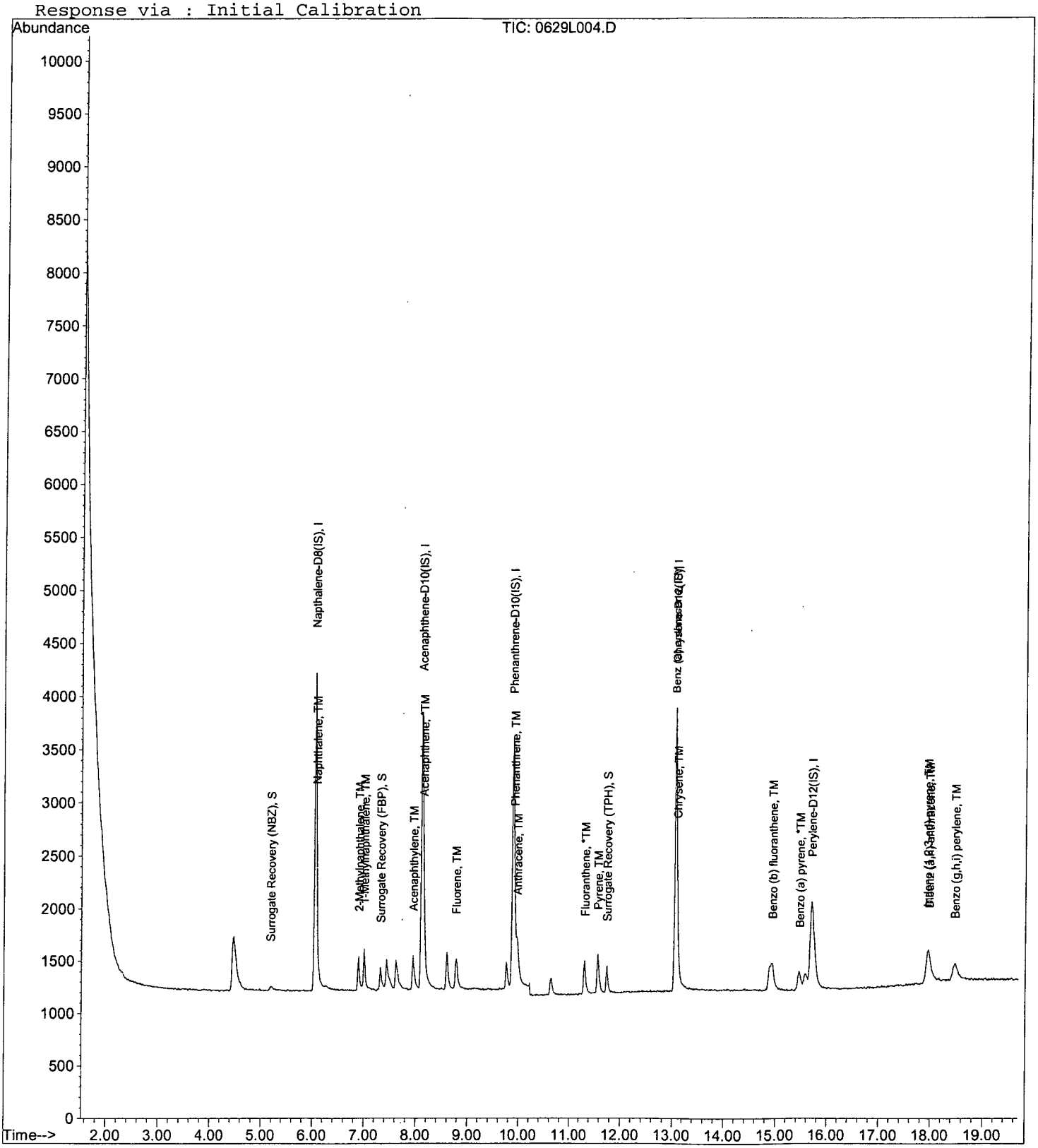
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L004.D Vial: 4
Acq On : 29 Jun 15 12:56 Operator: MA
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L005.D Vial: 5
Acq On : 29 Jun 15 13:23 Operator: MA
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	7407	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.10	164	3440	2.50000 ppb		-0.01
11) Phenanthrene-D10(IS)	9.87	188	5491	2.50000 ppb		0.01
15) Chrysene-D12(IS)	13.06	240	5905	2.50000 ppb		0.01
21) Perylene-D12(IS)	15.68	264	3572	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	319	1.05558 ppb		-0.02
Spiked Amount 2.500			Recovery = 42.240%			
7) Surrogate Recovery (FBP)	7.31	172	1017	0.60409 ppb		0.00
Spiked Amount 2.500			Recovery = 24.160%			
17) Surrogate Recovery (TPH)	11.74	244	1042	0.56740 ppb		0.01
Spiked Amount 2.500			Recovery = 22.680%			
Target Compounds						Qvalue
3) Naphthalene	6.07	128	1930	0.58662 ppb		98
4) 2-Methylnaphthalene	6.89	142	1121	0.66017 ppb		99
5) 1-Methylnaphthalene	7.00	142	1335	0.56263 ppb		96
8) Acenaphthylene	7.94	152	1828	0.59027 ppb		100
9) Acenaphthene	8.13	154	1134	0.58814 ppb		97
10) Fluorene	8.77	166	1235	0.62421 ppb		99
12) Phenanthrene	9.90	178	1566	0.59500 ppb		99
13) Anthracene	9.97	178	1781	0.66949 ppb		99
14) Fluoranthene	11.29	202	2103	0.62312 ppb		100
16) Pyrene	11.56	202	2174	0.62454 ppb		96
18) Benz (a) anthracene	13.03	228	1413	0.87204 ppb		99
19) Chrysene	13.09	228	2341	0.73556 ppb		98
20) Indeno (1,2,3-cd) pyrene	17.92	276	1881	0.56031 ppb	#	94
22) Benzo (b) fluoranthene	14.86	252	1009	0.76580 ppb		99
23) Benzo (k) fluoranthene	14.92	252	1079	0.13492 ppb		97
24) Benzo (a) pyrene	15.45	252	1487	0.58778 ppb		97
25) Dibenz (a,h) anthracene	17.94	278	1579	0.57180 ppb		97
26) Benzo (g,h,i) perylene	18.46	276	1665	0.59194 ppb		95

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

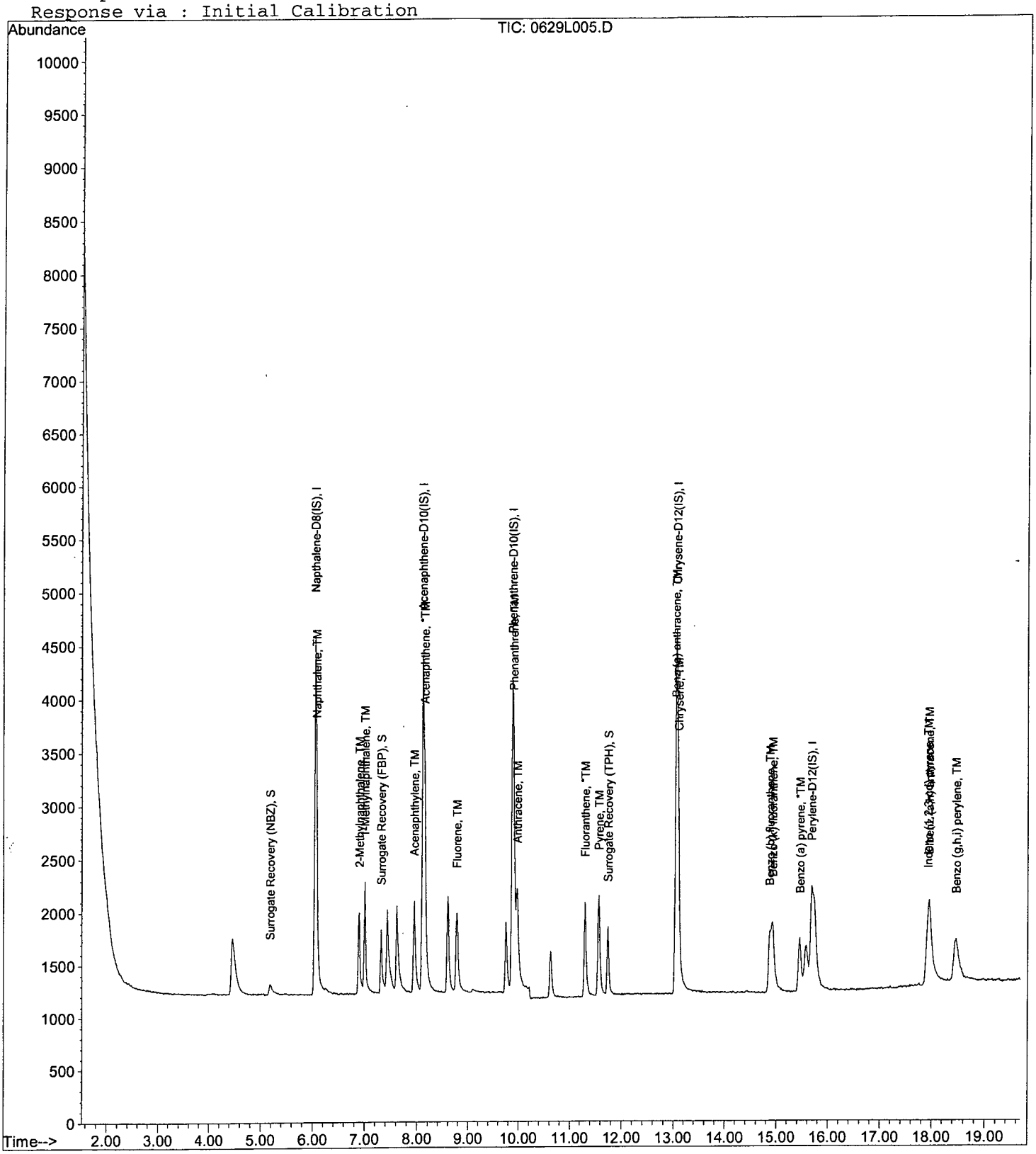
Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L005.D
Acq On : 29 Jun 15 13:23
Sample : 0.5ug/ml PAH
Misc :

Vial: 5
Operator: MA
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L006.D Vial: 6
Acq On : 29 Jun 15 13:50 Operator: MA
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6727	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.10	164	3339	2.50000 ppb		-0.01
11) Phenanthrene-D10(IS)	9.87	188	5489	2.50000 ppb		0.01
15) Chrysene-D12(IS)	13.06	240	5868	2.50000 ppb		0.01
21) Perylene-D12(IS)	15.68	264	3648	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	581	1.40790 ppb		-0.02
Spiked Amount 2.500			Recovery = 56.320%			
7) Surrogate Recovery (FBP)	7.31	172	1964	1.20188 ppb		0.00
Spiked Amount 2.500			Recovery = 48.080%			
17) Surrogate Recovery (TPH)	11.74	244	2079	1.13921 ppb		0.01
Spiked Amount 2.500			Recovery = 45.560%			
Target Compounds						Qvalue
3) Naphthalene	6.07	128	3798	1.27109 ppb		99
4) 2-Methylnaphthalene	6.89	142	2231	1.21885 ppb		99
5) 1-Methylnaphthalene	7.00	142	2578	1.19156 ppb		98
8) Acenaphthylene	7.94	152	3728	1.24021 ppb		99
9) Acenaphthene	8.13	154	2355	1.25836 ppb		94
10) Fluorene	8.77	166	2453	1.27733 ppb		98
12) Phenanthrene	9.90	178	3267	1.24175 ppb		99
13) Anthracene	9.97	178	3421	1.28644 ppb		97
14) Fluoranthene	11.29	202	4160	1.23305 ppb		99
16) Pyrene	11.56	202	4317	1.24799 ppb		98
18) Benz (a) anthracene	13.03	228	2942	1.31319 ppb		99
19) Chrysene	13.08	228	4582	1.44878 ppb		98
20) Indeno (1,2,3-cd) pyrene	17.91	276	3818	1.14447 ppb	#	98
22) Benzo (b) fluoranthene	14.86	252	2303	1.15123 ppb		99
23) Benzo (k) fluoranthene	14.91	252	2344	0.60729 ppb		95
24) Benzo (a) pyrene	15.44	252	2963	1.14680 ppb		99
25) Dibenz (a,h) anthracene	17.94	278	3304	1.17154 ppb		99
26) Benzo (g,h,i) perylene	18.45	276	3475	1.20970 ppb		95

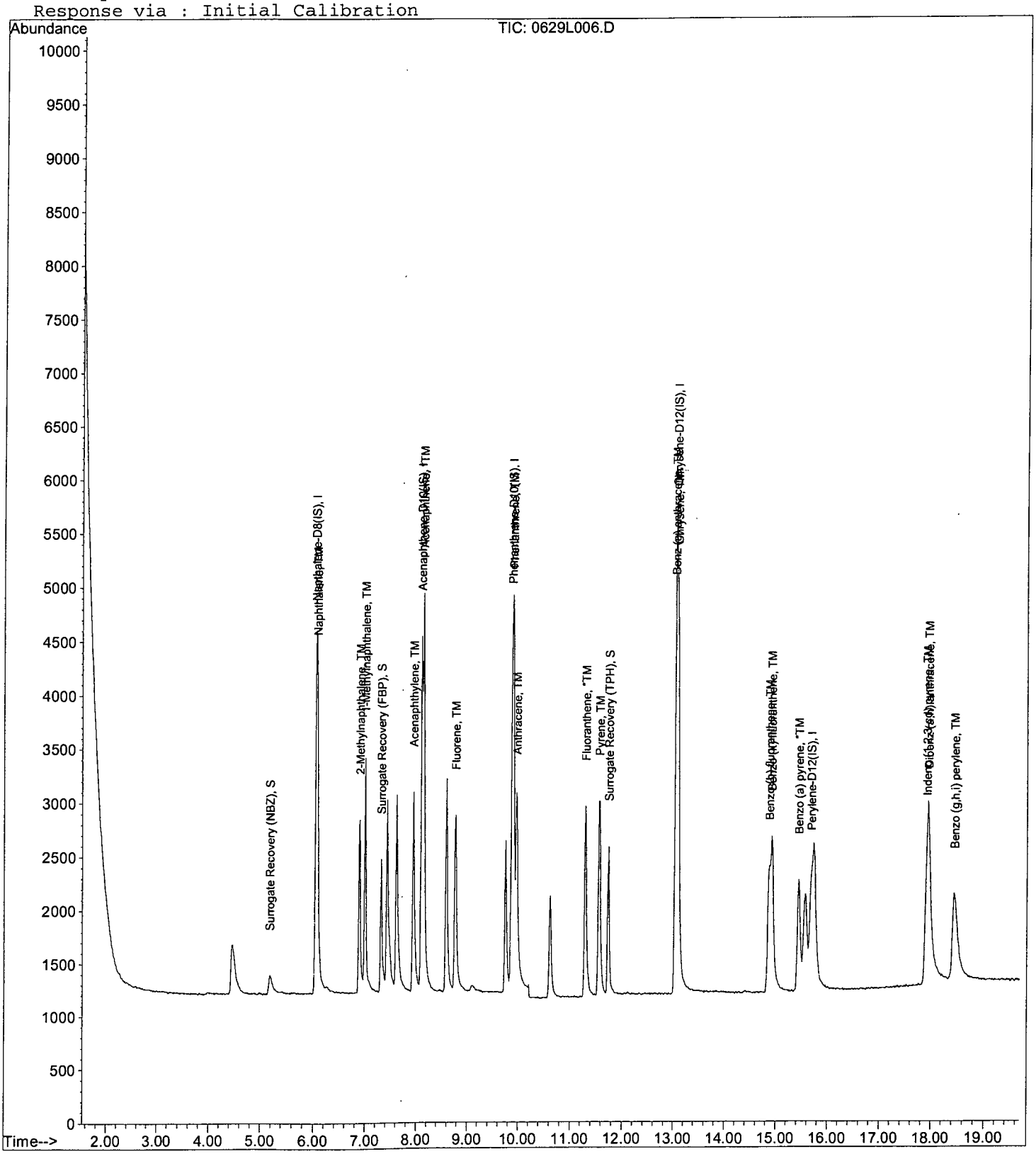
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L006.D Vial: 6
Acq On : 29 Jun 15 13:50 Operator: MA
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:58 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L007.D Vial: 7
Acq On : 29 Jun 15 14:17 Operator: MA
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6750	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.10	164	3406	2.50000 ppb		-0.01
11) Phenanthrene-D10(IS)	9.86	188	5719	2.50000 ppb		0.00
15) Chrysene-D12(IS)	13.03	240	6233	2.50000 ppb		-0.01
21) Perylene-D12(IS)	15.66	264	3777	2.50000 ppb		-0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.18	82	3139	4.48894 ppb		-0.04
Spiked Amount 2.500			Recovery	= 179.560%		
7) Surrogate Recovery (FBP)	7.31	172	10012	6.00637 ppb		0.00
Spiked Amount 2.500			Recovery	= 240.240%		
17) Surrogate Recovery (TPH)	11.73	244	10620	5.47859 ppb		0.00
Spiked Amount 2.500			Recovery	= 219.160%		
Target Compounds						Qvalue
3) Naphthalene	6.07	128	18605	6.20537 ppb		100
4) 2-Methylnaphthalene	6.88	142	11772	5.59509 ppb		99
5) 1-Methylnaphthalene	7.00	142	13363	6.13775 ppb		99
8) Acenaphthylene	7.94	152	18929	6.17331 ppb		99
9) Acenaphthene	8.13	154	11497	6.02239 ppb		98
10) Fluorene	8.75	166	12110	6.18189 ppb		99
12) Phenanthrene	9.88	178	17174	6.26514 ppb		100
13) Anthracene	9.94	178	16115	5.81621 ppb		99
14) Fluoranthene	11.28	202	20628	5.86837 ppb		96
16) Pyrene	11.54	202	21935	5.96980 ppb		95
18) Benz (a) anthracene	13.02	228	16824	5.01282 ppb		100
19) Chrysene	13.07	228	20166	6.00287 ppb		98
20) Indeno (1,2,3-cd) pyrene	17.87	276	20374	5.74958 ppb	#	98
22) Benzo (b) fluoranthene	14.84	252	16587	5.30599 ppb		98
23) Benzo (k) fluoranthene	14.89	252	11614	3.98197 ppb		99
24) Benzo (a) pyrene	15.41	252	15681	5.86191 ppb		99
25) Dibenz (a,h) anthracene	17.91	278	17300	5.92478 ppb		99
26) Benzo (g,h,i) perylene	18.41	276	17441	5.86411 ppb		98

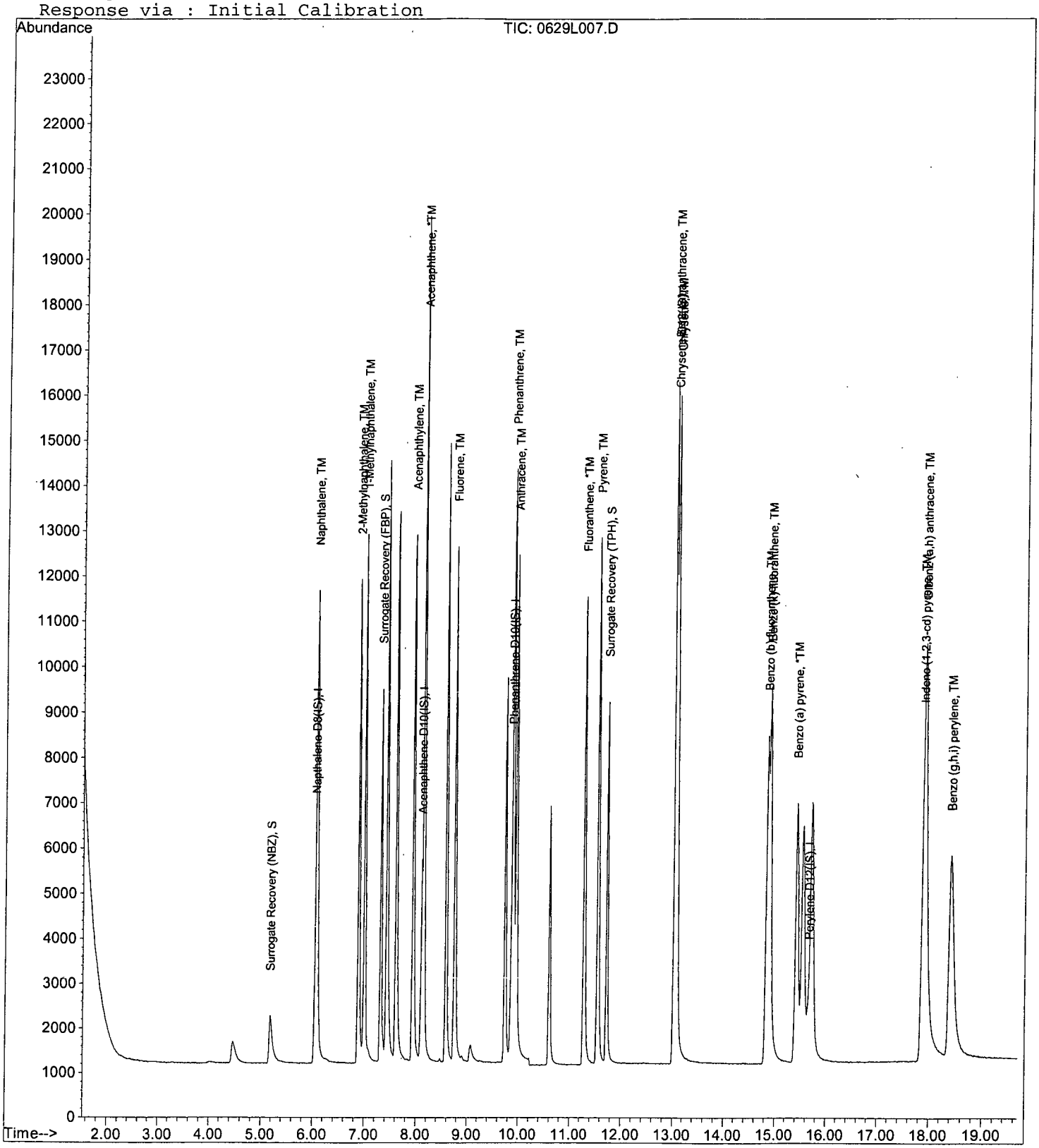
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L007.D Vial: 7
Acq On : 29 Jun 15 14:17 Operator: MA
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L008.D Vial: 8
Acq On : 29 Jun 15 14:44 Operator: MA
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6358	2.50000	ppb		-0.01
6) Acenaphthene-D10(IS)	8.10	164	3196	2.50000	ppb		-0.01
11) Phenanthrene-D10(IS)	9.85	188	5100	2.50000	ppb		-0.01
15) Chrysene-D12(IS)	13.03	240	5590	2.50000	ppb		-0.01
21) Perylene-D12(IS)	15.65	264	3355	2.50000	ppb		-0.02
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.18	82	5997	8.37970	ppb		-0.04
Spiked Amount 2.500			Recovery = 335.200%				
7) Surrogate Recovery (FBP)	7.31	172	19015	12.15698	ppb		0.00
Spiked Amount 2.500			Recovery = 486.280%				
17) Surrogate Recovery (TPH)	11.71	244	19884	11.43755	ppb		-0.01
Spiked Amount 2.500			Recovery = 457.520%				
Target Compounds							Qvalue
3) Naphthalene	6.07	128	33537	11.87532	ppb		99
4) 2-Methylnaphthalene	6.88	142	21582	10.70913	ppb		100
5) 1-Methylnaphthalene	7.00	142	23598	11.50335	ppb		99
8) Acenaphthylene	7.93	152	34434	11.96784	ppb		100
9) Acenaphthene	8.13	154	20697	11.55392	ppb		98
10) Fluorene	8.75	166	22059	12.00054	ppb		99
12) Phenanthrene	9.88	178	30321	12.40375	ppb		99
13) Anthracene	9.94	178	30287	12.25791	ppb		99
14) Fluoranthene	11.27	202	37899	12.09034	ppb		100
16) Pyrene	11.54	202	39554	12.00323	ppb		98
18) Benz (a) anthracene	13.02	228	34735	10.92899	ppb		99
19) Chrysene	13.07	228	33102	10.98699	ppb		99
20) Indeno (1,2,3-cd) pyrene	17.86	276	37697	11.86184	ppb	#	99
22) Benzo (b) fluoranthene	14.83	252	29821	10.27469	ppb		98
23) Benzo (k) fluoranthene	14.88	252	20149	8.04806	ppb		99
24) Benzo (a) pyrene	15.41	252	28761	12.10385	ppb		98
25) Dibenz (a,h) anthracene	17.91	278	31362	12.09161	ppb		95
26) Benzo (g,h,i) perylene	18.40	276	31598	11.96038	ppb		98

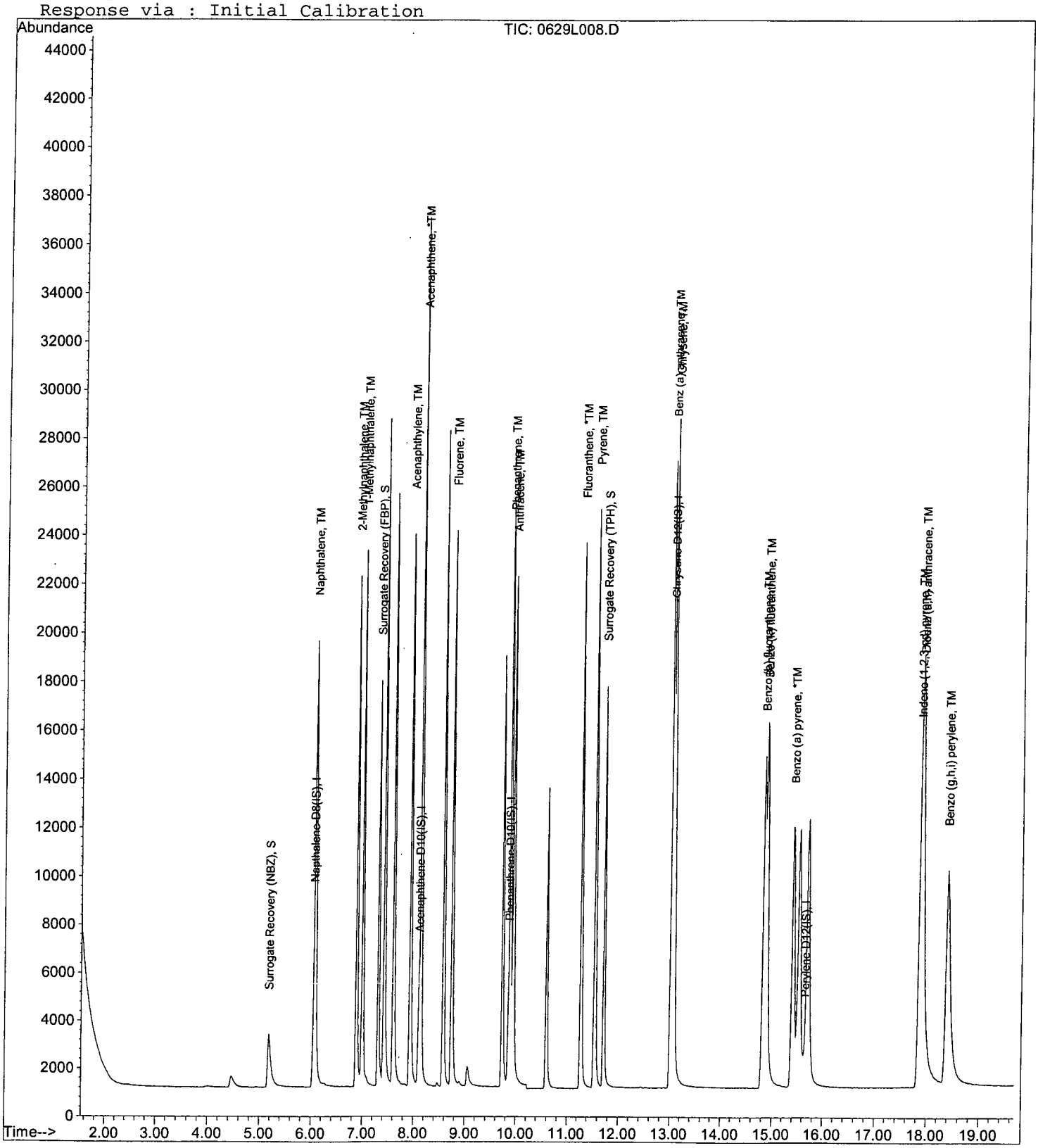
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L008.D Vial: 8
Acq On : 29 Jun 15 14:44 Operator: MA
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L009.D Vial: 9
Acq On : 29 Jun 15 15:12 Operator: MA
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6909	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.10	164	3274	2.50000 ppb	-0.01
11) Phenanthrene-D10(IS)	9.85	188	5525	2.50000 ppb	-0.01
15) Chrysene-D12(IS)	13.02	240	6441	2.50000 ppb	-0.02
21) Perylene-D12(IS)	15.63	264	3917	2.50000 ppb	-0.04
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.18	82	42300	50.52065 ppb	-0.04
Spiked Amount 2.500			Recovery	= 2020.840%	
7) Surrogate Recovery (FBP)	7.31	172	104374	65.14031 ppb	0.00
Spiked Amount 2.500			Recovery	= 2605.600%	
17) Surrogate Recovery (TPH)	11.70	244	115303	57.56102 ppb	-0.02
Spiked Amount 2.500			Recovery	= 2302.440%	
Target Compounds					Qvalue
3) Naphthalene	6.07	128	176135	57.39474 ppb	99
4) 2-Methylnaphthalene	6.88	142	116575	52.47275 ppb	99
5) 1-Methylnaphthalene	7.00	142	118182	53.00059 ppb	99
8) Acenaphthylene	7.93	152	182435	61.89628 ppb	99
9) Acenaphthene	8.13	154	106789	58.19379 ppb	100
10) Fluorene	8.74	166	117892	62.60765 ppb	100
12) Phenanthrene	9.87	178	163222	61.63483 ppb	99
13) Anthracene	9.93	178	161904	60.48608 ppb	99
14) Fluoranthene	11.26	202	206781	60.89184 ppb	99
16) Pyrene	11.53	202	211679	55.74988 ppb	97
18) Benz (a) anthracene	13.00	228	199455	52.59560 ppb	99
19) Chrysene	13.06	228	167162	48.15269 ppb	99
20) Indeno (1,2,3-cd) pyrene	17.84	276	210491	57.48273 ppb	98
22) Benzo (b) fluoranthene	14.82	252	180221	51.29045 ppb	97
23) Benzo (k) fluoranthene	14.86	252	140558	49.50130 ppb	99
24) Benzo (a) pyrene	15.40	252	161655	58.27035 ppb	96
25) Dibenz (a,h) anthracene	17.89	278	176809	58.38802 ppb	95
26) Benzo (g,h,i) perylene	18.38	276	174425	56.55005 ppb	96

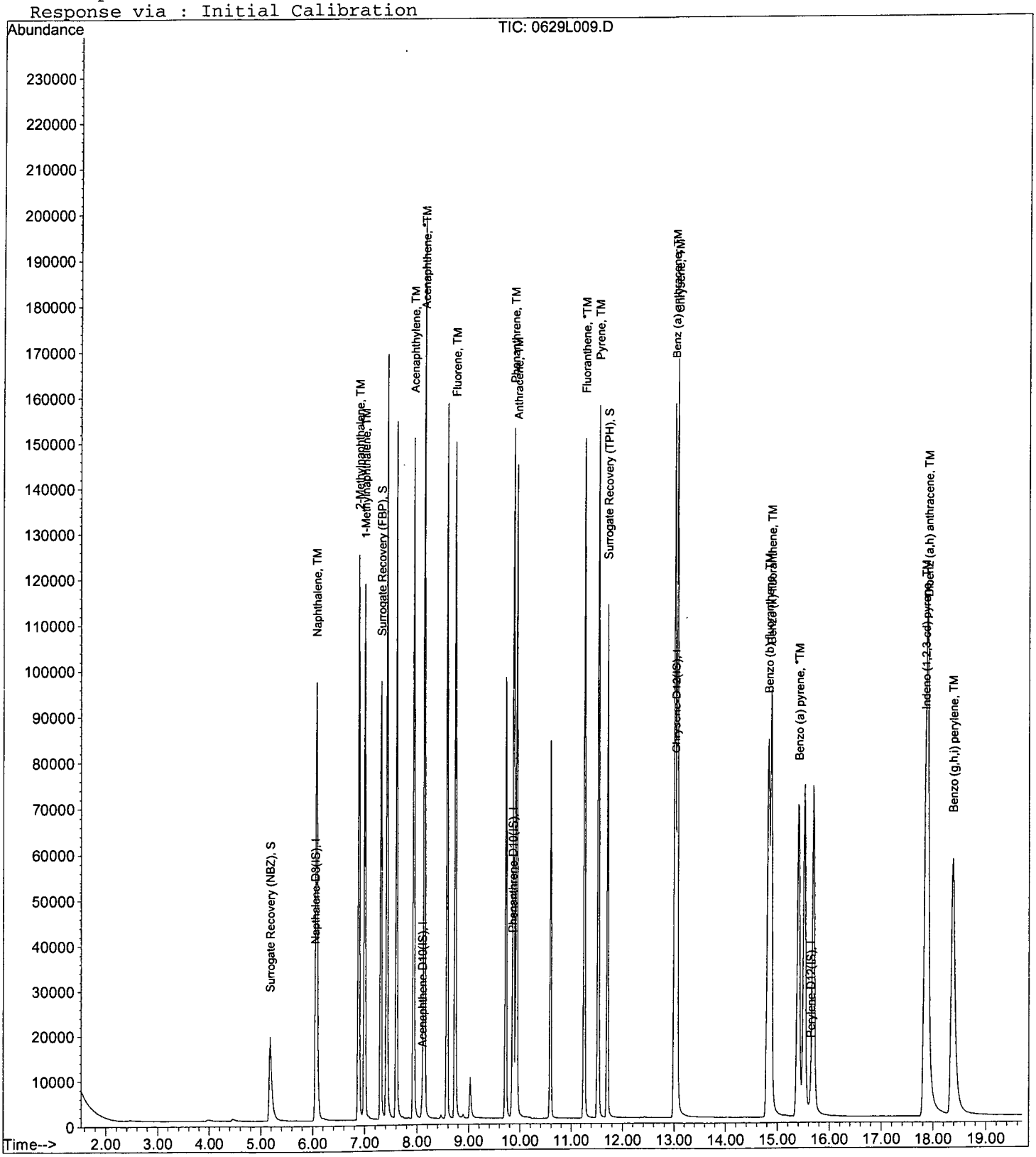
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L009.D Vial: 9
Acq On : 29 Jun 15 15:12 Operator: MA
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L010.D Vial: 10
Acq On : 29 Jun 15 15:39 Operator: MA
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Fri Jun 26 11:18:27 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	8233	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.10	164	3916	2.50000 ppb	-0.01
11) Phenanthrene-D10(IS)	9.85	188	6624	2.50000 ppb	-0.01
15) Chrysene-D12(IS)	13.02	240	7759	2.50000 ppb	-0.02
21) Perylene-D12(IS)	15.63	264	4835	2.50000 ppb	-0.03
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.18	82	93637	93.24498 ppb	-0.04
Spiked Amount 2.500			Recovery	= 3729.800%	
7) Surrogate Recovery (FBP)	7.31	172	224483	117.13238 ppb	0.00
Spiked Amount 2.500			Recovery	= 4685.280%	
17) Surrogate Recovery (TPH)	11.70	244	249102	103.23160 ppb	-0.02
Spiked Amount 2.500			Recovery	= 4129.280%	
Target Compounds					Qvalue
3) Naphthalene	6.07	128	378603	103.53032 ppb	99
4) 2-Methylnaphthalene	6.88	142	253857	95.73206 ppb	99
5) 1-Methylnaphthalene	7.00	142	252140	94.88835 ppb	100
8) Acenaphthylene	7.93	152	393188	111.53024 ppb	99
9) Acenaphthene	8.13	154	229203	104.42546 ppb	100
10) Fluorene	8.74	166	254457	112.97789 ppb	100
12) Phenanthrene	9.87	178	365349	115.07139 ppb	99
13) Anthracene	9.93	178	330542	102.99983 ppb	100
14) Fluoranthene	11.26	202	449663	110.44539 ppb	99
16) Pyrene	11.53	202	459679	100.50054 ppb	97
18) Benz (a) anthracene	13.01	228	428337	93.39704 ppb	99
19) Chrysene	13.06	228	375551	89.80478 ppb	99
20) Indeno (1,2,3-cd) pyrene	17.85	276	466509	105.75756 ppb	98
22) Benzo (b) fluoranthene	14.83	252	417397	95.83842 ppb	97
23) Benzo (k) fluoranthene	14.83	252	284721	81.41614 ppb	95
24) Benzo (a) pyrene	15.40	252	354485	103.51742 ppb	99
25) Dibenz (a,h) anthracene	17.90	278	389993	104.33578 ppb	93
26) Benzo (g,h,i) perylene	18.39	276	387045	101.65830 ppb	96

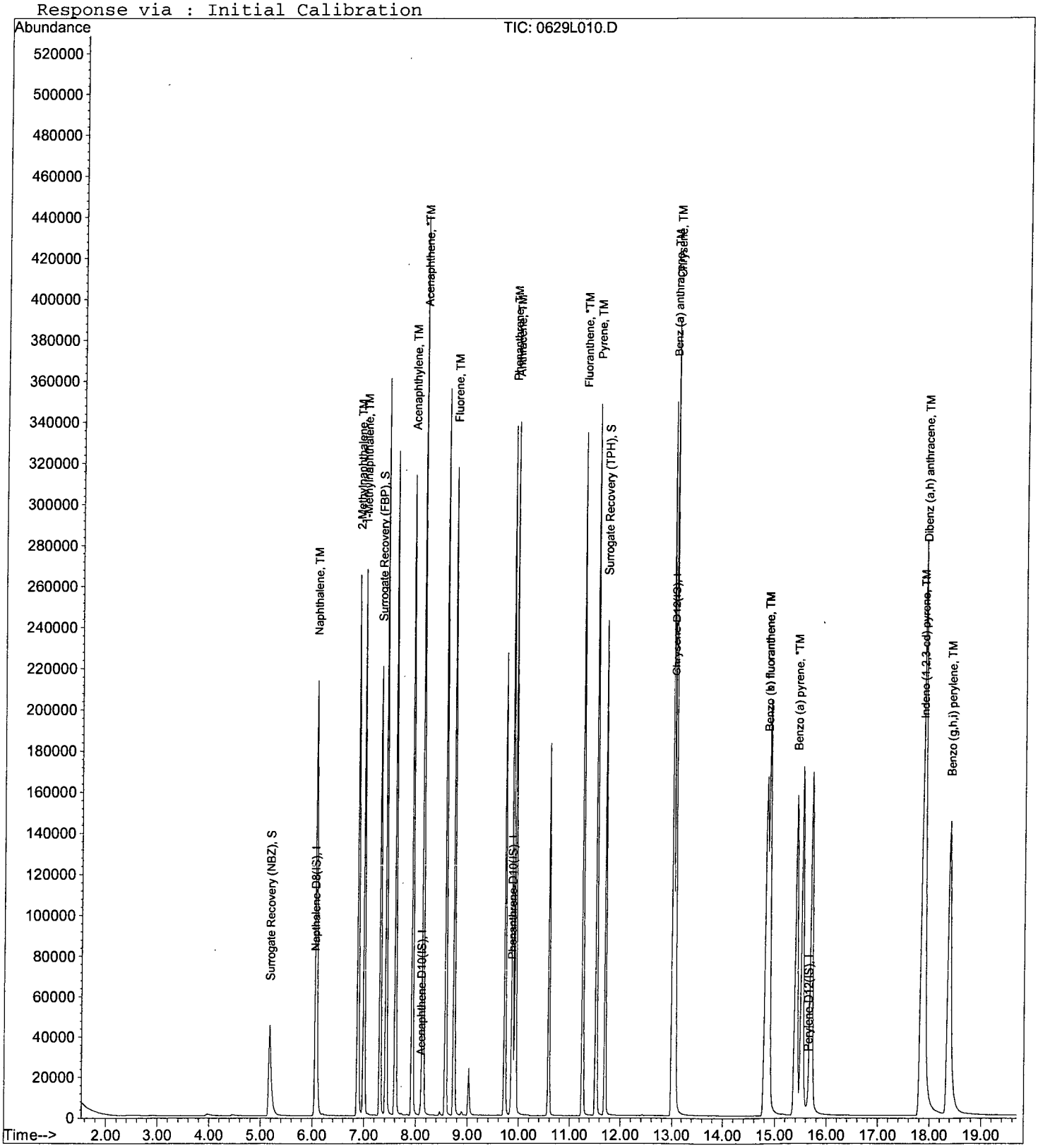
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L010.D Vial: 10
Acq On : 29 Jun 15 15:39 Operator: MA
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 29 15:59 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Form 7

Second Source Calibration

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

SDG No: 76687
Date Analyzed: 06/29/15
Instrument: Linus
Initial Cal. Date: 06/29/15
Data File: 0629L012.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	Naphthalene	1.363	1.200	12	TM	
2	TM	2-Methylnaphthalene	0.8267	0.7314	12	TM	
3	TM	1-Methylnaphthalene	0.9281	0.8273	11	TM	
4	TM	Acenaphthylene	2.808	2.344	17	TM	
5	*TM	Acenaphthene	1.716	1.454	15	*TM	
6	TM	Fluorene	1.813	1.538	15	TM	
7	TM	Phenanthrene	1.508	1.218	19	TM	
8	TM	Anthracene	1.559	1.328	15	TM	
9	*TM	Fluoranthene	1.945	1.580	19	*TM	
10	TM	Pyrene	1.832	1.525	17	TM	
11	TML	Benz (a) anthracene	1.436	1.214	15	TML	19
12	TML	Chrysene	1.709	1.366	20	TML	7.7
13	TM	Indeno (1,2,3-cd) pyrene	1.562	1.370	12	TM	
14	TML	Benzo (b) fluoranthene	2.024	1.823	9.9	TML	20
15	TML	Benzo (k) fluoranthene	1.429	1.591	11	TML	9.1
16	*TM	Benzo (a) pyrene	2.109	1.872	11	*TM	
17	TM	Dibenz (a,h) anthracene	2.326	1.925	17	TM	
18	TM	Benzo (g,h,i) perylene	2.395	1.906	20	TM	
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			14.9		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 30 9:09 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6523	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.10	164	3373	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	5642	2.50000 ppb		0.00
15) Chrysene-D12(IS)	13.04	240	6039	2.50000 ppb		0.01
21) Perylene-D12(IS)	15.67	264	3671	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000 ppb		
Spiked Amount 2.500			Recovery	= 0.000%		
7) Surrogate Recovery (FBP)	0.00	172	0d	0.00000 ppb		
Spiked Amount 2.500			Recovery	= 0.000%		
17) Surrogate Recovery (TPH)	0.00	244	0d	0.00000 ppb		
Spiked Amount 2.500			Recovery	= 0.000%		
Target Compounds						Qvalue
3) Naphthalene	6.07	128	15652	4.40095 ppb		99
4) 2-Methylnaphthalene	6.89	142	9542	4.42392 ppb		98
5) 1-Methylnaphthalene	7.00	142	10793	4.45685 ppb		99
8) Acenaphthylene	7.94	152	15815	4.17424 ppb		99
9) Acenaphthene	8.13	154	9808	4.23601 ppb		97
10) Fluorene	8.76	166	10373	4.23946 ppb		97
12) Phenanthrene	9.88	178	13743m	4.03788 ppb		99
13) Anthracene	9.96	178	14986m	4.25875 ppb		99
14) Fluoranthene	11.28	202	17828m	4.06229 ppb		98
16) Pyrene	11.55	202	18423	4.16342 ppb		97
18) Benz (a) anthracene	13.03	228	14660	4.06831 ppb		100
19) Chrysene	13.08	228	16496	4.61406 ppb		99
20) Indeno (1,2,3-cd) pyrene	17.90	276	16547	4.38683 ppb	#	100
22) Benzo (b) fluoranthene	14.85	252	13385m	4.00147 ppb		98
23) Benzo (k) fluoranthene	14.90	252	11680	4.54313 ppb		98
24) Benzo (a) pyrene	15.42	252	13743	4.43708 ppb		98
25) Dibenz (a,h) anthracene	17.93	278	14133	4.13755 ppb		95
26) Benzo (g,h,i) perylene	18.42	276	13996	3.97958 ppb		97

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

Quantitation Report

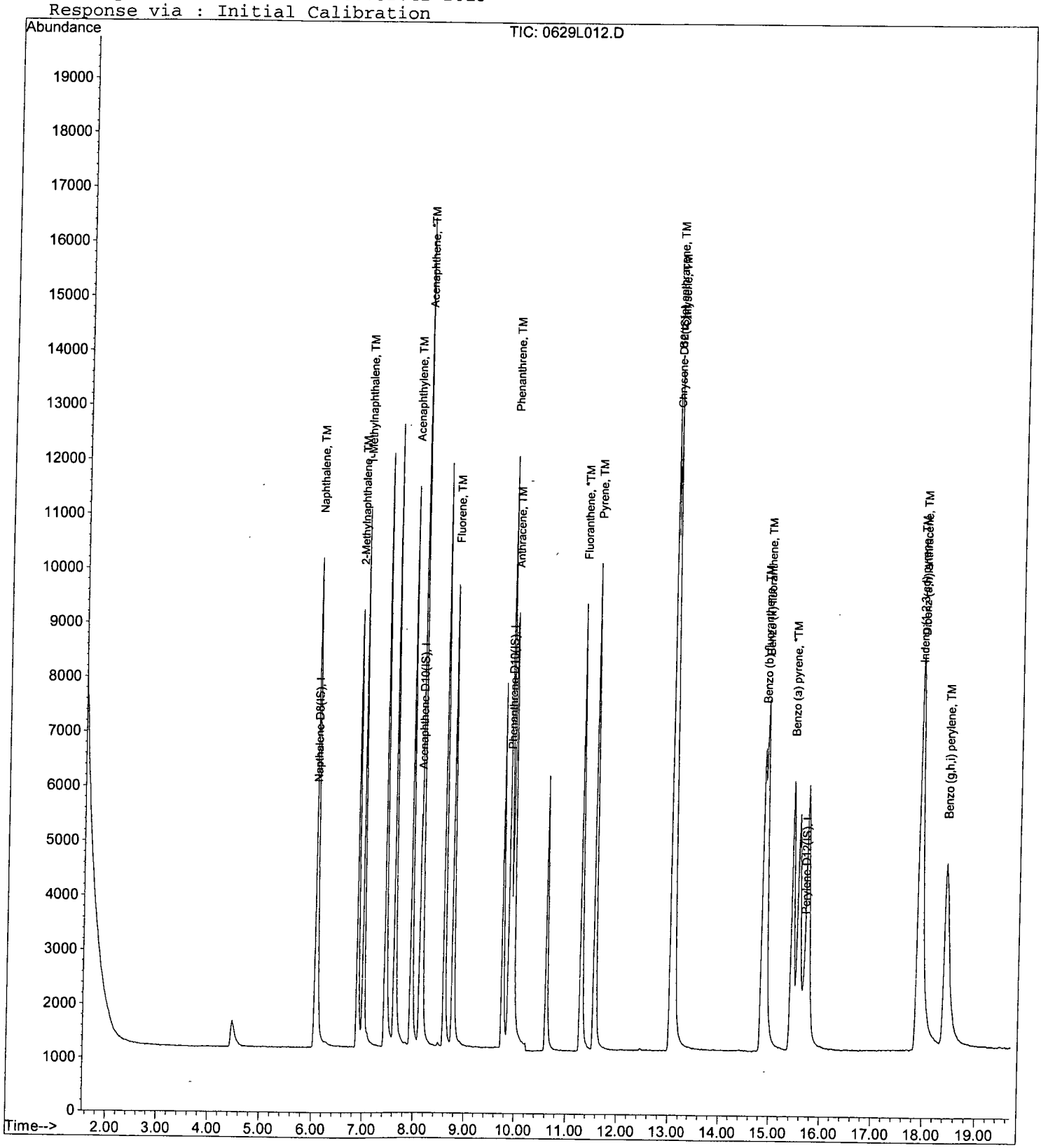
Data File : M:\LINUS\DATA\L150629\0629L012.D
Acq On : 29 Jun 15 17:28
Sample : 5.0ug/ml PAH SS 06/29/15
Misc :

Vial: 12
Operator: MA
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 30 9:09 2015

Quant Results File: P0629.RES

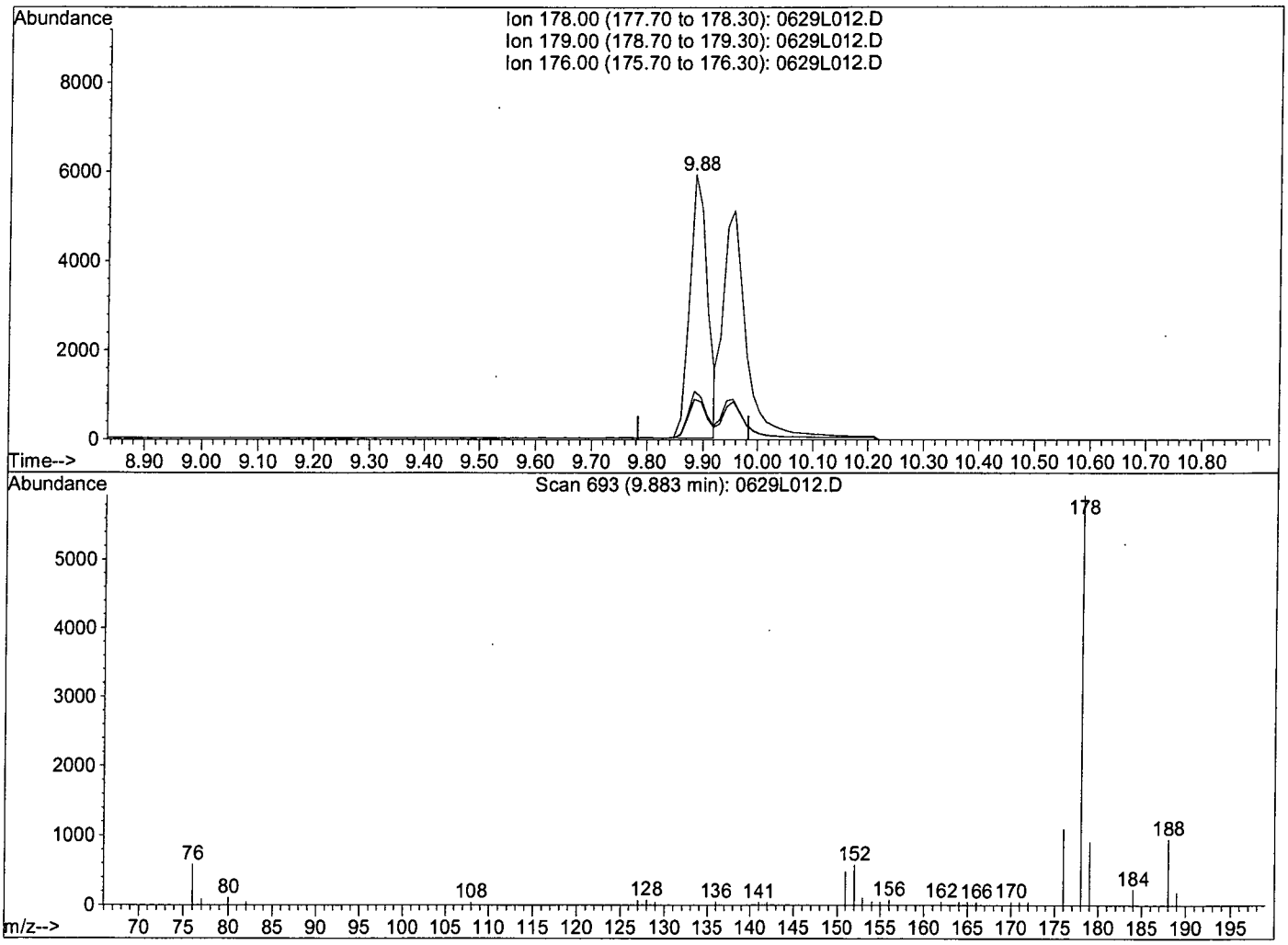
Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 8:54 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration



TIC: 0629L012.D

(12) Phenanthrene (TM)

9.88min 3.9544ppb

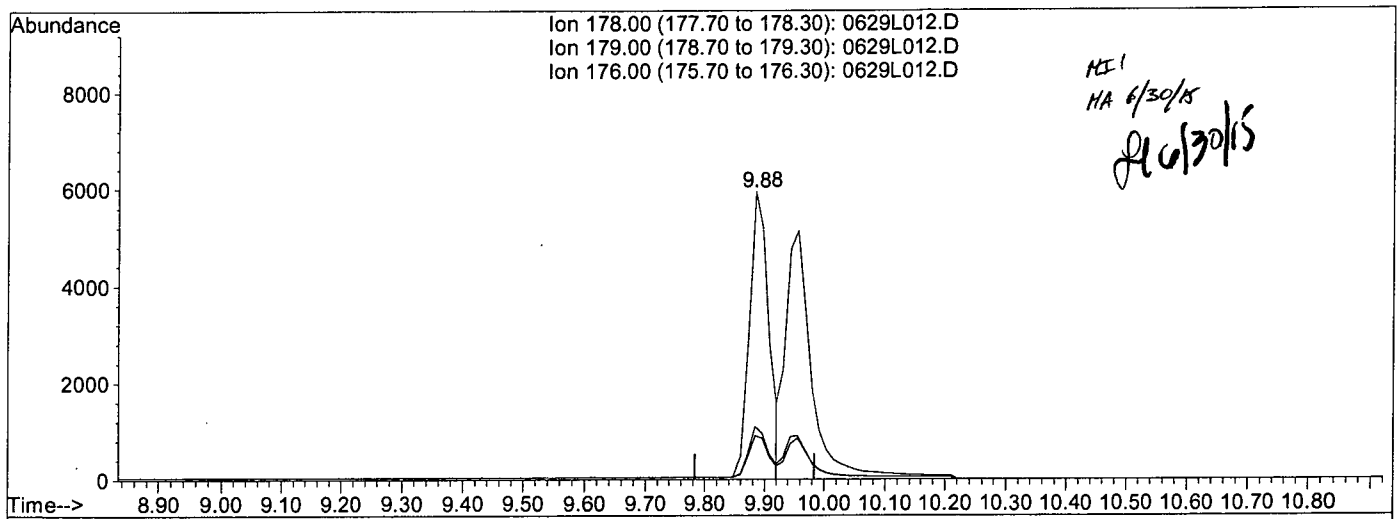
response 13459

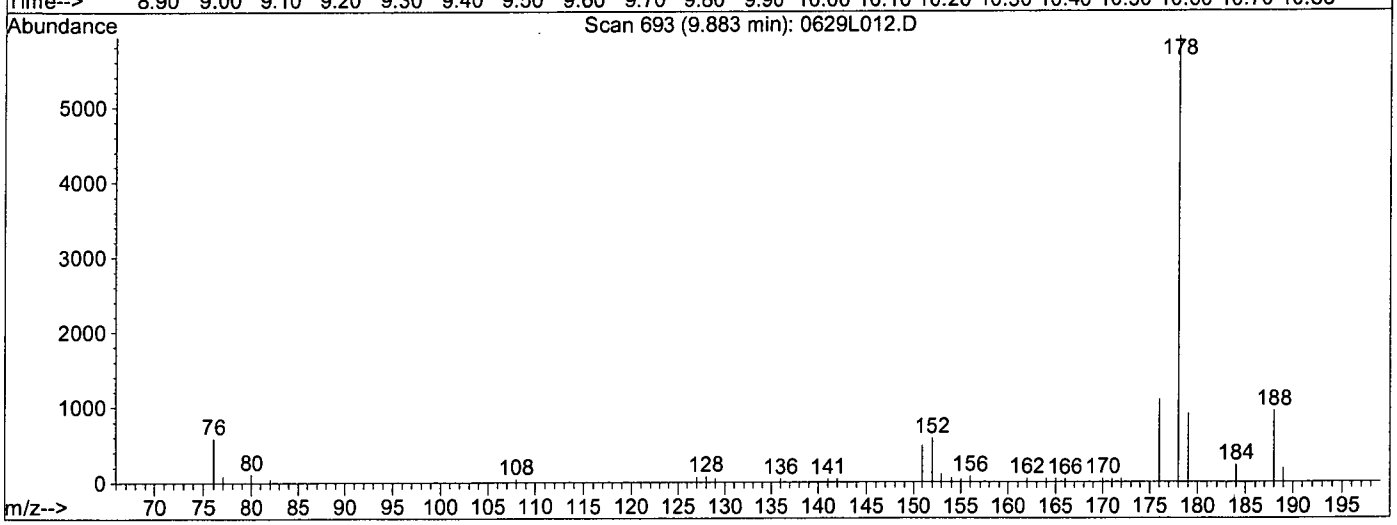
Ion	Exp%	Act%
178.00	100	100
179.00	15.00	14.65
176.00	17.50	17.85
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:08 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration





TIC: 0629L012.D

(12) Phenanthrene (TM)

9.88min 4.0379ppb m

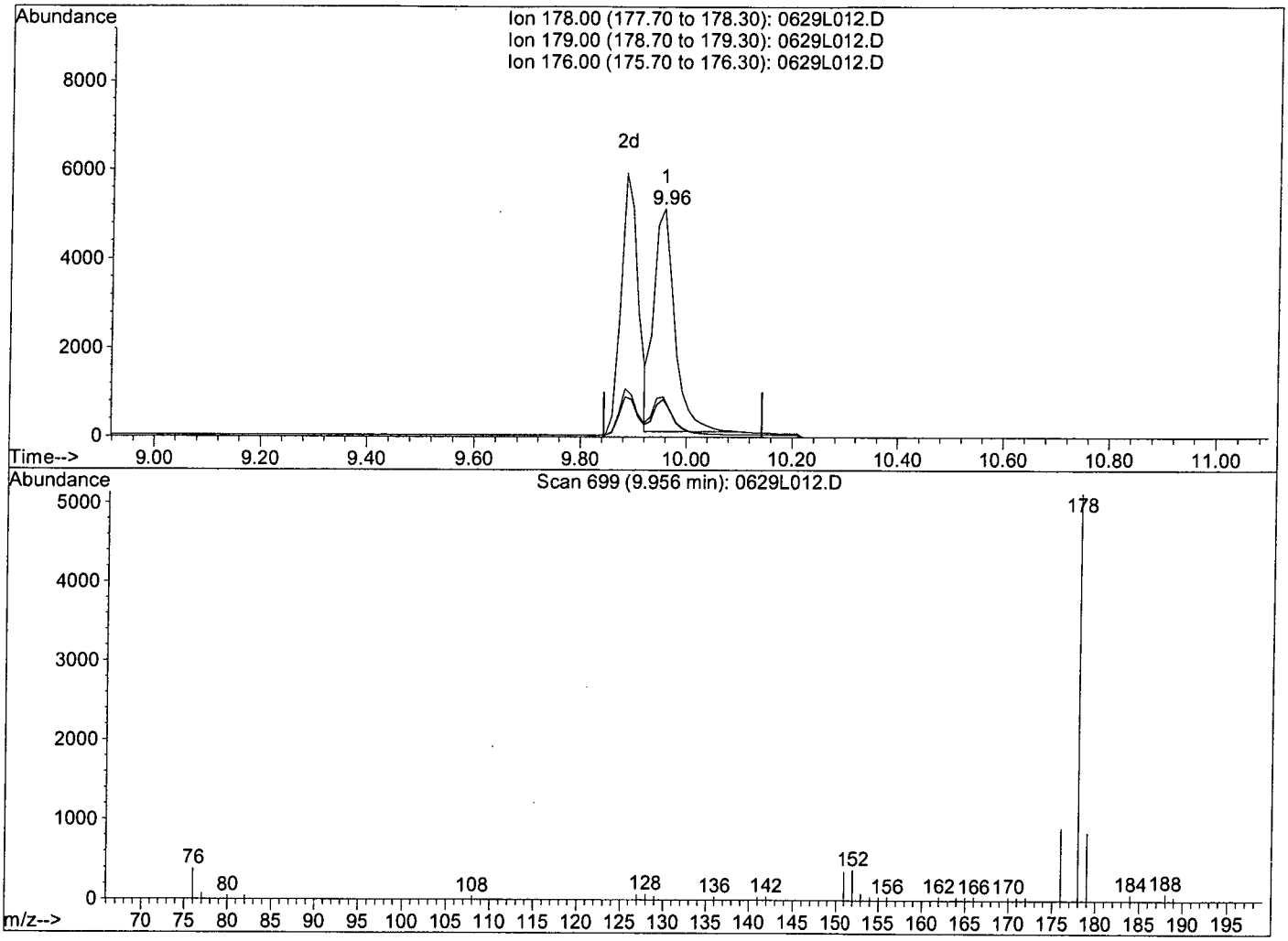
response 13743

Ion	Exp%	Act%
178.00	100	100
179.00	15.00	15.22
176.00	17.50	18.39
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:08 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration



TIC: 0629L012.D

(13) Anthracene (TM)

9.96min 3.9331ppb

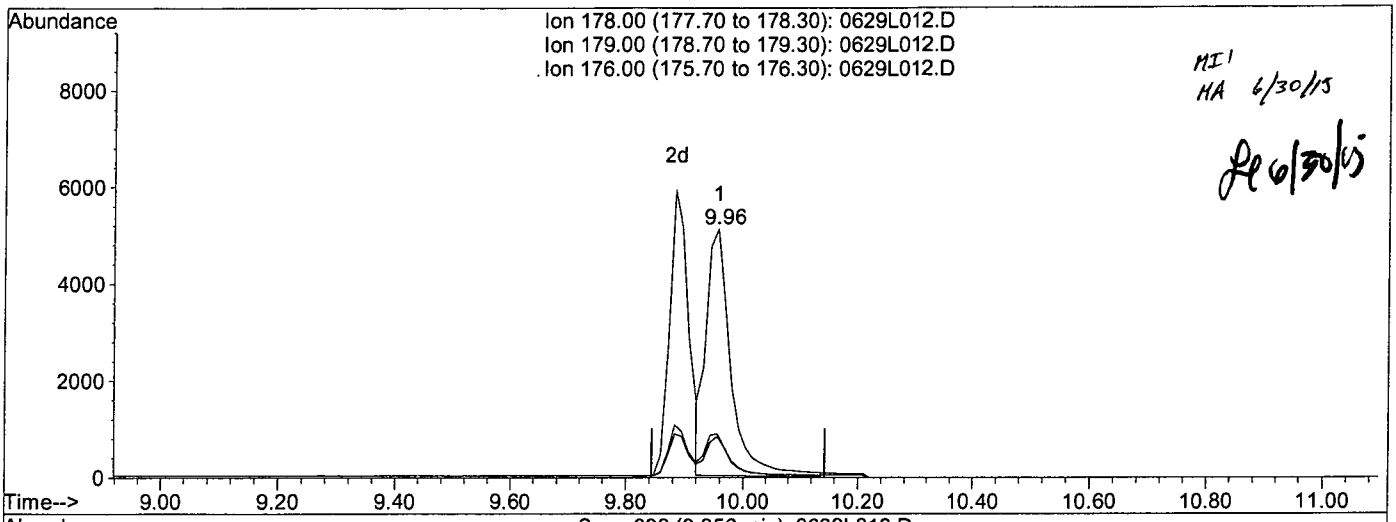
response 13840

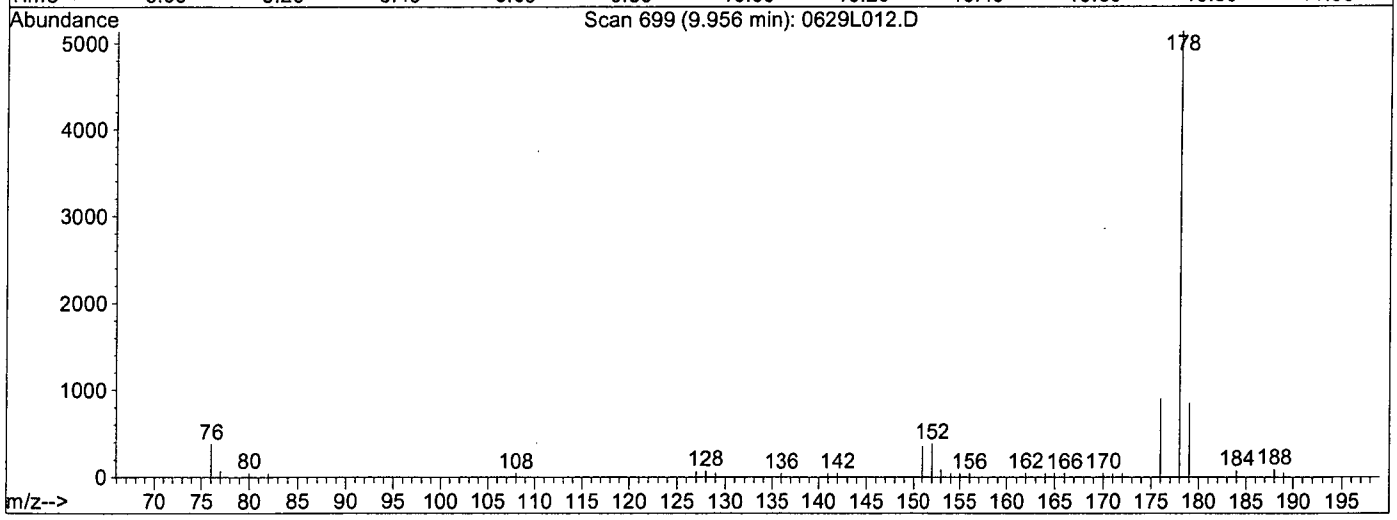
Ion	Exp%	Act%
178.00	100	100
179.00	15.60	15.92
176.00	17.40	16.98
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:08 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration





TIC: 0629L012.D

(13) Anthracene (TM)

9.96min 4.2588ppb m

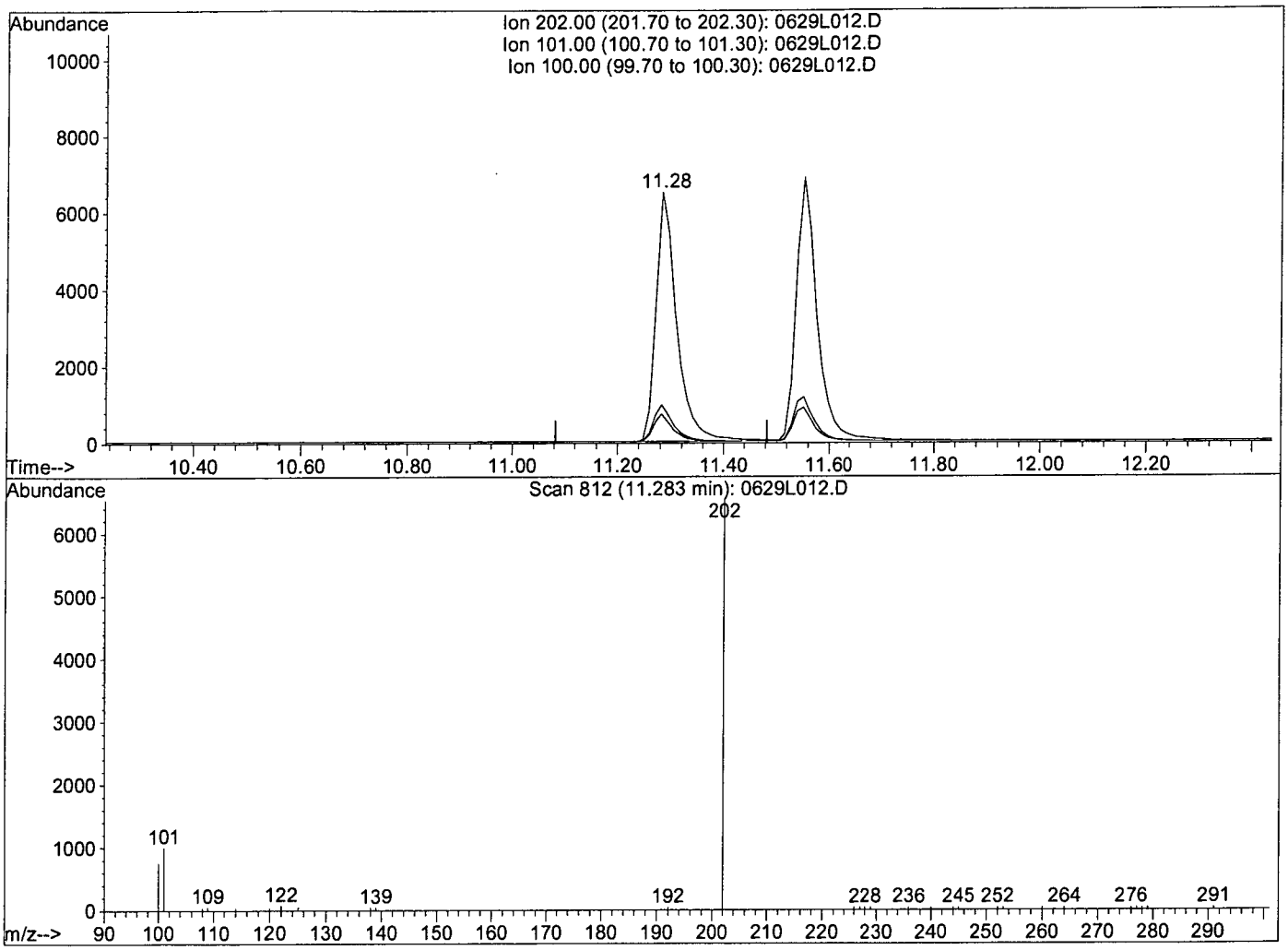
response 14986

Ion	Exp%	Act%
178.00	100	100
179.00	15.60	16.57
176.00	17.40	17.62
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:08 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration



TIC: 0629L012.D

(14) Fluoranthene (*TM)

11.28min 3.9570ppb

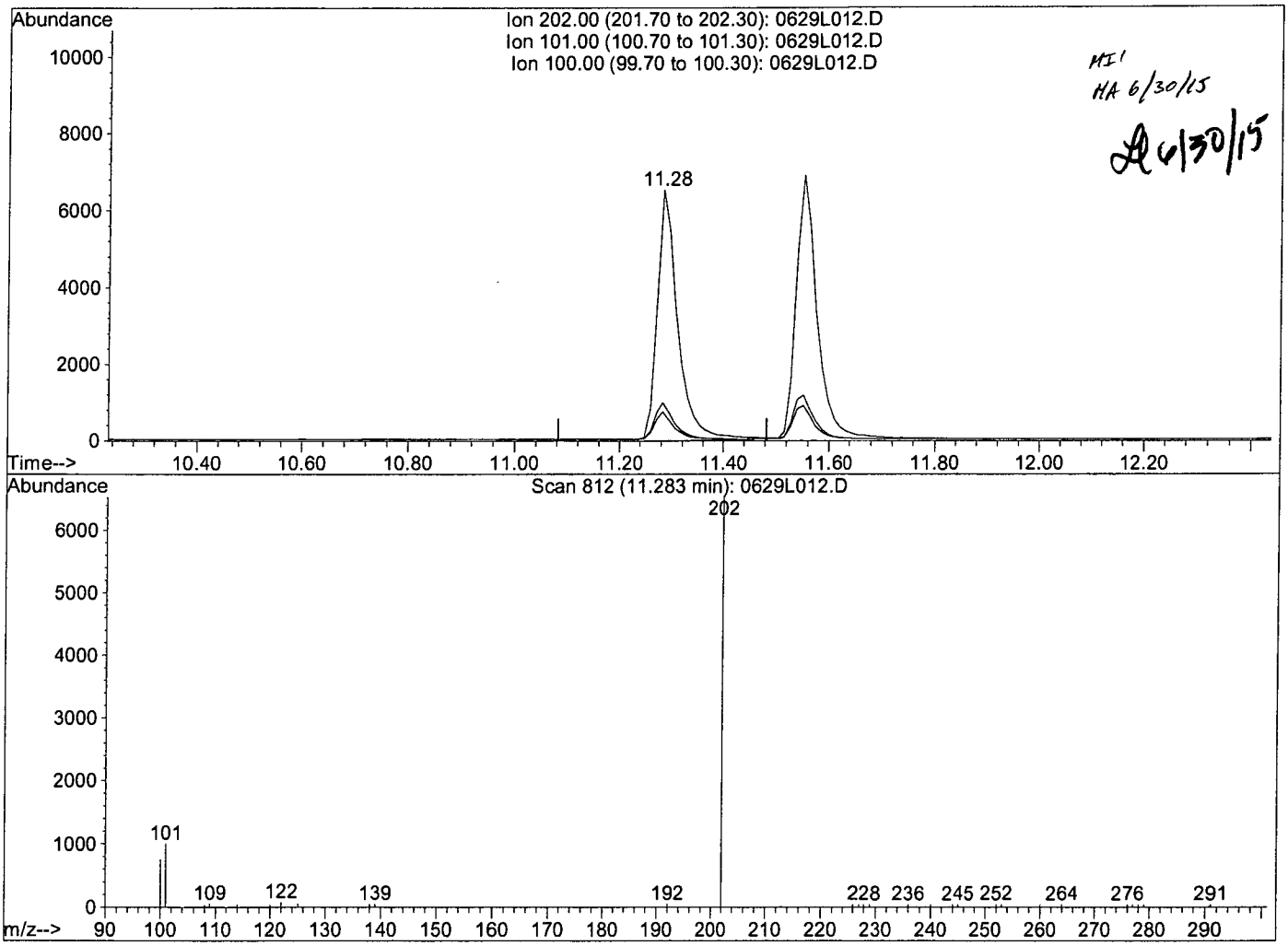
response 17366

Ion	Exp%	Act%
202.00	100	100
101.00	13.90	14.76
100.00	10.50	11.08
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:09 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration



TIC: 0629L012.D

(14) Fluoranthene (*TM)

11.28min 4.0623ppb m

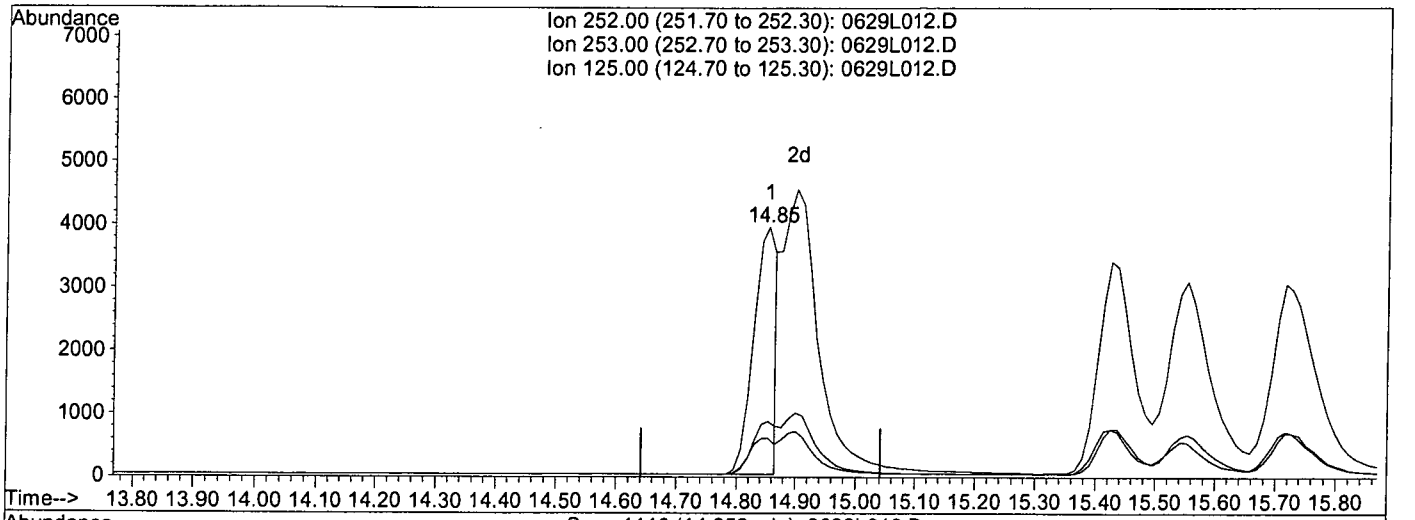
response 17828

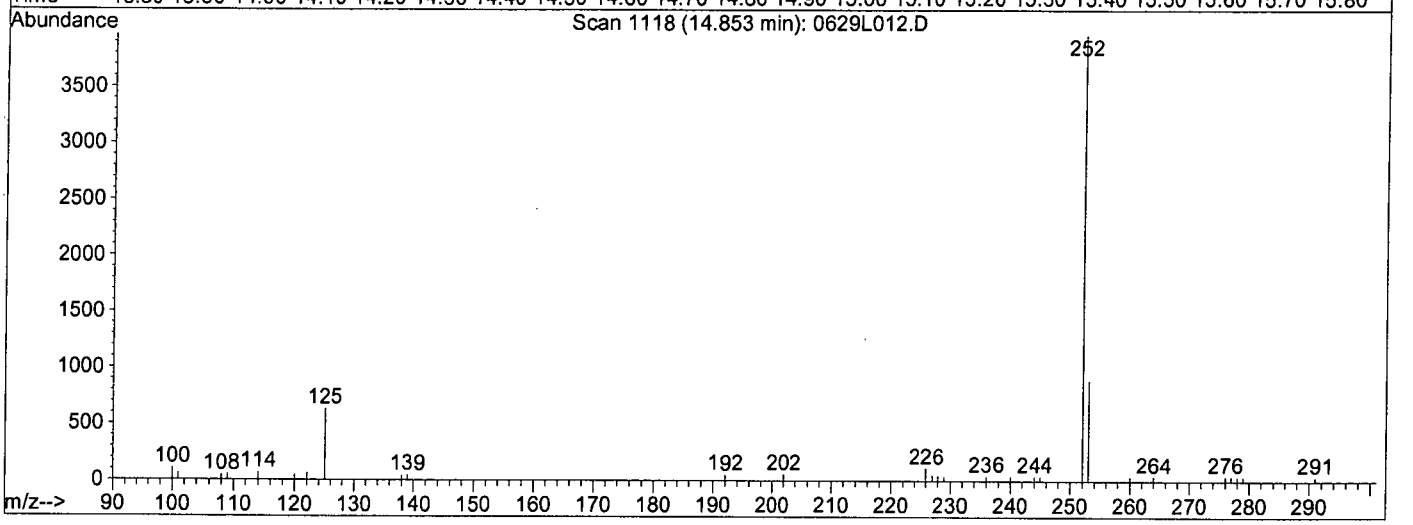
Ion	Exp%	Act%
202.00	100	100
101.00	13.90	15.30
100.00	10.50	11.60
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:09 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration





TIC: 0629L012.D

(22) Benzo (b) fluoranthene (TM)

14.85min 3.2083ppb

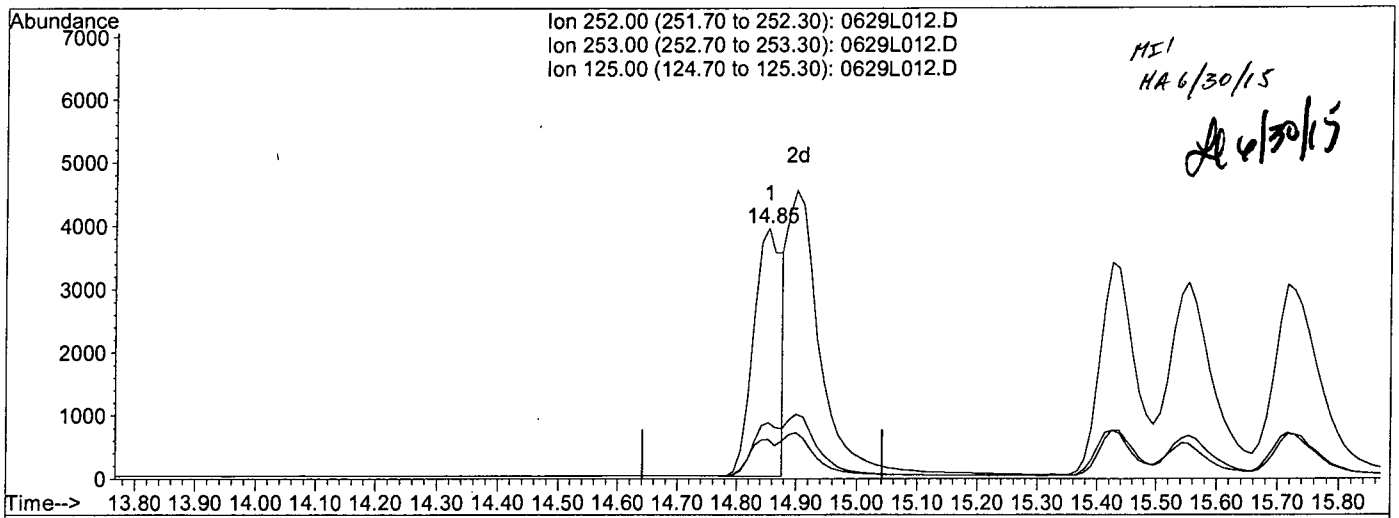
response 10844

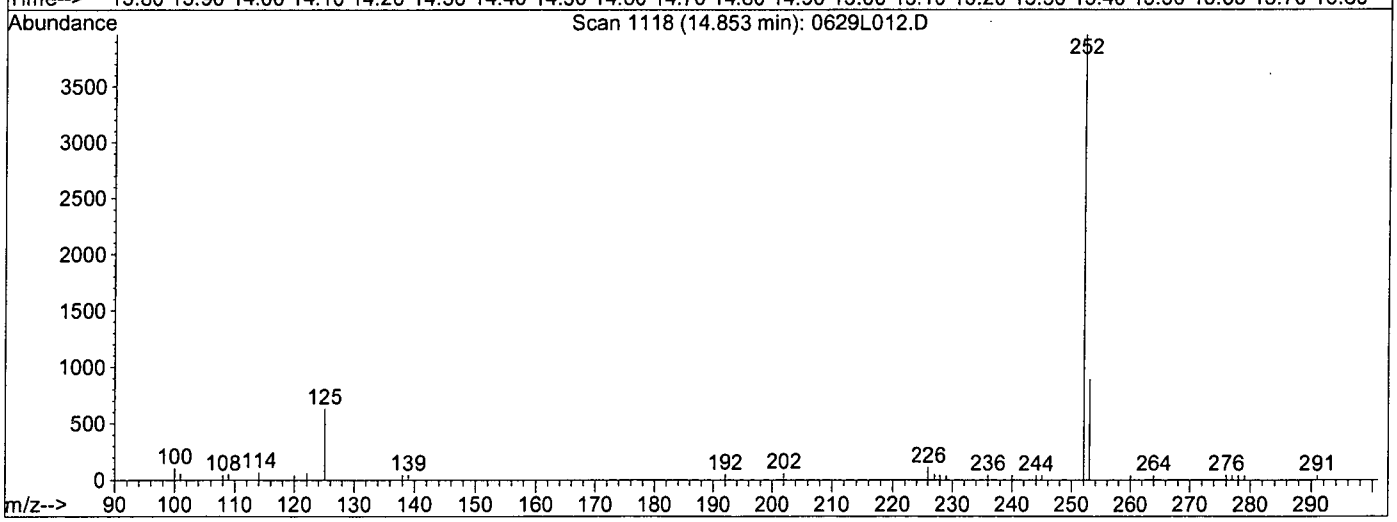
Ion	Exp%	Act%
252.00	100	100
253.00	22.40	21.58
125.00	16.10	14.80
0.00	0.00	0.00

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L012.D Vial: 12
Acq On : 29 Jun 15 17:28 Operator: MA
Sample : 5.0ug/ml PAH SS 06/29/15 Inst : Linus
Misc : Multiplr: 1.00
Quant Time: Jun 30 9:09 2015 Quant Results File: temp.res

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Multiple Level Calibration





TIC: 0629L012.D

(22) Benzo (b) fluoranthene (TM)

14.85min 4.0015ppb m

response 13385

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	22.40
125.00	16.10	15.80
0.00	0.00	0.00

Form 7

Continuing Calibration

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

SDG No: 76687
Date Analyzed: 2 Jul 15 10:01
Instrument: Linus
Initial Cal. Date: 06/29/15
Data File: 0629L131.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.2483	0.2381	4.1	S	
3	TM	Naphthalene	1.363	1.299	4.7	TM	
4	TM	2-Methylnaphthalene	0.8267	0.8408	1.7	TM	
5	TM	1-Methylnaphthalene	0.9281	0.9400	1.3	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.516	1.419	6.4	S	
8	TM	Acenaphthylene	2.808	2.614	6.9	TM	
9	*TM	Acenaphthene	1.716	1.562	9.0	*TM	
10	TM	Fluorene	1.813	1.713	5.5	TM	
11	I	Phenanthrene-D10(IS)	ISTD			I	
12	TM	Phenanthrene	1.508	1.331	12	TM	
13	TM	Anthracene	1.559	1.397	10	TM	
14	*TM	Fluoranthene	1.945	1.728	11	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	1.832	1.604	12	TM	
17	S	Surrogate Recovery (TPH)	0.9151	0.8534	6.7	S	
18	TML	Benz (a) anthracene	1.436	1.425	0.77	TML	5.1
19	TML	Chrysene	1.709	1.385	19	TML	6.1
20	TM	Indeno (1,2,3-cd) pyrene	1.562	1.555	0.42	TM	
21	I	Perylene-D12(IS)	ISTD			I	
22	TML	Benzo (b) fluoranthene	2.024	1.866	7.8	TML	18
23	TML	Benzo (k) fluoranthene	1.429	1.957	37	TML	15
24	*TM	Benzo (a) pyrene	2.109	1.976	6.3	*TM	
25	TM	Dibenz (a,h) anthracene	2.326	2.091	10	TM	
26	TM	Benzo (g,h,i) perylene	2.395	2.063	14	TM	
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			8.9		

Quantitation Report (Not Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L131.D Vial: 31
Acq On : 2 Jul 15 10:01 Operator: MA
Sample : CCV 5.0ug/ml PAH 06/30/15 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 2 10:21 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	5843	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.10	164	3117	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.85	188	5423	2.50000 ppb		-0.01
15) Chrysene-D12(IS)	13.03	240	6042	2.50000 ppb		0.00
21) Perylene-D12(IS)	15.66	264	3739	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.18	82	2783	4.79481 ppb		0.00
Spiked Amount 2.500			Recovery	= 191.800%		
7) Surrogate Recovery (FBP)	7.31	172	8847	4.68169 ppb		0.00
Spiked Amount 2.500			Recovery	= 187.280%		
17) Surrogate Recovery (TPH)	11.71	244	10312	4.66266 ppb		-0.01
Spiked Amount 2.500			Recovery	= 186.520%		
Target Compounds						Qvalue
3) Naphthalene	6.07	128	15185	4.76654 ppb		99
4) 2-Methylnaphthalene	6.88	142	9825	5.08525 ppb		99
5) 1-Methylnaphthalene	7.00	142	10985	5.06404 ppb		99
8) Acenaphthylene	7.94	152	16295	4.65417 ppb		99
9) Acenaphthene	8.13	154	9738	4.55120 ppb		99
10) Fluorene	8.75	166	10680	4.72343 ppb		98
12) Phenanthrene	9.88	178	14435	4.41247 ppb		99
13) Anthracene	9.94	178	15156	4.48100 ppb		99
14) Fluoranthene	11.27	202	18744	4.44349 ppb		98
16) Pyrene	11.54	202	19380	4.37752 ppb		99
18) Benz (a) anthracene	13.02	228	17216	4.74746 ppb		99
19) Chrysene	13.07	228	16740	4.69442 ppb		98
20) Indeno (1,2,3-cd) pyrene	17.87	276	18790	4.97901 ppb	#	99
22) Benzo (b) fluoranthene	14.83	252	13955	4.10017 ppb		97
23) Benzo (k) fluoranthene	14.89	252	14631	5.74400 ppb		97
24) Benzo (a) pyrene	15.41	252	14776	4.68383 ppb		95
25) Dibenz (a,h) anthracene	17.91	278	15635	4.49402 ppb		95
26) Benzo (g,h,i) perylene	18.40	276	15427	4.30670 ppb		98

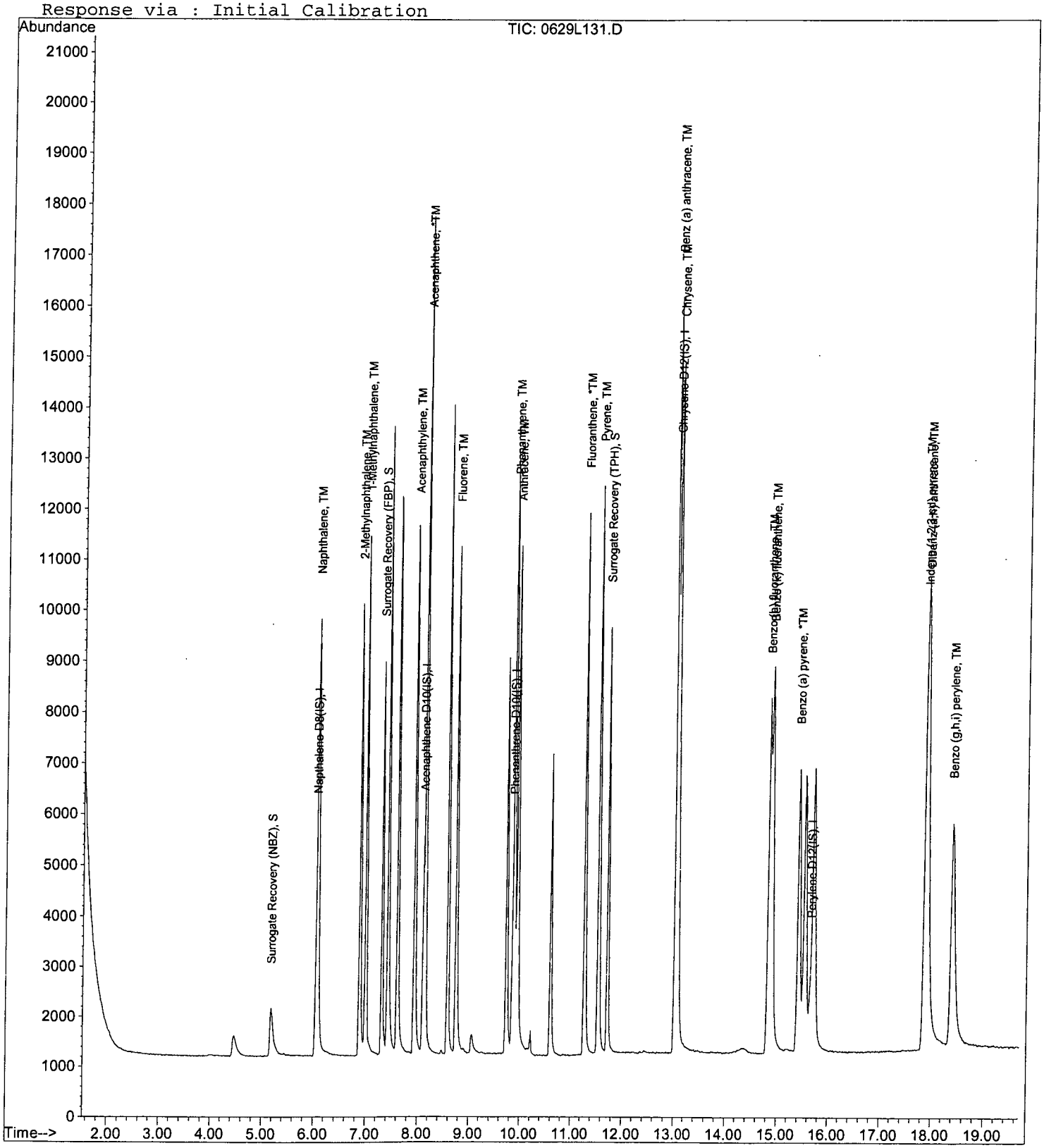
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L131.D Vial: 31
Acq On : 2 Jul 15 10:01 Operator: MA
Sample : CCV 5.0ug/ml PAH 06/30/15 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 2 10:21 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



EPA METHOD 8270D
Polynuclear Aromatic Hydrocarbons
Raw Data

APPL, INC.

Method Blank

EPA 8270D LL WATER DODv3

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150619W-17817 - 198588**
Batch ID: #SIMDD-150619A

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	06/19/15	07/02/15
BLANK	ACENAPHTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	ACENAPHTHYLENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	BENZ (A) ANTHRACENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	BENZO (A) PYRENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (B) FLUORANTHENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	BENZO (G,H,I) PERYLENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	BENZO (K) FLUORANTHENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	DIBENZ (A,H) ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	FLUORANTHENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	FLUORENE	0.10 U	0.2	0.10	0.06	ug/L	06/19/15	07/02/15
BLANK	INDENO (1,2,3-CD) PYRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	06/19/15	07/02/15
BLANK	PHENANTHRENE	0.10 U	0.2	0.10	0.07	ug/L	06/19/15	07/02/15
BLANK	PYRENE	0.10 U	0.2	0.10	0.08	ug/L	06/19/15	07/02/15
BLANK	SURROGATE: 2-FLUORBIPHENY	54.3	50-110			%	06/19/15	07/02/15
BLANK	SURROGATE: NITROBENZENE-	73.1	40-110			%	06/19/15	07/02/15
BLANK	SURROGATE: TERPHENYL-D14 (	75.3	50-135			%	06/19/15	07/02/15

Quant Method: P0629.M
Run #: 0629L137
Instrument: Linus
Sequence: L150629
Initials: MA

GC SC-Blank-REG MDLs
Printed: 07/06/15 11:00:32 AM

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L137.D Vial: 37
Acq On : 2 Jul 15 12:43 Operator: MA
Sample : 150619A BLK 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 6 10:25 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6216	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.10	164	3057	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	5222	2.50000 ppb	0.00
15) Chrysene-D12(IS)	13.04	240	6552	2.50000 ppb	0.01
21) Perylene-D12(IS)	15.68	264	4200	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.19	82	1128	1.82680 ppb	0.01
Spiked Amount 2.500			Recovery = 73.080%		
7) Surrogate Recovery (FBP)	7.31	172	2517	1.35810 ppb	0.00
Spiked Amount 2.500			Recovery = 54.320%		
17) Surrogate Recovery (TPH)	11.73	244	4514	1.88217 ppb	0.00
Spiked Amount 2.500			Recovery = 75.280%		

Target Compounds Qvalue

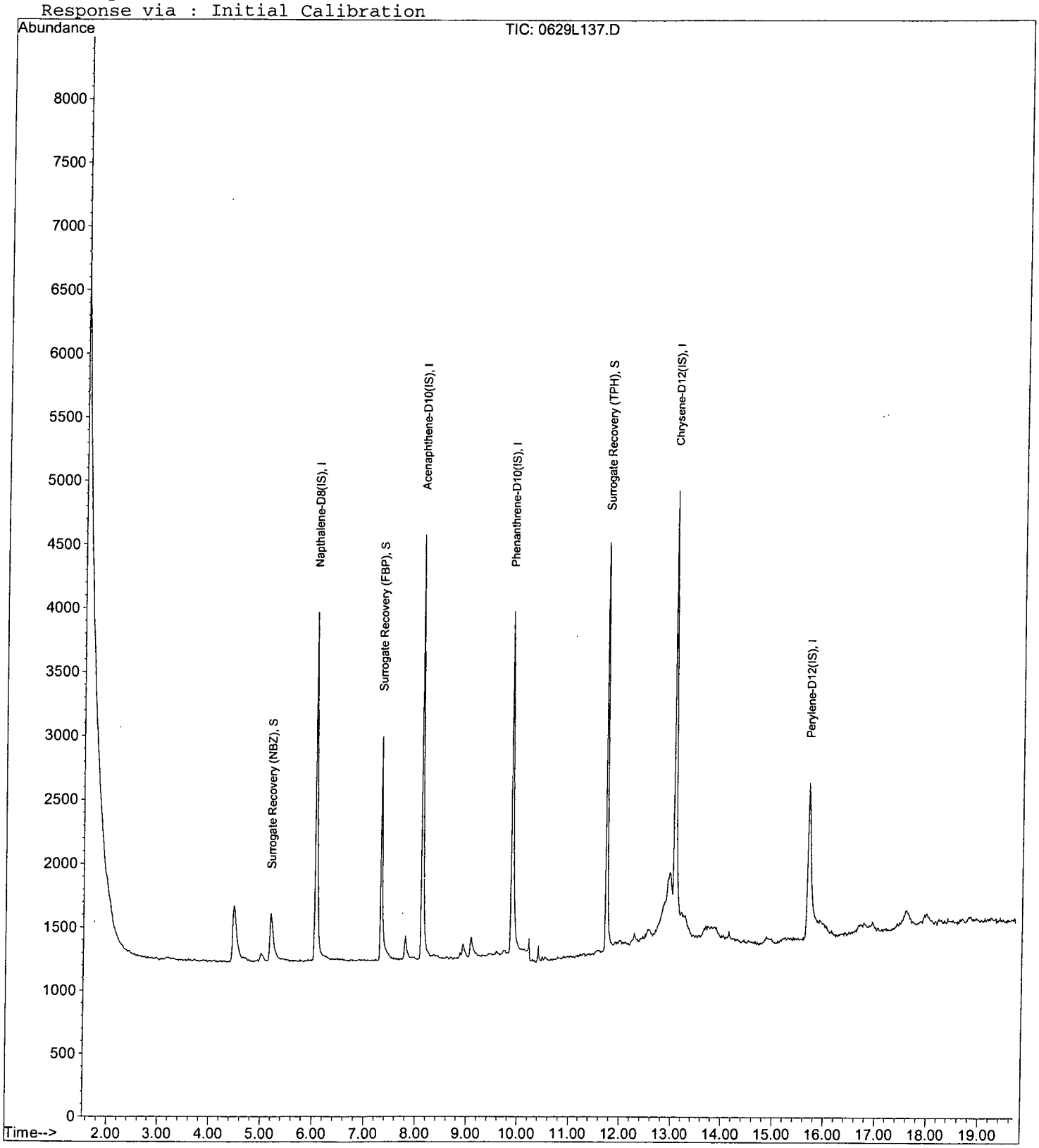
(#) = qualifier out of range (m) = manual integration
0629L137.D P0629.M Mon Jul 06 10:39:09 2015 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L137.D Vial: 37
Acq On : 2 Jul 15 12:43 Operator: MA
Sample : 150619A BLK 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 6 10:25 2015 Quant Results File: P0629.RES

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D LL WATER DODv3

APPL ID: **150619W-17817 LCS - 198588**
Batch ID: #SIMDD-150619A

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	1.90	38.0 #	45-105
ACENAPHTHENE	5.00	2.27	45.4	45-110
ACENAPHTHYLENE	5.00	2.50	50.0	50-105
ANTHRACENE	5.00	2.86	57.2	55-110
BENZ (A) ANTHRACENE	5.00	3.26	65.2	55-110
BENZO (A) PYRENE	5.00	3.43	68.6	55-110
BENZO (B) FLUORANTHENE	5.00	3.07	61.4	45-120
BENZO (G,H,I) PERYLENE	5.00	2.90	58.0	40-125
BENZO (K) FLUORANTHENE	5.00	2.87	57.4	45-125
CHRYSENE	5.00	3.02	60.4	55-110
DIBENZ (A,H) ANTHRACENE	5.00	3.09	61.8	40-125
FLUORANTHENE	5.00	3.02	60.4	55-115
FLUORENE	5.00	2.61	52.2	50-110
INDENO (1,2,3-CD) PYRENE	5.00	3.36	67.2	45-125
NAPHTHALENE	5.00	2.09	41.8	40-100
PHENANTHRENE	5.00	2.97	59.4	50-115
PYRENE	5.00	3.04	60.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.50	1.37	54.8	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.50	1.61	64.4	40-110
SURROGATE: TERPHENYL-D14 (S)	2.50	1.84	73.6	50-135

= Recovery is outside QC limits.

Comments: _____

Primary	SPK
Quant Method :	P0629.M
Extraction Date :	06/19/15
Analysis Date :	07/02/15
Instrument :	Linus
Run :	0629L138
Initials :	MA

Printed: 07/06/15 11:42:15 AM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L150629\0629L138.D Vial: 38
Acq On : 2 Jul 15 13:10 Operator: MA
Sample : 150619A LCS-1 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 6 11:36 2015 Quant Results File: P0629.RES

Quant Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration
DataAcq Meth : 87SIMAQA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.05	136	6493	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.10	164	3500	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	5984	2.50000 ppb		0.00
15) Chrysene-D12(IS)	13.03	240	6639	2.50000 ppb		0.00
21) Perylene-D12(IS)	15.66	264	4237	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.19	82	1037	1.60778 ppb		0.01
Spiked Amount 2.500			Recovery = 64.320%			
7) Surrogate Recovery (FBP)	7.31	172	2899	1.36623 ppb		0.00
Spiked Amount 2.500			Recovery = 54.640%			
17) Surrogate Recovery (TPH)	11.71	244	4478	1.84269 ppb		-0.01
Spiked Amount 2.500			Recovery = 73.720%			
Target Compounds						Qvalue
3) Naphthalene	6.07	128	7400	2.09031 ppb		98
4) 2-Methylnaphthalene	6.89	142	4070	1.89568 ppb		98
5) 1-Methylnaphthalene	7.00	142	4900	2.03275 ppb		97
8) Acenaphthylene	7.94	152	9833m	2.50117 ppb		99
9) Acenaphthene	8.13	154	5449	2.26799 ppb		97
10) Fluorene	8.75	166	6623	2.60861 ppb		100
12) Phenanthrene	9.88	178	10708	2.96635 ppb		99
13) Anthracene	9.94	178	10678m	2.86107 ppb		99
14) Fluoranthene	11.27	202	14070	3.02276 ppb		100
16) Pyrene	11.54	202	14772	3.03663 ppb		98
18) Benz (a) anthracene	13.02	228	12791	3.26185 ppb		99
19) Chrysene	13.07	228	13011	3.02498 ppb		99
20) Indeno (1,2,3-cd) pyrene	17.88	276	13915	3.35566 ppb	#	98
22) Benzo (b) fluoranthene	14.84	252	12008	3.07098 ppb		97
23) Benzo (k) fluoranthene	14.89	252	9159	2.86835 ppb		97
24) Benzo (a) pyrene	15.42	252	12262	3.43007 ppb		95
25) Dibenz (a,h) anthracene	17.91	278	12168	3.08641 ppb		98
26) Benzo (g,h,i) perylene	18.41	276	11767	2.89885 ppb		95

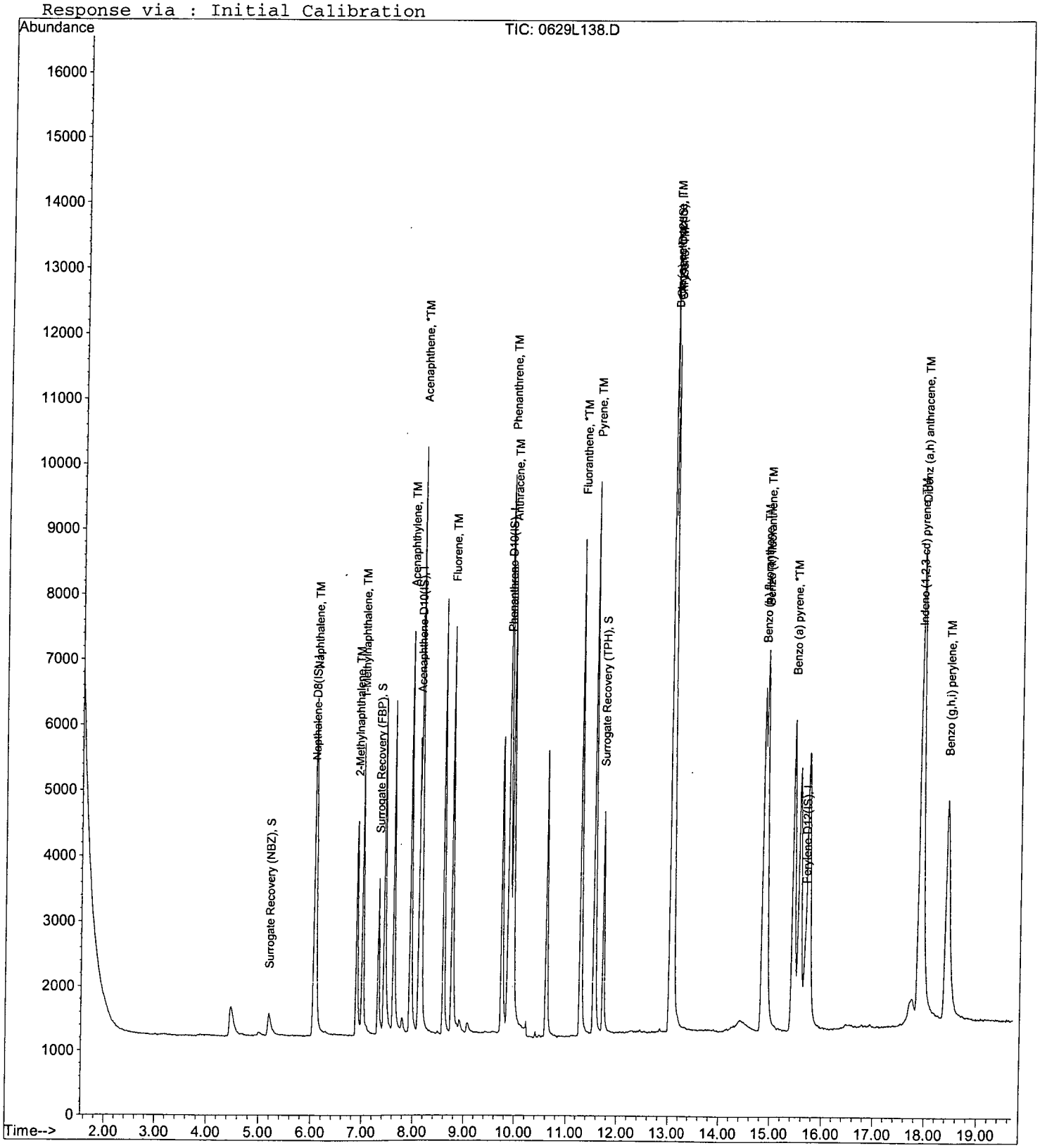
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L150629\0629L138.D Vial: 38
Acq On : 2 Jul 15 13:10 Operator: MA
Sample : 150619A LCS-1 1/1000 Inst : Linus
Misc : water Multiplr: 1.00

Quant Time: Jul 6 11:36 2015 Quant Results File: P0629.RES

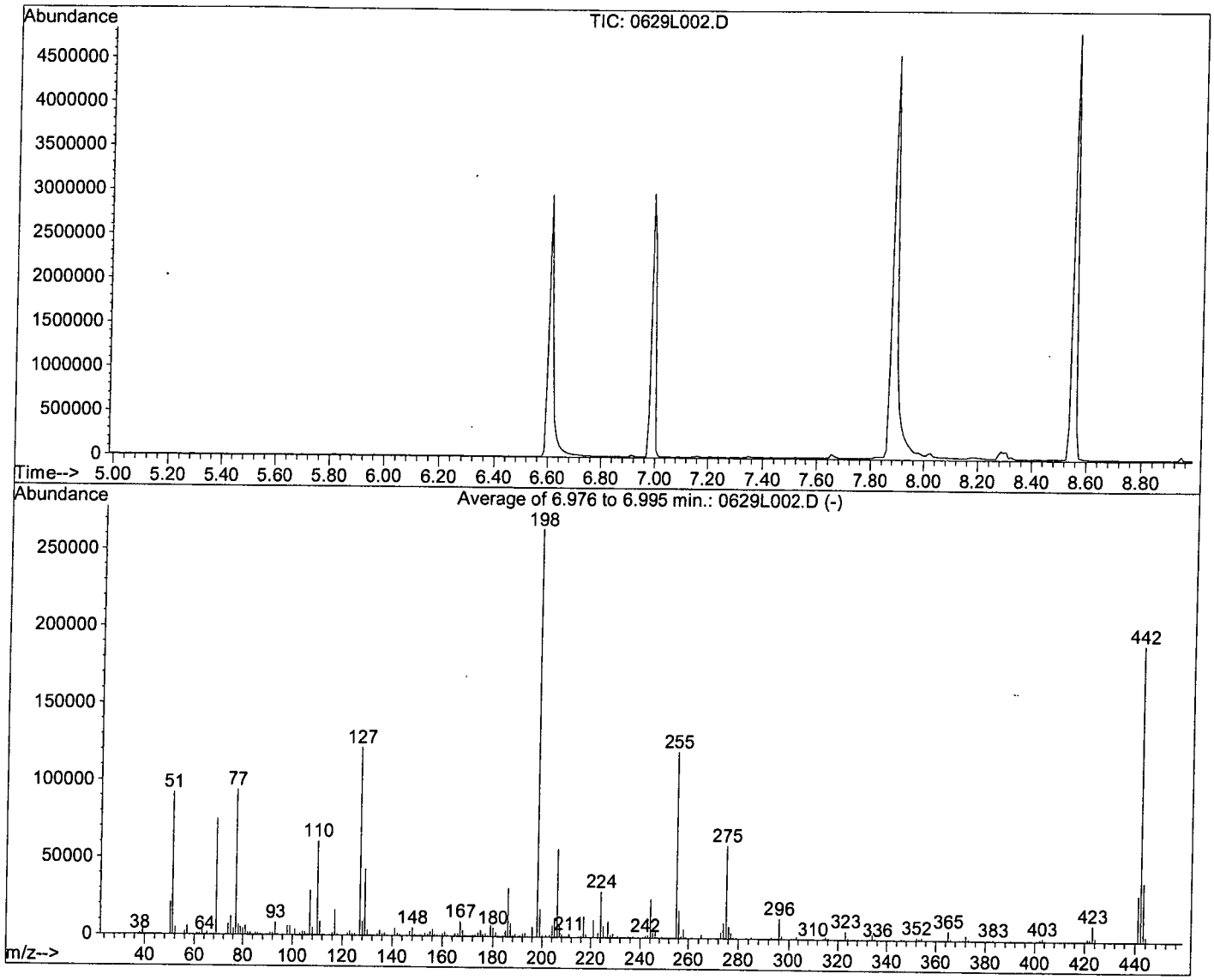
Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270
Last Update : Tue Jun 30 08:52:42 2015
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L150629\0629L002.D
Acq On : 29 Jun 15 12:12
Sample : SV Tune 05/14/15
Misc :

Vial: 2
Operator: MA
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270



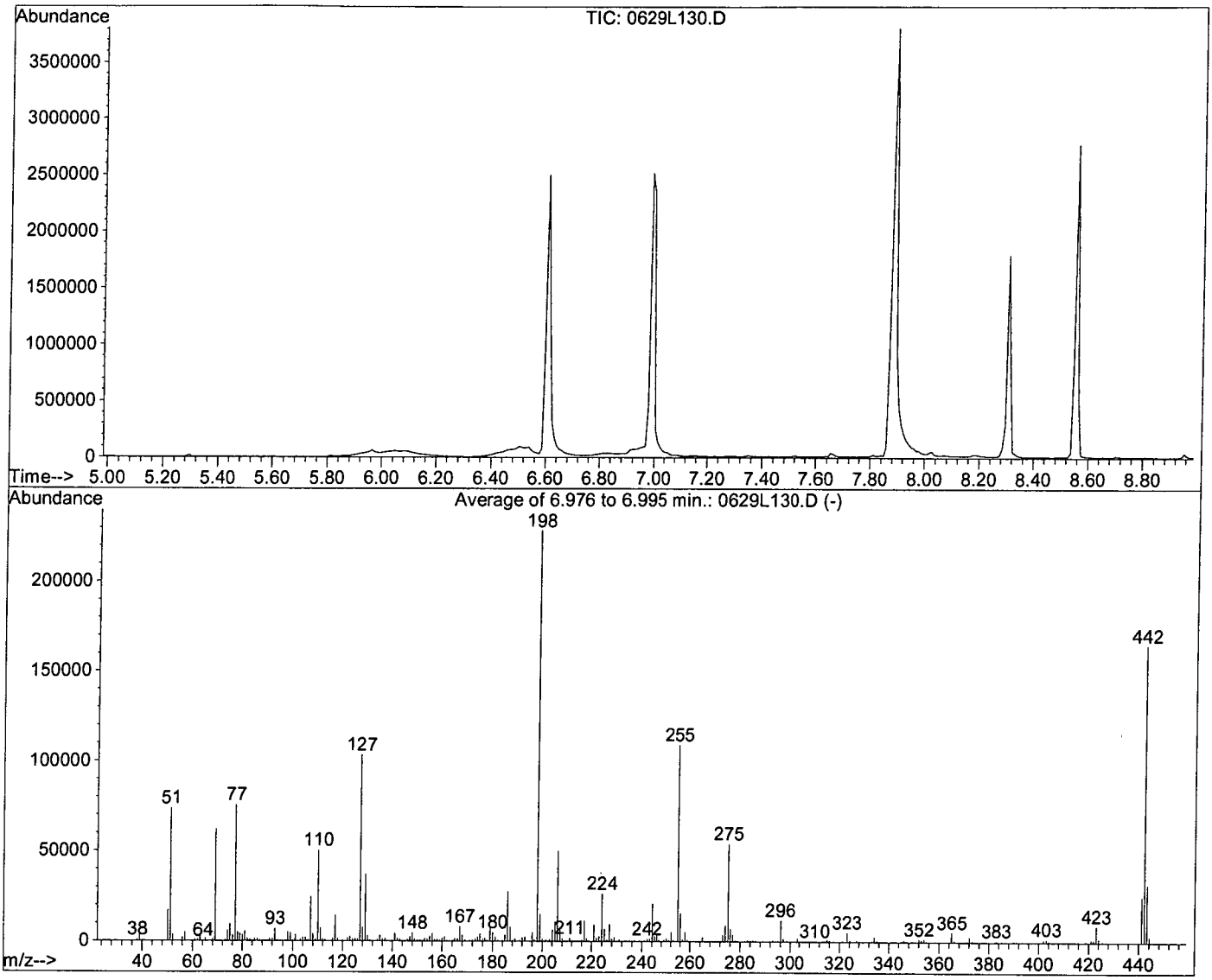
AutoFind: Scans 474, 475, 476; Background Corrected with Scan 471

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.9	92376	PASS
68	69	0.00	2	1.2	906	PASS
70	69	0.00	2	0.5	373	PASS
127	198	40	60	46.1	121773	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	264419	PASS
199	198	5	9	6.8	17949	PASS
275	198	10	30	22.6	59728	PASS
365	198	1	100	2.2	5941	PASS
441	443	0.01	100	78.4	29746	PASS
442	198	50	150	72.4	191416	PASS
443	442	17	23	19.8	37959	PASS

DFTPP

Data File : M:\LINUS\DATA\L150629\0629L130.D Vial: 30
Acq On : 2 Jul 15 9:44 Operator: MA
Sample : SV TUNE 5/14/15 Inst : Linus
Misc : water Multiplr: 1.00

Method : M:\LINUS\DATA\L150629\P0629.M (RTE Integrator)
Title : EPA 8270



AutoFind: Scans 474, 475, 476; 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	32.2	73672	PASS
68	69	0.00	2	1.6	977	PASS
70	69	0.00	2	0.5	308	PASS
127	198	40	60	45.2	103232	PASS
197	198	0.00	1	0.4	952	PASS
198	198	100	100	100.0	228478	PASS
199	198	5	9	6.6	14975	PASS
275	198	10	30	23.7	54039	PASS
365	198	1	100	2.2	5122	PASS
441	443	0.01	100	78.5	25082	PASS
442	198	50	150	72.1	164753	PASS
443	442	17	23	19.4	31965	PASS

_SEP004S

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	150619A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 230271-33746		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:	YES	
Spiked ID 7			Ext. Start Time:	06/19/15 11:30	
Spiked ID 8			Ext. End Time:	06/19/15 15:50	
			GC Requires Extract By:	**07/08/15 0:00**	

pH1	2	6/19/15 11:35:00 AM	Water Bath Temp Criteria	79,78 °C
pH2	14	06/19/15 1:10:00 PM		
pH3				

Spiked By: IC **Date** 06/19/15 **Witnessed By:** DC **Date** 06/19/15

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150619A Blk				0.0250	1 equip	1000 E-WB7	1	2/1	06/19/15 11:30	
2	150619A LCS-1		0.0250	1	0.0250	1 equip	1000 E-WB7	1	2/1	06/19/15 11:30	
3	AZ17817	AZ17817W05			0.0250	1 equip	1000 E-WB7	1	2/1	06/19/15 11:30	76674
4	AZ17821	AZ17821W05			0.0250	1 equip	1000 E-WB7	1	2/1	06/19/15 11:30	76674
5	AZ17826	AZ17826W08			0.0250	1 equip	1040 E-WB7	1	2/1	06/19/15 11:30	76674
6	AZ17827	AZ17827W04			0.0250	I equip	900 E-WB7	1	2/1	06/19/15 11:30	76674
7	AZ17828	AZ17828W08			0.0250	1 equip	960 E-WB7	1	2/1	06/19/15 11:30	76674
8	AZ17829	AZ17829W07			0.0250	1 equip	900 E-WB6	1	2/1	06/19/15 11:30	76674
9	AZ17907	AZ17907W08			0.0250	1 equip	900 E-WB6	1	2/1	06/19/15 11:30	76687
10	AZ17908	AZ17908W05			0.0250	1 equip	940 E-WB6	1	2/1	06/19/15 11:30	76687
11	AZ17909	AZ17909W08			0.0250	1 equip	900 E-WB6	1	2/1	06/19/15 11:30	76687

Ky 6/19/15

lvent and Lot#	
l Acid	6-2-15
STRIP	HC431579
	55006
Na2SO4	5-20-15
N NaOH	4-18-15
Na2SO4	XE21E
TER PAPER	400098

Extraction COC Transfer	
Extraction lab employee Initials	KY
GC analyst's initials	LH
Date	6/19/15
Time	4:40
Refrigerator	GC-C

	Technician's Initials
Scanned By	DC
Sample Preparation	DC
Extraction	DC,KY
Concentration	IC

Modified	06/19/15 4:08:38 PM

Reviewed By: Key **Date** 6/19/15

19/15 4:08:50 PM Ext_ID 48154

Injection Log

Directory: M:\LINUS\DATA\L150629\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	0629L002.D	1	SV Tune 05/14/15		29 Jun 15 12:12
2	3	0629L003.D	1	0.1ug/ml PAH 06/29/15		29 Jun 15 12:29
3	4	0629L004.D	1	0.2ug/ml PAH		29 Jun 15 12:56
4	5	0629L005.D	1	0.5ug/ml PAH		29 Jun 15 13:23
5	6	0629L006.D	1	1.0ug/ml PAH		29 Jun 15 13:50
6	7	0629L007.D	1	5.0ug/ml PAH		29 Jun 15 14:17
7	8	0629L008.D	1	10ug/ml PAH		29 Jun 15 14:44
8	9	0629L009.D	1	50ug/ml PAH		29 Jun 15 15:12
9	10	0629L010.D	1	100ug/ml PAH		29 Jun 15 15:39
10	12	0629L012.D	1	5.0ug/ml PAH SS 06/29/15		29 Jun 15 17:28
11	30	0629L130.D	1	SV TUNE 5/14/15	water	2 Jul 15 9:44
12	31	0629L131.D	1	CCV 5.0ug/ml PAH 06/30/15	water	2 Jul 15 10:01
13	37	0629L137.D	1	150619A BLK 1/1000	water	2 Jul 15 12:43
14	38	0629L138.D	1	150619A LCS-1 1/1000	water	2 Jul 15 13:10
15	45	0629L145.D	1.11111	AZ17907W08 1/900	water	2 Jul 15 16:19
16	46	0629L146.D	1.06383	AZ17908W05 1/940	water	2 Jul 15 16:46
17	47	0629L147.D	1.11111	AZ17909W08 1/900	water	2 Jul 15 17:13

RSK-175

APPL, INC.

RSK-175
QC Summary

APPL, INC.

Method Blank
RSK 175

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150624W-17694 - 198396**
Batch ID: #RSK-150624A

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	06/24/15	06/24/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method: 402RSK.M
Run #: 0624F008
Instrument: Frodo
Sequence: 150624
Initials: SD

GC SC-Blank-REG MDLs
Printed: 06/25/15 4:39:59 PM

Laboratory Control Spike Recovery

RSK 175

APPL ID: **150624W-17694 LCS - 198396**
Batch ID: #RSK-150624A

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	26.0	104	70-130
ETHENE	23.3	21.4	91.8	70-130
METHANE	13.3	14.6	110	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	06/24/15
Analysis Date :	06/24/15
Instrument :	Frodo
Run :	0624F006
Initials :	SD

Printed: 06/25/15 4:39:51 PM
APPL Standard LCS

RSK 175

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Frodo

Blank ID: 150624A-BLK Time Analyzed: 0944

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624A-LCS	Lab Control Spike	0624F006	06/24/15 0904
150624A-BLK	Blank	0624F008	06/24/15 0944
AZ17907	S67-MW021-061715	0624F035	06/24/15 1523
AZ17909	S67-MW025-061715	0624F036	06/24/15 1529

Comments: Batch: #RSK-150624A

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-MW021-061715

Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687

APPL ID: AZ17907

QCG: #RSK-150624A-198396

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	06/24/15	06/24/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
RSK 175	METHANE	7.1	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method: 402RSK.M
Run #: 0624F035
Instrument: Frodo
Sequence: 150624
Dilution Factor: 1
Initials: SD

Printed: 06/25/15 4:39:55 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

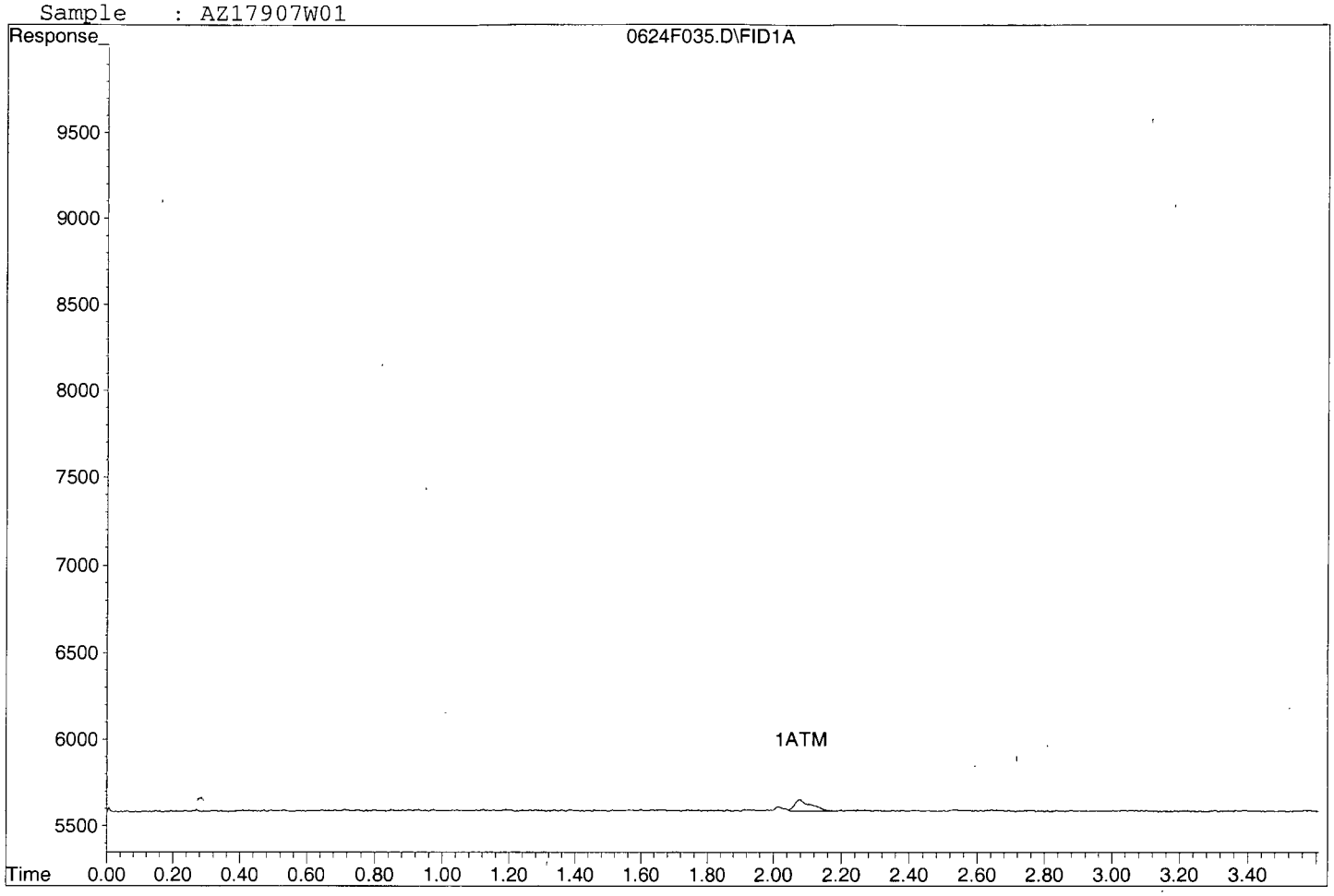
Data File : V:\FRODO\DATA\150624\0624F035.D Vial: 35
Acq On : 24 Jun 2015 15:23 Operator: SD
Sample : AZ17907W01 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 15:28 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Thu Jun 25 14:58:59 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	2.08	2345	7.086 ppb

Data File: V:\FRODO\DATA\150624\0624F035.D
Sample : AZ17907W01



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-MW025-061715

Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687

APPL ID: AZ17909

QCG: #RSK-150624A-198396

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	06/24/15	06/24/15
RSK 175	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
RSK 175	METHANE	0.45 U	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method:	402RSK.M
Run #:	0624F036
Instrument:	Frodo
Sequence:	150624
Dilution Factor:	1
Initials:	SD

Printed: 06/25/15 4:39:55 PM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150624\0624F036.D Vial: 36
Acq On : 24 Jun 2015 15:29 Operator: SD
Sample : AZ17909W01 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 25 15:42 2015 Quant Results File: 402RSK.RES

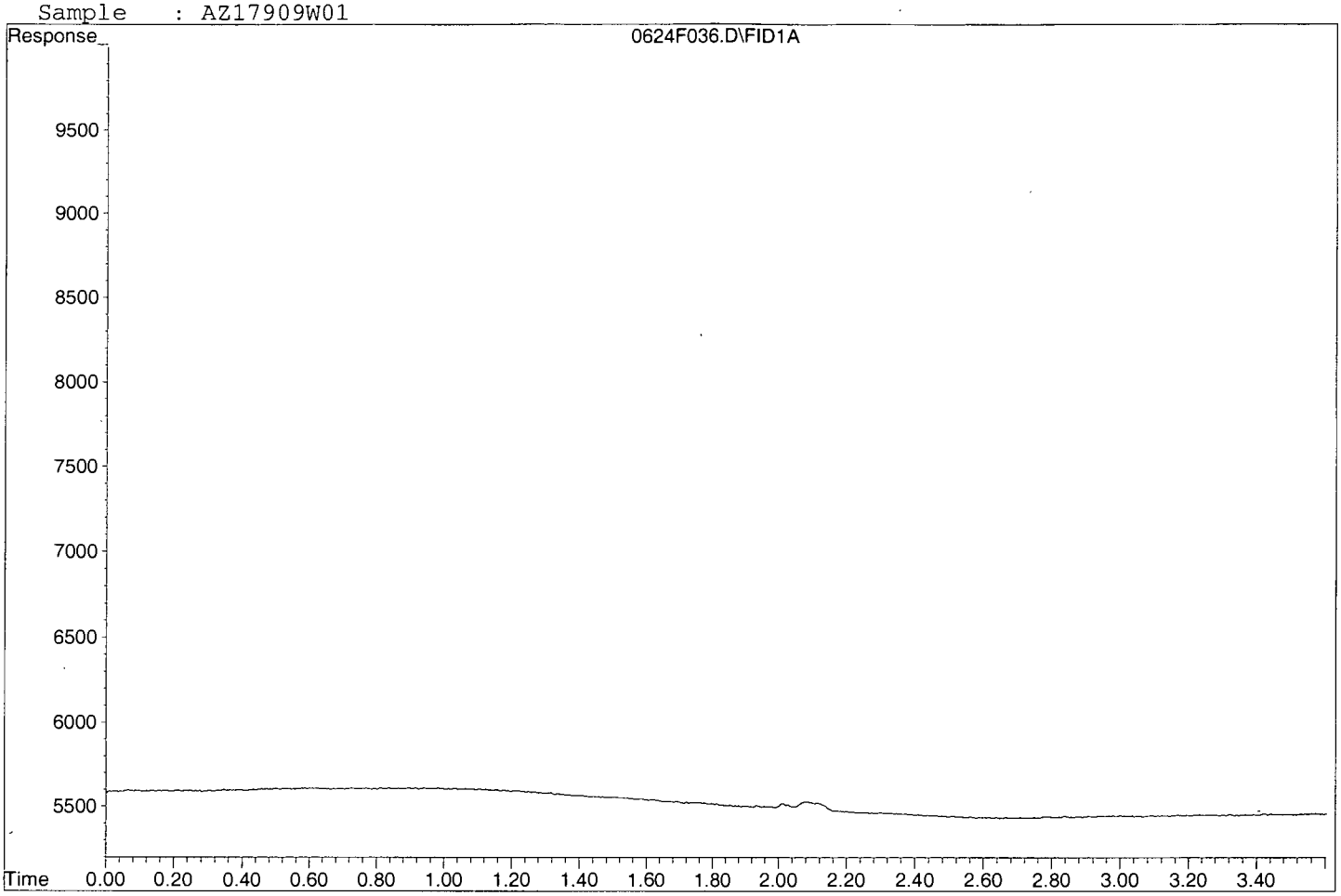
Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Thu Jun 25 14:58:59 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc	Units

Target Compounds

Data File: V:\FRODO\DATA\150624\0624F036.D
Sample : AZ17909W01



RSK-175
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:

Case No: Initial Cal. Date: 3/29/15 and 4/2/15

Matrix: Water Instrument: Frodo Initials: sd

0329F010 D 0329F001 D 0329F005 D 0329F012.D 0329F013 D 0329F015 D 0329F016 D 0402F001.D 0329F009.D

		Compound	1	2	3	4	5	6	7	8	1A		Avg	%RSD		
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																
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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)

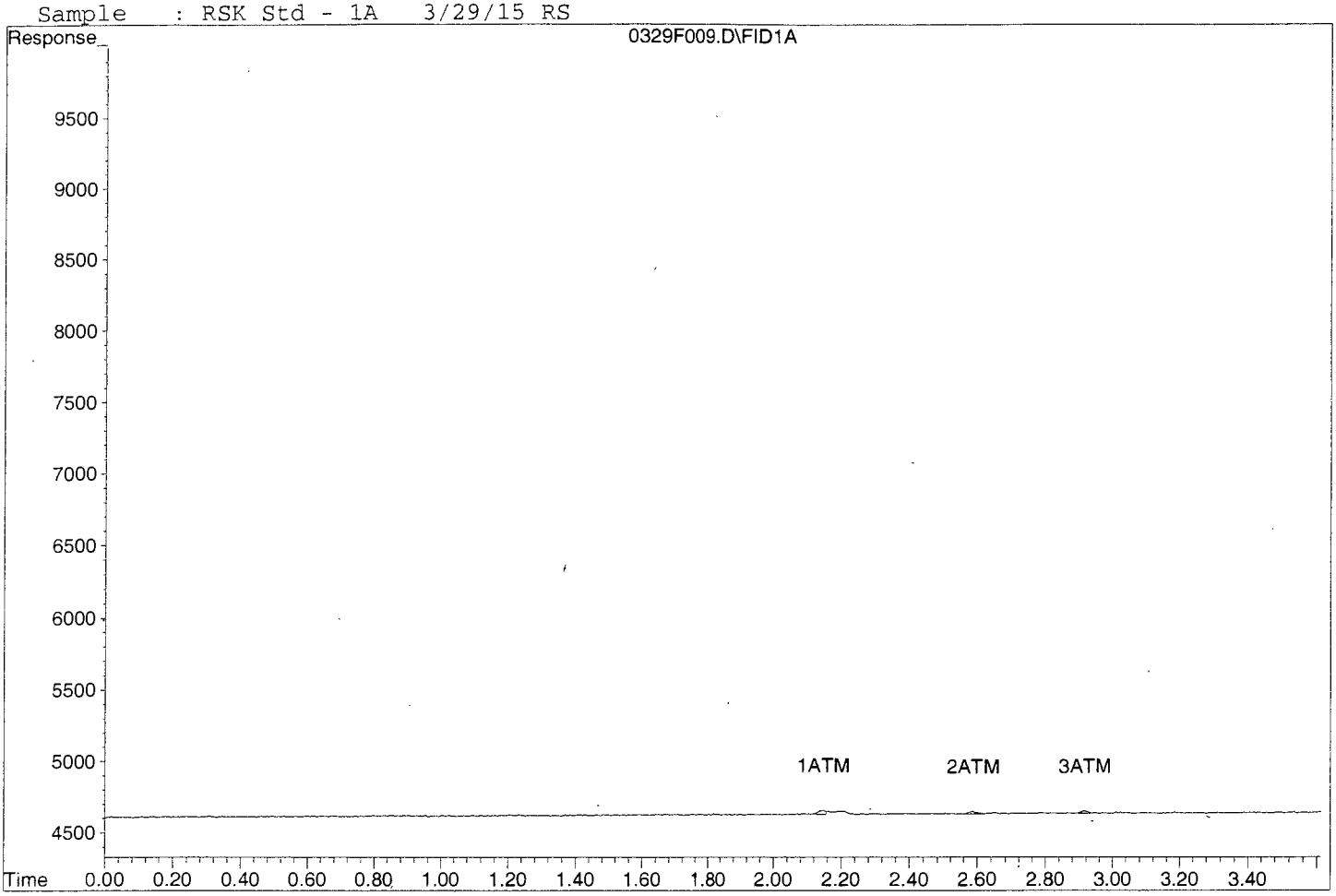
Data File : V:\FRODO\DATA\150329\0329F009.D Vial: 9
Acq On : 29 Mar 2015 09:45 Operator: SD
Sample : RSK Std - 1A 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:37 2015 Quant Results File: RSK175Q.RES

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

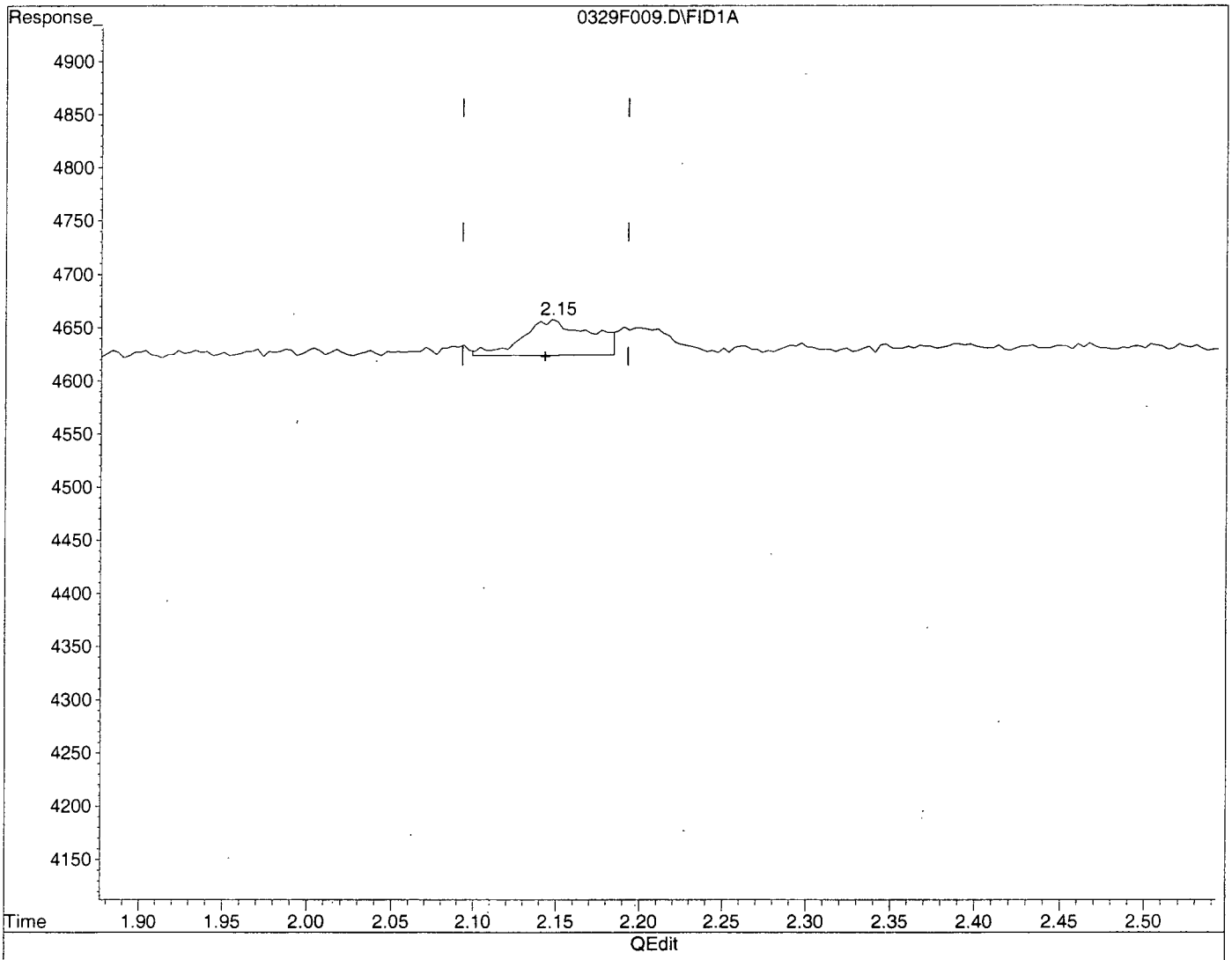
Data File: V:\FRODO\DATA\150329\0329F009.D
Sample : RSK Std - 1A 3/29/15 RS



Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F009.D 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 10:54 2015 Quant Results File: RSK175Q.RES

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

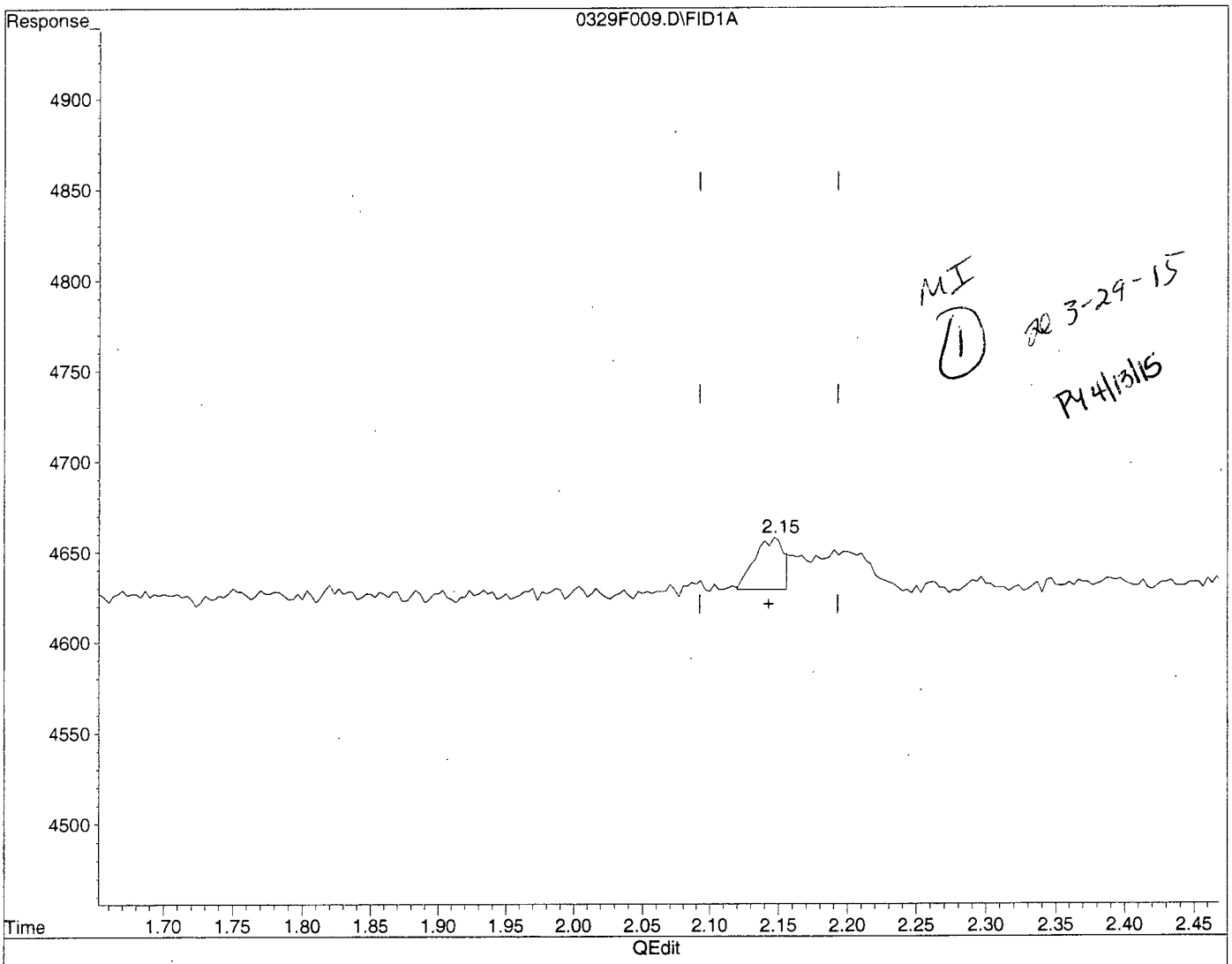
(+) = Expected Retention Time

0329F009.D RSK175Q.M Sun Mar 29 10:54:38 2015

Quantitation Report

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 10:55 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



(1) Methane (ATM)

2.15min 1.029ppb m

response 390

(+) = Expected Retention Time

0329F009.D RSK175Q.M Sun Mar 29 11:38:16 2015

Quantitation Report (QT Reviewed)

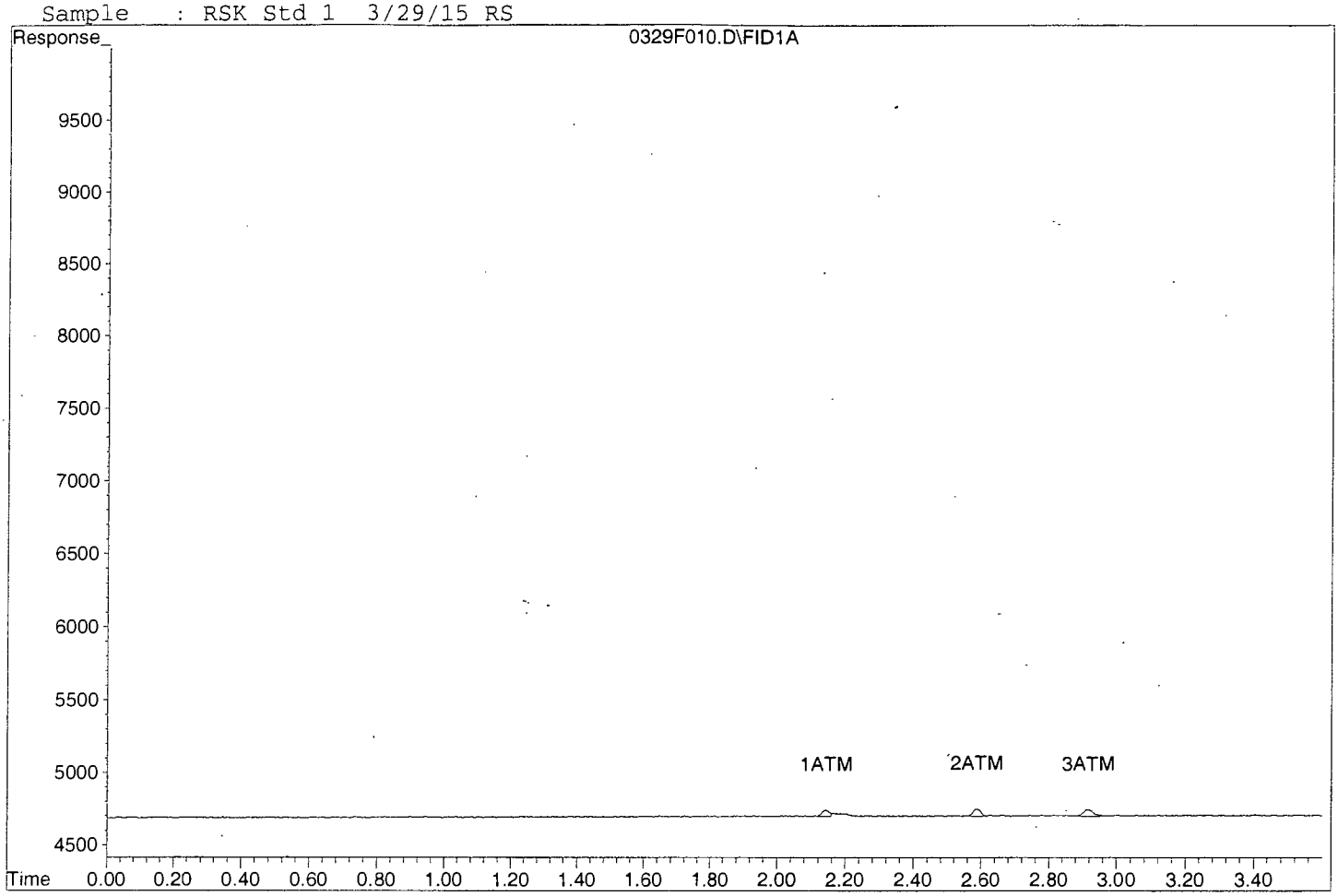
Data File : V:\FRODO\DATA\150329\0329F010.D Vial: 10
Acq On : 29 Mar 2015 10:04 Operator: SD
Sample : RSK Std 1 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:43 2015 Quant Results File: RSK175Q.RES

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	

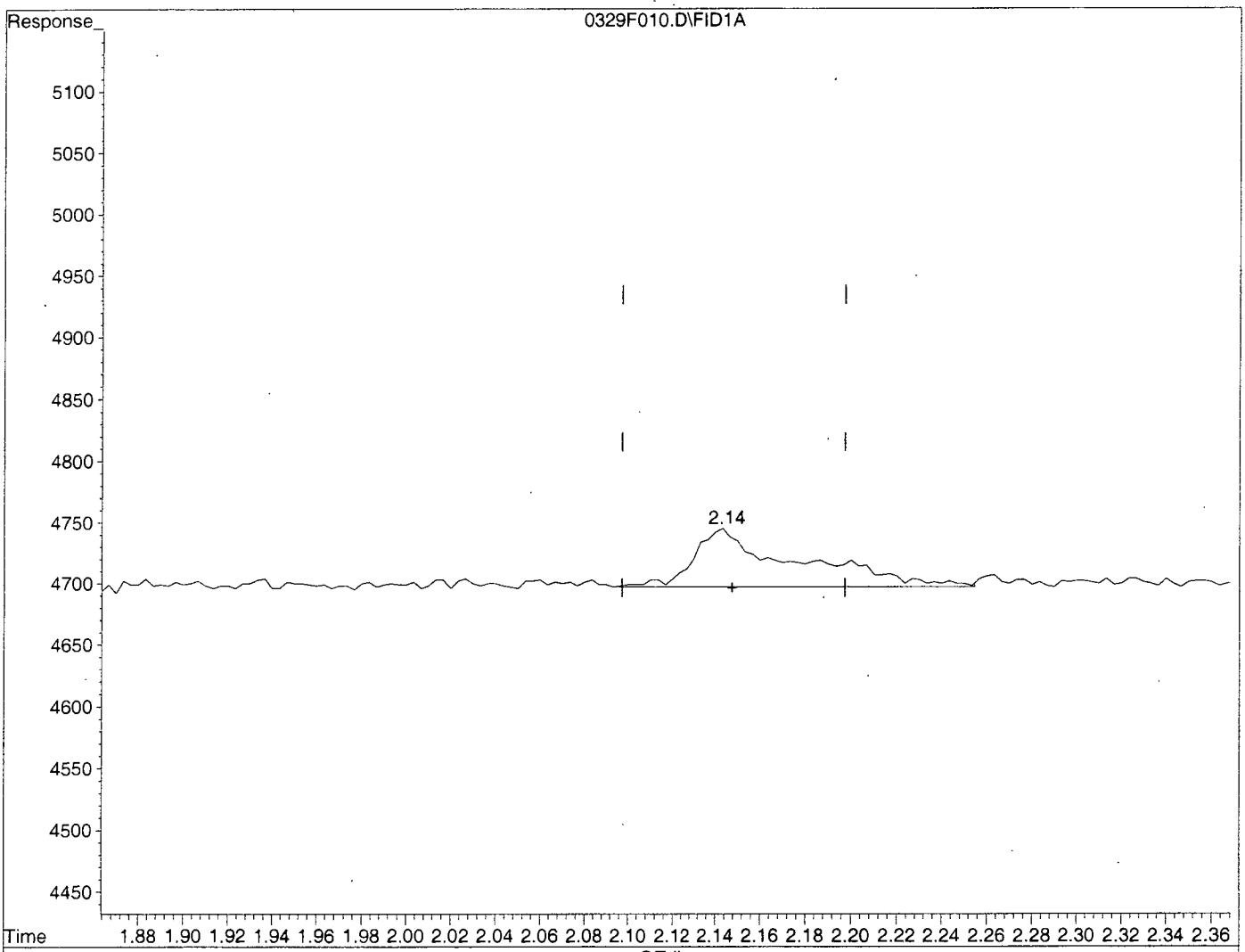
Data File: V:\FRODO\DATA\150329\0329F010.D
Sample : RSK Std 1 3/29/15 RS



Quantitation Report

Data File : V:\FRODO\DATA\150329\0329F010.D 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 10:08 2015 Quant Results File: RSK175Q.RES

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



QEdit

(1) Methane (ATM)

2.14min 1.589ppb

response 1509

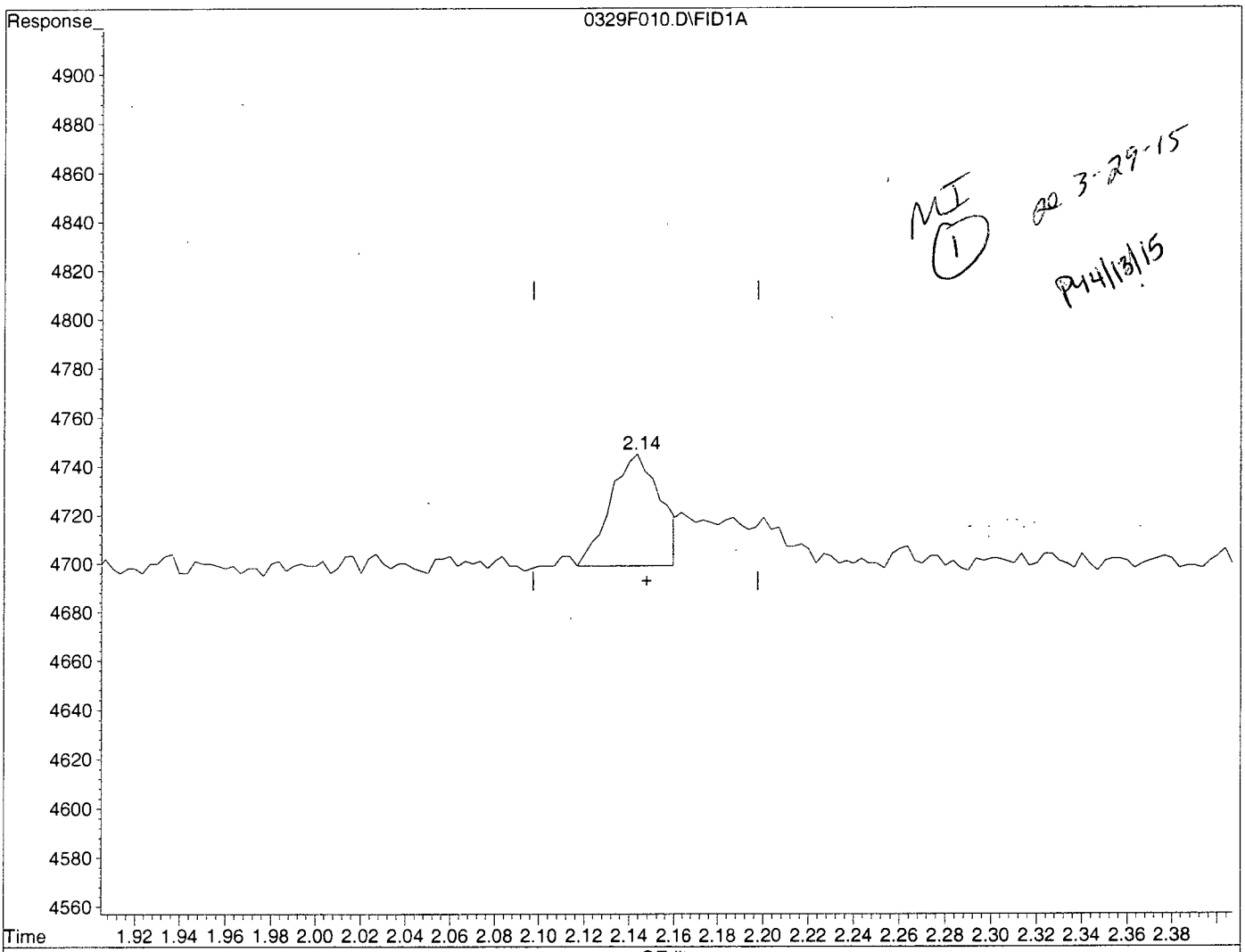
(+) = Expected Retention Time

0329F010.D RSK175Q.M Sun Mar 29 10:51:16 2015

Quantitation Report

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 10:57 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



MJ 3-29-15
(1)
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

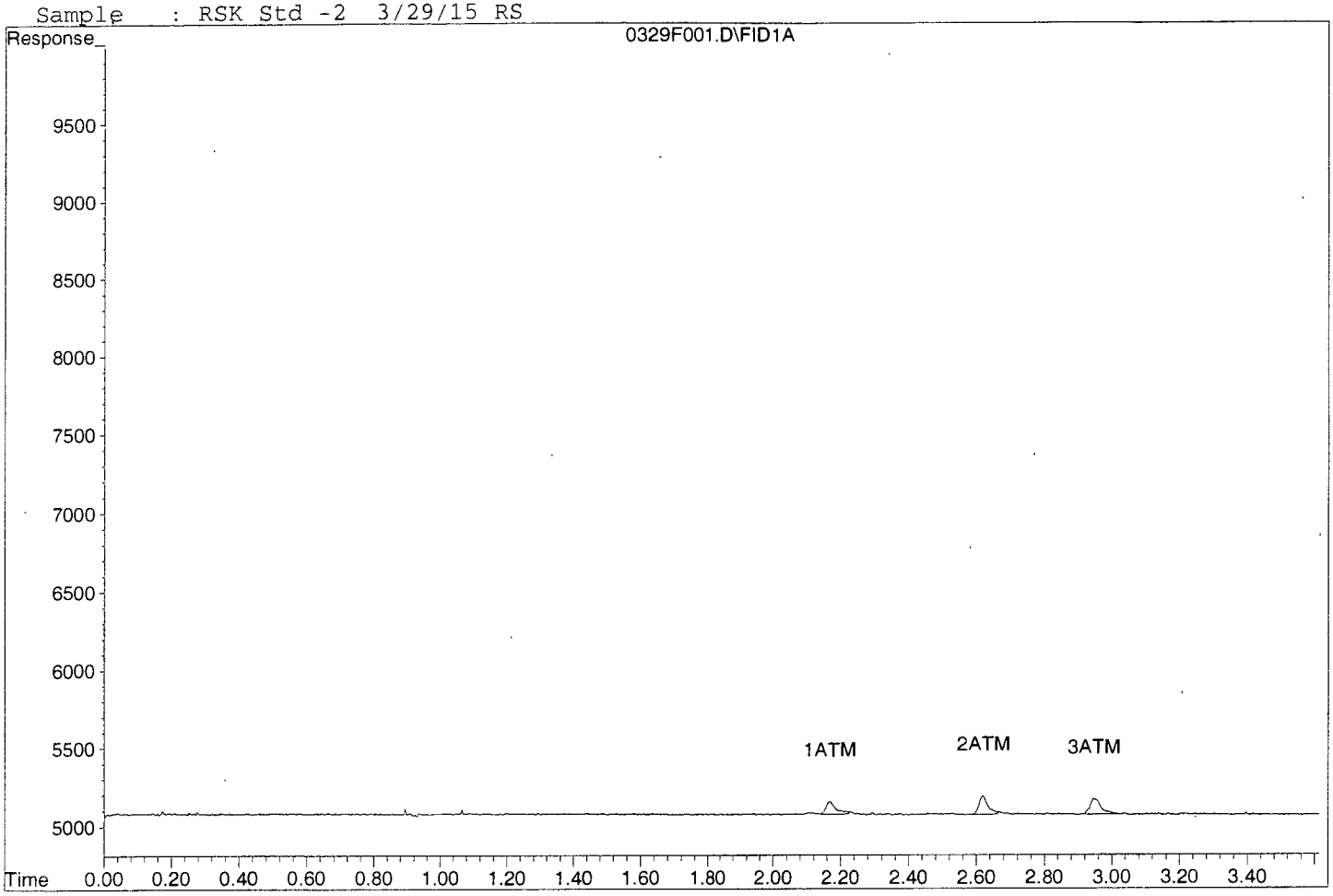
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

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

(f)=RT Delta > 1/2 Window (m)=manual int.
0329F001.D RSK175Q.M Sun Mar 29 11:36:56 2015 Page 1

Data File: V:\FRODO\DATA\150329\0329F001.D
Sample : RSK Std -2 3/29/15 RS



Quantitation Report (Not Reviewed)

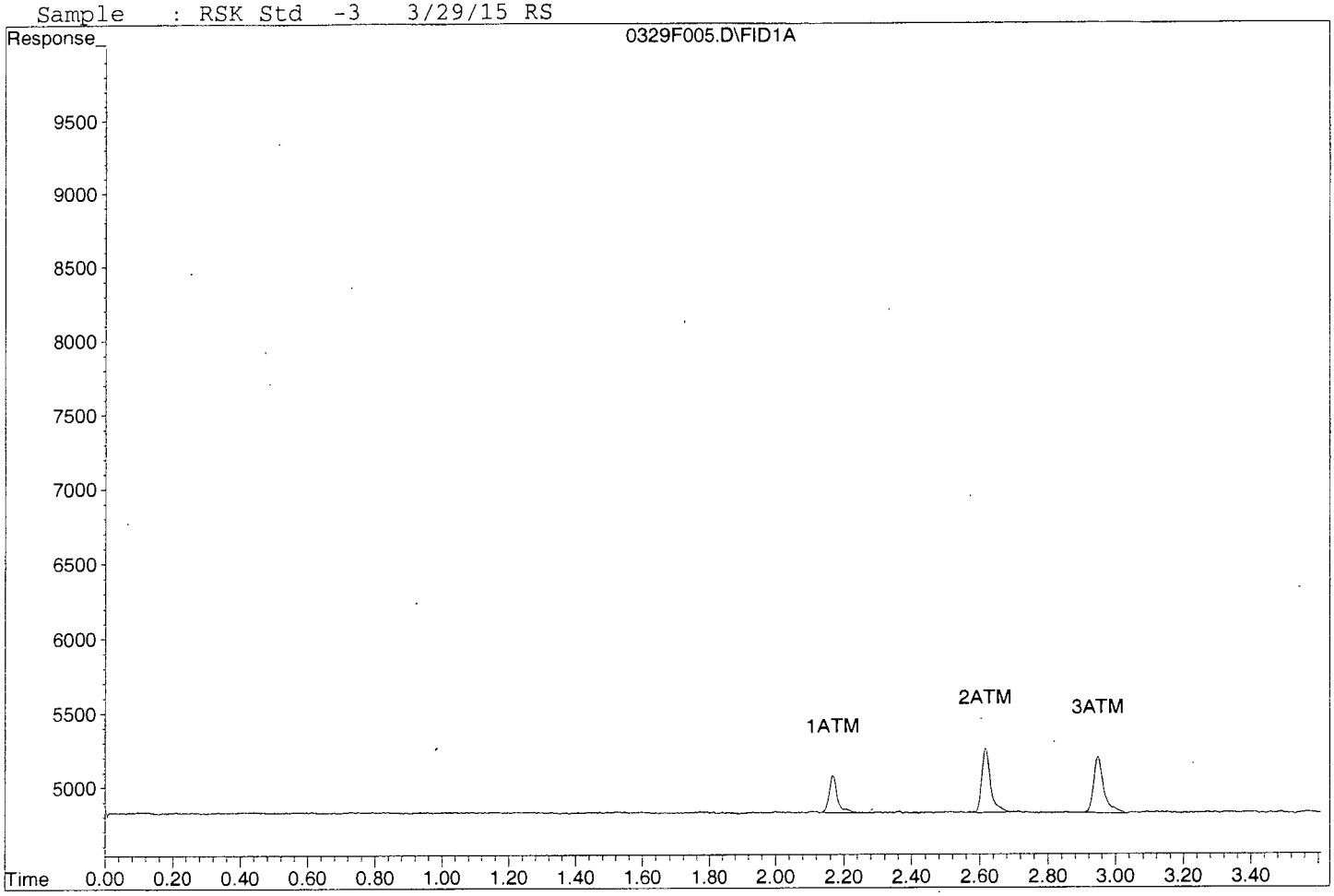
Data File : V:\FRODO\DATA\150329\0329F005.D Vial: 5
Acq On : 29 Mar 2015 09:04 Operator: SD
Sample : RSK Std -3 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:31 2015 Quant Results File: RSK175Q.RES

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

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

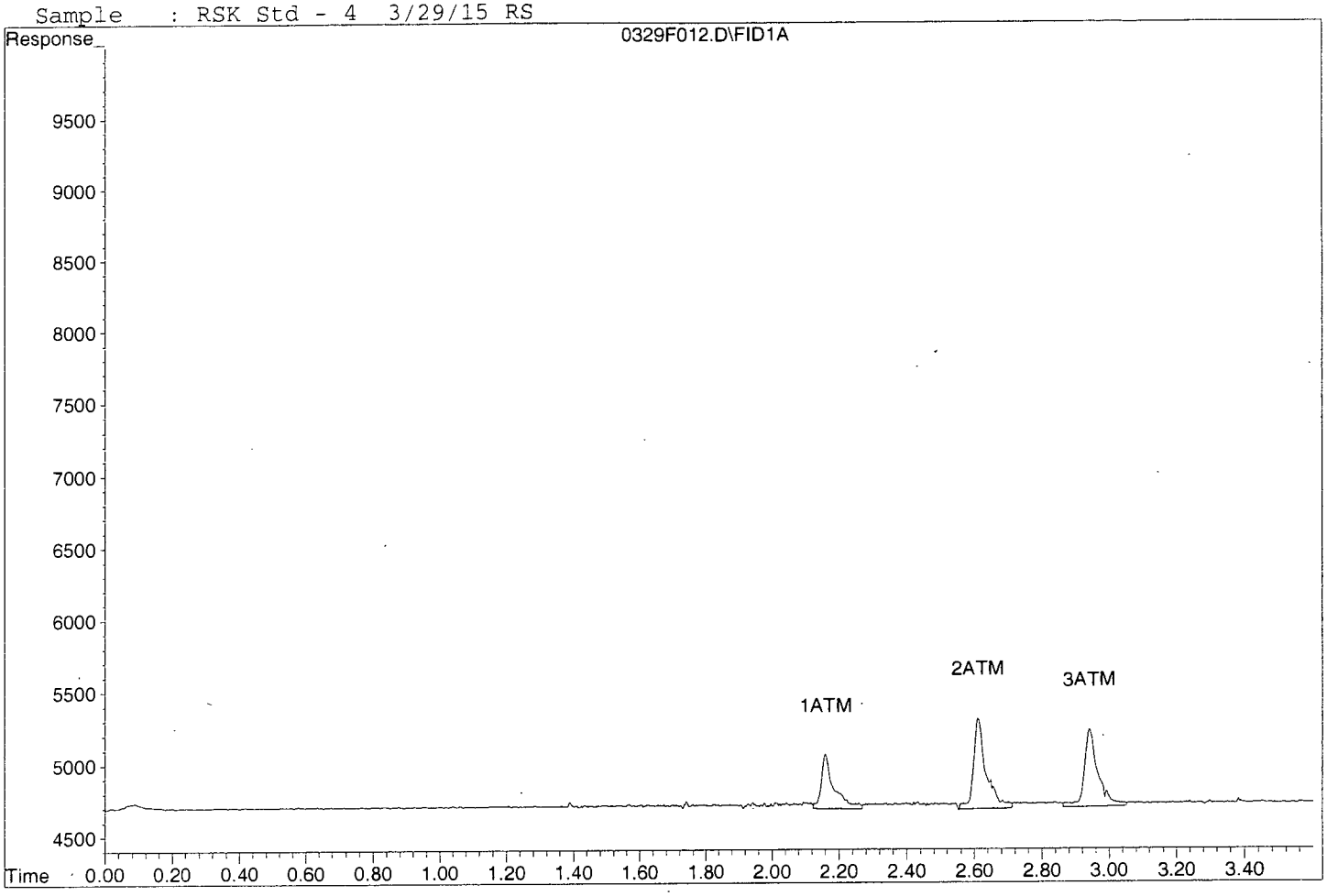
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

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

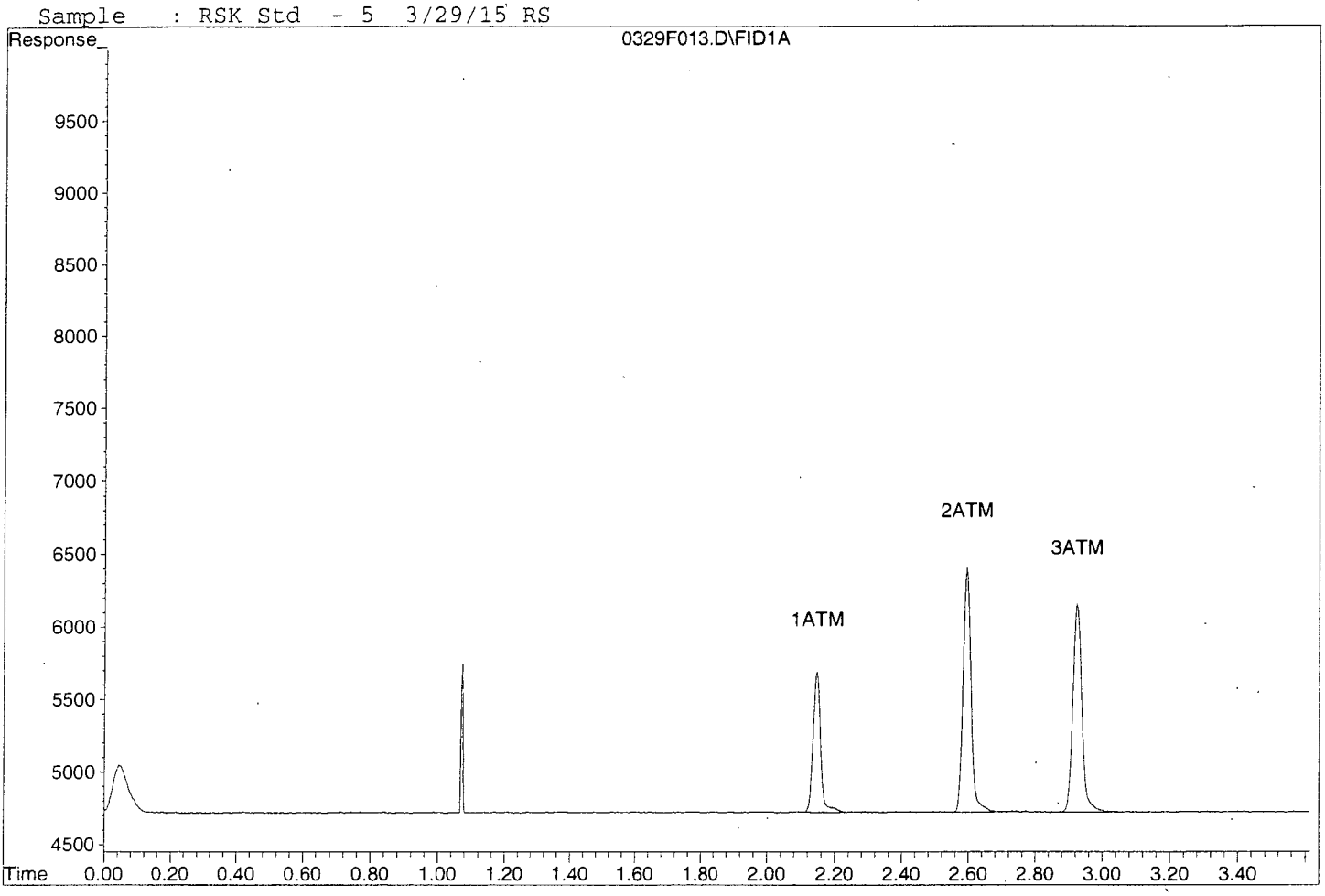
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

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

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: V:\FRODO\DATA\150329\0329F013.D
Sample : RSK Std - 5 3/29/15 RS



Quantitation Report (Not Reviewed)

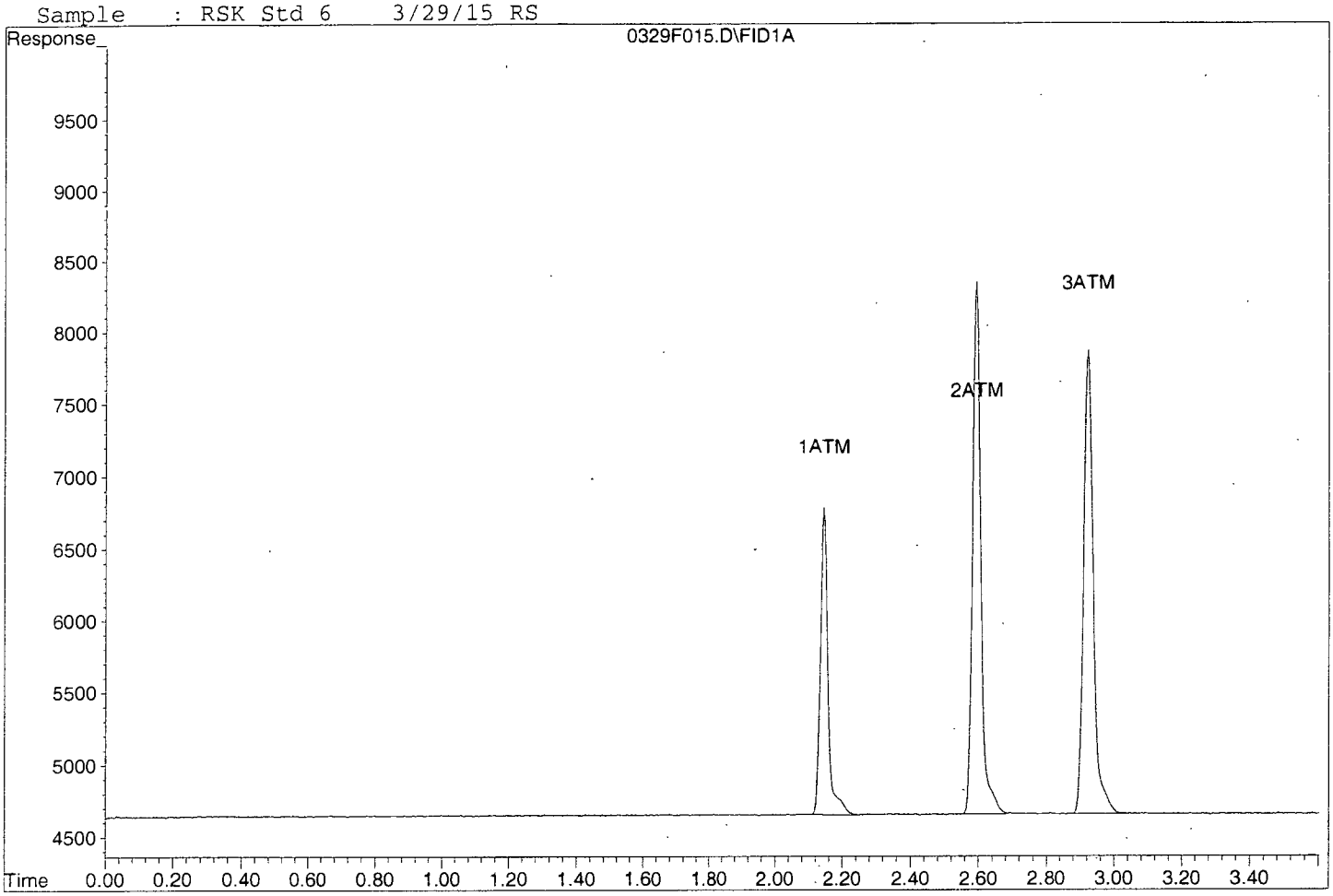
Data File : V:\FRODO\DATA\150329\0329F015.D Vial: 15
Acq On : 29 Mar 2015 10:34 Operator: SD
Sample : RSK Std 6 3/29/15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Mar 29 11:32 2015 Quant Results File: RSK175Q.RES

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

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 Vial: 16
Acq On : 29 Mar 2015 11:11 Operator: SD
Sample : RSK Std - 7 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

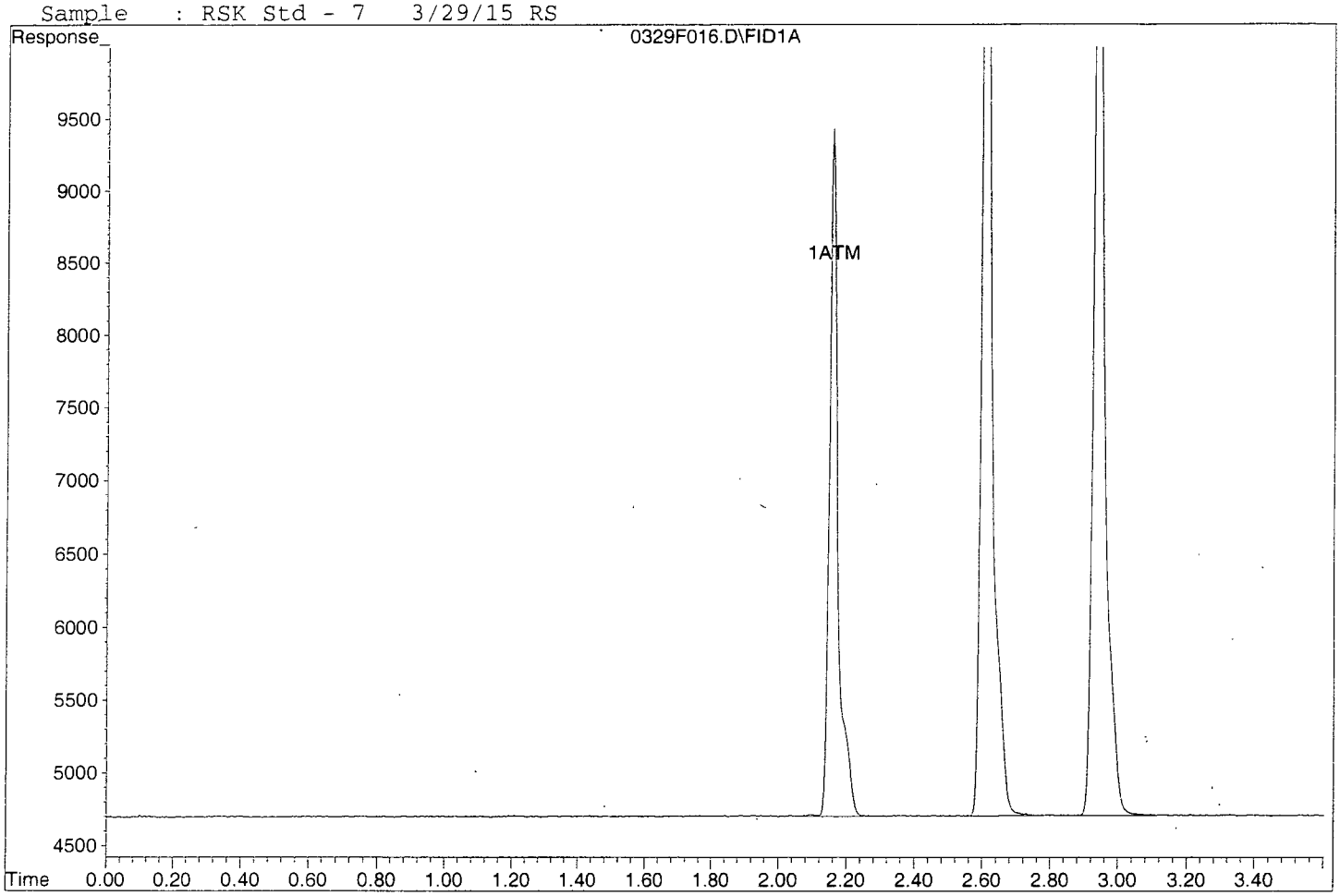
Method : V:\FRODO\DATA\150329\RSK175Q.M (Chemstation Integrator)
Title : RSK 175
Last Update : Sun Mar 29 11:20:33 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.16	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.

Data File: V:\FRODO\DATA\150329\0329F016.D
Sample : RSK Std - 7 3/29/15 RS



Quantitation Report (Not Reviewed)

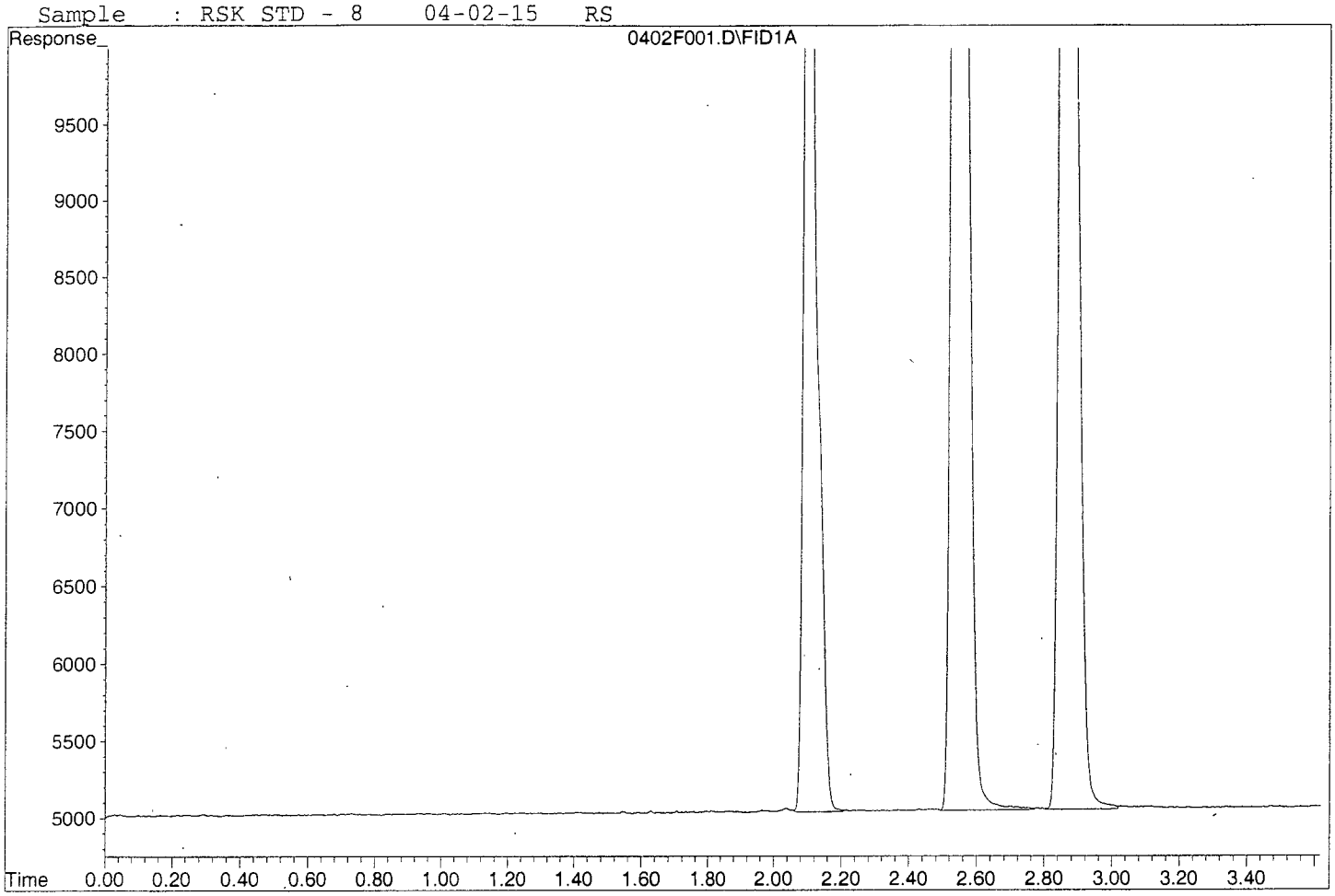
Data File : V:\FRODO\DATA\150402\0402F001.D Vial: 1
Acq On : 2 Apr 2015 07:55 Operator: SD
Sample : RSK STD - 8 04-02-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 2 10:14 2015 Quant Results File: RSK175Q.RES

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

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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39							
40							
		Average			3.1		

Quantitation Report (Not Reviewed)

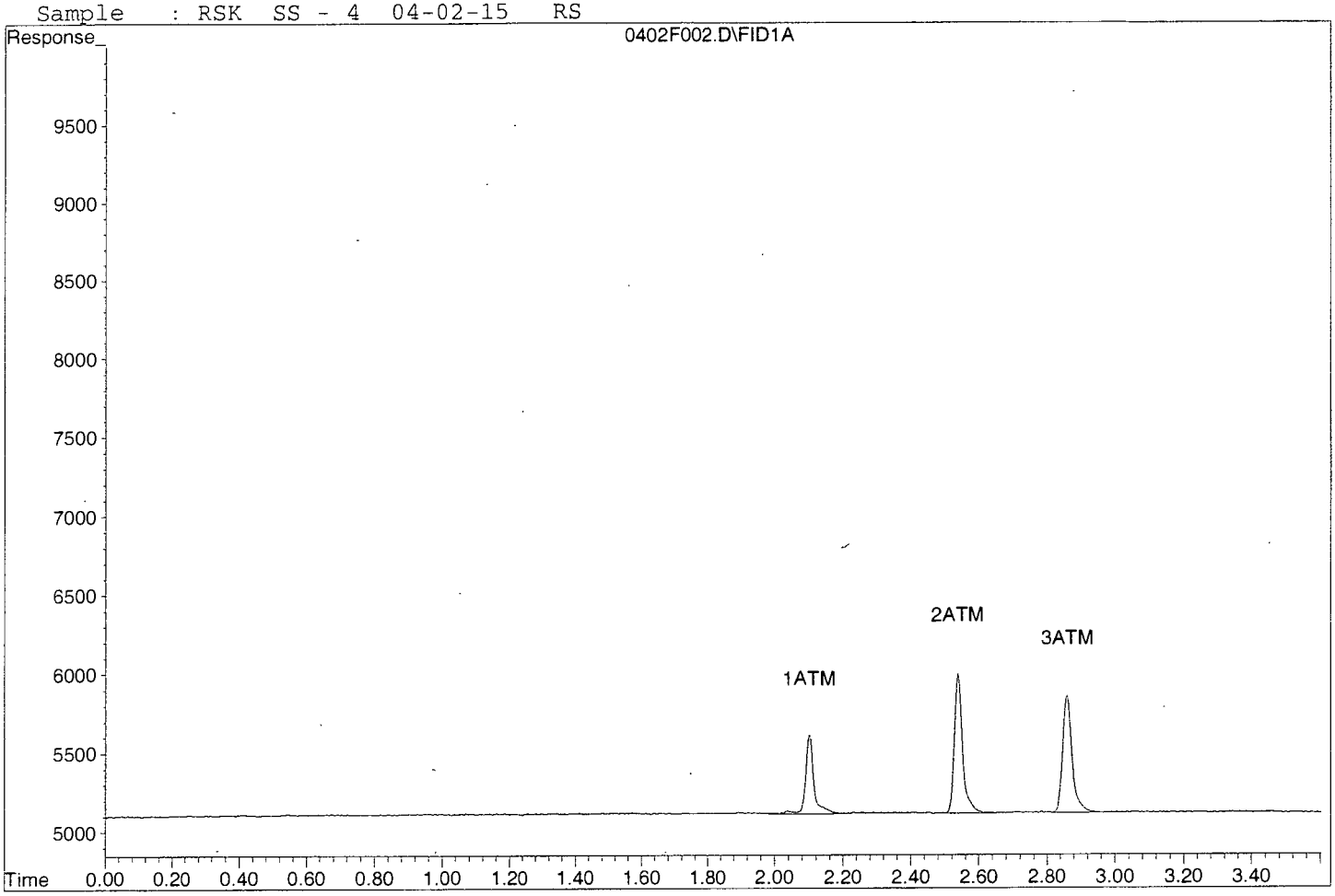
Data File : V:\FRODO\DATA\150402\0402F002.D Vial: 2
Acq On : 2 Apr 2015 08:15 Operator: SD
Sample : RSK SS - 4 04-02-15 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Apr 10 17:44 2015 Quant Results File: 402RSK.RES

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

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: 06/24/15
Instrument: Frodo
Initial Cal. Date: 06/24/15
Data File: 0624F004.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATM	Methane	331	337	1.9	ATM	
2	ATM	Ethane	284	278	2.0	ATM	
3	ATM	Ethene	303	247	19	ATM	
4							
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39							
40							
		Average			7.6		

Quantitation Report (Not Reviewed)

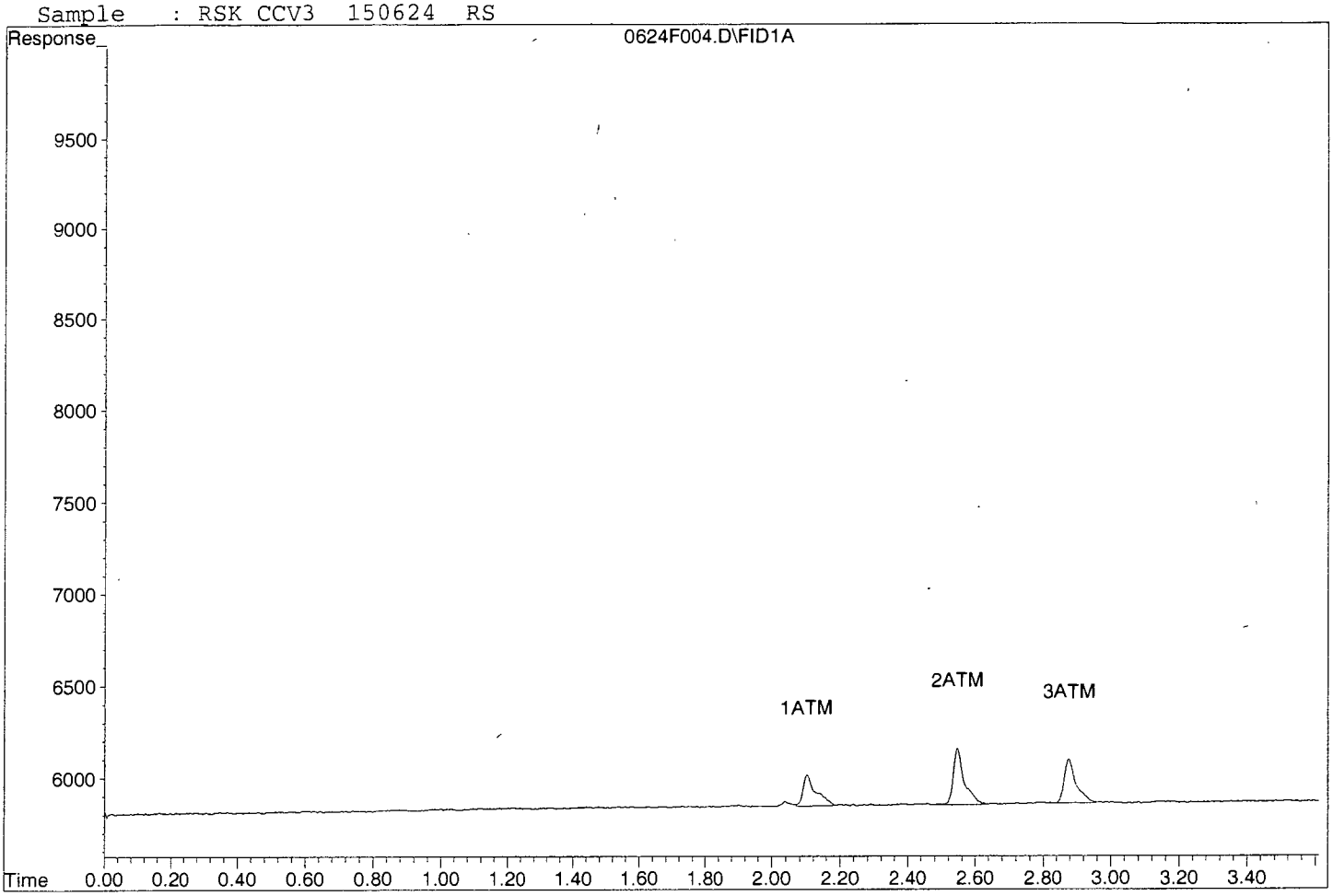
Data File : V:\FRODO\DATA\150624\0624F004.D Vial: 4
Acq On : 24 Jun 2015 08:20 Operator: SD
Sample : RSK CCV3 150624 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 8:40 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150625\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Jun 24 11:41:55 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	4500	13.595 ppb
2) ATM Ethane	2.55	6961	24.500 ppb
3) ATM Ethene	2.88	5761	18.985 ppb

Data File: V:\FRODO\DATA\150624\0624F004.D
Sample : RSK CCV3 150624 RS



Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 06/24/15
Instrument: Frodo
Initial Cal. Date: 06/24/15
Data File: 0624F023.D

		Compound	MEAN	CCRF	%D		%Drift
1	ATM	Methane	331	309	6.5	ATM	
2	ATM	Ethane	284	320	13	ATM	
3	ATM	Ethene	303	322	6.1	ATM	
4							
5							
6							
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40							
		Average			8.5		

Quantitation Report (Not Reviewed)

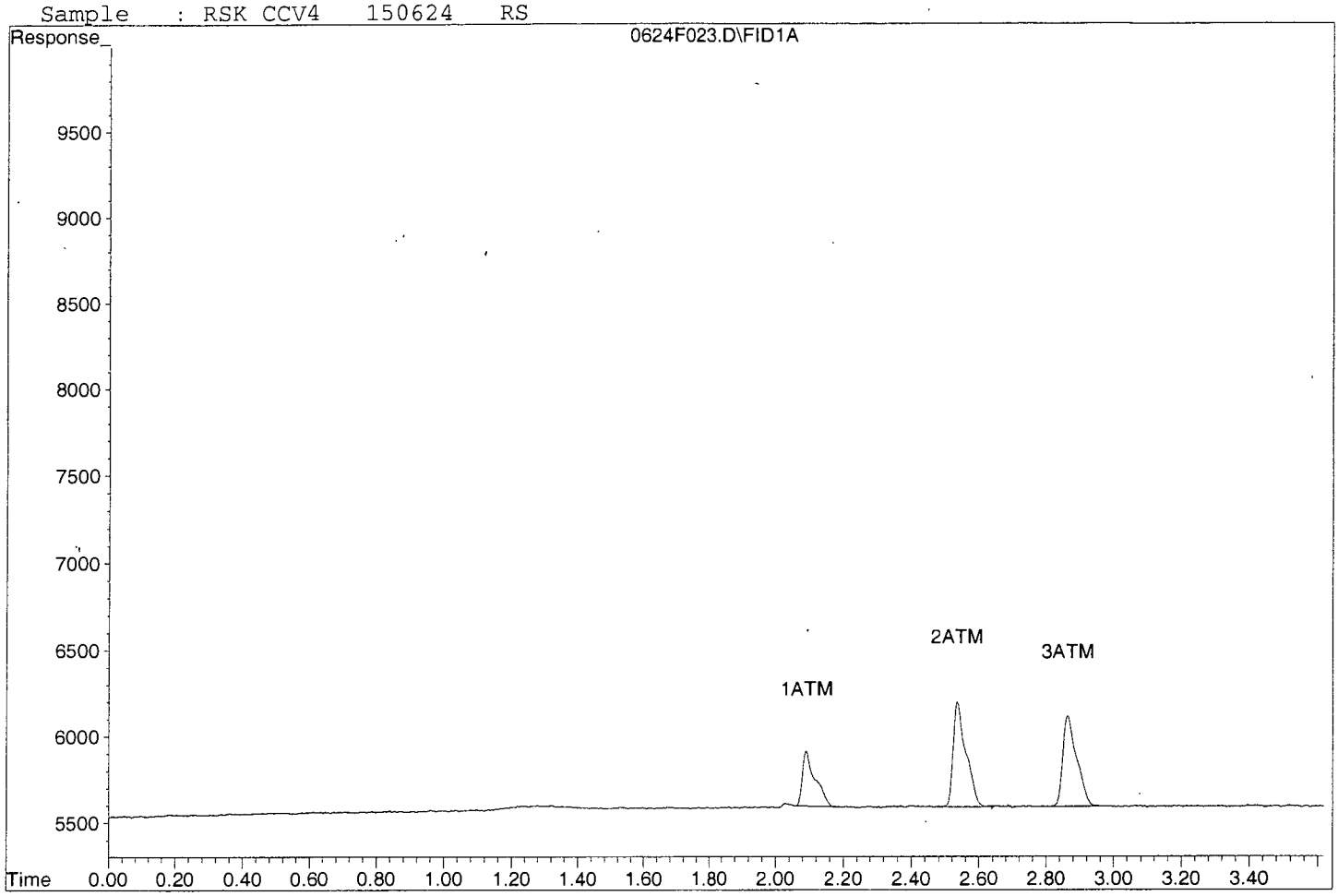
Data File : V:\FRODO\DATA\150624\0624F023.D Vial: 23
Acq On : 24 Jun 2015 11:53 Operator: SD
Sample : RSK CCV4 150624 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 11:56 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Thu Jun 25 14:58:59 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	2.09	8261	24.960	ppb
2) ATM Ethane	2.54	15997	56.303	ppb
3) ATM Ethene	2.86	15005	49.452	ppb

Data File: V:\FRODO\DATA\150624\0624F023.D
Sample : RSK CCV4 150624 RS



Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 06/24/15
Instrument: Frodo
Initial Cal. Date: 06/24/15
Data File: 0624F037.D

		Compound	MEAN	CCRF	%D	%Drift	
1	ATM	Methane	331	293	12	ATM	
2	ATM	Ethane	284	309	8.9	ATM	
3	ATM	Ethene	303	303	0.07	ATM	
4							
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39							
40							
		Average			7.0		

Quantitation Report (Not Reviewed)

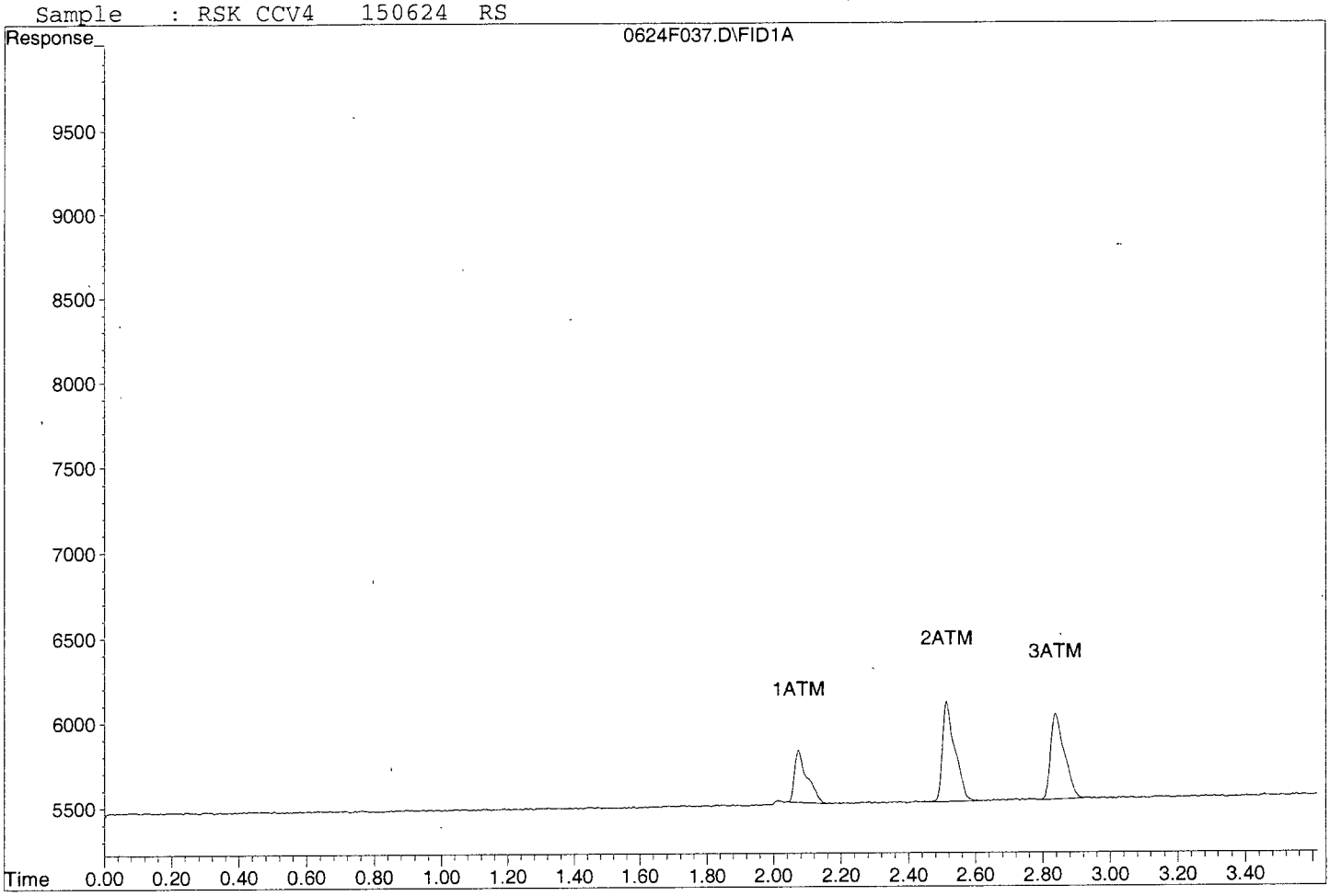
Data File : V:\FRODO\DATA\150624\0624F037.D Vial: 37
Acq On : 24 Jun 2015 15:34 Operator: SD
Sample : RSK CCV4 150624 RS Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 15:38 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Thu Jun 25 14:58:59 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	7812	23.602 ppb
2) ATM Ethane	2.51f	15465	54.432 ppb
3) ATM Ethene	2.84f	14130	46.570 ppb

Data File: V:\FRODO\DATA\150624\0624F037.D
Sample : RSK CCV4 150624 RS



RSK-175
Raw Data

APPL, INC.

Method Blank

RSK 175

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150624W-17694 - 198396**
Batch ID: #RSK-150624A

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	06/24/15	06/24/15
BLANK	ETHENE	0.80 U	1.8	0.80	0.47	ug/L	06/24/15	06/24/15
BLANK	METHANE	0.45 U	1.0	0.45	0.25	ug/L	06/24/15	06/24/15

Quant Method: 402RSK.M
Run #: 0624F008
Instrument: Frodo
Sequence: 150624
Initials: SD

GC SC-Blank-REG MDLs
Printed: 06/25/15 4:39:59 PM

Quantitation Report (QT Reviewed)

Data File : V:\FRODO\DATA\150624\0624F008.D Vial: 8
Acq On : 24 Jun 2015 09:44 Operator: SD
Sample : 150624A BLK-1 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 12:28 2015 Quant Results File: 402RSK.RES

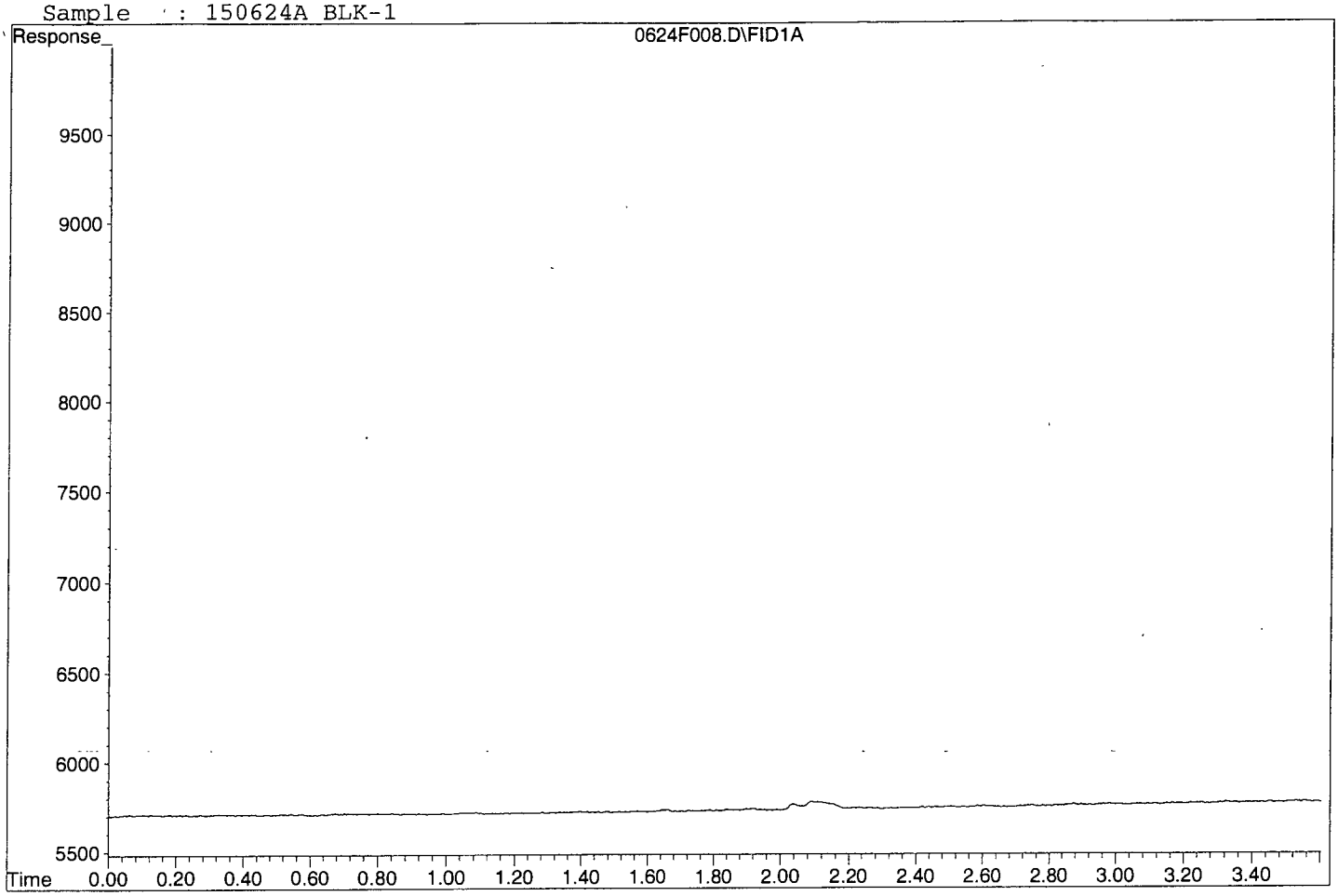
Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Jun 24 11:41:55 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

Compound	R.T.	Response	Conc Units

Target Compounds

Data File: V:\FRODO\DATA\150624\0624F008.D
Sample : 150624A BLK-1



Laboratory Control Spike Recovery

RSK 175

APPL ID: **150624W-17694 LCS - 198396**
Batch ID: #RSK-150624A

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	26.0	104	70-130
ETHENE	23.3	21.4	91.8	70-130
METHANE	13.3	14.6	110	70-130

Comments: _____

Primary	SPK
Quant Method :	402RSK.M
Extraction Date :	06/24/15
Analysis Date :	06/24/15
Instrument :	Frodo
Run :	0624F006
Initials :	SD

Printed: 06/25/15 4:39:51 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : V:\FRODO\DATA\150624\0624F006.D Vial: 6
Acq On : 24 Jun 2015 09:04 Operator: SD
Sample : 150624A LCS-3 Inst : Frodo
Misc : Water Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 24 9:14 2015 Quant Results File: 402RSK.RES

Method : V:\FRODO\DATA\150624\402RSK.M (Chemstation Integrator)
Title : RSK 175
Last Update : Wed Jun 24 11:41:55 2015
Response via : Multiple Level Calibration

Volume Inj. : 1ML
Signal Phase : CARBOPACK
Signal Info :

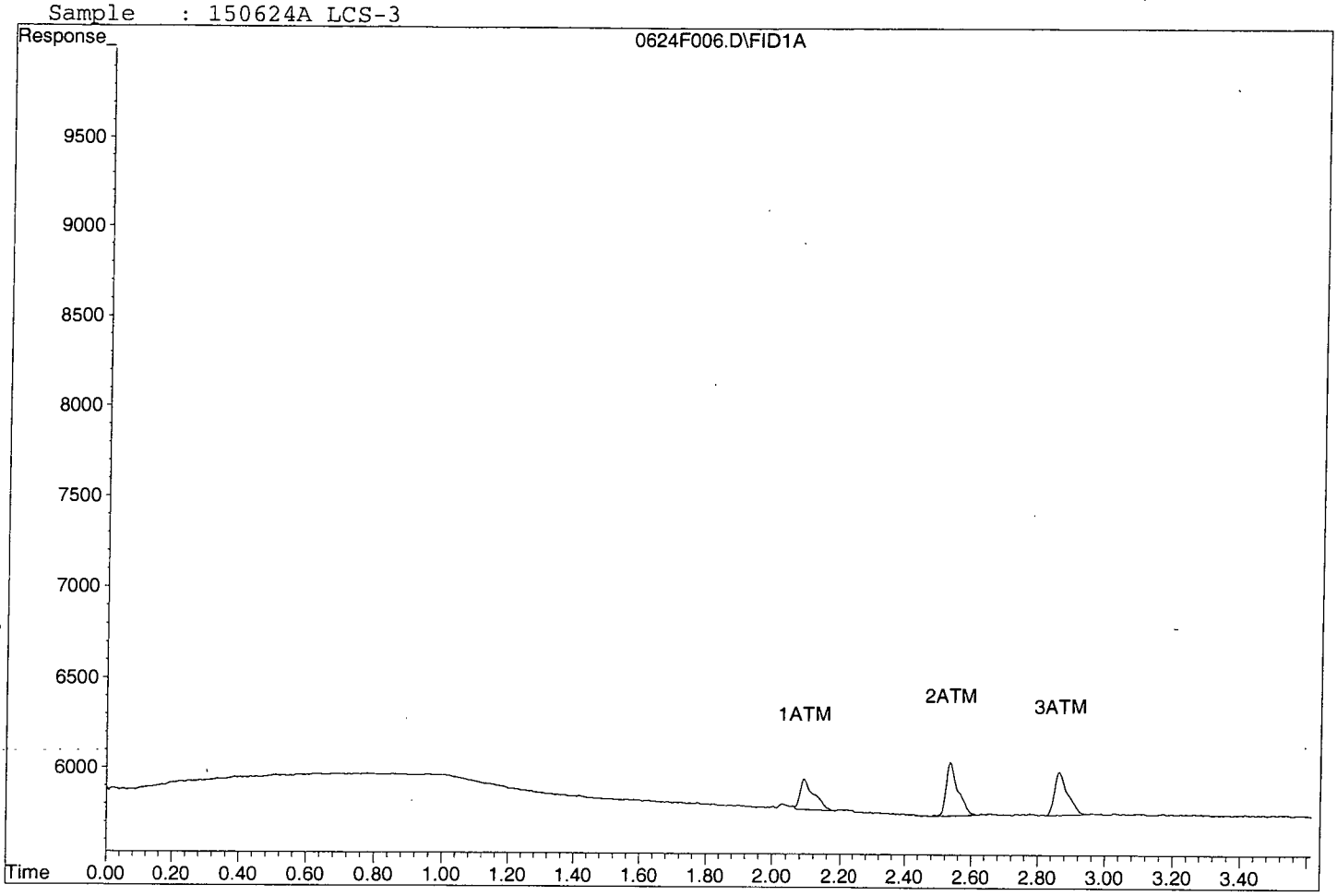
Compound	R.T.	Response	Conc Units
Target Compounds			
1) ATM Methane	2.09	4841	14.627 ppb ✓
2) ATM Ethane	2.54	7376	25.961 ppb
3) ATM Ethene	2.86	6494	21.403 ppb

Algorithm $\frac{4841\ (1.00)}{331} = 14.63$ ✓

JE 6-25-15

Quantitation Report

Data File: V:\FRODO\DATA\150624\0624F006.D
Sample : 150624A LCS-3



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 Nitrogen 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 #164PLU4S PC05L-34439	Primary Source Std #164PLU4 SPC05L-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 Nitrogen 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 #164PLU4S PC05L-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 3/29/15A into 10mL P&T water

final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

Intermediate Calibration Stock Standard 100ppmV 06/15/15 **Expires 7/15/15** **RS 06/15/15**
Prepared in a 1 L Tedlar bag. Add 990mL Nitrogen and 10mL of 164PLU4SPC05L-34437 standard.

CCV4 06/15/15 Expires 07/15/15 **RS 06/15/15**
4mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

CCV3 06/15/15 Expires 07/15/15 **RS 06/15/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

LCS-4 150615A **RS 06/15/15**
4mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

AZ17333W11 MS/MSD (level 4) **RS 06/15/15**
4mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

CCV3 06/24/15 Expires 07/15/15 **RS 06/24/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

CCV4 06/24/15 Expires 07/15/15 **RS 06/24/15**
4mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:26.7ppb Methane, 50.0ppb Ethane, and 46.6ppb Ethene

LCS-3 150624A **RS 06/24/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

AZ17690W08 MS/MSD (level 3) **RS 06/24/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

CCV3 06/25/15 Expires 07/15/15 **RS 06/25/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

LCS-3 150625A **RS 06/25/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

AZ17815W05 MS/MSD (level 3) **RS 06/25/15**
2mL of Intermediate cal stock 6/15/15 into 10mL P&T water
final conc:13.3ppb Methane, 25.0ppb Ethane, and 23.3ppb Ethene

76687

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
5	5	0329F005.D	1	**RSK Std -3 3/29/15 RS**	Water	29 Mar 2015 09:04
9	9	0329F009.D	1	**RSK Std - 1A 3/29/15 RS**	Water	29 Mar 2015 09:45
10	10	0329F010.D	1	**RSK Std 1 3/29/15 RS**	Water	29 Mar 2015 10:04
12	12	0329F012.D	1	**RSK Std - 4 3/29/15 RS**	Water	29 Mar 2015 10:16
13	13	0329F013.D	1	**RSK Std - 5 3/29/15 RS**	Water	29 Mar 2015 10:20
15	15	0329F015.D	1	**RSK Std 6 3/29/15 RS**	Water	29 Mar 2015 10:34
16	16	0329F016.D	1	**RSK Std - 7 3/29/15 RS**	Water	29 Mar 2015 11:11
41	1	0402F001.D	1	**RSK STD - 8 04-02-15 RS**	Water	2 Apr 2015 07:55
42	2	0402F002.D	1	**RSK SS - 4 04-02-15 RS**	Water	2 Apr 2015 08:15
4	4	0624F004.D	1	**RSK CCV3 150624 RS**	Water	24 Jun 2015 08:20
6	6	0624F006.D	1	150624A LCS-3	Water	24 Jun 2015 09:04
8	8	0624F008.D	1	150624A BLK-1	Water	24 Jun 2015 09:44
23	23	0624F023.D	1	**RSK CCV4 150624 RS**	Water	24 Jun 2015 11:53
35	35	0624F035.D	1	AZ17907W01	Water	24 Jun 2015 15:23
36	36	0624F036.D	1	AZ17909W01	Water	24 Jun 2015 15:29
37	37	0624F037.D	1	**RSK CCV4 150624 RS**	Water	24 Jun 2015 15:34

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: **150623W-17823 - 198538**
Batch ID: #6850-150623A

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	06/23/15	06/27/15

Quant Method: QTLMFL2
Run #: T627_007.d
Instrument: AGIL_6460
Sequence: TQ062715
Initials: RP

GC SC-Blank-REG MDLs
Printed: 07/06/15 8:34:21 AM

Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150623W-17823 LCS - 198538**
Batch ID: #6850-150623A

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	0.616	103	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	06/23/15
Analysis Date :	06/27/15
Instrument :	AGIL_6460
Run :	T627_005.d
Initials :	RP

Printed: 07/06/15 8:34:17 AM
APPL Standard LCS

Interferrence Check Sample

Perchlorate EPA 6850 Water

APPL ID: 150623W-17823 ICS-198538
Batch ID: #6850-150623A

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	0.675	112.5%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	06/23/15
Analysis Date:	06/27/15
Instrument:	AGIL_6560
Run:	T627_006.D
Initials:	RP

EPA 6850

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/27/15

Matrix: WATER Instrument: AGIL_6460

Blank ID: 150623A-BLK Time Analyzed: 1923

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150623A-LCS	Lab Control Spike	T627_005.d	06/27/15 1846
150623A-BLK	Blank	T627_007.d	06/27/15 1923
AZ17907	S67-MW021-061715	T627_023.d	06/28/15 0021
AZ17908	S67-MW020-061715	T705_022.d	07/05/15 1938
AZ17909	S67-MW025-061715	T705_024.d	07/05/15 2016

Comments: Batch: #6850-150623A

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.** **76687**

Lab File ID (Standard): T627_003.d

Instrument ID: Agilent 6460 Triple Quad LC/MS

	PER_IS			
	12_HOUR_STD AVERAGE	12081323		
	UPPER LIMIT RESPONSE	18121985		
	LOWER LIMIT RESPONSE	6040662		
Data File ID:	Sample ID:	Analysis Date and Time	IS AREA COUNT #	IS R.T. #
T627_002.d	PER_CCV 0.0004 ug/ml 06/27/15	6/27/15 17:50	10246572	14.007
T627_003.d	PER_CCV 0.002 ug/ml 06/27/15	6/27/15 18:09	12081323	14.017
T627_005.d	150623WA_LCS-1 1052.6 DF 06/23/15	6/27/15 18:46	8637265	14.068
T627_006.d	150623W_ICSA 1052.6 DF 06/23/15	6/27/15 19:04	6625849	13.171
T627_007.d	150623WBLKA 1052.6 DF 06/23/15	6/27/15 19:23	9544060	14.048
T627_015.d	PER_CCV 0.0004 ug/ml 06/27/15	6/27/15 21:52	9773292	14.109
T627_016.d	PER_CCV 0.002 ug/ml 06/27/15	6/27/15 22:11	10360182	14.139
T627_023.d	AZ17907_W03 1052.6 DF 06/23/15	6/28/15 0:21	6687423	13.722
T627_027.d	PER_CCV 0.0004 ug/ml 06/27/15	6/28/15 1:36	5976722	14.2
T627_028.d	PER_CCV 0.002 ug/ml 06/27/15	6/28/15 1:54	8545053	14.2

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.** **Page 1 of 1**

Lab File ID (Standard):T705_003.d **Date Analyzed: 07/05/15 13:44 thru 07/05/15 21:49**

Instrument ID: Agilent 6460 Triple Quad LC/MS

	PER_IS			
	12_HOUR_STD AVERAGE	8885934		
	UPPER LIMIT RESPONSE	13328901		
	LOWER LIMIT RESPONSE	4442967		
Data File ID:	Sample ID:	Analysis Date and Time	IS AREA COUNT #	IS R.T. #
T705_003.d	PER_CCV 0.002 ug/ml 06/27/15	07/05/15 13:44	8885934	13.406
T705_015.d	PER_CCV 0.0004 ug/ml 06/27/15	07/05/15 17:28	5539776	12.764
T705_016.d	PER_CCV 0.002 ug/ml 06/27/15	07/05/15 17:46	7213194	13.304
T705_022.d	AZ17908_W03 10526.3 DF 06/23/15_6/27	07/05/15 19:38	8038089	12.336
T705_024.d	AZ17909_W03 105263.2 DF 06/23/15_6/27	07/05/15 20:16	6819604	13.263
T705_028.d	PER_CCV 0.0004 ug/ml 06/27/15	07/05/15 21:30	6048909	12.794
T705_029.d	PER_CCV 0.002 ug/ml 06/27/15	07/05/15 21:49	8149373	13.344

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
Sample Name: PER_IS_50:50 0.005 ug/ml 11/11/14
Vial Number: NA
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
Sample Name: PERCHLORATE 0.0001 ug/ml 11/11/14
Vial Number: NA
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
Sample Name: PERCHLORATE 0.0002 ug/ml 11/11/14
Vial Number: NA
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
Sample Name: PERCHLORATE 0.0004 ug/ml 11/11/14
Vial Number: NA
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
Sample Name: PERCHLORATE 0.001 ug/ml 11/11/14
Vial Number: NA
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\150705
Instrument Name : TQ (Agilent 6460 Triple Quad LC/MS)
Method File : 6460_ESI_PER_N_NEWER_K'_COLUMN.m
Operator : BA

Date Aquired: 07/05/15 13:44 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 06/27/15 Data File ID: T705_003.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.412	4169858	3.3
2)	Perchlorate_85	13.44	1250542	

Date Aquired: 07/05/15 17:28 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 06/27/15 Data File ID: T705_015.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.77	604230	3.0
2)	Perchlorate_85	12.737	199384	

Date Aquired: 07/05/15 17:46 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 06/27/15 Data File ID: T705_016.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.3	3458048	3.4
2)	Perchlorate_85	13.317	1025582	

Date Aquired: 07/05/15 19:38 Vial Number: NA
Sample Name: AZ17908_W03 10526.3 DF 06/23/15_6/27 Data File ID: T705_022.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.332	6042201	3.3
2)	Perchlorate_85	12.329	1857290	

Date Aquired: 07/05/15 20:16 Vial Number: NA
Sample Name: AZ17909_W03 105263.2 DF 06/23/15_6/27 Data File ID: T705_024.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.27	11573562	3.5
2)	Perchlorate_85	13.277	3334471	

Date Aquired: 07/05/15 21:30 Vial Number: NA
Sample Name: PER_CCV 0.0004 ug/ml 06/27/15 Data File ID: T705_028.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	12.811	610878	2.8
2)	Perchlorate_85	12.859	215112	

Date Aquired: 07/05/15 21:49 Vial Number: NA
Sample Name: PER_CCV 0.002 ug/ml 06/27/15 Data File ID: T705_029.d

#	NAME	Ret Time	Target Response	Ratio
1)	Perchlorate_83	13.351	3859193	3.4
2)	Perchlorate_85	13.378	1146076	

EPA METHOD 6850
Perchlorate
LC/MS

Sample Data

APPL, INC.

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-MW021-061715
Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687
APPL ID: AZ17907
QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	0.25 J	0.60	0.400	0.200	ug/L	06/23/15	06/28/15

J = Estimated value.

Quant Method:	QTLMFL2
Run #:	T627_023.d
Instrument:	AGIL_6460
Sequence:	TQ062715
Dilution Factor:	1
Initials:	RP

Printed: 07/06/15 8:34:24 AM
APPL-F1-SC-NoMC-REG MDLs

Data File ID: T627_023.d

Date Injected : 06/28/15

Time Injected : 0:21

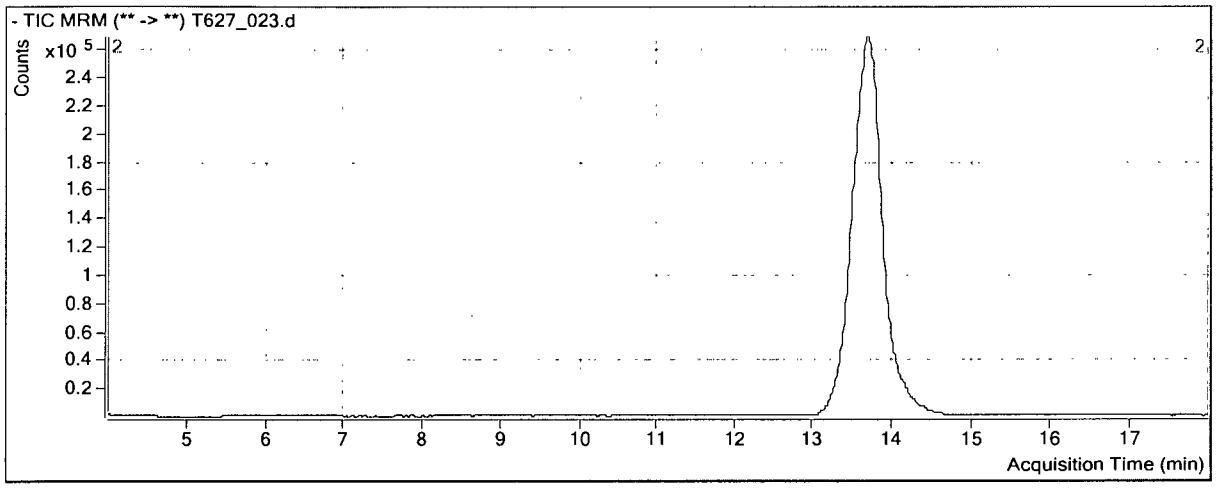
Sample ID : AZ17907_W03 1052.6 DF 06/23/15

Client ID : S67-MW021-061715

Retention Time	Area Count Response	Compound_ID Product Ion			
13.722	6687423	PER_IS_89			
13.759	411457	Perchlorate_83	(411457 * 0.0050) / (1.27 * 6687423.00) *	1052.60 =	0.254922 ppb
13.694	149475	Perchlorate_85	(149475 * 0.0050) / (0.39 * 6687423.00) *	1052.60 =	0.300397 ppb

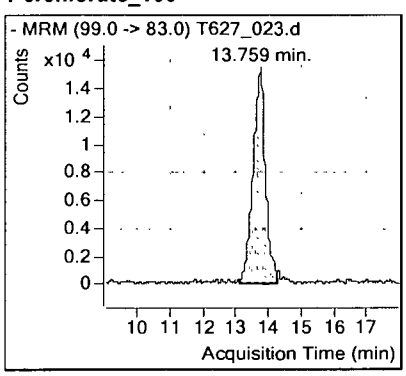
Quantitative Analysis Sample Report

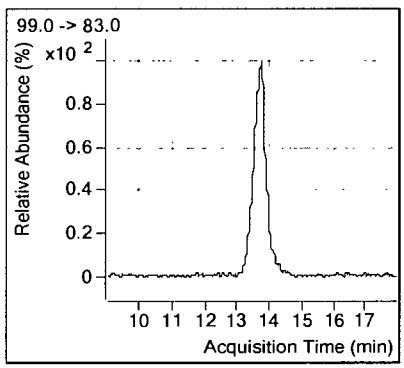
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_023.d	**Sample Name**	AZ17907_W03 1052.6 DF 06/23/15
Sample Type	Sample	**Acq_Date**	06/28/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	0:21
ClientID	S67-MW021-061715	**Inj Vol**	20

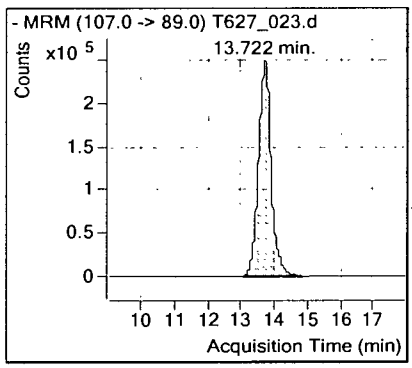


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.759	411457	6687423
Perchlorate_102	PER_IS_108	13.694	149475	6687423

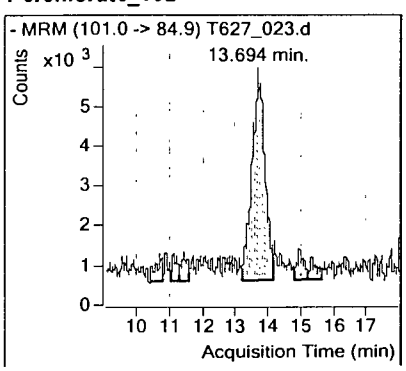
Perchlorate_100

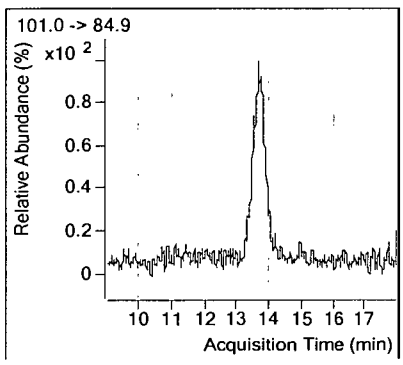


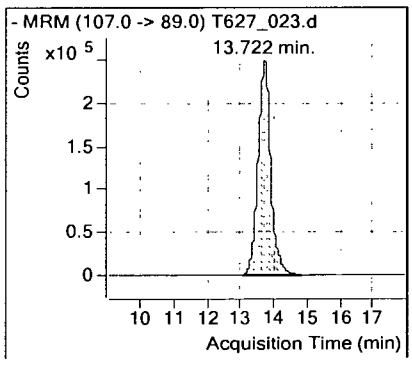




Perchlorate_102







Perchlorate

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: 76687

Sample ID: S67-MW020-061715

APPL ID: AZ17908

Sample Collection Date: 06/17/15

QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	31	6.00	4.000	2.000	ug/L	06/23/15	07/05/15

Quant Method:	QTLMFL2
Run #:	T705_022.d
Instrument:	AGIL_6460
Sequence:	TQ070515
Dilution Factor:	10
Initials:	MP

Printed: 07/07/15 4:41:28 PM
APPL-F1-SC-NoMC-REG MDLs

Data File ID: T705_022.d

Date Injected : 07/05/15

Time Injected : 19:38

Sample ID : AZ17908_W03 10526.3 DF 06/23/15_6/27

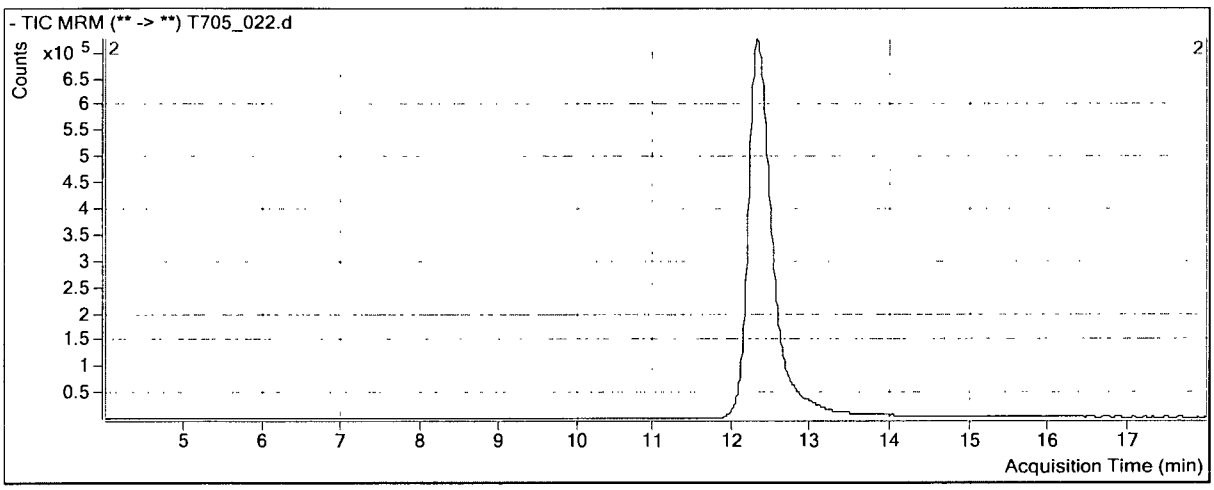
Client ID : S67-MW020-061715

Retention Time		Area Count Response	Compound_ID Product Ion				
12.336		8038089	PER_IS_89				
12.332		6042201	Perchlorate_83	(6042201 * 0.0050) / (1.27 *	8038089.00) *	10526.30 =	31.145628 ppb
12.329	*	1857290	Perchlorate_85	(1857290 * 0.0050) / (0.39 *	8038089.00) *	10526.30 =	31.054492 ppb

* MANUAL INTEGRAION

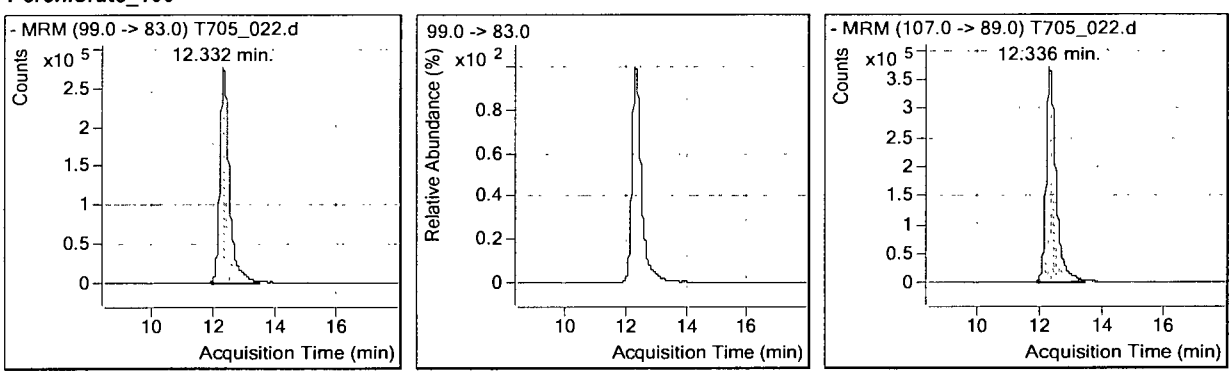
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_022.d	**Sample Name**	AZ17908_W03 10526.3 DF 06/23/15_6/27
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	19:38
ClientID	S67-MW020-061715	**Inj Vol**	20

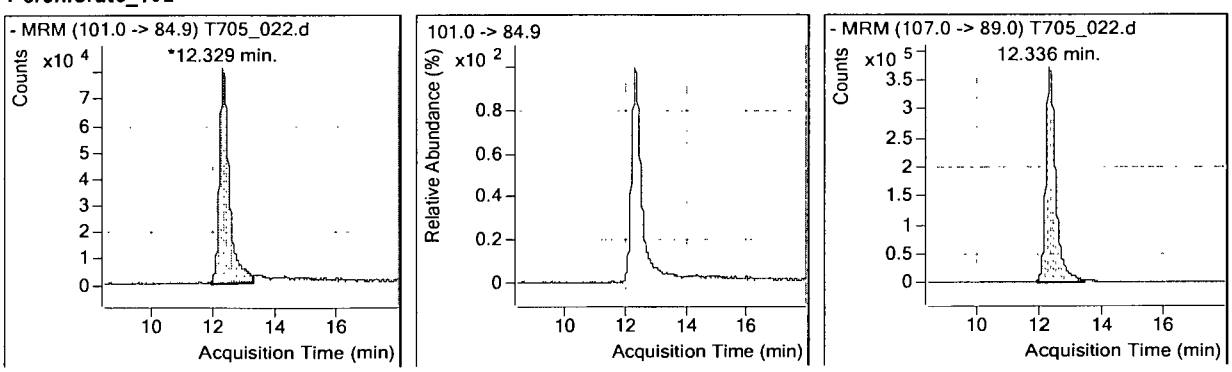


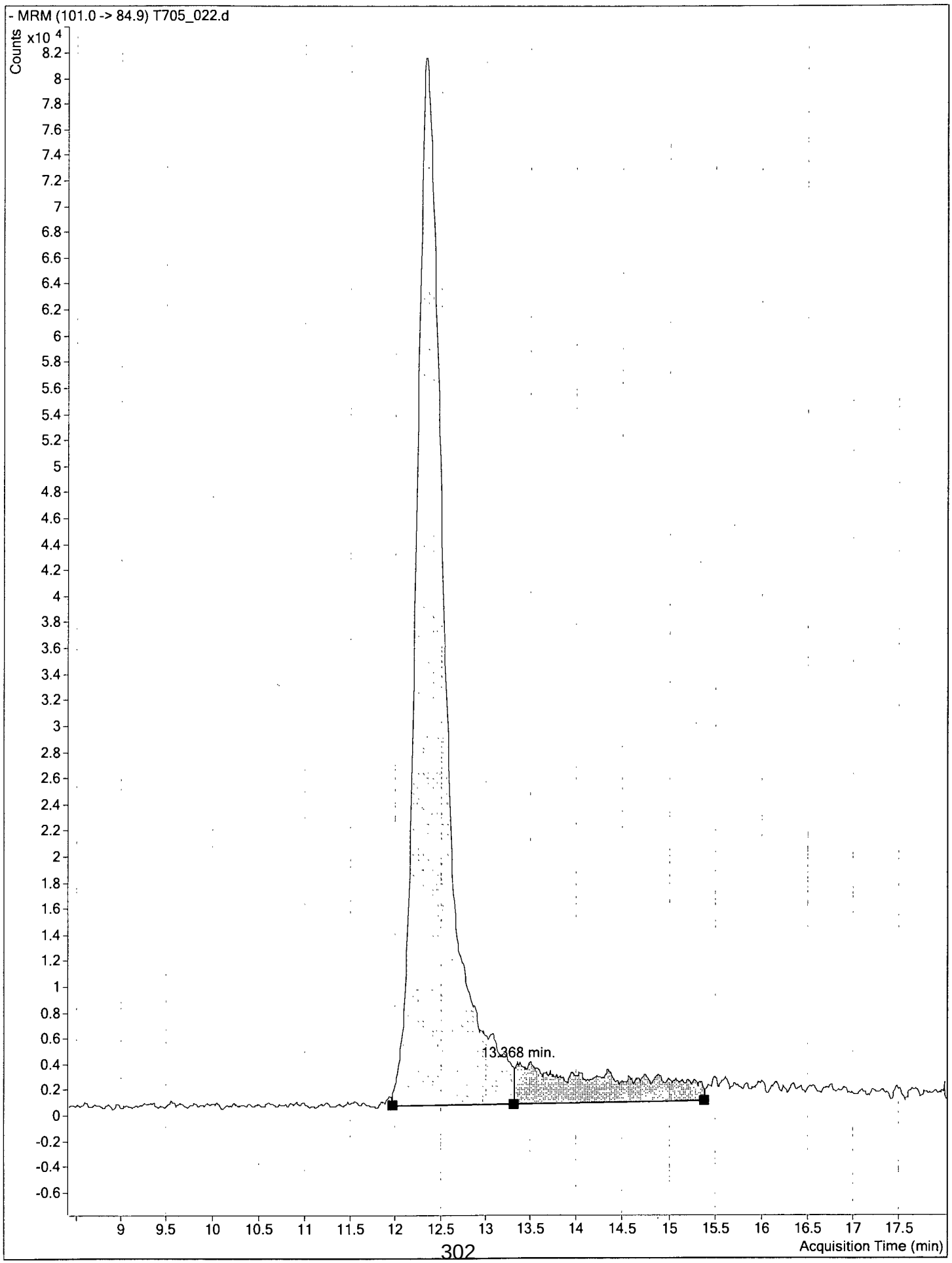
Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108		12.332	6042201	8038089	
Perchlorate_102	PER_IS_108	*	12.329	1857290	8038089	* MANUAL INT

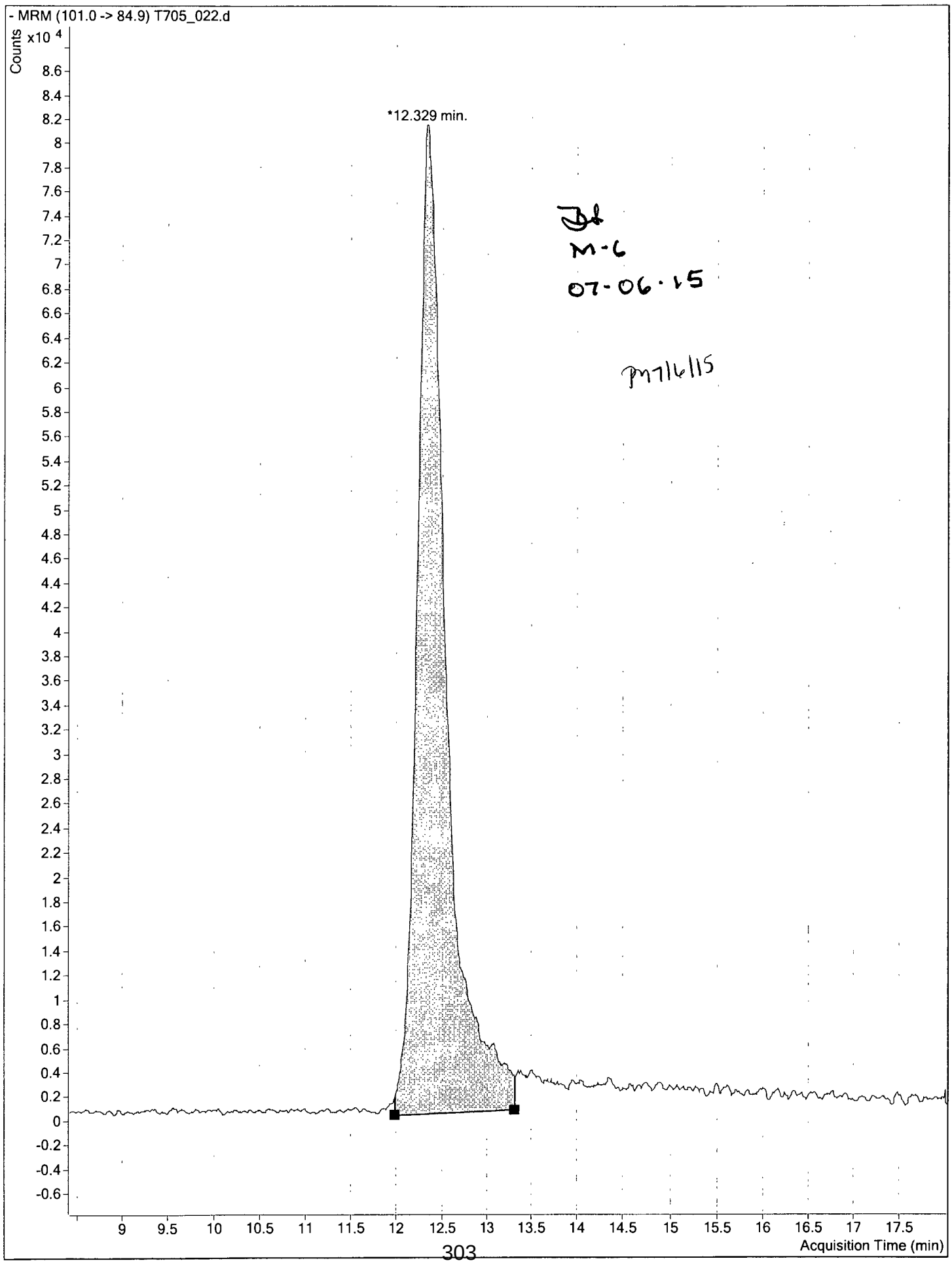
Perchlorate_100



Perchlorate_102




- MRM (101.0 -> 84.9) T705_022.d
Counts
x10 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
0
-0.2
-0.4
-0.6
13.368 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)



M-6
07-06-15

7/16/15

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-MW025-061715
Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687
APPL ID: AZ17909
QCG: #6850-150623A-198538

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 6850	PERCHLORATE	700	60.00	40.000	20.000	ug/L	06/23/15	07/05/15

Quant Method:	QTLMFL2
Run #:	T705_024.d
Instrument:	AGIL_6460
Sequence:	TQ070515
Dilution Factor:	100
Initials:	MP

Printed: 07/07/15 4:41:28 PM
APPL-F1-SC-NoMC-REG MDLs

Data File ID: T705_024.d

Date Injected : 07/05/15

Time Injected : 20:16

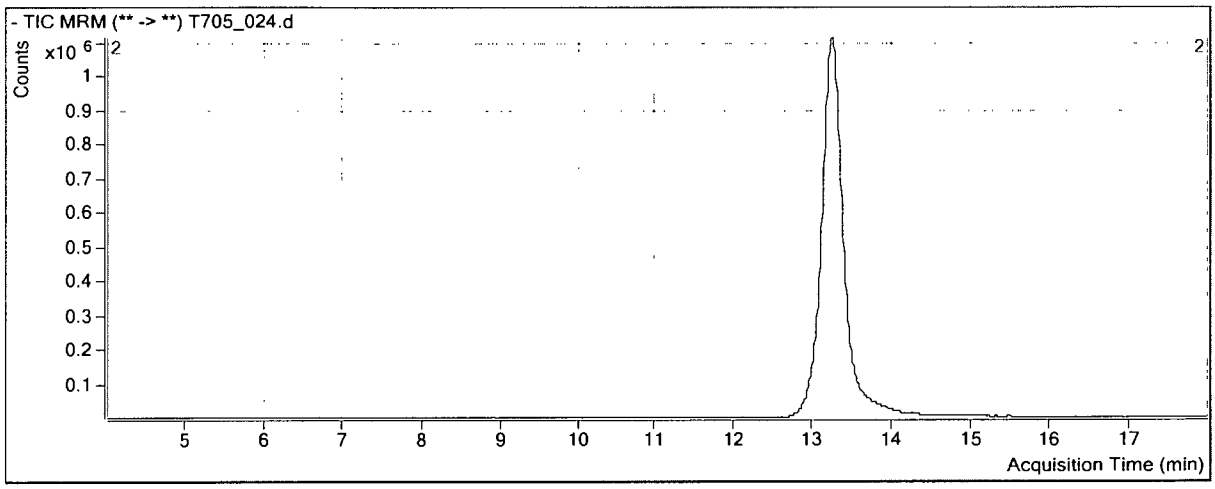
Sample ID : AZ17909_W03 105263.2 DF 06/23/15_6/27

Client ID : S67-MW025-061715

Retention Time	Area Count Response	Compound_ID Product Ion		
13.263	6819604	PER_IS_89		
13.200	11573562	Perchlorate_83	(11573562 * 0.0050) / (1.27 * 6819604.00) * 105263.20 = 703.175045 ppb	
13.277	3334471	Perchlorate_85	(3334471 * 0.0050) / (0.39 * 6819604.00) * 105263.20 = 657.152452 ppb	

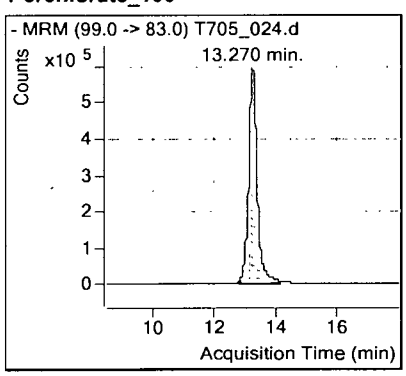
Quantitative Analysis Sample Report

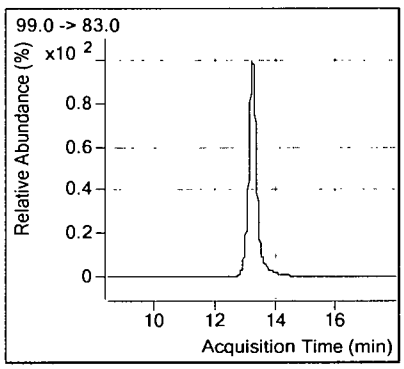
Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_024.d	**Sample Name**	AZ17909_W03 105263.2 DF 06/23/15_6/27
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:16
ClientID	S67-MW025-061715	**Inj Vol**	20

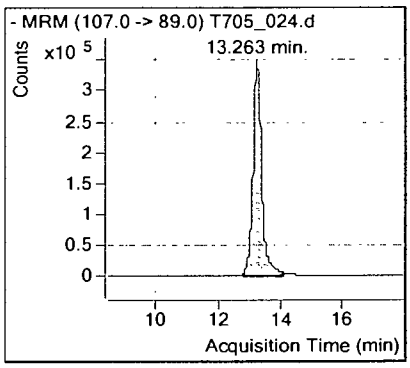


Compound	ISTD	RT	Resp	ISTD RESP
Perchlorate_100	PER_IS_108	13.270	11573562	6819604
Perchlorate_102	PER_IS_108	13.277	3334471	6819604

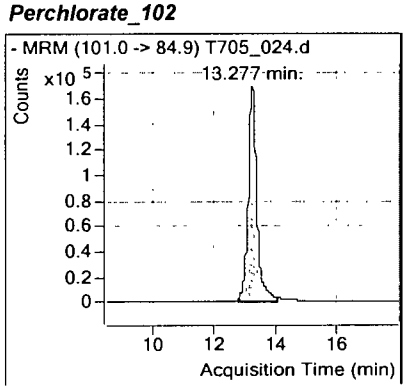
Perchlorate_100

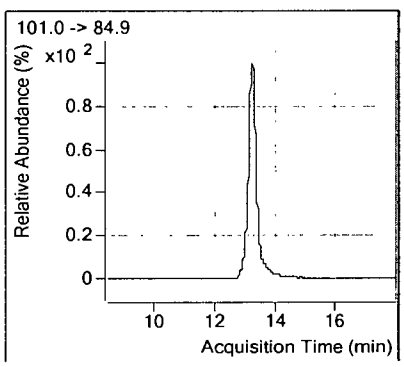


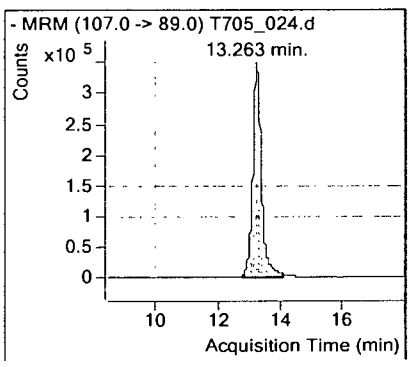




Perchlorate_102







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_003.d

Date Injected : 03/12/15

Time Injected : 17:52

Sample ID : PERCHLORATE 0.0002 ug/ml 11/11/14

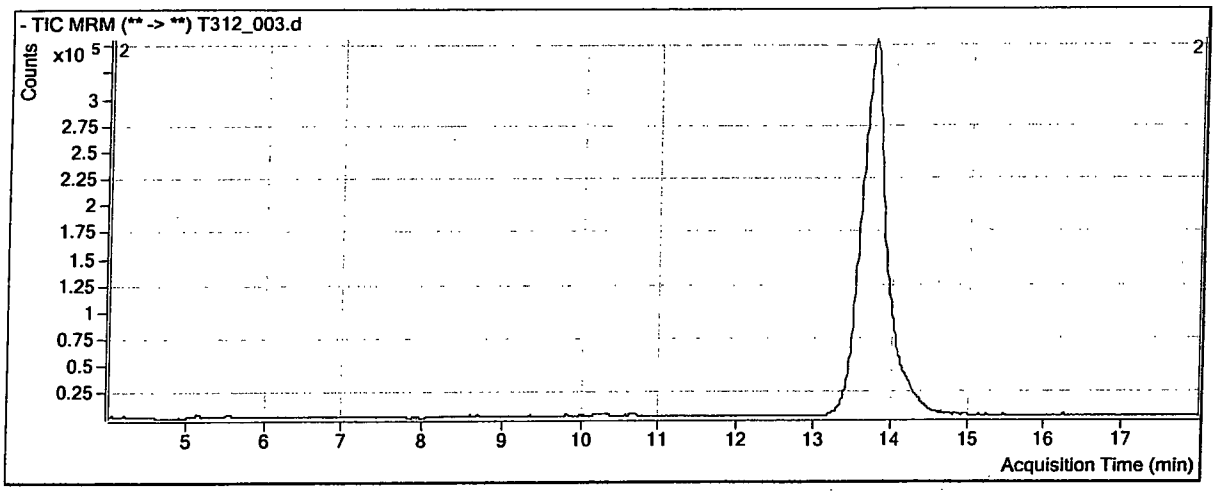
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
13.732		8337058	PER_IS_89
13.789	*	446712	Perchlorate_83
13.704		144754	Perchlorate_85

* MANUAL INTEGRAION

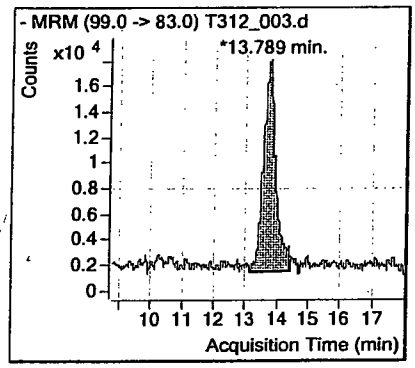
Quantitative Analysis Sample Report

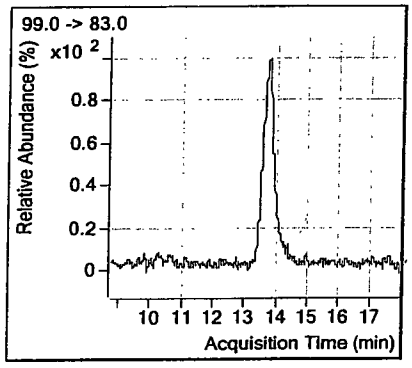
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_003.d	**Sample Name**	PERCHLORATE 0.0002 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	17:52
ClientID	NA	**Inj Vol**	20

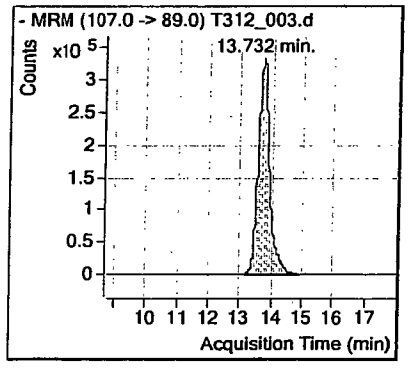


Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108	*	13.789	446712	8337058	* MANUAL INT
Perchlorate_102	PER_IS_108		13.704	144754	8337058	

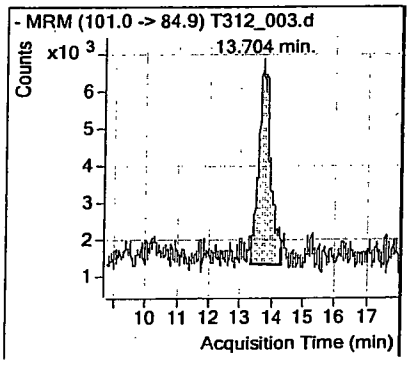
Perchlorate_100

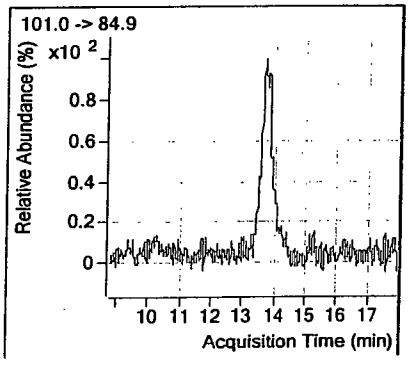


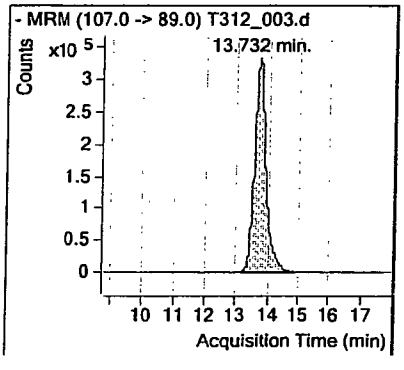


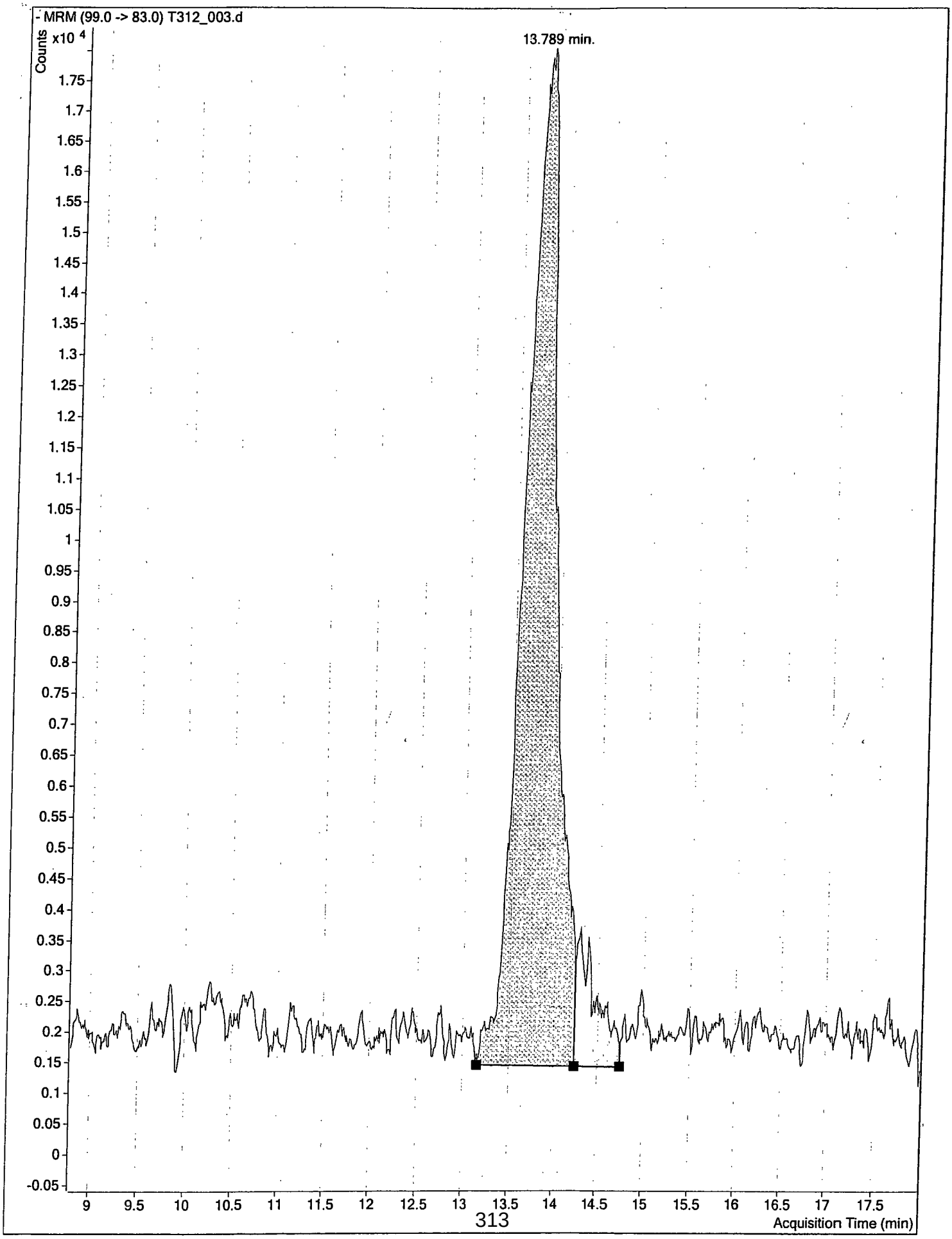


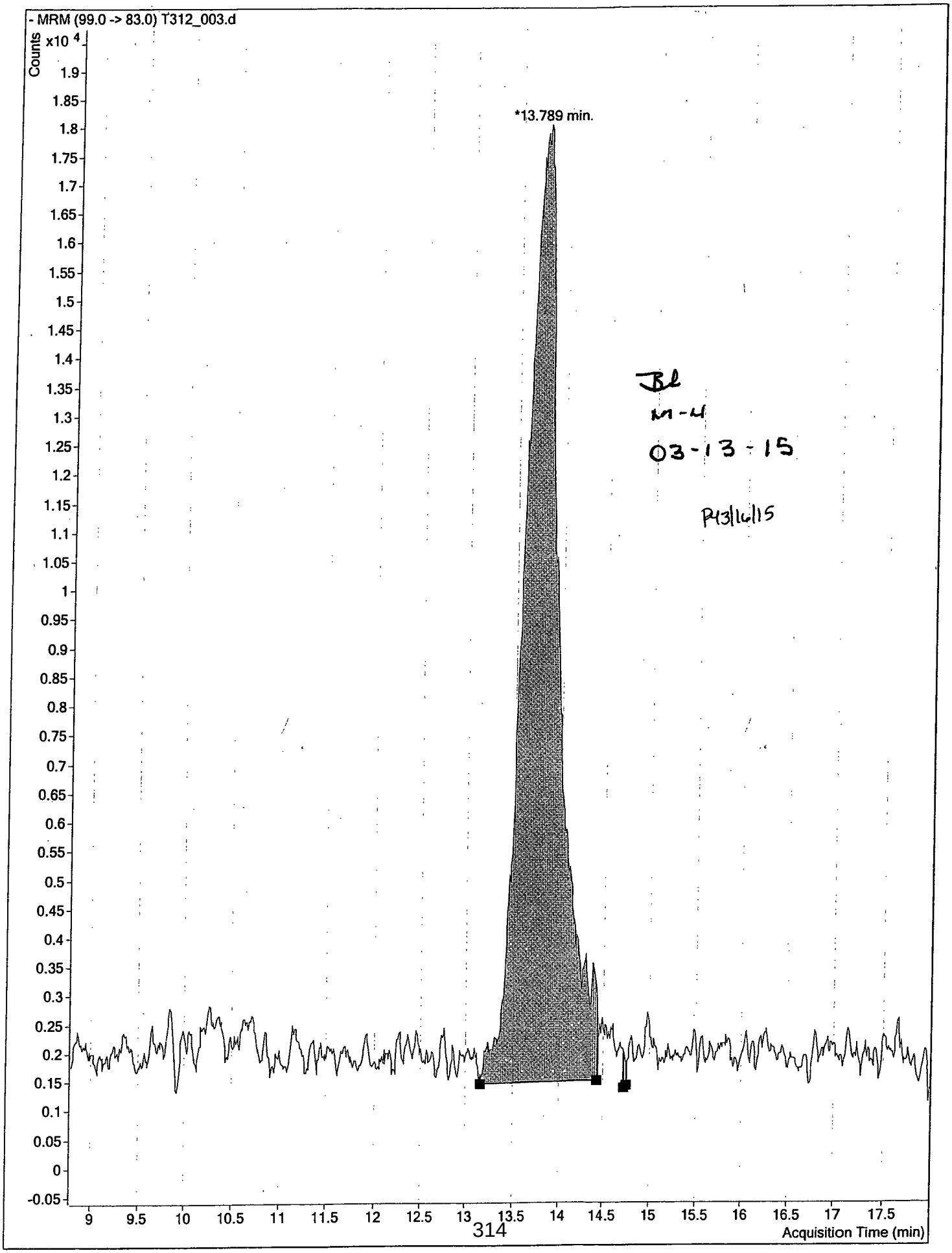
Perchlorate_102








- MRM (99.0 -> 83.0) T312_003.d
Counts
x10 4
13.789 min.
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
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_003.d
Counts
x10 4
1.9
1.85
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
*13.789 min.
BL
M-4
03-13-15
R13/16/15
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)

Data File ID: T312_004.d

Date Injected : 03/12/15

Time Injected : 18:11

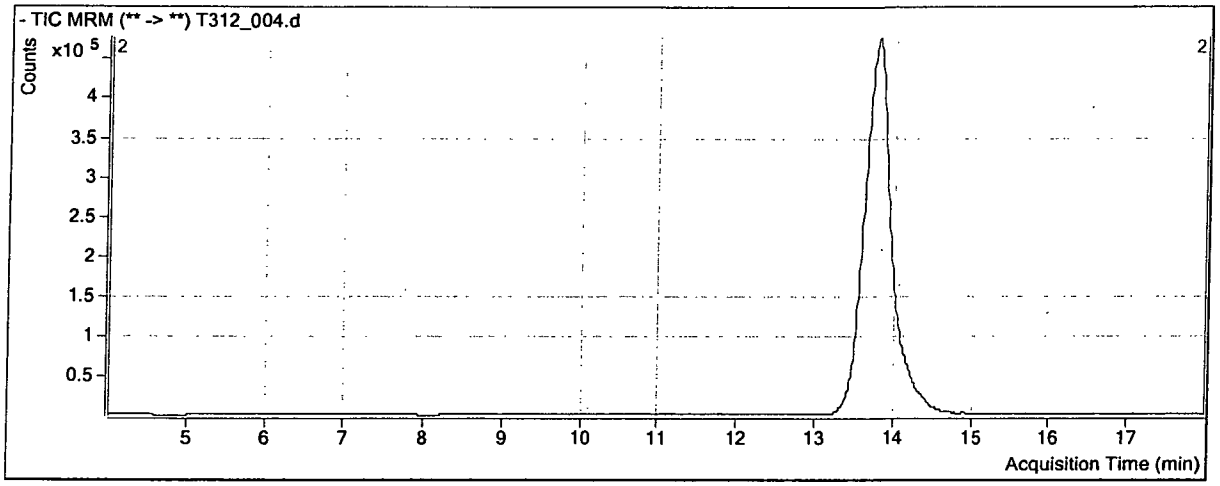
Sample ID : PERCHLORATE 0.0004 ug/ml 11/11/14

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

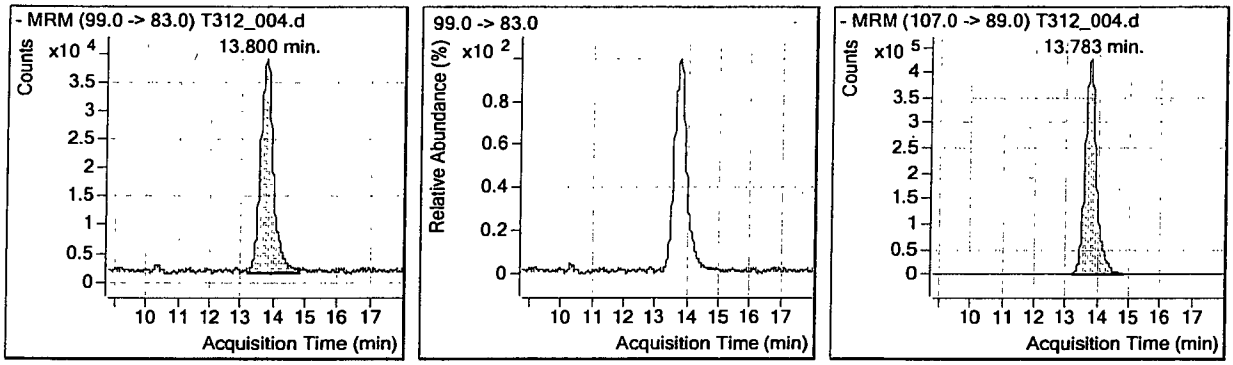
Quantitative Analysis Sample Report

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

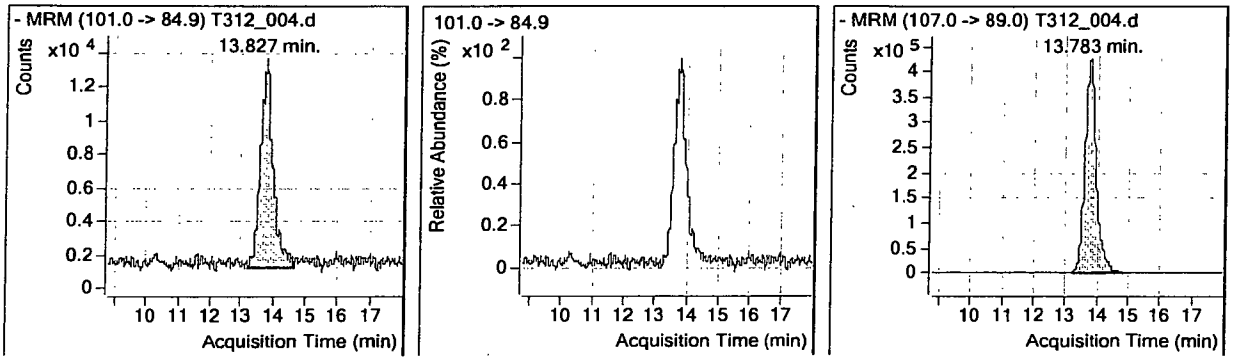


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.800	1023403	10671196
Perchlorate_102	PER_IS_108	13.827	337305	10671196

Perchlorate_100



Perchlorate_102



Data File ID: T312_005.d

Date Injected : 03/12/15

Time Injected : 18:29

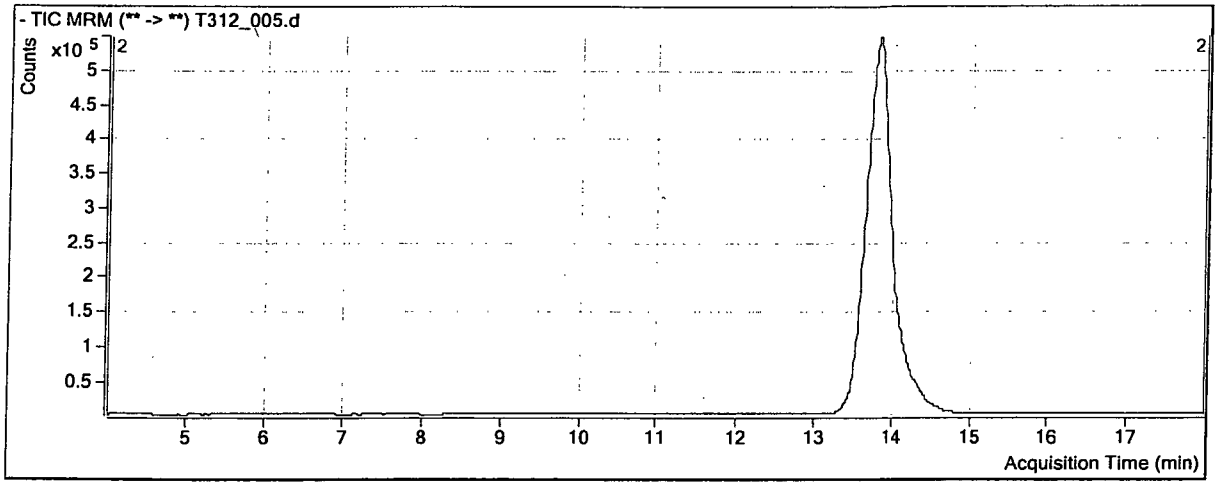
Sample ID : PERCHLORATE 0.001 ug/ml 11/11/14

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

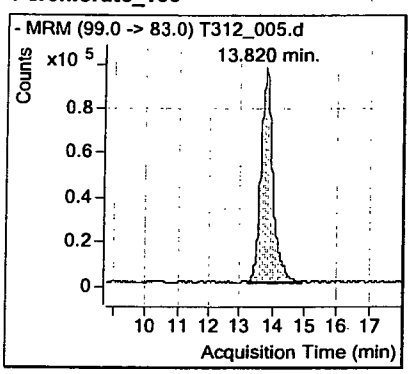
Quantitative Analysis Sample Report

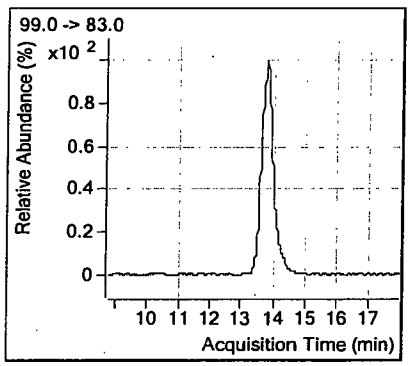
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_005.d	**Sample Name**	PERCHLORATE 0.001 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:29
ClientID	NA	**Inj Vol**	20

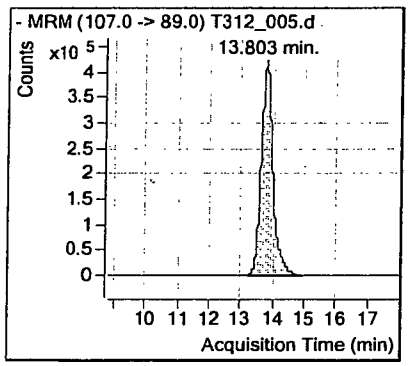


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.820	2483393	10651968
Perchlorate_102	PER_IS_108	13.827	781617	10651968

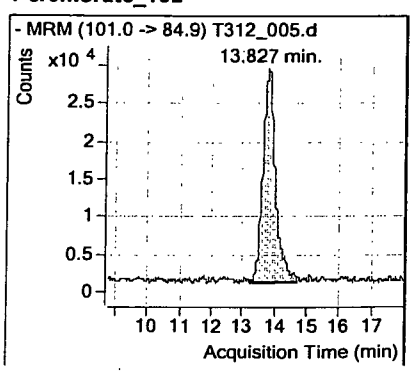
Perchlorate_100

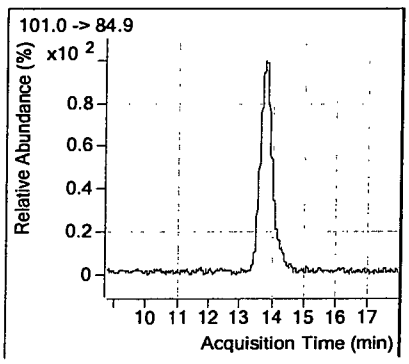


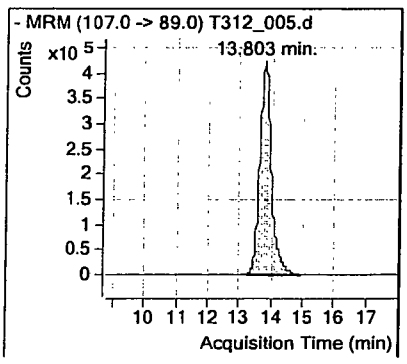




Perchlorate_102







Data File ID: T312_006.d

Date Injected : 03/12/15

Time Injected : 18:48

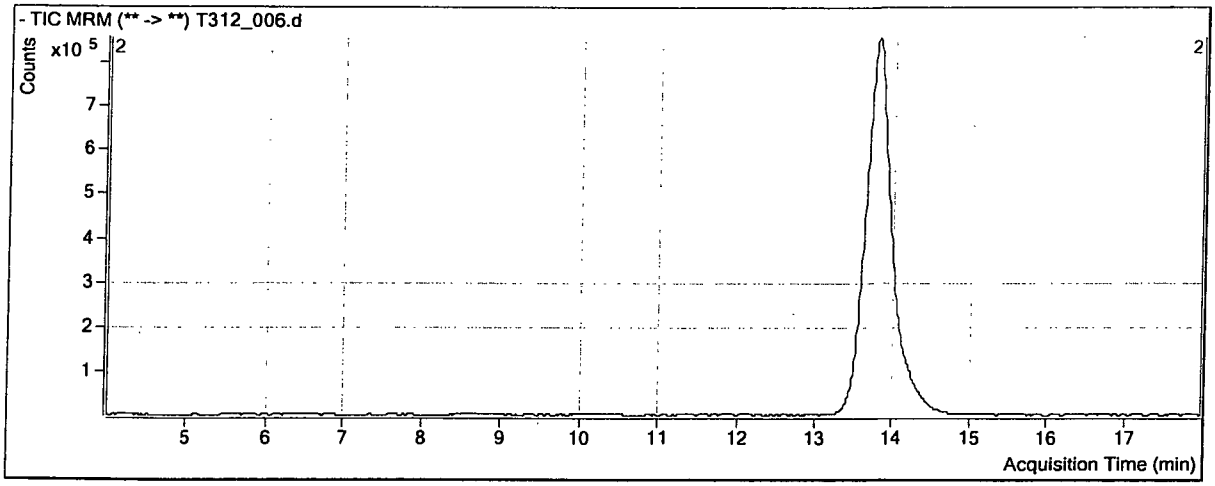
Sample ID : PERCHLORATE 0.002 ug/ml 11/11/14

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

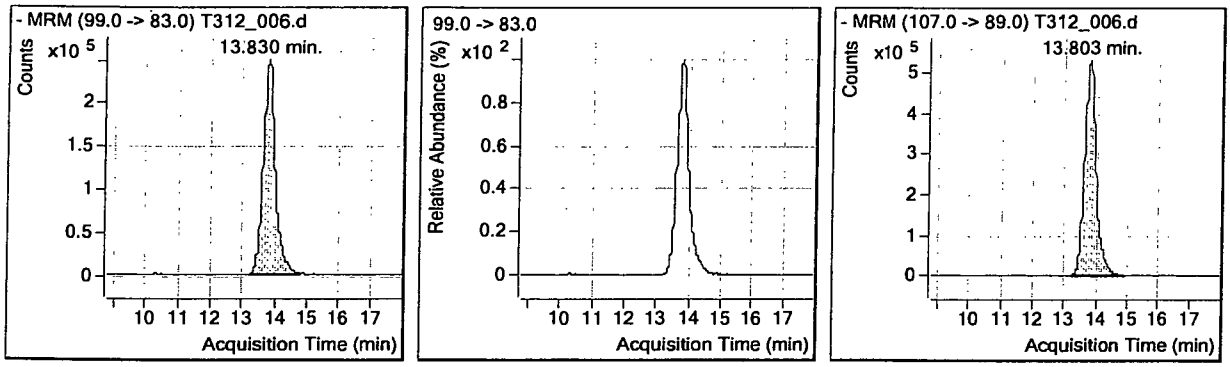
Quantitative Analysis Sample Report

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

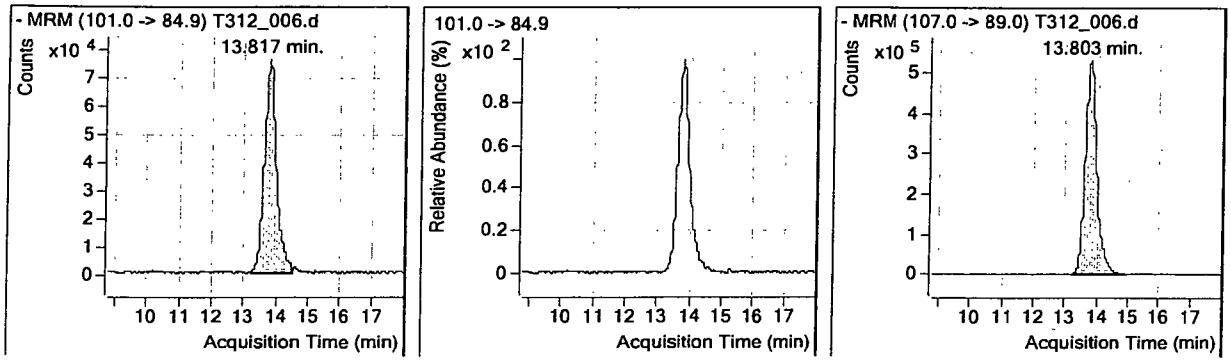


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.830	6351752	13529952
Perchlorate_102	PER_IS_108	13.817	1920912	13529952

Perchlorate_100



Perchlorate_102



Data File ID: T312_007.d

Date Injected : 03/12/15

Time Injected : 19:07

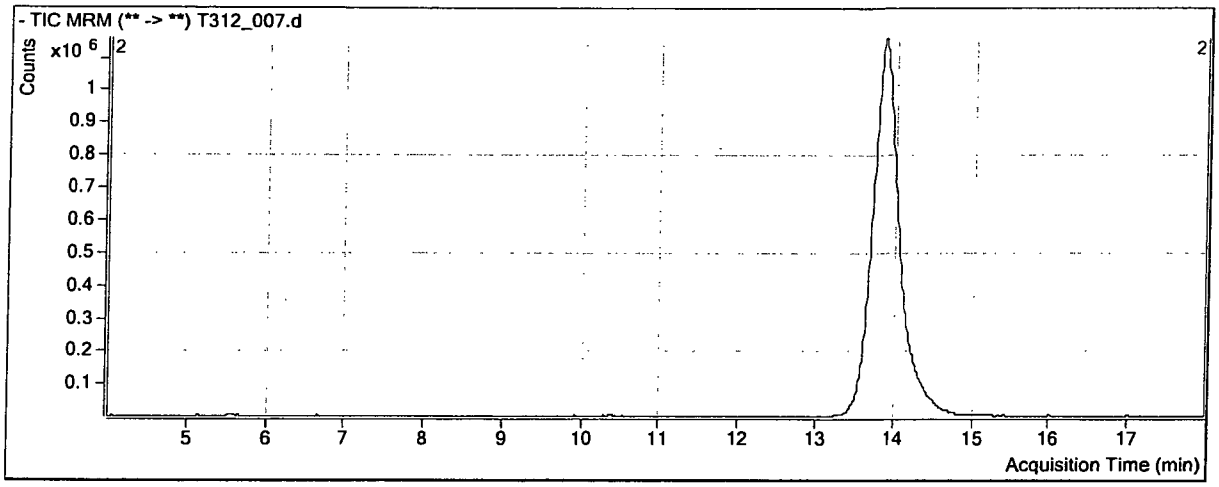
Sample ID : PERCHLORATE 0.005 ug/ml 11/11/14

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

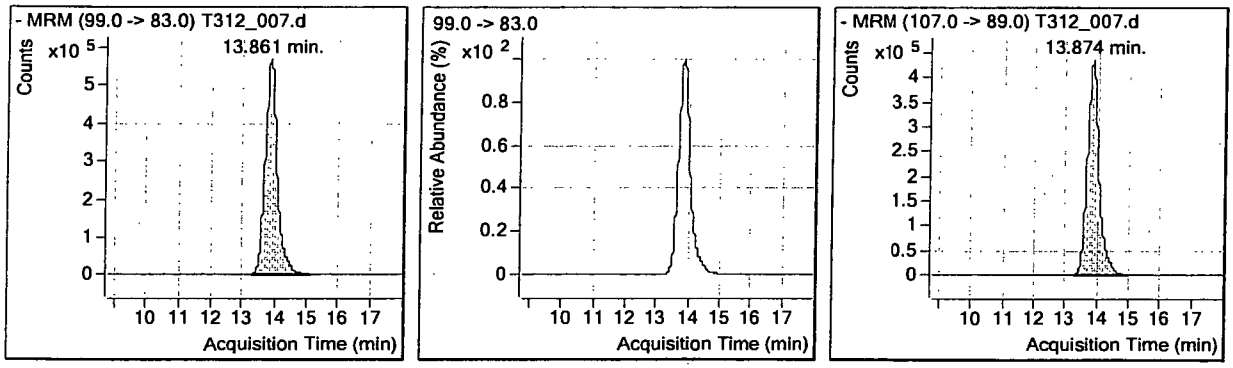
Quantitative Analysis Sample Report

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

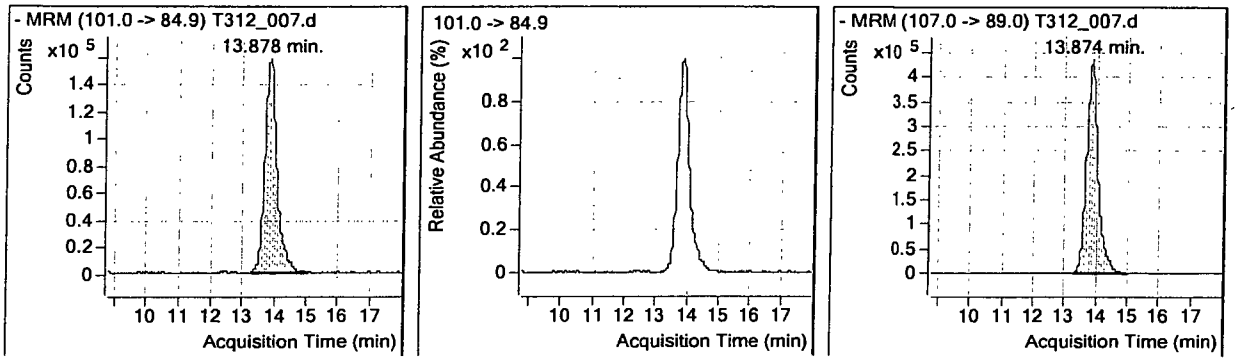


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.861	14499255	11028880
Perchlorate_102	PER_IS_108	13.878	4209044	11028880

Perchlorate_100



Perchlorate_102



Data File ID: T312_008.d

Date Injected : 03/12/15

Time Injected : 19:25

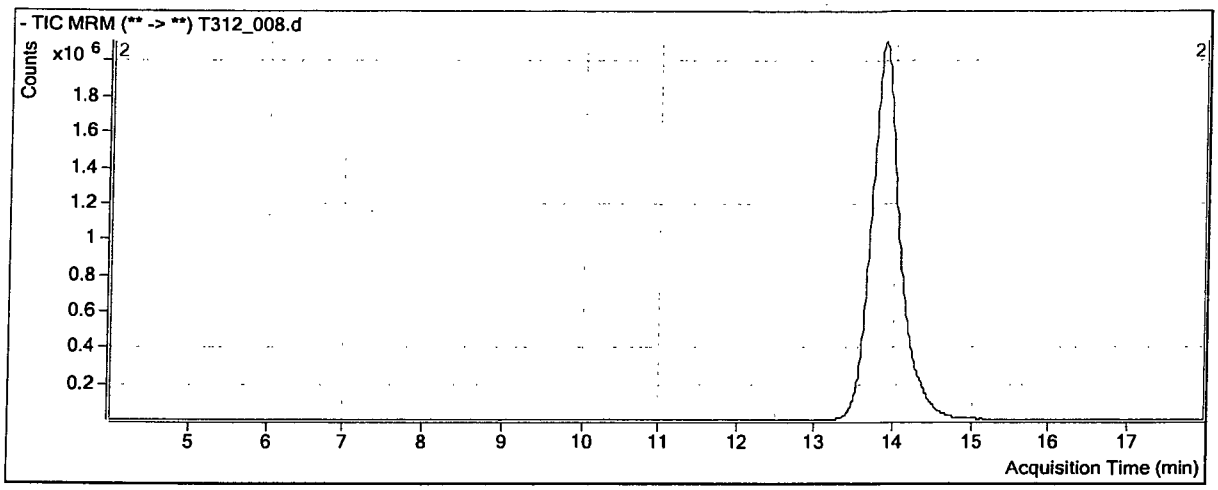
Sample ID : PERCHLORATE 0.010 ug/ml 08/27/14

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

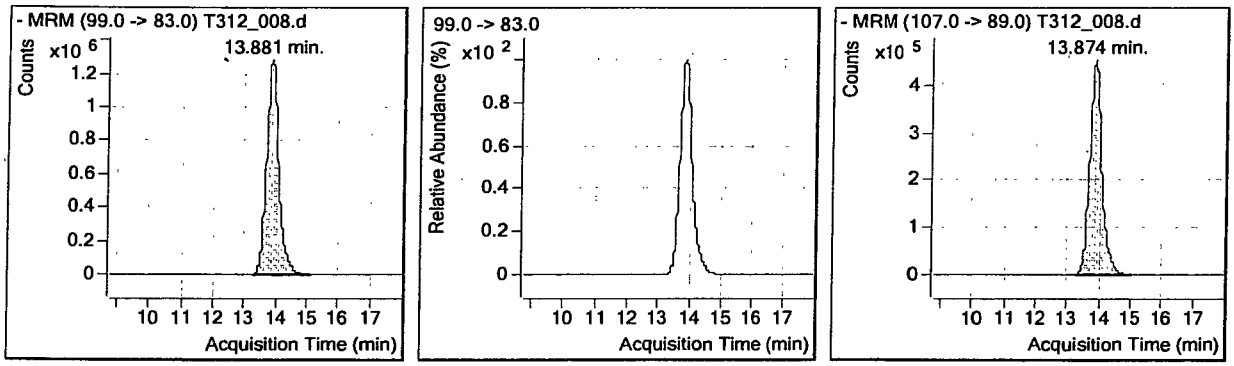
Quantitative Analysis Sample Report

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

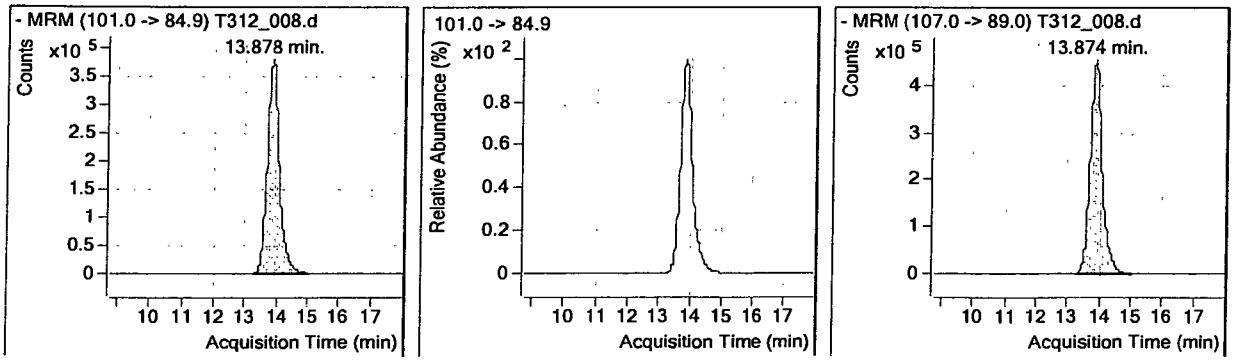


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.881	34223790	11973072
Perchlorate_102	PER_IS_108	13.878	9985270	11973072

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

FILE ID : TQCK1210.RFB

Data File ID: T312_010.d

Date Injected : 03/12/15

Time Injected : 20:02

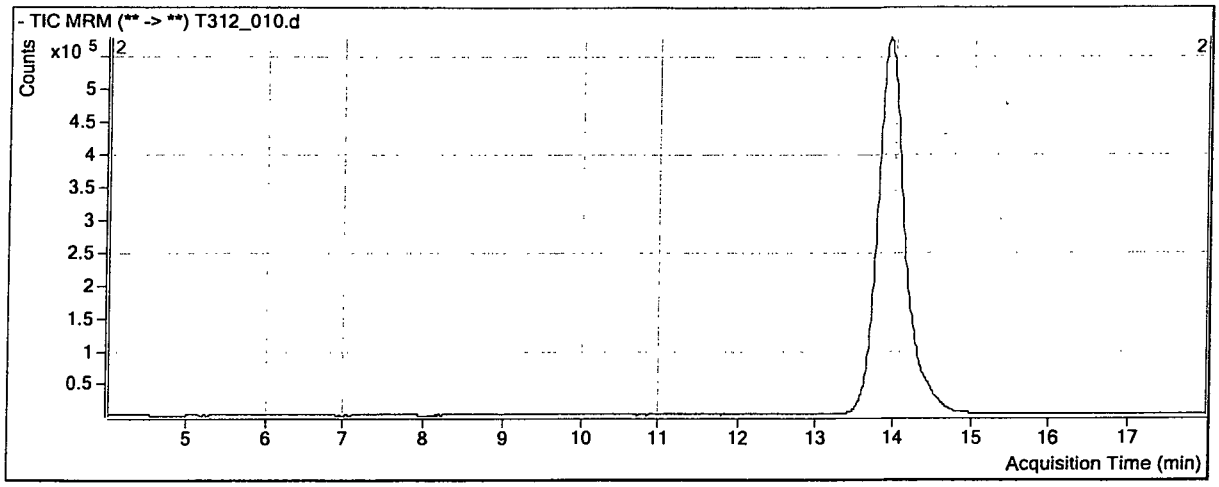
Sample ID : PER_SS 0.0004 ug/ml 11/11/14

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

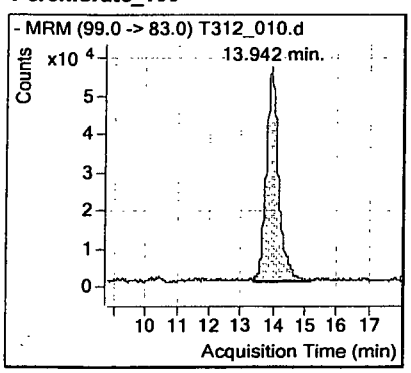
Quantitative Analysis Sample Report

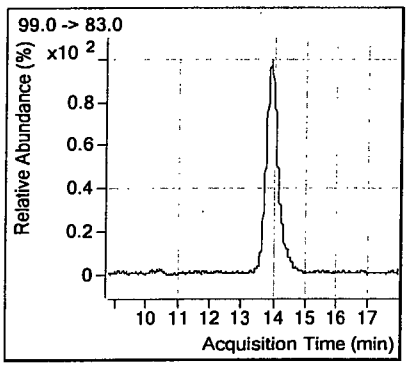
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_010.d	**Sample Name**	PER_SS 0.0004 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:02
ClientID	NA	**Inj Vol**	20

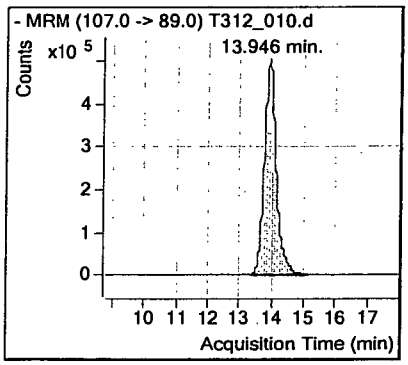


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.942	1472839	12977621
Perchlorate_102	PER_IS_108	13.959	440675	12977621

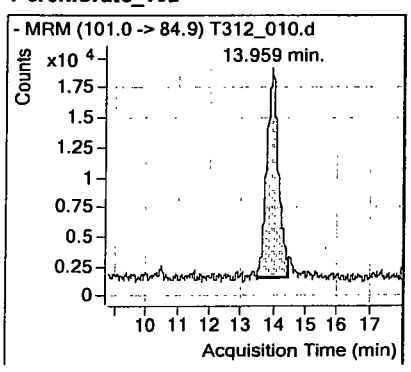
Perchlorate_100

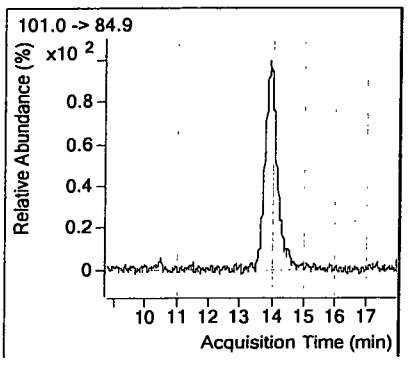


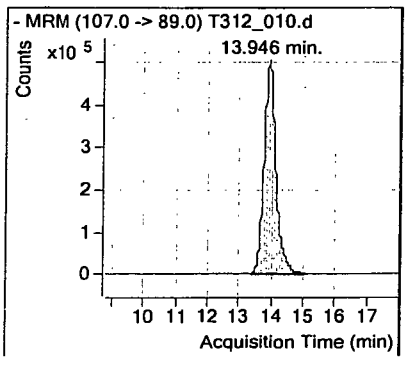




Perchlorate_102







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

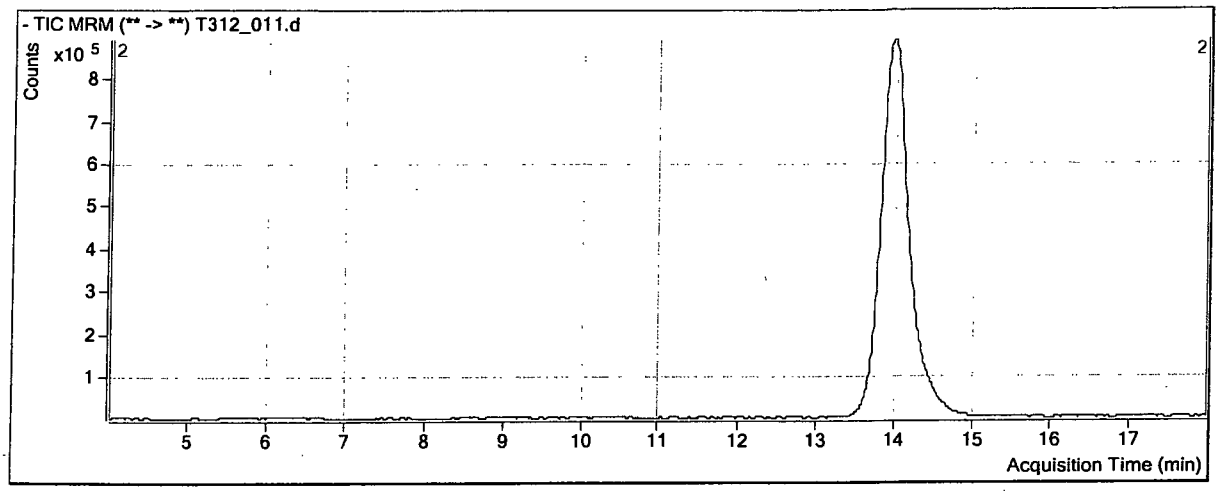
Sample ID : PER_SS 0.002 ug/ml 11/11/14

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

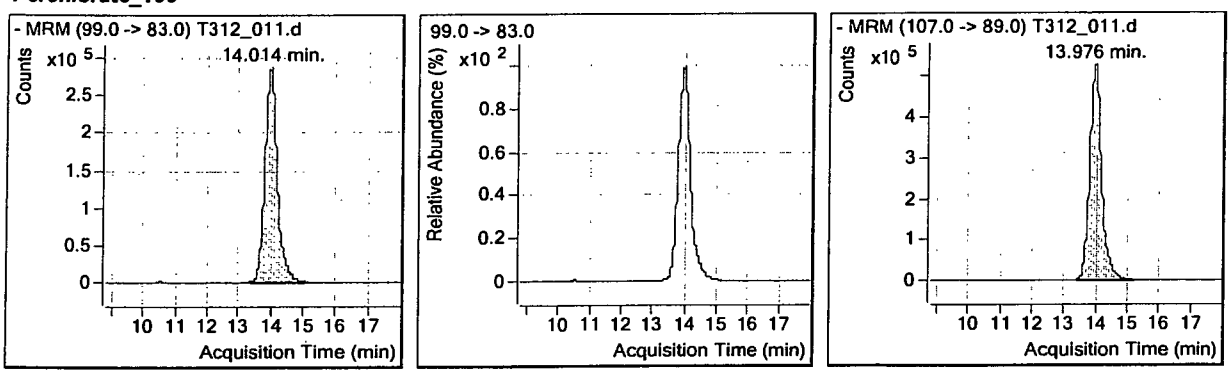
Quantitative Analysis Sample Report

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

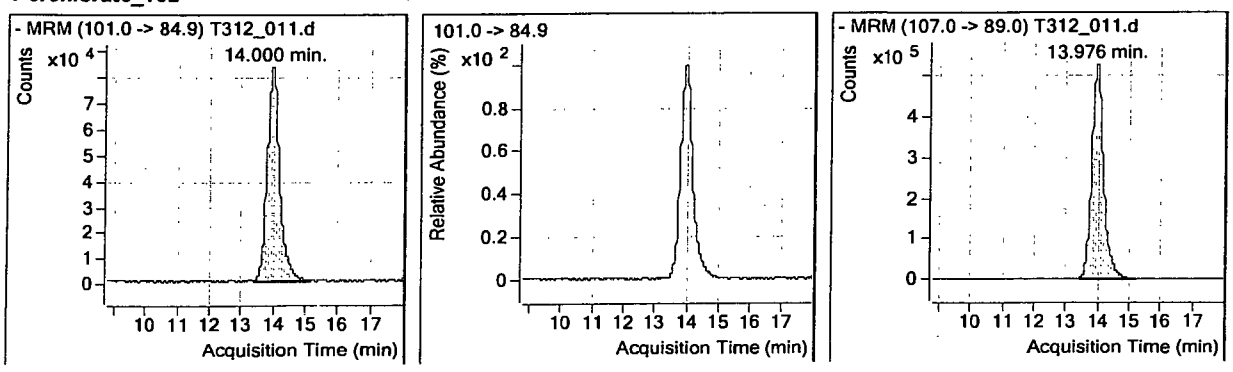


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.014	7468678	13747369
Perchlorate_102	PER_IS_108	14.000	2222387	13747369

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

.ab Name: APPL Inc.

)etector 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

:LE ID : TQCK1213.RFB

Data File ID: T312_013.d

Date Injected : 03/12/15

Time Injected : 20:58

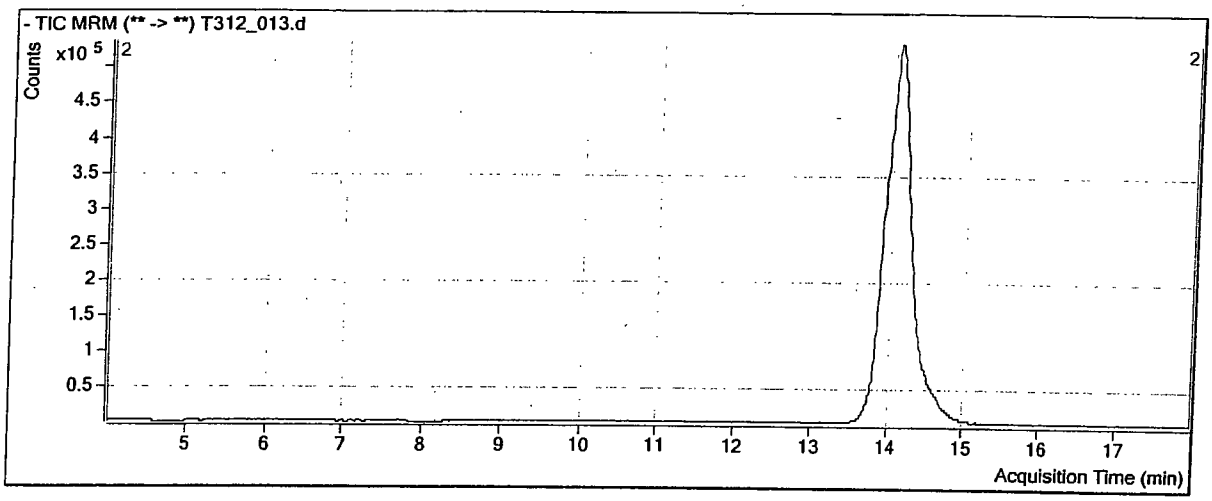
Sample ID : PER_CCV_1 0.0004 ug/ml 11/11/14

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

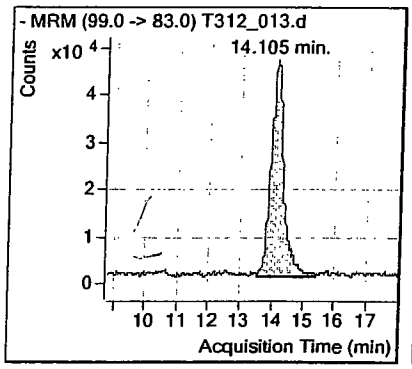
Quantitative Analysis Sample Report

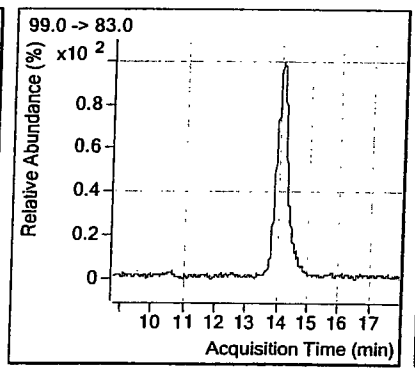
Batch Data Path	D:\MassHunter\Data\150312\QuantResults\150312_A1_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T312_013.d	**Sample Name**	PER_CCV_1 0.0004 ug/ml 11/11/14
Sample Type	Sample	**Acq_Date**	03/12/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	20:58
ClientID	NA	**Inj Vol**	20

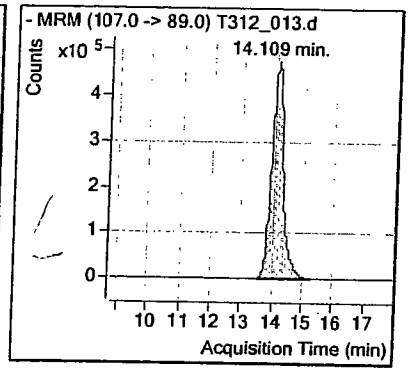


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.105	1267031	12323795
Perchlorate_102	PER_IS_108	14.143	410558	12323795

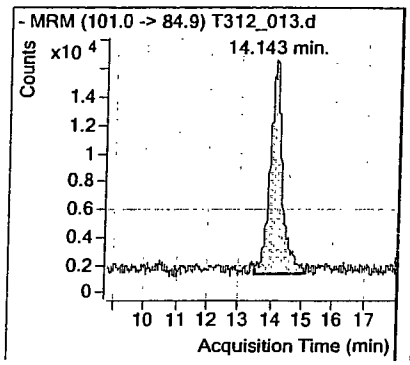
Perchlorate_100

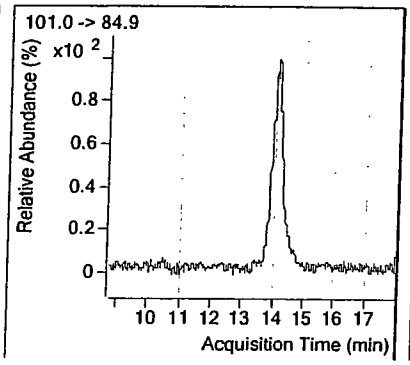


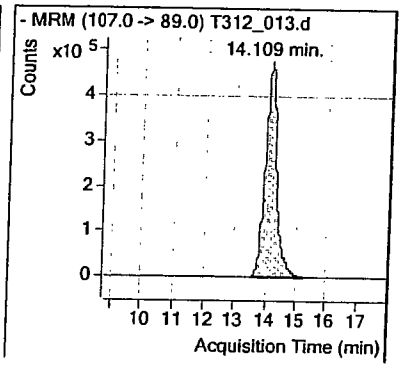




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

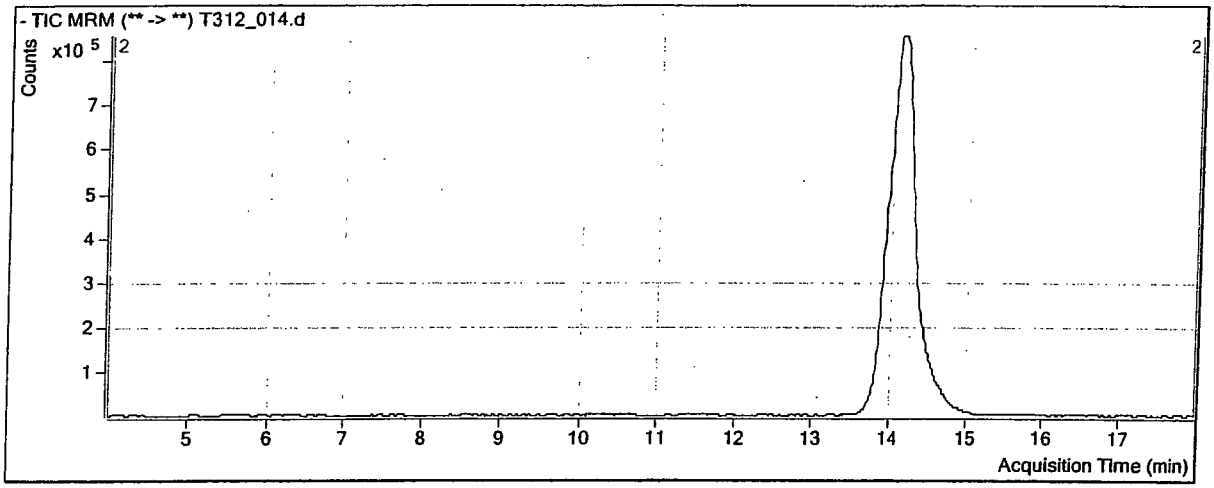
Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T312_014.d

	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

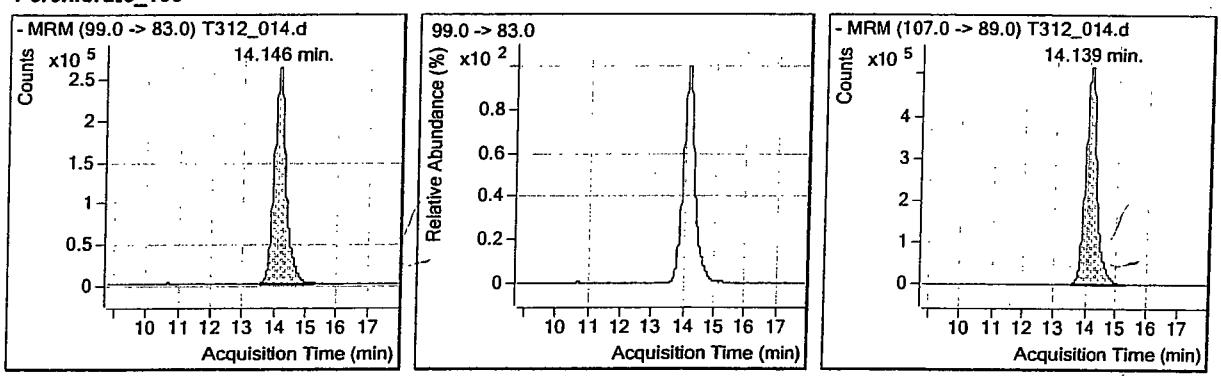
Quantitative Analysis Sample Report

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

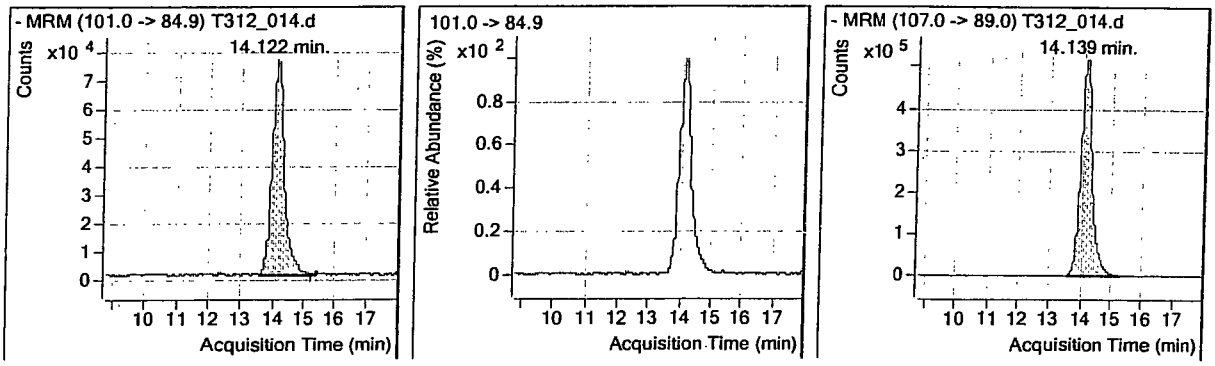


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.146	6907110	13576634
Perchlorate_102	PER_IS_108	14.122	2093567	13576634

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_002.d

	Date (s) of Analysis From:03/12/15 To:06/27/15 Time (s) of Analysis From:17:52 To:17:31				Date of Analysis: 06/27/15 Time of Analysis: 17:50 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	14.01	1.196307	N	5.8
Perchlorate_85	13.70	13.60	13.80	0.391605	14.04	0.387182	N	1.1

FILE ID : TQCK2702.RFB

Data File ID: T627_002.d

Date Injected : 06/27/15

Time Injected : 17:50

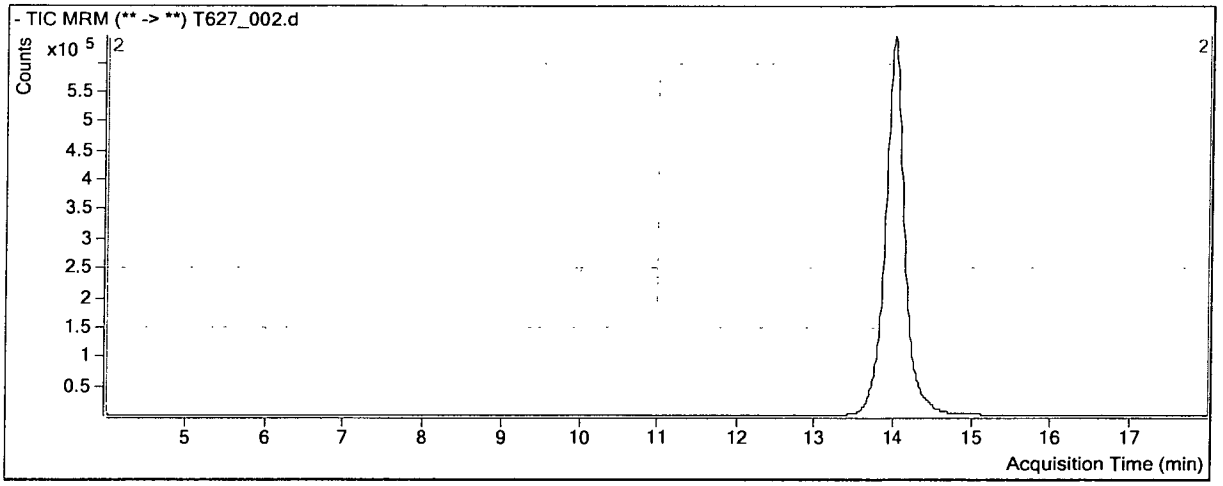
Sample ID : PER_CCV 0.0004 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.007	10246572	PER_IS_89
14.014	980644	Perchlorate_83
14.041	317383	Perchlorate_85

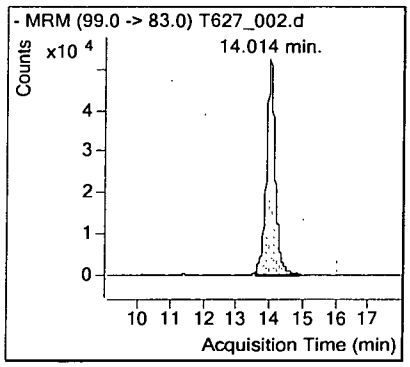
Quantitative Analysis Sample Report

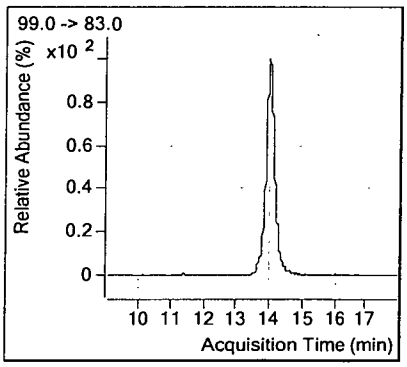
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_002.d	**Sample Name**	PER_CCV 0.0004 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	17:50
ClientID	NA	**Inj Vol**	20

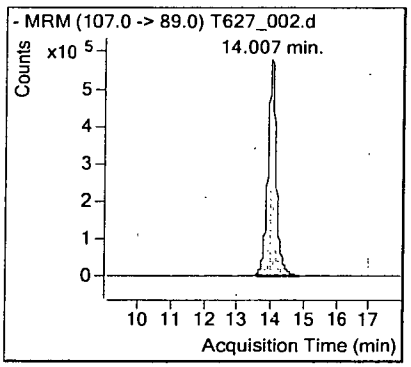


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.014	980644	10246572
Perchlorate_102	PER_IS_108	14.041	317383	10246572

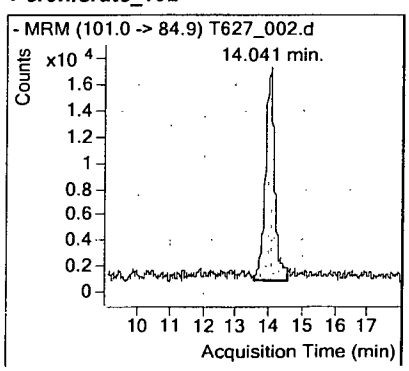
Perchlorate_100

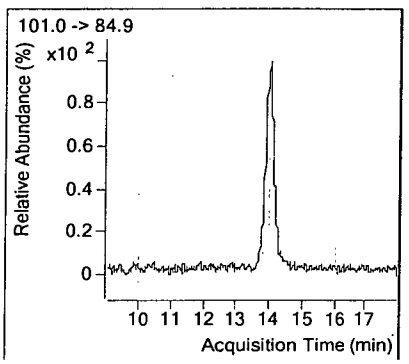


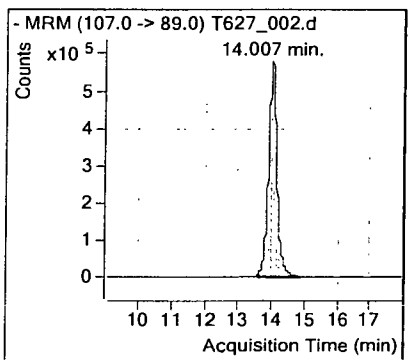




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_003.d

	Date (s) of Analysis From:03/12/15 To:06/27/15 Time (s) of Analysis From:17:52 To:17:31				Date of Analysis: 06/27/15 Time of Analysis: 18:09 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	14.02	1.119610	N	11.9
Perchlorate_85	13.70	13.60	13.80	0.391605	14.04	0.336045	N	14.2

FILE ID : TQCK2703.RFB

Data File ID: T627_003.d

Date Injected : 06/27/15

Time Injected : 18:09

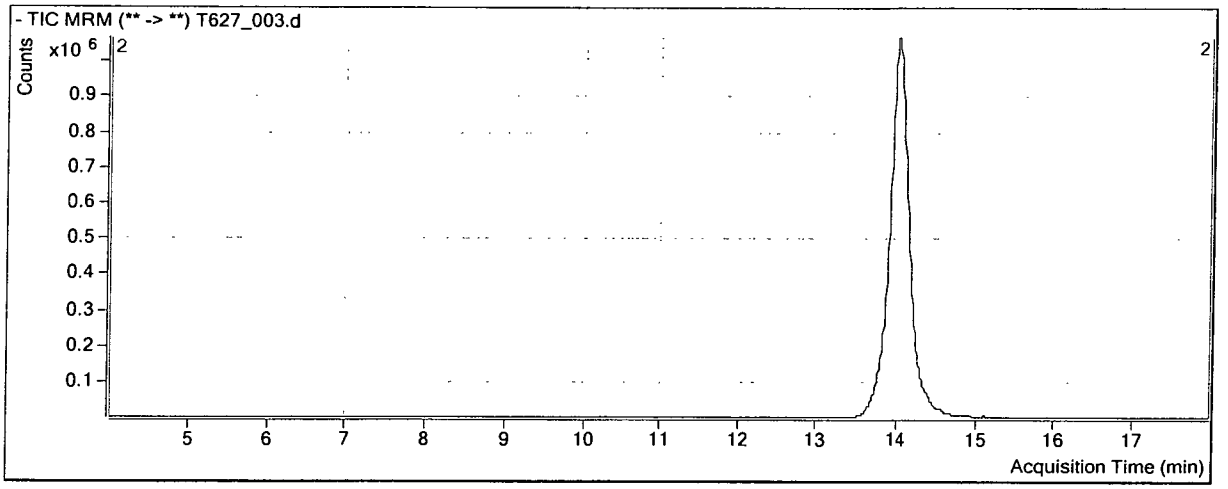
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.017	12081323	PER_IS_89
14.024	5410548	Perchlorate_83
14.041	1623949	Perchlorate_85

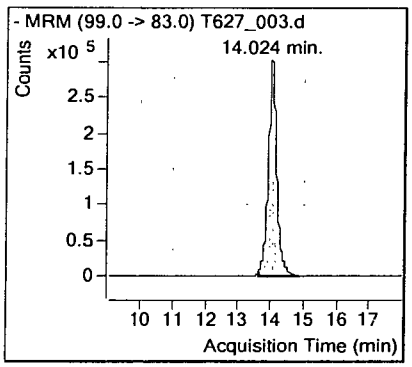
Quantitative Analysis Sample Report

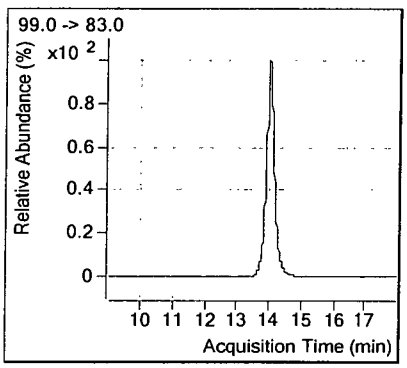
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_003.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:09
ClientID	NA	**Inj Vol**	20

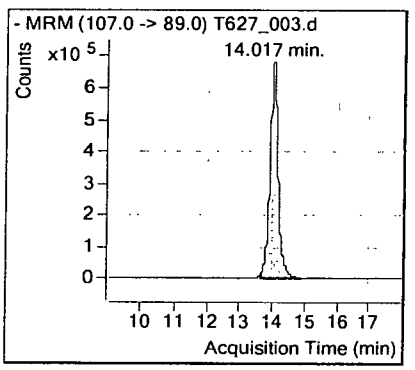


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.024	5410548	12081323
Perchlorate_102	PER_IS_108	14.041	1623949	12081323

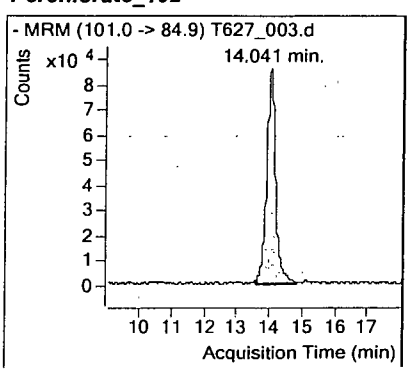
Perchlorate_100

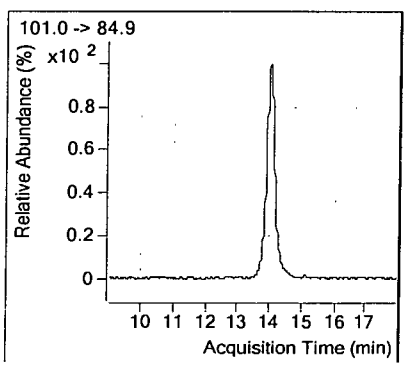


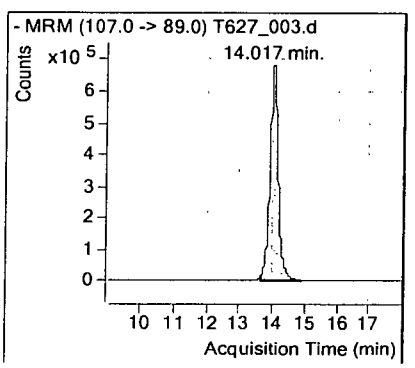




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_015.d

	Date (s) of Analysis From:03/12/15 To:06/27/15 Time (s) of Analysis From:17:52 To:21:15				Date of Analysis: 06/27/15 Time of Analysis: 21:52 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	14.12	1.175295	N	7.5
Perchlorate_85	13.70	13.60	13.80	0.391605	14.10	0.387853	N	1.0

FILE ID : TQCK2715.RFB

Data File ID: T627_015.d

Date Injected : 06/27/15

Time Injected : 21:52

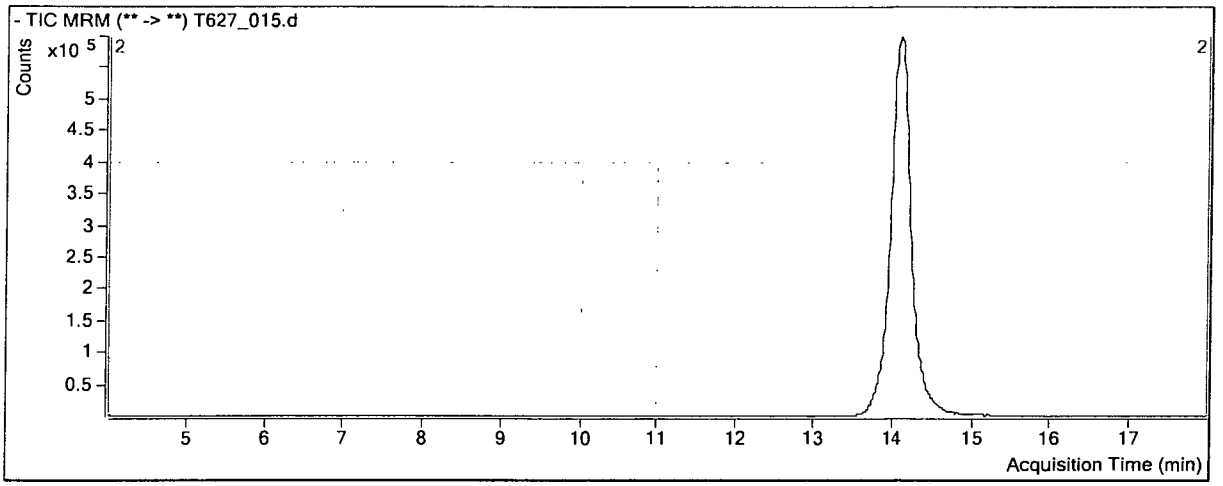
Sample ID : PER_CCV 0.0004 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.109	9773292	PER_IS_89
14.115	918920	Perchlorate_83
14.102	303248	Perchlorate_85

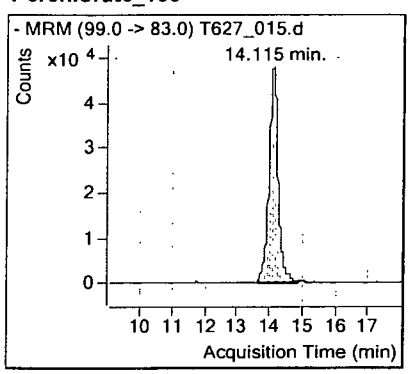
Quantitative Analysis Sample Report

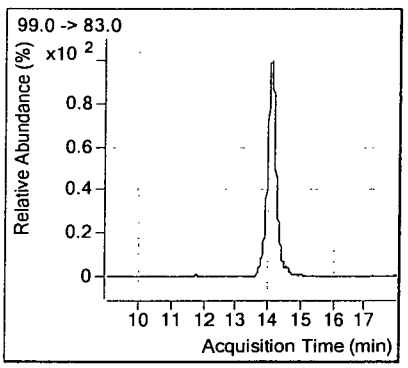
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_015.d	**Sample Name**	PER_CCV 0.0004 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:52
ClientID	NA	**Inj Vol**	20

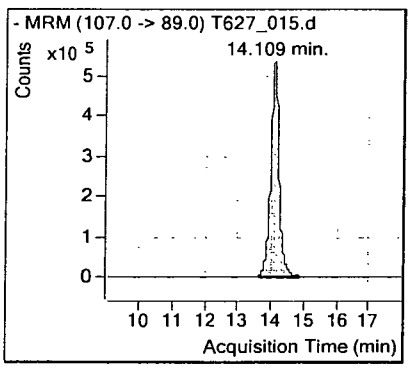


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.115	918920	9773292
Perchlorate_102	PER_IS_108	14.102	303248	9773292

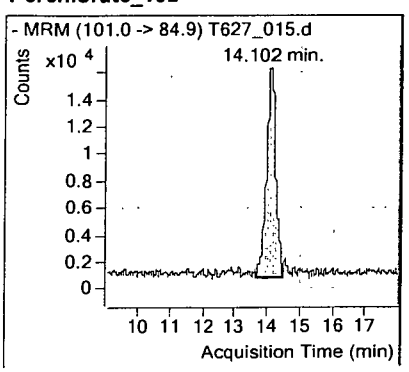
Perchlorate_100

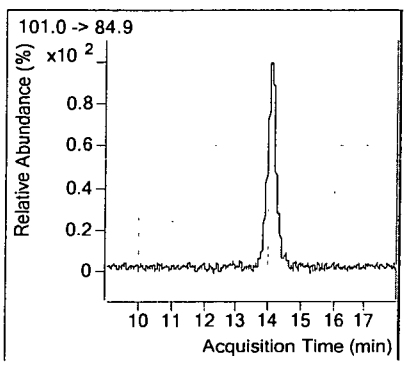


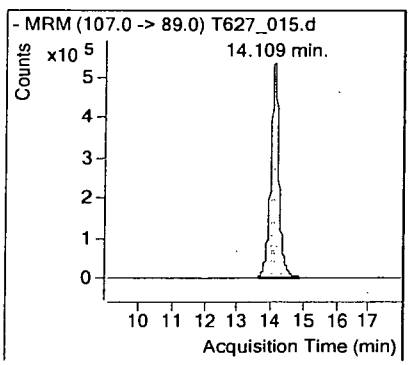




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_016.d

	Date (s) of Analysis From:03/12/15 To:06/27/15 Time (s) of Analysis From:17:52 To:21:15				Date of Analysis: 06/27/15 Time of Analysis: 22:11 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	14.14	1.119485	N	11.9
Perchlorate_85	13.70	13.60	13.80	0.391605	14.16	0.334666	N	14.5

FILE ID : TQCK2716.RFB

Data File ID: T627_016.d

Date Injected : 06/27/15

Time Injected : 22:11

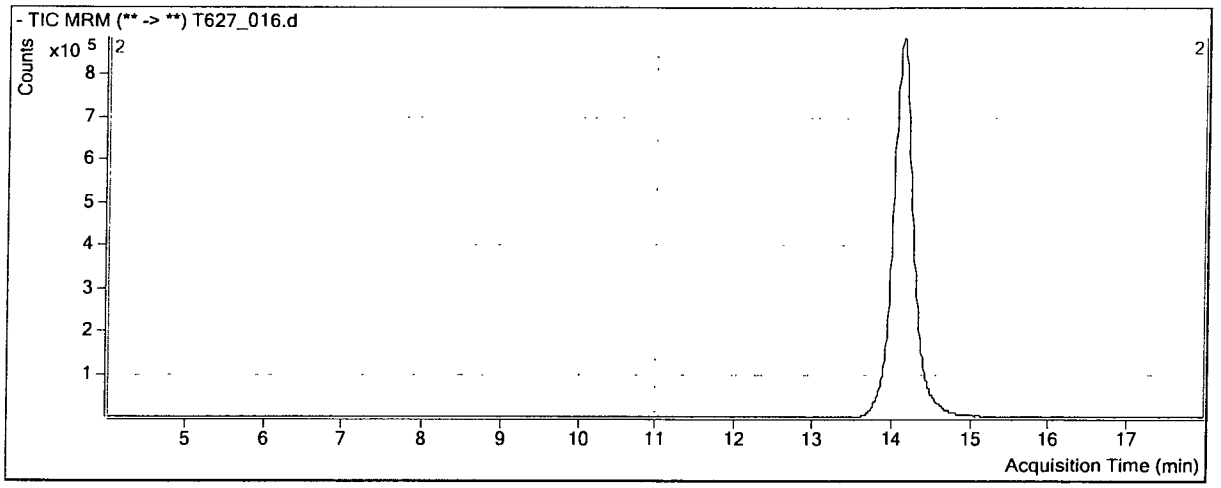
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.139	10360182	PER_IS_89
14.136	4639228	Perchlorate_83
14.163	1386880	Perchlorate_85

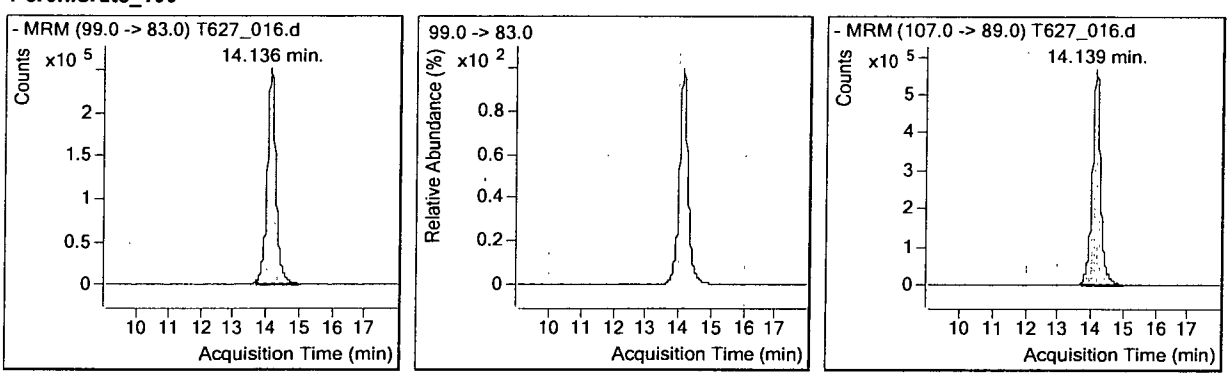
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_016.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	22:11
ClientID	NA	**Inj Vol**	20

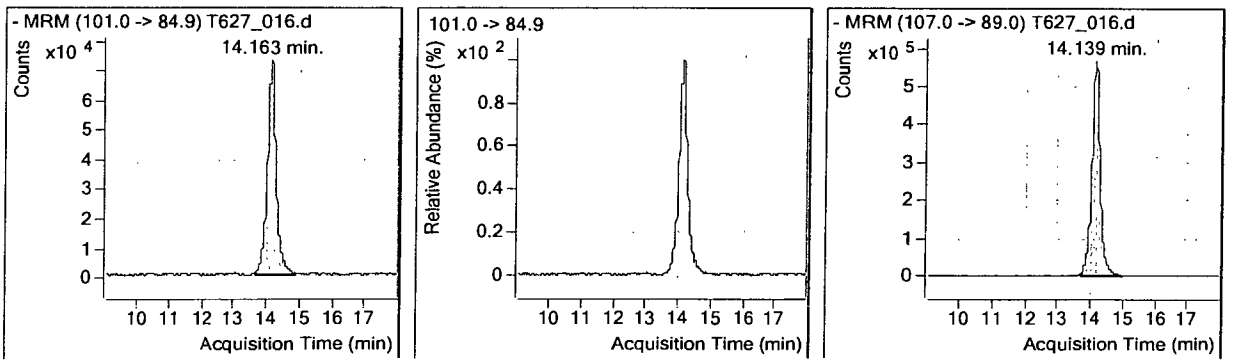


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.136	4639228	10360182
Perchlorate_102	PER_IS_108	14.163	1386880	10360182

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_027.d

	Date (s) of Analysis From:03/12/15 To:06/28/15 Time (s) of Analysis From:17:52 To:0:58				Date of Analysis: 06/28/15 Time of Analysis: 1:36 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	14.20	1.237942	N	2.5
Perchlorate_85	13.70	13.60	13.80	0.391605	14.17	0.417652	N	6.7

FILE ID : TQCK2727.RFB

Data File ID: T627_027.d

Date Injected : 06/28/15

Time Injected : 1:36

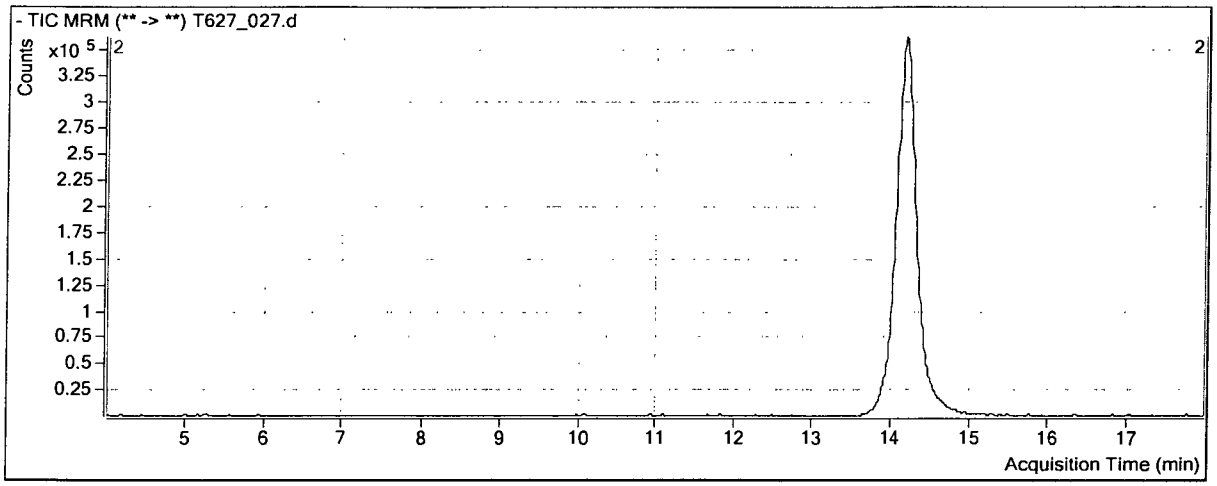
Sample ID : PER_CCV 0.0004 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.000	5976722	PER_IS_89
14.197	591907	Perchlorate_83
14.173	199695	Perchlorate_85

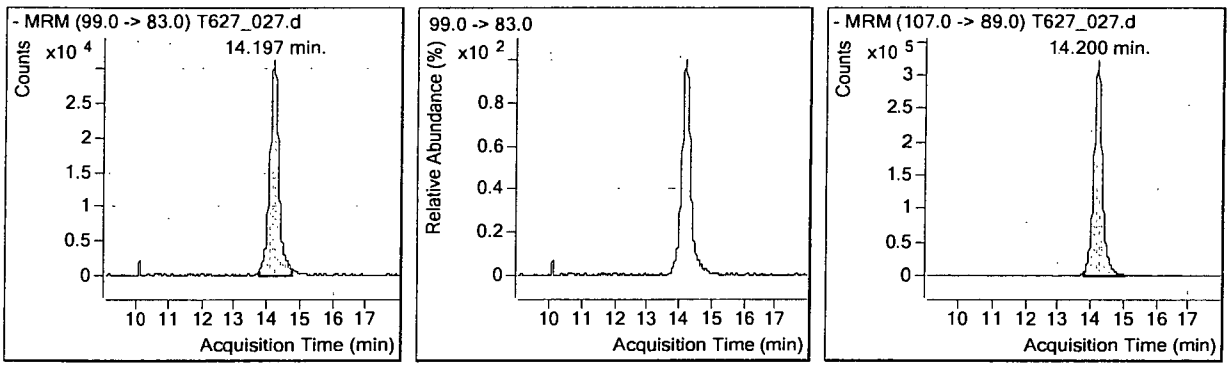
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_027.d	**Sample Name**	PER_CCV 0.0004 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/28/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	1:36
ClientID	NA	**Inj Vol**	20

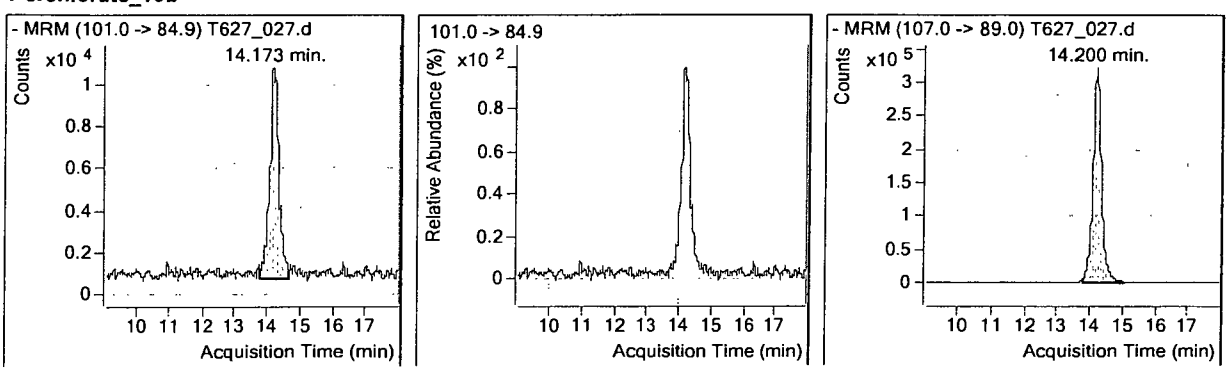


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.197	591907	5976722
Perchlorate_102	PER_IS_108	14.173	199695	5976722

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T627_028.d

	Date (s) of Analysis From:03/12/15 To:06/28/15 Time (s) of Analysis From:17:52 To:0:58				Date of Analysis: 06/28/15 Time of Analysis: 1:54 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	1.115852	N	12.2
Perchlorate_85	13.70	13.60	13.80	0.391605	14.23	0.333743	N	14.8

FILE ID : TQCK2728.RFB

Data File ID: T627_028.d

Date Injected : 06/28/15

Time Injected : 1:54

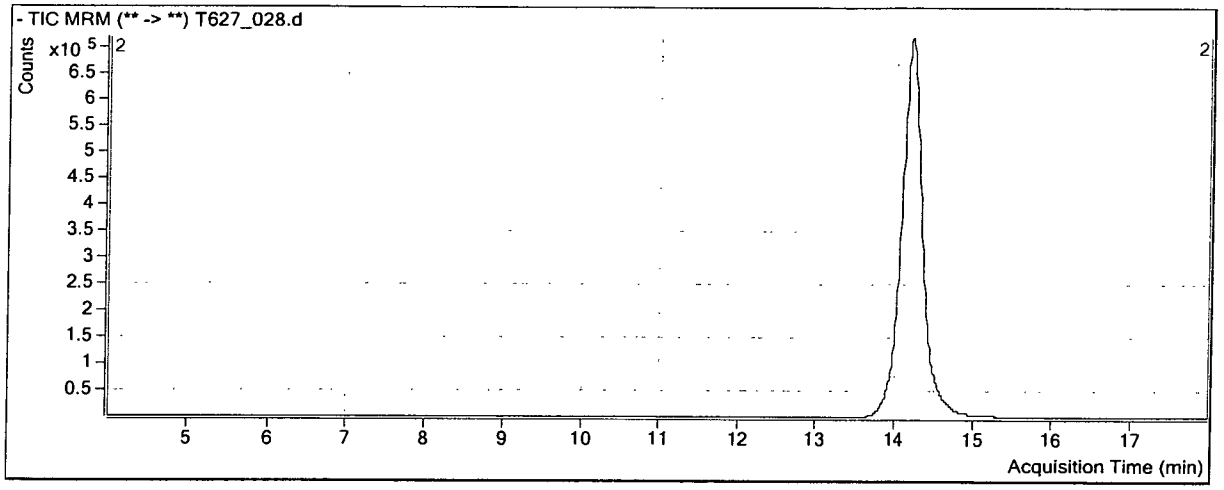
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
14.000	8545053	PER_IS_89
14.217	3814005	Perchlorate_83
14.234	1140740	Perchlorate_85

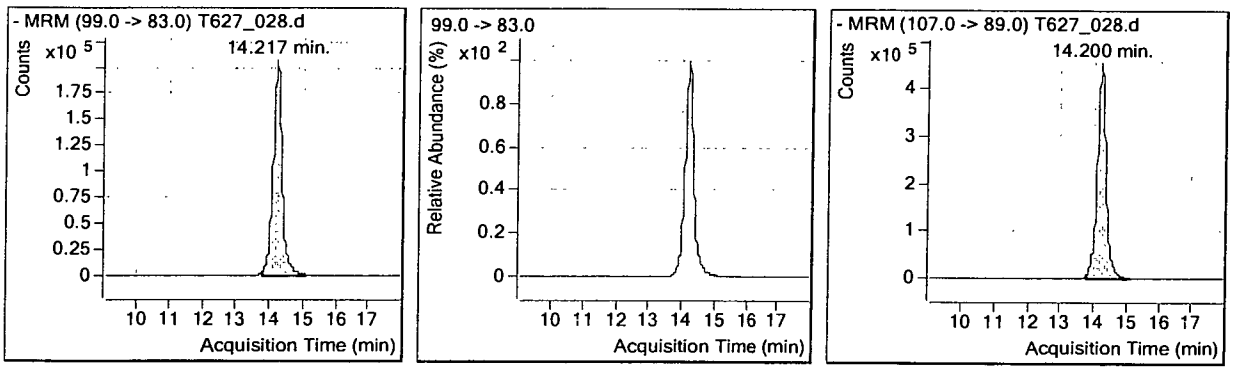
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_028.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	06/28/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	1:54
ClientID	NA	**Inj Vol**	20

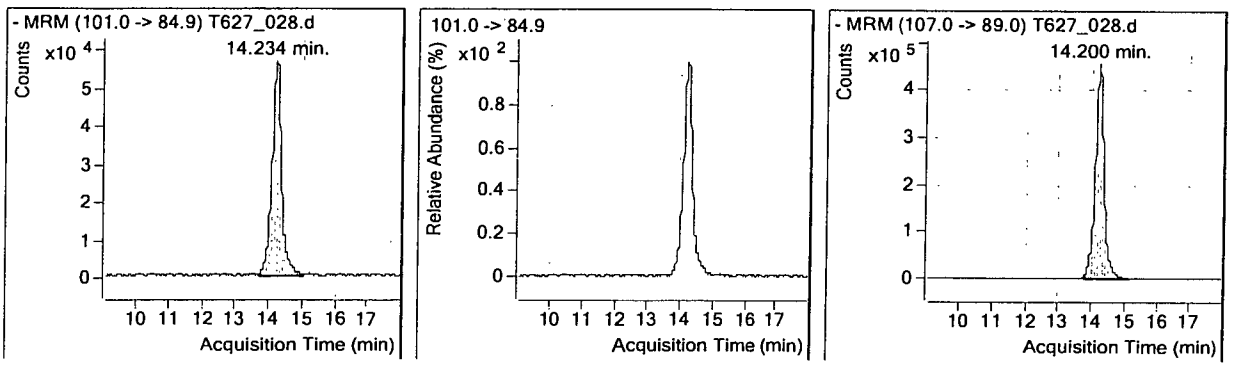


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.217	3814005	8545053
Perchlorate_102	PER_IS_108	14.234	1140740	8545053

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T705_003.d

	Date (s) of Analysis From:03/12/15 To:07/05/15 Time (s) of Analysis From:17:52 To:13:06				Date of Analysis: 07/05/15 Time of Analysis: 13:44 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	13.41	1.173163	N	7.6
Perchlorate_85	13.70	13.60	13.80	0.391605	13.44	0.351832	N	10.2

FILE ID : TQCK0503.RFB

Data File ID: T705_003.d

Date Injected : 07/05/15

Time Injected : 13:44

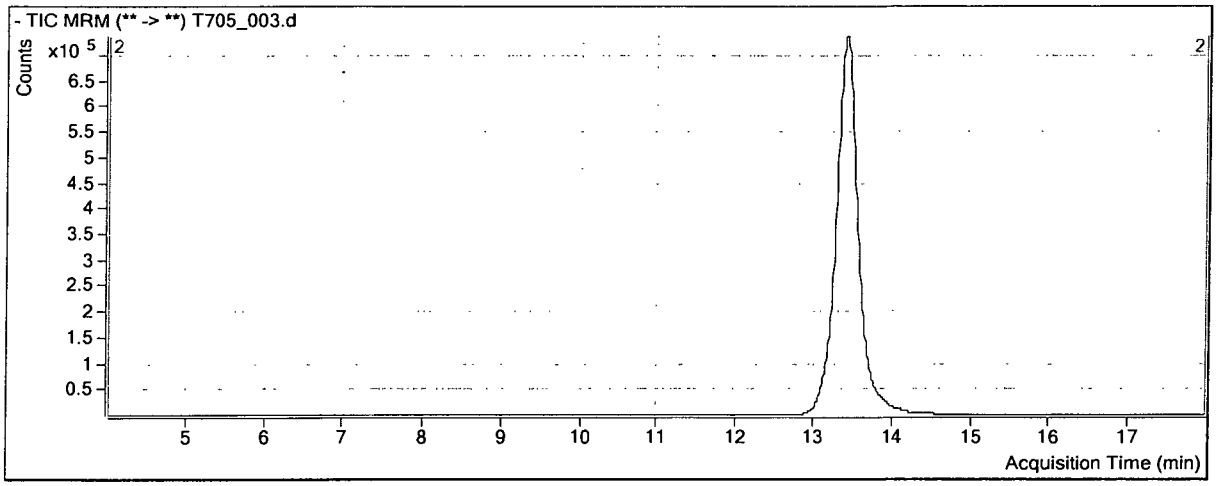
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.406	8885934	PER_IS_89
13.412	4169858	Perchlorate_83
13.400	1250542	Perchlorate_85

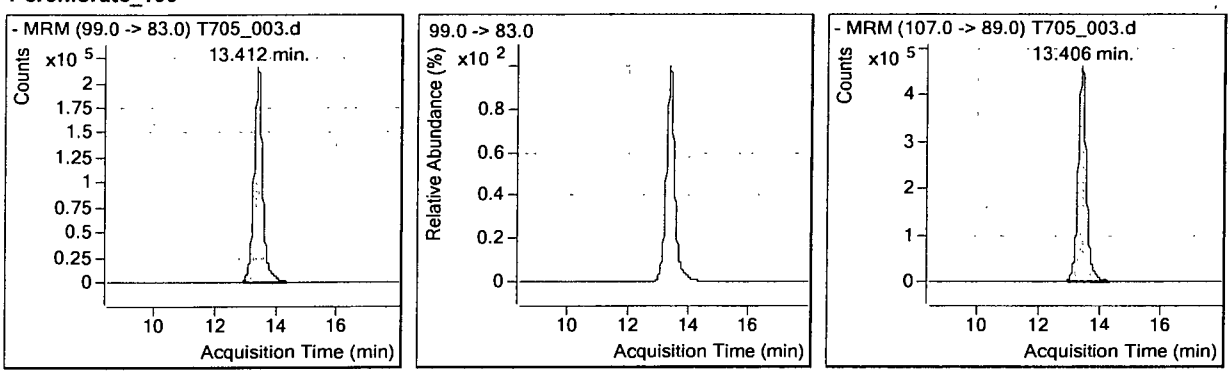
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_003.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	13:44
ClientID	NA	**Inj Vol**	20

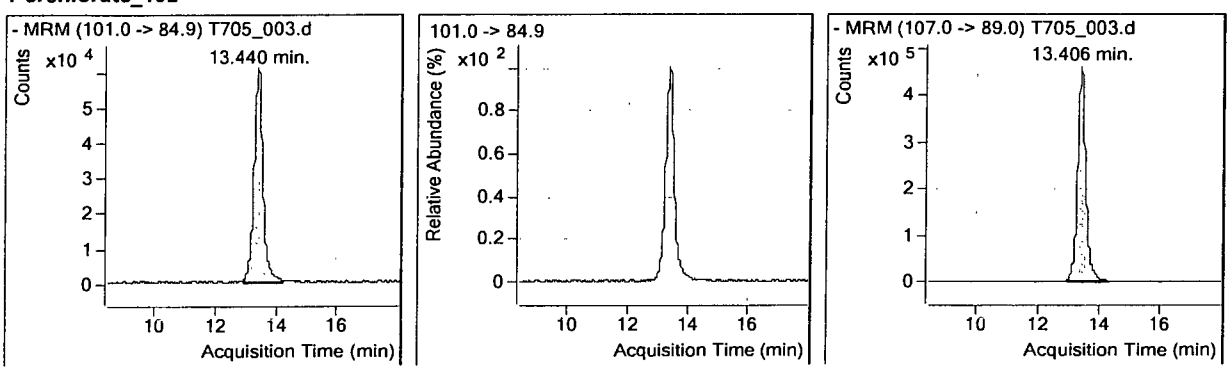


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.412	4169858	8885934
Perchlorate_102	PER_IS_108	13.440	1250542	8885934

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T705_015.d

	Date (s) of Analysis From:03/12/15 To:07/05/15 Time (s) of Analysis From:17:52 To:16:51				Date of Analysis: 07/05/15 Time of Analysis: 17:28 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	12.77	1.363390	N	7.3
Perchlorate_85	13.70	13.60	13.80	0.391605	12.74	0.449892	N	14.9

FILE ID : TQCK0515.RFB

Data File ID: T705_015.d

Date Injected : 07/05/15

Time Injected : 17:28

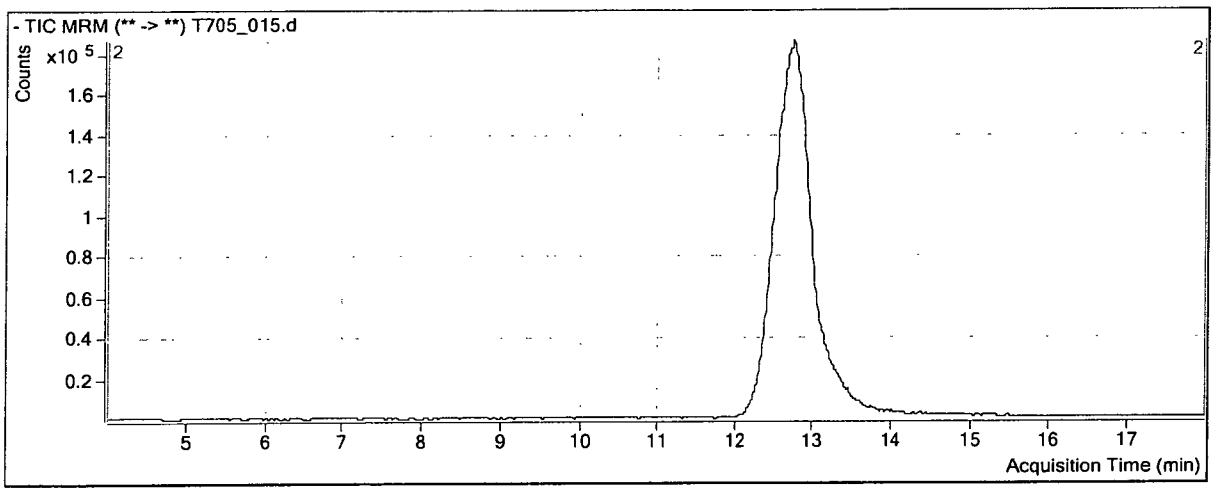
Sample ID : PER_CCV 0.0004 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
12.764	5539776	PER_IS_89
12.700	604230	Perchlorate_83
12.737	199384	Perchlorate_85

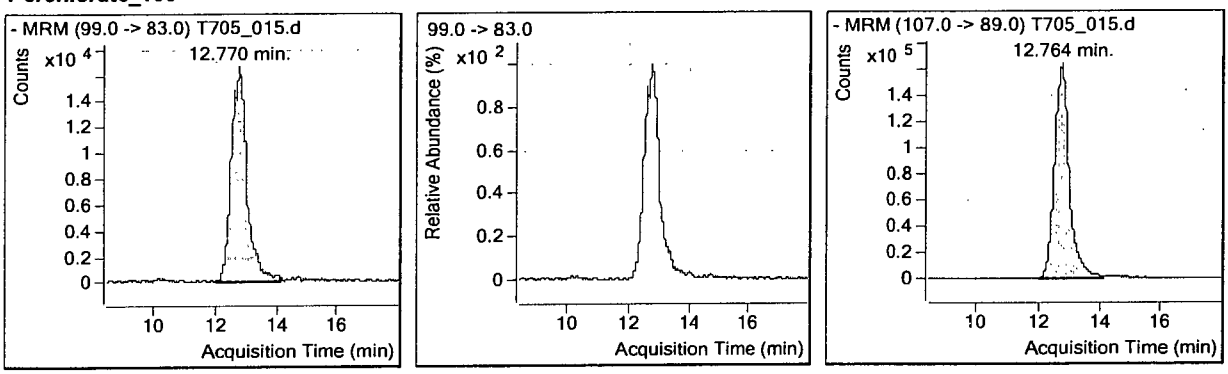
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_015.d	**Sample Name**	PER_CCV 0.0004 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	17:28
ClientID	NA	**Inj Vol**	20

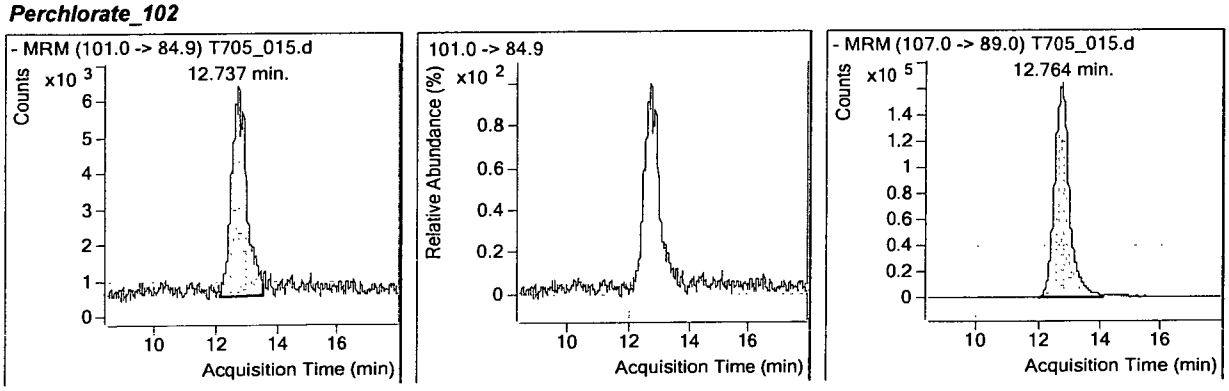


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	12.770	604230	5539776
Perchlorate_102	PER_IS_108	12.737	199384	5539776

Perchlorate_100



Perchlorate_102



CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T705_016.d

	Date (s) of Analysis From:03/12/15 To:07/05/15 Time (s) of Analysis From:17:52 To:16:51				Date of Analysis: 07/05/15 Time of Analysis: 17:46 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	13.30	1.198515	N	5.6
Perchlorate_85	13.70	13.60	13.80	0.391605	13.32	0.355453	N	9.2

FILE ID : TQCK0516.RFB

Data File ID: T705_016.d

Date Injected : 07/05/15

Time Injected : 17:46

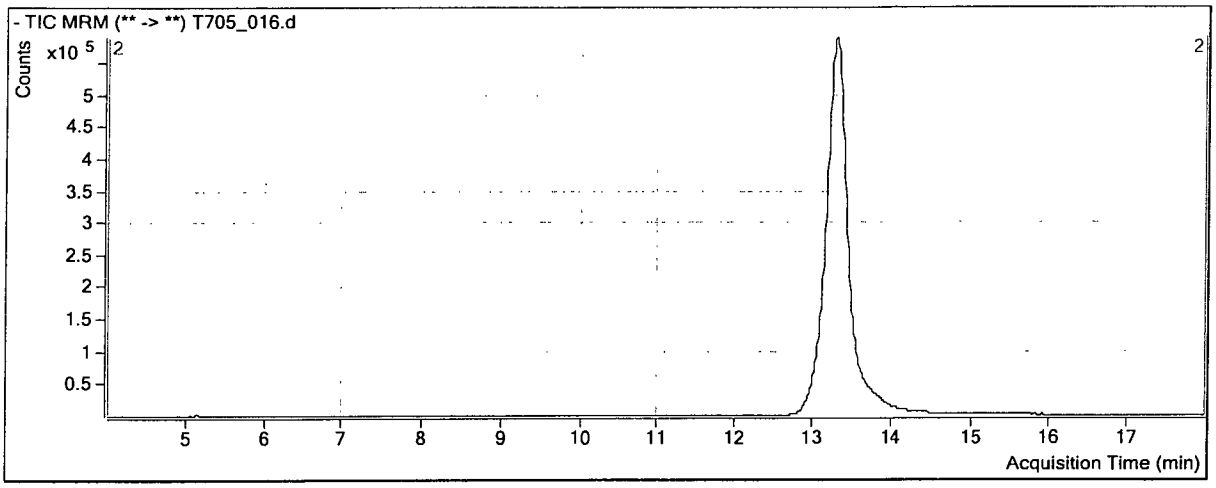
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.304	7213194	PER_IS_89
13.000	3458048	Perchlorate_83
13.317	1025582	Perchlorate_85

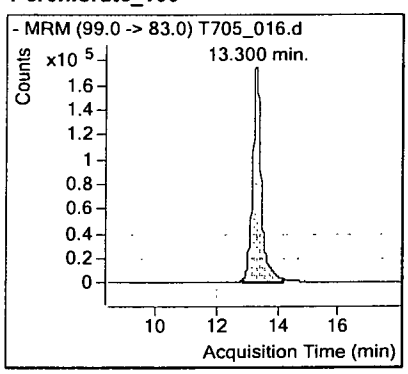
Quantitative Analysis Sample Report

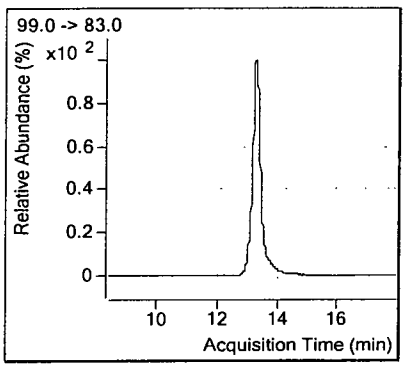
Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_016.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	17:46
ClientID	NA	**Inj Vol**	20

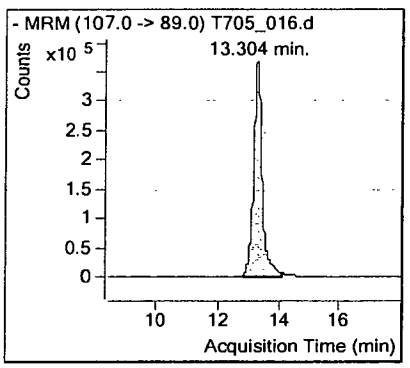


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.300	3458048	7213194
Perchlorate_102	PER_IS_108	13.317	1025582	7213194

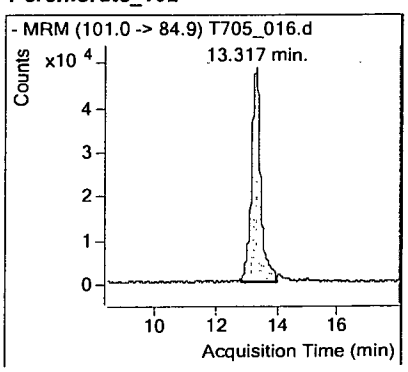
Perchlorate_100

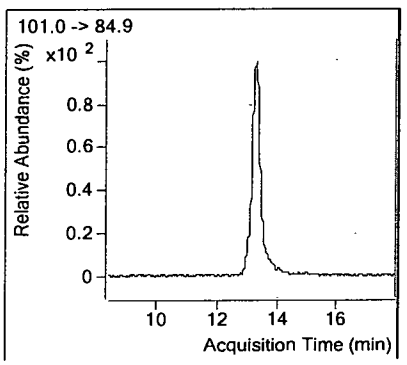


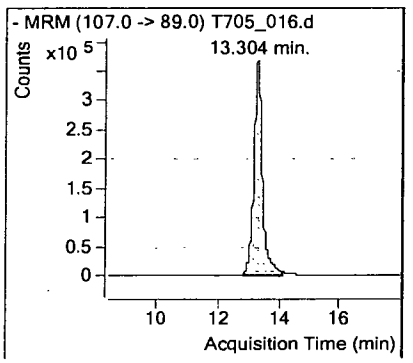




Perchlorate_102







CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T705_028.d

	Date (s) of Analysis From:03/12/15 To:07/05/15 Time (s) of Analysis From:17:52 To:20:53				Date of Analysis: 07/05/15 Time of Analysis: 21:30 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	12.81	1.262372	N	0.6
Perchlorate_85	13.70	13.60	13.80	0.391605	12.86	0.444526	N	13.5

FILE ID : TQCK0528.RFB

Data File ID: T705_028.d

Date Injected : 07/05/15

Time Injected : 21:30

Sample ID : PER_CCV 0.0004 ug/ml 06/27/15

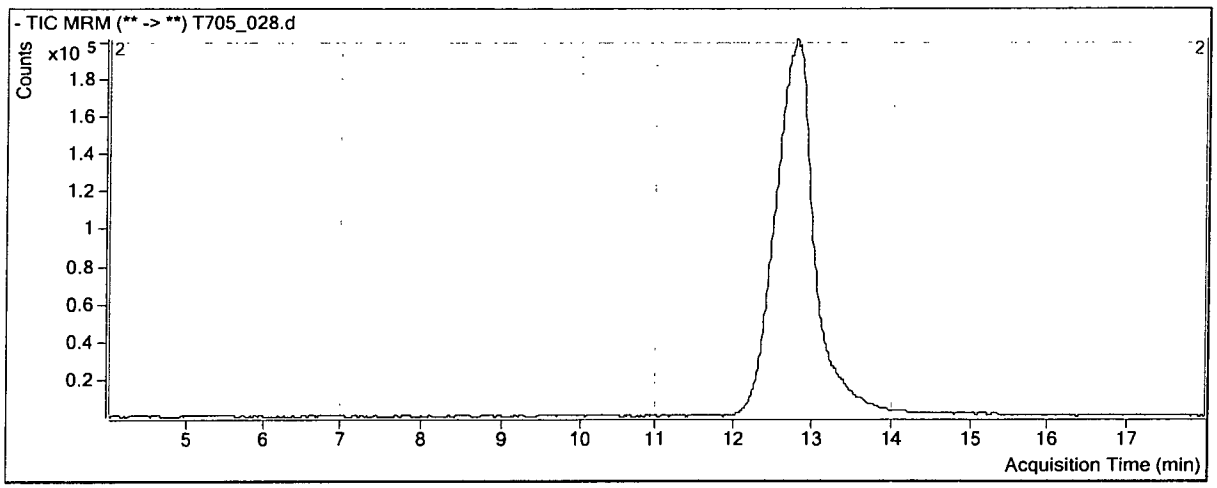
Client ID : NA

Retention Time		Area Count Response	Compound_ID Product Ion
12.794		6048909	PER_IS_89
12.811	*	610878	Perchlorate_83
12.859		215112	Perchlorate_85

* MANUAL INTEGRAION

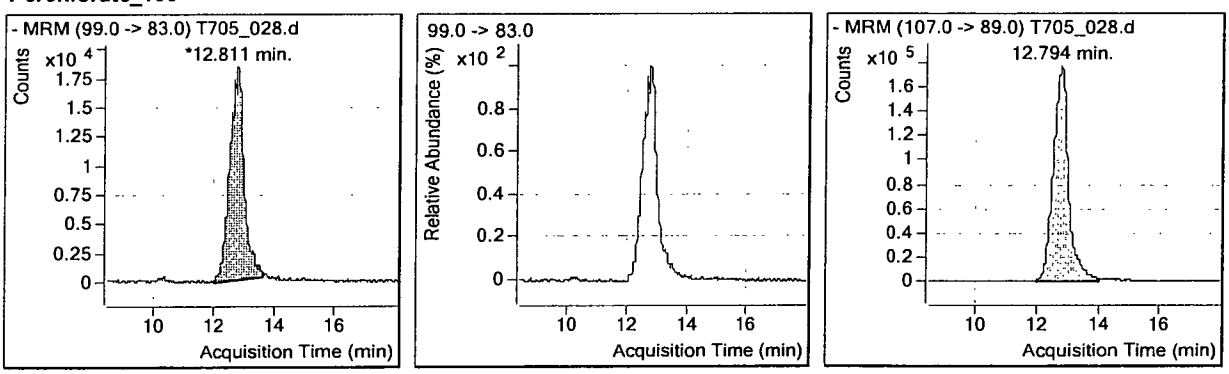
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_028.d	**Sample Name**	PER_CCV 0.0004 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:30
ClientID	NA	**Inj Vol**	20

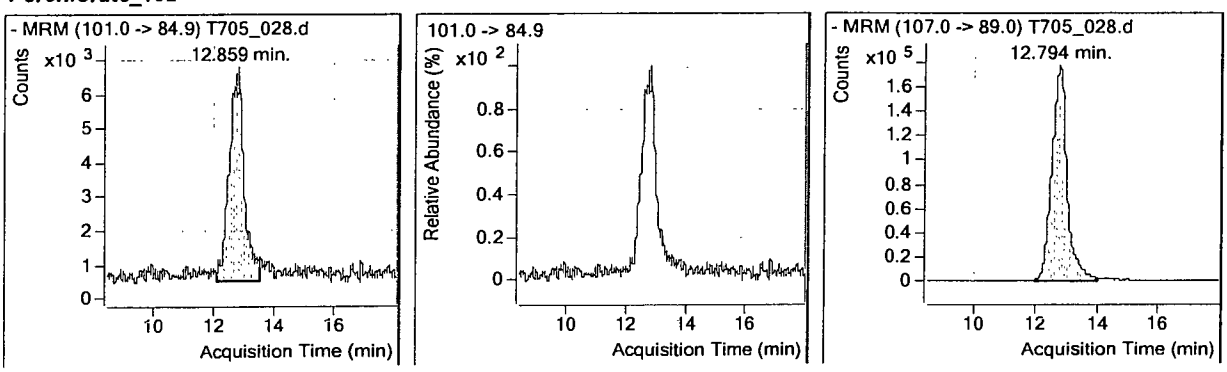


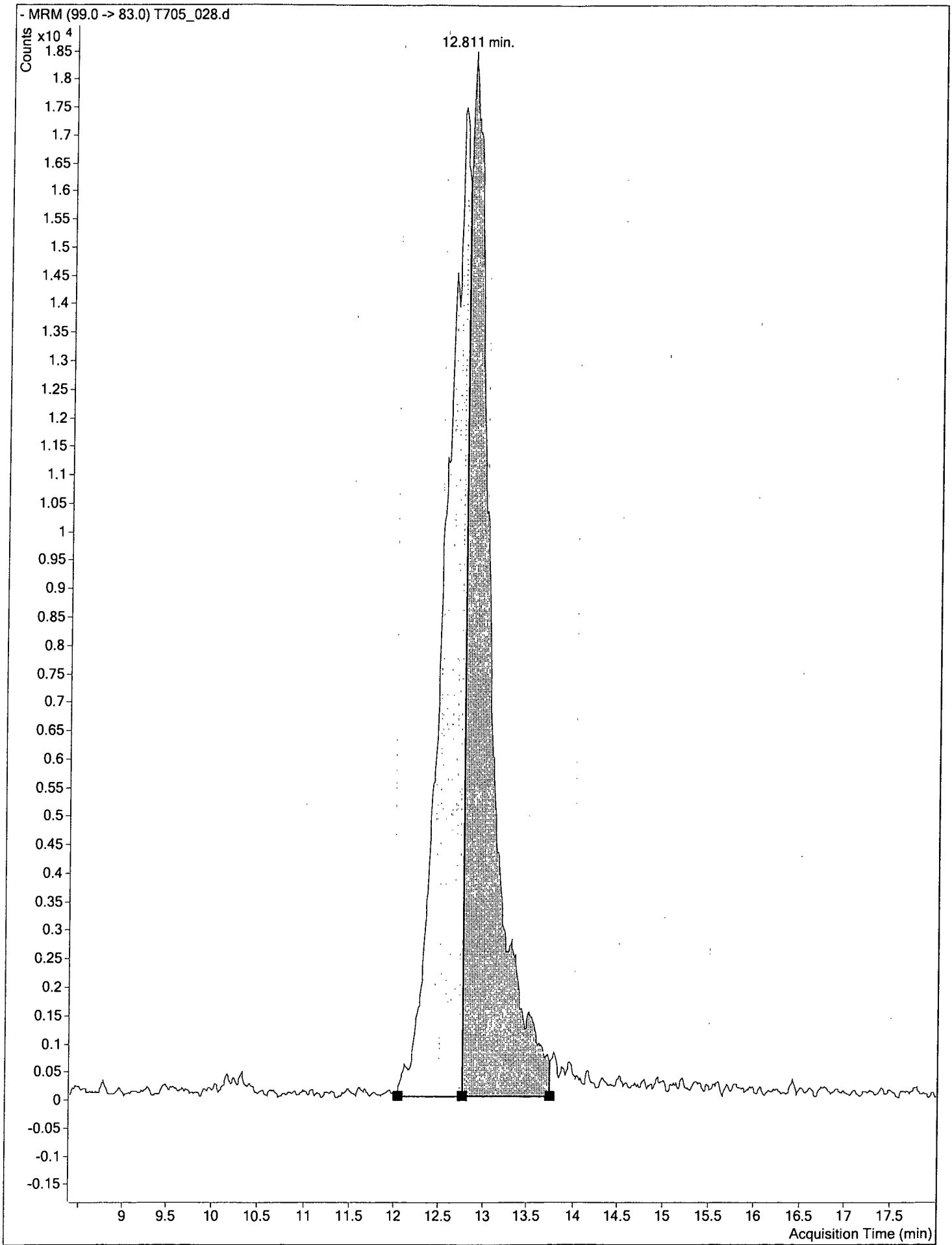
Compound	ISTD		RT	Resp	ISTD Resp	
Perchlorate_100	PER_IS_108	*	12.811	610878	6048909	* MANUAL INT
Perchlorate_102	PER_IS_108		12.859	215112	6048909	

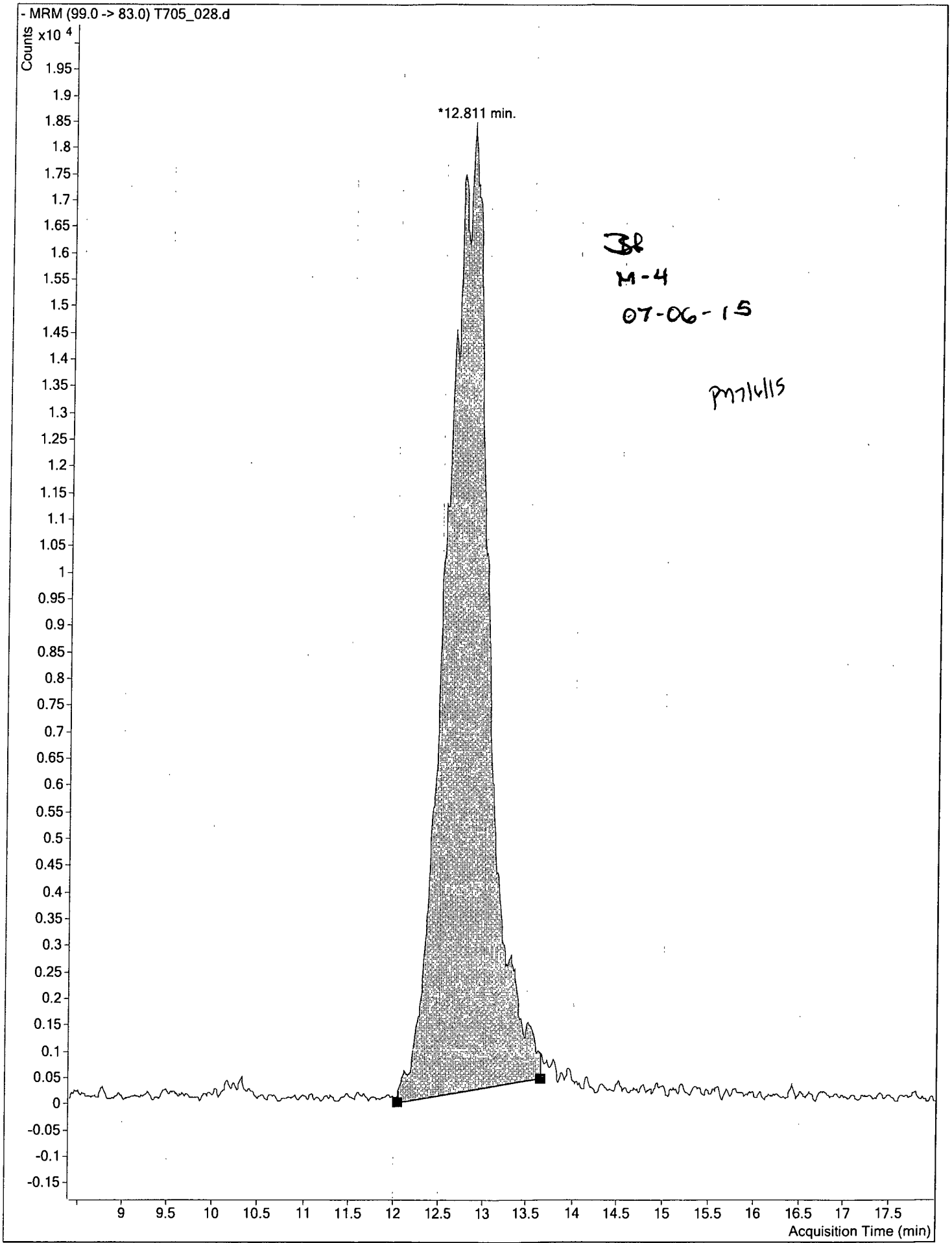
Perchlorate_100



Perchlorate_102




- MRM (99.0 -> 83.0) T705_028.d
Counts
x10 4
12.811 min.
Acquisition Time (min)


- MRM (99.0 -> 83.0) T705_028.d
Counts
x10 4
*12.811 min.
3R
M-4
07-06-15
PM 7/6/15
Acquisition Time (min)

CONTINUING CALIBRATION CHECK SUMMARY FORM

Lab Name: APPL Inc.

Detector ID: Agilent 6460 Triple Quad LC/MS DATA FILE ID: T705_029.d

	Date (s) of Analysis From:03/12/15 To:07/05/15 Time (s) of Analysis From:17:52 To:20:53				Date of Analysis: 07/05/15 Time of Analysis: 21:49 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	13.35	1.183893	N	6.8
Perchlorate_85	13.70	13.60	13.80	0.391605	13.38	0.351584	N	10.2

FILE ID : TQCK0529.RFB

Data File ID: T705_029.d

Date Injected : 07/05/15

Time Injected : 21:49

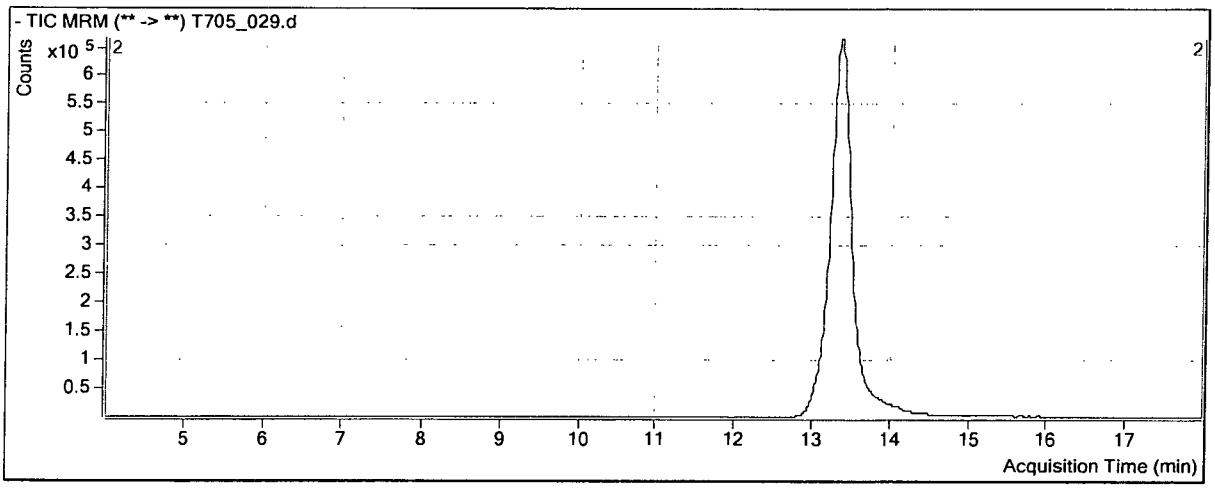
Sample ID : PER_CCV 0.002 ug/ml 06/27/15

Client ID : NA

Retention Time	Area Count Response	Compound_ID Product Ion
13.344	8149373	PER_IS_89
13.351	3859193	Perchlorate_83
13.378	1146076	Perchlorate_85

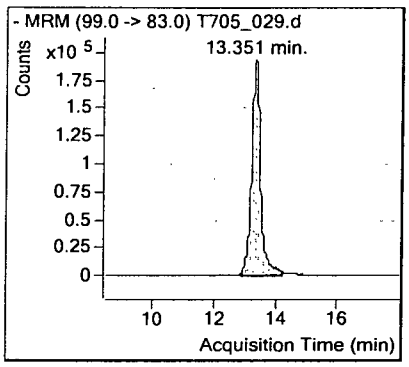
Quantitative Analysis Sample Report

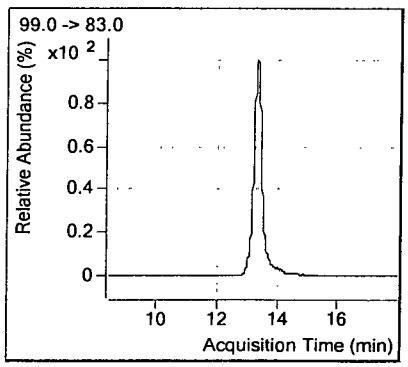
Batch Data Path	D:\MassHunter\Data\150705\QuantResults\150705_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T705_029.d	**Sample Name**	PER_CCV 0.002 ug/ml 06/27/15
Sample Type	Sample	**Acq_Date**	07/05/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	21:49
ClientID	NA	**Inj Vol**	20

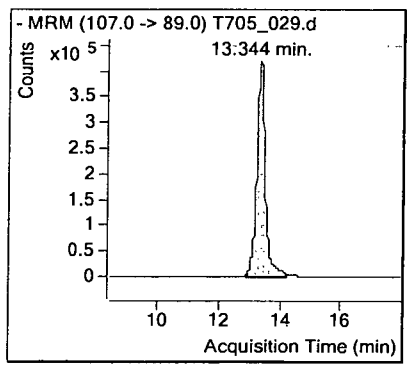


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.351	3859193	8149373
Perchlorate_102	PER_IS_108	13.378	1146076	8149373

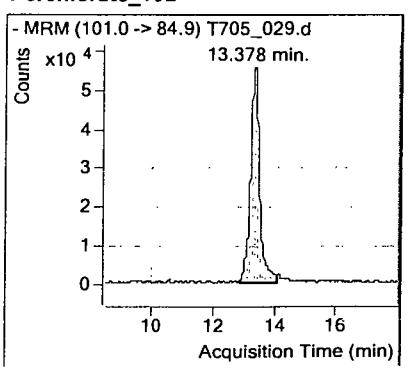
Perchlorate_100

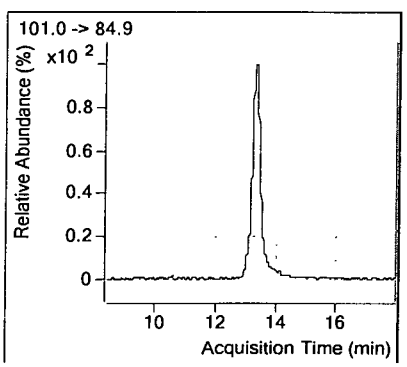


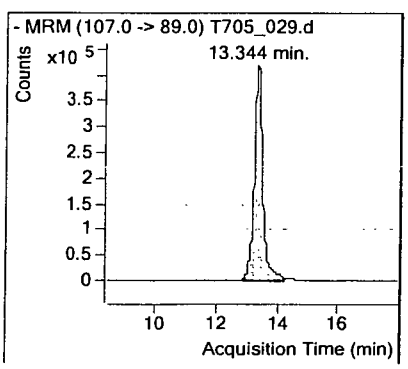




Perchlorate_102







EPA METHOD 6850
Perchlorate
LC/MS

Raw Data

APPL, INC.

Method Blank
Perchlorate

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150623W-17823 - 198538**
Batch ID: #6850-150623A

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	06/23/15	06/27/15

Quant Method: QTLMFL2
Run #: T627_007.d
Instrument: AGIL_6460
Sequence: TQ062715
Initials: RP

GC SC-Blank-REG MDLs
Printed: 07/06/15 8:34:21 AM

Data File ID: T627_007.d

Date Injected : 06/27/15

Time Injected : 19:23

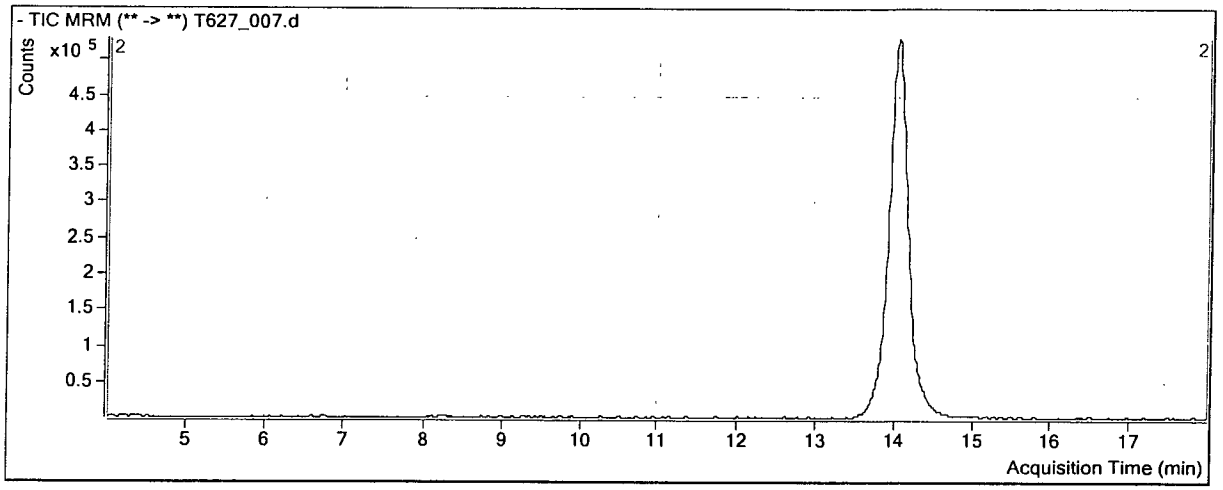
Sample ID : 150623WBLKA 1052.6 DF 06/23/15

Client ID : LAB_CNTL_W_BLKA

Retention Time	Area Count Response	Compound_ID Product Ion			
14.048	9544060	PER_IS_89			
13.963	5562	Perchlorate_83	(5562 * 0.0050) / (1.27 * 9544060.00) *	1052.60 =	0.002415 ppb
13.959	9067	Perchlorate_85	(9067 * 0.0050) / (0.39 * 9544060.00) *	1052.60 =	0.012768 ppb

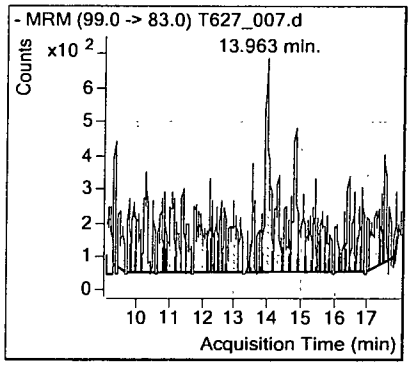
Quantitative Analysis Sample Report

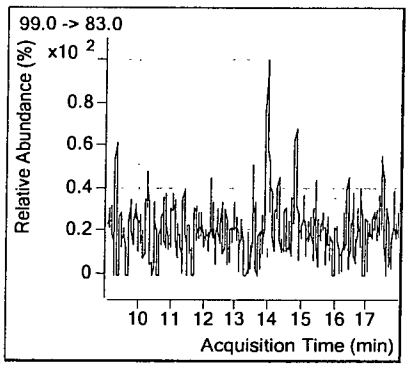
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_007.d	**Sample Name**	150623WBLKA 1052.6 DF 06/23/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	19:23
ClientID	LAB_CNTL_W_BLKA	**Inj Vol**	20

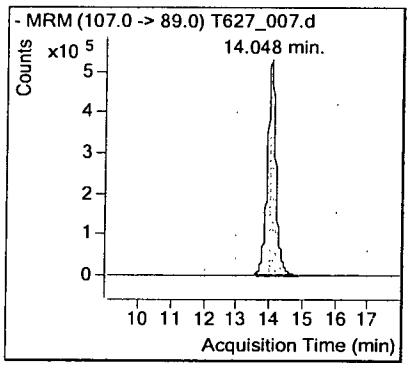


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.963	5562	9544060
Perchlorate_102	PER_IS_108	13.959	9067	9544060

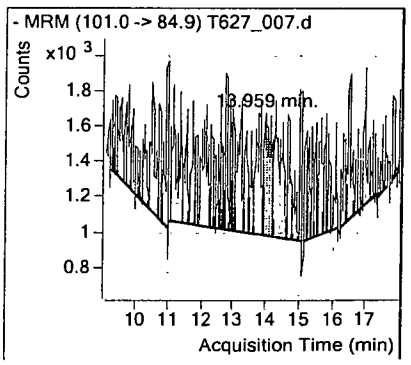
Perchlorate_100

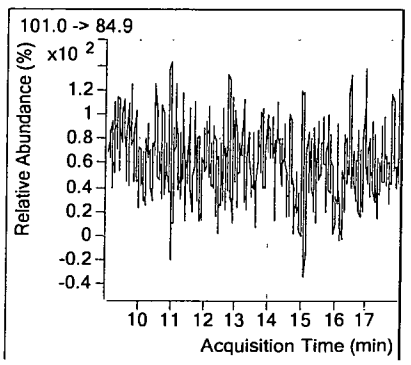


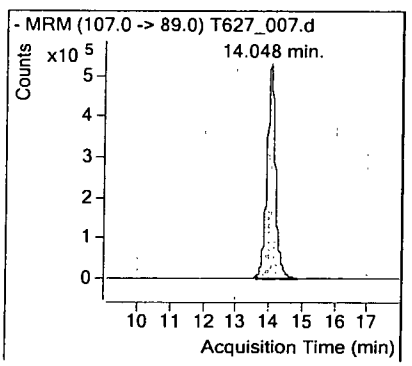




Perchlorate_102







Laboratory Control Spike Recovery
Perchlorate

APPL ID: **150623W-17823 LCS - 198538**
Batch ID: #6850-150623A

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	0.616	103	80-120

Comments: _____

Primary	SPK
Quant Method :	QTLMFL2
Extraction Date :	06/23/15
Analysis Date :	06/27/15
Instrument :	AGIL_6460
Run :	T627_005.d
Initials :	RP

Printed: 07/06/15 8:34:18 AM
APPL Standard LCS

Data File ID: T627_005.d

Date Injected : 06/27/15

Time Injected : 18:46

Sample ID : 150623WA_LCS-1 1052.6 DF 06/23/15

Client ID : LAB_CNTL_W_SPKA

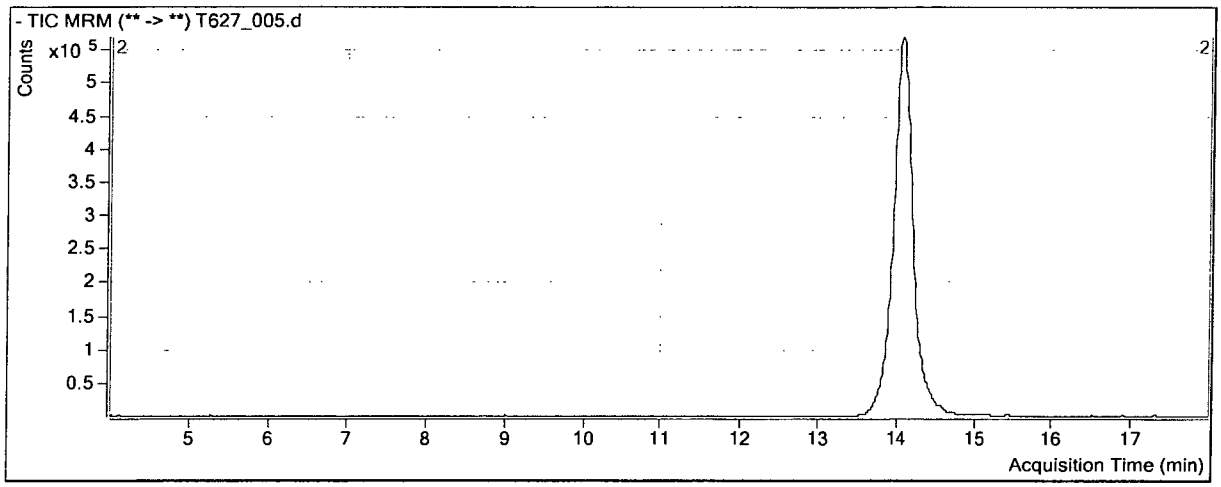
Retention Time	Area Count Response	Compound_ID Product Ion			
14.068	8637265	PER_IS_89			
14.075	1284148	Perchlorate_83	(1284148 * 0.0050) / (1.27 * 8637265.00) *	1052.60 =	0.616001 ppb
14.081	430461	Perchlorate_85	(430461 * 0.0050) / (0.39 * 8637265.00) *	1052.60 =	0.669796 ppb

$$\frac{(1052.6)(1284148)(0.005)}{(1.270255)(8637265)} = 0.616001$$

7/2/15
BP

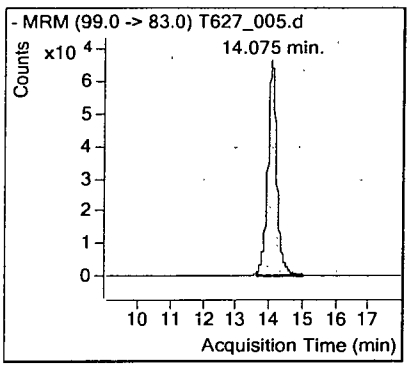
Quantitative Analysis Sample Report

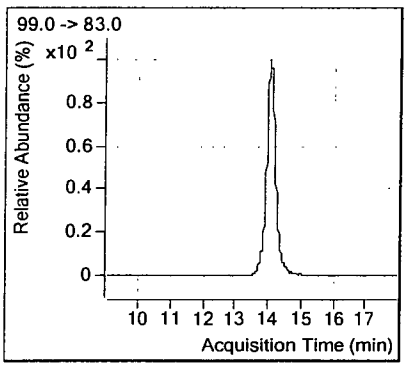
Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_005.d	**Sample Name**	150623WA_LCS-1 1052.6 DF 06/23/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	18:46
ClientID	LAB_CNTL_W_SPKA	**Inj Vol**	20

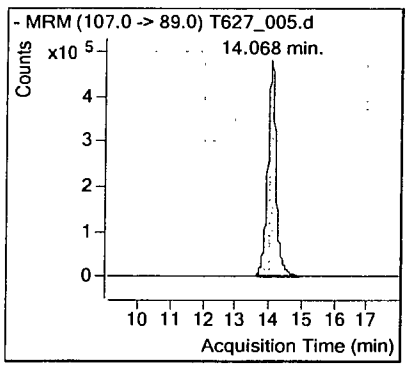


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	14.075	1284148	8637265
Perchlorate_102	PER_IS_108	14.081	430461	8637265

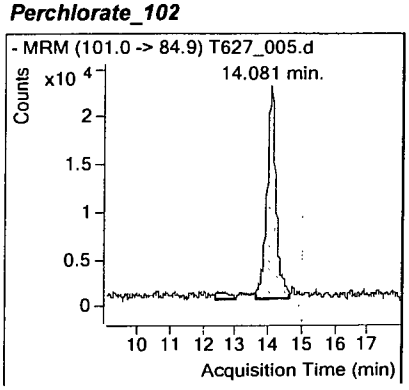
Perchlorate_100

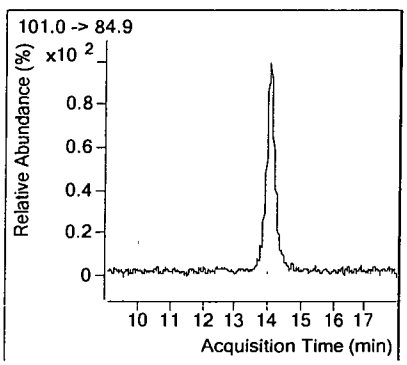


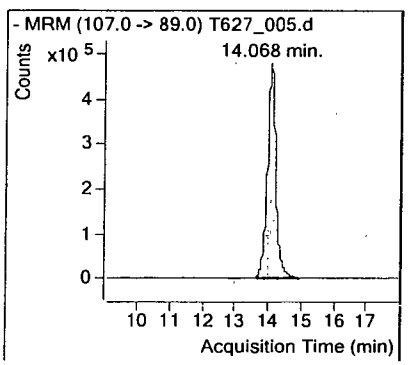




Perchlorate_102







Interferrence Check Sample

Perchlorate EPA 6850 Water

APPL ID: 150623W-17823 ICS-198538
Batch ID: #6850-150623A

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	0.675	112.5%	70-130

Comments:

Quant Method:	QTLMFL2
Extraction Date:	06/23/15
Analysis Date:	06/27/15
Instrument:	AGIL_6560
Run:	T627_006.D
Initials:	RP

Data File ID: T627_006.d

Date Injected : 06/27/15

Time Injected : 19:04

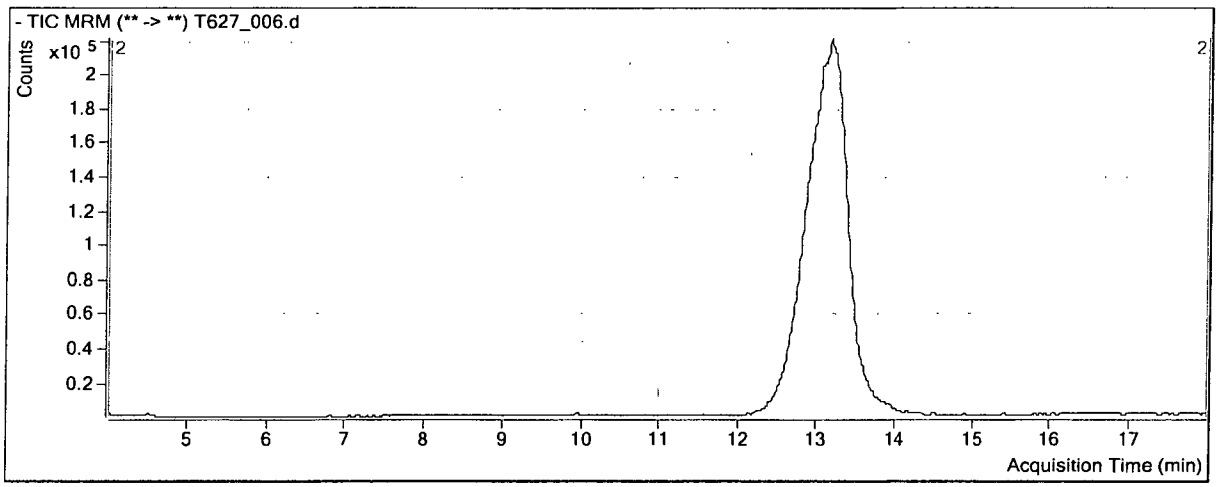
Sample ID : 150623W_ICSA 1052.6 DF 06/23/15

Client ID : LAB_CNTL_W_ICSA

Retention Time	Area Count Response	Compound_ID Product Ion				
13.171	6625849	PER_IS_89				
13.178	1080239	Perchlorate_83	(1080239 * 0.0050) / (1.27 * 6625849.00) *	1052.60 =	0.675493	ppb
13.195	359948	Perchlorate_85	(359948 * 0.0050) / (0.39 * 6625849.00) *	1052.60 =	0.730102	ppb

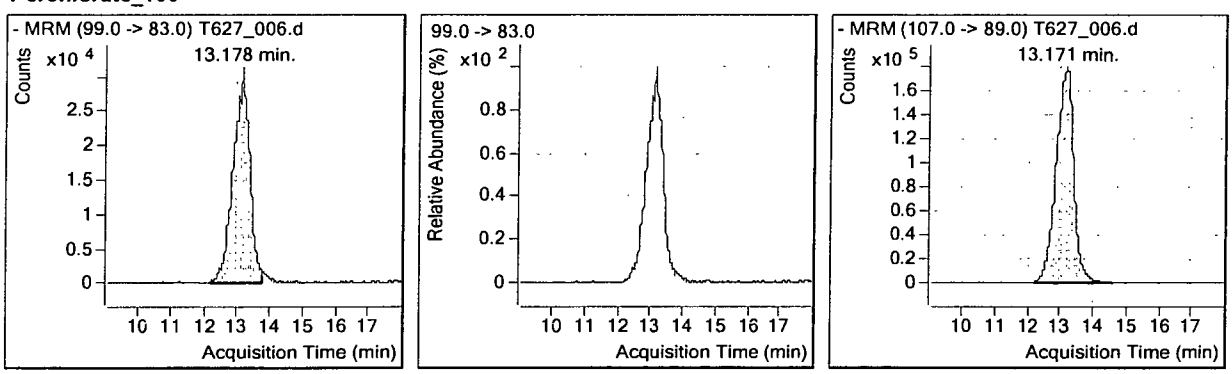
Quantitative Analysis Sample Report

Batch Data Path	D:\MassHunter\Data\150627\QuantResults\150627_A_MI.batch.bin		
Instrument	LCMS QQQ	**Operator**	ba
Data File	T627_006.d	**Sample Name**	150623W_ICSA 1052.6 DF 06/23/15
Sample Type	Sample	**Acq_Date**	06/27/15
Acq Method	6460_ESI_PER_N_NEWER_K'_COLUMN.m	**Acq Time**	19:04
ClientID	LAB_CNTL_W_ICSA	**Inj Vol**	20

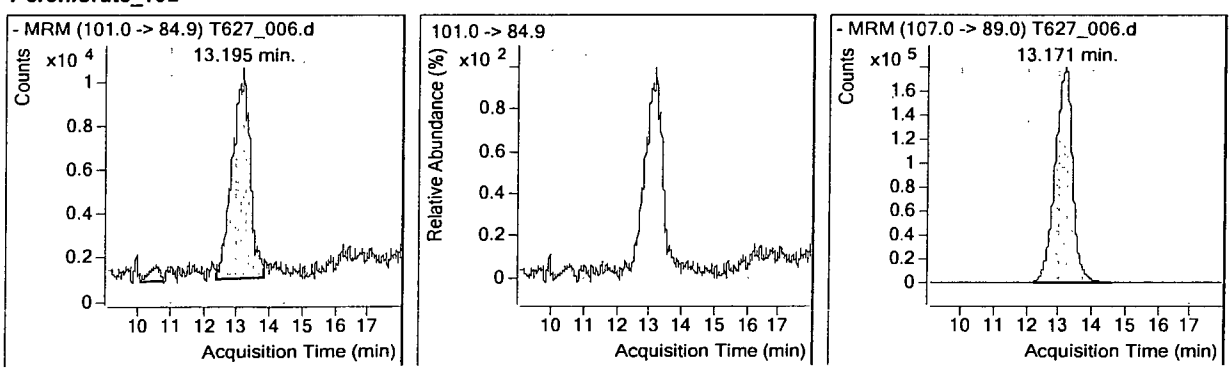


Compound	ISTD	RT	Resp	ISTD Resp
Perchlorate_100	PER_IS_108	13.178	1080239	6625849
Perchlorate_102	PER_IS_108	13.195	359948	6625849

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.

040 LCMS 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								

LCMS STANDARD PREP LOG# 1-- PAGE 21

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT#	DATE / INITIALS
SeaV_spk 250ng/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 02SI $^{18}O_4$ 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 02SI $^{18}O_4$ Perchlorate
100 µg/L lot 1059192-33479

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT#	DATE: INITIALS

NOTE: THE FOLLOWING DOCUMENTATION JL
WAS PERFORMED AS DATED: 05-19-15

PER_CCV 0.0004 µg/ml 05:07-15: JL
PER_SS 0.010 µg/ml 08-28-14 took 05-07-15
0.040 ml and added to 0.910ml
Laboratory Source DI_H20 that
had previously received 0.050ml
025I $^{18}O_4$ Perchlorate 100µg/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_H20 that had previously
received 0.050 ml 025I $^{18}O_4$
Perchlorate 100µg/L lot
1074176-35163

PER_IS 0.005µg/ml 05-07-15:
025I $^{18}O_4$ Perchlorate 100µg/L
lot 1074176-35163 took 0.050
ml and added to 0.950 ml
Laboratory Source DI_H20
NOTE: Repeated the above
process four times in order
to prepare 2-2ml vials
that were full.

STANDARD PREP LOG# 105 PAGE# 103

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE INITIAL

NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: JR 06-19-15 — JR 06-19-15

PER_CCV ~~0.000H~~ JR ~~0.004~~ µg/ml 05-29-15: — JR 05.29.15

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 received 0.050 ml 025I $^{18}O_4$ Perchlorate 100µg/L lot 1074176-35163

PER_CCV 0.002 µg/ml 05-29-15:
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 025I $^{18}O_4$ Perchlorate 100 µg/L lot 1074176-35163

PER_IS 0.005 µg/ml 05-29-15:
025I $^{18}O_4$ 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.

STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT VOLUME	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE & INITIALS

NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: JH 06-28-15 JH 06-28-15

AZ17047_W01 21052.6 DF 06-04-15_6/5: JH
AZ17047_W01 1052.6 DF 06-04-15 06-05-15
TOOK 0.050 mL AND ADDED TO
0.950 mL PER_IS_50:50 0.005 µg/mL
06-03-15

AZ17047_W01 10526.3 DF 06-04-15_6/5:
AZ17047_W01 1052.6 DF 06-04-15
TOOK 0.050 mL AND ADDED TO
0.450 mL PER_IS_50:50 0.005 µg/mL
06-03-15

PER_CCV 0.0004 µg/mL 06-11-15: JH
PER_SS 0.010 µg/mL 08-28-14 06-11-15
took 0.040 mL and added to
0.910 mL Laboratory Source
DI_H2O that had received
0.050 mL 025I $^{18}O_4$ Perchlorate
100 µg/L lot 107H176-35163

PER_CCV 0.002 µg/mL 06-11-15:
PER_SS 0.010 µg/mL 08-28-15
took 0.200 mL and added to
0.750 mL Laboratory Source
DI_H2O that had received
0.050 mL 025I $^{18}O_4$ Perchlorate
100 µg/L lot 107H176-35163

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE INITIALS
NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: ~~JK~~ 06-29-15							JL 06-29-15
PER_IS 0.005 µg/mL 06-11-15:							JL
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		06-11-15
NOTE: Repeated the above process four times in order to prepare 2-2mL vials that were full.							
AZ16235_W01 10526.3 DF 05-12-15_6/12:							JL
AZ16235-W01 1052.6 DF 05-12-15							06-12-15
TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS.50:50 0.005µg/mL 06-03-15							
~~AZ16963_W01 10526.3 DF 06-02-15_6/3~~							JL 6-29-15

LCMS STANDARD PREP LOG# 105 PAGES 116

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE/ INITIALS
NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED! JR 07-01-15							07-01-15
AZ17695_W01 10526.3 DF 06-17-15_6/22 AZ17695_W01 1052.6 DF 06-17-15 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005 µg/mL 06-03-15							JR 06-22-15
AZ17695_W01 105263.2 DF 06-17-15_6/22: AZ17695_W01 10526.3 DF 06-17-15_6/22 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005 µg/mL 06-03-15							
AZ17695_W01 1052631.6 DF 06-17-15_6/22 ~~AZ17695~~ JR AZ17695_W01 105263.2 DF 06-17-15_6/22 TOOK 0.050 mL AND ADDED TO 0.450 mL PER_IS_50:50 0.005 µg/mL 06-03-15							
PER_CCV 0.0002 µg/mL 06-27-15: PER_SS 0.010 µg/mL 08-28-15 took 0.040 mL and added to 0.910 mL Laboratory Source DI-H2O that had received 0.050 mL 02SI $^{18}O_4$ Perchlorate 100 µg/L Lot# 1074176-3516.3. Repeated the above process and then combined the aliquots into a single vial.							JR 06-22-15

LC/MS STANDARD PREP LOG# 105 PAGE 111

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL. EN. LOT#	DATE INITIALS

NOTE: THE FOLLOWING DOCUMENTATION WAS PERFORMED AS DATED: JBk 07.01.15 07.01.15

PER-CCV 0.002 µg/mL 06.27.15 JBk

PER-SS 0.010 µg/mL 08.28.15 06.27.15

TOOK 0.200 mL and added to 0.750 mL Laboratory Source DI H2O that had received 0.050 mL 02SI $^{18}O_4$ Perchlorate 100 µg/L lot 10TN176-35163. Repeated the above process and then combined the aliquots into a single vial.

AZ17826-W03 10526.3 DF 06.23.15_6/28 JBk 7 JBk

AZ17826-W03 1052.6 DF 06.23.15 06.28.15 JBk

TOOK 0.050 mL AND ADDED TO 0.450 mL PER-IS-50:50 0.005 µg/mL 06.03.15

AZ17826-W03 105263.2 DF 06.23.15_6/28 7 JBk

AZ17826-W03 10526.3 DF 06.23.15_6/28 7 JBk

TOOK 0.050 mL AND ADDED TO 0.450 mL PER-IS-50:50 0.005 µg/mL 06.03.15

AZ17826-W03 1052631.6 DF 06.23.15_6/28 7 JBk

AZ17826-W03 10526.3 DF 06.23.15_6/28 7 JBk

TOOK 0.050 mL AND ADDED TO 0.450 mL PER-IS-50:50 0.005 µg/mL 06.03.15

LCMS STANDARD PREP LOG# 105 PAGE 113

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT#	DATE INITIALS

NOTE: THE FOLLOWING DOCUMENTATION JR
WAS PERFORMED AS DATED: JR 07-07-15 07-07-15

AZ17908_W03 10526.3 DF 06-23-15_6/27: JR
AZ17908_W03 1052.6 DF 06-23-15 06-27-15
TOOK 0.050 ml AND ADDED TO
0.450 ml PER_IS_50:50 0.005 µg/ml
06-27-15

AZ17909_W03 10526.3 DF 06-23-15_6/27:
AZ17909_W03 1052.6 DF 06-23-15
TOOK 0.050 ml AND ADDED TO
0.450 ml PER_IS_50:50 0.005 µg/ml
06-27-15

AZ17909_W03 105263.2 DF 06-23-15_6/27:
AZ17909_W03 10526.3 DF 06-2375_6/27
TOOK 0.050 ml AND ADDED TO
0.450 ml PER_IS_50:50 0.005 µg/ml
06-27-15

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150623A	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:	06/23/15 14:18	
Spiked ID 8			Ext. End Time:	06/23/15 14:26	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 06/23/15 2:15:00 PM **Witnessed By:** DL **Date** 06/23/15 2:15:00 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150623A Blk				NA	NA equip	5ML	5ML	NA	06/23/15 14:18	
2	150623A LCS-1		0.030	1	NA	NA equip	5ML	5ML	NA	06/23/15 14:18	
3	150623A ICS		0.030/0.060	1/2	NA	NA equip	5ML	5ML	NA	06/23/15 14:18	
4	AZ17817	AZ17817W02			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
5	AZ17818	AZ17818W02			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
6	AZ17821	AZ17821W02			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
7	AZ17823 MS-1	AZ17823W02	0.030	1	NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
8	AZ17823 MSD-1	AZ17823W02	0.030	1	NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
9	AZ17823	AZ17823W02			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
10	AZ17825	AZ17825W02			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
11	AZ17826	AZ17826W03			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
12	AZ17827	AZ17827W01			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
13	AZ17828	AZ17828W03			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
14	AZ17829	AZ17829W03			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76674
15	AZ17907	AZ17907W03			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76687
16	AZ17908	AZ17908W01			NA	NA equip	5ML	5ML	NA	06/23/15 14:18	76687

Solvent and Lot#	
DI WATER	6-23-15

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PY
Date	6/23/15
Time	15:30
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	06/23/15 2:28:21 PM

Reviewed By: PY **Date** 6/23/15

Organic Extraction Worksheet

Method	EPA 6850 HPLC Perchlorate Extraction	Extraction Set	150623A	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:	06/23/15 14:18	
Spiked ID 8			Ext. End Time:	06/23/15 14:26	
			GC Requires Extract By:		

pH1			Water Bath Temp Criteria	
pH2				
pH3				

Spiked By: CFM **Date** 06/23/15 2:15:00 PM **Witnessed By:** DL **Date** 06/23/15 2:15:00 PM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
17	AZ17909	AZ17909W03			NA	NA	5ML	5ML	NA	06/23/15 14:18	76687
						equip					

PY 6/23/15

Solvent and Lot#	
DI WATER	6-23-15

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	PY
Date	6/23/15
Time	15:30
Refrigerator	NA

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	06/23/15 2:28:21 PM

Reviewed By: PY **Date** 6/23/15

METHOD 6850 INJECTION LOG: 03/12/15, 06/27/15

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 06/27/15	T627_002.d	06/27/15 17:50
PER_CCV 0.002 ug/ml 06/27/15	T627_003.d	06/27/15 18:09
150623WA_LCS-1 1052.6 DF 06/23/15	T627_005.d	06/27/15 18:46
150623W_ICSA 1052.6 DF 06/23/15	T627_006.d	06/27/15 19:04
150623WBLKA 1052.6 DF 06/23/15	T627_007.d	06/27/15 19:23
PER_CCV 0.0004 ug/ml 06/27/15	T627_015.d	06/27/15 21:52
PER_CCV 0.002 ug/ml 06/27/15	T627_016.d	06/27/15 22:11
AZ17907_W03 1052.6 DF 06/23/15	T627_023.d	06/28/15 0:21
PER_CCV 0.0004 ug/ml 06/27/15	T627_027.d	06/28/15 1:36
PER_CCV 0.002 ug/ml 06/27/15	T627_028.d	06/28/15 1:54

METHOD 6850 INJECTION LOG : 07/05/15 THRU 07/06/15

DETECTOR ID : Agilent 6460 Triple Quad LC/MS PAGE 1 OF 1

SAMPLE INJECTION ID :			DATA FILE ID:	INJECTION DATE/TIME
PER_CCV	0.002 ug/ml	06/27/15	T705_003.d	07/05/15 13:44
PER_CCV	0.0004 ug/ml	06/27/15	T705_015.d	07/05/15 17:28
PER_CCV	0.002 ug/ml	06/27/15	T705_016.d	07/05/15 17:46
AZ17908_W03	10526.3 DF	06/23/15	T705_022.d	07/05/15 19:38
AZ17909_W03	105263.2 DF	06/23/15	T705_024.d	07/05/15 20:16
PER_CCV	0.0004 ug/ml	06/27/15	T705_028.d	07/05/15 21:30
PER_CCV	0.002 ug/ml	06/27/15	T705_029.d	07/05/15 21:49

FILE ID : R76687.SEQ

EXPLOSIVES
EPA METHOD 8330

APPL, INC.

EPA 8330
EXPLOSIVES

QC Summary

APPL, INC.

Method Blank
EPA 8330B WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **150622W-17907 - 198432**
Batch ID: #83BJU11W-150622

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	06/22/15	06/24/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
BLANK	SURROGATE: 1,2-DINITROBENZ	92.2	70-130			%	06/22/15	06/24/15

Quant Method: STE2_15052
Run #: 0624_000006
Instrument: Statler
Sequence: 150624
Initials: MP

GC SC-Blank-REG MDLs
Printed: 06/29/15 11:42:36 AM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Statler

APPL ID.	Client Sample No.	SURROGATE: 1,2-DINITROBENZENE (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
150622-BLK	Blank	70-130	92.2				
AZ17907	S67-MW021-061715	70-130	89.5				
AZ17909	S67-MW025-061715	70-130	92.0				
150622-LCS	Lab Control Spike	70-130	88.3				
AZ17908	S67-MW020-061715	70-130	86.1				

Comments: Batch: #83BJU11W-15062

Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150622W-17907 LCS - 198432**
Batch ID: #83BJU11W-150622

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	7.17	89.6	60-135
2,6-DINITROTOLUENE	8.00	7.15	89.4	60-135
HMX	8.00	7.64	95.5	80-115
NITROGLYCERIN	8.00	7.11	88.9	70-130
RDX	8.00	7.24	90.5	50-160
TETRYL	8.00	7.70	96.3	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	7.06	88.3	70-130

Comments:

Primary	SPK
Quant Method :	W150627.M
Extraction Date :	06/22/15
Analysis Date :	06/28/15
Instrument :	Waldorf
Run :	0627_000032
Initials :	MP

Printed: 06/29/15 11:42:32 AM
APPL Standard LCS

EPA 8330B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: WATER Instrument: Statler

Blank ID: 150622-BLK Time Analyzed: 1439

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150622-BLK	Blank	0624_000006	06/24/15 1439
AZ17907	S67-MW021-061715	0624_000007	06/24/15 1519
AZ17909	S67-MW025-061715	0624_000009	06/24/15 1638
150622-LCS	Lab Control Spike	0627_000032	06/28/15 0752
AZ17908	S67-MW020-061715	0627_000053	06/28/15 2040

Comments: Batch: #83BJU11W-15062

EPA 8330
EXPLOSIVES

Sample Data

APPL, INC.

EPA 8330B WATER

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

Attn: Ed Corack

Project: CTO JU11 112G02622 NSF Indian Head

Sample ID: S67-MW021-061715

Sample Collection Date: 06/17/15

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 76687

APPL ID: AZ17907

QCG: #83BJU11W-150622-19843

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	06/22/15	06/24/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	89.5	70-130			%	06/22/15	06/24/15

Quant Method:	STE2_150522.M
Run #:	0624_000007
Instrument:	Statler
Sequence:	150624
Dilution Factor:	1
Initials:	MP

Printed: 06/29/15 11:42:40 AM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 15:19:11
Operator : MP
Sample : AZ17907W05 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4097 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:52:57 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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	8.060	0	99126	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.	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	11.912	0	516	N.D.	d LDL NoCal	
9)	TM TETRYL	11.888	0.000	855	0	NoCal	LDL 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.	NT N.D.	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	22.925f	0	16790	N.D.	d NT NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

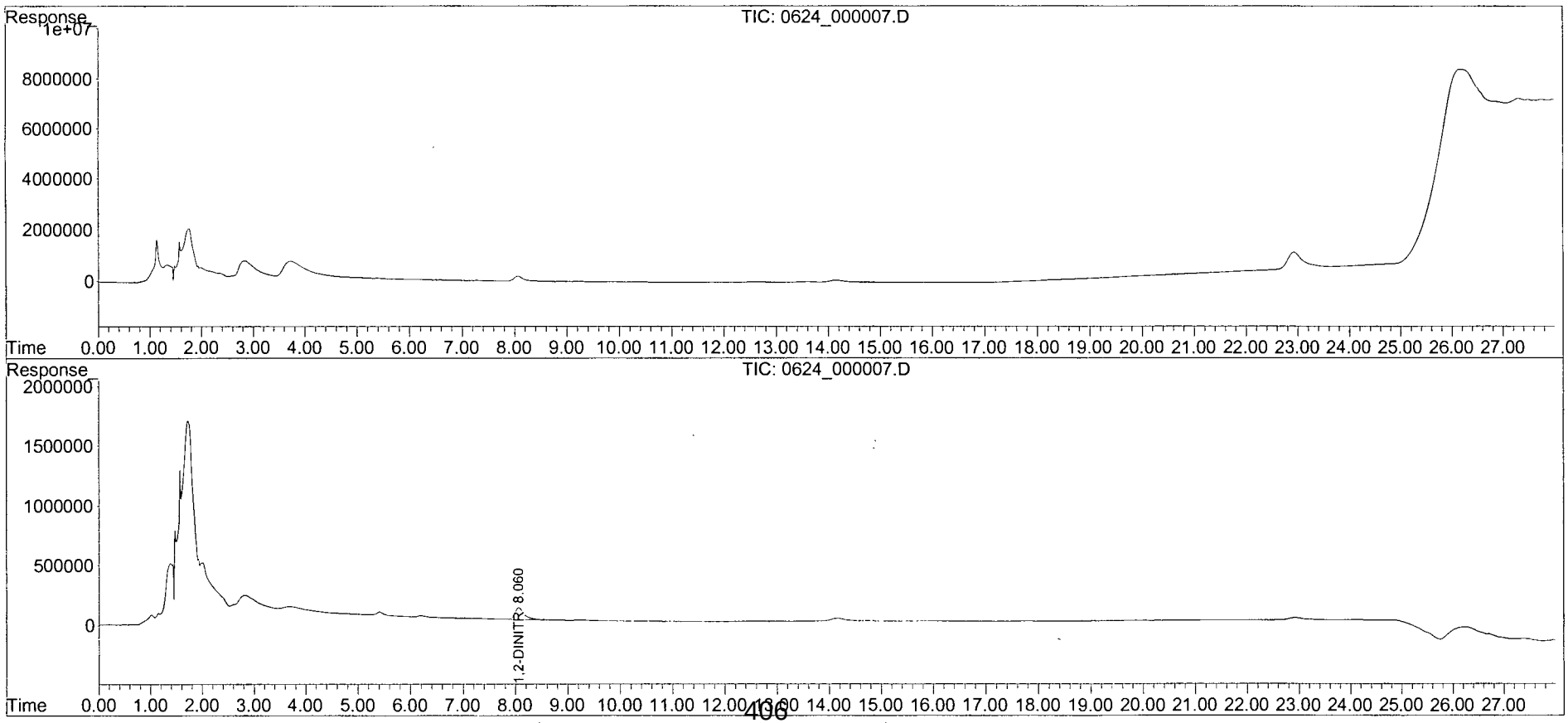
MP
06-25-15

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 15:19:11
Operator : MP
Sample : AZ17907W05 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4097 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:52:57 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



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: 76687

Sample ID: S67-MW020-061715

APPL ID: AZ17908

Sample Collection Date: 06/17/15

QCG: #83BJU11W-150622-198432

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	06/22/15	06/28/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/28/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/28/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/28/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/28/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/28/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	86.1	70-130			%	06/22/15	06/28/15

Quant Method: W150627.M
Run #: 0627_000053
Instrument: Waldorf
Sequence: 150627
Dilution Factor: 1
Initials: MP

Printed: 07/15/15 2:49:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000053.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 20:40:06
Operator : MP
Sample : AZ17908 0.016 DF 06/22/15
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: Jun 29 07:34:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	3.759	0	769282	N.D.		0.861	#
	Spiked Amount 1.000			Recovery =		0.00%		86.10%	
	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 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 ΔRT	N.D.	
9)	TM TETRYL	0.000	0.000	0	0	N.D.		N.D.	
10)	TM 2,4,6-TRI...	7.166	0.000	571764	0	NoCal	NT	N.D.	d
11)	TM 2-AMINO-4...	7.603	0.000	6372	0	NoCal	NT	N.D.	d
12)	TM 4-AMINO-2...	8.098	0.000	21724	0	NoCal	NT	N.D.	
13)	TM 2,4-DINIT...	8.890	0.000	1603762	0	NoCal	ΔRT	N.D.	d
14)	TM 2,6-DINIT...	9.451	0.000	173419	0	NoCal	<DL	N.D.	d
15)	TM 2-NITROTO...	0.000	0.000	0	0	N.D.	NT	N.D.	d
16)	TM 4-NITROTO...	0.000	0.000	0	0	N.D.	NT	N.D.	d
17)	TM 3-NITROTO...	0.000	0.000	0	0	N.D.	NT	N.D.	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.

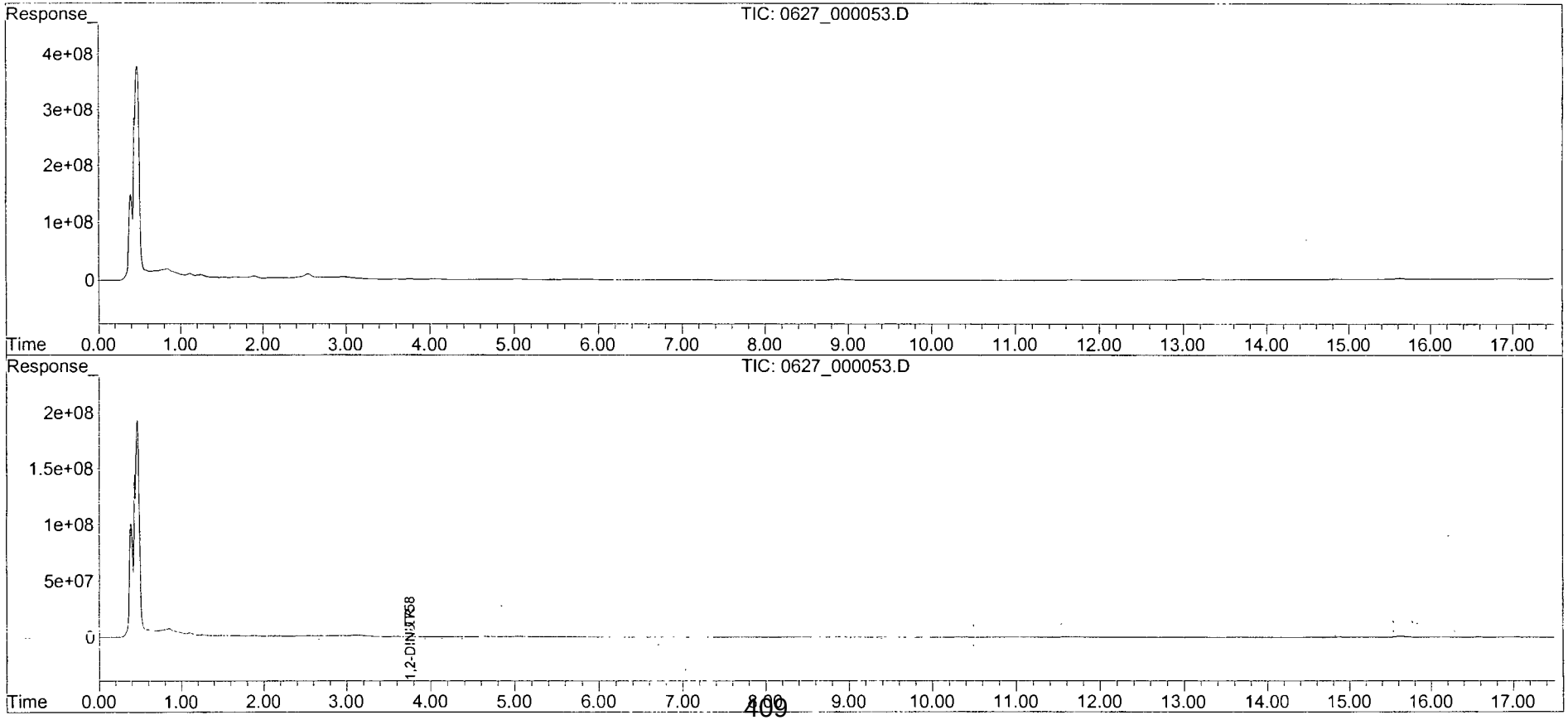
MP
06-29-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000053.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 20:40:06
Operator : MP
Sample : AZ17908 0.016 DF 06/22/15
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: Jun 29 07:34:36 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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\150624\
Data File : 0624_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 15:58:42
Operator : MP
Sample : AZ17908W02 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4098 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:55:08 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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	7.925	0	212952	N.D.	1.923	#
Spiked Amount	1.000			Recovery	=	0.00%	192.30%	
	Target Compounds							
1) TM	HMX	0.000	4.051	0	128157	N.D.	1.168	#
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.	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.	N.D.	d
7) TM	2,4,6-TRI...	0.000	0.000	0	0	N.D.	N.D.	
8) TM	NITROGLYC...	0.000	11.970	0	3306	N.D. d	NoCal	
9) TM	TETRYL	11.990	0.000	2950	0	NoCal	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.	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	22.930f	0	218358	N.D. d	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

WALDORF ND NT NT <DL <DL NT

MP 06-25-15

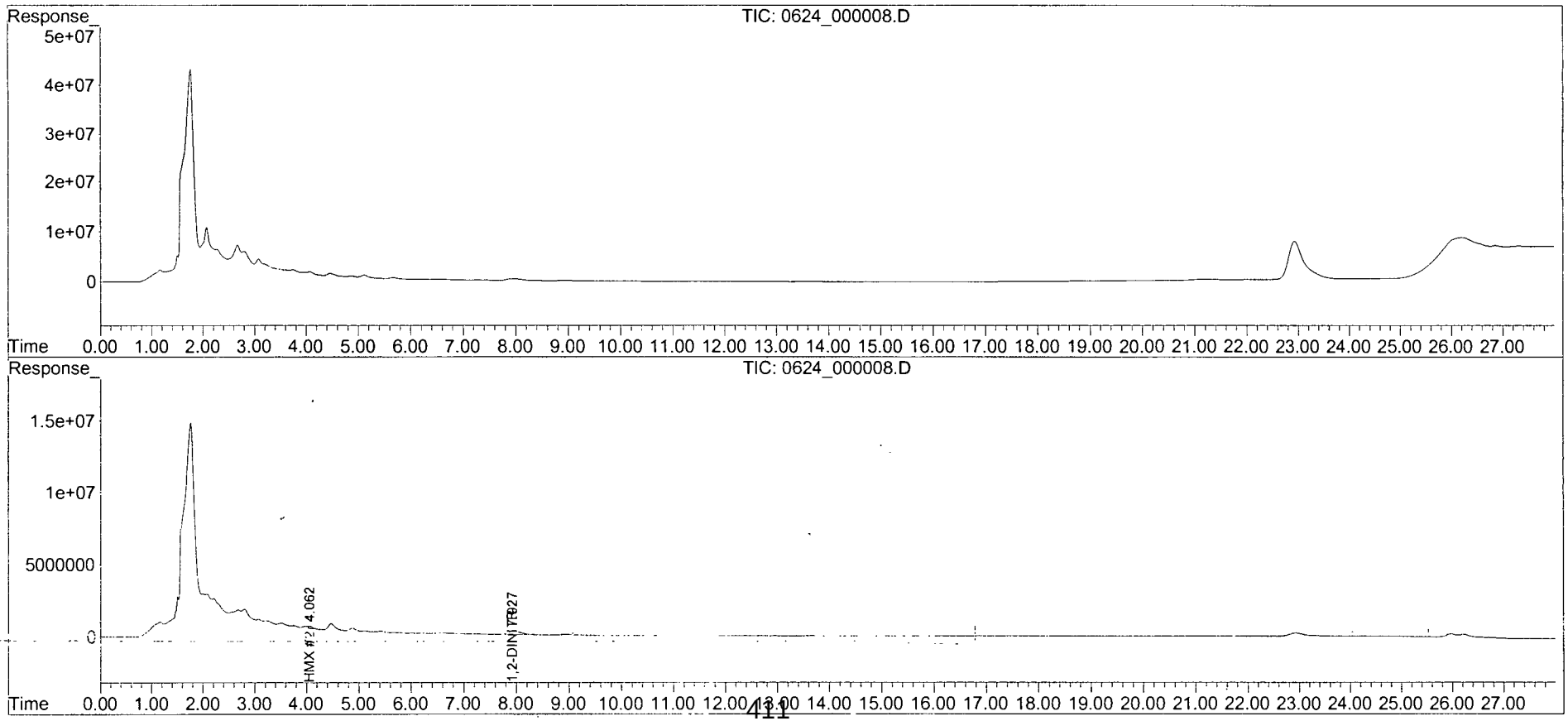
Reported surrogate from Waldorf MP 6-30-15

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 15:58:42
Operator : MP
Sample : AZ17908W02 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4098 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:55:08 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



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: 76687

Sample ID: S67-MW025-061715

APPL ID: AZ17909

Sample Collection Date: 06/17/15

QCG: #83BJU11W-150622-19843

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	06/22/15	06/24/15
EPA 8330B	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
EPA 8330B	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
EPA 8330B	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
EPA 8330B	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
EPA 8330B	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
EPA 8330B	SURROGATE: 1,2-DINITROBENZENE (	92.0	70-130			%	06/22/15	06/24/15

Quant Method:	STE2_150522.M
Run #:	0624_000009
Instrument:	Statler
Sequence:	150624
Dilution Factor:	1
Initials:	MP

Printed: 06/29/15 11:42:40 AM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 16:38:13
Operator : MP
Sample : AZ17909W05 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4099 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:56:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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	8.055	0	101889	N.D.		0.920	#
	Spiked Amount 1.000			Recovery	=	0.00%		92.00%	
	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.	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	11.814	0	1157	N.D.		NoCal	
9)	TM TETRYL	0.000	0.000	0	0	N.D.	<DL	N.D.	d
10)	TM 2,6-DINIT...	13.059f	0.000	828	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	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	22.922f	0	93892	N.D.	d	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

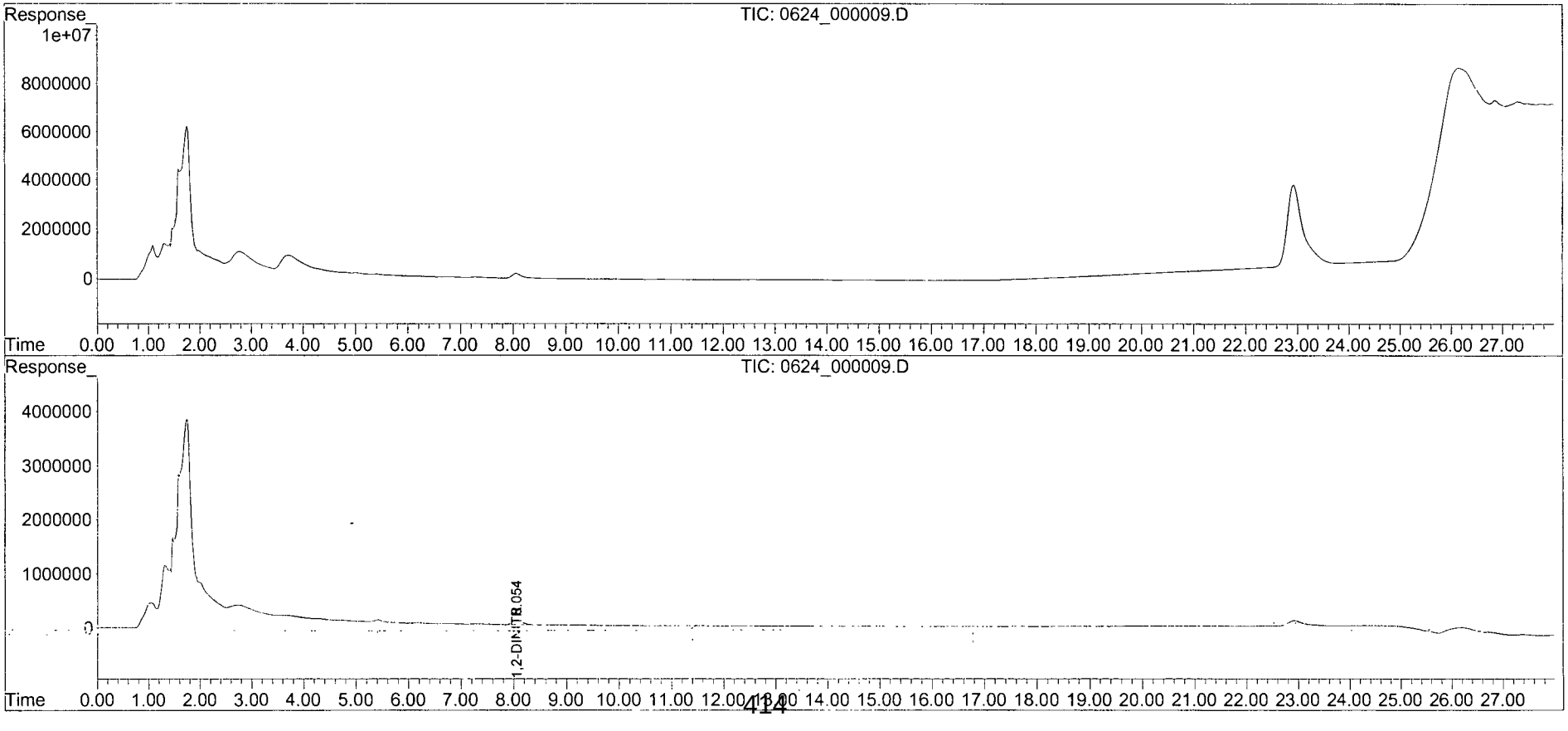
MP
06-25-15

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 16:38:13
Operator : MP
Sample : AZ17909W05 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4099 Sample Multiplier: 0.016

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 15:56:41 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



EPA 8330
EXPLOSIVES

Calibration Data

APPL, INC.

Initial Calibration

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

SDG No: 76687
Initial Cal. Date: 05/22/15
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.

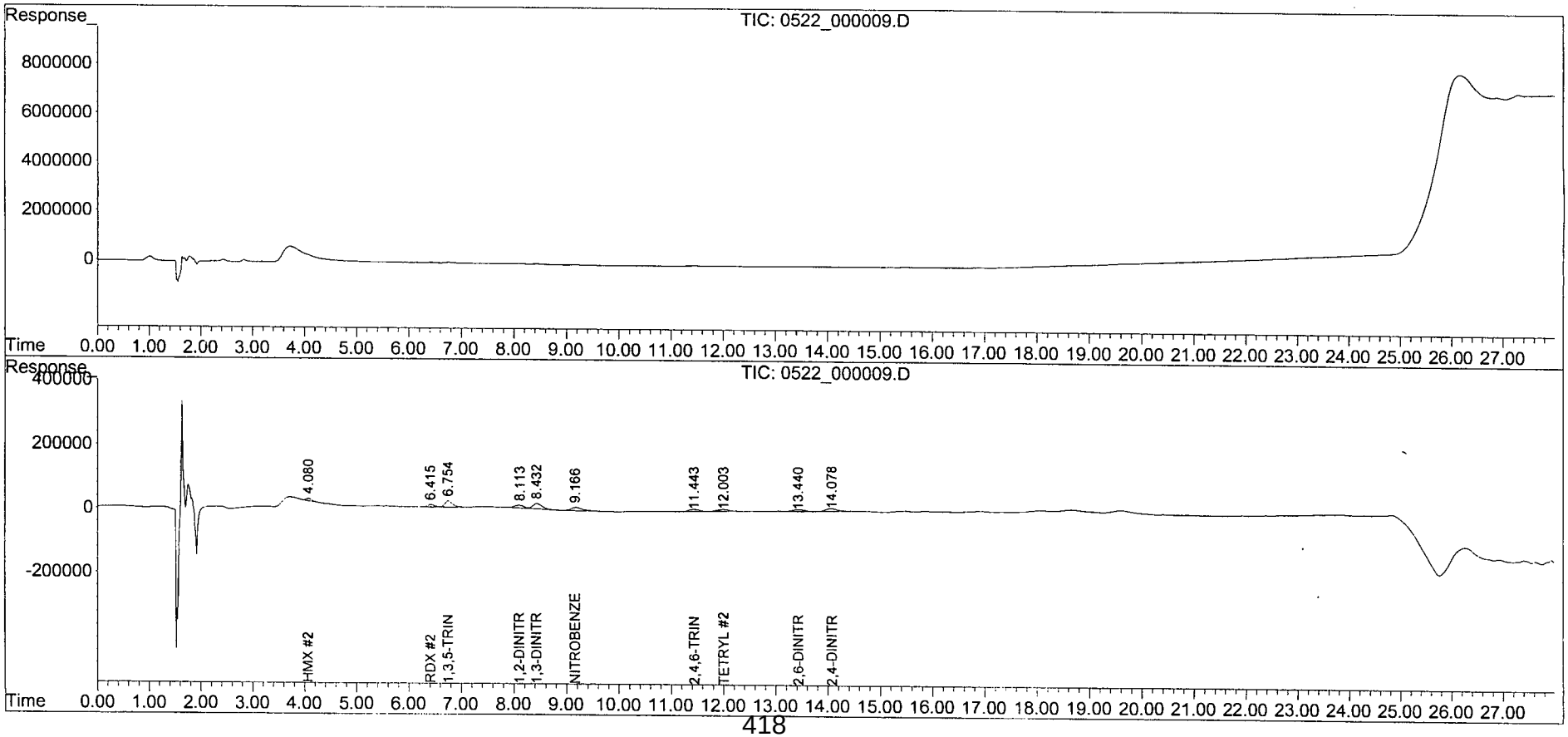
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

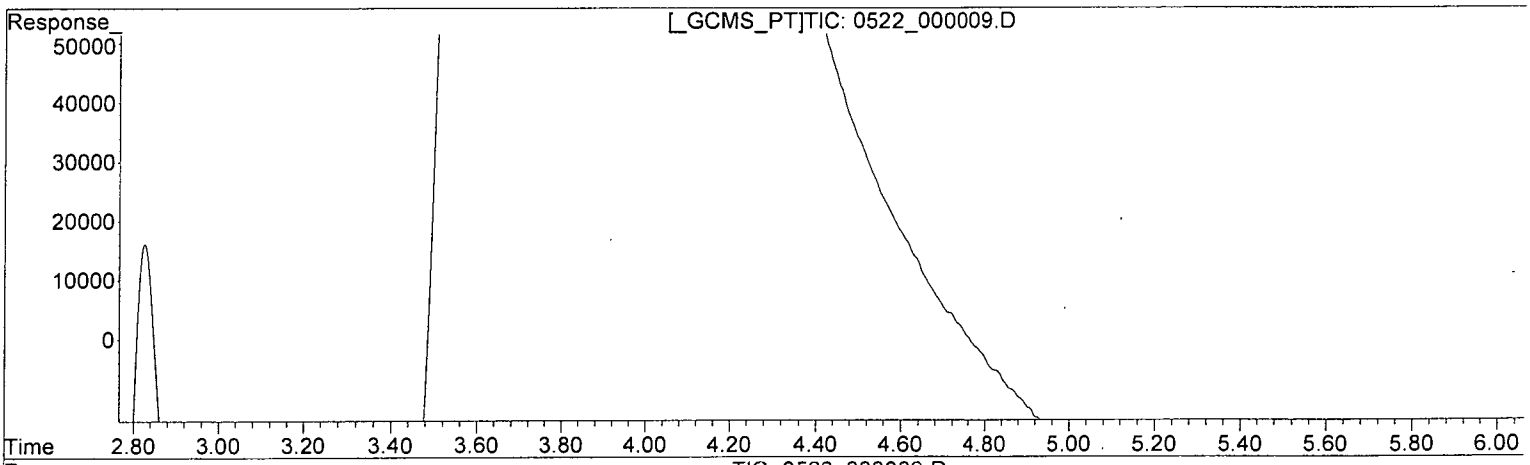


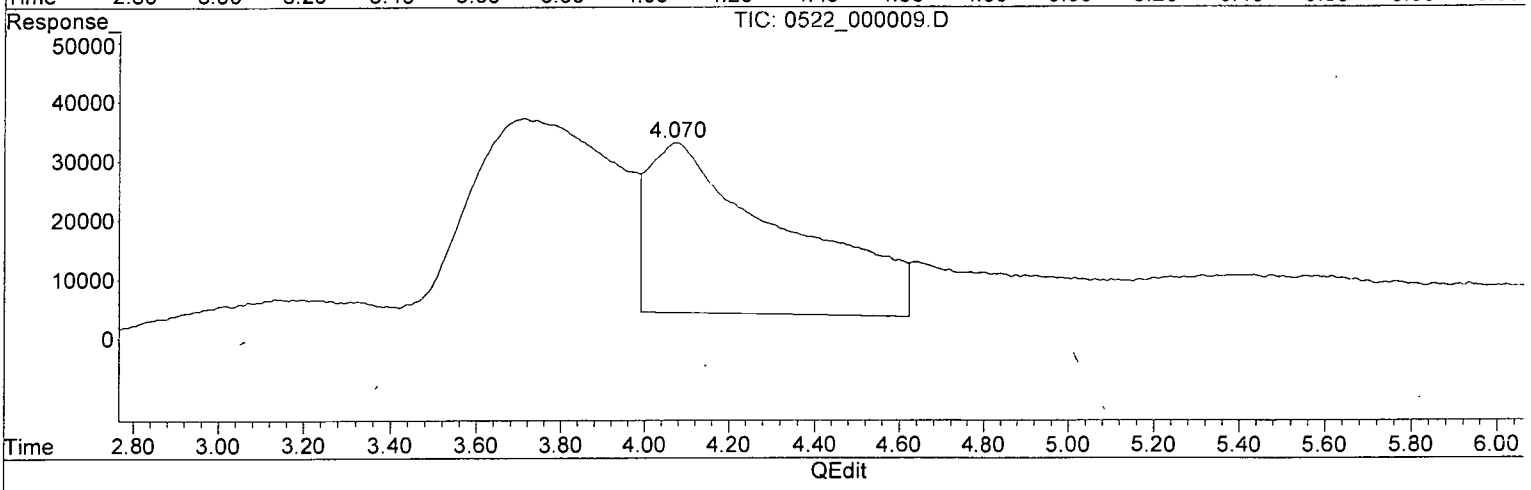
Quantitation Report (Qedit)

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

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.074min 13.606 ppb

response 28611

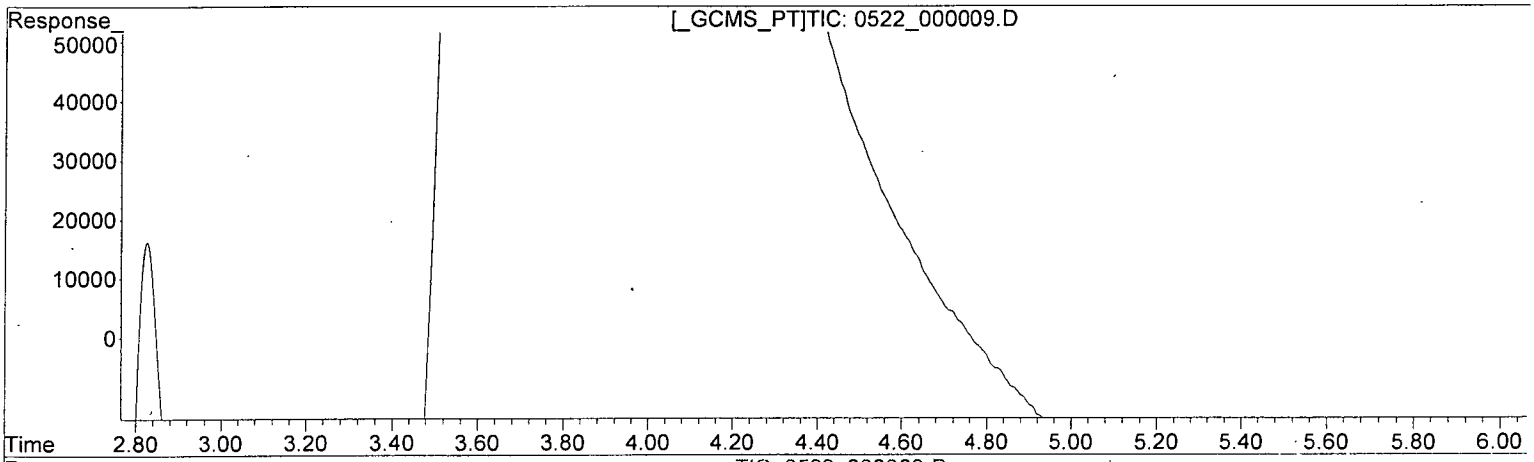
(+) = Expected Retention Time

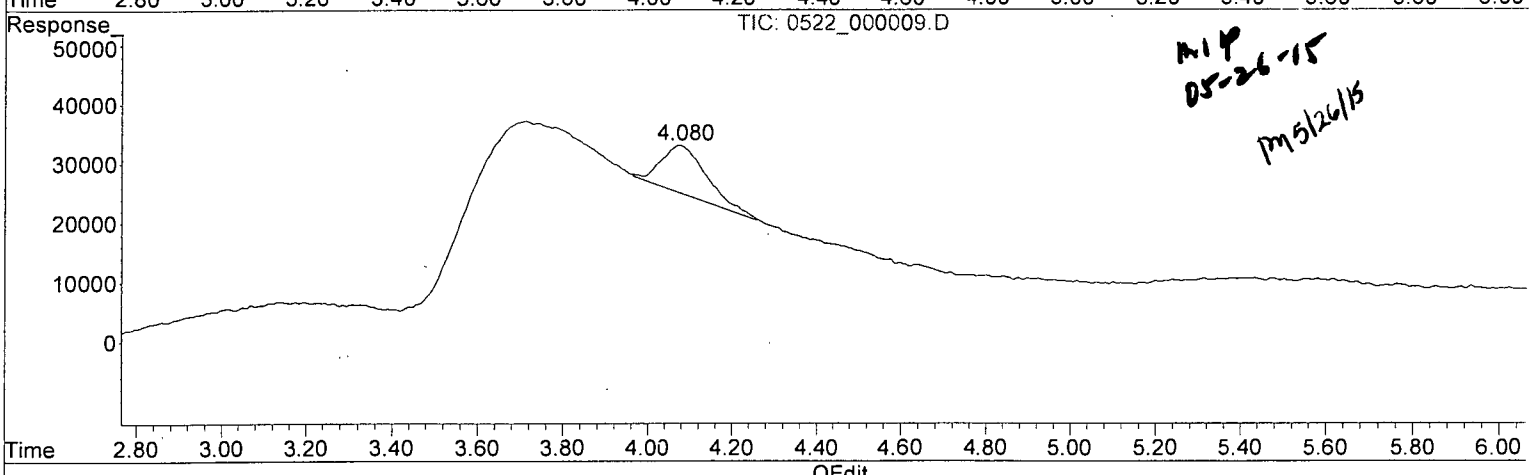
Quantitation Report (Qedit)

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-





MP 05-26-15

pm 5/26/15

QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.080min 3.829 ppb m

response 8051

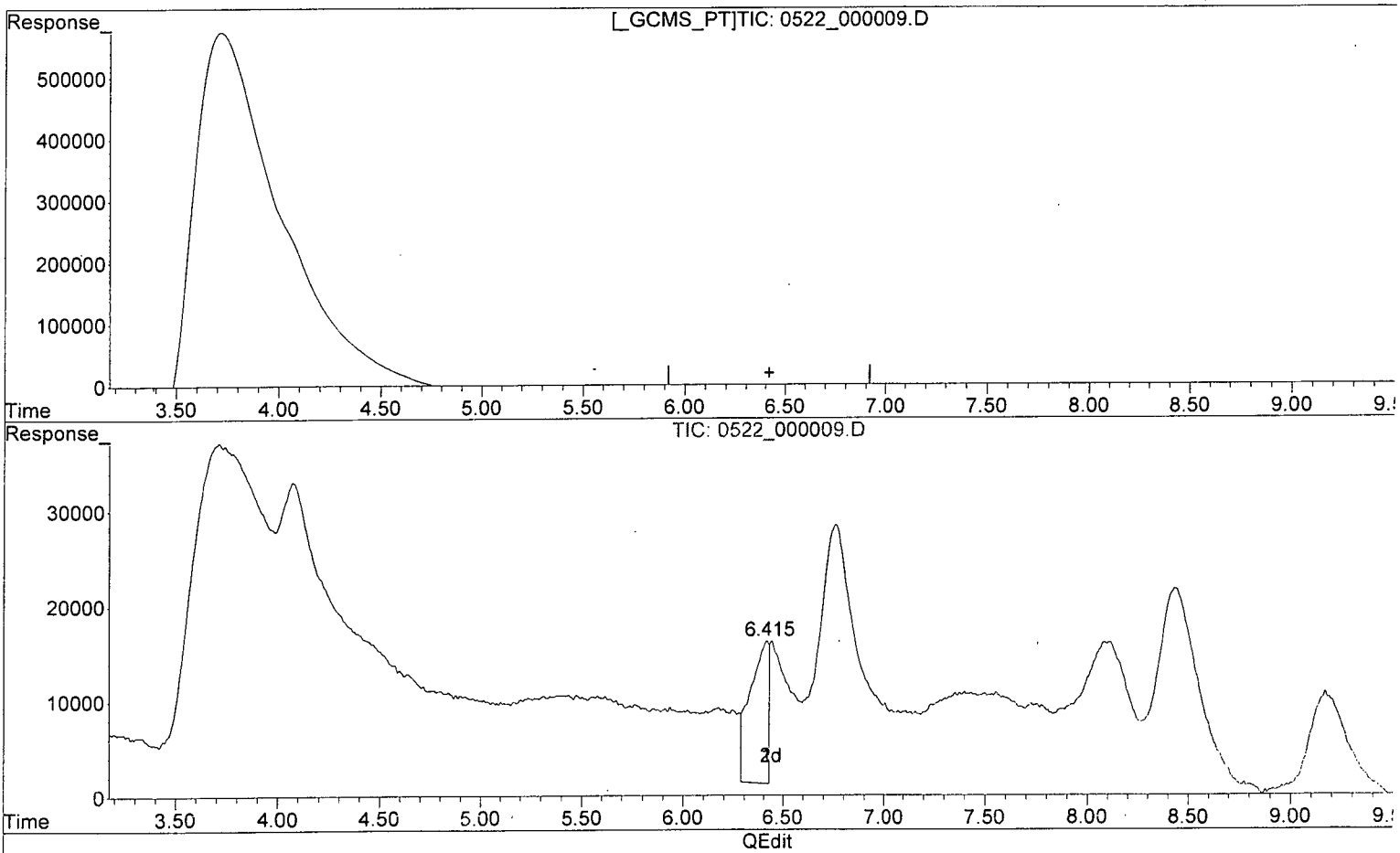
(+) = Expected Retention Time

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-r



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.415min 8.101 ppb

response 15004

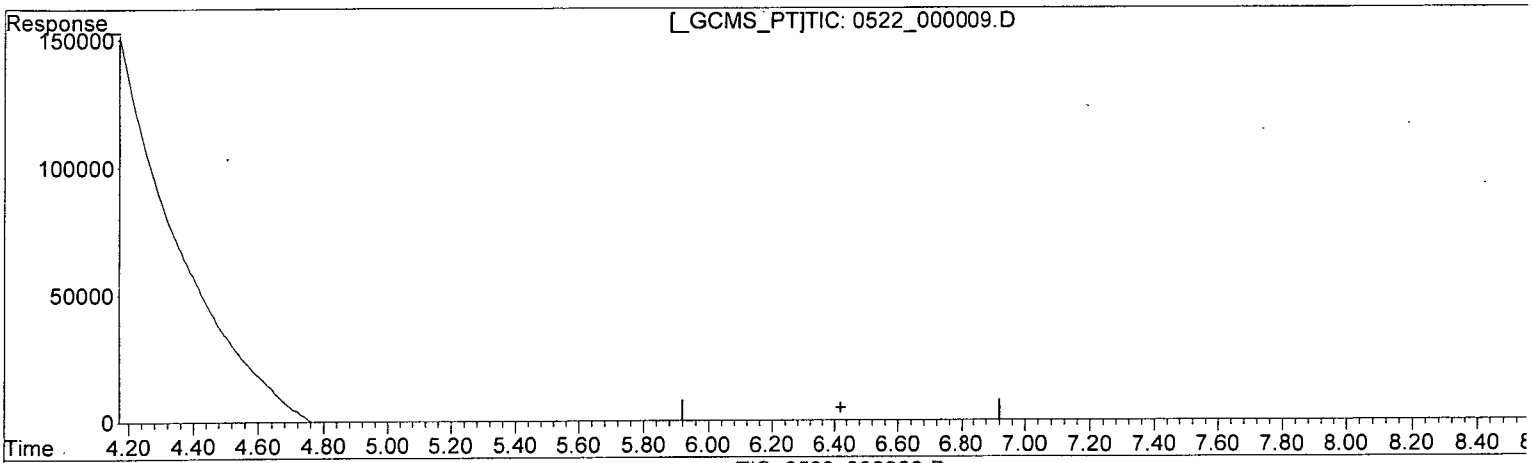
(+) = Expected Retention Time

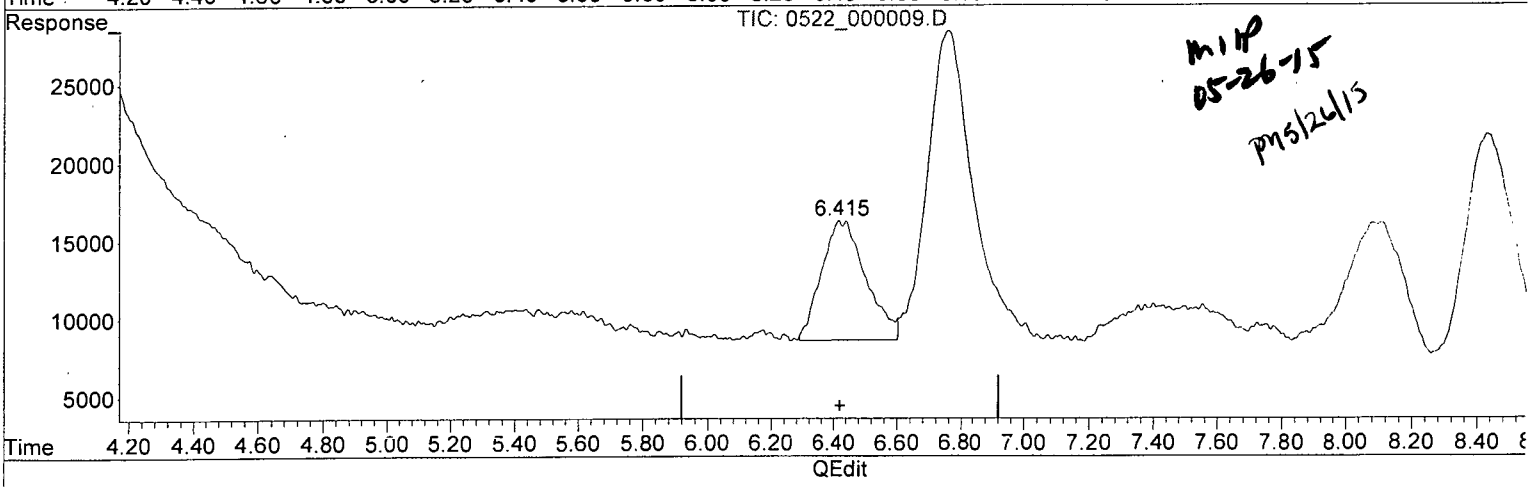
Quantitation Report (Qedit)

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-µ





MHP 05-26-15
pm5/26/15

QEdit

(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
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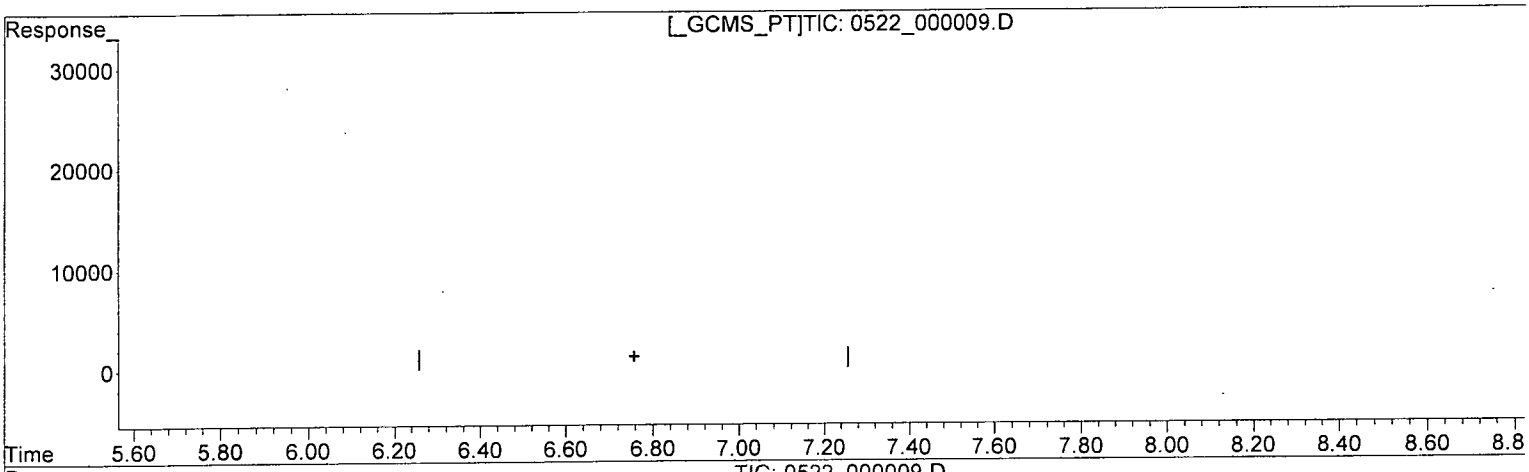
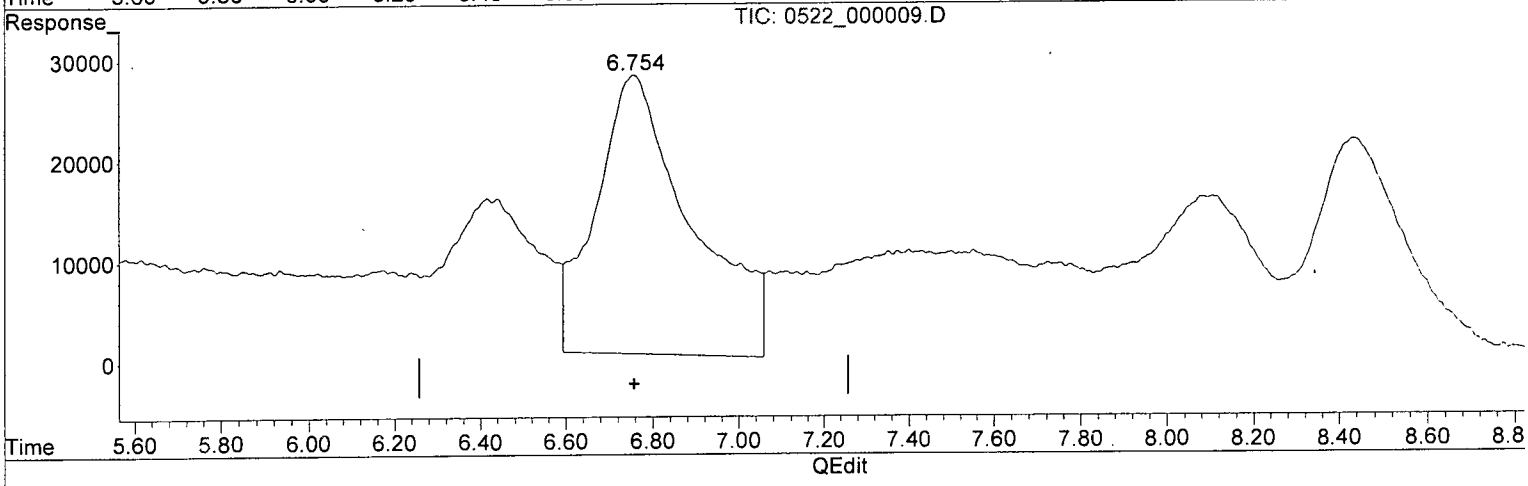
Volume Inj. : 40uL
Signal #1 Phase : 214nm Signal #2 Phase: 254nm
Signal #1 Info : Acclaim E2 150x3. Signal #2 Info : Acclaim E2 150x3.0mm 3.0-





(3) 1,3,5-TRINITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(3) 1,3,5-TRINITROBENZENE #2 (TM)

6.756min 6.174 ppb

response 27597

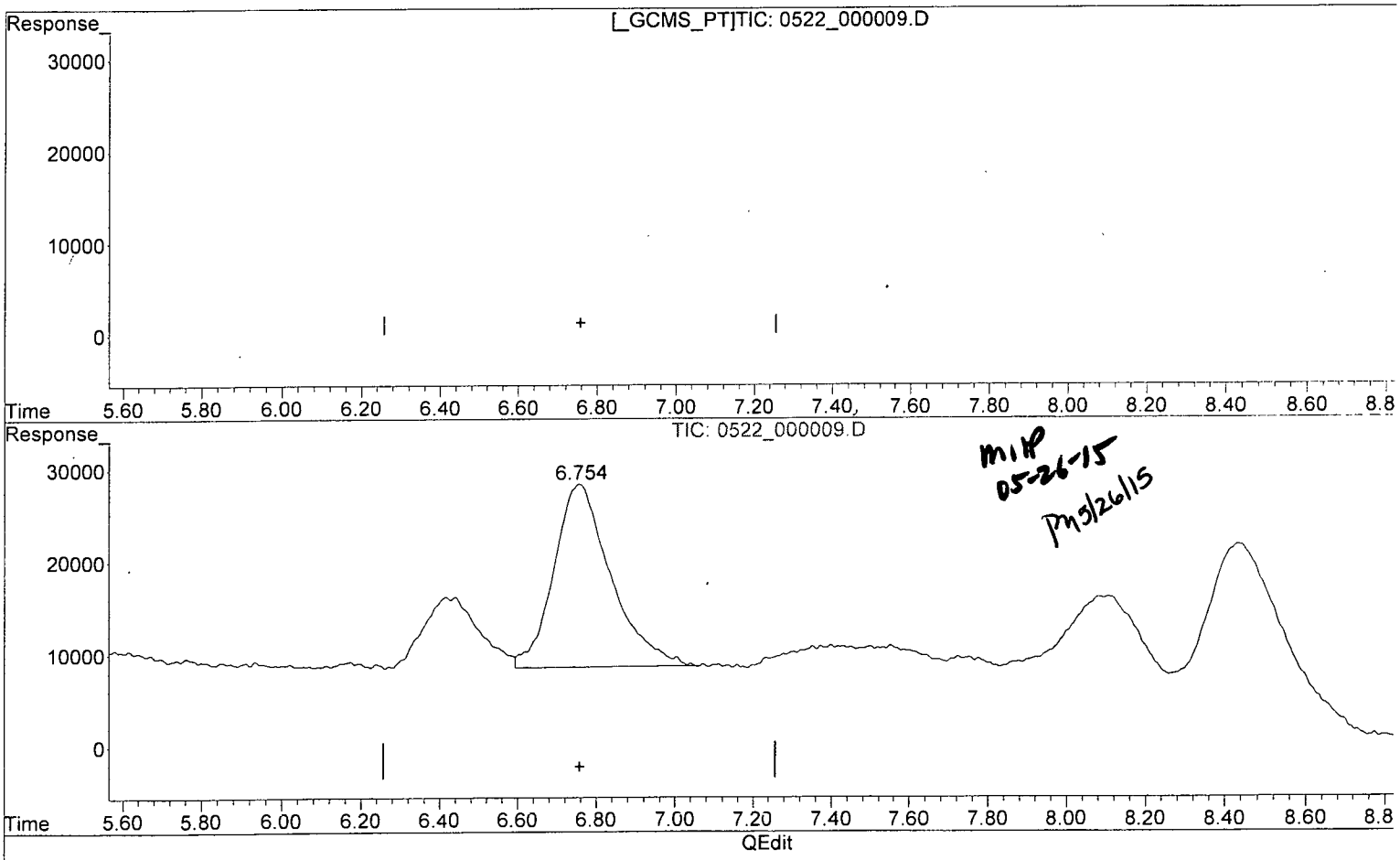
(+) = Expected Retention Time

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-µ



(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

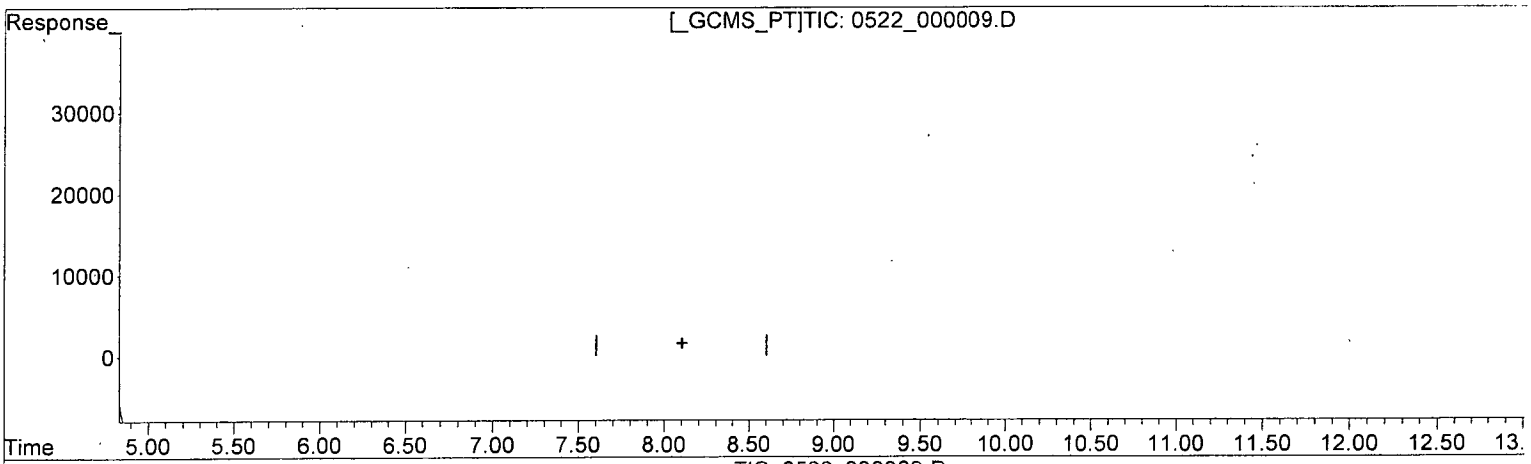
(+) = Expected Retention Time

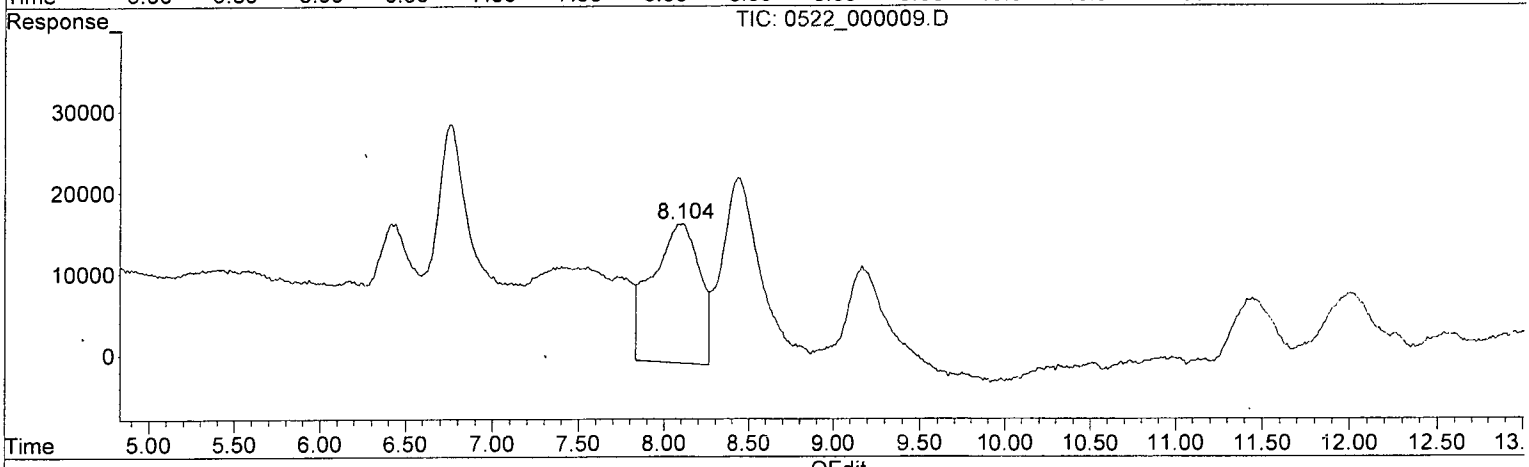
Quantitation Report (Qedit)

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-





QEdit

(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

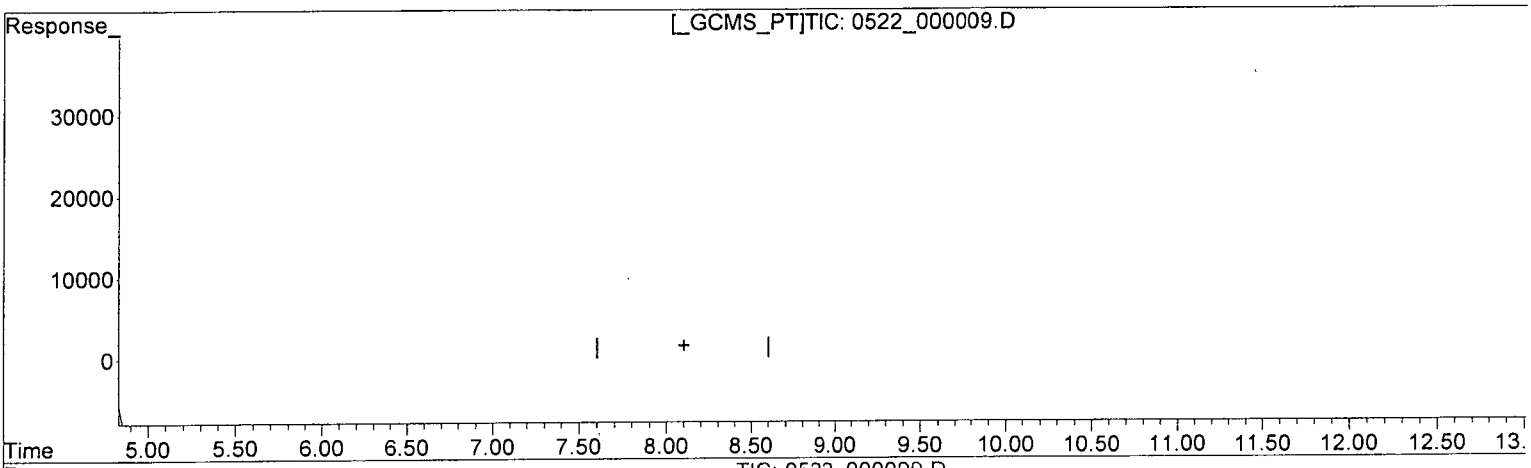
(+) = Expected Retention Time

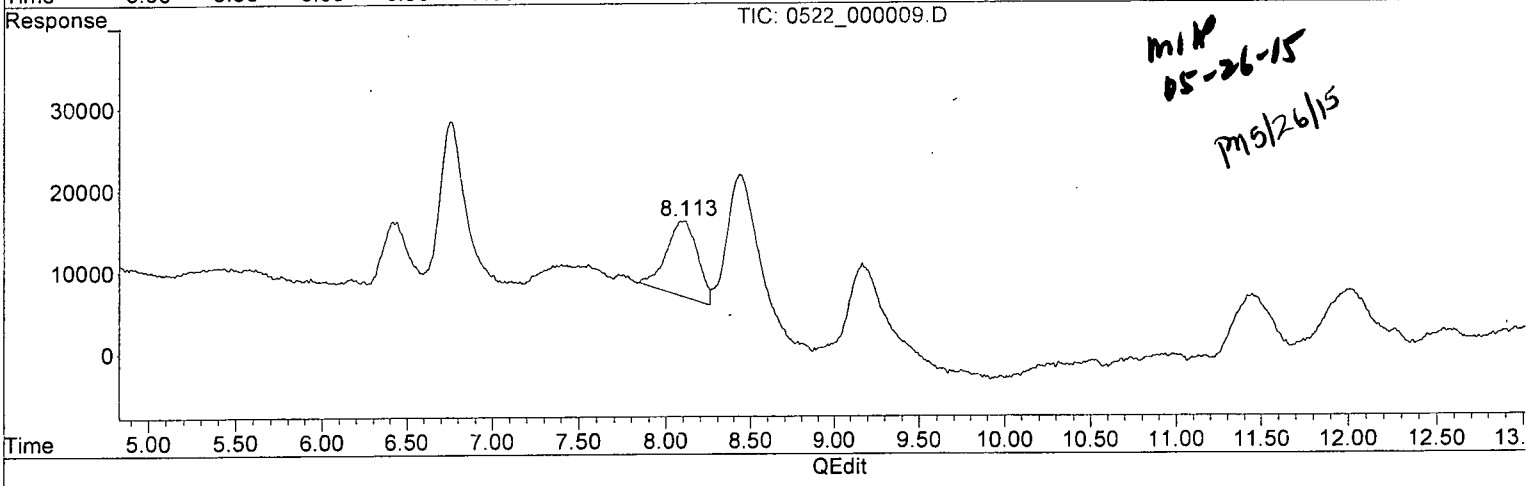
Quantitation Report (Qedit)

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-





MLP 05-26-15

pm5/26/15

(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

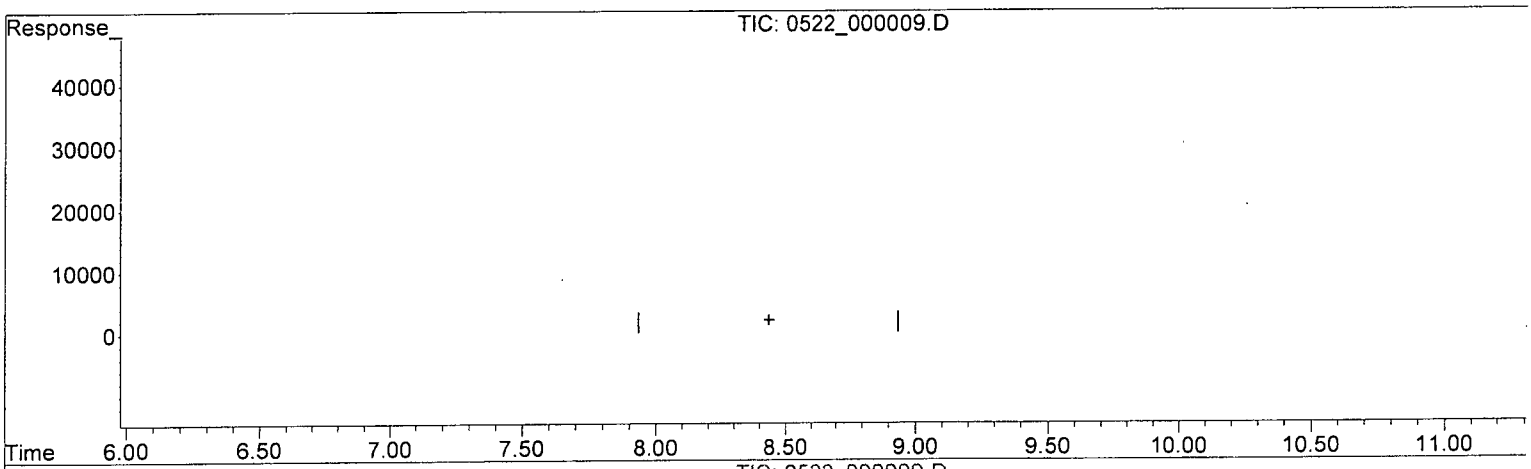
(+) = Expected Retention Time

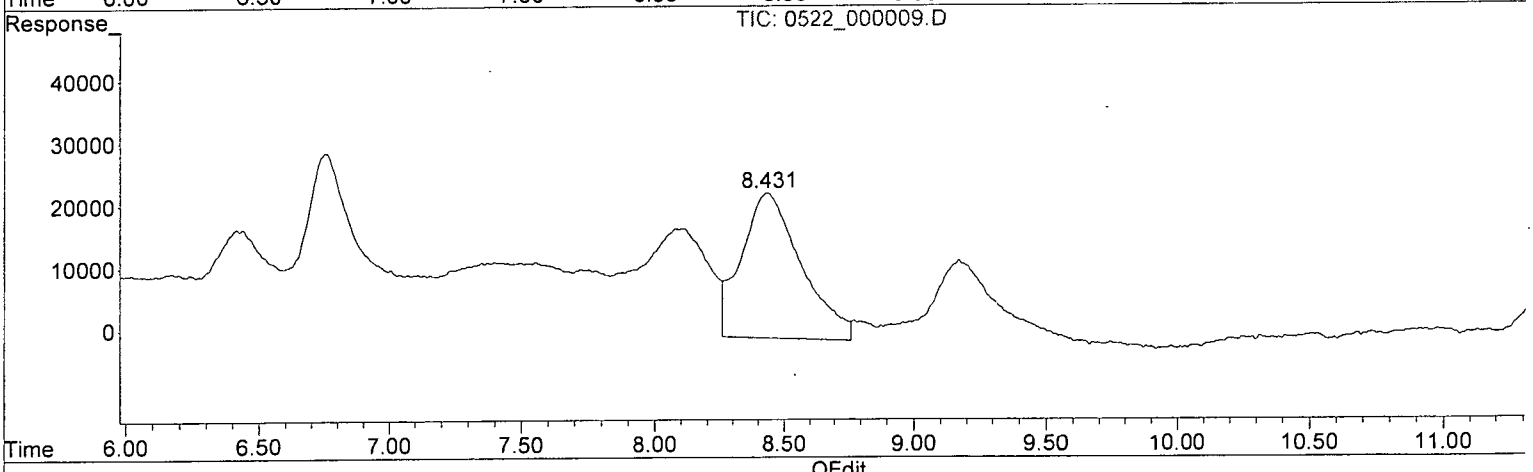
Quantitation Report (Qedit)

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

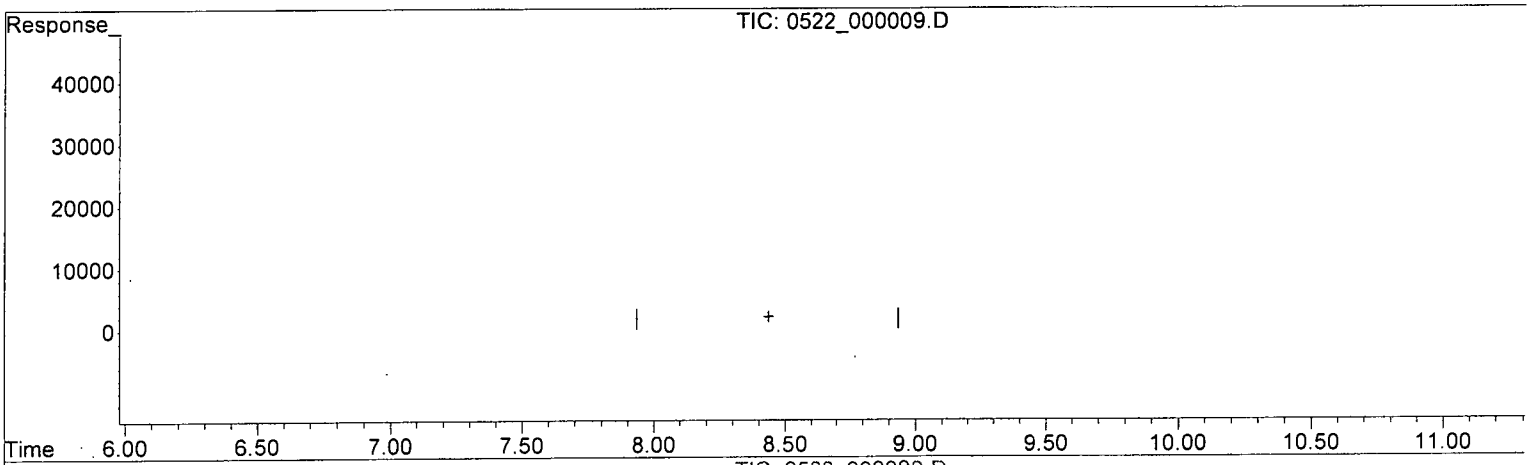
(+) = Expected Retention Time

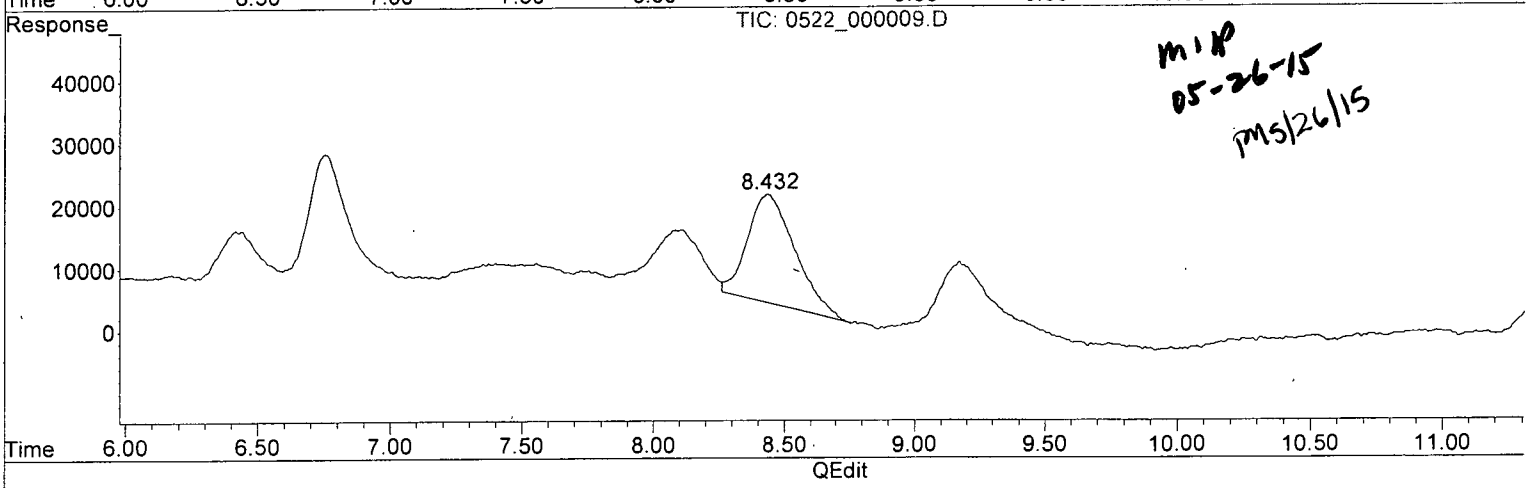
Quantitation Report (Qedit)

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-r





MJP 05-26-15
PMS/26/15

(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

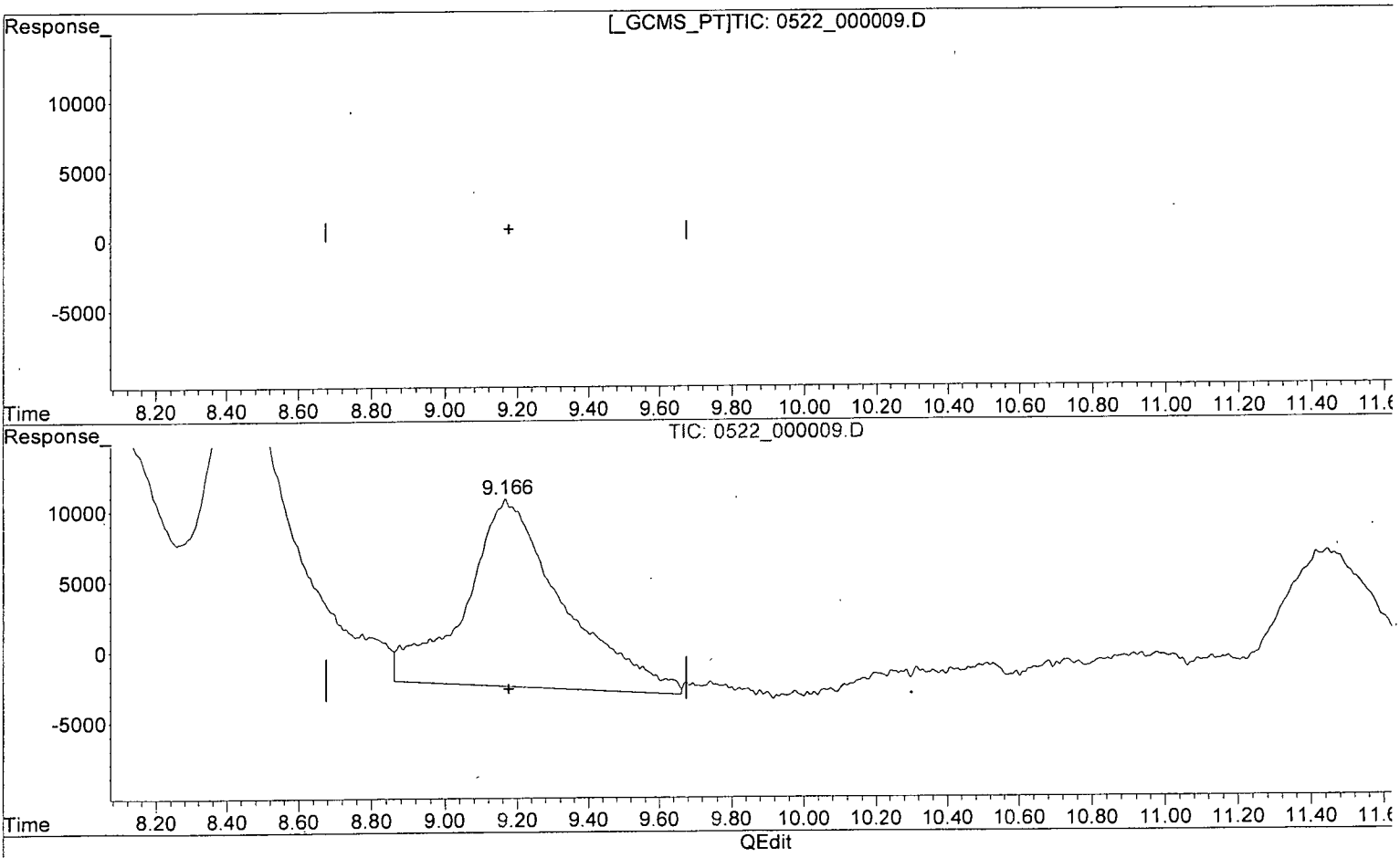
(+) = Expected Retention Time

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-



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.167min 5.196 ppb

response 13311

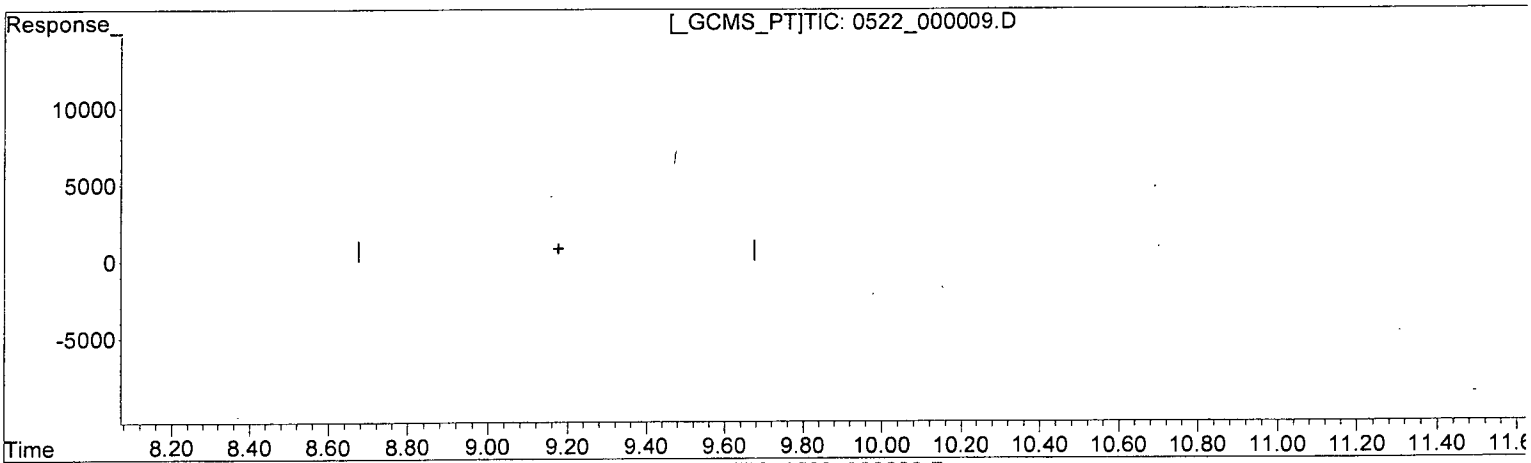
(+) = Expected Retention Time

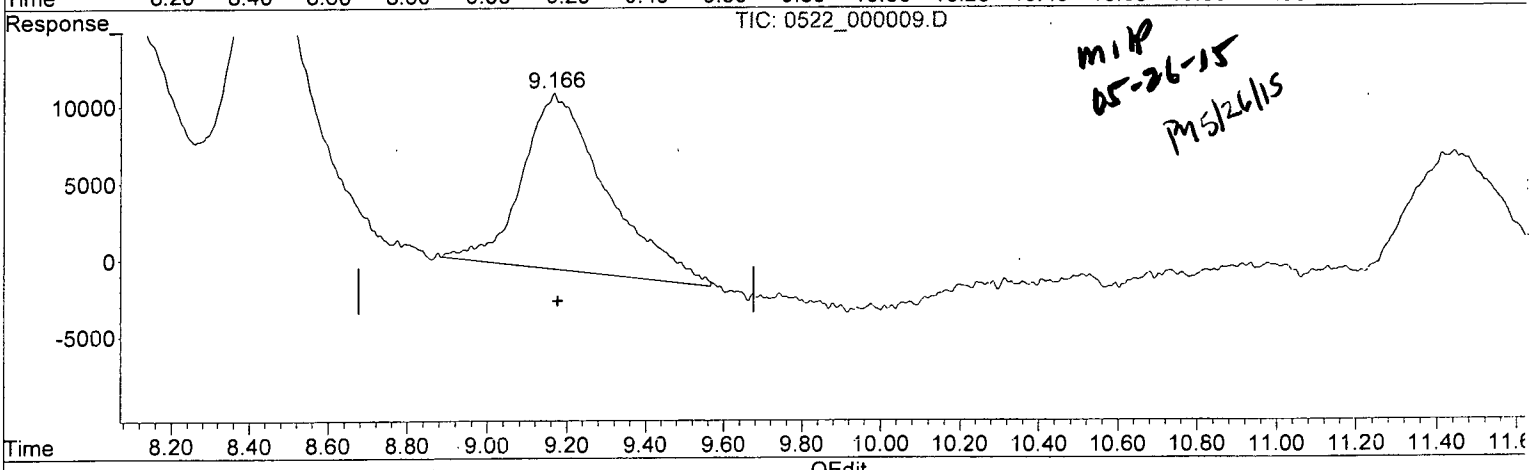
Quantitation Report (Qedit)

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-µ





MIP 05-26-15 PM 5/26/15

(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.166min 4.465 ppb m

response 11437

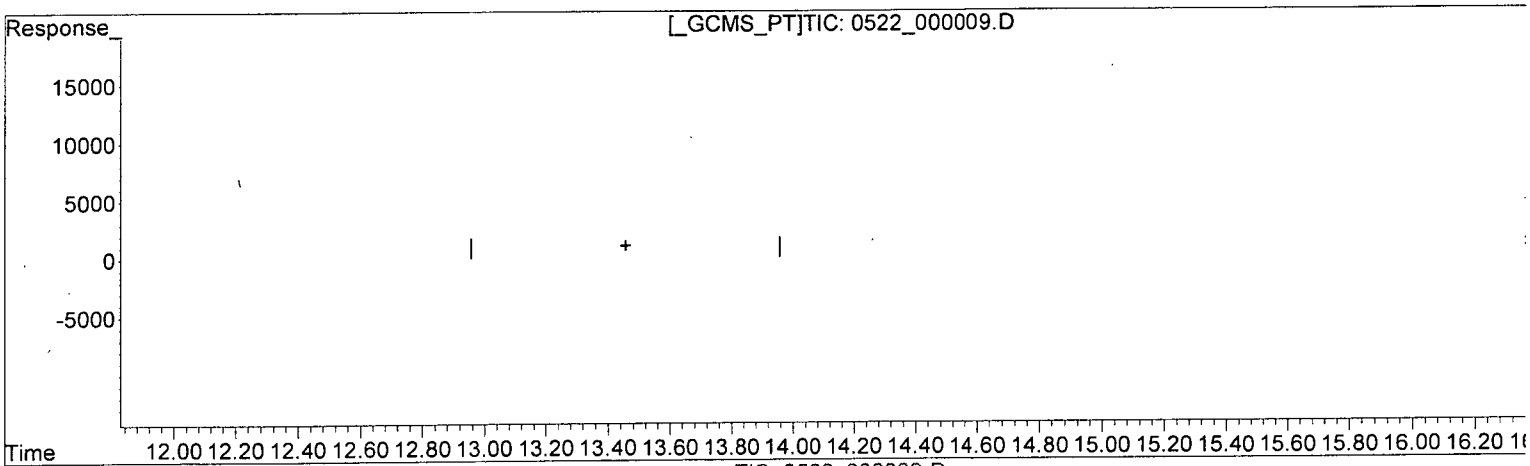
(+) = Expected Retention Time

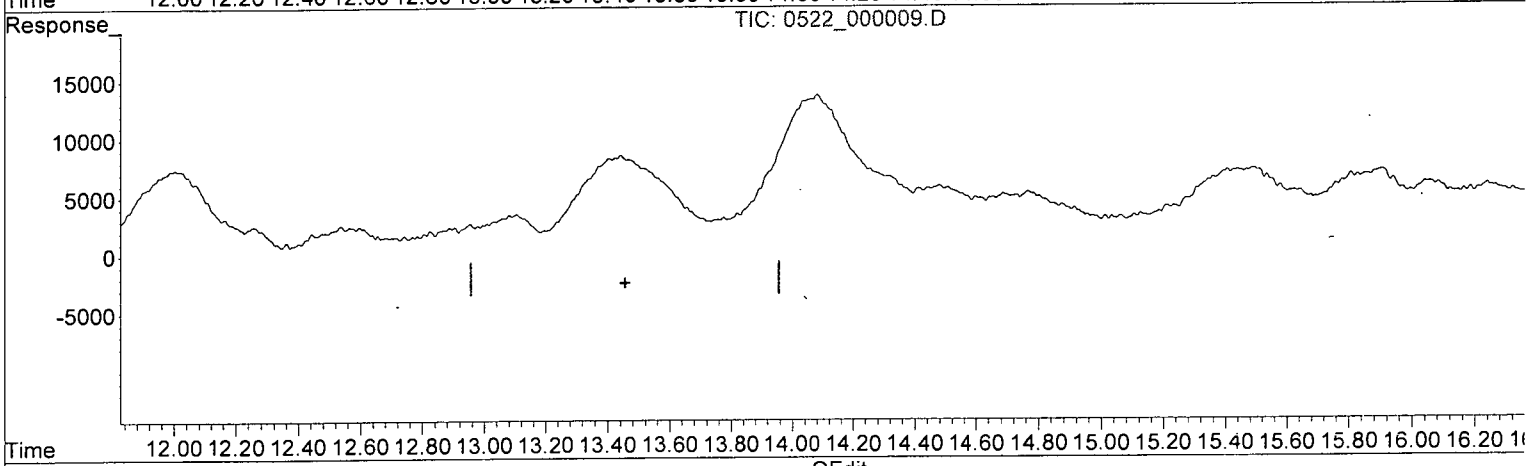
Quantitation Report (Qedit)

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

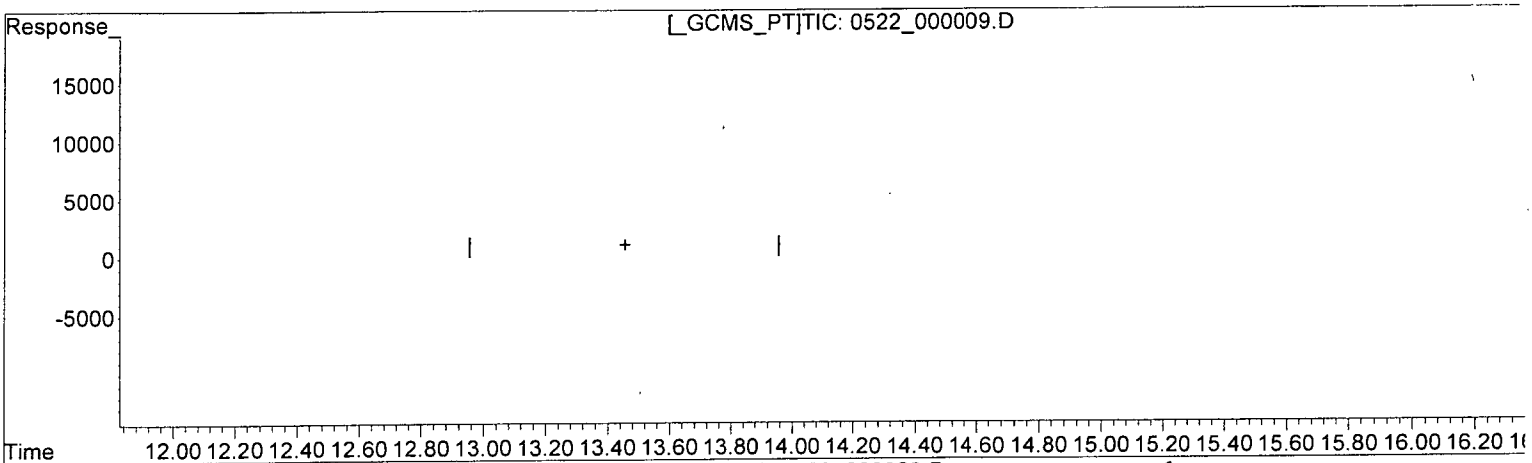
(+) = Expected Retention Time

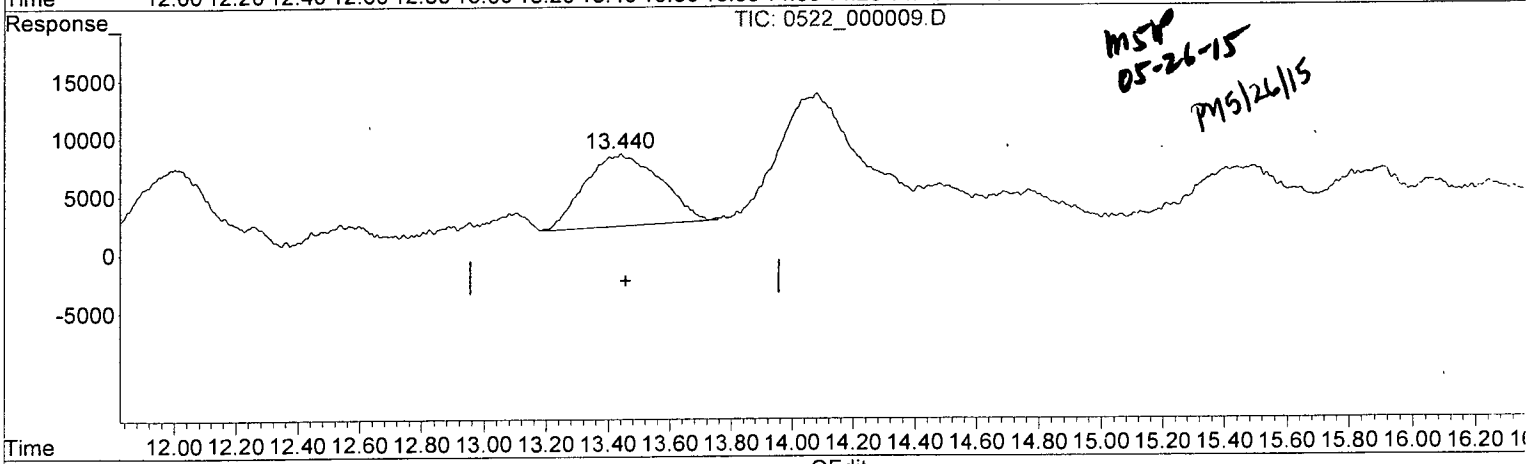
Quantitation Report (Qedit)

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-





MSP 05-26-15
PM5/26/15

QEdit

(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

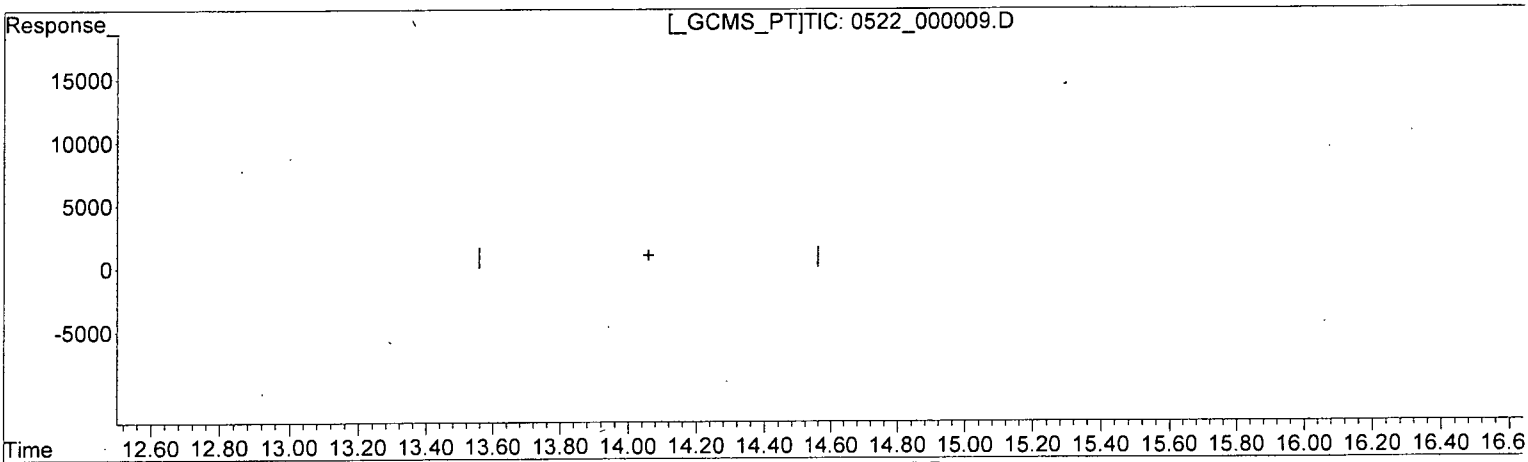
(+) = Expected Retention Time

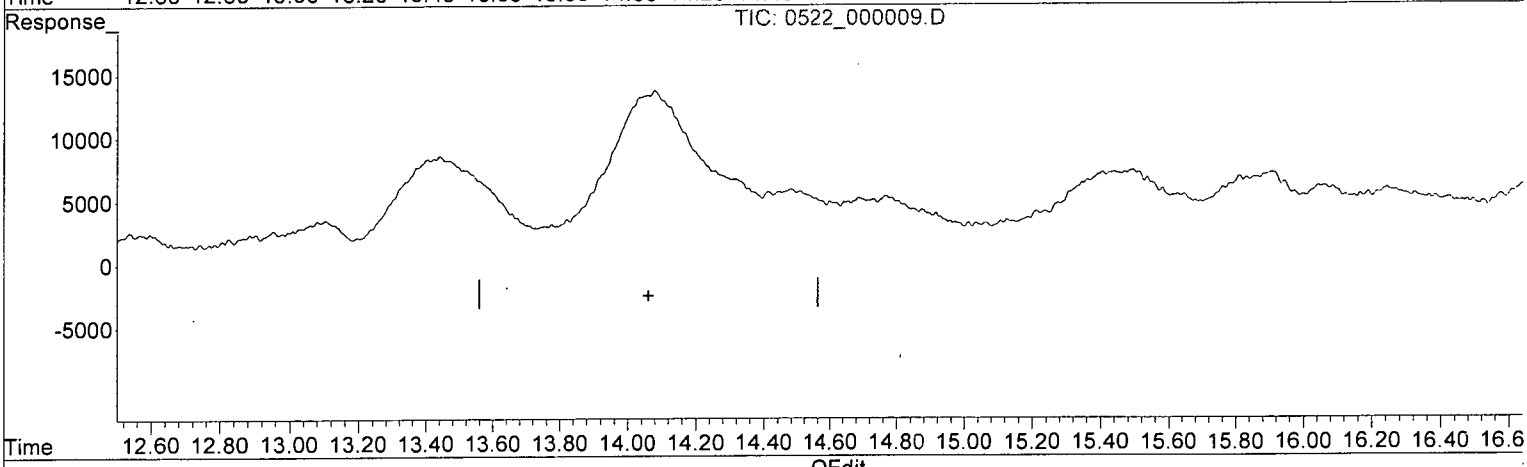
Quantitation Report (Qedit)

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

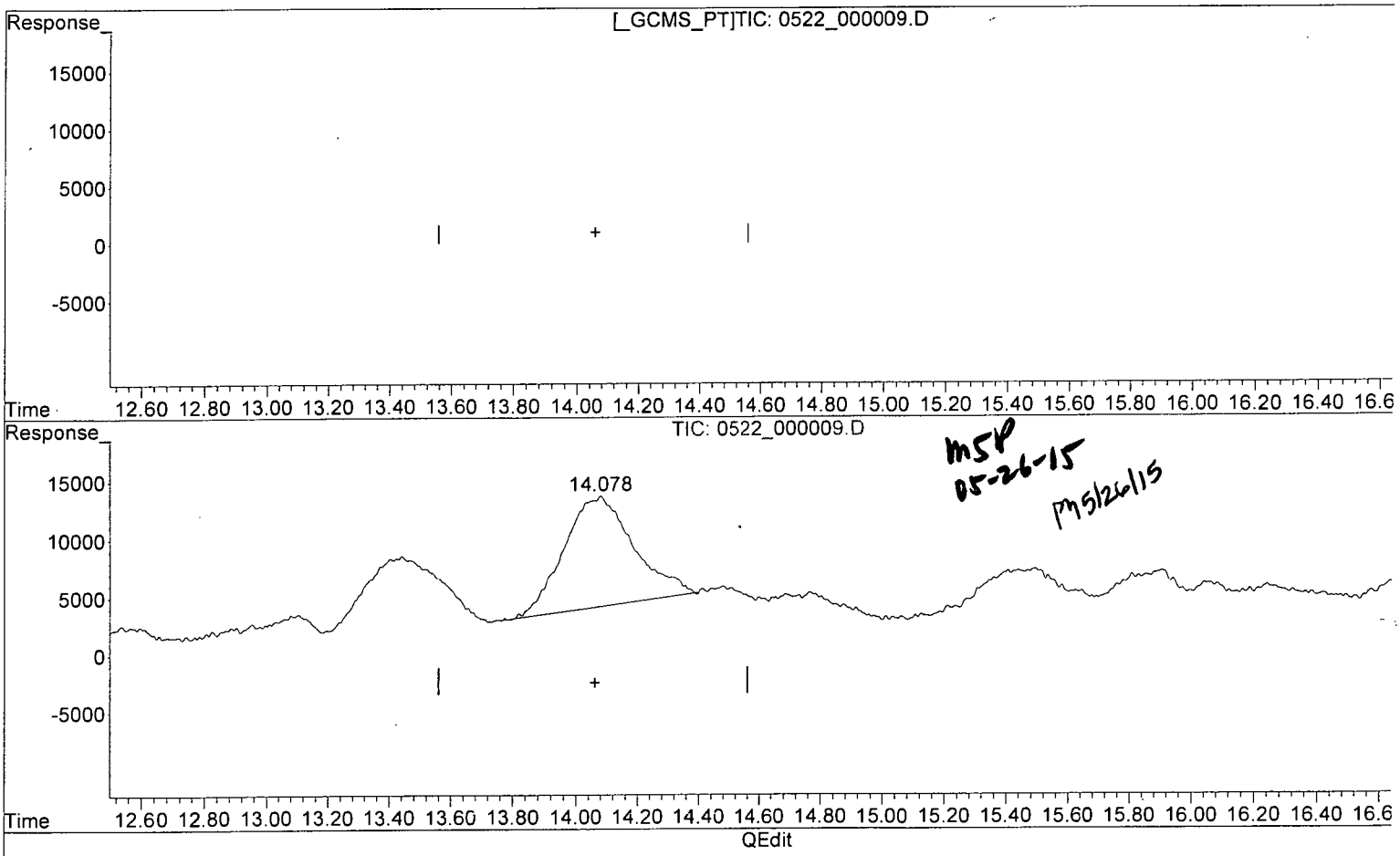
(+) = Expected Retention Time

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-µ



(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.

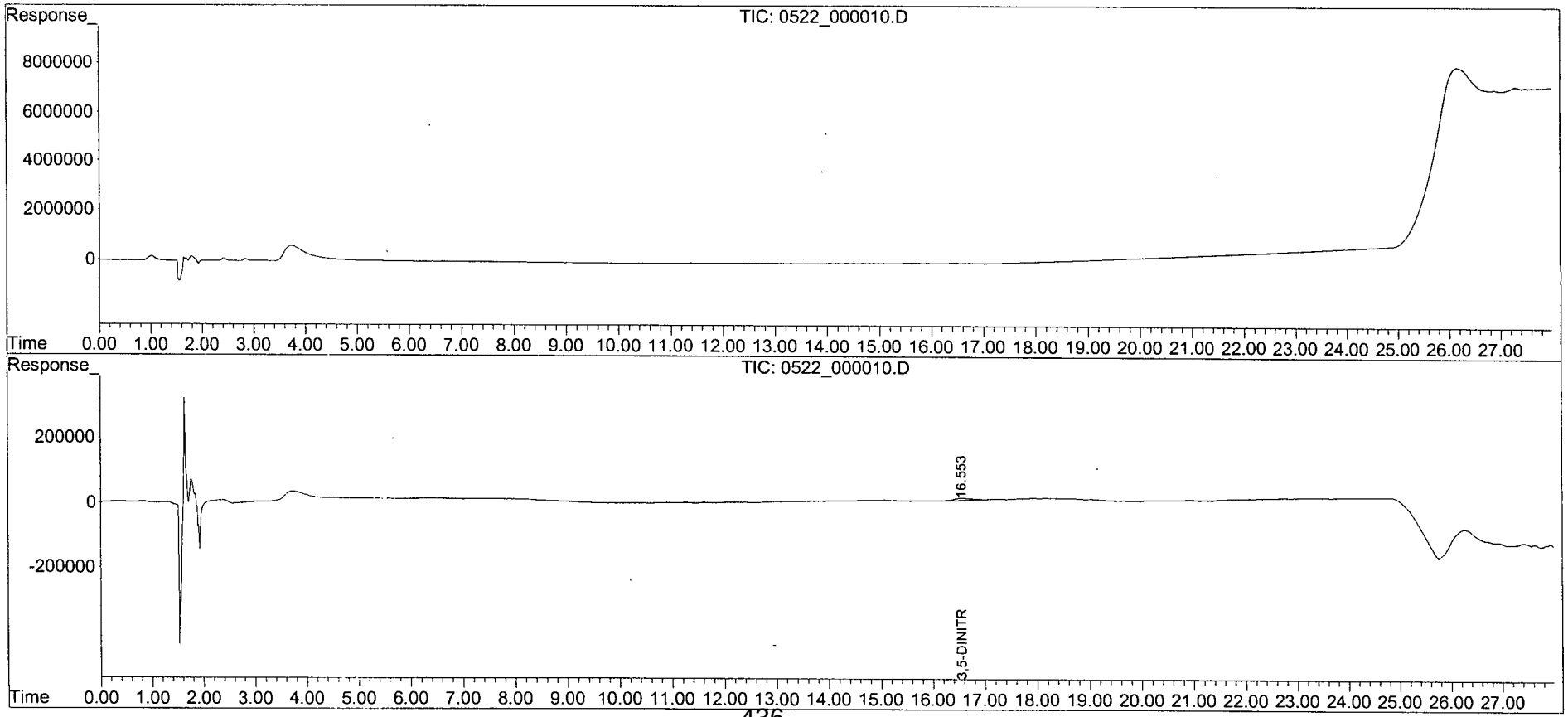
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

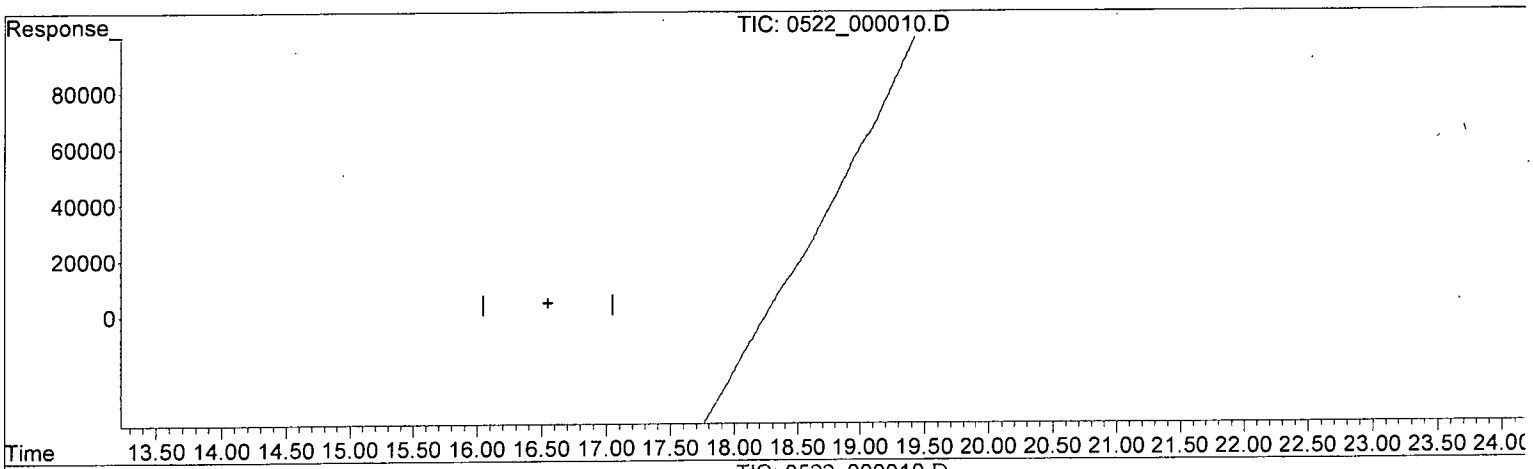


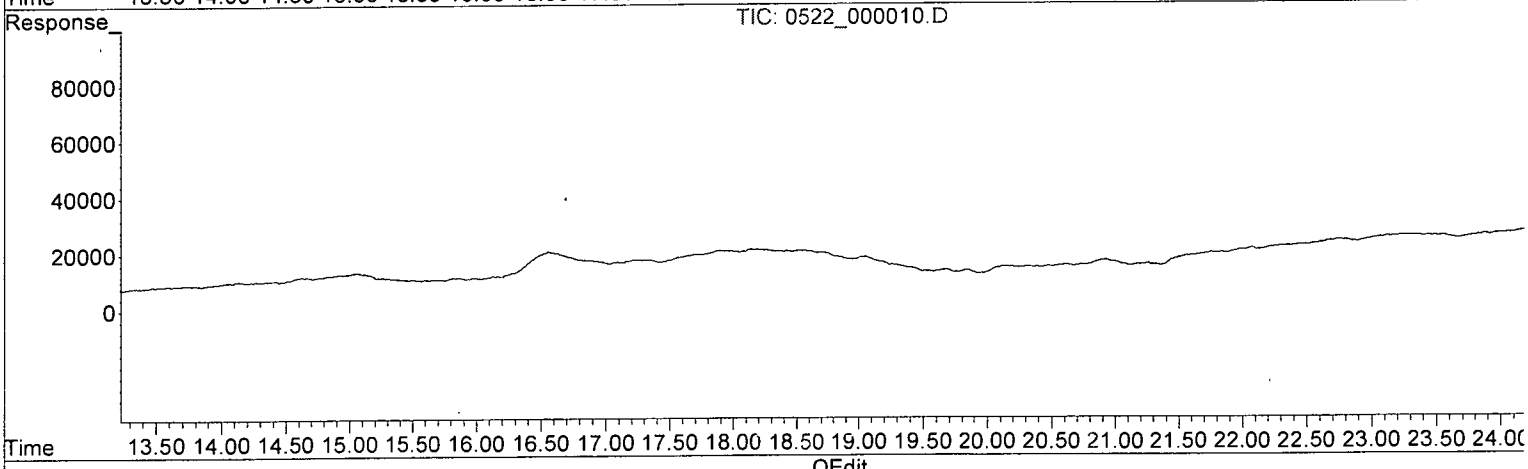
Quantitation Report (Qedit)

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-





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

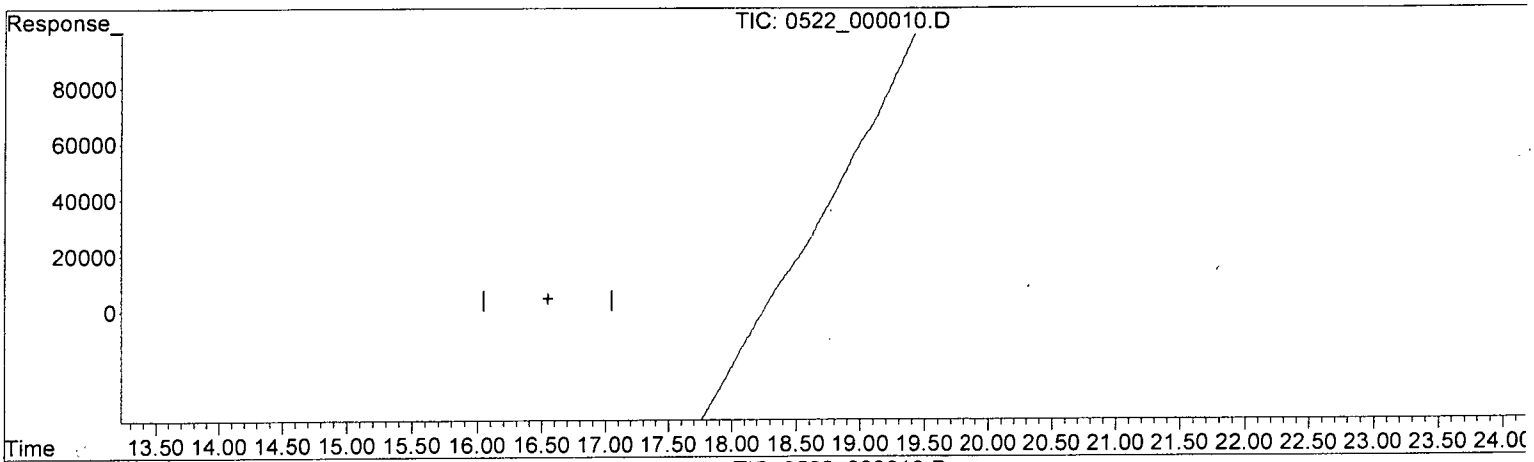
(+) = Expected Retention Time

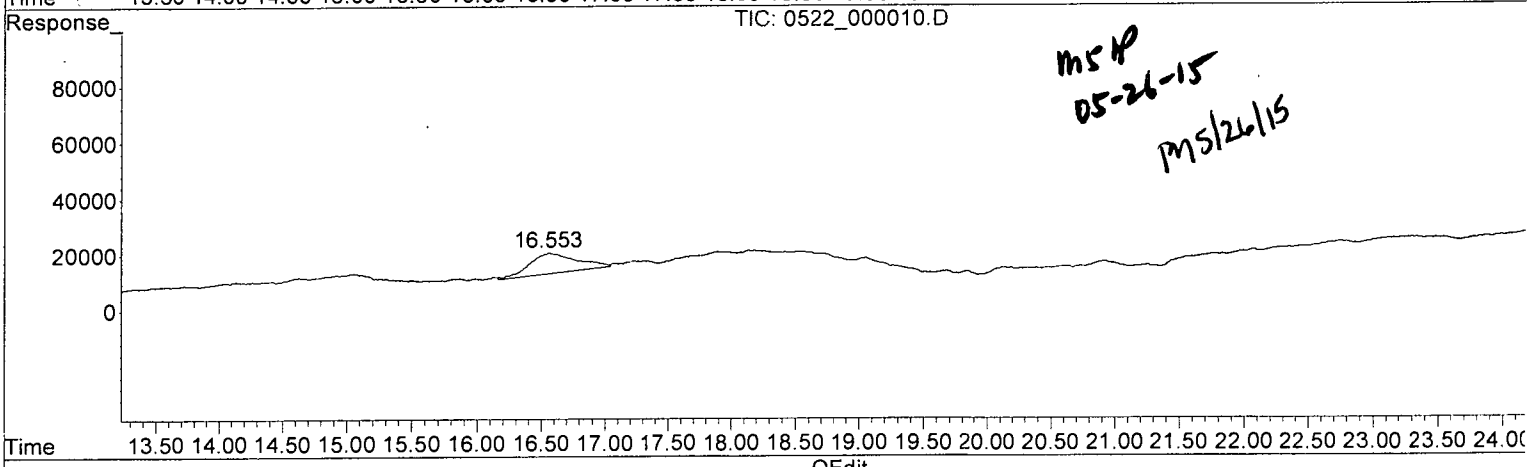
Quantitation Report (Qedit)

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-





MSP 05-26-15 5/26/15

QEdit

(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.

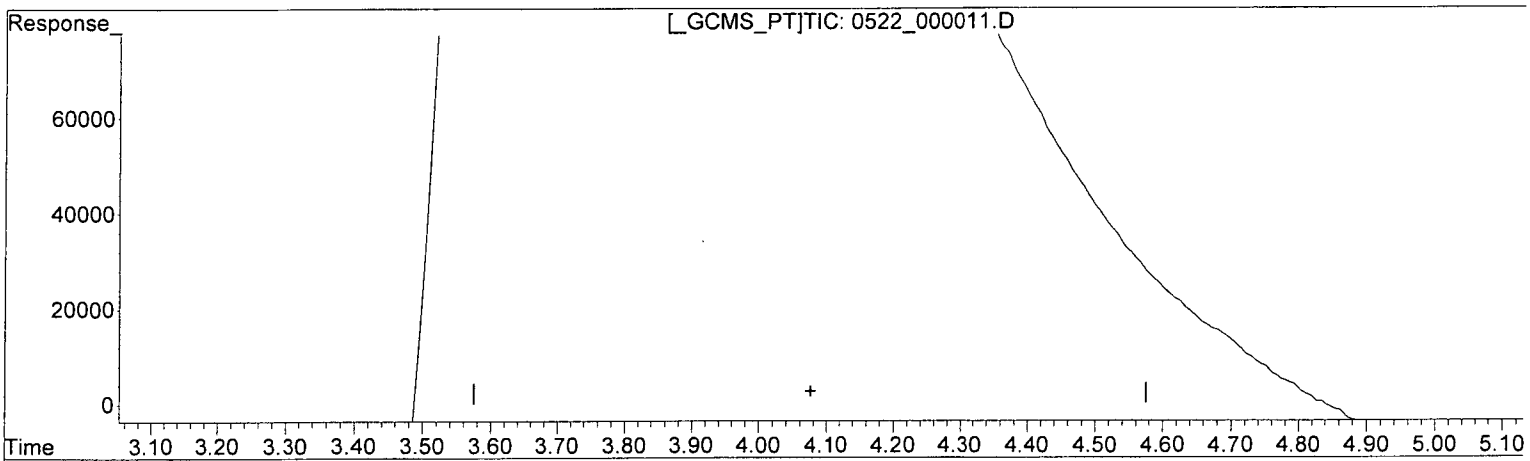
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

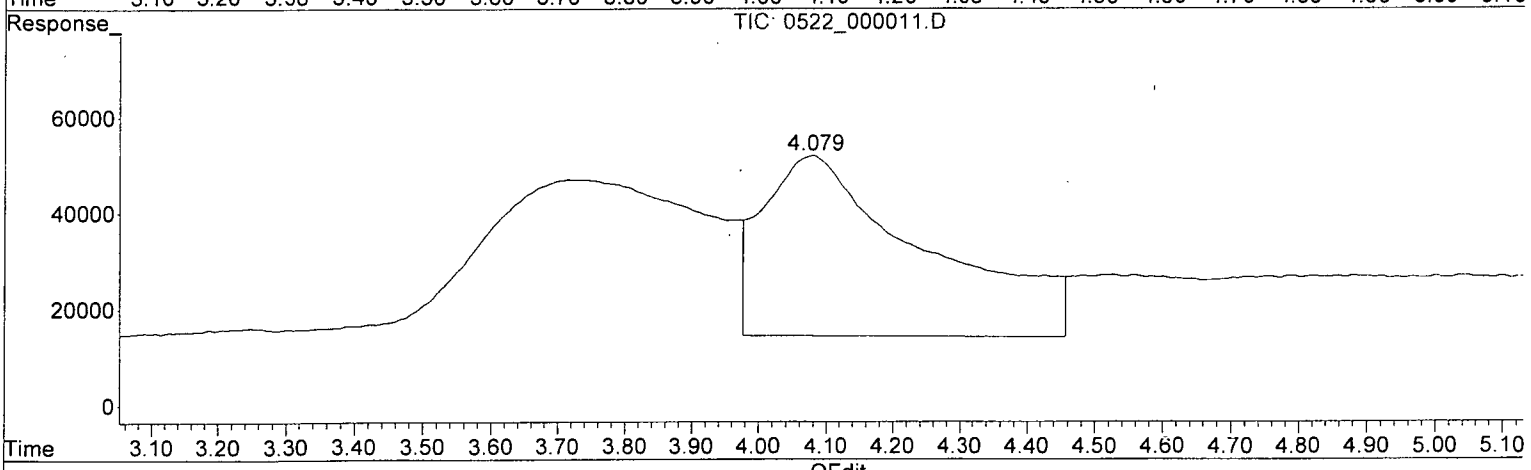
Quantitation Report (Qedit)

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





QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.078min 17.847 ppb

response 37530

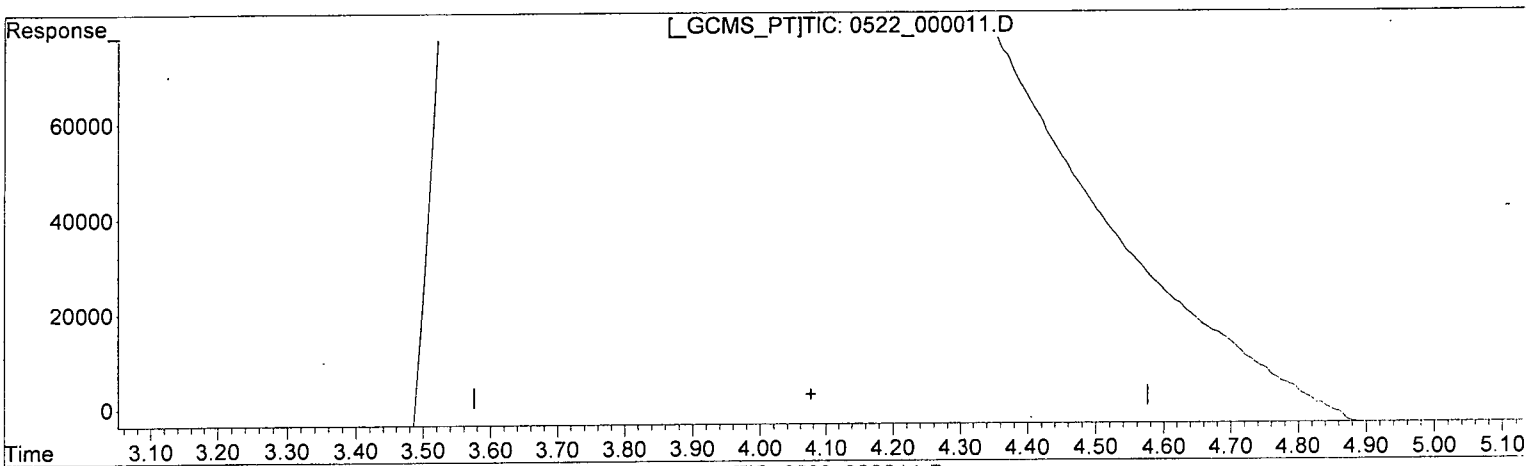
(+) = Expected Retention Time

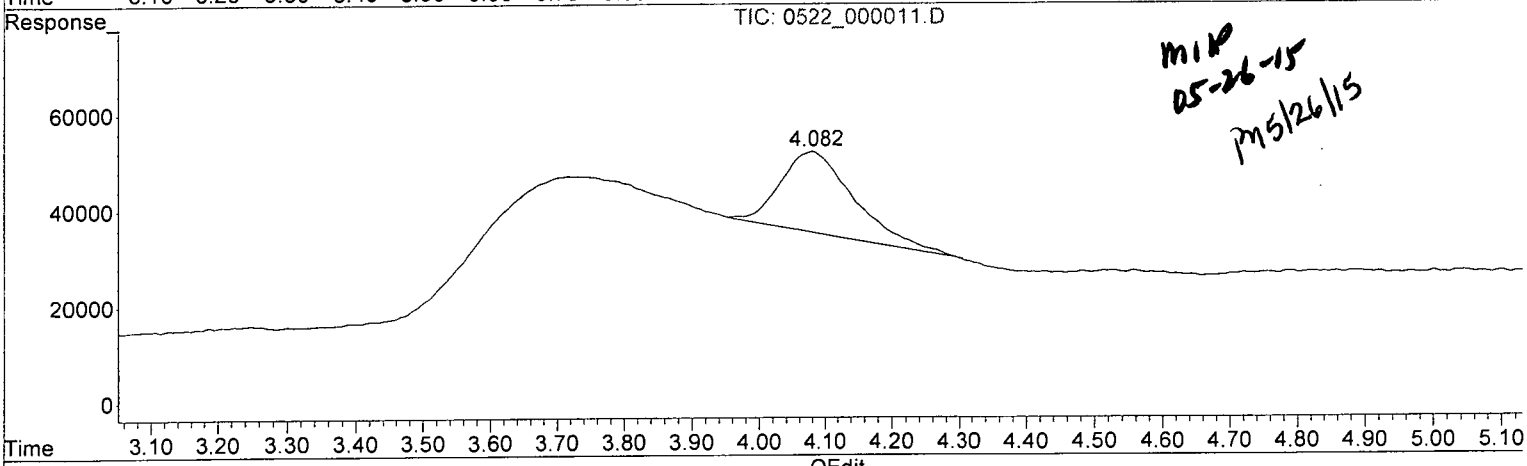
Quantitation Report (Qedit)

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

QEdit

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.082min 7.993 ppb m

response 16807

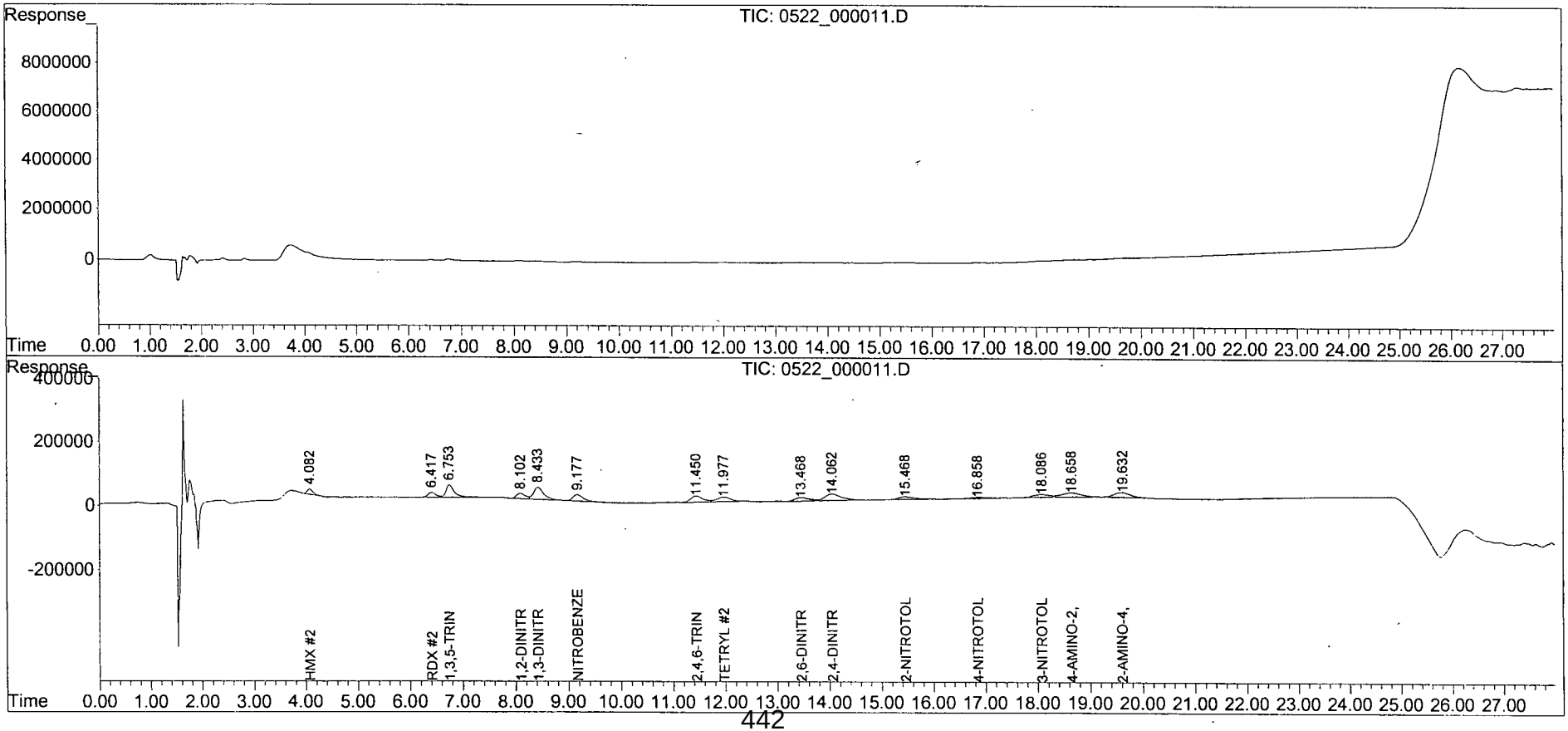
(+) = Expected Retention Time

Quantitation Report (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

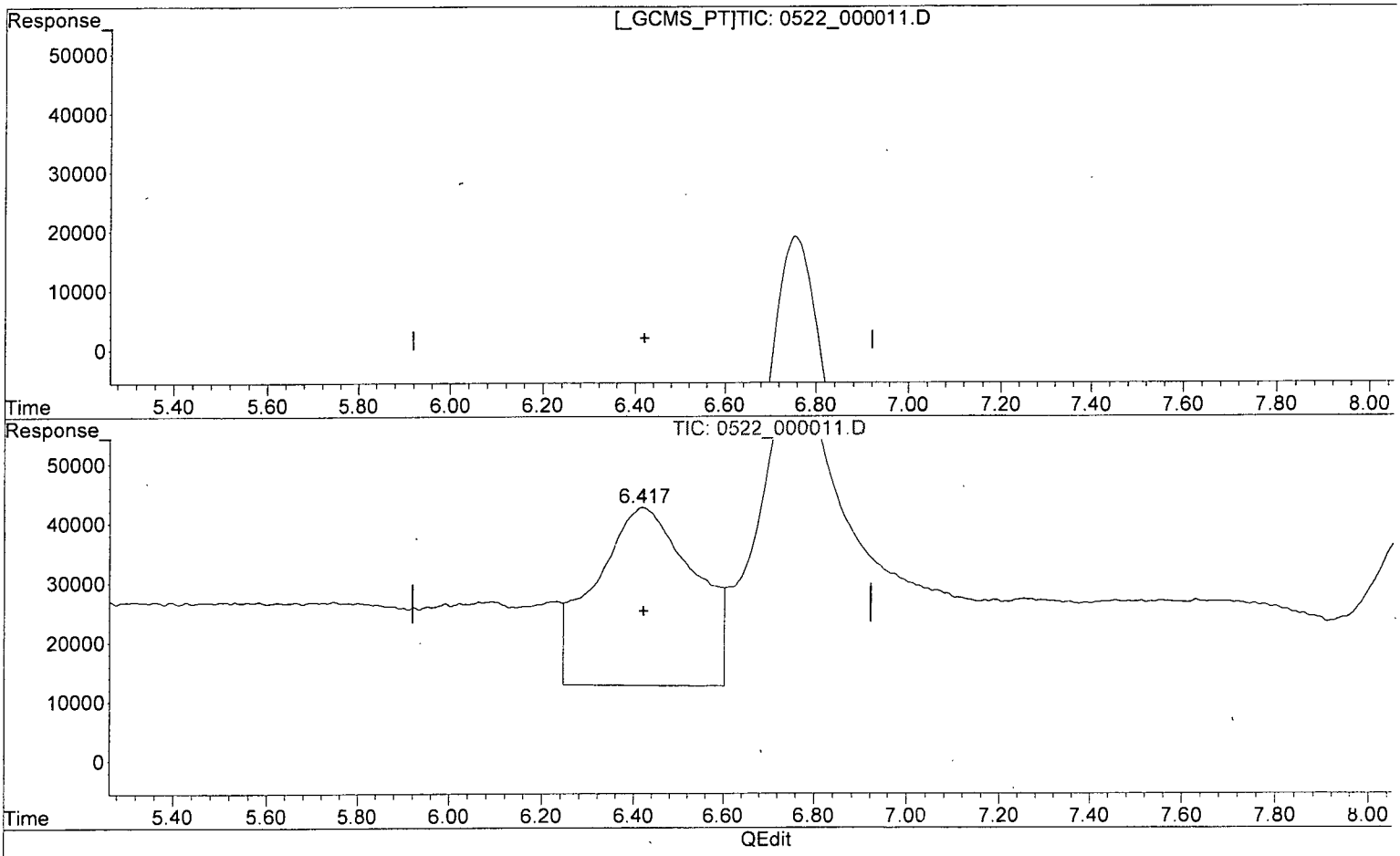


Quantitation Report (Qedit)

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-



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.418min 16.136 ppb

response 29887

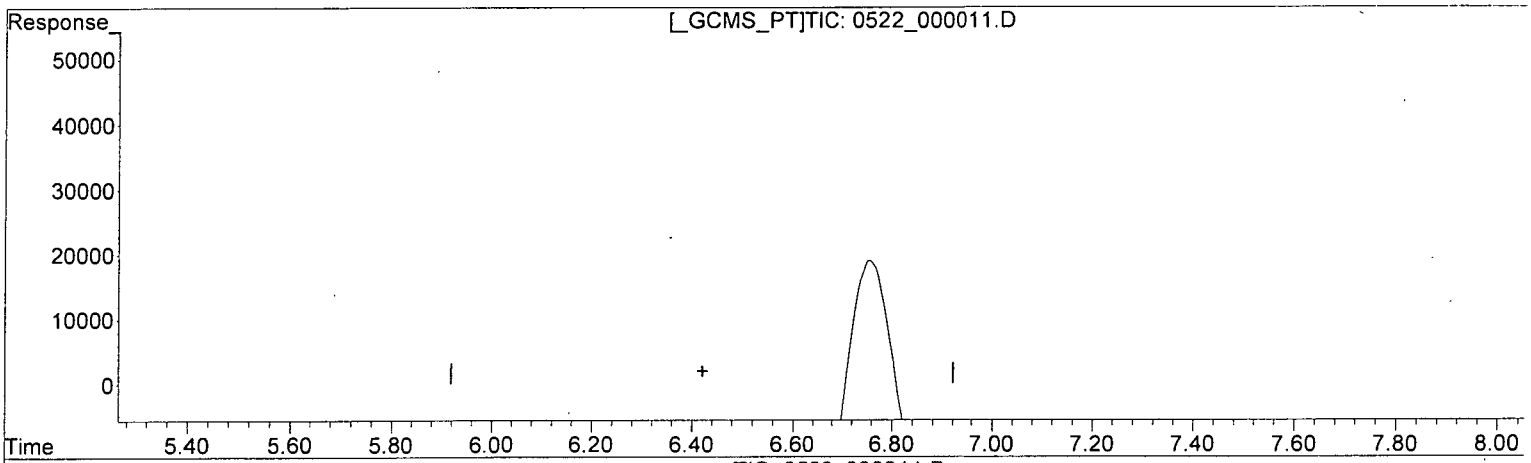
(+) = Expected Retention Time

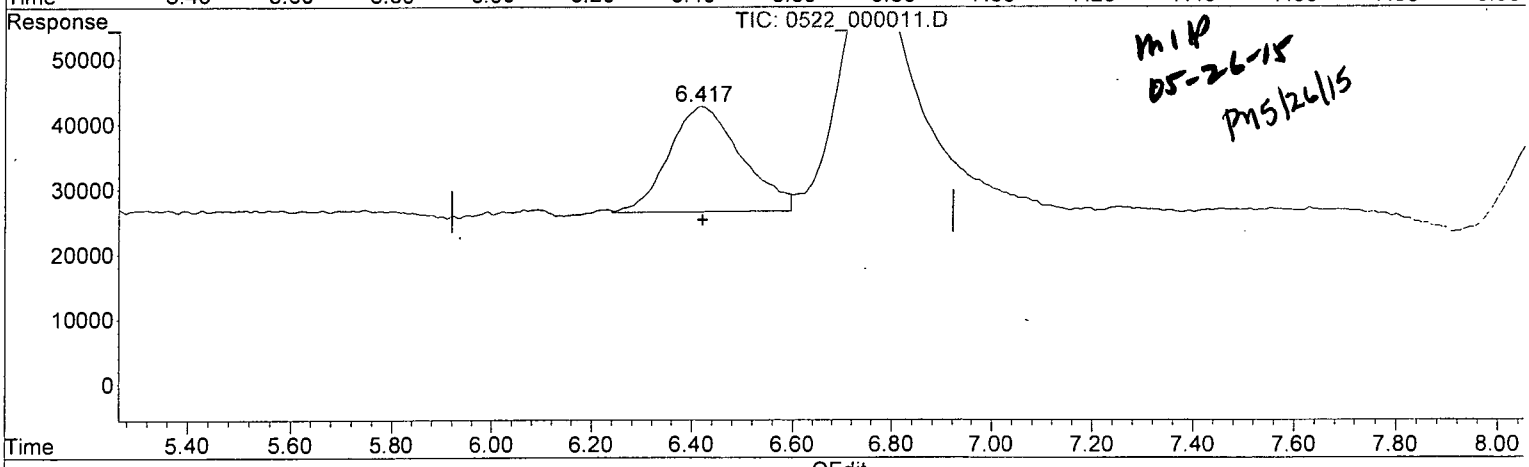
Quantitation Report (Qedit)

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-





MLP 05-26-15 PM 5/26/15

QEdit

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.417min 8.719 ppb m

response 16148

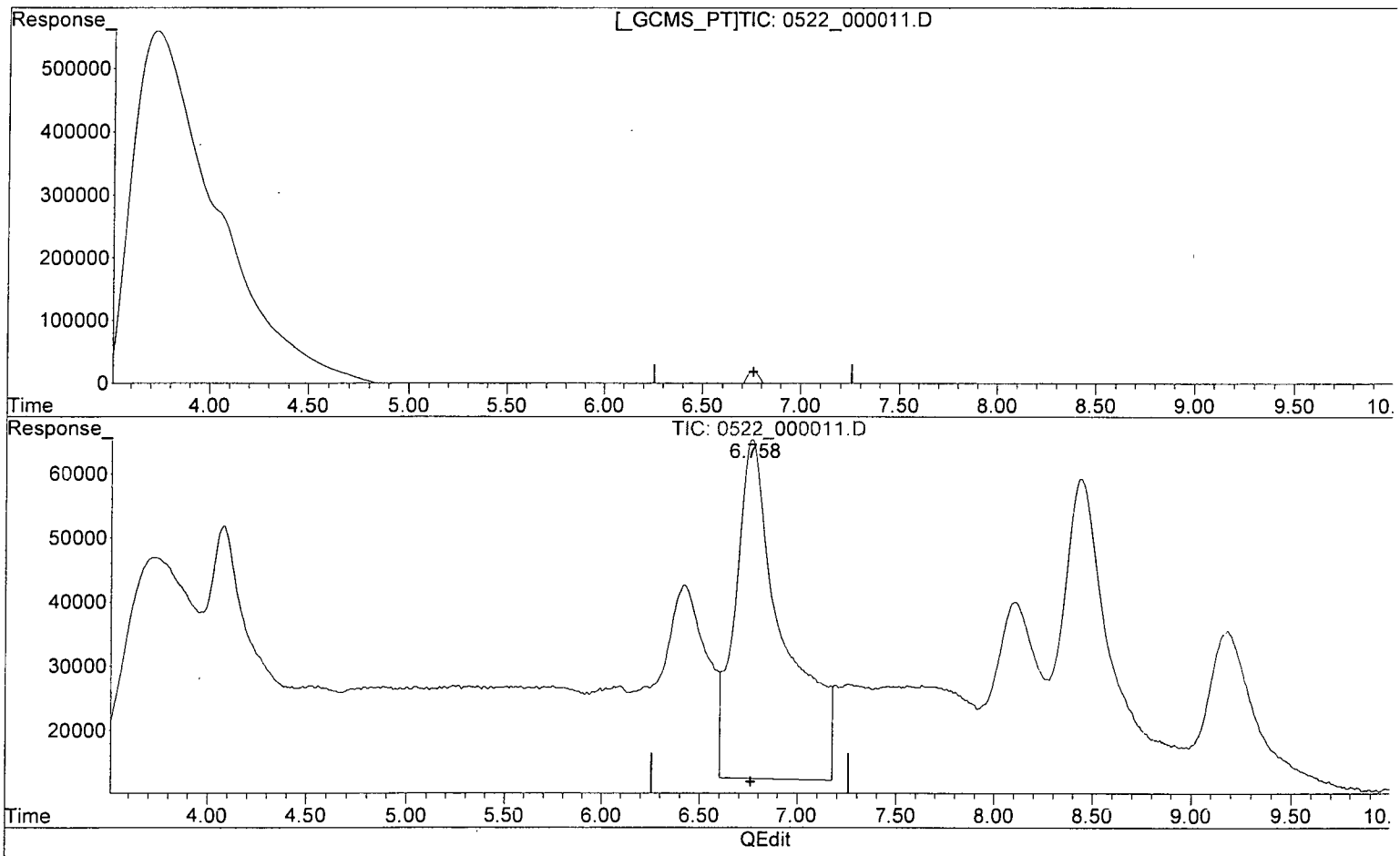
(+) = Expected Retention Time

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

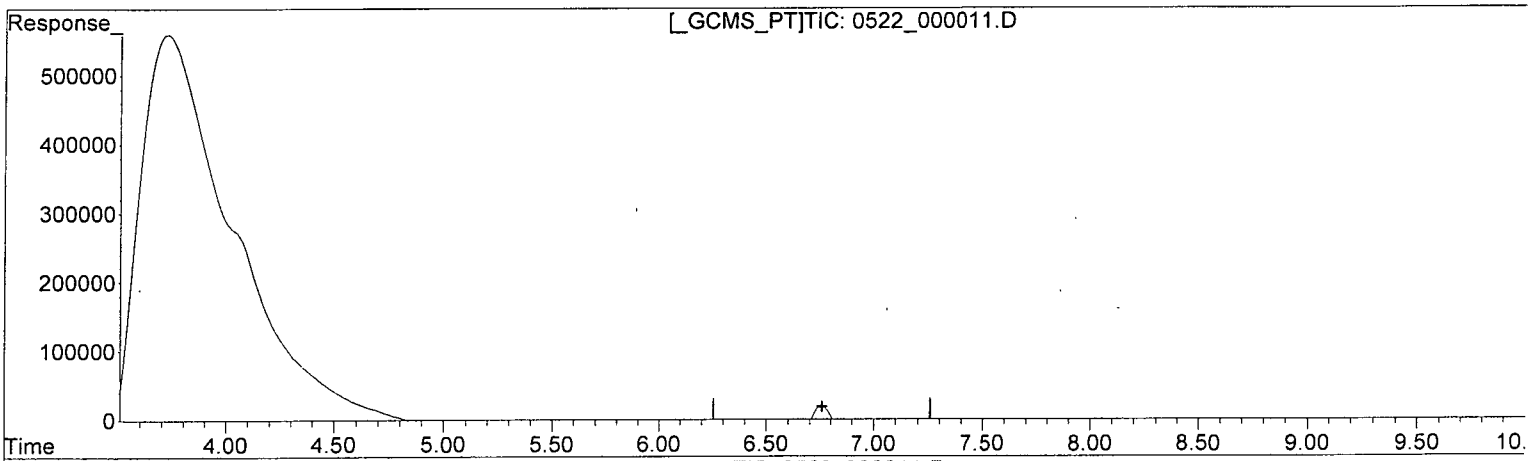
(+) = Expected Retention Time

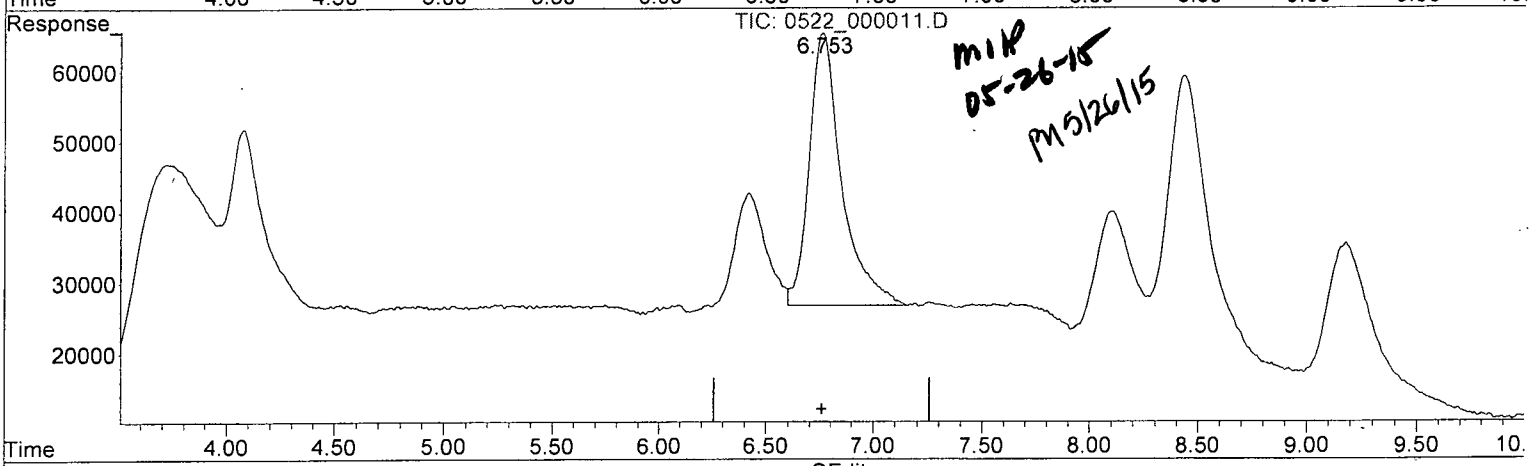
Quantitation Report (Qedit)

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-





QEdit

(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

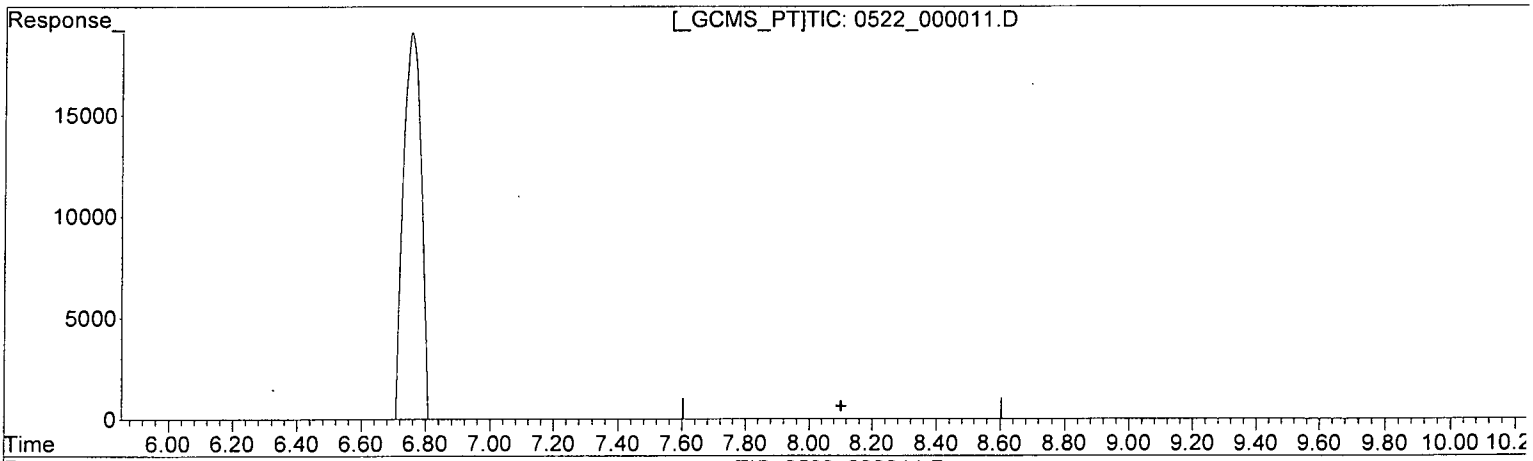
(+) = Expected Retention Time

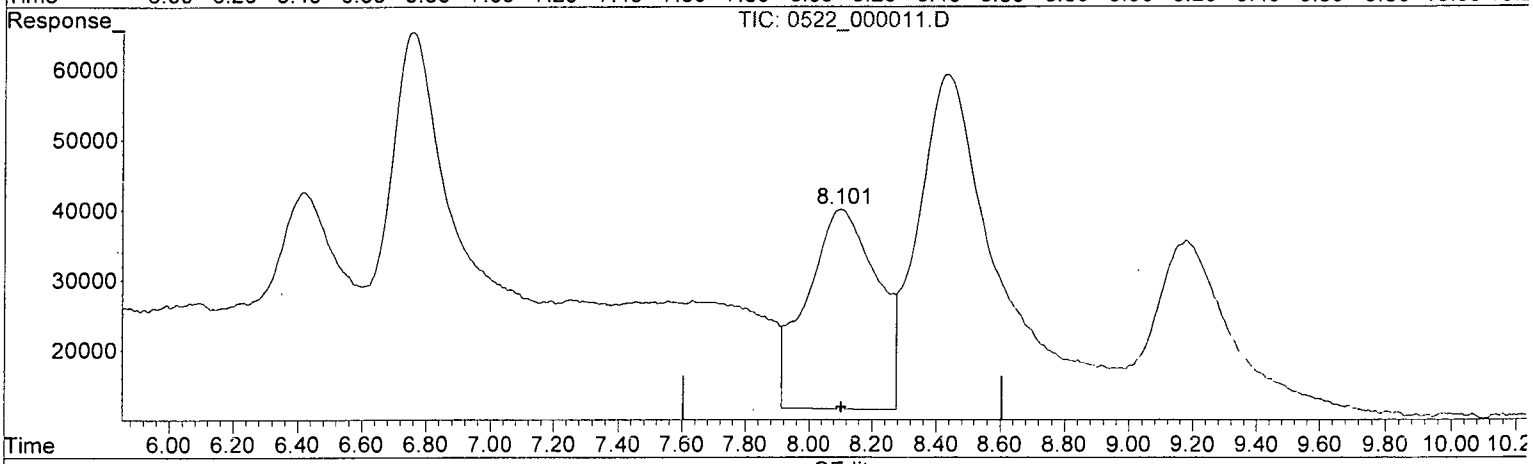
Quantitation Report (Qedit)

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-µ





QEdit

(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

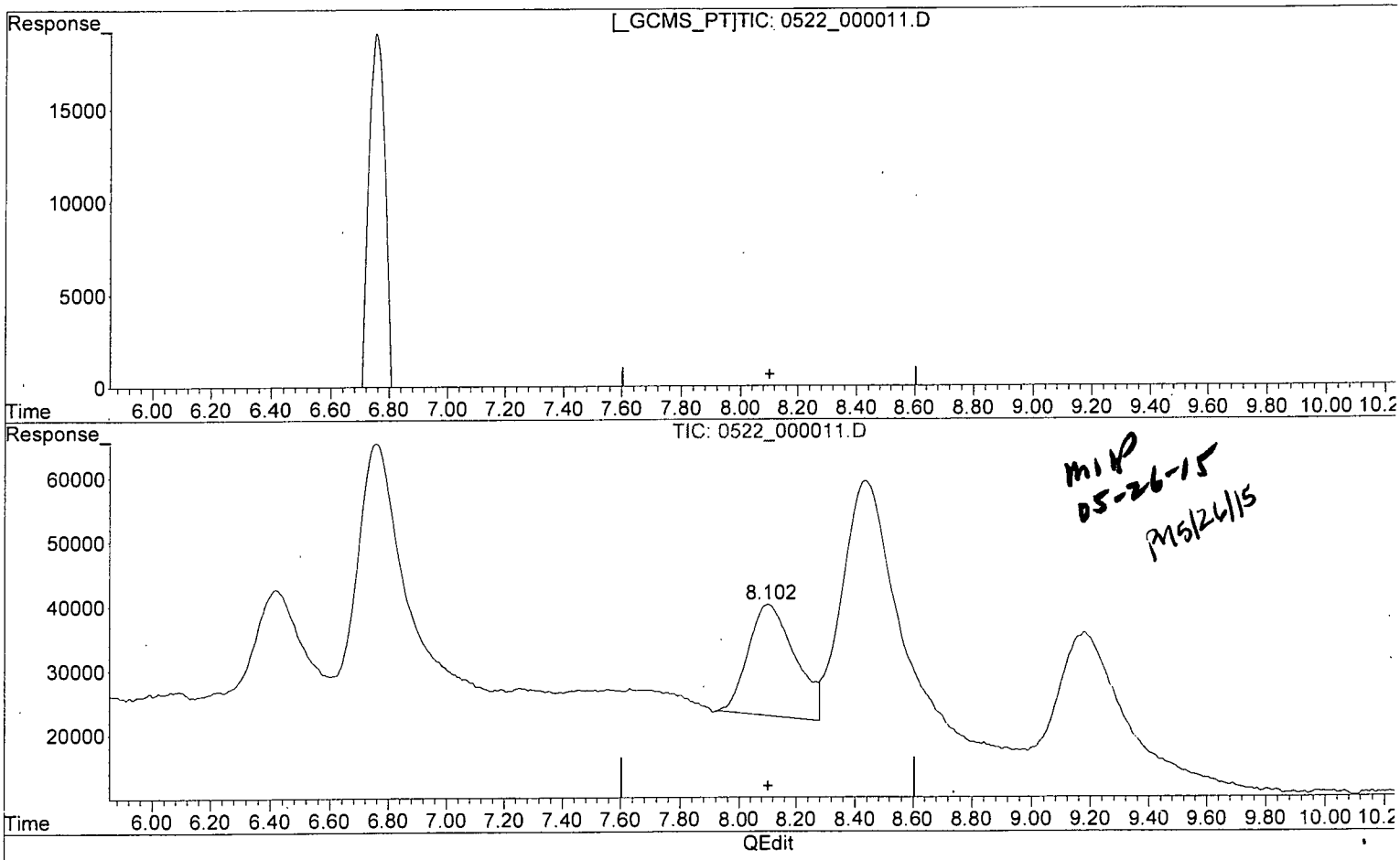
(+) = Expected Retention Time

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



MHP 05-26-15
MS/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

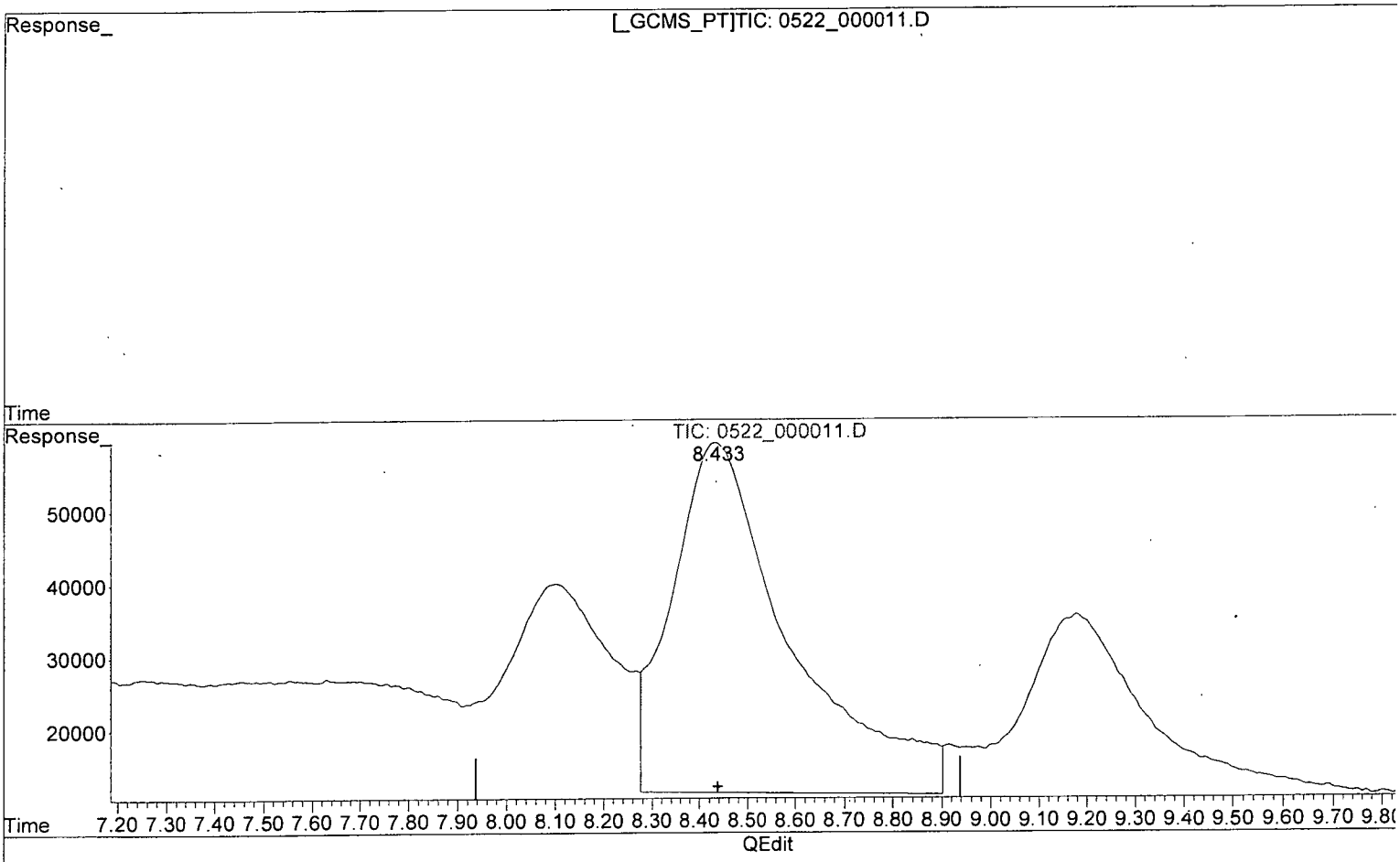
(+) = Expected Retention Time

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-r



(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

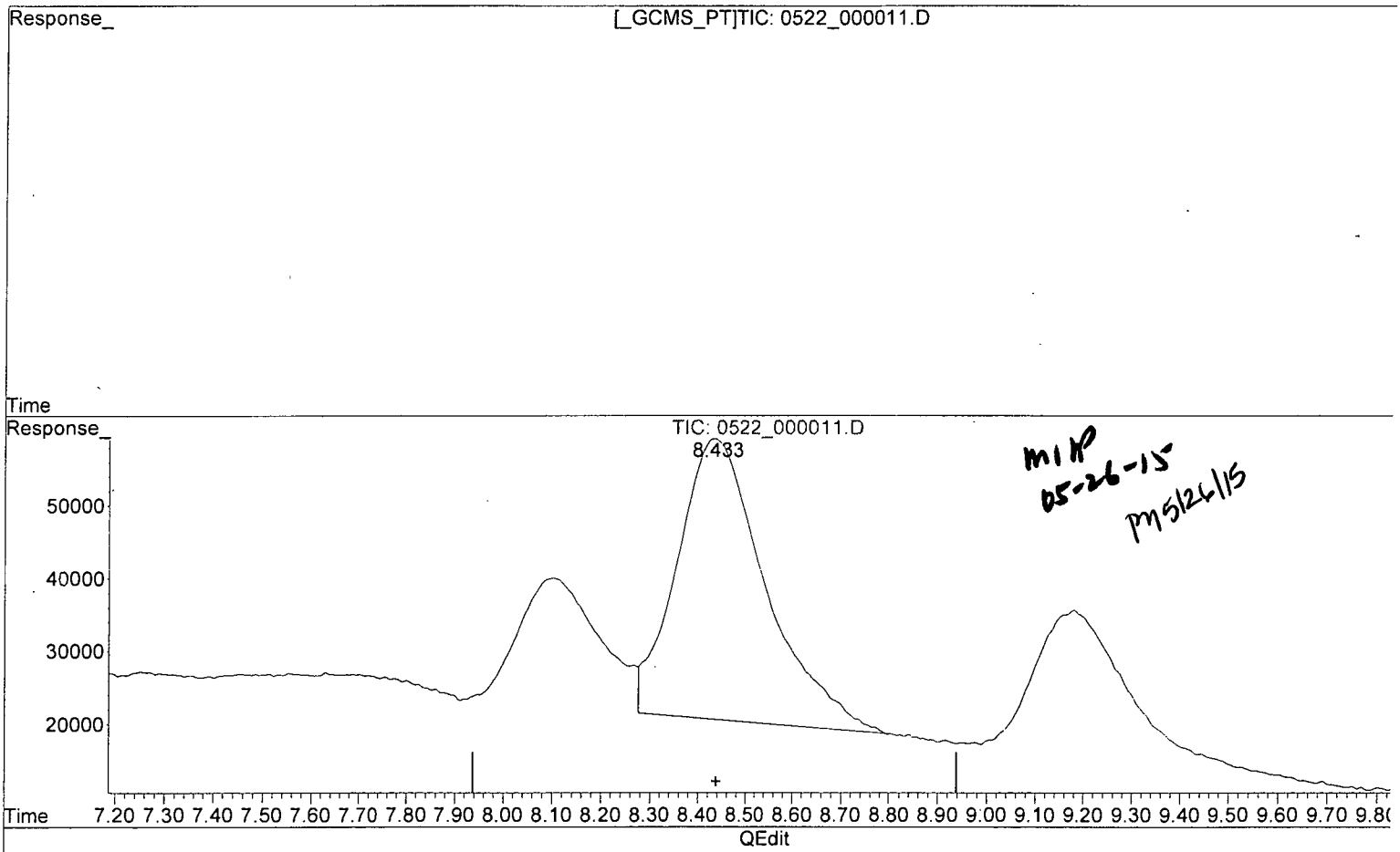
(+) = Expected Retention Time

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-r



(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

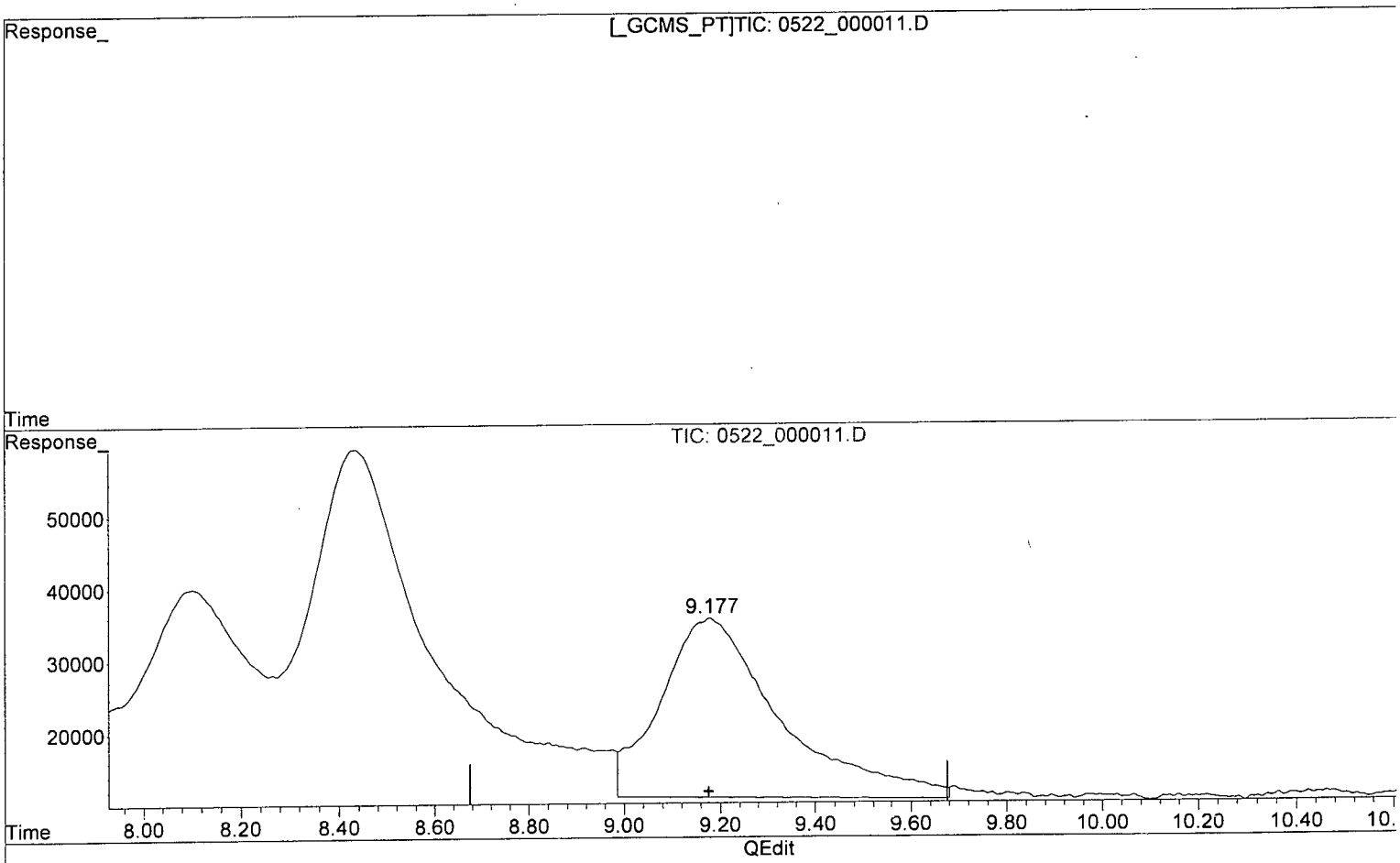
(+) = Expected Retention Time

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-r



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.178min 9.671 ppb

response 24773

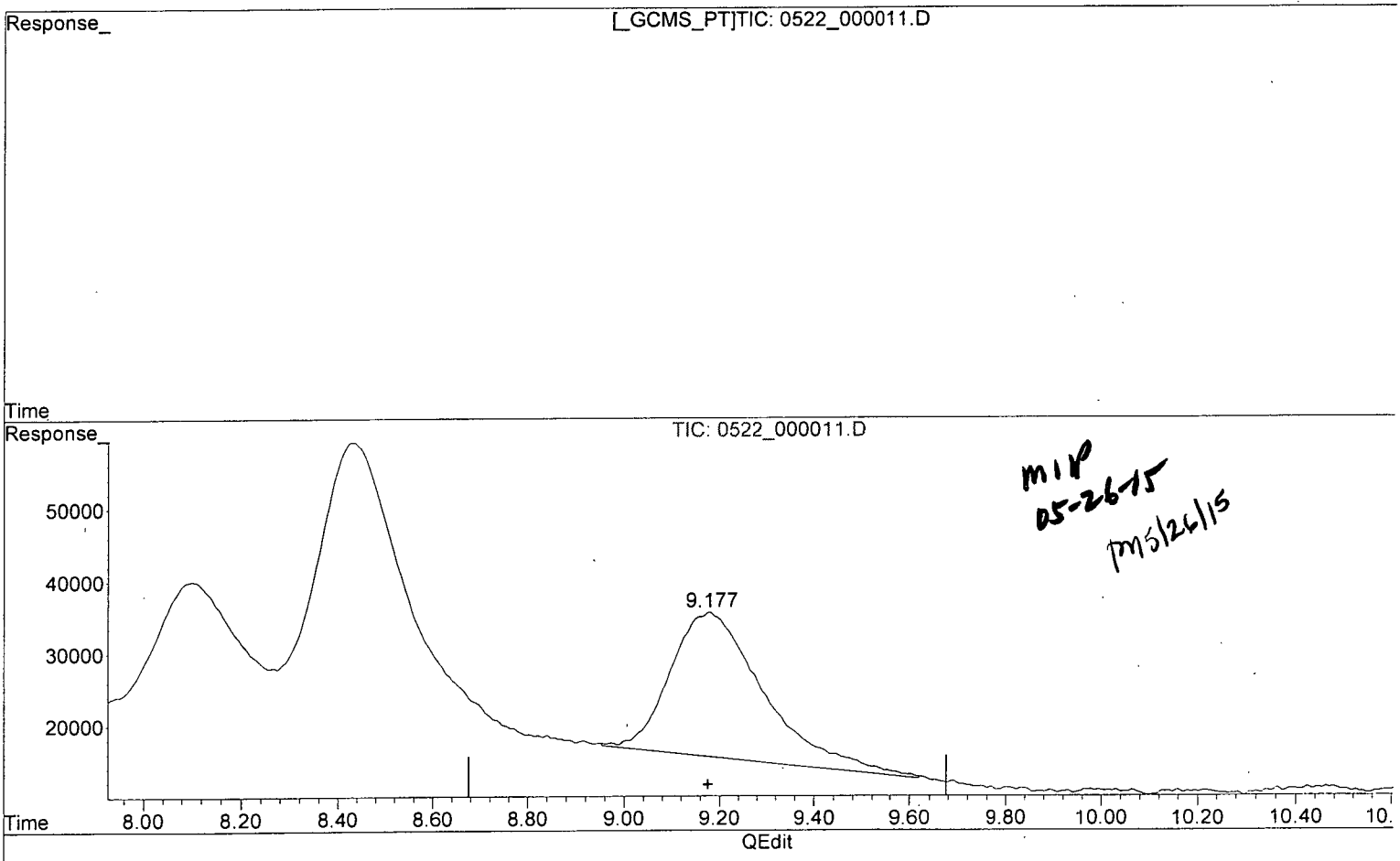
(+) = Expected Retention Time

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-µ



(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.177min 7.841 ppb m

response 20086

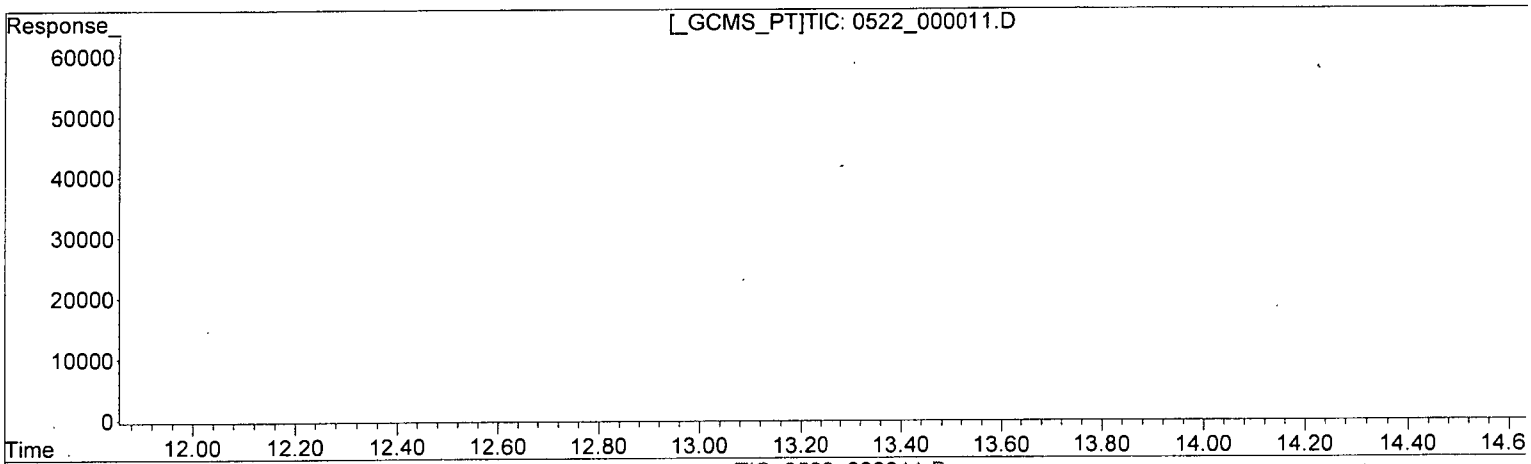
(+) = Expected Retention Time

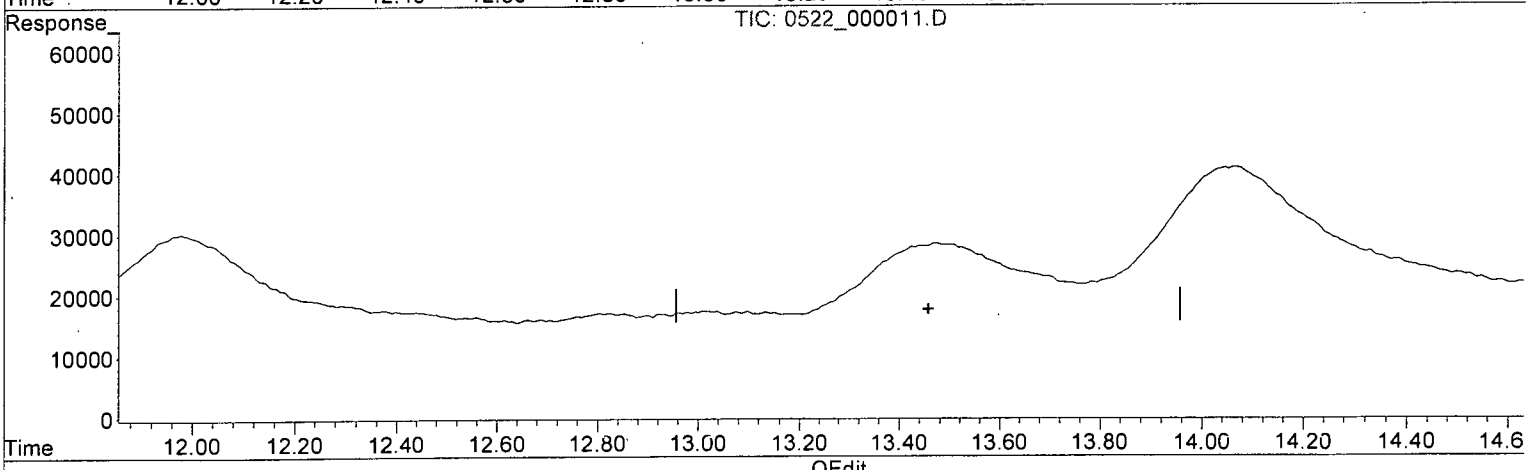
Quantitation Report (Qedit)

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-µ





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

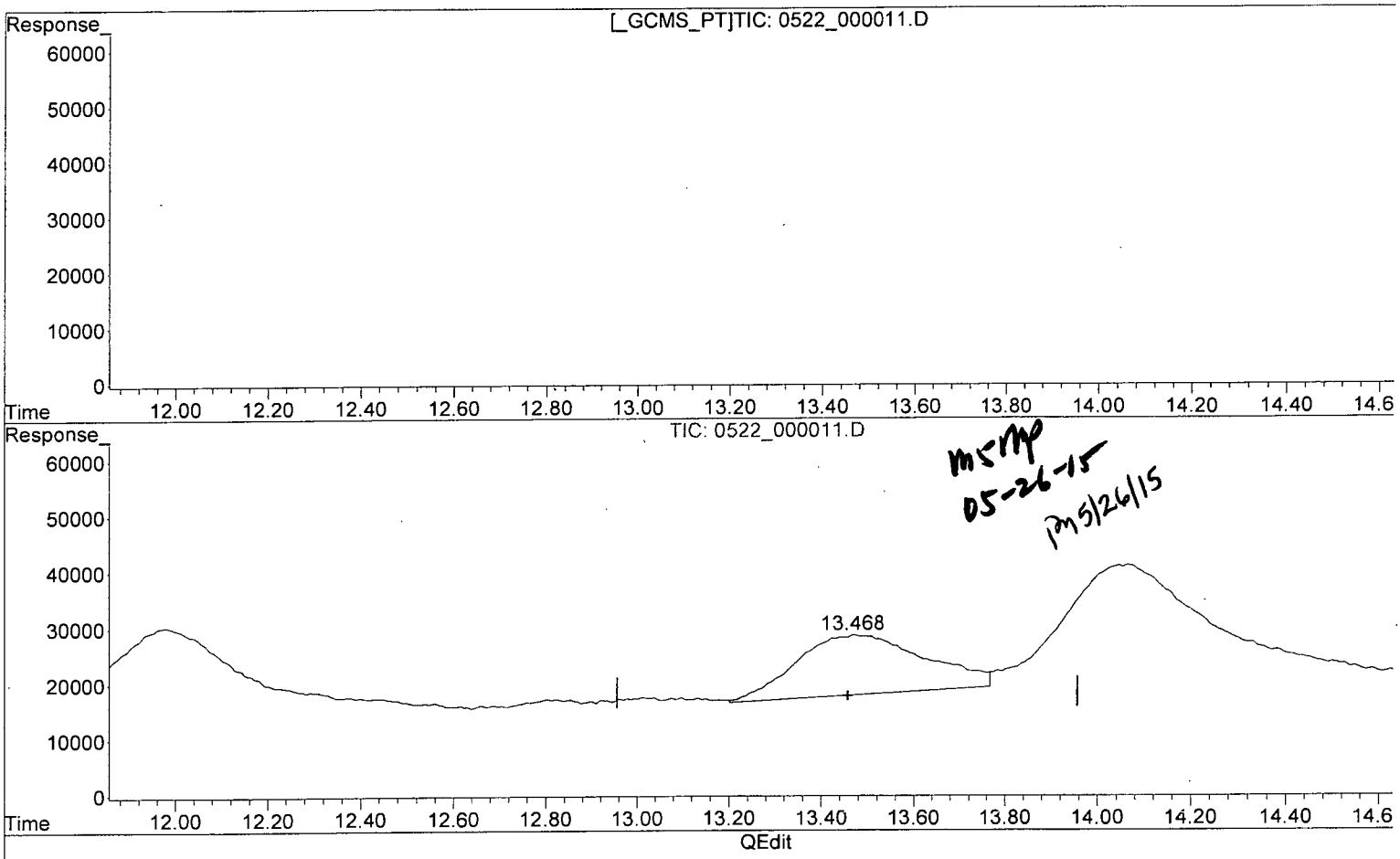
(+) = Expected Retention Time

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-r



(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

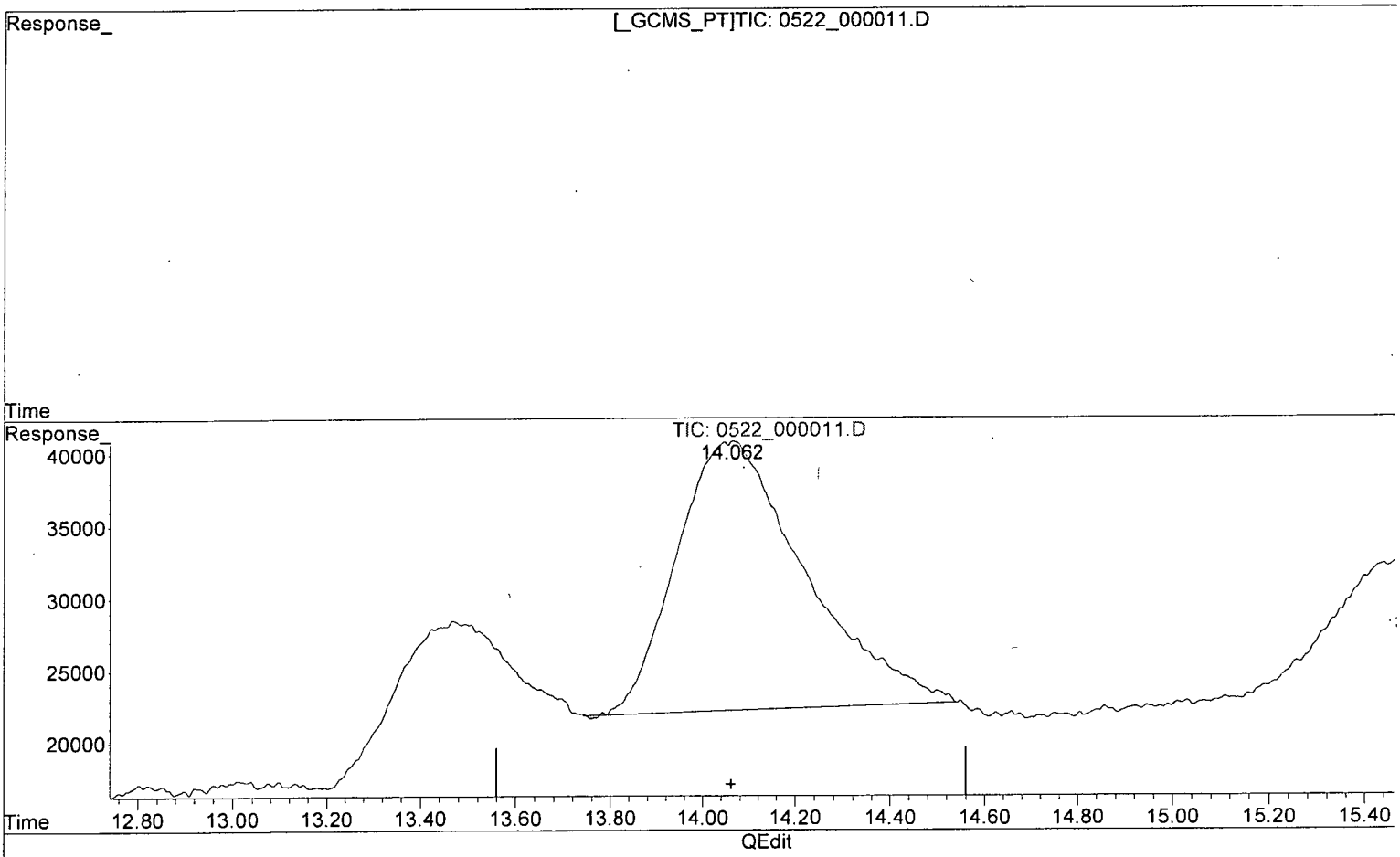
(+) = Expected Retention Time

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

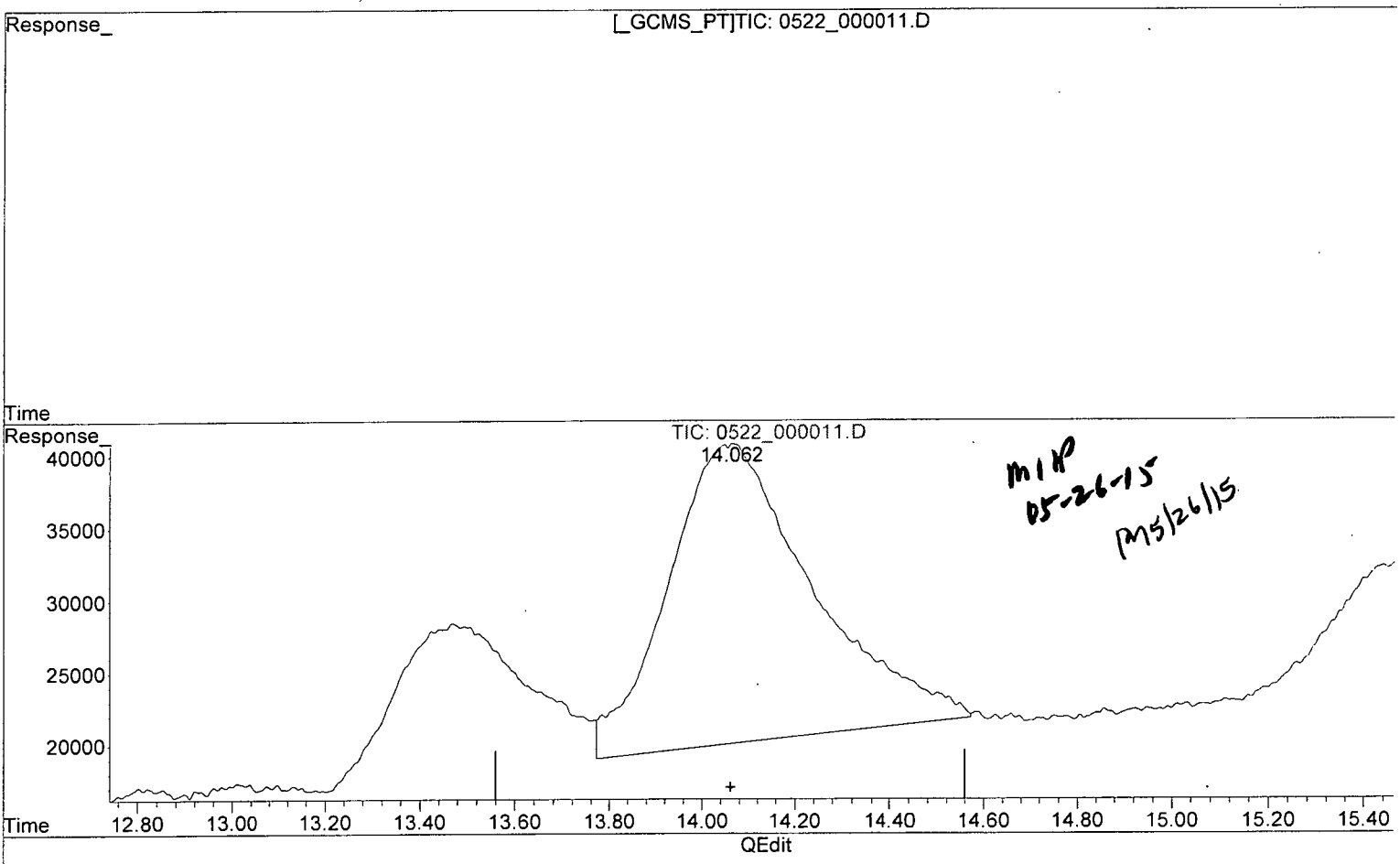
(+) = Expected Retention Time

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-



(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

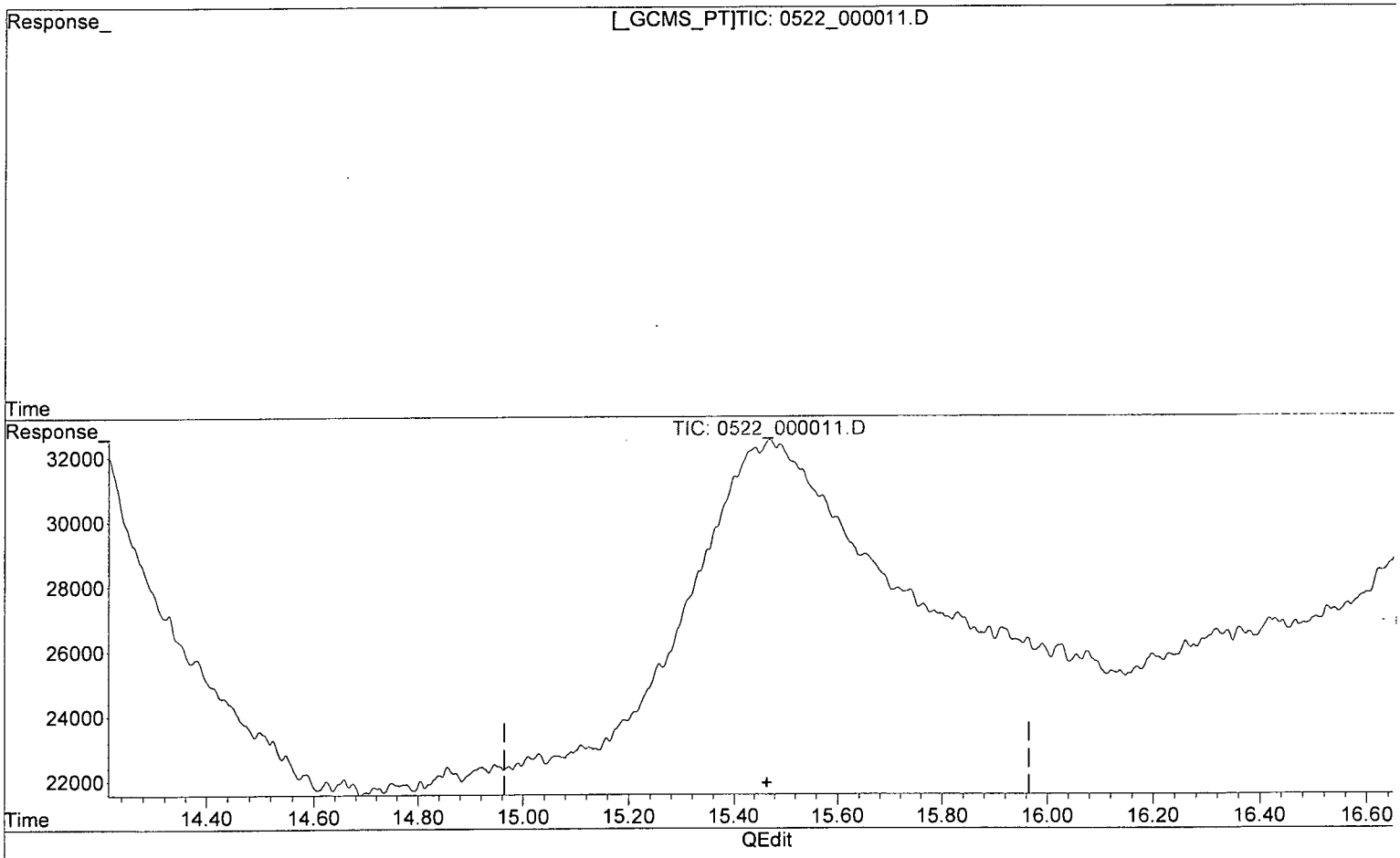
(+) = Expected Retention Time

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-



(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

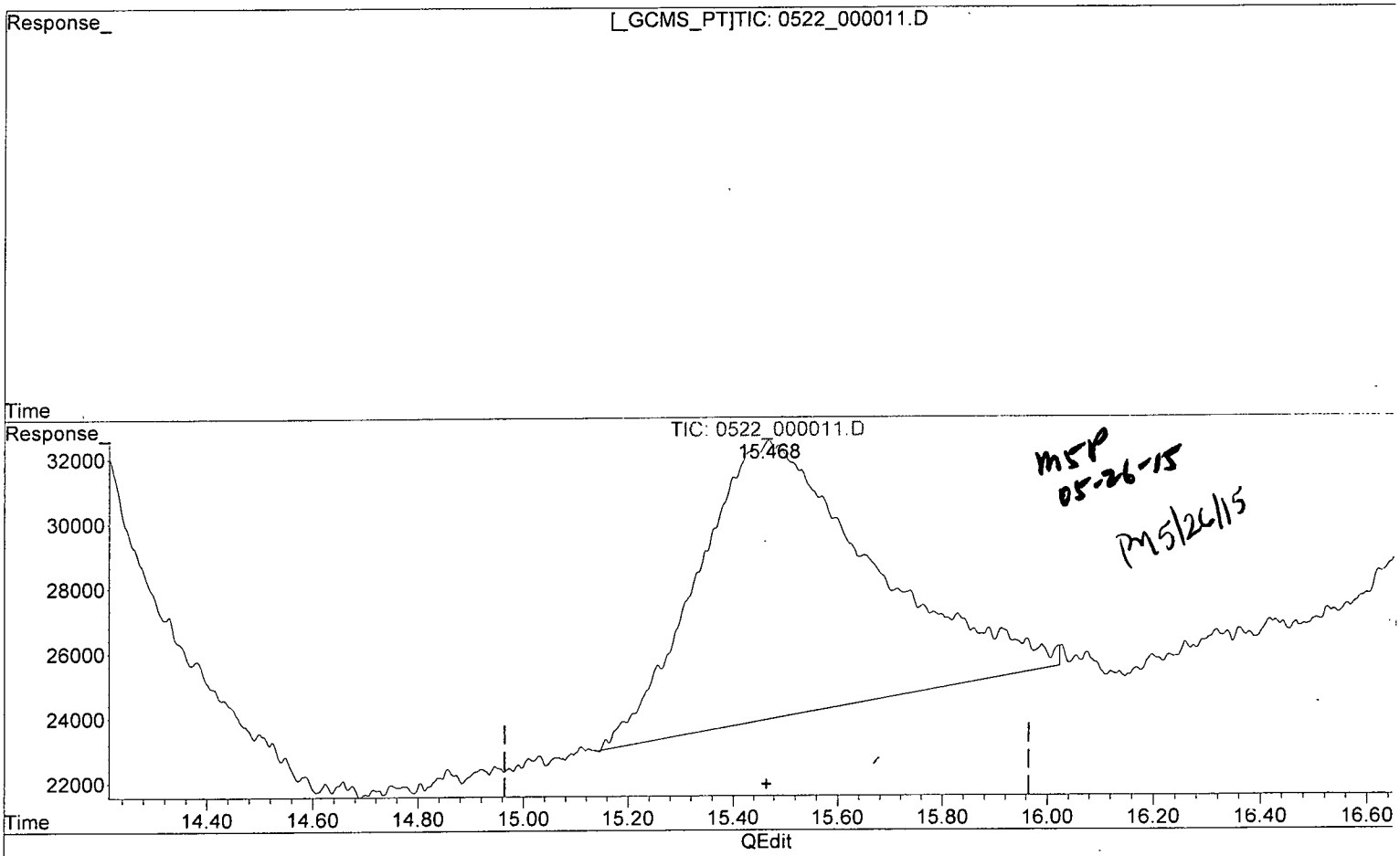
(+) = Expected Retention Time

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



MSP 05-26-15 PM 5/26/15

(12) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(12) 2-NITROTOLUENE #2 (TM)

15.468min 8.142 ppb m

response 8585

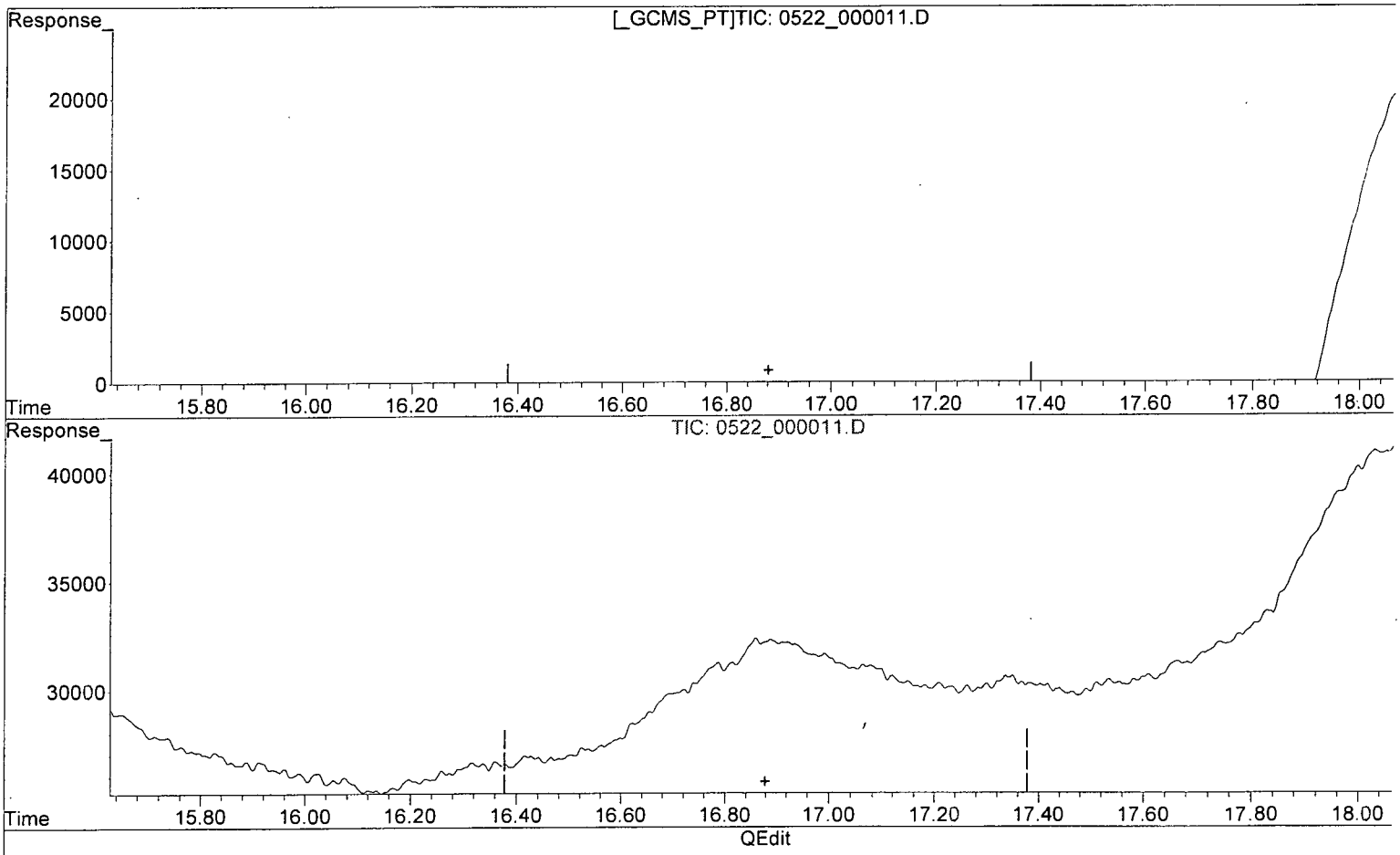
(+) = Expected Retention Time

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-µ



(13) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(13) 4-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

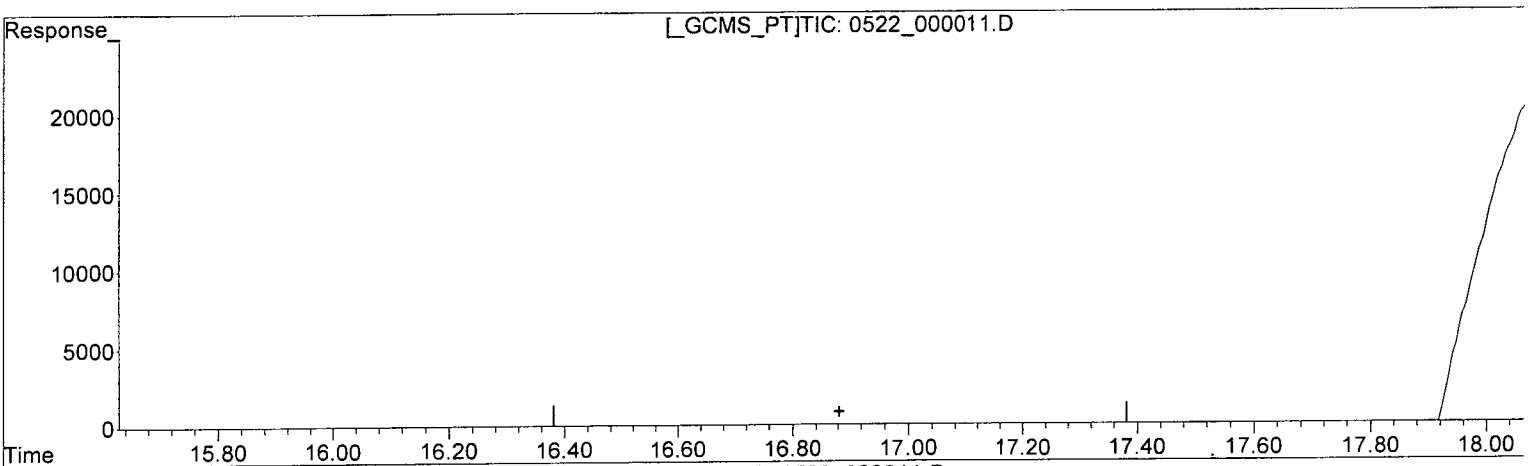
(+) = Expected Retention Time

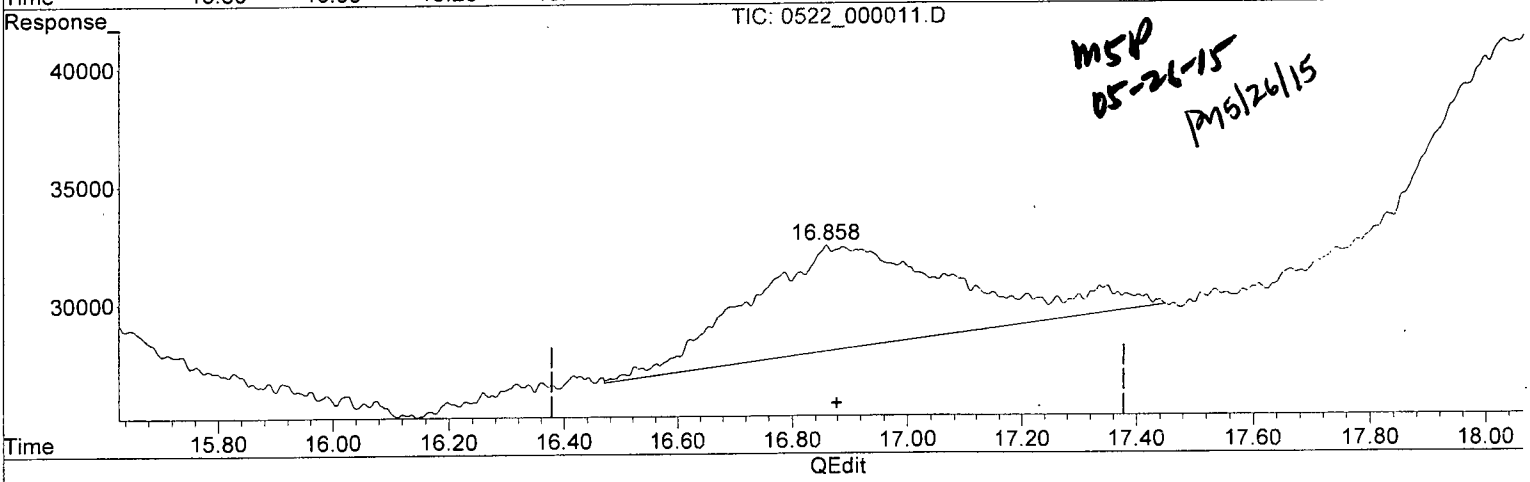
Quantitation Report (Qedit)

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-r





MSP 05-26-15 PM 5/26/15

(13) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(13) 4-NITROTOLUENE #2 (TM)

16.858min 5.100 ppb m

response 4467

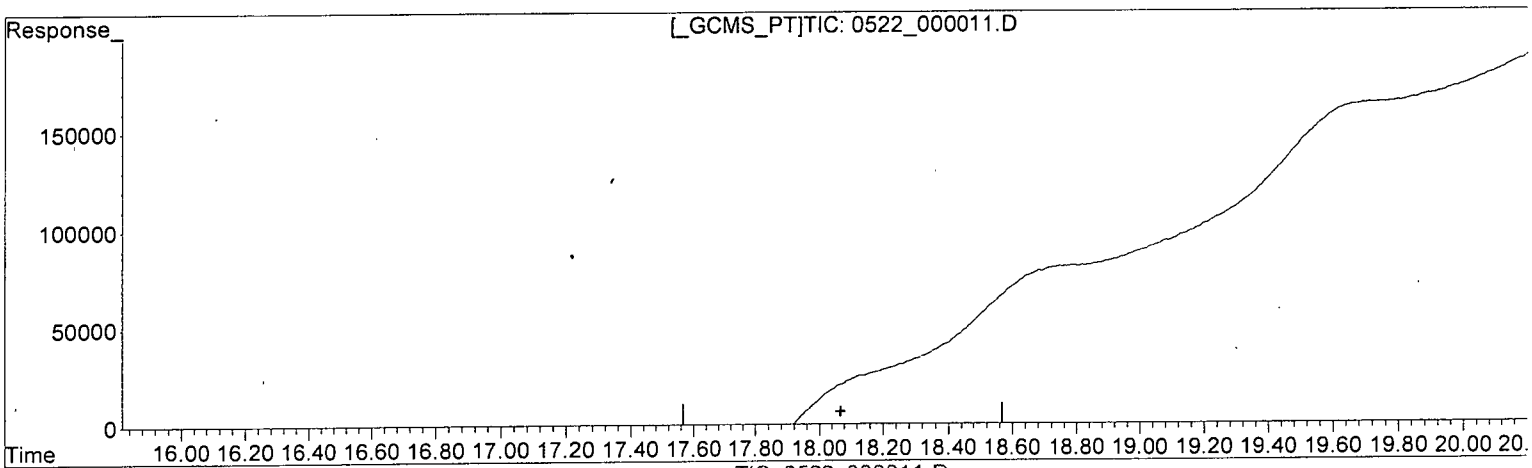
(+) = Expected Retention Time

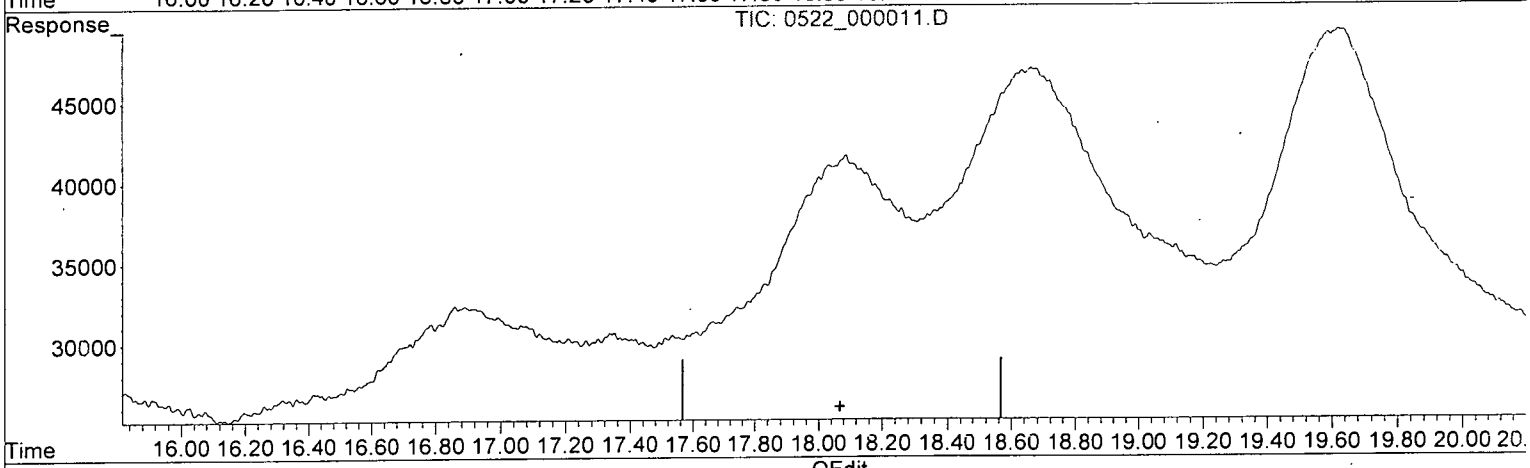
Quantitation Report (Qedit)

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-





QEdit

(15) 3-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 3-NITROTOLUENE #2 (TM)

0.000min 0.000 ppb

response 0

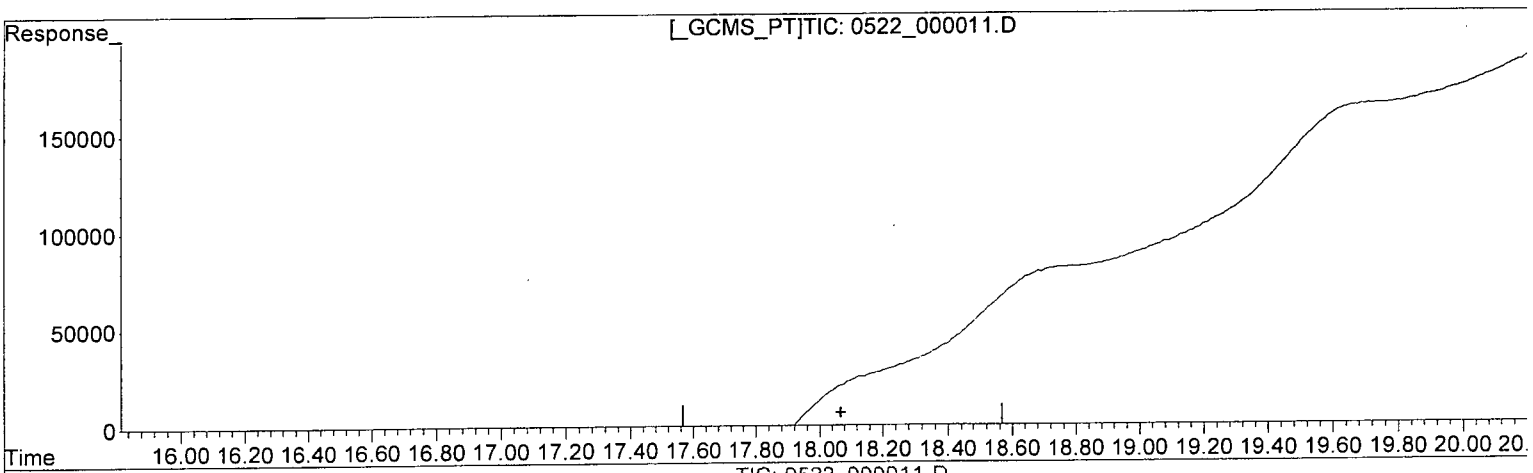
(+) = Expected Retention Time

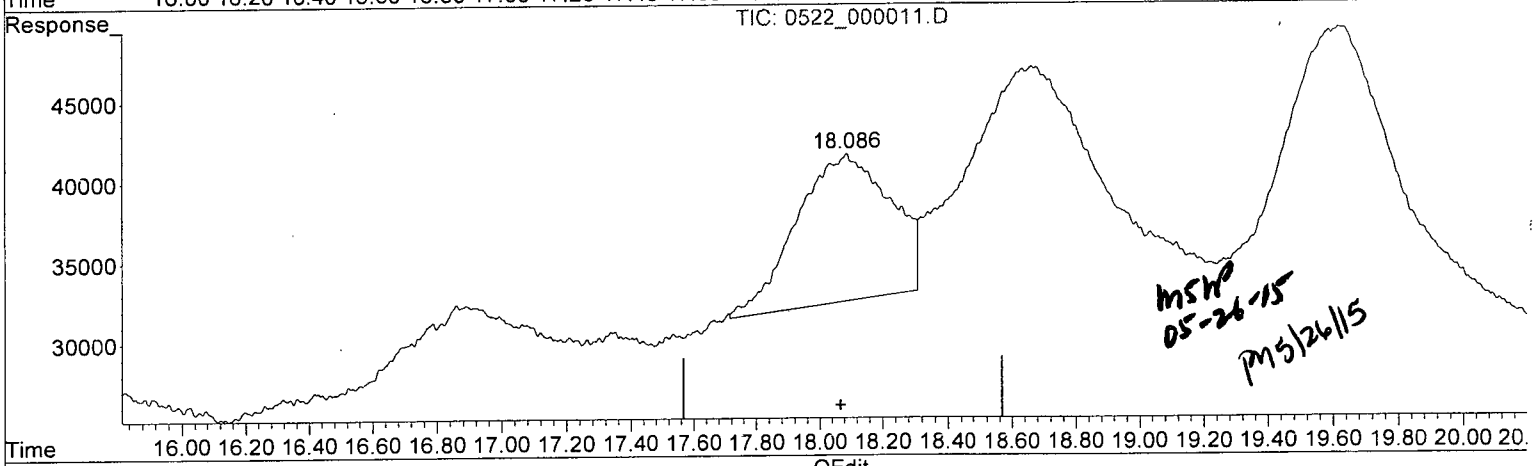
Quantitation Report (Qedit)

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-r





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

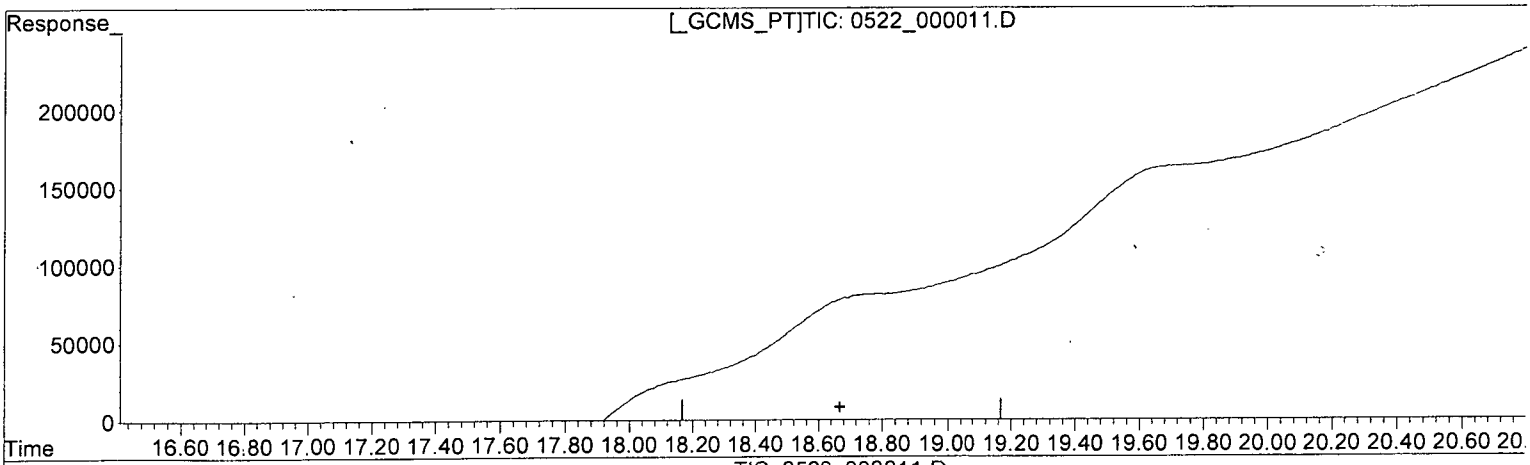
(+) = Expected Retention Time

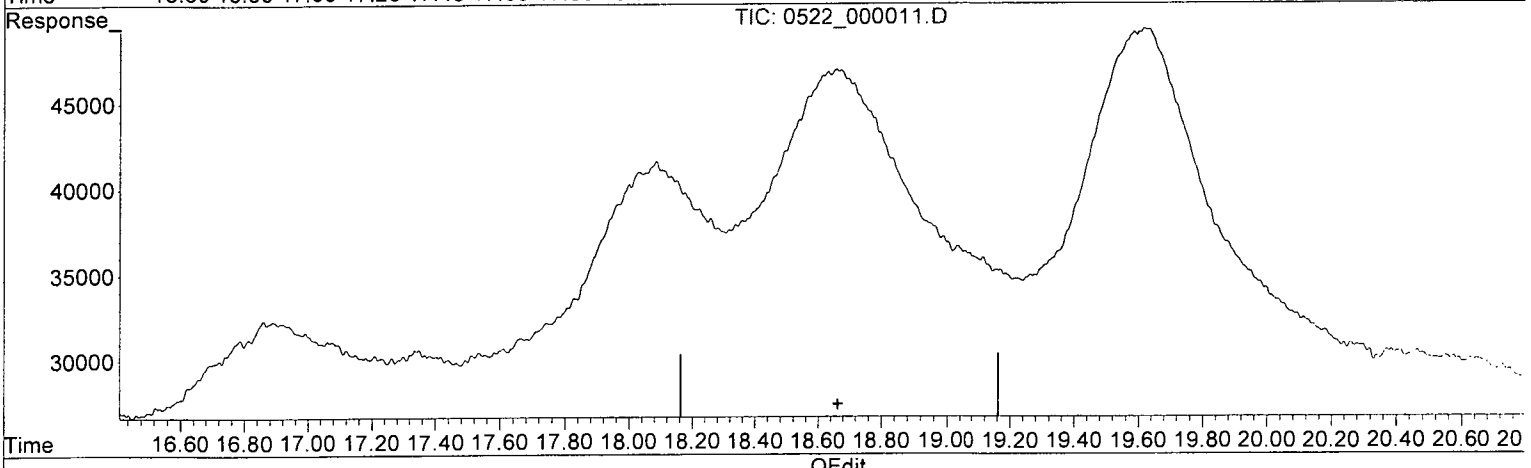
Quantitation Report (Qedit)

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-r





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

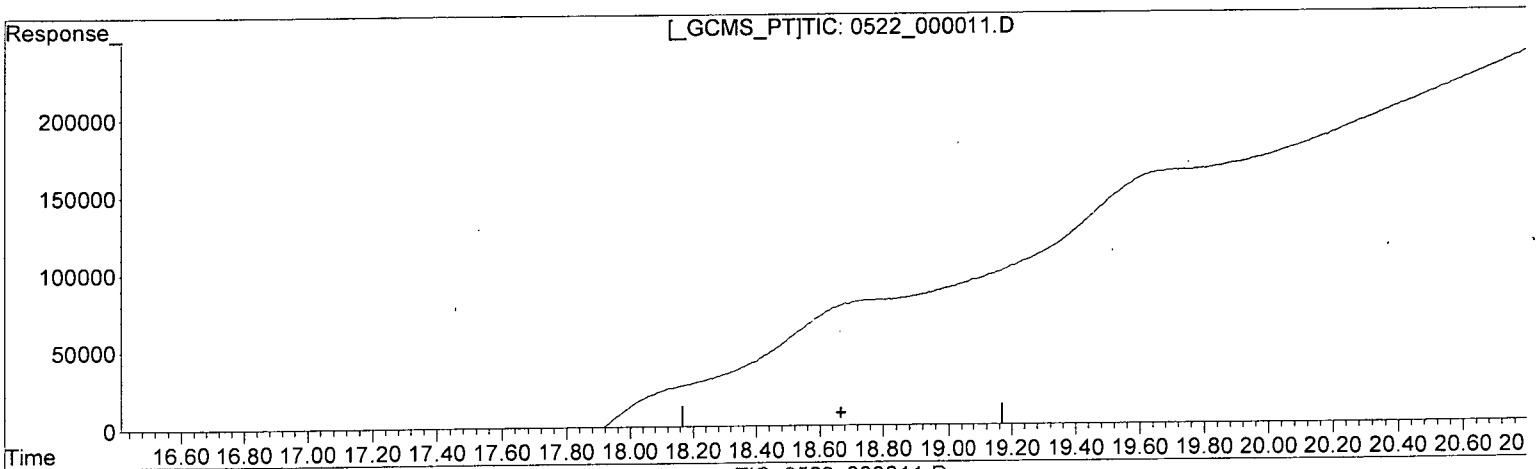
(+) = Expected Retention Time

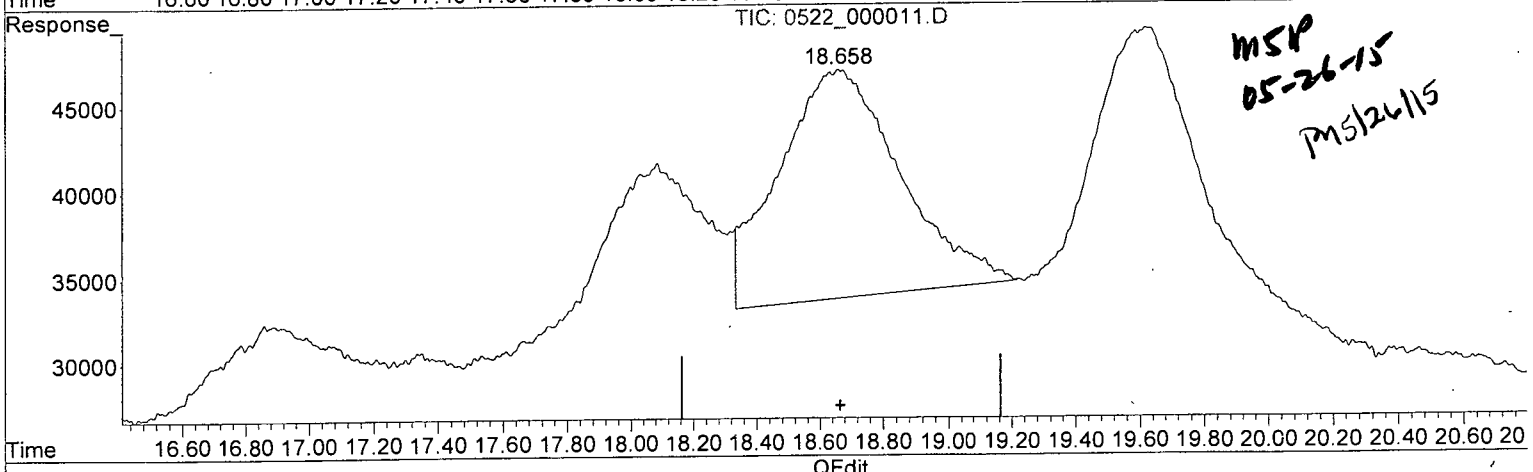
Quantitation Report (Qedit)

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-





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.

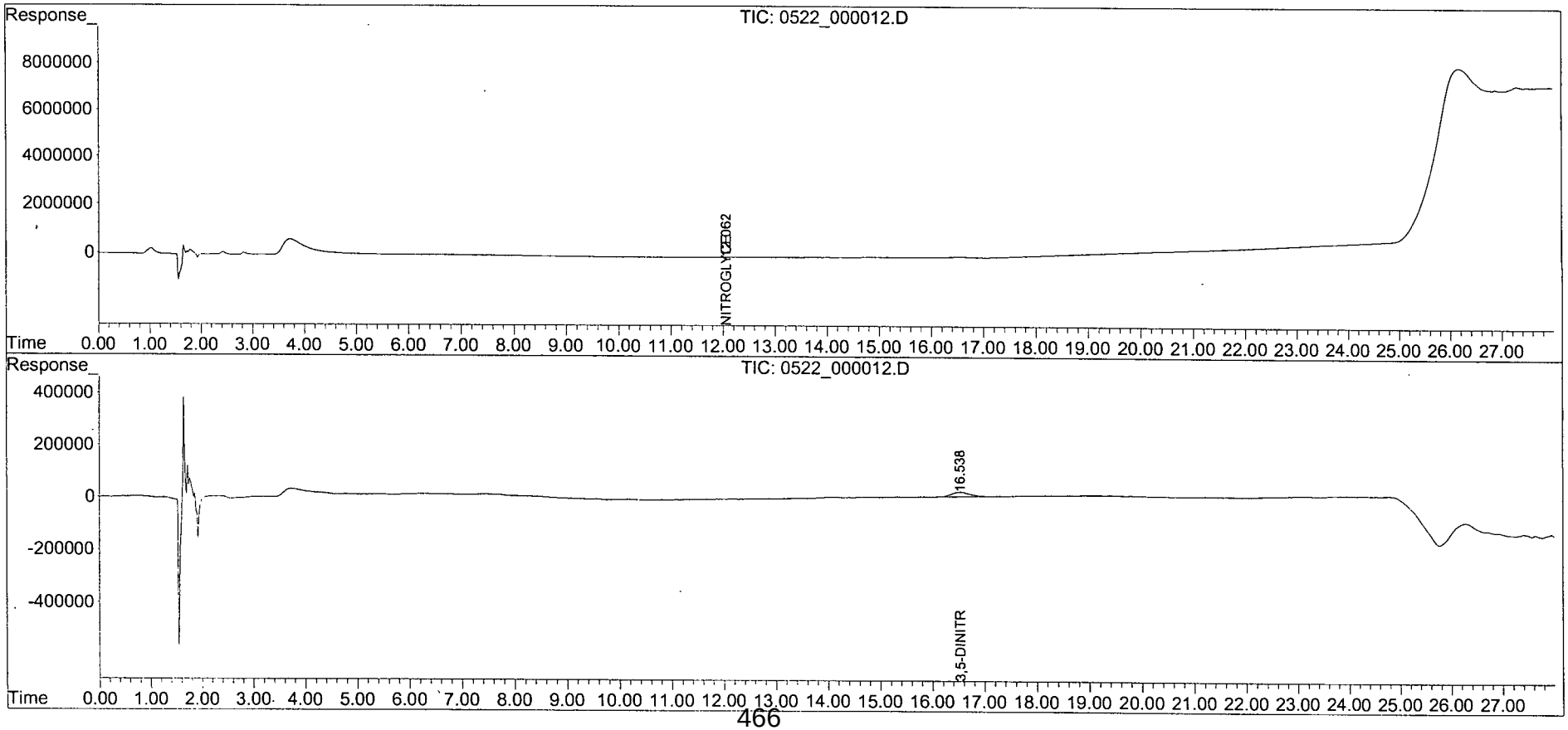
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

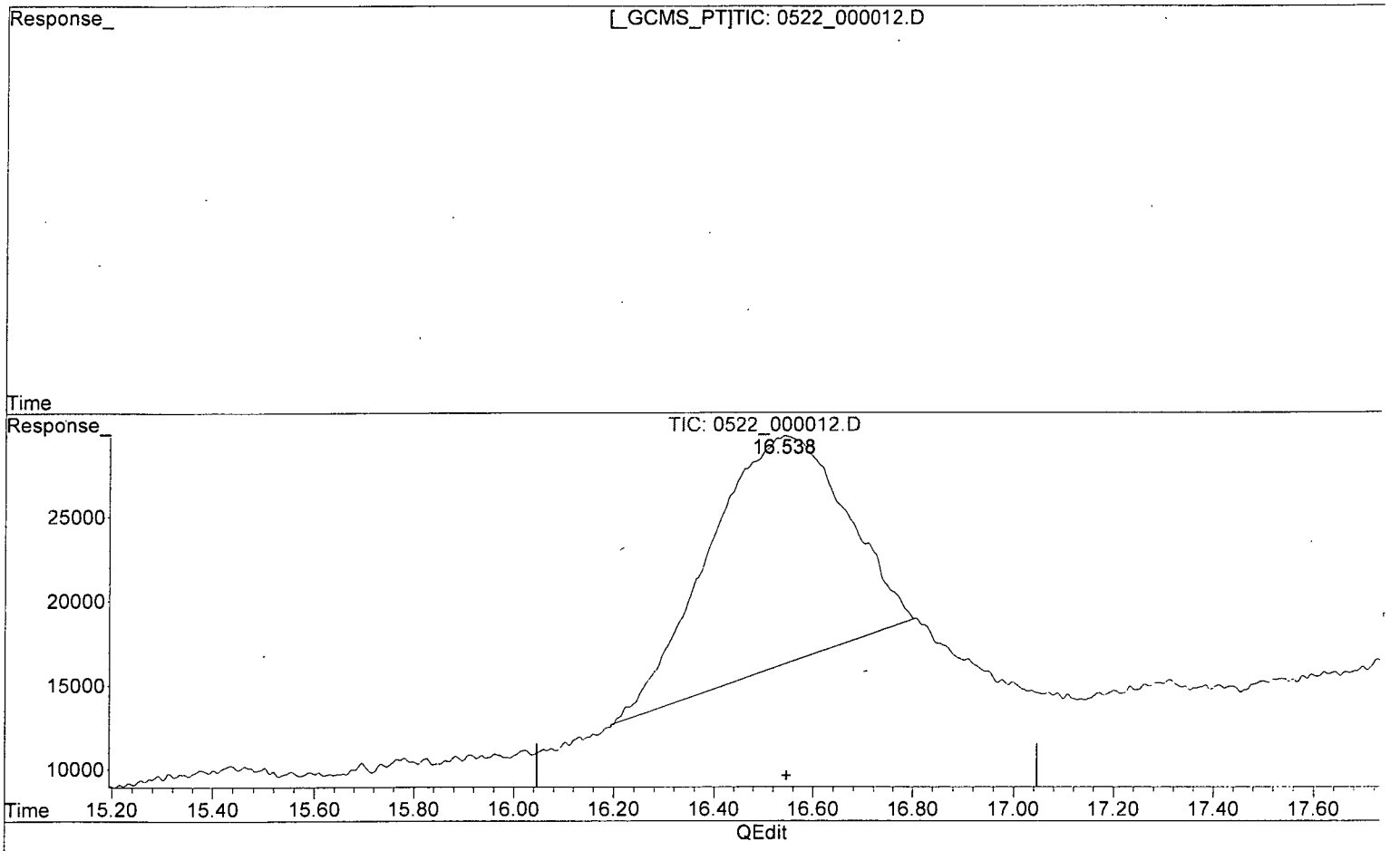


Quantitation Report (Qedit)

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

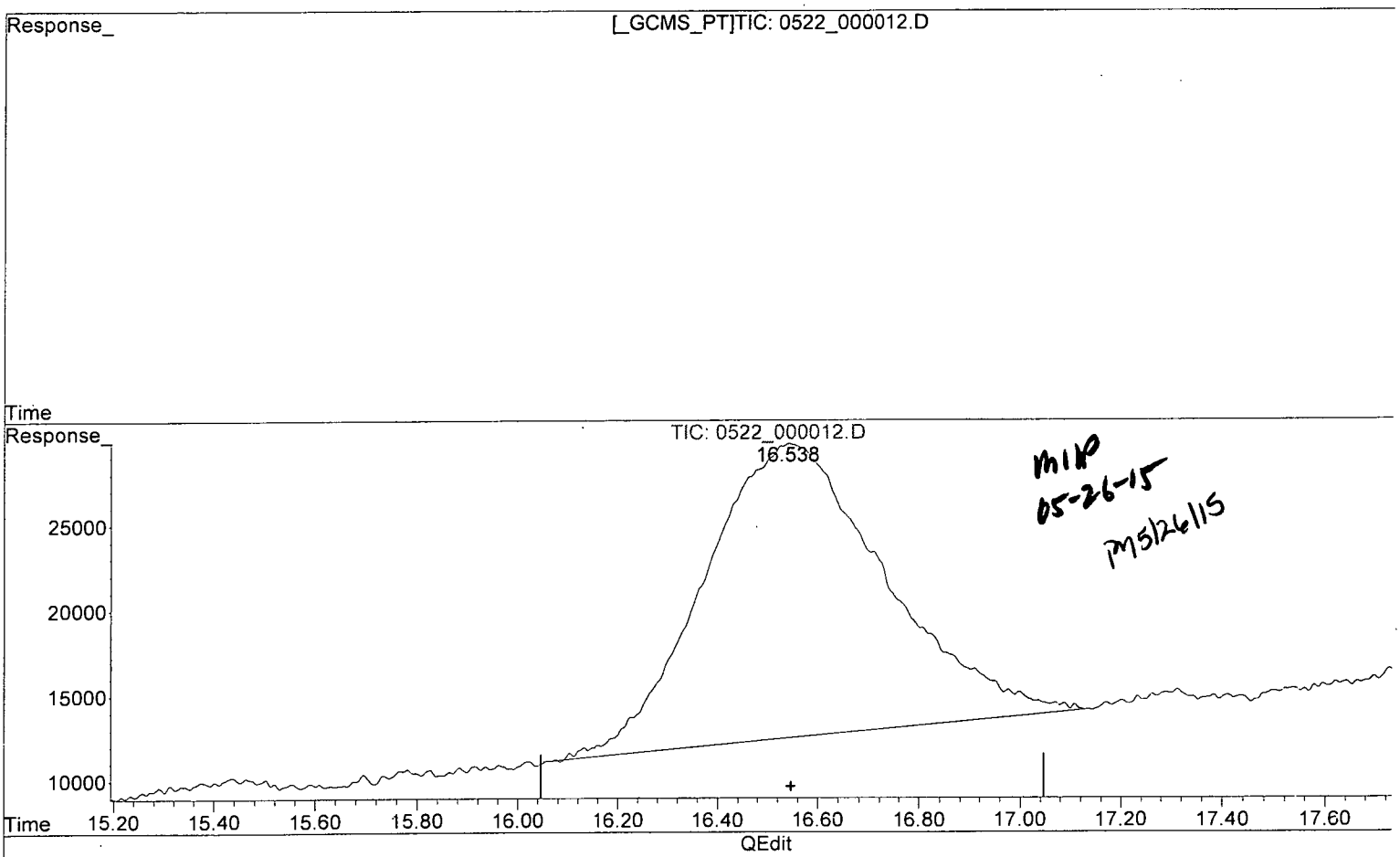
(+) = Expected Retention Time

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.

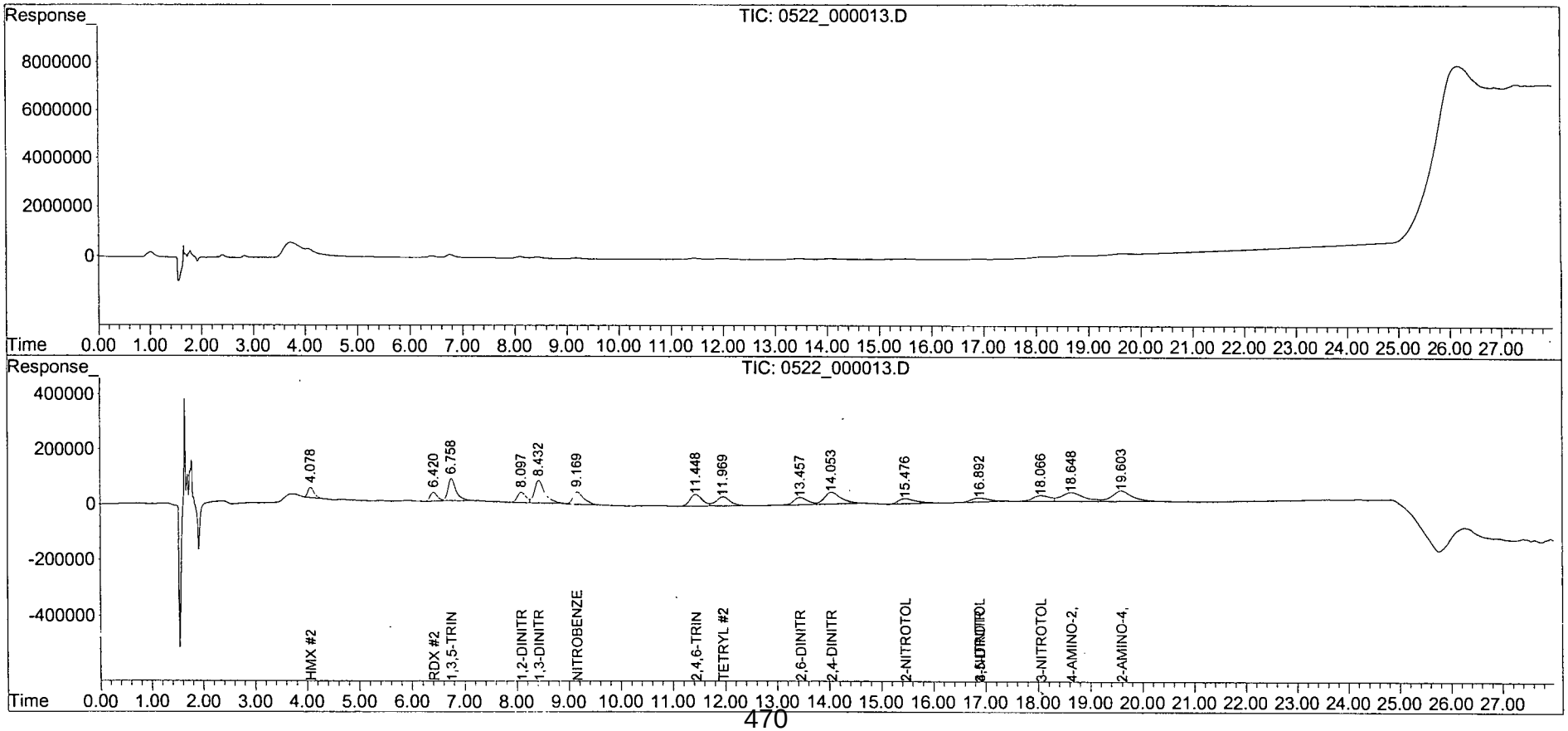
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

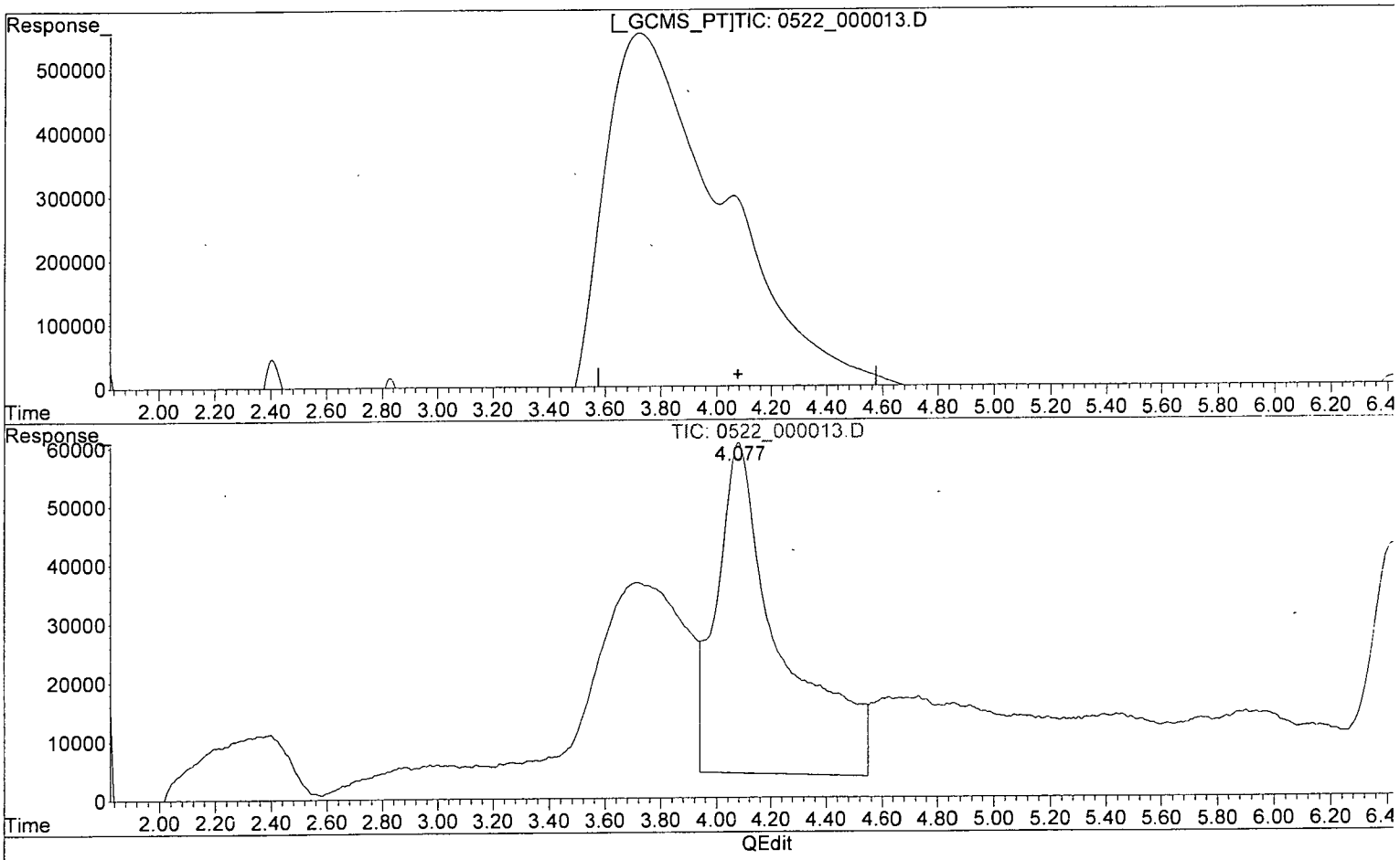


Quantitation Report (Qedit)

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-



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 26.787 ppb

response 56329

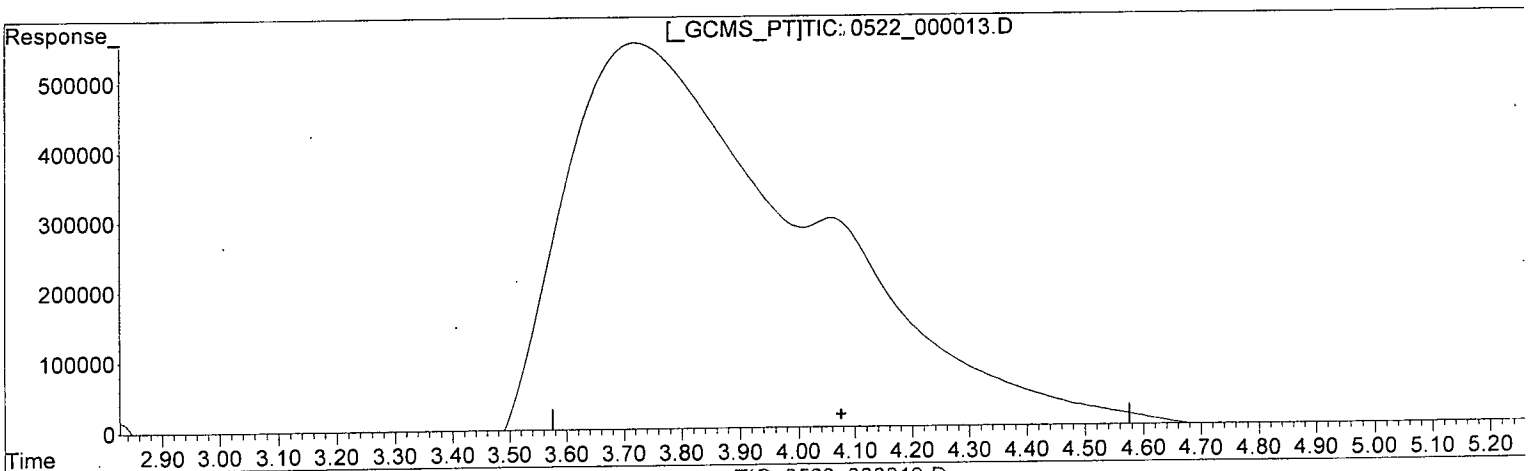
(+) = Expected Retention Time

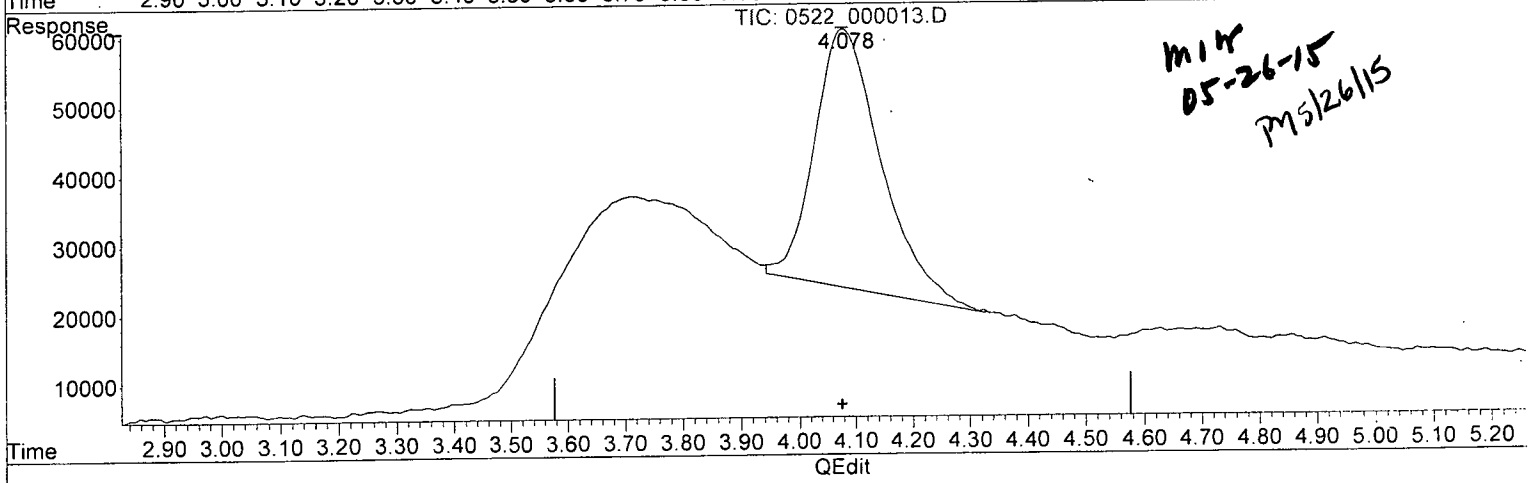
Quantitation Report (Qedit)

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





MLR 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

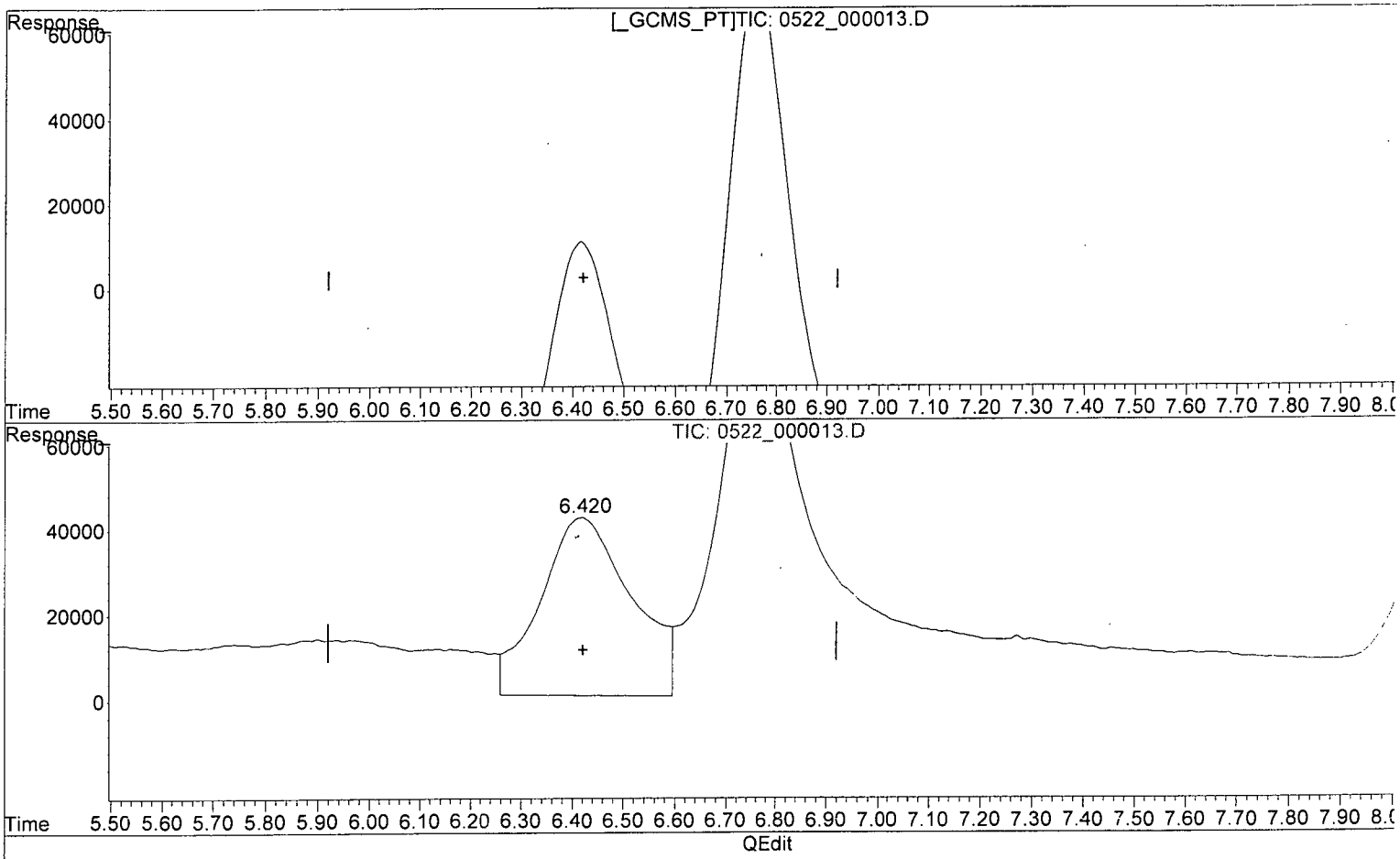
(+) = Expected Retention Time

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

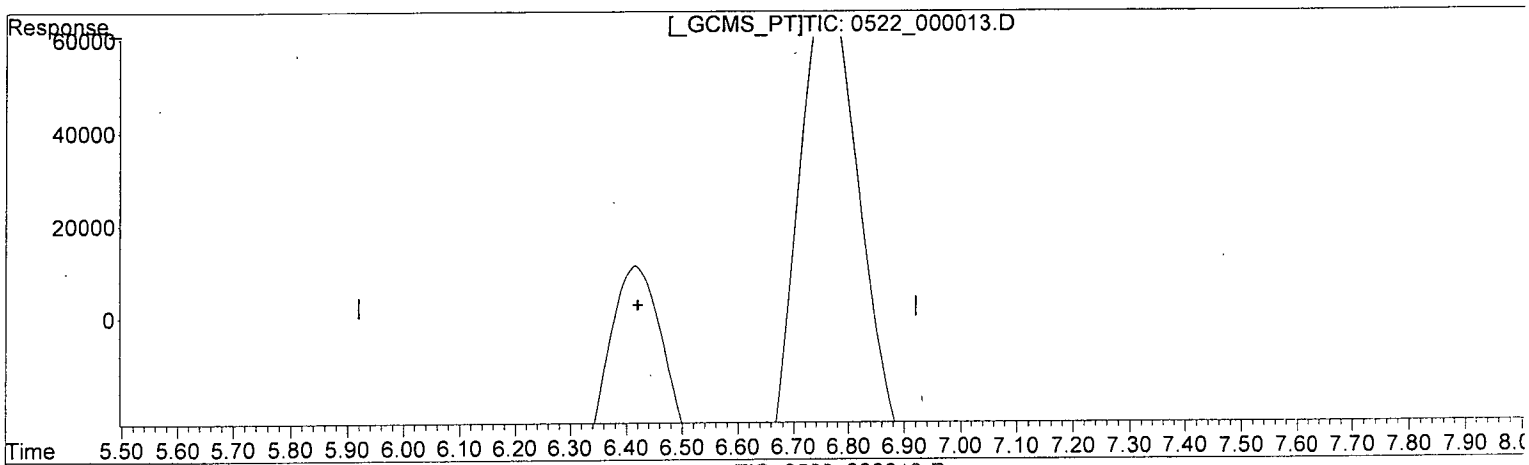
(+) = Expected Retention Time

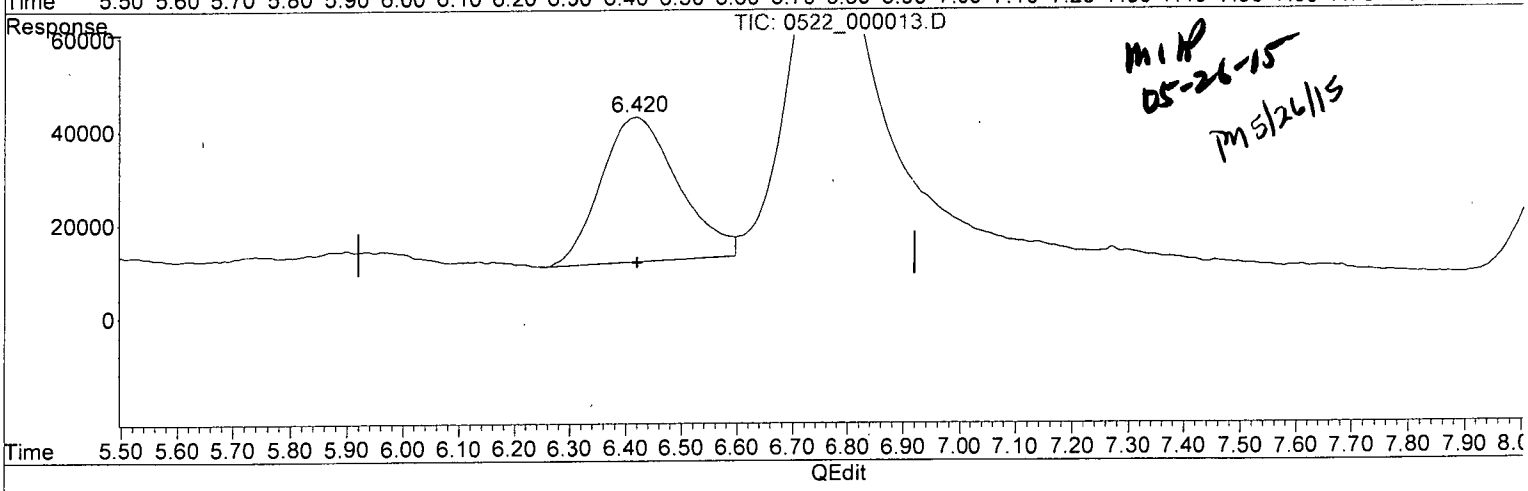
Quantitation Report (Qedit)

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





MP 05-26-15
PM 5/26/15

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.420min 16.678 ppb m

response 30890

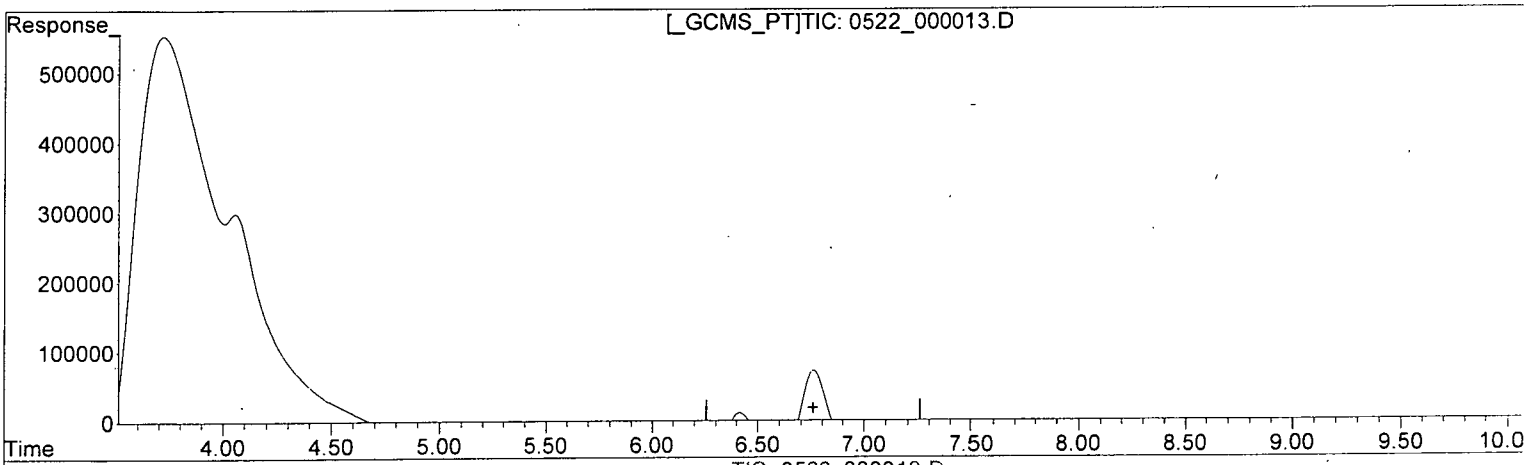
(+) = Expected Retention Time

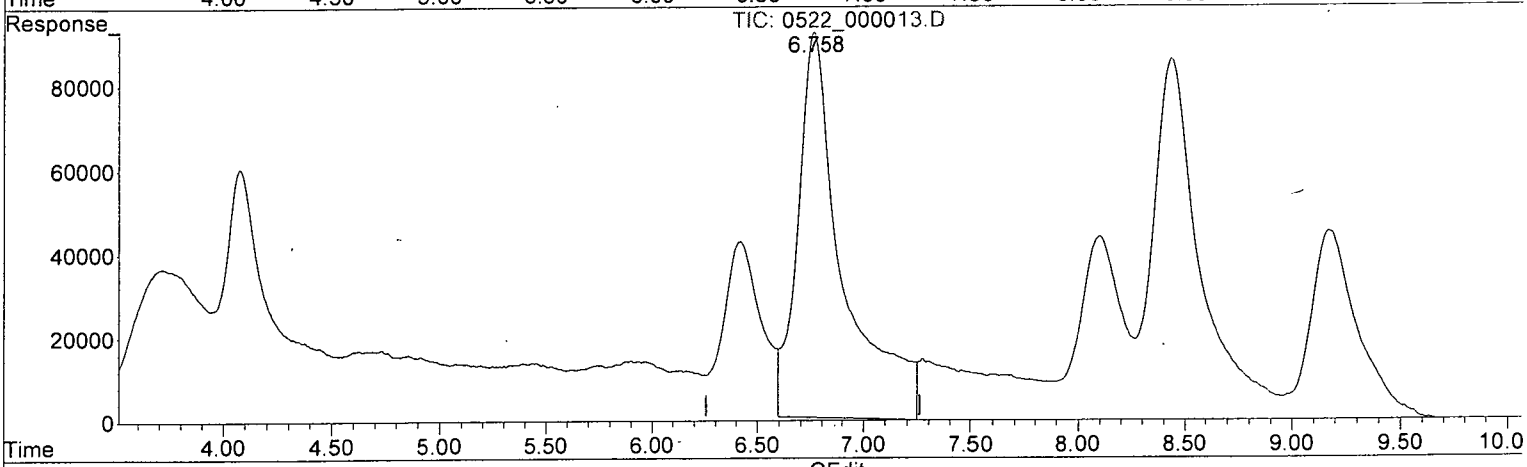
Quantitation Report (Qedit)

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-µ





(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

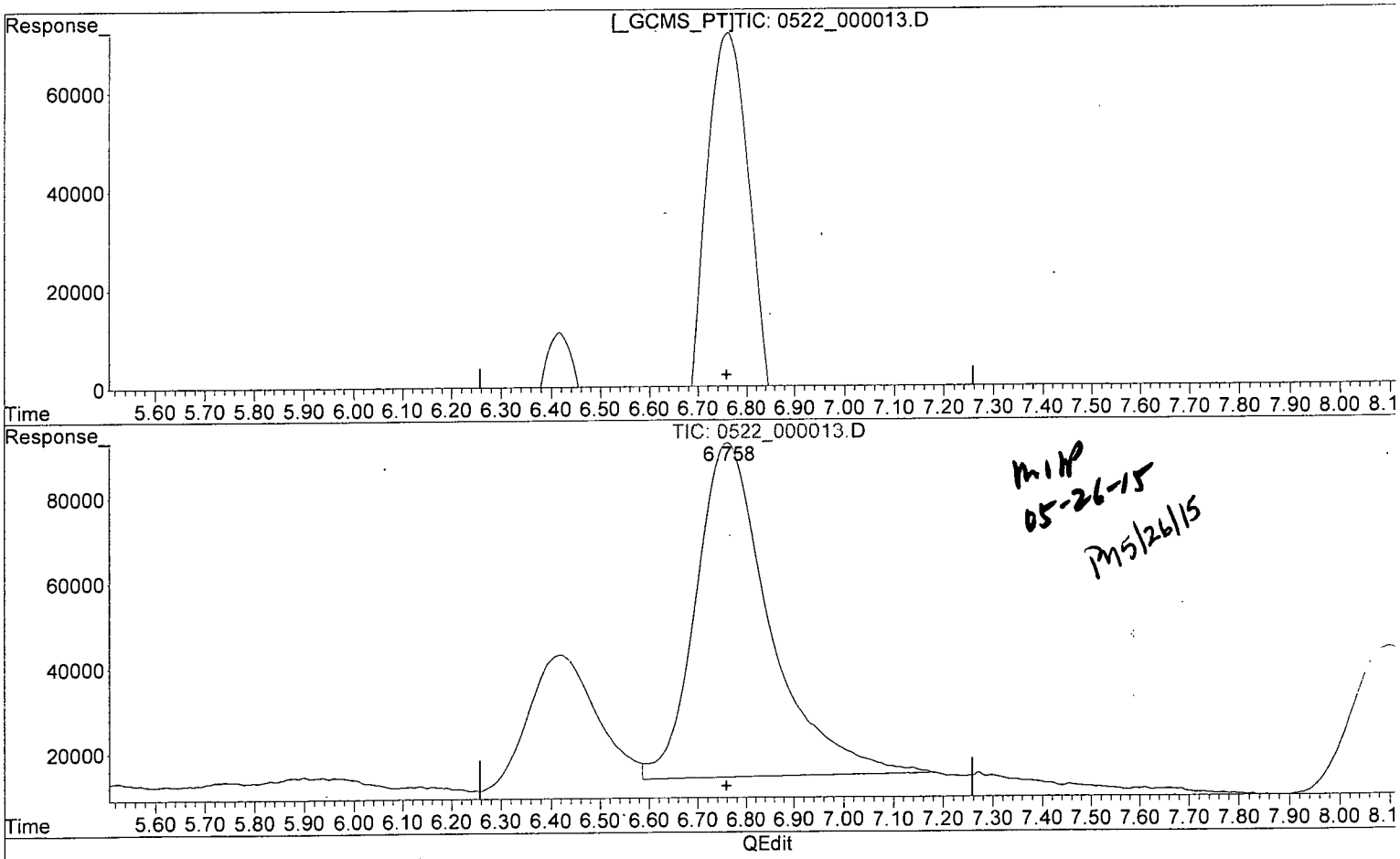
(+) = Expected Retention Time

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-



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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

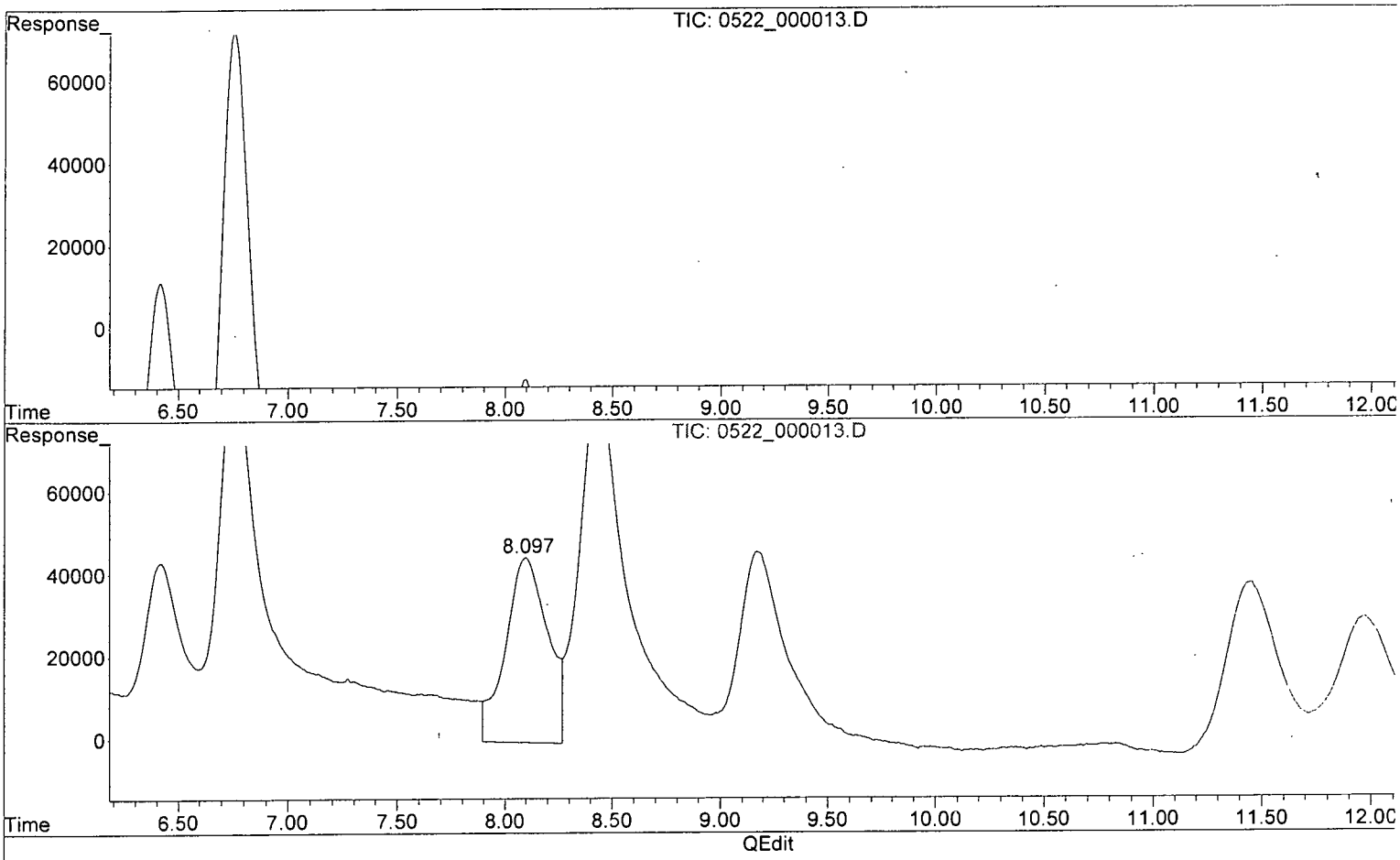
(+) = Expected Retention Time

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-µ



(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

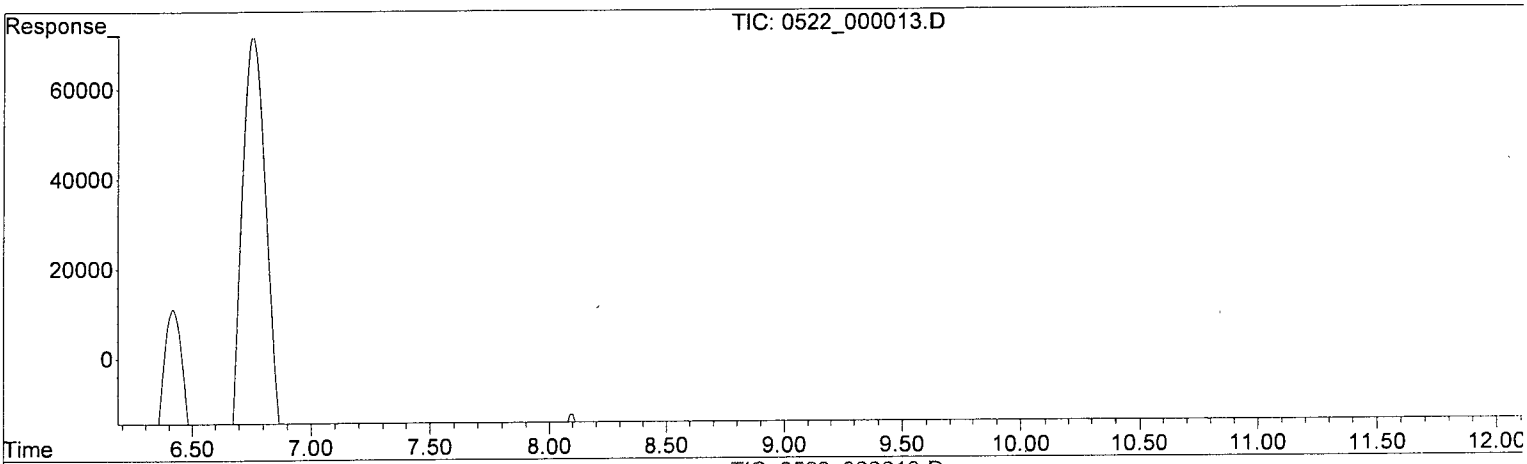
(+) = Expected Retention Time

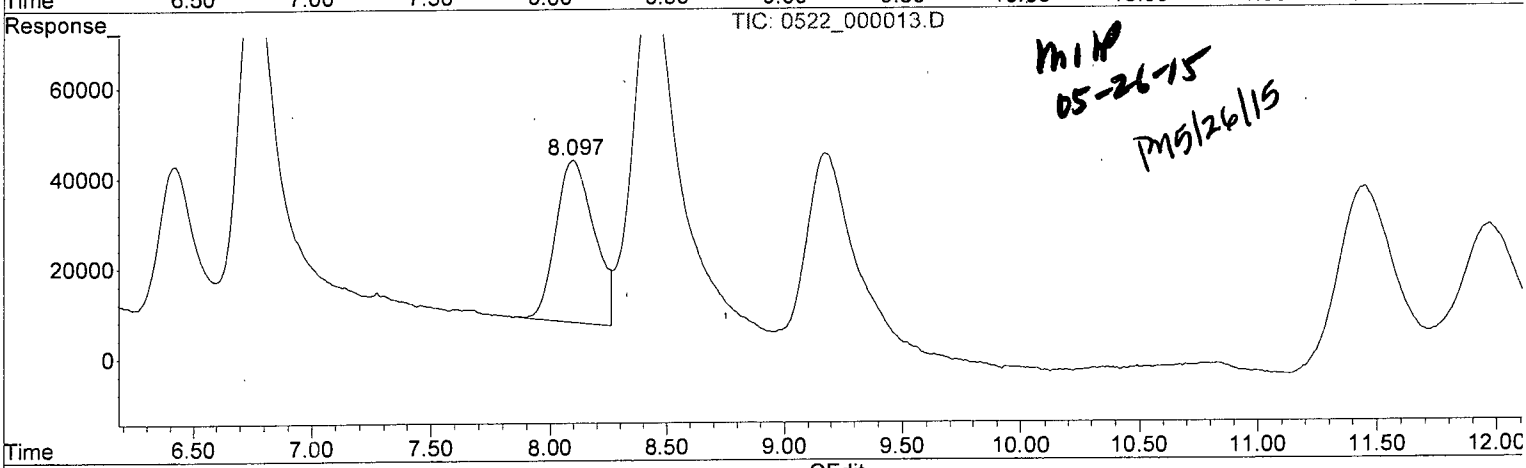
Quantitation Report (Qedit)

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

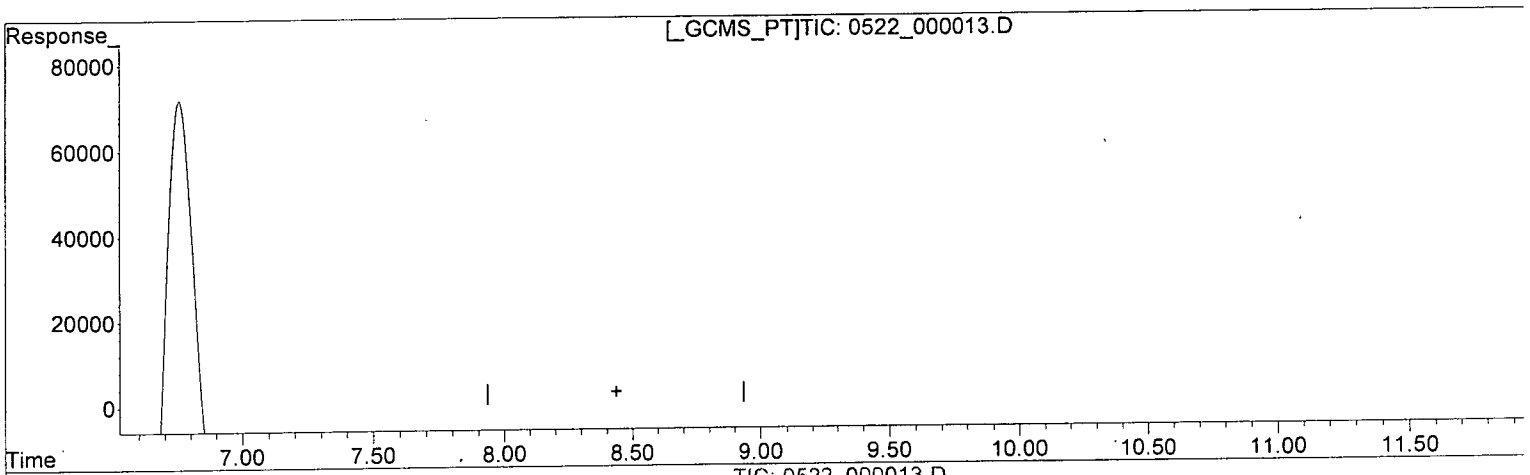
(+) = Expected Retention Time

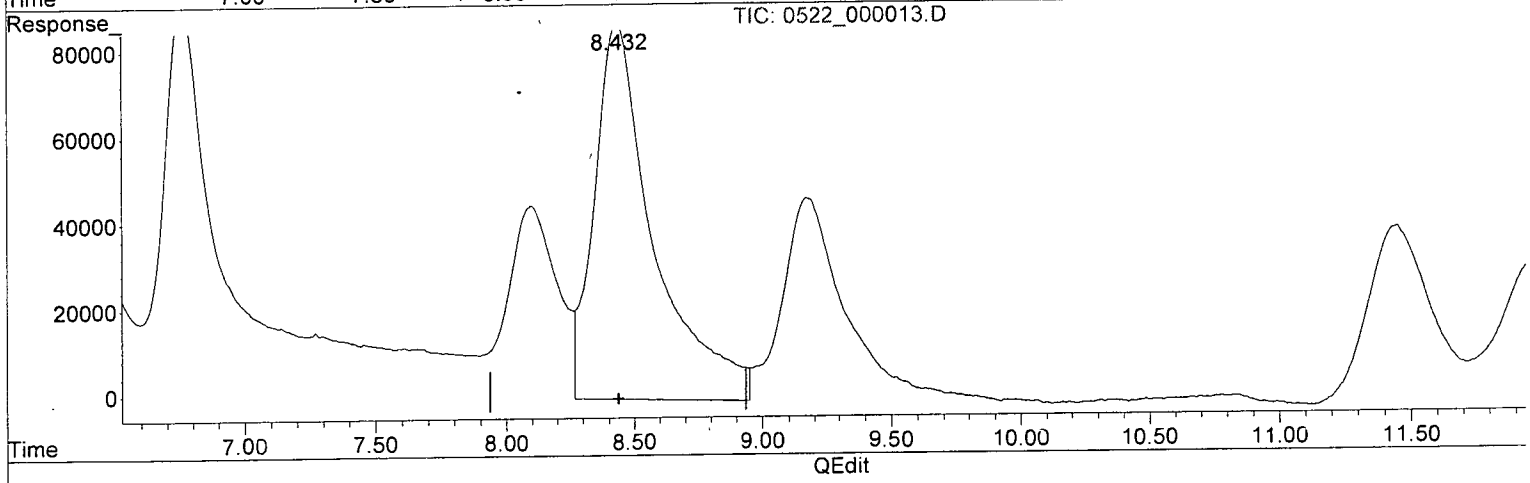
Quantitation Report (Qedit)

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-µ





(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

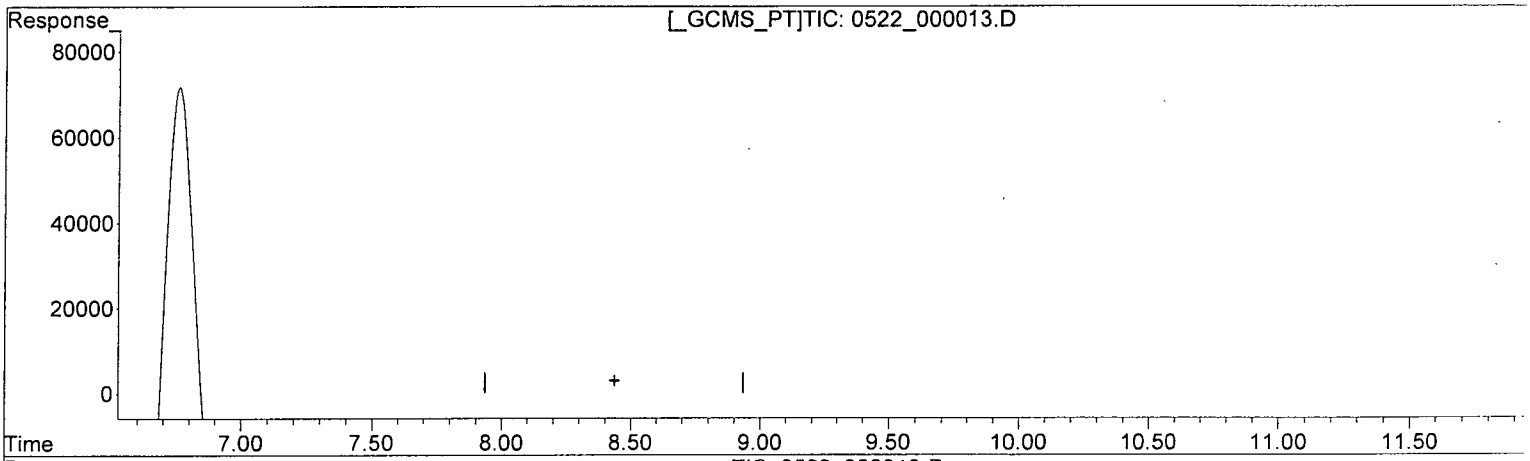
(+) = Expected Retention Time

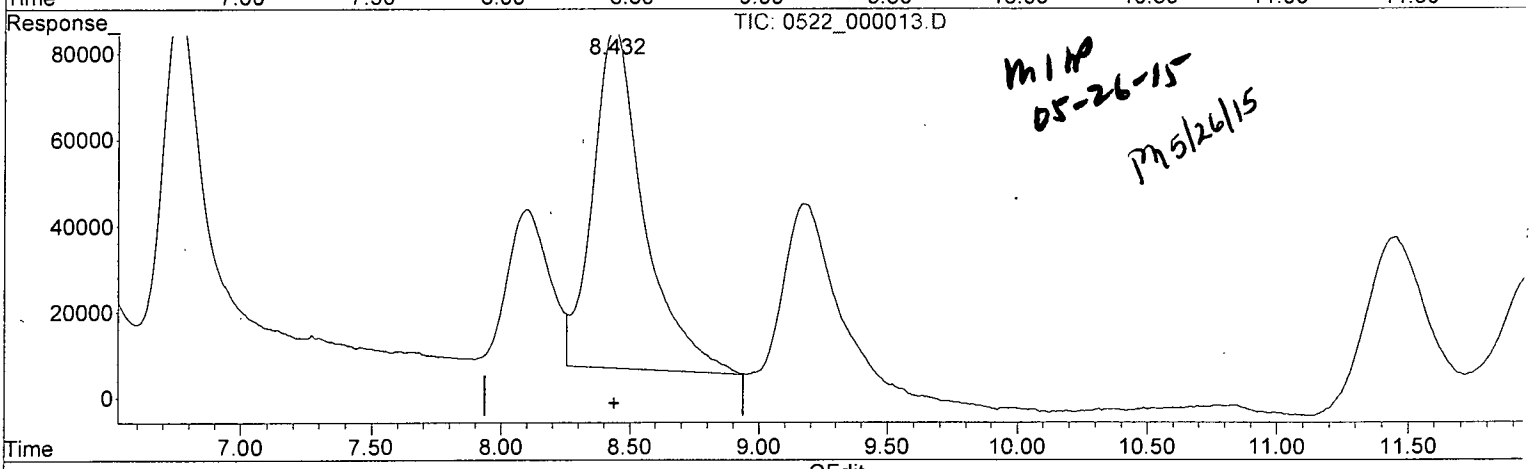
Quantitation Report (Qedit)

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-





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QEdit

(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

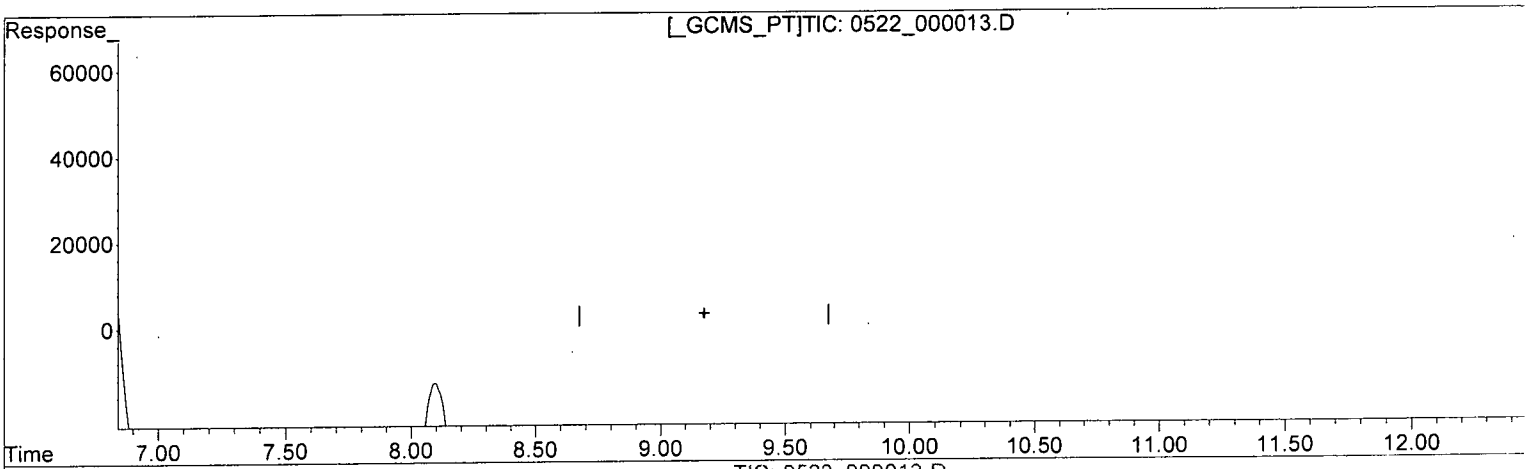
(+) = Expected Retention Time

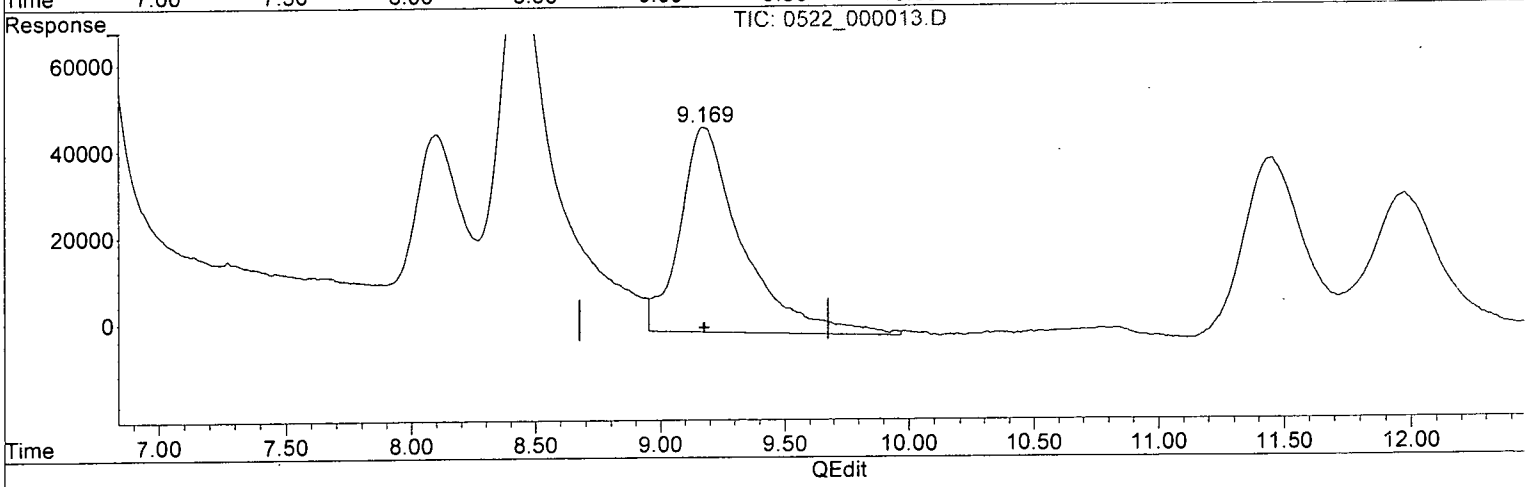
Quantitation Report (Qedit)

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

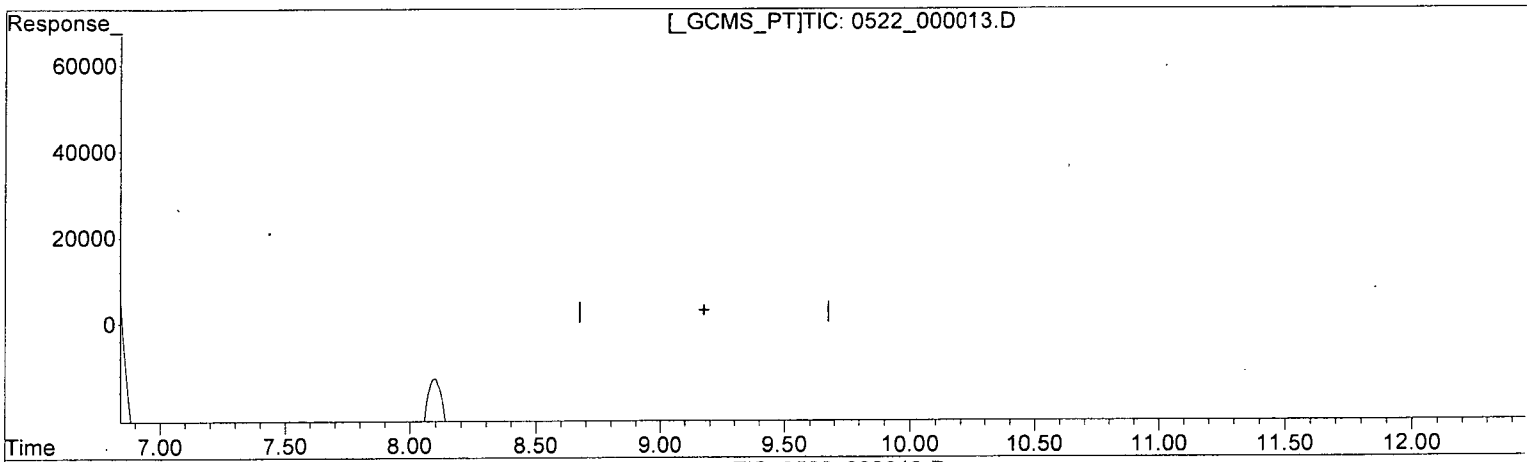
(+) = Expected Retention Time

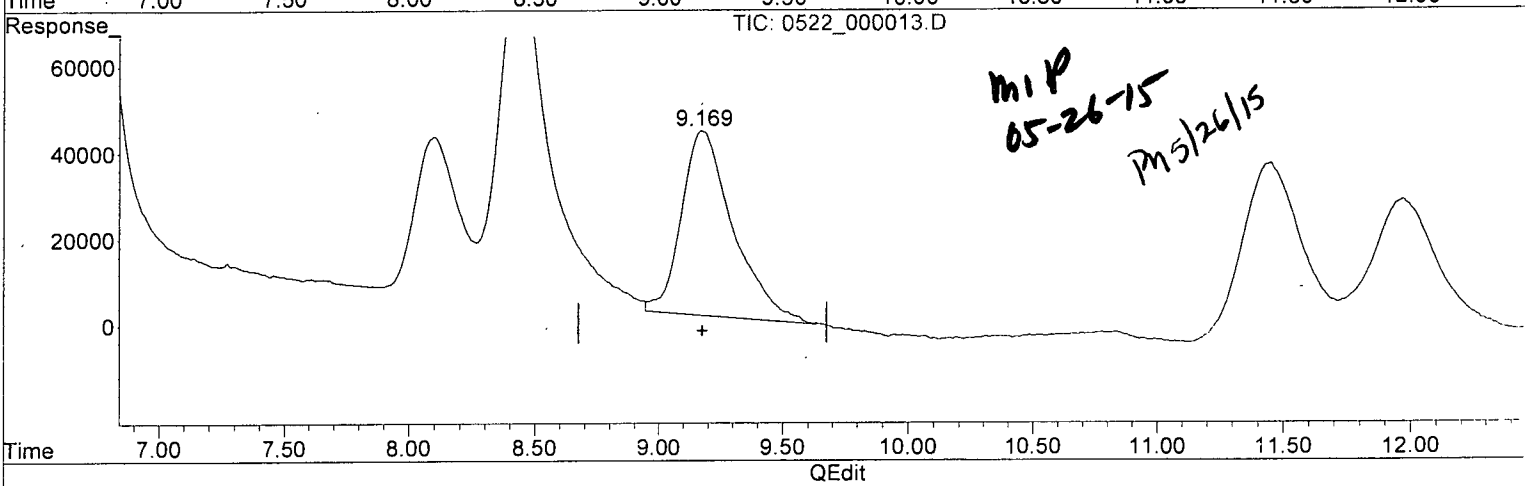
Quantitation Report (Qedit)

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





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PM 5/26/15

QEdit

(6) NITROBENZENE (TM)

0.000min 0.000 ppb

response 0

(6) NITROBENZENE #2 (TM)

9.169min 16.674 ppb m

response 42712

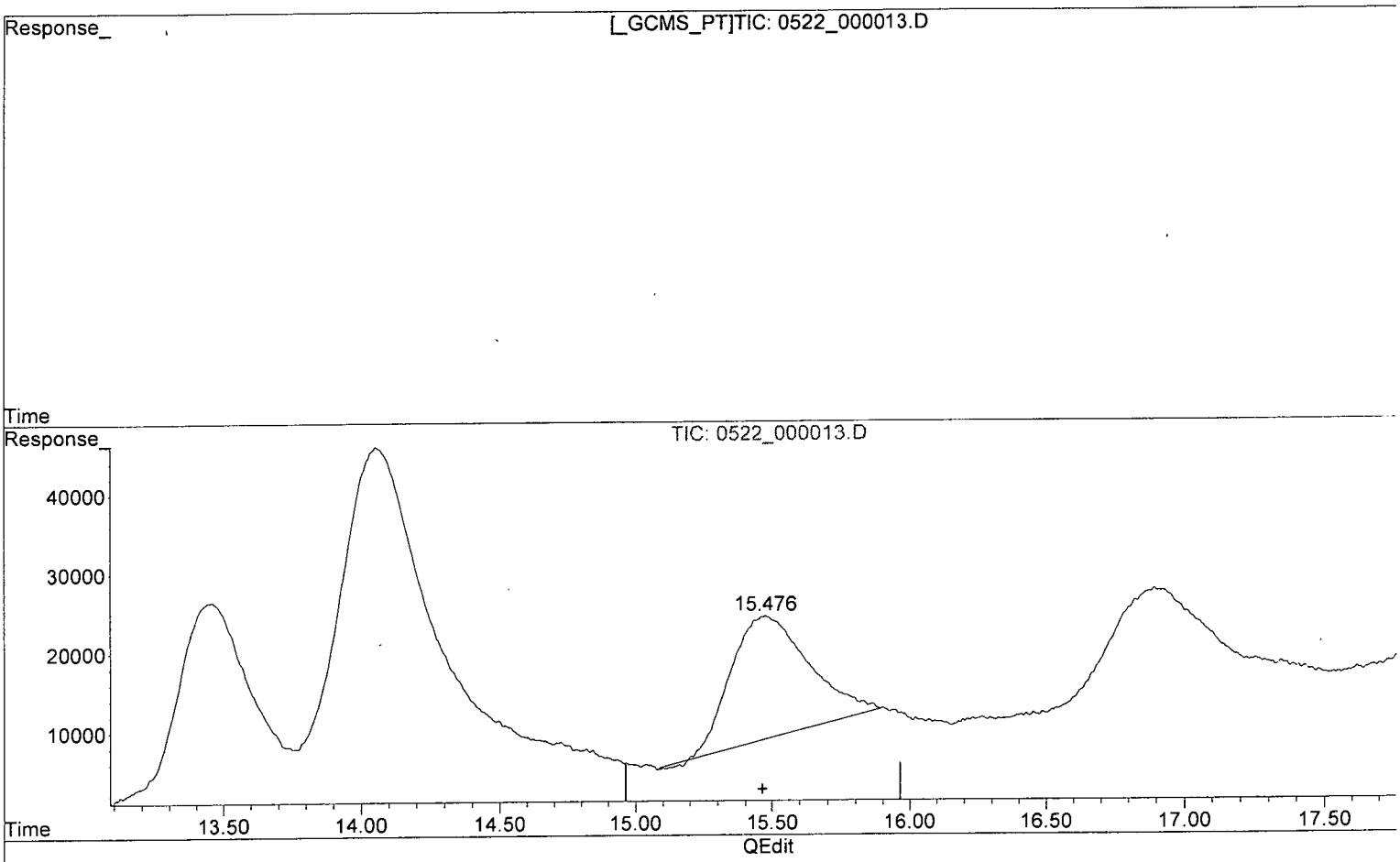
(+) = Expected Retention Time

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

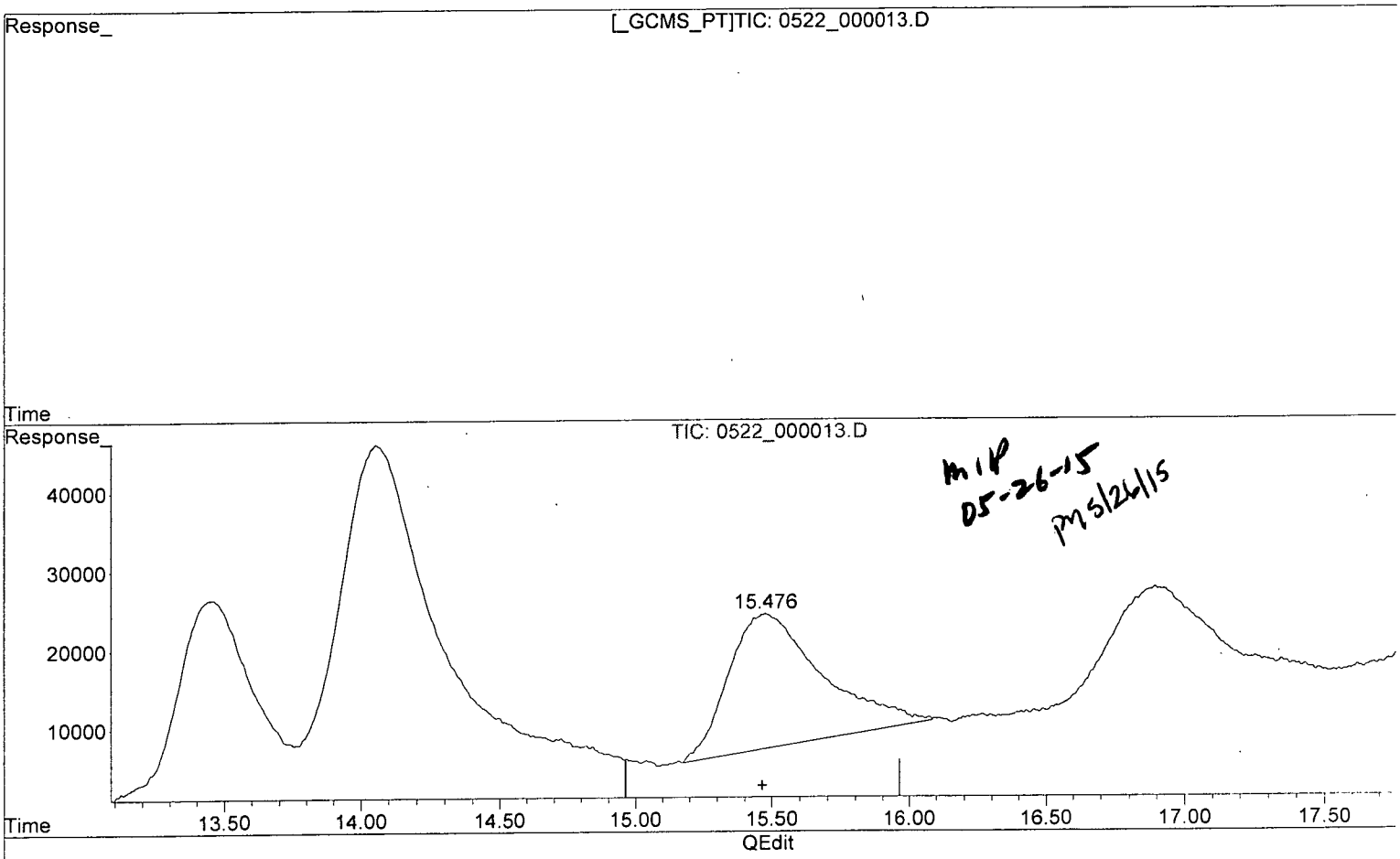
(+) = Expected Retention Time

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. #

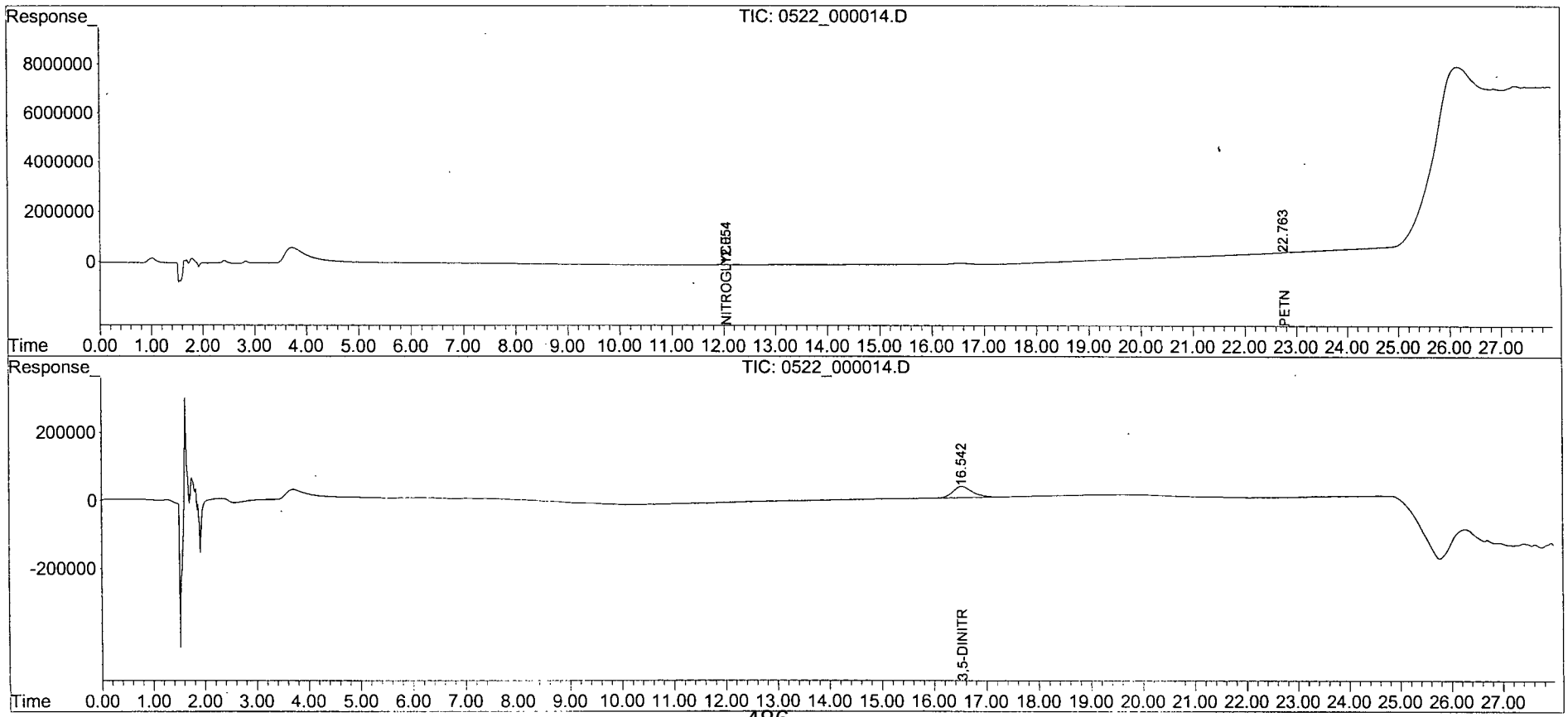
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

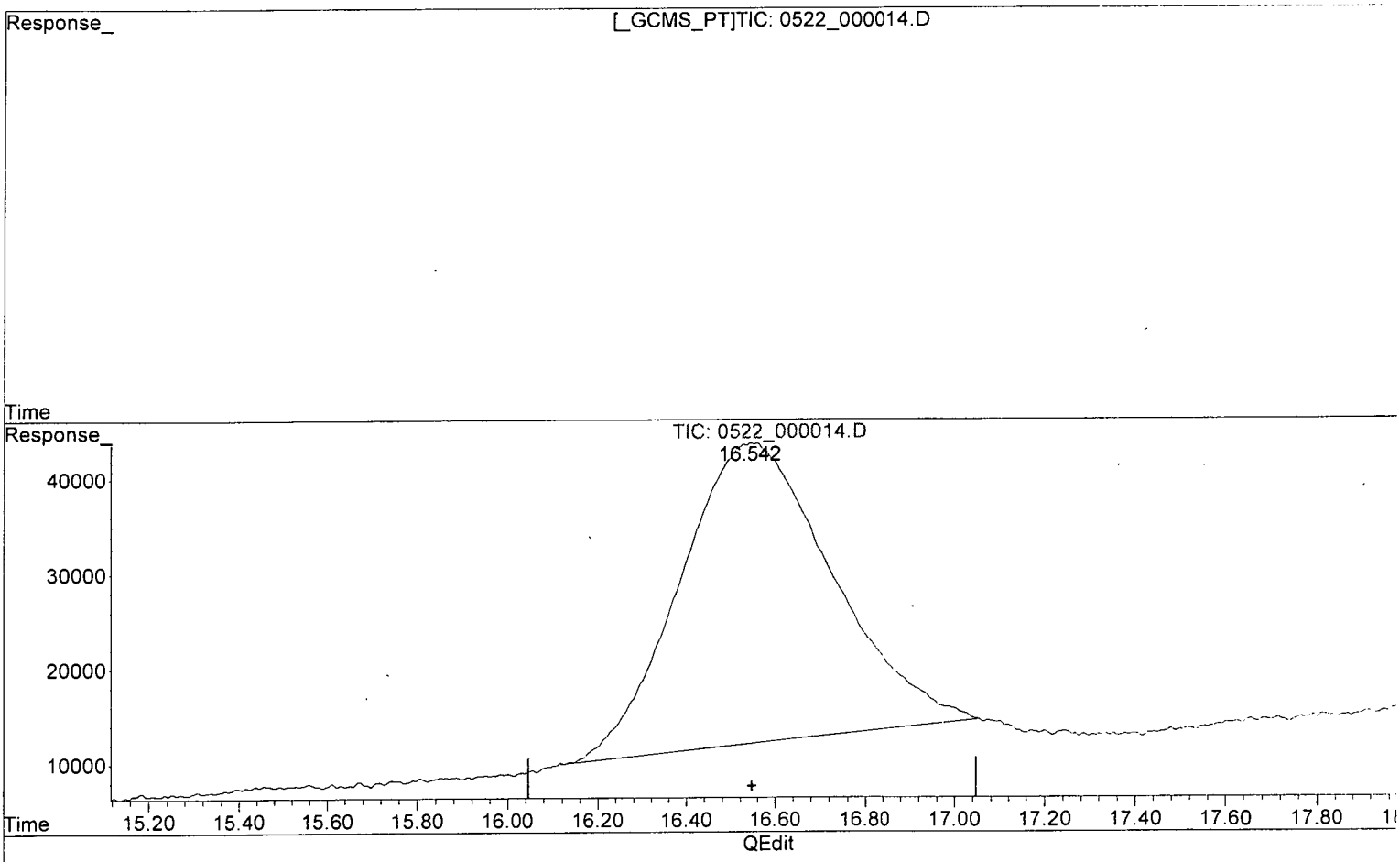


Quantitation Report (Qedit)

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

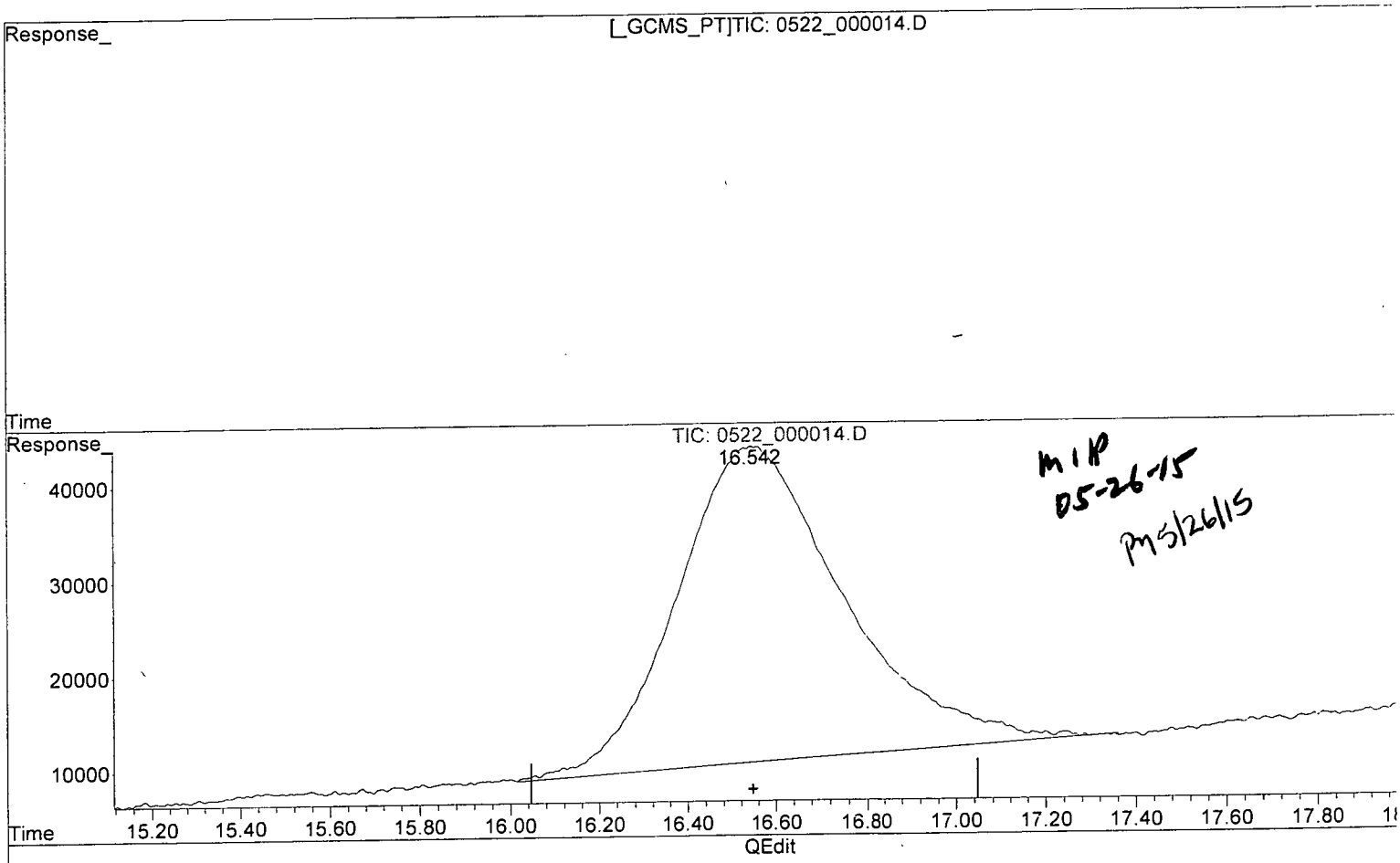
(+) = Expected Retention Time

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-



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(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

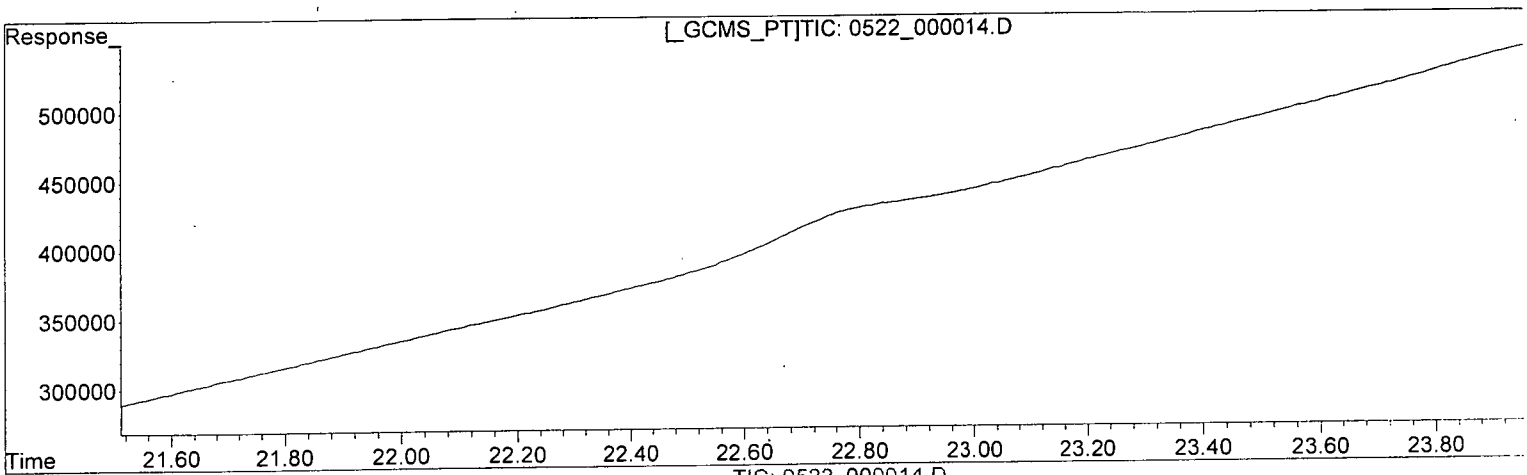
(+) = Expected Retention Time

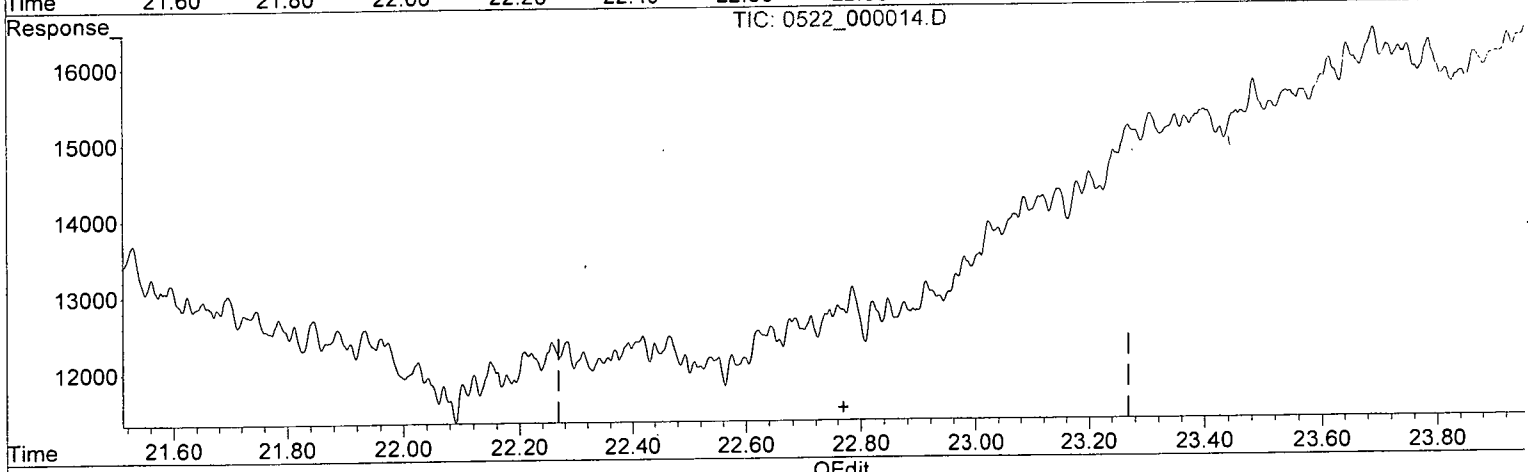
Quantitation Report (Qedit)

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-µ





QEdit

(18) PETN (TM)

0.000min 0.000 ppb

response 0

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

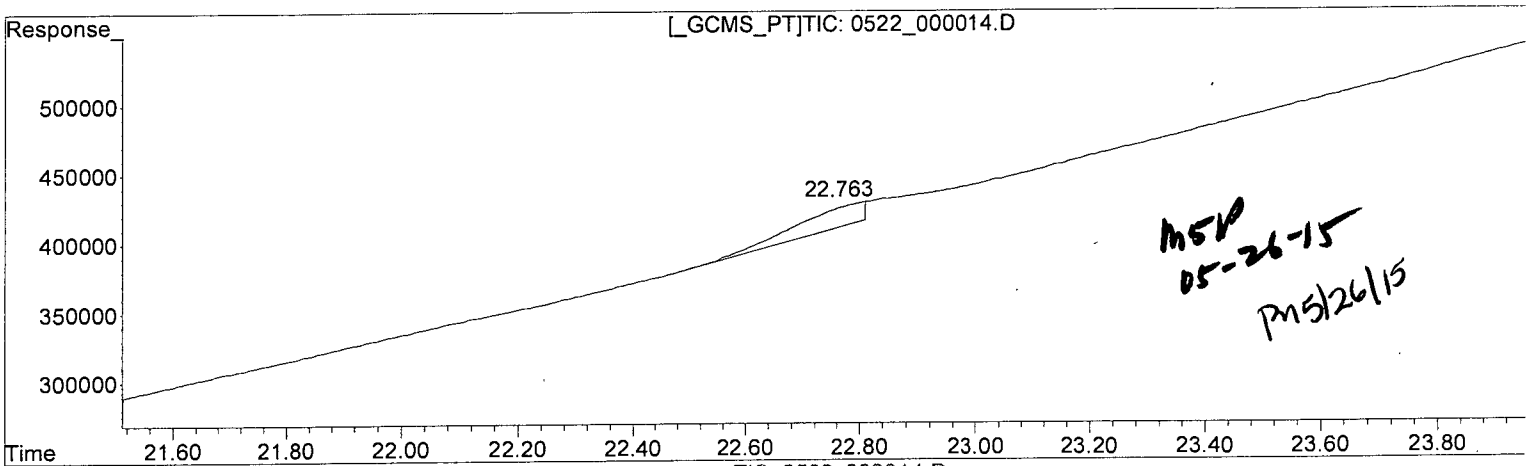
(+) = Expected Retention Time

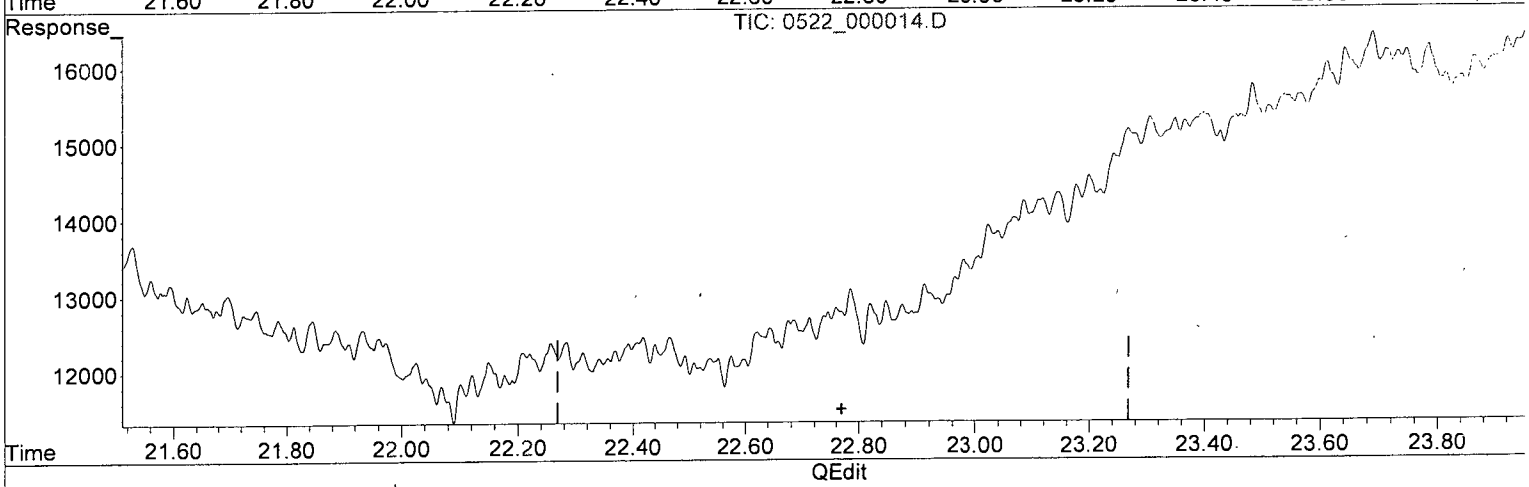
Quantitation Report (Qedit)

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-µ





(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.

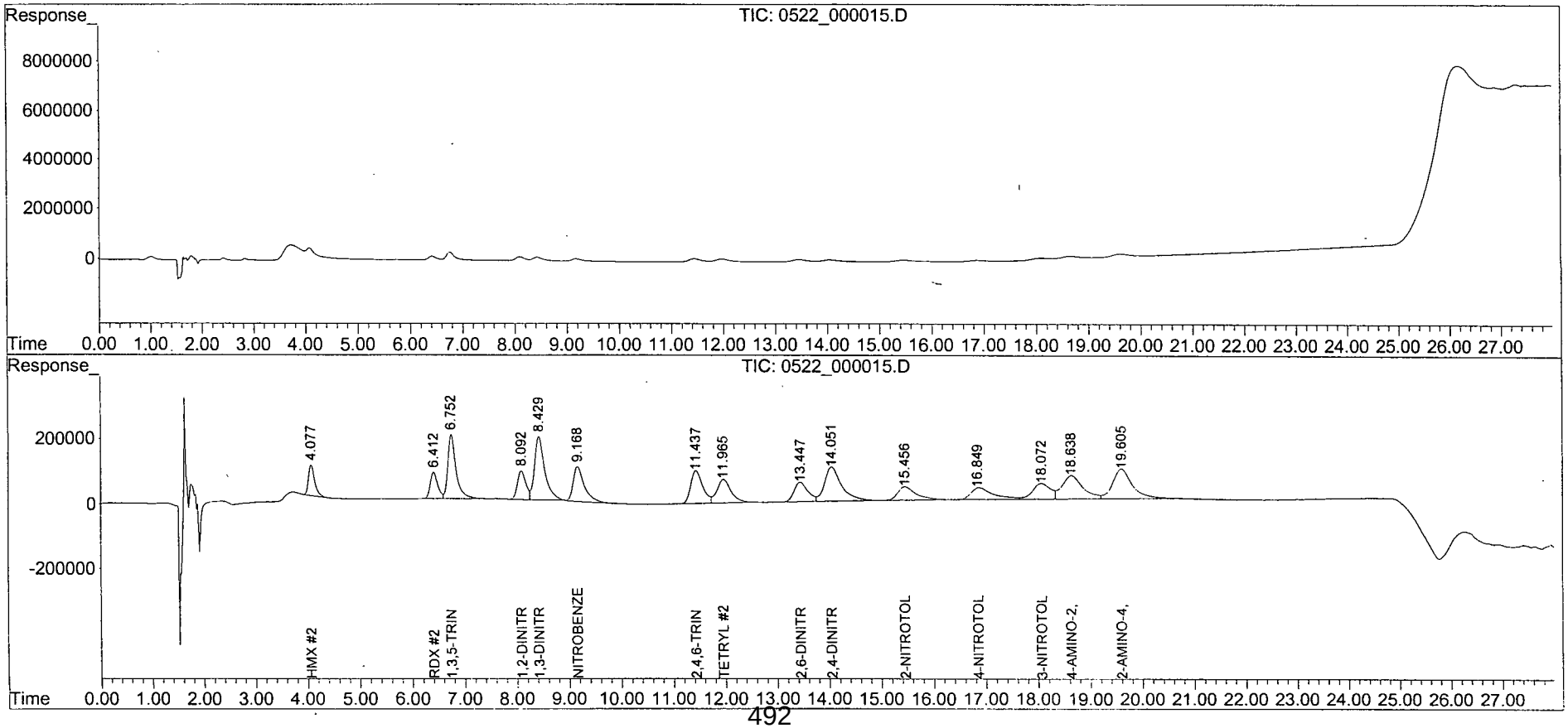
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

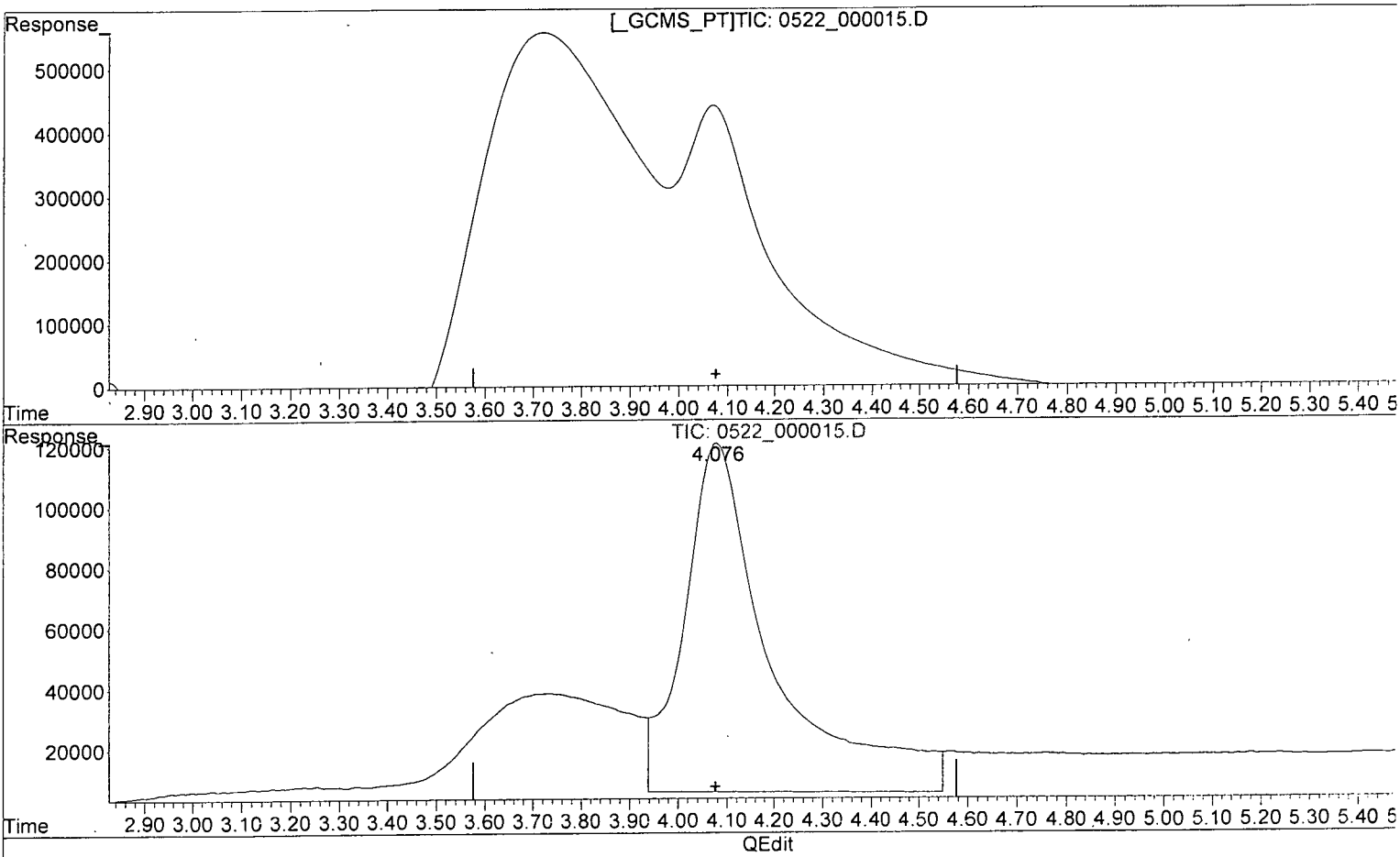


Quantitation Report (Qedit)

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-



(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 54.675 ppb

response 114973

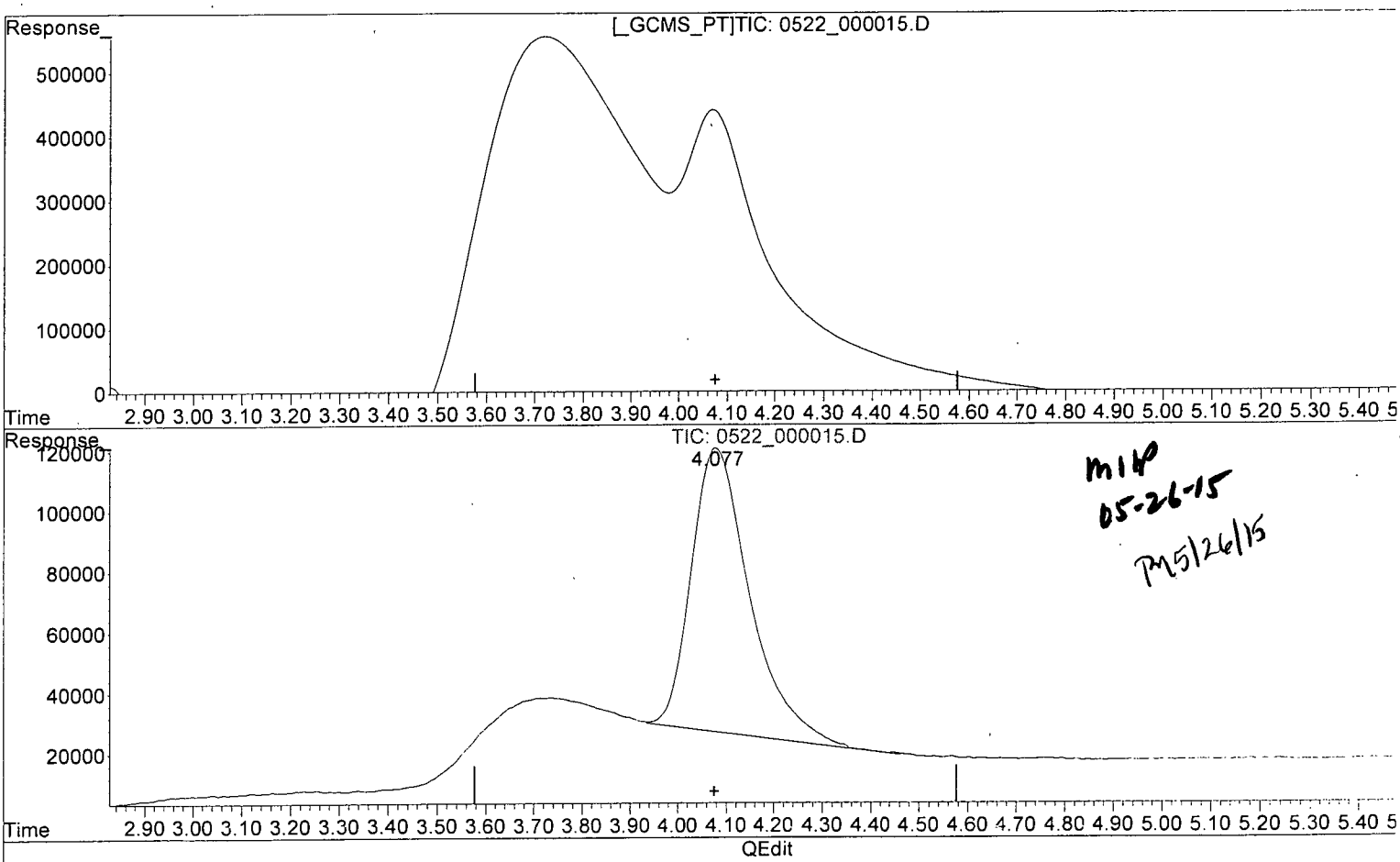
(+) = Expected Retention Time

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-



MHP
05-26-15
PM 5/26/15

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.077min 44.514 ppb m

response 93606

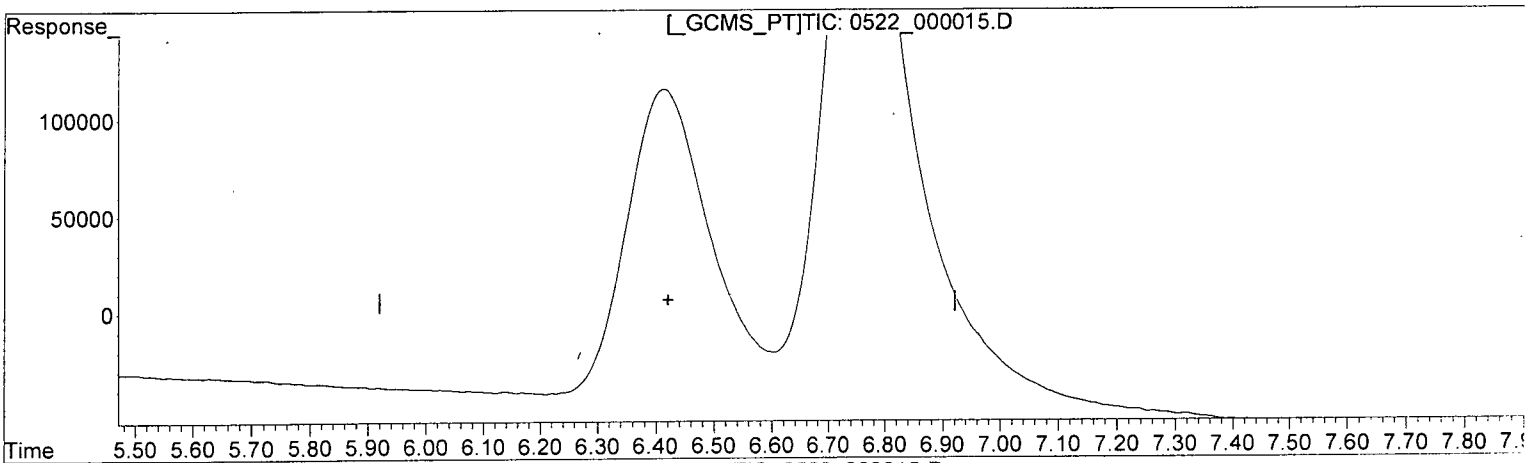
(+) = Expected Retention Time

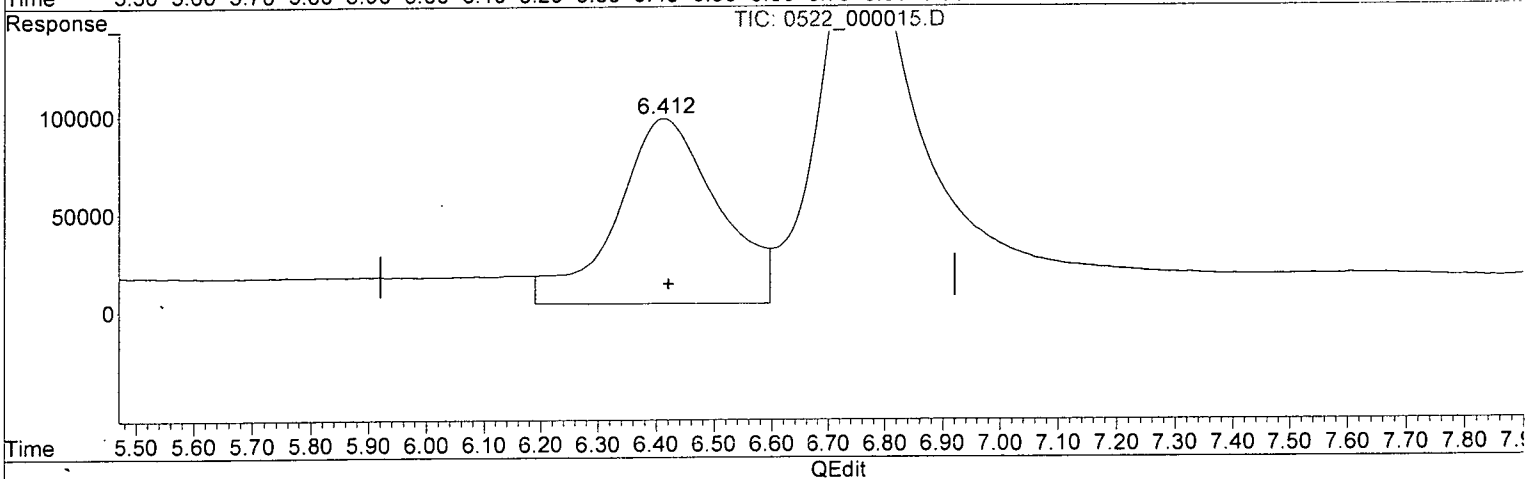
Quantitation Report (Qedit)

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-





(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.412min 51.095 ppb

response 94635

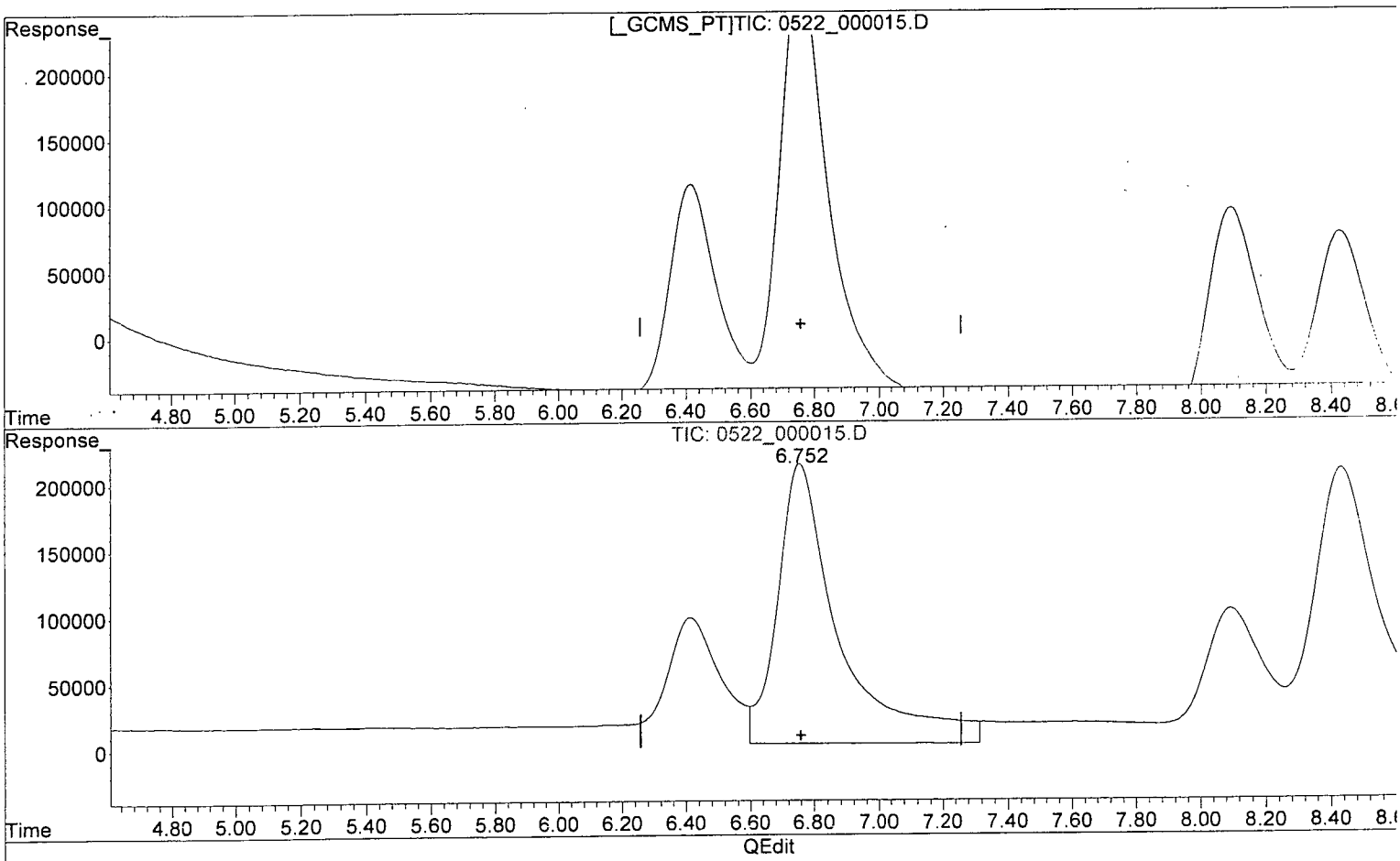
(+) = Expected Retention Time

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-r



(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

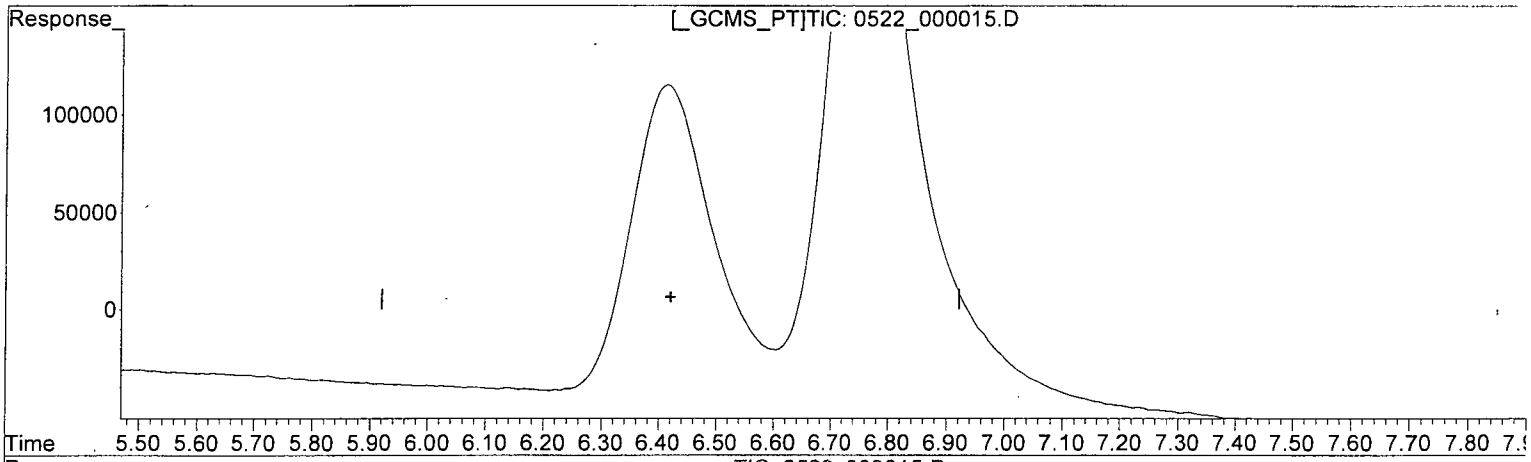
(+) = Expected Retention Time

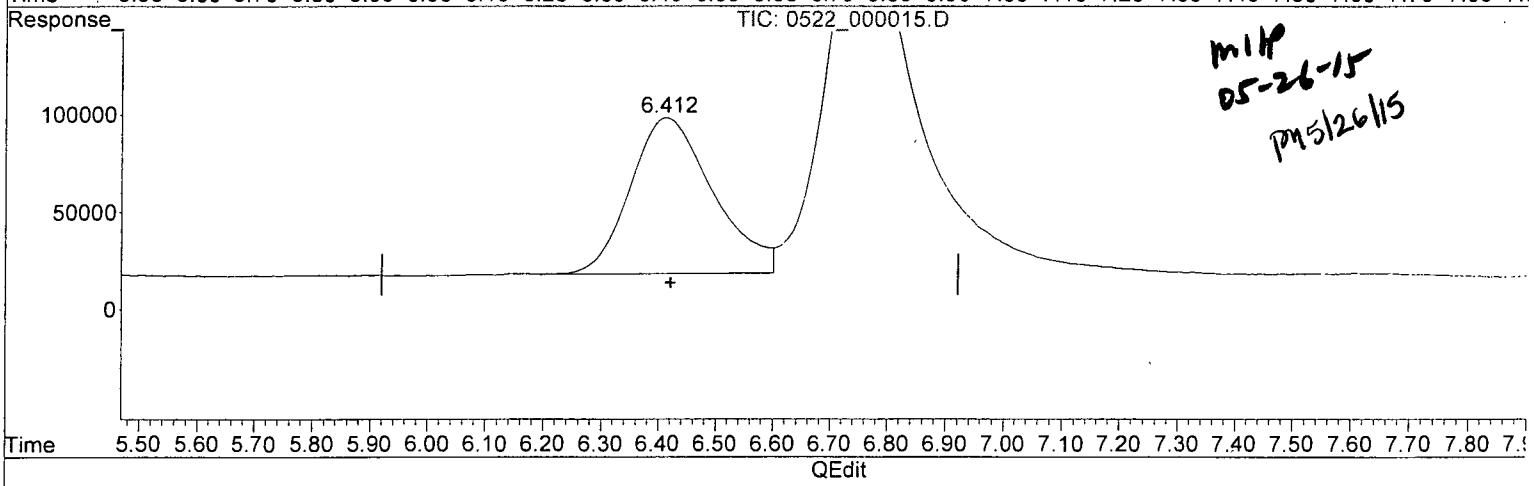
Quantitation Report (Qedit)

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-





MLP 05-26-15 PM 5/26/15

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.412min 43.213 ppb m

response 80036

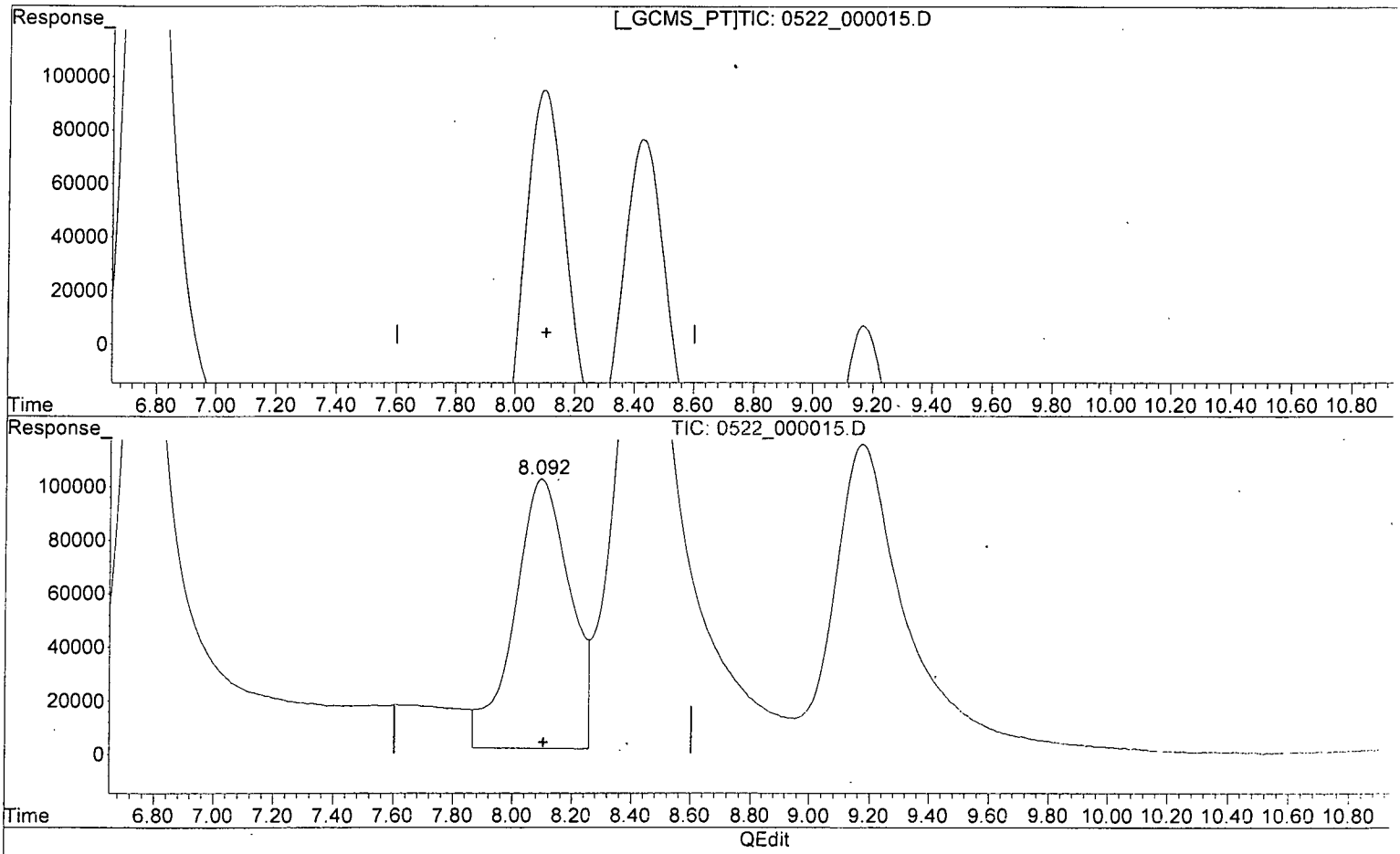
(+) = Expected Retention Time

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-r



(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

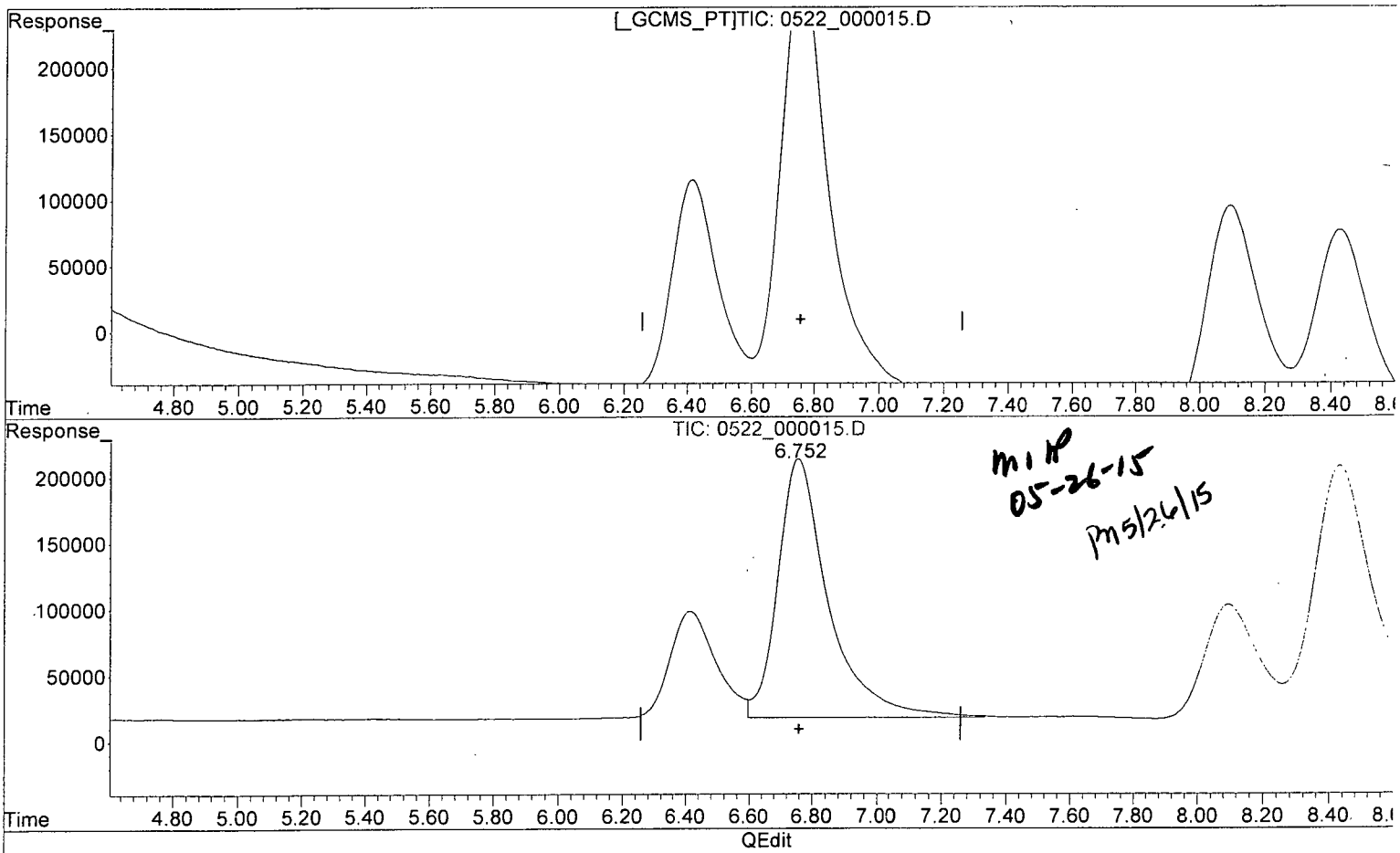
(+) = Expected Retention Time

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-



(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

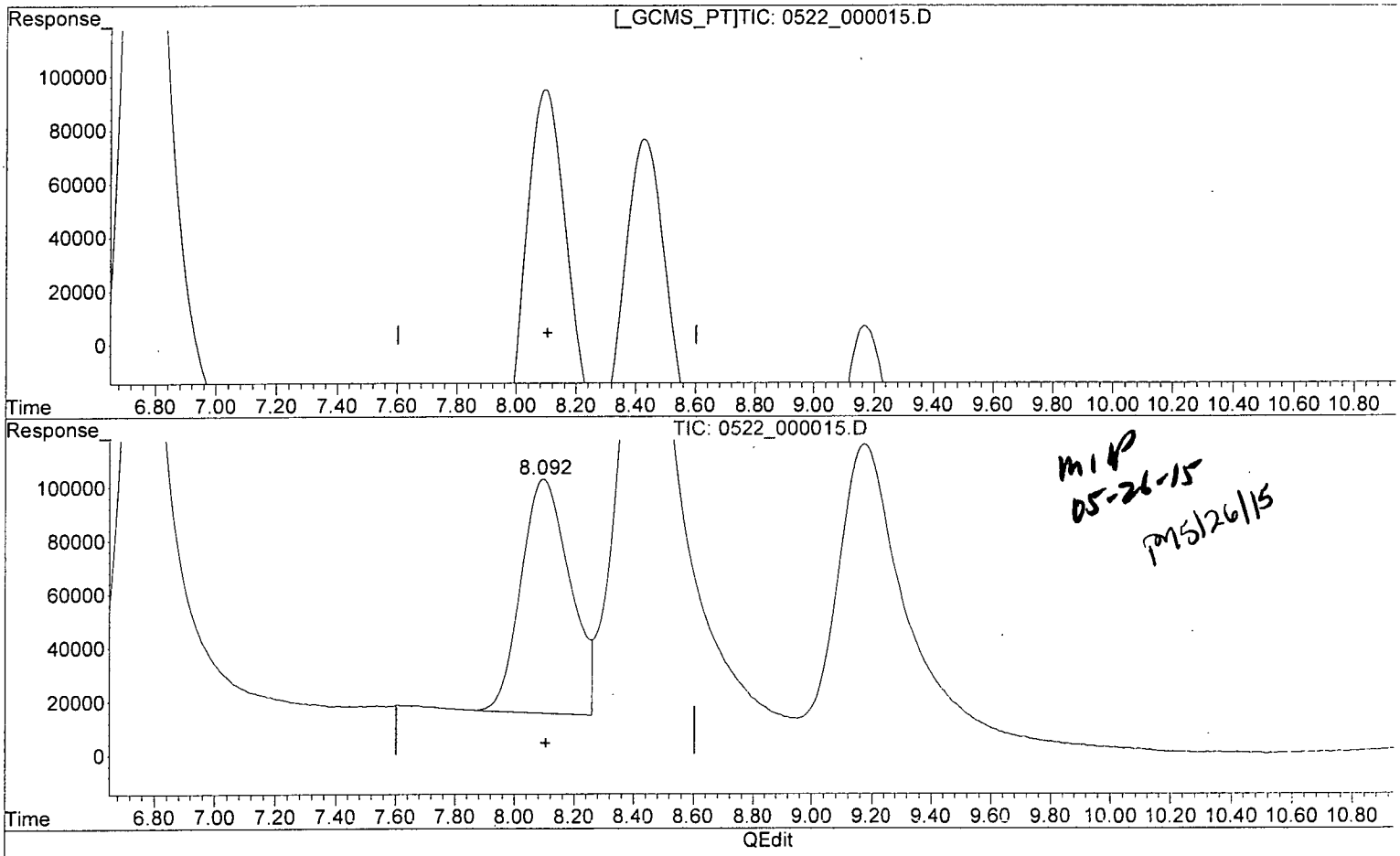
(+) = Expected Retention Time

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-



MLP 05-26-15 jm5/26/15

(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

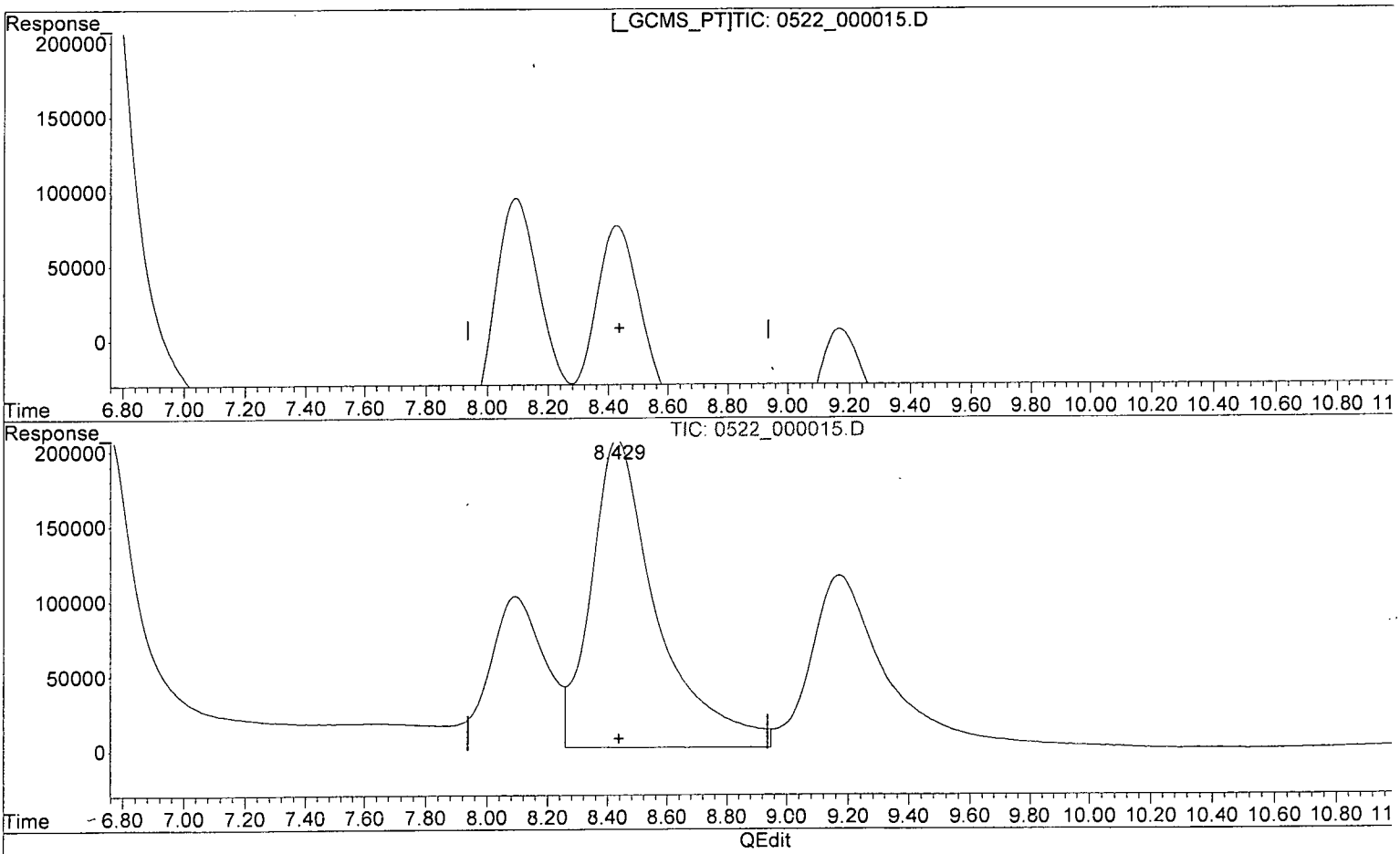
(+) = Expected Retention Time

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-µ



(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

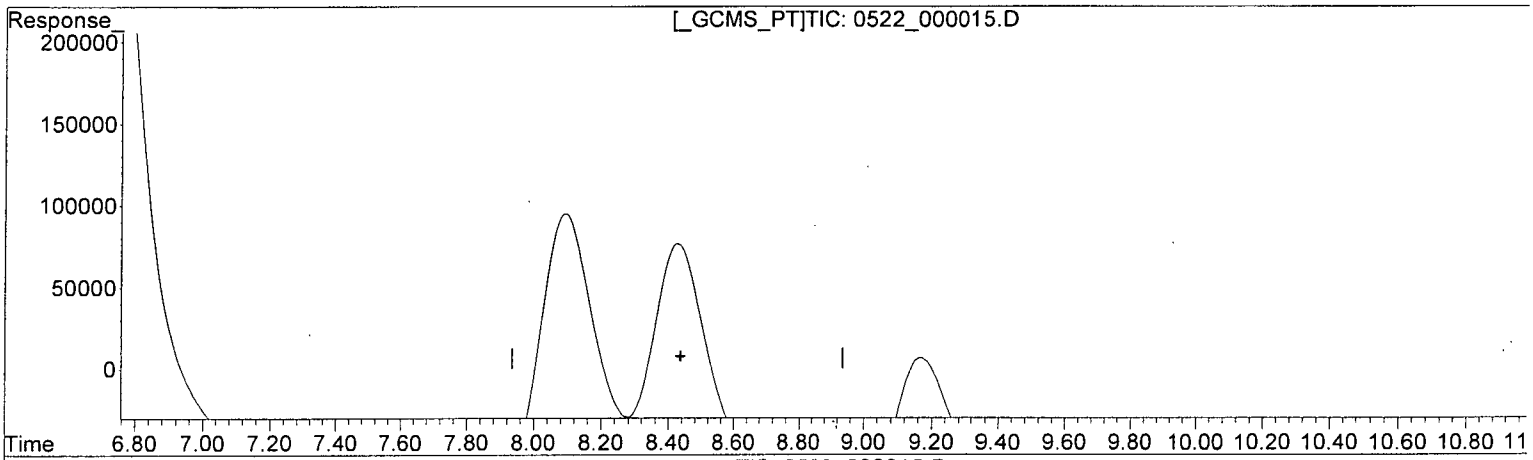
(+) = Expected Retention Time

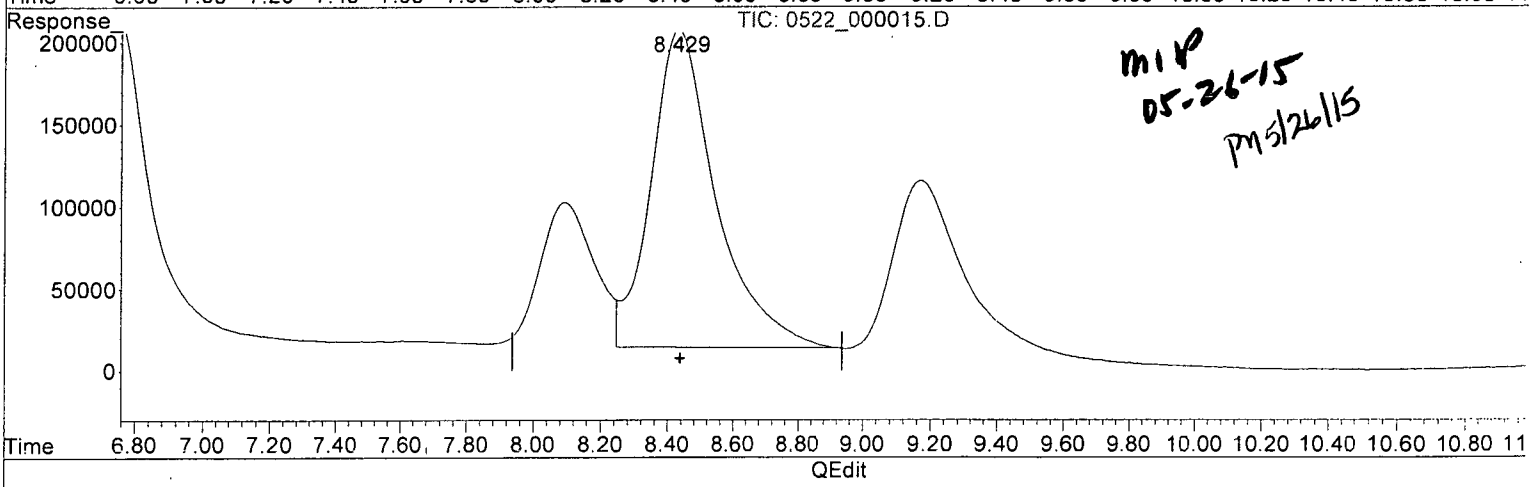
Quantitation Report (Qedit)

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-r





MP
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

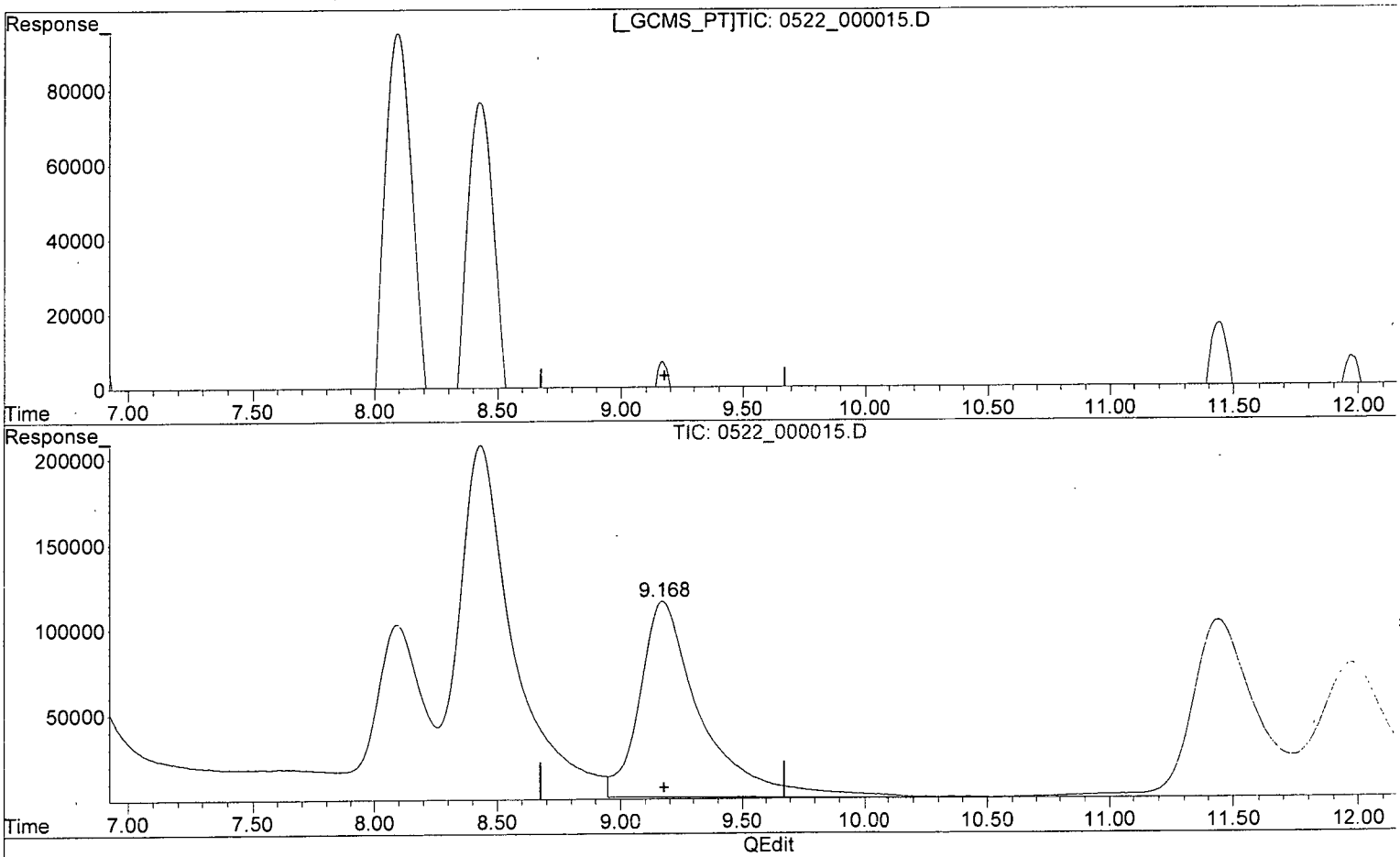
(+) = Expected Retention Time

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

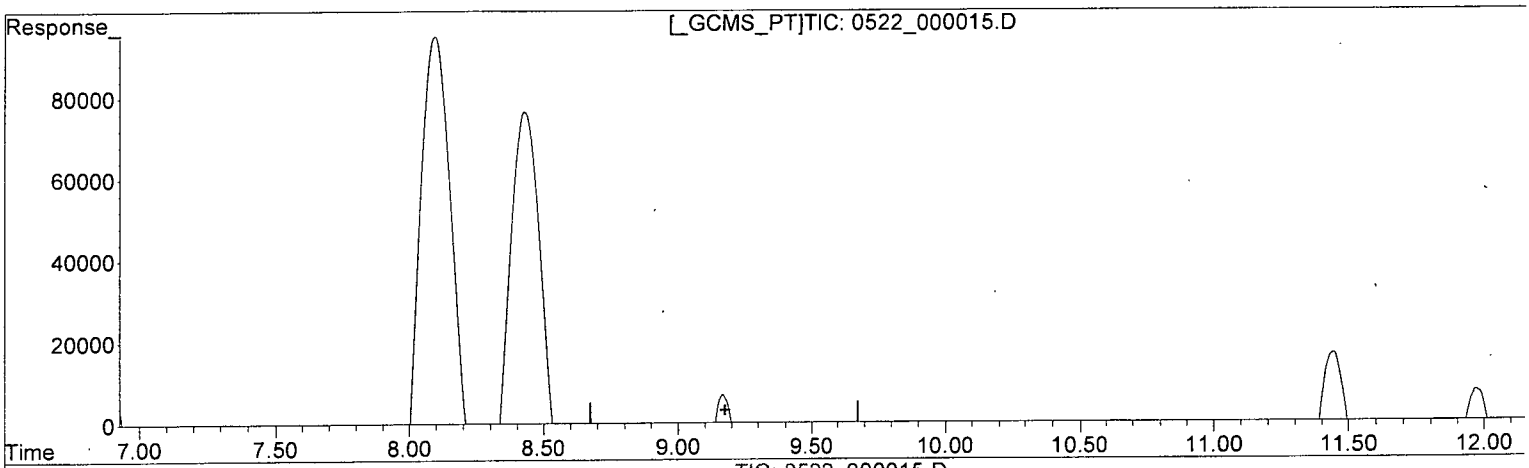
(+) = Expected Retention Time

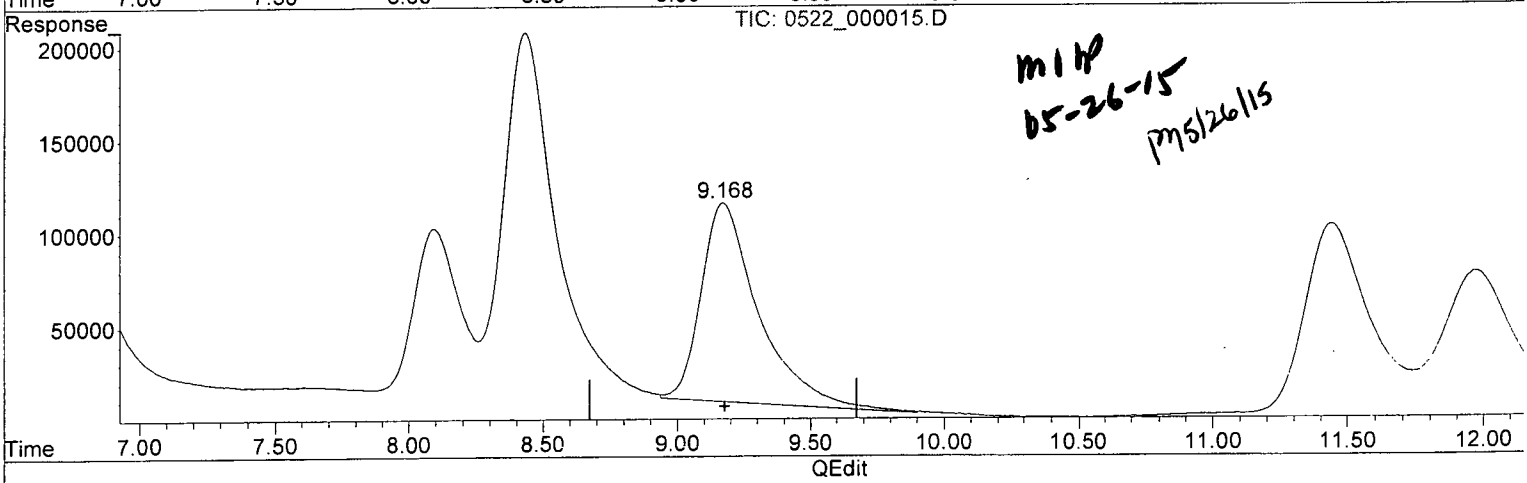
Quantitation Report (Qedit)

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-µ





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. #

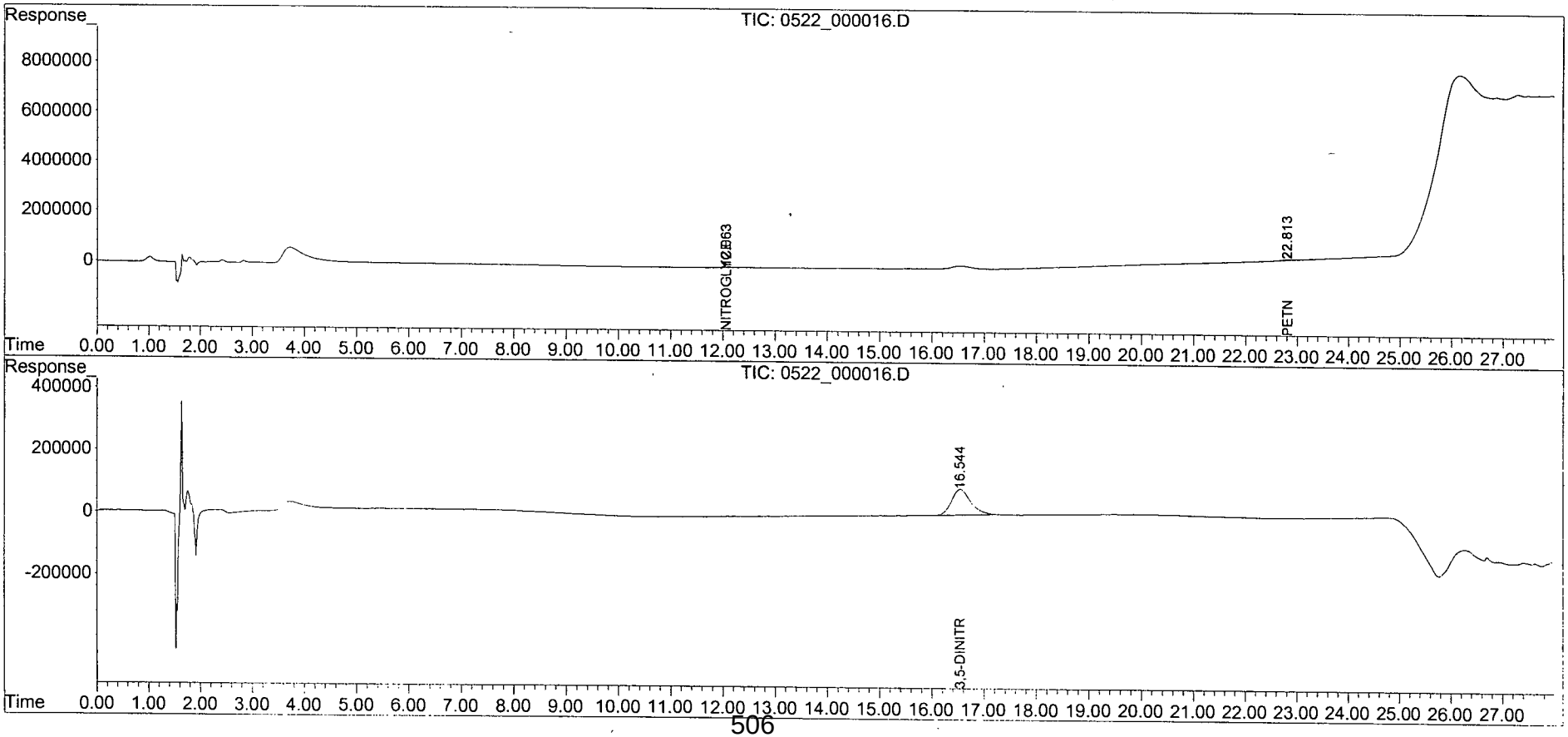
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

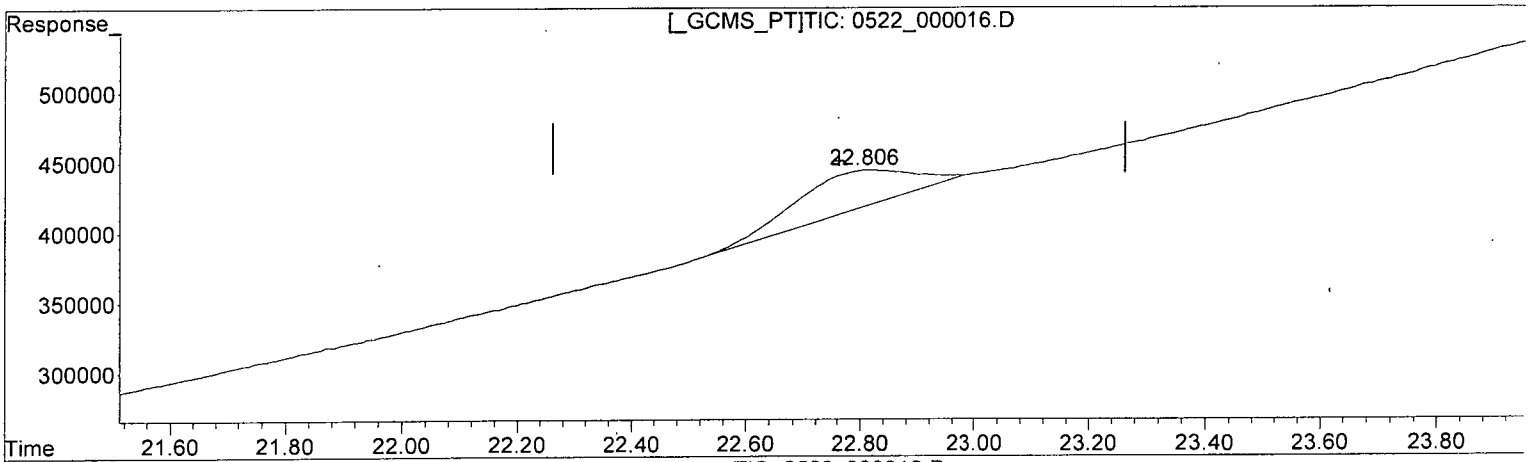


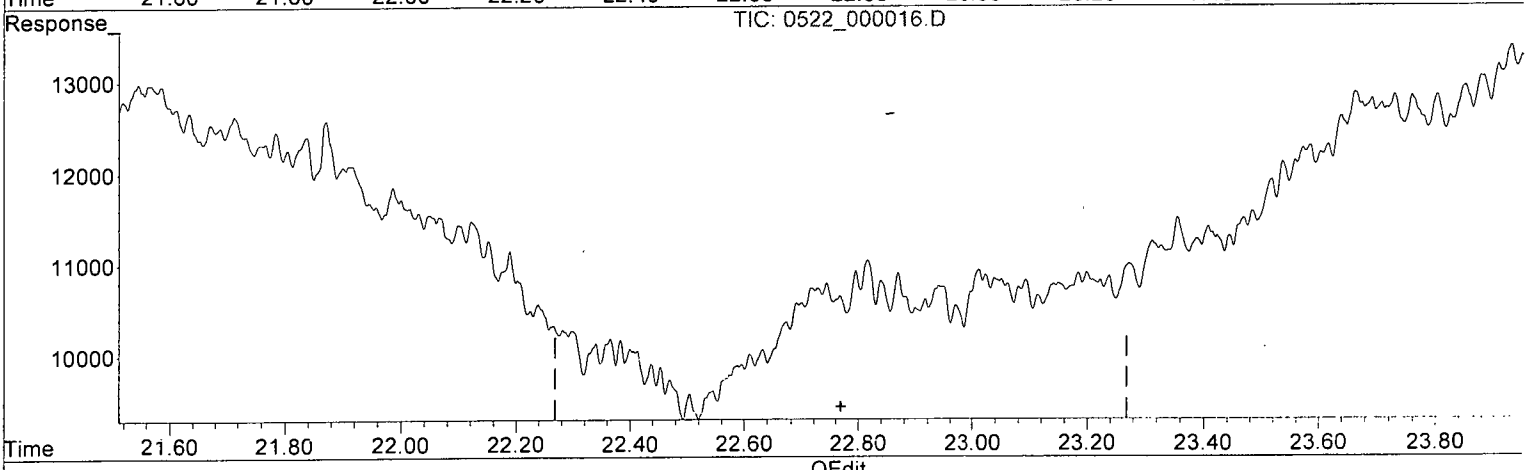
Quantitation Report (Qedit)

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-





QEdit

(18) PETN (TM)

22.821min 26.079 ppb

response 23796

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

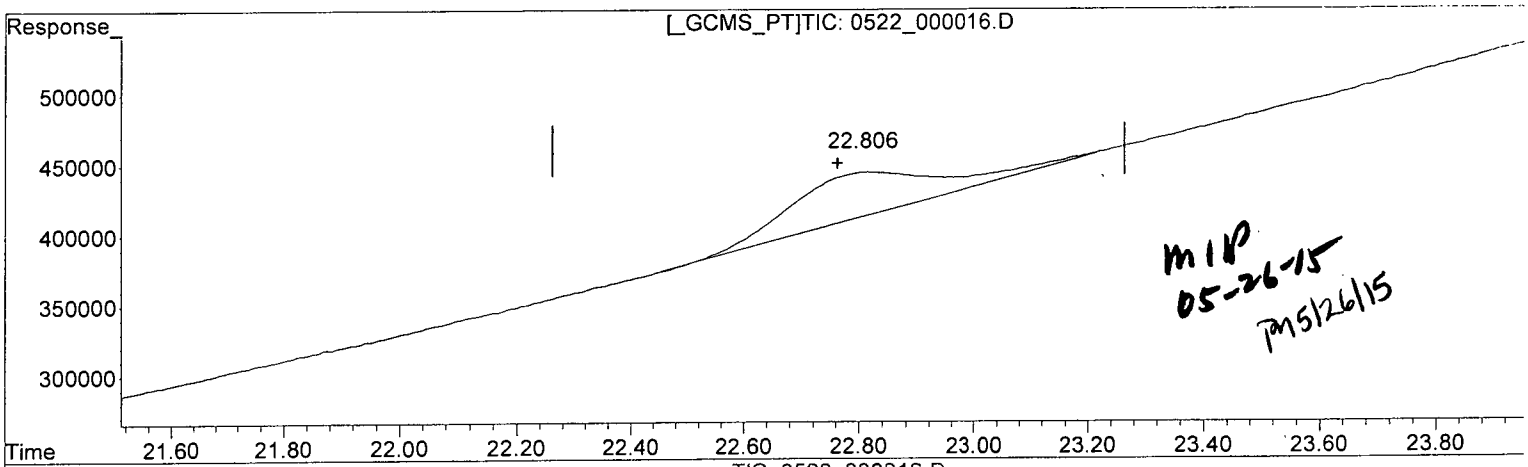
(+) = Expected Retention Time

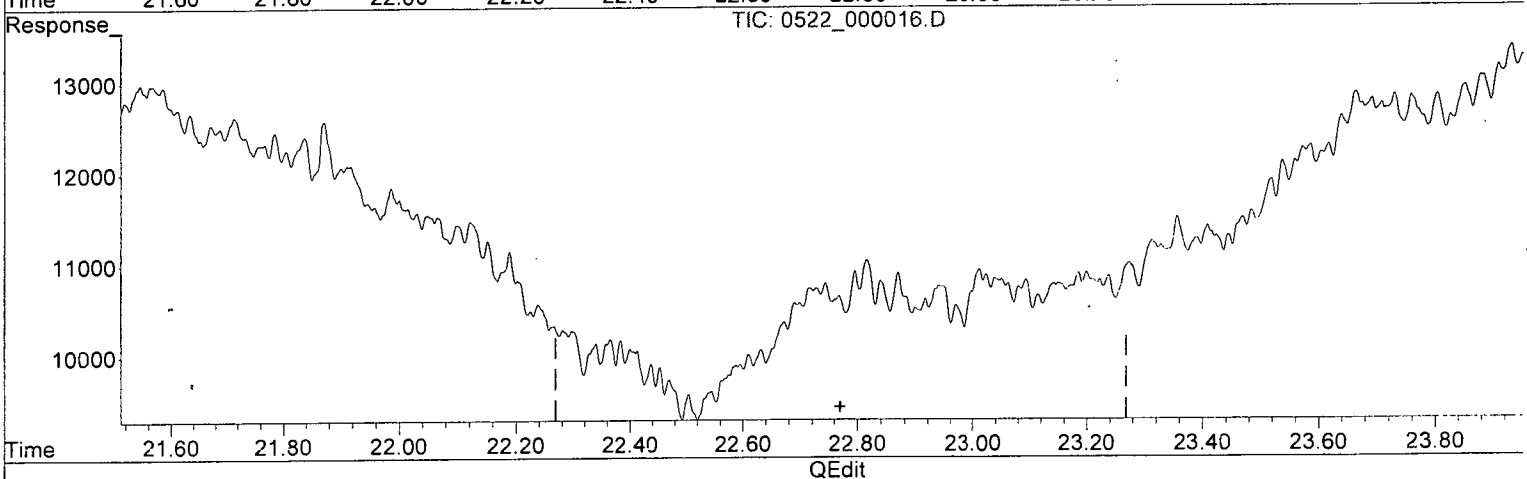
Quantitation Report (Qedit)

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-r





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.

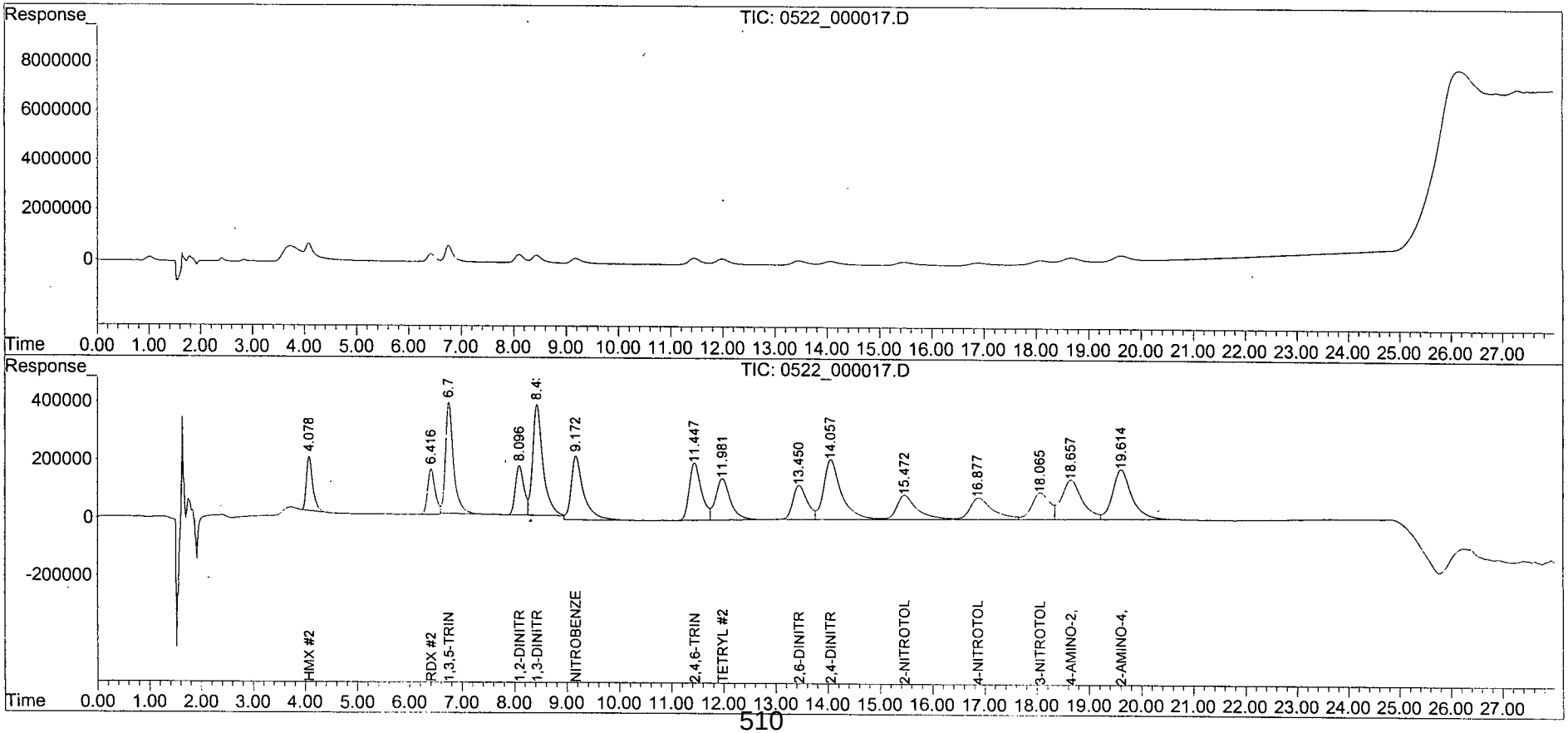
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

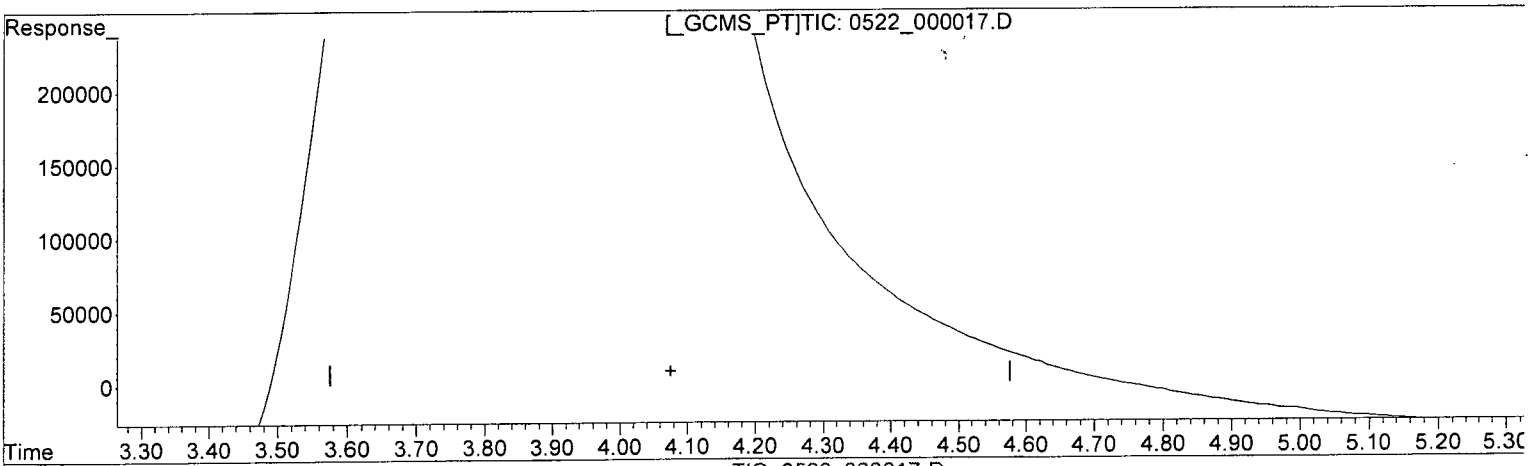


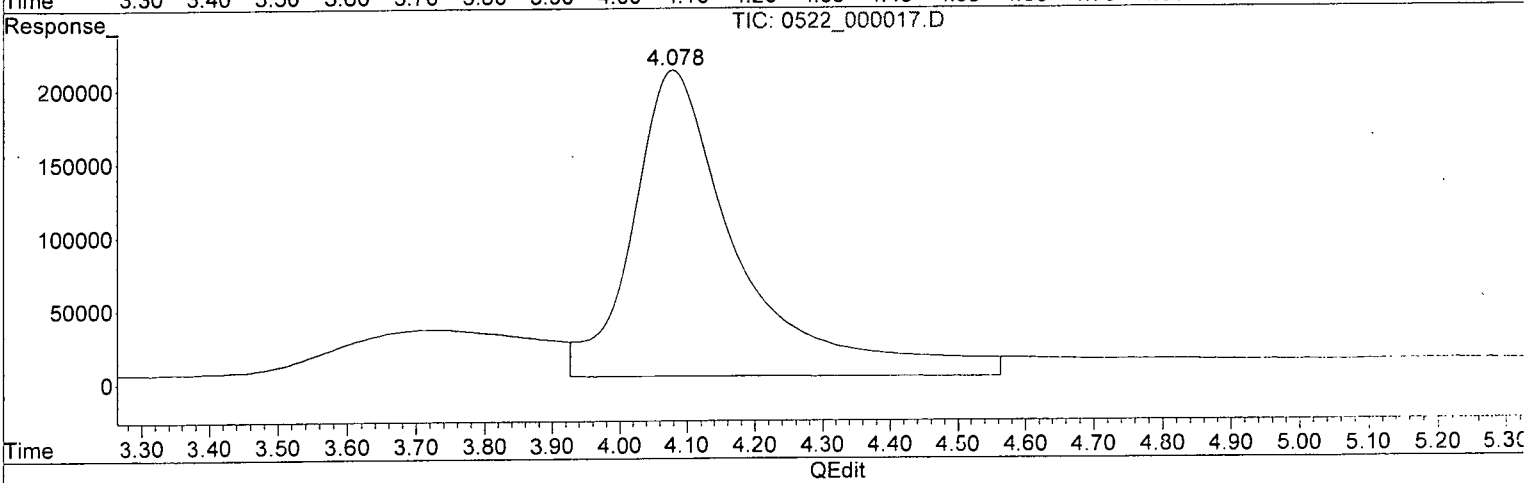
Quantitation Report (Qedit)

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

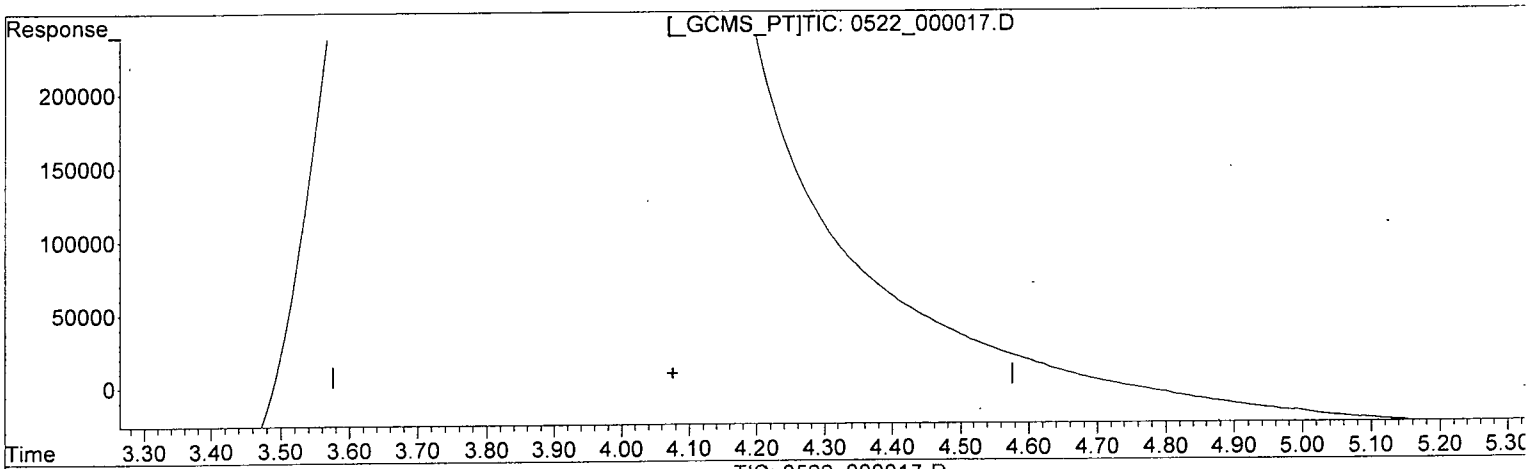
(+) = Expected Retention Time,

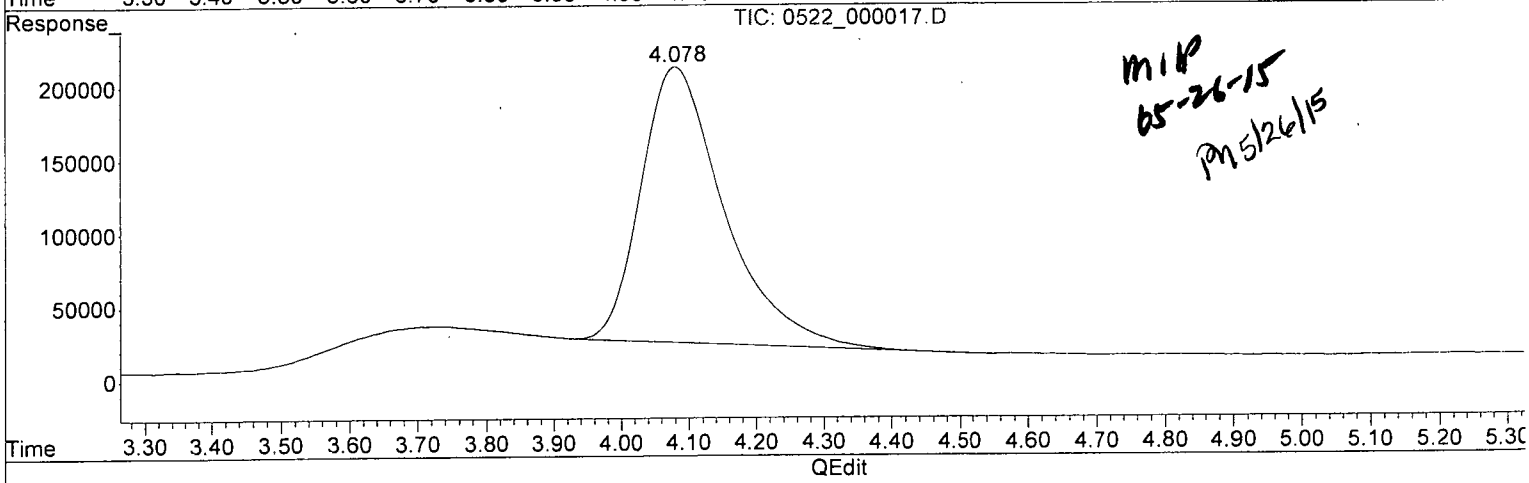
Quantitation Report (Qedit)

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

(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.078min 89.085 ppb m

response 187333

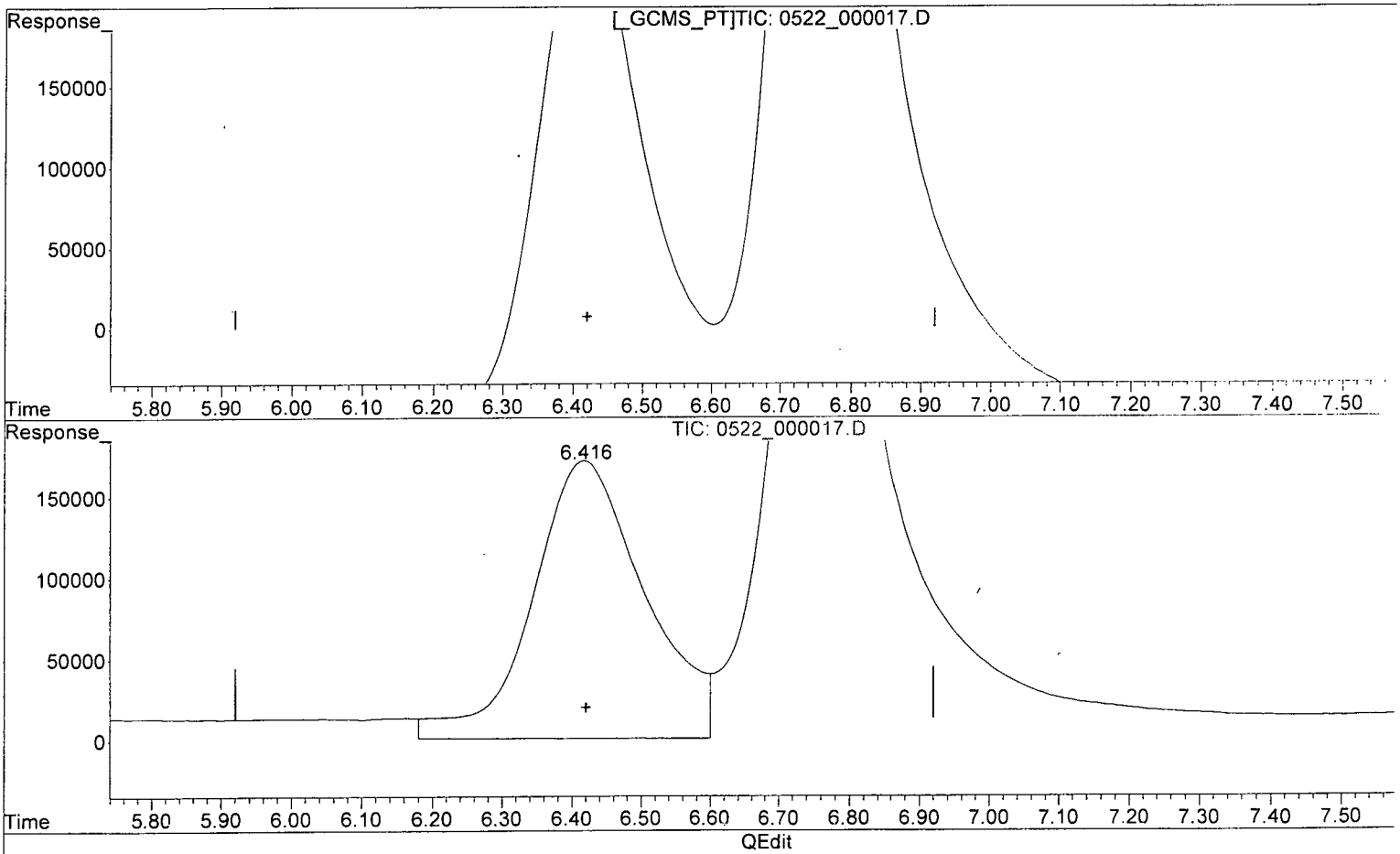
(+) = Expected Retention Time

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-



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.417min 92.221 ppb

response 170806

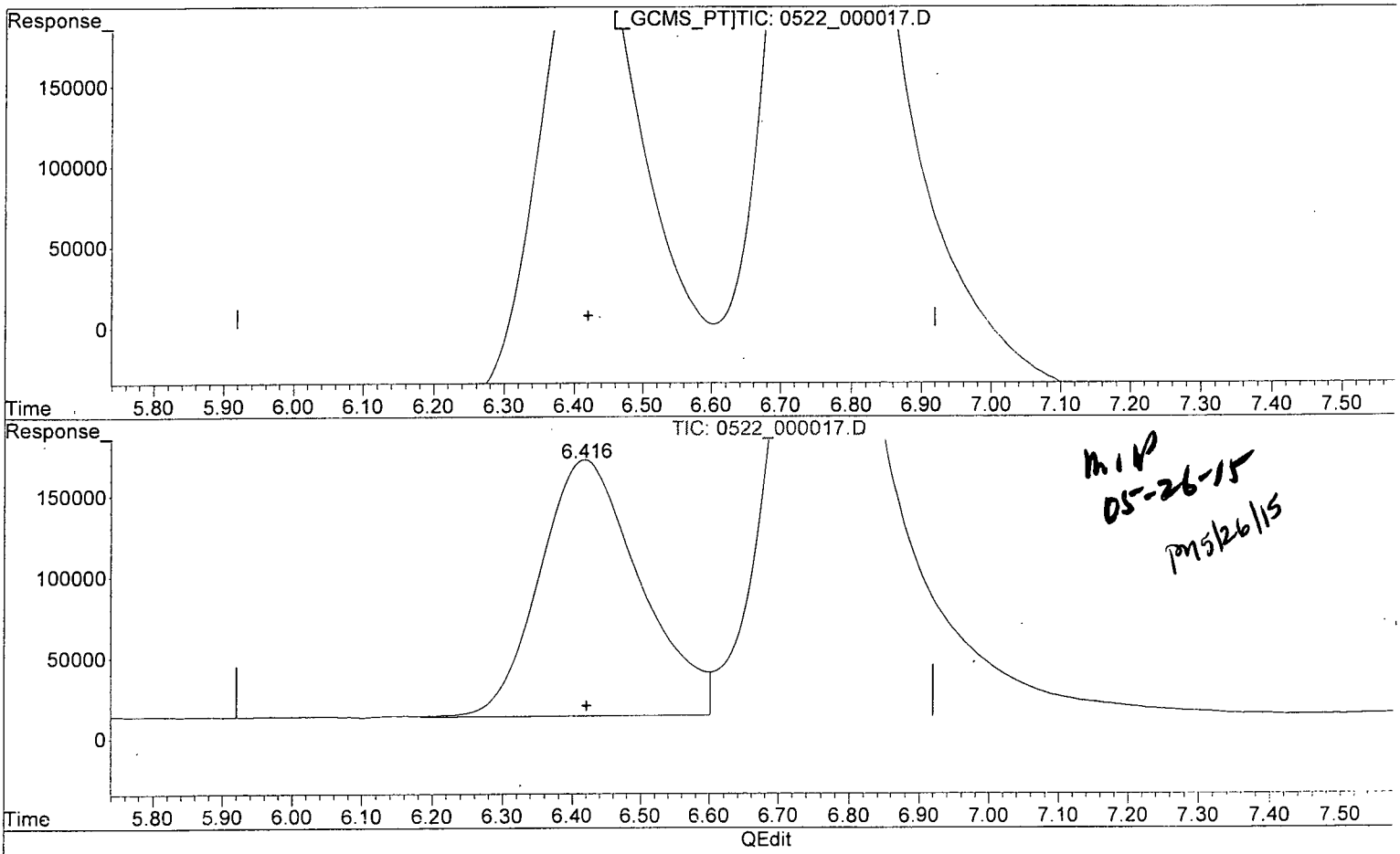
(+) = Expected Retention Time

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

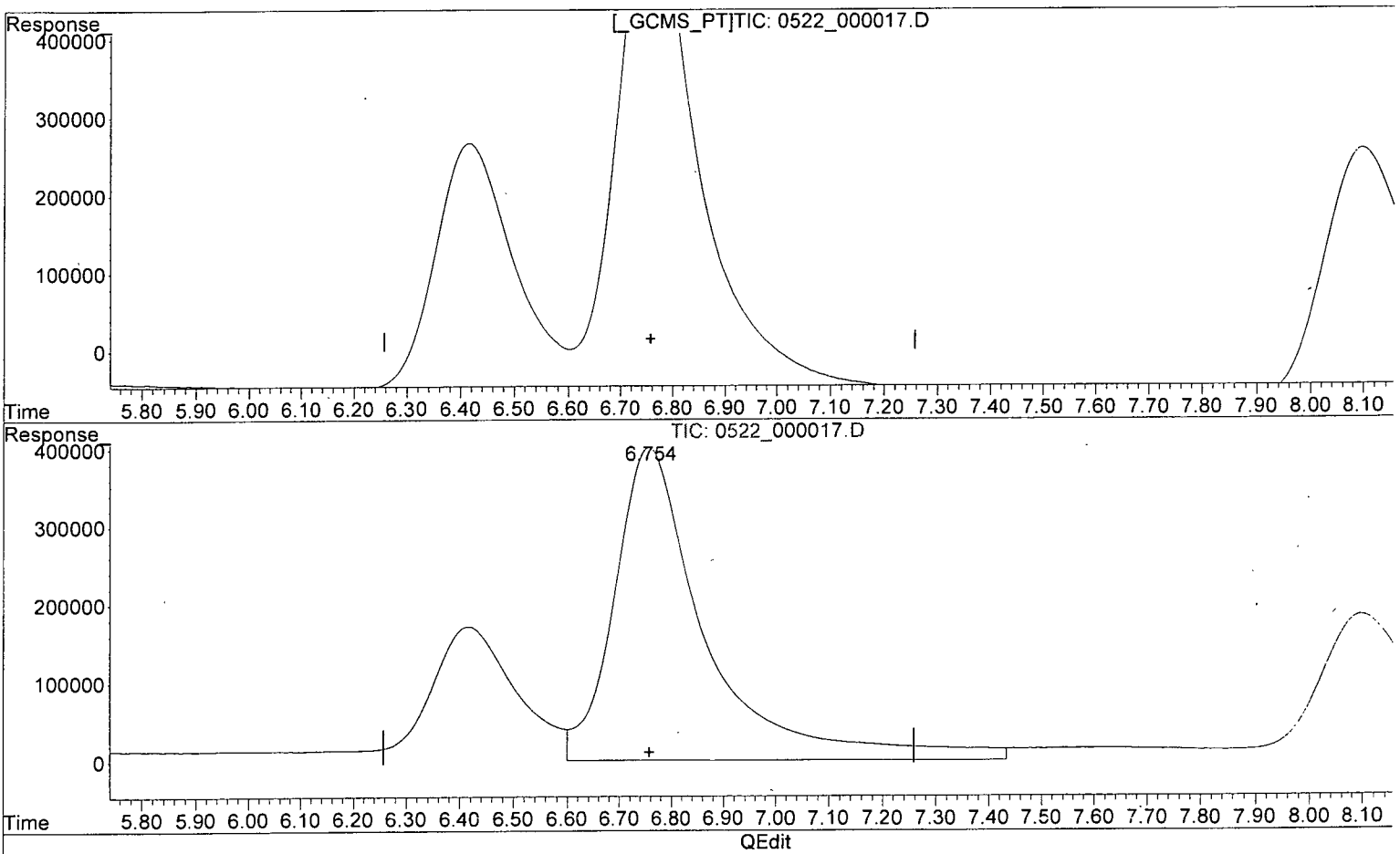
(+) = Expected Retention Time

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-



(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

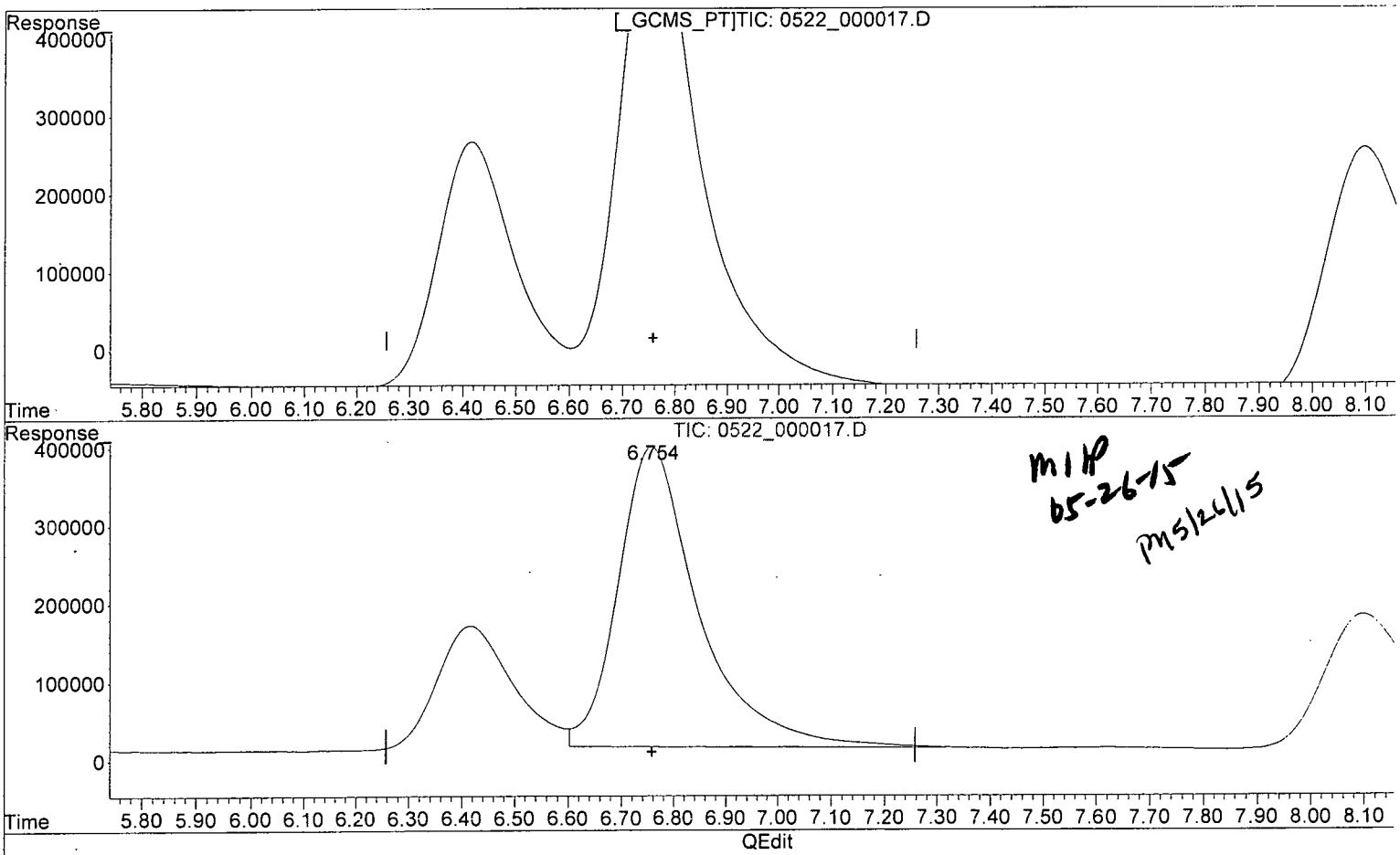
(+) = Expected Retention Time

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-



MLP 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

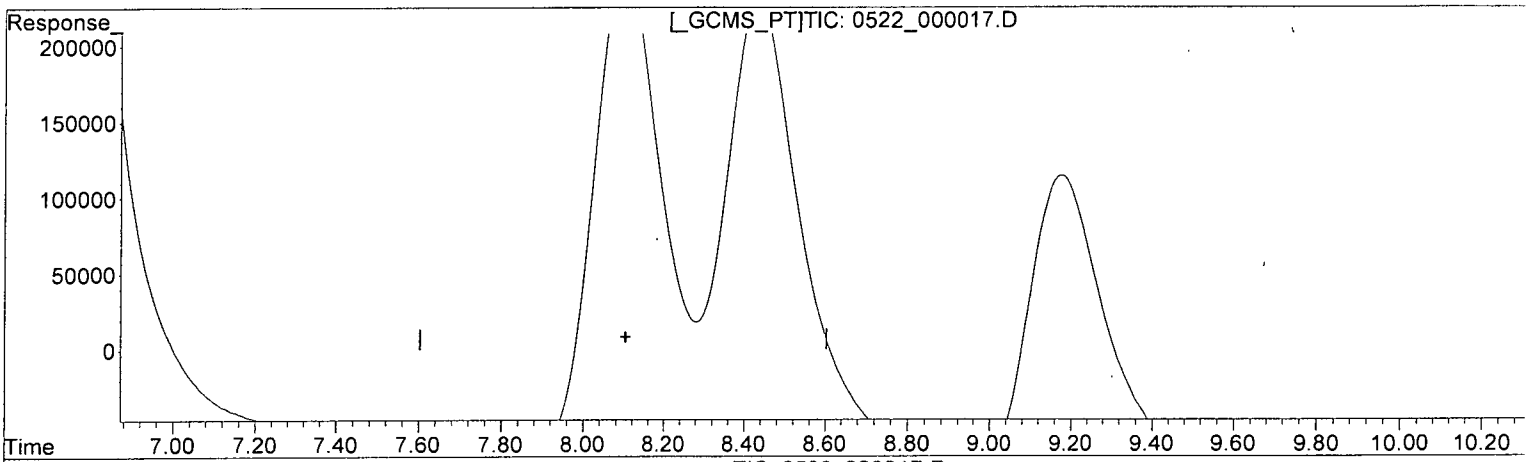
(+) = Expected Retention Time

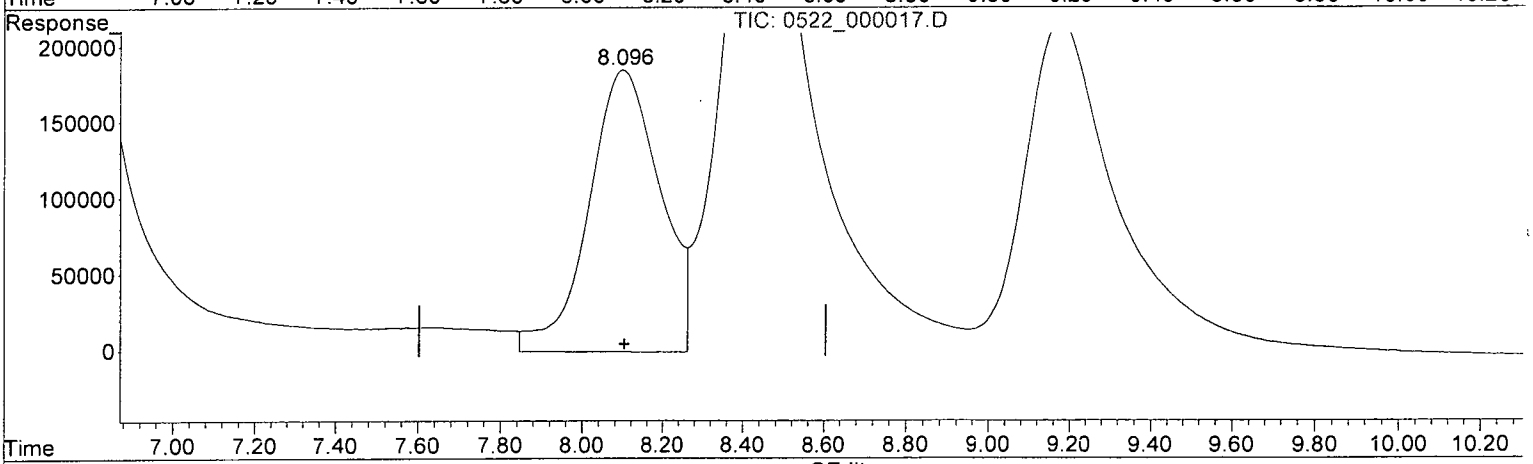
Quantitation Report (Qedit)

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-





QEdit

(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

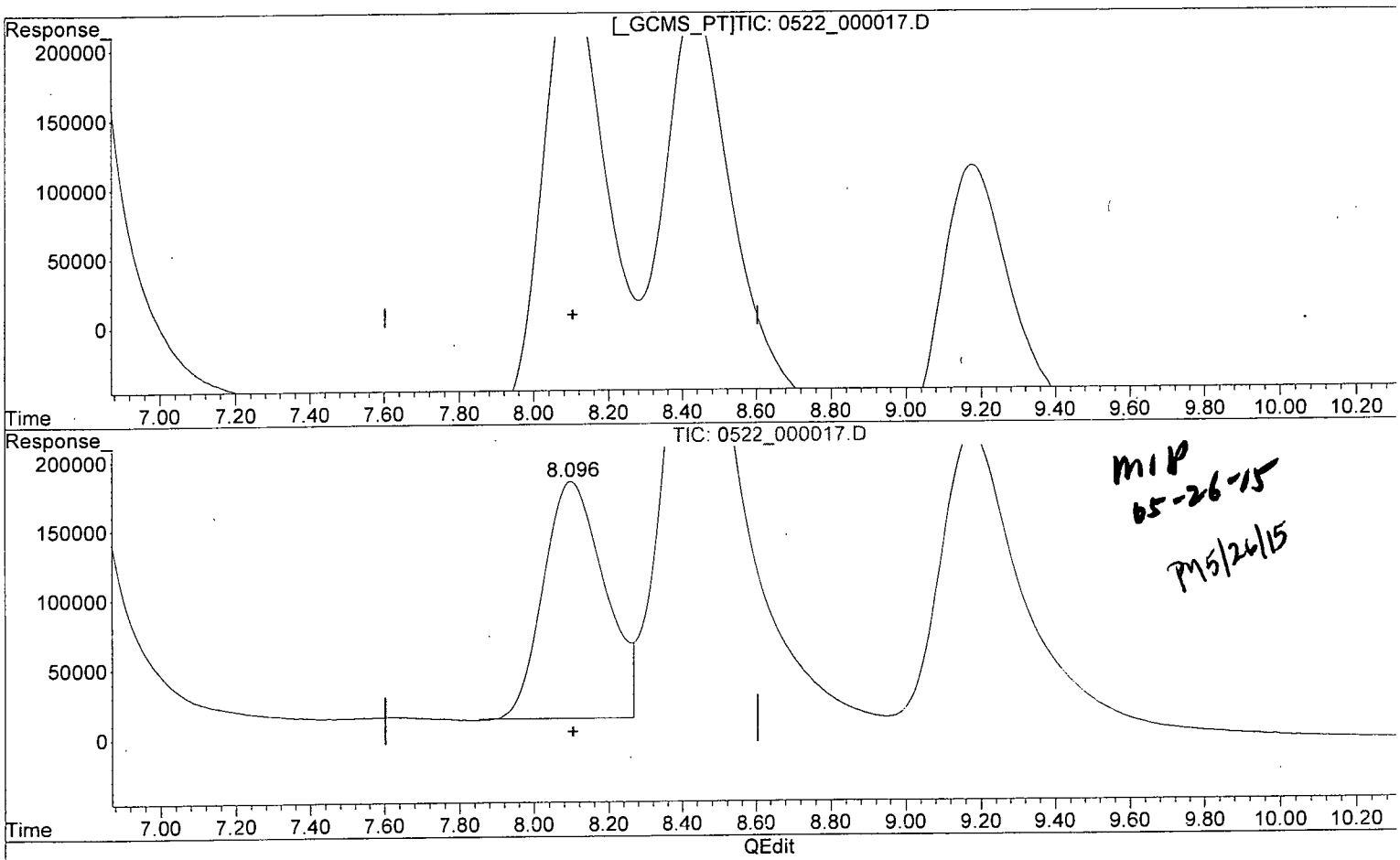
(+) = Expected Retention Time

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-µ



(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

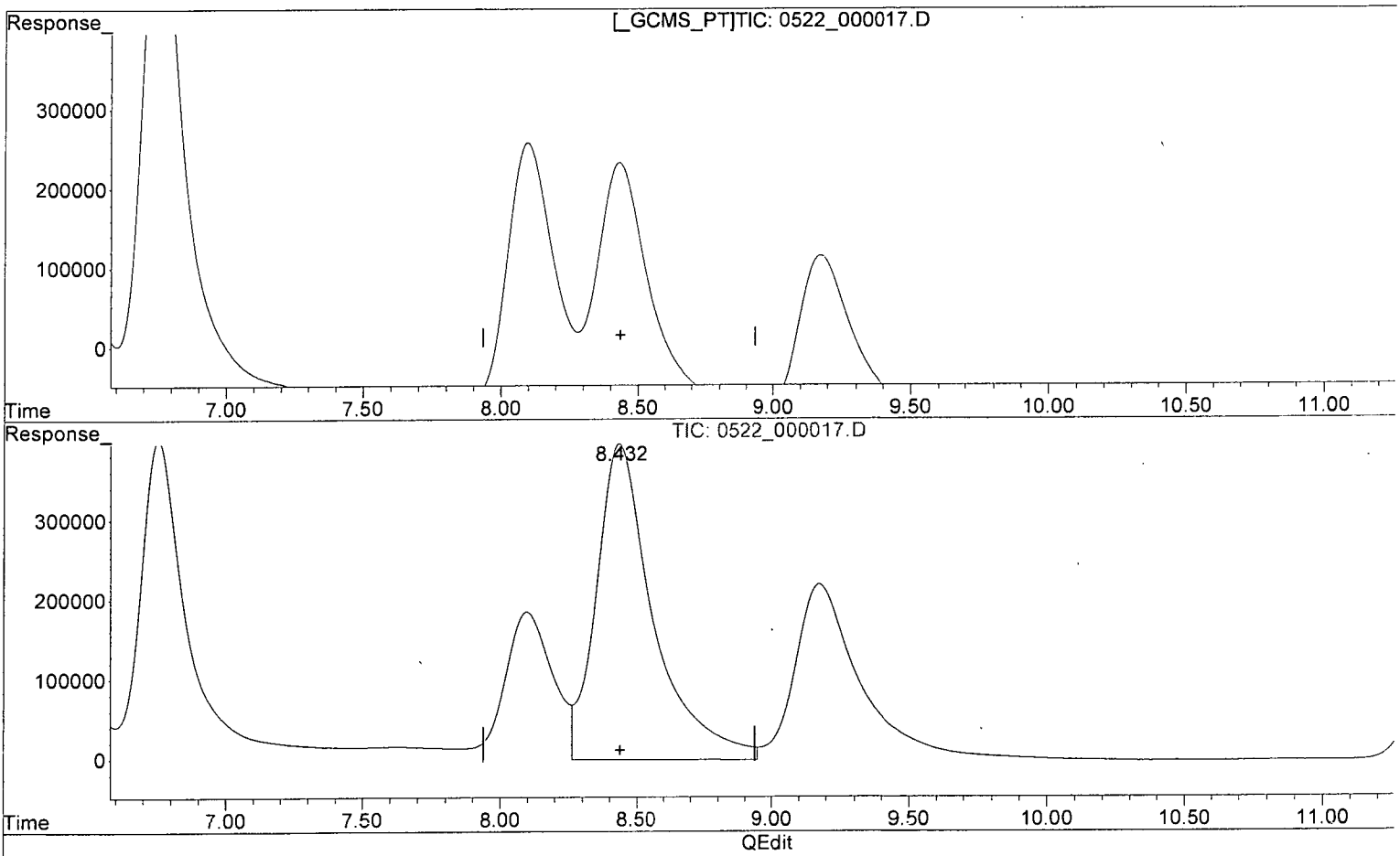
(+) = Expected Retention Time

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



(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

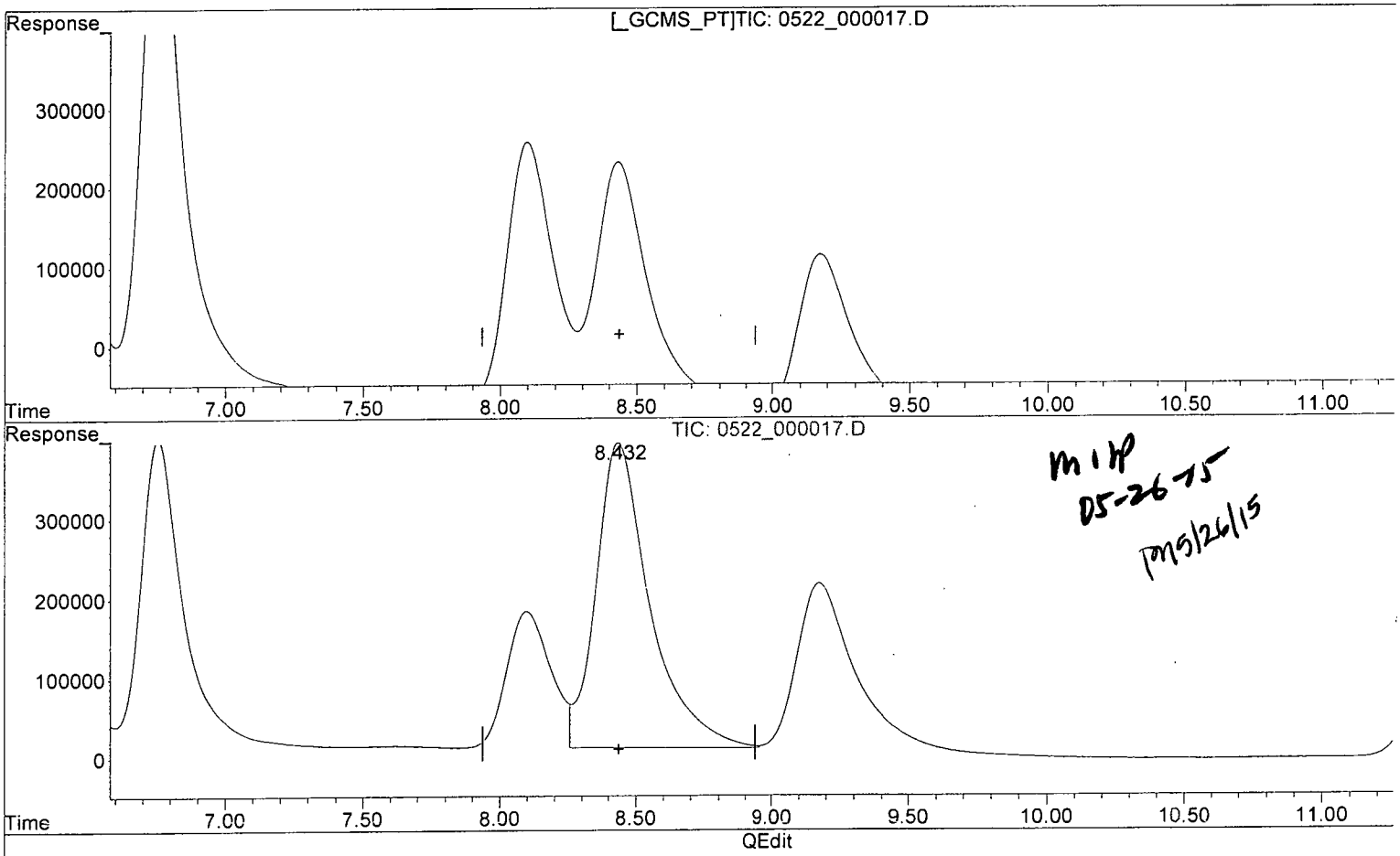
(+) = Expected Retention Time

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 PM 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. #

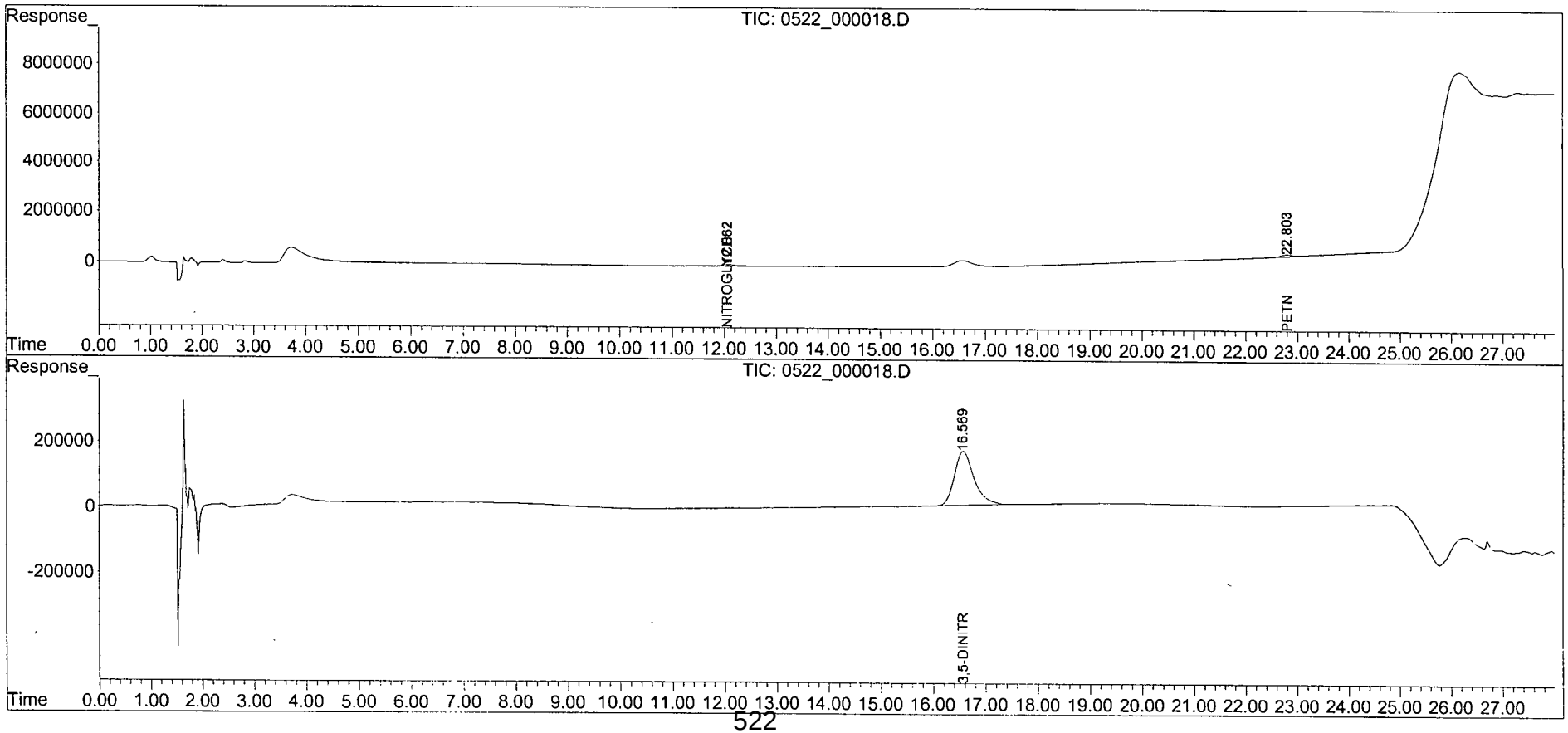
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

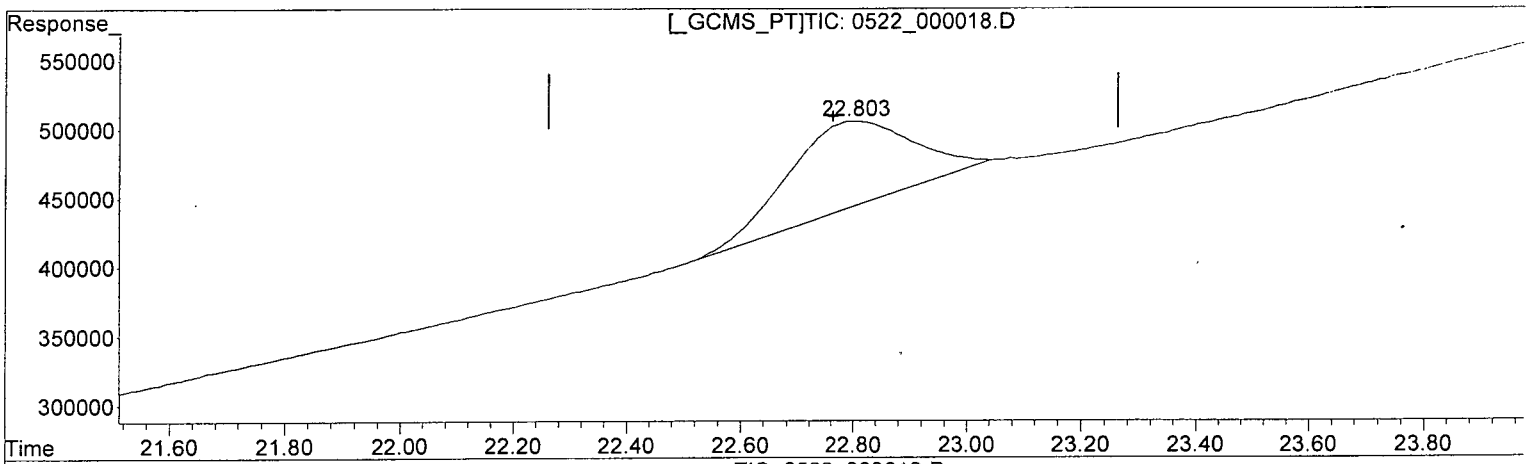


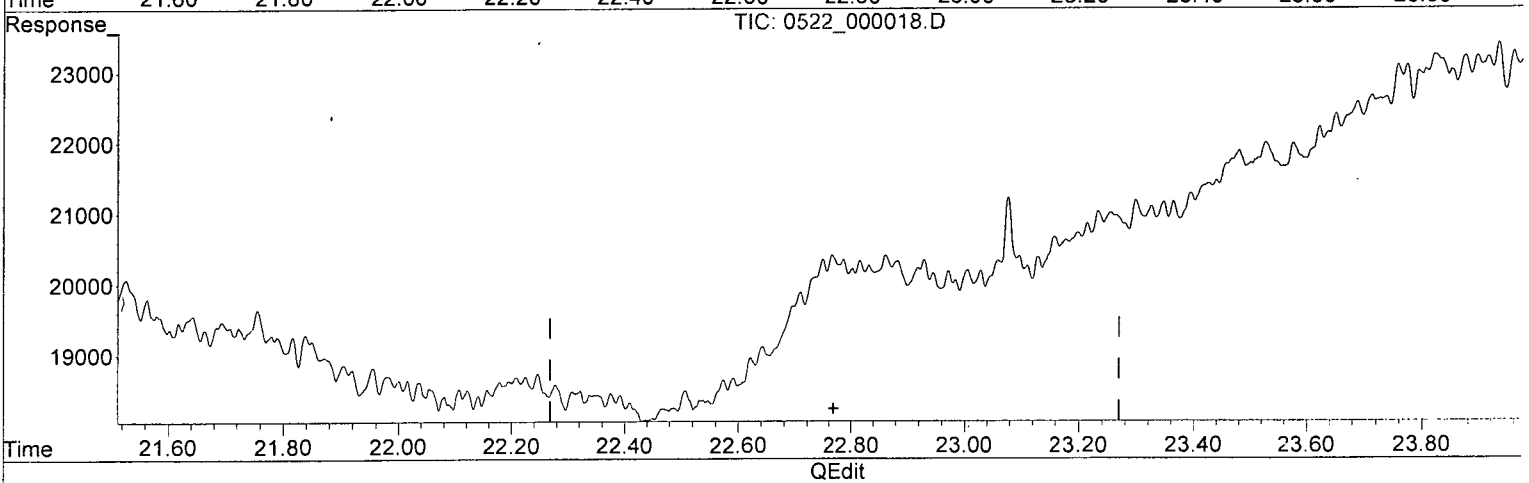
Quantitation Report (Qedit)

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-





QEdit

(18) PETN (TM)

22.803min 67.152 ppb

response 61273

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

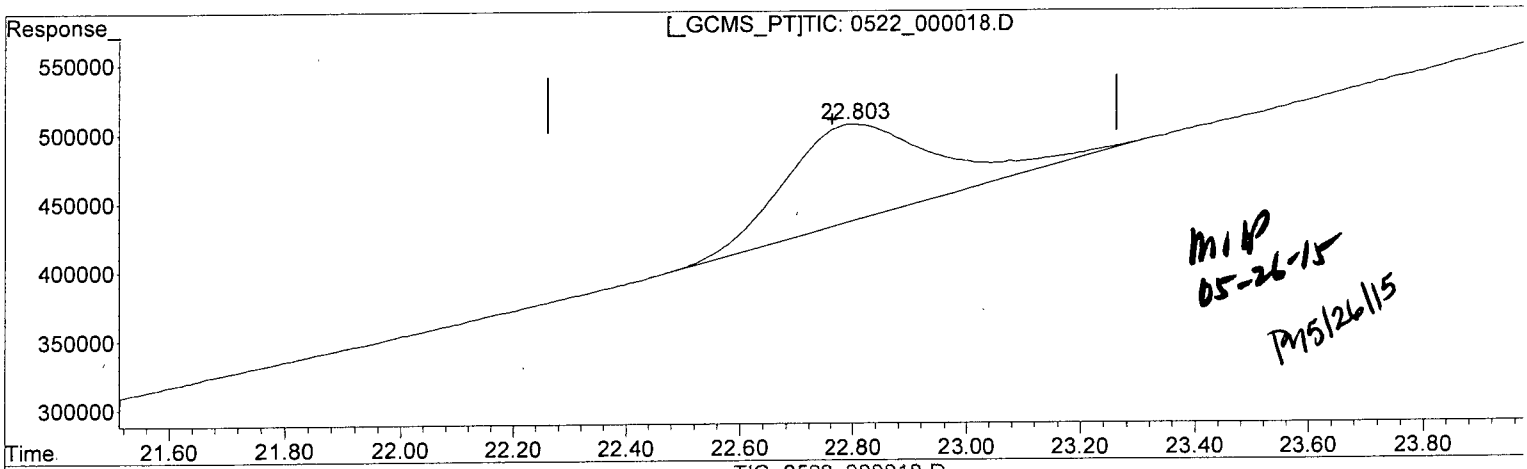
(+) = Expected Retention Time

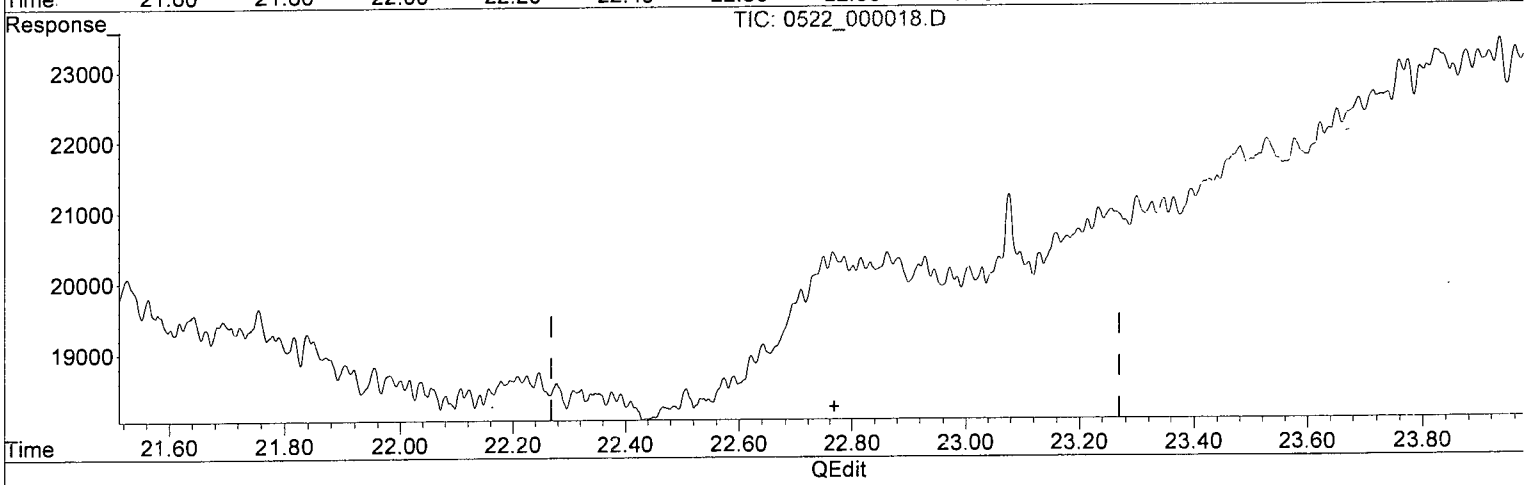
Quantitation Report (Qedit)

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-µ





(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.

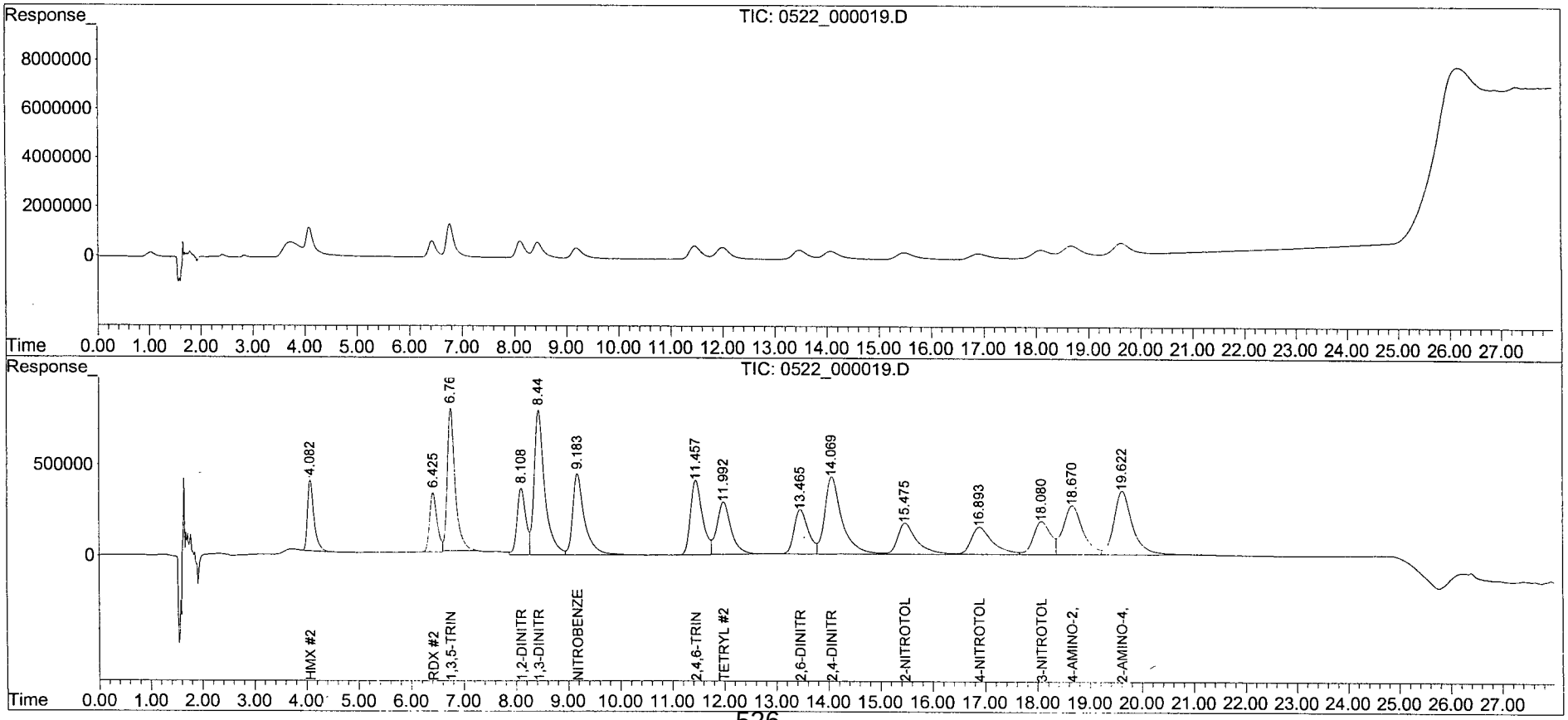
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

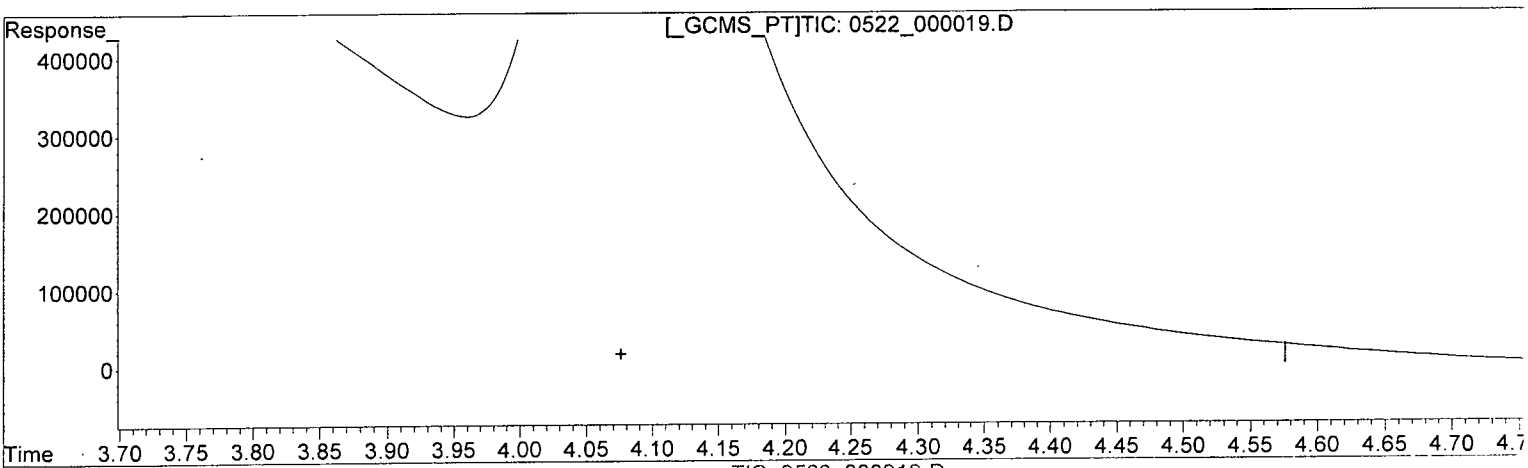


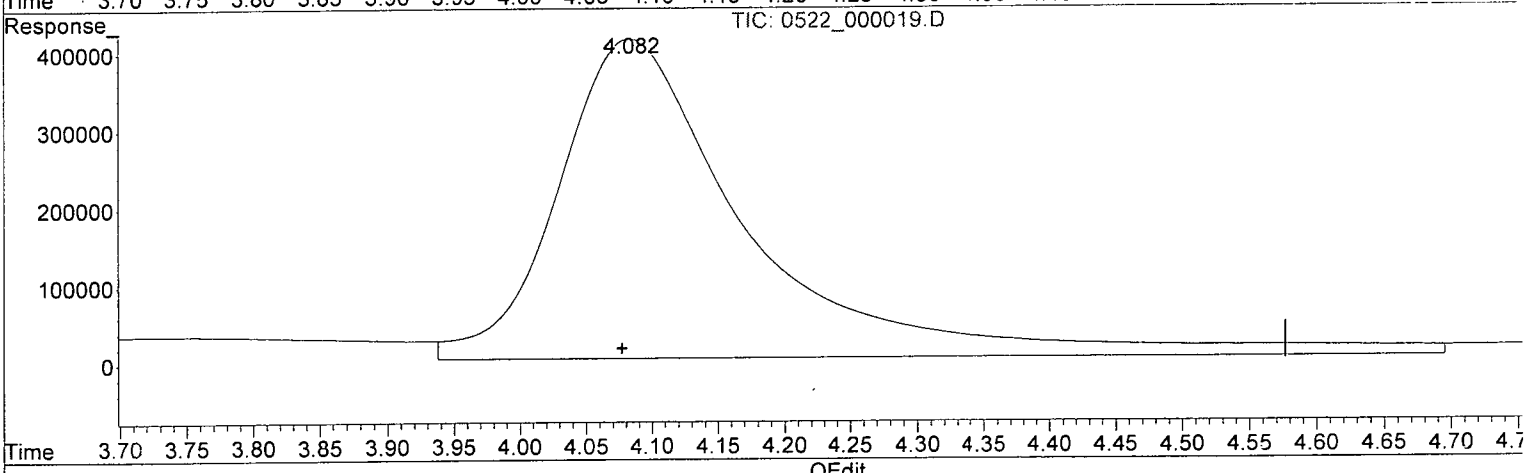
Quantitation Report (Qedit)

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





(1) HMX (TM)

0.000min 0.000 ppb

response 0

(1) HMX #2 (TM)

4.083min 195.469 ppb

response 411042

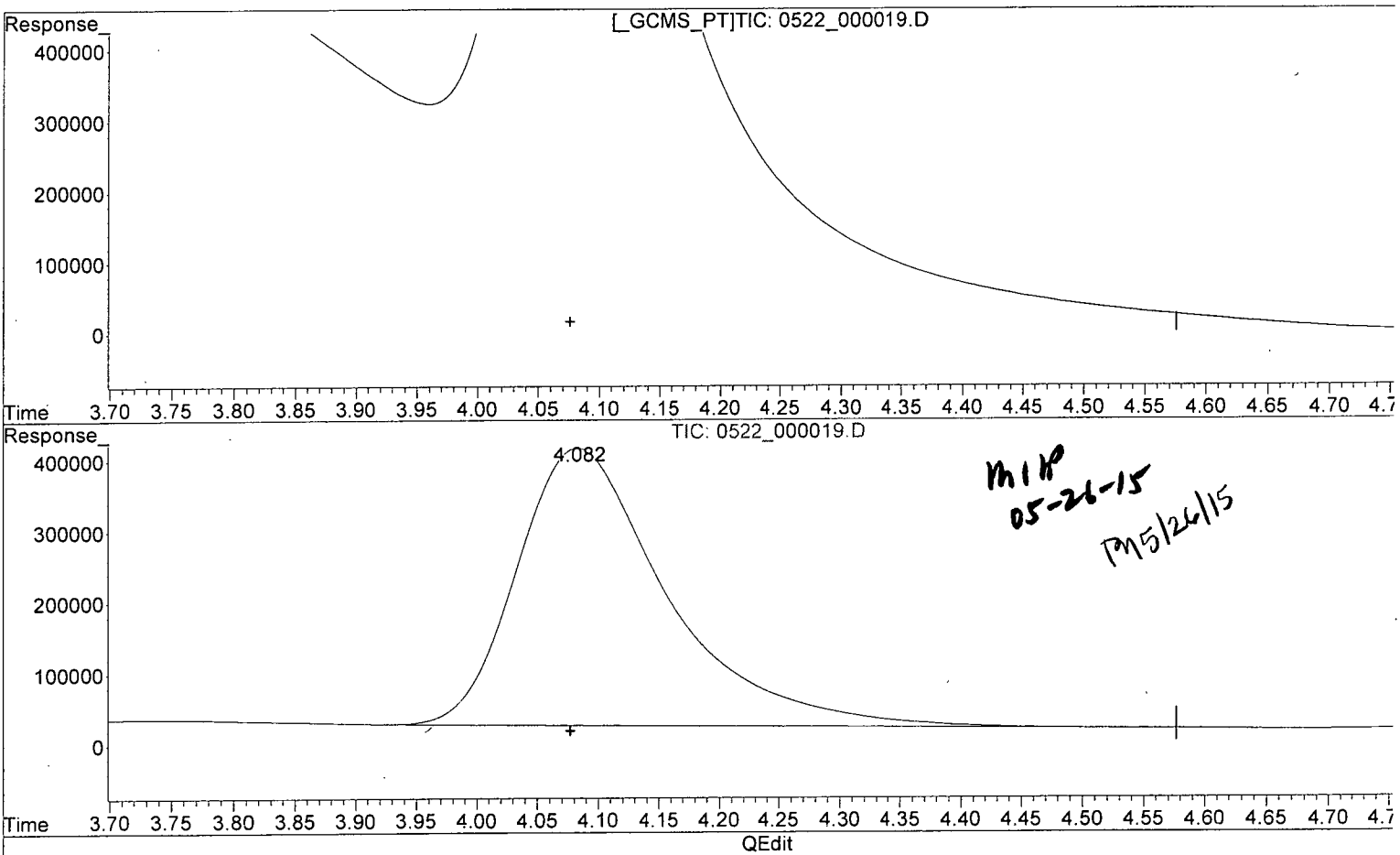
(+) = Expected Retention Time

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-



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

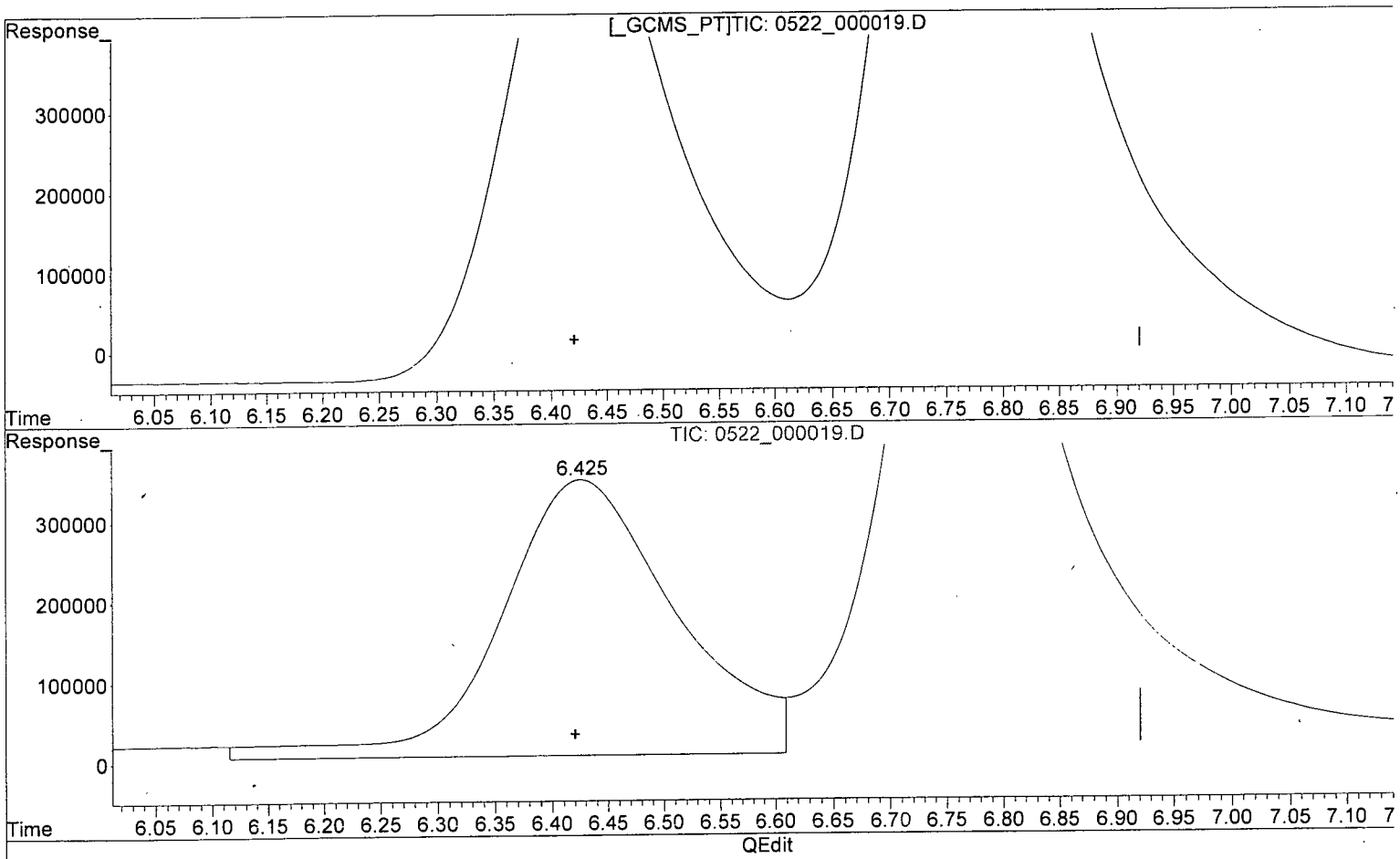
(+) = Expected Retention Time

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



(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

6.426min 185.202 ppb

response 343017

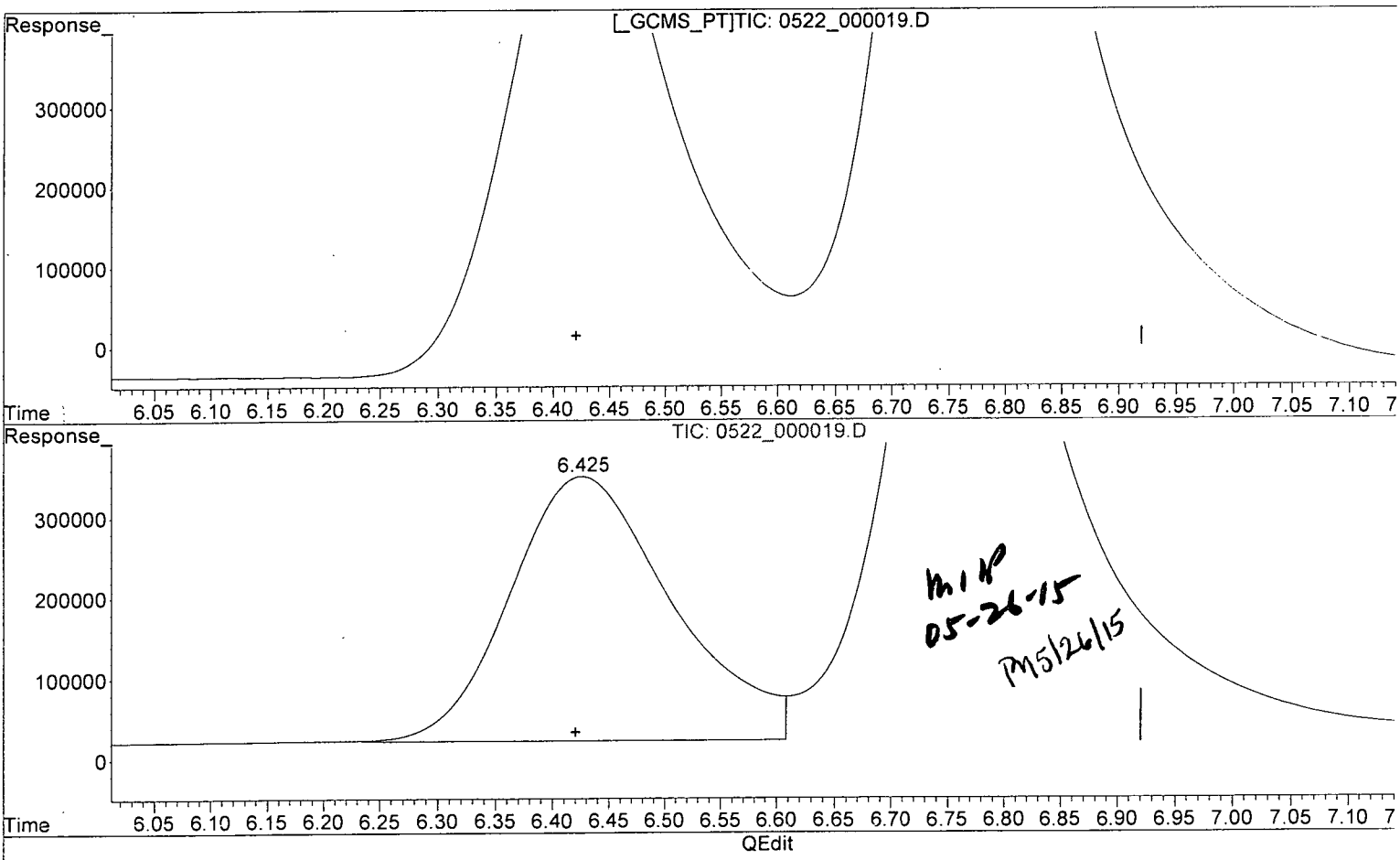
(+) = Expected Retention Time

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-



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

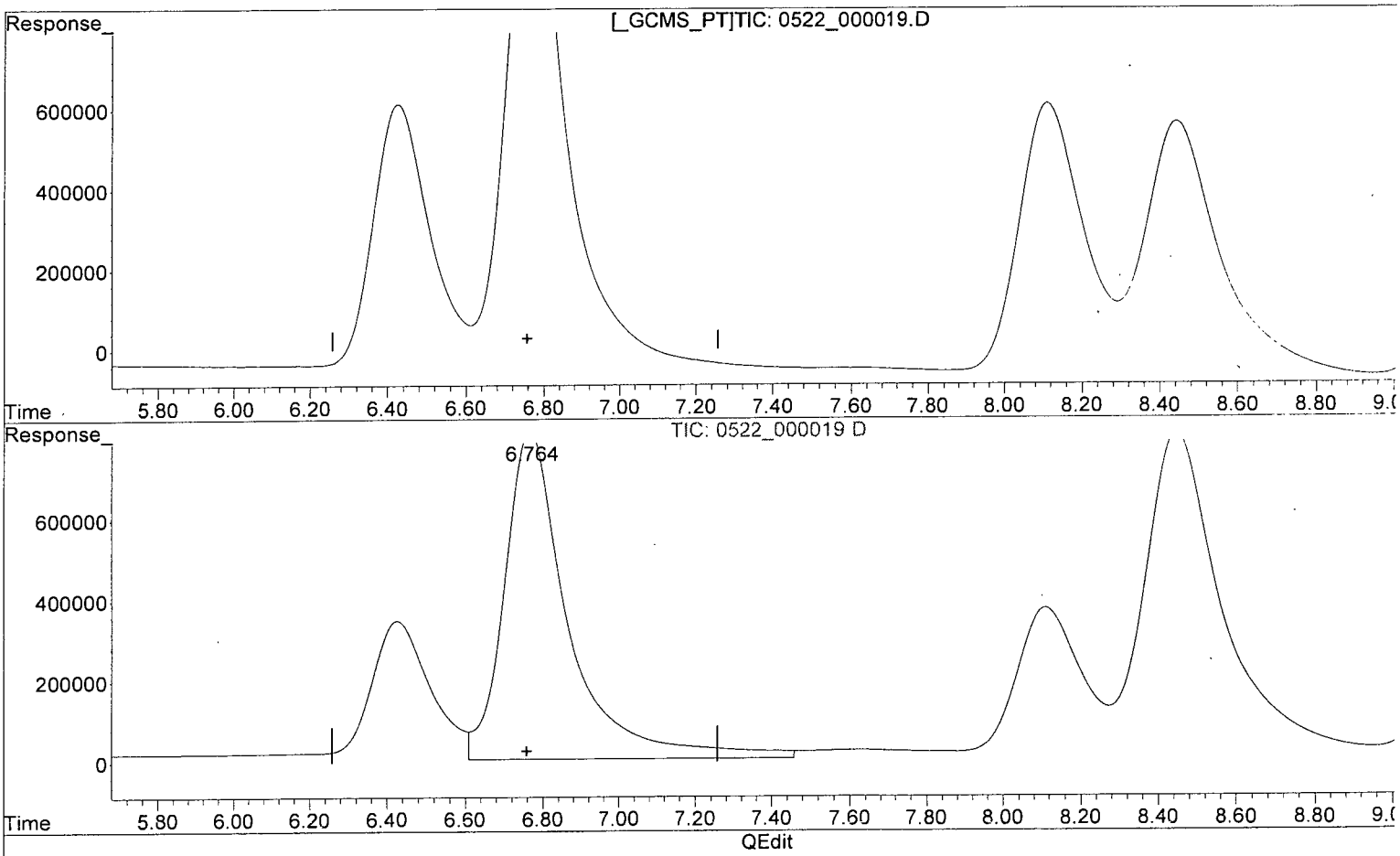
(+) = Expected Retention Time

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-



(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

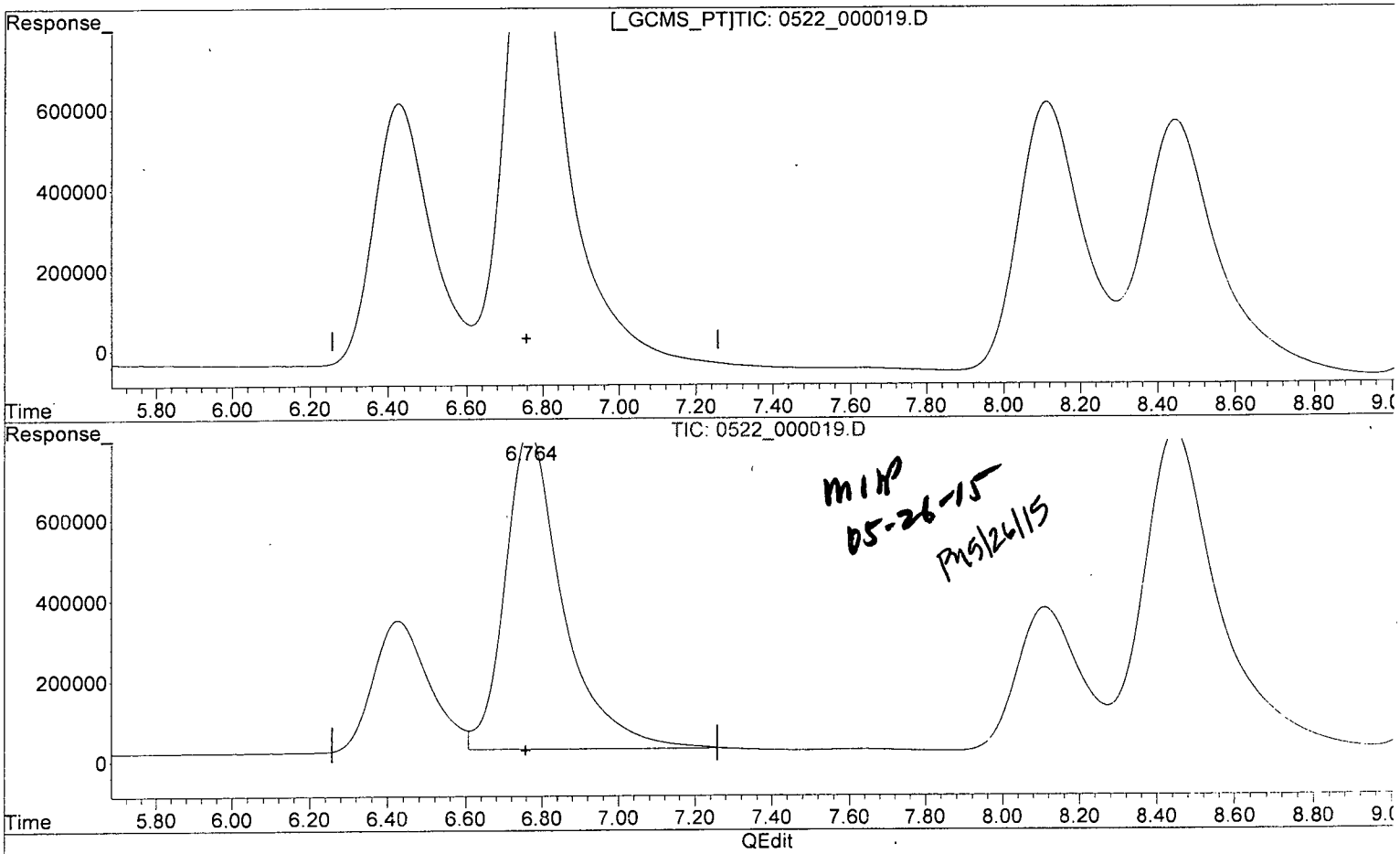
(+) = Expected Retention Time

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-µ



(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. #

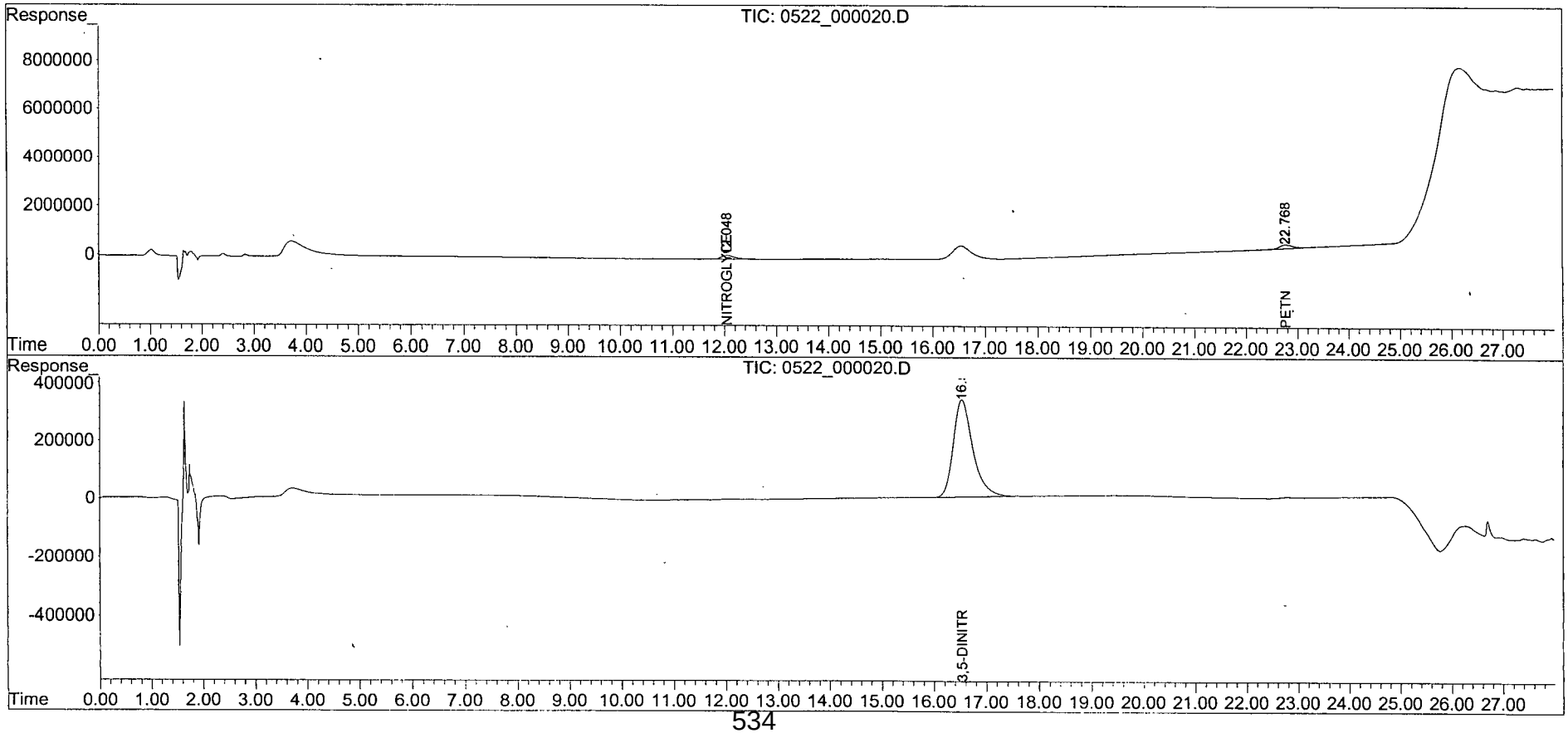
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

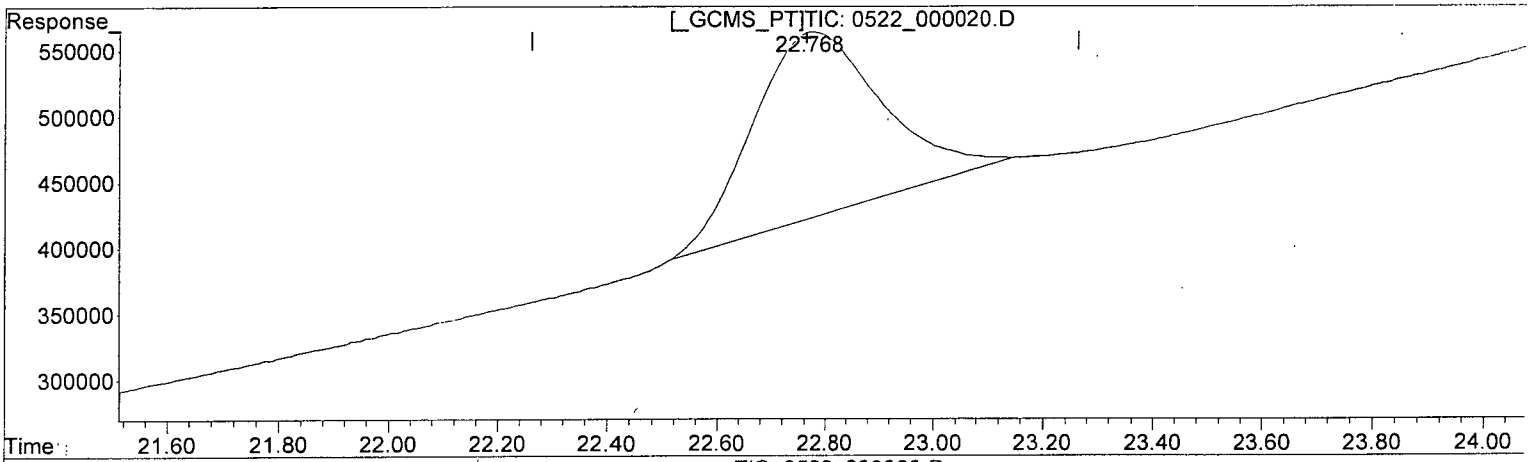


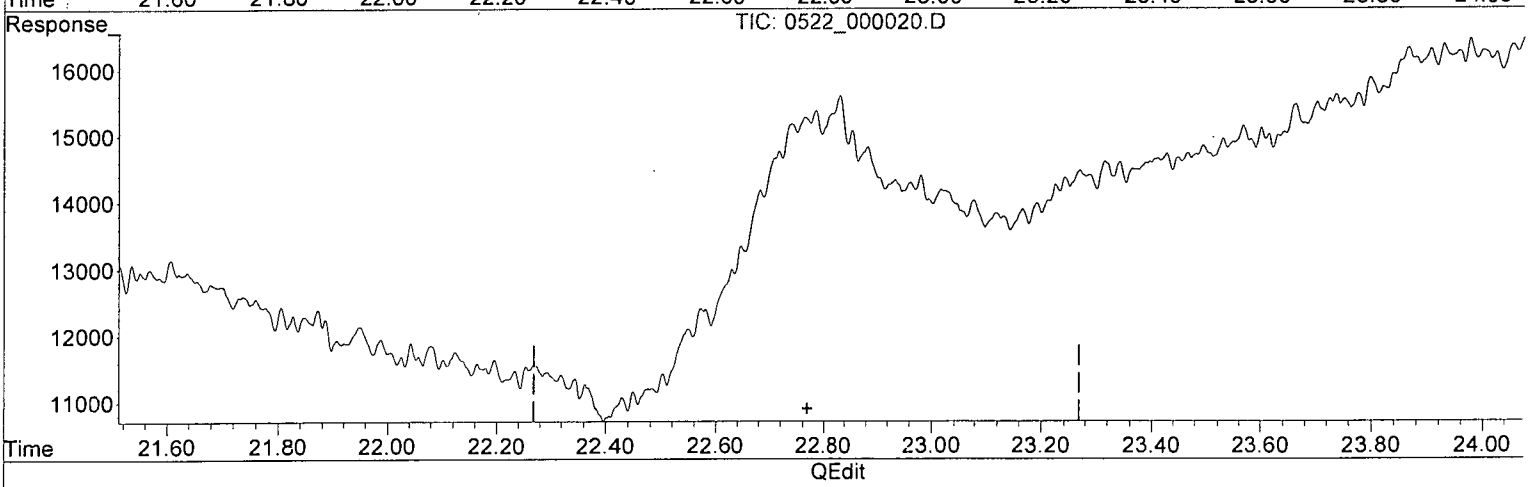
Quantitation Report (Qedit)

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-r





(18) PETN (TM)

22.776min 154.013 ppb

response 140531

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

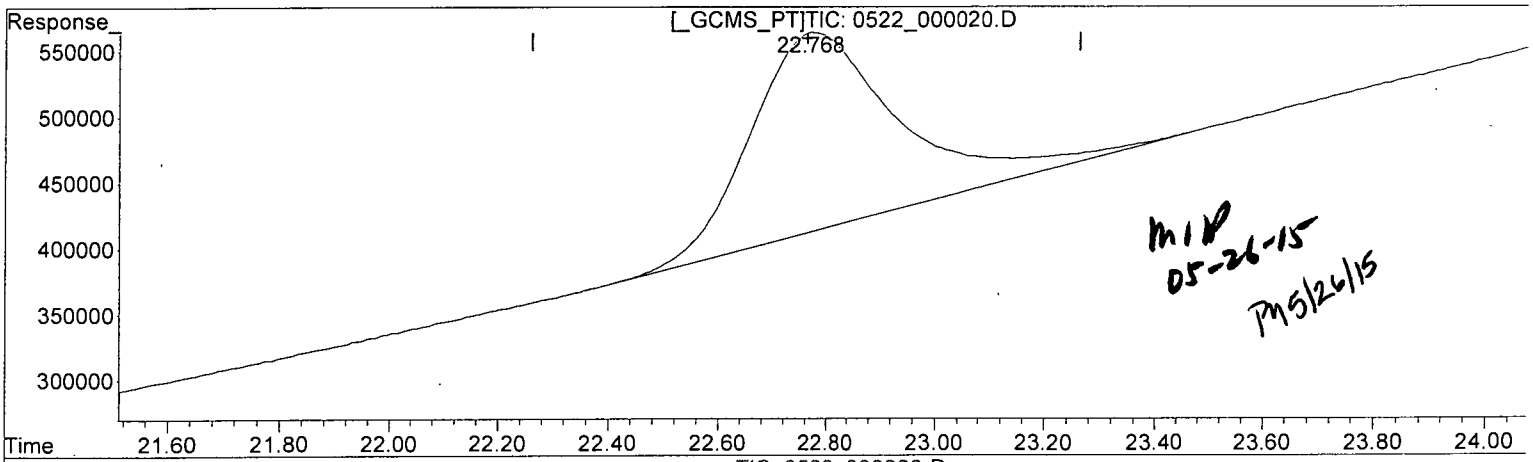
(+) = Expected Retention Time

Quantitation Report (Qedit)

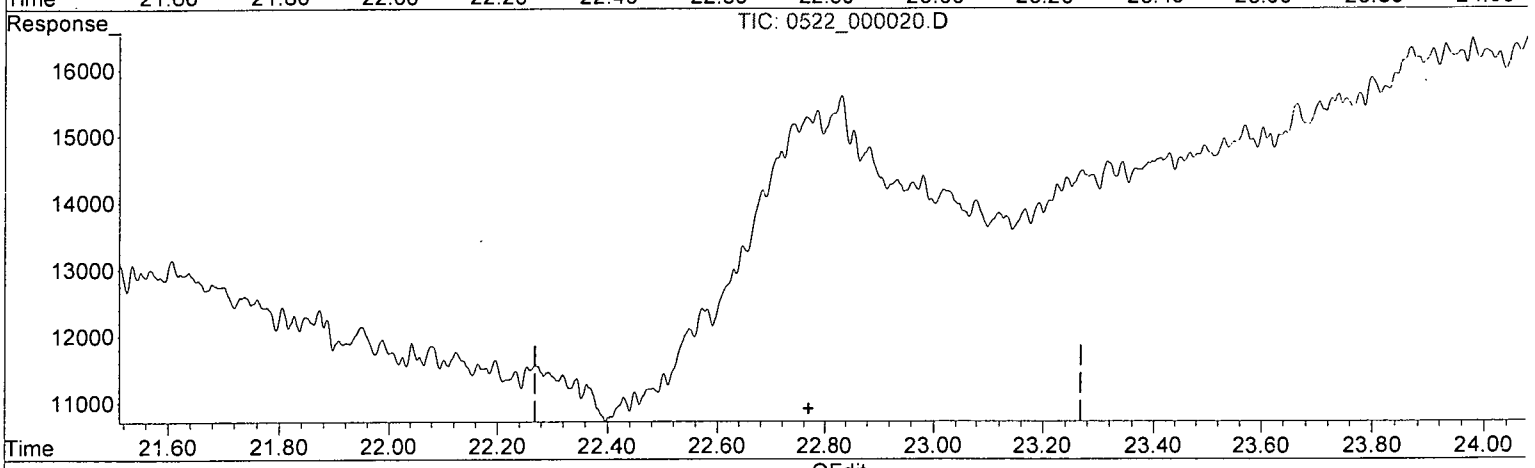
Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_000020.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 22-May-2015, 21:27:50
Operator : MP
Sample : 8330MXB_CB 0.20 PPM 05/22/15
Misc :
ALS Vial : 4290 Sample Multiplier: 1

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-µ



MIP 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.

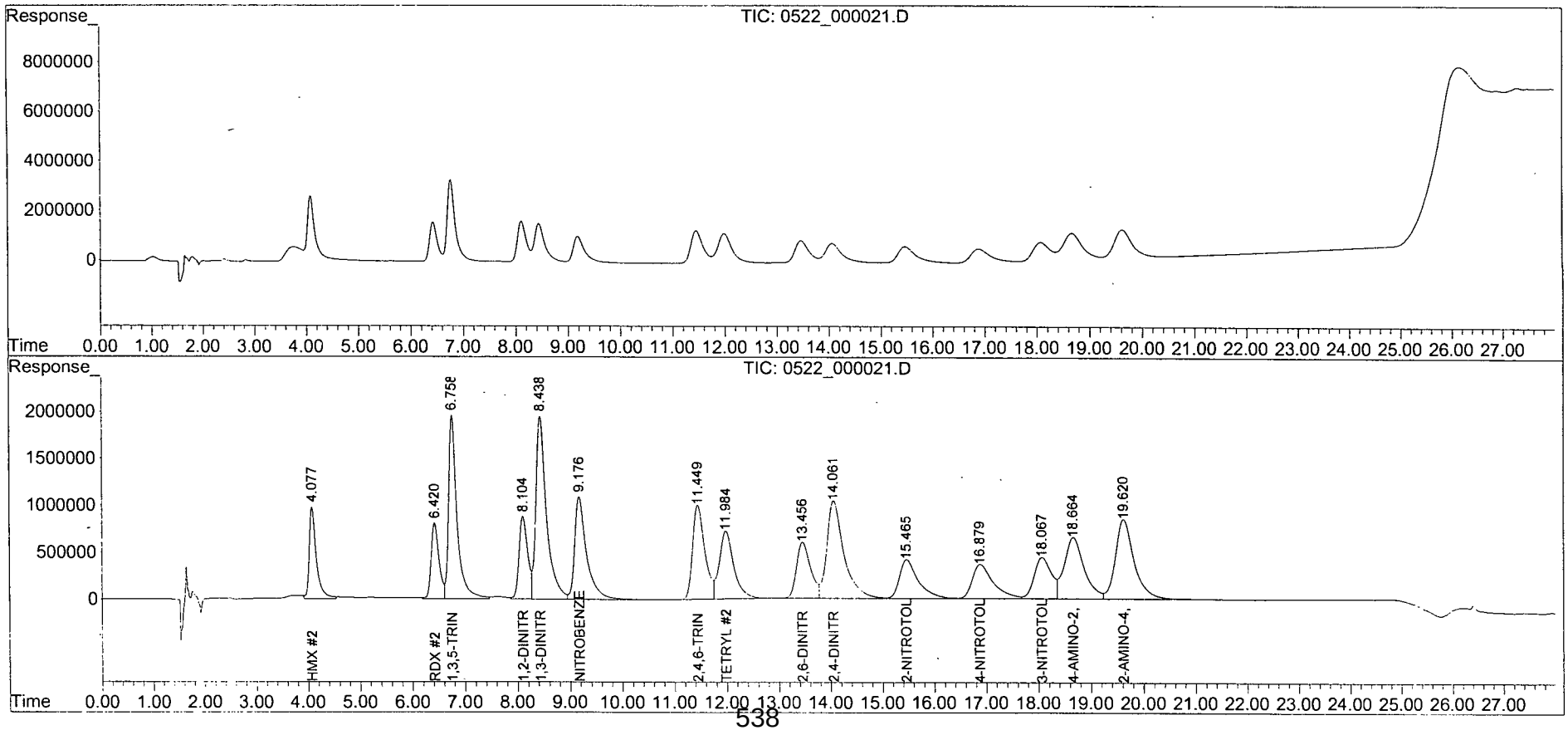
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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. #

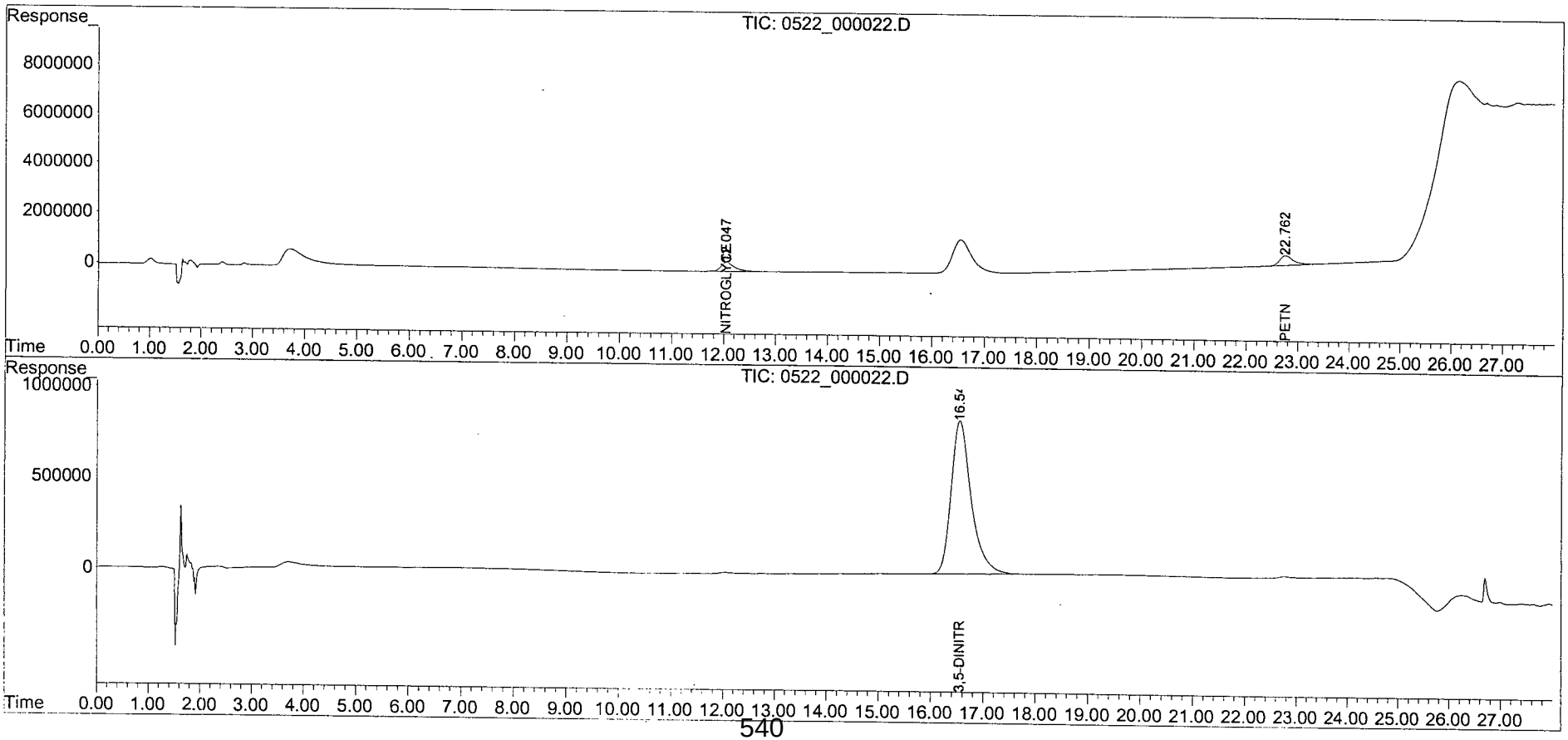
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

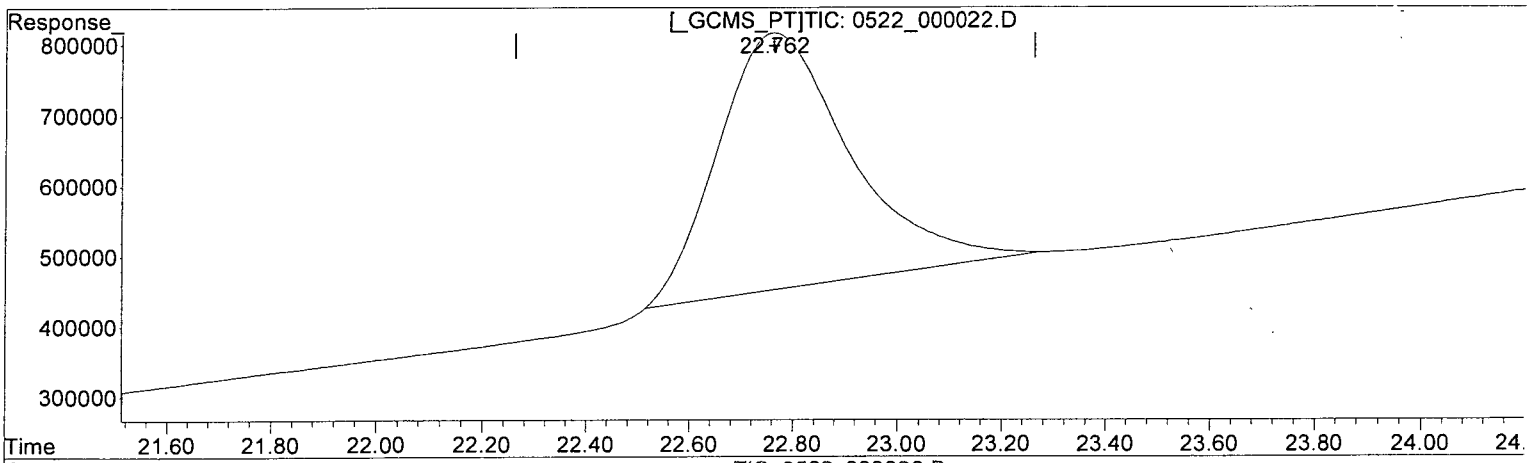


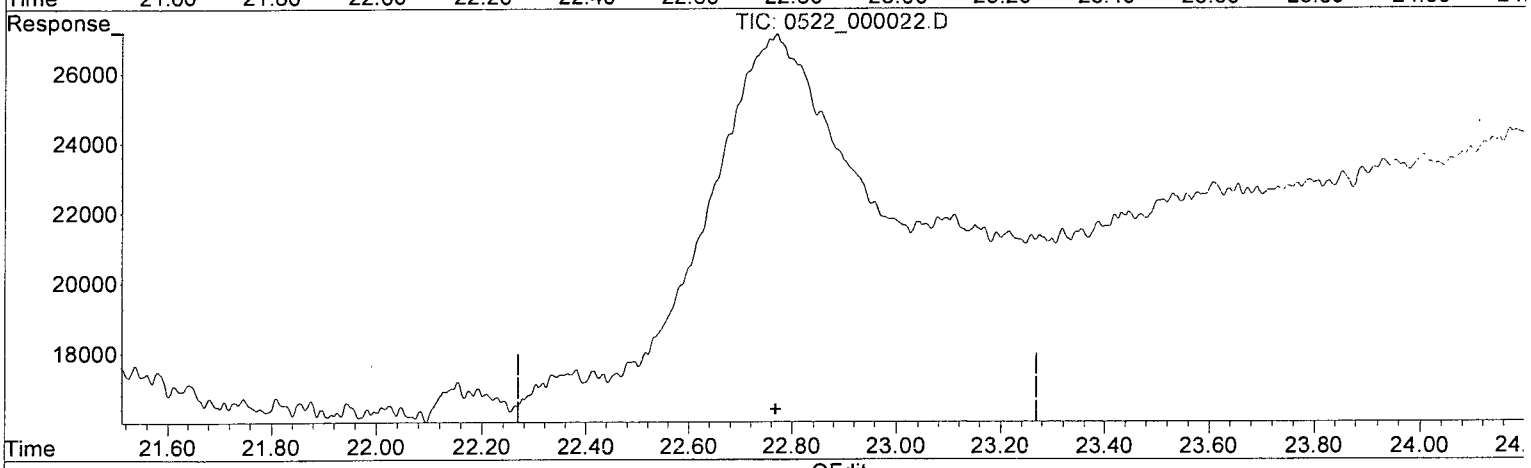
Quantitation Report (Qedit)

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-r





QEdit

(18) PETN (TM)

22.763min 398.817 ppb

response 363907

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

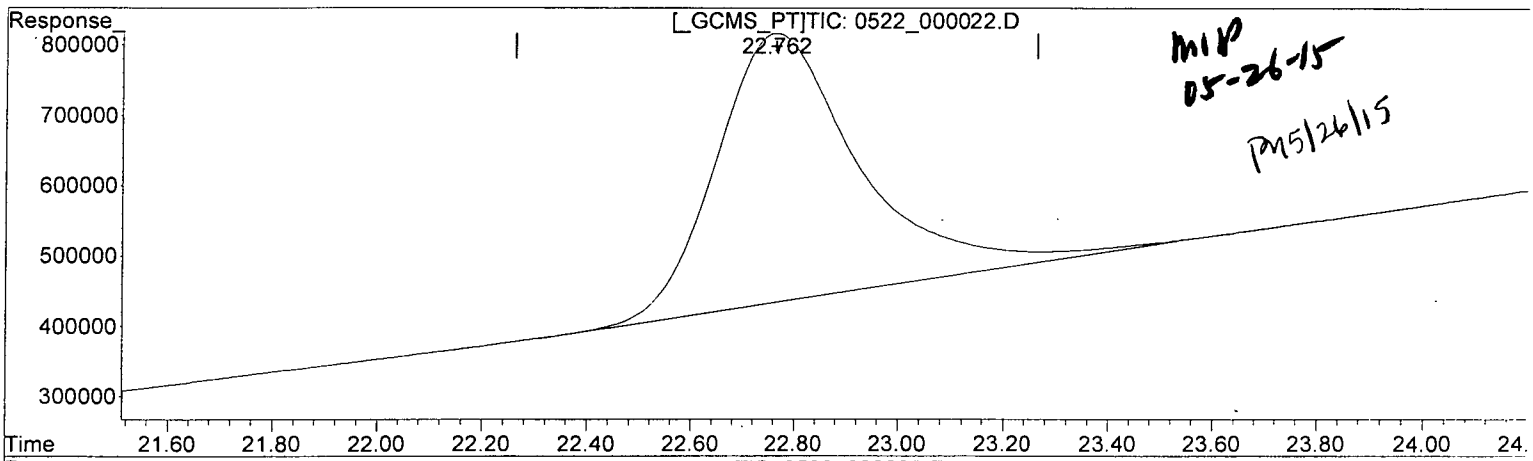
(+) = Expected Retention Time

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-



QEdit

(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.

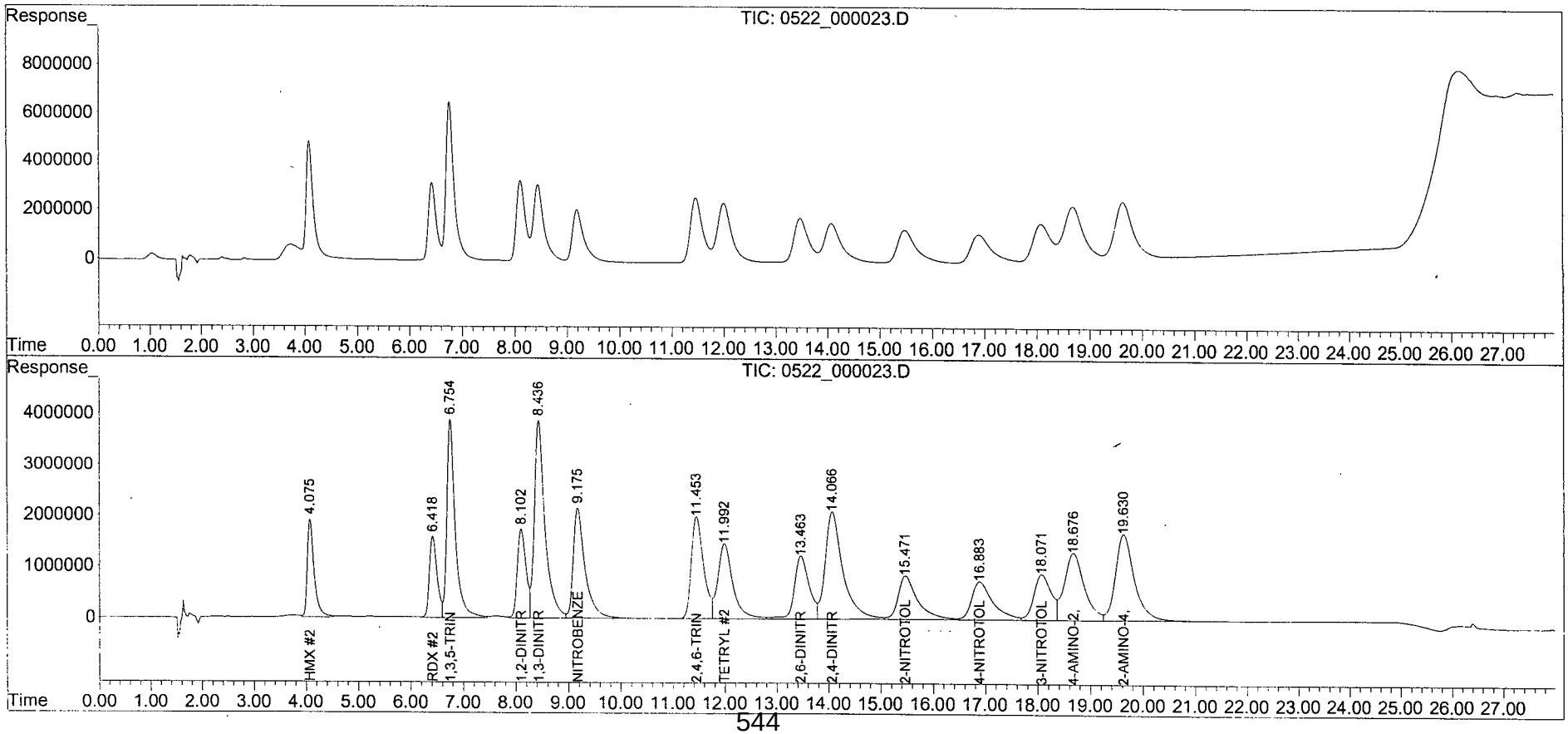
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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



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 #

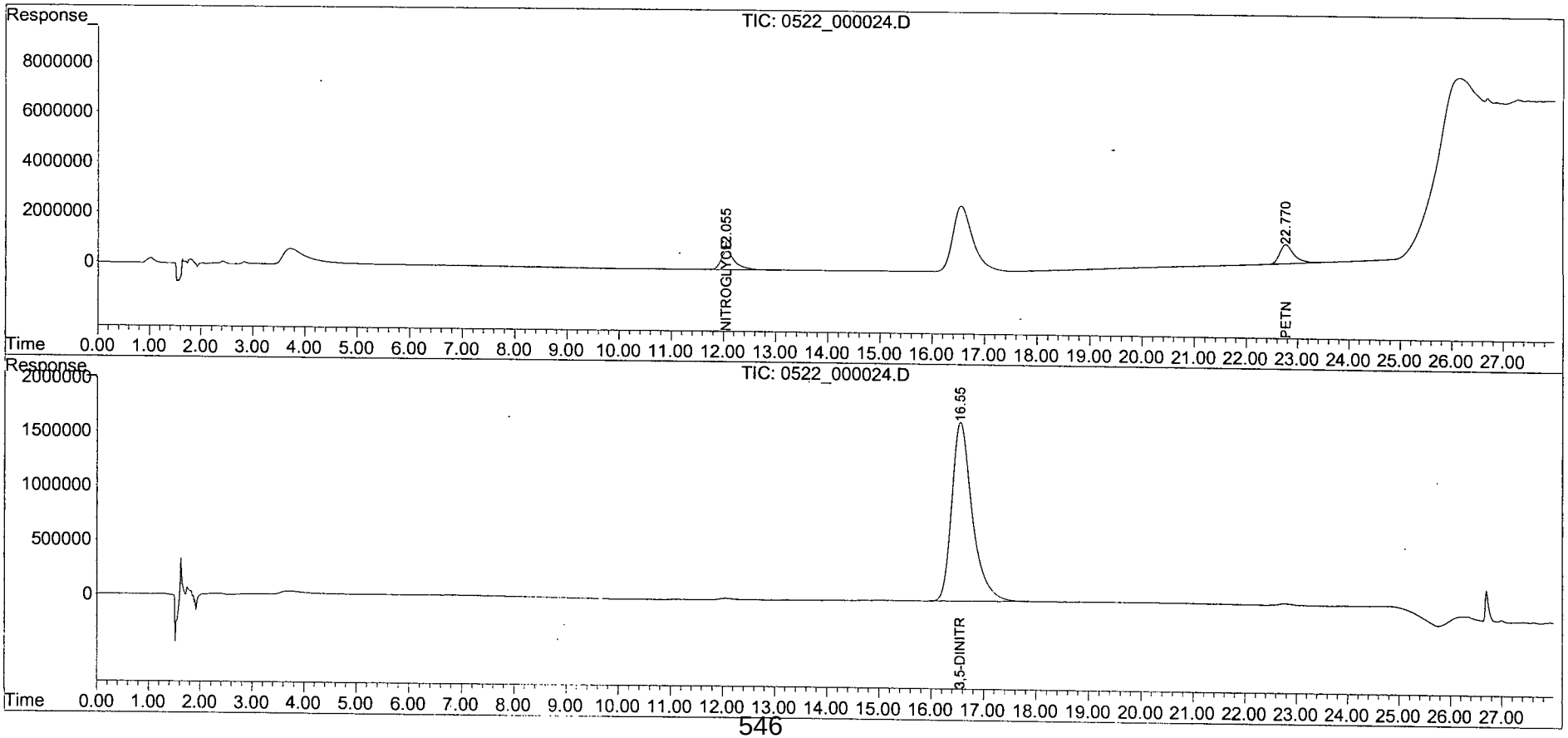
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

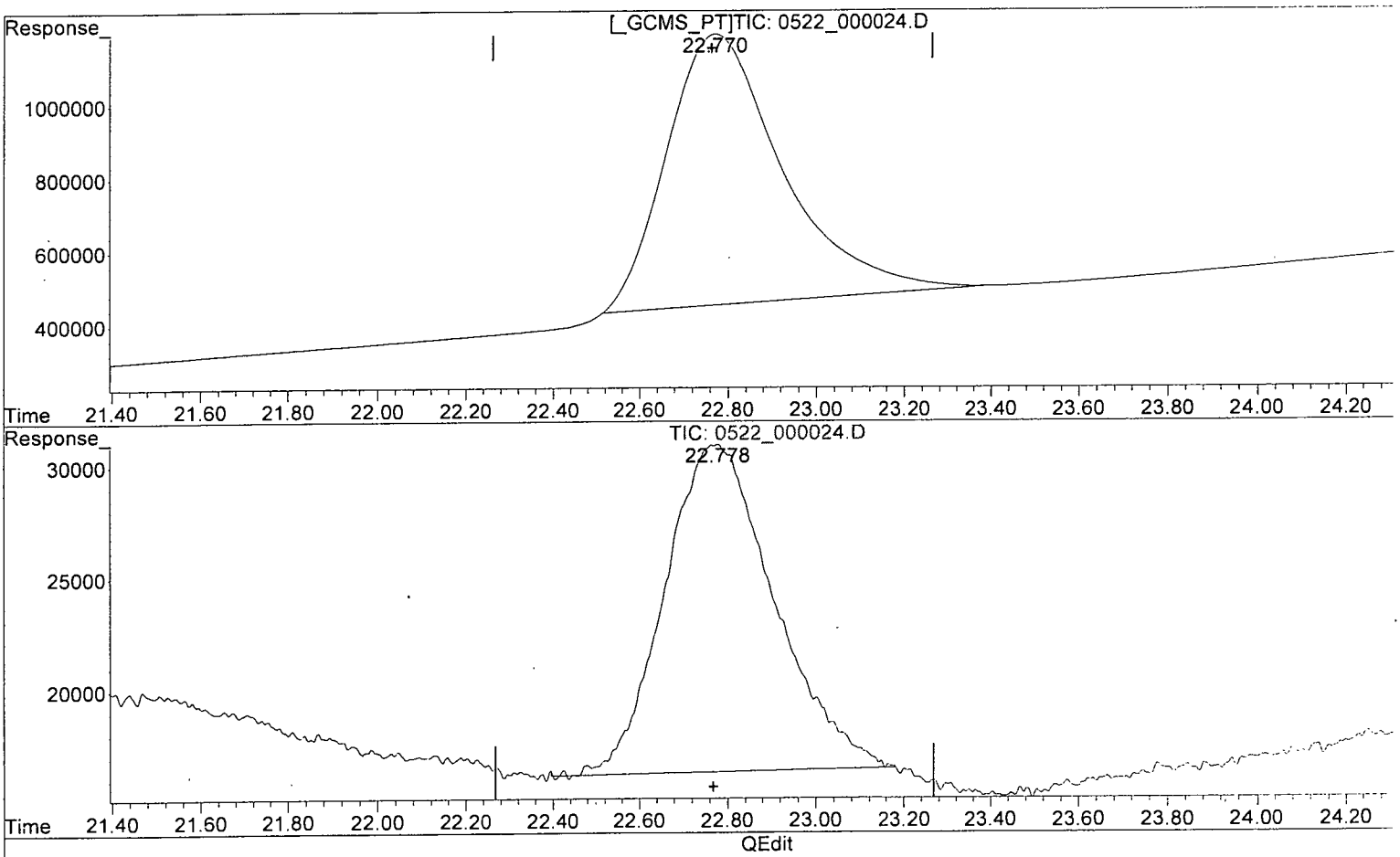


Quantitation Report (Qedit)

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-



(18) PETN (TM)

22.770min 806.856 ppb

response 736228

(18) PETN #2 (TM)

22.770min 0.000 ppb

response 14524

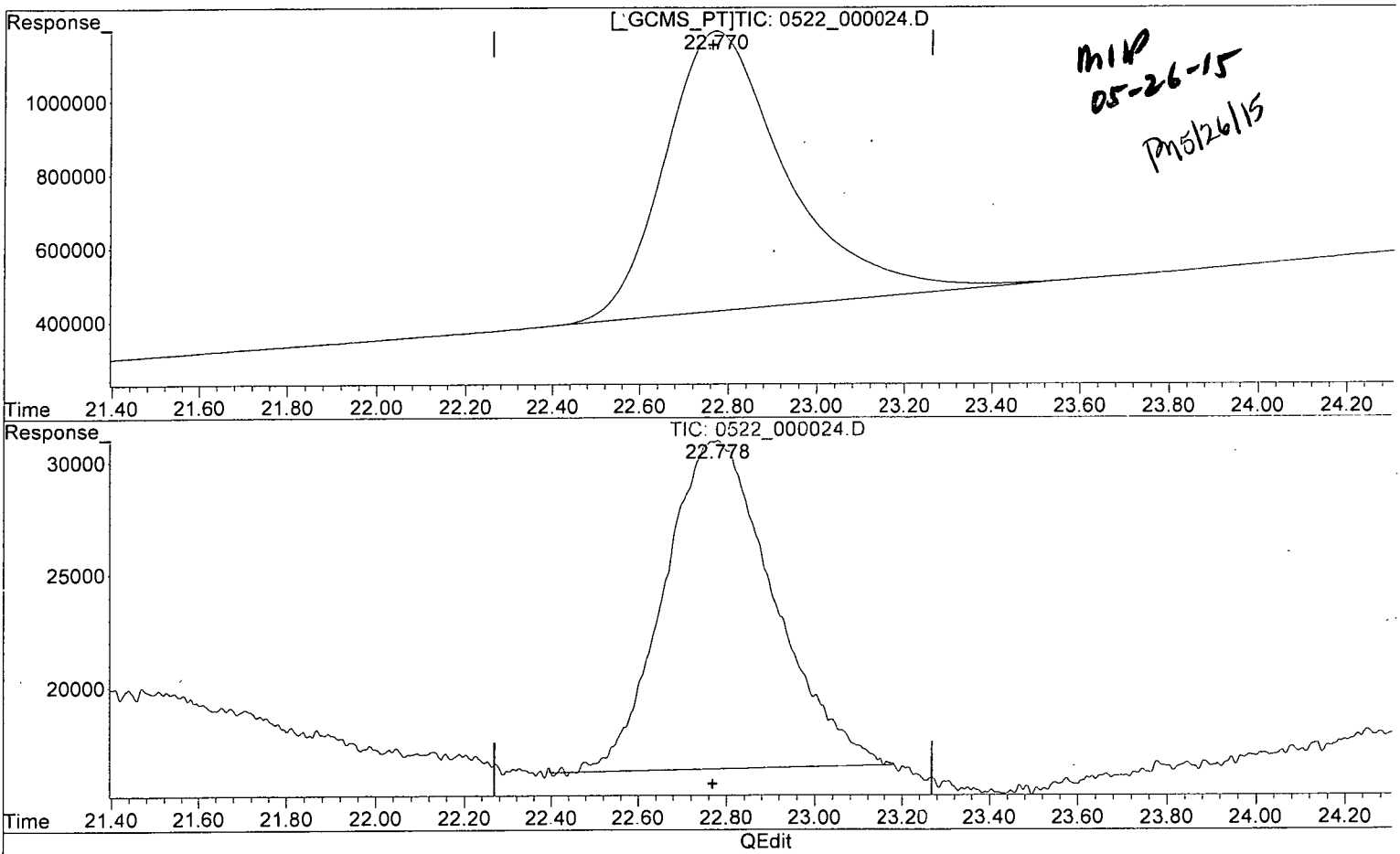
(+) = Expected Retention Time

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-



(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_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 #

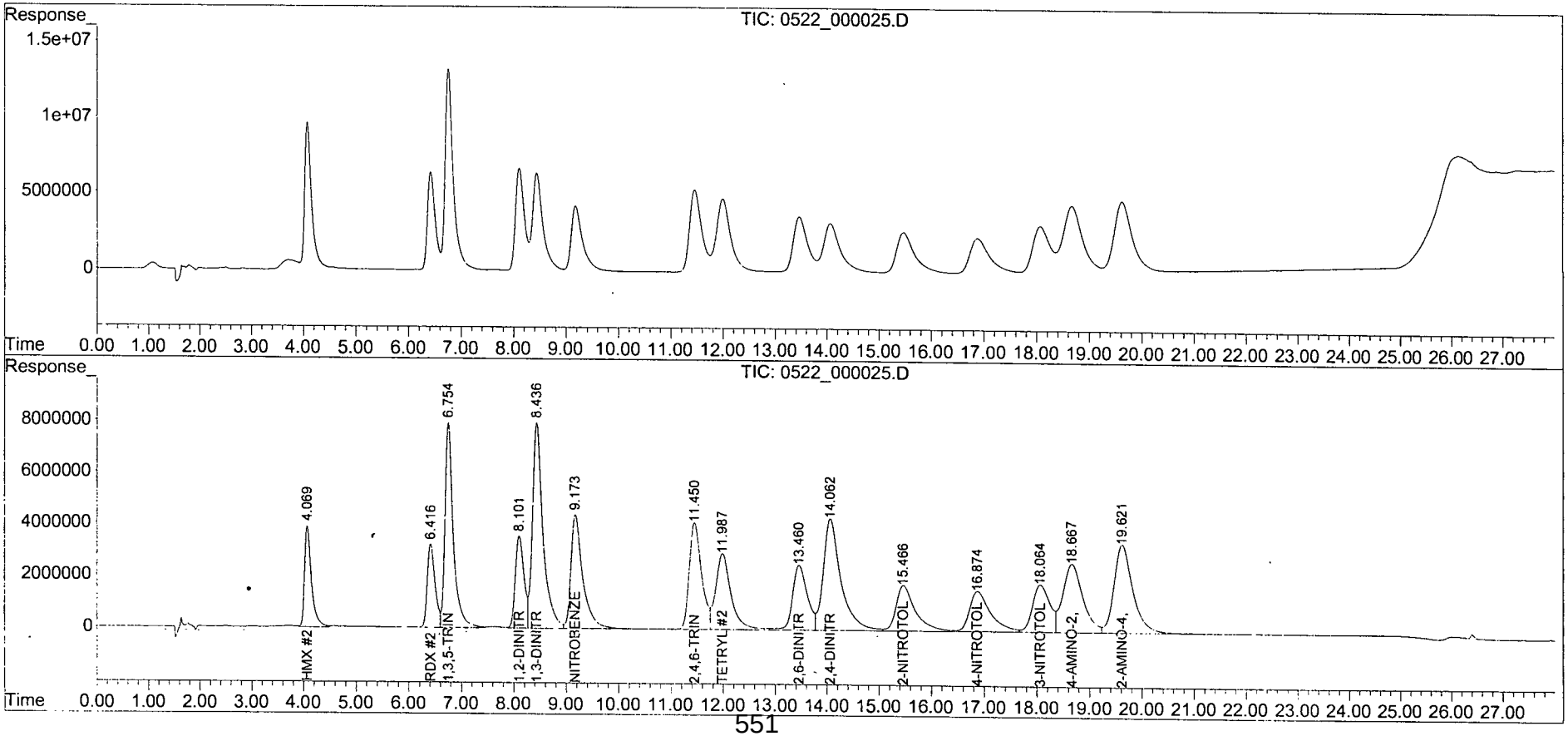
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150522\
Data File : 0522_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

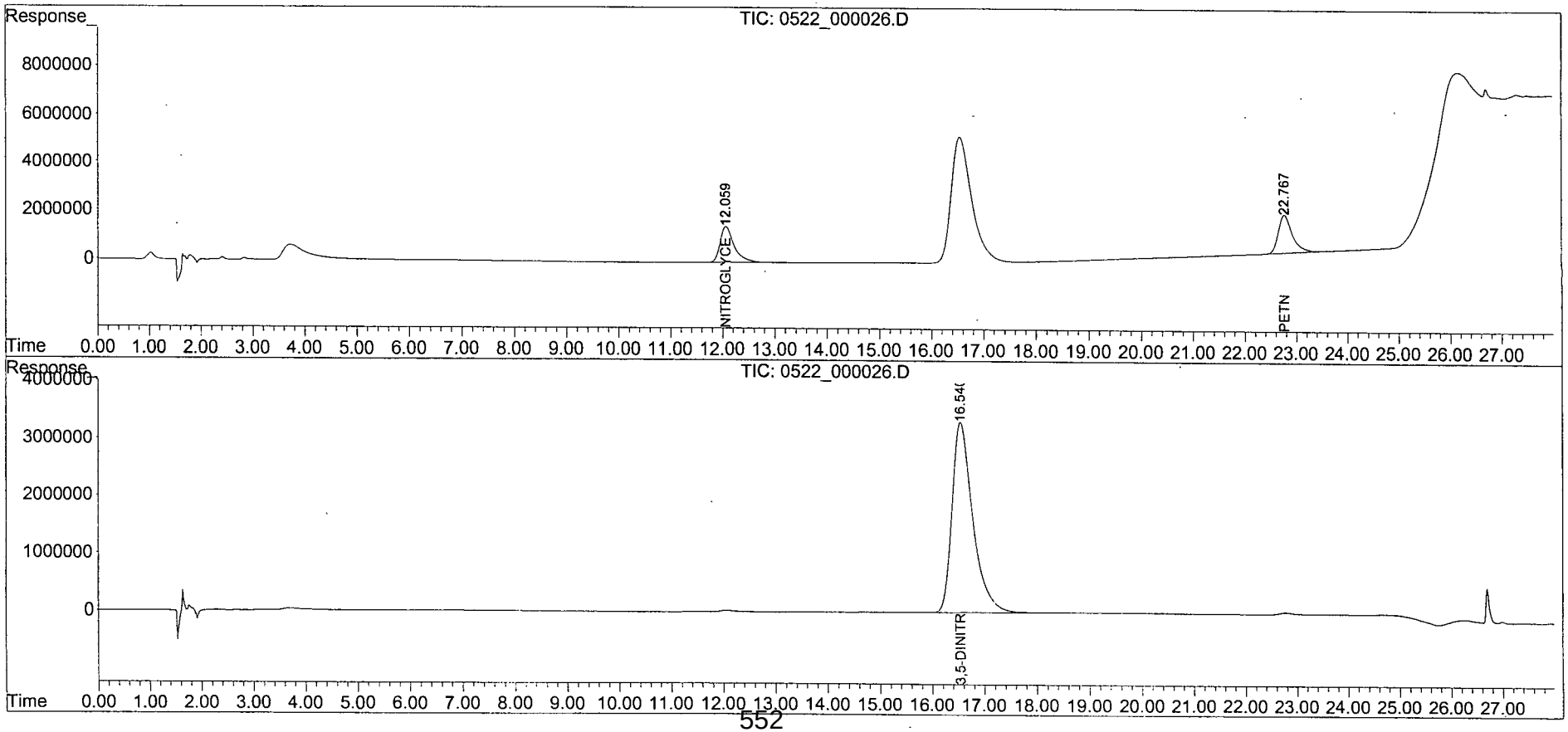


Quantitation Report (QT Reviewed)

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

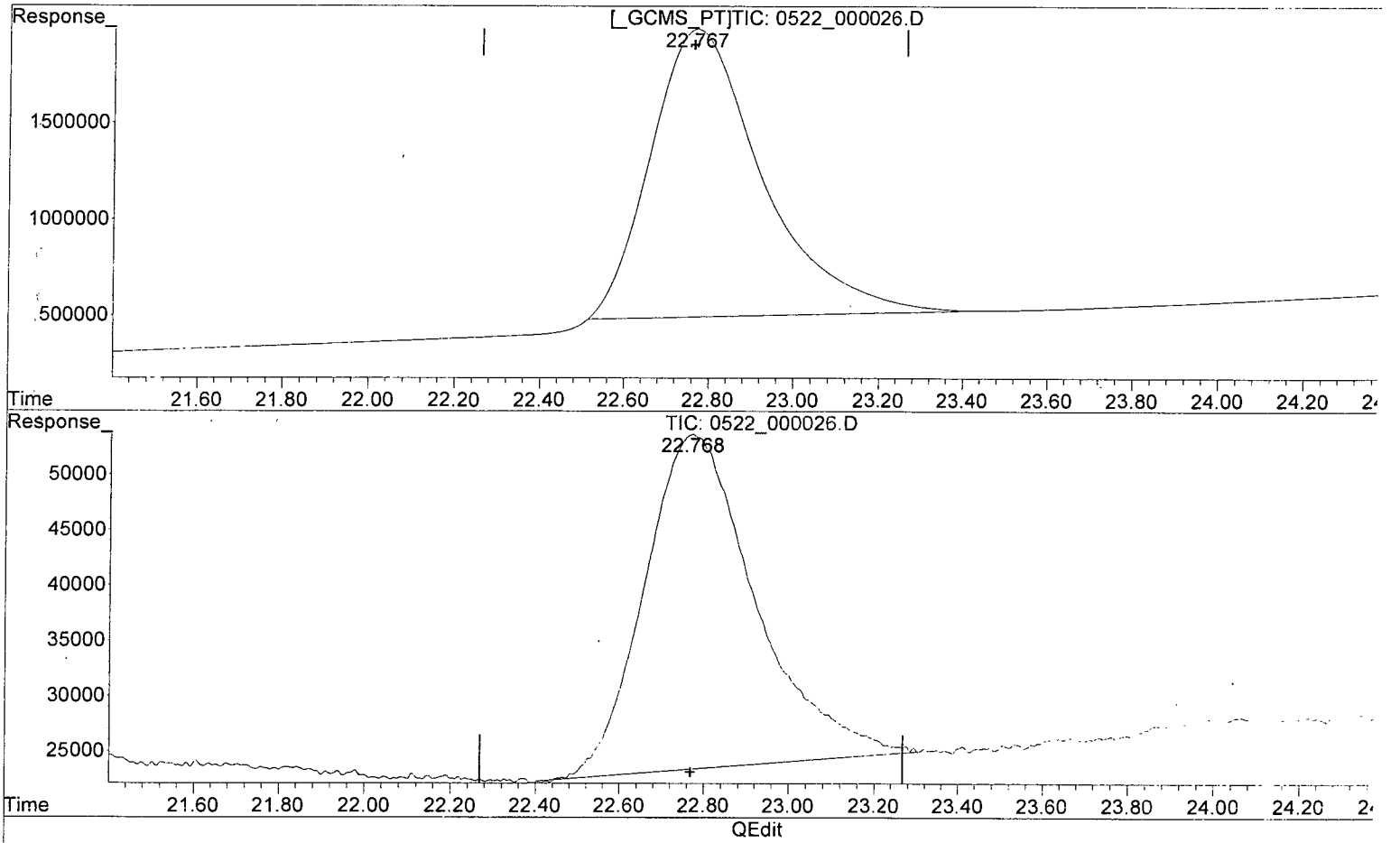


Quantitation Report (Qedit)

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)

22.769min 1638.003 ppb

response 1494619

(18) PETN #2 (TM)

22.769min 0.000 ppb

response 30238

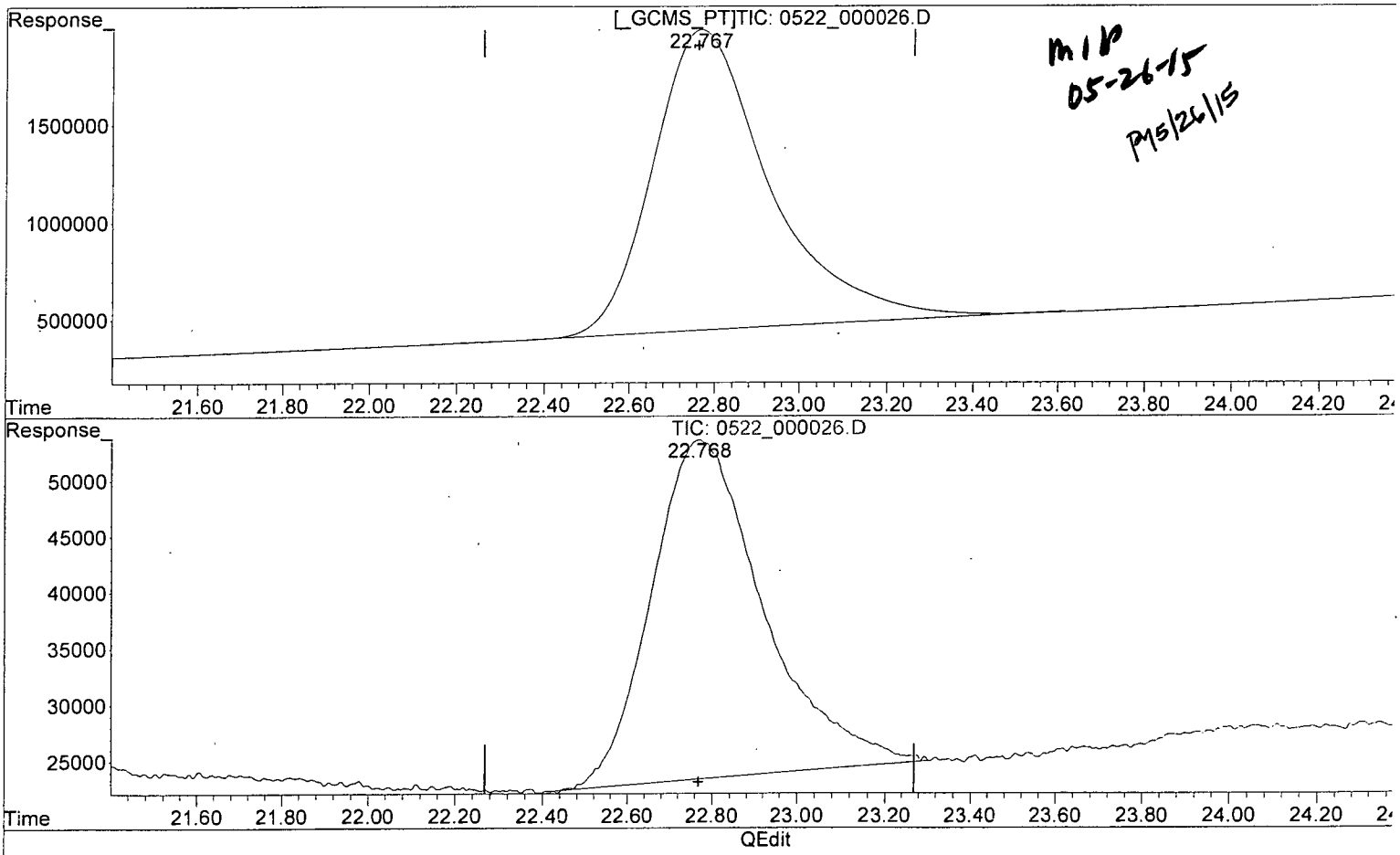
(+) = Expected Retention Time

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: 76687
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							
22							
23							
24							
25							
26							
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35							
36							
37							
38							
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.

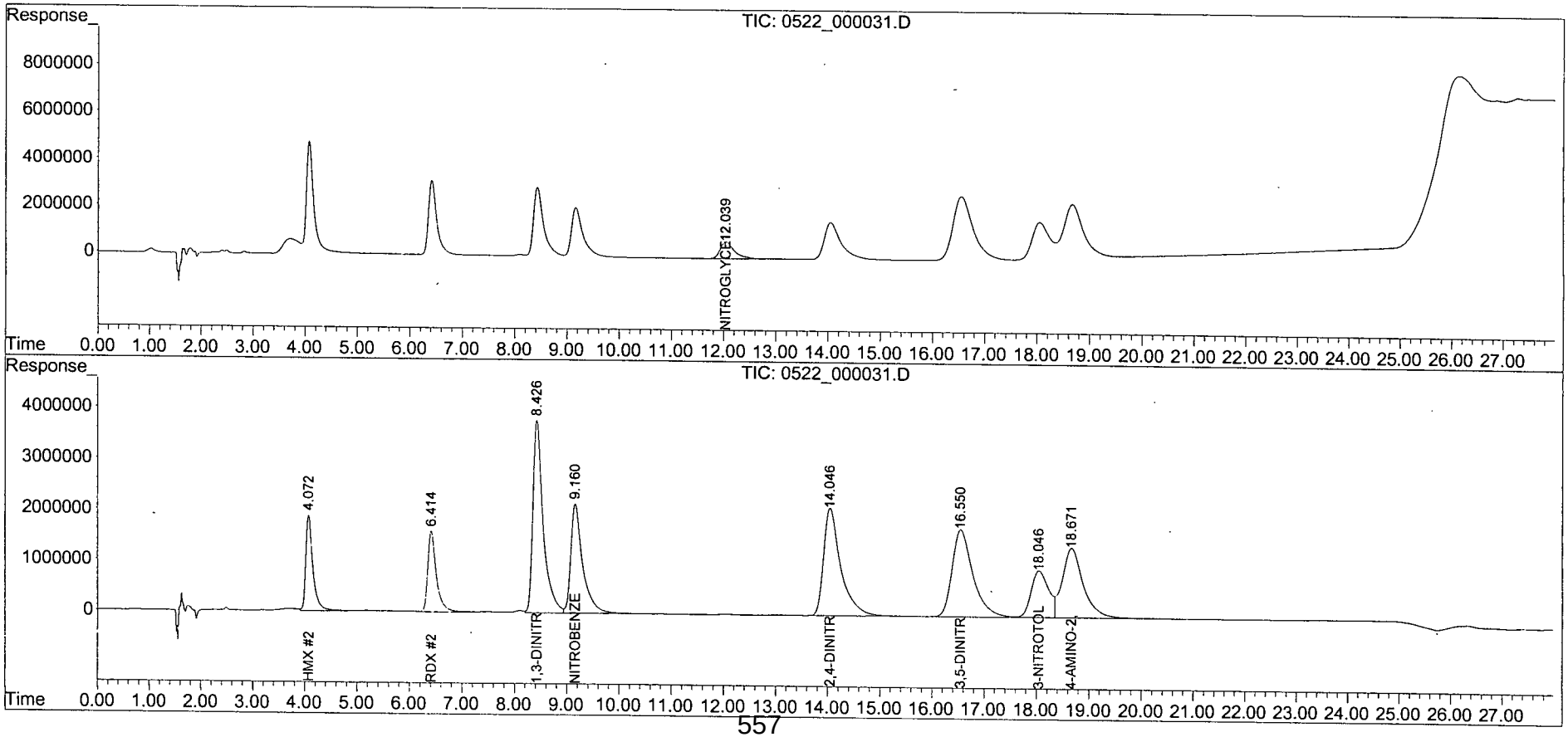
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

Page: 2

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.

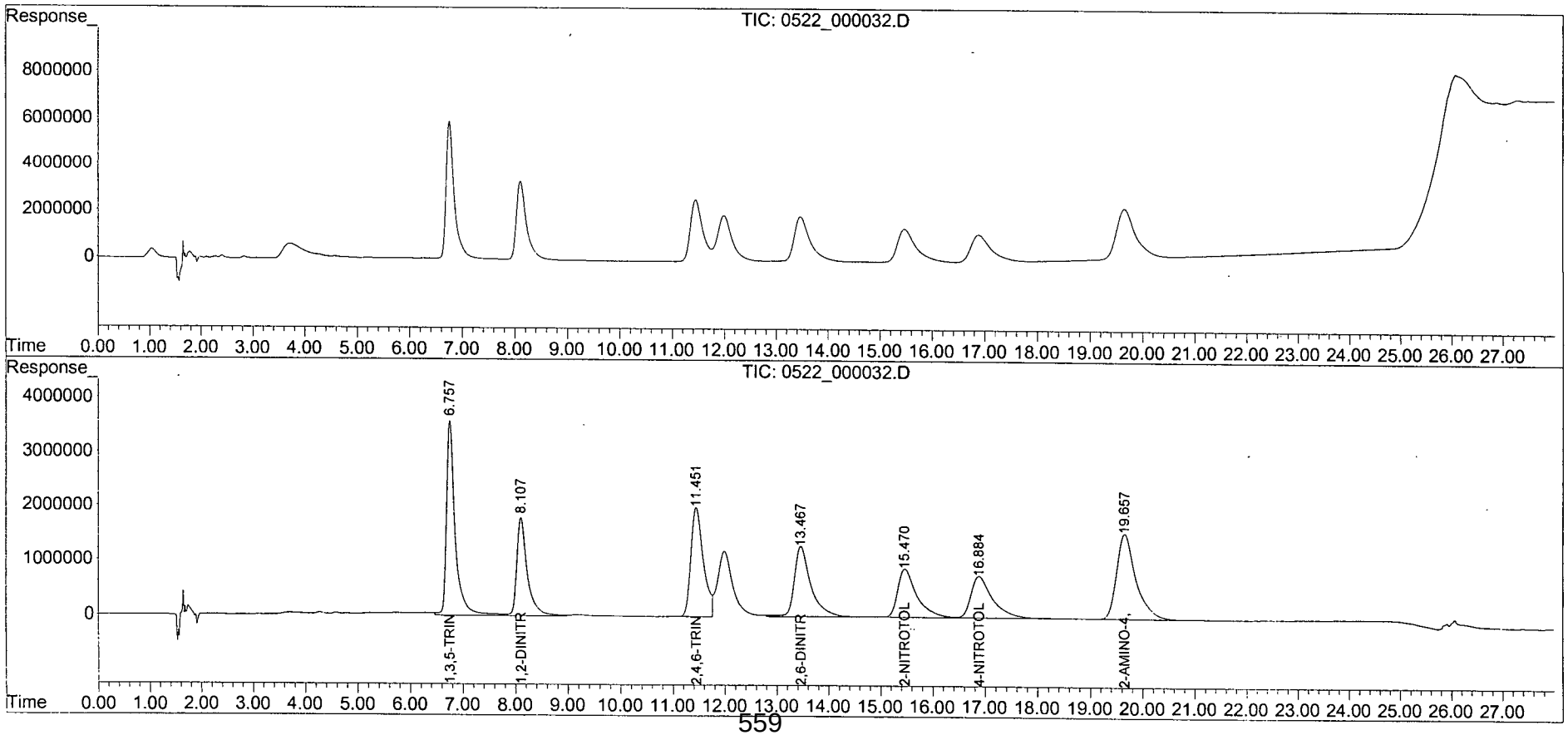
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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



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. #

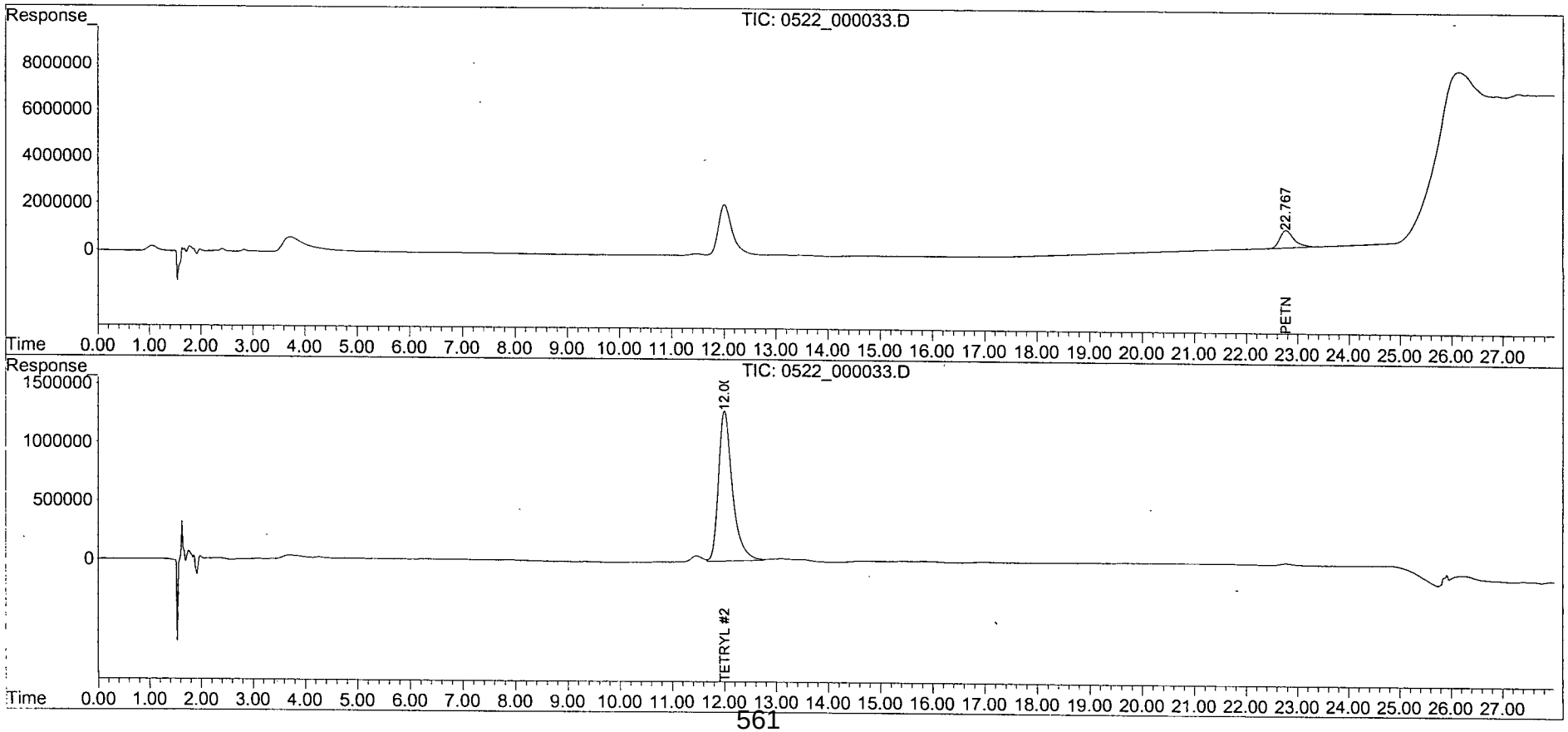
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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

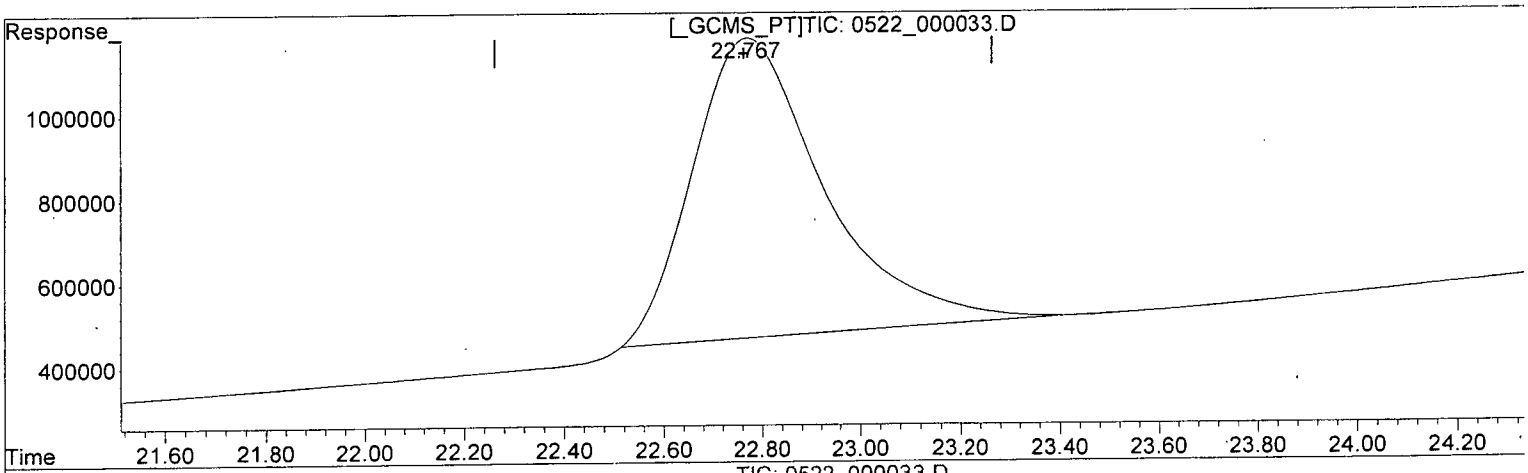


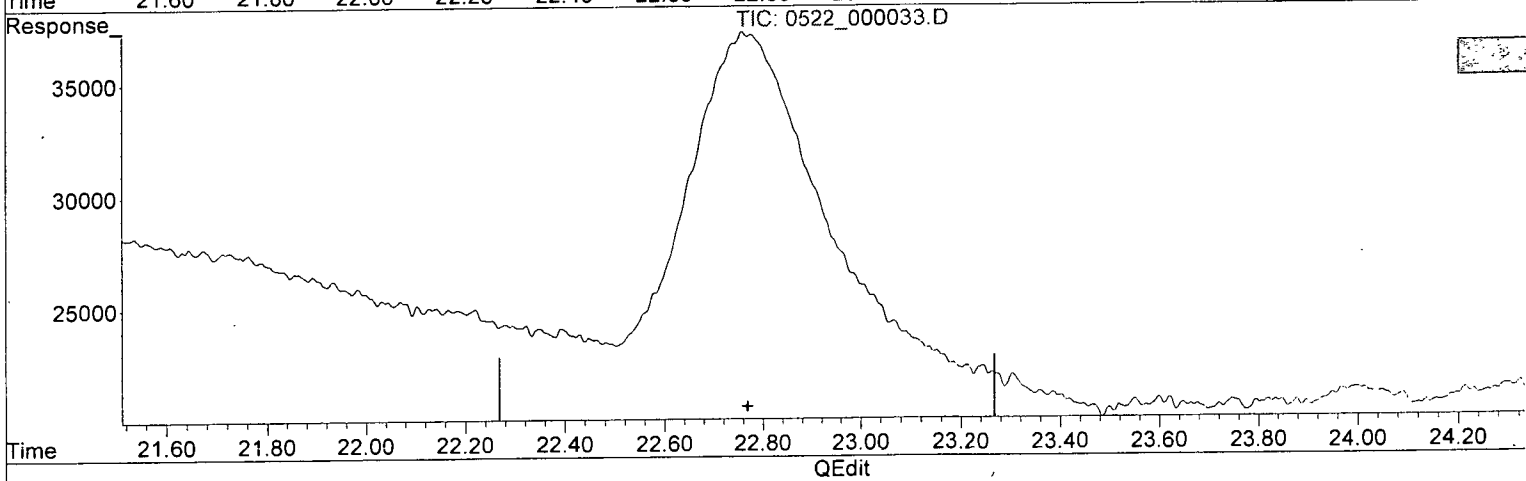
Quantitation Report (Qedit)

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-µ





QEdit

(18) PETN (TM)

22.769min 982.640 ppb

response 713587

(18) PETN #2 (TM)

0.000min 0.000 ppb

response 0

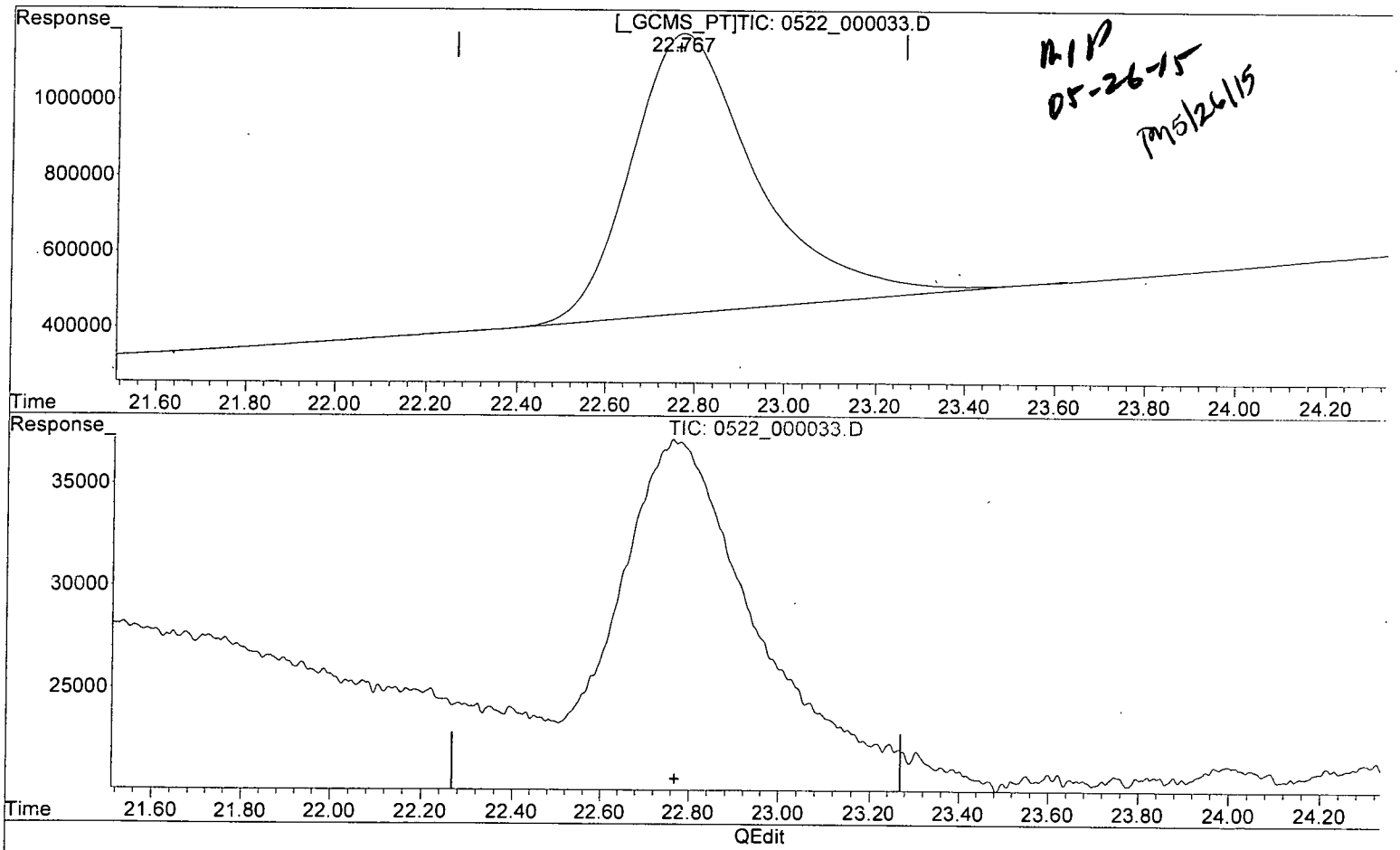
(+) = Expected Retention Time

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-



NAD 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. SDG No: 71687

Case No: Date Analyzed: 24-Jun-2015, 14:00:10

Matrix: Instrument: Statler

Initial Cal. Date: 05/22/15

Data File: 0624_000004-05.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	18.6	18.5	0.26	TM	
2	TM	PETN	18.2	18.7	3.0	TM	
3		Signal #2					
4	TM	3,5-DINITROANILINE	41.3	42.0	1.6	TM	
5	TM	HMX	46.3	46.7	1.0	TM	
6	TM	RDX	39.8	39.0	2.0	TM	
7	TM	1,3,5-TRINITROBENZENE	97.9	97.5	0.39	TM	
8	S	1,2-DINITROBENZENE	44.3	43.7	1.2	S	
9	TM	1,3-DINITROBENZENE	96.6	96.6	0.04	TM	
10	TM	NITROBENZENE	54.2	53.9	0.62	TM	
11	TM	2,4,6-TRINITROTOLUENE	50.2	50.3	0.13	TM	
12	TM	TETRYL	36.6	39.7	8.7	TM	
13	TM	2,6-DINITROTOLUENE	30.0	29.9	0.21	TM	
14	TM	2,4-DINITROTOLUENE	51.7	52.3	1.1	TM	
15	TM	2-NITROTOLUENE	21.2	20.8	1.9	TM	
16	TM	4-NITROTOLUENE	18.3	18.1	0.60	TM	
17	TM	3-NITROTOLUENE	22.9	21.7	5.5	TM	
18	TM	4-AMINO-2,6-DINITROTOLUEN	34.2	33.0	3.5	TM	
19	TM	2-AMINO-4,6-DINITROTOLUEN	43.0	40.4	6.1	TM	
20							
21							
22							
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Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 13:20:40
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 24 15:14:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Wed Jun 24 15:13:39 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	8.053	0	1749915	N.D.	987.855 #
Spiked Amount 62.500			Recovery	=	0.00%	1580.57%
Target Compounds						
1) TM HMX	0.000	4.039	0	1869541	N.D.	1010.066 #
2) TM RDX	0.000	6.363	0	1558593	N.D.	979.725 #
3) TM 1,3,5-TRI...	0.000	6.729	0	3900796	N.D.	996.050 #
5) TM 1,3-DINIT...	0.000	8.393	0	3864091	N.D.	1000.411 #
6) TM NITROBENZENE	0.000	9.138	0	2155361	N.D.	993.784 #
7) TM 2,4,6-TRI...	0.000	11.392	0	2011044	N.D.	1001.281 #
8) TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9) TM TETRYL	11.880	11.879	1570212	1589887	NoCal	1087.274 #
10) TM 2,6-DINIT...	13.384	13.383	1837951	1197455	NoCal	997.883 #
11) TM 2,4-DINIT...	0.000	13.976	0	2091083	N.D.	1010.792 #
12) TM 2-NITROTO...	0.000	15.396	0	830140	N.D.	980.826 #
13) TM 4-NITROTO...	0.000	16.793	0	725980	N.D.	993.990 #
14) TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
15) TM 3-NITROTO...	0.000	17.989	0	866293	N.D.	944.712 #
16) TM 4-AMINO-2...	0.000	18.459	0	1318348	N.D.	964.872 #
17) TM 2-AMINO-4...	0.000	19.424	0	1614785	N.D.	939.092 #
18) TM PETN	0.000	0.000	0	0	N.D.	N.D.

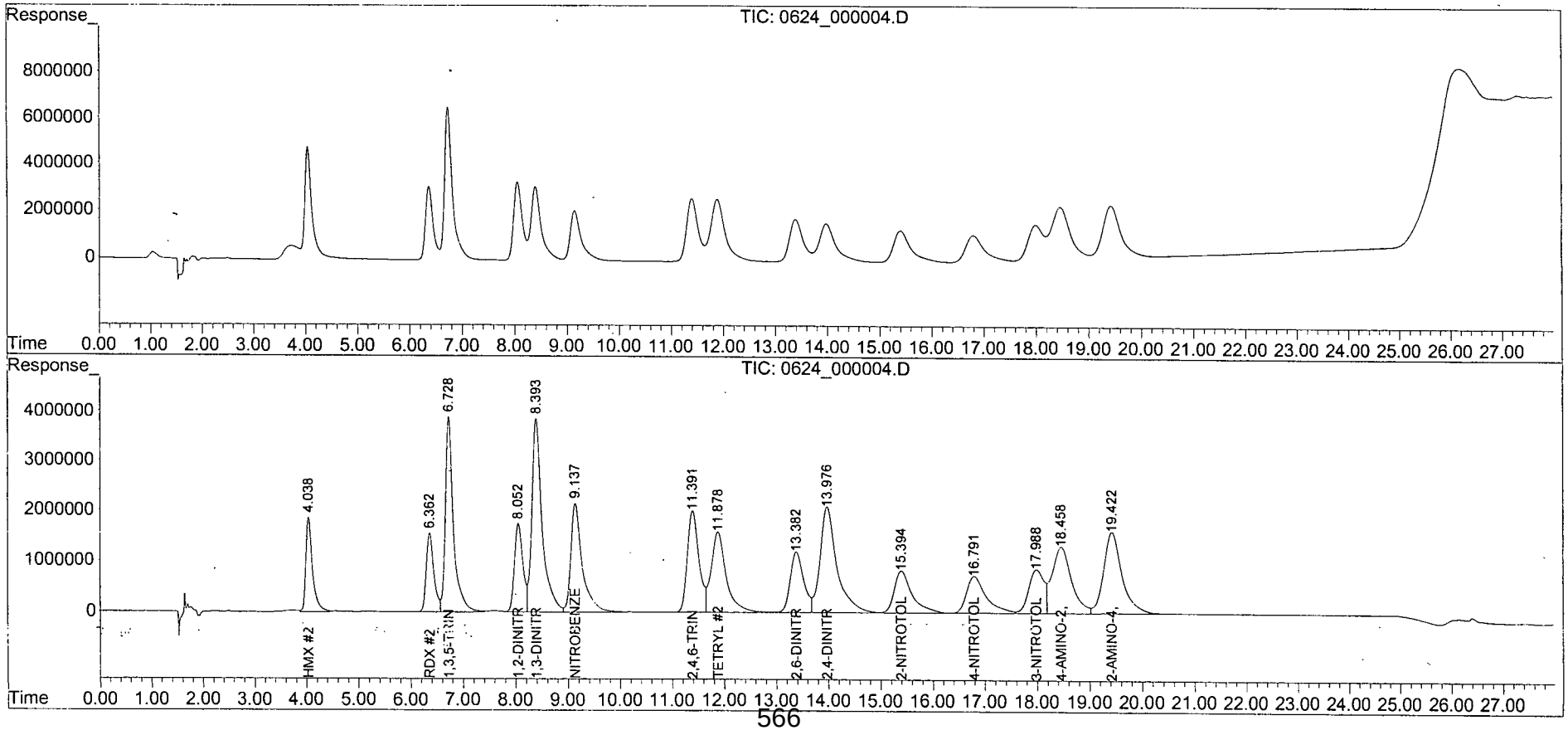
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 13:20:40
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 24 15:14:50 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\STE2_150522.M
Quant Title : 8330 A + B - Statler
QLast Update : Wed Jun 24 15:13:39 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\150624\
Data File : 0624_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 14:00:10
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 24 15:14:10 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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...	11.975	0.000	740111	0	997.421	N.D. d#
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	13.347	0.000	1195	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	16.299	0	1680219	N.D.	1016.135 #
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	22.667	22.665	748252	14085	1030.375	NoCal #

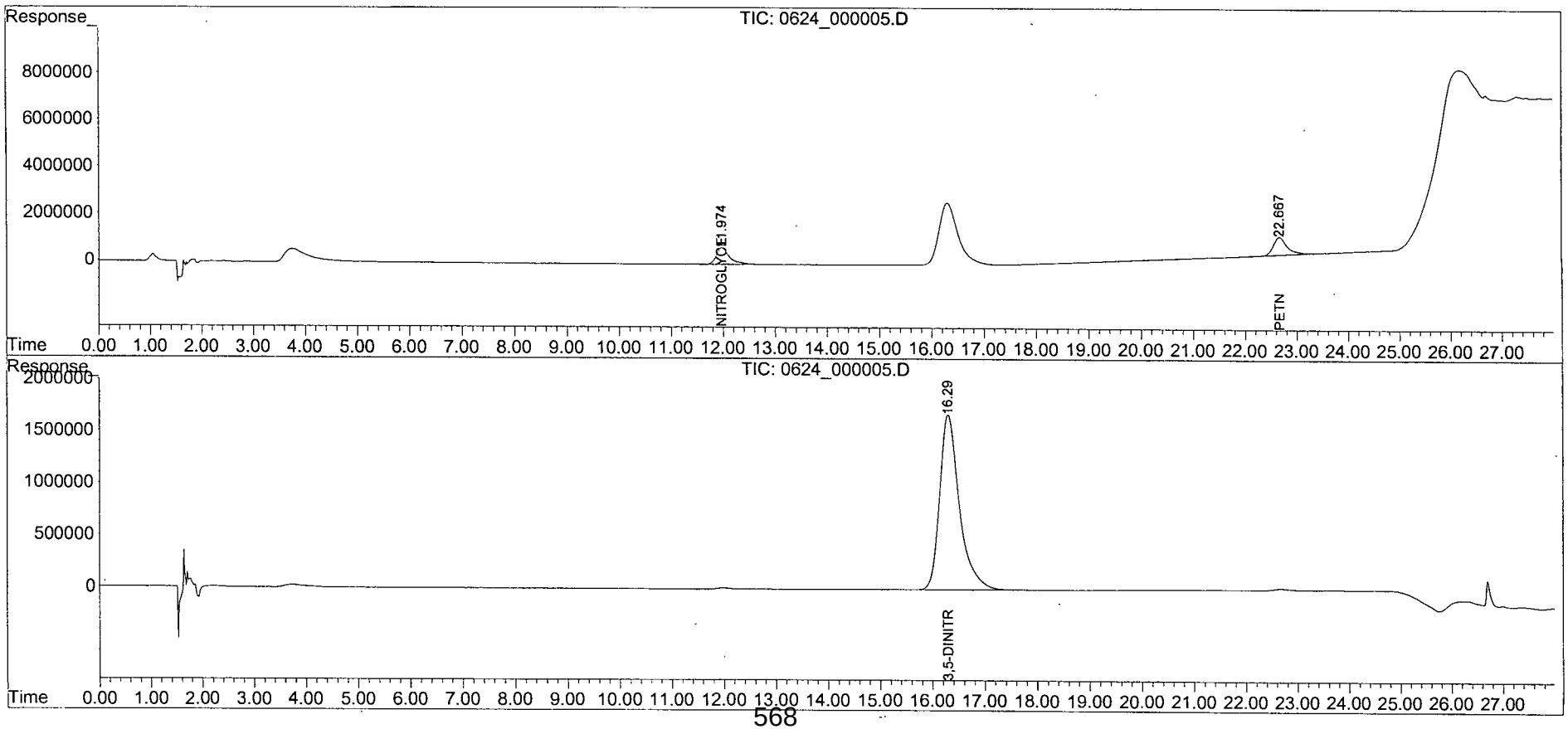
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 14:00:10
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 24 15:14:10 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



Form 7

Continuing Calibration

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

SDG No: 76687
Date Analyzed: 24-Jun-2015, 19:57:18
Instrument: Statler
Initial Cal. Date: 05/22/15
Data File: 0624_000015-16.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	18.6	18.2	2.0	TM	
2	TM	PETN	18.2	18.2	0.29	TM	
3		Signal #2					
4	TM	3,5-DINITROANILINE	41.3	41.3	0.05	TM	
5	TM	HMX	46.3	46.3	0.00	TM	
6	TM	RDX	39.8	38.3	3.6	TM	
7	TM	1,3,5-TRINITROBENZENE	97.9	96.6	1.4	TM	
8	S	1,2-DINITROBENZENE	44.3	43.0	3.0	S	
9	TM	1,3-DINITROBENZENE	96.6	95.2	1.4	TM	
10	TM	NITROBENZENE	54.2	52.4	3.3	TM	
11	TM	2,4,6-TRINITROTOLUENE	50.2	49.6	1.1	TM	
12	TM	TETRYL	36.6	39.4	7.8	TM	
13	TM	2,6-DINITROTOLUENE	30.0	29.6	1.5	TM	
14	TM	2,4-DINITROTOLUENE	51.7	51.6	0.28	TM	
15	TM	2-NITROTOLUENE	21.2	20.2	4.6	TM	
16	TM	4-NITROTOLUENE	18.3	17.8	2.4	TM	
17	TM	3-NITROTOLUENE	22.9	21.1	7.8	TM	
18	TM	4-AMINO-2,6-DINITROTOLUEN	34.2	32.6	4.6	TM	
19	TM	2-AMINO-4,6-DINITROTOLUEN	43.0	39.5	8.2	TM	
20							
21							
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Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 19:17:48
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 11:21:42 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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	8.042	0	1718628	N.D.	970.193 #
	Spiked Amount 62.500			Recovery	=	0.00%	1552.31%
	Target Compounds						
1)	TM HMX	0.000	4.032	0	1850914	N.D.	1000.003 #
2)	TM RDX	0.000	6.353	0	1533219	N.D.	963.775 #
3)	TM 1,3,5-TRI...	0.000	6.725	0	3862342	N.D.	986.231 #
5)	TM 1,3-DINIT...	0.000	8.387	0	3809781	N.D.	986.351 #
6)	TM NITROBENZENE	0.000	9.132	0	2097130	N.D.	966.936 #
7)	TM 2,4,6-TRI...	0.000	11.386	0	1985421	N.D.	988.523 #
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D. d	N.D. d
9)	TM TETRYL	11.864	11.862	1583474	1575718	NoCal	1077.584 #
10)	TM 2,6-DINIT...	13.376	13.375	1818705	1182170	NoCal	985.145 #
11)	TM 2,4-DINIT...	0.000	13.964	0	2063047	N.D.	997.240 #
12)	TM 2-NITROTO...	0.000	15.386	0	807472	N.D.	954.043 #
13)	TM 4-NITROTO...	0.000	16.780	0	713126	N.D.	976.390 #
14)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.
15)	TM 3-NITROTO...	0.000	17.977	0	845437	N.D.	921.968 #
16)	TM 4-AMINO-2...	0.000	18.436	0	1304027	N.D.	954.391 #
17)	TM 2-AMINO-4...	0.000	19.397	0	1579058	N.D.	918.314 #
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.

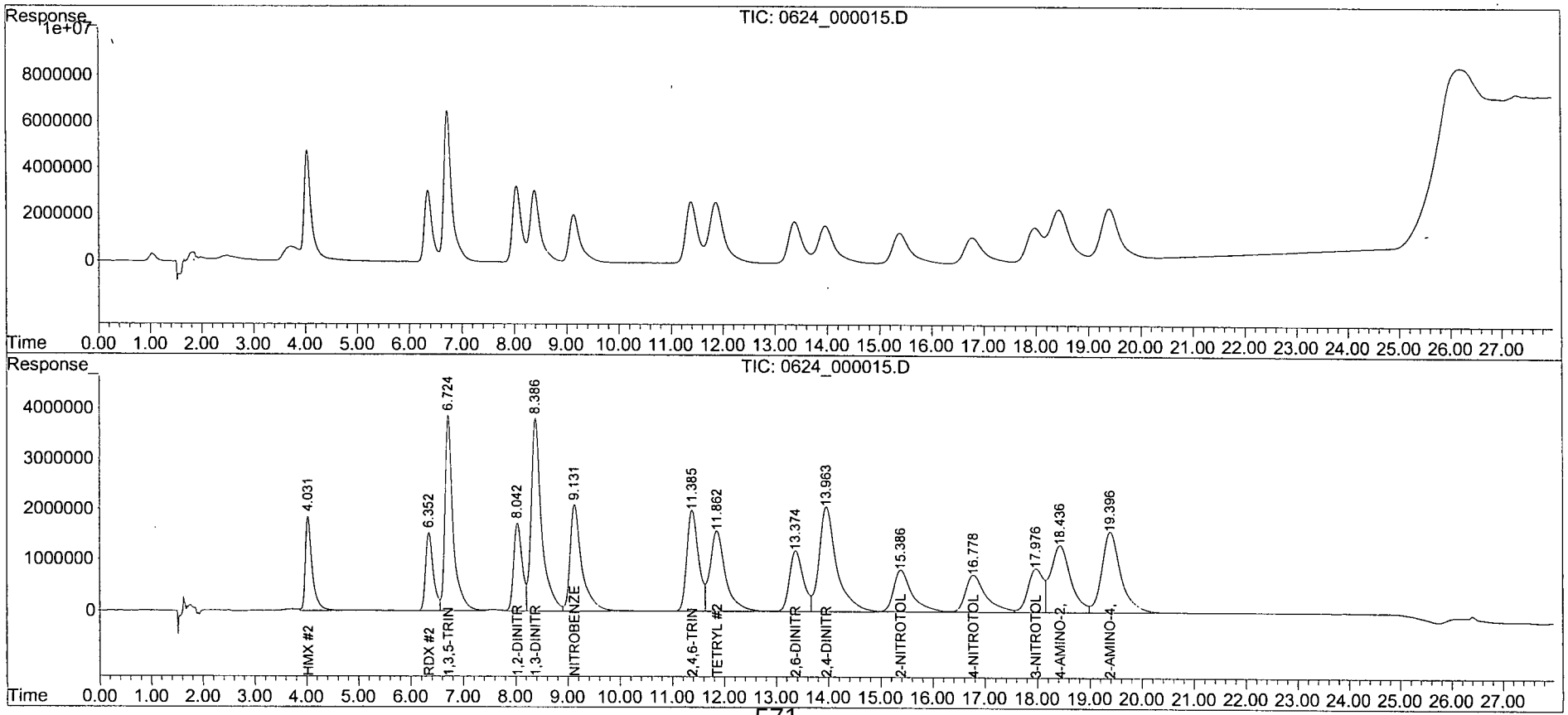
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000015.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 19:17:48
Operator : MP
Sample : 8330MXA_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4423 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 11:21:42 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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\150624\
Data File : 0624_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 19:57:18
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 11:22:33 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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...	11.961	11.953	727270	11368	980.116	NoCal #
9) TM TETRYL	0.000	0.000	0	0	N.D. d	N.D. d
10) TM 2,6-DINIT...	13.447	0.000	972	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	16.264	0	1652639	N.D.	999.455 #
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	22.649	22.648	728303	16354	1002.904	NoCal #

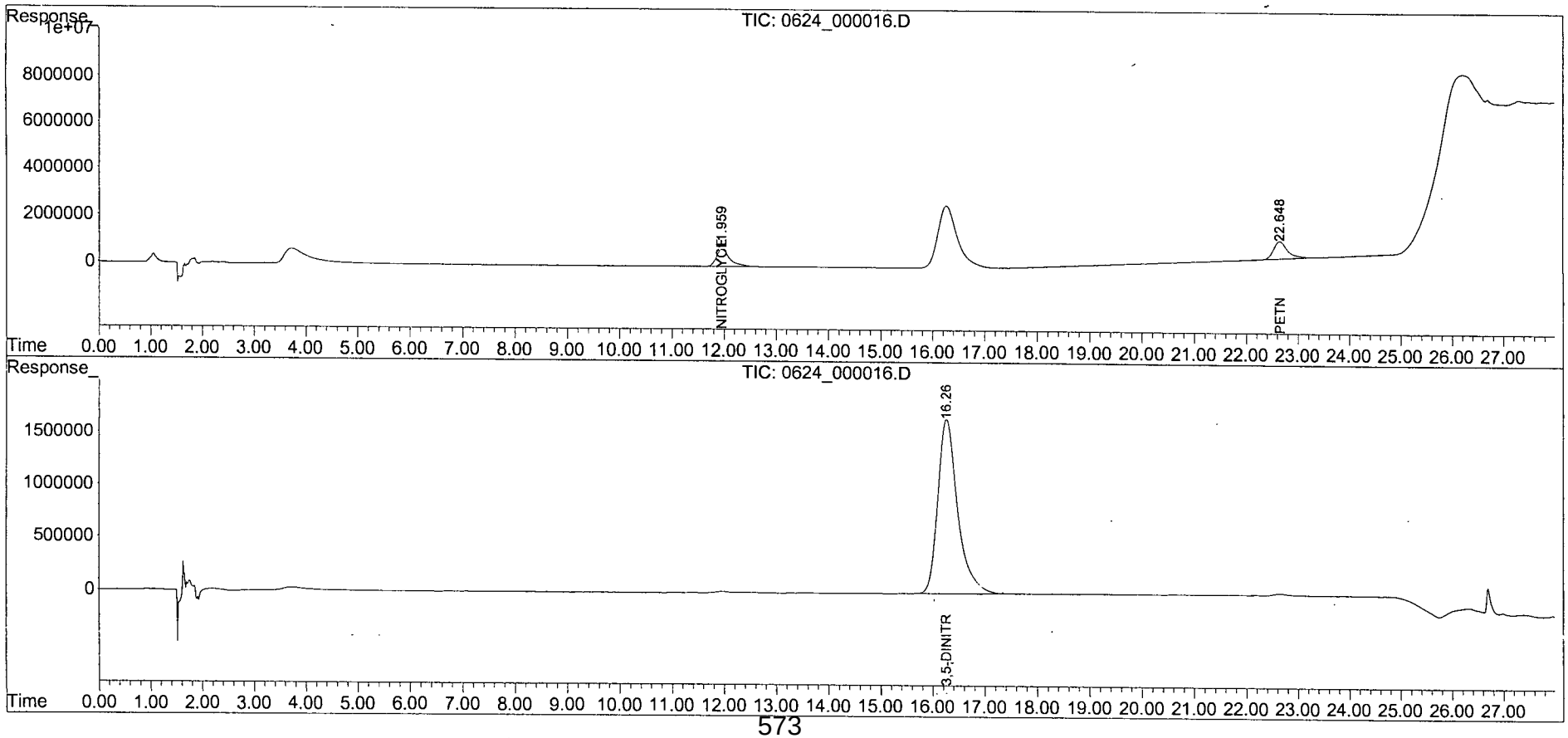
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000016.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 19:57:18
Operator : MP
Sample : 8330MXB_CCV 1.0 PPM 06/24/15
Misc :
ALS Vial : 4424 Sample Multiplier: 1

Integration File signal 1: STE2_Signal_1.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 25 11:22:33 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



Initial Calibration

Lab Name: APPL, Inc. SDG No: 76687

Case No: Initial Cal. Date: 06/27/15

Matrix: Instrument: Waldorf

Initials: MP

			0627_000004.D	0627_000005.D	0627_000006.D	0627_000007.D	0627_000008.D	0627_000009.D	0627_000010.D	0627_000011.D	0627_000027.D				
		Compound	1	2	3	4	5	6	7	8	9		Avg	%RSD	
####	TM	NITROGLYCERIN	149	173	160	151	151	150	130	146	145		150.6	7.6	TM
####	TM	PETN			128	133	128	129	113	128	128		126.7	5.0	TM
####		Signal #2													
####	TM	HMX #2	689	712	727	712	714	719	618	692	692		697.3	4.7	TM
####	TM	RDX #2	435	474	455	460	465	466	411	458	460		453.9	4.2	TM
####	TM	1,3,5-TRINITROBENZENE #2	838	834	844	834	832	842	731	815	824		821.5	4.3	TM
####	S	1,2-DINITROBENZENE #2	361	357	363	361	362	364	318	360	370		357.5	4.2	S
####	TM	1,3-DINITROBENZENE #2	758	762	773	768	768	778	680	769	787		760.5	4.1	TM
####	TM	3,5-DINITROANILINE #2	651	660	673	667	668	674	592	665	660		656.6	3.9	TM
####	TM	NITROBENZENE #2	351	352	353	351	351	355	309	350	358		347.7	4.3	TM
####	TM	TETRYL #2	281	295	293	280	298	271	237	264	282		277.7	6.8	TM
####	TM	2,4,6-TRINITROTOLUENE #2	357	357	362	355	353	359	309	350	356		350.9	4.6	TM
####	TM	2-AMINO-4,6-DINITROTOLUENE	332	340	346	342	342	345	298	339	346		336.6	4.5	TM
####	TM	4-AMINO-2,6-DINITROTOLUENE	254	252	257	253	253	255	220	248	252		249.4	4.6	TM
####	TM	2,4-DINITROTOLUENE #2	328	327	333	330	328	333	288	329	338		326.1	4.6	TM
####	TM	2,6-DINITROTOLUENE #2	186	186	188	187	186	188	162	185	190		184.3	4.6	TM
####	TM	2-NITROTOLUENE #2	133	136	138	133	134	135	116	134	137		132.9	4.9	TM
####	TM	4-NITROTOLUENE #2	135	133	135	130	131	132	114	131	135		130.6	5.0	TM
####	TM	3-NITROTOLUENE #2	155	155	159	157	157	159	137	157	162		155.3	4.6	TM
####															
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:32:24 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.723	0	72206	N.D.	5.536 #
Spiked Amount	62.500			Recovery	=	0.00%	8.86%
	Target Compounds						
1) TM	HMX	0.000	0.942	0	137888	N.D.	5.155m#
2) TM	RDX	0.000	1.790	0	87021	N.D.	5.111m#
3) TM	1,3,5-TRI...	0.000	2.916	0	167563	N.D.	5.562 #
5) TM	1,3-DINIT...	0.000	3.878	0	151682	N.D.	5.489 #
6) TM	3,5-DINIT...	0.000	4.137	0	130156	N.D.	5.476 #
7) TM	NITROBENZENE	0.000	5.287	0	70198	N.D.	5.599 #
8) TM	NITROGLYC...	6.195	0.000	29718	0	5.087m	N.D. #
9) TM	TETRYL	6.689	6.690	95673	56138	NoCal	5.146 #
10) TM	2,4,6-TRI...	7.150	7.152	99736	71368	NoCal	5.652 #
11) TM	2-AMINO-4...	7.516	7.518	111371	66371	NoCal	5.570 #
12) TM	4-AMINO-2...	7.876	7.874	99976	50898	NoCal	5.725 #
13) TM	2,4-DINIT...	8.999	8.992	60635	65628	NoCal	5.681 #
14) TM	2,6-DINIT...	9.356	9.355	65824	37239	NoCal	5.589 #
15) TM	2-NITROTO...	0.000	12.773	0	26615	N.D.	5.269m#
16) TM	4-NITROTO...	0.000	13.358	0	26945	N.D.	5.258m#
17) TM	3-NITROTO...	0.000	14.228	0	30957	N.D.	5.092 #
18) TM	PETN	0.000	0.000	0	0	N.D. d	N.D.

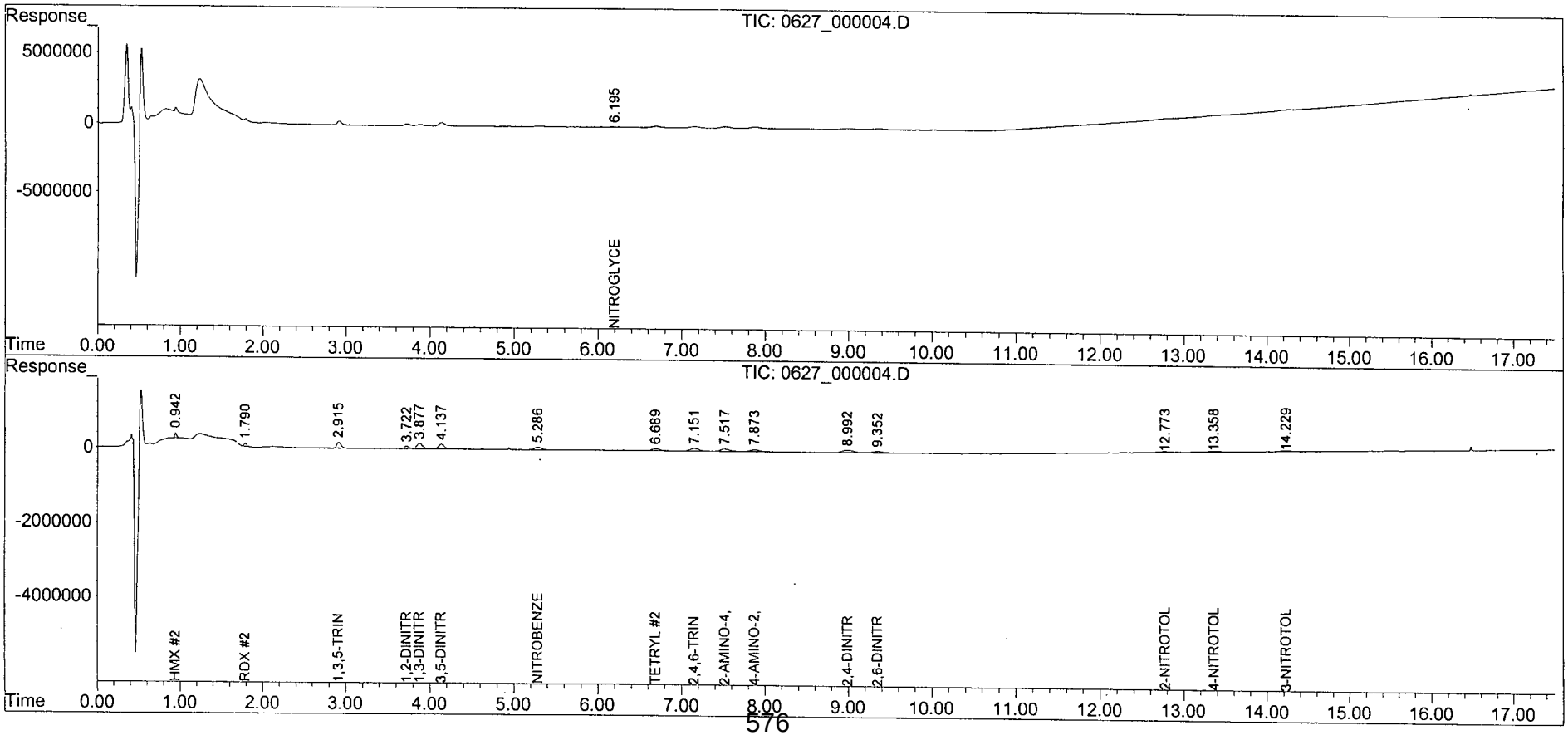
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:32:24 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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

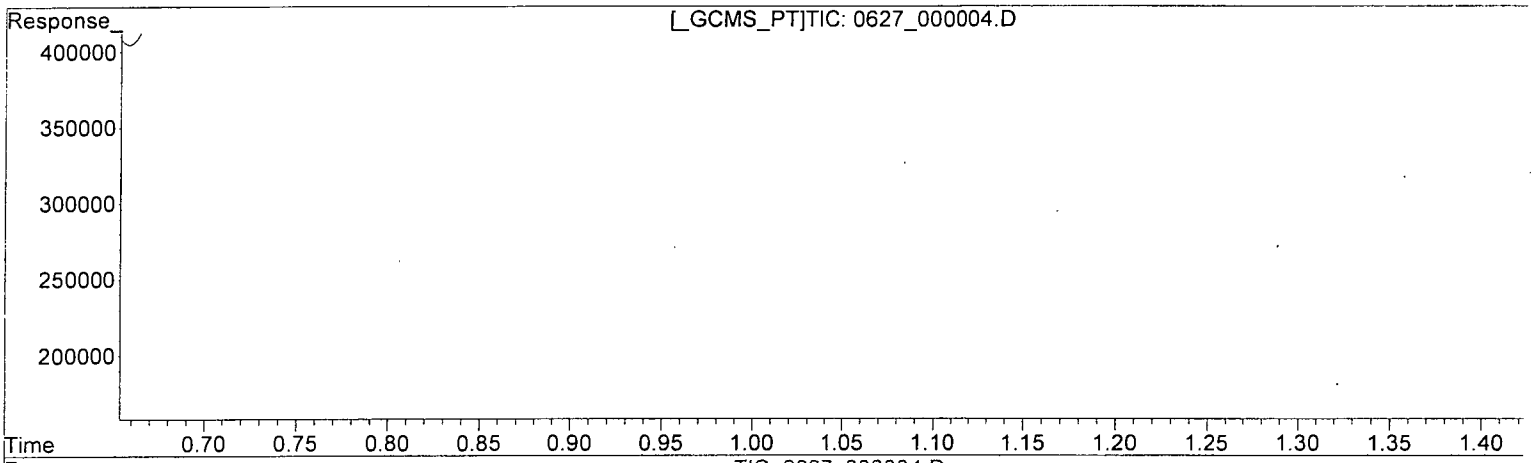


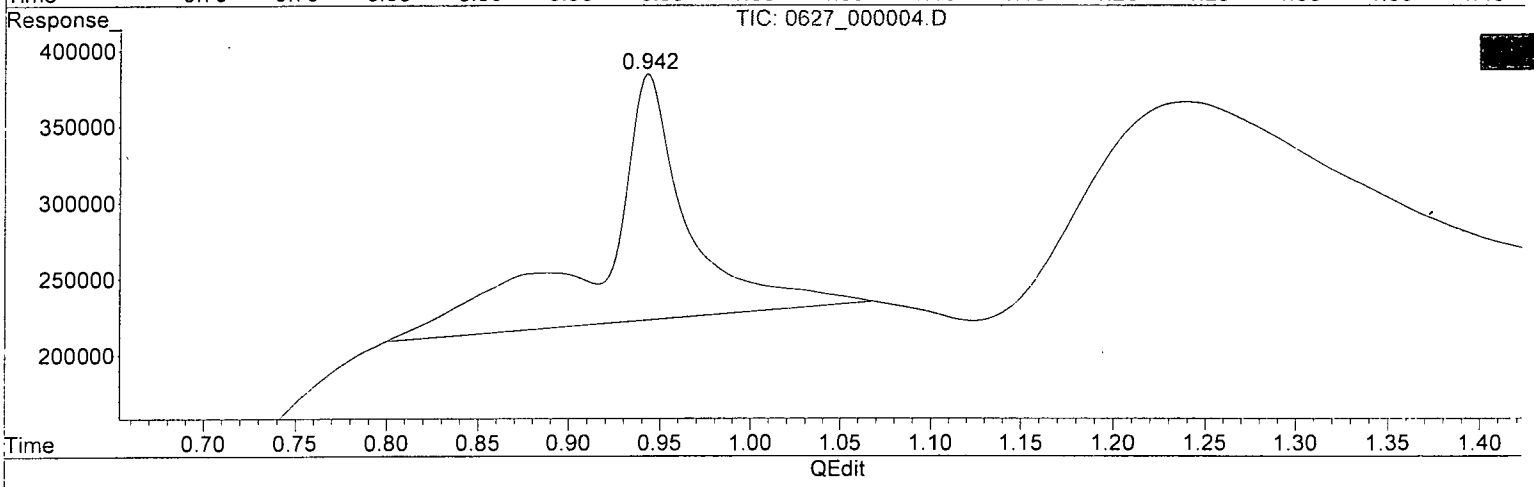
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

0.944min 5.990 ppb

response 160217

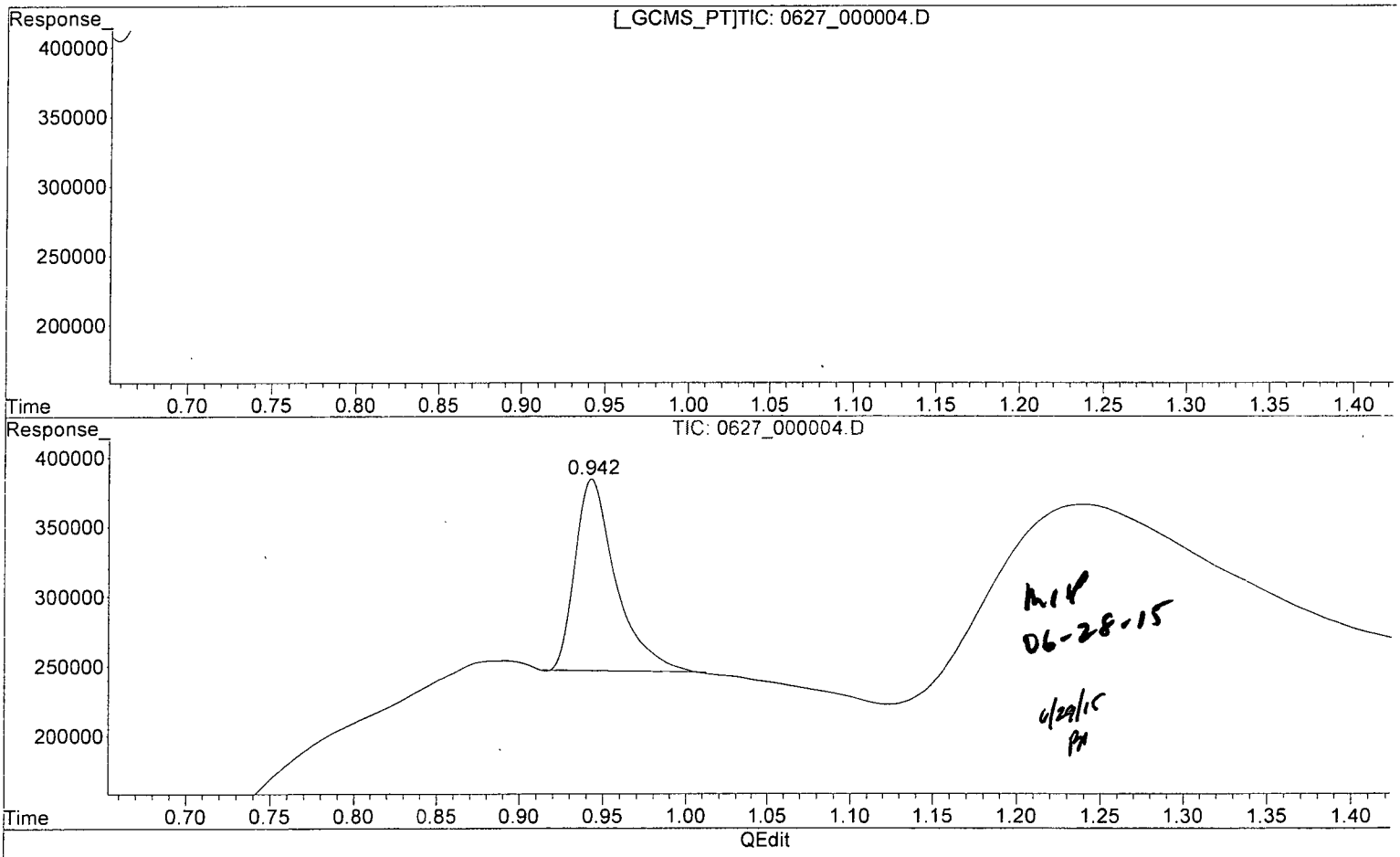
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

0.942min 5.155 ppb m

response 137888

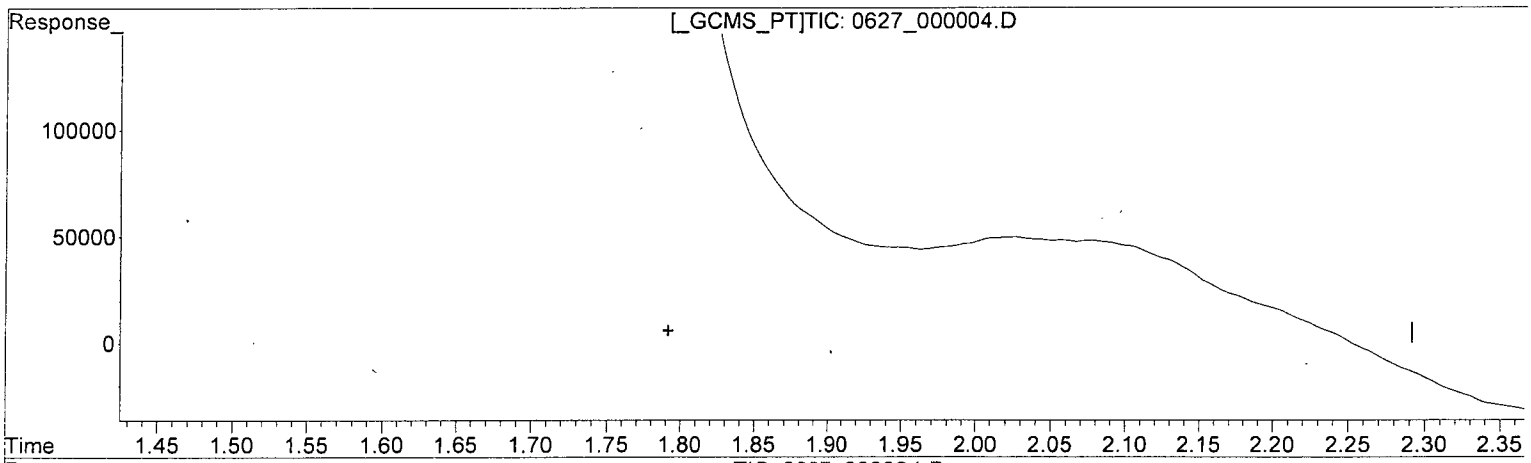
(+) = Expected Retention Time

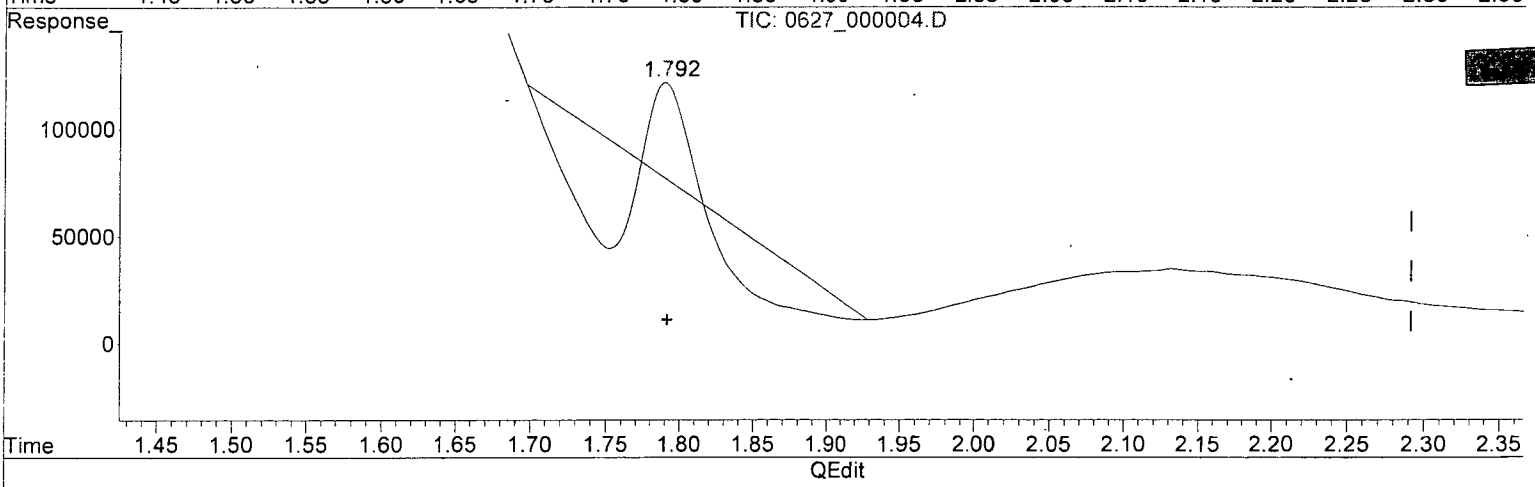
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2)r RDX #2 (TM)

1.790min 2.642 ppb

response 44976

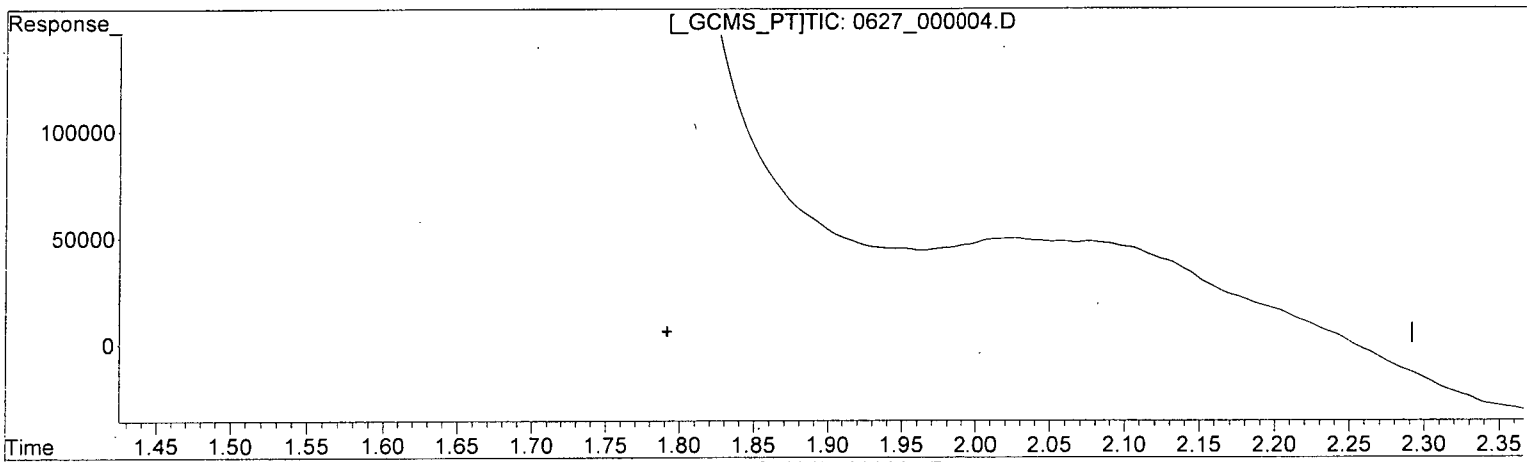
(+) = Expected Retention Time

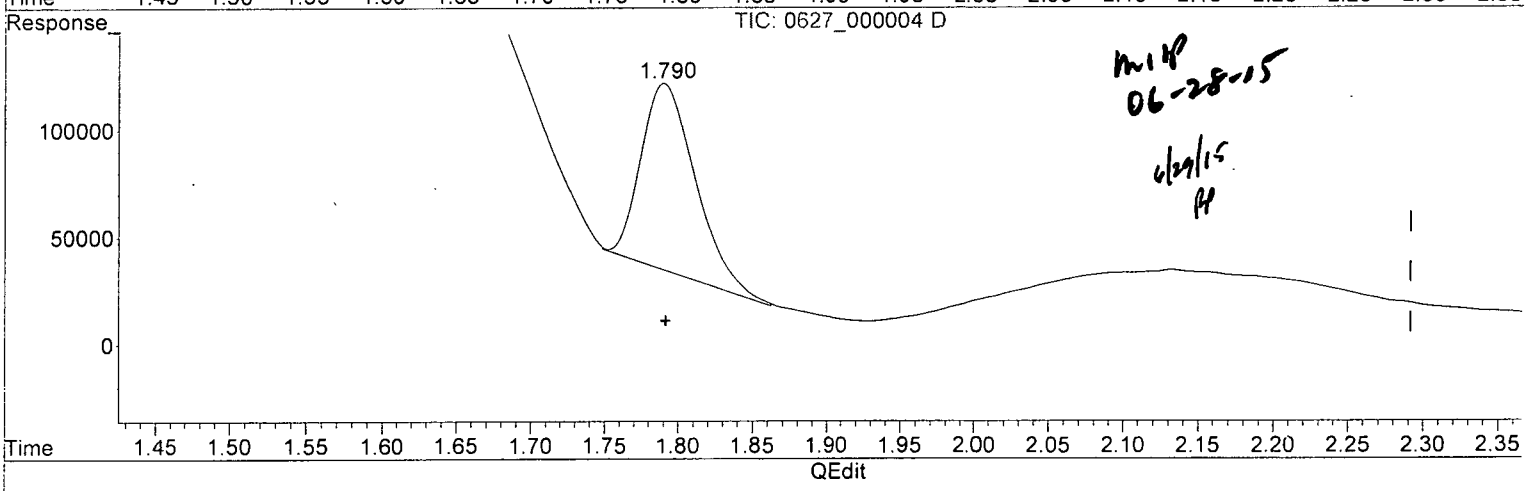
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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





MHP 06-28-15

6/29/15 MP

QEdit

(2) RDX (TM)

0.000min 0.000 ppb

response 0

(2) RDX #2 (TM)

1.790min 5.111 ppb m

response 87021

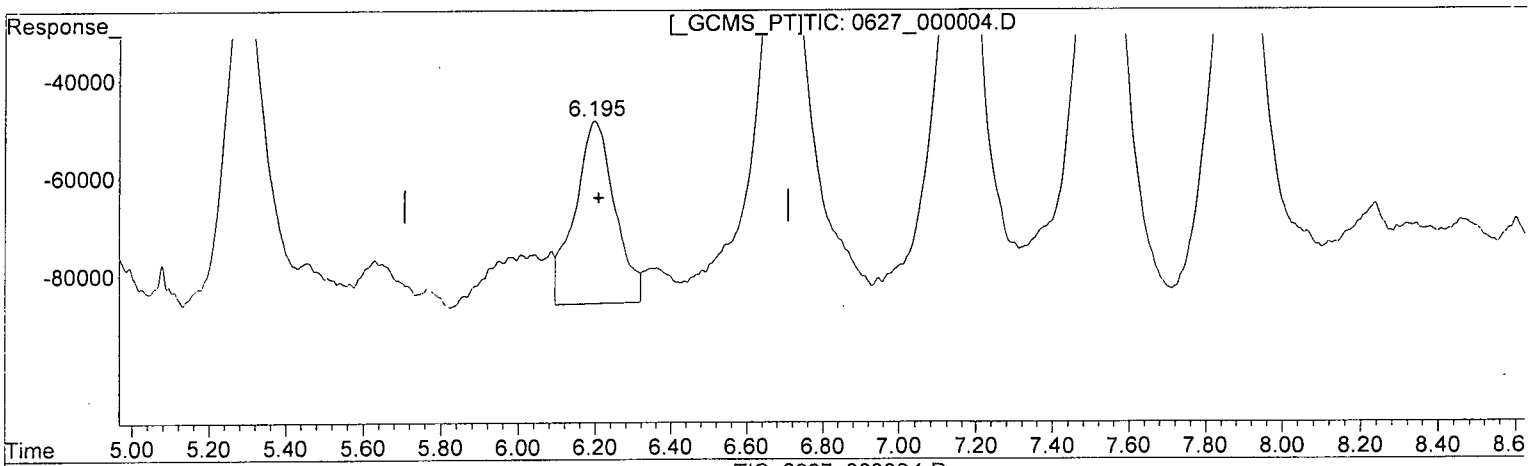
(+) = Expected Retention Time

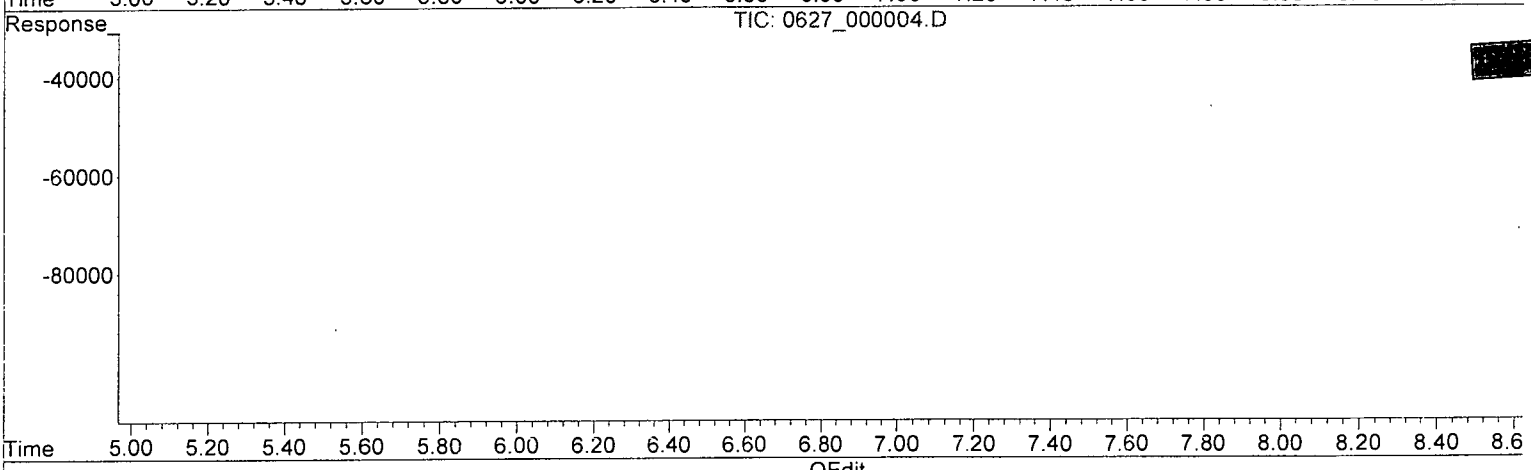
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

6.196min 6.392 ppb

response 37343

(8) NITROGLYCERIN #2 (TM)

0.000min 0.000 ppb

response 0

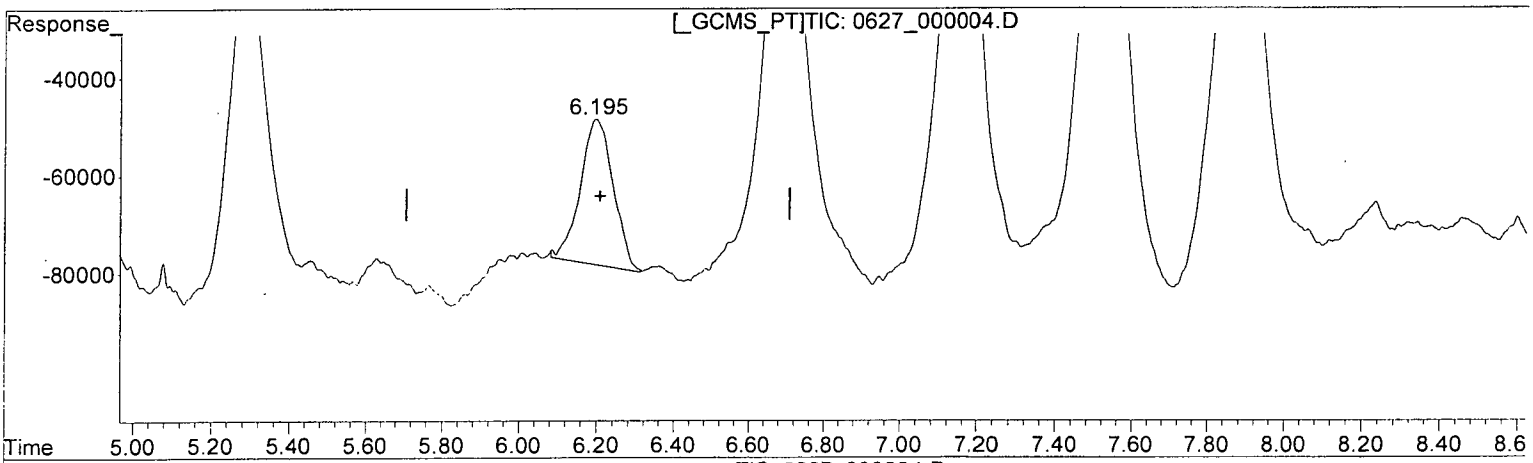
(+) = Expected Retention Time

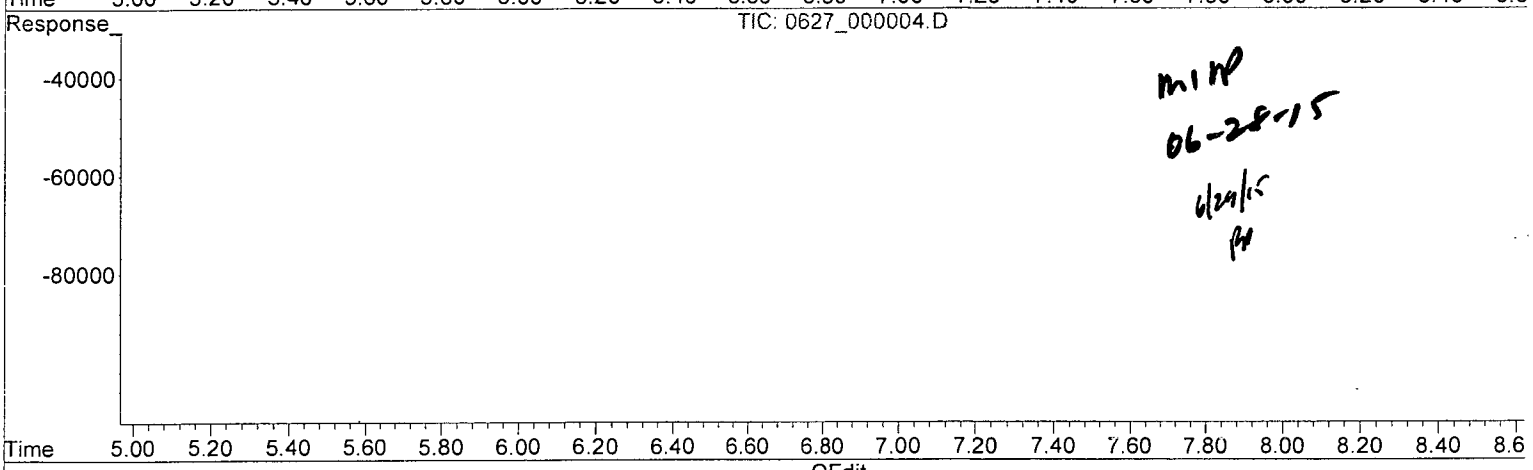
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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 06-28-15 6/29/15 PM

QEdit

(8) NITROGLYCERIN (TM)

6.195min 5.087 ppb m

response 29718

(8) NITROGLYCERIN #2 (TM)

0.000min 0.000 ppb

response 0

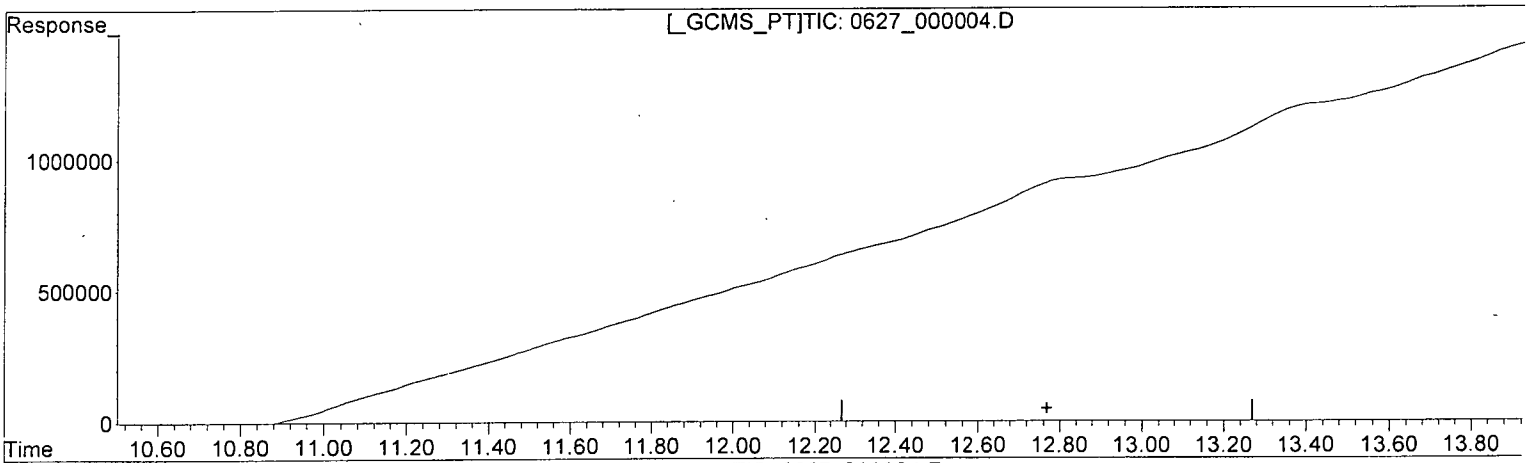
(+) = Expected Retention Time

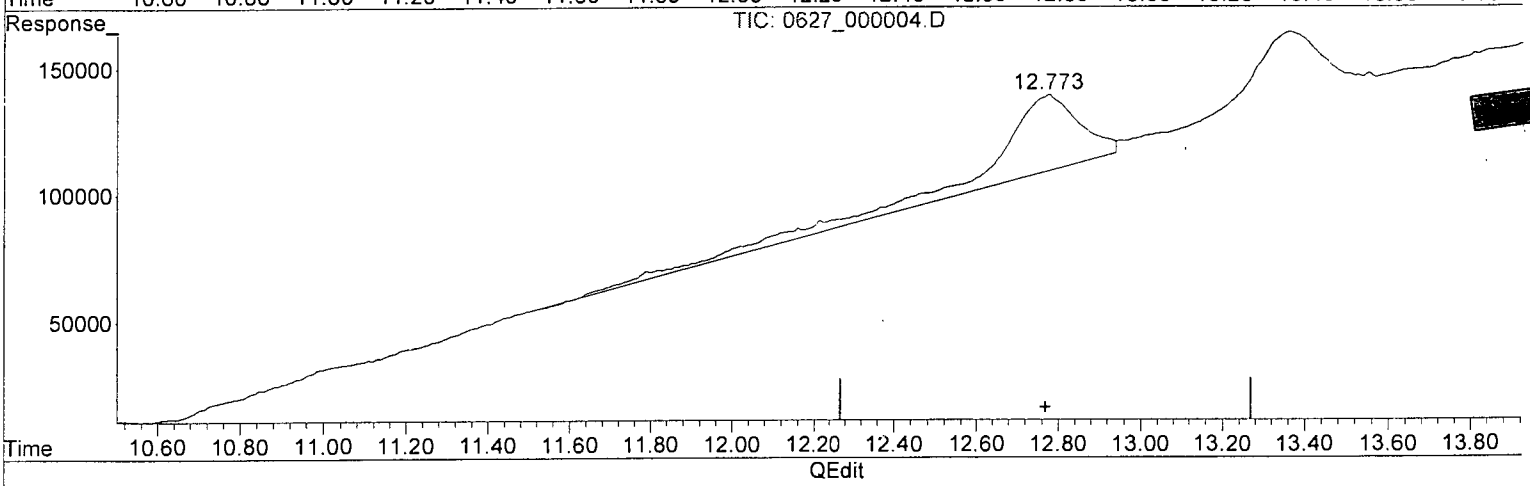
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

12.772min 6.021 ppb

response 30411

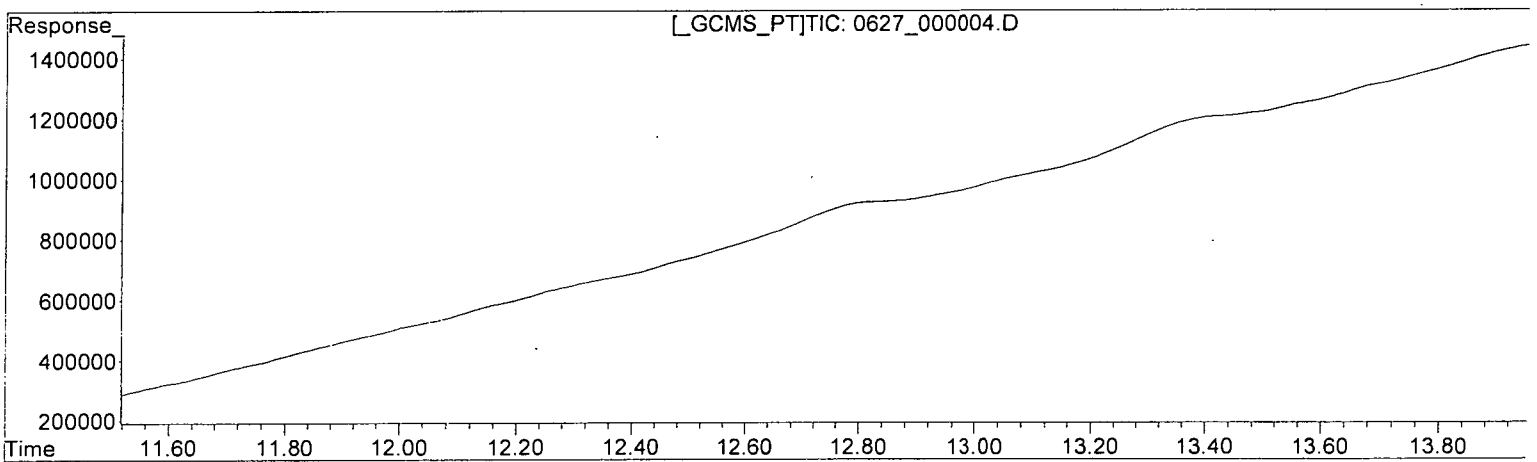
(+) = Expected Retention Time

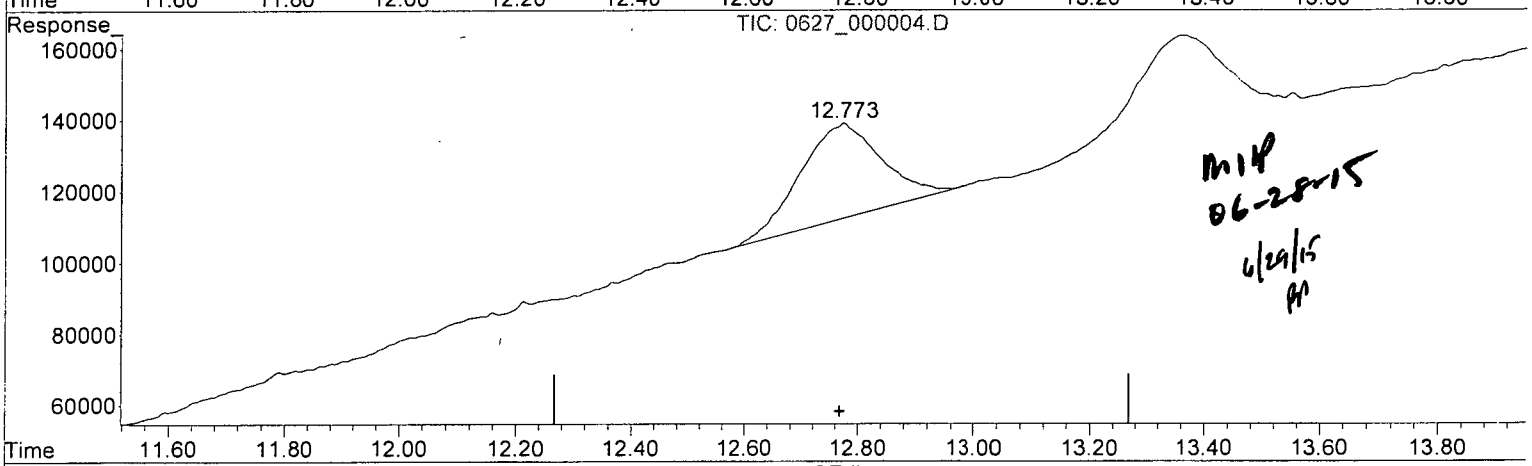
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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 06-28-15 6/29/15 MP

QEdit

(15) 2-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(15) 2-NITROTOLUENE #2 (TM)

12.773min 5.269 ppb m

response 26615

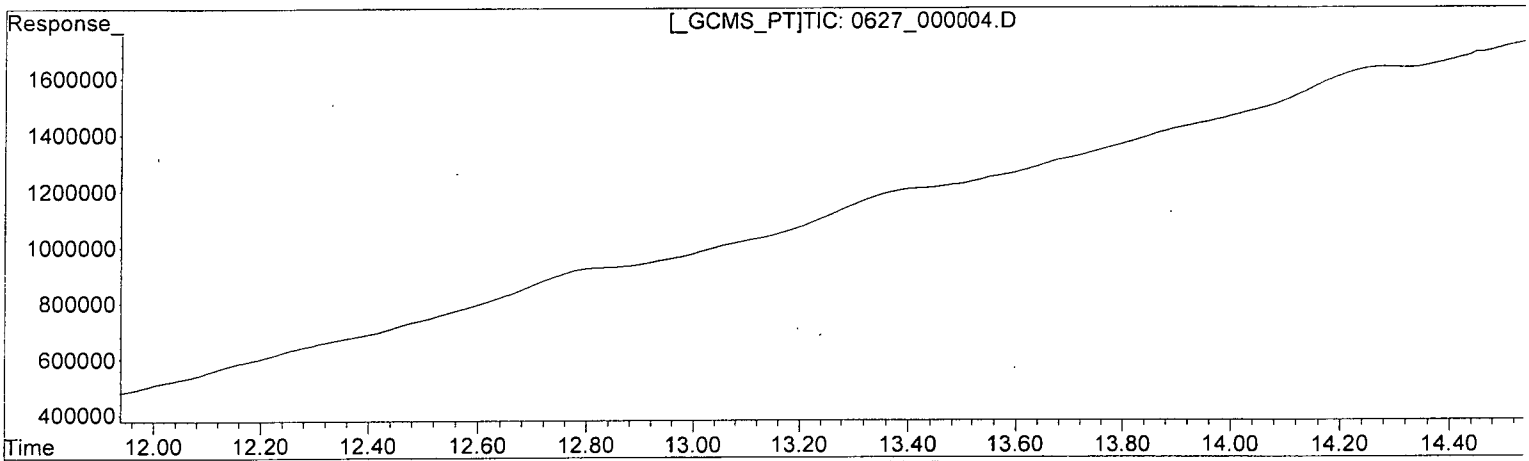
(+) = Expected Retention Time

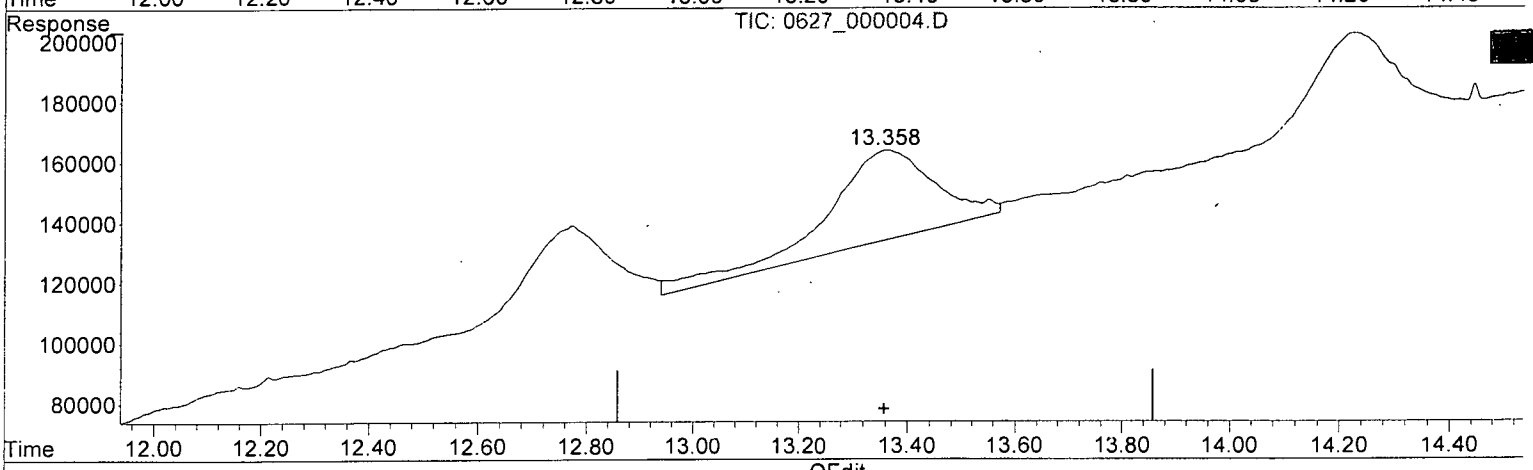
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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

(16) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(16) 4-NITROTOLUENE #2 (TM)

13.362min 5.782 ppb

response 29632

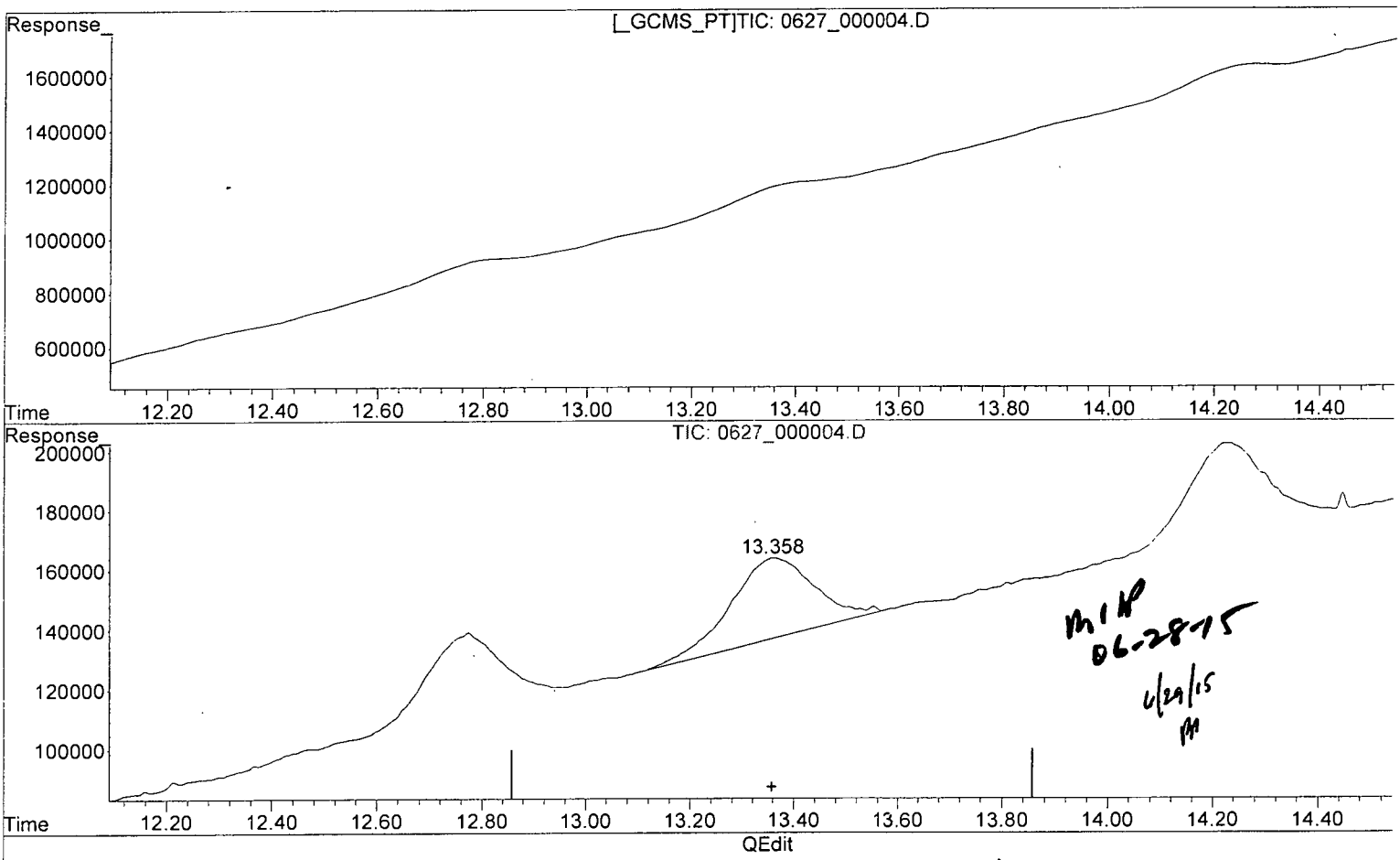
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000004.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 15:48:31
Operator : MP
Sample : 8330_CB 0.005 PPM 06/26/15
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: Jun 28 05:19:40 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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



MKP 06-28-15
6/29/15 PM

(16) 4-NITROTOLUENE (TM)

0.000min 0.000 ppb

response 0

(16) 4-NITROTOLUENE #2 (TM)

13.358min 5.258 ppb m

response 26945

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 16:26:01
Operator : MP
Sample : 8330_CB 0.010 PPM 06/26/15
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: Jun 28 05:30:13 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.725	0	142908	N.D.	10.957 #
Spiked Amount	62.500			Recovery	=	0.00%	17.53%
	Target Compounds						
1) TM	HMX	0.000	0.942	0	284788	N.D.	10.647m#
2) TM	RDX	0.000	1.792	0	189534	N.D.	11.132 #
3) TM	1,3,5-TRI...	0.000	2.917	0	333485	N.D.	11.070 #
5) TM	1,3-DINIT...	0.000	3.880	0	304951	N.D.	11.035 #
6) TM	3,5-DINIT...	0.000	4.141	0	264091	N.D.	11.112 #
7) TM	NITROBENZENE	0.000	5.287	0	140899	N.D.	11.238 #
8) TM	NITROGLYC...	6.200	0.000	69073	0	11.823	N.D. #
9) TM	TETRYL	6.688	6.690	198326	117831	NoCal	10.800 #
10) TM	2,4,6-TRI...	7.154	7.153	179150	142932	NoCal	11.320 #
11) TM	2-AMINO-4...	7.520	7.521	203145	135960	NoCal	11.411 #
12) TM	4-AMINO-2...	7.875	7.878	185184	100816	NoCal	11.340 #
13) TM	2,4-DINIT...	8.994	8.994	100923	130824	NoCal	11.324 #
14) TM	2,6-DINIT...	9.357	9.359	109009	74444	NoCal	11.172 #
15) TM	2-NITROTO...	0.000	12.770	0	54338	N.D.	10.759 #
16) TM	4-NITROTO...	0.000	13.360	0	53369	N.D.	10.414 #
17) TM	3-NITROTO...	0.000	14.229	0	61832	N.D.	10.170 #
18) TM	PETN	0.000	0.000	0	0	N.D. d	N.D. d

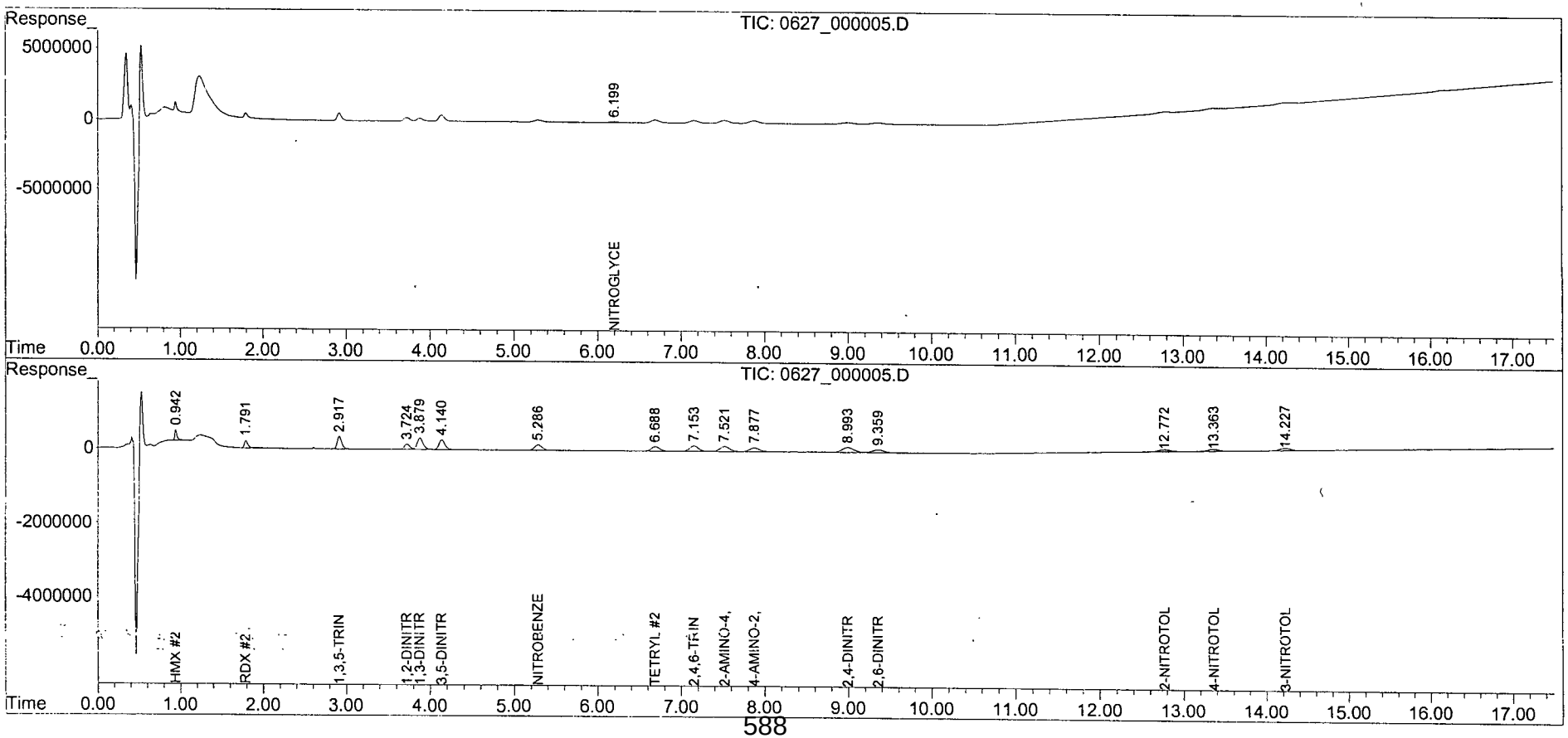
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 16:26:01
Operator : MP
Sample : 8330_CB 0.010 PPM 06/26/15
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: Jun 28 05:30:13 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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

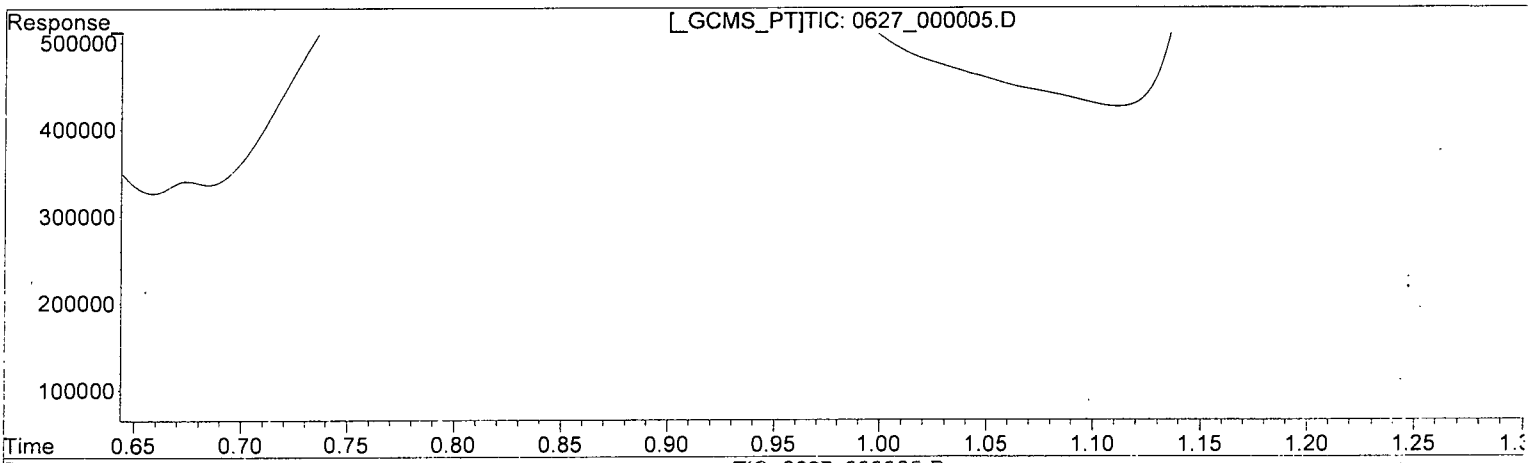


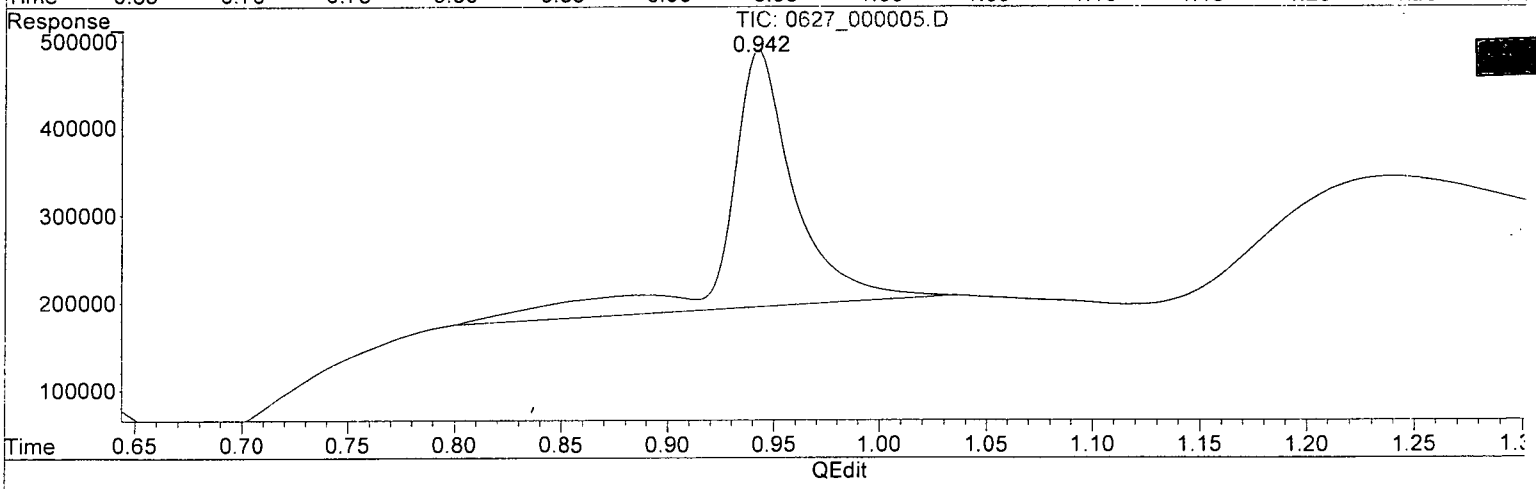
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 16:26:01
Operator : MP
Sample : 8330_CB 0.010 PPM 06/26/15
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: Jun 28 05:19:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

0.943min 10.867 ppb

response 290656

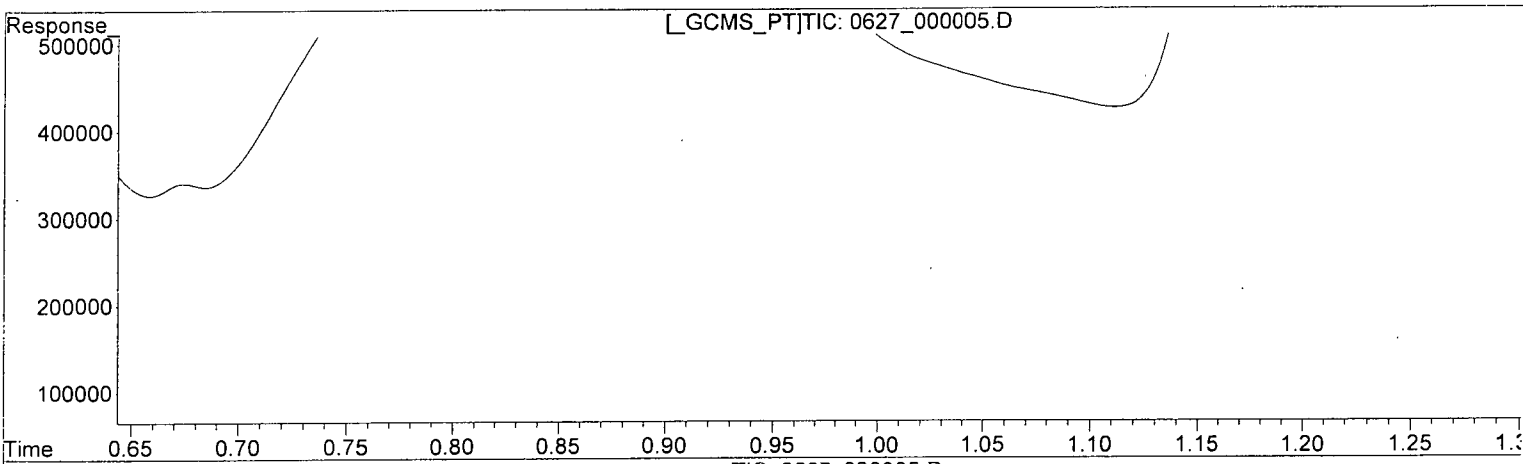
(+) = Expected Retention Time

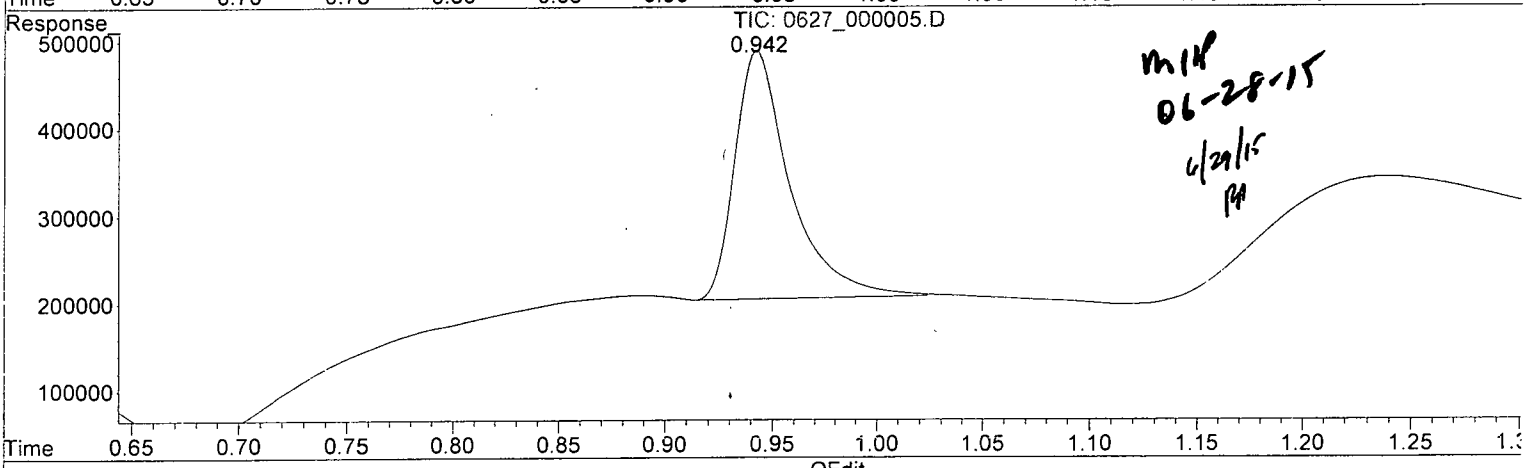
Quantitation Report (Qedit)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000005.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 16:26:01
Operator : MP
Sample : 8330_CB 0.010 PPM 06/26/15
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: Jun 28 05:19:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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)

0.942min 10.647 ppb m

response 284788

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 17:03:31
Operator : MP
Sample : 8330_CB 0.020 PPM 06/26/15
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: Jun 28 05:19:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.726	0	290713	N.D.	22.290	#
Spiked Amount 62.500			Recovery =		0.00%	35.66%	
Target Compounds							
1) TM HMX	0.000	0.945	0	581745	N.D.	21.750	#
2) TM RDX	0.000	1.794	0	364158	N.D.	21.389	#
3) TM 1,3,5-TRI...	0.000	2.919	0	675161	N.D.	22.411	#
5) TM 1,3-DINIT...	0.000	3.881	0	618590	N.D.	22.384	#
6) TM 3,5-DINIT...	0.000	4.142	0	538274	N.D.	22.648	#
7) TM NITROBENZENE	0.000	5.291	0	282037	N.D.	22.496	#
8) TM NITROGLYC...	6.206	0.000	128084	0	21.924	N.D.	#
9) TM TETRYL	6.696	6.696	380828	234184	NoCal	21.465	#
10) TM 2,4,6-TRI...	7.160	7.159	370224	289666	NoCal	22.942	#
11) TM 2-AMINO-4...	7.524	7.524	423877	276675	NoCal	23.221	#
12) TM 4-AMINO-2...	7.880	7.879	383203	205405	NoCal	23.104	#
13) TM 2,4-DINIT...	9.002	8.999	203988	266410	NoCal	23.060	#
14) TM 2,6-DINIT...	9.365	9.364	220585	150387	NoCal	22.569	#
15) TM 2-NITROTO...	0.000	12.765	0	110627	N.D.	21.903	#
16) TM 4-NITROTO...	0.000	13.355	0	107885	N.D.	21.051	#
17) TM 3-NITROTO...	0.000	14.220	0	127467	N.D.	20.965	#
18) TM PETN	16.140	0.000	102346	0	21.124	N.D.	#

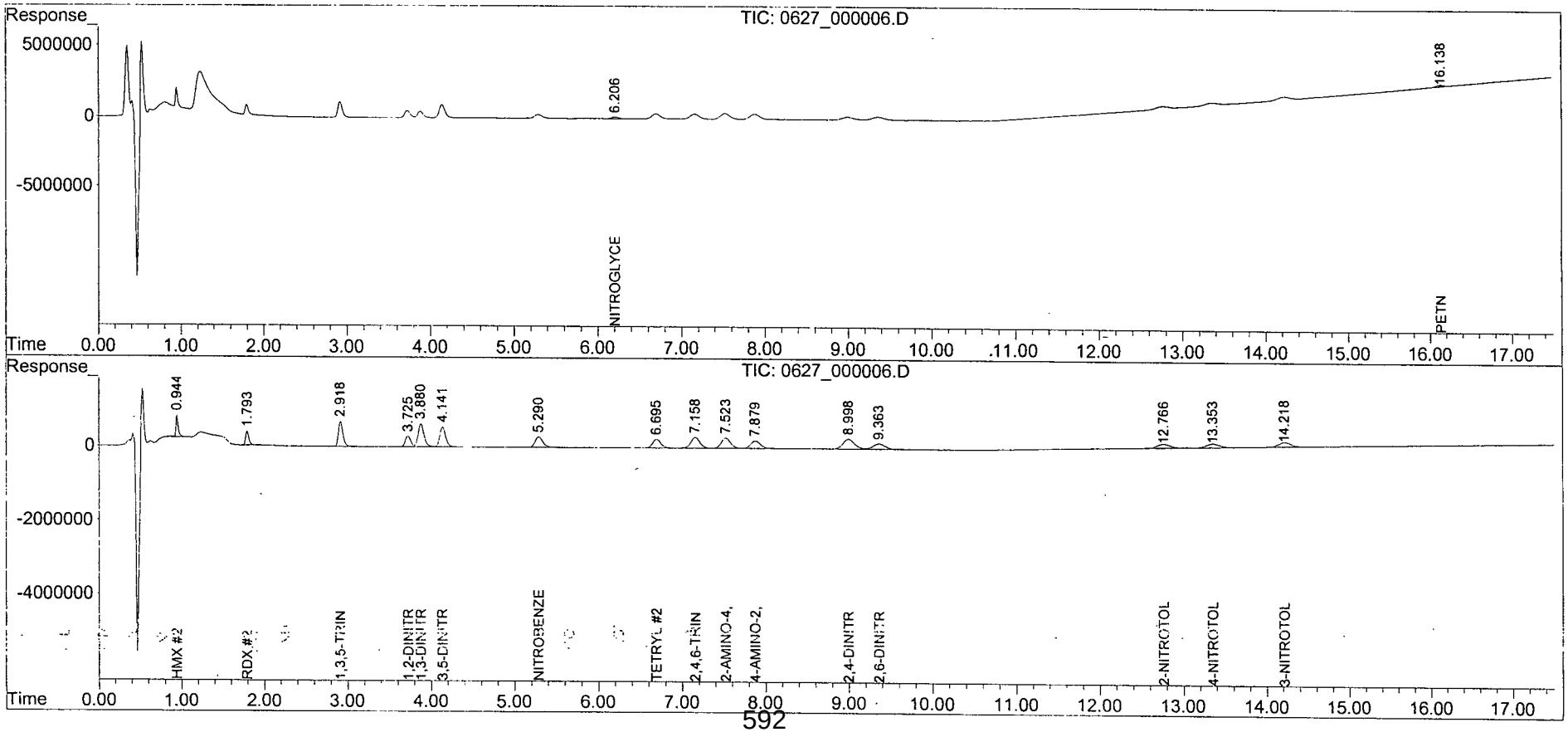
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 17:03:31
Operator : MP
Sample : 8330_CB 0.020 PPM 06/26/15
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: Jun 28 05:19:46 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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



W150627.M Sun Jun 28 05:28:26 2015 WALDORF Page: 2

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 17:41:02
Operator : MP
Sample : 8330_CB 0.050 PPM 06/26/15
Misc :
ALS Vial : 8451 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:49 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.723	0	721478	N.D.	55.319	#
	Spiked Amount 62.500			Recovery =		0.00%	88.51%	
	Target Compounds							
1)	TM HMX	0.000	0.944	0	1424906	N.D.	53.272	#
2)	TM RDX	0.000	1.793	0	920147	N.D.	54.046	#
3)	TM 1,3,5-TRI...	0.000	2.918	0	1668548	N.D.	55.386	#
5)	TM 1,3-DINIT...	0.000	3.878	0	1535624	N.D.	55.568	#
6)	TM 3,5-DINIT...	0.000	4.139	0	1333598	N.D.	56.111	#
7)	TM NITROBENZENE	0.000	5.284	0	701293	N.D.	55.936	#
8)	TM NITROGLYC...	6.199	0.000	302264	0	51.738	N.D.	#
9)	TM TETRYL	6.689	6.689	905812	560091	NoCal	51.338	#
10)	TM 2,4,6-TRI...	7.152	7.152	916594	709057	NoCal	56.158	#
11)	TM 2-AMINO-4...	7.518	7.518	1036448	683325	NoCal	57.350	#
12)	TM 4-AMINO-2...	7.873	7.873	940347	506786	NoCal	57.003	#
13)	TM 2,4-DINIT...	8.992	8.991	495598	659672	NoCal	57.101	#
14)	TM 2,6-DINIT...	9.356	9.355	534190	373054	NoCal	55.986	#
15)	TM 2-NITROTO...	0.000	12.761	0	266805	N.D.	52.825	#
16)	TM 4-NITROTO...	0.000	13.353	0	259954	N.D.	50.723	#
17)	TM 3-NITROTO...	0.000	14.219	0	313046	N.D.	51.488	#
18)	TM PETN	16.145	0.000	265740	0	54.847	N.D.	#

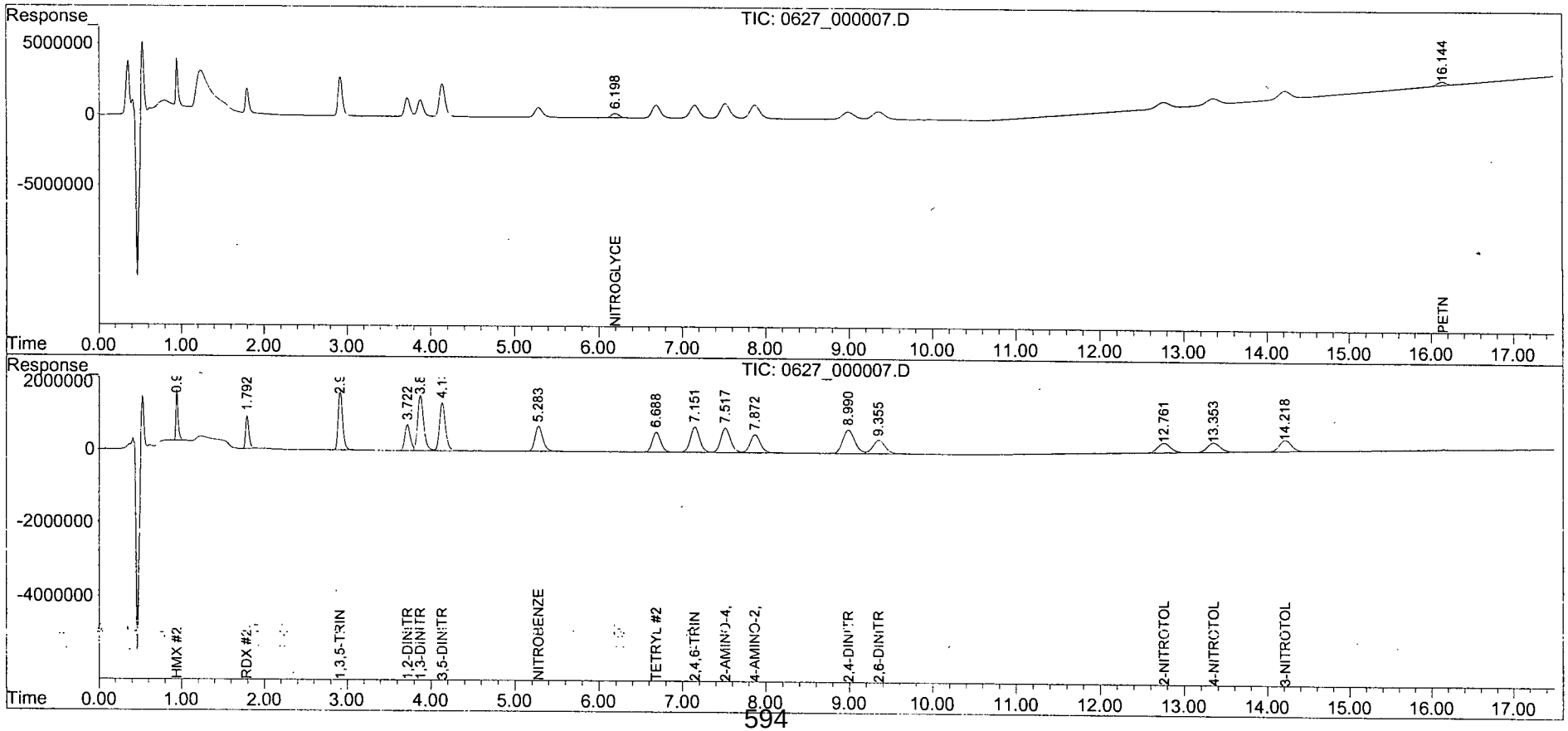
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000007.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 17:41:02
Operator : MP
Sample : 8330_CB 0.050 PPM 06/26/15
Misc :
ALS Vial : 8451 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:49 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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\150627\150627\
Data File : 0627_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 18:18:32
Operator : MP
Sample : 8330_CB 0.10 PPM 06/26/15
Misc :
ALS Vial : 8452 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:52 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.725	0	1446035	N.D.	110.875	#
	Spiked Amount 62.500			Recovery	=	0.00%	177.40%	
	Target Compounds							
1)	TM HMX	0.000	0.943	0	2854765	N.D.	106.730	#
2)	TM RDX	0.000	1.793	0	1858543	N.D.	109.163	#
3)	TM 1,3,5-TRI...	0.000	2.918	0	3329272	N.D.	110.512	#
5)	TM 1,3-DINIT...	0.000	3.880	0	3072148	N.D.	111.168	#
6)	TM 3,5-DINIT...	0.000	4.142	0	2671055	N.D.	112.385	#
7)	TM NITROBENZENE	0.000	5.289	0	1402485	N.D.	111.865	#
8)	TM NITROGLYC...	6.207	0.000	604575	0	103.483	N.D.	#
9)	TM TETRYL	6.698	6.698	1941999	1190299	NoCal	109.103	#
10)	TM 2,4,6-TRI...	7.161	7.161	1830603	1413014	NoCal	111.913	#
11)	TM 2-AMINO-4...	7.527	7.527	2076066	1368769	NoCal	114.879	#
12)	TM 4-AMINO-2...	7.883	7.883	1892953	1012033	NoCal	113.834	#
13)	TM 2,4-DINIT...	9.002	9.001	978615	1313056	NoCal	113.657	#
14)	TM 2,6-DINIT...	9.368	9.368	1043659	745620	NoCal	111.899	#
15)	TM 2-NITROTO...	0.000	12.765	0	536923	N.D.	106.306	#
16)	TM 4-NITROTO...	0.000	13.356	0	525099	N.D.	102.459	#
17)	TM 3-NITROTO...	0.000	14.222	0	628578	N.D.	103.386	#
18)	TM PETN	16.144	0.000	510206	0	105.304	N.D.	#

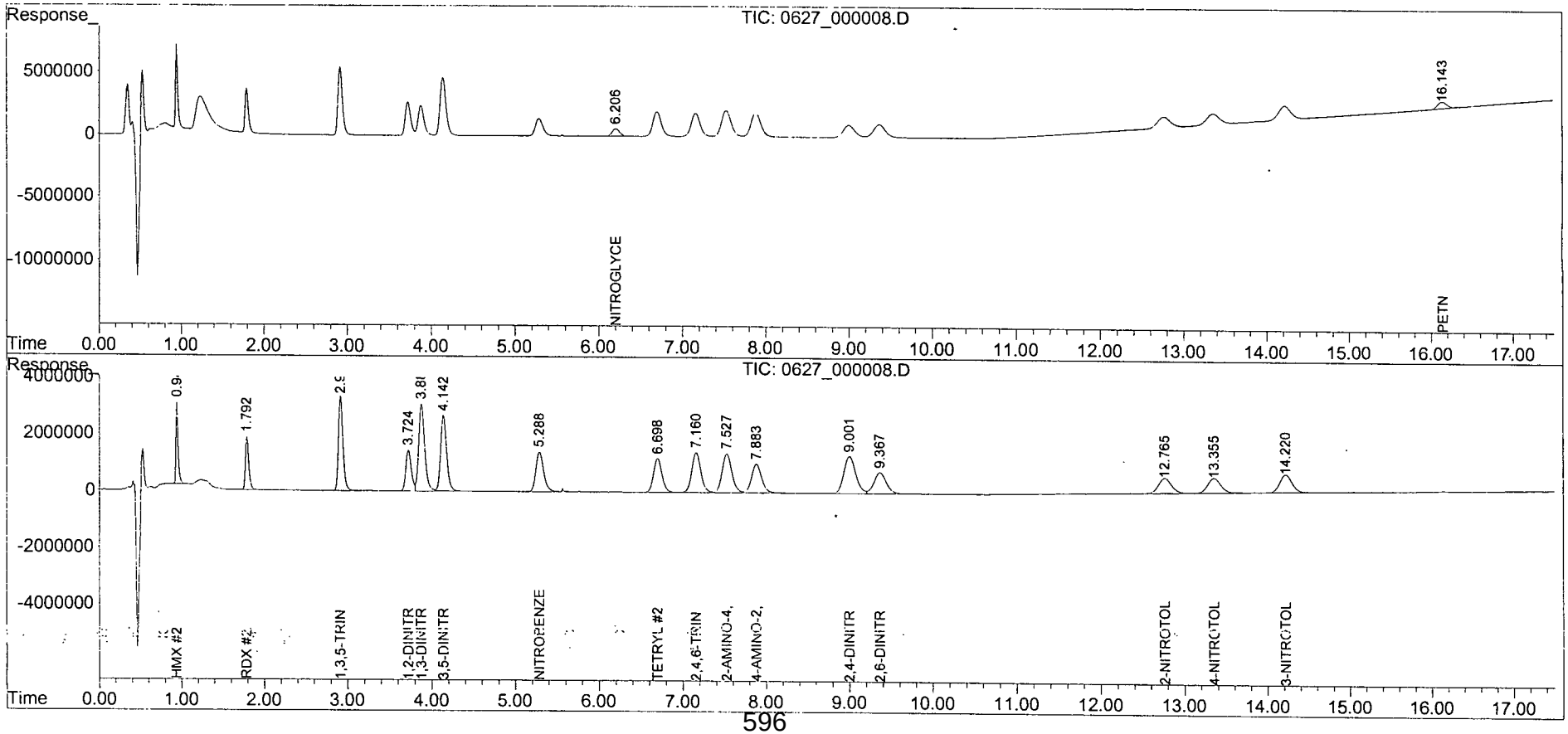
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000008.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 18:18:32
Operator : MP
Sample : 8330_CB 0.10 PPM 06/26/15
Misc :
ALS Vial : 8452 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:52 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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\150627\150627\
Data File : 0627_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 18:56:03
Operator : MP
Sample : 8330_CB 0.20 PPM 06/26/15
Misc :
ALS Vial : 8453 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:55 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.727	0	2915268	N.D.	223.528	#
Spiked Amount 62.500			Recovery =		0.00%	357.64%	
Target Compounds							
1) TM HMX	0.000	0.944	0	5753948	N.D.	215.121	#
2) TM RDX	0.000	1.794	0	3730360	N.D.	219.106	#
3) TM 1,3,5-TRI...	0.000	2.921	0	6736112	N.D.	223.599	#
5) TM 1,3-DINIT...	0.000	3.882	0	6223842	N.D.	225.214	#
6) TM 3,5-DINIT...	0.000	4.144	0	5394418	N.D.	226.970	#
7) TM NITROBENZENE	0.000	5.289	0	2836918	N.D.	226.278	#
8) TM NITROGLYC...	6.209	6.208	1200796	24962	205.537	NoCal	#
9) TM TETRYL	6.701	6.701	3501474	2164738	NoCal	198.421	#
10) TM 2,4,6-TRI...	7.164	7.164	3707835	2871520	NoCal	227.429	#
11) TM 2-AMINO-4...	7.530	7.530	4177134	2761384	NoCal	231.759	#
12) TM 4-AMINO-2...	7.886	7.887	3803943	2041737	NoCal	229.655	#
13) TM 2,4-DINIT...	9.002	9.002	1979518	2666316	NoCal	230.794	#
14) TM 2,6-DINIT...	9.368	9.368	2101428	1506457	NoCal	226.082	#
15) TM 2-NITROTO...	0.000	12.767	0	1076072	N.D.	213.053	#
16) TM 4-NITROTO...	0.000	13.359	0	1056362	N.D.	206.122	#
17) TM 3-NITROTO...	0.000	14.227	0	1272204	N.D.	209.246	#
18) TM PETN	16.152	0.000	1033598	0	213.329	N.D.	#

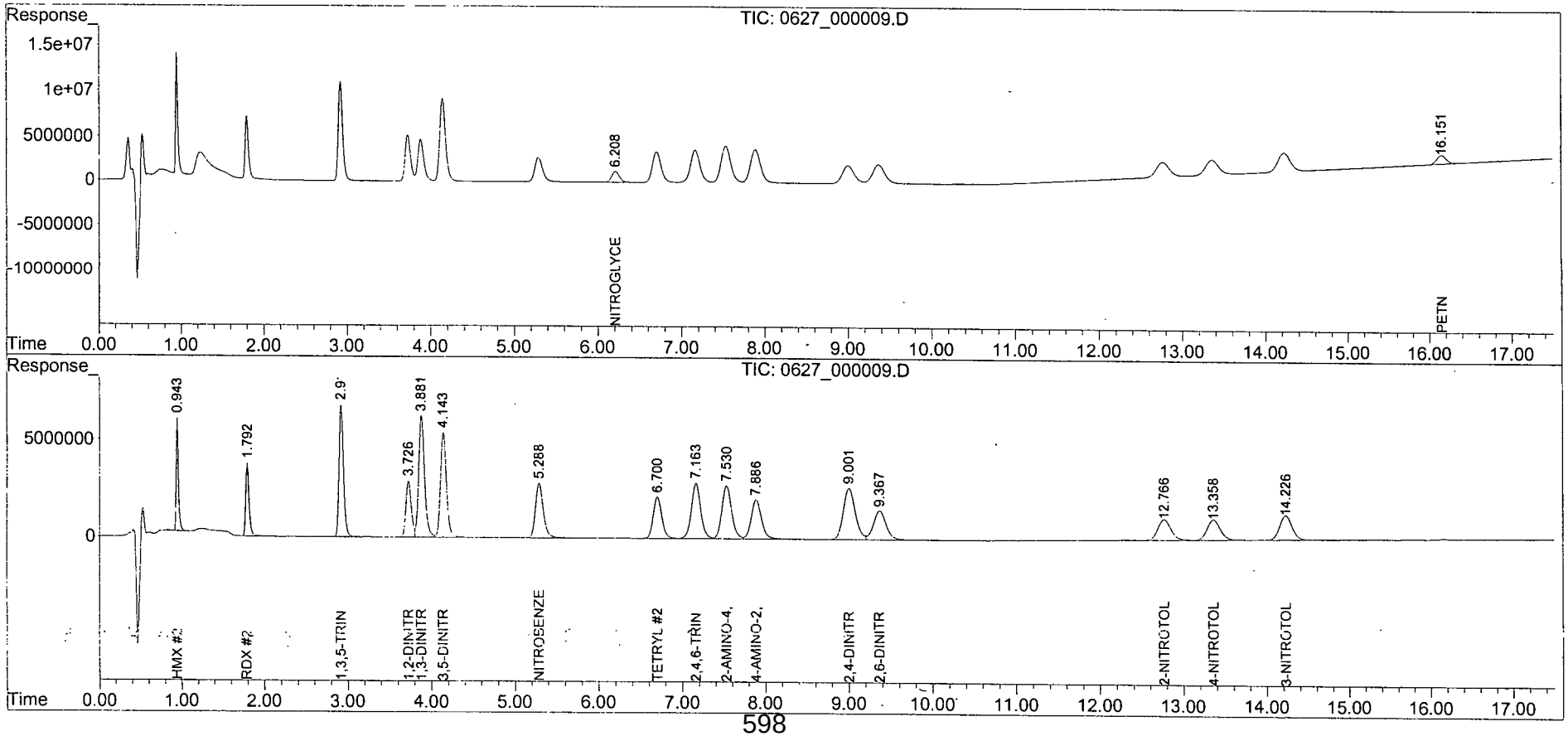
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000009.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 18:56:03
Operator : MP
Sample : 8330_CB 0.20 PPM 06/26/15
Misc :
ALS Vial : 8453 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:55 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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\150627\150627\
Data File : 0627_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 19:33:33
Operator : MP
Sample : 8330_CB 0.50 PPM 06/26/15
Misc :
ALS Vial : 8454 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:58 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.725	0	6369600	N.D.	488.390	#
	Spiked Amount 62.500			Recovery =		0.00%	781.42%	
	Target Compounds							
1)	TM HMX	0.000	0.940	0	12357854	N.D.	462.019	#
2)	TM RDX	0.000	1.793	0	8227356	N.D.	483.241	#
3)	TM 1,3,5-TRI...	0.000	2.919	0	14612676	N.D.	485.054	#
5)	TM 1,3-DINIT...	0.000	3.880	0	13599729	N.D.	492.116	#
6)	TM 3,5-DINIT...	0.000	4.143	0	11833339	N.D.	497.887	#
7)	TM NITROBENZENE	0.000	5.288	0	6175775	N.D.	492.591	#
8)	TM NITROGLYC...	6.208	6.206	2599912	50166	445.019	NoCal	#
9)	TM TETRYL	6.700	6.700	7674328	4741052	NoCal	434.567	#
10)	TM 2,4,6-TRI...	7.162	7.162	7964428	6170180	NoCal	488.688	#
11)	TM 2-AMINO-4...	7.529	7.529	9016460	5965392	NoCal	500.667	#
12)	TM 4-AMINO-2...	7.886	7.886	8188175	4395456	NoCal	494.401	#
13)	TM 2,4-DINIT...	9.004	9.003	4250597	5752419	NoCal	497.925	#
14)	TM 2,6-DINIT...	9.371	9.371	4500729	3240882	NoCal	486.376	#
15)	TM 2-NITROTO...	0.000	12.769	0	2325082	N.D.	460.346	#
16)	TM 4-NITROTO...	0.000	13.359	0	2279977	N.D.	444.878	#
17)	TM 3-NITROTO...	0.000	14.226	0	2744442	N.D.	451.393	#
18)	TM PETN	16.152	0.000	2257431	0	465.921	N.D.	#

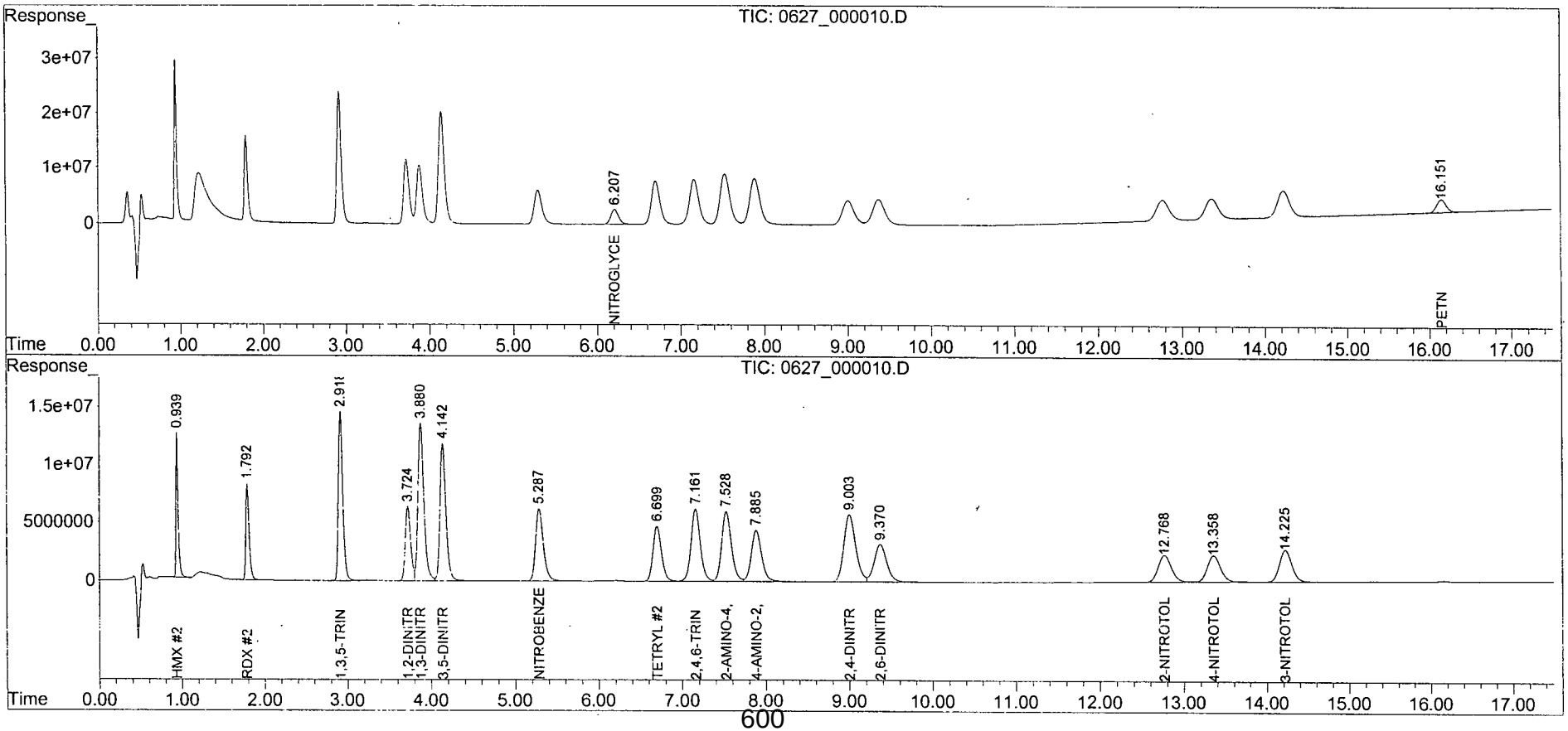
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000010.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 19:33:33
Operator : MP
Sample : 8330_CB 0.50 PPM 06/26/15
Misc :
ALS Vial : 8454 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:19:58 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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\150627\150627\
Data File : 0627_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 20:11:04
Operator : MP
Sample : 8330_CB 1.0 PPM 06/26/15
Misc :
ALS Vial : 8455 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:20:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.727	0	14408041	N.D.	1104.738 #
Spiked Amount 62.500			Recovery	=	0.00%	1767.58%
Target Compounds						
1) TM HMX	0.000	0.944	0	27672901	N.D.	1034.597 #
2) TM RDX	0.000	1.794	0	18337745	N.D.	1077.084 #
3) TM 1,3,5-TRI...	0.000	2.920	0	32583519	N.D.	1081.580 #
5) TM 1,3-DINIT...	0.000	3.882	0	30760183	N.D.	1113.079 #
6) TM 3,5-DINIT...	0.000	4.146	0	26601827	N.D.	1119.271 #
7) TM NITROBENZENE	0.000	5.289	0	14004410	N.D.	1117.017 #
8) TM NITROGLYC...	6.212	6.212	5857732	119686	1002.651	NoCal #
9) TM TETRYL	6.705	6.704	17101363	10556664	NoCal	967.630 #
10) TM 2,4,6-TRI...	7.166	7.166	18056598	13993896	NoCal	1108.340 #
11) TM 2-AMINO-4...	7.530	7.530	20442190	13541709	NoCal	1136.536 #
12) TM 4-AMINO-2...	7.887	7.887	18507412	9930111	NoCal	1116.939 #
13) TM 2,4-DINIT...	9.002	9.002	9705223	13160714	NoCal	1139.180 #
14) TM 2,6-DINIT...	9.370	9.370	10266419	7407407	NoCal	1111.667 #
15) TM 2-NITROTO...	0.000	12.765	0	5341772	N.D.	1057.625 #
16) TM 4-NITROTO...	0.000	13.353	0	5226814	N.D.	1019.876 #
17) TM 3-NITROTO...	0.000	14.223	0	6281650	N.D.	1033.177 #
18) TM PETN	16.152	0.000	5132874	0	1059.396	N.D. #

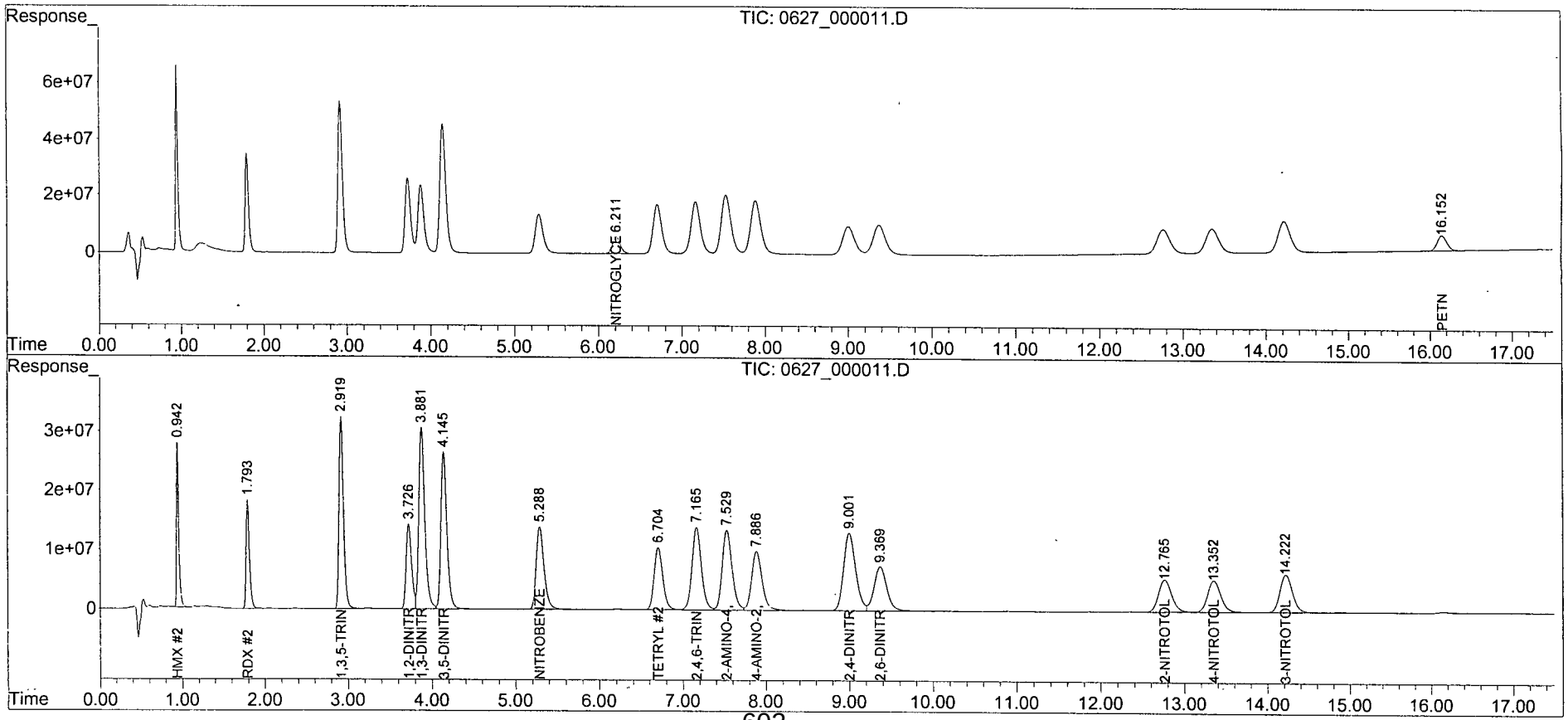
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000011.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 20:11:04
Operator : MP
Sample : 8330_CB 1.0 PPM 06/26/15
Misc :
ALS Vial : 8455 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:20:01 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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



W150627.M Sun Jun 28 05:23:23 2015 WALDORF Page: 2

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 20:48:35
Operator : MP
Sample : 8330MXA_CB 2.0 PPM 06/26/15
Misc :
ALS Vial : 8456 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:12:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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	3.727	0	29635199	N.D.	2272.282	#
	Spiked Amount 62.500			Recovery	=	0.00%	3635.65%	
	Target Compounds							
1)	TM HMX	0.000	0.944	0	55377291	N.D.	2070.371	#
2)	TM RDX	0.000	1.796	0	36821454	N.D.	2162.742	#
3)	TM 1,3,5-TRI...	0.000	2.922	0	65943947	N.D.	2188.949	#
5)	TM 1,3-DINIT...	0.000	3.882	0	62994173	N.D.	2279.489	#
6)	TM 3,5-DINIT...	0.000	0.000	0	0	N.D.	N.D.	
7)	TM NITROBENZENE	0.000	5.286	0	28674612	N.D.	2287.139	#
8)	TM NITROGLYC...	0.000	0.000	0	0	N.D.	N.D.	
9)	TM TETRYL	6.709	6.709	36600167	22557025	NoCal	2067.590	#
10)	TM 2,4,6-TRI...	7.172	7.172	36716209	28519881	NoCal	2258.822	#
11)	TM 2-AMINO-4...	7.534	7.534	41658254	27658149	NoCal	2321.308	#
12)	TM 4-AMINO-2...	7.893	7.894	37632759	20164305	NoCal	2268.082	#
13)	TM 2,4-DINIT...	9.007	9.007	19900745	27065436	NoCal	2342.761	#
14)	TM 2,6-DINIT...	9.377	9.377	21041278	15208027	NoCal	2282.346	#
15)	TM 2-NITROTO...	0.000	12.768	0	10990622	N.D.	2176.050	#
16)	TM 4-NITROTO...	0.000	13.352	0	10773051	N.D.	2102.080	#
17)	TM 3-NITROTO...	0.000	14.221	0	12949844	N.D.	2129.930	#
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.	

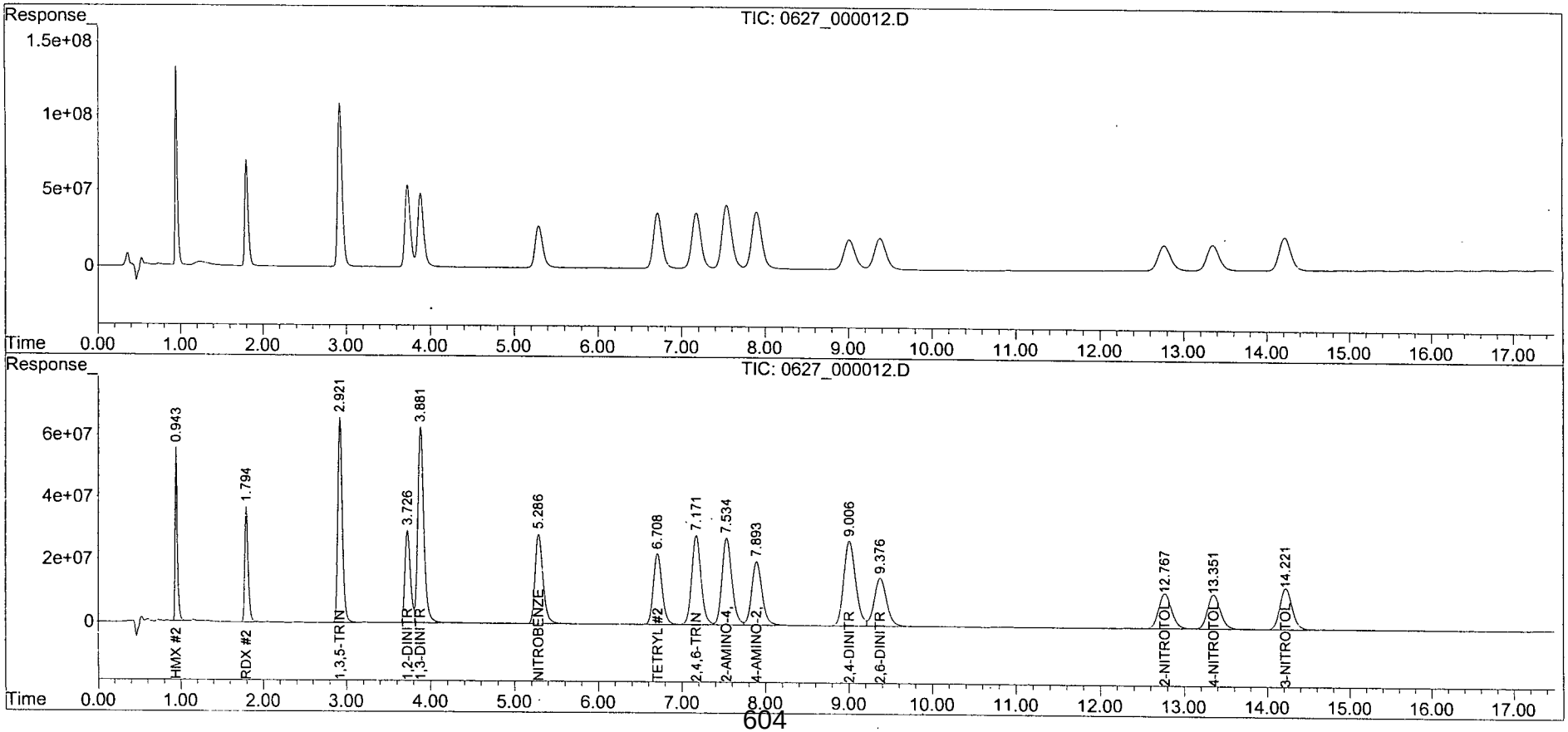
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000012.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 27-Jun-2015, 20:48:35
Operator : MP
Sample : 8330MXA_CB 2.0 PPM 06/26/15
Misc :
ALS Vial : 8456 Sample Multiplier: 1

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 05:12:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Tue Jun 23 08:54:37 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\150627\150627\
Data File : 0627_000027.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 05:22:26
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 06/26/15
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: Jun 28 06:17:06 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 05:38:07 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	4.164	0	52810036	N.D.	2012.031 #
7)	TM NITROBENZENE	0.000	0.000	0	0	N.D. d	N.D. d
8)	TM NITROGLYC...	6.235	6.235	11586372	226948	1914.801	NoCal #
9)	TM TETRYL	6.711	0.000	7414	0	NoCal	N.D.
10)	TM 2,4,6-TRI...	7.191	0.000	45521	0	NoCal	N.D.
11)	TM 2-AMINO-4...	7.587	0.000	7307	0	NoCal	N.D.
12)	TM 4-AMINO-2...	7.878	0.000	11689	0	NoCal	N.D.
13)	TM 2,4-DINIT...	9.004	0.000	12147	0	NoCal	N.D.
14)	TM 2,6-DINIT...	9.389	0.000	15660	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	16.195	0.000	10275320	0	2031.372	N.D. #

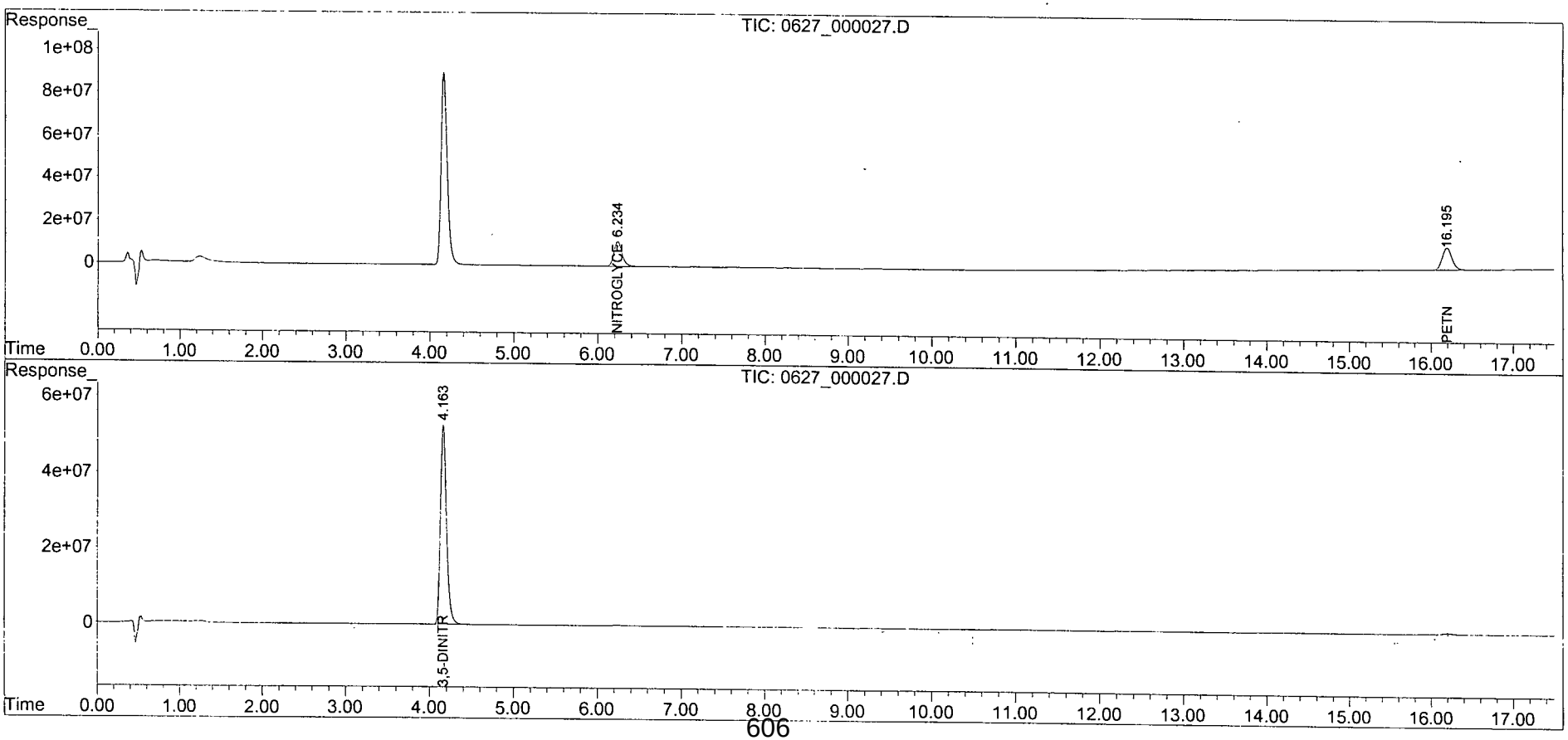
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000027.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 05:22:26
Operator : MP
Sample : 8330MXB_CB 2.0 PPM 06/26/15
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: Jun 28 06:17:06 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 05:38:07 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: 7667
Date Analyzed: 28-Jun-2015, 05:49:56
Instrument: Waldorf
Initial Cal. Date: 06/27/15
Data File: 0627_000028-029.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	151	144	4.2	TM	
2	TM	PETN	127	122	4.0	TM	
3		Signal #2					
4	TM	HMX	697	691	0.92	TM	
5	TM	RDX	454	463	2.0	TM	
6	TM	1,3,5-TRINITROBENZENE	822	698	15	TM	
7	S	1,2-DINITROBENZENE	357	366	2.4	S	
8	TM	1,3-DINITROBENZENE	760	773	1.7	TM	
9	TM	3,5-DINITROANILINE	657	678	3.3	TM	
10	TM	NITROBENZENE	348	346	0.37	TM	
11	TM	2,4,6-TRINITROTOLUENE	351	342	2.7	TM	
12	TM	2-AMINO-4,6-DINITROTOLUEN	337	313	7.1	TM	
13	TM	4-AMINO-2,6-DINITROTOLUEN	249	267	7.2	TM	
14	TM	2,4-DINITROTOLUENE	326	343	5.3	TM	
15	TM	2,6-DINITROTOLUENE	184	189	2.8	TM	
16	TM	2-NITROTOLUENE	133	137	3.0	TM	
17	TM	4-NITROTOLUENE	131	132	1.0	TM	
18	TM	3-NITROTOLUENE	155	162	4.6	TM	
19	TM	TETRYL	278	270	2.9	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000028.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 05:49:56
Operator : MP
Sample : 8330_SS 1.0 PPM 06/26/15
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: Jun 28 06:24:09 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	3.741	0	14646807	N.D.	1024.261	#
	Spiked Amount 62.500			Recovery	=	0.00%	1638.82%	
	Target Compounds							
1)	TM HMX	0.000	0.947	0	27636970	N.D.	990.824	#
2)	TM RDX	0.000	1.801	0	18516186	N.D.	1019.808	#
3)	TM 1,3,5-TRI...	0.000	2.932	0	27916907	N.D.	849.559	#
5)	TM 1,3-DINIT...	0.000	3.895	0	30931104	N.D.	1016.835	#
6)	TM 3,5-DINIT...	0.000	4.165	0	27128264	N.D.	1032.880	#
7)	TM NITROBENZENE	0.000	5.302	0	13854640	N.D.	996.260	#
8)	TM NITROGLYC...	6.235	6.235	5769672	121248	958.049	NoCal	#
9)	TM TETRYL	6.740	6.740	9838070	6107379	NoCal	549.853	#
10)	TM 2,4,6-TRI...	7.199	7.199	17586413	13662315	NoCal	973.460	#
11)	TM 2-AMINO-4...	7.575	7.575	18822233	12510213	NoCal	929.232	#
12)	TM 4-AMINO-2...	7.934	7.934	19876833	10696896	NoCal	1072.080	#
13)	TM 2,4-DINIT...	9.045	9.045	10052135	13736229	NoCal	1053.191	#
14)	TM 2,6-DINIT...	9.417	9.416	10466586	7579890	NoCal	1028.101	#
15)	TM 2-NITROTO...	0.000	12.810	0	5478510	N.D.	1030.203	#
16)	TM 4-NITROTO...	0.000	13.396	0	5277488	N.D.	1010.039	#
17)	TM 3-NITROTO...	0.000	14.264	0	6494475	N.D.	1045.600	#
18)	TM PETN	0.000	0.000	0	0	N.D.	N.D.	

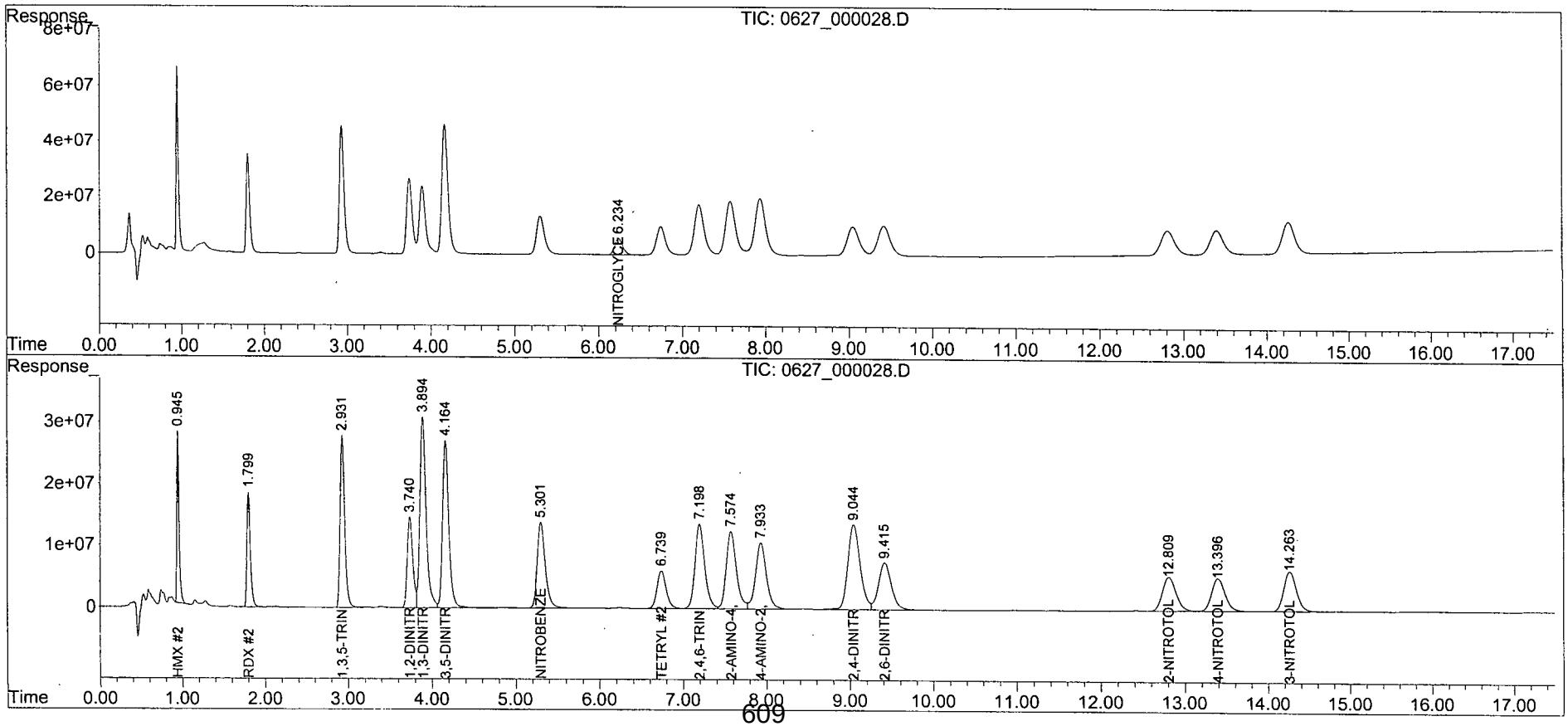
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000028.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 05:49:56
Operator : MP
Sample : 8330_SS 1.0 PPM 06/26/15
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: Jun 28 06:24:09 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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\150627\150627\
Data File : 0627_000029.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 06:17:27
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 06/26/15
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: Jun 28 06:45:31 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	6.730	6.730	17557664	10783808	NoCal	970.876 #
10)	TM 2,4,6-TRI...	0.000	0.000	0	0	N.D. d	N.D. d
11)	TM 2-AMINO-4...	7.543	0.000	11208	0	NoCal	N.D.
12)	TM 4-AMINO-2...	7.842	0.000	10171	0	NoCal	N.D.
13)	TM 2,4-DINIT...	0.000	0.000	0	0	N.D. d	N.D. d
14)	TM 2,6-DINIT...	9.515	0.000	11066	0	NoCal	N.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	16.191	0.000	4865297	0	959.691	N.D. #

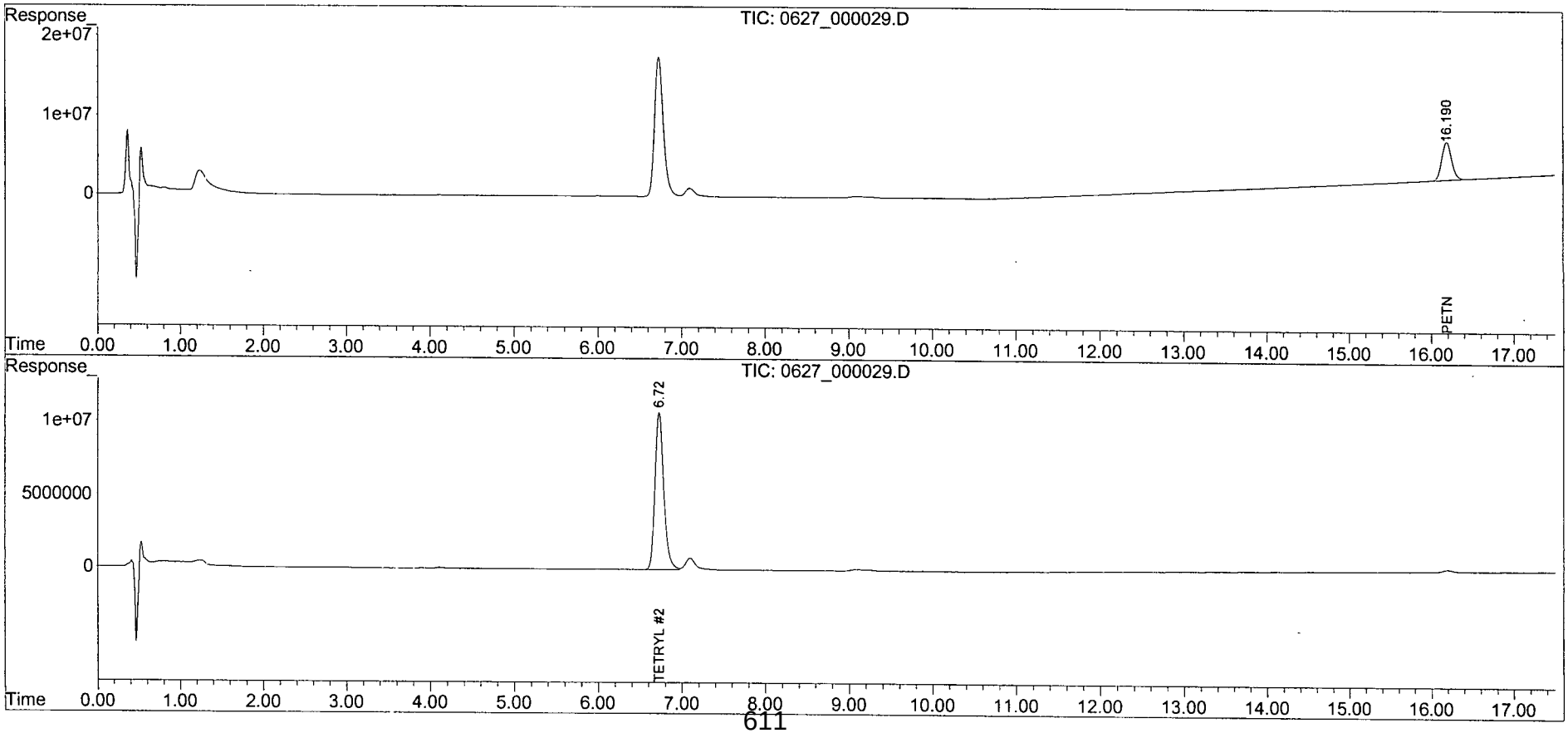
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000029.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 06:17:27
Operator : MP
Sample : PETN_TETRYL_SS 1.0 PPM 06/26/15
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: Jun 28 06:45:31 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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



Continuing Calibration

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

SDG No: 76687
Date Analyzed: 28-Jun-2015, 07:23:47
Instrument: Waldorf
Initial Cal. Date: 06/27/15
Data File: 0627_000031.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	151	143	5.0	TM	
2	TM	PETN	127	127	0.02	TM	
3		Signal #2					
4	TM	HMX	697	693	0.60	TM	
5	TM	RDX	454	453	0.15	TM	
6	TM	1,3,5-TRINITROBENZENE	822	816	0.63	TM	
7	S	1,2-DINITROBENZENE	357	358	0.11	S	
8	TM	1,3-DINITROBENZENE	760	766	0.75	TM	
9	TM	3,5-DINITROANILINE	657	652	0.75	TM	
10	TM	NITROBENZENE	348	349	0.25	TM	
11	TM	TETRYL	278	301	8.3	TM	
12	TM	2,4,6-TRINITROTOLUENE	351	347	1.2	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	337	335	0.51	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	249	246	1.4	TM	
15	TM	2,4-DINITROTOLUENE	326	325	0.24	TM	
16	TM	2,6-DINITROTOLUENE	184	183	0.67	TM	
17	TM	2-NITROTOLUENE	133	134	0.70	TM	
18	TM	4-NITROTOLUENE	131	132	1.2	TM	
19	TM	3-NITROTOLUENE	155	159	2.1	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000031.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 07:23:47
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 28 08:06:12 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 08:06:05 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	3.754	0	14315170	N.D.	1001.070	#
	Spiked Amount 62.500			Recovery	=	0.00%	1601.71%	
	Target Compounds							
1)	TM HMX	0.000	0.949	0	27725234	N.D.	993.988	#
2)	TM RDX	0.000	1.806	0	18128719	N.D.	998.468	#
3)	TM 1,3,5-TRI...	0.000	2.940	0	32654834	N.D.	993.742	#
5)	TM 1,3-DINIT...	0.000	3.908	0	30648300	N.D.	1007.538	#
6)	TM 3,5-DINIT...	0.000	4.181	0	26067237	N.D.	992.483	#
7)	TM NITROBENZENE	0.000	5.321	0	13941672	N.D.	1002.518	#
8)	TM NITROGLYC...	6.259	6.259	5722142	119100	950.157	NoCal	#
9)	TM TETRYL	6.774	6.774	19595073	12030694	NoCal	1083.134	#
10)	TM 2,4,6-TRI...	7.229	7.229	17794163	13863375	NoCal	987.786	#
11)	TM 2-AMINO-4...	7.611	7.611	20156248	13394387	NoCal	994.906	#
12)	TM 4-AMINO-2...	7.972	7.972	18301531	9839196	NoCal	986.118	#
13)	TM 2,4-DINIT...	9.086	9.086	9516539	13011189	NoCal	997.600	#
14)	TM 2,6-DINIT...	9.460	9.460	10113728	7323046	NoCal	993.264	#
15)	TM 2-NITROTO...	0.000	12.846	0	5355166	N.D.	1007.008	#
16)	TM 4-NITROTO...	0.000	13.431	0	5286522	N.D.	1011.768	#
17)	TM 3-NITROTO...	0.000	14.295	0	6340092	N.D.	1020.745	#
18)	TM PETN	16.230	0.000	5068476	0	999.769	N.D.	#

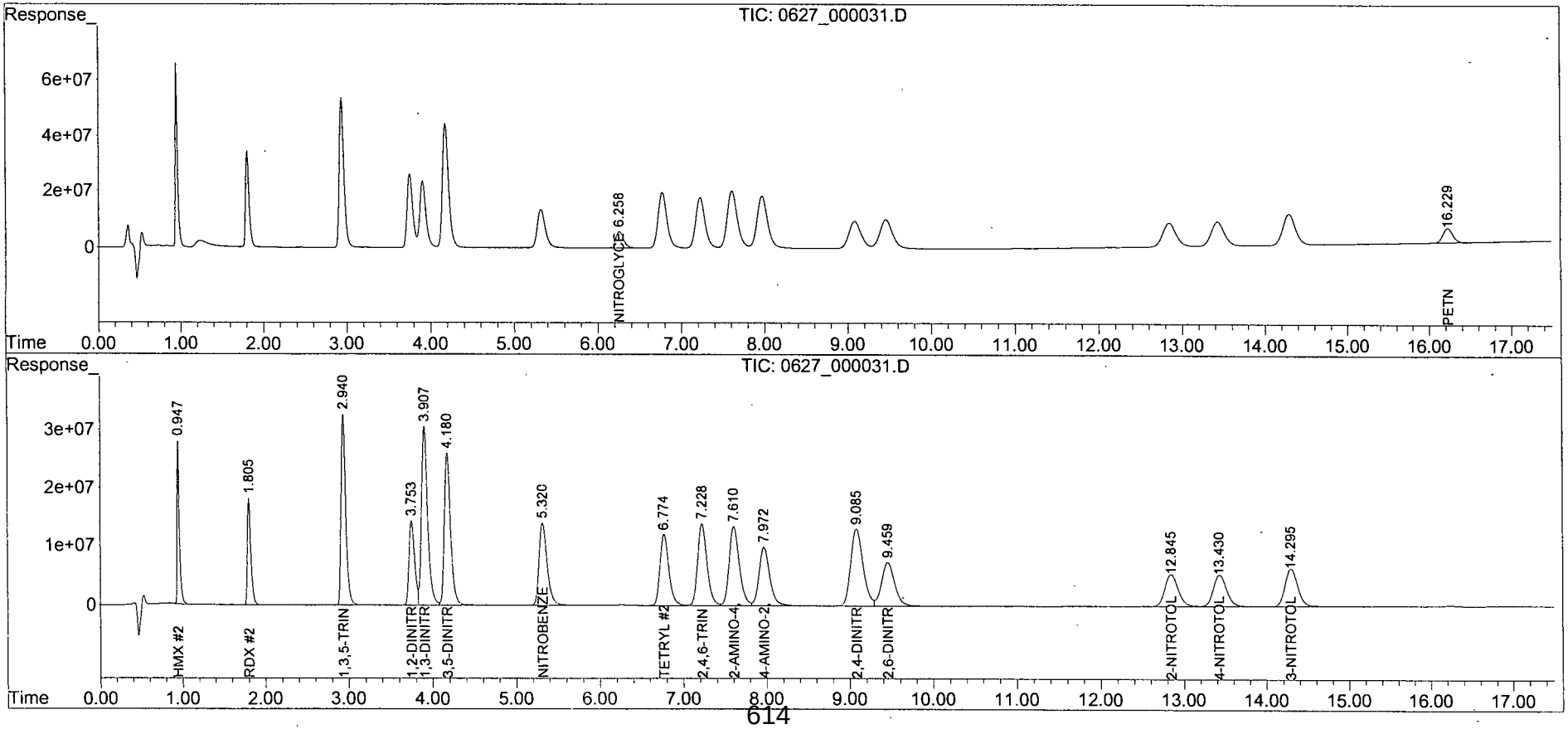
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000031.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 07:23:47
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 28 08:06:12 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 08:06:05 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: 76687
Date Analyzed: 28-Jun-2015, 13:29:59
Instrument: Waldorf
Initial Cal. Date: 06/26/15
Data File: 0627_000041.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	151	142	5.6	TM	
2	TM	PETN	127	126	0.90	TM	
3		Signal #2					
4	TM	HMX	697	697	0.11	TM	
5	TM	RDX	454	453	0.26	TM	
6	TM	1,3,5-TRINITROBENZENE	822	813	0.98	TM	
7	S	1,2-DINITROBENZENE	357	357	0.02	S	
8	TM	1,3-DINITROBENZENE	760	764	0.48	TM	
9	TM	3,5-DINITROANILINE	657	650	1.0	TM	
10	TM	NITROBENZENE	348	344	1.1	TM	
11	TM	TETRYL	278	298	7.3	TM	
12	TM	2,4,6-TRINITROTOLUENE	351	345	1.6	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	337	334	0.79	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	249	245	1.8	TM	
15	TM	2,4-DINITROTOLUENE	326	324	0.54	TM	
16	TM	2,6-DINITROTOLUENE	184	182	1.0	TM	
17	TM	2-NITROTOLUENE	133	131	1.5	TM	
18	TM	4-NITROTOLUENE	131	130	0.56	TM	
19	TM	3-NITROTOLUENE	155	156	0.20	TM	
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000041.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 13:29:59
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 28 13:56:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	3.749	0	14297039	N.D.	999.802	#
	Spiked Amount 62.500			Recovery =		0.00%	1599.68%	
	Target Compounds							
1)	TM HMX	0.000	0.948	0	27861813	N.D.	998.884	#
2)	TM RDX	0.000	1.804	0	18108588	N.D.	997.359	#
3)	TM 1,3,5-TRI...	0.000	2.939	0	32539821	N.D.	990.242	#
5)	TM 1,3-DINIT...	0.000	3.904	0	30565851	N.D.	1004.828	#
6)	TM 3,5-DINIT...	0.000	4.173	0	25992283	N.D.	989.629	#
7)	TM NITROBENZENE	0.000	5.313	0	13751361	N.D.	988.833	#
8)	TM NITROGLYC...	6.260	6.260	5687551	116647	944.413	NoCal	#
9)	TM TETRYL	6.765	6.765	19442294	11920844	NoCal	1073.244	#
10)	TM 2,4,6-TRI...	7.223	7.223	17711808	13803678	NoCal	983.533	#
11)	TM 2-AMINO-4...	7.593	7.593	20058964	13357253	NoCal	992.148	#
12)	TM 4-AMINO-2...	7.953	7.953	18182373	9795730	NoCal	981.762	#
13)	TM 2,4-DINIT...	9.071	9.071	9480767	12972611	NoCal	994.642	#
14)	TM 2,6-DINIT...	9.444	9.444	10079767	7295409	NoCal	989.515	#
15)	TM 2-NITROTO...	0.000	12.829	0	5237287	N.D.	984.842	#
16)	TM 4-NITROTO...	0.000	13.415	0	5195831	N.D.	994.411	#
17)	TM 3-NITROTO...	0.000	14.281	0	6223582	N.D.	1001.987	#
18)	TM PETN	16.243	0.000	5024253	0	991.045	N.D.	#

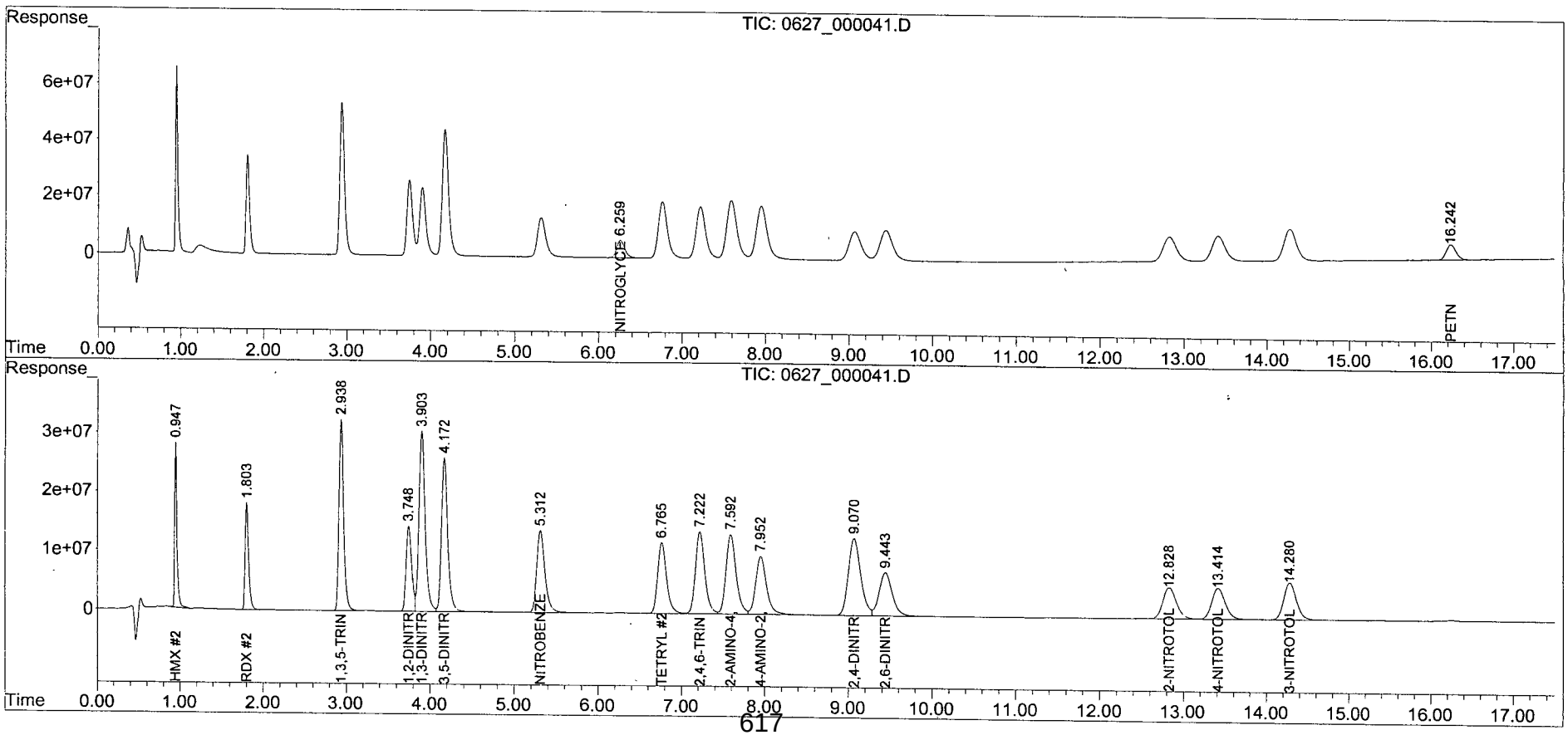
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000041.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 13:29:59
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 28 13:56:43 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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. SDG No: 76687

Case No: Date Analyzed: 28-Jun-2015, 20:12:32

Matrix: Instrument: Waldorf

Initial Cal. Date: 06/27/15

Data File: 0627_000052.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	151	142	5.6	TM	
2	TM	PETN	127	126	0.69	TM	
3		Signal #2					
4	TM	HMX	697	691	0.85	TM	
5	TM	RDX	454	453	0.22	TM	
6	TM	1,3,5-TRINITROBENZENE	822	813	1.1	TM	
7	S	1,2-DINITROBENZENE	357	357	0.19	S	
8	TM	1,3-DINITROBENZENE	760	762	0.25	TM	
9	TM	3,5-DINITROANILINE	657	649	1.2	TM	
10	TM	NITROBENZENE	348	338	2.7	TM	
11	TM	TETRYL	278	296	6.8	TM	
12	TM	2,4,6-TRINITROTOLUENE	351	344	2.0	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	337	334	0.84	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	249	245	1.9	TM	
15	TM	2,4-DINITROTOLUENE	326	323	0.89	TM	
16	TM	2,6-DINITROTOLUENE	184	182	1.2	TM	
17	TM	2-NITROTOLUENE	133	128	3.5	TM	
18	TM	4-NITROTOLUENE	131	128	1.8	TM	
19	TM	3-NITROTOLUENE	155	153	1.3	TM	
20							
21							
22							
23							
24							
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39							
40							

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000052.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 20:12:32
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 29 07:23:18 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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

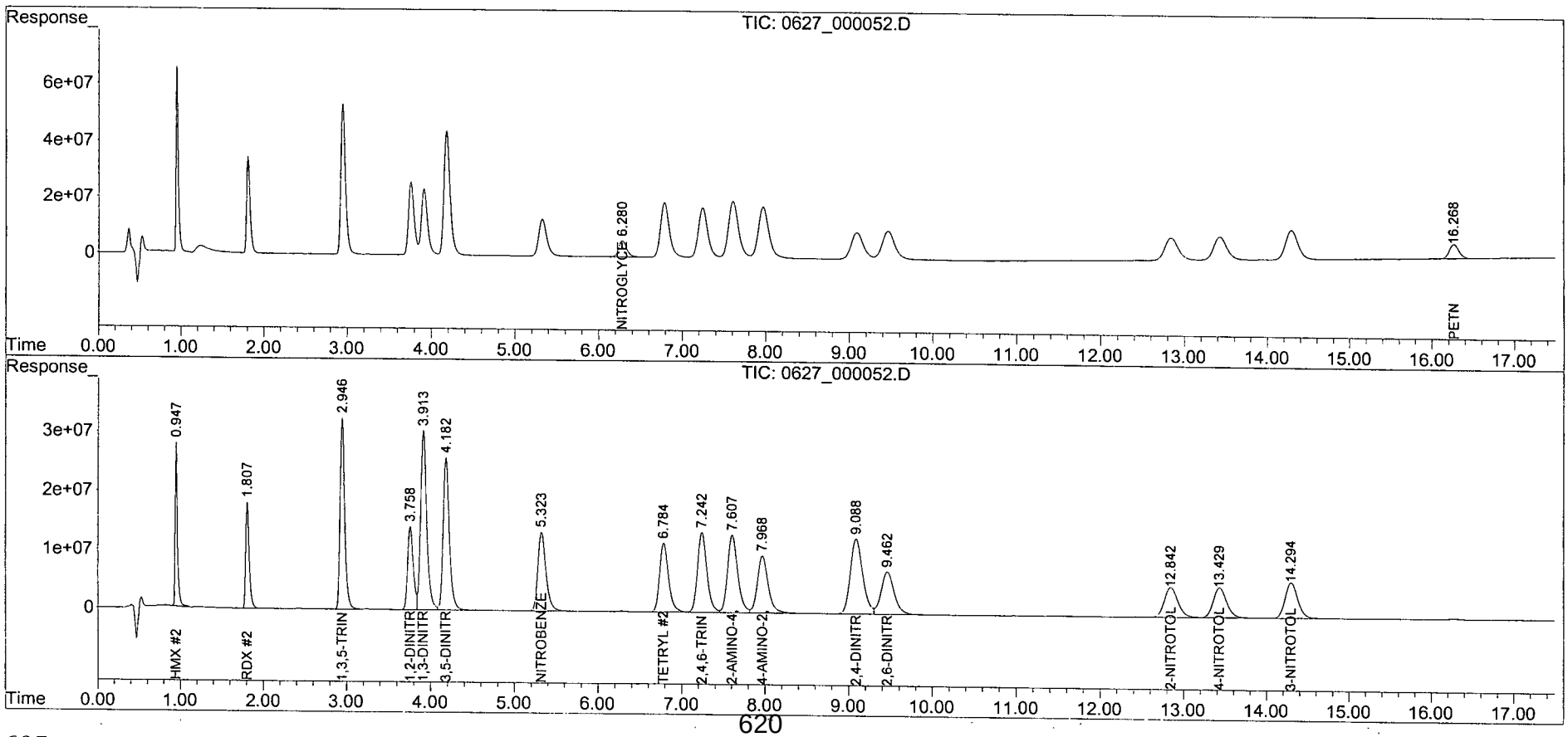
	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
4)	S 1,2-DINIT...	0.000	3.759	0	14272009	N.D.	998.051	#
	Spiked Amount 62.500			Recovery	=	0.00%	1596.88%	
	Target Compounds							
1)	TM HMX	0.000	0.949	0	27656309	N.D.	991.517	#
2)	TM RDX	0.000	1.808	0	18116135	N.D.	997.775	#
3)	TM 1,3,5-TRI...	0.000	2.947	0	32507816	N.D.	989.268	#
5)	TM 1,3-DINIT...	0.000	3.914	0	30495633	N.D.	1002.520	#
6)	TM 3,5-DINIT...	0.000	4.183	0	25954376	N.D.	988.186	#
7)	TM NITROBENZENE	0.000	5.324	0	13537493	N.D.	973.454	#
8)	TM NITROGLYC...	6.281	6.282	5686475	116140	944.234	NoCal	#
9)	TM TETRYL	6.785	6.785	19333281	11859644	NoCal	1067.734	#
10)	TM 2,4,6-TRI...	7.243	7.243	17661547	13752057	NoCal	979.855	#
11)	TM 2-AMINO-4...	7.607	7.607	20084707	13349874	NoCal	991.600	#
12)	TM 4-AMINO-2...	7.968	7.969	18184101	9787729	NoCal	980.960	#
13)	TM 2,4-DINIT...	9.089	9.089	9469110	12926298	NoCal	991.092	#
14)	TM 2,6-DINIT...	9.463	9.463	10075023	7286911	NoCal	988.362	#
15)	TM 2-NITROTO...	0.000	12.843	0	5130381	N.D.	964.739	#
16)	TM 4-NITROTO...	0.000	13.430	0	5132321	N.D.	982.256	#
17)	TM 3-NITROTO...	0.000	14.295	0	6129848	N.D.	986.896	#
18)	TM PETN	16.269	0.000	5034862	0	993.138	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000052.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 20:12:32
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 29 07:23:18 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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: 76687
Date Analyzed: 29-Jun-2015, 02:55:08
Instrument: Waldorf
Initial Cal. Date: 06/27/15
Data File: 0627_000063.D

		Compound	MEAN	CCRF	%D		%Drift
1	TM	NITROGLYCERIN	151	140	6.7	TM	
2	TM	PETN	127	125	1.7	TM	
3		Signal #2					
4	TM	HMX	697	691	0.90	TM	
5	TM	RDX	454	448	1.2	TM	
6	TM	1,3,5-TRINITROBENZENE	822	806	1.9	TM	
7	S	1,2-DINITROBENZENE	357	353	1.1	S	
8	TM	1,3-DINITROBENZENE	760	756	0.55	TM	
9	TM	3,5-DINITROANILINE	657	642	2.2	TM	
10	TM	NITROBENZENE	348	331	4.9	TM	
11	TM	TETRYL	278	292	5.0	TM	
12	TM	2,4,6-TRINITROTOLUENE	351	340	3.0	TM	
13	TM	2-AMINO-4,6-DINITROTOLUEN	337	329	2.3	TM	
14	TM	4-AMINO-2,6-DINITROTOLUEN	249	242	3.2	TM	
15	TM	2,4-DINITROTOLUENE	326	320	1.9	TM	
16	TM	2,6-DINITROTOLUENE	184	180	2.3	TM	
17	TM	2-NITROTOLUENE	133	125	6.0	TM	
18	TM	4-NITROTOLUENE	131	126	3.4	TM	
19	TM	3-NITROTOLUENE	155	150	3.4	TM	
20							
21							
22							
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Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000063.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 29-Jun-2015, 02:55:08
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 29 07:25:41 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	3.767	0	14137084	N.D.	988.616	#
	Spiked Amount 62.500			Recovery	=	0.00%	1581.79%	
	Target Compounds							
1)	TM HMX	0.000	0.950	0	27642258	N.D.	991.013	#
2)	TM RDX	0.000	1.812	0	17931718	N.D.	987.618	#
3)	TM 1,3,5-TRI...	0.000	2.952	0	32243286	N.D.	981.218	#
5)	TM 1,3-DINIT...	0.000	3.921	0	30250303	N.D.	994.455	#
6)	TM 3,5-DINIT...	0.000	4.196	0	25678509	N.D.	977.632	#
7)	TM NITROBENZENE	0.000	5.331	0	13223991	N.D.	950.911	#
8)	TM NITROGLYC...	6.289	6.289	5618967	116137	933.025	NoCal	#
9)	TM TETRYL	6.803	6.803	19048756	11666719	NoCal	1050.365	#
10)	TM 2,4,6-TRI...	7.255	7.255	17467369	13619019	NoCal	970.375	#
11)	TM 2-AMINO-4...	7.633	7.633	19773259	13154390	NoCal	977.080	#
12)	TM 4-AMINO-2...	7.994	7.994	17947532	9660286	NoCal	968.187	#
13)	TM 2,4-DINIT...	9.108	9.108	9341729	12799379	NoCal	981.360	#
14)	TM 2,6-DINIT...	9.483	9.483	9940781	7202871	NoCal	976.964	#
15)	TM 2-NITROTO...	0.000	12.861	0	5000833	N.D.	940.378	#
16)	TM 4-NITROTO...	0.000	13.447	0	5047493	N.D.	966.021	#
17)	TM 3-NITROTO...	0.000	14.311	0	5997493	N.D.	965.587	#
18)	TM PETN	16.288	0.000	4982437	0	982.797	N.D.	#

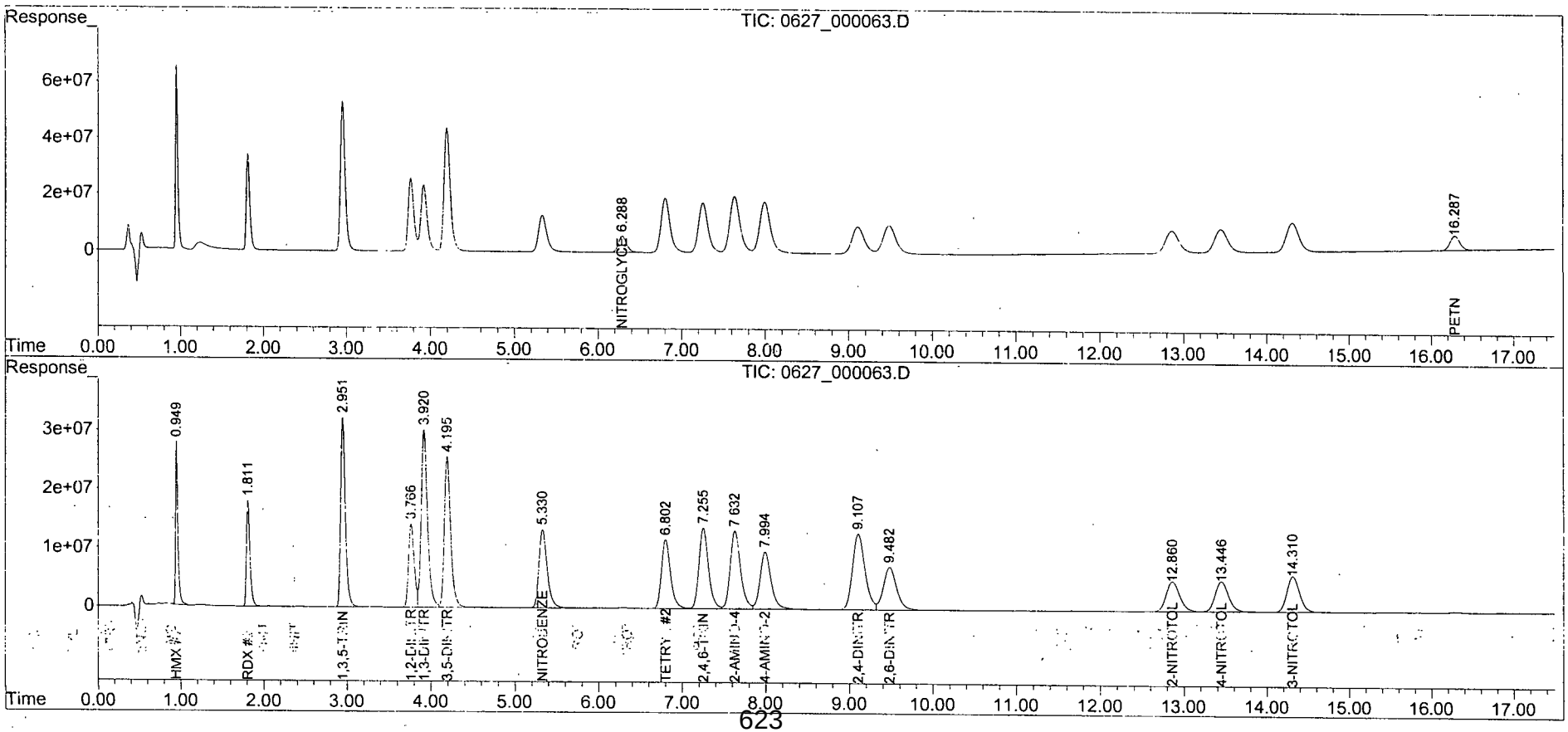
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000063.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 29-Jun-2015, 02:55:08
Operator : MP
Sample : 8330_CCV 1.0 PPM 06/28/15
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: Jun 29 07:25:41 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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

Raw Data

APPL, INC.

Method Blank
EPA 8330B WATER

Blank Name/QCG: **150622W-17907 - 198432**
Batch ID: #83BJU11W-150622

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	06/22/15	06/24/15
BLANK	2,6-DINITROTOLUENE	0.300 U	0.50	0.300	0.125	ug/L	06/22/15	06/24/15
BLANK	HMX	0.300 U	0.50	0.300	0.115	ug/L	06/22/15	06/24/15
BLANK	NITROGLYCERIN	0.300 U	0.50	0.300	0.130	ug/L	06/22/15	06/24/15
BLANK	RDX	0.300 U	0.50	0.300	0.123	ug/L	06/22/15	06/24/15
BLANK	TETRYL	0.300 U	0.50	0.300	0.133	ug/L	06/22/15	06/24/15
BLANK	SURROGATE: 1,2-DINITROBENZ	92.2	70-130			%	06/22/15	06/24/15

Quant Method: STE2_15052
Run #: 0624_000006
Instrument: Statler
Sequence: 150624
Initials: MP

GC SC-Blank-REG MDLs
Printed: 06/30/15 10:29:54 AM

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 14:39:41
Operator : MP
Sample : 150622ABLKW C.016 DF 06/22/15
Misc :
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: Jun 25 15:59:31 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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	8.061	0	102054	N.D.		0.922	#
Spiked Amount	1.000			Recovery	=	0.00%		92.20%	
	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.	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	11.878	0	369	N.D.	d <DL	NoCal	
9) TM	TETRYL	11.712	0.000	741	0	NoCal	<DL	N.D.	d
10) TM	2,6-DINIT...	13.172	0.000	1583	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	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	22.923f	0	89247	N.D.	d NT	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

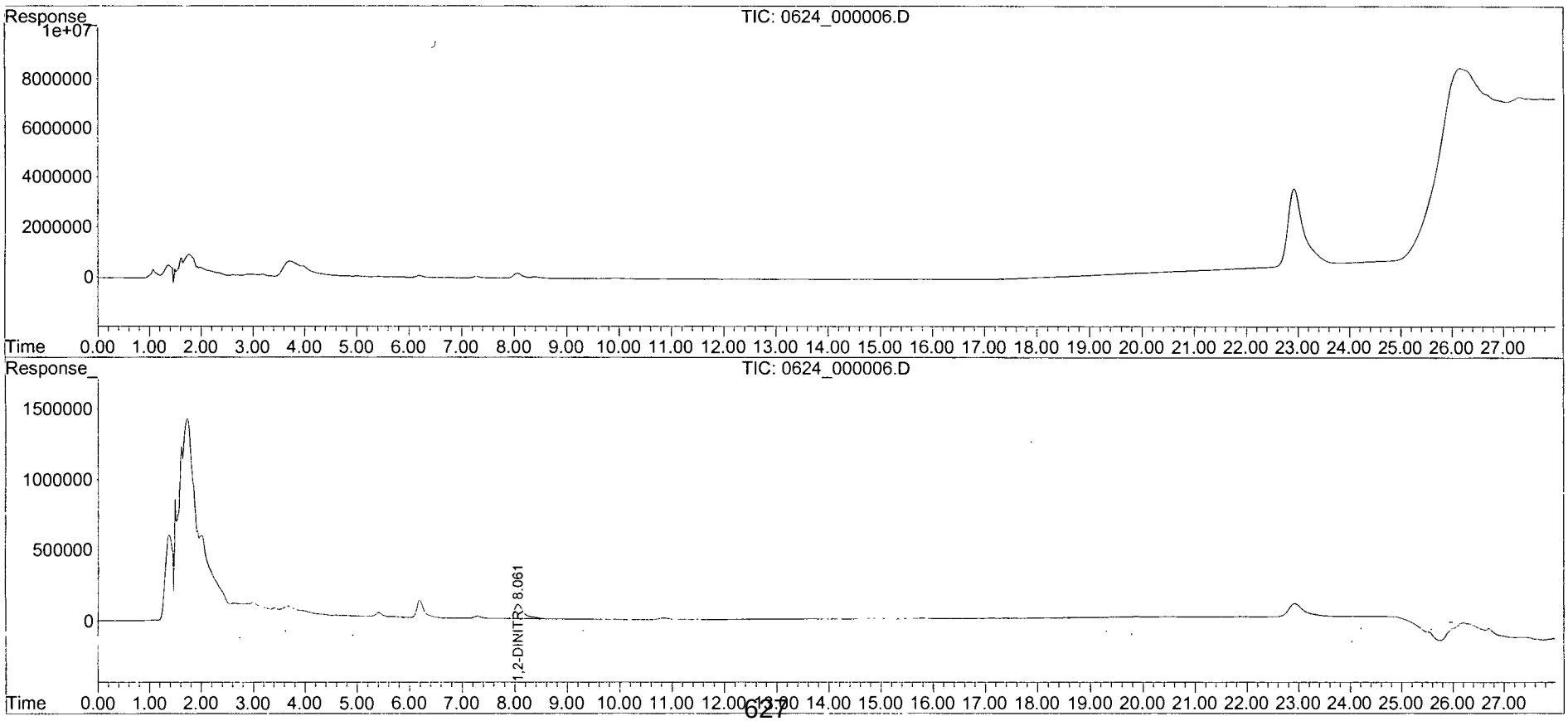
MP
06-25-15

Quantitation Report (QT Reviewed)

Data Path : Z:\STATLER\CHEM32\1\DATA\150522\150624\
Data File : 0624_000006.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 24-Jun-2015, 14:39:41
Operator : MP
Sample : 150622ABLKW 0.016 DF 06/22/15
Misc :
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: Jun 25 15:59:31 2015
Quant Method : Z:\STATLER\CHEM32\1\DATA\150522\150624\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



Laboratory Control Spike Recovery
EPA 8330B WATER

APPL ID: **150622W-17907 LCS - 198432**
Batch ID: #83BJU11W-150622

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	7.17	89.6	60-135
2,6-DINITROTOLUENE	8.00	7.15	89.4	60-135
HMX	8.00	7.64	95.5	80-115
NITROGLYCERIN	8.00	7.11	88.9	70-130
RDX	8.00	7.24	90.5	50-160
TETRYL	8.00	7.70	96.3	20-175
SURROGATE: 1,2-DINITROBENZENE (S	8.00	7.06	88.3	70-130

Comments: _____

Primary	SPK
Quant Method :	W150627.M
Extraction Date :	06/22/15
Analysis Date :	06/28/15
Instrument :	Waldorf
Run :	0627_000032
Initials :	MP

Printed: 06/30/15 10:29:55 AM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000032.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 07:52:25
Operator : MP
Sample : 150622ALCS-1 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4160 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 12:46:00 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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	3.749	0	6314260	N.D.	7.065	#
	Spiked Amount 1.000			Recovery =		0.00%	706.50%	
	Target Compounds							
1)	TM HMX	0.000	0.952	0	13315552	N.D.	7.638	#
2)	TM RDX	0.000	1.806	0	8219508	N.D.	7.243	#
3)	TM 1,3,5-TRI...	0.000	2.938	0	14541499	N.D.	7.080	#
5)	TM 1,3-DINIT...	0.000	3.902	0	13373384	N.D.	7.034	#
6)	TM 3,5-DINIT...	0.000	4.170	0	11301118	N.D.	6.884	#
7)	TM NITROBENZENE	0.000	5.310	0	6042352	N.D.	6.952	#
8)	TM NITROGLYC...	6.252	6.251	2676477	73917	7.111	NoCal	#
9)	TM TETRYL	6.758	6.758	8692433	5342957	NoCal	7.696	#
10)	TM 2,4,6-TRI...	7.213	7.213	8208018	6366782	NoCal	7.258	#
11)	TM 2-AMINO-4...	7.585	7.585	8945802	5930492	NoCal	7.048	#
12)	TM 4-AMINO-2...	7.944	7.944	7585210	4079056	NoCal	6.541	#
13)	TM 2,4-DINIT...	9.061	9.061	4277525	5843710	NoCal	7.169	#
14)	TM 2,6-DINIT...	9.433	9.432	4551221	3293535	NoCal	7.148	#
15)	TM 2-NITROTO...	0.000	12.824	0	2280185	N.D.	6.860	#
16)	TM 4-NITROTO...	0.000	13.413	0	2264458	N.D.	6.934	#
17)	TM 3-NITROTO...	0.000	14.278	0	2711969	N.D.	6.986	#
18)	TM PETN	16.222	0.000	2338424	0	7.380	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

HP 06-28-15

Algorithm check

HMX

$\frac{13715552}{697.3\ (\%)} \times 0.016 = 7.638$

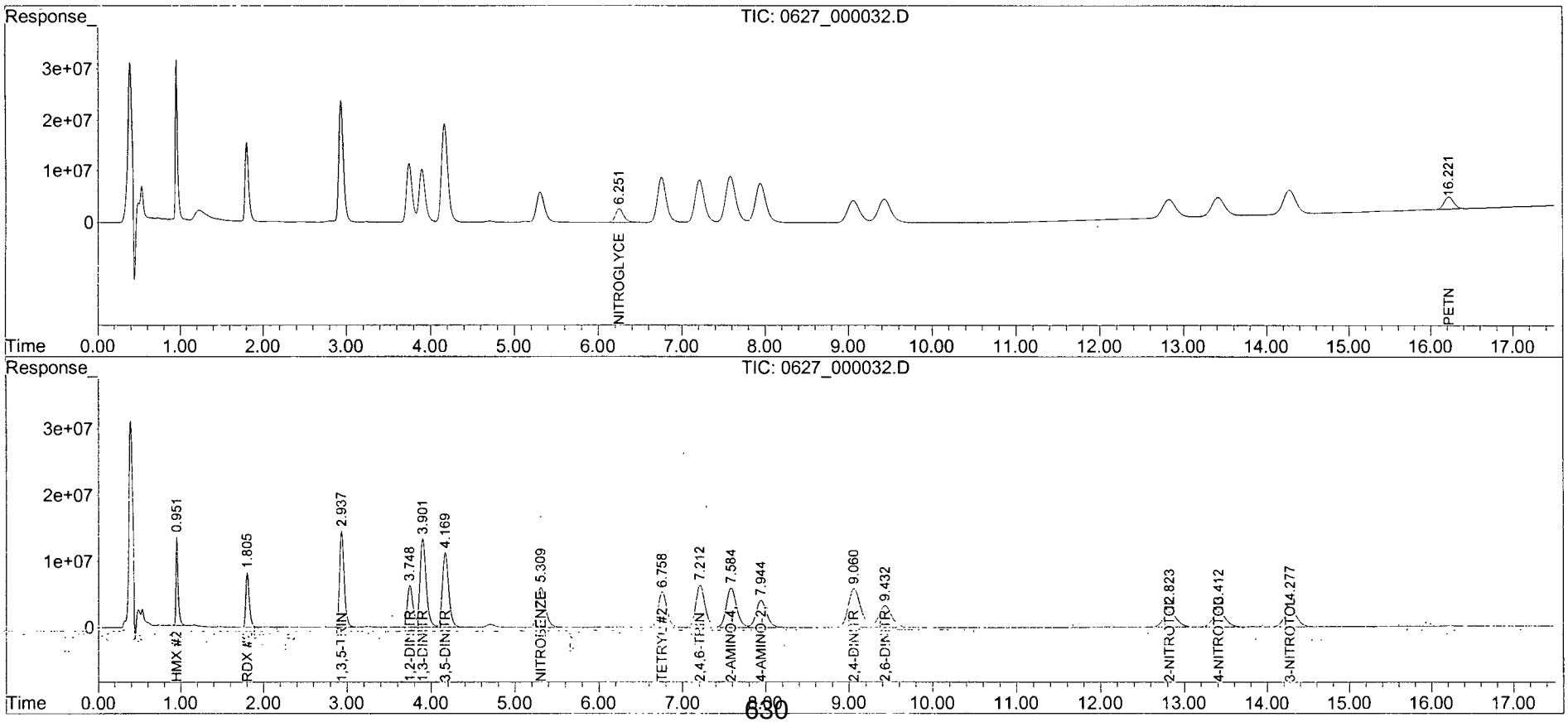
✓ HP 6-30-15

Quantitation Report (QT Reviewed)

Data Path : Z:\WALDORF\CHEM32\2\DATA\150627\150627\
Data File : 0627_000032.D
Signal(s) : Signal #1: DAD1B.ch Signal #2: DAD1A.ch
Acq On : 28-Jun-2015, 07:52:25
Operator : MP
Sample : 150622ALCS-1 0.016 DF 06/22/15
Misc : Water
ALS Vial : 4160 Sample Multiplier: 0.016

Integration File signal 1: Waldorf_Signal_1_110721.e
Integration File signal 2: Waldorf_Signal_2_110803.e
Quant Time: Jun 28 12:46:00 2015
Quant Method : Z:\WALDORF\CHEM32\2\DATA\150627\150627\W150627.M
Quant Title : 8330B - Soil - Waldorf
QLast Update : Sun Jun 28 06:23:43 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



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 6a 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							
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					MP 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 0G445/52292	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					

LC/MS STANDARD PREP LOG# 103 PAGE# 65

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT 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

066

LC/MS STANDARD PREP LOG# 103 PAGE# 66

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL. EN. 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 #9509B, 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

GCMS STANDARD PREP LOG# 104 PAGE 8

008 STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOLVENT LOT #	DATE / INITIALS
1,2-DNB	1000 ug/mL						04-23-14 KP

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
010986-01
Lot # 216681 | Storage <10 Degrees C | Expiry 10/25/16
Solvt: Acetonitrile
1,2-Dinitrobenzene
Lot #: 216681 - 33241
Rec: 1/8/14 MFR exp. 10/25/16

1,2-DNB	100 ug/mL							KP
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 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
FOR LABORATORY USE ONLY
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive 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

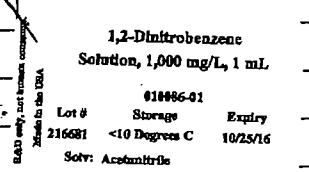
MX-8330	100 ug/mL							KP
MX-8330R	1000	04-23-14	1.0	10.0	100	1:1 ACN/MeOH	02-19-14	04-23-14

1,2-DNB	5.0 ug/mL							KP
1,2-DNB	100	04-23-14	0.50	10.0	5.0	1:1 ACN/MeOH	02-19-14	04-23-14

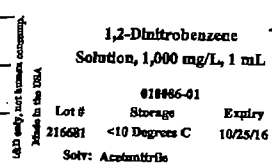
LC/MS STANDARD PREP LOG# 104 PAGE# 23

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/53235	06-12-14 P
HPLC FS	100	03-17-14	0.020	1.0			
	8321 TS 0.0025 DF						
8321 TS	0.10 DF	06-12-14	0.050	2.0	0.0025	MeOH/53235	06-12-14 P
HPLC FS	100	03-17-14	0.020	1.0			
	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 1.00 ml from each vial and diluted to 20.0 ml 1:1 ACN MeOH 02-19-14. I labeled this solution 1,2-DNB 100 ug/mL 06-12-14

I combined the remaining balance of MP 06-12-14 the 2 vials above and transferred to one amber 1.8 ml injection vial. I labeled this solution 1,2-DNB 1000 ug/mL 06-12-14

LC/MS STANDARD PREP LOG# 104 PAGE# 25

025

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS

PETN 1000 ug/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

I broke open the vial labeled to the left and transferred to an 8ml Amber Vial

→ PETN 1000 ug/ml 06-12-14

PETN 100 ug/ml
PETN 1000 06-12-14 1.0 10.0 100 1:1 ACN/MeOH 06-12-14 [illegible]

8321MX6-7 500 ug/ml 06-12-14 [illegible]

o2si smart solutions
Custom Pesticide Solution, 6-7, 500 mg/L, 5 x 2 ml
130287-01-05
Storage: </= -10 Degrees C
Made in USA
Lot No: 160093
Exp: 6/1/2013
Date Opened:
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 → 8321MX6-7 500 ug/ml (to be QCd) [illegible]

8321MX6-7 20 ug/ml 06-12-14 [illegible]
8321MX6-7 500 06-12-14 0.080 2.0 20 Methanol/53235 [illegible]

8321MX6-7 0.02 DF (OLD) [illegible]
8321MX6-7 20 06-12-14 0.040 2.0 0.02 MeOH/53235 06-12-14
HPLC FS 100 03-17-14 0.020 ⊥ 1.0 ⊥ ⊥

LCMS STANDARD PREP LOG# 104 Page 37

037

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	INITIALS
Spinos-d 1000 ug/mL							
Spinos-d	1000	04-14-14	0.075	1.0	100	Methanol/53235	kp 07-14-14
Spinos-d 500 ug/mL							
Sp.nos-d	500	07-14-14	0.10	1.0	50	Methanol/53235	kp 07-14-14
Spinos-d 200 ug/mL							kp
Sp.nos-d	200	07-14-14	0.10	1.0	20	Methanol/53235	07-14-14
Spinos-d 10 ug/mL							
Sp.nos-d	100	07-14-14	0.10	1.0	10	Methanol/53235	07-14-14 kp
Picric Acid spk 2.0 ug/mL							
Picric Acid	100	04-16-14	0.160	8.0	2.0	ACN/DI509	07-15-14 kp
Picric Acid spk 0.2 ug/mL							
Picric Acid	spk 2.0	07-15-14	0.80	8.0	0.2	ACN/DI509	07-15-14 kp
HPLC IS 1.0 ug/mL							
HPLC IS	1000	04-22-14	0.20	200	1.0	MeOH/53235	07-15-14 kp
HPLC IS 1000 ug/mL							07-15-14 kp

I broke open the vial labled to the left and transferred to an amber 1.8 ml injection Vial → HPLC IS 100 ug/mL 07-15-14

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 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

HPLC IS 100 ug/mL							
HPLC IS	1000	07-15-14	1.0	10.0	100	MeOH/53235	07-15-14 kp
Tetryl SS 100 ug/mL							kp
tetryl ss	1000	08-27-13	0.10	1.0	100	1:1 ACN/MeOH	07-01-14
							02-13-14

LCMS STANDARD PREP LOG# 104 PAGE 45

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 P
8321VIS	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 P
8321VIS	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
ective 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
010806-01
Lot # 216681 | Storage <10 Degrees C | Expiry 10/25/16
Solv: Acetonitrile
R&D only, not for 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 1000ug/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 for human consump.
Made in the USA

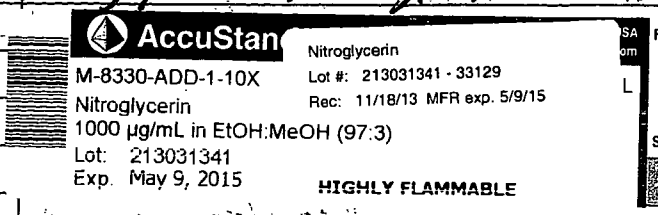
3,5-Dinitroaniline
Lot #: 199709 - 33122
Rec: 11/15/13 MFR exp. 11/21/15

I broke open the vial labeled to the left and transferred to an amber 1.8ml injection vial → 3,5-DNA 1000ug/mL 08-06-14

LC/MS STANDARD PREP LOG# 104 PAGE# 46

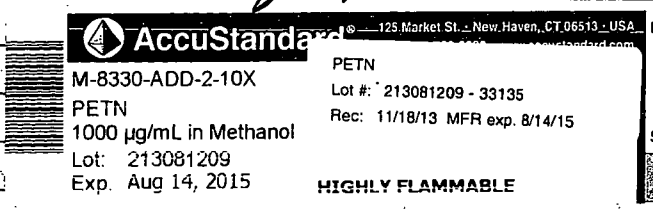
046

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE INITIALS
Nitroglycerin 1000 ug/ml							08-06-14 HP



I broke open the vial labeled above and transferred to an amber 1.8ml injection vial → Nitroglycerin 1000 ug/ml 08-06-14

PETN 1000 ug/ml 08-06-14 HP



I broke open the vial labeled above and transferred to an amber 1.8ml injection vial → PETN 1000 ug/ml 08-06-14

	8330 MIX A 10 ug/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 ug/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	"	"	"	"		"

LC/MS STANDARD PREP LOG# 104 PAGE 47

047

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N. LOT #	DATE INITIALS
	PETN_SS 100 ng/mL						
PETN	1000	06-12-14	0.10	1.0	100	1:1 ACN/MeOH 07-02-14	08-06-14 M
	8321 SURR 20 ng/mL						M
Isotope	1024	03-10-14	0.195	10.0	20	MeOH/53235	08-07-14
8141 surr	1000	07-31-14	0.20	1	1	1	1
	8321 TS_SPL 1 DF						
8321 MXB-7	1000	06-12-14	0.10	5.0	20	MeOH/53235	08-07-14 M

M

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

LC/MS STANDARD PREP LOG# 104 PAGE# 49

049

DATE / INITIALS

6-14 MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT/LOT	DATE/IN.
8330_CB(1:1) 1.0 PPM							MP 08-06-14
8330MXA	10.0	08/06/14	0.100	1.0	1.0	1:1 ACN/MEOH 02/19/14	08/06/14
8330MXB	10.0	08/06/14					
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 02/19/14	08/06/14
8330_CB 0.005 PPM							
8330_CB(1:1)	0.1	08/06/14	0.050	1	0.005	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_CB 0.010 PPM							
8330_CB(1:1)	0.1	08/06/14	0.100	1.00	0.010	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_CB 0.020 PPM							
8330_CB(1:1)	0.1	08/06/14	0.200	1.00	0.020	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_CB 0.050 PPM							
8330_CB(1:1)	1.0	08/06/14	0.050	1.00	0.050	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_CB 0.10 PPM							
8330_CB(1:1)	1.0	08/06/14	0.100	1.00	0.10	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_CB 0.20 PPM							
8330_CB(1:1)	1.0	08/06/14	0.20	1.00	0.20	1:1:6_ACN MEOH: MILLIPORE	08/06/14
8330_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
8330MXB	10.0	08/06/14	0.050				
8330_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
8330MXB	10.0	08/06/14	0.100				
8330MXA_CB 2.0 PPM							
8330MXA_CB	10.0	08/06/14	0.200	1.00	2.000	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
8330_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	100	12/27/13	0.010				
PETN_TET_SS 1.0 PPM							
PETN_SS	100	08/06/14	0.01	1.00	1.0	1:1:6_ACN MEOH: MILLIPORE	08/06/14
TETRYL_SS	100	07/01/14	0.01				

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048 STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT#	DATE INITIALS
							08/06/14 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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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE / INITIALS
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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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	LOT #	DATE 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
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	SOL'N. LOT #	INITIALS
CC_Carb sph 2.0 ug/mL							
8321_SS	100	11-03-14	0.200	10.0	2.0	MeOH/54115	12-12-14 HP
HPLC_IS 1.0 ug/mL							
HPLCIS	100	10-02-14	2.0	200	1.0	MeOH/54115	12-15-14 HP
HPLCISAQ 1.0 ug/mL					12-16-14		
HPLCIS	100	10-02-14	1.0	100	1.0	Millipore water	12-16-14 HP
Carb sph 10 ug/mL							
8321MX298	400	09-22-14	0.050	2.0	10	MeOH/54115	12-17-14 HP
8321_Surr 10 ug/mL							
Isoxaben	1024	03-10-14	0.025	3.0	10.0	MeOH/54115	12-17-14 HP
8141 Surr	1000	10-30-14	0.030	〃	〃	〃	〃
8321_Surr 20 ug/mL							
Isoxaben	1024	03-10-14	0.195	10.0	20	MeOH/54115	12-17-14 HP
8141 Surr	1000	~~10-30-14~~ 12-03-14 HP 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 HP
Nitroglycerin 100 ug/mL							
Nitroglycerin	1000	02-25-14	0.50	5.0	100	1:1 ACN/MeOH	12-19-14 HP
8321_Stock							
8321MX67	1000	09-25-14	0.050	10.0	5.0	MeOH/54115	12-22-14 HP
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					HPLCIS 1 ug/ml		
8324TS 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	⊥	⊥		
83TS sph/surr 100 DF	12-22-14	0.10	1.0	100 DF	HPLCIS 1 ug/ml		12-22-14 HP

Tetryl SS 1000 ug/ml 12-23-14
Tetryl 1000 ug/ml Absolute Lot 112310-33879, I broke open the vial and transferred to an amber 1.8 ml injection vial → Tetryl 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

R&D only, not human consump. Made in the USA
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 - 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

R&D only, not human consump. Made in the USA
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
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	SOL'VENT 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	1	1	1	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	1	1	1	12-23-14	1
PETN	1000	06-12-14	1	1	1		
	Tetryl 55 100 ug/mL						N
Tetryl 55	1000	12-23-14	0.10	1.0	10.0	1:1 ACN/MeOH	12-23-14
						12-27-14	

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	SOL'N LOT#	INITIAL DATE
PETN	1000 ug/ml						NP 12-29-14

S-12837A4-5ML Exp 4/30/2015
GHT PO BOX 599
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 amber 8ml vial → PETN 1000ug/ml 12-29-14

	PETN 100ug/ml							NP
PETN	1000	12-29-14	0.5	5.0	100	1:1 ACN/MeOH 07-2-14		12-29-14
	PGDN spike 10ug/ml							NP
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							NP
PGDN spk	10	01-06-15	0.10	1.0	1.0	1:1 ACN/MeOH 7-2-14		01-06-15
	Nitroglycerin 100ug/ml							NP
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							NP
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							NP
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-8330R	1000	08-06-14	0.80	8.0	100	1:1 ACN/MeOH	01-15-15
1,2-DND	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	SOLVENT 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	SOL'N 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	100	08/06/14	0.01	1.00	1.0	1:1:6_ACN	03/12/15
TETRYL_SS	100	01/15/15	0.01			MEOH: MILLIPORE	

HP HP

PETN_SS 100 08-06-14 The Solution was QC'd on 03-13-15 on Stather, Data File 0312_D00047.D HP 03-16-15

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STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOL. CHL. / LOT # 02	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-(1,3,5-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 CONC	SOLVENT 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	100	08/06/14	0.01	1.00	1.0	1:1:6_ACN	03/17/15
TETRYL_SS	100	01/15/15	0.01			MEOH: MILLIPORE	

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 JP
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

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

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-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

MP

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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/DM394		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	"				
Scav Surr 30 ug/mL							
1,3,5-Trimethylhexahydro-1,3,5-triazine							HP
1077	04-17-15	0.557	20	30	ACN/DM394		04-23-15
PETN SS 100 ug/mL							3-5-15
PETN 1000	06-09-14	0.10	1.0	100	1:1 ACN/MeOH		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	

Gross weight Comparison 04-28-15 HP

Balance ID: Mettler AT-200 #J-28448

Tare-S-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

1,2-DNB 1000 PPM 06/15/15
MP

1,2-DNB 1000 PPM,O2SI LOT 227342-34118, I BROKE OPEN THE VIAL AND TRANSFERRED THE CONTENTS TO AN AMBER 1.8 ML INJECTION VIAL ---1,2-DNB 1000 PPM 06/15/15

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
1,2-DNB 100 PPM							
1,2-DNB	1000	06/15/15	1.000	10.0	100.0	1:1 ACN/MEOH 05/22/15	06/15/15 MP

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOLVENT/LOT	DATE/IN.
8330MXA_CB(1:1) 1.0 PPM 8330MXA	10.0	05/15/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	05/22/15
8330MXA_CB(1:1) 0.10 PPM 8330MXA_CB(1:1)	1.0	05/22/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	05/22/15
8330MXB_CB(1:1) 1.0 PPM 8330MXB	10.0	05/15/15	0.100	1.0	1.0	1:1 ACN/MEOH 03/05/15	05/22/15 05/22/15
8330MXB_CB(1:1) 0.10 PPM 8330MXB_CB(1:1)	1.0	05/22/15	0.100	1.0	0.1	1:1 ACN/MEOH 03/05/15	05/22/15
8330MXA_CB 0.005 PPM 8330MXA_CB(1:1)	0.1	05/22/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.010 PPM 8330MXA_CB(1:1)	0.1	05/22/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.020 PPM 8330MXA_CB(1:1)	0.1	05/22/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.050 PPM 8330MXA_CB(1:1)	1.0	05/22/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.10 PPM 8330MXA_CB(1:1)	1.0	05/22/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.20 PPM 8330MXA_CB(1:1)	1.0	05/22/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 0.50 PPM 8330MXA	10.0	05/15/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 1.0 PPM 8330MXA	10.0	05/15/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_CB 2.0 PPM 8330MXA_CB	10.0	05/15/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.005 PPM 8330MXB_CB(1:1)	0.1	05/22/15	0.050	1	0.005	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.010 PPM 8330MXB_CB(1:1)	0.1	05/22/15	0.100	1.00	0.010	1:1:6_ACN/MEOH MILLIPORE	05/22/15

8330MXB_CB 0.020 PPM							
8330MXB_CB(1:1)	0.1	05/22/15	0.200	1.00	0.020	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.050 PPM							
8330MXB_CB(1:1)	1.0	05/22/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.10 PPM							
8330MXB_CB(1:1)	1.0	05/22/15	0.100	1.00	0.100	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.20 PPM							
8330MXB_CB(1:1)	1.0	05/22/15	0.200	1.00	0.200	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 0.50 PPM							
8330MXB_CB	10.0	05/15/15	0.050	1.00	0.050	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 1.0 PPM							
8330MXB_CB	10.0	05/15/15	0.100	1.00	1.000	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_CB 2.0 PPM							
8330MXB_CB	10.0	05/15/15	0.200	1.00	2.000	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXA_SS 1.0 PPM							
8330MXA_SS	100	05/15/15	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	05/22/15
8330MXB_SS 1.0 PPM							
8330MXB_SS	100	05/15/15	0.010	1.00	1.0	1:1:6_ACN/MEOH MILLIPORE	05/22/15
PETN_TET_SS 1.0 PPM							
PETN_SS	100	05/15/15	0.01	1.00	1.0	1:1:6_ACN	05/22/15
TETRYL_SS	100	05/15/15	0.01			MEOH: MILLIPORE	

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOVENT/LOT	DATE/IN.
8330MX-A 10.0 PPM							
MX-8330R	500	05/15/15	0.400	20.0	10.0	1:1 ACN/MEOH	06/21/15
1,2-DNB	1000	05/15/15	0.200			05/22/15	MP
8330MX-B 10.0 PPM							
NITROGLYCERIN	1000	05/15/15	0.200	20.0	10.0	1:1 ACN/MEOH	06/21/15
3,5-DNA	1000	05/15/15	0.200			05/22/15	MP
PETN	1000	05/15/15	0.200				

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC.	SOLVENT/LOT	DATE/IN.
8330_CB(1:1) 1.0 PPM							
8330MXA	10.0	06/21/15	0.100	1.0	1.0	1:1 ACN/MEOH	06/26/15
8330MXB	10.0	06/21/15				05/22/15	MP
8330_CB(1:1) 0.1 PPM							
8330_CB(1:1)	1.0	06/26/15	0.100	1	0.1	1:1 ACN/MEOH	06/26/15
						05/22/15	MP
8330_CB 0.005 PPM							
8330_CB(1:1)	0.1	06/26/15	0.050	1	0.005	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.010 PPM							
8330_CB(1:1)	0.1	06/26/15	0.100	1.00	0.010	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.020 PPM							
8330_CB(1:1)	0.1	06/26/15	0.200	1.00	0.020	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.050 PPM							
8330_CB(1:1)	1.0	06/26/15	0.050	1.00	0.050	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.10 PPM							
8330_CB(1:1)	1.0	06/26/15	0.100	1.00	0.10	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.20 PPM							
8330_CB(1:1)	1.0	06/26/15	0.20	1.00	0.20	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_CB 0.50 PPM							
8330MXA	10.0	06/21/15	0.050	1.00	0.050	1:1:6_ACN	06/26/15
8330MXB	10.0	06/21/15	0.050			MEOH: MILLIPOR	MP
8330_CB 1.0 PPM							
8330MXA	10.0	06/21/15	0.100	1.00	1.000	1:1:6_ACN	06/26/15
8330MXB	10.0	06/21/15	0.100			MEOH: MILLIPOR	MP
8330MXA_CB 2.0 PPM							
8330MXA_CB	10.0	06/21/15	0.200	1.00	2.000	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330MXB_CB 2.0 PPM							
8330MXB_CB	10.0	06/21/15	0.200	1.00	2.000	1:1:6_ACN	06/26/15
						MEOH: MILLIPOR	MP
8330_SS 1.0 PPM							
8330MXA_SS	100	05/15/15	0.010	1.00	1.0	1:1:6_ACN	06/26/15
8330MXB_SS	100	05/15/15	0.010			MEOH: MILLIPOR	MP
PETN_TET_SS 1.0 PPM							
PETN_SS	100	05/15/15	0.01	1.00	1.0	1:1:6_ACN	06/26/15
TETRYL_SS	100	05/15/15	0.01			MEOH: MILLIPOR	MP

Organic Extraction Worksheet

Method	EPA Method 3535A	Extraction Set	150622A	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	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:	YES	
Spiked ID 7			Ext. Start Time:	06/22/15 11:12	
Spiked ID 8			Ext. End Time:	06/22/15 15:44	
			GC Requires Extract By:		

pH1	2	6/22/15 10:50:00 AM	Water Bath Temp Criteria
pH2			
pH3			

Spiked By: CFM **Date** 06/22/15 11:05:00 AM **Witnessed By:** RP **Date** 06/22/15 11:05:00 AM

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	150622A Blk				0.100	1 equip	500	2ML	2	06/22/15 11:12	
2	150622A LCS-1		0.040	1-4	NA	NA equip	500	2ML	2	06/22/15 11:12	
3	AZ17907	AZ17907W05			0.100	1 equip	500	2ML	2	06/22/15 11:12	76687 - STD
4	AZ17908	AZ17908W02			0.100	1 equip	500	2ML	2	06/22/15 11:12	76687 - STD
5	AZ17909	AZ17909W05			0.100	1 equip	500	2ML	2	06/22/15 11:12	76687 - STD
6	AZ17956	AZ17956W01			0.100	1 equip	465	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
7	AZ17957	AZ17957W01			0.100	1 equip	465	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
8	AZ17958	AZ17958W01			0.100	1 equip	470	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
9	AZ17959 MS-1	AZ17959W02	0.040	1-4	NA	NA equip	460	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
10	AZ17959 MSD-1	AZ17959W03	0.040	1-4	NA	NA equip	485	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
11	AZ17959	AZ17959W01			0.100	1 equip	450	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH
12	AZ17960	AZ17960W01			0.100	1 equip	500	2ML	2	06/22/15 11:12	76701- 72 HOUR RUSH

olvent and Lot#	
cetonitrile	DM 394
artridge Sorbent Lot	S311-032
erial No	512616
odium Bisulfate	234615
H Strip	HC 431579

Extraction COC Transfer	
Extraction lab employee Initials	CFM
GC analyst's initials	
Date	
Time	
Refrigerator	

	Technician's Initials
Scanned By	CFM
Sample Preparation	CFM
Extraction	CFM
Concentration	----------

Modified	06/22/15 2:45:40 PM

Reviewed By: **Date**

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

Injection Log

Directory: Z:\STATLER\CHEM32\1\DATA\150522\150624

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0624_000004.D		8330MXA_CCV 1.0 PPM 06/24/15		6/24/15 13:20
2	0	0624_000005.D		8330MXB_CCV 1.0 PPM 06/24/15		6/24/15 14:00
3	0	0624_000006.D	0.016	150622ABLKW 0.016 DF 06/22/15	Water	6/24/15 14:39
4	0	0624_000007.D	0.016	AZ17907W05 0.016 DF 06/22/15	Water	6/24/15 15:19
5	0	0624_000008.D	0.016	AZ17908W02 0.016 DF 06/22/15	Water	6/24/15 15:58
6	0	0624_000009.D	0.016	AZ17909W05 0.016 DF 06/22/15	Water	6/24/15 16:38
7	0	0624_000015.D		8330MXA_CCV 1.0 PPM 06/24/15		6/24/15 19:17
8	0	0624_000016.D		8330MXB_CCV 1.0 PPM 06/24/15		6/24/15 19:57

Injection Log

Directory: Z:\WALDORF\CHEM32\2\DATA\150627\150627

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0627_000004.D		8330_CB 0.005 PPM 06/26/15		6/27/15 15:48
2	0	0627_000005.D		8330_CB 0.010 PPM 06/26/15		6/27/15 16:26
3	0	0627_000006.D		8330_CB 0.020 PPM 06/26/15		6/27/15 17:03
4	0	0627_000007.D		8330_CB 0.050 PPM 06/26/15		6/27/15 17:41
5	0	0627_000008.D		8330_CB 0.10 PPM 06/26/15		6/27/15 18:18
6	0	0627_000009.D		8330_CB 0.20 PPM 06/26/15		6/27/15 18:56
7	0	0627_000010.D		8330_CB 0.50 PPM 06/26/15		6/27/15 19:33
8	0	0627_000011.D		8330_CB 1.0 PPM 06/26/15		6/27/15 20:11
9	0	0627_000012.D		8330MXA_CB 2.0 PPM 06/26/15		6/27/15 20:48
10	0	0627_000027.D		8330MXB_CB 2.0 PPM 06/26/15		6/28/15 5:22
11	0	0627_000028.D		8330_SS 1.0 PPM 06/26/15		6/28/15 5:49
12	0	0627_000029.D		PETN_TETRYL_SS 1.0 PPM 06/26/15		6/28/15 6:17

Injection Log

Directory: Z:\WALDORF\CHEM32\2\DATA\150627\150627

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	0	0627_000031.D		8330_CCV-1.0 PPM-06/28/15		6/28/15 7:23
2	0	0627_000032.D	0.016	150622ALCS-1-0.016 DF-06/22/15	Water	6/28/15 7:52
3	0	0627_000041.D		8330_CCV-1.0 PPM-06/28/15		6/28/15 13:29
4	0	0627_000052.D		8330_CCV-1.0 PPM-06/28/15		6/28/15 20:12
5	0	0627_000053.D	0.016	AZ17908-0.016 DF-06/22/15	Water	6/28/15 20:40
6	0	0627_000063.D		8330_CCV-1.0 PPM-06/28/15		6/29/15 2:55

METALS

APPL, INC.

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)	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	LITHIUM (LI)	0.67 J	1.0	0.80	0.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ZINC (ZN)	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ALUMINUM (AL) (DI	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	LITHIUM (LI) (DISSO	0.53 J	1.0	0.80	0.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	ZINC (ZN) (DISSOL	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	07/08/15	07/09/15	#TCLPG-150708A-AZ17910
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	BARIUM (BA)	2.00 U	50.0	2.00	0.75	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CHROMIUM (CR)	2.00 U	50.0	2.00	1.37	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SILVER (AG)	0.78 J	10.0	0.75	0.25	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	06/24/15	06/24/15	#TCLPG-150624A-AZ17911
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	BARIUM (BA)	19.6 J	50.0	2.00	0.75	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CHROMIUM (CR)	2.0 J	50.0	2.00	1.37	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SILVER (AG)	0.65 J	10.0	0.75	0.25	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911

J = Estimated value.

Metals SC-Blank-REG MDLs
Printed: 07/13/15 4:50:06 PM

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	1790	89.5	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	BORON (B) (DISSOLVED)	250	233	93.2	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	105	105	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	472	94.4	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ALUMINUM (AL)	2000	2150	108	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	BORON (B)	250	235	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	LITHIUM (LI)	100.0	93.3	93.3	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	ZINC (ZN)	500	470	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694

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	ARSENIC (AS)	250	256	102	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	BARIUM (BA)	250	264	106	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CADMIUM (CD)	50.0	51.7	103	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CHROMIUM (CR)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	LEAD (PB)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SELENIUM (SE)	250	247	98.8	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SILVER (AG)	100.0	98.4	98.4	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 7470A	MERCURY (HG)	4.00	3.6	90.0	80-120	07/08/15	07/09/15	#TCLPG-150708A-AZ17910

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	ARSENIC (AS)	250	263	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	BARIUM (BA)	250	262	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CADMIUM (CD)	50.0	53.5	107	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CHROMIUM (CR)	250	250	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	LEAD (PB)	250	251	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SELENIUM (SE)	250	264	106	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SILVER (AG)	100.0	101	101	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 7470A	MERCURY (HG)	4.00	3.8	95.0	80-120	06/24/15	06/24/15	#TCLPG-150624A-AZ17911

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150707W-17910 MS - 198709**

Sample ID: AZ17910

Client ID: S67-AQIDW-061715

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 6010C	ARSENIC (AS)	250	1.8	272	262	108	104	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	BARIUM (BA)	250	173	448	432	110	104	3.6	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CADMIUM (CD)	50.0	0.50	53.2	51.1	105	101	4.0	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CHROMIUM (CR)	250	1.9	270	261	107	104	3.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	LEAD (PB)	250	1.2	273	263	109	105	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SELENIUM (SE)	250	1.5	254	248	101	98.6	2.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SILVER (AG)	100.0	0.94	99.5	96.5	98.6	95.6	3.1	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 7470A	MERCURY (HG)	4.00	ND	3.6	3.6	90.0	90.0	0.0	15	80-120	07/08/15	07/09/15	07/08/15	07/09/15	198716	AZ17910

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **150624S-17911 MS - 198346**

Sample ID: AZ17911

Client ID: S67-SOIDW-061715

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 6010C	ARSENIC (AS)	250	ND	264	256	106	102	3.1	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	BARIUM (BA)	250	383	637	618	102	94.0	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CADMIUM (CD)	50.0	7.7	58.6	56.6	102	97.8	3.5	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CHROMIUM (CR)	250	ND	248	241	99.2	96.4	2.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	LEAD (PB)	250	255	514	499	104	97.6	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SELENIUM (SE)	250	ND	260	255	104	102	1.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SILVER (AG)	100.0	ND	101	97.7	101	97.7	3.3	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 7470A	MERCURY (HG)	4.00	ND	3.7	3.6	92.5	90.0	2.7	15	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198323	AZ17911

Comments: _____

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/06/15

Matrix: WATER Instrument: Jules

Blank ID: 150701A1-BLK Time Analyzed: 1222

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ17908	S67-MW020-061715	150706A	07/06/15 1827
AZ17907	S67-MW021-061715	150706A	07/06/15 1821
150701A1-LCS	Lab Control Spike	150706A	07/06/15 1227
150701A1-BLK	Blank	150706A	07/06/15 1222
AZ17909	S67-MW025-061715	150706A	07/06/15 1833

Comments: Batch: #61CJU-150701A1

6010C/3010A^

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/10/15

Matrix: WATER Instrument: Jules

Blank ID: 150701A2-BLK Time Analyzed: 1002

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150701A2-BLK	Blank	150710A	07/10/15 1002
AZ17909	S67-MW025-061715	150710A	07/10/15 1027
150701A2-LCS	Lab Control Spike	150710A	07/10/15 1008
AZ17908	S67-MW020-061715	150710A	07/10/15 1021
AZ17907	S67-MW021-061715	150710A	07/10/15 1014

Comments: Batch: #61CJU-150701A2

6010C/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/08/15

Matrix: WATER Instrument: Phoebe

Blank ID: 150707A-BLK Time Analyzed: 1257

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150707A-LCS	Lab Control Spike	150708A	07/08/15 1302
150707A-MSD	Matrix SpikeD	150708A	07/08/15 1335
150707A-MS	Matrix Spike	150708A	07/08/15 1329
150707A-BLK	Blank	150708A	07/08/15 1257
AZ17910	S67-AQIDW-061715	150708A	07/08/15 1309

Comments: Batch: #TCLPM-150707A

6010C/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: SOIL Instrument: Phoebe

Blank ID: 150624A-BLK Time Analyzed: 1409

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150624A-MSD	Matrix SpikeD	150623A	06/24/15 1453
150624A-MS	Matrix Spike	150623A	06/24/15 1446
150624A-LCS	Lab Control Spike	150623A	06/24/15 1416
AZ17911	S67-SOIDW-061715	150623A	06/24/15 1423
150624A-BLK	Blank	150623A	06/24/15 1409

Comments: Batch: #TCLPM-150624A

7470A/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 06/24/15

Matrix: SOIL Instrument: Freddie

Blank ID: 150624A-BLK Time Analyzed: 1452

APPL ID.	Client Sample No.	File ID.	Date Analyzed
AZ17911	S67-SOIDW-061715	150624W	06/24/15 1456
150624A-BLK	Blank	150624W	06/24/15 1452
150624A-LCS	Lab Control Spike	150624W	06/24/15 1454
150624A-MS	Matrix Spike	150624W	06/24/15 1458
150624A-MSD	Matrix SpikeD	150624W	06/24/15 1501

Comments: Batch: #TCLPG-150624A

7470A/TCLP

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 76687

Case No: 76687 Date Analyzed: 07/09/15

Matrix: WATER Instrument: Freddie

Blank ID: 150708A-BLK Time Analyzed: 1135

APPL ID.	Client Sample No.	File ID.	Date Analyzed
150708A-LCS	Lab Control Spike	150709W	07/09/15 1138
150708A-MS	Matrix Spike	150709W	07/09/15 1146
150708A-MSD	Matrix SpikeD	150709W	07/09/15 1148
AZ17910	S67-AQIDW-061715	150709W	07/09/15 1144
150708A-BLK	Blank	150709W	07/09/15 1135

Comments: Batch: #TCLPG-150708A

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-MW021-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17907

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	976	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	206	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	8.6	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	41.6J	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	130J	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	211	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	10.1	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	29.8J	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

J = Estimated value.

Printed: 07/13/15 11:51:11 AM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 62
Sample ID: AZ17907W10
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 83
Date Collected: 07/06/15 6:21:01 PM
Data Type: Reprocessed on 07/07/15 8:54:38 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17907W10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	234320.4	98.27	%	0.462				0.47%
Y Radial	13744.5	84.61	%	28.595				33.80%
Ag 338.289†	14.5	0.075	ug/L	0.1678	0.075	ug/L	0.1678	223.95%
Al 308.215†	1344.8	975.6	ug/L	429.27	975.6	ug/L	429.27	44.00%
As 188.979†	20.8	4.857	ug/L	0.6287	4.857	ug/L	0.6287	12.94%
B 249.677†	7120.8	205.5	ug/L	1.67	205.5	ug/L	1.67	0.81%
Ba 233.527†	5051.5	11.59	ug/L	0.075	11.59	ug/L	0.075	0.65%
Be 313.107†	87.3	0.025	ug/L	0.0032	0.025	ug/L	0.0032	12.89%
Ca 315.887†	33175.1	2045	ug/L	848.12	2045	ug/L	848.12	41.48%
Cd 214.440†	51.9	0.577	ug/L	0.2109	0.577	ug/L	0.2109	36.57%
Co 228.616†	26.0	0.054	ug/L	0.1289	0.054	ug/L	0.1289	239.15%
Cr 267.716†	160.5	1.849	ug/L	0.0682	1.849	ug/L	0.0682	3.69%
Cu 327.393†	1348.8	6.080	ug/L	0.1922	6.080	ug/L	0.1922	3.16%
Fe 273.955†	83823.9	1051	ug/L	4.79	1051	ug/L	4.79	0.46%
K 766.490†	47084.5	5266	ug/L	2043.36	5266	ug/L	2043.36	38.81%
Mg 285.213†	11941.6	673.0	ug/L	284.69	673.0	ug/L	284.69	42.30%
Mn 257.610†	3994.9	43.36	ug/L	17.944	43.36	ug/L	17.944	41.39%
Mo 202.031†	29.3	0.994	ug/L	0.2285	0.994	ug/L	0.2285	22.99%
Na 589.592†	2159952.7	192800	ug/L	75673.63	192800	ug/L	75673.63	39.25%
Ni 231.604†	16.6	0.181	ug/L	0.1205	0.181	ug/L	0.1205	66.40%
P 213.617†	1925.3	590.6	ug/L	4.33	590.6	ug/L	4.33	0.73%
Pb 220.353†	33.8	7.496	ug/L	1.2535	7.496	ug/L	1.2535	16.72%
Sb 206.836†	-5.7	-0.749	ug/L	0.6795	-0.749	ug/L	0.6795	90.76%
Se 196.026†	-2.3	0.011	ug/L	1.2653	0.011	ug/L	1.2653	>999.9%
Sn 189.927†	-1.2	-0.216	ug/L	0.2318	-0.216	ug/L	0.2318	107.20%
Sr 421.552†	9397.7	12.85	ug/L	5.343	12.85	ug/L	5.343	41.57%
Ti 337.279†	475.3	11.87	ug/L	5.005	11.87	ug/L	5.005	42.16%
Tl 190.801†	-6.4	-1.672	ug/L	1.0919	-1.672	ug/L	1.0919	65.31%
V 292.402†	221.4	2.217	ug/L	0.0404	2.217	ug/L	0.0404	1.82%
Zn 206.200†	3617.6	41.58	ug/L	1.687	41.58	ug/L	1.687	4.06%
Li 670.784	208103.5	8.583	ug/L	0.0856	8.583	ug/L	0.0856	1.00%

Sequence No.: 14
Sample ID: AZ17907W10
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 41
Date Collected: 07/10/15 10:14:26 AM
Data Type: Reprocessed on 07/13/15 8:58:59 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17907W10

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	235491.5	98.70	%	0.269				0.27%
Y Radial	16583.9	103.6	%	1.61				1.55%
Ag 338.289†	84.2	0.450	ug/L	0.3418	0.450	ug/L	0.3418	75.92%
Al 308.215†	186.4	129.8	ug/L	7.50	129.8	ug/L	7.50	5.78%
As 188.979†	42.6	8.746	ug/L	1.0178	8.746	ug/L	1.0178	11.64%
B 249.677†	7528.9	210.5	ug/L	0.58	210.5	ug/L	0.58	0.28%
Ba 233.527†	4090.7	9.547	ug/L	0.0667	9.547	ug/L	0.0667	0.70%
Be 313.107†	171.9	0.046	ug/L	0.0014	0.046	ug/L	0.0014	2.99%
Ca 315.887†	25538.9	1594	ug/L	17.06	1594	ug/L	17.06	1.07%
Cd 214.440†	-101.0	0.036	ug/L	0.0260	0.036	ug/L	0.0260	72.08%
Co 228.616†	73.2	0.587	ug/L	0.1148	0.587	ug/L	0.1148	19.56%
Cr 267.716†	44.2	0.508	ug/L	0.0344	0.508	ug/L	0.0344	6.78%
Cu 327.393†	3699.5	17.58	ug/L	0.387	17.58	ug/L	0.387	2.20%
Fe 273.955†	40777.0	517.4	ug/L	0.41	517.4	ug/L	0.41	0.08%
K 766.490†	37026.0	4412	ug/L	156.66	4412	ug/L	156.66	3.55%
Mg 285.213†	8161.8	468.5	ug/L	5.33	468.5	ug/L	5.33	1.14%
Mn 257.610†	2874.9	32.50	ug/L	0.347	32.50	ug/L	0.347	1.07%
Mo 202.031†	111.3	3.324	ug/L	0.2177	3.324	ug/L	0.2177	6.55%
Na 589.592†	1752074.4	177400	ug/L	5303.65	177400	ug/L	5303.65	2.99%
Ni 231.604†	55.7	0.983	ug/L	0.1021	0.983	ug/L	0.1021	10.38%
P 213.617†	1949.0	577.0	ug/L	4.72	577.0	ug/L	4.72	0.82%
Pb 220.353†	13.3	3.022	ug/L	0.6152	3.022	ug/L	0.6152	20.36%
Sb 206.836†	-6.2	-0.786	ug/L	0.2636	-0.786	ug/L	0.2636	33.54%
Se 196.026†	-3.6	-0.664	ug/L	2.1742	-0.664	ug/L	2.1742	327.59%
Sn 189.927†	11.3	2.070	ug/L	0.2379	2.070	ug/L	0.2379	11.49%
Sr 421.552†	7097.1	11.43	ug/L	0.394	11.43	ug/L	0.394	3.44%
Ti 337.279†	116.1	2.987	ug/L	0.4025	2.987	ug/L	0.4025	13.47%
Tl 190.801†	4.5	0.833	ug/L	0.7103	0.833	ug/L	0.7103	85.29%
V 292.402†	38.1	0.359	ug/L	0.0629	0.359	ug/L	0.0629	17.51%
Zn 206.200†	2499.8	29.75	ug/L	0.377	29.75	ug/L	0.377	1.27%
Li 670.784	226175.6	10.05	ug/L	0.017	10.05	ug/L	0.017	0.16%

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-MW020-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17908

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	6020	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	265	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	39.1	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	185	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	5750	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	267	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	45.3	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	187	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

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APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 63
Sample ID: AZ17908W07
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 84
Date Collected: 07/06/15 6:27:05 PM
Data Type: Reprocessed on 07/07/15 8:54:39 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17908W07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	277069.3	116.2	%	0.62				0.53%
Y Radial	19862.1	122.3	%	1.71				1.40%
Ag 338.289†	98.6	0.511	ug/L	0.1614	0.511	ug/L	0.1614	31.60%
Al 308.215†	8252.3	6021	ug/L	96.96	6021	ug/L	96.96	1.61%
As 188.979†	34.6	5.112	ug/L	0.4426	5.112	ug/L	0.4426	8.66%
B 249.677†	9082.7	265.2	ug/L	2.16	265.2	ug/L	2.16	0.81%
Ba 233.527†	6102.7	13.87	ug/L	0.163	13.87	ug/L	0.163	1.17%
Be 313.107†	11470.1	3.235	ug/L	0.0271	3.235	ug/L	0.0271	0.84%
Ca 315.887†	355484.8	22070	ug/L	284.23	22070	ug/L	284.23	1.29%
Cd 214.440†	411.0	1.675	ug/L	0.0177	1.675	ug/L	0.0177	1.06%
Co 228.616†	6229.0	62.81	ug/L	0.619	62.81	ug/L	0.619	0.99%
Cr 267.716†	100.9	0.841	ug/L	0.1201	0.841	ug/L	0.1201	14.29%
Cu 327.393†	2456.7	11.38	ug/L	0.108	11.38	ug/L	0.108	0.95%
Fe 273.955†	243400.9	3052	ug/L	11.71	3052	ug/L	11.71	0.38%
K 766.490†	34745.4	3920	ug/L	48.95	3920	ug/L	48.95	1.25%
Mg 285.213†	157193.2	8851	ug/L	110.04	8851	ug/L	110.04	1.24%
Mn 257.610†	77479.6	834.3	ug/L	10.95	834.3	ug/L	10.95	1.31%
Mo 202.031†	7.9	0.434	ug/L	0.2097	0.434	ug/L	0.2097	48.35%
Na 589.592†	1097411.4	97970	ug/L	995.65	97970	ug/L	995.65	1.02%
Ni 231.604†	1867.7	37.43	ug/L	0.357	37.43	ug/L	0.357	0.95%
P 213.617†	17.5	5.364	ug/L	0.3890	5.364	ug/L	0.3890	7.25%
Pb 220.353†	-13.1	-0.392	ug/L	0.0805	-0.392	ug/L	0.0805	20.53%
Sb 206.836†	-11.3	-1.496	ug/L	0.3421	-1.496	ug/L	0.3421	22.87%
Se 196.026†	-9.7	-2.145	ug/L	1.1626	-2.145	ug/L	1.1626	54.19%
Sn 189.927†	-23.2	-4.115	ug/L	0.5029	-4.115	ug/L	0.5029	12.22%
Sr 421.552†	85423.5	117.2	ug/L	1.08	117.2	ug/L	1.08	0.92%
Ti 337.279†	73.0	1.670	ug/L	0.1834	1.670	ug/L	0.1834	10.98%
Tl 190.801†	-13.6	-3.561	ug/L	0.8682	-3.561	ug/L	0.8682	24.38%
V 292.402†	63.6	0.637	ug/L	0.0527	0.637	ug/L	0.0527	8.28%
Zn 206.200†	17537.8	184.8	ug/L	1.51	184.8	ug/L	1.51	0.82%
Li 670.784	949032.7	39.14	ug/L	0.291	39.14	ug/L	0.291	0.74%

Sequence No.: 15
Sample ID: AZ17908W07
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 42
Date Collected: 07/10/15 10:21:28 AM
Data Type: Reprocessed on 07/13/15 8:59:00 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17908W07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	269040.8	112.8	%	0.66				0.58%
Y Radial	19517.3	122.0	%	7.23				5.93%
Ag 338.289†	227.9	1.218	ug/L	0.1071	1.218	ug/L	0.1071	8.79%
Al 308.215†	7891.2	5748	ug/L	355.89	5748	ug/L	355.89	6.19%
As 188.979†	35.5	5.129	ug/L	0.6323	5.129	ug/L	0.6323	12.33%
B 249.677†	9341.8	266.8	ug/L	1.56	266.8	ug/L	1.56	0.59%
Ba 233.527†	6401.7	14.77	ug/L	0.070	14.77	ug/L	0.070	0.47%
Be 313.107†	11661.3	3.094	ug/L	0.0213	3.094	ug/L	0.0213	0.69%
Ca 315.887†	357834.9	22520	ug/L	1482.46	22520	ug/L	1482.46	6.58%
Cd 214.440†	281.2	1.263	ug/L	0.0278	1.263	ug/L	0.0278	2.20%
Co 228.616†	6395.0	64.43	ug/L	0.412	64.43	ug/L	0.412	0.64%
Cr 267.716†	77.8	0.562	ug/L	0.0862	0.562	ug/L	0.0862	15.33%
Cu 327.393†	4365.3	20.75	ug/L	0.573	20.75	ug/L	0.573	2.76%
Fe 273.955†	252645.4	3204	ug/L	4.15	3204	ug/L	4.15	0.13%
K 766.490†	35543.9	4278	ug/L	274.82	4278	ug/L	274.82	6.42%
Mg 285.213†	157251.5	9022	ug/L	588.08	9022	ug/L	588.08	6.52%
Mn 257.610†	77932.0	872.7	ug/L	57.45	872.7	ug/L	57.45	6.58%
Mo 202.031†	74.9	2.369	ug/L	0.0505	2.369	ug/L	0.0505	2.13%
Na 589.592†	1146914.4	116100	ug/L	7622.54	116100	ug/L	7622.54	6.57%
Ni 231.604†	1957.0	39.70	ug/L	0.262	39.70	ug/L	0.262	0.66%
P 213.617†	14.2	4.214	ug/L	1.1452	4.214	ug/L	1.1452	27.18%
Pb 220.353†	-33.1	-3.201	ug/L	1.2514	-3.201	ug/L	1.2514	39.10%
Sb 206.836†	-13.8	-1.754	ug/L	0.4649	-1.754	ug/L	0.4649	26.50%
Se 196.026†	-14.9	-3.642	ug/L	0.7588	-3.642	ug/L	0.7588	20.83%
Sn 189.927†	-16.2	-2.961	ug/L	0.4162	-2.961	ug/L	0.4162	14.05%
Sr 421.552†	91413.1	147.9	ug/L	9.70	147.9	ug/L	9.70	6.56%
Ti 337.279†	65.9	1.546	ug/L	0.1994	1.546	ug/L	0.1994	12.90%
Tl 190.801†	-10.9	-2.022	ug/L	0.4929	-2.022	ug/L	0.4929	24.38%
V 292.402†	24.2	0.227	ug/L	0.0179	0.227	ug/L	0.0179	7.86%
Zn 206.200†	17649.5	187.3	ug/L	1.00	187.3	ug/L	1.00	0.53%
Li 670.784	1018972.1	45.29	ug/L	0.181	45.29	ug/L	0.181	0.40%

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-MW025-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17909

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/3010A	ALUMINUM (AL)	258J	300.0	80.00	27.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	BORON (B)	469	50.0	40.00	29.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	LITHIUM (LI)	14.6	1.0	0.80	0.40	ug/L	1	07/01/15	07/06/15
6010C/3010A	ZINC (ZN)	191	150.0	20.00	13.70	ug/L	1	07/01/15	07/06/15
6010C/3010A	ALUMINUM (AL) (DISSOLVE	212J	300.0	80.00	27.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	BORON (B) (DISSOLVED)	481	50.0	40.00	29.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	LITHIUM (LI) (DISSOLVED)	17.4	1.0	0.80	0.40	ug/L	1	07/01/15	07/10/15
6010C/3010A	ZINC (ZN) (DISSOLVED)	202	150.0	20.00	13.70	ug/L	1	07/01/15	07/10/15

J = Estimated value.

Printed: 07/13/15 11:51:11 AM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 64
Sample ID: AZ17909W10
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 85
Date Collected: 07/06/15 6:33:14 PM
Data Type: Reprocessed on 07/07/15 8:54:40 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17909W10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	251858.0	105.6	%	0.12				0.11%
Y Radial	17973.0	110.6	%	1.12				1.01%
Ag 338.289†	7.5	0.039	ug/L	0.5096	0.039	ug/L	0.5096	>999.9%
Al 308.215†	359.6	258.2	ug/L	1.69	258.2	ug/L	1.69	0.66%
As 188.979†	11.5	1.460	ug/L	0.4610	1.460	ug/L	0.4610	31.58%
B 249.677†	16483.7	469.2	ug/L	1.68	469.2	ug/L	1.68	0.36%
Ba 233.527†	14837.9	34.10	ug/L	0.179	34.10	ug/L	0.179	0.52%
Be 313.107†	7966.4	2.247	ug/L	0.0117	2.247	ug/L	0.0117	0.52%
Ca 315.887†	185513.5	11510	ug/L	135.53	11510	ug/L	135.53	1.18%
Cd 214.440†	455.2	1.832	ug/L	0.0153	1.832	ug/L	0.0153	0.84%
Co 228.616†	11633.4	117.6	ug/L	0.08	117.6	ug/L	0.08	0.07%
Cr 267.716†	58.5	0.461	ug/L	0.1793	0.461	ug/L	0.1793	38.85%
Cu 327.393†	1153.9	5.168	ug/L	0.2089	5.168	ug/L	0.2089	4.04%
Fe 273.955†	12296.1	153.3	ug/L	0.65	153.3	ug/L	0.65	0.43%
K 766.490†	71151.2	8141	ug/L	69.83	8141	ug/L	69.83	0.86%
Mg 285.213†	77371.9	4355	ug/L	44.27	4355	ug/L	44.27	1.02%
Mn 257.610†	50183.0	540.4	ug/L	5.71	540.4	ug/L	5.71	1.06%
Mo 202.031†	10.0	0.420	ug/L	0.1563	0.420	ug/L	0.1563	37.17%
Na 589.592†	943827.7	84250	ug/L	838.39	84250	ug/L	838.39	1.00%
Ni 231.604†	1775.9	35.40	ug/L	0.109	35.40	ug/L	0.109	0.31%
P 213.617†	6.1	1.873	ug/L	0.6059	1.873	ug/L	0.6059	32.34%
Pb 220.353†	-12.3	-1.655	ug/L	0.6976	-1.655	ug/L	0.6976	42.15%
Sb 206.836†	-7.8	-1.033	ug/L	0.2373	-1.033	ug/L	0.2373	22.98%
Se 196.026†	-8.2	-2.903	ug/L	1.4449	-2.903	ug/L	1.4449	49.77%
Sn 189.927†	-10.0	-1.768	ug/L	0.4606	-1.768	ug/L	0.4606	26.06%
Sr 421.552†	56250.2	77.29	ug/L	0.653	77.29	ug/L	0.653	0.85%
Ti 337.279†	26.6	0.573	ug/L	0.0395	0.573	ug/L	0.0395	6.89%
Tl 190.801†	-12.8	-3.335	ug/L	0.6179	-3.335	ug/L	0.6179	18.53%
V 292.402†	51.2	0.513	ug/L	0.0508	0.513	ug/L	0.0508	9.91%
Zn 206.200†	18106.7	190.5	ug/L	0.51	190.5	ug/L	0.51	0.27%
Li 670.784	354879.2	14.64	ug/L	0.188	14.64	ug/L	0.188	1.29%

Sequence No.: 16
Sample ID: AZ17909W10
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 43
Date Collected: 07/10/15 10:27:38 AM
Data Type: Reprocessed on 07/13/15 8:59:02 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17909W10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	239905.9	100.5	%	3.51				3.49%
Y Radial	17731.3	110.8	%	3.38				3.05%
Ag 338.289†	131.2	0.701	ug/L	0.4021	0.701	ug/L	0.4021	57.34%
Al 308.215†	297.8	212.0	ug/L	8.79	212.0	ug/L	8.79	4.15%
As 188.979†	20.1	3.069	ug/L	0.7376	3.069	ug/L	0.7376	24.04%
B 249.677†	17339.8	481.1	ug/L	21.59	481.1	ug/L	21.59	4.49%
Ba 233.527†	15547.2	36.26	ug/L	1.531	36.26	ug/L	1.531	4.22%
Be 313.107†	8501.5	2.255	ug/L	0.1179	2.255	ug/L	0.1179	5.23%
Ca 315.887†	185109.9	11650	ug/L	470.77	11650	ug/L	470.77	4.04%
Cd 214.440†	302.9	1.353	ug/L	0.0448	1.353	ug/L	0.0448	3.31%
Co 228.616†	12207.7	123.4	ug/L	5.10	123.4	ug/L	5.10	4.13%
Cr 267.716†	26.7	0.083	ug/L	0.0986	0.083	ug/L	0.0986	119.20%
Cu 327.393†	2868.7	13.51	ug/L	0.138	13.51	ug/L	0.138	1.02%
Fe 273.955†	11469.9	144.6	ug/L	6.18	144.6	ug/L	6.18	4.27%
K 766.490†	71719.7	8762	ug/L	355.67	8762	ug/L	355.67	4.06%
Mg 285.213†	76641.3	4396	ug/L	174.38	4396	ug/L	174.38	3.97%
Mn 257.610†	50194.0	562.1	ug/L	22.90	562.1	ug/L	22.90	4.07%
Mo 202.031†	77.5	2.369	ug/L	0.0611	2.369	ug/L	0.0611	2.58%
Na 589.592†	1002560.1	101500	ug/L	4073.78	101500	ug/L	4073.78	4.01%
Ni 231.604†	1896.0	38.26	ug/L	1.152	38.26	ug/L	1.152	3.01%
P 213.617†	-2.4	-0.719	ug/L	1.0486	-0.719	ug/L	1.0486	145.85%
Pb 220.353†	-30.9	-4.229	ug/L	0.1868	-4.229	ug/L	0.1868	4.42%
Sb 206.836†	-9.9	-1.259	ug/L	0.1316	-1.259	ug/L	0.1316	10.46%
Se 196.026†	-6.4	-2.333	ug/L	1.3403	-2.333	ug/L	1.3403	57.45%
Sn 189.927†	-0.3	-0.057	ug/L	0.3506	-0.057	ug/L	0.3506	611.76%
Sr 421.552†	60085.3	97.30	ug/L	3.947	97.30	ug/L	3.947	4.06%
Ti 337.279†	34.5	0.798	ug/L	0.0583	0.798	ug/L	0.0583	7.30%
Tl 190.801†	-10.7	-1.981	ug/L	0.1628	-1.981	ug/L	0.1628	8.22%
V 292.402†	-7.3	-0.069	ug/L	0.0792	-0.069	ug/L	0.0792	115.52%
Zn 206.200†	19092.6	202.2	ug/L	9.08	202.2	ug/L	9.08	4.49%
Li 670.784	390732.5	17.37	ug/L	0.025	17.37	ug/L	0.025	0.15%

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-AQIDW-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17910

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/TCLP	ARSENIC (AS)	25.00 U	50.0	25.00	25.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	BARIUM (BA)	173	50.0	20.00	7.50	ug/L	10	07/07/15	07/08/15
6010C/TCLP	CADMIUM (CD)	10.00 U	50.0	10.00	5.10	ug/L	10	07/07/15	07/08/15
6010C/TCLP	CHROMIUM (CR)	20.00 U	50.0	20.00	14.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	LEAD (PB)	20.00 U	50.0	20.00	16.00	ug/L	10	07/07/15	07/08/15
7470A/TCLP	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	1	07/08/15	07/09/15
6010C/TCLP	SELENIUM (SE)	50.00 U	50.0	50.00	32.00	ug/L	10	07/07/15	07/08/15
6010C/TCLP	SILVER (AG)	7.50 U	10.0	7.50	2.50	ug/L	10	07/07/15	07/08/15

Printed: 07/13/15 5:02:19 PM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 14
Sample ID: AZ17910W04
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 07/08/15 1:09:16 PM
Data Type: Reprocessed on 07/09/15 9:09:01 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17910W04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1090612.8	96.55	%	0.392				0.41%
Y 371.029 Radial	54956.6	95.92	%	0.915				0.95%
Ag 338.289†	108.3	0.945	ug/L	0.8085	0.945	ug/L	0.8085	85.57%
Al 308.215†	584.3	921.5	ug/L	13.96	921.5	ug/L	13.96	1.51%
As 188.979†	7.1	1.815	ug/L	1.1522	1.815	ug/L	1.1522	63.47%
B†	502.6	291.6	ug/L	5.96	291.6	ug/L	5.96	2.04%
Ba 233.527†	23646.6	172.6	ug/L	0.89	172.6	ug/L	0.89	0.51%
Be 313.107†	75.8	0.252	ug/L	0.0076	0.252	ug/L	0.0076	3.02%
Ca 315.887†	82944.4	15930	ug/L	22.9	15930	ug/L	22.9	0.14%
Cd 214.440†	152.4	0.502	ug/L	0.0314	0.502	ug/L	0.0314	6.25%
Co 228.616†	1976.9	34.81	ug/L	0.178	34.81	ug/L	0.178	0.51%
Cr 267.716†	232.8	1.868	ug/L	0.1792	1.868	ug/L	0.1792	9.60%
Cu 327.393†	356.5	3.871	ug/L	0.5012	3.871	ug/L	0.5012	12.95%
Fe 273.955†	14939.7	1132	ug/L	6.5	1132	ug/L	6.5	0.58%
K 766.490†	12057.9	5758	ug/L	42.0	5758	ug/L	42.0	0.73%
Mg 285.213†	46137.2	4900	ug/L	14.1	4900	ug/L	14.1	0.29%
Mn 257.610†	6886.3	426.0	ug/L	5.72	426.0	ug/L	5.72	1.34%
Mo 202.031†	127.1	4.035	ug/L	0.0342	4.035	ug/L	0.0342	0.85%
Na 589.592†	966495.2	106400	ug/L	84.7	106400	ug/L	84.7	0.08%
Ni 231.604†	713.9	15.22	ug/L	0.034	15.22	ug/L	0.034	0.22%
P 213.617†	82.7	19.11	ug/L	1.346	19.11	ug/L	1.346	7.05%
Pb 220.353†	14.7	1.239	ug/L	0.4378	1.239	ug/L	0.4378	35.34%
Sb 206.836†	5.1	1.150	ug/L	0.5920	1.150	ug/L	0.5920	51.50%
Se 196.026†	11.7	1.532	ug/L	0.8123	1.532	ug/L	0.8123	53.02%
Sn 189.927†	-17.9	1.516	ug/L	0.3331	1.516	ug/L	0.3331	21.96%
Sr 421.552†	55886.3	84.75	ug/L	0.290	84.75	ug/L	0.290	0.34%
Ti 337.279†	379.2	10.61	ug/L	0.165	10.61	ug/L	0.165	1.55%
Tl 190.801†	-5.4	-1.143	ug/L	0.3846	-1.143	ug/L	0.3846	33.65%
V 292.402†	457.1	1.924	ug/L	0.0719	1.924	ug/L	0.0719	3.74%
Zn 206.200†	11984.7	421.1	ug/L	3.46	421.1	ug/L	3.46	0.82%

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-SOIDW-061715
Sample Collection Date: 06/17/15

ARF: 76687
APPL ID: AZ17911

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6010C/TCLP	ARSENIC (AS)	25.00U	50.0	25.00	25.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	BARIUM (BA)	383	50.0	20.00	7.50	ug/L	10	06/24/15	06/24/15
6010C/TCLP	CADMIUM (CD)	7.7J	50.0	10.00	5.10	ug/L	10	06/24/15	06/24/15
6010C/TCLP	CHROMIUM (CR)	20.00U	50.0	20.00	14.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	LEAD (PB)	255	50.0	20.00	16.00	ug/L	10	06/24/15	06/24/15
7470A/TCLP	MERCURY (HG)	0.15U	0.2	0.15	0.06	ug/L	1	06/24/15	06/24/15
6010C/TCLP	SELENIUM (SE)	50.00U	50.0	50.00	32.00	ug/L	10	06/24/15	06/24/15
6010C/TCLP	SILVER (AG)	7.50U	10.0	7.50	2.50	ug/L	10	06/24/15	06/24/15

J = Estimated value.

Printed: 07/13/15 11:51:11 AM

APPL-F1-SC-NoMC-REG MDLs

Sequence No.: 125
Sample ID: AZ17911S01
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 122
Date Collected: 06/24/15 2:23:06 PM
Data Type: Reprocessed on 06/30/15 12:36:15 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17911S01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	794056.3	90.43	%	0.651				0.72%
Y 371.029 Radial	48102.1	97.82	%	0.923				0.94%
Ag 338.289†	21.5	0.191	ug/L	0.2991	0.191	ug/L	0.2991	156.51%
Al 308.215†	236.8	379.3	ug/L	10.19	379.3	ug/L	10.19	2.69%
As 188.979†	12.6	3.668	ug/L	0.1868	3.668	ug/L	0.1868	5.09%
B†	116.9	67.29	ug/L	3.418	67.29	ug/L	3.418	5.08%
Ba 233.527†	52712.5	382.9	ug/L	2.37	382.9	ug/L	2.37	0.62%
Be 313.107†	457.9	1.536	ug/L	0.0233	1.536	ug/L	0.0233	1.52%
Ca 315.887†	267823.5	51860	ug/L	237.7	51860	ug/L	237.7	0.46%
Cd 214.440†	1868.1	7.735	ug/L	0.1314	7.735	ug/L	0.1314	1.70%
Co 228.616†	11808.1	206.8	ug/L	1.20	206.8	ug/L	1.20	0.58%
Cr 267.716†	312.6	2.081	ug/L	0.1667	2.081	ug/L	0.1667	8.01%
Cu 327.393†	18578.4	223.7	ug/L	2.46	223.7	ug/L	2.46	1.10%
Fe 273.955†	4244.6	302.3	ug/L	1.80	302.3	ug/L	1.80	0.60%
K 766.490†	6831.0	3638	ug/L	89.7	3638	ug/L	89.7	2.47%
Mg 285.213†	68032.8	7544	ug/L	36.7	7544	ug/L	36.7	0.49%
Mn 257.610†	24862.5	1341	ug/L	3.7	1341	ug/L	3.7	0.27%
Mo 202.031†	12.1	2.252	ug/L	0.1733	2.252	ug/L	0.1733	7.70%
Na 589.592†	9947036.4	1249000	ug/L	24845.7	1249000	ug/L	24845.7	1.99%
Ni 231.604†	2457.0	56.49	ug/L	0.693	56.49	ug/L	0.693	1.23%
P 213.617†	37.0	8.678	ug/L	0.7053	8.678	ug/L	0.7053	8.13%
Pb 220.353†	2815.8	255.4	ug/L	1.39	255.4	ug/L	1.39	0.54%
Sb 206.836†	8.9	1.977	ug/L	0.8544	1.977	ug/L	0.8544	43.22%
Se 196.026†	24.9	-9.719	ug/L	1.8764	-9.719	ug/L	1.8764	19.31%
Sn 189.927†	-121.0	9.531	ug/L	0.6237	9.531	ug/L	0.6237	6.54%
Sr 421.552†	101606.5	172.5	ug/L	0.56	172.5	ug/L	0.56	0.32%
Ti 337.279†	39.5	0.687	ug/L	0.3732	0.687	ug/L	0.3732	54.30%
Tl 190.801†	5.5	1.043	ug/L	0.6495	1.043	ug/L	0.6495	62.29%
V 292.402†	-56.9	-2.799	ug/L	0.1340	-2.799	ug/L	0.1340	4.79%
Zn 206.200†	32219.2	1093	ug/L	9.0	1093	ug/L	9.0	0.83%

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: 76687 SDG: 76687
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 07/06/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 11:29	%R(1)	True CCV1	Found 11:53	%R(1)	True CCV2	Found 14:53	%R(1)	
Aluminum (Al)	12500	12270	98.2	10000	10600	106	7500	7245	96.6	P
Boron (B)	500	515.4	103	500	547.9	110	375	384.5	103	P
Lithium (Li)	250	247	98.8	250	259.8	104	187.5	180	96.0	P
Zinc (Zn)	500	518.4	104	500	540.8	108	375	381.6	102	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: 76687 SDG: 76687
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 07/06/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 11:29	%R(1)	True CCV2	Found 17:50	%R(1)	True CCV1	Found 19:04	%R(1)	
Aluminum (Al)	12500	12270	98.2	7500	7297	97.3	10000	9623	96.2	P
Boron (B)	500	515.4	103	375	386.9	103	500	490	98.0	P
Lithium (Li)	250	247	98.8	187.5	171.2	91.3	250	249.6	99.8	P
Zinc (Zn)	500	518.4	104	375	389.3	104	500	483.9	96.8	P

(1) Control Limits: Metals 90-110

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No: 76687 SDG: 76687
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 07/10/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 9:07	%R(1)	True CCV1	Found 9:34	%R(1)	True CCV2	Found 10:34	%R(1)	
Aluminum (Al)	12500	11900	95.2	10000	9715	97.2	7500	7048	94.0	P
Boron (B)	500	507.1	101	500	508.8	102	375	386.6	103	P
Lithium (Li)	250	230.6	92.2	250	248.6	99.4	187.5	200.6	107	P
Zinc (Zn)	500	502.9	101	500	507.8	102	375	394.7	105	P

(1) Control Limits: Metals 90-110

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76687 SDG: 76687

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 07/08/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:09	%R(1)	True CCV1	Found 12:43	%R(1)	True CCV2	Found 13:16	%R(1)	
Silver (Ag)	500	508.2	102	500	500	100	375	370.9	98.9	P
Arsenic (As)	1000	1004	100	1000	992.4	99.2	750	736.7	98.2	P
Barium (Ba)	1000	1017	102	1000	1004	100	750	741.4	98.9	P
Cadmium (Cd)	1000	1040	104	1000	1014	101	750	755.7	101	P
Chromium (Cr)	1000	1034	103	1000	1006	101	750	752	100	P
Lead (Pb)	1000	1056	106	1000	1017	102	750	759	101	P
Selenium (Se)	1000	1044	104	1000	1002	100	750	745.2	99.4	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: 76687 SDG: 76687

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 07/08/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:09	%R(1)	True CCV1	Found 14:06	%R(1)	True	Found	%R(1)	
Silver (Ag)	500	508.2	102	500	497.3	99.5				P
Arsenic (As)	1000	1004	100	1000	978.5	97.8				P
Barium (Ba)	1000	1017	102	1000	986.7	98.7				P
Cadmium (Cd)	1000	1040	104	1000	997.4	99.7				P
Chromium (Cr)	1000	1034	103	1000	999.7	100				P
Lead (Pb)	1000	1056	106	1000	1003	100				P
Selenium (Se)	1000	1044	104	1000	988.8	98.9				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: 76687 SDG: 76687

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/23/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:06	%R(1)	True CCV1	Found 13:47	%R(1)	True CCV2	Found 13:58	%R(1)	
Silver (Ag)	500	492.4	98.5	500	491.3	98.3	375	387	103	P
Arsenic (As)	1000	973.7	97.4	1000	1009	101	750	777.2	104	P
Barium (Ba)	1000	994.3	99.4	1000	1000	100	750	791.8	106	P
Cadmium (Cd)	1000	992.9	99.3	1000	1012	101	750	816.5	109	P
Chromium (Cr)	1000	1002	100	1000	999.9	100	750	789.7	105	P
Lead (Pb)	1000	1015	102	1000	1024	102	750	815.6	109	P
Selenium (Se)	1000	1002	100	1000	1016	102	750	809.5	108	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: 76687 SDG: 76687

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/23/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:06	%R(1)	True CCV1	Found 14:36	%R(1)	True CCV2	Found 15:44	%R(1)	
Silver (Ag)	500	492.4	98.5	500	514.8	103	375	388.5	104	P
Arsenic (As)	1000	973.7	97.4	1000	1025	103	750	777.8	104	P
Barium (Ba)	1000	994.3	99.4	1000	1045	105	750	797.6	106	P
Cadmium (Cd)	1000	992.9	99.3	1000	1073	107	750	818.9	109	P
Chromium (Cr)	1000	1002	100	1000	1044	104	750	794.4	106	P
Lead (Pb)	1000	1015	102	1000	1078	108	750	817.5	109	P
Selenium (Se)	1000	1002	100	1000	1062	106	750	800	107	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: 76687 SDG: 76687
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 06/24/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 14:20	%R(1)	True CCV1	Found 14:25	%R(1)	True CCV1	Found 14:48	%R(1)	
Mercury (Hg)	4	4.118	103	5	4.993	99.9	5	4.979	99.6	P

(1) Control Limits: Metals 90-110

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76687 SDG: 76687

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 06/24/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 14:20	%R(1)	True CCV1	Found 15:09	%R(1)	True	Found	%R(1)	
Mercury (Hg)	4	4.118	103	5	4.901	98.0				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: 76687 SDG: 76687
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 07/09/15 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 11:23	%R(1)	True CCV1	Found 11:28	%R(1)	True CCV1	Found 11:57	%R(1)	
Mercury (Hg)	4	3.981	99.5	5	4.93	98.6	5	4.748	95.0	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.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 07/06/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C				C	
	11:35		12:03		14:58		17:55				12:22		
Aluminum (Al)	300.00	U	300.00	U	300.00	U	300.00	U			300.00	U	P
Boron (B)	50.00	U	50.00	U	50.00	U	50.00	U			50.00	U	P
Lithium (Li)	1.00	U	1.00	U	1.00	U	1.00	U			.67	J	P
Zinc (Zn)	150.00	U	150.00	U	150.00	U	150.00	U			150.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 07/06/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	11:35		19:09						12:22		
Aluminum (Al)	300.00	U	300.00	U					300.00	U	P
Boron (B)	50.00	U	50.00	U					50.00	U	P
Lithium (Li)	1.00	U	1.00	U					.67	J	P
Zinc (Zn)	150.00	U	150.00	U					150.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 07/10/15

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
	09:17		09:44		10:43				10:02		
Aluminum (Al)	300.00	U	300.00	U	300.00	U			300.00	U	P
Boron (B)	50.00	U	50.00	U	50.00	U			50.00	U	P
Lithium (Li)	1.00	U	1.00	U	1.00	U			.53	J	P
Zinc (Zn)	150.00	U	150.00	U	150.00	U			150.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 07/08/15

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
	12:14		12:52		13:24		14:20		12:57		
Silver (Ag)	.79	J	1.00	U	1.00	U	1.00	U	.78	J	P
Arsenic (As)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P
Barium (Ba)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P
Cadmium (Cd)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P
Chromium (Cr)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P
Lead (Pb)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P
Selenium (Se)	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	P

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/23/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	13:12		13:52		14:05		14:41				14:09		
Silver (Ag)	1.00	U	1.00	U	1.00	U	.47	J			.65	J	P
Arsenic (As)	5.00	U	5.00	U	5.00	U	5.00	U			5.00	U	P
Barium (Ba)	5.00	U	5.00	U	5.00	U	5.00	U			19.60	*	*
Cadmium (Cd)	5.00	U	.79	J	5.00	U	.58	J			5.00	U	P
Chromium (Cr)	5.00	U	5.00	U	5.00	U	5.00	U			2.03	J	P
Lead (Pb)	5.00	U	5.00	U	5.00	U	5.00	U			5.00	U	P
Selenium (Se)	4.81	J	5.00	U	5.00	U	5.00	U			5.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/23/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	13:12		15:52						14:09		
Silver (Ag)	1.00	U	1.00	U					.65	J	P
Arsenic (As)	5.00	U	5.00	U					5.00	U	P
Barium (Ba)	5.00	U	5.00	U					19.60	*	*
Cadmium (Cd)	5.00	U	.54	J					5.00	U	P
Chromium (Cr)	5.00	U	5.00	U					2.03	J	P
Lead (Pb)	5.00	U	5.00	U					5.00	U	P
Selenium (Se)	4.81	J	5.00	U					5.00	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 06/24/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	14:23		14:27		14:50		15:11		14:52				
Mercury (Hg)	.20	U	.20	U	.20	U	.20	U	.20	U	P		

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 07/09/15

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	11:26		11:31		11:59						11:35		
Mercury (Hg)	.20	U	.20	U	.20	U					.20	U	P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76687 SDG: 76687
ICP ID Number: Jules ICS Source: Environmental Express

Analysis Date: 07/06/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 11:41	Sol AB 11:47	%R(1)
Aluminum (Al)	100000	100000	98920	98980	99.0
Boron (B)			3.21	4.4	
Calcium (Ca)	100000	100000	101700	101500	102
Iron (Fe)	100000	100000	92570	94710	94.7
Lithium (Li)		0	0.396	0.389	
Magnesium (Mg)	100000	100000	97180	97200	97.2
Zinc (Zn)		500	3.862	476.1	95.2

(1) Control Limits: Metals 80-120

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76687 SDG: 76687
ICP ID Number: Jules ICS Source: Environmental Express

Analysis Date: 07/10/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 9:23	Sol AB 9:29	%R(1)
Aluminum (Al)	100000	100000	101700	95850	95.8
Boron (B)			6.05	4.443	
Calcium (Ca)	100000	100000	105400	99370	99.4
Iron (Fe)	100000	100000	96500	100100	100
Lithium (Li)		0	0.368	0.361	
Magnesium (Mg)	100000	100000	99650	94460	94.5
Zinc (Zn)		500	-2.058	520	104

(1) Control Limits: Metals 80-120

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76687 SDG: 76687
ICP ID Number: Phoebe ICS Source: Environmental Express

Analysis Date: 07/08/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 12:30	Sol AB 12:37	%R(1)
Silver (Ag)		1000	-0.646	1010	101
Aluminum (Al)	200000	200000	199200	198900	99.5
Arsenic (As)		500	3.345	469.8	94.0
Barium (Ba)		500	-1.871	460.6	92.1
Calcium (Ca)	200000	200000	231200	208100	104
Cadmium (Cd)		1000	-0.827	954.6	95.5
Chromium (Cr)		500	1.005	483.3	96.7
Iron (Fe)	200000	200000	188500	188000	94.0
Magnesium (Mg)	200000	200000	197000	197000	98.5
Lead (Pb)		1000	1.247	977.7	97.8
Selenium (Se)		500	-0.629	486.8	97.4

(1) Control Limits: Metals 80-120

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

ICP ID Number: Phoebe ICS Source: Environmental Express

Analysis Date: 06/23/15 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 13:34	Sol AB 13:40	%R(1)
Silver (Ag)		1000	-0.27	1032	103
Aluminum (Al)	200000	200000	204300	202500	101
Arsenic (As)		500	1.518	503.7	101
Barium (Ba)		500	-3.291	499.1	99.8
Calcium (Ca)	200000	200000	217000	215400	108
Cadmium (Cd)		1000	-0.474	987.7	98.8
Chromium (Cr)		500	-3.234	494.3	98.9
Iron (Fe)	200000	200000	193600	192400	96.2
Magnesium (Mg)	200000	200000	204600	203100	102
Lead (Pb)		1000	1.644	1005	101
Selenium (Se)		500	-0.88	505	101

(1) Control Limits: Metals 80-120

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

S67-AQIDW-061715

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Analysis Date: 07/08/15 Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Silver (Ag)	75-125	93.42		0.945		100.000	92.5		
Arsenic (As)	75-125	268.2		1.815		250.000	107		
Cadmium (Cd)	75-125	52.49		0 502		50 000	104		
Chromium (Cr)	75-125	269.5		1.868		250.000	107		
Lead (Pb)	75-125	268.3		1.239		250.000	107		
Selenium (Se)	75-125	250.4		1.532		250.000	99.5		

Comments:

07/08/15 13:09 AZ17910W04

07/08/15 13:42 AZ17910W04-A

Sequence No.: 19
Sample ID: AZ17910W04-A
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 07/08/15 1:42:09 PM
Data Type: Reprocessed on 07/09/15 9:09:06 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17910W04-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1062649.7	94.07	%	1.088				1.16%
Y 371.029 Radial	54165.7	94.54	%	0.751				0.79%
Ag 338.289†	10708.2	93.42	ug/L	0.977	93.42	ug/L	0.977	1.05%
Al 308.215†	1949.1	3074	ug/L	31.3	3074	ug/L	31.3	1.02%
As 188.979†	1050.8	268.2	ug/L	5.51	268.2	ug/L	5.51	2.05%
B†	977.7	565.4	ug/L	7.14	565.4	ug/L	7.14	1.26%
Ba 233.527†	59257.3	433.0	ug/L	0.95	433.0	ug/L	0.95	0.22%
Be 313.107†	16514.8	54.89	ug/L	0.350	54.89	ug/L	0.350	0.64%
Ca 315.887†	227170.3	43640	ug/L	615.6	43640	ug/L	615.6	1.41%
Cd 214.440†	12565.5	52.49	ug/L	0.331	52.49	ug/L	0.331	0.63%
Co 228.616†	17057.8	301.3	ug/L	1.62	301.3	ug/L	1.62	0.54%
Cr 267.716†	27416.9	269.5	ug/L	1.38	269.5	ug/L	1.38	0.51%
Cu 327.393†	24869.8	270.0	ug/L	2.00	270.0	ug/L	2.00	0.74%
Fe 273.955†	28624.9	2168	ug/L	6.7	2168	ug/L	6.7	0.31%
K 766.490†	23030.8	11000	ug/L	146.9	11000	ug/L	146.9	1.34%
Mg 285.213†	307348.1	32640	ug/L	451.3	32640	ug/L	451.3	1.38%
Mn 257.610†	11170.3	690.1	ug/L	5.17	690.1	ug/L	5.17	0.75%
Mo 202.031†	8246.4	244.8	ug/L	3.22	244.8	ug/L	3.22	1.31%
Na 589.592†	1176444.5	129400	ug/L	1988.5	129400	ug/L	1988.5	1.54%
Ni 231.604†	13193.3	283.6	ug/L	1.19	283.6	ug/L	1.19	0.42%
P 213.617†	9323.8	2156	ug/L	23.2	2156	ug/L	23.2	1.07%
Pb 220.353†	3183.1	268.3	ug/L	3.17	268.3	ug/L	3.17	1.18%
Sb 206.836†	1093.9	248.5	ug/L	2.29	248.5	ug/L	2.29	0.92%
Se 196.026†	934.0	250.4	ug/L	2.94	250.4	ug/L	2.94	1.17%
Sn 189.927†	2867.3	252.0	ug/L	3.80	252.0	ug/L	3.80	1.51%
Sr 421.552†	232401.2	353.3	ug/L	5.18	353.3	ug/L	5.18	1.47%
Ti 337.279†	9101.1	257.8	ug/L	2.22	257.8	ug/L	2.22	0.86%
Tl 190.801†	1269.4	268.9	ug/L	3.27	268.9	ug/L	3.27	1.22%
V 292.402†	56582.1	285.0	ug/L	0.56	285.0	ug/L	0.56	0.20%
Zn 206.200†	26396.4	927.5	ug/L	6.34	927.5	ug/L	6.34	0.68%

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

S67-SOIDW-061715

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Analysis Date: 06/24/15 Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Silver (Ag)	75-125	96.95		0.191		100.000	96.8		
Arsenic (As)	75-125	258.2		3.668		250.000	102		
Cadmium (Cd)	75-125	56.39		7.735		50.000	97.3		
Chromium (Cr)	75-125	244.2		2.081		250.000	96.8		
Selenium (Se)	75-125	257.3		-9.719		250.000	103		

Comments:

06/24/15 14:23 AZ17911S01

06/24/15 14:59 AZ17911S01-A

Sequence No.: 131 **Autosampler Location: 126**
Sample ID: AZ17911S01-A **Date Collected: 06/24/15 2:59:44 PM**
Analyst: RJS - Phoebe **Data Type: Reprocessed on 06/30/15 12:36:23 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: AZ17911S01-A

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	802594.2	91.40	%	0.105				0.12%
Y 371.029 Radial	47676.1	96.95	%	1.545				1.59%
Ag 338.289†	10923.1	96.95	ug/L	0.471	96.95	ug/L	0.471	0.49%
Al 308.215†	1400.7	2243	ug/L	22.1	2243	ug/L	22.1	0.98%
As 188.979†	889.2	258.2	ug/L	4.02	258.2	ug/L	4.02	1.56%
B†	580.0	309.4	ug/L	3.21	309.4	ug/L	3.21	1.04%
Ba 233.527†	83417.0	606.1	ug/L	1.56	606.1	ug/L	1.56	0.26%
Be 313.107†	15268.7	51.23	ug/L	0.386	51.23	ug/L	0.386	0.75%
Ca 315.887†	391773.2	75880	ug/L	163.4	75880	ug/L	163.4	0.22%
Cd 214.440†	12838.4	56.39	ug/L	0.251	56.39	ug/L	0.251	0.44%
Co 228.616†	24775.9	434.8	ug/L	0.47	434.8	ug/L	0.47	0.11%
Cr 267.716†	20846.5	244.2	ug/L	0.31	244.2	ug/L	0.31	0.13%
Cu 327.393†	38583.1	464.7	ug/L	2.05	464.7	ug/L	2.05	0.44%
Fe 273.955†	17285.9	1231	ug/L	3.4	1231	ug/L	3.4	0.27%
K 766.490†	16807.4	8952	ug/L	78.3	8952	ug/L	78.3	0.87%
Mg 285.213†	288037.6	31980	ug/L	142.4	31980	ug/L	142.4	0.45%
Mn 257.610†	29308.8	1580	ug/L	5.1	1580	ug/L	5.1	0.32%
Mo 202.031†	6873.0	243.8	ug/L	1.42	243.8	ug/L	1.42	0.58%
Na 589.592†	10008623.0	1257000	ug/L	16579.8	1257000	ug/L	16579.8	1.32%
Ni 231.604†	12777.2	299.0	ug/L	0.96	299.0	ug/L	0.96	0.32%
P 213.617†	9129.6	2140	ug/L	21.0	2140	ug/L	21.0	0.98%
Pb 220.353†	5432.1	492.7	ug/L	5.70	492.7	ug/L	5.70	1.16%
Sb 206.836†	1113.4	247.4	ug/L	0.99	247.4	ug/L	0.99	0.40%
Se 196.026†	956.2	257.3	ug/L	2.40	257.3	ug/L	2.40	0.93%
Sn 189.927†	2491.7	256.1	ug/L	2.58	256.1	ug/L	2.58	1.01%
Sr 421.552†	241981.5	413.9	ug/L	2.12	413.9	ug/L	2.12	0.51%
Ti 337.279†	7601.9	240.0	ug/L	1.12	240.0	ug/L	1.12	0.47%
Tl 190.801†	1257.5	236.8	ug/L	3.18	236.8	ug/L	3.18	1.34%
V 292.402†	41503.8	254.2	ug/L	0.87	254.2	ug/L	0.87	0.34%
Zn 206.200†	45510.0	1544	ug/L	9.2	1544	ug/L	9.2	0.59%

A.P.P.L. INC.
9
ICP SERIAL DILUTION

CLIENT SAMPLE NO.
S67-AQIDW-061715

Lab Name: A.P.P.L. INC. Contract: Tetra Tech
ARF No.: 76687 SDG: 76687
Matrix: water

Analysis Date: 07/08/15 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Barium (Ba)	172.6		174.5		1.10		

Comments:

07/08/15 13:09 AZ17910W04

07/08/15 13:48 AZ17910W04-1/5

Sequence No.: 20
Sample ID: AZ17910W04-1/5
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 62
Date Collected: 07/08/15 1:48:33 PM
Data Type: Reprocessed on 07/09/15 9:09:07 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17910W04-1/5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1105900.0	97.90	%	0.266				0.27%
Y 371.029 Radial	55791.6	97.38	%	0.941				0.97%
Ag 338.289†	-5.5	-0.048	ug/L	0.9076	-0.239	ug/L	4.5380	>999.9%
Al 308.215†	117.7	185.6	ug/L	5.12	928.0	ug/L	25.59	2.76%
As 188.979†	1.4	0.345	ug/L	0.2071	1.724	ug/L	1.0357	60.06%
B†	102.6	59.60	ug/L	3.514	298.0	ug/L	17.57	5.90%
Ba 233.527†	4782.9	34.90	ug/L	0.234	174.5	ug/L	1.17	0.67%
Be 313.107†	17.9	0.059	ug/L	0.0179	0.297	ug/L	0.0894	30.13%
Ca 315.887†	16355.6	3141	ug/L	70.1	15710	ug/L	350.7	2.23%
Cd 214.440†	42.3	0.150	ug/L	0.0378	0.752	ug/L	0.1888	25.11%
Co 228.616†	400.4	7.049	ug/L	0.1407	35.24	ug/L	0.703	2.00%
Cr 267.716†	627.6	6.093	ug/L	0.0770	30.47	ug/L	0.385	1.26%
Cu 327.393†	68.3	0.741	ug/L	0.2868	3.705	ug/L	1.4338	38.70%
Fe 273.955†	3392.7	257.0	ug/L	1.05	1285	ug/L	5.2	0.41%
K 766.490†	2353.9	1124	ug/L	33.0	5620	ug/L	165.1	2.94%
Mg 285.213†	9642.1	1024	ug/L	11.2	5120	ug/L	56.1	1.10%
Mn 257.610†	1374.4	85.03	ug/L	0.749	425.2	ug/L	3.74	0.88%
Mo 202.031†	66.2	2.017	ug/L	0.1329	10.09	ug/L	0.664	6.59%
Na 589.592†	194465.0	21400	ug/L	484.5	107000	ug/L	2422.7	2.26%
Ni 231.604†	317.6	6.814	ug/L	0.2298	34.07	ug/L	1.149	3.37%
P 213.617†	28.1	6.505	ug/L	0.7229	32.53	ug/L	3.614	11.11%
Pb 220.353†	-1.3	-0.106	ug/L	0.2769	-0.530	ug/L	1.3843	261.03%
Sb 206.836†	7.4	1.674	ug/L	0.4571	8.369	ug/L	2.2854	27.31%
Se 196.026†	5.9	1.296	ug/L	2.5213	6.478	ug/L	12.6064	194.62%
Sn 189.927†	2.1	0.788	ug/L	1.0149	3.941	ug/L	5.0744	128.78%
Sr 421.552†	10987.0	16.66	ug/L	0.459	83.29	ug/L	2.293	2.75%
Ti 337.279†	80.2	2.244	ug/L	0.2341	11.22	ug/L	1.170	10.43%
Tl 190.801†	-0.7	-0.152	ug/L	0.9510	-0.762	ug/L	4.7552	624.19%
V 292.402†	172.5	0.849	ug/L	0.2649	4.246	ug/L	1.3244	31.19%
Zn 206.200†	2549.3	89.57	ug/L	0.340	447.9	ug/L	1.70	0.38%

A.P.P.L. INC.

9

ICP SERIAL DILUTION

CLIENT SAMPLE NO.

S67-SOIDW-061715

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No.: 76687 SDG: 76687

Matrix: water

Analysis Date: 06/24/15 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Barium (Ba)	382.9		415.3		8.46		
Lead (Pb)	255.4		267.7		4.82		

Comments:

06/24/15 14:23 AZ17911S01

06/24/15 15:06 AZ17911S01-1/5

Sequence No.: 132
Sample ID: AZ17911S01-1/5
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 127
Date Collected: 06/24/15 3:06:18 PM
Data Type: Reprocessed on 06/30/15 12:36:24 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17911S01-1/5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	855295.4	97.40	%	0.396				0.41%
Y 371.029 Radial	49945.1	101.6	%	3.44				3.38%
Ag 338.289†	-36.3	-0.322	ug/L	0.9981	-1.611	ug/L	4.9904	309.76%
Al 308.215†	49.4	79.18	ug/L	4.766	395.9	ug/L	23.83	6.02%
As 188.979†	1.5	0.429	ug/L	1.0591	2.145	ug/L	5.2956	246.87%
B†	23.0	13.37	ug/L	3.282	66.84	ug/L	16.411	24.55%
Ba 233.527†	11435.9	83.06	ug/L	0.787	415.3	ug/L	3.93	0.95%
Be 313.107†	105.9	0.355	ug/L	0.0108	1.777	ug/L	0.0540	3.04%
Ca 315.887†	54621.6	10580	ug/L	294.0	52880	ug/L	1470.1	2.78%
Cd 214.440†	417.2	1.734	ug/L	0.0705	8.669	ug/L	0.3526	4.07%
Co 228.616†	2480.8	43.45	ug/L	0.458	217.2	ug/L	2.29	1.05%
Cr 267.716†	96.0	0.791	ug/L	0.0838	3.957	ug/L	0.4188	10.58%
Cu 327.393†	3733.5	44.96	ug/L	0.230	224.8	ug/L	1.15	0.51%
Fe 273.955†	902.6	64.29	ug/L	0.493	321.5	ug/L	2.47	0.77%
K 766.490†	1314.1	699.9	ug/L	39.80	3500	ug/L	199.0	5.69%
Mg 285.213†	14496.1	1607	ug/L	58.0	8037	ug/L	289.9	3.61%
Mn 257.610†	5276.6	284.7	ug/L	10.10	1423	ug/L	50.5	3.55%
Mo 202.031†	14.2	0.892	ug/L	0.1368	4.458	ug/L	0.6841	15.34%
Na 589.592†	2122109.5	266500	ug/L	13323.3	1333000	ug/L	66616.3	5.00%
Ni 231.604†	539.3	12.41	ug/L	0.402	62.04	ug/L	2.008	3.24%
P 213.617†	26.1	6,106	ug/L	0.4605	30.53	ug/L	2.302	7.54%
Pb 220.353†	590.3	53.54	ug/L	0.469	267.7	ug/L	2.34	0.88%
Sb 206.836†	7.6	1.684	ug/L	0.9978	8.420	ug/L	4.9888	59.25%
Se 196.026†	-0.5	-3.724	ug/L	1.6731	-18.62	ug/L	8.365	44.93%
Sn 189.927†	-47.2	-0.009	ug/L	0.3682	-0.046	ug/L	1.8411	>999.9%
Sr 421.552†	20969.8	35.59	ug/L	1.059	178.0	ug/L	5.29	2.98%
Ti 337.279†	20.4	0.526	ug/L	0.5809	2.630	ug/L	2.9046	110.46%
Tl 190.801†	4.0	0.762	ug/L	0.3443	3.809	ug/L	1.7217	45.20%
V 292.402†	-40.0	-0.757	ug/L	0.1089	-3.787	ug/L	0.5444	14.37%
Zn 206.200†	6824.9	231.5	ug/L	1.89	1157	ug/L	9.5	0.82%

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150706A6010
Results Library (original): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb
Results Data Set (reprocessed): 150706A6010X
Results Library (reprocessed): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: CalBlk 150706RJS I:JL O:R Date Collected: 07/06/15 11:08:23 AM
Analyst: Data Type: Reprocessed on 07/07/15 8:53:26 AM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:
Wash Time:

Mean Data: CalBlk 150706RJS I:JL O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	238446.1	465.53	0.20%	100.0	%
Y Radial	16244.9	70.38	0.43%	100.0	%
Ag 338.289†	-150.3	21.32	14.19%	[0.00]	ug/L
Al 308.215†	34.5	3.58	10.35%	[0.00]	ug/L
As 188.979†	-73.3	2.12	2.89%	[0.00]	ug/L
B 249.677†	94.9	6.20	6.53%	[0.00]	ug/L
Ba 233.527†	79.1	10.08	12.75%	[0.00]	ug/L
Be 313.107†	1888.2	35.44	1.88%	[0.00]	ug/L
Ca 315.887†	-67.8	12.62	18.63%	[0.00]	ug/L
Cd 214.440†	-490.8	11.12	2.27%	[0.00]	ug/L
Co 228.616†	-167.8	13.48	8.03%	[0.00]	ug/L
Cr 267.716†	21.5	4.72	21.98%	[0.00]	ug/L
Cu 327.393†	-1206.2	33.07	2.74%	[0.00]	ug/L
Fe 273.955†	386.3	7.32	1.89%	[0.00]	ug/L
K 766.490†	-654.2	54.98	8.40%	[0.00]	ug/L
Mg 285.213†	71.1	6.19	8.71%	[0.00]	ug/L
Mn 257.610†	-31.9	10.50	32.93%	[0.00]	ug/L
Mo 202.031†	-24.3	1.55	6.40%	[0.00]	ug/L
Na 589.592†	1094.2	95.51	8.73%	[0.00]	ug/L
Ni 231.604†	-133.3	9.80	7.36%	[0.00]	ug/L
P 213.617†	-60.5	3.91	6.46%	[0.00]	ug/L
Pb 220.353†	9.2	5.54	60.32%	[0.00]	ug/L
Sb 206.836†	-15.2	4.26	27.97%	[0.00]	ug/L
Se 196.026†	16.7	4.81	28.78%	[0.00]	ug/L
Sn 189.927†	5.8	2.16	37.26%	[0.00]	ug/L
Sr 421.552†	-10.1	3.13	31.18%	[0.00]	ug/L
Ti 337.279†	-32.8	4.72	14.39%	[0.00]	ug/L
Tl 190.801†	-12.5	5.75	45.91%	[0.00]	ug/L
V 292.402†	-128.1	14.01	10.93%	[0.00]	ug/L
Zn 206.200†	355.9	13.03	3.66%	[0.00]	ug/L
Li 670.784	7114.1	120.40	1.69%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150706RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 07/06/15 11:14:08 AM
Data Type: Reprocessed on 07/07/15 8:53:29 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150706RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	240628.2	878.39	0.37%	100.9	%
Y Radial	16417.4	102.50	0.62%	101.1	%
Ag 338.289†	980.5	77.68	7.92%	[0.5]	ug/L
Al 308.215†	312.1	9.67	3.10%	[50]	ug/L
As 188.979†	55.3	2.29	4.14%	[2]	ug/L
B 249.677†	1155.4	6.48	0.56%	[25]	ug/L
Ba 233.527†	5035.2	39.66	0.79%	[1.5]	ug/L
Be 313.107†	35741.0	120.37	0.34%	[1]	ug/L
Ca 315.887†	8806.2	21.23	0.24%	[50]	ug/L
Cd 214.440†	2989.2	9.68	0.32%	[0.25]	ug/L
Co 228.616†	1263.8	2.81	0.22%	[2.5]	ug/L
Cr 267.716†	895.6	5.08	0.57%	[0.5]	ug/L
Cu 327.393†	2433.5	17.40	0.72%	[2.5]	ug/L
Fe 273.955†	17251.1	15.52	0.09%	[25]	ug/L
K 766.490†	5700.0	37.05	0.65%	[500]	ug/L
Mg 285.213†	9088.7	31.67	0.35%	[25]	ug/L
Mn 257.610†	977.1	5.12	0.52%	[1]	ug/L
Mo 202.031†	360.0	7.67	2.13%	[1]	ug/L
Na 589.592†	7785.7	90.12	1.16%	[500]	ug/L
Ni 231.604†	538.4	1.91	0.35%	[1]	ug/L
P 213.617†	186.8	1.69	0.91%	[12.5]	ug/L
Pb 220.353†	62.4	2.99	4.79%	[1.5]	ug/L
Sb 206.836†	80.9	1.53	1.89%	[2]	ug/L
Se 196.026†	34.8	5.91	17.01%	[2]	ug/L
Sn 189.927†	68.4	3.10	4.53%	[3]	ug/L
Sr 421.552†	7493.7	66.05	0.88%	[1]	ug/L
Ti 337.279†	461.4	4.59	0.99%	[2.5]	ug/L
Tl 190.801†	41.7	5.09	12.19%	[2]	ug/L
V 292.402†	1037.1	14.70	1.42%	[0.5]	ug/L
Zn 206.200†	3221.8	18.73	0.58%	[25]	ug/L
Li 670.784	80843.1	134.53	0.17%	[5]	ug/L

Sequence No.: 3
Sample ID: STD 2 150706RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 07/06/15 11:19:52 AM
Data Type: Reprocessed on 07/07/15 8:53:30 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150706RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	227024.7	998.35	0.44%	95.21	%
Y Radial	15671.2	100.74	0.64%	96.47	%
Ag 338.289†	50708.1	159.51	0.31%	[250]	ug/L
Al 308.215†	14484.1	22.51	0.16%	[10000]	ug/L
As 188.979†	2704.8	18.39	0.68%	[500]	ug/L
B 249.677†	18368.7	86.33	0.47%	[500]	ug/L
Ba 233.527†	231424.6	646.98	0.28%	[500]	ug/L
Be 313.107†	1886837.5	4539.53	0.24%	[500]	ug/L
Ca 315.887†	430118.8	4629.90	1.08%	[25000]	ug/L
Cd 214.440†	155998.0	536.27	0.34%	[500]	ug/L
Co 228.616†	52844.5	130.28	0.25%	[500]	ug/L
Cr 267.716†	45729.1	116.74	0.26%	[500]	ug/L
Cu 327.393†	110182.1	229.75	0.21%	[500]	ug/L
Fe 273.955†	851630.8	2901.45	0.34%	[10000]	ug/L
K 766.490†	90661.0	260.97	0.29%	[10000]	ug/L
Mg 285.213†	473518.4	4611.50	0.97%	[25000]	ug/L
Mn 257.610†	49591.5	253.26	0.51%	[500]	ug/L
Mo 202.031†	19024.0	89.97	0.47%	[500]	ug/L
Na 589.592†	148205.6	1362.86	0.92%	[12500]	ug/L
Ni 231.604†	26757.8	160.63	0.60%	[500]	ug/L
P 213.617†	8551.5	41.12	0.48%	[2500]	ug/L
Pb 220.353†	2829.6	12.69	0.45%	[500]	ug/L
Sb 206.836†	3961.8	18.22	0.46%	[500]	ug/L
Se 196.026†	1725.8	15.71	0.91%	[500]	ug/L
Sn 189.927†	2986.2	18.06	0.60%	[500]	ug/L
Sr 421.552†	384998.4	3429.16	0.89%	[500]	ug/L
Ti 337.279†	21210.0	93.23	0.44%	[500]	ug/L
Tl 190.801†	2051.2	11.46	0.56%	[500]	ug/L
V 292.402†	52883.3	154.12	0.29%	[500]	ug/L
Zn 206.200†	51329.6	169.12	0.33%	[500]	ug/L
Li 670.784	6105583.8	26779.39	0.44%	[250]	ug/L

Sequence No.: 4
Sample ID: STD 3 150706RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 4
Date Collected: 07/06/15 11:25:12 AM
Data Type: Reprocessed on 07/07/15 8:53:31 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150706RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	222417.8	1239.82	0.56%	93.28	%
Y Radial	15761.6	49.59	0.31%	97.02	%
Ag 338.289†	95231.1	217.10	0.23%	[500]	ug/L
Al 308.215†	26988.9	86.74	0.32%	[20000]	ug/L
As 188.979†	5087.2	38.69	0.76%	[1000]	ug/L
B 249.677†	34705.9	62.70	0.18%	[1000]	ug/L
Ba 233.527†	428276.3	1181.51	0.28%	[1000]	ug/L
Be 313.107†	3488520.3	8600.55	0.25%	[1000]	ug/L
Ca 315.887†	791417.7	7162.10	0.90%	[50000]	ug/L
Cd 214.440†	286888.0	917.78	0.32%	[1000]	ug/L
Co 228.616†	97059.1	269.04	0.28%	[1000]	ug/L
Cr 267.716†	84663.3	261.70	0.31%	[1000]	ug/L
Cu 327.393†	206158.7	286.57	0.14%	[1000]	ug/L
Fe 273.955†	1567374.1	4191.20	0.27%	[20000]	ug/L
K 766.490†	171077.7	484.93	0.28%	[20000]	ug/L
Mg 285.213†	873512.3	8790.78	1.01%	[50000]	ug/L
Mn 257.610†	91268.1	178.00	0.20%	[1000]	ug/L
Mo 202.031†	35320.9	264.35	0.75%	[1000]	ug/L
Na 589.592†	275898.2	3250.64	1.18%	[25000]	ug/L
Ni 231.604†	48852.1	348.31	0.71%	[1000]	ug/L
P 213.617†	16098.0	111.60	0.69%	[5000]	ug/L
Pb 220.353†	5180.9	51.50	0.99%	[1000]	ug/L
Sb 206.836†	7467.0	46.32	0.62%	[1000]	ug/L
Se 196.026†	3254.3	15.07	0.46%	[1000]	ug/L
Sn 189.927†	5556.2	37.96	0.68%	[1000]	ug/L
Sr 421.552†	711739.2	7863.06	1.10%	[1000]	ug/L
Ti 337.279†	39348.9	27.01	0.07%	[1000]	ug/L
Tl 190.801†	3755.9	32.79	0.87%	[1000]	ug/L
V 292.402†	98392.9	237.89	0.24%	[1000]	ug/L
Zn 206.200†	94302.4	304.68	0.32%	[1000]	ug/L
Li 670.784	12100910.9	840.99	0.01%	[500]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	192.9	0.00000	0.999638	
Al 308.215	3	Lin Thru 0	0.0	1.369	0.00000	0.999551	
As 188.979	3	Lin Thru 0	0.0	5.152	0.00000	0.999656	
B 249.677	3	Lin Thru 0	0.0	35.12	0.00000	0.999708	
Ba 233.527	3	Lin Thru 0	0.0	435.2	0.00000	0.999455	
Be 313.107	3	Lin Thru 0	0.0	3546	0.00000	0.999450	
Ca 315.887	3	Lin Thru 0	0.0	16.10	0.00000	0.999377	
Cd 214.440	3	Lin Thru 0	0.0	291.9	0.00000	0.999369	
Co 228.616	3	Lin Thru 0	0.0	98.79	0.00000	0.999348	
Cr 267.716	3	Lin Thru 0	0.0	86.02	0.00000	0.999462	
Cu 327.393	3	Lin Thru 0	0.0	209.0	0.00000	0.999597	
Fe 273.955	3	Lin Thru 0	0.0	79.73	0.00000	0.999383	
K 766.490	3	Lin Thru 0	0.0	8.658	0.00000	0.999695	
Mg 285.213	3	Lin Thru 0	0.0	17.76	0.00000	0.999414	
Mn 257.610	3	Lin Thru 0	0.0	92.85	0.00000	0.999383	
Mo 202.031	3	Lin Thru 0	0.0	35.87	0.00000	0.999505	
Na 589.592	3	Lin Thru 0	0.0	11.20	0.00000	0.999547	
Ni 231.604	3	Lin Thru 0	0.0	49.79	0.00000	0.999260	
P 213.617	3	Lin Thru 0	0.0	3.260	0.00000	0.999664	
Pb 220.353	3	Lin Thru 0	0.0	5.277	0.00000	0.999301	
Sb 206.836	3	Lin Thru 0	0.0	7.558	0.00000	0.999678	
Se 196.026	3	Lin Thru 0	0.0	3.294	0.00000	0.999684	

Sn 189.927	3	Lin Thru 0	0.0	5.640	0.00000	0.999531
Sr 421.552	3	Lin Thru 0	0.0	723.4	0.00000	0.999447
Ti 337.279	3	Lin Thru 0	0.0	39.96	0.00000	0.999495
Tl 190.801	3	Lin Thru 0	0.0	3.825	0.00000	0.999313
V 292.402	3	Lin Thru 0	0.0	99.87	0.00000	0.999525
Zn 206.200	3	Lin Thru 0	0.0	95.99	0.00000	0.999365
Li 670.784	3	Lin Thru 0	0.0	24250	0.00000	0.999989

Sequence No.: 5
Sample ID: ICV 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 07/06/15 11:29:55 AM
Data Type: Reprocessed on 07/07/15 8:53:32 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	229534.5	96.26	%	0.606				0.63%
Y Radial	15907.8	97.92	%	0.264				0.27%
Ag 338.289†	47918.3	248.4	ug/L	0.64	248.4	ug/L	0.64	0.26%
QC value within limits for Ag 338.289 Recovery = 99.34%								
Al 308.215†	16774.4	12270	ug/L	74.15	12270	ug/L	74.15	0.60%
QC value within limits for Al 308.215 Recovery = 98.20%								
As 188.979†	2508.4	483.7	ug/L	1.59	483.7	ug/L	1.59	0.33%
QC value within limits for As 188.979 Recovery = 96.74%								
B 249.677†	17119.2	515.4	ug/L	0.77	515.4	ug/L	0.77	0.15%
QC value within limits for B 249.677 Recovery = 103.08%								
Ba 233.527†	216050.6	496.0	ug/L	0.90	496.0	ug/L	0.90	0.18%
QC value within limits for Ba 233.527 Recovery = 99.21%								
Be 313.107†	1753106.3	494.4	ug/L	0.56	494.4	ug/L	0.56	0.11%
QC value within limits for Be 313.107 Recovery = 98.89%								
Ca 315.887†	212791.5	13210	ug/L	25.09	13210	ug/L	25.09	0.19%
QC value within limits for Ca 315.887 Recovery = 105.67%								
Cd 214.440†	146237.6	501.0	ug/L	1.27	501.0	ug/L	1.27	0.25%
QC value within limits for Cd 214.440 Recovery = 100.21%								
Co 228.616†	49481.1	500.8	ug/L	1.15	500.8	ug/L	1.15	0.23%
QC value within limits for Co 228.616 Recovery = 100.16%								
Cr 267.716†	42971.5	499.5	ug/L	0.93	499.5	ug/L	0.93	0.19%
QC value within limits for Cr 267.716 Recovery = 99.90%								
Cu 327.393†	106153.7	509.0	ug/L	0.60	509.0	ug/L	0.60	0.12%
QC value within limits for Cu 327.393 Recovery = 101.80%								
Fe 273.955†	992032.8	12400	ug/L	25.19	12400	ug/L	25.19	0.20%
QC value within limits for Fe 273.955 Recovery = 99.23%								
K 766.490†	104987.9	12100	ug/L	28.30	12100	ug/L	28.30	0.23%
QC value within limits for K 766.490 Recovery = 96.80%								
Mg 285.213†	226888.3	12780	ug/L	29.43	12780	ug/L	29.43	0.23%
QC value within limits for Mg 285.213 Recovery = 102.26%								
Mn 257.610†	46065.5	495.8	ug/L	1.06	495.8	ug/L	1.06	0.21%
QC value within limits for Mn 257.610 Recovery = 99.16%								
Mo 202.031†	17604.1	491.4	ug/L	1.99	491.4	ug/L	1.99	0.41%
QC value within limits for Mo 202.031 Recovery = 98.27%								
Na 589.592†	138709.7	12370	ug/L	80.45	12370	ug/L	80.45	0.65%
QC value within limits for Na 589.592 Recovery = 98.94%								
Ni 231.604†	25541.3	512.1	ug/L	3.48	512.1	ug/L	3.48	0.68%
QC value within limits for Ni 231.604 Recovery = 102.41%								
P 213.617†	8118.7	2490	ug/L	14.01	2490	ug/L	14.01	0.56%
QC value within limits for P 213.617 Recovery = 99.62%								
Pb 220.353†	2734.8	521.6	ug/L	1.68	521.6	ug/L	1.68	0.32%
QC value within limits for Pb 220.353 Recovery = 104.32%								
Sb 206.836†	3721.5	492.4	ug/L	1.82	492.4	ug/L	1.82	0.37%
QC value within limits for Sb 206.836 Recovery = 98.47%								
Se 196.026†	1658.3	508.3	ug/L	3.73	508.3	ug/L	3.73	0.73%
QC value within limits for Se 196.026 Recovery = 101.65%								
Sn 189.927†	1448.7	256.9	ug/L	1.49	256.9	ug/L	1.49	0.58%
QC value within limits for Sn 189.927 Recovery = 102.75%								
Sr 421.552†	367446.4	507.4	ug/L	3.54	507.4	ug/L	3.54	0.70%
QC value within limits for Sr 421.552 Recovery = 101.49%								
Ti 337.279†	19820.7	495.8	ug/L	1.32	495.8	ug/L	1.32	0.27%
QC value within limits for Ti 337.279 Recovery = 99.16%								
Tl 190.801†	2015.7	526.9	ug/L	2.92	526.9	ug/L	2.92	0.55%
QC value within limits for Tl 190.801 Recovery = 105.39%								
V 292.402†	49466.4	495.3	ug/L	0.51	495.3	ug/L	0.51	0.10%
QC value within limits for V 292.402 Recovery = 99.06%								
Zn 206.200†	49172.2	518.4	ug/L	1.14	518.4	ug/L	1.14	0.22%
QC value within limits for Zn 206.200 Recovery = 103.68%								

Li 670.784	5989083.1	247.0 ug/L	1.46	247.0 ug/L	1.46	0.59%

QC value within limits for Li 670.784 Recovery = 98.81%
All analyte(s) passed QC.

Sequence No.: 6
Sample ID: ICB 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/06/15 11:35:17 AM
Data Type: Reprocessed on 07/07/15 8:53:34 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	241576.7	101.3	%	0.46				0.46%
Y Radial	16540.9	101.8	%	1.16				1.14%
Ag 338.289†	-8.5	-0.044	ug/L	0.2017	-0.044	ug/L	0.2017	458.96%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	1.0	0.709	ug/L	7.7923	0.709	ug/L	7.7923	>999.9%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.9	0.179	ug/L	1.4663	0.179	ug/L	1.4663	818.30%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	105.2	3.004	ug/L	0.5073	3.004	ug/L	0.5073	16.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-15.2	-0.035	ug/L	0.0189	-0.035	ug/L	0.0189	53.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	72.4	0.020	ug/L	0.0079	0.020	ug/L	0.0079	38.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	21.2	1.314	ug/L	0.3496	1.314	ug/L	0.3496	26.61%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	40.1	0.138	ug/L	0.0471	0.138	ug/L	0.0471	34.20%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-2.0	-0.018	ug/L	0.1174	-0.018	ug/L	0.1174	652.22%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	1.9	0.022	ug/L	0.0834	0.022	ug/L	0.0834	373.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	596.4	2.853	ug/L	0.0148	2.853	ug/L	0.0148	0.52%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	211.7	2.654	ug/L	0.4211	2.654	ug/L	0.4211	15.87%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	133.2	15.38	ug/L	2.369	15.38	ug/L	2.369	15.41%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	14.6	0.822	ug/L	0.3984	0.822	ug/L	0.3984	48.47%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-4.9	-0.053	ug/L	0.0742	-0.053	ug/L	0.0742	140.33%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	26.1	0.728	ug/L	0.3292	0.728	ug/L	0.3292	45.21%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	83.8	7.463	ug/L	4.7410	7.463	ug/L	4.7410	63.52%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-2.3	-0.048	ug/L	0.1946	-0.048	ug/L	0.1946	402.52%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-8.0	-2.458	ug/L	0.5801	-2.458	ug/L	0.5801	23.60%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	8.8	1.663	ug/L	0.8269	1.663	ug/L	0.8269	49.73%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.7	-0.224	ug/L	0.2768	-0.224	ug/L	0.2768	123.81%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.7	0.831	ug/L	0.5743	0.831	ug/L	0.5743	69.12%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.5	1.156	ug/L	0.1598	1.156	ug/L	0.1598	13.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	8.2	0.011	ug/L	0.0218	0.011	ug/L	0.0218	192.93%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-4.8	-0.121	ug/L	0.0827	-0.121	ug/L	0.0827	68.14%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	12.8	3.351	ug/L	1.7841	3.351	ug/L	1.7841	53.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	0.5	0.005	ug/L	0.0285	0.005	ug/L	0.0285	558.26%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	67.4	0.703	ug/L	0.1906	0.703	ug/L	0.1906	27.11%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Sequence No.: 7
Sample ID: ICSA 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 6
Date Collected: 07/06/15 11:41:00 AM
Data Type: Reprocessed on 07/07/15 8:53:36 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	226020.9	94.79	%	0.122				0.13%
Y Radial	15871.3	97.70	%	0.725				0.74%
Ag 338.289†	111.5	0.578	ug/L	0.0366	0.578	ug/L	0.0366	6.33%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	135450.6	98920	ug/L	1192.52	98920	ug/L	1192.52	1.21%
QC value within limits for Al 308.215 Recovery = 98.92%								
As 188.979†	-3.3	-0.964	ug/L	2.7779	-0.964	ug/L	2.7779	288.29%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-7466.6	3.210	ug/L	1.3859	3.210	ug/L	1.3859	43.17%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1575.0	-1.609	ug/L	0.0816	-1.609	ug/L	0.0816	5.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	229.2	0.065	ug/L	0.0041	0.065	ug/L	0.0041	6.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1638435.9	101700	ug/L	1304.14	101700	ug/L	1304.14	1.28%
QC value within limits for Ca 315.887 Recovery = 101.74%								
Cd 214.440†	1105.0	0.257	ug/L	0.0486	0.257	ug/L	0.0486	18.89%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	127.3	-1.449	ug/L	0.0399	-1.449	ug/L	0.0399	2.75%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	86.7	0.153	ug/L	0.1294	0.153	ug/L	0.1294	84.67%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-144.7	0.553	ug/L	0.0804	0.553	ug/L	0.0804	14.54%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	7380713.2	92570	ug/L	767.44	92570	ug/L	767.44	0.83%
QC value within limits for Fe 273.955 Recovery = 92.57%								
K 766.490†	199.4	-69.66	ug/L	7.278	-69.66	ug/L	7.278	10.45%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1724950.7	97180	ug/L	1198.22	97180	ug/L	1198.22	1.23%
QC value within limits for Mg 285.213 Recovery = 97.18%								
Mn 257.610†	277.8	-0.250	ug/L	0.2110	-0.250	ug/L	0.2110	84.49%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-96.2	-1.356	ug/L	0.3316	-1.356	ug/L	0.3316	24.45%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	314.2	15.99	ug/L	7.195	15.99	ug/L	7.195	44.99%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-104.9	0.201	ug/L	0.3549	0.201	ug/L	0.3549	176.55%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-119.0	-36.49	ug/L	0.250	-36.49	ug/L	0.250	0.68%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-81.1	-0.202	ug/L	0.7803	-0.202	ug/L	0.7803	386.36%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-21.1	-2.792	ug/L	1.8085	-2.792	ug/L	1.8085	64.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-125.4	6.088	ug/L	1.0019	6.088	ug/L	1.0019	16.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	8.5	1.507	ug/L	0.4959	1.507	ug/L	0.4959	32.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	423.6	-3.391	ug/L	0.0453	-3.391	ug/L	0.0453	1.34%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	49.5	-0.435	ug/L	0.8280	-0.435	ug/L	0.8280	190.50%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-15.9	-4.155	ug/L	2.4236	-4.155	ug/L	2.4236	58.34%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-2.9	-0.029	ug/L	0.0399	-0.029	ug/L	0.0399	138.30%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	416.5	3.862	ug/L	0.0861	3.862	ug/L	0.0861	2.23%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	6687.8	0.276 ug/L	0.0075	0.276 ug/L	0.0075	2.71%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Li 670.784	9432.8	0.389 ug/L	0.0106	0.389 ug/L	0.0106	2.73%

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICSAB 150706RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 7
Date Collected: 07/06/15 11:47:18 AM
Data Type: Reprocessed on 07/07/15 8:53:37 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150706RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	225836.7	94.71	%	0.434				0.46%
Y Radial	16026.0	98.65	%	0.089				0.09%
Ag 338.289†	97744.4	506.6	ug/L	0.84	506.6	ug/L	0.84	0.17%
QC value within limits for Ag 338.289 Recovery = 101.32%								
Al 308.215†	135510.7	98980	ug/L	809.50	98980	ug/L	809.50	0.82%
QC value within limits for Al 308.215 Recovery = 98.98%								
As 188.979†	1239.3	238.9	ug/L	1.96	238.9	ug/L	1.96	0.82%
QC value within limits for As 188.979 Recovery = 95.56%								
B 249.677†	-7587.5	4.400	ug/L	1.0157	4.400	ug/L	1.0157	23.09%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	108597.9	244.3	ug/L	0.44	244.3	ug/L	0.44	0.18%
QC value within limits for Ba 233.527 Recovery = 97.74%								
Be 313.107†	853322.1	240.7	ug/L	0.82	240.7	ug/L	0.82	0.34%
QC value within limits for Be 313.107 Recovery = 96.27%								
Ca 315.887†	1634272.9	101500	ug/L	668.04	101500	ug/L	668.04	0.66%
QC value within limits for Ca 315.887 Recovery = 101.48%								
Cd 214.440†	141131.1	480.0	ug/L	1.79	480.0	ug/L	1.79	0.37%
QC value within limits for Cd 214.440 Recovery = 96.01%								
Co 228.616†	24681.6	247.7	ug/L	1.38	247.7	ug/L	1.38	0.56%
QC value within limits for Co 228.616 Recovery = 99.08%								
Cr 267.716†	21875.7	253.5	ug/L	1.08	253.5	ug/L	1.08	0.43%
QC value within limits for Cr 267.716 Recovery = 101.40%								
Cu 327.393†	52860.8	254.0	ug/L	0.41	254.0	ug/L	0.41	0.16%
QC value within limits for Cu 327.393 Recovery = 101.61%								
Fe 273.955†	7552942.3	94710	ug/L	370.53	94710	ug/L	370.53	0.39%
QC value within limits for Fe 273.955 Recovery = 94.71%								
K 766.490†	225.5	-69.36	ug/L	6.193	-69.36	ug/L	6.193	8.93%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1725324.9	97200	ug/L	813.79	97200	ug/L	813.79	0.84%
QC value within limits for Mg 285.213 Recovery = 97.20%								
Mn 257.610†	23104.3	245.6	ug/L	0.32	245.6	ug/L	0.32	0.13%
QC value within limits for Mn 257.610 Recovery = 98.25%								
Mo 202.031†	8412.8	236.1	ug/L	0.65	236.1	ug/L	0.65	0.27%
QC value within limits for Mo 202.031 Recovery = 94.45%								
Na 589.592†	211.8	5.886	ug/L	2.3585	5.886	ug/L	2.3585	40.07%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	23718.6	478.2	ug/L	2.50	478.2	ug/L	2.50	0.52%
QC value within limits for Ni 231.604 Recovery = 95.63%								
P 213.617†	-276.2	-84.73	ug/L	2.452	-84.73	ug/L	2.452	2.89%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	2537.1	496.5	ug/L	2.13	496.5	ug/L	2.13	0.43%
QC value within limits for Pb 220.353 Recovery = 99.31%								
Sb 206.836†	1816.4	240.3	ug/L	1.37	240.3	ug/L	1.37	0.57%
QC value within limits for Sb 206.836 Recovery = 96.13%								
Se 196.026†	677.3	250.2	ug/L	2.78	250.2	ug/L	2.78	1.11%
QC value within limits for Se 196.026 Recovery = 100.08%								
Sn 189.927†	10.4	1.850	ug/L	0.8661	1.850	ug/L	0.8661	46.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	465.0	-3.326	ug/L	0.0580	-3.326	ug/L	0.0580	1.74%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	54.3	-0.272	ug/L	0.3532	-0.272	ug/L	0.3532	129.74%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	928.4	242.7	ug/L	2.89	242.7	ug/L	2.89	1.19%
QC value within limits for Tl 190.801 Recovery = 97.08%								
V 292.402†	24884.3	249.2	ug/L	0.04	249.2	ug/L	0.04	0.02%
QC value within limits for V 292.402 Recovery = 99.67%								
Zn 206.200†	45485.7	476.1	ug/L	1.98	476.1	ug/L	1.98	0.42%
QC value within limits for Zn 206.200 Recovery = 95.23%								

Li 670.784	9610.2	0.396 ug/L	0.0107	0.396 ug/L	0.0107	2.71%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCV1 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 07/06/15 11:53:37 AM
Data Type: Reprocessed on 07/07/15 8:53:38 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	229088.0	96.08 %	0.218			0.23%
Y Radial	16113.8	99.19 %	0.323			0.33%
Ag 338.289†	51006.4	264.4 ug/L	0.39	264.4 ug/L	0.39	0.15%
QC value within limits for Ag 338.289 Recovery = 105.75%						
Al 308.215†	14473.7	10600 ug/L	51.56	10600 ug/L	51.56	0.49%
QC value within limits for Al 308.215 Recovery = 105.96%						
As 188.979†	2742.5	527.3 ug/L	3.13	527.3 ug/L	3.13	0.59%
QC value within limits for As 188.979 Recovery = 105.46%						
B 249.677†	18417.2	547.9 ug/L	2.82	547.9 ug/L	2.82	0.51%
QC value within limits for B 249.677 Recovery = 109.58%						
Ba 233.527†	232425.1	533.8 ug/L	0.51	533.8 ug/L	0.51	0.09%
QC value within limits for Ba 233.527 Recovery = 106.75%						
Be 313.107†	1900909.0	536.1 ug/L	0.47	536.1 ug/L	0.47	0.09%
QC value within limits for Be 313.107 Recovery = 107.23%						
Ca 315.887†	425466.7	26420 ug/L	180.80	26420 ug/L	180.80	0.68%
QC value within limits for Ca 315.887 Recovery = 105.66%						
Cd 214.440†	155450.2	532.9 ug/L	1.21	532.9 ug/L	1.21	0.23%
QC value within limits for Cd 214.440 Recovery = 106.58%						
Co 228.616†	53015.4	536.6 ug/L	0.93	536.6 ug/L	0.93	0.17%
QC value within limits for Co 228.616 Recovery = 107.33%						
Cr 267.716†	45738.9	531.6 ug/L	0.59	531.6 ug/L	0.59	0.11%
QC value within limits for Cr 267.716 Recovery = 106.32%						
Cu 327.393†	111306.9	533.6 ug/L	0.96	533.6 ug/L	0.96	0.18%
QC value within limits for Cu 327.393 Recovery = 106.72%						
Fe 273.955†	854302.8	10670 ug/L	13.47	10670 ug/L	13.47	0.13%
QC value within limits for Fe 273.955 Recovery = 106.72%						
K 766.490†	91747.2	10570 ug/L	34.08	10570 ug/L	34.08	0.32%
QC value within limits for K 766.490 Recovery = 105.71%						
Mg 285.213†	475832.9	26790 ug/L	228.70	26790 ug/L	228.70	0.85%
QC value within limits for Mg 285.213 Recovery = 107.18%						
Mn 257.610†	49230.2	529.3 ug/L	1.67	529.3 ug/L	1.67	0.32%
QC value within limits for Mn 257.610 Recovery = 105.85%						
Mo 202.031†	19154.3	534.6 ug/L	3.44	534.6 ug/L	3.44	0.64%
QC value within limits for Mo 202.031 Recovery = 106.91%						
Na 589.592†	149146.1	13300 ug/L	123.30	13300 ug/L	123.30	0.93%
QC value within limits for Na 589.592 Recovery = 106.40%						
Ni 231.604†	26915.5	539.6 ug/L	3.00	539.6 ug/L	3.00	0.56%
QC value within limits for Ni 231.604 Recovery = 107.93%						
P 213.617†	8663.4	2658 ug/L	18.74	2658 ug/L	18.74	0.71%
QC value within limits for P 213.617 Recovery = 106.30%						
Pb 220.353†	2891.7	551.8 ug/L	4.24	551.8 ug/L	4.24	0.77%
QC value within limits for Pb 220.353 Recovery = 110.35%						
Sb 206.836†	4026.1	532.7 ug/L	1.99	532.7 ug/L	1.99	0.37%
QC value within limits for Sb 206.836 Recovery = 106.53%						
Se 196.026†	1747.8	534.1 ug/L	4.72	534.1 ug/L	4.72	0.88%
QC value within limits for Se 196.026 Recovery = 106.83%						
Sn 189.927†	3005.1	532.9 ug/L	3.30	532.9 ug/L	3.30	0.62%
QC value within limits for Sn 189.927 Recovery = 106.57%						
Sr 421.552†	387486.7	534.6 ug/L	4.84	534.6 ug/L	4.84	0.91%
QC value within limits for Sr 421.552 Recovery = 106.93%						
Ti 337.279†	21203.1	530.2 ug/L	0.90	530.2 ug/L	0.90	0.17%
QC value within limits for Ti 337.279 Recovery = 106.04%						
Tl 190.801†	2127.5	556.2 ug/L	2.87	556.2 ug/L	2.87	0.52%
QC value greater than the upper limit for Tl 190.801 Recovery = 111.23%						
V 292.402†	53438.6	535.1 ug/L	1.01	535.1 ug/L	1.01	0.19%
QC value within limits for V 292.402 Recovery = 107.02%						
Zn 206.200†	51220.0	540.8 ug/L	1.19	540.8 ug/L	1.19	0.22%
QC value within limits for Zn 206.200 Recovery = 108.15%						

Li 670.784	6298526.5	259.8 ug/L	0.48	259.8 ug/L	0.48	0.19%

QC value within limits for Li 670.784 Recovery = 103.91%
QC Failed. Continue with analysis.

Sequence No.: 10
Sample ID: CCB 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/06/15 12:03:05 PM
Data Type: Reprocessed on 07/07/15 8:53:40 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	241232.3	101.2	%	0.79				0.78%
Y Radial	16660.1	102.6	%	0.73				0.71%
Ag 338.289†	-37.2	-0.193	ug/L	0.3388	-0.193	ug/L	0.3388	175.78%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	1.6	1.109	ug/L	3.7525	1.109	ug/L	3.7525	338.30%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-1.2	-0.231	ug/L	0.7746	-0.231	ug/L	0.7746	335.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	143.5	4.098	ug/L	0.5886	4.098	ug/L	0.5886	14.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-3.9	-0.010	ug/L	0.0021	-0.010	ug/L	0.0021	20.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	115.7	0.033	ug/L	0.0006	0.033	ug/L	0.0006	1.98%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	64.2	3.984	ug/L	0.0438	3.984	ug/L	0.0438	1.10%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	39.7	0.137	ug/L	0.0419	0.137	ug/L	0.0419	30.73%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	2.2	0.026	ug/L	0.0675	0.026	ug/L	0.0675	260.84%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.6	-0.007	ug/L	0.0339	-0.007	ug/L	0.0339	475.03%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	734.0	3.511	ug/L	0.0289	3.511	ug/L	0.0289	0.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	333.9	4.195	ug/L	0.1736	4.195	ug/L	0.1736	4.14%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	99.3	11.48	ug/L	9.930	11.48	ug/L	9.930	86.53%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	26.8	1.511	ug/L	0.2519	1.511	ug/L	0.2519	16.67%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-6.8	-0.073	ug/L	0.0373	-0.073	ug/L	0.0373	50.84%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	39.4	1.099	ug/L	0.1308	1.099	ug/L	0.1308	11.90%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-132.9	-11.88	ug/L	2.050	-11.88	ug/L	2.050	17.26%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-2.9	-0.059	ug/L	0.1431	-0.059	ug/L	0.1431	242.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-14.0	-4.295	ug/L	1.1172	-4.295	ug/L	1.1172	26.01%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	6.4	1.209	ug/L	0.2351	1.209	ug/L	0.2351	19.44%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.2	-0.293	ug/L	0.5511	-0.293	ug/L	0.5511	187.84%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.4	0.117	ug/L	0.3770	0.117	ug/L	0.3770	322.15%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.7	1.193	ug/L	0.3391	1.193	ug/L	0.3391	28.41%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	11.3	0.015	ug/L	0.0175	0.015	ug/L	0.0175	112.91%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-1.6	-0.039	ug/L	0.1449	-0.039	ug/L	0.1449	370.63%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	11.3	2.967	ug/L	1.2938	2.967	ug/L	1.2938	43.61%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-8.4	-0.084	ug/L	0.0527	-0.084	ug/L	0.0527	62.47%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	99.7	1.039	ug/L	0.3286	1.039	ug/L	0.3286	31.62%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	7286.0	0.301 ug/L	0.0065	0.301 ug/L	0.0065	2.15%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 29
Sample ID: CCV2 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 07/06/15 2:53:31 PM
Data Type: Reprocessed on 07/07/15 8:54:01 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	232613.4	97.55	%	1.269				1.30%
Y Radial	16144.6	99.38	%	0.935				0.94%
Ag 338.289†	35071.9	181.8	ug/L	3.17	181.8	ug/L	3.17	1.74%
QC value within limits for Ag 338.289 Recovery = 96.95%								
Al 308.215†	9898.3	7245	ug/L	27.16	7245	ug/L	27.16	0.37%
QC value within limits for Al 308.215 Recovery = 96.60%								
As 188.979†	1854.4	356.5	ug/L	7.18	356.5	ug/L	7.18	2.01%
QC value within limits for As 188.979 Recovery = 95.06%								
B 249.677†	12946.7	384.5	ug/L	6.30	384.5	ug/L	6.30	1.64%
QC value within limits for B 249.677 Recovery = 102.54%								
Ba 233.527†	156544.9	359.5	ug/L	5.84	359.5	ug/L	5.84	1.62%
QC value within limits for Ba 233.527 Recovery = 95.87%								
Be 313.107†	1246062.4	351.4	ug/L	5.26	351.4	ug/L	5.26	1.50%
QC value within limits for Be 313.107 Recovery = 93.72%								
Ca 315.887†	299158.9	18570	ug/L	100.80	18570	ug/L	100.80	0.54%
QC value within limits for Ca 315.887 Recovery = 99.06%								
Cd 214.440†	105296.4	361.0	ug/L	6.34	361.0	ug/L	6.34	1.76%
QC value within limits for Cd 214.440 Recovery = 96.26%								
Co 228.616†	35813.5	362.5	ug/L	5.88	362.5	ug/L	5.88	1.62%
QC value within limits for Co 228.616 Recovery = 96.66%								
Cr 267.716†	32794.0	381.1	ug/L	6.75	381.1	ug/L	6.75	1.77%
QC value within limits for Cr 267.716 Recovery = 101.63%								
Cu 327.393†	76873.2	368.5	ug/L	5.75	368.5	ug/L	5.75	1.56%
QC value within limits for Cu 327.393 Recovery = 98.27%								
Fe 273.955†	578444.9	7227	ug/L	122.65	7227	ug/L	122.65	1.70%
QC value within limits for Fe 273.955 Recovery = 96.36%								
K 766.490†	62769.4	7232	ug/L	44.97	7232	ug/L	44.97	0.62%
QC value within limits for K 766.490 Recovery = 96.42%								
Mg 285.213†	336593.7	18950	ug/L	94.68	18950	ug/L	94.68	0.50%
QC value within limits for Mg 285.213 Recovery = 101.09%								
Mn 257.610†	34080.1	366.4	ug/L	2.08	366.4	ug/L	2.08	0.57%
QC value within limits for Mn 257.610 Recovery = 97.70%								
Mo 202.031†	12963.5	361.8	ug/L	5.97	361.8	ug/L	5.97	1.65%
QC value within limits for Mo 202.031 Recovery = 96.48%								
Na 589.592†	106165.1	9468	ug/L	44.42	9468	ug/L	44.42	0.47%
QC value within limits for Na 589.592 Recovery = 100.99%								
Ni 231.604†	18241.6	365.8	ug/L	6.24	365.8	ug/L	6.24	1.70%
QC value within limits for Ni 231.604 Recovery = 97.53%								
P 213.617†	5787.5	1775	ug/L	32.77	1775	ug/L	32.77	1.85%
QC value within limits for P 213.617 Recovery = 94.69%								
Pb 220.353†	1858.3	354.8	ug/L	7.92	354.8	ug/L	7.92	2.23%
QC value within limits for Pb 220.353 Recovery = 94.60%								
Sb 206.836†	2685.9	355.4	ug/L	6.43	355.4	ug/L	6.43	1.81%
QC value within limits for Sb 206.836 Recovery = 94.76%								
Se 196.026†	1198.9	366.4	ug/L	8.22	366.4	ug/L	8.22	2.24%
QC value within limits for Se 196.026 Recovery = 97.70%								
Sn 189.927†	2039.8	361.7	ug/L	4.64	361.7	ug/L	4.64	1.28%
QC value within limits for Sn 189.927 Recovery = 96.45%								
Sr 421.552†	267552.6	369.1	ug/L	5.14	369.1	ug/L	5.14	1.39%
QC value within limits for Sr 421.552 Recovery = 98.44%								
Ti 337.279†	14700.0	367.6	ug/L	1.20	367.6	ug/L	1.20	0.33%
QC value within limits for Ti 337.279 Recovery = 98.02%								
Tl 190.801†	1308.6	342.1	ug/L	4.91	342.1	ug/L	4.91	1.44%
QC value within limits for Tl 190.801 Recovery = 91.22%								
V 292.402†	35091.8	351.4	ug/L	5.05	351.4	ug/L	5.05	1.44%
QC value within limits for V 292.402 Recovery = 93.70%								
Zn 206.200†	36139.3	381.6	ug/L	6.15	381.6	ug/L	6.15	1.61%
QC value within limits for Zn 206.200 Recovery = 101.77%								

Li 670.784	4363482.0	180.0 ug/L	0.34	180.0 ug/L	0.34	0.19%

QC value within limits for Li 670.784 Recovery = 95.99%
All analyte(s) passed QC.

Sequence No.: 30
Sample ID: CCB 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 07/06/15 2:58:49 PM
Data Type: Reprocessed on 07/07/15 8:54:02 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	247396.5	103.8	%	3.28				3.16%
Y Radial	16030.3	98.68	%	0.613				0.62%
Ag 338.289†	-28.1	-0.146	ug/L	0.1582	-0.146	ug/L	0.1582	108.49%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-2.6	-1.931	ug/L	3.6653	-1.931	ug/L	3.6653	189.83%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-4.2	-0.818	ug/L	1.2073	-0.818	ug/L	1.2073	147.51%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	53.2	1.520	ug/L	0.0921	1.520	ug/L	0.0921	6.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.005	ug/L	0.0057	-0.005	ug/L	0.0057	120.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	164.6	0.046	ug/L	0.0206	0.046	ug/L	0.0206	44.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	77.5	4.815	ug/L	0.5344	4.815	ug/L	0.5344	11.10%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	2.5	0.009	ug/L	0.0312	0.009	ug/L	0.0312	353.26%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	11.0	0.115	ug/L	0.0999	0.115	ug/L	0.0999	87.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.6	-0.030	ug/L	0.0559	-0.030	ug/L	0.0559	186.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	191.9	0.918	ug/L	0.1509	0.918	ug/L	0.1509	16.44%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	141.7	1.789	ug/L	0.8214	1.789	ug/L	0.8214	45.91%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	71.5	8.275	ug/L	0.9334	8.275	ug/L	0.9334	11.28%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	25.9	1.458	ug/L	0.2306	1.458	ug/L	0.2306	15.81%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-3.8	-0.041	ug/L	0.0744	-0.041	ug/L	0.0744	181.46%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	29.0	0.807	ug/L	0.1124	0.807	ug/L	0.1124	13.93%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-300.7	-26.86	ug/L	2.447	-26.86	ug/L	2.447	9.11%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	1.9	0.037	ug/L	0.1989	0.037	ug/L	0.1989	533.05%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-15.7	-4.811	ug/L	1.5757	-4.811	ug/L	1.5757	32.75%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-0.3	-0.056	ug/L	1.9457	-0.056	ug/L	1.9457	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-3.7	-0.485	ug/L	0.0618	-0.485	ug/L	0.0618	12.74%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.8	0.837	ug/L	1.8302	0.837	ug/L	1.8302	218.66%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	2.5	0.443	ug/L	0.3848	0.443	ug/L	0.3848	86.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	9.7	0.013	ug/L	0.0346	0.013	ug/L	0.0346	261.67%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-4.3	-0.106	ug/L	0.3766	-0.106	ug/L	0.3766	353.61%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	3.7	0.961	ug/L	1.0996	0.961	ug/L	1.0996	114.47%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-16.6	-0.166	ug/L	0.1031	-0.166	ug/L	0.1031	62.01%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-173.8	-1.811	ug/L	0.1977	-1.811	ug/L	0.1977	10.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	1655.4	0.068 ug/L	0.0033	0.068 ug/L	0.0033	4.80%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 57
Sample ID: CCV2 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 07/06/15 5:50:27 PM
Data Type: Reprocessed on 07/07/15 8:54:32 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	237300.4	99.52	%	0.309				0.31%
Y Radial	16605.8	102.2	%	0.85				0.84%
Ag 338.289†	34947.4	181.1	ug/L	0.52	181.1	ug/L	0.52	0.29%
QC value within limits for Ag 338.289 Recovery = 96.60%								
Al 308.215†	9967.1	7297	ug/L	41.07	7297	ug/L	41.07	0.56%
QC value within limits for Al 308.215 Recovery = 97.29%								
As 188.979†	1894.9	364.3	ug/L	1.83	364.3	ug/L	1.83	0.50%
QC value within limits for As 188.979 Recovery = 97.15%								
B 249.677†	13022.3	386.9	ug/L	2.19	386.9	ug/L	2.19	0.57%
QC value within limits for B 249.677 Recovery = 103.18%								
Ba 233.527†	159972.2	367.4	ug/L	0.27	367.4	ug/L	0.27	0.07%
QC value within limits for Ba 233.527 Recovery = 97.97%								
Be 313.107†	1298552.0	366.2	ug/L	0.83	366.2	ug/L	0.83	0.23%
QC value within limits for Be 313.107 Recovery = 97.67%								
Ca 315.887†	300947.7	18680	ug/L	125.91	18680	ug/L	125.91	0.67%
QC value within limits for Ca 315.887 Recovery = 99.65%								
Cd 214.440†	107615.5	368.9	ug/L	0.58	368.9	ug/L	0.58	0.16%
QC value within limits for Cd 214.440 Recovery = 98.38%								
Co 228.616†	36724.5	371.7	ug/L	0.43	371.7	ug/L	0.43	0.12%
QC value within limits for Co 228.616 Recovery = 99.13%								
Cr 267.716†	33295.8	387.0	ug/L	2.25	387.0	ug/L	2.25	0.58%
QC value within limits for Cr 267.716 Recovery = 103.19%								
Cu 327.393†	75969.4	364.2	ug/L	0.84	364.2	ug/L	0.84	0.23%
QC value within limits for Cu 327.393 Recovery = 97.12%								
Fe 273.955†	587829.3	7343	ug/L	8.49	7343	ug/L	8.49	0.12%
QC value within limits for Fe 273.955 Recovery = 97.91%								
K 766.490†	61669.4	7105	ug/L	44.31	7105	ug/L	44.31	0.62%
QC value within limits for K 766.490 Recovery = 94.73%								
Mg 285.213†	334850.2	18860	ug/L	113.88	18860	ug/L	113.88	0.60%
QC value within limits for Mg 285.213 Recovery = 100.56%								
Mn 257.610†	33934.1	364.8	ug/L	2.43	364.8	ug/L	2.43	0.67%
QC value within limits for Mn 257.610 Recovery = 97.28%								
Mo 202.031†	13090.4	365.3	ug/L	1.86	365.3	ug/L	1.86	0.51%
QC value within limits for Mo 202.031 Recovery = 97.42%								
Na 589.592†	101070.2	9013	ug/L	62.15	9013	ug/L	62.15	0.69%
QC value within limits for Na 589.592 Recovery = 96.14%								
Ni 231.604†	18475.7	370.4	ug/L	2.08	370.4	ug/L	2.08	0.56%
QC value within limits for Ni 231.604 Recovery = 98.78%								
P 213.617†	5921.7	1817	ug/L	8.97	1817	ug/L	8.97	0.49%
QC value within limits for P 213.617 Recovery = 96.88%								
Pb 220.353†	2023.2	386.0	ug/L	4.07	386.0	ug/L	4.07	1.05%
QC value within limits for Pb 220.353 Recovery = 102.94%								
Sb 206.836†	2775.3	367.2	ug/L	2.11	367.2	ug/L	2.11	0.57%
QC value within limits for Sb 206.836 Recovery = 97.91%								
Se 196.026†	1203.6	367.8	ug/L	4.29	367.8	ug/L	4.29	1.17%
QC value within limits for Se 196.026 Recovery = 98.08%								
Sn 189.927†	2088.8	370.4	ug/L	2.29	370.4	ug/L	2.29	0.62%
QC value within limits for Sn 189.927 Recovery = 98.77%								
Sr 421.552†	252165.2	347.9	ug/L	2.92	347.9	ug/L	2.92	0.84%
QC value within limits for Sr 421.552 Recovery = 92.76%								
Ti 337.279†	14604.8	365.2	ug/L	2.29	365.2	ug/L	2.29	0.63%
QC value within limits for Ti 337.279 Recovery = 97.38%								
Tl 190.801†	1538.9	402.3	ug/L	5.86	402.3	ug/L	5.86	1.46%
QC value within limits for Tl 190.801 Recovery = 107.28%								
V 292.402†	36880.1	369.3	ug/L	1.06	369.3	ug/L	1.06	0.29%
QC value within limits for V 292.402 Recovery = 98.48%								
Zn 206.200†	36869.6	389.3	ug/L	2.15	389.3	ug/L	2.15	0.55%
QC value within limits for Zn 206.200 Recovery = 103.81%								

Li 670.784	4150762.5	171.2 ug/L	0.63	171.2 ug/L	0.63	0.37%

QC value within limits for Li 670.784 Recovery = 91.31%
All analyte(s) passed QC.

Sequence No.: 58
Sample ID: CCB 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 07/06/15 5:55:45 PM
Data Type: Reprocessed on 07/07/15 8:54:33 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	246066.6	103.2	%	0.39				0.37%
Y Radial	16719.4	102.9	%	0.32				0.31%
Ag 338.289†	-55.3	-0.287	ug/L	0.6769	-0.287	ug/L	0.6769	236.02%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	8.7	6.366	ug/L	7.8934	6.366	ug/L	7.8934	124.00%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-3.7	-0.728	ug/L	0.5377	-0.728	ug/L	0.5377	73.83%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	114.2	3.252	ug/L	0.6263	3.252	ug/L	0.6263	19.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-25.4	-0.058	ug/L	0.0563	-0.058	ug/L	0.0563	96.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-12.3	-0.003	ug/L	0.0079	-0.003	ug/L	0.0079	228.51%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	21.1	1.309	ug/L	1.4308	1.309	ug/L	1.4308	109.28%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	20.7	0.071	ug/L	0.0429	0.071	ug/L	0.0429	60.26%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-10.6	-0.105	ug/L	0.0969	-0.105	ug/L	0.0969	91.86%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.6	-0.030	ug/L	0.0314	-0.030	ug/L	0.0314	103.07%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	62.1	0.297	ug/L	0.1733	0.297	ug/L	0.1733	58.29%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-48.0	-0.607	ug/L	0.2449	-0.607	ug/L	0.2449	40.33%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	61.3	7.080	ug/L	5.1357	7.080	ug/L	5.1357	72.54%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	23.5	1.321	ug/L	0.1951	1.321	ug/L	0.1951	14.77%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-4.9	-0.052	ug/L	0.0584	-0.052	ug/L	0.0584	111.68%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.7	0.438	ug/L	0.1247	0.438	ug/L	0.1247	28.50%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-38.6	-3.452	ug/L	2.6925	-3.452	ug/L	2.6925	77.99%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-0.2	-0.004	ug/L	0.0784	-0.004	ug/L	0.0784	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-12.6	-3.878	ug/L	0.5403	-3.878	ug/L	0.5403	13.93%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	1.7	0.334	ug/L	1.0825	0.334	ug/L	1.0825	323.61%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.2	-0.023	ug/L	0.6079	-0.023	ug/L	0.6079	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.0	-1.202	ug/L	0.7013	-1.202	ug/L	0.7013	58.33%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-2.6	-0.454	ug/L	0.2599	-0.454	ug/L	0.2599	57.19%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	10.9	0.015	ug/L	0.0170	0.015	ug/L	0.0170	113.51%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-0.5	-0.013	ug/L	0.1168	-0.013	ug/L	0.1168	873.45%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	9.2	2.393	ug/L	0.9399	2.393	ug/L	0.9399	39.27%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	6.7	0.067	ug/L	0.0623	0.067	ug/L	0.0623	93.41%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-242.4	-2.525	ug/L	0.0296	-2.525	ug/L	0.0296	1.17%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	-116.6	-0.005 ug/L	0.0030	-0.005 ug/L	0.0030	62.72%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 69
Sample ID: CCV1 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 07/06/15 7:04:11 PM
Data Type: Reprocessed on 07/07/15 8:54:46 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	244895.2	102.7	%	0.08				0.08%
Y Radial	17370.5	106.9	%	0.98				0.92%
Ag 338.289†	45977.8	238.3	ug/L	1.45	238.3	ug/L	1.45	0.61%
QC value within limits for Ag 338.289 Recovery = 95.32%								
Al 308.215†	13145.6	9623	ug/L	24.63	9623	ug/L	24.63	0.26%
QC value within limits for Al 308.215 Recovery = 96.23%								
As 188.979†	2488.4	478.5	ug/L	2.41	478.5	ug/L	2.41	0.50%
QC value within limits for As 188.979 Recovery = 95.69%								
B 249.677†	16466.3	490.0	ug/L	3.14	490.0	ug/L	3.14	0.64%
QC value within limits for B 249.677 Recovery = 98.00%								
Ba 233.527†	209436.0	481.0	ug/L	1.75	481.0	ug/L	1.75	0.36%
QC value within limits for Ba 233.527 Recovery = 96.19%								
Be 313.107†	1699834.4	479.4	ug/L	2.30	479.4	ug/L	2.30	0.48%
QC value within limits for Be 313.107 Recovery = 95.88%								
Ca 315.887†	384952.3	23900	ug/L	157.54	23900	ug/L	157.54	0.66%
QC value within limits for Ca 315.887 Recovery = 95.60%								
Cd 214.440†	140115.6	480.3	ug/L	1.56	480.3	ug/L	1.56	0.32%
QC value within limits for Cd 214.440 Recovery = 96.06%								
Co 228.616†	47857.9	484.4	ug/L	1.41	484.4	ug/L	1.41	0.29%
QC value within limits for Co 228.616 Recovery = 96.89%								
Cr 267.716†	41294.0	479.9	ug/L	2.07	479.9	ug/L	2.07	0.43%
QC value within limits for Cr 267.716 Recovery = 95.99%								
Cu 327.393†	100489.4	481.8	ug/L	2.35	481.8	ug/L	2.35	0.49%
QC value within limits for Cu 327.393 Recovery = 96.35%								
Fe 273.955†	769864.8	9618	ug/L	36.52	9618	ug/L	36.52	0.38%
QC value within limits for Fe 273.955 Recovery = 96.18%								
K 766.490†	82839.1	9544	ug/L	32.64	9544	ug/L	32.64	0.34%
QC value within limits for K 766.490 Recovery = 95.44%								
Mg 285.213†	429547.9	24190	ug/L	133.18	24190	ug/L	133.18	0.55%
QC value within limits for Mg 285.213 Recovery = 96.75%								
Mn 257.610†	44568.9	479.1	ug/L	1.86	479.1	ug/L	1.86	0.39%
QC value within limits for Mn 257.610 Recovery = 95.83%								
Mo 202.031†	17281.3	482.3	ug/L	1.65	482.3	ug/L	1.65	0.34%
QC value within limits for Mo 202.031 Recovery = 96.46%								
Na 589.592†	138719.7	12370	ug/L	54.76	12370	ug/L	54.76	0.44%
QC value within limits for Na 589.592 Recovery = 98.97%								
Ni 231.604†	24274.9	486.7	ug/L	1.41	486.7	ug/L	1.41	0.29%
QC value within limits for Ni 231.604 Recovery = 97.34%								
P 213.617†	7843.6	2406	ug/L	8.88	2406	ug/L	8.88	0.37%
QC value within limits for P 213.617 Recovery = 96.24%								
Pb 220.353†	2584.6	493.2	ug/L	1.96	493.2	ug/L	1.96	0.40%
QC value within limits for Pb 220.353 Recovery = 98.64%								
Sb 206.836†	3656.2	483.7	ug/L	2.36	483.7	ug/L	2.36	0.49%
QC value within limits for Sb 206.836 Recovery = 96.74%								
Se 196.026†	1592.7	486.7	ug/L	3.13	486.7	ug/L	3.13	0.64%
QC value within limits for Se 196.026 Recovery = 97.34%								
Sn 189.927†	2732.8	484.6	ug/L	1.31	484.6	ug/L	1.31	0.27%
QC value within limits for Sn 189.927 Recovery = 96.92%								
Sr 421.552†	350478.5	483.6	ug/L	3.14	483.6	ug/L	3.14	0.65%
QC value within limits for Sr 421.552 Recovery = 96.71%								
Ti 337.279†	19357.2	484.0	ug/L	1.84	484.0	ug/L	1.84	0.38%
QC value within limits for Ti 337.279 Recovery = 96.81%								
Tl 190.801†	1911.1	499.6	ug/L	3.46	499.6	ug/L	3.46	0.69%
QC value within limits for Tl 190.801 Recovery = 99.92%								
V 292.402†	47986.3	480.5	ug/L	2.44	480.5	ug/L	2.44	0.51%
QC value within limits for V 292.402 Recovery = 96.10%								
Zn 206.200†	45825.2	483.9	ug/L	1.76	483.9	ug/L	1.76	0.36%
QC value within limits for Zn 206.200 Recovery = 96.77%								

Li 670.784	6051774.0	249.6 ug/L	1.46	249.6 ug/L	1.46	0.58%

QC value within limits for Li 670.784 Recovery = 99.84%
All analyte(s) passed QC.

Sequence No.: 70
Sample ID: CCB 150706RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/06/15 7:09:31 PM
Data Type: Reprocessed on 07/07/15 8:54:47 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150706RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	260163.1	109.1	%	0.77				0.70%
Y Radial	17326.4	106.7	%	2.43				2.28%
Ag 338.289†	-30.7	-0.159	ug/L	0.3695	-0.159	ug/L	0.3695	232.22%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-7.7	-5.669	ug/L	3.9502	-5.669	ug/L	3.9502	69.69%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.226	ug/L	1.2291	0.226	ug/L	1.2291	542.84%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	88.6	2.520	ug/L	0.4361	2.520	ug/L	0.4361	17.31%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-19.1	-0.044	ug/L	0.0142	-0.044	ug/L	0.0142	32.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-136.7	-0.039	ug/L	0.0076	-0.039	ug/L	0.0076	19.69%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	35.2	2.182	ug/L	0.4645	2.182	ug/L	0.4645	21.29%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	50.0	0.172	ug/L	0.0393	0.172	ug/L	0.0393	22.86%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	21.1	0.216	ug/L	0.0420	0.216	ug/L	0.0420	19.40%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-12.2	-0.142	ug/L	0.0449	-0.142	ug/L	0.0449	31.63%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	232.7	1.114	ug/L	0.1393	1.114	ug/L	0.1393	12.51%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-142.5	-1.794	ug/L	0.1565	-1.794	ug/L	0.1565	8.73%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	208.9	24.14	ug/L	3.166	24.14	ug/L	3.166	13.12%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	26.2	1.473	ug/L	0.3644	1.473	ug/L	0.3644	24.74%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	2.5	0.026	ug/L	0.1070	0.026	ug/L	0.1070	405.63%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	29.3	0.817	ug/L	0.2904	0.817	ug/L	0.2904	35.56%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-92.3	-8.268	ug/L	1.9234	-8.268	ug/L	1.9234	23.26%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	9.0	0.181	ug/L	0.0919	0.181	ug/L	0.0919	50.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-4.4	-1.341	ug/L	1.2959	-1.341	ug/L	1.2959	96.61%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	0.9	0.178	ug/L	0.5983	0.178	ug/L	0.5983	337.00%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.3	-0.298	ug/L	0.4823	-0.298	ug/L	0.4823	161.89%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.6	-1.099	ug/L	0.5583	-1.099	ug/L	0.5583	50.80%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	0.4	0.066	ug/L	0.4714	0.066	ug/L	0.4714	714.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-1.5	-0.002	ug/L	0.0153	-0.002	ug/L	0.0153	710.93%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	2.7	0.066	ug/L	0.2514	0.066	ug/L	0.2514	378.48%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2.6	0.693	ug/L	0.8821	0.693	ug/L	0.8821	127.36%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	7.1	0.071	ug/L	0.0170	0.071	ug/L	0.0170	23.75%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-244.0	-2.543	ug/L	0.0389	-2.543	ug/L	0.0389	1.53%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	59.1	0.002 ug/L	0.0035	0.002 ug/L	0.0035	144.80%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150710A6010
Results Library (original): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb
Results Data Set (reprocessed): 150710A6010X
Results Library (reprocessed): C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: CalBlk 150710RJS I:JL O:R
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/10/15 8:44:35 AM
Data Type: Reprocessed on 07/13/15 8:58:42 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CalBlk 150710RJS I:JL O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	238601.8	109.65	0.05%	100.0	%
Y Radial	16004.2	44.62	0.28%	100.0	%
Ag 338.289†	-260.0	60.36	23.21%	[0.00]	ug/L
Al 308.215†	49.6	8.09	16.31%	[0.00]	ug/L
As 188.979†	-75.4	4.06	5.38%	[0.00]	ug/L
B 249.677†	57.0	1.96	3.43%	[0.00]	ug/L
Ba 233.527†	-34.5	5.39	15.63%	[0.00]	ug/L
Be 313.107†	1834.8	9.07	0.49%	[0.00]	ug/L
Ca 315.887†	-280.5	9.41	3.35%	[0.00]	ug/L
Cd 214.440†	-384.2	5.18	1.35%	[0.00]	ug/L
Co 228.616†	-213.7	4.73	2.21%	[0.00]	ug/L
Cr 267.716†	39.2	5.15	13.14%	[0.00]	ug/L
Cu 327.393†	-1014.4	43.73	4.31%	[0.00]	ug/L
Fe 273.955†	360.3	17.14	4.76%	[0.00]	ug/L
K 766.490†	-817.0	78.41	9.60%	[0.00]	ug/L
Mg 285.213†	64.0	0.29	0.45%	[0.00]	ug/L
Mn 257.610†	-47.0	10.22	21.75%	[0.00]	ug/L
Mo 202.031†	-75.2	2.02	2.68%	[0.00]	ug/L
Na 589.592†	723.2	95.88	13.26%	[0.00]	ug/L
Ni 231.604†	-156.1	8.44	5.41%	[0.00]	ug/L
P 213.617†	-62.1	3.42	5.52%	[0.00]	ug/L
Pb 220.353†	30.5	4.57	14.96%	[0.00]	ug/L
Sb 206.836†	-10.5	2.39	22.69%	[0.00]	ug/L
Se 196.026†	18.3	1.52	8.29%	[0.00]	ug/L
Sn 189.927†	0.8	2.56	336.66%	[0.00]	ug/L
Sr 421.552†	-35.1	17.20	49.01%	[0.00]	ug/L
Ti 337.279†	-52.2	10.75	20.61%	[0.00]	ug/L
Tl 190.801†	-18.1	8.58	47.38%	[0.00]	ug/L
V 292.402†	-94.7	3.06	3.23%	[0.00]	ug/L
Zn 206.200†	1056.5	42.85	4.06%	[0.00]	ug/L
Li 670.784	3810.0	41.73	1.10%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150710RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 2
Date Collected: 07/10/15 8:50:17 AM
Data Type: Reprocessed on 07/13/15 8:58:45 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150710RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	238450.1	622.29	0.26%	99.94	%
Y Radial	16598.6	662.65	3.99%	103.7	%
Ag 338.289†	1016.4	36.70	3.61%	[0.5]	ug/L
Al 308.215†	331.6	8.87	2.68%	[50]	ug/L
As 188.979†	63.2	5.83	9.23%	[2]	ug/L
B 249.677†	1244.5	14.66	1.18%	[25]	ug/L
Ba 233.527†	5093.5	20.96	0.41%	[1.5]	ug/L
Be 313.107†	39045.3	24.71	0.06%	[1]	ug/L
Ca 315.887†	8616.3	346.39	4.02%	[50]	ug/L
Cd 214.440†	3079.2	18.51	0.60%	[0.25]	ug/L
Co 228.616†	1291.8	4.36	0.34%	[2.5]	ug/L
Cr 267.716†	909.1	12.30	1.35%	[0.5]	ug/L
Cu 327.393†	2794.8	17.00	0.61%	[2.5]	ug/L
Fe 273.955†	18108.1	183.84	1.02%	[25]	ug/L
K 766.490†	5175.9	204.95	3.96%	[500]	ug/L
Mg 285.213†	8702.5	367.85	4.23%	[25]	ug/L
Mn 257.610†	950.0	31.96	3.36%	[1]	ug/L
Mo 202.031†	370.3	7.26	1.96%	[1]	ug/L
Na 589.592†	6506.3	363.39	5.59%	[500]	ug/L
Ni 231.604†	575.1	25.11	4.37%	[1]	ug/L
P 213.617†	202.1	2.50	1.24%	[12.5]	ug/L
Pb 220.353†	85.6	4.02	4.70%	[1.5]	ug/L
Sb 206.836†	94.0	7.08	7.54%	[2]	ug/L
Se 196.026†	36.8	1.80	4.90%	[2]	ug/L
Sn 189.927†	71.0	5.69	8.02%	[3]	ug/L
Sr 421.552†	6119.5	273.83	4.47%	[1]	ug/L
Ti 337.279†	464.3	20.16	4.34%	[2.5]	ug/L
Tl 190.801†	66.4	2.41	3.63%	[2]	ug/L
V 292.402†	1127.3	2.94	0.26%	[0.5]	ug/L
Zn 206.200†	3882.3	141.28	3.64%	[25]	ug/L
Li 670.784	80674.5	845.15	1.05%	[5]	ug/L

Sequence No.: 3
Sample ID: STD 2 150710RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 07/10/15 8:56:01 AM
Data Type: Reprocessed on 07/13/15 8:58:46 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150710RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	225295.1	1745.80	0.77%	94.42	%
Y Radial	15673.6	73.45	0.47%	97.93	%
Ag 338.289†	46117.7	143.14	0.31%	[250]	ug/L
Al 308.215†	13378.2	55.56	0.42%	[10000]	ug/L
As 188.979†	2621.3	27.91	1.06%	[500]	ug/L
B 249.677†	17616.1	109.57	0.62%	[500]	ug/L
Ba 233.527†	212468.4	366.01	0.17%	[500]	ug/L
Be 313.107†	1869030.2	1980.16	0.11%	[500]	ug/L
Ca 315.887†	390471.1	1745.78	0.45%	[25000]	ug/L
Cd 214.440†	145590.3	119.72	0.08%	[500]	ug/L
Co 228.616†	49422.7	8.69	0.02%	[500]	ug/L
Cr 267.716†	42196.8	56.08	0.13%	[500]	ug/L
Cu 327.393†	101368.4	168.06	0.17%	[500]	ug/L
Fe 273.955†	785210.1	1238.06	0.16%	[10000]	ug/L
K 766.490†	78260.9	236.64	0.30%	[10000]	ug/L
Mg 285.213†	438970.6	1698.17	0.39%	[25000]	ug/L
Mn 257.610†	43894.6	137.26	0.31%	[500]	ug/L
Mo 202.031†	17395.0	90.49	0.52%	[500]	ug/L
Na 589.592†	119140.9	536.74	0.45%	[12500]	ug/L
Ni 231.604†	24800.4	154.55	0.62%	[500]	ug/L
P 213.617†	8328.4	58.92	0.71%	[2500]	ug/L
Pb 220.353†	3139.1	24.04	0.77%	[500]	ug/L
Sb 206.836†	3908.4	27.62	0.71%	[500]	ug/L
Se 196.026†	1646.5	12.69	0.77%	[500]	ug/L
Sn 189.927†	2706.4	16.44	0.61%	[500]	ug/L
Sr 421.552†	296699.5	1356.70	0.46%	[500]	ug/L
Ti 337.279†	18982.9	60.57	0.32%	[500]	ug/L
Tl 190.801†	2758.2	19.43	0.70%	[500]	ug/L
V 292.402†	52401.3	14.10	0.03%	[500]	ug/L
Zn 206.200†	47942.8	66.39	0.14%	[500]	ug/L
Li 670.784	5217600.9	9674.55	0.19%	[250]	ug/L

Sequence No.: 4
Sample ID: STD 3 150710RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 4
Date Collected: 07/10/15 9:01:21 AM
Data Type: Reprocessed on 07/13/15 8:58:47 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150710RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	223771.6	1074.88	0.48%	93.78	%
Y Radial	15698.2	114.75	0.73%	98.09	%
Ag 338.289†	93877.5	163.87	0.17%	[500]	ug/L
Al 308.215†	27591.9	101.10	0.37%	[20000]	ug/L
As 188.979†	5334.6	17.68	0.33%	[1000]	ug/L
B 249.677†	36222.8	84.07	0.23%	[1000]	ug/L
Ba 233.527†	429902.4	437.37	0.10%	[1000]	ug/L
Be 313.107†	3777404.2	98.80	0.00%	[1000]	ug/L
Ca 315.887†	797243.7	5652.71	0.71%	[50000]	ug/L
Cd 214.440†	291481.7	497.32	0.17%	[1000]	ug/L
Co 228.616†	98856.5	130.15	0.13%	[1000]	ug/L
Cr 267.716†	85450.7	83.98	0.10%	[1000]	ug/L
Cu 327.393†	207058.4	252.95	0.12%	[1000]	ug/L
Fe 273.955†	1578313.4	1544.16	0.10%	[20000]	ug/L
K 766.490†	163348.4	618.50	0.38%	[20000]	ug/L
Mg 285.213†	870167.8	5347.36	0.61%	[50000]	ug/L
Mn 257.610†	89666.3	310.85	0.35%	[1000]	ug/L
Mo 202.031†	35144.1	190.66	0.54%	[1000]	ug/L
Na 589.592†	249090.5	1652.43	0.66%	[25000]	ug/L
Ni 231.604†	49058.8	208.51	0.43%	[1000]	ug/L
P 213.617†	16947.5	94.38	0.56%	[5000]	ug/L
Pb 220.353†	6168.8	33.26	0.54%	[1000]	ug/L
Sb 206.836†	7848.0	44.46	0.57%	[1000]	ug/L
Se 196.026†	3308.3	23.44	0.71%	[1000]	ug/L
Sn 189.927†	5477.4	12.46	0.23%	[1000]	ug/L
Sr 421.552†	619812.0	3872.50	0.62%	[1000]	ug/L
Ti 337.279†	38844.3	239.82	0.62%	[1000]	ug/L
Tl 190.801†	5376.5	43.00	0.80%	[1000]	ug/L
V 292.402†	106554.1	36.87	0.03%	[1000]	ug/L
Zn 206.200†	95361.9	18.89	0.02%	[1000]	ug/L
Li 670.784	11454108.0	89867.49	0.78%	[500]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	187.1	0.00000	0.999936	
Al 308.215	3	Lin Thru 0	0.0	1.371	0.00000	0.999889	
As 188.979	3	Lin Thru 0	0.0	5.316	0.00000	0.999937	
B 249.677	3	Lin Thru 0	0.0	36.03	0.00000	0.999903	
Ba 233.527	3	Lin Thru 0	0.0	428.9	0.00000	0.999946	
Be 313.107	3	Lin Thru 0	0.0	3770	0.00000	0.999956	
Ca 315.887	3	Lin Thru 0	0.0	15.88	0.00000	0.999927	
Cd 214.440	3	Lin Thru 0	0.0	291.4	0.00000	0.999957	
Co 228.616	3	Lin Thru 0	0.0	98.86	0.00000	0.999955	
Cr 267.716	3	Lin Thru 0	0.0	85.24	0.00000	0.999946	
Cu 327.393	3	Lin Thru 0	0.0	206.2	0.00000	0.999916	
Fe 273.955	3	Lin Thru 0	0.0	78.84	0.00000	0.999956	
K 766.490	3	Lin Thru 0	0.0	8.100	0.00000	0.999839	
Mg 285.213	3	Lin Thru 0	0.0	17.43	0.00000	0.999958	
Mn 257.610	3	Lin Thru 0	0.0	89.29	0.00000	0.999927	
Mo 202.031	3	Lin Thru 0	0.0	35.07	0.00000	0.999955	
Na 589.592	3	Lin Thru 0	0.0	9.878	0.00000	0.999831	
Ni 231.604	3	Lin Thru 0	0.0	49.17	0.00000	0.999945	
P 213.617	3	Lin Thru 0	0.0	3.378	0.00000	0.999940	
Pb 220.353	3	Lin Thru 0	0.0	6.191	0.00000	0.999914	
Sb 206.836	3	Lin Thru 0	0.0	7.842	0.00000	0.999959	
Se 196.026	3	Lin Thru 0	0.0	3.305	0.00000	0.999965	

Sn 189.927	3	Lin Thru 0	0.0	5.465	0.00000	0.999949
Sr 421.552	3	Lin Thru 0	0.0	614.5	0.00000	0.999820
Ti 337.279	3	Lin Thru 0	0.0	38.67	0.00000	0.999923
Tl 190.801	3	Lin Thru 0	0.0	5.405	0.00000	0.999904
V 292.402	3	Lin Thru 0	0.0	106.2	0.00000	0.999937
Zn 206.200	3	Lin Thru 0	0.0	95.50	0.00000	0.999900
Li 670.784	3	Lin Thru 0	0.0	22500	0.00000	0.999341

Sequence No.: 5
Sample ID: ICV 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 07/10/15 9:07:50 AM
Data Type: Reprocessed on 07/13/15 8:58:48 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	230046.0	96.41	%	0.315				0.33%
Y Radial	16087.6	100.5	%	1.25				1.25%
Ag 338.289†	45633.3	243.9	ug/L	0.46	243.9	ug/L	0.46	0.19%
QC value within limits for Ag 338.289 Recovery = 97.56%								
Al 308.215†	16290.5	11900	ug/L	24.77	11900	ug/L	24.77	0.21%
QC value within limits for Al 308.215 Recovery = 95.22%								
As 188.979†	2272.4	424.3	ug/L	2.86	424.3	ug/L	2.86	0.67%
QC value less than the lower limit for As 188.979 Recovery = 84.87%								
B 249.677†	17201.7	507.1	ug/L	2.18	507.1	ug/L	2.18	0.43%
QC value within limits for B 249.677 Recovery = 101.41%								
Ba 233.527†	209665.9	488.4	ug/L	0.26	488.4	ug/L	0.26	0.05%
QC value within limits for Ba 233.527 Recovery = 97.68%								
Be 313.107†	1825594.8	484.3	ug/L	0.92	484.3	ug/L	0.92	0.19%
QC value within limits for Be 313.107 Recovery = 96.86%								
Ca 315.887†	198361.8	12490	ug/L	8.42	12490	ug/L	8.42	0.07%
QC value within limits for Ca 315.887 Recovery = 99.90%								
Cd 214.440†	144117.1	494.6	ug/L	0.80	494.6	ug/L	0.80	0.16%
QC value within limits for Cd 214.440 Recovery = 98.92%								
Co 228.616†	48777.5	493.4	ug/L	1.15	493.4	ug/L	1.15	0.23%
QC value within limits for Co 228.616 Recovery = 98.67%								
Cr 267.716†	41879.9	491.3	ug/L	0.75	491.3	ug/L	0.75	0.15%
QC value within limits for Cr 267.716 Recovery = 98.25%								
Cu 327.393†	101625.0	493.9	ug/L	0.11	493.9	ug/L	0.11	0.02%
QC value within limits for Cu 327.393 Recovery = 98.78%								
Fe 273.955†	963745.2	12190	ug/L	3.36	12190	ug/L	3.36	0.03%
QC value within limits for Fe 273.955 Recovery = 97.49%								
K 766.490†	96702.3	11910	ug/L	13.87	11910	ug/L	13.87	0.12%
QC value within limits for K 766.490 Recovery = 95.30%								
Mg 285.213†	214571.5	12320	ug/L	5.16	12320	ug/L	5.16	0.04%
QC value within limits for Mg 285.213 Recovery = 98.54%								
Mn 257.610†	43181.2	483.3	ug/L	0.51	483.3	ug/L	0.51	0.10%
QC value within limits for Mn 257.610 Recovery = 96.65%								
Mo 202.031†	16907.4	482.6	ug/L	1.28	482.6	ug/L	1.28	0.27%
QC value within limits for Mo 202.031 Recovery = 96.52%								
Na 589.592†	120063.3	12140	ug/L	133.94	12140	ug/L	133.94	1.10%
QC value within limits for Na 589.592 Recovery = 97.11%								
Ni 231.604†	24921.5	505.9	ug/L	2.52	505.9	ug/L	2.52	0.50%
QC value within limits for Ni 231.604 Recovery = 101.19%								
P 213.617†	8273.4	2449	ug/L	8.86	2449	ug/L	8.86	0.36%
QC value within limits for P 213.617 Recovery = 97.97%								
Pb 220.353†	3094.6	503.3	ug/L	3.06	503.3	ug/L	3.06	0.61%
QC value within limits for Pb 220.353 Recovery = 100.66%								
Sb 206.836†	3784.4	482.6	ug/L	1.59	482.6	ug/L	1.59	0.33%
QC value within limits for Sb 206.836 Recovery = 96.52%								
Se 196.026†	1650.9	504.2	ug/L	3.84	504.2	ug/L	3.84	0.76%
QC value within limits for Se 196.026 Recovery = 100.84%								
Sn 189.927†	1397.3	255.7	ug/L	2.23	255.7	ug/L	2.23	0.87%
QC value within limits for Sn 189.927 Recovery = 102.28%								
Sr 421.552†	306134.5	497.7	ug/L	4.47	497.7	ug/L	4.47	0.90%
QC value within limits for Sr 421.552 Recovery = 99.53%								
Ti 337.279†	18719.3	483.9	ug/L	0.65	483.9	ug/L	0.65	0.13%
QC value within limits for Ti 337.279 Recovery = 96.78%								
Tl 190.801†	2704.4	500.4	ug/L	1.99	500.4	ug/L	1.99	0.40%
QC value within limits for Tl 190.801 Recovery = 100.08%								
V 292.402†	51275.4	482.8	ug/L	1.32	482.8	ug/L	1.32	0.27%
QC value within limits for V 292.402 Recovery = 96.56%								
Zn 206.200†	47448.7	502.9	ug/L	1.38	502.9	ug/L	1.38	0.28%
QC value within limits for Zn 206.200 Recovery = 100.58%								

Li 670.784	5187935.2	230.6 ug/L	1.97	230.6 ug/L	1.97	0.86%

QC value within limits for Li 670.784 Recovery = 92.23%
QC Failed. Continue with analysis.

Sequence No.: 6
Sample ID: ICB 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/10/15 9:17:18 AM
Data Type: Reprocessed on 07/13/15 8:58:50 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	241318.6	101.1	%	1.00				0.99%
Y Radial	16562.7	103.5	%	0.43				0.41%
Ag 338.289†	51.5	0.275	ug/L	0.1073	0.275	ug/L	0.1073	39.02%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-1.5	-1.176	ug/L	1.6292	-1.176	ug/L	1.6292	138.55%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	12.7	2.371	ug/L	1.2499	2.371	ug/L	1.2499	52.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	116.7	3.244	ug/L	0.1086	3.244	ug/L	0.1086	3.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	37.8	0.087	ug/L	0.0194	0.087	ug/L	0.0194	22.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	77.2	0.020	ug/L	0.0012	0.020	ug/L	0.0012	5.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	92.3	5.809	ug/L	0.4305	5.809	ug/L	0.4305	7.41%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-12.5	-0.042	ug/L	0.0361	-0.042	ug/L	0.0361	85.67%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	28.6	0.294	ug/L	0.0317	0.294	ug/L	0.0317	10.78%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	13.6	0.159	ug/L	0.1550	0.159	ug/L	0.1550	97.33%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	95.4	0.465	ug/L	0.3195	0.465	ug/L	0.3195	68.75%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	90.8	1.163	ug/L	1.0738	1.163	ug/L	1.0738	92.33%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	106.9	13.20	ug/L	2.999	13.20	ug/L	2.999	22.72%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	17.2	0.989	ug/L	0.6239	0.989	ug/L	0.6239	63.11%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	9.5	0.107	ug/L	0.0231	0.107	ug/L	0.0231	21.71%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	53.4	1.521	ug/L	0.0857	1.521	ug/L	0.0857	5.63%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-81.6	-8.281	ug/L	2.7577	-8.281	ug/L	2.7577	33.30%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	20.7	0.420	ug/L	0.1500	0.420	ug/L	0.1500	35.74%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-1.5	-0.457	ug/L	0.6307	-0.457	ug/L	0.6307	138.09%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-14.3	-2.299	ug/L	0.0663	-2.299	ug/L	0.0663	2.88%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.1	0.519	ug/L	0.4043	0.519	ug/L	0.4043	77.91%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.2	-0.676	ug/L	0.6228	-0.676	ug/L	0.6228	92.09%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.6	0.658	ug/L	0.5701	0.658	ug/L	0.5701	86.58%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-0.2	-0.001	ug/L	0.0294	-0.001	ug/L	0.0294	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	17.9	0.463	ug/L	0.2027	0.463	ug/L	0.2027	43.74%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	11.5	2.133	ug/L	1.0246	2.133	ug/L	1.0246	48.04%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-14.9	-0.140	ug/L	0.0709	-0.140	ug/L	0.0709	50.49%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-809.0	-8.469	ug/L	0.0420	-8.469	ug/L	0.0420	0.50%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	4277.6	0.190 ug/L	0.0051	0.190 ug/L	0.0051	2.71%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICSA 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 6
Date Collected: 07/10/15 9:23:01 AM
Data Type: Reprocessed on 07/13/15 8:58:51 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	233469.3	97.85	%	0.665				0.68%
Y Radial	16463.3	102.9	%	0.57				0.56%
Ag 338.289†	106.4	0.569	ug/L	0.2181	0.569	ug/L	0.2181	38.36%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	139514.9	101700	ug/L	512.83	101700	ug/L	512.83	0.50%
QC value within limits for Al 308.215 Recovery = 101.74%								
As 188.979†	5.7	0.818	ug/L	1.1419	0.818	ug/L	1.1419	139.52%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-8516.4	6.050	ug/L	0.1750	6.050	ug/L	0.1750	2.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1780.4	-1.299	ug/L	0.0843	-1.299	ug/L	0.0843	6.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.4	0.055	ug/L	0.0039	0.055	ug/L	0.0039	7.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1673871.1	105400	ug/L	652.23	105400	ug/L	652.23	0.62%
QC value within limits for Ca 315.887 Recovery = 105.41%								
Cd 214.440†	1057.8	-0.084	ug/L	0.0267	-0.084	ug/L	0.0267	31.75%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	163.6	-1.193	ug/L	0.0425	-1.193	ug/L	0.0425	3.56%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	90.9	0.197	ug/L	0.1549	0.197	ug/L	0.1549	78.75%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-260.4	0.065	ug/L	0.1349	0.065	ug/L	0.1349	206.42%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	7607984.4	96500	ug/L	738.42	96500	ug/L	738.42	0.77%
QC value within limits for Fe 273.955 Recovery = 96.50%								
K 766.490†	292.2	-60.14	ug/L	5.386	-60.14	ug/L	5.386	8.96%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1735899.9	99650	ug/L	480.33	99650	ug/L	480.33	0.48%
QC value within limits for Mg 285.213 Recovery = 99.65%								
Mn 257.610†	307.5	0.130	ug/L	0.0174	0.130	ug/L	0.0174	13.34%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-66.4	-0.512	ug/L	0.0889	-0.512	ug/L	0.0889	17.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	315.2	19.47	ug/L	3.291	19.47	ug/L	3.291	16.90%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-72.4	0.940	ug/L	0.3596	0.940	ug/L	0.3596	38.28%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-122.0	-36.12	ug/L	1.882	-36.12	ug/L	1.882	5.21%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-96.8	1.544	ug/L	2.1972	1.544	ug/L	2.1972	142.34%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-16.7	-2.135	ug/L	1.6079	-2.135	ug/L	1.6079	75.30%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-127.8	7.335	ug/L	2.8777	7.335	ug/L	2.8777	39.23%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	13.4	2.461	ug/L	0.4364	2.461	ug/L	0.4364	17.73%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	453.7	-3.382	ug/L	0.0390	-3.382	ug/L	0.0390	1.15%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	62.9	-0.091	ug/L	0.5532	-0.091	ug/L	0.5532	607.78%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-26.8	-4.960	ug/L	0.5942	-4.960	ug/L	0.5942	11.98%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	6.4	0.060	ug/L	0.0065	0.060	ug/L	0.0065	10.71%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-144.3	-2.058	ug/L	0.0585	-2.058	ug/L	0.0585	2.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	8275.7	0.368 ug/L	0.0105	0.368 ug/L	0.0105	2.86%

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICSAB 150710RJS I:JL O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 7
Date Collected: 07/10/15 9:29:18 AM
Data Type: Reprocessed on 07/13/15 8:58:52 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150710RJS I:JL O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	224929.3	94.27	%	0.075				0.08%
Y Radial	17468.2	109.1	%	6.76				6.19%
Ag 338.289†	101768.3	543.9	ug/L	0.34	543.9	ug/L	0.34	0.06%
QC value within limits for Ag 338.289 Recovery = 108.79%								
Al 308.215†	131425.1	95850	ug/L	6838.64	95850	ug/L	6838.64	7.13%
QC value within limits for Al 308.215 Recovery = 95.85%								
As 188.979†	1339.4	251.2	ug/L	3.14	251.2	ug/L	3.14	1.25%
QC value within limits for As 188.979 Recovery = 100.49%								
B 249.677†	-8899.4	4.443	ug/L	1.5948	4.443	ug/L	1.5948	35.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	114654.5	261.8	ug/L	0.36	261.8	ug/L	0.36	0.14%
QC value within limits for Ba 233.527 Recovery = 104.73%								
Be 313.107†	962464.2	255.3	ug/L	0.21	255.3	ug/L	0.21	0.08%
QC value within limits for Be 313.107 Recovery = 102.13%								
Ca 315.887†	1578069.5	99370	ug/L	6960.20	99370	ug/L	6960.20	7.00%
QC value within limits for Ca 315.887 Recovery = 99.37%								
Cd 214.440†	149622.7	509.6	ug/L	0.99	509.6	ug/L	0.99	0.19%
QC value within limits for Cd 214.440 Recovery = 101.91%								
Co 228.616†	26097.6	261.8	ug/L	0.90	261.8	ug/L	0.90	0.34%
QC value within limits for Co 228.616 Recovery = 104.70%								
Cr 267.716†	22866.3	267.5	ug/L	1.06	267.5	ug/L	1.06	0.40%
QC value within limits for Cr 267.716 Recovery = 106.99%								
Cu 327.393†	57389.8	279.7	ug/L	2.47	279.7	ug/L	2.47	0.88%
QC value within limits for Cu 327.393 Recovery = 111.86%								
Fe 273.955†	7894321.3	100100	ug/L	301.04	100100	ug/L	301.04	0.30%
QC value within limits for Fe 273.955 Recovery = 100.11%								
K 766.490†	324.6	-57.56	ug/L	18.846	-57.56	ug/L	18.846	32.74%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1645395.7	94460	ug/L	6619.13	94460	ug/L	6619.13	7.01%
QC value within limits for Mg 285.213 Recovery = 94.46%								
Mn 257.610†	22093.5	244.4	ug/L	16.25	244.4	ug/L	16.25	6.65%
QC value within limits for Mn 257.610 Recovery = 97.75%								
Mo 202.031†	8794.2	252.4	ug/L	1.95	252.4	ug/L	1.95	0.77%
QC value within limits for Mo 202.031 Recovery = 100.97%								
Na 589.592†	160.1	3.432	ug/L	5.1644	3.432	ug/L	5.1644	150.50%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	24956.8	509.4	ug/L	2.45	509.4	ug/L	2.45	0.48%
QC value within limits for Ni 231.604 Recovery = 101.88%								
P 213.617†	-242.5	-71.78	ug/L	6.142	-71.78	ug/L	6.142	8.56%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	2959.6	494.1	ug/L	1.51	494.1	ug/L	1.51	0.31%
QC value within limits for Pb 220.353 Recovery = 98.82%								
Sb 206.836†	1986.3	253.3	ug/L	0.86	253.3	ug/L	0.86	0.34%
QC value within limits for Sb 206.836 Recovery = 101.32%								
Se 196.026†	722.8	265.7	ug/L	1.23	265.7	ug/L	1.23	0.46%
QC value within limits for Se 196.026 Recovery = 106.27%								
Sn 189.927†	0.9	0.174	ug/L	2.1328	0.174	ug/L	2.1328	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	454.2	-3.154	ug/L	0.2637	-3.154	ug/L	0.2637	8.36%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	55.4	-0.163	ug/L	0.7761	-0.163	ug/L	0.7761	475.01%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	1223.3	226.3	ug/L	1.87	226.3	ug/L	1.87	0.83%
QC value within limits for Tl 190.801 Recovery = 90.54%								
V 292.402†	28425.9	267.7	ug/L	1.51	267.7	ug/L	1.51	0.56%
QC value within limits for V 292.402 Recovery = 107.06%								
Zn 206.200†	49461.3	520.0	ug/L	1.18	520.0	ug/L	1.18	0.23%
QC value within limits for Zn 206.200 Recovery = 104.00%								

Li 670.784	8112.1	0.361 ug/L	0.0067	0.361 ug/L	0.0067	1.87%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCV1 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 3
Date Collected: 07/10/15 9:34:52 AM
Data Type: Reprocessed on 07/13/15 8:58:53 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	229536.1	96.20	%	0.271				0.28%
Y Radial	16203.8	101.2	%	0.29				0.28%
Ag 338.289†	46655.7	249.4	ug/L	0.66	249.4	ug/L	0.66	0.26%
QC value within limits for Ag 338.289 Recovery = 99.75%								
Al 308.215†	13292.6	9715	ug/L	17.45	9715	ug/L	17.45	0.18%
QC value within limits for Al 308.215 Recovery = 97.15%								
As 188.979†	2599.6	484.2	ug/L	1.54	484.2	ug/L	1.54	0.32%
QC value within limits for As 188.979 Recovery = 96.85%								
B 249.677†	17479.4	508.8	ug/L	0.74	508.8	ug/L	0.74	0.14%
QC value within limits for B 249.677 Recovery = 101.76%								
Ba 233.527†	212163.7	494.4	ug/L	0.85	494.4	ug/L	0.85	0.17%
QC value within limits for Ba 233.527 Recovery = 98.87%								
Be 313.107†	1830890.8	485.7	ug/L	0.98	485.7	ug/L	0.98	0.20%
QC value within limits for Be 313.107 Recovery = 97.14%								
Ca 315.887†	402281.6	25330	ug/L	116.16	25330	ug/L	116.16	0.46%
QC value within limits for Ca 315.887 Recovery = 101.31%								
Cd 214.440†	145060.1	498.1	ug/L	0.74	498.1	ug/L	0.74	0.15%
QC value within limits for Cd 214.440 Recovery = 99.62%								
Co 228.616†	49017.0	495.8	ug/L	1.17	495.8	ug/L	1.17	0.24%
QC value within limits for Co 228.616 Recovery = 99.16%								
Cr 267.716†	42055.9	493.3	ug/L	1.04	493.3	ug/L	1.04	0.21%
QC value within limits for Cr 267.716 Recovery = 98.65%								
Cu 327.393†	102915.7	500.1	ug/L	0.86	500.1	ug/L	0.86	0.17%
QC value within limits for Cu 327.393 Recovery = 100.02%								
Fe 273.955†	788365.5	9962	ug/L	17.28	9962	ug/L	17.28	0.17%
QC value within limits for Fe 273.955 Recovery = 99.62%								
K 766.490†	81334.2	10020	ug/L	43.27	10020	ug/L	43.27	0.43%
QC value within limits for K 766.490 Recovery = 100.15%								
Mg 285.213†	445262.5	25550	ug/L	92.32	25550	ug/L	92.32	0.36%
QC value within limits for Mg 285.213 Recovery = 102.19%								
Mn 257.610†	44347.5	495.8	ug/L	1.65	495.8	ug/L	1.65	0.33%
QC value within limits for Mn 257.610 Recovery = 99.15%								
Mo 202.031†	17416.6	497.0	ug/L	0.69	497.0	ug/L	0.69	0.14%
QC value within limits for Mo 202.031 Recovery = 99.41%								
Na 589.592†	130708.8	13220	ug/L	111.67	13220	ug/L	111.67	0.84%
QC value within limits for Na 589.592 Recovery = 105.75%								
Ni 231.604†	24759.5	502.7	ug/L	0.26	502.7	ug/L	0.26	0.05%
QC value within limits for Ni 231.604 Recovery = 100.54%								
P 213.617†	8245.9	2441	ug/L	0.98	2441	ug/L	0.98	0.04%
QC value within limits for P 213.617 Recovery = 97.64%								
Pb 220.353†	2899.2	472.0	ug/L	1.79	472.0	ug/L	1.79	0.38%
QC value within limits for Pb 220.353 Recovery = 94.39%								
Sb 206.836†	3823.4	487.6	ug/L	1.70	487.6	ug/L	1.70	0.35%
QC value within limits for Sb 206.836 Recovery = 97.51%								
Se 196.026†	1652.6	503.3	ug/L	1.69	503.3	ug/L	1.69	0.34%
QC value within limits for Se 196.026 Recovery = 100.65%								
Sn 189.927†	2686.7	491.7	ug/L	0.16	491.7	ug/L	0.16	0.03%
QC value within limits for Sn 189.927 Recovery = 98.33%								
Sr 421.552†	333526.7	541.7	ug/L	4.55	541.7	ug/L	4.55	0.84%
QC value within limits for Sr 421.552 Recovery = 108.35%								
Ti 337.279†	19093.6	493.4	ug/L	1.21	493.4	ug/L	1.21	0.25%
QC value within limits for Ti 337.279 Recovery = 98.68%								
Tl 190.801†	2392.6	442.7	ug/L	1.60	442.7	ug/L	1.60	0.36%
QC value less than the lower limit for Tl 190.801 Recovery = 88.54%								
V 292.402†	50658.6	477.0	ug/L	1.06	477.0	ug/L	1.06	0.22%
QC value within limits for V 292.402 Recovery = 95.40%								
Zn 206.200†	47857.8	507.8	ug/L	1.47	507.8	ug/L	1.47	0.29%
QC value within limits for Zn 206.200 Recovery = 101.57%								

Li 670.784	5593982.1	248.6 ug/L	2.27	248.6 ug/L	2.27	0.91%

QC value within limits for Li 670.784 Recovery = 99.45%
QC Failed. Continue with analysis.

Sequence No.: 10
Sample ID: CCB 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 1
Date Collected: 07/10/15 9:44:19 AM
Data Type: Reprocessed on 07/13/15 8:58:55 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	248506.0	104.2	%	3.46				3.32%
Y Radial	17062.5	106.6	%	3.93				3.69%
Ag 338.289†	95.9	0.512	ug/L	0.0992	0.512	ug/L	0.0992	19.35%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-11.6	-8.562	ug/L	5.8871	-8.562	ug/L	5.8871	68.75%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	4.1	0.750	ug/L	0.7248	0.750	ug/L	0.7248	96.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	146.9	4.083	ug/L	0.6507	4.083	ug/L	0.6507	15.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	49.1	0.113	ug/L	0.0252	0.113	ug/L	0.0252	22.19%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	66.2	0.018	ug/L	0.0112	0.018	ug/L	0.0112	63.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	141.5	8.906	ug/L	0.9452	8.906	ug/L	0.9452	10.61%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-33.7	-0.115	ug/L	0.0840	-0.115	ug/L	0.0840	72.98%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	36.4	0.373	ug/L	0.0372	0.373	ug/L	0.0372	9.98%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-12.8	-0.151	ug/L	0.0701	-0.151	ug/L	0.0701	46.57%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	151.4	0.736	ug/L	0.3798	0.736	ug/L	0.3798	51.57%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	151.6	1.941	ug/L	0.1094	1.941	ug/L	0.1094	5.64%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	253.8	31.33	ug/L	5.474	31.33	ug/L	5.474	17.47%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	19.6	1.123	ug/L	0.2425	1.123	ug/L	0.2425	21.59%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	14.8	0.165	ug/L	0.0370	0.165	ug/L	0.0370	22.37%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	60.6	1.728	ug/L	0.2137	1.728	ug/L	0.2137	12.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	-73.3	-7.463	ug/L	2.3839	-7.463	ug/L	2.3839	31.95%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	22.5	0.456	ug/L	0.0989	0.456	ug/L	0.0989	21.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-2.1	-0.623	ug/L	0.5638	-0.623	ug/L	0.5638	90.45%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-14.5	-2.344	ug/L	0.1664	-2.344	ug/L	0.1664	7.10%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.8	-0.228	ug/L	0.5221	-0.228	ug/L	0.5221	228.74%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.1	0.322	ug/L	3.4377	0.322	ug/L	3.4377	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.8	0.702	ug/L	0.1995	0.702	ug/L	0.1995	28.43%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	7.6	0.012	ug/L	0.0199	0.012	ug/L	0.0199	165.66%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	23.3	0.602	ug/L	0.0930	0.602	ug/L	0.0930	15.44%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	9.5	1.752	ug/L	0.6457	1.752	ug/L	0.6457	36.86%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-25.0	-0.235	ug/L	0.0514	-0.235	ug/L	0.0514	21.86%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-833.8	-8.732	ug/L	0.1672	-8.732	ug/L	0.1672	1.91%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	5007.9	0.223 ug/L	0.0075	0.223 ug/L	0.0075	3.36%

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 17
Sample ID: CCV2 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 8
Date Collected: 07/10/15 10:34:25 AM
Data Type: Reprocessed on 07/13/15 8:59:03 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	234950.3	98.47	%	2.137				2.17%
Y Radial	16101.6	100.6	%	0.90				0.90%
Ag 338.289†	35448.9	189.5	ug/L	3.85	189.5	ug/L	3.85	2.03%
QC value within limits for Ag 338.289 Recovery = 101.05%								
Al 308.215†	9646.2	7048	ug/L	21.77	7048	ug/L	21.77	0.31%
QC value within limits for Al 308.215 Recovery = 93.97%								
As 188.979†	1865.3	347.3	ug/L	7.13	347.3	ug/L	7.13	2.05%
QC value within limits for As 188.979 Recovery = 92.62%								
B 249.677†	13293.1	386.6	ug/L	8.40	386.6	ug/L	8.40	2.17%
QC value within limits for B 249.677 Recovery = 103.10%								
Ba 233.527†	156520.7	364.7	ug/L	7.90	364.7	ug/L	7.90	2.17%
QC value within limits for Ba 233.527 Recovery = 97.25%								
Be 313.107†	1289132.9	342.0	ug/L	7.92	342.0	ug/L	7.92	2.31%
QC value within limits for Be 313.107 Recovery = 91.20%								
Ca 315.887†	301930.2	19010	ug/L	63.99	19010	ug/L	63.99	0.34%
QC value within limits for Ca 315.887 Recovery = 101.39%								
Cd 214.440†	108111.7	371.2	ug/L	7.88	371.2	ug/L	7.88	2.12%
QC value within limits for Cd 214.440 Recovery = 99.00%								
Co 228.616†	35764.1	361.8	ug/L	7.97	361.8	ug/L	7.97	2.20%
QC value within limits for Co 228.616 Recovery = 96.47%								
Cr 267.716†	31142.7	365.2	ug/L	8.46	365.2	ug/L	8.46	2.32%
QC value within limits for Cr 267.716 Recovery = 97.39%								
Cu 327.393†	77837.2	378.2	ug/L	8.17	378.2	ug/L	8.17	2.16%
QC value within limits for Cu 327.393 Recovery = 100.86%								
Fe 273.955†	587573.5	7427	ug/L	166.63	7427	ug/L	166.63	2.24%
QC value within limits for Fe 273.955 Recovery = 99.02%								
K 766.490†	63009.2	7759	ug/L	27.13	7759	ug/L	27.13	0.35%
QC value within limits for K 766.490 Recovery = 103.45%								
Mg 285.213†	336175.1	19290	ug/L	69.10	19290	ug/L	69.10	0.36%
QC value within limits for Mg 285.213 Recovery = 102.87%								
Mn 257.610†	33921.9	379.2	ug/L	1.28	379.2	ug/L	1.28	0.34%
QC value within limits for Mn 257.610 Recovery = 101.12%								
Mo 202.031†	12977.4	370.4	ug/L	7.28	370.4	ug/L	7.28	1.97%
QC value within limits for Mo 202.031 Recovery = 98.76%								
Na 589.592†	109827.4	11110	ug/L	49.64	11110	ug/L	49.64	0.45%
QC value greater than the upper limit for Na 589.592 Recovery = 118.48%								
Ni 231.604†	18419.1	374.0	ug/L	7.85	374.0	ug/L	7.85	2.10%
QC value within limits for Ni 231.604 Recovery = 99.74%								
P 213.617†	5885.9	1742	ug/L	39.18	1742	ug/L	39.18	2.25%
QC value within limits for P 213.617 Recovery = 92.93%								
Pb 220.353†	1823.1	297.2	ug/L	6.82	297.2	ug/L	6.82	2.29%
QC value less than the lower limit for Pb 220.353 Recovery = 79.25%								
Sb 206.836†	2645.7	337.4	ug/L	7.37	337.4	ug/L	7.37	2.18%
QC value within limits for Sb 206.836 Recovery = 89.97%								
Se 196.026†	1217.9	371.0	ug/L	7.64	371.0	ug/L	7.64	2.06%
QC value within limits for Se 196.026 Recovery = 98.92%								
Sn 189.927†	1979.1	362.2	ug/L	7.85	362.2	ug/L	7.85	2.17%
QC value within limits for Sn 189.927 Recovery = 96.58%								
Sr 421.552†	274758.0	446.4	ug/L	3.62	446.4	ug/L	3.62	0.81%
QC value greater than the upper limit for Sr 421.552 Recovery = 119.03%								
Ti 337.279†	14463.1	373.8	ug/L	1.33	373.8	ug/L	1.33	0.36%
QC value within limits for Ti 337.279 Recovery = 99.67%								
Tl 190.801†	1216.0	225.0	ug/L	5.04	225.0	ug/L	5.04	2.24%
QC value less than the lower limit for Tl 190.801 Recovery = 60.00%								
V 292.402†	34681.8	326.6	ug/L	7.69	326.6	ug/L	7.69	2.36%
QC value less than the lower limit for V 292.402 Recovery = 87.08%								
Zn 206.200†	37216.4	394.7	ug/L	8.61	394.7	ug/L	8.61	2.18%
QC value within limits for Zn 206.200 Recovery = 105.25%								

Li 670.784	4512549.6	200.6 ug/L	0.24	200.6 ug/L	0.24	0.12%

QC value within limits for Li 670.784 Recovery = 106.96%
QC Failed. Continue with analysis.

Sequence No.: 18
Sample ID: CCB 150710RJS I:JL O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 5
Date Collected: 07/10/15 10:43:48 AM
Data Type: Reprocessed on 07/13/15 8:59:04 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150710RJS I:JL O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	240274.2	100.7	%	0.63				0.62%
Y Radial	16411.0	102.5	%	0.17				0.17%
Ag 338.289†	58.5	0.313	ug/L	0.0903	0.313	ug/L	0.0903	28.87%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-31.3	-22.97	ug/L	4.114	-22.97	ug/L	4.114	17.92%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-4.8	-0.928	ug/L	0.6324	-0.928	ug/L	0.6324	68.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	135.5	3.761	ug/L	0.3562	3.761	ug/L	0.3562	9.47%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	126.5	0.293	ug/L	0.0312	0.293	ug/L	0.0312	10.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	170.2	0.045	ug/L	0.0031	0.045	ug/L	0.0031	6.90%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	398.8	25.11	ug/L	0.225	25.11	ug/L	0.225	0.90%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	-153.5	-0.526	ug/L	0.0550	-0.526	ug/L	0.0550	10.47%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	65.9	0.675	ug/L	0.1257	0.675	ug/L	0.1257	18.63%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-24.8	-0.291	ug/L	0.0780	-0.291	ug/L	0.0780	26.78%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	204.8	0.994	ug/L	0.0601	0.994	ug/L	0.0601	6.05%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	-72.7	-0.895	ug/L	0.4754	-0.895	ug/L	0.4754	53.12%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	312.8	38.61	ug/L	8.704	38.61	ug/L	8.704	22.55%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	28.3	1.620	ug/L	0.4069	1.620	ug/L	0.4069	25.12%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	7.4	0.083	ug/L	0.0994	0.083	ug/L	0.0994	119.53%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	87.2	2.485	ug/L	0.1450	2.485	ug/L	0.1450	5.84%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	110.4	11.13	ug/L	3.634	11.13	ug/L	3.634	32.65%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	24.2	0.492	ug/L	0.1568	0.492	ug/L	0.1568	31.84%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	2.9	0.870	ug/L	0.7089	0.870	ug/L	0.7089	81.47%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-27.4	-4.421	ug/L	0.5972	-4.421	ug/L	0.5972	13.51%
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-8.3	-1.060	ug/L	0.8482	-1.060	ug/L	0.8482	80.04%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.7	-0.504	ug/L	1.3394	-0.504	ug/L	1.3394	265.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	8.7	1.600	ug/L	0.5498	1.600	ug/L	0.5498	34.35%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	35.1	0.056	ug/L	0.0100	0.056	ug/L	0.0100	17.74%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	6.8	0.175	ug/L	0.3160	0.175	ug/L	0.3160	180.19%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	3.3	0.607	ug/L	1.1425	0.607	ug/L	1.1425	188.32%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-40.3	-0.379	ug/L	0.1053	-0.379	ug/L	0.1053	27.77%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-848.8	-8.890	ug/L	0.0817	-8.890	ug/L	0.0817	0.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								

Li 670.784	3031.5	0.135 ug/L	0.0061	0.135 ug/L	0.0061	4.56%

QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: ICP Continuous

Results Data Set (original): 150708A6010X
Results Library (original): C:\PE\chemist\RESULTS\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 1
Sample ID: CalBlk 150708RJS I:PB O:R Date Collected: 07/08/15 11:48:55 AM
Analyst: Data Type: Reprocessed on 07/09/15 9:08:46 AM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CalBlk 150708RJS I:PB O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1129615.5	11646.47	1.03%	100.0	%
Y 371.029 Radial	57293.4	313.89	0.55%	100.0	%
Ag 338.289†	141.6	28.92	20.42%	[0.00]	ug/L
Al 308.215†	5.7	3.99	70.51%	[0.00]	ug/L
As 188.979†	-2.8	1.90	67.59%	[0.00]	ug/L
B†	7.1	2.52	35.39%	[0.00]	ug/L
Ba 233.527†	168.2	10.88	6.47%	[0.00]	ug/L
Be 313.107†	15.2	5.18	33.98%	[0.00]	ug/L
Ca 315.887†	42.5	11.56	27.18%	[0.00]	ug/L
Cd 214.440†	205.0	17.94	8.75%	[0.00]	ug/L
Co 228.616†	111.1	15.58	14.03%	[0.00]	ug/L
Cr 267.716†	411.4	16.42	3.99%	[0.00]	ug/L
Cu 327.393†	-262.6	8.56	3.26%	[0.00]	ug/L
Fe 273.955†	-56.7	9.55	16.84%	[0.00]	ug/L
K 766.490†	-105.6	29.19	27.64%	[0.00]	ug/L
Mg 285.213†	-102.5	7.18	7.01%	[0.00]	ug/L
Mn 257.610†	-52.0	2.78	5.36%	[0.00]	ug/L
Mo 202.031†	90.8	6.13	6.76%	[0.00]	ug/L
Na 589.592†	165.0	124.82	75.67%	[0.00]	ug/L
Ni 231.604†	-221.8	10.35	4.67%	[0.00]	ug/L
P 213.617†	-62.2	3.55	5.70%	[0.00]	ug/L
Pb 220.353†	12.0	3.25	27.01%	[0.00]	ug/L
Sb 206.836†	-5.8	6.95	119.31%	[0.00]	ug/L
Se 196.026†	8.8	3.56	40.38%	[0.00]	ug/L
Sn 189.927†	83.3	11.39	13.66%	[0.00]	ug/L
Sr 421.552†	650.4	117.64	18.09%	[0.00]	ug/L
Ti 337.279†	-250.3	17.63	7.04%	[0.00]	ug/L
Tl 190.801†	-3.4	3.35	100.02%	[0.00]	ug/L
V 292.402†	-580.0	92.53	15.95%	[0.00]	ug/L
Zn 206.200†	-417.7	3.10	0.74%	[0.00]	ug/L

Sequence No.: 2
Sample ID: STD 1 150708RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 07/08/15 11:53:52 AM
Data Type: Reprocessed on 07/09/15 9:08:47 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150708RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1123084.6	6864.78	0.61%	99.42	%
Y 371.029 Radial	57911.4	1153.19	1.99%	101.1	%
Ag 338.289†	97.9	27.49	28.09%	[1.00]	ug/L
Al 308.215†	62.9	2.11	3.36%	[100.00]	ug/L
As 188.979†	12.3	2.74	22.27%	[3.50]	ug/L
B†	89.6	2.75	3.07%	[50.00]	ug/L
Ba 233.527†	674.5	12.10	1.79%	[5.00]	ug/L
Be 313.107†	583.0	10.94	1.88%	[2.00]	ug/L
Ca 315.887†	538.0	11.65	2.16%	[100.00]	ug/L
Cd 214.440†	1254.6	18.10	1.44%	[5.00]	ug/L
Co 228.616†	299.2	17.31	5.79%	[5.00]	ug/L
Cr 267.716†	537.9	9.05	1.68%	[5.00]	ug/L
Cu 327.393†	467.1	41.53	8.89%	[5.00]	ug/L
Fe 273.955†	658.7	2.50	0.38%	[50.00]	ug/L
K 766.490†	2030.9	53.72	2.65%	[1000.00]	ug/L
Mg 285.213†	496.7	16.00	3.22%	[50]	ug/L
Mn 257.610†	82.9	0.73	0.88%	[5.00]	ug/L
Mo 202.031†	166.4	11.56	6.95%	[5.00]	ug/L
Na 589.592†	9140.3	292.22	3.20%	[1000.00]	ug/L
Ni 231.604†	244.1	11.83	4.85%	[5.00]	ug/L
P 213.617†	101.5	3.79	3.74%	[25.00]	ug/L
Pb 220.353†	33.7	1.20	3.56%	[3.00]	ug/L
Sb 206.836†	19.5	3.34	17.07%	[5.00]	ug/L
Se 196.026†	13.8	11.79	85.36%	[5.00]	ug/L
Sn 189.927†	53.1	5.76	10.85%	[5.00]	ug/L
Sr 421.552†	3319.7	84.37	2.54%	[5.00]	ug/L
Ti 337.279†	183.6	20.06	10.92%	[5.00]	ug/L
Tl 190.801†	19.8	4.79	24.15%	[5.00]	ug/L
V 292.402†	1059.0	142.18	13.43%	[5.00]	ug/L
Zn 206.200†	611.3	5.27	0.86%	[20.00]	ug/L

Sequence No.: 3
Sample ID: STD 2 150708RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 07/08/15 11:58:51 AM
Data Type: Reprocessed on 07/09/15 9:08:48 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 2 150708RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1066536.3	5841.56	0.55%	94.42	%
Y 371.029 Radial	55540.4	1011.02	1.82%	96.94	%
Ag 338.289†	56978.6	23.48	0.04%	[500.0]	ug/L
Al 308.215†	12638.0	206.72	1.64%	[20000.00]	ug/L
As 188.979†	3898.5	17.48	0.45%	[1000.00]	ug/L
B†	1728.4	31.24	1.81%	[1000.00]	ug/L
Ba 233.527†	136257.7	259.03	0.19%	[1000.00]	ug/L
Be 313.107†	302440.8	12240.13	4.05%	[1000.00]	ug/L
Ca 315.887†	262068.7	8848.09	3.38%	[50000]	ug/L
Cd 214.440†	241312.7	1036.96	0.43%	[1000.00]	ug/L
Co 228.616†	56729.3	86.12	0.15%	[1000.00]	ug/L
Cr 267.716†	101844.4	346.42	0.34%	[1000.00]	ug/L
Cu 327.393†	91311.9	397.88	0.44%	[1000.00]	ug/L
Fe 273.955†	265152.0	737.65	0.28%	[20000]	ug/L
K 766.490†	41485.9	1507.55	3.63%	[20000]	ug/L
Mg 285.213†	477267.4	16342.85	3.42%	[50000]	ug/L
Mn 257.610†	16167.3	262.67	1.62%	[1000.00]	ug/L
Mo 202.031†	33880.7	107.87	0.32%	[1000.00]	ug/L
Na 589.592†	227690.1	8377.05	3.68%	[25000]	ug/L
Ni 231.604†	47013.4	3.82	0.01%	[1000.00]	ug/L
P 213.617†	21515.8	129.43	0.60%	[5000]	ug/L
Pb 220.353†	11979.1	41.91	0.35%	[1000.00]	ug/L
Sb 206.836†	4390.7	27.98	0.64%	[1000.00]	ug/L
Se 196.026†	3693.2	19.85	0.54%	[1000.00]	ug/L
Sn 189.927†	11708.6	54.22	0.46%	[1000.00]	ug/L
Sr 421.552†	658780.3	24395.32	3.70%	[1000.00]	ug/L
Ti 337.279†	35259.1	548.38	1.56%	[1000.00]	ug/L
Tl 190.801†	4757.7	13.61	0.29%	[1000.00]	ug/L
V 292.402†	201316.6	235.01	0.12%	[1000.00]	ug/L
Zn 206.200†	28845.6	179.12	0.62%	[1000.00]	ug/L

Sequence No.: 4
Sample ID: STD 3 150708RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 07/08/15 12:02:50 PM
Data Type: Reprocessed on 07/09/15 9:08:49 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 3 150708RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1038957.1	1661.41	0.16%	91.97	%
Y 371.029 Radial	54742.6	845.40	1.54%	95.55	%
Ag 338.289†	114796.1	790.55	0.69%	[1000.00]	ug/L
Al 308.215†	25386.7	623.73	2.46%	[40000.00]	ug/L
As 188.979†	7846.7	49.41	0.63%	[2000.00]	ug/L
B†	3486.9	83.04	2.38%	[2000.00]	ug/L
Ba 233.527†	273571.6	884.34	0.32%	[2000.00]	ug/L
Be 313.107†	600916.0	14061.52	2.34%	[2000.00]	ug/L
Ca 315.887†	519561.6	11333.81	2.18%	[100000.0]	ug/L
Cd 214.440†	477335.4	2515.17	0.53%	[2000.00]	ug/L
Co 228.616†	113000.0	318.43	0.28%	[2000.00]	ug/L
Cr 267.716†	203090.1	805.31	0.40%	[2000.00]	ug/L
Cu 327.393†	184616.1	459.14	0.25%	[2000.00]	ug/L
Fe 273.955†	527470.1	685.74	0.13%	[40000]	ug/L
K 766.490†	83968.0	1921.33	2.29%	[40000]	ug/L
Mg 285.213†	938388.7	20298.86	2.16%	[100000]	ug/L
Mn 257.610†	32296.6	704.61	2.18%	[2000.00]	ug/L
Mo 202.031†	67412.0	199.37	0.30%	[2000.00]	ug/L
Na 589.592†	454120.7	10490.06	2.31%	[50000]	ug/L
Ni 231.604†	92497.0	246.74	0.27%	[2000.00]	ug/L
P 213.617†	43310.7	166.85	0.39%	[10000]	ug/L
Pb 220.353†	23666.9	25.93	0.11%	[2000.00]	ug/L
Sb 206.836†	8811.7	40.36	0.46%	[2000.00]	ug/L
Se 196.026†	7379.1	51.74	0.70%	[2000.00]	ug/L
Sn 189.927†	23404.2	52.69	0.23%	[2000.00]	ug/L
Sr 421.552†	1312039.6	27997.59	2.13%	[2000.00]	ug/L
Ti 337.279†	70441.9	1623.48	2.30%	[2000.00]	ug/L
Tl 190.801†	9422.9	31.59	0.34%	[2000.00]	ug/L
V 292.402†	404739.4	1006.51	0.25%	[2000.00]	ug/L
Zn 206.200†	56729.8	263.20	0.46%	[2000.00]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	114.6	0.00000	0.999996	
Al 308.215	3	Lin Thru 0	0.0	0.6341	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	3.918	0.00000	0.999997	
B	3	Lin Thru 0	0.0	1.740	0.00000	0.999994	
Ba 233.527	3	Lin Thru 0	0.0	136.7	0.00000	0.999999	
Be 313.107	3	Lin Thru 0	0.0	300.9	0.00000	0.999997	
Ca 315.887	3	Lin Thru 0	0.0	5.205	0.00000	0.999994	
Cd 214.440	3	Lin Thru 0	0.0	239.2	0.00000	0.999990	
Co 228.616	3	Lin Thru 0	0.0	56.55	0.00000	0.999999	
Cr 267.716	3	Lin Thru 0	0.0	101.6	0.00000	0.999999	
Cu 327.393	3	Lin Thru 0	0.0	92.11	0.00000	0.999991	
Fe 273.955	3	Lin Thru 0	0.0	13.20	0.00000	0.999998	
K 766.490	3	Lin Thru 0	0.0	2.094	0.00000	0.999988	
Mg 285.213	3	Lin Thru 0	0.0	9.416	0.00000	0.999976	
Mn 257.610	3	Lin Thru 0	0.0	16.15	0.00000	1.000000	
Mo 202.031	3	Lin Thru 0	0.0	33.74	0.00000	0.999998	
Na 589.592	3	Lin Thru 0	0.0	9.087	0.00000	0.999999	
Ni 231.604	3	Lin Thru 0	0.0	46.40	0.00000	0.999978	
P 213.617	3	Lin Thru 0	0.0	4.325	0.00000	0.999997	
Pb 220.353	3	Lin Thru 0	0.0	11.86	0.00000	0.999988	
Sb 206.836	3	Lin Thru 0	0.0	4.403	0.00000	0.999999	
Se 196.026	3	Lin Thru 0	0.0	3.690	0.00000	1.000000	
Sn 189.927	3	Lin Thru 0	0.0	11.70	0.00000	1.000000	
Sr 421.552	3	Lin Thru 0	0.0	656.6	0.00000	0.999999	

Ti 337.279	3	Lin Thru 0	0.0	35.23	0.00000	1.000000
Tl 190.801	3	Lin Thru 0	0.0	4.721	0.00000	0.999992
V 292.402	3	Lin Thru 0	0.0	202.2	0.00000	0.999998
Zn 206.200	3	Lin Thru 0	0.0	28.46	0.00000	0.999977

Sequence No.: 5
Sample ID: ICV 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 07/08/15 12:09:09 PM
Data Type: Reprocessed on 07/09/15 9:08:51 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1066502.2	94.41	%	0.305				0.32%
Y 371.029 Radial	56217.6	98.12	%	1.188				1.21%
Ag 338.289†	58255.5	508.2	ug/L	4.23	508.2	ug/L	4.23	0.83%
QC value within limits for Ag 338.289 Recovery = 101.64%								
Al 308.215†	16094.7	25380	ug/L	429.7	25380	ug/L	429.7	1.69%
QC value within limits for Al 308.215 Recovery = 101.53%								
As 188.979†	3932.1	1004	ug/L	4.0	1004	ug/L	4.0	0.39%
QC value within limits for As 188.979 Recovery = 100.35%								
B†	1712.1	1044	ug/L	27.2	1044	ug/L	27.2	2.61%
QC value within limits for B Recovery = 104.36%								
Ba 233.527†	140037.7	1017	ug/L	2.8	1017	ug/L	2.8	0.27%
QC value within limits for Ba 233.527 Recovery = 101.67%								
Be 313.107†	301068.4	1001	ug/L	11.2	1001	ug/L	11.2	1.12%
QC value within limits for Be 313.107 Recovery = 100.07%								
Ca 315.887†	137138.8	26340	ug/L	291.1	26340	ug/L	291.1	1.11%
QC value within limits for Ca 315.887 Recovery = 105.35%								
Cd 214.440†	248907.0	1040	ug/L	4.2	1040	ug/L	4.2	0.41%
QC value within limits for Cd 214.440 Recovery = 103.99%								
Co 228.616†	58786.7	1039	ug/L	2.0	1039	ug/L	2.0	0.19%
QC value within limits for Co 228.616 Recovery = 103.89%								
Cr 267.716†	104996.6	1034	ug/L	2.0	1034	ug/L	2.0	0.19%
QC value within limits for Cr 267.716 Recovery = 103.43%								
Cu 327.393†	93252.2	1012	ug/L	5.0	1012	ug/L	5.0	0.49%
QC value within limits for Cu 327.393 Recovery = 101.24%								
Fe 273.955†	340056.7	25760	ug/L	66.9	25760	ug/L	66.9	0.26%
QC value within limits for Fe 273.955 Recovery = 103.04%								
K 766.490†	52065.1	24860	ug/L	330.1	24860	ug/L	330.1	1.33%
QC value within limits for K 766.490 Recovery = 99.45%								
Mg 285.213†	245568.6	26110	ug/L	281.8	26110	ug/L	281.8	1.08%
QC value within limits for Mg 285.213 Recovery = 104.43%								
Mn 257.610†	16479.8	1020	ug/L	19.9	1020	ug/L	19.9	1.95%
QC value within limits for Mn 257.610 Recovery = 102.03%								
Mo 202.031†	34442.2	1023	ug/L	3.7	1023	ug/L	3.7	0.36%
QC value within limits for Mo 202.031 Recovery = 102.30%								
Na 589.592†	228529.2	25140	ug/L	294.6	25140	ug/L	294.6	1.17%
QC value within limits for Na 589.592 Recovery = 100.55%								
Ni 231.604†	49521.3	1066	ug/L	3.4	1066	ug/L	3.4	0.32%
QC value within limits for Ni 231.604 Recovery = 106.60%								
P 213.617†	22440.2	5188	ug/L	22.6	5188	ug/L	22.6	0.44%
QC value within limits for P 213.617 Recovery = 103.76%								
Pb 220.353†	12524.6	1056	ug/L	4.8	1056	ug/L	4.8	0.46%
QC value within limits for Pb 220.353 Recovery = 105.58%								
Sb 206.836†	4822.4	1095	ug/L	7.1	1095	ug/L	7.1	0.65%
QC value within limits for Sb 206.836 Recovery = 109.53%								
Se 196.026†	3821.5	1044	ug/L	7.9	1044	ug/L	7.9	0.76%
QC value within limits for Se 196.026 Recovery = 104.36%								
Sn 189.927†	6179.5	532.1	ug/L	2.41	532.1	ug/L	2.41	0.45%
QC value within limits for Sn 189.927 Recovery = 106.42%								
Sr 421.552†	671452.9	1020	ug/L	10.4	1020	ug/L	10.4	1.02%
QC value within limits for Sr 421.552 Recovery = 102.00%								
Ti 337.279†	35796.4	1016	ug/L	17.5	1016	ug/L	17.5	1.72%
QC value within limits for Ti 337.279 Recovery = 101.57%								
Tl 190.801†	4899.7	1038	ug/L	2.4	1038	ug/L	2.4	0.23%
QC value within limits for Tl 190.801 Recovery = 103.79%								
V 292.402†	205051.1	1032	ug/L	2.4	1032	ug/L	2.4	0.23%
QC value within limits for V 292.402 Recovery = 103.22%								
Zn 206.200†	29965.4	1053	ug/L	6.3	1053	ug/L	6.3	0.60%
QC value within limits for Zn 206.200 Recovery = 105.29%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: ICB 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 07/08/15 12:14:39 PM
Data Type: Reprocessed on 07/09/15 9:08:52 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1126440.2	99.72	%	1.206				1.21%
Y 371.029 Radial	56471.1	98.56	%	0.544				0.55%
Ag 338.289†	90.7	0.791	ug/L	0.8216	0.791	ug/L	0.8216	103.81%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-1.2	-1.831	ug/L	1.9335	-1.831	ug/L	1.9335	105.60%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	4.4	1.126	ug/L	0.4459	1.126	ug/L	0.4459	39.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	7.5	4.331	ug/L	2.1052	4.331	ug/L	2.1052	48.61%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	-14.7	-0.108	ug/L	0.0681	-0.108	ug/L	0.0681	62.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	5.0	0.017	ug/L	0.0074	0.017	ug/L	0.0074	44.76%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	10.3	1.972	ug/L	3.9918	1.972	ug/L	3.9918	202.44%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	49.2	0.206	ug/L	0.0548	0.206	ug/L	0.0548	26.57%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	6.4	0.116	ug/L	0.4316	0.116	ug/L	0.4316	372.16%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3.8	-0.037	ug/L	0.1638	-0.037	ug/L	0.1638	448.26%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-12.4	-0.135	ug/L	0.1040	-0.135	ug/L	0.1040	77.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	10.4	0.787	ug/L	0.1149	0.787	ug/L	0.1149	14.59%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-7.5	-3.567	ug/L	33.0669	-3.567	ug/L	33.0669	927.04%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	12.9	1.372	ug/L	0.3723	1.372	ug/L	0.3723	27.13%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-1.6	-0.101	ug/L	0.5044	-0.101	ug/L	0.5044	501.52%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	39.5	1.171	ug/L	0.2576	1.171	ug/L	0.2576	22.01%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	4.2	0.456	ug/L	12.3428	0.456	ug/L	12.3428	>999.9%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	6.6	0.142	ug/L	0.2230	0.142	ug/L	0.2230	157.26%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	5.9	1.356	ug/L	0.6822	1.356	ug/L	0.6822	50.32%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	18.6	1.564	ug/L	0.5131	1.564	ug/L	0.5131	32.80%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.1	2.523	ug/L	0.7608	2.523	ug/L	0.7608	30.15%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.5	1.498	ug/L	0.6801	1.498	ug/L	0.6801	45.41%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	39.1	3.339	ug/L	0.8023	3.339	ug/L	0.8023	24.02%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	54.3	0.083	ug/L	0.1461	0.083	ug/L	0.1461	176.82%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	3.1	0.089	ug/L	0.3164	0.089	ug/L	0.3164	354.91%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	6.5	1.381	ug/L	0.0203	1.381	ug/L	0.0203	1.47%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	58.9	0.307	ug/L	0.1759	0.307	ug/L	0.1759	57.25%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	20.2	0.710	ug/L	0.0756	0.710	ug/L	0.0756	10.66%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICSA 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 07/08/15 12:30:51 PM
Data Type: Reprocessed on 07/09/15 9:08:54 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1011830.8	89.57	%	0.558				0.62%
Y 371.029 Radial	53535.0	93.44	%	2.309				2.47%
Ag 338.289†	-74.1	-0.646	ug/L	0.1913	-0.646	ug/L	0.1913	29.60%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	126309.8	199200	ug/L	8168.0	199200	ug/L	8168.0	4.10%
QC value within limits for Al 308.215 Recovery = 99.60%								
As 188.979†	13.1	3.345	ug/L	1.0080	3.345	ug/L	1.0080	30.14%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	-864.4	-49.82	ug/L	15.416	-49.82	ug/L	15.416	30.95%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	8361.6	-1.871	ug/L	0.4985	-1.871	ug/L	0.4985	26.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.3	0.034	ug/L	0.0049	0.034	ug/L	0.0049	14.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1203445.2	231200	ug/L	9439.4	231200	ug/L	9439.4	4.08%
QC value within limits for Ca 315.887 Recovery = 115.59%								
Cd 214.440†	2360.2	-0.827	ug/L	0.1311	-0.827	ug/L	0.1311	15.85%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	261.6	1.773	ug/L	0.5714	1.773	ug/L	0.5714	32.23%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	209.3	1.005	ug/L	0.2570	1.005	ug/L	0.2570	25.58%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-39.9	-0.433	ug/L	0.0567	-0.433	ug/L	0.0567	13.10%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	2488157.6	188500	ug/L	465.3	188500	ug/L	465.3	0.25%
QC value within limits for Fe 273.955 Recovery = 94.24%								
K 766.490†	-52.7	-25.19	ug/L	14.419	-25.19	ug/L	14.419	57.24%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1852891.8	197000	ug/L	8009.3	197000	ug/L	8009.3	4.07%
QC value within limits for Mg 285.213 Recovery = 98.50%								
Mn 257.610†	13.0	-0.358	ug/L	0.3229	-0.358	ug/L	0.3229	90.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-441.7	-2.209	ug/L	0.1886	-2.209	ug/L	0.1886	8.54%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	702.6	92.04	ug/L	2.438	92.04	ug/L	2.438	2.65%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-272.3	-0.017	ug/L	0.0351	-0.017	ug/L	0.0351	206.29%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-246.8	-57.06	ug/L	0.297	-57.06	ug/L	0.297	0.52%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	14.8	1.247	ug/L	0.6829	1.247	ug/L	0.6829	54.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.5	1.470	ug/L	1.0755	1.470	ug/L	1.0755	73.16%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-246.7	-0.629	ug/L	1.0613	-0.629	ug/L	1.0613	168.69%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-229.2	0.356	ug/L	2.0449	0.356	ug/L	2.0449	575.02%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	12466.6	-1.072	ug/L	0.9944	-1.072	ug/L	0.9944	92.79%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	90.1	-1.032	ug/L	0.6648	-1.032	ug/L	0.6648	64.40%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-10.2	-2.168	ug/L	1.6977	-2.168	ug/L	1.6977	78.30%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	8314.9	1.152	ug/L	0.0408	1.152	ug/L	0.0408	3.54%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-230.5	-8.100	ug/L	0.3046	-8.100	ug/L	0.3046	3.76%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSAB 150708RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 07/08/15 12:37:22 PM
Data Type: Reprocessed on 07/09/15 9:08:55 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150708RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1012385.0	89.62	%	0.455				0.51%
Y 371.029 Radial	53385.3	93.18	%	1.959				2.10%
Ag 338.289†	115744.1	1010	ug/L	0.9	1010	ug/L	0.9	0.09%
QC value within limits for Ag 338.289 Recovery = 100.97%								
Al 308.215†	126147.2	198900	ug/L	7580.0	198900	ug/L	7580.0	3.81%
QC value within limits for Al 308.215 Recovery = 99.47%								
As 188.979†	1841.0	469.8	ug/L	1.63	469.8	ug/L	1.63	0.35%
QC value within limits for As 188.979 Recovery = 93.97%								
B†	-868.7	-53.57	ug/L	10.502	-53.57	ug/L	10.502	19.60%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	71500.9	460.6	ug/L	0.69	460.6	ug/L	0.69	0.15%
QC value within limits for Ba 233.527 Recovery = 92.13%								
Be 313.107†	147655.1	490.8	ug/L	19.37	490.8	ug/L	19.37	3.95%
QC value within limits for Be 313.107 Recovery = 98.16%								
Ca 315.887†	1083419.8	208100	ug/L	7862.0	208100	ug/L	7862.0	3.78%
QC value within limits for Ca 315.887 Recovery = 104.06%								
Cd 214.440†	230837.2	954.6	ug/L	1.26	954.6	ug/L	1.26	0.13%
QC value within limits for Cd 214.440 Recovery = 95.46%								
Co 228.616†	28483.7	501.9	ug/L	1.91	501.9	ug/L	1.91	0.38%
QC value within limits for Co 228.616 Recovery = 100.37%								
Cr 267.716†	49158.3	483.3	ug/L	0.94	483.3	ug/L	0.94	0.19%
QC value within limits for Cr 267.716 Recovery = 96.67%								
Cu 327.393†	46297.3	502.6	ug/L	1.86	502.6	ug/L	1.86	0.37%
QC value within limits for Cu 327.393 Recovery = 100.53%								
Fe 273.955†	2481645.9	188000	ug/L	404.2	188000	ug/L	404.2	0.22%
QC value within limits for Fe 273.955 Recovery = 94.00%								
K 766.490†	-37.5	-17.89	ug/L	12.332	-17.89	ug/L	12.332	68.92%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1852644.4	197000	ug/L	7258.0	197000	ug/L	7258.0	3.68%
QC value within limits for Mg 285.213 Recovery = 98.48%								
Mn 257.610†	8097.0	500.3	ug/L	11.12	500.3	ug/L	11.12	2.22%
QC value within limits for Mn 257.610 Recovery = 100.06%								
Mo 202.031†	16001.5	485.6	ug/L	1.50	485.6	ug/L	1.50	0.31%
QC value within limits for Mo 202.031 Recovery = 97.12%								
Na 589.592†	406.8	60.00	ug/L	1.283	60.00	ug/L	1.283	2.14%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	44180.2	957.0	ug/L	4.41	957.0	ug/L	4.41	0.46%
QC value within limits for Ni 231.604 Recovery = 95.70%								
P 213.617†	-847.4	-195.9	ug/L	3.00	-195.9	ug/L	3.00	1.53%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	11598.5	977.7	ug/L	4.77	977.7	ug/L	4.77	0.49%
QC value within limits for Pb 220.353 Recovery = 97.77%								
Sb 206.836†	2317.3	526.3	ug/L	1.58	526.3	ug/L	1.58	0.30%
QC value within limits for Sb 206.836 Recovery = 105.27%								
Se 196.026†	1552.1	486.8	ug/L	2.72	486.8	ug/L	2.72	0.56%
QC value within limits for Se 196.026 Recovery = 97.37%								
Sn 189.927†	-236.0	-2.401	ug/L	1.2978	-2.401	ug/L	1.2978	54.05%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	858.2	-18.54	ug/L	0.018	-18.54	ug/L	0.018	0.10%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	76.2	-1.327	ug/L	0.2343	-1.327	ug/L	0.2343	17.66%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2302.1	487.7	ug/L	1.82	487.7	ug/L	1.82	0.37%
QC value within limits for Tl 190.801 Recovery = 97.53%								
V 292.402†	106888.9	500.3	ug/L	1.11	500.3	ug/L	1.11	0.22%
QC value within limits for V 292.402 Recovery = 100.06%								
Zn 206.200†	26881.6	944.5	ug/L	4.60	944.5	ug/L	4.60	0.49%
QC value within limits for Zn 206.200 Recovery = 94.45%								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV1 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 07/08/15 12:43:49 PM
Data Type: Reprocessed on 07/09/15 9:08:56 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1072529.0	94.95	%	0.886				0.93%
Y 371.029 Radial	56515.4	98.64	%	2.698				2.74%
Ag 338.289†	57309.6	500.0	ug/L	1.05	500.0	ug/L	1.05	0.21%
QC value within limits for Ag 338.289 Recovery = 99.99%								
Al 308.215†	12578.7	19840	ug/L	399.0	19840	ug/L	399.0	2.01%
QC value within limits for Al 308.215 Recovery = 99.18%								
As 188.979†	3888.6	992.4	ug/L	9.26	992.4	ug/L	9.26	0.93%
QC value within limits for As 188.979 Recovery = 99.24%								
B†	1694.6	1019	ug/L	13.2	1019	ug/L	13.2	1.30%
QC value within limits for B Recovery = 101.93%								
Ba 233.527†	138040.9	1004	ug/L	2.7	1004	ug/L	2.7	0.26%
QC value within limits for Ba 233.527 Recovery = 100.39%								
Be 313.107†	296679.1	986.1	ug/L	20.51	986.1	ug/L	20.51	2.08%
QC value within limits for Be 313.107 Recovery = 98.61%								
Ca 315.887†	259898.4	49920	ug/L	1137.4	49920	ug/L	1137.4	2.28%
QC value within limits for Ca 315.887 Recovery = 99.85%								
Cd 214.440†	242671.8	1014	ug/L	3.4	1014	ug/L	3.4	0.34%
QC value within limits for Cd 214.440 Recovery = 101.41%								
Co 228.616†	57245.8	1012	ug/L	3.8	1012	ug/L	3.8	0.37%
QC value within limits for Co 228.616 Recovery = 101.17%								
Cr 267.716†	102140.4	1006	ug/L	3.3	1006	ug/L	3.3	0.32%
QC value within limits for Cr 267.716 Recovery = 100.59%								
Cu 327.393†	91527.5	993.7	ug/L	2.56	993.7	ug/L	2.56	0.26%
QC value within limits for Cu 327.393 Recovery = 99.37%								
Fe 273.955†	267952.1	20300	ug/L	62.7	20300	ug/L	62.7	0.31%
QC value within limits for Fe 273.955 Recovery = 101.49%								
K 766.490†	41322.9	19730	ug/L	452.1	19730	ug/L	452.1	2.29%
QC value within limits for K 766.490 Recovery = 98.66%								
Mg 285.213†	472317.4	50180	ug/L	1115.4	50180	ug/L	1115.4	2.22%
QC value within limits for Mg 285.213 Recovery = 100.36%								
Mn 257.610†	16125.6	997.0	ug/L	22.72	997.0	ug/L	22.72	2.28%
QC value within limits for Mn 257.610 Recovery = 99.70%								
Mo 202.031†	34104.6	1013	ug/L	13.4	1013	ug/L	13.4	1.32%
QC value within limits for Mo 202.031 Recovery = 101.25%								
Na 589.592†	225210.1	24770	ug/L	556.9	24770	ug/L	556.9	2.25%
QC value within limits for Na 589.592 Recovery = 99.07%								
Ni 231.604†	47278.5	1017	ug/L	2.3	1017	ug/L	2.3	0.23%
QC value within limits for Ni 231.604 Recovery = 101.75%								
P 213.617†	21525.9	4977	ug/L	53.6	4977	ug/L	53.6	1.08%
QC value within limits for P 213.617 Recovery = 99.53%								
Pb 220.353†	12058.6	1017	ug/L	10.3	1017	ug/L	10.3	1.02%
QC value within limits for Pb 220.353 Recovery = 101.65%								
Sb 206.836†	4392.8	997.7	ug/L	16.72	997.7	ug/L	16.72	1.68%
QC value within limits for Sb 206.836 Recovery = 99.77%								
Se 196.026†	3680.1	1002	ug/L	8.1	1002	ug/L	8.1	0.81%
QC value within limits for Se 196.026 Recovery = 100.24%								
Sn 189.927†	11786.2	1014	ug/L	11.5	1014	ug/L	11.5	1.13%
QC value within limits for Sn 189.927 Recovery = 101.42%								
Sr 421.552†	652515.5	991.6	ug/L	19.28	991.6	ug/L	19.28	1.94%
QC value within limits for Sr 421.552 Recovery = 99.16%								
Ti 337.279†	35194.2	998.2	ug/L	20.94	998.2	ug/L	20.94	2.10%
QC value within limits for Ti 337.279 Recovery = 99.82%								
Tl 190.801†	4846.1	1027	ug/L	14.8	1027	ug/L	14.8	1.44%
QC value within limits for Tl 190.801 Recovery = 102.66%								
V 292.402†	201785.6	1017	ug/L	1.2	1017	ug/L	1.2	0.12%
QC value within limits for V 292.402 Recovery = 101.67%								
Zn 206.200†	29013.2	1019	ug/L	2.6	1019	ug/L	2.6	0.26%
QC value within limits for Zn 206.200 Recovery = 101.94%								

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 07/08/15 12:52:39 PM
Data Type: Reprocessed on 07/09/15 9:08:57 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1130108.8	100.0	%	0.57				0.57%
Y 371.029 Radial	57328.6	100.1	%	2.14				2.14%
Ag 338.289†	7.9	0.069	ug/L	0.6452	0.069	ug/L	0.6452	931.36%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	5.3	8.433	ug/L	1.3635	8.433	ug/L	1.3635	16.17%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.2	0.303	ug/L	0.5373	0.303	ug/L	0.5373	177.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	4.5	2.587	ug/L	1.9699	2.587	ug/L	1.9699	76.16%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	-1.3	-0.010	ug/L	0.0894	-0.010	ug/L	0.0894	887.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	6.3	0.021	ug/L	0.0180	0.021	ug/L	0.0180	85.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	30.8	5.922	ug/L	1.6555	5.922	ug/L	1.6555	27.95%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	39.8	0.167	ug/L	0.0481	0.167	ug/L	0.0481	28.80%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-6.1	-0.106	ug/L	0.3014	-0.106	ug/L	0.3014	284.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	26.3	0.259	ug/L	0.0573	0.259	ug/L	0.0573	22.08%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	67.0	0.727	ug/L	0.4751	0.727	ug/L	0.4751	65.36%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	23.2	1.759	ug/L	0.0318	1.759	ug/L	0.0318	1.81%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-31.5	-15.06	ug/L	35.363	-15.06	ug/L	35.363	234.86%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	38.2	4.063	ug/L	1.0963	4.063	ug/L	1.0963	26.98%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	1.0	0.064	ug/L	0.1144	0.064	ug/L	0.1144	177.99%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	29.3	0.869	ug/L	0.0533	0.869	ug/L	0.0533	6.14%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	101.9	11.21	ug/L	9.338	11.21	ug/L	9.338	83.29%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	8.7	0.188	ug/L	0.1211	0.188	ug/L	0.1211	64.34%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	1.0	0.242	ug/L	0.6464	0.242	ug/L	0.6464	267.63%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	4.8	0.403	ug/L	0.2630	0.403	ug/L	0.2630	65.23%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.9	2.020	ug/L	1.4055	2.020	ug/L	1.4055	69.59%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.9	0.509	ug/L	1.7837	0.509	ug/L	1.7837	350.41%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	30.5	2.605	ug/L	0.3726	2.605	ug/L	0.3726	14.30%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	-49.8	-0.076	ug/L	0.1644	-0.076	ug/L	0.1644	215.80%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-2.2	-0.062	ug/L	0.2501	-0.062	ug/L	0.2501	405.13%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	4.9	1.036	ug/L	0.3638	1.036	ug/L	0.3638	35.12%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	63.7	0.329	ug/L	0.1708	0.329	ug/L	0.1708	51.86%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	11.2	0.394	ug/L	0.1097	0.394	ug/L	0.1097	27.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 15
Sample ID: CCV2 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 07/08/15 1:16:01 PM
Data Type: Reprocessed on 07/09/15 9:09:02 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1078804.0	95.50	%	0.147				0.15%
Y 371.029 Radial	55378.8	96.66	%	1.016				1.05%
Ag 338.289†	42520.5	370.9	ug/L	3.28	370.9	ug/L	3.28	0.89%
QC value within limits for Ag 338.289 Recovery = 98.92%								
Al 308.215†	9731.8	15350	ug/L	213.0	15350	ug/L	213.0	1.39%
QC value within limits for Al 308.215 Recovery = 102.31%								
As 188.979†	2886.7	736.7	ug/L	1.64	736.7	ug/L	1.64	0.22%
QC value within limits for As 188.979 Recovery = 98.23%								
B†	1334.4	800.3	ug/L	13.38	800.3	ug/L	13.38	1.67%
QC value within limits for B Recovery = 106.71%								
Ba 233.527†	101952.1	741.4	ug/L	0.23	741.4	ug/L	0.23	0.03%
QC value within limits for Ba 233.527 Recovery = 98.86%								
Be 313.107†	226949.0	754.3	ug/L	7.47	754.3	ug/L	7.47	0.99%
QC value within limits for Be 313.107 Recovery = 100.58%								
Ca 315.887†	198755.0	38180	ug/L	446.3	38180	ug/L	446.3	1.17%
QC value within limits for Ca 315.887 Recovery = 101.81%								
Cd 214.440†	180842.9	755.7	ug/L	0.62	755.7	ug/L	0.62	0.08%
QC value within limits for Cd 214.440 Recovery = 100.76%								
Co 228.616†	42607.2	752.9	ug/L	2.36	752.9	ug/L	2.36	0.31%
QC value within limits for Co 228.616 Recovery = 100.39%								
Cr 267.716†	76366.2	752.0	ug/L	1.29	752.0	ug/L	1.29	0.17%
QC value within limits for Cr 267.716 Recovery = 100.27%								
Cu 327.393†	67997.8	738.2	ug/L	1.53	738.2	ug/L	1.53	0.21%
QC value within limits for Cu 327.393 Recovery = 98.43%								
Fe 273.955†	198243.2	15020	ug/L	29.2	15020	ug/L	29.2	0.19%
QC value within limits for Fe 273.955 Recovery = 100.12%								
K 766.490†	31463.5	15020	ug/L	158.7	15020	ug/L	158.7	1.06%
QC value within limits for K 766.490 Recovery = 100.16%								
Mg 285.213†	365842.3	38870	ug/L	447.6	38870	ug/L	447.6	1.15%
QC value within limits for Mg 285.213 Recovery = 103.65%								
Mn 257.610†	12505.6	773.2	ug/L	10.35	773.2	ug/L	10.35	1.34%
QC value within limits for Mn 257.610 Recovery = 103.09%								
Mo 202.031†	25398.8	754.1	ug/L	3.04	754.1	ug/L	3.04	0.40%
QC value within limits for Mo 202.031 Recovery = 100.54%								
Na 589.592†	172408.2	18960	ug/L	170.5	18960	ug/L	170.5	0.90%
QC value within limits for Na 589.592 Recovery = 101.12%								
Ni 231.604†	35354.4	760.9	ug/L	1.41	760.9	ug/L	1.41	0.19%
QC value within limits for Ni 231.604 Recovery = 101.45%								
P 213.617†	15943.4	3686	ug/L	10.6	3686	ug/L	10.6	0.29%
QC value within limits for P 213.617 Recovery = 98.29%								
Pb 220.353†	9003.4	759.0	ug/L	4.39	759.0	ug/L	4.39	0.58%
QC value within limits for Pb 220.353 Recovery = 101.20%								
Sb 206.836†	3305.4	750.8	ug/L	3.02	750.8	ug/L	3.02	0.40%
QC value within limits for Sb 206.836 Recovery = 100.10%								
Se 196.026†	2736.2	745.2	ug/L	2.92	745.2	ug/L	2.92	0.39%
QC value within limits for Se 196.026 Recovery = 99.36%								
Sn 189.927†	8795.9	757.0	ug/L	3.81	757.0	ug/L	3.81	0.50%
QC value within limits for Sn 189.927 Recovery = 100.94%								
Sr 421.552†	497272.0	755.7	ug/L	7.02	755.7	ug/L	7.02	0.93%
QC value within limits for Sr 421.552 Recovery = 100.76%								
Ti 337.279†	26970.5	765.0	ug/L	9.86	765.0	ug/L	9.86	1.29%
QC value within limits for Ti 337.279 Recovery = 102.00%								
Tl 190.801†	3606.0	763.9	ug/L	2.56	763.9	ug/L	2.56	0.34%
QC value within limits for Tl 190.801 Recovery = 101.85%								
V 292.402†	150269.9	757.2	ug/L	1.03	757.2	ug/L	1.03	0.14%
QC value within limits for V 292.402 Recovery = 100.96%								
Zn 206.200†	22448.7	788.7	ug/L	3.08	788.7	ug/L	3.08	0.39%
QC value within limits for Zn 206.200 Recovery = 105.17%								

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCB 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 07/08/15 1:24:27 PM
Data Type: Reprocessed on 07/09/15 9:09:03 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1132219.2	100.2	%	0.36				0.36%
Y 371.029 Radial	56804.1	99.15	%	2.761				2.79%
Ag 338.289†	12.5	0.109	ug/L	0.9846	0.109	ug/L	0.9846	900.52%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	3.3	5.233	ug/L	4.2357	5.233	ug/L	4.2357	80.95%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	2.5	0.650	ug/L	0.5673	0.650	ug/L	0.5673	87.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	8.3	4.748	ug/L	3.0194	4.748	ug/L	3.0194	63.60%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	-20.4	-0.149	ug/L	0.0816	-0.149	ug/L	0.0816	54.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	5.7	0.019	ug/L	0.0073	0.019	ug/L	0.0073	38.82%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	13.9	2.679	ug/L	1.8764	2.679	ug/L	1.8764	70.03%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	8.5	0.036	ug/L	0.0174	0.036	ug/L	0.0174	48.51%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-6.9	-0.120	ug/L	0.2077	-0.120	ug/L	0.2077	173.58%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.5	-0.023	ug/L	0.3515	-0.023	ug/L	0.3515	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	6.8	0.074	ug/L	0.2667	0.074	ug/L	0.2667	358.70%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	15.9	1.204	ug/L	0.2925	1.204	ug/L	0.2925	24.30%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	6.7	3.210	ug/L	19.1133	3.210	ug/L	19.1133	595.36%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	28.6	3.035	ug/L	0.4090	3.035	ug/L	0.4090	13.48%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-7.0	-0.431	ug/L	0.2161	-0.431	ug/L	0.2161	50.12%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	24.9	0.737	ug/L	0.4281	0.737	ug/L	0.4281	58.07%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	63.8	7.011	ug/L	9.7557	7.011	ug/L	9.7557	139.14%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-4.2	-0.090	ug/L	0.1318	-0.090	ug/L	0.1318	146.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-0.4	-0.092	ug/L	1.0194	-0.092	ug/L	1.0194	>999.9%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-2.0	-0.171	ug/L	0.5344	-0.171	ug/L	0.5344	313.32%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.0	2.498	ug/L	0.6538	2.498	ug/L	0.6538	26.18%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.5	-0.416	ug/L	1.7047	-0.416	ug/L	1.7047	409.53%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	22.4	1.916	ug/L	0.5521	1.916	ug/L	0.5521	28.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	53.5	0.081	ug/L	0.0675	0.081	ug/L	0.0675	83.03%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	3.5	0.100	ug/L	0.1062	0.100	ug/L	0.1062	106.70%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	5.2	1.093	ug/L	0.6626	1.093	ug/L	0.6626	60.60%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	99.3	0.501	ug/L	0.5052	0.501	ug/L	0.5052	100.84%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	3.9	0.139	ug/L	0.0871	0.139	ug/L	0.0871	62.89%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV1 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 07/08/15 2:06:38 PM
Data Type: Reprocessed on 07/09/15 9:09:11 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1056772.2	93.55	%	0.447				0.48%
Y 371.029 Radial	55520.7	96.91	%	0.952				0.98%
Ag 338.289†	57007.2	497.3	ug/L	5.10	497.3	ug/L	5.10	1.03%
QC value within limits for Ag 338.289 Recovery = 99.46%								
Al 308.215†	12567.0	19820	ug/L	359.3	19820	ug/L	359.3	1.81%
QC value within limits for Al 308.215 Recovery = 99.09%								
As 188.979†	3834.1	978.5	ug/L	5.89	978.5	ug/L	5.89	0.60%
QC value within limits for As 188.979 Recovery = 97.85%								
B†	1699.5	1021	ug/L	25.2	1021	ug/L	25.2	2.46%
QC value within limits for B Recovery = 102.13%								
Ba 233.527†	135678.6	986.7	ug/L	5.34	986.7	ug/L	5.34	0.54%
QC value within limits for Ba 233.527 Recovery = 98.67%								
Be 313.107†	291457.9	968.8	ug/L	12.59	968.8	ug/L	12.59	1.30%
QC value within limits for Be 313.107 Recovery = 96.88%								
Ca 315.887†	254382.3	48860	ug/L	742.6	48860	ug/L	742.6	1.52%
QC value within limits for Ca 315.887 Recovery = 97.73%								
Cd 214.440†	238691.9	997.4	ug/L	4.24	997.4	ug/L	4.24	0.43%
QC value within limits for Cd 214.440 Recovery = 99.74%								
Co 228.616†	56821.7	1004	ug/L	2.0	1004	ug/L	2.0	0.20%
QC value within limits for Co 228.616 Recovery = 100.42%								
Cr 267.716†	101508.7	999.7	ug/L	4.14	999.7	ug/L	4.14	0.41%
QC value within limits for Cr 267.716 Recovery = 99.97%								
Cu 327.393†	91580.8	994.3	ug/L	3.90	994.3	ug/L	3.90	0.39%
QC value within limits for Cu 327.393 Recovery = 99.43%								
Fe 273.955†	263583.3	19970	ug/L	135.5	19970	ug/L	135.5	0.68%
QC value within limits for Fe 273.955 Recovery = 99.84%								
K 766.490†	40406.5	19290	ug/L	367.8	19290	ug/L	367.8	1.91%
QC value within limits for K 766.490 Recovery = 96.47%								
Mg 285.213†	472461.5	50200	ug/L	717.8	50200	ug/L	717.8	1.43%
QC value within limits for Mg 285.213 Recovery = 100.39%								
Mn 257.610†	16059.1	992.9	ug/L	18.69	992.9	ug/L	18.69	1.88%
QC value within limits for Mn 257.610 Recovery = 99.29%								
Mo 202.031†	33737.3	1002	ug/L	7.9	1002	ug/L	7.9	0.79%
QC value within limits for Mo 202.031 Recovery = 100.16%								
Na 589.592†	222820.4	24510	ug/L	391.4	24510	ug/L	391.4	1.60%
QC value within limits for Na 589.592 Recovery = 98.02%								
Ni 231.604†	46812.7	1007	ug/L	3.2	1007	ug/L	3.2	0.32%
QC value within limits for Ni 231.604 Recovery = 100.75%								
P 213.617†	21229.2	4908	ug/L	30.8	4908	ug/L	30.8	0.63%
QC value within limits for P 213.617 Recovery = 98.16%								
Pb 220.353†	11893.7	1003	ug/L	3.9	1003	ug/L	3.9	0.38%
QC value within limits for Pb 220.353 Recovery = 100.26%								
Sb 206.836†	4425.6	1005	ug/L	9.5	1005	ug/L	9.5	0.95%
QC value within limits for Sb 206.836 Recovery = 100.52%								
Se 196.026†	3630.2	988.8	ug/L	3.74	988.8	ug/L	3.74	0.38%
QC value within limits for Se 196.026 Recovery = 98.88%								
Sn 189.927†	11725.2	1009	ug/L	7.7	1009	ug/L	7.7	0.76%
QC value within limits for Sn 189.927 Recovery = 100.89%								
Sr 421.552†	638462.0	970.2	ug/L	13.92	970.2	ug/L	13.92	1.44%
QC value within limits for Sr 421.552 Recovery = 97.02%								
Ti 337.279†	34921.9	990.5	ug/L	21.78	990.5	ug/L	21.78	2.20%
QC value within limits for Ti 337.279 Recovery = 99.05%								
Tl 190.801†	4767.6	1010	ug/L	10.1	1010	ug/L	10.1	1.00%
QC value within limits for Tl 190.801 Recovery = 100.99%								
V 292.402†	200540.9	1010	ug/L	5.8	1010	ug/L	5.8	0.58%
QC value within limits for V 292.402 Recovery = 101.05%								
Zn 206.200†	28618.3	1006	ug/L	5.7	1006	ug/L	5.7	0.57%
QC value within limits for Zn 206.200 Recovery = 100.55%								

All analyte(s) passed QC.

Sequence No.: 24
Sample ID: CCB 150708RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 07/08/15 2:20:46 PM
Data Type: Reprocessed on 07/09/15 9:09:12 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150708RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1121375.5	99.27	%	0.521				0.52%
Y 371.029 Radial	56860.6	99.24	%	1.548				1.56%
Ag 338.289†	10.3	0.090	ug/L	0.6296	0.090	ug/L	0.6296	703.09%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	2.1	3.251	ug/L	0.8164	3.251	ug/L	0.8164	25.11%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.3	-0.077	ug/L	0.5851	-0.077	ug/L	0.5851	762.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	4.1	2.374	ug/L	1.9443	2.374	ug/L	1.9443	81.89%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	-2.0	-0.015	ug/L	0.0989	-0.015	ug/L	0.0989	664.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3.2	0.011	ug/L	0.0104	0.011	ug/L	0.0104	96.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	31.8	6.112	ug/L	1.9728	6.112	ug/L	1.9728	32.28%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	3.7	0.016	ug/L	0.0275	0.016	ug/L	0.0275	175.25%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-22.4	-0.396	ug/L	0.3615	-0.396	ug/L	0.3615	91.33%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.3	-0.012	ug/L	0.2842	-0.012	ug/L	0.2842	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	4.1	0.045	ug/L	0.2534	0.045	ug/L	0.2534	565.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	18.6	1.406	ug/L	0.1069	1.406	ug/L	0.1069	7.60%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	-41.7	-19.92	ug/L	20.370	-19.92	ug/L	20.370	102.28%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	29.1	3.087	ug/L	0.3884	3.087	ug/L	0.3884	12.58%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	5.0	0.311	ug/L	0.2802	0.311	ug/L	0.2802	89.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	9.2	0.274	ug/L	0.4000	0.274	ug/L	0.4000	146.02%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	443.6	48.82	ug/L	7.333	48.82	ug/L	7.333	15.02%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	1.6	0.036	ug/L	0.1989	0.036	ug/L	0.1989	560.08%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	6.6	1.520	ug/L	1.4632	1.520	ug/L	1.4632	96.29%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-3.4	-0.288	ug/L	0.3373	-0.288	ug/L	0.3373	117.25%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.4	1.004	ug/L	0.5791	1.004	ug/L	0.5791	57.70%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.5	0.148	ug/L	2.0091	0.148	ug/L	2.0091	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.7	0.574	ug/L	0.0996	0.574	ug/L	0.0996	17.33%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	115.6	0.176	ug/L	0.1693	0.176	ug/L	0.1693	96.32%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	0.0	0.001	ug/L	0.1116	0.001	ug/L	0.1116	>999.9%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-2.6	-0.550	ug/L	0.4288	-0.550	ug/L	0.4288	77.98%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	40.5	0.204	ug/L	0.1317	0.204	ug/L	0.1317	64.62%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-5.2	-0.182	ug/L	0.2371	-0.182	ug/L	0.2371	129.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Method Loaded
Method Name: 150623A6010B-CINT **Method Last Saved: 06/23/15 1:46:01 PM**
IEC File: 150623A6010IEC.iec **MSF File: 150623A6010MSF.msf**
Method Description: EPA 6010 DOD FINAL

Analyte	Calibration Equation	Processing	View	Internal Standard		IEC
Ag 338.289	Lin Thru 0	MSF	Axial	Y 371.029		No
Al 308.215	Lin Thru 0	MSF	Radial	Y 371.029	Radial	No
As 188.979	Lin Thru 0	MSF	Axial	Y 371.029		No
B	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Be 313.107	Lin Thru 0	MSF	Radial	Y 371.029	Radial	No
Ca 315.887	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Cd 214.440	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Cu 327.393	Lin Thru 0	MSF	Axial	Y 371.029		No
Fe 273.955	Lin Thru 0	MSF	Axial	Y 371.029		No
K 766.490	Lin Thru 0	MSF	Radial	Y 371.029	Radial	No
Mg 285.213	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Mn 257.610	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
P 213.617	Lin Thru 0	MSF	Axial	Y 371.029		No
Pb 220.353	Lin Thru 0	MSF	Axial	Y 371.029		No
Sb 206.836	Lin Thru 0	MSF	Axial	Y 371.029		No
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Ti 337.279	Lin Thru 0	Peak Area	Radial	Y 371.029	Radial	Yes
Tl 190.801	Lin Thru 0	MSF	Axial	Y 371.029		No
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029		Yes
Zn 206.200	Lin Thru 0	MSF	Axial	Y 371.029		No
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a		n/a
Y 371.029 Radial	Lin, Calc Int	Peak Area	Radial	n/a		n/a

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: CalBlk 150623RJS I:PB O:R **Date Collected: 06/23/15 12:48:26 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:32 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CalBlk 150623RJS I:PB O:R

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	878088.7	4775.20	0.54%	100.0	%
Y 371.029 Radial	49174.2	755.91	1.54%	100.0	%
Ag 338.289†	37.7	86.03	228.45%	[0.00]	ug/L
Al 308.215†	5.8	2.20	37.97%	[0.00]	ug/L
As 188.979†	0.1	3.70	>999.9%	[0.00]	ug/L
B†	8.7	10.25	117.21%	[0.00]	ug/L
Ba 233.527†	124.2	9.20	7.41%	[0.00]	ug/L
Be 313.107†	22.6	1.29	5.74%	[0.00]	ug/L
Ca 315.887†	-125.2	10.33	8.26%	[0.00]	ug/L
Cd 214.440†	292.0	15.20	5.21%	[0.00]	ug/L
Co 228.616†	106.3	21.75	20.47%	[0.00]	ug/L
Cr 267.716†	461.4	5.64	1.22%	[0.00]	ug/L
Cu 327.393†	-495.2	2.06	0.42%	[0.00]	ug/L
Fe 273.955†	-89.5	4.65	5.20%	[0.00]	ug/L
K 766.490†	-371.3	39.20	10.56%	[0.00]	ug/L
Mg 285.213†	-108.0	0.85	0.79%	[0.00]	ug/L
Mn 257.610†	-40.5	2.48	6.13%	[0.00]	ug/L
Mo 202.031†	97.5	7.30	7.49%	[0.00]	ug/L
Na 589.592†	-16.5	102.29	619.52%	[0.00]	ug/L
Ni 231.604†	-223.0	10.00	4.49%	[0.00]	ug/L

P 213.617†	-4.0	2.33	58.33%	[0.00] ug/L
Pb 220.353†	-5.8	6.07	105.16%	[0.00] ug/L
Sb 206.836†	-7.4	1.95	26.23%	[0.00] ug/L
Se 196.026†	1.0	5.91	600.08%	[0.00] ug/L
Sn 189.927†	82.2	6.45	7.84%	[0.00] ug/L
Sr 421.552†	1001.4	49.94	4.99%	[0.00] ug/L
Ti 337.279†	-261.1	6.90	2.64%	[0.00] ug/L
Tl 190.801†	-4.0	2.91	72.34%	[0.00] ug/L
V 292.402†	-454.3	20.75	4.57%	[0.00] ug/L
Zn 206.200†	-323.4	0.88	0.27%	[0.00] ug/L

Sequence No.: 2
Sample ID: STD 1 150623RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 06/23/15 12:53:19 PM
Data Type: Reprocessed on 06/30/15 12:33:34 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: STD 1 150623RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	882486.0	7564.21	0.86%	100.5	%
Y 371.029 Radial	49935.0	1777.73	3.56%	101.5	%
Ag 338.289†	12.5	33.74	268.93%	[1.00]	ug/L
Al 308.215†	32.6	3.59	11.00%	[100.00]	ug/L
As 188.979†	3.8	5.48	145.11%	[3.50]	ug/L
B†	44.9	6.25	13.94%	[50.00]	ug/L
Ba 233.527†	235.8	19.72	8.36%	[5.00]	ug/L
Be 313.107†	318.6	10.75	3.37%	[2.00]	ug/L
Ca 315.887†	410.3	13.07	3.18%	[100.00]	ug/L
Cd 214.440†	73.6	12.71	17.28%	[5.00]	ug/L
Co 228.616†	145.9	6.00	4.11%	[5.00]	ug/L
Cr 267.716†	62.8	10.16	16.19%	[5.00]	ug/L
Cu 327.393†	165.9	8.19	4.94%	[5.00]	ug/L
Fe 273.955†	404.0	5.95	1.47%	[50.00]	ug/L
K 766.490†	891.1	76.38	8.57%	[1000.00]	ug/L
Mg 285.213†	270.8	5.93	2.19%	[50]	ug/L
Mn 257.610†	15.6	5.23	33.52%	[5.00]	ug/L
Mo 202.031†	20.4	4.16	20.36%	[5.00]	ug/L
Na 589.592†	4260.8	115.51	2.71%	[1000.00]	ug/L
Ni 231.604†	51.0	8.09	15.86%	[5.00]	ug/L
P 213.617†	58.9	1.90	3.24%	[25.00]	ug/L
Pb 220.353†	17.5	2.08	11.90%	[3.00]	ug/L
Sb 206.836†	8.8	3.40	38.47%	[5.00]	ug/L
Se 196.026†	8.5	5.49	64.19%	[5.00]	ug/L
Sn 189.927†	29.6	1.08	3.64%	[5.00]	ug/L
Sr 421.552†	628.3	71.75	11.42%	[5.00]	ug/L
Ti 337.279†	89.2	7.70	8.63%	[5.00]	ug/L
Tl 190.801†	14.0	2.67	19.06%	[5.00]	ug/L
V 292.402†	49.6	20.89	42.15%	[5.00]	ug/L
Zn 206.200†	820.5	2.79	0.34%	[20.00]	ug/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: STD 2 150623RJS I:PB O:RJ **Date Collected: 06/23/15 12:58:17 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:35 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: STD 2 150623RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	836616.2	3865.76	0.46%	95.28	%
Y 371.029 Radial	49051.8	712.00	1.45%	99.75	%
Ag 338.289†	55741.7	235.99	0.42%	[500.0]	ug/L
Al 308.215†	12194.0	231.09	1.90%	[20000.00]	ug/L
As 188.979†	3455.3	23.91	0.69%	[1000.00]	ug/L
B†	1884.5	46.35	2.46%	[1000.00]	ug/L
Ba 233.527†	137817.6	391.97	0.28%	[1000.00]	ug/L
Be 313.107†	294770.0	8242.64	2.80%	[1000.00]	ug/L
Ca 315.887†	255765.9	6054.69	2.37%	[50000]	ug/L
Cd 214.440†	228541.3	1006.19	0.44%	[1000.00]	ug/L
Co 228.616†	57463.9	290.04	0.50%	[1000.00]	ug/L
Cr 267.716†	84836.4	266.71	0.31%	[1000.00]	ug/L
Cu 327.393†	81724.4	439.09	0.54%	[1000.00]	ug/L
Fe 273.955†	283184.5	1733.69	0.61%	[20000]	ug/L
K 766.490†	36459.9	946.61	2.60%	[20000]	ug/L
Mg 285.213†	449740.7	10538.61	2.34%	[50000]	ug/L
Mn 257.610†	18264.4	338.64	1.85%	[1000.00]	ug/L
Mo 202.031†	28636.8	319.94	1.12%	[1000.00]	ug/L
Na 589.592†	195441.5	4762.71	2.44%	[25000]	ug/L
Ni 231.604†	42926.3	144.98	0.34%	[1000.00]	ug/L
P 213.617†	21503.0	199.63	0.93%	[5000]	ug/L
Pb 220.353†	11311.8	85.47	0.76%	[1000.00]	ug/L
Sb 206.836†	4512.1	65.46	1.45%	[1000.00]	ug/L
Se 196.026†	3535.1	35.57	1.01%	[1000.00]	ug/L
Sn 189.927†	10874.5	96.74	0.89%	[1000.00]	ug/L
Sr 421.552†	570154.4	13569.48	2.38%	[1000.00]	ug/L
Ti 337.279†	31084.2	571.80	1.84%	[1000.00]	ug/L
Tl 190.801†	5452.6	63.83	1.17%	[1000.00]	ug/L
V 292.402†	163630.6	290.07	0.18%	[1000.00]	ug/L
Zn 206.200†	29948.1	207.73	0.69%	[1000.00]	ug/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: STD 3 150623RJS I:PB O:RJ **Date Collected: 06/23/15 1:02:15 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:37 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: STD 3 150623RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	824850.8	5683.21	0.69%	93.94	%
Y 371.029 Radial	48052.0	178.37	0.37%	97.72	%
Ag 338.289†	112957.8	356.15	0.32%	[1000.00]	ug/L
Al 308.215†	25125.0	296.09	1.18%	[40000.00]	ug/L
As 188.979†	6881.4	93.55	1.36%	[2000.00]	ug/L
B†	3862.0	67.78	1.76%	[2000.00]	ug/L
Ba 233.527†	274949.6	798.80	0.29%	[2000.00]	ug/L
Be 313.107†	597676.3	1523.11	0.25%	[2000.00]	ug/L
Ca 315.887†	517060.7	3609.34	0.70%	[100000.0]	ug/L
Cd 214.440†	450523.8	2426.45	0.54%	[2000.00]	ug/L
Co 228.616†	113364.5	511.74	0.45%	[2000.00]	ug/L
Cr 267.716†	169627.5	597.17	0.35%	[2000.00]	ug/L
Cu 327.393†	166726.7	507.79	0.30%	[2000.00]	ug/L
Fe 273.955†	560356.9	1993.93	0.36%	[40000]	ug/L
K 766.490†	75670.7	560.08	0.74%	[40000]	ug/L
Mg 285.213†	900709.5	7487.90	0.83%	[100000]	ug/L
Mn 257.610†	37162.2	308.48	0.83%	[2000.00]	ug/L
Mo 202.031†	56721.0	714.04	1.26%	[2000.00]	ug/L
Na 589.592†	399942.2	3510.81	0.88%	[50000]	ug/L
Ni 231.604†	84696.0	421.50	0.50%	[2000.00]	ug/L
P 213.617†	42585.7	506.23	1.19%	[10000]	ug/L
Pb 220.353†	21909.2	165.59	0.76%	[2000.00]	ug/L
Sb 206.836†	8995.7	77.71	0.86%	[2000.00]	ug/L
Se 196.026†	6925.4	78.60	1.14%	[2000.00]	ug/L
Sn 189.927†	21417.8	250.55	1.17%	[2000.00]	ug/L
Sr 421.552†	1167875.7	11567.19	0.99%	[2000.00]	ug/L
Ti 337.279†	63325.4	661.67	1.04%	[2000.00]	ug/L
Tl 190.801†	10548.7	137.76	1.31%	[2000.00]	ug/L
V 292.402†	330926.1	815.48	0.25%	[2000.00]	ug/L
Zn 206.200†	58733.6	419.57	0.71%	[2000.00]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 338.289	3	Lin Thru 0	0.0	112.7	0.00000	0.999986	
Al 308.215	3	Lin Thru 0	0.0	0.6244	0.00000	0.999930	
As 188.979	3	Lin Thru 0	0.0	3.444	0.00000	0.999998	
B	3	Lin Thru 0	0.0	1.921	0.00000	0.999882	
Ba 233.527	3	Lin Thru 0	0.0	137.5	0.00000	0.999998	
Be 313.107	3	Lin Thru 0	0.0	298.0	0.00000	0.999985	
Ca 315.887	3	Lin Thru 0	0.0	5.160	0.00000	0.999991	
Cd 214.440	3	Lin Thru 0	0.0	225.9	0.00000	0.999981	
Co 228.616	3	Lin Thru 0	0.0	56.84	0.00000	0.999984	
Cr 267.716	3	Lin Thru 0	0.0	84.82	0.00000	0.999998	
Cu 327.393	3	Lin Thru 0	0.0	83.04	0.00000	0.999968	
Fe 273.955	3	Lin Thru 0	0.0	14.04	0.00000	0.999991	
K 766.490	3	Lin Thru 0	0.0	1.878	0.00000	0.999824	
Mg 285.213	3	Lin Thru 0	0.0	9.005	0.00000	1.000000	
Mn 257.610	3	Lin Thru 0	0.0	18.52	0.00000	0.999975	
Mo 202.031	3	Lin Thru 0	0.0	28.42	0.00000	0.999991	
Na 589.592	3	Lin Thru 0	0.0	7.961	0.00000	0.999924	
Ni 231.604	3	Lin Thru 0	0.0	42.46	0.00000	0.999984	
P 213.617	3	Lin Thru 0	0.0	4.267	0.00000	0.999992	
Pb 220.353	3	Lin Thru 0	0.0	11.03	0.00000	0.999916	
Sb 206.836	3	Lin Thru 0	0.0	4.501	0.00000	0.999998	
Se 196.026	3	Lin Thru 0	0.0	3.477	0.00000	0.999965	
Sn 189.927	3	Lin Thru 0	0.0	10.74	0.00000	0.999980	

Sr 421.552	3	Lin Thru 0	0.0	581.2	0.00000	0.999953
Ti 337.279	3	Lin Thru 0	0.0	31.55	0.00000	0.999973
Tl 190.801	3	Lin Thru 0	0.0	5.310	0.00000	0.999909
V 292.402	3	Lin Thru 0	0.0	165.1	0.00000	0.999988
Zn 206.200	3	Lin Thru 0	0.0	29.48	0.00000	0.999963

Sequence No.: 5 **Autosampler Location: 11**
Sample ID: ICV 150623RJS I:PB O:RJS **Date Collected: 06/23/15 1:06:51 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:38 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICV 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	853650.0	97.22	%	0.327				0.34%
Y 371.029 Radial	48351.8	98.33	%	0.247				0.25%
Ag 338.289†	55471.7	492.4	ug/L	2.87	492.4	ug/L	2.87	0.58%
QC value within limits for Ag 338.289 Recovery = 98.47%								
Al 308.215†	15599.5	24980	ug/L	374.0	24980	ug/L	374.0	1.50%
QC value within limits for Al 308.215 Recovery = 99.93%								
As 188.979†	3353.0	973.7	ug/L	5.90	973.7	ug/L	5.90	0.61%
QC value within limits for As 188.979 Recovery = 97.37%								
B†	1871.2	1042	ug/L	32.1	1042	ug/L	32.1	3.08%
QC value within limits for B Recovery = 104.22%								
Ba 233.527†	137329.5	994.3	ug/L	1.08	994.3	ug/L	1.08	0.11%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	299598.6	1005	ug/L	16.5	1005	ug/L	16.5	1.64%
QC value within limits for Be 313.107 Recovery = 100.53%								
Ca 315.887†	134339.3	26030	ug/L	334.7	26030	ug/L	334.7	1.29%
QC value within limits for Ca 315.887 Recovery = 104.11%								
Cd 214.440†	224468.2	992.9	ug/L	3.16	992.9	ug/L	3.16	0.32%
QC value within limits for Cd 214.440 Recovery = 99.29%								
Co 228.616†	57232.7	1006	ug/L	1.9	1006	ug/L	1.9	0.19%
QC value within limits for Co 228.616 Recovery = 100.62%								
Cr 267.716†	84876.8	1002	ug/L	1.3	1002	ug/L	1.3	0.13%
QC value within limits for Cr 267.716 Recovery = 100.16%								
Cu 327.393†	82012.4	987.7	ug/L	7.78	987.7	ug/L	7.78	0.79%
QC value within limits for Cu 327.393 Recovery = 98.77%								
Fe 273.955†	351624.8	25050	ug/L	55.7	25050	ug/L	55.7	0.22%
QC value within limits for Fe 273.955 Recovery = 100.19%								
K 766.490†	46384.4	24710	ug/L	381.0	24710	ug/L	381.0	1.54%
QC value within limits for K 766.490 Recovery = 98.82%								
Mg 285.213†	234522.2	26070	ug/L	352.4	26070	ug/L	352.4	1.35%
QC value within limits for Mg 285.213 Recovery = 104.29%								
Mn 257.610†	18368.2	992.5	ug/L	13.22	992.5	ug/L	13.22	1.33%
QC value within limits for Mn 257.610 Recovery = 99.25%								
Mo 202.031†	27901.5	984.1	ug/L	3.81	984.1	ug/L	3.81	0.39%
QC value within limits for Mo 202.031 Recovery = 98.41%								
Na 589.592†	199400.5	25030	ug/L	427.1	25030	ug/L	427.1	1.71%
QC value within limits for Na 589.592 Recovery = 100.14%								
Ni 231.604†	43406.7	1021	ug/L	2.9	1021	ug/L	2.9	0.28%
QC value within limits for Ni 231.604 Recovery = 102.10%								
P 213.617†	21145.0	4956	ug/L	15.7	4956	ug/L	15.7	0.32%
QC value within limits for P 213.617 Recovery = 99.11%								
Pb 220.353†	11187.2	1015	ug/L	1.7	1015	ug/L	1.7	0.17%
QC value within limits for Pb 220.353 Recovery = 101.46%								
Sb 206.836†	4457.3	990.4	ug/L	3.29	990.4	ug/L	3.29	0.33%
QC value within limits for Sb 206.836 Recovery = 99.04%								
Se 196.026†	3457.0	1002	ug/L	5.7	1002	ug/L	5.7	0.57%
QC value within limits for Se 196.026 Recovery = 100.20%								
Sn 189.927†	5349.4	502.1	ug/L	1.10	502.1	ug/L	1.10	0.22%
QC value within limits for Sn 189.927 Recovery = 100.41%								
Sr 421.552†	593645.5	1021	ug/L	15.7	1021	ug/L	15.7	1.53%
QC value within limits for Sr 421.552 Recovery = 102.14%								
Ti 337.279†	31402.5	995.0	ug/L	16.13	995.0	ug/L	16.13	1.62%
QC value within limits for Ti 337.279 Recovery = 99.50%								
Tl 190.801†	5409.5	1019	ug/L	1.0	1019	ug/L	1.0	0.09%
QC value within limits for Tl 190.801 Recovery = 101.87%								
V 292.402†	163778.7	1008	ug/L	2.5	1008	ug/L	2.5	0.25%
QC value within limits for V 292.402 Recovery = 100.85%								
Zn 206.200†	29361.8	995.9	ug/L	2.78	995.9	ug/L	2.78	0.28%
QC value within limits for Zn 206.200 Recovery = 99.59%								

All analyte(s) passed QC.

Sequence No.: 6 **Autosampler Location: 1**
Sample ID: ICB 150623RJS I:PB O:RJS **Date Collected: 06/23/15 1:12:22 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:40 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICB 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	885864.1	100.9	%	0.23				0.22%
Y 371.029 Radial	50462.2	102.6	%	2.36				2.30%
Ag 338.289†	-30.5	-0.271	ug/L	0.5730	-0.271	ug/L	0.5730	211.62%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	-1.1	-1.726	ug/L	3.0322	-1.726	ug/L	3.0322	175.70%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-1.9	-0.552	ug/L	0.6527	-0.552	ug/L	0.6527	118.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	7.3	3.830	ug/L	1.5270	3.830	ug/L	1.5270	39.87%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	-8.5	-0.063	ug/L	0.0728	-0.063	ug/L	0.0728	115.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	10.0	0.033	ug/L	0.0182	0.033	ug/L	0.0182	54.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	24.2	4.695	ug/L	3.7628	4.695	ug/L	3.7628	80.15%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	106.7	0.472	ug/L	0.0592	0.472	ug/L	0.0592	12.52%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-22.8	-0.401	ug/L	0.1593	-0.401	ug/L	0.1593	39.76%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-19.3	-0.228	ug/L	0.1286	-0.228	ug/L	0.1286	56.42%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	23.3	0.281	ug/L	0.2772	0.281	ug/L	0.2772	98.78%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	26.0	1.851	ug/L	1.3653	1.851	ug/L	1.3653	73.74%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	2.6	1.359	ug/L	10.5128	1.359	ug/L	10.5128	773.63%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	26.8	2.984	ug/L	0.0154	2.984	ug/L	0.0154	0.52%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-2.9	-0.158	ug/L	0.2410	-0.158	ug/L	0.2410	152.75%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	28.8	1.012	ug/L	0.2328	1.012	ug/L	0.2328	23.00%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	38.1	4.778	ug/L	5.8348	4.778	ug/L	5.8348	122.12%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	17.4	0.410	ug/L	0.3466	0.410	ug/L	0.3466	84.58%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	-1.4	-0.331	ug/L	1.0433	-0.331	ug/L	1.0433	315.07%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	6.1	0.557	ug/L	0.7743	0.557	ug/L	0.7743	139.14%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.8	1.961	ug/L	0.6804	1.961	ug/L	0.6804	34.69%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	16.7	4.806	ug/L	1.4289	4.806	ug/L	1.4289	29.73%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	21.2	1.976	ug/L	0.8526	1.976	ug/L	0.8526	43.14%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	129.2	0.222	ug/L	0.2212	0.222	ug/L	0.2212	99.57%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	28.3	0.897	ug/L	0.4930	0.897	ug/L	0.4930	54.96%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	9.3	1.755	ug/L	0.4127	1.755	ug/L	0.4127	23.51%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-20.8	-0.115	ug/L	0.0631	-0.115	ug/L	0.0631	54.73%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	66.5	2.255	ug/L	0.1095	2.255	ug/L	0.1095	4.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICSA 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 06/23/15 1:34:23 PM
Data Type: Reprocessed on 06/30/15 12:33:42 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	806172.2	91.81	%	0.530				0.58%
Y 371.029 Radial	46431.7	94.42	%	1.999				2.12%
Ag 338.289†	-30.4	-0.270	ug/L	0.1923	-0.270	ug/L	0.1923	71.25%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	127571.6	204300	ug/L	5038.2	204300	ug/L	5038.2	2.47%
QC value within limits for Al 308.215 Recovery = 102.15%								
As 188.979†	5.2	1.518	ug/L	0.7453	1.518	ug/L	0.7453	49.09%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	-961.2	36.69	ug/L	16.801	36.69	ug/L	16.801	45.79%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	4777.1	-3,291	ug/L	0.1786	-3.291	ug/L	0.1786	5.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	7.2	0.024	ug/L	0.0122	0.024	ug/L	0.0122	50.47%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	1119932.8	217000	ug/L	5784.2	217000	ug/L	5784.2	2.67%
QC value within limits for Ca 315.887 Recovery = 108.51%								
Cd 214.440†	2365.8	-0.474	ug/L	0.0453	-0.474	ug/L	0.0453	9.56%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	253.1	1.584	ug/L	0.2581	1.584	ug/L	0.2581	16.30%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-185.9	-3.234	ug/L	0.2221	-3.234	ug/L	0.2221	6.87%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-151.3	-1.822	ug/L	0.0890	-1.822	ug/L	0.0890	4.88%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	2718479.9	193600	ug/L	383.3	193600	ug/L	383.3	0.20%
QC value within limits for Fe 273.955 Recovery = 96.82%								
K 766.490†	-18.8	-10.01	ug/L	9.143	-10.01	ug/L	9.143	91.38%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1839921.3	204600	ug/L	5153.3	204600	ug/L	5153.3	2.52%
QC value within limits for Mg 285.213 Recovery = 102.28%								
Mn 257.610†	-12.1	2.581	ug/L	0.1619	2.581	ug/L	0.1619	6.28%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-404.4	-2.941	ug/L	0.1251	-2.941	ug/L	0.1251	4.25%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	257.6	49.53	ug/L	10.309	49.53	ug/L	10.309	20.81%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	-217.3	0.896	ug/L	0.4235	0.896	ug/L	0.4235	47.27%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	108.6	25.46	ug/L	1.784	25.46	ug/L	1.784	7.01%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	18.1	1.644	ug/L	0.9660	1.644	ug/L	0.9660	58.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.7	0.600	ug/L	1.3491	0.600	ug/L	1.3491	224.94%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-241.2	-0.880	ug/L	3.7980	-0.880	ug/L	3.7980	431.34%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-271.3	-6.922	ug/L	0.4271	-6.922	ug/L	0.4271	6.17%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	689.2	0.167	ug/L	0.0539	0.167	ug/L	0.0539	32.20%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	91.5	-0.778	ug/L	0.2997	-0.778	ug/L	0.2997	38.54%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-3.4	-0.648	ug/L	0.8738	-0.648	ug/L	0.8738	134.82%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	7485.5	-1.193	ug/L	0.0900	-1.193	ug/L	0.0900	7.55%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-333.3	-11.30	ug/L	0.228	-11.30	ug/L	0.228	2.01%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSAB 150623RJS I:PB O:RJ
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 06/23/15 1:40:49 PM
Data Type: Reprocessed on 06/30/15 12:33:44 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB 150623RJS I:PB O:RJ

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	805265.4	91.71	%	0.470				0.51%
Y 371.029 Radial	46878.2	95.33	%	2.124				2.23%
Ag 338.289†	116290.7	1032	ug/L	4.8	1032	ug/L	4.8	0.47%
QC value within limits for Ag 338.289 Recovery = 103.22%								
Al 308.215†	126445.5	202500	ug/L	7214.9	202500	ug/L	7214.9	3.56%
QC value within limits for Al 308.215 Recovery = 101.25%								
As 188.979†	1734.4	503.7	ug/L	1.89	503.7	ug/L	1.89	0.38%
QC value within limits for As 188.979 Recovery = 100.73%								
B†	-943.7	41.75	ug/L	9.442	41.75	ug/L	9.442	22.62%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	73789.1	499.1	ug/L	1.05	499.1	ug/L	1.05	0.21%
QC value within limits for Ba 233.527 Recovery = 99.82%								
Be 313.107†	153476.8	515.0	ug/L	16.61	515.0	ug/L	16.61	3.23%
QC value within limits for Be 313.107 Recovery = 103.00%								
Ca 315.887†	1111571.1	215400	ug/L	7253.2	215400	ug/L	7253.2	3.37%
QC value within limits for Ca 315.887 Recovery = 107.70%								
Cd 214.440†	225538.9	987.7	ug/L	0.91	987.7	ug/L	0.91	0.09%
QC value within limits for Cd 214.440 Recovery = 98.77%								
Co 228.616†	29240.7	512.5	ug/L	2.94	512.5	ug/L	2.94	0.57%
QC value within limits for Co 228.616 Recovery = 102.51%								
Cr 267.716†	41965.5	494.3	ug/L	0.44	494.3	ug/L	0.44	0.09%
QC value within limits for Cr 267.716 Recovery = 98.86%								
Cu 327.393†	42835.1	515.9	ug/L	1.08	515.9	ug/L	1.08	0.21%
QC value within limits for Cu 327.393 Recovery = 103.17%								
Fe 273.955†	2700889.6	192400	ug/L	582.8	192400	ug/L	582.8	0.30%
QC value within limits for Fe 273.955 Recovery = 96.19%								
K 766.490†	-17.0	-9.065	ug/L	9.4324	-9.065	ug/L	9.4324	104.06%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	1827309.0	203100	ug/L	6775.0	203100	ug/L	6775.0	3.33%
QC value within limits for Mg 285.213 Recovery = 101.57%								
Mn 257.610†	9320.4	506.6	ug/L	10.71	506.6	ug/L	10.71	2.11%
QC value within limits for Mn 257.610 Recovery = 101.33%								
Mo 202.031†	13757.4	495.8	ug/L	2.32	495.8	ug/L	2.32	0.47%
QC value within limits for Mo 202.031 Recovery = 99.15%								
Na 589.592†	144.6	33.42	ug/L	32.112	33.42	ug/L	32.112	96.09%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	41913.1	992.1	ug/L	2.33	992.1	ug/L	2.33	0.23%
QC value within limits for Ni 231.604 Recovery = 99.21%								
P 213.617†	97.4	22.82	ug/L	2.128	22.82	ug/L	2.128	9.33%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	11084.4	1005	ug/L	7.3	1005	ug/L	7.3	0.73%
QC value within limits for Pb 220.353 Recovery = 100.53%								
Sb 206.836†	2272.9	505.0	ug/L	2.64	505.0	ug/L	2.64	0.52%
QC value within limits for Sb 206.836 Recovery = 101.00%								
Se 196.026†	1519.7	505.0	ug/L	1.78	505.0	ug/L	1.78	0.35%
QC value within limits for Se 196.026 Recovery = 101.00%								
Sn 189.927†	-259.9	-5.712	ug/L	0.3934	-5.712	ug/L	0.3934	6.89%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	689.1	0.177	ug/L	0.1028	0.177	ug/L	0.1028	58.08%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	74.7	-1.231	ug/L	0.2135	-1.231	ug/L	0.2135	17.34%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2578.4	485.6	ug/L	3.23	485.6	ug/L	3.23	0.67%
QC value within limits for Tl 190.801 Recovery = 97.12%								
V 292.402†	90613.7	514.4	ug/L	0.28	514.4	ug/L	0.28	0.05%
QC value within limits for V 292.402 Recovery = 102.87%								
Zn 206.200†	28811.2	977.2	ug/L	2.84	977.2	ug/L	2.84	0.29%
QC value within limits for Zn 206.200 Recovery = 97.72%								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: CCV1 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 06/23/15 1:47:17 PM
Data Type: Reprocessed on 06/30/15 12:33:45 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	839225.4	95.57	%	0.556				0.58%
Y 371.029 Radial	49708.9	101.1	%	0.85				0.85%
Ag 338.289†	55353.4	491.3	ug/L	4.18	491.3	ug/L	4.18	0.85%
QC value within limits for Ag 338.289 Recovery = 98.26%								
Al 308.215†	12289.7	19680	ug/L	471.8	19680	ug/L	471.8	2.40%
QC value within limits for Al 308.215 Recovery = 98.41%								
As 188.979†	3475.0	1009	ug/L	6.8	1009	ug/L	6.8	0.67%
QC value within limits for As 188.979 Recovery = 100.91%								
B†	1871.1	1027	ug/L	33.6	1027	ug/L	33.6	3.27%
QC value within limits for B Recovery = 102.74%								
Ba 233.527†	138028.5	1000	ug/L	2.3	1000	ug/L	2.3	0.23%
QC value within limits for Ba 233.527 Recovery = 100.03%								
Be 313.107†	290414.3	974.5	ug/L	8.84	974.5	ug/L	8.84	0.91%
QC value within limits for Be 313.107 Recovery = 97.45%								
Ca 315.887†	252887.4	49000	ug/L	585.9	49000	ug/L	585.9	1.20%
QC value within limits for Ca 315.887 Recovery = 98.01%								
Cd 214.440†	228710.1	1012	ug/L	1.7	1012	ug/L	1.7	0.17%
QC value within limits for Cd 214.440 Recovery = 101.19%								
Co 228.616†	57624.4	1013	ug/L	2.0	1013	ug/L	2.0	0.19%
QC value within limits for Co 228.616 Recovery = 101.32%								
Cr 267.716†	84750.7	999.9	ug/L	1.93	999.9	ug/L	1.93	0.19%
QC value within limits for Cr 267.716 Recovery = 99.99%								
Cu 327.393†	81499.7	981.5	ug/L	8.89	981.5	ug/L	8.89	0.91%
QC value within limits for Cu 327.393 Recovery = 98.15%								
Fe 273.955†	283528.5	20200	ug/L	29.8	20200	ug/L	29.8	0.15%
QC value within limits for Fe 273.955 Recovery = 100.98%								
K 766.490†	36114.5	19240	ug/L	213.1	19240	ug/L	213.1	1.11%
QC value within limits for K 766.490 Recovery = 96.18%								
Mg 285.213†	444689.3	49410	ug/L	628.9	49410	ug/L	628.9	1.27%
QC value within limits for Mg 285.213 Recovery = 98.81%								
Mn 257.610†	18230.5	983.7	ug/L	27.49	983.7	ug/L	27.49	2.79%
QC value within limits for Mn 257.610 Recovery = 98.37%								
Mo 202.031†	28662.1	1010	ug/L	9.6	1010	ug/L	9.6	0.95%
QC value within limits for Mo 202.031 Recovery = 101.04%								
Na 589.592†	193369.8	24270	ug/L	318.9	24270	ug/L	318.9	1.31%
QC value within limits for Na 589.592 Recovery = 97.10%								
Ni 231.604†	42985.2	1011	ug/L	2.4	1011	ug/L	2.4	0.23%
QC value within limits for Ni 231.604 Recovery = 101.09%								
P 213.617†	21463.0	5030	ug/L	39.2	5030	ug/L	39.2	0.78%
QC value within limits for P 213.617 Recovery = 100.60%								
Pb 220.353†	11288.6	1024	ug/L	5.5	1024	ug/L	5.5	0.54%
QC value within limits for Pb 220.353 Recovery = 102.38%								
Sb 206.836†	4476.0	994.5	ug/L	7.27	994.5	ug/L	7.27	0.73%
QC value within limits for Sb 206.836 Recovery = 99.45%								
Se 196.026†	3513.8	1016	ug/L	11.4	1016	ug/L	11.4	1.12%
QC value within limits for Se 196.026 Recovery = 101.58%								
Sn 189.927†	10871.9	1019	ug/L	7.6	1019	ug/L	7.6	0.75%
QC value within limits for Sn 189.927 Recovery = 101.91%								
Sr 421.552†	564242.7	970.6	ug/L	12.67	970.6	ug/L	12.67	1.31%
QC value within limits for Sr 421.552 Recovery = 97.06%								
Ti 337.279†	31130.5	986.0	ug/L	23.41	986.0	ug/L	23.41	2.37%
QC value within limits for Ti 337.279 Recovery = 98.60%								
Tl 190.801†	5423.5	1021	ug/L	9.9	1021	ug/L	9.9	0.97%
QC value within limits for Tl 190.801 Recovery = 102.14%								
V 292.402†	163881.9	1011	ug/L	3.0	1011	ug/L	3.0	0.30%
QC value within limits for V 292.402 Recovery = 101.06%								
Zn 206.200†	30074.1	1020	ug/L	5.0	1020	ug/L	5.0	0.49%
QC value within limits for Zn 206.200 Recovery = 102.00%								

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB 150623RJS I:PB O:RJS **Date Collected: 06/23/15 1:52:47 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:33:47 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	877714.2	99.96	%	0.767				0.77%
Y 371.029 Radial	49910.9	101.5	%	3.36				3.31%
Ag 338.289†	-28.9	-0.256	ug/L	0.6453	-0.256	ug/L	0.6453	251.85%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	5.7	9.066	ug/L	5.2079	9.066	ug/L	5.2079	57.45%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	4.8	1.393	ug/L	0.8727	1.393	ug/L	0.8727	62.64%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	13.2	6.902	ug/L	1.1436	6.902	ug/L	1.1436	16.57%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	39.2	0.283	ug/L	0.0463	0.283	ug/L	0.0463	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	112.6	0.378	ug/L	0.0326	0.378	ug/L	0.0326	8.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	135.7	26.29	ug/L	2.133	26.29	ug/L	2.133	8.11%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	178.3	0.789	ug/L	0.0138	0.789	ug/L	0.0138	1.75%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	8.0	0.142	ug/L	0.3344	0.142	ug/L	0.3344	234.66%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	26.6	0.314	ug/L	0.1540	0.314	ug/L	0.1540	49.06%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-18.3	-0.220	ug/L	0.1980	-0.220	ug/L	0.1980	89.93%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	116.2	8.273	ug/L	0.3012	8.273	ug/L	0.3012	3.64%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	23.1	12.28	ug/L	23.022	12.28	ug/L	23.022	187.45%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	222.4	24.71	ug/L	1.122	24.71	ug/L	1.122	4.54%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-4.3	-0.235	ug/L	0.0664	-0.235	ug/L	0.0664	28.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	30.9	1.087	ug/L	0.2693	1.087	ug/L	0.2693	24.79%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	174.3	21.88	ug/L	7.227	21.88	ug/L	7.227	33.03%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	16.1	0.379	ug/L	0.2461	0.379	ug/L	0.2461	64.92%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	11.3	2.660	ug/L	0.8299	2.660	ug/L	0.8299	31.20%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	4.2	0.383	ug/L	0.1717	0.383	ug/L	0.1717	44.78%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	9.3	2.077	ug/L	0.5660	2.077	ug/L	0.5660	27.25%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.2	-0.921	ug/L	4.5959	-0.921	ug/L	4.5959	499.16%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	18.9	1.768	ug/L	0.3636	1.768	ug/L	0.3636	20.57%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	234.8	0.404	ug/L	0.1900	0.404	ug/L	0.1900	47.05%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	20.6	0.651	ug/L	0.0839	0.651	ug/L	0.0839	12.88%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	8.5	1.606	ug/L	0.5852	1.606	ug/L	0.5852	36.44%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	42.4	0.273	ug/L	0.1848	0.273	ug/L	0.1848	67.80%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	30.3	1.028	ug/L	0.1071	1.028	ug/L	0.1071	10.42%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 121
Sample ID: CCV2 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 06/24/15 1:58:53 PM
Data Type: Reprocessed on 06/30/15 12:36:10 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV2 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	839526.4	95.61	%	0.336				0.35%
Y 371.029 Radial	49724.7	101.1	%	2.85				2.82%
Ag 338.289†	43597.3	387.0	ug/L	3.69	387.0	ug/L	3.69	0.95%
QC value within limits for Ag 338.289 Recovery = 103.19%								
Al 308.215†	9629.9	15420	ug/L	417.9	15420	ug/L	417.9	2.71%
QC value within limits for Al 308.215 Recovery = 102.81%								
As 188.979†	2676.5	777.2	ug/L	0.84	777.2	ug/L	0.84	0.11%
QC value within limits for As 188.979 Recovery = 103.63%								
B†	1474.0	810.1	ug/L	21.23	810.1	ug/L	21.23	2.62%
QC value within limits for B Recovery = 108.01%								
Ba 233.527†	109267.5	791.8	ug/L	2.76	791.8	ug/L	2.76	0.35%
QC value within limits for Ba 233.527 Recovery = 105.57%								
Be 313.107†	238001.5	798.6	ug/L	10.55	798.6	ug/L	10.55	1.32%
QC value within limits for Be 313.107 Recovery = 106.48%								
Ca 315.887†	207690.8	40250	ug/L	934.8	40250	ug/L	934.8	2.32%
QC value within limits for Ca 315.887 Recovery = 107.32%								
Cd 214.440†	184556.0	816.5	ug/L	6.32	816.5	ug/L	6.32	0.77%
QC value within limits for Cd 214.440 Recovery = 108.87%								
Co 228.616†	45981.4	808.4	ug/L	5.28	808.4	ug/L	5.28	0.65%
QC value within limits for Co 228.616 Recovery = 107.79%								
Cr 267.716†	66935.9	789.7	ug/L	1.91	789.7	ug/L	1.91	0.24%
QC value within limits for Cr 267.716 Recovery = 105.29%								
Cu 327.393†	62989.7	758.6	ug/L	3.67	758.6	ug/L	3.67	0.48%
QC value within limits for Cu 327.393 Recovery = 101.15%								
Fe 273.955†	227096.3	16180	ug/L	75.3	16180	ug/L	75.3	0.47%
QC value within limits for Fe 273.955 Recovery = 107.84%								
K 766.490†	28696.9	15280	ug/L	379.3	15280	ug/L	379.3	2.48%
QC value within limits for K 766.490 Recovery = 101.90%								
Mg 285.213†	355942.9	39550	ug/L	840.1	39550	ug/L	840.1	2.12%
QC value within limits for Mg 285.213 Recovery = 105.46%								
Mn 257.610†	14672.9	791.7	ug/L	20.59	791.7	ug/L	20.59	2.60%
QC value within limits for Mn 257.610 Recovery = 105.56%								
Mo 202.031†	22470.6	792.2	ug/L	2.52	792.2	ug/L	2.52	0.32%
QC value within limits for Mo 202.031 Recovery = 105.62%								
Na 589.592†	154137.5	19350	ug/L	389.2	19350	ug/L	389.2	2.01%
QC value within limits for Na 589.592 Recovery = 103.20%								
Ni 231.604†	34388.3	808.7	ug/L	6.46	808.7	ug/L	6.46	0.80%
QC value within limits for Ni 231.604 Recovery = 107.83%								
P 213.617†	17159.6	4022	ug/L	7.9	4022	ug/L	7.9	0.20%
QC value within limits for P 213.617 Recovery = 107.24%								
Pb 220.353†	8993.0	815.6	ug/L	2.49	815.6	ug/L	2.49	0.31%
QC value within limits for Pb 220.353 Recovery = 108.75%								
Sb 206.836†	3618.7	804.0	ug/L	2.38	804.0	ug/L	2.38	0.30%
QC value within limits for Sb 206.836 Recovery = 107.20%								
Se 196.026†	2800.1	809.5	ug/L	3.94	809.5	ug/L	3.94	0.49%
QC value within limits for Se 196.026 Recovery = 107.93%								
Sn 189.927†	8629.7	809.1	ug/L	2.19	809.1	ug/L	2.19	0.27%
QC value within limits for Sn 189.927 Recovery = 107.88%								
Sr 421.552†	458645.1	789.0	ug/L	15.52	789.0	ug/L	15.52	1.97%
QC value within limits for Sr 421.552 Recovery = 105.20%								
Ti 337.279†	24709.8	782.6	ug/L	20.93	782.6	ug/L	20.93	2.67%
QC value within limits for Ti 337.279 Recovery = 104.35%								
Tl 190.801†	4395.4	827.7	ug/L	3.16	827.7	ug/L	3.16	0.38%
QC value within limits for Tl 190.801 Recovery = 110.37%								
V 292.402†	128030.5	789.5	ug/L	1.35	789.5	ug/L	1.35	0.17%
QC value within limits for V 292.402 Recovery = 105.27%								
Zn 206.200†	24945.1	846.1	ug/L	1.67	846.1	ug/L	1.67	0.20%
QC value greater than the upper limit for Zn 206.200 Recovery = 112.81%								

QC Failed. Continue with analysis.

Sequence No.: 122
Sample ID: CCB 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 06/24/15 2:05:08 PM
Data Type: Reprocessed on 06/30/15 12:36:11 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	877445.0	99.93	%	0.772				0.77%
Y 371.029 Radial	50774.9	103.3	%	1.53				1.49%
Ag 338.289†	-35.1	-0.311	ug/L	0.6596	-0.311	ug/L	0.6596	211.91%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	4.4	7.100	ug/L	7.5355	7.100	ug/L	7.5355	106.13%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-5.4	-1.554	ug/L	1.1798	-1.554	ug/L	1.1798	75.91%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	13.8	7.181	ug/L	2.3321	7.181	ug/L	2.3321	32.47%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	26.3	0.190	ug/L	0.1072	0.190	ug/L	0.1072	56.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	63.0	0.212	ug/L	0.0294	0.212	ug/L	0.0294	13.90%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	59.8	11.58	ug/L	1.609	11.58	ug/L	1.609	13.90%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	66.2	0.294	ug/L	0.0797	0.294	ug/L	0.0797	27.14%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-11.7	-0.204	ug/L	0.2791	-0.204	ug/L	0.2791	137.09%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	44.7	0.528	ug/L	0.0961	0.528	ug/L	0.0961	18.21%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-95.0	-1.144	ug/L	0.2704	-1.144	ug/L	0.2704	23.63%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	52.4	3.735	ug/L	0.3575	3.735	ug/L	0.3575	9.57%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	75.4	40.18	ug/L	17.311	40.18	ug/L	17.311	43.08%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	93.4	10.38	ug/L	2.489	10.38	ug/L	2.489	23.99%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-0.8	-0.044	ug/L	0.6265	-0.044	ug/L	0.6265	>999.9%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	35.7	1.257	ug/L	0.4409	1.257	ug/L	0.4409	35.07%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	591.2	74.23	ug/L	23.320	74.23	ug/L	23.320	31.41%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	14.5	0.340	ug/L	0.2142	0.340	ug/L	0.2142	62.99%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	23.4	5.475	ug/L	1.8967	5.475	ug/L	1.8967	34.65%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-7.1	-0.642	ug/L	0.3014	-0.642	ug/L	0.3014	46.91%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	0.116	ug/L	0.9916	0.116	ug/L	0.9916	851.43%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.4	0.414	ug/L	3.7409	0.414	ug/L	3.7409	902.73%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	19.5	1.813	ug/L	0.0536	1.813	ug/L	0.0536	2.96%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	315.9	0.543	ug/L	0.0582	0.543	ug/L	0.0582	10.70%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	14.5	0.458	ug/L	1.4430	0.458	ug/L	1.4430	315.12%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	9.9	1.865	ug/L	0.2720	1.865	ug/L	0.2720	14.58%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	5.7	0.056	ug/L	0.1663	0.056	ug/L	0.1663	298.46%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-90.9	-3.083	ug/L	0.0681	-3.083	ug/L	0.0681	2.21%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 127
Sample ID: CCV1 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 06/24/15 2:36:14 PM
Data Type: Reprocessed on 06/30/15 12:36:17 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV1 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	848965.3	96.68	%	0.444				0.46%
Y 371.029 Radial	50378.1	102.4	%	0.37				0.36%
Ag 338.289†	58001.7	514.8	ug/L	1.56	514.8	ug/L	1.56	0.30%
QC value within limits for Ag 338.289 Recovery = 102.97%								
Al 308.215†	12370.2	19810	ug/L	161.3	19810	ug/L	161.3	0.81%
QC value within limits for Al 308.215 Recovery = 99.05%								
As 188.979†	3531.1	1025	ug/L	7.0	1025	ug/L	7.0	0.68%
QC value within limits for As 188.979 Recovery = 102.54%								
B†	1899.9	1046	ug/L	13.4	1046	ug/L	13.4	1.28%
QC value within limits for B Recovery = 104.55%								
Ba 233.527†	144145.3	1045	ug/L	4.6	1045	ug/L	4.6	0.44%
QC value within limits for Ba 233.527 Recovery = 104.46%								
Be 313.107†	313265.0	1051	ug/L	6.2	1051	ug/L	6.2	0.59%
QC value within limits for Be 313.107 Recovery = 105.11%								
Ca 315.887†	271042.5	52520	ug/L	346.3	52520	ug/L	346.3	0.66%
QC value within limits for Ca 315.887 Recovery = 105.04%								
Cd 214.440†	242497.7	1073	ug/L	4.4	1073	ug/L	4.4	0.41%
QC value within limits for Cd 214.440 Recovery = 107.29%								
Co 228.616†	60266.2	1060	ug/L	3.4	1060	ug/L	3.4	0.32%
QC value within limits for Co 228.616 Recovery = 105.97%								
Cr 267.716†	88491.7	1044	ug/L	5.3	1044	ug/L	5.3	0.51%
QC value within limits for Cr 267.716 Recovery = 104.40%								
Cu 327.393†	83514.4	1006	ug/L	3.8	1006	ug/L	3.8	0.38%
QC value within limits for Cu 327.393 Recovery = 100.58%								
Fe 273.955†	299392.0	21330	ug/L	100.5	21330	ug/L	100.5	0.47%
QC value within limits for Fe 273.955 Recovery = 106.63%								
K 766.490†	37835.3	20150	ug/L	93.7	20150	ug/L	93.7	0.47%
QC value within limits for K 766.490 Recovery = 100.76%								
Mg 285.213†	467157.9	51900	ug/L	230.5	51900	ug/L	230.5	0.44%
QC value within limits for Mg 285.213 Recovery = 103.81%								
Mn 257.610†	18756.6	1012	ug/L	8.5	1012	ug/L	8.5	0.84%
QC value within limits for Mn 257.610 Recovery = 101.20%								
Mo 202.031†	29908.6	1054	ug/L	7.6	1054	ug/L	7.6	0.72%
QC value within limits for Mo 202.031 Recovery = 105.44%								
Na 589.592†	209487.2	26300	ug/L	91.3	26300	ug/L	91.3	0.35%
QC value within limits for Na 589.592 Recovery = 105.19%								
Ni 231.604†	45196.2	1063	ug/L	3.6	1063	ug/L	3.6	0.34%
QC value within limits for Ni 231.604 Recovery = 106.29%								
P 213.617†	22633.9	5304	ug/L	21.6	5304	ug/L	21.6	0.41%
QC value within limits for P 213.617 Recovery = 106.09%								
Pb 220.353†	11882.4	1078	ug/L	4.0	1078	ug/L	4.0	0.37%
QC value within limits for Pb 220.353 Recovery = 107.77%								
Sb 206.836†	4803.7	1067	ug/L	4.7	1067	ug/L	4.7	0.44%
QC value within limits for Sb 206.836 Recovery = 106.73%								
Se 196.026†	3674.0	1062	ug/L	7.4	1062	ug/L	7.4	0.70%
QC value within limits for Se 196.026 Recovery = 106.22%								
Sn 189.927†	11502.9	1078	ug/L	5.0	1078	ug/L	5.0	0.47%
QC value within limits for Sn 189.927 Recovery = 107.83%								
Sr 421.552†	604408.2	1040	ug/L	4.4	1040	ug/L	4.4	0.43%
QC value within limits for Sr 421.552 Recovery = 103.97%								
Ti 337.279†	31930.1	1011	ug/L	8.9	1011	ug/L	8.9	0.88%
QC value within limits for Ti 337.279 Recovery = 101.13%								
Tl 190.801†	5785.9	1090	ug/L	7.3	1090	ug/L	7.3	0.67%
QC value within limits for Tl 190.801 Recovery = 108.96%								
V 292.402†	170084.5	1049	ug/L	6.1	1049	ug/L	6.1	0.58%
QC value within limits for V 292.402 Recovery = 104.89%								
Zn 206.200†	31523.9	1069	ug/L	6.6	1069	ug/L	6.6	0.62%
QC value within limits for Zn 206.200 Recovery = 106.92%								

All analyte(s) passed QC.

Sequence No.: 128
Sample ID: CCB 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 06/24/15 2:41:43 PM
Data Type: Reprocessed on 06/30/15 12:36:19 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	891022.7	101.5	%	0.30				0.30%
Y 371.029 Radial	50935.7	103.6	%	1.34				1.29%
Ag 338.289†	53.5	0.475	ug/L	0.5763	0.475	ug/L	0.5763	121.32%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	8.8	14.05	ug/L	5.493	14.05	ug/L	5.493	39.11%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.8	0.222	ug/L	0.2722	0.222	ug/L	0.2722	122.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	17.9	9.369	ug/L	1.0027	9.369	ug/L	1.0027	10.70%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	62.5	0.452	ug/L	0.0869	0.452	ug/L	0.0869	19.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	156.5	0,525	ug/L	0.0222	0.525	ug/L	0.0222	4.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	142.4	27.58	ug/L	0.706	27.58	ug/L	0.706	2.56%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	130.8	0.579	ug/L	0.0915	0.579	ug/L	0.0915	15.81%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	4.1	0.076	ug/L	0.2500	0.076	ug/L	0.2500	329.31%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	46.6	0.550	ug/L	0.3284	0.550	ug/L	0.3284	59.69%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-31.9	-0.384	ug/L	0.3364	-0.384	ug/L	0.3364	87.70%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	137.1	9.764	ug/L	0.4047	9.764	ug/L	0.4047	4.14%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	56.8	30.24	ug/L	29.073	30.24	ug/L	29.073	96.14%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	243.3	27.03	ug/L	2.056	27.03	ug/L	2.056	7.61%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	5.6	0.301	ug/L	0.3371	0.301	ug/L	0.3371	112.12%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	38.4	1.353	ug/L	0.1609	1.353	ug/L	0.1609	11.89%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	3037.3	381.5	ug/L	18.78	381.5	ug/L	18.78	4.92%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	35.6	0.838	ug/L	0.3669	0.838	ug/L	0.3669	43.81%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	33.1	7.764	ug/L	0.2240	7.764	ug/L	0.2240	2.88%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	3.3	0.295	ug/L	0.0489	0.295	ug/L	0.0489	16.58%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.9	1.972	ug/L	0.6577	1.972	ug/L	0.6577	33.36%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	7.6	2.174	ug/L	2.8957	2.174	ug/L	2.8957	133.20%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	21.8	2.033	ug/L	1.0538	2.033	ug/L	1.0538	51.85%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	446.4	0.767	ug/L	0.1928	0.767	ug/L	0.1928	25.13%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-9.7	-0.309	ug/L	0.6816	-0.309	ug/L	0.6816	220.83%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	6.8	1.284	ug/L	0.3439	1.284	ug/L	0.3439	26.79%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	103.2	0.646	ug/L	0.0606	0.646	ug/L	0.0606	9.37%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-82.7	-2.804	ug/L	0.1597	-2.804	ug/L	0.1597	5.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 138 **Autosampler Location: 8**
Sample ID: CCV2 150623RJS I:PB O:RJS **Date Collected: 06/24/15 3:44:02 PM**
Analyst: **Data Type: Reprocessed on 06/30/15 12:36:31 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV2 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	840581.3	95.73	%	0.343				0.36%
Y 371.029 Radial	48938.8	99.52	%	1.530				1.54%
Ag 338.289†	43774.0	388.5	ug/L	1.61	388.5	ug/L	1.61	0.41%
QC value within limits for Ag 338.289 Recovery = 103.61%								
Al 308.215†	9674.5	15490	ug/L	366.8	15490	ug/L	366.8	2.37%
QC value within limits for Al 308.215 Recovery = 103.29%								
As 188.979†	2678.5	777.8	ug/L	2.97	777.8	ug/L	2.97	0.38%
QC value within limits for As 188.979 Recovery = 103.71%								
B†	1458.3	802.2	ug/L	19.73	802.2	ug/L	19.73	2.46%
QC value within limits for B Recovery = 106.96%								
Ba 233.527†	110071.1	797.6	ug/L	1.55	797.6	ug/L	1.55	0.19%
QC value within limits for Ba 233.527 Recovery = 106.35%								
Be 313.107†	235900.9	791.5	ug/L	15.81	791.5	ug/L	15.81	2.00%
QC value within limits for Be 313.107 Recovery = 105.54%								
Ca 315.887†	206952.9	40100	ug/L	890.7	40100	ug/L	890.7	2.22%
QC value within limits for Ca 315.887 Recovery = 106.94%								
Cd 214.440†	185102.6	818.9	ug/L	3.19	818.9	ug/L	3.19	0.39%
QC value within limits for Cd 214.440 Recovery = 109.19%								
Co 228.616†	46141.0	811.2	ug/L	3.23	811.2	ug/L	3.23	0.40%
QC value within limits for Co 228.616 Recovery = 108.16%								
Cr 267.716†	67340.9	794.4	ug/L	1.37	794.4	ug/L	1.37	0.17%
QC value within limits for Cr 267.716 Recovery = 105.93%								
Cu 327.393†	63215.5	761.3	ug/L	2.91	761.3	ug/L	2.91	0.38%
QC value within limits for Cu 327.393 Recovery = 101.51%								
Fe 273.955†	228434.5	16270	ug/L	55.5	16270	ug/L	55.5	0.34%
QC value within limits for Fe 273.955 Recovery = 108.48%								
K 766.490†	28919.3	15400	ug/L	402.7	15400	ug/L	402.7	2.61%
QC value within limits for K 766.490 Recovery = 102.69%								
Mg 285.213†	356130.8	39570	ug/L	862.7	39570	ug/L	862.7	2.18%
QC value within limits for Mg 285.213 Recovery = 105.51%								
Mn 257.610†	14722.8	794.4	ug/L	17.49	794.4	ug/L	17.49	2.20%
QC value within limits for Mn 257.610 Recovery = 105.92%								
Mo 202.031†	22571.9	795.8	ug/L	3.56	795.8	ug/L	3.56	0.45%
QC value within limits for Mo 202.031 Recovery = 106.10%								
Na 589.592†	157660.6	19790	ug/L	357.5	19790	ug/L	357.5	1.81%
QC value within limits for Na 589.592 Recovery = 105.56%								
Ni 231.604†	34520.6	811.8	ug/L	3.64	811.8	ug/L	3.64	0.45%
QC value within limits for Ni 231.604 Recovery = 108.24%								
P 213.617†	17071.8	4001	ug/L	24.9	4001	ug/L	24.9	0.62%
QC value within limits for P 213.617 Recovery = 106.69%								
Pb 220.353†	9013.8	817.5	ug/L	4.38	817.5	ug/L	4.38	0.54%
QC value within limits for Pb 220.353 Recovery = 109.00%								
Sb 206.836†	3617.2	803.7	ug/L	4.91	803.7	ug/L	4.91	0.61%
QC value within limits for Sb 206.836 Recovery = 107.16%								
Se 196.026†	2767.0	800.0	ug/L	2.24	800.0	ug/L	2.24	0.28%
QC value within limits for Se 196.026 Recovery = 106.66%								
Sn 189.927†	8670.7	812.9	ug/L	4.07	812.9	ug/L	4.07	0.50%
QC value within limits for Sn 189.927 Recovery = 108.38%								
Sr 421.552†	460753.5	792.6	ug/L	17.11	792.6	ug/L	17.11	2.16%
QC value within limits for Sr 421.552 Recovery = 105.68%								
Ti 337.279†	24756.7	784.1	ug/L	17.07	784.1	ug/L	17.07	2.18%
QC value within limits for Ti 337.279 Recovery = 104.55%								
Tl 190.801†	4404.4	829.5	ug/L	4.08	829.5	ug/L	4.08	0.49%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.59%								
V 292.402†	128925.8	795.0	ug/L	1.97	795.0	ug/L	1.97	0.25%
QC value within limits for V 292.402 Recovery = 106.01%								
Zn 206.200†	24972.4	847.0	ug/L	3.47	847.0	ug/L	3.47	0.41%
QC value greater than the upper limit for Zn 206.200 Recovery = 112.93%								

QC Failed. Continue with analysis.

Sequence No.: 139
Sample ID: CCB 150623RJS I:PB O:RJS
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 06/24/15 3:52:03 PM
Data Type: Reprocessed on 06/30/15 12:36:33 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB 150623RJS I:PB O:RJS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	861145.0	98.07	%	0.340				0.35%
Y 371.029 Radial	50143.6	102.0	%	3.02				2.96%
Ag 338.289†	14.4	0.128	ug/L	0.7902	0.128	ug/L	0.7902	616.74%
QC value within limits for Ag 338.289 Recovery = Not calculated								
Al 308.215†	7.5	12.09	ug/L	3.127	12.09	ug/L	3.127	25.87%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.2	-0.067	ug/L	0.5232	-0.067	ug/L	0.5232	776.41%
QC value within limits for As 188.979 Recovery = Not calculated								
B†	26.0	13.54	ug/L	1.425	13.54	ug/L	1.425	10.53%
QC value within limits for B Recovery = Not calculated								
Ba 233.527†	45.6	0.329	ug/L	0.0899	0.329	ug/L	0.0899	27.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	98.4	0.330	ug/L	0.0330	0.330	ug/L	0.0330	9.99%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 315.887†	81.4	15.75	ug/L	3.385	15.75	ug/L	3.385	21.49%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Cd 214.440†	122.0	0.541	ug/L	0.0761	0.541	ug/L	0.0761	14.07%
QC value within limits for Cd 214.440 Recovery = Not calculated								
Co 228.616†	-2.8	-0.044	ug/L	0.1504	-0.044	ug/L	0.1504	338.12%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	80.0	0.944	ug/L	0.2938	0.944	ug/L	0.2938	31.12%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-121.5	-1.464	ug/L	0.3037	-1.464	ug/L	0.3037	20.75%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 273.955†	105.5	7.513	ug/L	0.4318	7.513	ug/L	0.4318	5.75%
QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.490†	24.1	12.82	ug/L	24.307	12.82	ug/L	24.307	189.55%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 285.213†	145.3	16.14	ug/L	2.478	16.14	ug/L	2.478	15.35%
QC value within limits for Mg 285.213 Recovery = Not calculated								
Mn 257.610†	-5.6	-0.304	ug/L	0.0956	-0.304	ug/L	0.0956	31.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	60.1	2.117	ug/L	0.2694	2.117	ug/L	0.2694	12.73%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	1987.1	249.6	ug/L	6.61	249.6	ug/L	6.61	2.65%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	21.7	0.510	ug/L	0.5417	0.510	ug/L	0.5417	106.20%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 213.617†	29.2	6.853	ug/L	0.3250	6.853	ug/L	0.3250	4.74%
QC value within limits for P 213.617 Recovery = Not calculated								
Pb 220.353†	-0.6	-0.050	ug/L	0.4640	-0.050	ug/L	0.4640	920.68%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.7	1.259	ug/L	1.0027	1.259	ug/L	1.0027	79.65%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	10.9	3.148	ug/L	2.5439	3.148	ug/L	2.5439	80.81%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	25.6	2.389	ug/L	1.3867	2.389	ug/L	1.3867	58.05%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Sr 421.552†	427.7	0.736	ug/L	0.3803	0.736	ug/L	0.3803	51.71%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Ti 337.279†	-2.4	-0.077	ug/L	1.3769	-0.077	ug/L	1.3769	>999.9%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	15.8	2.978	ug/L	0.8414	2.978	ug/L	0.8414	28.25%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	47.0	0.321	ug/L	0.1448	0.321	ug/L	0.1448	45.11%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-108.2	-3.670	ug/L	0.1068	-3.670	ug/L	0.1068	2.91%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: AA FIMS-MHS

Results Data Set (original): 150624-7470
Results Library (original): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb
Results Data Set (reprocessed): 150624-7470X
Results Library (reprocessed): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib. Blank Date Collected: 06/24/15 1:53:46 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:46 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]	-0.0000	0.0008	0.0001	1:54:36 PM	Yes
2		[0.00]	0.0001	0.0014	0.0002	1:55:05 PM	Yes
3		[0.00]	-0.0000	0.0007	0.0001	1:55:34 PM	Yes
Mean:		[0.00]	-0.0000				
SD:		0.0000	0.0000				
%RSD:		0.00%	>999.9%				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: 0.2 Date Collected: 06/24/15 1:55:53 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:46 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	0.0061	0.0016	1:56:43 PM	Yes
2		[0.2]	0.0016	0.0072	0.0017	1:57:12 PM	Yes
3		[0.2]	0.0016	0.0081	0.0018	1:57:40 PM	Yes
Mean:		[0.2]	0.0015				
SD:		0.000	0.0001				
%RSD:		0.00%	5.67				

Standard number 1 applied. [0.2]
Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: 0.5 Date Collected: 06/24/15 1:58:00 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:48 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]	0.0043	0.0196	0.0045	1:58:49 PM	Yes
2		[0.5]	0.0041	0.0176	0.0042	1:59:18 PM	Yes
3		[0.5]	0.0041	0.0178	0.0043	1:59:47 PM	Yes
Mean:		[0.5]	0.0042				
SD:		0.000	0.0001				
%RSD:		0.00%	2.78				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 Date Collected: 06/24/15 2:00:06 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:48 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]	0.0082	0.0349	0.0084	2:00:56 PM	Yes
2		[1]	0.0081	0.0350	0.0083	2:01:25 PM	Yes
3		[1]	0.0083	0.0361	0.0085	2:01:54 PM	Yes
Mean:		[1]	0.0082				
SD:		0.00	0.0001				
%RSD:		0.00%	1.18				

Standard number 3 applied. [1]
Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 Date Collected: 06/24/15 2:02:13 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:49 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]	0.0168	0.0704	0.0170	2:03:04 PM	Yes
2		[2]	0.0167	0.0703	0.0169	2:03:33 PM	Yes
3		[2]	0.0168	0.0721	0.0170	2:04:02 PM	Yes
Mean:		[2]	0.0168				
SD:		0.00	0.0001				
%RSD:		0.00%	0.44				

Standard number 4 applied. [2]
Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 Date Collected: 06/24/15 2:04:22 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:49 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]	0.0404	0.1680	0.0406	2:05:12 PM	Yes
2		[5]	0.0401	0.1688	0.0403	2:05:41 PM	Yes
3		[5]	0.0404	0.1686	0.0405	2:06:09 PM	Yes
Mean:		[5]	0.0403				
SD:		0.00	0.0002				
%RSD:		0.00%	0.38				

Standard number 5 applied. [5]
Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 Date Collected: 06/24/15 2:06:30 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:49 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]	0.0818	0.3420	0.0820	2:07:21 PM	Yes
2		[10]	0.0813	0.3397	0.0815	2:07:50 PM	Yes
3		[10]	0.0814	0.3372	0.0816	2:08:19 PM	Yes
Mean:		[10]	0.0815				
SD:		0.00	0.0003				
%RSD:		0.00%	0.31				

Standard number 6 applied. [10]
Correlation Coef.: 0.999954 Slope: 0.00814 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	0.0015	0.2	0.190	0.00	5.67
0.5	0.0042	0.5	0.512	0.00	2.78
1	0.0082	1.0	1.009	0.00	1.18
2	0.0168	2.0	2.061	0.00	0.44
5	0.0403	5.0	4.950	0.00	0.38
10	0.0815	10.0	10.011	0.00	0.31

Correlation Coef.: 0.999954 Slope: 0.00814 Intercept: 0.00000

==========

Sequence No.: 8 Autosampler Location: 9
Sample ID: ICV 06/24/15 RE Date Collected: 06/24/15 2:20:59 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:49 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICV 06/24/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.101	4.101	0.0334	0.1367	0.0336	2:21:48 PM	Yes
2	4.124	4.124	0.0336	0.1392	0.0337	2:22:17 PM	Yes
3	4.131	4.131	0.0336	0.1395	0.0338	2:22:46 PM	Yes
Mean:	4.118	4.118	0.0335				
SD:	0.0156	0.0156	0.0001				
%RSD:	0.38%	0.38%	0.38				

QC value within limits for Hg 253.7 Recovery = 102.96%
All analyte(s) passed QC.

==========

Sequence No.: 9 Autosampler Location: 1
Sample ID: ICB 06/24/15 RE Date Collected: 06/24/15 2:23:05 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:49 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: ICB 06/24/15 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	-0.0006	0.0000	2:23:55 PM	Yes
2	-0.002	-0.002	-0.0000	0.0010	0.0001	2:24:24 PM	Yes
3	-0.016	-0.016	-0.0001	-0.0015	0.0000	2:24:52 PM	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.0081	0.0081	0.0001				
%RSD:	70.39%	70.39%	70.39				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 10 Autosampler Location: 6
Sample ID: CCV 06/24/15 RE Date Collected: 06/24/15 2:25:12 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:50 PM

Reprocessing Begun
Logged In Analyst: chemist_metals Technique: AA FIMS-MHS

Results Data Set (original): 150708A-7470
Results Library (original): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb
Results Data Set (reprocessed): 150708A-7470X
Results Library (reprocessed): C:\Users\Public\PerkinElmer\AA\Data\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib. Blank Date Collected: 07/09/15 11:09:00 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:02 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]	0.0002	0.0018	0.0003	11:09:56 AM	Yes
2		[0.00]	-0.0002	-0.0017	-0.0000	11:10:25 AM	Yes
3		[0.00]	0.0000	0.0017	0.0002	11:10:54 AM	Yes
Mean:		[0.00]	0.0000				
SD:		0.0000	0.0002				
%RSD:		0.00%	>999.9%				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: 0.2 Date Collected: 07/09/15 11:11:13 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:02 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]	0.0013	0.0066	0.0015	11:12:03 AM	Yes
2		[0.2]	0.0013	0.0065	0.0015	11:12:32 AM	Yes
3		[0.2]	0.0014	0.0077	0.0016	11:13:00 AM	Yes
Mean:		[0.2]	0.0014				
SD:		0.000	0.0001				
%RSD:		0.00%	5.19				

Standard number 1 applied. [0.2]
Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: 0.5 Date Collected: 07/09/15 11:13:20 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:02 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]	0.0034	0.0142	0.0036	11:14:10 AM	Yes
2		[0.5]	0.0036	0.0161	0.0038	11:14:38 AM	Yes
3		[0.5]	0.0036	0.0154	0.0038	11:15:07 AM	Yes
Mean:		[0.5]	0.0036				
SD:		0.000	0.0001				
%RSD:		0.00%	3.60				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

Sequence No.: 4 Autosampler Location: 4
Sample ID: 1 Date Collected: 07/09/15 11:15:26 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:02 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]	0.0076	0.0337	0.0077	11:16:16 AM	Yes
2		[1]	0.0075	0.0332	0.0076	11:16:45 AM	Yes
3		[1]	0.0073	0.0312	0.0075	11:17:13 AM	Yes
Mean:		[1]	0.0075				
SD:		0.00	0.0001				
%RSD:		0.00%	1.45				

Standard number 3 applied. [1]
Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 Date Collected: 07/09/15 11:17:33 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:03 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]	0.0150	0.0649	0.0152	11:18:23 AM	Yes
2		[2]	0.0150	0.0659	0.0152	11:18:52 AM	Yes
3		[2]	0.0150	0.0653	0.0152	11:19:21 AM	Yes
Mean:		[2]	0.0150				
SD:		0.00	0.0000				
%RSD:		0.00%	0.14				

Standard number 4 applied. [2]
Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 Date Collected: 07/09/15 11:19:41 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:03 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]	0.0371	0.1618	0.0373	11:20:31 AM	Yes
2		[5]	0.0370	0.1602	0.0372	11:20:59 AM	Yes
3		[5]	0.0369	0.1593	0.0370	11:21:28 AM	Yes
Mean:		[5]	0.0370				
SD:		0.00	0.0001				
%RSD:		0.00%	0.33				

Standard number 5 applied. [5]
Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 Date Collected: 07/09/15 11:21:49 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:03 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]	0.0739	0.3229	0.0741	11:22:39 AM	Yes
2		[10]	0.0732	0.3190	0.0734	11:23:08 AM	Yes
3		[10]	0.0733	0.3185	0.0735	11:23:36 AM	Yes
Mean:		[10]	0.0735				
SD:		0.00	0.0004				
%RSD:		0.00%	0.50				

Standard number 6 applied. [10]
Correlation Coef.: 0.999978 Slope: 0.00736 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	0.0014	0.2	0.184	0.00	5.19
0.5	0.0036	0.5	0.484	0.00	3.60
1	0.0075	1.0	1.012	0.00	1.45
2	0.0150	2.0	2.041	0.00	0.14
5	0.0370	5.0	5.022	0.00	0.33
10	0.0735	10.0	9.980	0.00	0.50

Correlation Coef.: 0.999978 Slope: 0.00736 Intercept: 0.00000

==========

Sequence No.: 8
Sample ID: ICV 07/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 07/09/15 11:23:57 AM
Data Type: Reprocessed on 07/09/15 12:37:03 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV 07/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.981	3.981	0.0293	0.1275	0.0295	11:24:46 AM	Yes
2	3.980	3.980	0.0293	0.1269	0.0295	11:25:15 AM	Yes
3	3.983	3.983	0.0293	0.1275	0.0295	11:25:44 AM	Yes
Mean:	3.981	3.981	0.0293				
SD:	0.0014	0.0014	0.0000				
%RSD:	0.03%	0.03%	0.03				

QC value within limits for Hg 253.7 Recovery = 99.53%
All analyte(s) passed QC.

==========

Sequence No.: 9
Sample ID: ICB 07/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 07/09/15 11:26:03 AM
Data Type: Reprocessed on 07/09/15 12:37:03 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB 07/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0001	-0.0006	0.0000	11:26:53 AM	Yes
2	-0.023	-0.023	-0.0002	-0.0017	-0.0000	11:27:22 AM	Yes
3	-0.024	-0.024	-0.0002	-0.0008	-0.0000	11:27:50 AM	Yes
Mean:	-0.022	-0.022	-0.0002				
SD:	0.0020	0.0020	0.0000				
%RSD:	8.75%	8.75%	8.75				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 10
Sample ID: CCV 07/09/15 RE
Analyst:

Autosampler Location: 6
Date Collected: 07/09/15 11:28:10 AM
Data Type: Reprocessed on 07/09/15 12:37:04 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)	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	BORON (B)	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	LITHIUM (LI)	0.67 J	1.0	0.80	0.40	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ZINC (ZN)	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
6010C	ALUMINUM (AL) (DI	80.00 U	300.0	80.00	27.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	BORON (B) (DISSO	40.00 U	50.0	40.00	29.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	LITHIUM (LI) (DISSO	0.53 J	1.0	0.80	0.40	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
6010C	ZINC (ZN) (DISSOL	20.00 U	150.0	20.00	13.70	ug/L	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	07/08/15	07/09/15	#TCLPG-150708A-AZ17910
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	BARIUM (BA)	2.00 U	50.0	2.00	0.75	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	CHROMIUM (CR)	2.00 U	50.0	2.00	1.37	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
6010C	SILVER (AG)	0.78 J	10.0	0.75	0.25	ug/L	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
7470A	MERCURY (HG)	0.15 U	0.2	0.15	0.06	ug/L	06/24/15	06/24/15	#TCLPG-150624A-AZ17911
6010C	ARSENIC (AS)	2.50 U	50.0	2.50	2.45	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	BARIUM (BA)	19.6 J	50.0	2.00	0.75	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CADMIUM (CD)	1.00 U	50.0	1.00	0.51	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	CHROMIUM (CR)	2.0 J	50.0	2.00	1.37	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	LEAD (PB)	2.00 U	50.0	2.00	1.58	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SELENIUM (SE)	5.00 U	50.0	5.00	3.17	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
6010C	SILVER (AG)	0.65 J	10.0	0.75	0.25	ug/L	06/24/15	06/24/15	#TCLPM-150624A-AZ17911

J = Estimated value.

Metals SC-Blank-REG MDLs
Printed: 07/13/15 4:50:05 PM

Sequence No.: 13
Sample ID: 150701A-3010 BLK
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 40
Date Collected: 07/06/15 12:22:13 PM
Data Type: Reprocessed on 07/07/15 8:53:43 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150701A-3010 BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	240977.7	101.1	%	1.61				1.59%
Y Radial	16528.3	101.7	%	2.28				2.24%
Ag 338.289†	42.9	0.222	ug/L	0.3245	0.222	ug/L	0.3245	145.95%
Al 308.215†	-7.2	-5.240	ug/L	5.5018	-5.240	ug/L	5.5018	104.99%
As 188.979†	-4.6	-0.894	ug/L	0.5599	-0.894	ug/L	0.5599	62.63%
B 249.677†	71.1	2.043	ug/L	0.3613	2.043	ug/L	0.3613	17.68%
Ba 233.527†	-7.7	-0.018	ug/L	0.0328	-0.018	ug/L	0.0328	180.05%
Be 313.107†	68.6	0.019	ug/L	0.0136	0.019	ug/L	0.0136	70.09%
Ca 315.887†	425.3	26.41	ug/L	0.501	26.41	ug/L	0.501	1.90%
Cd 214.440†	-30.5	-0.104	ug/L	0.0213	-0.104	ug/L	0.0213	20.43%
Co 228.616†	6.5	0.066	ug/L	0.0547	0.066	ug/L	0.0547	82.31%
Cr 267.716†	11.1	0.129	ug/L	0.0746	0.129	ug/L	0.0746	57.99%
Cu 327.393†	1667.2	7.977	ug/L	0.3227	7.977	ug/L	0.3227	4.04%
Fe 273.955†	625.0	7.838	ug/L	0.3637	7.838	ug/L	0.3637	4.64%
K 766.490†	121.7	14.03	ug/L	5.052	14.03	ug/L	5.052	36.01%
Mg 285.213†	111.3	6.271	ug/L	0.4373	6.271	ug/L	0.4373	6.97%
Mn 257.610†	3.9	0.042	ug/L	0.0810	0.042	ug/L	0.0810	192.40%
Mo 202.031†	12.8	0.356	ug/L	0.1104	0.356	ug/L	0.1104	31.01%
Na 589.592†	180.5	16.10	ug/L	2.461	16.10	ug/L	2.461	15.29%
Ni 231.604†	7.2	0.145	ug/L	0.1443	0.145	ug/L	0.1443	99.53%
P 213.617†	-1.1	-0.334	ug/L	1.3740	-0.334	ug/L	1.3740	411.26%
Pb 220.353†	5.4	1.017	ug/L	0.3981	1.017	ug/L	0.3981	39.14%
Sb 206.836†	-4.4	-0.585	ug/L	0.3675	-0.585	ug/L	0.3675	62.78%
Se 196.026†	0.8	0.259	ug/L	1.4783	0.259	ug/L	1.4783	569.72%
Sn 189.927†	9.9	1.757	ug/L	0.2903	1.757	ug/L	0.2903	16.52%
Sr 421.552†	7.2	0.009	ug/L	0.0179	0.009	ug/L	0.0179	199.76%
Ti 337.279†	-3.5	-0.088	ug/L	0.1985	-0.088	ug/L	0.1985	226.19%
Tl 190.801†	4.8	1.256	ug/L	1.1973	1.256	ug/L	1.1973	95.30%
V 292.402†	-1.6	-0.016	ug/L	0.0274	-0.016	ug/L	0.0274	169.79%
Zn 206.200†	93.7	0.979	ug/L	0.2609	0.979	ug/L	0.2609	26.65%
Li 670.784	16350.8	0.674	ug/L	0.0173	0.674	ug/L	0.0173	2.56%

Sequence No.: 12
Sample ID: 150701A-3010 BLK
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 39
Date Collected: 07/10/15 10:02:33 AM
Data Type: Reprocessed on 07/13/15 8:58:57 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150701A-3010 BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	244359.6	102.4	%	0.28				0.28%
Y Radial	17039.3	106.5	%	3.87				3.64%
Ag 338.289†	104.8	0.560	ug/L	0.1198	0.560	ug/L	0.1198	21.39%
Al 308.215†	-17.2	-12.63	ug/L	1.115	-12.63	ug/L	1.115	8.83%
As 188.979†	1.3	0.240	ug/L	0.3304	0.240	ug/L	0.3304	137.45%
B 249.677†	91.9	2.576	ug/L	0.1498	2.576	ug/L	0.1498	5.82%
Ba 233.527†	75.2	0.174	ug/L	0.0463	0.174	ug/L	0.0463	26.62%
Be 313.107†	35.7	0.009	ug/L	0.0056	0.009	ug/L	0.0056	59.10%
Ca 315.887†	463.4	29.18	ug/L	1.191	29.18	ug/L	1.191	4.08%
Cd 214.440†	-96.0	-0.329	ug/L	0.0234	-0.329	ug/L	0.0234	7.11%
Co 228.616†	42.7	0.434	ug/L	0.0493	0.434	ug/L	0.0493	11.35%
Cr 267.716†	-2.3	-0.028	ug/L	0.0424	-0.028	ug/L	0.0424	153.51%
Cu 327.393†	1763.7	8.556	ug/L	0.4281	8.556	ug/L	0.4281	5.00%
Fe 273.955†	740.2	9.410	ug/L	0.5388	9.410	ug/L	0.5388	5.73%
K 766.490†	254.5	31.40	ug/L	9.260	31.40	ug/L	9.260	29.49%
Mg 285.213†	143.1	8.214	ug/L	0.5477	8.214	ug/L	0.5477	6.67%
Mn 257.610†	25.0	0.280	ug/L	0.0243	0.280	ug/L	0.0243	8.66%
Mo 202.031†	45.2	1.287	ug/L	0.2439	1.287	ug/L	0.2439	18.95%
Na 589.592†	101.4	10.23	ug/L	4.855	10.23	ug/L	4.855	47.46%
Ni 231.604†	26.7	0.542	ug/L	0.1391	0.542	ug/L	0.1391	25.68%
P 213.617†	-8.3	-2.450	ug/L	1.2334	-2.450	ug/L	1.2334	50.34%
Pb 220.353†	-12.4	-2.001	ug/L	0.6500	-2.001	ug/L	0.6500	32.48%
Sb 206.836†	-4.2	-0.537	ug/L	0.6192	-0.537	ug/L	0.6192	115.21%
Se 196.026†	-3.2	-0.955	ug/L	1.6932	-0.955	ug/L	1.6932	177.26%
Sn 189.927†	13.8	2.524	ug/L	0.4061	2.524	ug/L	0.4061	16.09%
Sr 421.552†	50.6	0.081	ug/L	0.0067	0.081	ug/L	0.0067	8.28%
Ti 337.279†	37.3	0.965	ug/L	0.1976	0.965	ug/L	0.1976	20.48%
Tl 190.801†	3.6	0.673	ug/L	0.6444	0.673	ug/L	0.6444	95.73%
V 292.402†	-30.9	-0.291	ug/L	0.0685	-0.291	ug/L	0.0685	23.55%
Zn 206.200†	-637.4	-6.673	ug/L	0.1517	-6.673	ug/L	0.1517	2.27%
Li 670.784	11943.0	0.531	ug/L	0.0033	0.531	ug/L	0.0033	0.62%

Sequence No.: 12
Sample ID: 150707A-3010T-BLK
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 07/08/15 12:57:28 PM
Data Type: Reprocessed on 07/09/15 9:08:58 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150707A-3010T-BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1148992.4	101.7	%	0.49				0.48%
Y 371.029 Radial	57012.2	99.51	%	0.531				0.53%
Ag 338.289†	89.0	0.777	ug/L	0.2564	0.777	ug/L	0.2564	33.01%
Al 308.215†	8.5	13.36	ug/L	3.114	13.36	ug/L	3.114	23.31%
As 188.979†	3.3	0.832	ug/L	1.0619	0.832	ug/L	1.0619	127.68%
B†	3.8	2.204	ug/L	3.6820	2.204	ug/L	3.6820	167.03%
Ba 233.527†	-9.7	-0.071	ug/L	0.0967	-0.071	ug/L	0.0967	135.24%
Be 313.107†	0.8	0.003	ug/L	0.0157	0.003	ug/L	0.0157	570.85%
Ca 315.887†	126.6	24.32	ug/L	1.793	24.32	ug/L	1.793	7.37%
Cd 214.440†	33.2	0.139	ug/L	0.0732	0.139	ug/L	0.0732	52.48%
Co 228.616†	2.6	0.047	ug/L	0.2728	0.047	ug/L	0.2728	578.62%
Cr 267.716†	19.9	0.196	ug/L	0.1006	0.196	ug/L	0.1006	51.37%
Cu 327.393†	52.3	0.567	ug/L	0.1847	0.567	ug/L	0.1847	32.56%
Fe 273.955†	21.5	1.628	ug/L	0.2788	1.628	ug/L	0.2788	17.13%
K 766.490†	-50.6	-24.19	ug/L	11.363	-24.19	ug/L	11.363	46.98%
Mg 285.213†	91.4	9.707	ug/L	0.7214	9.707	ug/L	0.7214	7.43%
Mn 257.610†	1.4	0.086	ug/L	0.2814	0.086	ug/L	0.2814	326.85%
Mo 202.031†	26.9	0.798	ug/L	0.2091	0.798	ug/L	0.2091	26.22%
Na 589.592†	141.2	15.54	ug/L	12.538	15.54	ug/L	12.538	80.67%
Ni 231.604†	-12.6	-0.271	ug/L	0.2683	-0.271	ug/L	0.2683	99.01%
P 213.617†	-0.2	-0.051	ug/L	1.2852	-0.051	ug/L	1.2852	>999.9%
Pb 220.353†	-2.4	-0.201	ug/L	0.2137	-0.201	ug/L	0.2137	106.35%
Sb 206.836†	3.0	0.674	ug/L	0.1975	0.674	ug/L	0.1975	29.31%
Se 196.026†	-1.5	-0.407	ug/L	0.4467	-0.407	ug/L	0.4467	109.78%
Sn 189.927†	51.2	4.378	ug/L	0.4053	4.378	ug/L	0.4053	9.26%
Sr 421.552†	83.3	0.126	ug/L	0.2070	0.126	ug/L	0.2070	163.71%
Ti 337.279†	9.5	0.271	ug/L	0.2167	0.271	ug/L	0.2167	80.11%
Tl 190.801†	1.8	0.381	ug/L	0.4158	0.381	ug/L	0.4158	109.02%
V 292.402†	13.4	0.079	ug/L	0.2288	0.079	ug/L	0.2288	289.90%
Zn 206.200†	14.2	0.498	ug/L	0.0385	0.498	ug/L	0.0385	7.73%

Sequence No.: 123
Sample ID: 150624A-3010T-BLK
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 06/24/15 2:09:59 PM
Data Type: Reprocessed on 06/30/15 12:36:13 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150624A-3010T-BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	770479.0	87.75	%	0.263				0.30%
Y 371.029 Radial	47821.6	97.25	%	0.266				0.27%
Ag 338.289†	73.4	0.652	ug/L	0.2428	0.652	ug/L	0.2428	37.25%
Al 308.215†	5.0	8.025	ug/L	6.8142	8.025	ug/L	6.8142	84.91%
As 188.979†	4.3	1.256	ug/L	0.2358	1.256	ug/L	0.2358	18.78%
B†	13.4	14.67	ug/L	1.578	14.67	ug/L	1.578	10.75%
Ba 233.527†	2736.7	19.62	ug/L	0.148	19.62	ug/L	0.148	0.76%
Be 313.107†	13.5	0.045	ug/L	0.0055	0.045	ug/L	0.0055	12.09%
Ca 315.887†	14.3	-47.75	ug/L	1.673	-47.75	ug/L	1.673	3.50%
Cd 214.440†	117.2	0.101	ug/L	0.1302	0.101	ug/L	0.1302	128.71%
Co 228.616†	6.2	-0.628	ug/L	0.1869	-0.628	ug/L	0.1869	29.75%
Cr 267.716†	206.3	2.034	ug/L	0.0992	2.034	ug/L	0.0992	4.88%
Cu 327.393†	-50.2	-0.605	ug/L	0.6420	-0.605	ug/L	0.6420	106.12%
Fe 273.955†	85.8	6.115	ug/L	0.5118	6.115	ug/L	0.5118	8.37%
K 766.490†	1138.0	606.1	ug/L	39.48	606.1	ug/L	39.48	6.51%
Mg 285.213†	-9.8	-11.96	ug/L	1.082	-11.96	ug/L	1.082	9.05%
Mn 257.610†	-8.5	-1.291	ug/L	0.0229	-1.291	ug/L	0.0229	1.77%
Mo 202.031†	155.0	7.217	ug/L	0.3206	7.217	ug/L	0.3206	4.44%
Na 589.592†	10334102.9	1298000	ug/L	17550.2	1298000	ug/L	17550.2	1.35%
Ni 231.604†	-33.3	-1.695	ug/L	0.1861	-1.695	ug/L	0.1861	10.98%
P 213.617†	20.2	4.733	ug/L	1.1267	4.733	ug/L	1.1267	23.81%
Pb 220.353†	-1.1	-0.096	ug/L	0.5181	-0.096	ug/L	0.5181	540.03%
Sb 206.836†	1.7	0.367	ug/L	1.4716	0.367	ug/L	1.4716	400.48%
Se 196.026†	16.3	-10.87	ug/L	2.828	-10.87	ug/L	2.828	26.00%
Sn 189.927†	63.3	21.52	ug/L	0.489	21.52	ug/L	0.489	2.27%
Sr 421.552†	808.0	-0.669	ug/L	0.1901	-0.669	ug/L	0.1901	28.41%
Ti 337.279†	8.7	-0.092	ug/L	0.3222	-0.092	ug/L	0.3222	351.97%
Tl 190.801†	-0.3	-0.059	ug/L	0.7828	-0.059	ug/L	0.7828	>999.9%
V 292.402†	-100.1	-3.250	ug/L	0.1558	-3.250	ug/L	0.1558	4.79%
Zn 206.200†	-132.8	-4.503	ug/L	0.1748	-4.503	ug/L	0.1748	3.88%

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	1790	89.5	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	BORON (B) (DISSOLVED)	250	233	93.2	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	LITHIUM (LI) (DISSOLVED)	100.0	105	105	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ZINC (ZN) (DISSOLVED)	500	472	94.4	80-120	07/01/15	07/10/15	#61CJU-150701A2-AZ17907
EPA 6010C	ALUMINUM (AL)	2000	2150	108	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	BORON (B)	250	235	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	LITHIUM (LI)	100.0	93.3	93.3	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694
EPA 6010C	ZINC (ZN)	500	470	94.0	80-120	07/01/15	07/06/15	#61CJU-150701A1-AZ17694

Comments: _____

Sequence No.: 13
Sample ID: 150701A-3010 LCS
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 40
Date Collected: 07/10/15 10:08:18 AM
Data Type: Reprocessed on 07/13/15 8:58:58 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150701A-3010 LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	240274.2	100.7	%	0.54				0.53%
Y Radial	17493.3	109.3	%	7.73				7.07%
Ag 338.289†	18584.5	99.33	ug/L	0.646	99.33	ug/L	0.646	0.65%
Al 308.215†	2439.8	1789	ug/L	121.12	1789	ug/L	121.12	6.77%
As 188.979†	1225.7	226.7	ug/L	2.03	226.7	ug/L	2.03	0.90%
B 249.677†	8339.9	232.9	ug/L	1.38	232.9	ug/L	1.38	0.59%
Ba 233.527†	105305.3	245.6	ug/L	1.25	245.6	ug/L	1.25	0.51%
Be 313.107†	172009.6	45.63	ug/L	0.192	45.63	ug/L	0.192	0.42%
Ca 315.887†	374049.7	23550	ug/L	1664.45	23550	ug/L	1664.45	7.07%
Cd 214.440†	13920.1	48.32	ug/L	0.359	48.32	ug/L	0.359	0.74%
Co 228.616†	24686.1	249.8	ug/L	1.25	249.8	ug/L	1.25	0.50%
Cr 267.716†	21888.4	256.7	ug/L	1.59	256.7	ug/L	1.59	0.62%
Cu 327.393†	50015.5	242.8	ug/L	1.34	242.8	ug/L	1.34	0.55%
Fe 273.955†	78052.9	970.5	ug/L	4.55	970.5	ug/L	4.55	0.47%
K 766.490†	38089.8	4674	ug/L	319.37	4674	ug/L	319.37	6.83%
Mg 285.213†	400538.8	22970	ug/L	1601.30	22970	ug/L	1601.30	6.97%
Mn 257.610†	21198.9	236.5	ug/L	15.44	236.5	ug/L	15.44	6.53%
Mo 202.031†	8622.0	246.0	ug/L	1.91	246.0	ug/L	1.91	0.77%
Na 589.592†	259180.5	26230	ug/L	1834.50	26230	ug/L	1834.50	6.99%
Ni 231.604†	11816.3	239.9	ug/L	1.22	239.9	ug/L	1.22	0.51%
P 213.617†	6386.2	1891	ug/L	7.08	1891	ug/L	7.08	0.37%
Pb 220.353†	1252.1	204.3	ug/L	2.15	204.3	ug/L	2.15	1.05%
Sb 206.836†	1752.6	223.5	ug/L	0.81	223.5	ug/L	0.81	0.36%
Se 196.026†	748.6	225.9	ug/L	1.45	225.9	ug/L	1.45	0.64%
Sn 189.927†	1306.5	239.1	ug/L	1.10	239.1	ug/L	1.10	0.46%
Sr 421.552†	164630.3	267.0	ug/L	18.39	267.0	ug/L	18.39	6.89%
Ti 337.279†	9213.6	237.9	ug/L	15.14	237.9	ug/L	15.14	6.36%
Tl 190.801†	949.8	175.7	ug/L	1.55	175.7	ug/L	1.55	0.88%
V 292.402†	25219.1	237.5	ug/L	1.07	237.5	ug/L	1.07	0.45%
Zn 206.200†	44622.7	471.8	ug/L	3.13	471.8	ug/L	3.13	0.66%
Li 670.784	2353973.9	104.6	ug/L	0.51	104.6	ug/L	0.51	0.48%

Sequence No.: 14
Sample ID: 150701A-3010 LCS
Analyst: RJS - Jules
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:
Wash Time:

Autosampler Location: 41
Date Collected: 07/06/15 12:27:58 PM
Data Type: Reprocessed on 07/07/15 8:53:44 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150701A-3010 LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	234096.6	98.18	%	0.792				0.81%
Y Radial	14855.0	91.44	%	10.986				12.01%
Ag 338.289†	17738.2	91.94	ug/L	1.291	91.94	ug/L	1.291	1.40%
Al 308.215†	2932.6	2152	ug/L	278.19	2152	ug/L	278.19	12.93%
As 188.979†	1193.2	227.4	ug/L	1.62	227.4	ug/L	1.62	0.71%
B 249.677†	8212.9	234.9	ug/L	1.10	234.9	ug/L	1.10	0.47%
Ba 233.527†	105290.9	242.0	ug/L	0.87	242.0	ug/L	0.87	0.36%
Be 313.107†	168651.9	47.57	ug/L	0.346	47.57	ug/L	0.346	0.73%
Ca 315.887†	441254.9	27400	ug/L	3462.81	27400	ug/L	3462.81	12.64%
Cd 214.440†	13884.8	48.17	ug/L	0.279	48.17	ug/L	0.279	0.58%
Co 228.616†	24401.4	246.9	ug/L	1.43	246.9	ug/L	1.43	0.58%
Cr 267.716†	21743.8	252.7	ug/L	1.69	252.7	ug/L	1.69	0.67%
Cu 327.393†	50592.5	242.4	ug/L	0.88	242.4	ug/L	0.88	0.36%
Fe 273.955†	77658.5	953.6	ug/L	4.75	953.6	ug/L	4.75	0.50%
K 766.490†	45246.0	5196	ug/L	662.77	5196	ug/L	662.77	12.75%
Mg 285.213†	477427.3	26880	ug/L	3410.98	26880	ug/L	3410.98	12.69%
Mn 257.610†	25105.3	269.3	ug/L	35.68	269.3	ug/L	35.68	13.25%
Mo 202.031†	8597.4	239.9	ug/L	1.62	239.9	ug/L	1.62	0.68%
Na 589.592†	310749.5	27730	ug/L	3544.47	27730	ug/L	3544.47	12.78%
Ni 231.604†	11696.5	234.5	ug/L	1.82	234.5	ug/L	1.82	0.78%
P 213.617†	6225.8	1910	ug/L	13.25	1910	ug/L	13.25	0.69%
Pb 220.353†	1202.8	230.1	ug/L	2.03	230.1	ug/L	2.03	0.88%
Sb 206.836†	1722.1	227.8	ug/L	1.39	227.8	ug/L	1.39	0.61%
Se 196.026†	741.1	224.3	ug/L	1.76	224.3	ug/L	1.76	0.79%
Sn 189.927†	1285.1	227.9	ug/L	0.73	227.9	ug/L	0.73	0.32%
Sr 421.552†	199492.1	274.7	ug/L	34.98	274.7	ug/L	34.98	12.73%
Ti 337.279†	10873.9	271.7	ug/L	34.94	271.7	ug/L	34.94	12.86%
Tl 190.801†	841.6	220.0	ug/L	1.02	220.0	ug/L	1.02	0.46%
V 292.402†	24701.9	247.3	ug/L	1.70	247.3	ug/L	1.70	0.69%
Zn 206.200†	44679.0	470.1	ug/L	1.84	470.1	ug/L	1.84	0.39%
Li 670.784	2262226.9	93.31	ug/L	0.945	93.31	ug/L	0.945	1.01%

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	ARSENIC (AS)	250	256	102	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	BARIUM (BA)	250	264	106	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CADMIUM (CD)	50.0	51.7	103	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	CHROMIUM (CR)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	LEAD (PB)	250	269	108	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SELENIUM (SE)	250	247	98.8	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 6010C	SILVER (AG)	100.0	98.4	98.4	80-120	07/07/15	07/08/15	#TCLPM-150707A-AZ17910
EPA 7470A	MERCURY (HG)	4.00	3.6	90.0	80-120	07/08/15	07/09/15	#TCLPG-150708A-AZ17910

Comments: _____

Sequence No.: 13
Sample ID: 150707A-3010T-LCS
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 07/08/15 1:02:26 PM
Data Type: Reprocessed on 07/09/15 9:09:00 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: 150707A-3010T-LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1098158.1	97.22	%	0.365				0.38%
Y 371.029 Radial	55167.5	96.29	%	0.370				0.38%
Ag 338.289†	11275.3	98.36	ug/L	1.355	98.36	ug/L	1.355	1.38%
Al 308.215†	1394.8	2200	ug/L	7.6	2200	ug/L	7.6	0.35%
As 188.979†	1004.1	256.3	ug/L	1.40	256.3	ug/L	1.40	0.55%
B†	479.1	276.2	ug/L	2.40	276.2	ug/L	2.40	0.87%
Ba 233.527†	36035.6	263.5	ug/L	0.24	263.5	ug/L	0.24	0.09%
Be 313.107†	16110.6	53.55	ug/L	0.369	53.55	ug/L	0.369	0.69%
Ca 315.887†	147926.4	28420	ug/L	122.1	28420	ug/L	122.1	0.43%
Cd 214.440†	12338.5	51.68	ug/L	0.396	51.68	ug/L	0.396	0.77%
Co 228.616†	14864.3	262.6	ug/L	1.18	262.6	ug/L	1.18	0.45%
Cr 267.716†	27357.4	269.3	ug/L	0.92	269.3	ug/L	0.92	0.34%
Cu 327.393†	23634.9	256.6	ug/L	1.28	256.6	ug/L	1.28	0.50%
Fe 273.955†	14047.3	1064	ug/L	3.9	1064	ug/L	3.9	0.37%
K 766.490†	11230.6	5363	ug/L	56.1	5363	ug/L	56.1	1.05%
Mg 285.213†	261867.0	27810	ug/L	65.2	27810	ug/L	65.2	0.23%
Mn 257.610†	4496.5	277.2	ug/L	0.35	277.2	ug/L	0.35	0.13%
Mo 202.031†	8634.9	256.1	ug/L	1.88	256.1	ug/L	1.88	0.73%
Na 589.592†	246851.5	27160	ug/L	118.4	27160	ug/L	118.4	0.44%
Ni 231.604†	12507.7	269.0	ug/L	0.74	269.0	ug/L	0.74	0.28%
P 213.617†	9115.4	2107	ug/L	13.1	2107	ug/L	13.1	0.62%
Pb 220.353†	3193.8	269.2	ug/L	1.33	269.2	ug/L	1.33	0.49%
Sb 206.836†	1141.6	259.3	ug/L	1.45	259.3	ug/L	1.45	0.56%
Se 196.026†	917.0	247.4	ug/L	2.81	247.4	ug/L	2.81	1.14%
Sn 189.927†	2953.4	256.4	ug/L	3.77	256.4	ug/L	3.77	1.47%
Sr 421.552†	178208.0	271.1	ug/L	0.88	271.1	ug/L	0.88	0.33%
Ti 337.279†	9132.3	258.8	ug/L	0.52	258.8	ug/L	0.52	0.20%
Tl 190.801†	1257.7	266.4	ug/L	3.26	266.4	ug/L	3.26	1.23%
V 292.402†	55729.3	281.3	ug/L	0.16	281.3	ug/L	0.16	0.06%
Zn 206.200†	15308.7	537.9	ug/L	3.79	537.9	ug/L	3.79	0.71%

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	ARSENIC (AS)	250	263	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	BARIUM (BA)	250	262	105	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CADMIUM (CD)	50.0	53.5	107	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	CHROMIUM (CR)	250	250	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	LEAD (PB)	250	251	100	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SELENIUM (SE)	250	264	106	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 6010C	SILVER (AG)	100.0	101	101	80-120	06/24/15	06/24/15	#TCLPM-150624A-AZ17911
EPA 7470A	MERCURY (HG)	4.00	3.8	95.0	80-120	06/24/15	06/24/15	#TCLPG-150624A-AZ17911

Comments: _____

Sequence No.: 124 **Autosampler Location: 121**
Sample ID: 150624A-3010T-LCS **Date Collected: 06/24/15 2:16:31 PM**
Analyst: RJS - Phoebe **Data Type: Reprocessed on 06/30/15 12:36:14 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 150624A-3010T-LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	764969.9	87.12	%	0.339				0.39%
Y 371.029 Radial	47078.0	95.74	%	0.645				0.67%
Ag 338.289†	11379.2	101.0	ug/L	0.82	101.0	ug/L	0.82	0.81%
Al 308.215†	1181.0	1891	ug/L	13.9	1891	ug/L	13.9	0.74%
As 188.979†	904.2	262.6	ug/L	2.18	262.6	ug/L	2.18	0.83%
B†	472.2	254.8	ug/L	0.87	254.8	ug/L	0.87	0.34%
Ba 233.527†	36046.5	261.8	ug/L	1.08	261.8	ug/L	1.08	0.41%
Be 313.107†	15193.6	50.98	ug/L	0.397	50.98	ug/L	0.397	0.78%
Ca 315.887†	134785.3	26070	ug/L	71.3	26070	ug/L	71.3	0.27%
Cd 214.440†	12150.5	53.45	ug/L	0.216	53.45	ug/L	0.216	0.40%
Co 228.616†	14234.5	249.5	ug/L	1.50	249.5	ug/L	1.50	0.60%
Cr 267.716†	21236.6	250.0	ug/L	1.07	250.0	ug/L	1.07	0.43%
Cu 327.393†	20634.2	248.5	ug/L	1.67	248.5	ug/L	1.67	0.67%
Fe 273.955†	13861.5	987.4	ug/L	7.20	987.4	ug/L	7.20	0.73%
K 766.490†	11614.9	6186	ug/L	106.7	6186	ug/L	106.7	1.72%
Mg 285.213†	224823.9	24960	ug/L	66.1	24960	ug/L	66.1	0.26%
Mn 257.610†	4458.2	238.8	ug/L	0.67	238.8	ug/L	0.67	0.28%
Mo 202.031†	7297.8	258.8	ug/L	1.02	258.8	ug/L	1.02	0.39%
Na 589.592†	10563898.0	1327000	ug/L	8544.4	1327000	ug/L	8544.4	0.64%
Ni 231.604†	11003.5	257.7	ug/L	0.36	257.7	ug/L	0.36	0.14%
P 213.617†	9393.5	2201	ug/L	10.0	2201	ug/L	10.0	0.45%
Pb 220.353†	2765.7	250.8	ug/L	0.20	250.8	ug/L	0.20	0.08%
Sb 206.836†	1151.7	255.9	ug/L	1.73	255.9	ug/L	1.73	0.68%
Se 196.026†	974.2	263.5	ug/L	7.22	263.5	ug/L	7.22	2.74%
Sn 189.927†	2713.4	272.0	ug/L	1.22	272.0	ug/L	1.22	0.45%
Sr 421.552†	144475.2	246.4	ug/L	0.17	246.4	ug/L	0.17	0.07%
Ti 337.279†	7810.2	246.8	ug/L	1.78	246.8	ug/L	1.78	0.72%
Tl 190.801†	1277.6	240.6	ug/L	0.49	240.6	ug/L	0.49	0.20%
V 292.402†	42206.7	258.4	ug/L	0.71	258.4	ug/L	0.71	0.27%
Zn 206.200†	15743.1	534.0	ug/L	0.76	534.0	ug/L	0.76	0.14%

Matrix Spike Recoveries

METALS

APPL ID: **150707W-17910 MS - 198709**

Sample ID: AZ17910

Client ID: S67-AQIDW-061715

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 6010C	ARSENIC (AS)	250	1.8	272	262	108	104	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	BARIUM (BA)	250	173	448	432	110	104	3.6	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CADMIUM (CD)	50.0	0.50	53.2	51.1	105	101	4.0	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	CHROMIUM (CR)	250	1.9	270	261	107	104	3.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	LEAD (PB)	250	1.2	273	263	109	105	3.7	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SELENIUM (SE)	250	1.5	254	248	101	98.6	2.4	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 6010C	SILVER (AG)	100.0	0.94	99.5	96.5	98.6	95.6	3.1	20	80-120	07/07/15	07/08/15	07/07/15	07/08/15	198709	AZ17910
EPA 7470A	MERCURY (HG)	4.00	ND	3.6	3.6	90.0	90.0	0.0	15	80-120	07/08/15	07/09/15	07/08/15	07/09/15	198716	AZ17910

Comments: _____

Sequence No.: 17
Sample ID: AZ17910W04 MS
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 07/08/15 1:29:18 PM
Data Type: Reprocessed on 07/09/15 9:09:04 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17910W04 MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1064690.7	94.25	%	0.723				0.77%
Y 371.029 Radial	54800.9	95.65	%	1.065				1.11%
Ag 338.289†	11405.6	99.50	ug/L	0.463	99.50	ug/L	0.463	0.47%
Al 308.215†	2202.4	3473	ug/L	56.8	3473	ug/L	56.8	1.64%
As 188.979†	1066.5	272.2	ug/L	0.72	272.2	ug/L	0.72	0.27%
B†	994.4	575.5	ug/L	11.26	575.5	ug/L	11.26	1.96%
Ba 233.527†	61277.5	447.7	ug/L	2.04	447.7	ug/L	2.04	0.46%
Be 313.107†	16556.4	55.03	ug/L	0.577	55.03	ug/L	0.577	1.05%
Ca 315.887†	233529.6	44860	ug/L	279.1	44860	ug/L	279.1	0.62%
Cd 214.440†	12738.0	53.21	ug/L	0.494	53.21	ug/L	0.494	0.93%
Co 228.616†	17205.8	303.9	ug/L	1.82	303.9	ug/L	1.82	0.60%
Cr 267.716†	27513.6	270.4	ug/L	0.08	270.4	ug/L	0.08	0.03%
Cu 327.393†	25117.7	272.7	ug/L	1.24	272.7	ug/L	1.24	0.46%
Fe 273.955†	30980.0	2347	ug/L	16.3	2347	ug/L	16.3	0.70%
K 766.490†	23794.0	11360	ug/L	103.8	11360	ug/L	103.8	0.91%
Mg 285.213†	310921.4	33020	ug/L	205.8	33020	ug/L	205.8	0.62%
Mn 257.610†	11474.4	708.9	ug/L	9.22	708.9	ug/L	9.22	1.30%
Mo 202.031†	8858.0	263.0	ug/L	1.59	263.0	ug/L	1.59	0.60%
Na 589.592†	1225968.6	134900	ug/L	900.0	134900	ug/L	900.0	0.67%
Ni 231.604†	13259.8	285.1	ug/L	2.52	285.1	ug/L	2.52	0.88%
P 213.617†	9476.6	2191	ug/L	15.9	2191	ug/L	15.9	0.73%
Pb 220.353†	3242.8	273.4	ug/L	3.13	273.4	ug/L	3.13	1.15%
Sb 206.836†	1185.4	269.2	ug/L	1.52	269.2	ug/L	1.52	0.57%
Se 196.026†	946.8	253.8	ug/L	6.19	253.8	ug/L	6.19	2.44%
Sn 189.927†	3114.9	273.3	ug/L	2.12	273.3	ug/L	2.12	0.78%
Sr 421.552†	238011.8	361.8	ug/L	1.51	361.8	ug/L	1.51	0.42%
Ti 337.279†	9542.1	270.3	ug/L	3.49	270.3	ug/L	3.49	1.29%
Tl 190.801†	828.3	175.5	ug/L	1.54	175.5	ug/L	1.54	0.88%
V 292.402†	56853.6	286.5	ug/L	0.37	286.5	ug/L	0.37	0.13%
Zn 206.200†	26789.9	941.3	ug/L	6.25	941.3	ug/L	6.25	0.66%

Sequence No.: 18
Sample ID: AZ17910W04 MSD
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 07/08/15 1:35:42 PM
Data Type: Reprocessed on 07/09/15 9:09:05 AM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17910W04 MSD

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	1063722.4	94.17	%	0.883				0.94%
Y 371.029 Radial	54466.9	95.07	%	1.309				1.38%
Ag 338.289†	11067.3	96.55	ug/L	0.501	96.55	ug/L	0.501	0.52%
Al 308.215†	2171.8	3425	ug/L	38.2	3425	ug/L	38.2	1.12%
As 188.979†	1025.4	261.7	ug/L	4.36	261.7	ug/L	4.36	1.67%
B†	981.0	567.6	ug/L	10.43	567.6	ug/L	10.43	1.84%
Ba 233.527†	59135.6	432.0	ug/L	1.84	432.0	ug/L	1.84	0.43%
Be 313.107†	16162.7	53.72	ug/L	0.683	53.72	ug/L	0.683	1.27%
Ca 315.887†	226314.5	43470	ug/L	227.9	43470	ug/L	227.9	0.52%
Cd 214.440†	12223.6	51.06	ug/L	0.269	51.06	ug/L	0.269	0.53%
Co 228.616†	16508.1	291.6	ug/L	1.75	291.6	ug/L	1.75	0.60%
Cr 267.716†	26528.8	260.7	ug/L	0.94	260.7	ug/L	0.94	0.36%
Cu 327.393†	24259.3	263.4	ug/L	1.73	263.4	ug/L	1.73	0.66%
Fe 273.955†	30004.9	2273	ug/L	15.1	2273	ug/L	15.1	0.67%
K 766.490†	23194.6	11080	ug/L	28.1	11080	ug/L	28.1	0.25%
Mg 285.213†	301701.5	32040	ug/L	166.2	32040	ug/L	166.2	0.52%
Mn 257.610†	11215.5	692.9	ug/L	8.04	692.9	ug/L	8.04	1.16%
Mo 202.031†	8560.5	254.2	ug/L	2.90	254.2	ug/L	2.90	1.14%
Na 589.592†	1194251.3	131400	ug/L	653.1	131400	ug/L	653.1	0.50%
Ni 231.604†	12793.6	275.1	ug/L	0.90	275.1	ug/L	0.90	0.33%
P 213.617†	9103.7	2105	ug/L	26.8	2105	ug/L	26.8	1.27%
Pb 220.353†	3117.4	262.8	ug/L	2.48	262.8	ug/L	2.48	0.95%
Sb 206.836†	1138.3	258.5	ug/L	2.85	258.5	ug/L	2.85	1.10%
Se 196.026†	923.3	247.5	ug/L	3.48	247.5	ug/L	3.48	1.41%
Sn 189.927†	2893.3	254.2	ug/L	2.52	254.2	ug/L	2.52	0.99%
Sr 421.552†	230631.9	350.6	ug/L	1.16	350.6	ug/L	1.16	0.33%
Ti 337.279†	9341.2	264.6	ug/L	3.21	264.6	ug/L	3.21	1.21%
Tl 190.801†	753.1	159.5	ug/L	1.12	159.5	ug/L	1.12	0.70%
V 292.402†	54889.8	276.6	ug/L	0.43	276.6	ug/L	0.43	0.16%
Zn 206.200†	25842.3	908.0	ug/L	1.91	908.0	ug/L	1.91	0.21%

Matrix Spike Recoveries

METALS

APPL ID: **150624S-17911 MS - 198346**

Sample ID: AZ17911

Client ID: S67-SOIDW-061715

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 6010C	ARSENIC (AS)	250	ND	264	256	106	102	3.1	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	BARIUM (BA)	250	383	637	618	102	94.0	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CADMIUM (CD)	50.0	7.7	58.6	56.6	102	97.8	3.5	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	CHROMIUM (CR)	250	ND	248	241	99.2	96.4	2.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	LEAD (PB)	250	255	514	499	104	97.6	3.0	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SELENIUM (SE)	250	ND	260	255	104	102	1.9	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 6010C	SILVER (AG)	100.0	ND	101	97.7	101	97.7	3.3	20	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198346	AZ17911
EPA 7470A	MERCURY (HG)	4.00	ND	3.7	3.6	92.5	90.0	2.7	15	80-120	06/24/15	06/24/15	06/24/15	06/24/15	198323	AZ17911

Comments: _____

Sequence No.: 129
Sample ID: AZ17911S01 MS
Analyst: RJS - Phoebe
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 124
Date Collected: 06/24/15 2:46:33 PM
Data Type: Reprocessed on 06/30/15 12:36:20 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: AZ17911S01 MS

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	794649.7	90.50	%	0.453				0.50%
Y 371.029 Radial	47907.0	97.42	%	1.008				1.04%
Ag 338.289†	11422.8	101.4	ug/L	0.48	101.4	ug/L	0.48	0.47%
Al 308.215†	1448.5	2320	ug/L	29.1	2320	ug/L	29.1	1.25%
As 188.979†	909.4	264.1	ug/L	1.57	264.1	ug/L	1.57	0.59%
B†	589.9	315.0	ug/L	3.59	315.0	ug/L	3.59	1.14%
Ba 233.527†	87692.4	637.1	ug/L	0.29	637.1	ug/L	0.29	0.04%
Be 313.107†	15699.5	52.68	ug/L	0.840	52.68	ug/L	0.840	1.60%
Ca 315.887†	407461.9	78920	ug/L	350.3	78920	ug/L	350.3	0.44%
Cd 214.440†	13349.3	58.63	ug/L	0.457	58.63	ug/L	0.457	0.78%
Co 228.616†	25788.9	452.6	ug/L	0.41	452.6	ug/L	0.41	0.09%
Cr 267.716†	21202.6	248.3	ug/L	0.74	248.3	ug/L	0.74	0.30%
Cu 327.393†	39515.7	475.9	ug/L	2.12	475.9	ug/L	2.12	0.45%
Fe 273.955†	17987.3	1281	ug/L	2.7	1281	ug/L	2.7	0.21%
K 766.490†	17052.4	9082	ug/L	102.8	9082	ug/L	102.8	1.13%
Mg 285.213†	294227.5	32660	ug/L	126.7	32660	ug/L	126.7	0.39%
Mn 257.610†	30997.7	1672	ug/L	25.5	1672	ug/L	25.5	1.53%
Mo 202.031†	7209.3	255.8	ug/L	1.92	255.8	ug/L	1.92	0.75%
Na 589.592†	10472294.4	1315000	ug/L	28737.7	1315000	ug/L	28737.7	2.18%
Ni 231.604†	13080.4	306.2	ug/L	1.57	306.2	ug/L	1.57	0.51%
P 213.617†	8971.1	2102	ug/L	7.1	2102	ug/L	7.1	0.34%
Pb 220.353†	5663.8	513.7	ug/L	4.89	513.7	ug/L	4.89	0.95%
Sb 206.836†	1165.0	258.9	ug/L	2.08	258.9	ug/L	2.08	0.80%
Se 196.026†	968.5	260.1	ug/L	1.66	260.1	ug/L	1.66	0.64%
Sn 189.927†	2626.4	269.7	ug/L	2.54	269.7	ug/L	2.54	0.94%
Sr 421.552†	249420.0	426.6	ug/L	0.17	426.6	ug/L	0.17	0.04%
Ti 337.279†	7949.0	251.0	ug/L	3.78	251.0	ug/L	3.78	1.51%
Tl 190.801†	704.9	132.8	ug/L	2.01	132.8	ug/L	2.01	1.51%
V 292.402†	42272.8	258.9	ug/L	0.68	258.9	ug/L	0.68	0.26%
Zn 206.200†	48281.6	1638	ug/L	4.2	1638	ug/L	4.2	0.26%

Sequence No.: 130 **Autosampler Location: 125**
Sample ID: AZ17911S01 MSD **Date Collected: 06/24/15 2:53:08 PM**
Analyst: RJS - Phoebe **Data Type: Reprocessed on 06/30/15 12:36:22 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: AZ17911S01 MSD

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	796514.5	90.71	%	0.207				0.23%
Y 371.029 Radial	47929.8	97.47	%	0.470				0.48%
Ag 338.289†	11003.3	97.67	ug/L	0.694	97.67	ug/L	0.694	0.71%
Al 308.215†	1413.6	2264	ug/L	7.7	2264	ug/L	7.7	0.34%
As 188.979†	880.1	255.6	ug/L	2.13	255.6	ug/L	2.13	0.84%
B†	577.0	308.0	ug/L	3.96	308.0	ug/L	3.96	1.28%
Ba 233.527†	85089.7	618.2	ug/L	1.79	618.2	ug/L	1.79	0.29%
Be 313.107†	15261.4	51.21	ug/L	0.339	51.21	ug/L	0.339	0.66%
Ca 315.887†	399287.0	77330	ug/L	315.6	77330	ug/L	315.6	0.41%
Cd 214.440†	12890.8	56.61	ug/L	0.473	56.61	ug/L	0.473	0.84%
Co 228.616†	25058.6	439.7	ug/L	2.51	439.7	ug/L	2.51	0.57%
Cr 267.716†	20569.8	240.9	ug/L	0.98	240.9	ug/L	0.98	0.41%
Cu 327.393†	38498.7	463.6	ug/L	1.59	463.6	ug/L	1.59	0.34%
Fe 273.955†	17399.4	1239	ug/L	4.9	1239	ug/L	4.9	0.40%
K 766.490†	16928.3	9016	ug/L	80.8	9016	ug/L	80.8	0.90%
Mg 285.213†	286993.2	31860	ug/L	114.3	31860	ug/L	114.3	0.36%
Mn 257.610†	30399.7	1639	ug/L	5.9	1639	ug/L	5.9	0.36%
Mo 202.031†	6934.1	246.0	ug/L	0.82	246.0	ug/L	0.82	0.33%
Na 589.592†	10240559.3	1286000	ug/L	6938.0	1286000	ug/L	6938.0	0.54%
Ni 231.604†	12732.3	298.0	ug/L	2.64	298.0	ug/L	2.64	0.89%
P 213.617†	8709.1	2041	ug/L	7.3	2041	ug/L	7.3	0.36%
Pb 220.353†	5506.4	499.4	ug/L	2.38	499.4	ug/L	2.38	0.48%
Sb 206.836†	1118.8	248.6	ug/L	0.86	248.6	ug/L	0.86	0.35%
Se 196.026†	948.8	254.8	ug/L	0.52	254.8	ug/L	0.52	0.20%
Sn 189.927†	2515.3	258.8	ug/L	2.21	258.8	ug/L	2.21	0.85%
Sr 421.552†	242674.5	415.1	ug/L	1.68	415.1	ug/L	1.68	0.40%
Ti 337.279†	7708.8	243.4	ug/L	0.69	243.4	ug/L	0.69	0.28%
Tl 190.801†	689.3	129.8	ug/L	0.53	129.8	ug/L	0.53	0.41%
V 292.402†	40839.0	250.1	ug/L	0.62	250.1	ug/L	0.62	0.25%
Zn 206.200†	46971.3	1593	ug/L	8.8	1593	ug/L	8.8	0.55%

Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 06/24/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.022	5.022	0.0409	0.1697	0.0411	2:26:02 PM	Yes
2	4.959	4.959	0.0404	0.1662	0.0405	2:26:31 PM	Yes
3	4.998	4.998	0.0407	0.1674	0.0409	2:27:00 PM	Yes
Mean:	4.993	4.993	0.0407				
SD:	0.0318	0.0318	0.0003				
%RSD:	0.64%	0.64%	0.64				

QC value within limits for Hg 253.7 Recovery = 99.86%
All analyte(s) passed QC.

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Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB 06/24/15 RE Date Collected: 06/24/15 2:27:20 PM
Analyst: Data Type: Reprocessed on 06/24/15 3:27:50 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/24/15 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	-0.0004	0.0001	2:28:10 PM	Yes
2	-0.012	-0.012	-0.0001	-0.0000	0.0001	2:28:39 PM	Yes
3	0.018	0.018	0.0001	0.0030	0.0003	2:29:07 PM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0176	0.0176	0.0001				
%RSD:	710.20%	710.20%	710.20				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 12 Autosampler Location: 17
Sample ID: 150624A BLK Date Collected: 06/24/15 2:31:22 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/24/15 3:27:50 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150624A BLK 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	0.0001	0.0001	2:32:11 PM	Yes
2	0.001	0.001	0.0000	0.0012	0.0002	2:32:40 PM	Yes
3	-0.014	-0.014	-0.0001	-0.0003	0.0000	2:33:09 PM	Yes
Mean:	-0.008	-0.008	-0.0001				
SD:	0.0074	0.0074	0.0001				
%RSD:	96.41%	96.41%	96.41				

==========

Sequence No.: 13 Autosampler Location: 18
Sample ID: 150624A LCS Date Collected: 06/24/15 2:33:28 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/24/15 3:27:50 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150624A LCS 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	0.0330	0.1378	0.0332	2:34:17 PM	Yes
2	3.980	3.980	0.0324	0.1328	0.0326	2:34:46 PM	Yes
3	3.984	3.984	0.0324	0.1321	0.0326	2:35:15 PM	Yes

Mean:	4.007	4.007	0.0326
SD:	0.0430	0.0430	0.0004
%RSD:	1.07%	1.07%	1.07

Sequence No.: 14
Sample ID: AZ15369W01 LOD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 06/24/15 2:35:34 PM
Data Type: Reprocessed on 06/24/15 3:27:50 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ15369W01 LOD — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.109	0.109	0.0009	0.0040	0.0010	2:36:23 PM	Yes
2	0.115	0.115	0.0009	0.0047	0.0011	2:36:52 PM	Yes
3	0.118	0.118	0.0010	0.0052	0.0011	2:37:21 PM	Yes
Mean:	0.114	0.114	0.0009				
SD:	0.0045	0.0045	0.0000				
%RSD:	4.00%	4.00%	4.00				

Sequence No.: 15
Sample ID: AZ15369W01 LOQ
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 06/24/15 2:37:40 PM
Data Type: Reprocessed on 06/24/15 3:27:51 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ15369W01 LOQ — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.184	0.184	0.0015	0.0065	0.0017	2:38:29 PM	Yes
2	0.185	0.185	0.0015	0.0071	0.0017	2:38:58 PM	Yes
3	0.190	0.190	0.0015	0.0071	0.0017	2:39:27 PM	Yes
Mean:	0.186	0.186	0.0015				
SD:	0.0031	0.0031	0.0000				
%RSD:	1.67%	1.67%	1.67				

Sequence No.: 16
Sample ID: AZ17956W04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 06/24/15 2:39:46 PM
Data Type: Reprocessed on 06/24/15 3:27:51 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17956W04 — 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	0.0013	0.0002	2:40:35 PM	Yes
2	0.004	0.004	0.0000	0.0008	0.0002	2:41:04 PM	Yes
3	0.006	0.006	0.0001	0.0007	0.0002	2:41:33 PM	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.0009	0.0009	0.0000				
%RSD:	16.72%	16.72%	16.72				

Sequence No.: 17
Sample ID: AZ17956W04 DUP
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 06/24/15 2:41:52 PM
Data Type: Reprocessed on 06/24/15 3:27:51 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17956W04 DUP — Analyte: Hg 253.7

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.007	-0.007	-0.0001	0.0001	0.0001	2:42:42 PM	Yes
2	0.004	0.004	0.0000	0.0010	0.0002	2:43:11 PM	Yes
3	0.002	0.002	0.0000	0.0005	0.0002	2:43:40 PM	Yes
Mean:	-0.000	-0.000	-0.0000				
SD:	0.0054	0.0054	0.0000				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 18 **Autosampler Location: 23**
Sample ID: AZ17956W03 MS **Date Collected: 06/24/15 2:43:59 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/24/15 3:27:51 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ17956W03 MS **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.817	3.817	0.0311	0.1276	0.0312	2:44:49 PM	Yes
2	3.769	3.769	0.0307	0.1263	0.0309	2:45:17 PM	Yes
3	3.776	3.776	0.0307	0.1258	0.0309	2:45:46 PM	Yes
Mean:	3.787	3.787	0.0308				
SD:	0.0260	0.0260	0.0002				
%RSD:	0.69%	0.69%	0.69				

Sequence No.: 19 **Autosampler Location: 24**
Sample ID: AZ17971M04 **Date Collected: 06/24/15 2:46:06 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/24/15 3:27:51 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ17971M04 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.436	0.436	0.0036	0.0149	0.0037	2:46:56 PM	Yes
2	0.430	0.430	0.0035	0.0148	0.0037	2:47:25 PM	Yes
3	0.442	0.442	0.0036	0.0153	0.0038	2:47:53 PM	Yes
Mean:	0.436	0.436	0.0036				
SD:	0.0058	0.0058	0.0000				
%RSD:	1.33%	1.33%	1.33				

Sequence No.: 20 **Autosampler Location: 6**
Sample ID: CCV 06/24/15 RE **Date Collected: 06/24/15 2:48:13 PM**
Analyst: **Data Type: Reprocessed on 06/24/15 3:27:51 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/24/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.990	4.990	0.0406	0.1686	0.0408	2:49:04 PM	Yes
2	4.952	4.952	0.0403	0.1650	0.0405	2:49:33 PM	Yes
3	4.995	4.995	0.0407	0.1665	0.0408	2:50:02 PM	Yes
Mean:	4.979	4.979	0.0405				
SD:	0.0237	0.0237	0.0002				
%RSD:	0.48%	0.48%	0.48				

QC value within limits for Hg 253.7 Recovery = 99.58%
All analyte(s) passed QC.

Sequence No.: 21 **Autosampler Location: 1**
Sample ID: CCB 06/24/15 RE **Date Collected: 06/24/15 2:50:22 PM**
Analyst: **Data Type: Reprocessed on 06/24/15 3:27:52 PM**
Logged In Analyst (Original) : chemist_metals

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 06/24/15 RE 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	0.0003	0.0001	2:51:12 PM	Yes
2	0.012	0.012	0.0001	0.0027	0.0003	2:51:41 PM	Yes
3	-0.008	-0.008	-0.0001	0.0005	0.0001	2:52:09 PM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0111	0.0111	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 22 Autosampler Location: 25
Sample ID: 150624A BLK TCLP Date Collected: 06/24/15 2:52:29 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/24/15 3:27:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150624A BLK TCLP 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	0.0007	0.0001	2:53:19 PM	Yes
2	-0.007	-0.007	-0.0001	0.0005	0.0001	2:53:48 PM	Yes
3	-0.001	-0.001	-0.0000	0.0010	0.0001	2:54:16 PM	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.0032	0.0032	0.0000				
%RSD:	81.59%	81.59%	81.59				

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Sequence No.: 23 Autosampler Location: 26
Sample ID: 150624A LCS TCLP Date Collected: 06/24/15 2:54:36 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/24/15 3:27:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150624A LCS TCLP Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.831	3.831	0.0312	0.1284	0.0314	2:55:27 PM	Yes
2	3.740	3.740	0.0305	0.1243	0.0306	2:55:55 PM	Yes
3	3.787	3.787	0.0308	0.1264	0.0310	2:56:25 PM	Yes
Mean:	3.786	3.786	0.0308				
SD:	0.0457	0.0457	0.0004				
%RSD:	1.21%	1.21%	1.21				

==========

Sequence No.: 24 Autosampler Location: 27
Sample ID: AZ17911S01 Date Collected: 06/24/15 2:56:45 PM
Analyst: RE-Freddie Data Type: Reprocessed on 06/24/15 3:27:52 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ17911S01 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	-0.0020	-0.0000	2:57:35 PM	Yes
2	0.016	0.016	0.0001	0.0017	0.0003	2:58:04 PM	Yes
3	0.003	0.003	0.0000	0.0007	0.0002	2:58:33 PM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0180	0.0180	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

Sequence No.: 25
Sample ID: AZ17911S01 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 06/24/15 2:58:54 PM
Data Type: Reprocessed on 06/24/15 3:27:52 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17911S01 MS — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.664	3.664	0.0298	0.1218	0.0300	2:59:44 PM	Yes
2	3.663	3.663	0.0298	0.1244	0.0300	3:00:13 PM	Yes
3	3.674	3.674	0.0299	0.1228	0.0301	3:00:42 PM	Yes
Mean:	3.667	3.667	0.0299				
SD:	0.0064	0.0064	0.0001				
%RSD:	0.18%	0.18%	0.18				

Sequence No.: 26
Sample ID: AZ17911S01 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 06/24/15 3:01:03 PM
Data Type: Reprocessed on 06/24/15 3:27:53 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17911S01 MSD — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.606	3.606	0.0294	0.1209	0.0295	3:01:54 PM	Yes
2	3.544	3.544	0.0289	0.1187	0.0290	3:02:23 PM	Yes
3	3.590	3.590	0.0292	0.1211	0.0294	3:02:52 PM	Yes
Mean:	3.580	3.580	0.0292				
SD:	0.0324	0.0324	0.0003				
%RSD:	0.91%	0.91%	0.91				

Sequence No.: 27
Sample ID: AZ17961S01
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 06/24/15 3:03:12 PM
Data Type: Reprocessed on 06/24/15 3:27:53 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17961S01 — 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	-0.0000	0.0001	3:04:03 PM	Yes
2	-0.021	-0.021	-0.0002	-0.0009	-0.0000	3:04:32 PM	Yes
3	-0.006	-0.006	-0.0000	0.0005	0.0001	3:05:01 PM	Yes
Mean:	-0.013	-0.013	-0.0001				
SD:	0.0075	0.0075	0.0001				
%RSD:	56.04%	56.04%	56.04				

Sequence No.: 28
Sample ID: AZ17961S01 DUP
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 06/24/15 3:05:22 PM
Data Type: Reprocessed on 06/24/15 3:27:53 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17961S01 DUP — 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	-0.0005	0.0000	3:06:14 PM	Yes
2	0.019	0.019	0.0002	0.0027	0.0003	3:06:42 PM	Yes

3	-0.014	-0.014	-0.0001	-0.0006	0.0000	3:07:11 PM	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.0200	0.0200	0.0002				
%RSD:	545.10%	545.10%	545.10				

Sequence No.: 29 **Autosampler Location: 32**
Sample ID: AZ17961S01 MS **Date Collected: 06/24/15 3:07:32 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/24/15 3:27:53 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: AZ17961S01 MS **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.858	3.858	0.0314	0.1300	0.0316	3:08:21 PM	Yes
2	3.767	3.767	0.0307	0.1274	0.0308	3:08:50 PM	Yes
3	3.849	3.849	0.0313	0.1298	0.0315	3:09:19 PM	Yes
Mean:	3.825	3.825	0.0311				
SD:	0.0503	0.0503	0.0004				
%RSD:	1.32%	1.32%	1.32				

Sequence No.: 30 **Autosampler Location: 6**
Sample ID: CCV 06/24/15 RE **Date Collected: 06/24/15 3:09:38 PM**
Analyst: **Data Type: Reprocessed on 06/24/15 3:27:53 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV 06/24/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.922	4.922	0.0401	0.1651	0.0402	3:10:28 PM	Yes
2	4.870	4.870	0.0397	0.1644	0.0398	3:10:57 PM	Yes
3	4.910	4.910	0.0400	0.1645	0.0401	3:11:25 PM	Yes
Mean:	4.901	4.901	0.0399				
SD:	0.0271	0.0271	0.0002				
%RSD:	0.55%	0.55%	0.55				

QC value within limits for Hg 253.7 Recovery = 98.01%
All analyte(s) passed QC.

Sequence No.: 31 **Autosampler Location: 1**
Sample ID: CCB 06/24/15 RE **Date Collected: 06/24/15 3:11:46 PM**
Analyst: **Data Type: Reprocessed on 06/24/15 3:27:53 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 06/24/15 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	0.0012	0.0001	3:12:35 PM	Yes
2	-0.027	-0.027	-0.0002	-0.0022	-0.0001	3:13:04 PM	Yes
3	-0.018	-0.018	-0.0001	-0.0011	0.0000	3:13:33 PM	Yes
Mean:	-0.015	-0.015	-0.0001				
SD:	0.0131	0.0131	0.0001				
%RSD:	86.38%	86.38%	86.38				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 0**
Sample ID: Rinse **Date Collected: 06/24/15 3:13:52 PM**
Analyst: RE-Freddie **Data Type: Reprocessed on 06/24/15 3:27:54 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	0.002	0.002	0.0000	0.0016	0.0002	3:14:36 PM	Yes
2	0.026	0.026	0.0002	0.0027	0.0004	3:15:05 PM	Yes
3	0.010	0.010	0.0001	0.0015	0.0002	3:15:34 PM	Yes
Mean:	0.013	0.013	0.0001				
SD:	0.0123	0.0123	0.0001				
%RSD:	96.66%	96.66%	96.66				

Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV 07/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.961	4.961	0.0365	0.1597	0.0367	11:29:00 AM	Yes
2	4.913	4.913	0.0362	0.1568	0.0363	11:29:29 AM	Yes
3	4.915	4.915	0.0362	0.1562	0.0364	11:29:58 AM	Yes
Mean:	4.930	4.930	0.0363				
SD:	0.0271	0.0271	0.0002				
%RSD:	0.55%	0.55%	0.55				

QC value within limits for Hg 253.7 Recovery = 98.59%
All analyte(s) passed QC.

==========

Sequence No.: 11 Autosampler Location: 1
Sample ID: CCB 07/09/15 RE Date Collected: 07/09/15 11:31:45 AM
Analyst: Data Type: Reprocessed on 07/09/15 12:37:04 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCB 07/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0001	0.0002	0.0001	11:32:35 AM	Yes
2	-0.016	-0.016	-0.0001	-0.0004	0.0001	11:33:04 AM	Yes
3	-0.023	-0.023	-0.0002	-0.0015	-0.0000	11:33:33 AM	Yes
Mean:	-0.018	-0.018	-0.0001				
SD:	0.0047	0.0047	0.0000				
%RSD:	26.26%	26.26%	26.26				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 12 Autosampler Location: 17
Sample ID: AZ18025W05 MS Date Collected: 07/09/15 11:33:52 AM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:04 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18025W05 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.477	3.477	0.0256	0.1130	0.0258	11:34:41 AM	Yes
2	3.436	3.436	0.0253	0.1112	0.0255	11:35:10 AM	Yes
3	3.448	3.448	0.0254	0.1110	0.0256	11:35:39 AM	Yes
Mean:	3.454	3.454	0.0254				
SD:	0.0208	0.0208	0.0002				
%RSD:	0.60%	0.60%	0.60				

==========

Sequence No.: 13 Autosampler Location: 18
Sample ID: 150708A BLK Date Collected: 07/09/15 11:35:58 AM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:04 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 150708A BLK 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	0.0005	0.0001	11:36:47 AM	Yes
2	-0.024	-0.024	-0.0002	-0.0010	-0.0000	11:37:16 AM	Yes
3	0.024	0.024	0.0002	0.0019	0.0003	11:37:44 AM	Yes

Mean:	-0.002	-0.002	-0.0000
SD:	0.0241	0.0241	0.0002
%RSD:	965.73%	965.73%	965.73

Sequence No.: 14
Sample ID: 150708A LCS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 07/09/15 11:38:03 AM
Data Type: Reprocessed on 07/09/15 12:37:05 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150708A LCS — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.613	3.613	0.0266	0.1165	0.0268	11:38:53 AM	Yes
2	3.587	3.587	0.0264	0.1160	0.0266	11:39:22 AM	Yes
3	3.569	3.569	0.0263	0.1146	0.0264	11:39:51 AM	Yes

Matrix Recovery Check: 150708A LCS

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Hg 253.7			3.998	3.590	0.022	ug/L	89.8
Mean:	3.590	3.590	0.0264				
SD:	0.0221	0.0221	0.0002				
%RSD:	0.62%	0.62%	0.62				

Sequence No.: 15
Sample ID: 150702B BLK
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 07/09/15 11:40:10 AM
Data Type: Reprocessed on 07/09/15 12:37:05 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150702B 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	0.0016	0.0003	11:40:59 AM	Yes
2	-0.010	-0.010	-0.0001	0.0006	0.0001	11:41:28 AM	Yes
3	-0.023	-0.023	-0.0002	-0.0013	0.0000	11:41:57 AM	Yes
Mean:	-0.007	-0.007	-0.0000				
SD:	0.0180	0.0180	0.0001				
%RSD:	270.50%	270.50%	270.50				

Sequence No.: 16
Sample ID: 150702B LCS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 07/09/15 11:42:16 AM
Data Type: Reprocessed on 07/09/15 12:37:05 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 150702B LCS — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.364	3.364	0.0248	0.1089	0.0249	11:43:05 AM	Yes
2	3.301	3.301	0.0243	0.1067	0.0245	11:43:34 AM	Yes
3	3.332	3.332	0.0245	0.1079	0.0247	11:44:04 AM	Yes

Matrix Recovery Check: 150702B LCS

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Hg 253.7			3.993	3.332	0.031	ug/L	83.5
Mean:	3.332	3.332	0.0245				
SD:	0.0313	0.0313	0.0002				
%RSD:	0.94%	0.94%	0.94				

Sequence No.: 17
Sample ID: AZ17910W04
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 07/09/15 11:44:23 AM
Data Type: Reprocessed on 07/09/15 12:37:05 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17910W04 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0002	0.0010	0.0003	11:45:13 AM	Yes
2	0.014	0.014	0.0001	0.0021	0.0003	11:45:41 AM	Yes
3	-0.011	-0.011	-0.0001	0.0000	0.0001	11:46:10 AM	Yes
Mean:	0.008	0.008	0.0001				
SD:	0.0168	0.0168	0.0001				
%RSD:	208.58%	208.58%	208.58				

Sequence No.: 18
Sample ID: AZ17910W04 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 07/09/15 11:46:30 AM
Data Type: Reprocessed on 07/09/15 12:37:06 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17910W04 MS Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.608	3.608	0.0266	0.1162	0.0267	11:47:19 AM	Yes
2	3.587	3.587	0.0264	0.1145	0.0266	11:47:49 AM	Yes
3	3.625	3.625	0.0267	0.1172	0.0269	11:48:17 AM	Yes

Matrix Recovery Check: AZ17910W04 MS

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Hg 253.7			4.008	3.607	0.019	ug/L	90.0
Mean:	3.607	3.607	0.0266				
SD:	0.0186	0.0186	0.0001				
%RSD:	0.52%	0.52%	0.52				

Sequence No.: 19
Sample ID: AZ17910W04 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 07/09/15 11:48:37 AM
Data Type: Reprocessed on 07/09/15 12:37:06 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ17910W04 MSD Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.562	3.562	0.0262	0.1158	0.0264	11:49:27 AM	Yes
2	3.547	3.547	0.0261	0.1137	0.0263	11:49:56 AM	Yes
3	3.564	3.564	0.0262	0.1160	0.0264	11:50:25 AM	Yes

Duplicate Check: AZ17910W04 MSD

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Hg 253.7			3.607	3.558	0.009	ug/L	1.4
Mean:	3.558	3.558	0.0262				
SD:	0.0093	0.0093	0.0001				
%RSD:	0.26%	0.26%	0.26				

Sequence No.: 20
Autosampler Location: 25

Sample ID: AZ18128W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Date Collected: 07/09/15 11:50:44 AM
Data Type: Reprocessed on 07/09/15 12:37:06 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ18128W05 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	-0.0017	0.0001	11:51:34 AM	Yes
2	-0.010	-0.010	-0.0001	-0.0002	0.0001	11:52:02 AM	Yes
3	-0.014	-0.014	-0.0001	-0.0012	0.0001	11:52:31 AM	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.0021	0.0021	0.0000				
%RSD:	17.98%	17.98%	17.98				

Sequence No.: 21
Sample ID: AZ18129W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 07/09/15 11:52:51 AM
Data Type: Reprocessed on 07/09/15 12:37:06 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ18129W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.107	0.107	0.0008	0.0045	0.0010	11:53:42 AM	Yes
2	0.089	0.089	0.0007	0.0031	0.0008	11:54:10 AM	Yes
3	0.091	0.091	0.0007	0.0027	0.0008	11:54:39 AM	Yes
Mean:	0.095	0.095	0.0007				
SD:	0.0099	0.0099	0.0001				
%RSD:	10.41%	10.41%	10.41				

Sequence No.: 22
Sample ID: AZ18130W05
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 07/09/15 11:54:59 AM
Data Type: Reprocessed on 07/09/15 12:37:07 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ18130W05 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	0.0006	0.0002	11:55:50 AM	Yes
2	-0.018	-0.018	-0.0001	-0.0024	0.0000	11:56:18 AM	Yes
3	-0.003	-0.003	-0.0000	-0.0002	0.0001	11:56:47 AM	Yes
Mean:	-0.005	-0.005	-0.0000				
SD:	0.0121	0.0121	0.0001				
%RSD:	229.26%	229.26%	229.26				

Sequence No.: 23
Sample ID: CCV 07/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 07/09/15 11:57:07 AM
Data Type: Reprocessed on 07/09/15 12:37:07 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 07/09/15 RE Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.763	4.763	0.0351	0.1535	0.0352	11:57:58 AM	Yes
2	4.744	4.744	0.0349	0.1537	0.0351	11:58:27 AM	Yes
3	4.737	4.737	0.0349	0.1532	0.0350	11:58:56 AM	Yes
Mean:	4.748	4.748	0.0350				
SD:	0.0136	0.0136	0.0001				

%RSD: 0.29% 0.29% 0.29
QC value within limits for Hg 253.7 Recovery = 94.96%
All analyte(s) passed QC.

Sequence No.: 24 | **Autosampler Location: 1**
Sample ID: CCB 07/09/15 RE | **Date Collected: 07/09/15 11:59:16 AM**
Analyst: | **Data Type: Reprocessed on 07/09/15 12:37:07 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Replicate Data: CCB 07/09/15 RE | **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0000	-0.0010	0.0001	12:00:05 PM	Yes
2	-0.002	-0.002	-0.0000	-0.0003	0.0002	12:00:34 PM	Yes
3	-0.008	-0.008	-0.0001	-0.0002	0.0001	12:01:03 PM	Yes
Mean:	-0.005	-0.005	-0.0000				
SD:	0.0036	0.0036	0.0000				
%RSD:	64.68%	64.68%	64.68				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 25 | **Autosampler Location: 28**
Sample ID: AZ18131W05 | **Date Collected: 07/09/15 12:01:22 PM**
Analyst: RE-Freddie | **Data Type: Reprocessed on 07/09/15 12:37:07 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Replicate Data: AZ18131W05 | **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.036	0.036	0.0003	0.0039	0.0004	12:02:12 PM	Yes
2	-0.005	-0.005	-0.0000	-0.0006	0.0001	12:02:41 PM	Yes
3	0.015	0.015	0.0001	0.0006	0.0003	12:03:10 PM	Yes
Mean:	0.015	0.015	0.0001				
SD:	0.0202	0.0202	0.0001				
%RSD:	131.73%	131.73%	131.73				

Sequence No.: 26 | **Autosampler Location: 29**
Sample ID: AZ18132W05 | **Date Collected: 07/09/15 12:03:30 PM**
Analyst: RE-Freddie | **Data Type: Reprocessed on 07/09/15 12:37:08 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Replicate Data: AZ18132W05 | **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	-0.0001	-0.0029	0.0000	12:04:21 PM	Yes
2	0.042	0.042	0.0003	0.0039	0.0005	12:04:50 PM	Yes
3	0.005	0.005	0.0000	-0.0003	0.0002	12:05:19 PM	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.0314	0.0314	0.0002				
%RSD:	348.00%	348.00%	348.00				

Sequence No.: 27 | **Autosampler Location: 30**
Sample ID: AZ18133W05 | **Date Collected: 07/09/15 12:05:40 PM**
Analyst: RE-Freddie | **Data Type: Reprocessed on 07/09/15 12:37:08 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Replicate Data: AZ18133W05 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	0.0010	0.0003	12:06:31 PM	Yes
2	0.009	0.009	0.0001	-0.0004	0.0002	12:06:59 PM	Yes
3	0.009	0.009	0.0001	-0.0008	0.0002	12:07:28 PM	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.0042	0.0042	0.0000				
%RSD:	36.18%	36.18%	36.18				

Sequence No.: 28 Autosampler Location: 31
Sample ID: AZ18134W05 Date Collected: 07/09/15 12:07:49 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:08 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18134W05 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	-0.0006	0.0001	12:08:41 PM	Yes
2	-0.001	-0.001	-0.0000	-0.0007	0.0002	12:09:09 PM	Yes
3	0.002	0.002	0.0000	-0.0004	0.0002	12:09:39 PM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0044	0.0044	0.0000				
%RSD:	210.65%	210.65%	210.65				

Sequence No.: 29 Autosampler Location: 32
Sample ID: AZ18135W05 Date Collected: 07/09/15 12:09:59 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:08 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18135W05 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	0.0001	12:10:48 PM	Yes
2	0.002	0.002	0.0000	-0.0002	0.0002	12:11:17 PM	Yes
3	0.020	0.020	0.0001	0.0004	0.0003	12:11:45 PM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0122	0.0122	0.0001				
%RSD:	201.15%	201.15%	201.15				

Sequence No.: 30 Autosampler Location: 33
Sample ID: AZ18136W05 Date Collected: 07/09/15 12:12:05 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:08 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18136W05 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	-0.0017	0.0001	12:12:54 PM	Yes
2	0.015	0.015	0.0001	-0.0004	0.0003	12:13:23 PM	Yes
3	0.005	0.005	0.0000	-0.0003	0.0002	12:13:51 PM	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.0099	0.0099	0.0001				
%RSD:	206.07%	206.07%	206.07				

Sequence No.: 31 Autosampler Location: 34
Sample ID: AZ18137W05 Date Collected: 07/09/15 12:14:10 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:09 PM
Logged In Analyst (Original) : chemist_metals

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18137W05 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	-0.0002	0.0002	12:15:00 PM	Yes
2	0.033	0.033	0.0002	0.0009	0.0004	12:15:28 PM	Yes
3	-0.001	-0.001	-0.0000	-0.0015	0.0002	12:15:57 PM	Yes
Mean:	0.012	0.012	0.0001				
SD:	0.0185	0.0185	0.0001				
%RSD:	153.09%	153.09%	153.09				

==========

Sequence No.: 32 Autosampler Location: 35
Sample ID: AZ18138W05 Date Collected: 07/09/15 12:16:16 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:09 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18138W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0001	-0.0041	0.0003	12:17:05 PM	Yes
2	0.013	0.013	0.0001	-0.0035	0.0003	12:17:34 PM	Yes
3	-0.012	-0.012	-0.0001	-0.0042	0.0001	12:18:03 PM	Yes
Mean:	0.007	0.007	0.0000				
SD:	0.0164	0.0164	0.0001				
%RSD:	247.04%	247.04%	247.04				

==========

Sequence No.: 33 Autosampler Location: 36
Sample ID: AZ18139W05 Date Collected: 07/09/15 12:18:22 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:09 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18139W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.031	0.031	0.0002	-0.0012	0.0004	12:19:11 PM	Yes
2	0.040	0.040	0.0003	-0.0010	0.0005	12:19:40 PM	Yes
3	0.017	0.017	0.0001	-0.0007	0.0003	12:20:09 PM	Yes
Mean:	0.029	0.029	0.0002				
SD:	0.0117	0.0117	0.0001				
%RSD:	39.87%	39.87%	39.87				

==========

Sequence No.: 34 Autosampler Location: 37
Sample ID: AZ18140W05 Date Collected: 07/09/15 12:20:28 PM
Analyst: RE-Freddie Data Type: Reprocessed on 07/09/15 12:37:09 PM
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: AZ18140W05 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.120	0.120	0.0009	0.0043	0.0011	12:21:18 PM	Yes
2	0.065	0.065	0.0005	0.0014	0.0006	12:21:46 PM	Yes
3	0.070	0.070	0.0005	0.0022	0.0007	12:22:15 PM	Yes
Mean:	0.085	0.085	0.0006				
SD:	0.0304	0.0304	0.0002				
%RSD:	35.75%	35.75%	35.75				

==========

Sequence No.: 35
Sample ID: AZ18140W05 MS
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 07/09/15 12:22:35 PM
Data Type: Reprocessed on 07/09/15 12:37:10 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ18140W05 MS — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.797	2.797	0.0206	0.0903	0.0208	12:23:24 PM	Yes
2	2.739	2.739	0.0202	0.0868	0.0203	12:23:53 PM	Yes
3	2.783	2.783	0.0205	0.0882	0.0207	12:24:23 PM	Yes

Matrix Recovery Check: AZ18140W05 MS

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Recovery (%)
Hg 253.7			4.085	2.773	0.030	ug/L	67.2
Mean:	2.773	2.773	0.0204				
SD:	0.0302	0.0302	0.0002				
%RSD:	1.09%	1.09%	1.09				

Sequence No.: 36
Sample ID: AZ18140W05 MSD
Analyst: RE-Freddie
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 07/09/15 12:24:42 PM
Data Type: Reprocessed on 07/09/15 12:37:10 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: AZ18140W05 MSD — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.803	2.803	0.0206	0.0898	0.0208	12:25:32 PM	Yes
2	2.807	2.807	0.0207	0.0888	0.0208	12:26:01 PM	Yes
3	2.770	2.770	0.0204	0.0873	0.0206	12:26:30 PM	Yes

Duplicate Check: AZ18140W05 MSD

Analyte			Expected Conc.	Measured Conc.	Std. Dev.	Units	Difference (%)
Hg 253.7			2.773	2.793	0.020	ug/L	0.7
Mean:	2.793	2.793	0.0206				
SD:	0.0201	0.0201	0.0001				
%RSD:	0.72%	0.72%	0.72				

Sequence No.: 37
Sample ID: CCV 07/09/15 RE
Analyst:
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 07/09/15 12:26:49 PM
Data Type: Reprocessed on 07/09/15 12:37:10 PM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV 07/09/15 RE — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.076	5.076	0.0374	0.1669	0.0375	12:27:40 PM	Yes
2	5.070	5.070	0.0373	0.1650	0.0375	12:28:09 PM	Yes
3	5.002	5.002	0.0368	0.1620	0.0370	12:28:38 PM	Yes
Mean:	5.049	5.049	0.0372				
SD:	0.0409	0.0409	0.0003				
%RSD:	0.81%	0.81%	0.81				

QC value within limits for Hg 253.7 Recovery = 100.98%
All analyte(s) passed QC.

Sequence No.: 38
Autosampler Location: 1

Sample ID: CCB 07/09/15 RE **Date Collected: 07/09/15 12:28:58 PM**
Analyst: **Data Type: Reprocessed on 07/09/15 12:37:10 PM**
Logged In Analyst (Original) : chemist_metals
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB 07/09/15 RE **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0002	0.0007	0.0004	12:29:48 PM	Yes
2	0.023	0.023	0.0002	-0.0003	0.0003	12:30:16 PM	Yes
3	0.005	0.005	0.0000	-0.0023	0.0002	12:30:45 PM	Yes
Mean:	0.019	0.019	0.0001				
SD:	0.0127	0.0127	0.0001				
%RSD:	66.40%	66.40%	66.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

1%HNO3 / 5%HCl BLK					6010B/6010C ICSA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4114020	07/06/15	1mL	Al	CPI	14D237-33868	01/15/16
20 mL	HNO3	JT BAKER	0000067379	07/06/15	1mL	Ca	CPI	14D176-33867	01/15/16
Prepared in 2000 ml DI Water					1mL	Mg	CPI	14F190-33865	01/15/16
STD 1 / LDL 6010B/6010C					1mL	Fe	O2SI	1062942-33880	01/12/16
AMOUNT	STD	MANUFACTURER	LOT	EXP DATE	Prepared in 50 ml 1%HNO3/5%HCl				
0.5 mL	6010 LDL	O2SI	1062903-33879	08/01/15	6010B/6010C ICSAB				
Prepared in 50 ml 1%HNO3/5%HCl					1mL	Al	CPI	14D237-33868	01/15/16
STD 3 / HDL 6010B/6010C					1mL	Ca	CPI	14D176-33867	01/15/16
1ML	CCV-A	Environmental Express	1428118-34178	10/14/15	1mL	Mg	CPI	14F190-33865	01/15/16
1ML	CCV-B	Environmental Express	1428119-34179	10/14/15	1mL	Fe	O2SI	1062942-33880	01/12/16
1ML	CCV-C	Environmental Express	1428120-34180	10/14/15	0.5mL	INT SPECIAL MIX	O2SI	1070553-34624	03/01/16
Prepared in 100 ml 1%HNO3 / 5%HCl					Prepared in 50 ml 1%HNO3/5%HCl				
STD 2 / CCV1 6010B/6010C/6010C					6010B/6010C ICV				
AMOUNT	STD	PREP DATE	EXP DATE		0.5ML	QCS ICV A	CPI	15C180-34943	09/19/16
25mL	STD 3	Today	1 week		0.5ML	QCS ICV B	CPI	15C181-34944	09/19/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 50ml 1%HNO3/5%HCl				
CCV2 6010B/6010C					6010B/6010C Internal Standard				
AMOUNT	STD	PREP DATE	EXP DATE		AMOUNT	STD	MANUFACTURER		
15mL	STD 3	Today	1 week		2mL	Yttrium	O2SI	1073310-35027	10/01/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 2L 1%HNO3 / 5%HCl				

1%HNO3 / 5%HCl BLK					6010B/6010C ICSA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4114020	07/10/15	1mL	Al	CPI	14D237-33868	01/15/16
20 mL	HNO3	JT BAKER	0000067379	07/10/15	1mL	Ca	CPI	14D176-33867	01/15/16
Prepared in 2000 ml DI Water					1mL	Mg	CPI	14F190-33865	01/15/16
STD 1 / LDL 6010B/6010C					1mL	Fe	O2SI	1062942-33880	01/12/16
AMOUNT	STD	MANUFACTURER	LOT	EXP DATE	Prepared in 50 ml 1%HNO3/5%HCl				
0 5 mL	6010 LDL	O2SI	1062903-33879	08/01/15	6010B/6010C ICSAB				
Prepared in 50 ml 1%HNO3/5%HCl					1mL	Al	CPI	14D237-33868	01/15/16
STD 3 / HDL 6010B/6010C					1mL	Ca	CPI	14D176-33867	01/15/16
1ML	CCV-A	Environmental Express	1428118-34178	10/14/15	1mL	Mg	CPI	14F190-33865	01/15/16
1ML	CCV-B	Environmental Express	1428119-34179	10/14/15	1mL	Fe	O2SI	1062942-33880	01/12/16
1ML	CCV-C	Environmental Express	1428120-34180	10/14/15	0 5mL	INT SPECIAL MIX	O2SI	1070553-34624	03/01/16
Prepared in 100 ml 1%HNO3 / 5%HCl					Prepared in 50 ml 1%HNO3/5%HCl				
STD 2 / CCV1 6010B/6010C/6010C					6010B/6010C ICV				
AMOUNT	STD	PREP DATE	EXP DATE		0.5ML	QCS ICV A	CPI	15C180-34943	09/19/16
25mL	STD 3	Today	1 week		0 5ML	QCS ICV B	CPI	15C181-34944	09/19/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 50ml 1%HNO3/5%HCl				
CCV2 6010B/6010C					6010B/6010C Internal Standard				
AMOUNT	STD	PREP DATE	EXP DATE		AMOUNT	STD	MANUFACTURER		
15mL	STD 3	Today	1 week		2mL	Yttrium	O2SI	1073310-35027	10/01/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 2L 1%HNO3 / 5%HCl				

1%HNO3 / 5%HCl BLK					6010B/6010C ICSA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4114020	07/08/15	1mL	Al	CPI	14D237-33868	01/15/16
20 mL	HNO3	JT BAKER	0000067379	07/08/15	1mL	Ca	CPI	14D176-33867	01/15/16
Prepared in 2000 ml DI Water					1mL	Mg	CPI	14F190-33865	01/15/16
STD 1 / LDL 6010B/6010C					1mL	Fe	O2SI	1062942-33880	01/12/16
AMOUNT	STD	MANUFACTURER	LOT	EXP DATE	Prepared in 50 ml 1%HNO3/5%HCl				
0.5 mL	6010 LDL	O2SI	1062903-33879	08/01/15	6010B/6010C ICSAB				
Prepared in 50 ml 1%HNO3/5%HCl					1mL	Al	CPI	14D237-33868	01/15/16
STD 3 / HDL 6010B/6010C					1mL	Ca	CPI	14D176-33867	01/15/16
1ML	CCV-A	Environmental Express	1428118-34178	10/14/15	1mL	Mg	CPI	14F190-33865	01/15/16
1ML	CCV-B	Environmental Express	1428119-34179	10/14/15	1mL	Fe	O2SI	1062942-33880	01/12/16
1ML	CCV-C	Environmental Express	1428120-34180	10/14/15	0.5mL	INT SPECIAL MIX	O2SI	1070553-34624	03/01/16
Prepared in 100 ml 1%HNO3 / 5%HCl					Prepared in 50 ml 1%HNO3/5%HCl				
STD 2 / CCV1 6010B/6010C/6010C					6010B/6010C ICV				
AMOUNT	STD	PREP DATE	EXP DATE		0.5ML	QCS ICV A	CPI	15C180-34943	09/19/16
25mL	STD 3	Today	1 week		0.5ML	QCS ICV B	CPI	15C181-34944	09/19/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 50ml 1%HNO3/5%HCl				
CCV2 6010B/6010C					6010B/6010C Internal Standard				
AMOUNT	STD	PREP DATE	EXP DATE		AMOUNT	STD	MANUFACTURER		
15mL	STD 3	Today	1 week		2mL	Yttrium	O2SI	1073310-35027	10/01/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 2L 1%HNO3 / 5%HCl				

1%HNO3 / 5%HCl BLK					6010B/6010C ICSA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4114020	06/23/15	1mL	Al	CPI	14D237-33868	01/15/16
20 mL	HNO3	JT BAKER	0000067379	06/23/15	1mL	Ca	CPI	14D176-33867	01/15/16
Prepared in 2000 ml DI Water					1mL	Mg	CPI	14F190-33865	01/15/16
STD 1 / LDL 6010B/6010C					1mL	Fe	O2SI	1062942-33880	01/12/16
AMOUNT	STD	MANUFACTURER	LOT	EXP DATE	Prepared in 50 ml 1%HNO3/5%HCl				
0.5 mL	6010 LDL	O2SI	1062903-33879	08/01/15	6010B/6010C ICSAB				
Prepared in 50 ml 1%HNO3/5%HCl					1mL	Al	CPI	14D237-33868	01/15/16
STD 3 / HDL 6010B/6010C					1mL	Ca	CPI	14D176-33867	01/15/16
1ML	CCV-A	Environmental Express	1428118-34178	10/14/15	1mL	Mg	CPI	14F190-33865	01/15/16
1ML	CCV-B	Environmental Express	1428119-34179	10/14/15	1mL	Fe	O2SI	1062942-33880	01/12/16
1ML	CCV-C	Environmental Express	1428120-34180	10/14/15	0.5mL	INT SPECIAL MIX	O2SI	1070553-34624	03/01/16
Prepared in 100 ml 1%HNO3 / 5%HCl					Prepared in 50 ml 1%HNO3/5%HCl				
STD 2 / CCV1 6010B/6010C/6010C					6010B/6010C ICV				
AMOUNT	STD	PREP DATE	EXP DATE		0.5ML	QCS ICV A	CPI	15C180-34943	09/19/16
25mL	STD 3	Today	1 week		0.5ML	QCS ICV B	CPI	15C181-34944	09/19/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 50ml 1%HNO3/5%HCl				
CCV2 6010B/6010C					6010B/6010C Internal Standard				
AMOUNT	STD	PREP DATE	EXP DATE		AMOUNT	STD	MANUFACTURER		
15mL	STD 3	Today	1 week		2mL	Yttrium	O2SI	1073310-35027	10/01/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 2L 1%HNO3 / 5%HCl				

1%HNO3 / 5%HCl BLK					6010B/6010C ICSA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4114020	06/23/15	1mL	Al	CPI	14D237-33868	01/15/16
20 mL	HNO3	JT BAKER	0000067379	06/23/15	1mL	Ca	CPI	14D176-33867	01/15/16
Prepared in 2000 ml DI Water					1mL	Mg	CPI	14F190-33865	01/15/16
STD 1 / LDL 6010B/6010C					1mL	Fe	O2SI	1062942-33880	01/12/16
AMOUNT	STD	MANUFACTURER	LOT	EXP DATE	Prepared in 50 ml 1%HNO3/5%HCl				
0.5 mL	6010 LDL	ABSOLUTE	1062903-33879	08/01/15	6010B/6010C ICSAB				
Prepared in 50 ml 1%HNO3/5%HCl					1mL	Al	CPI	14D237-33868	01/15/16
STD 3 / HDL 6010B/6010C					1mL	Ca	CPI	14D176-33867	01/15/16
1ML	CCV-A	Environmental Express	1428118-34178	10/14/15	1mL	Mg	CPI	14F190-33865	01/15/16
1ML	CCV-B	Environmental Express	1428119-34179	10/14/15	1mL	Fe	O2SI	1062942-33880	01/12/16
1ML	CCV-C	Environmental Express	1428120-34180	10/14/15	0.5mL	INT SPECIAL MIX	O2SI	1070553-34624	03/01/16
Prepared in 100 ml 1%HNO3 / 5%HCl					Prepared in 50 ml 1%HNO3/5%HCl				
STD 2 / CCV1 6010B/6010C/6010C					6010B/6010C ICV				
AMOUNT	STD	PREP DATE	EXP DATE		0.5ML	QCS ICV A	CPI	15C180-34943	09/19/16
25mL	STD 3	Today	1 week		0.5ML	QCS ICV B	CPI	15C181-34944	09/19/16
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 50ml 1%HNO3/5%HCl				
CCV2 6010B/6010C					6010B/6010C Internal Standard				
AMOUNT	STD	PREP DATE	EXP DATE		AMOUNT	STD	MANUFACTURER	PREP	EXP
15mL	STD 3	Today	1 week		2mL	Yttrium	O2SI	Today	1 week
25mL	1%HNO3/5%HCl	Today	1 week		Prepared in 2L 1%HNO3 / 5%HCl				

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 10/17/2016 and 1mL HNO3 EMD LOT# 113071 4435 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# 113071 4435 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#113071 4435 to final vol 200mL with milipore water	06/08/15	exp:	07/06/15 final conc: 50ug/L expires daily
Hg WORKING ICV	1ml 10ug/ml Hg STOCK ICV and 2mL HNO3 EMD LOT#113071 4435 to final vol 200mL with milipore water	06/08/15	exp:	07/06/15 final conc: 50ug/L expires daily

10% HCL	3% HCl
200 mL of HCL in 2000 mL of DI H2O Prep Date: 06/17/15 Exp Date: 06/17/16 Prepared by: RE Lot# HCL: BDH 4114121 3927	30 mL of HCL in 1000 mL of DI H2O Prep Date: 06/24/15 Exp Date: 06/24/16 Prepared by: RE Lot# HCL: BDH 115020 4329

1.1% STANNOUS CHLORIDE
11g SnCl2 EMD Lot #B1006939-411 30 mL HCl BDH Lot #4115020 4329 Brought to 1000 mL with DI Water Prep. Date 06/24/15 Exp. Date 06/24/16 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 10/17/2016 and 1mL HNO3 EMD LOT# 113071 4435 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep. Date 07/08/15 Exp. Date 08/05/15	1mL Ultra Sci Hg ICV STD Lot #P00139-32881 conc: 1000ug/mL exp 03/31/19 and 1mL HNO3 EMD LOT# 113071 4435 to final volume of 100mL milipore water Final conc.: 10ug/mL Hg in 1%HNO3 Prep.Date 07/08/15 Exp. Date 08/05/15

Hg WORKING STANDARDS 7470A/7471/245.1				
Hg WORKING STD	1ml 10ug/ml Hg STOCK STD. and 2mL HNO3 EMD LOT#113071 4435 to final vol 200mL with milipore water	07/08/15	exp:	08/05/15 final conc: 50ug/L expires daily
Hg WORKING ICV	1ml 10ug/ml Hg STOCK ICV and 2mL HNO3 EMD LOT#113071 4435 to final vol 200mL with milipore water	07/08/15	exp:	08/05/15 final conc: 50ug/L expires daily

10% HCL	3% HCl
200 mL of HCL in 2000 mL of DI H2O Prep Date: 07/09/15 Exp Date: 07/09/16 Prepared by: RE Lot# HCL: BDH 4114121 3927	30 mL of HCL in 1000 mL of DI H2O Prep Date: 07/09/15 Exp Date: 07/09/16 Prepared by: RE Lot# HCL: BDH 115020 4329

1.1% STANNOUS CHLORIDE
11g SnCl2 EMD Lot #B0991639 348 30 mL HCl BDH Lot #4115020 4329 Brought to 1000 mL with DI Water Prep. Date 07/09/15 Exp. Date 07/09/16 By RE

Metals Digestion Worksheet

Method Name 3010A Digestion (Field Filter) **Prep Method** M3010F **Set** 150701A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1073180-35017		
Spiked ID 2	LCSW LOT# 1073080-35018		
Spiked ID 3	Li 10mg/L Prep: 7-1-15		
Spiked ID 4			
Spiked By	NM	Date:	07/01/15 8:45:00 AM
Witnessed By	KRG	Date:	07/01/15 8:45:00 AM

Starting Temp:	95 c
Ending Temp:	97 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	07/01/15 14:00

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150701A Blk				50mL	50mL	07/01/15 8:45	equip: Modblock2 FIELD FILTER
2	150701A LCS		500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
3	AZ17692	AZ17692W06			50mL	50mL	07/01/15 8:45	equip: Modblock2
4	AZ17693	AZ17693W06			50mL	50mL	07/01/15 8:45	equip: Modblock2
5	AZ17694	AZ17694W19			50mL	50mL	07/01/15 8:45	equip: Modblock2
6	AZ17694 MS	AZ17694W19	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
7	AZ17694 MSD	AZ17694W19	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
8	AZ17695	AZ17695W06			50mL	50mL	07/01/15 8:45	equip: Modblock2
9	AZ17696	AZ17696W09			50mL	50mL	07/01/15 8:45	equip: Modblock2
10	AZ17817	AZ17817W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
11	AZ17818	AZ17818W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
12	AZ17821	AZ17821W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
13	AZ17823	AZ17823W19			50mL	50mL	07/01/15 8:45	equip: Modblock2
14	AZ17823 MS	AZ17823W19	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
15	AZ17823 MSD	AZ17823W19	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
16	AZ17826	AZ17826W09			50mL	50mL	07/01/15 8:45	equip: Modblock2
17	AZ17827	AZ17827W06			50mL	50mL	07/01/15 8:45	equip: Modblock2
18	AZ17828	AZ17828W09			50mL	50mL	07/01/15 8:45	equip: Modblock2
19	AZ17829	AZ17829W09			50mL	50mL	07/01/15 8:45	equip: Modblock2
20	AZ17907	AZ17907W09			50mL	50mL	07/01/15 8:45	equip: Modblock2
21	AZ17908	AZ17908W06			50mL	50mL	07/01/15 8:45	equip: Modblock2
22	AZ17909	AZ17909W09			50mL	50mL	07/01/15 8:45	equip: Modblock2

Solvent and Lot#
HNO3 J.T.B. 106819 4358
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RTS
Date	7/1/15
Time	1700
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	07/01/15 8:19:29 AM

Reviewed By: RTS **Date:** 7/1/15

Metals Digestion Worksheet

Method Name 3010A Digestion **Prep Method** M3010 **Set** 150701A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1075288-35199		
Spiked ID 2	LCSW LOT# 1075395-35200		
Spiked ID 3	10mg/L Prep: 7-1-15		
Spiked ID 4			
Spiked By	NM	Date:	07/01/15 8:45:00 AM
Witnessed By	KRG	Date:	07/01/15 8:45:00 AM

Starting Temp:	95 c
Ending Temp:	97 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	07/01/15 13:45

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150701A Blk				50mL	50mL	07/01/15 8:45	equip: Modblock2 TOTAL
2	150701A LCS		500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
3	AZ17692	AZ17692W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
4	AZ17693	AZ17693W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
5	AZ17694	AZ17694W22			50mL	50mL	07/01/15 8:45	equip: Modblock2
6	AZ17694 MS	AZ17694W22	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
7	AZ17694 MSD	AZ17694W22	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
8	AZ17695	AZ17695W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
9	AZ17696	AZ17696W10			50mL	50mL	07/01/15 8:45	equip: Modblock2
10	AZ17817	AZ17817W08			50mL	50mL	07/01/15 8:45	equip: Modblock2
11	AZ17818	AZ17818W08			50mL	50mL	07/01/15 8:45	equip: Modblock2
12	AZ17821	AZ17821W08			50mL	50mL	07/01/15 8:45	equip: Modblock2
13	AZ17823	AZ17823W22			50mL	50mL	07/01/15 8:45	equip: Modblock2
14	AZ17823 MS	AZ17823W22	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
15	AZ17823 MSD	AZ17823W22	500uL	1+2+3	50mL	50mL	07/01/15 8:45	equip: Modblock2
16	AZ17826	AZ17826W10			50mL	50mL	07/01/15 8:45	equip: Modblock2
17	AZ17827	AZ17827W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
18	AZ17828	AZ17828W10			50mL	50mL	07/01/15 8:45	equip: Modblock2
19	AZ17829	AZ17829W10			50mL	50mL	07/01/15 8:45	equip: Modblock2
20	AZ17907	AZ17907W10			50mL	50mL	07/01/15 8:45	equip: Modblock2
21	AZ17908	AZ17908W07			50mL	50mL	07/01/15 8:45	equip: Modblock2
22	AZ17909	AZ17909W10			50mL	50mL	07/01/15 8:45	equip: Modblock2

Solvent and Lot#
HNO3 J.T.B. 106819 4358
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	ROS
Date	7/1/15
Time	1700
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	07/01/15 8:23:16 AM

Reviewed By: ROS **Date:** 7/1/15

Metals Digestion Worksheet

Method Name 3010A Digestion (TCLP) **Prep Method** M3010TCLP T **Set** 150707A **Units** mL

Spikes	
Spiked ID 1	LCSW LOT# 1075288-35199
Spiked ID 2	LCSW LOT# 1075395-35200
Spiked ID 3	
Spiked ID 4	
Spiked By	NM Date: 07/07/15 10:00:00 AM
Witnessed By	MM Date: 07/07/15 10:00:00 AM

Starting Temp:	96 c
Ending Temp:	95 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	07/07/15 13:40

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150707A Blk				50mL	50mL	07/07/15 10:00	equip: Modblock2 % solid <0.5
2	150707A LCS		500uL	1+2	50mL	50mL	07/07/15 10:00	equip: Modblock2
3	AZ17910	AZ17910W04			50mL	50mL	07/07/15 10:00	equip: Modblock2
4	AZ17910 MS	AZ17910W04	500uL	1+2	50mL	50mL	07/07/15 10:00	equip: Modblock2
5	AZ17910 MSD	AZ17910W04	500uL	1+2	50mL	50mL	07/07/15 10:00	equip: Modblock2

Solvent and Lot#
HNO3 J.T.B 106819 4358
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RDS
Date	7/8/15
Time	1155
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	07/07/15 9:49:05 AM

Reviewed By: RDS **Date:** 7/8/15

Mercury Digestion Worksheet

Method Name 7470 Mercury Digestion (TCLP) **Prep Method** M7470TCLP **Set** 150708A **Units** mL

Spikes			
Spiked ID 1	Hg WORKING STANDARD prep 7-8-15		
Spiked ID 2	Hg WORKING ICV prep 7-8-15		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	07/08/15 10:26:00 AM
Witnessed By	RE	Date:	07/08/15 10:26:00 AM

Starting Temp:	95 c
Ending Temp:	95 c
Temp Type:	Modblock3 % Solid <0.5
End Date/Time	07/08/15 12:30:00 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 07/08/15 10:26

Sufficient Vol for Matrix QC:	Yes

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150708A Blk				50mL	72.25mL	07/08/15 10:26	equip: Modblock3 % Solid <0.5
2	150708A LCS		4mL	1	50mL	72.25mL	07/08/15 10:26	equip: Modblock3
3	AZ17910	AZ17910W04			50mL	72.25mL	07/08/15 10:26	equip: Modblock3
4	AZ17910 MS	AZ17910W04	4mL	1	50mL	72.25mL	07/08/15 10:26	equip: Modblock3
5	AZ17910 MSD	AZ17910W04	4mL	1	50mL	72.25mL	07/08/15 10:26	equip: Modblock3

Solvent and Lot#
HNO3 J.T.B 113071 4479
H2SO4 J.T.B 71333 3971
KMnO4 7-6-15
K2S2O8 6-2-15
Decolorizer 7-2-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RE
Date	7/10/15
Time	10:55
Moved to	Metals

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	07/08/15 10:00:33 AM

Reviewed By: RE Ext_ID 874 48335 **Date:** 7/10/15

Metals Digestion Worksheet

Method Name 3010A Digestion (TCLP) **Prep Method** M3010TCLP T **Set** 150624A **Units** mL

Spikes	
Spiked ID 1	LCSW LOT# 1075288-35199
Spiked ID 2	LCSW LOT# 1075395-35200
Spiked ID 3	
Spiked ID 4	
Spiked By	NM Date: 06/24/15 9:41:00 AM
Witnessed By	RE Date: 06/24/15 9:41:00 AM

Starting Temp:	90 c
Ending Temp:	91 c
Temperature Type:	Mod Block
Sufficient Vol for Matrix QC:	Yes
End Date/Time	06/24/15 13:08

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150624A Blk				50mL	50mL	06/24/15 9:41	equip: Modblock4 Tumble Start time 6/23/15@15:35
2	150624A LCS		500uL	1+2	50mL	50mL	06/24/15 9:41	equip: Modblock4 Tumble End Time 6/24/15@08:00
3	AZ17911	AZ17911S01			50mL	50mL	06/24/15 9:41	equip: Modblock4 Fluid # 1
4	AZ17911 MS	AZ17911S01	500uL	1+2	50mL	50mL	06/24/15 9:41	equip: Modblock4
5	AZ17911 MSD	AZ17911S01	500uL	1+2	50mL	50mL	06/24/15 9:41	equip: Modblock4
6	AZ17961	AZ17961S01			50mL	50mL	06/24/15 9:41	equip: Modblock4
7	AZ17961 DUP	AZ17961S01			50mL	50mL	06/24/15 9:41	equip: Modblock4
8	AZ17961 MS	AZ17961S01	500uL	1+2	50mL	50mL	06/24/15 9:41	equip: Modblock4

Solvent and Lot#
HNO3 EMD 54181 3178
1:1 HCL 1-12-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RDS
Date	6/24/15
Time	1000
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	06/24/15 9:31:52 AM

Reviewed By: RDS **Date:** 6/24/15

_M7470TCL

Mercury Digestion Worksheet

Method Name 7470 Mercury Digestion (TCLP) **Prep Method** M7470TCLP **Set** 150624A **Units** mL

Spikes	
Spiked ID 1	Hg WORKING STANDARD prep 6-24-15
Spiked ID 2	Hg WORKING ICV prep 6-24-15
Spiked ID 3	
Spiked ID 4	
Spiked By	NM Date: 06/24/15 11:39:00 AM
Witnessed By	RE Date: 06/24/15 11:39:00 AM

Starting Temp:	96 C
Ending Temp:	96 C
Temp Type:	Modblock3 Tumble Start Time 6/23/15@15:35
End Date/Time	

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 06/24/15 11:39

Sufficient Vol for Matrix QC:	Yes

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	150624A Blk				50mL	72.25mL	06/24/15 11:39	equip: Modblock3 Tumble Start Time 6/23/15@15:35
2	150624A LCS		4mL	1	50mL	72.25mL	06/24/15 11:39	equip: Modblock3 Tumble End Time 6/24/15@08:00
3	AZ17911	AZ17911S01			50mL	72.25mL	06/24/15 11:39	equip: Modblock3 Fluid # 1
4	AZ17911 MS	AZ17911S01	4mL	1	50mL	72.25mL	06/24/15 11:39	equip: Modblock3
5	AZ17911 MSD	AZ17911S01	4mL	1	50mL	72.25mL	06/24/15 11:39	equip: Modblock3
6	AZ17961	AZ17961S01			50mL	72.25mL	06/24/15 11:39	equip: Modblock3
7	AZ17961 DUP	AZ17961S01			50mL	72.25mL	06/24/15 11:39	equip: Modblock3
8	AZ17961 MS	AZ17961S01	4mL	1	50mL	72.25mL	06/24/15 11:39	equip: Modblock3

Solvent and Lot#
HNO3 J.T.B 113071 4435
H2SO4 J.T.B 71333 3971
KMnO4 6-8-15
K2S2O8 6-2-15
Decolorizer 5-28-15

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	RE
Date	6/24/15
Time	15:24
Moved to	Metals

Technician's Initials	
Scanned By	nm
Sample Preparation	nm
Digestion	nm
Bring up to volume	nm
Modified	06/24/15 11:39:03 AM

Reviewed By: RE **Date:** 6/24/15

06/24/15 3:21:16 PM

Ext_ID 876 48230

6010 Injection Log

Directory: K:\ICAP PHOEBE\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	08 Jul 2015	11:48	CalBlk 150708RJS I:PB O:R		150708A6010	1.
2	08 Jul 2015	11:53	STD 1 150708RJS I:PB O:RJ		150708A6010	1.
3	08 Jul 2015	11:58	STD 2 150708RJS I:PB O:RJ		150708A6010	1.
4	08 Jul 2015	12:02	STD 3 150708RJS I:PB O:RJ		150708A6010	1.
5	08 Jul 2015	12:09	ICV 150708RJS I:PB O:RJS		150708A6010	1.
6	08 Jul 2015	12:14	ICB 150708RJS I:PB O:RJS		150708A6010	1.
8	08 Jul 2015	12:30	ICSA 150708RJS I:PB O:RJS		150708A6010	1.
9	08 Jul 2015	12:37	ICSAB 150708RJS I:PB O:RJ		150708A6010	1.
10	08 Jul 2015	12:43	CCV1 150708RJS I:PB O:RJS		150708A6010	1.
11	08 Jul 2015	12:52	CCB 150708RJS I:PB O:RJS		150708A6010	1.
12	08 Jul 2015	12:57	150707A-3010T-BLK		150708A6010	1.
13	08 Jul 2015	13:02	150707A-3010T-LCS		150708A6010	1.
14	08 Jul 2015	13:09	AZ17910W04		150708A6010	1.
15	08 Jul 2015	13:16	CCV2 150708RJS I:PB O:RJS		150708A6010	1.
16	08 Jul 2015	13:24	CCB 150708RJS I:PB O:RJS		150708A6010	1.
17	08 Jul 2015	13:29	AZ17910W04 MS		150708A6010	1.
18	08 Jul 2015	13:35	AZ17910W04 MSD		150708A6010	1.
19	08 Jul 2015	13:42	AZ17910W04-A		150708A6010	1.
20	08 Jul 2015	13:48	AZ17910W04-1/5		150708A6010	5.
23	08 Jul 2015	14:06	CCV1 150708RJS I:PB O:RJS		150708A6010	1.
24	08 Jul 2015	14:20	CCB 150708RJS I:PB O:RJS		150708A6010	1.

6010 Injection Log

Directory: K:\ICAP PHOEBE\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	23 Jun 2015	12:48	CalBlk 150623RJS I:PB O:R		150623A6010	1.
2	23 Jun 2015	12:53	STD 1 150623RJS I:PB O:RJ		150623A6010	1.
3	23 Jun 2015	12:58	STD 2 150623RJS I:PB O:RJ		150623A6010	1.
4	23 Jun 2015	13:02	STD 3 150623RJS I:PB O:RJ		150623A6010	1.
5	23 Jun 2015	13:06	ICV 150623RJS I:PB O:RJS		150623A6010	1.
6	23 Jun 2015	13:12	ICB 150623RJS I:PB O:RJS		150623A6010	1.
8	23 Jun 2015	13:34	ICSA 150623RJS I:PB O:RJS		150623A6010	1.
9	23 Jun 2015	13:40	ICSAB 150623RJS I:PB O:RJ		150623A6010	1.
10	23 Jun 2015	13:47	CCV1 150623RJS I:PB O:RJS		150623A6010	1.
11	23 Jun 2015	13:52	CCB 150623RJS I:PB O:RJS		150623A6010	1.
121	24 Jun 2015	13:58	CCV2 150623RJS I:PB O:RJS		150623A6010	1.
122	24 Jun 2015	14:05	CCB 150623RJS I:PB O:RJS		150623A6010	1.
123	24 Jun 2015	14:09	150624A-3010T-BLK		150623A6010	1.
124	24 Jun 2015	14:16	150624A-3010T-LCS		150623A6010	1.
125	24 Jun 2015	14:23	AZ17911S01		150623A6010	1.
127	24 Jun 2015	14:36	CCV1 150623RJS I:PB O:RJS		150623A6010	1.
128	24 Jun 2015	14:41	CCB 150623RJS I:PB O:RJS		150623A6010	1.
129	24 Jun 2015	14:46	AZ17911S01 MS		150623A6010	1.
130	24 Jun 2015	14:53	AZ17911S01 MSD		150623A6010	1.
131	24 Jun 2015	14:59	AZ17911S01-A		150623A6010	1.
132	24 Jun 2015	15:06	AZ17911S01-1/5		150623A6010	5.
138	24 Jun 2015	15:44	CCV2 150623RJS I:PB O:RJS		150623A6010	1.
139	24 Jun 2015	15:52	CCB 150623RJS I:PB O:RJS		150623A6010	1.

6010 Injection Log

Directory: K:\ICAP JULES\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	06 Jul 2015	11:08	CalBlk 150706RJS I:JL O:R		150706A6010	1.
2	06 Jul 2015	11:14	STD 1 150706RJS I:JL O:RJ		150706A6010	1.
3	06 Jul 2015	11:19	STD 2 150706RJS I:JL O:RJ		150706A6010	1.
4	06 Jul 2015	11:25	STD 3 150706RJS I:JL O:RJ		150706A6010	1.
5	06 Jul 2015	11:29	ICV 150706RJS I:JL O:RJS		150706A6010	1.
6	06 Jul 2015	11:35	ICB 150706RJS I:JL O:RJS		150706A6010	1.
7	06 Jul 2015	11:41	ICSA 150706RJS I:JL O:RJS		150706A6010	1.
8	06 Jul 2015	11:47	ICSAB 150706RJS I:JL O:RJ		150706A6010	1.
9	06 Jul 2015	11:53	CCV1 150706RJS I:JL O:RJS		150706A6010	1.
10	06 Jul 2015	12:03	CCB 150706RJS I:JL O:RJS		150706A6010	1.
13	06 Jul 2015	12:22	150701A-3010 BLK		150706A6010	1.
14	06 Jul 2015	12:27	150701A-3010 LCS		150706A6010	1.
29	06 Jul 2015	14:53	CCV2 150706RJS I:JL O:RJS		150706A6010	1.
30	06 Jul 2015	14:58	CCB 150706RJS I:JL O:RJS		150706A6010	1.
57	06 Jul 2015	17:50	CCV2 150706RJS I:JL O:RJS		150706A6010	1.
58	06 Jul 2015	17:55	CCB 150706RJS I:JL O:RJS		150706A6010	1.
62	06 Jul 2015	18:21	AZ17907W10		150706A6010	1.
63	06 Jul 2015	18:27	AZ17908W07		150706A6010	1.
64	06 Jul 2015	18:33	AZ17909W10		150706A6010	1.
69	06 Jul 2015	19:04	CCV1 150706RJS I:JL O:RJS		150706A6010	1.
70	06 Jul 2015	19:09	CCB 150706RJS I:JL O:RJS		150706A6010	1.

6010 Injection Log

Directory: K:\ICAP JULES\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	10 Jul 2015	08:44	CalBlk 150710RJS I:JL O:R		150710A6010	1.
2	10 Jul 2015	08:50	STD 1 150710RJS I:JL O:RJ		150710A6010	1.
3	10 Jul 2015	08:56	STD 2 150710RJS I:JL O:RJ		150710A6010	1.
4	10 Jul 2015	09:01	STD 3 150710RJS I:JL O:RJ		150710A6010	1.
5	10 Jul 2015	09:07	ICV 150710RJS I:JL O:RJS		150710A6010	1.
6	10 Jul 2015	09:17	ICB 150710RJS I:JL O:RJS		150710A6010	1.
7	10 Jul 2015	09:23	ICSA 150710RJS I:JL O:RJS		150710A6010	1.
8	10 Jul 2015	09:29	ICSAB 150710RJS I:JL O:RJ		150710A6010	1.
9	10 Jul 2015	09:34	CCV1 150710RJS I:JL O:RJS		150710A6010	1.
10	10 Jul 2015	09:44	CCB 150710RJS I:JL O:RJS		150710A6010	1.
12	10 Jul 2015	10:02	150701A-3010 BLK		150710A6010	1.
13	10 Jul 2015	10:08	150701A-3010 LCS		150710A6010	1.
14	10 Jul 2015	10:14	AZ17907W10		150710A6010	1.
15	10 Jul 2015	10:21	AZ17908W07		150710A6010	1.
16	10 Jul 2015	10:27	AZ17909W10		150710A6010	1.
17	10 Jul 2015	10:34	CCV2 150710RJS I:JL O:RJS		150710A6010	1.
18	10 Jul 2015	10:43	CCB 150710RJS I:JL O:RJS		150710A6010	1.

various Injection Log

Directory: K:\FIMS Freddie\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	24 Jun 2015	13:53	Calib. Blank		150624W	1.
2	24 Jun 2015	13:55	0.2		150624W	1.
3	24 Jun 2015	13:58	0.5		150624W	1.
4	24 Jun 2015	14:00	1		150624W	1.
5	24 Jun 2015	14:02	2		150624W	1.
6	24 Jun 2015	14:04	5		150624W	1.
7	24 Jun 2015	14:06	10		150624W	1.
8	24 Jun 2015	14:20	ICV 06/24/15 RE		150624W	1.
9	24 Jun 2015	14:23	ICB 06/24/15 RE		150624W	1.
10	24 Jun 2015	14:25	CCV 06/24/15 RE		150624W	1.
11	24 Jun 2015	14:27	CCB 06/24/15 RE		150624W	1.
20	24 Jun 2015	14:48	CCV 06/24/15 RE		150624W	1.
21	24 Jun 2015	14:50	CCB 06/24/15 RE		150624W	1.
22	24 Jun 2015	14:52	150624A BLK TCLP		150624W	1.
23	24 Jun 2015	14:54	150624A LCS TCLP		150624W	1.
24	24 Jun 2015	14:56	AZ17911S01		150624W	1.
25	24 Jun 2015	14:58	AZ17911S01 MS		150624W	1.
26	24 Jun 2015	15:01	AZ17911S01 MSD		150624W	1.
30	24 Jun 2015	15:09	CCV 06/24/15 RE		150624W	1.
31	24 Jun 2015	15:11	CCB 06/24/15 RE		150624W	1.

various Injection Log

Directory: K:\FIMS Freddie\Backup Excel\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	09 Jul 2015	11:09	Calib. Blank		150709W	1.
2	09 Jul 2015	11:11	0.2		150709W	1.
3	09 Jul 2015	11:13	0.5		150709W	1.
4	09 Jul 2015	11:15	1		150709W	1.
5	09 Jul 2015	11:17	2		150709W	1.
6	09 Jul 2015	11:19	5		150709W	1.
7	09 Jul 2015	11:21	10		150709W	1.
8	09 Jul 2015	11:23	ICV 07/09/15 RE		150709W	1.
9	09 Jul 2015	11:26	ICB 07/09/15 RE		150709W	1.
10	09 Jul 2015	11:28	CCV 07/09/15 RE		150709W	1.
11	09 Jul 2015	11:31	CCB 07/09/15 RE		150709W	1.
12	09 Jul 2015	11:33	AZ18025W05 MS		150709W	1.
13	09 Jul 2015	11:35	150708A BLK		150709W	1.
14	09 Jul 2015	11:38	150708A LCS		150709W	1.
17	09 Jul 2015	11:44	AZ17910W04		150709W	1.
18	09 Jul 2015	11:46	AZ17910W04 MS		150709W	1.
19	09 Jul 2015	11:48	AZ17910W04 MSD		150709W	1.
23	09 Jul 2015	11:57	CCV 07/09/15 RE		150709W	1.
24	09 Jul 2015	11:59	CCB 07/09/15 RE		150709W	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	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	CHLORIDE	1.4	1.0	0.20	0.08	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	07/01/15	07/01/15	#906-150701A-AZ17694

Wetlab SC-Blank-REG MDLs
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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	18.9	94.5	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.9	99.1	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	SULFATE	20.0	19.6	98.0	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.0	95.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	9.98	9.27	92.9	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	20.0	18.8	94.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
SW846 906	TOTAL ORGANIC CARBON	10.00	10.2	102	90-110	07/01/15	07/01/15	#906-150701A-AZ17694

Comments: _____

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-MW021-061715

Sample Collection Date: 06/17/15

APPL ID: AZ17907

ARF: 76687

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	134	10.0	2.00	0.80	mg/L	10	06/19/15	06/19/15
EPA 300.0	NITRATE	0.77	0.5	0.18	0.04	mg/L	1	06/18/15	06/18/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	06/18/15	06/18/15
EPA 300.0	SULFATE	6.7	1.0	0.20	0.09	mg/L	1	06/18/15	06/18/15
SW846 9060	TOTAL ORGANIC CARBON	0.14 J	0.5	0.35	0.13	mg/L	1	07/01/15	07/01/15

J = Estimated value.

Printed: 07/13/15 3:47:26 PM

APPL-F1-SC-NoMC-REG MDLs

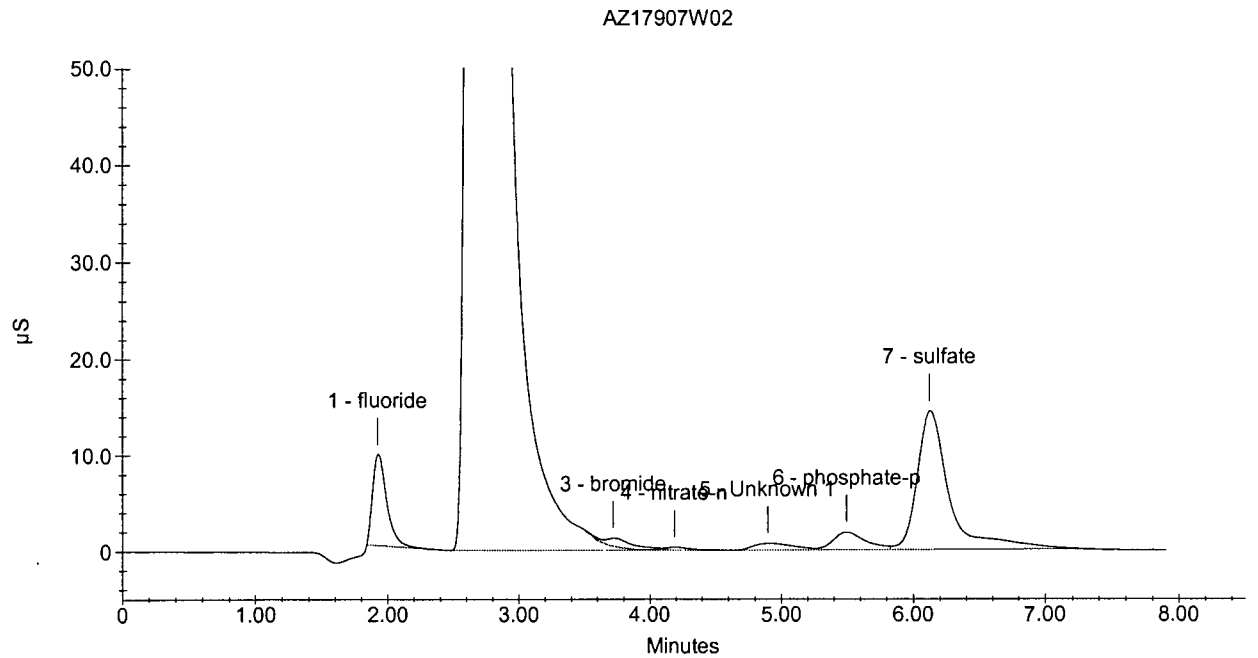
Sample Analysis Report

Sample Name : AZ17907W02
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_043.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150604A.met
Date Time Collected : 6/18/15 15:07:14
System Operator : EM
Injection Number : 43
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.92	fluoride	1.1049	707969	93815
2	2.71	chloride	163.9308	92446142	10065019
3	3.72	bromide	0.7947	127483	8668
4	4.19	nitrate-n	0.1732	37688	2916
5	4.89	Unknown 1	0.0000	143575	6993
6	5.49	phosphate-p	0.4244	314808	18460
7	6.12	sulfate	6.7132	2437467	144245



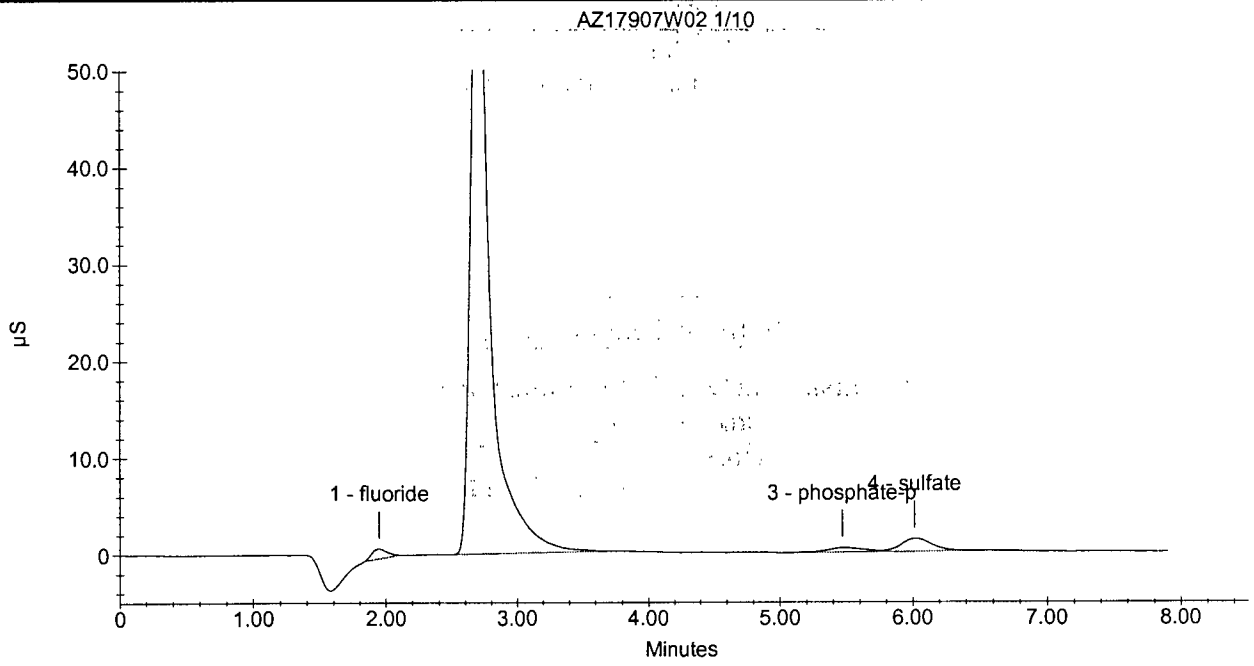
Sample Analysis Report

Sample Name : AZ17907W02 1/10
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150619a_043.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 18:40:51
System Operator : EM
Injection Number : 43
Multiplier : 10.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.95	fluoride	1.2471	82751	10353
2	2.69	chloride	134.3134	7003456	683998
3	5.47	phosphate-p	-0.9514	89069	4609
4	6.01	sulfate	10.4077	216122	13332



APPL, Inc.

Current Date : 6/19/15
Current Time : 18:51:18

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-MW025-061715

Sample Collection Date: 06/17/15

APPL ID: AZ17909

ARF: 76687

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
EPA 300.0	CHLORIDE	91.7	2.0	0.40	0.16	mg/L	2	06/19/15	06/19/15
EPA 300.0	NITRATE	42.7	0.5	0.36	0.08	mg/L	2	06/19/15	06/19/15
EPA 300.0	SULFATE	121	10.0	2.00	0.90	mg/L	10	06/19/15	06/19/15
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	1	06/18/15	06/18/15
SW846 9060	TOTAL ORGANIC CARBON	0.35 U	0.5	0.35	0.13	mg/L	1	07/01/15	07/01/15

Printed: 07/13/15 3:47:26 PM

APPL-F1-SC-NoMC-REG MDLs

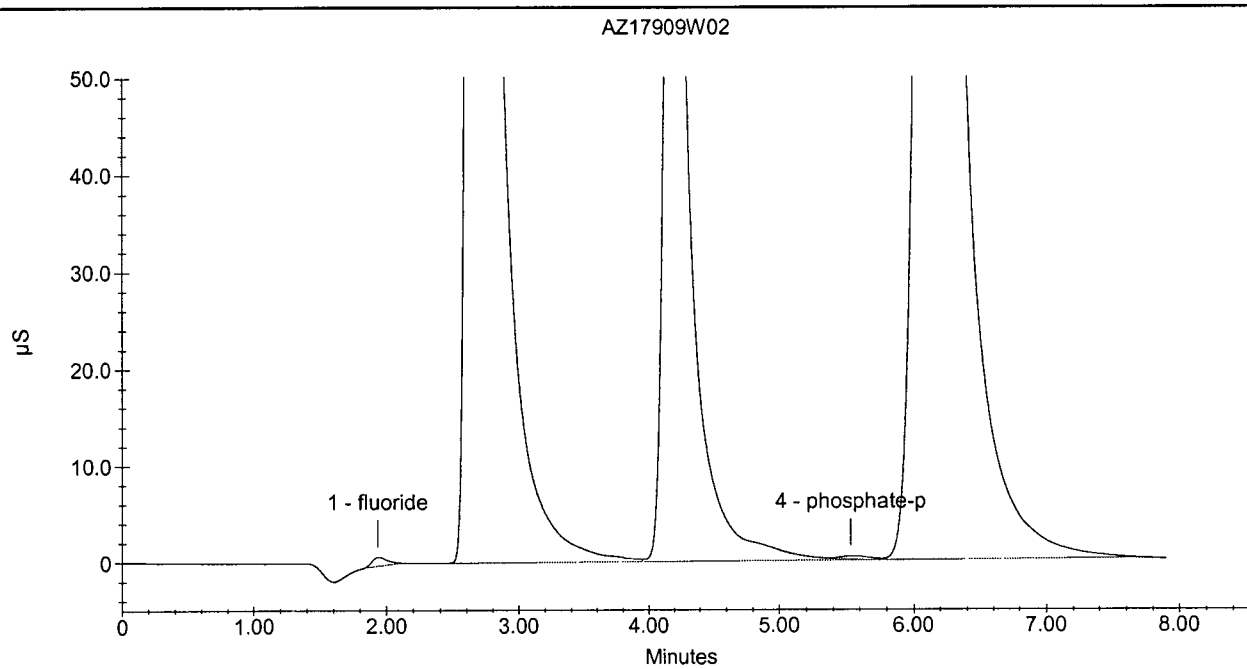
Sample Analysis Report

Sample Name : AZ17909W02
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_044.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150604A.met
Date Time Collected : 6/18/15 15:17:52
System Operator : EM
Injection Number : 44
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	0.1082	72247	9119
2	2.69	chloride	98.0840	55063085	6175799
3	4.19	nitrate-n	10.2726	13350822	1024010
4	5.53	phosphate-p	-0.1702	56471	3586
5	6.17	sulfate	132.2168	51585351	3273351



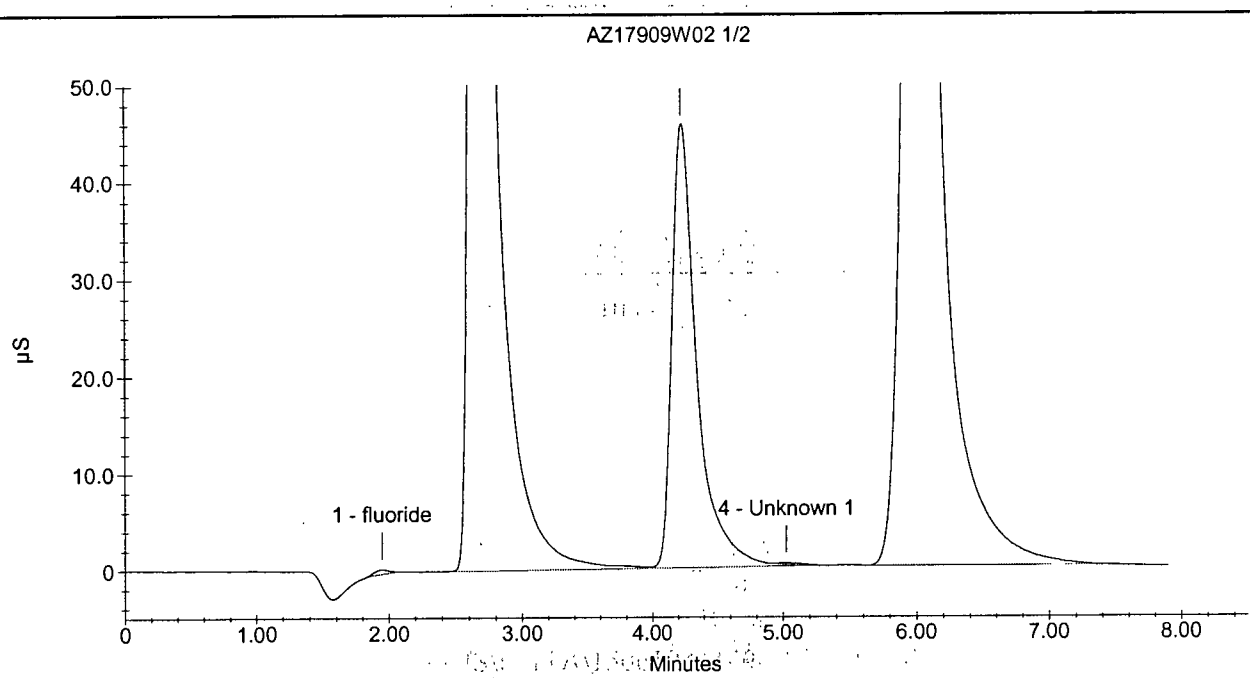
Sample Analysis Report

Sample Name : AZ17909W02 1/2
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150619a_044.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 18:51:23
System Operator : EM
Injection Number : 44
Multiplier : 2.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.95	fluoride	0.0999	35072	4744
2	2.68	chloride	91.6841	25403908	2621482
3	4.23	nitrate-n	9.6316	6157542	455493
4	5.03	Unknown 1	0.0000	27176	1907
5	6.03	sulfate	125.3126	24345080	1463198



APPL, Inc.

Current Date : 6/19/15
Current Time : 19:01:59

Sample Analysis Report

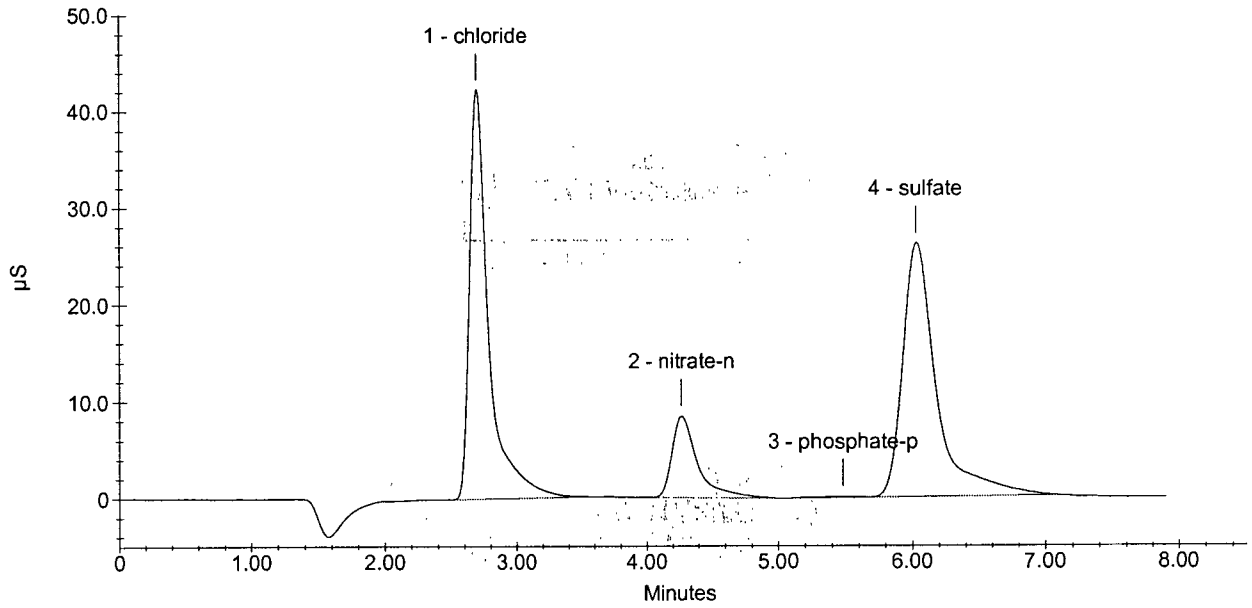
Sample Name : AZ17909W02 1/10
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150619a_045.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 19:02:03
System Operator : EM
Injection Number : 45
Multiplier : 10.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	2.69	chloride	86.8455	4308568	421269
2	4.27	nitrate-n	10.1486	1147139	83541
3	5.48	phosphate-p	-2.4670	23218	923
4	6.03	sulfate	121.3038	4558870	260312

AZ17909W02 1/10

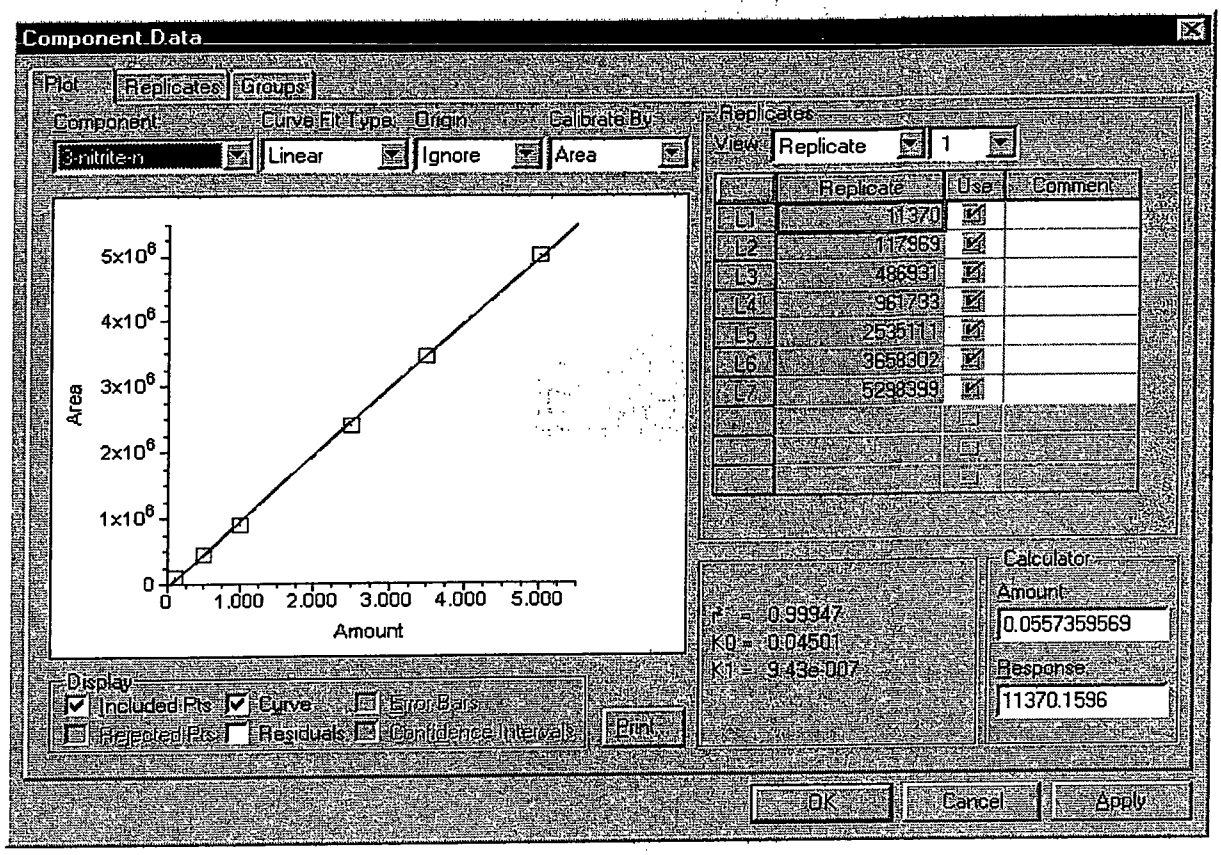


APPL, Inc.

Current Date : 6/19/15
Current Time : 19:12:30

INORGANIC ANALYSIS
Calibration Data

APPL, INC.


Component Data
Plot
Replicates
Groups
Component
Curve Fit Type
Origin
Calibrate By
3-nitrite-n
Linear
Ignore
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
Replicates
View
Replicate
1
Replicate
Use
Comment
L1 11370
L2 117369
L3 486931
L4 961733
L5 2535111
L6 3658302
L7 5298399
r² = 0.99947
K0 = 0.04501
K1 = 9.43e-007
Calculator
Amount
0.0557359569
Response
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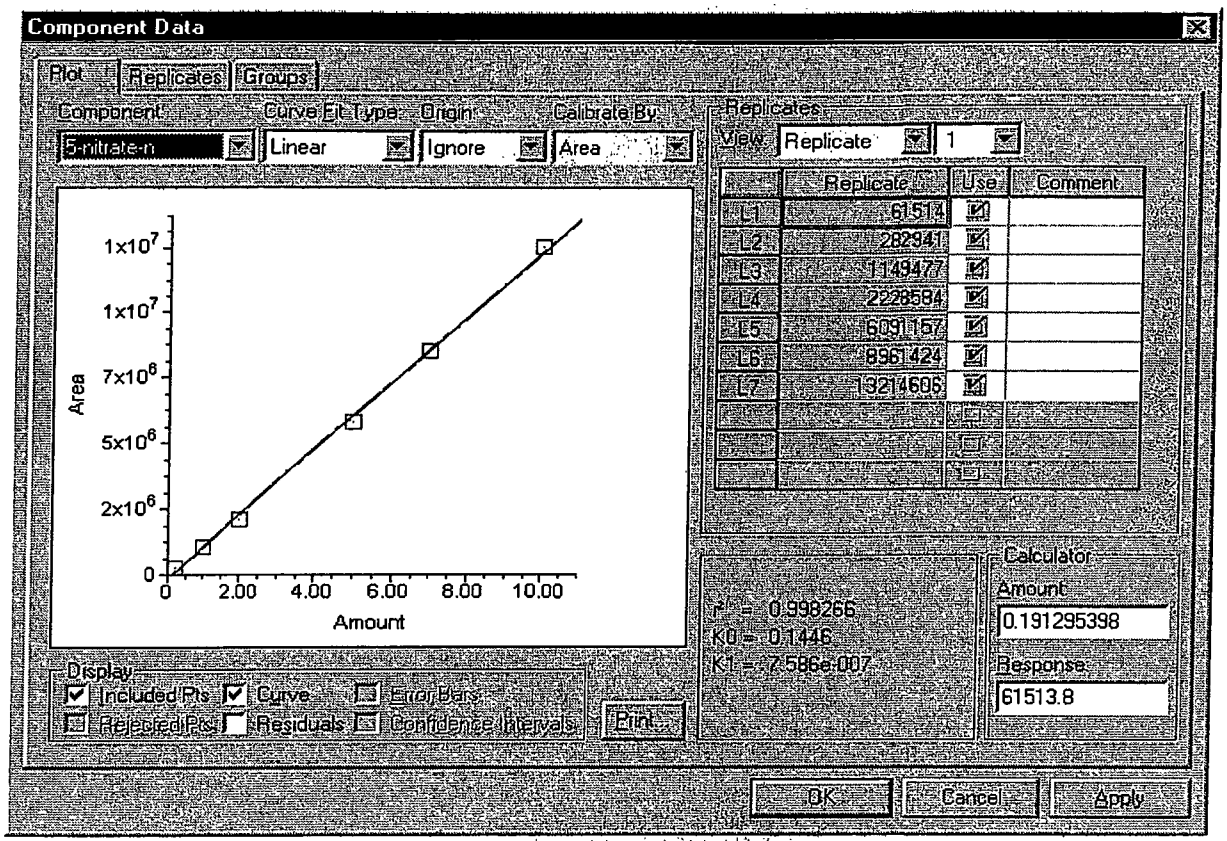
Display
Included Pts
Curve
Error Bars
Rejected Pts
Residuals
Confidence Intervals
Print
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component
Curve Fit Type
Origin
Calibrate By
5-nitrate-n
Linear
Ignore
Area
1x10^7
1x10^7
7x10^6
5x10^6
2x10^6
0
Area
0
2.00
4.00
6.00
8.00
10.00
Amount
Replicates
View
Replicate
1
Replicate
Use
Comment
L1 61514
L2 282941
L3 1149477
L4 2228584
L5 6091157
L6 8961424
L7 13214606
r² = 0.998266
K0 = 0.1446
K1 = 7.586e-007
Calculator
Amount
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Response
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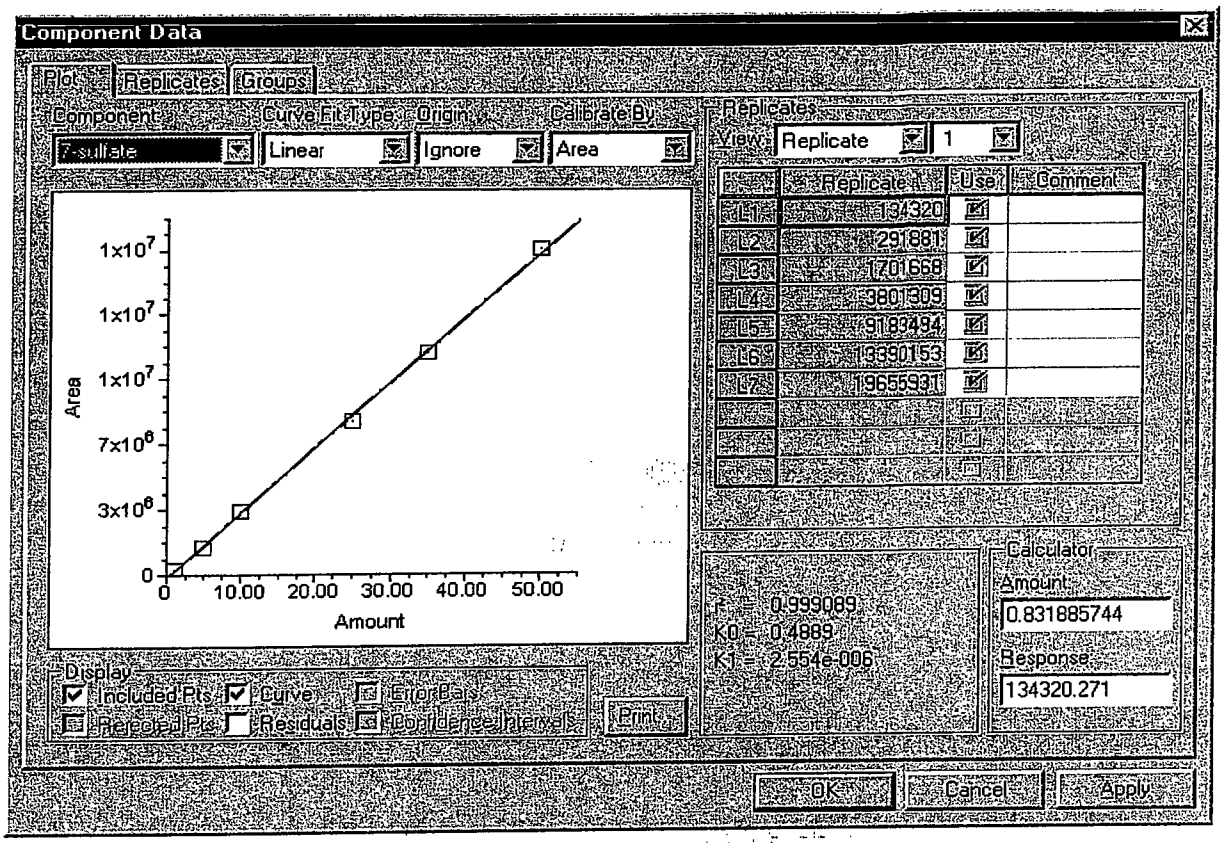
Display
Included Pts
Curve
Error Bars
Rejected Pts
Residuals
Confidence Intervals
Print
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component
Curve Fit Type
Origin
Calibrate By
7-sulfate
Linear
Ignore
Area
1x10^7
1x10^7
1x10^7
7x10^6
3x10^6
0
Area
0
10.00
20.00
30.00
40.00
50.00
Amount
Display
Included Pts
Curve
Error Bars
Rejected Pts
Residuals
Confidence Intervals
Print
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1
134320
L2
291881
L3
701668
L4
3801309
L5
9183484
L6
13390153
L7
19655931
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K0 = 0.4889
K1 = 2.554e-006
Calculator
Amount
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Response
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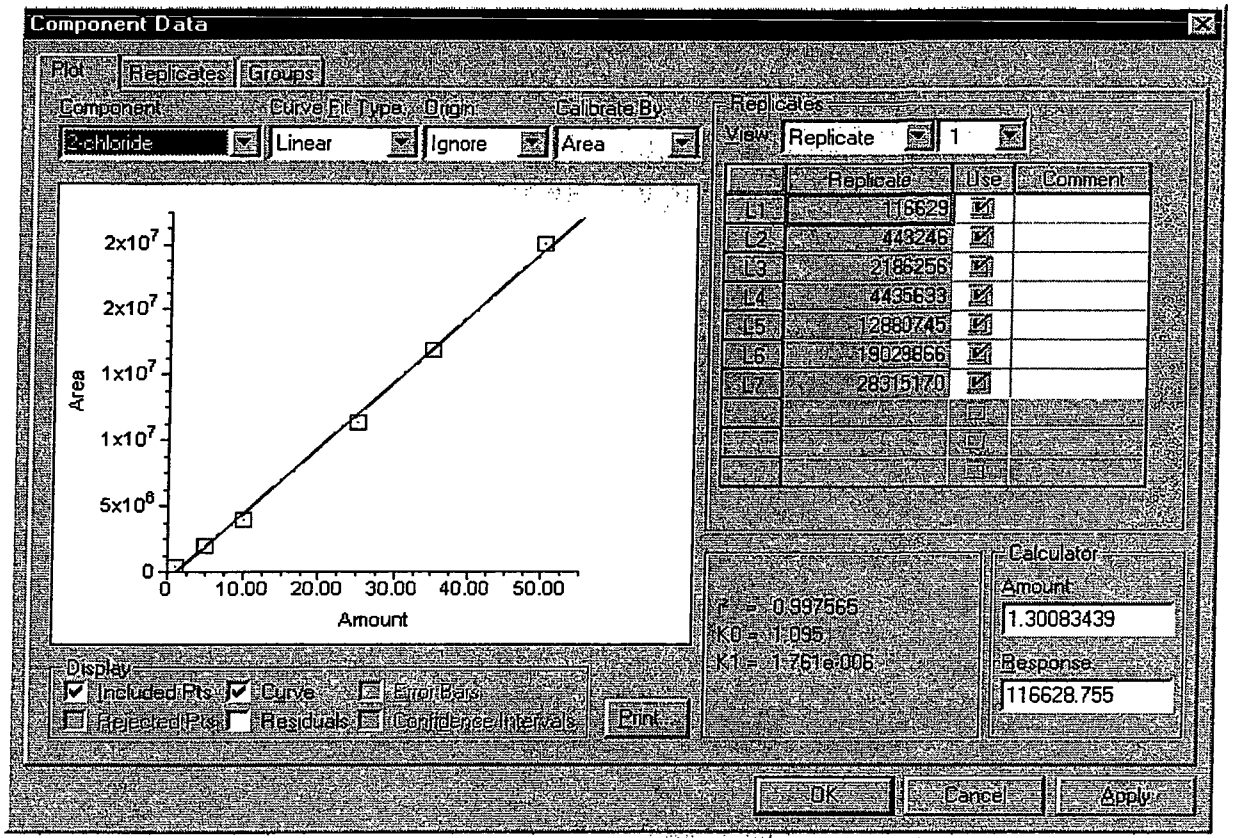
OK
Cancel
Apply


Component Data
Plot
Replicates
Groups
Component
Curve Fit Type
Origin
Calibrate By
2-chloride
Linear
Ignore
Area
Area
Amount
Replicates
View:
Replicate
1
Replicate
Use
Comment
L1 116629
L2 443246
L3 2186256
L4 4435633
L5 12880745
L6 19029866
L7 28315170
r = 0.997565
K0 = -1.095
K1 = 1.761e-006
Calculator
Amount
1.30083439
Response
116628.755
Display
Included Pts
Curve
Error Bars
Rejected Pts
Residuals
Confidence Intervals
Print...
OK
Cancel
Apply

INORGANIC ANALYSES
AUTO CALIBRATION

Analytical Method: 300/9056A

Lab Name: APPL, Inc.

Instrument ID: Dionex

Autocal ID: 150604a

Concentration Units (mg/L or mg/kg): mg/L

Analyte	1	2	3	4	5	6	7
	Autocal 12:53	Autocal 13:03	Autocal 13:14	Autocal 13:25	Autocal 13:35	Autocal 13:35	Autocal 13:46
Bromide	13196	128787	494940	947418	2521515	2521515	3609161
Chloride	116628	443245	2186255	4435632	12880745	12880745	19029865
Fluoride	73804	56647	306356	600958	1629248	1629248	2227813
Nitrate-N	61513	282940	1149477	2228583	6091157	6091157	8961424
Nitrite-N	11370	117968	486930	961733	2535111	2535111	3658301
Phosphate-P	100931	205911	611253	1039285	2311592	2311592	3167637
Sulfate	134320	291880	1701667	3801308	9183493	9183493	13390153

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

Continuing Calibration Source: o2si

Analysis Date: 06/04/15

Analyte	Calibration Verification									M
	True ICV	Found 14:52	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
bromide	12.5	11.9465	95.6							
chloride	20	18.5471	92.7							
fluoride	2.5	2.50301	100							
Nitrate(NO3)-N	5	4.82436	96.5							
Nitrite(NO2)-N	3.04	2.84916	93.7							
phosphate-p	5	4.86564	97.3							
sulfate	20	18.5541	92.8							

(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 06/04/15 15:03	C		C		C		C		C	
bromide	.500	U									
chloride	1.000	U									
fluoride	.100	U									
Nitrate(NO3)-N	.200	U									
Nitrite(NO2)-N	.100	U									
phosphate-p	.200	U									
sulfate	1.000	U									

Calibration Update Report

Sample Name : CAL STD #1 05/05/15
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_023.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 12:53:15

Calibration Date : 6/4/15 13:03:33
System Operator : DT
Injection Number : 23

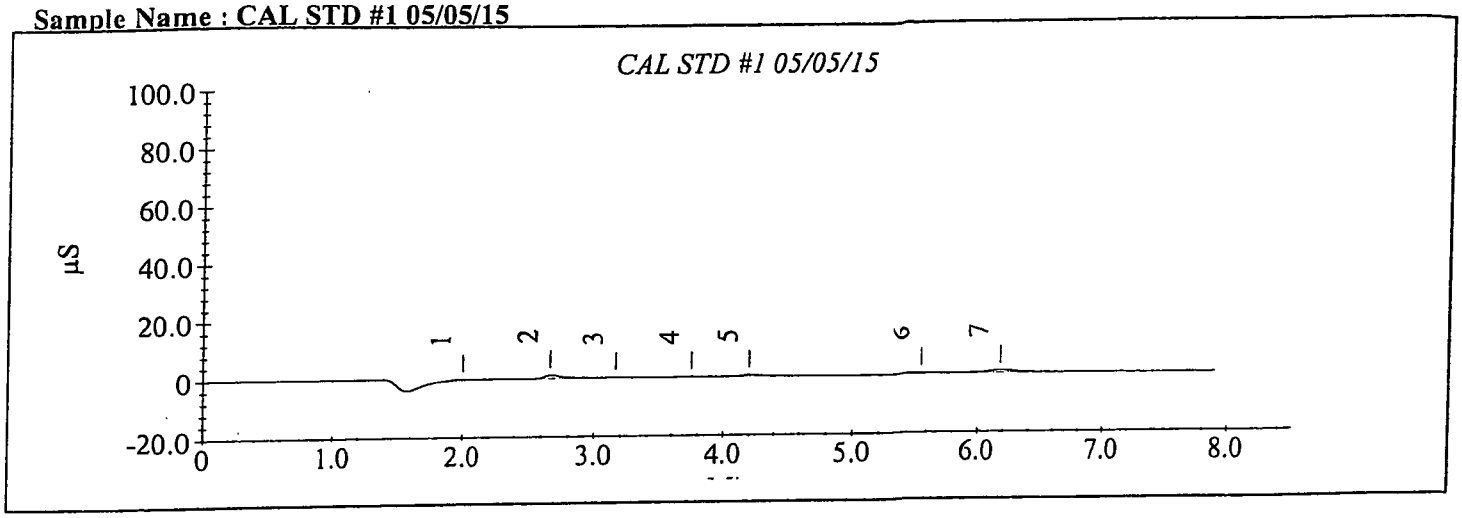
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	2.00	fluoride	32228	73804	73804
2	2.67	chloride	93020	116629	116629
3	3.16	nitrite-n	12996	11370	11370
4	3.75	bromide	13290	13196	13196
5	4.20	nitrate-n	40653	61514	61514
6	5.56	phosphate-p	90339	100931	100931
7	6.17	sulfate	67957	134320	134320

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	2.00	fluoride	0.04	73804	4628	-
2	2.67	chloride	0.40	116629	11041	-
3	3.16	nitrite-n	0.04	11370	1252	-
4	3.75	bromide	0.20	13196	1445	-
5	4.20	nitrate-n	0.08	61514	4993	-
6	5.56	phosphate-p	0.08	100931	3845	-
7	6.17	sulfate	0.40	134320	8119	-

Sample Name : CAL STD #1 05/05/15



Calibration Update Report

Sample Name : CAL STD #2
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_024.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:03:54

Calibration Date : 6/4/15 13:14:12
System Operator : DT
Injection Number : 24

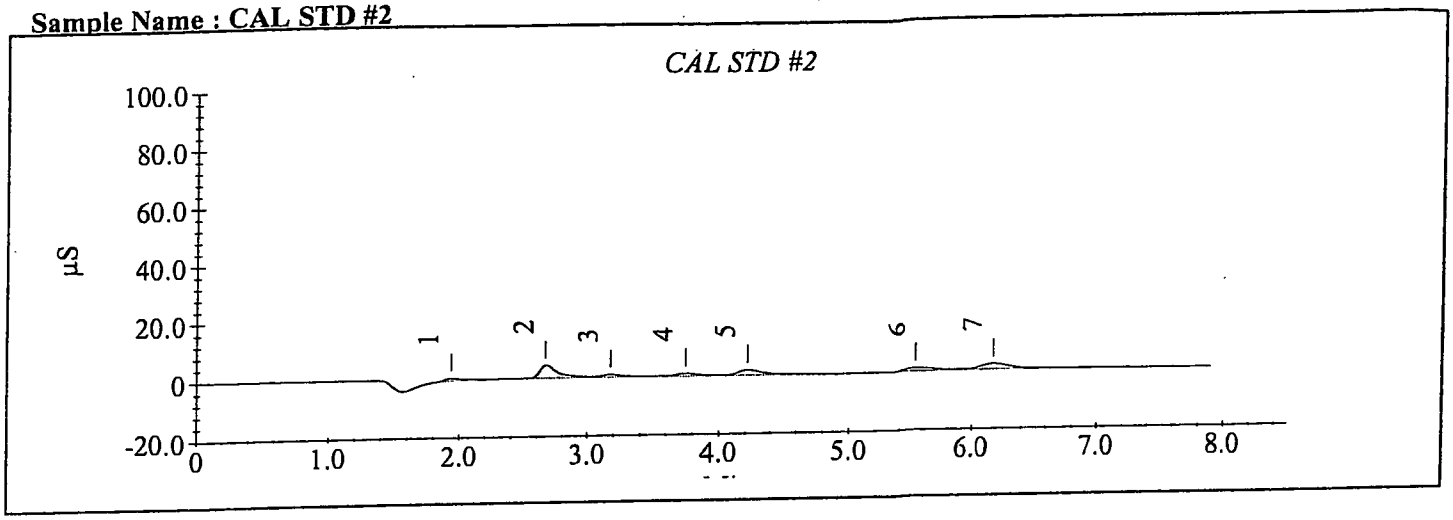
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.93	fluoride	57622	56647	56647
2	2.67	chloride	430478	443246	443246
3	3.17	nitrite-n	133908	117969	117969
4	3.75	bromide	120492	128787	128787
5	4.21	nitrate-n	254028	282941	282941
6	5.55	phosphate-p	171940	205911	205911
7	6.17	sulfate	291321	291881	291881

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.93	fluoride	0.10	56647	7929	
2	2.67	chloride	1.00	443246	43892	
3	3.17	nitrite-n	0.10	117969	8901	
4	3.75	bromide	0.50	128787	9430	
5	4.21	nitrate-n	0.20	282941	18584	
6	5.55	phosphate-p	0.20	205911	10220	
7	6.17	sulfate	1.00	291881	18607	

Sample Name : CAL STD #2



Calibration Update Report

Sample Name : CAL STD #3
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_025.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:14:34

Calibration Date : 6/4/15 13:24:52
System Operator : DT
Injection Number : 25

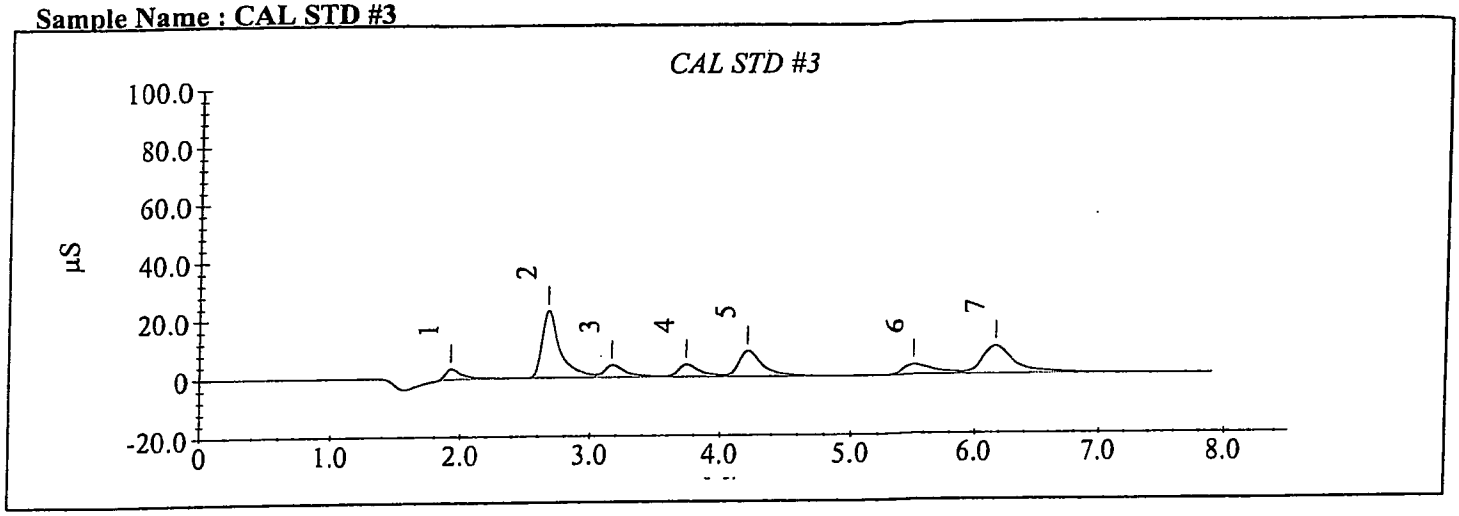
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	321944	306357	306357
2	2.67	chloride	2136860	2186256	2186256
3	3.16	nitrite-n	545677	486931	486931
4	3.73	bromide	484621	494941	494941
5	4.20	nitrate-n	1101997	1149477	1149477
6	5.51	phosphate-p	572833	611254	611254
7	6.16	sulfate	1510375	1701668	1701668

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	0.50	306357	35643	
2	2.67	chloride	5.00	2186256	228631	
3	3.16	nitrite-n	0.50	486931	41752	
4	3.73	bromide	2.50	494941	42142	
5	4.20	nitrate-n	1.00	1149477	87569	
6	5.51	phosphate-p	1.00	611254	33175	
7	6.16	sulfate	5.00	1701668	94475	

Sample Name : CAL STD #3



Calibration Update Report

Sample Name : CAL STD #4
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_026.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:25:14

Calibration Date : 6/4/15 13:35:32
System Operator : DT
Injection Number : 26

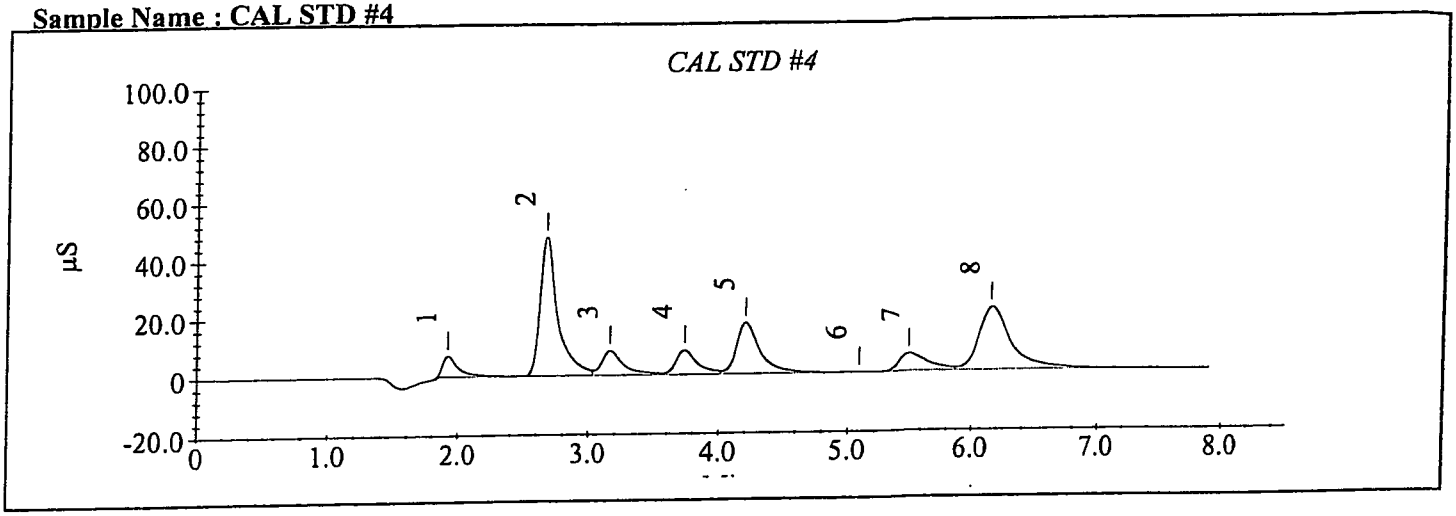
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	747950	600959	600959
2	2.67	chloride	4658364	4435633	4435633
3	3.16	nitrite-n	1140946	961733	961733
4	3.73	bromide	1009395	947419	947419
5	4.20	nitrate-n	2269536	2228584	2228584
7	5.49	phosphate-p	1002780	1039285	1039285
8	6.15	sulfate	3203590	3801309	3801309

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	1.00	600959	70213	
2	2.67	chloride	10.00	4435633	478180	
3	3.16	nitrite-n	1.00	961733	83768	
4	3.73	bromide	5.00	947419	82703	
5	4.20	nitrate-n	2.00	2228584	174883	
7	5.49	phosphate-p	2.00	1039285	59740	
8	6.15	sulfate	10.00	3801309	213680	

Sample Name : CAL STD #4



Calibration Update Report

Sample Name : CAL STD #5
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_027.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:35:59

Calibration Date : 6/4/15 13:46:17
System Operator : DT
Injection Number : 27

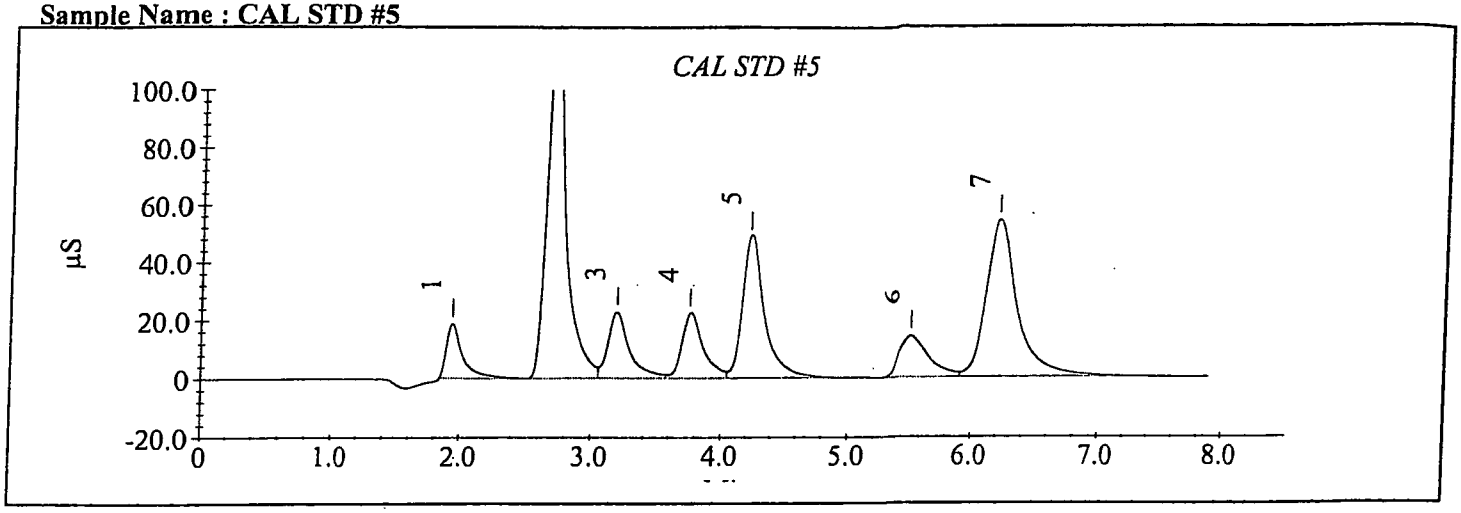
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.93	fluoride	1627638	1629248	1629248
2	2.68	chloride	12647726	12880745	12880745
3	3.19	nitrite-n	2651302	2535111	2535111
4	3.75	bromide	2485415	2521516	2521516
5	4.21	nitrate-n	6110954	6091157	6091157
6	5.52	phosphate-p	2255377	2311592	2311592
7	6.20	sulfate	8790093	9183494	9183494

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.93	fluoride	2.50	1629248	186759	
2	2.68	chloride	25.00	12880745	1414042	
3	3.19	nitrite-n	2.50	2535111	227759	
4	3.75	bromide	12.50	2521516	222264	
5	4.21	nitrate-n	5.00	6091157	489104	
6	5.52	phosphate-p	5.00	2311592	141653	
7	6.20	sulfate	25.00	9183494	540987	

Sample Name : CAL STD #5



Calibration Update Report

EM 6/4/15

Sample Name : CAL STD #6
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604A_M028.DXD

M11 DD 6.4.15

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:46:39

Calibration Date : 6/4/15 13:56:57
System Operator : DT
Injection Number : 28

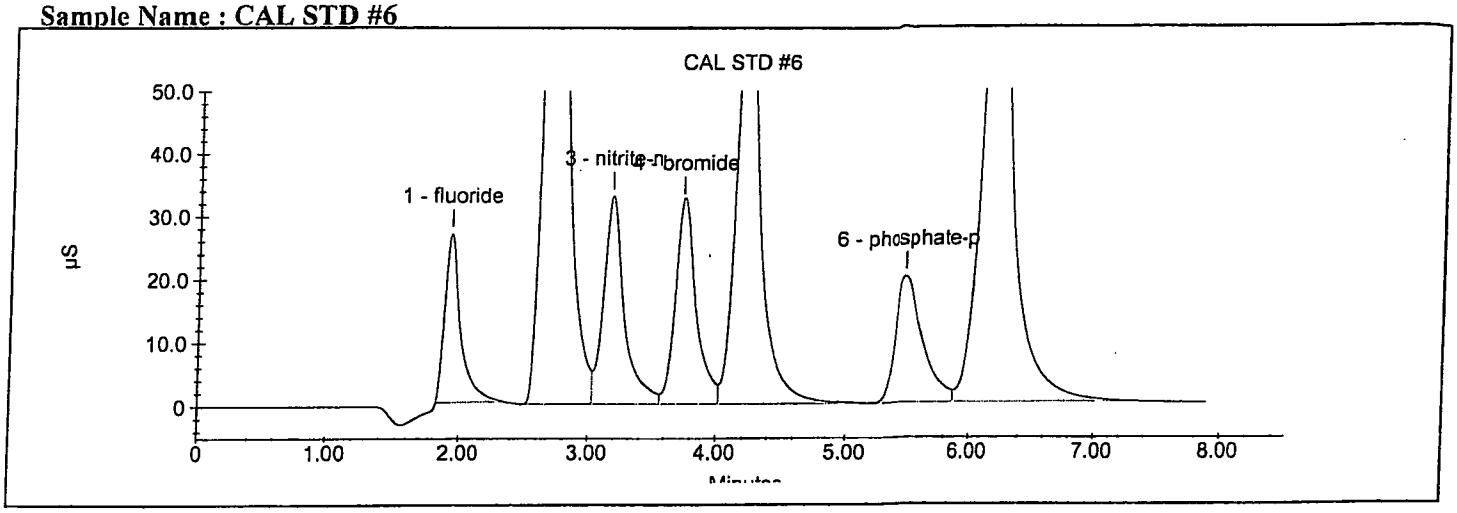
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	2536233	2227813	1851094
2	2.67	chloride	18712590	19029866	19029866
3	3.16	nitrite-n	3843358	3658302	3658302
4	3.72	bromide	3656064	3609161	3609161
5	4.19	nitrate-n	9060782	8961424	8961424
6	5.48	phosphate-p	3183590	3167637	3167637
7	6.16	sulfate	12873666	13390153	13390153

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	3.50	2227813	265757	
2	2.67	chloride	35.00	19029866	2147059	
3	3.16	nitrite-n	3.50	3658302	328328	
4	3.72	bromide	17.50	3609161	320796	
5	4.19	nitrate-n	7.00	8961424	725966	
6	5.48	phosphate-p	7.00	3167637	198451	
7	6.16	sulfate	35.00	13390153	803383	

Sample Name : CAL STD #6



Calibration Update Report

Sample Name : CAL STD #6
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_028.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:46:39

Calibration Date : 6/4/15 13:56:57
System Operator : DT
Injection Number : 28

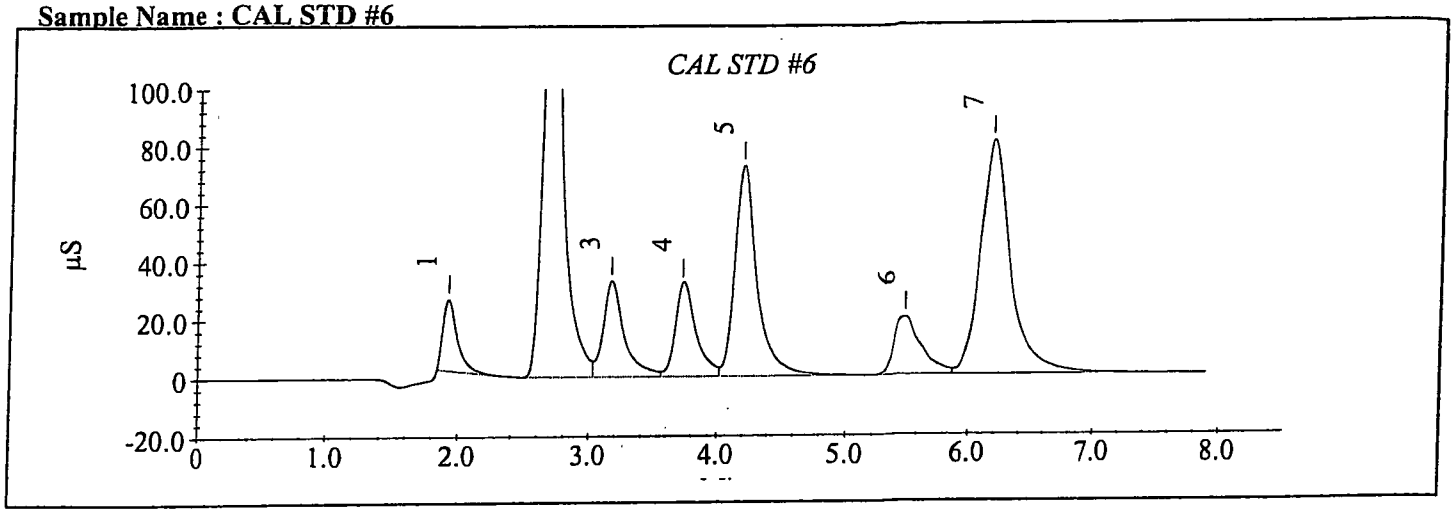
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	2536233	1851094	1851094
2	2.67	chloride	18712590	19029866	19029866
3	3.16	nitrite-n	3843358	3658302	3658302
4	3.72	bromide	3656064	3609161	3609161
5	4.19	nitrate-n	9060782	8961424	8961424
6	5.48	phosphate-p	3183590	3167637	3167637
7	6.16	sulfate	12873666	13390153	13390153

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	3.50	1851094	245148	
2	2.67	chloride	35.00	19029866	2147059	
3	3.16	nitrite-n	3.50	3658302	328328	
4	3.72	bromide	17.50	3609161	320796	
5	4.19	nitrate-n	7.00	8961424	725966	
6	5.48	phosphate-p	7.00	3167637	198451	
7	6.16	sulfate	35.00	13390153	803383	

Sample Name : CAL STD #6



Calibration Update Report

EM 6/4/15

Sample Name : CAL STD #7
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604A_M029.DXD

M\1

06.4.15

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:57:19

Calibration Date : 6/4/15 14:07:37
System Operator : DT
Injection Number : 29

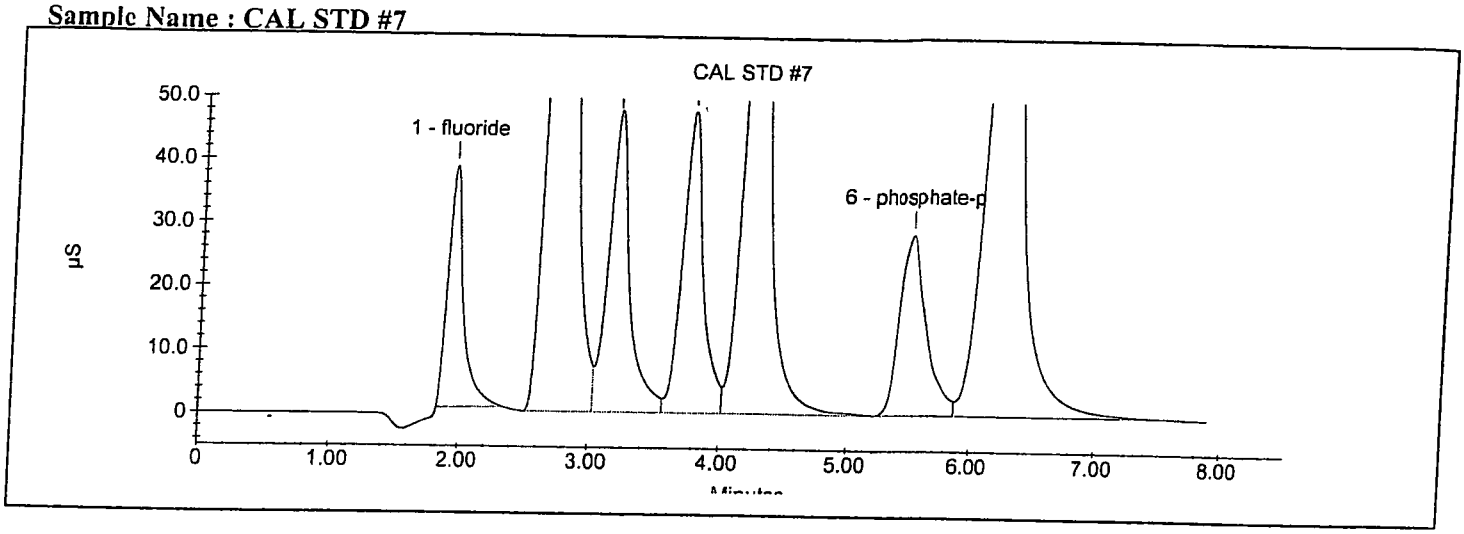
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	3565505	3190365	2696582
2	2.68	chloride	28275016	28315170	28315170
3	3.16	nitrite-n	5501151	5298399	5298399
4	3.73	bromide	5312485	5234318	5234318
5	4.19	nitrate-n	13407822	13214606	13214606
6	5.48	phosphate-p	4524114	4459977	4459977
7	6.17	sulfate	19278034	19655931	19655931

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	5.00	3190365	379126	
2	2.68	chloride	50.00	28315170	3247050	
3	3.16	nitrite-n	5.00	5298399	469665	
4	3.73	bromide	25.00	5234318	476237	
5	4.19	nitrate-n	10.00	13214606	1073141	
6	5.48	phosphate-p	10.00	4459977	283597	
7	6.17	sulfate	50.00	19655931	1192433	

Sample Name : CAL STD #7



Calibration Update Report

Sample Name : CAL STD #7
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_029.DXD

Method File Name : ...\anions 150604a.met
Schedule File Name : ...\150604a.sch
Date Time Collected : 6/4/15 13:57:19

Calibration Date : 6/4/15 14:07:37
System Operator : DT
Injection Number : 29

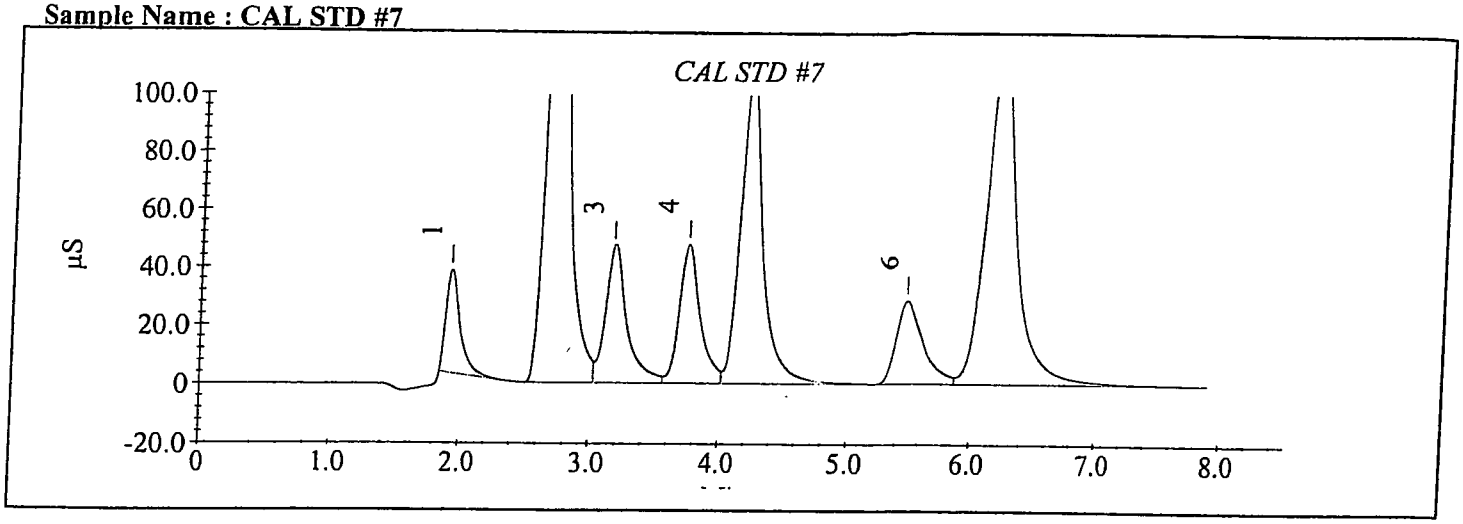
Peak Information : All Components

Peak #	Retention Time	Component Name	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	1.92	fluoride	3565505	2696582	2696582
2	2.68	chloride	28275016	28315170	28315170
3	3.16	nitrite-n	5501151	5298399	5298399
4	3.73	bromide	5312485	5234318	5234318
5	4.19	nitrate-n	13407822	13214606	13214606
6	5.48	phosphate-p	4524114	4459977	4459977
7	6.17	sulfate	19278034	19655931	19655931

Peak Information : All Components

Peak #	Retention Time	Component Name	Amount (mg/L)	Peak Area	Peak Height	Limit Exceeded
1	1.92	fluoride	5.00	2696582	352393	
2	2.68	chloride	50.00	28315170	3247050	
3	3.16	nitrite-n	5.00	5298399	469665	
4	3.73	bromide	25.00	5234318	476237	
5	4.19	nitrate-n	10.00	13214606	1073141	
6	5.48	phosphate-p	10.00	4459977	283597	
7	6.17	sulfate	50.00	19655931	1192433	

Sample Name : CAL STD #7



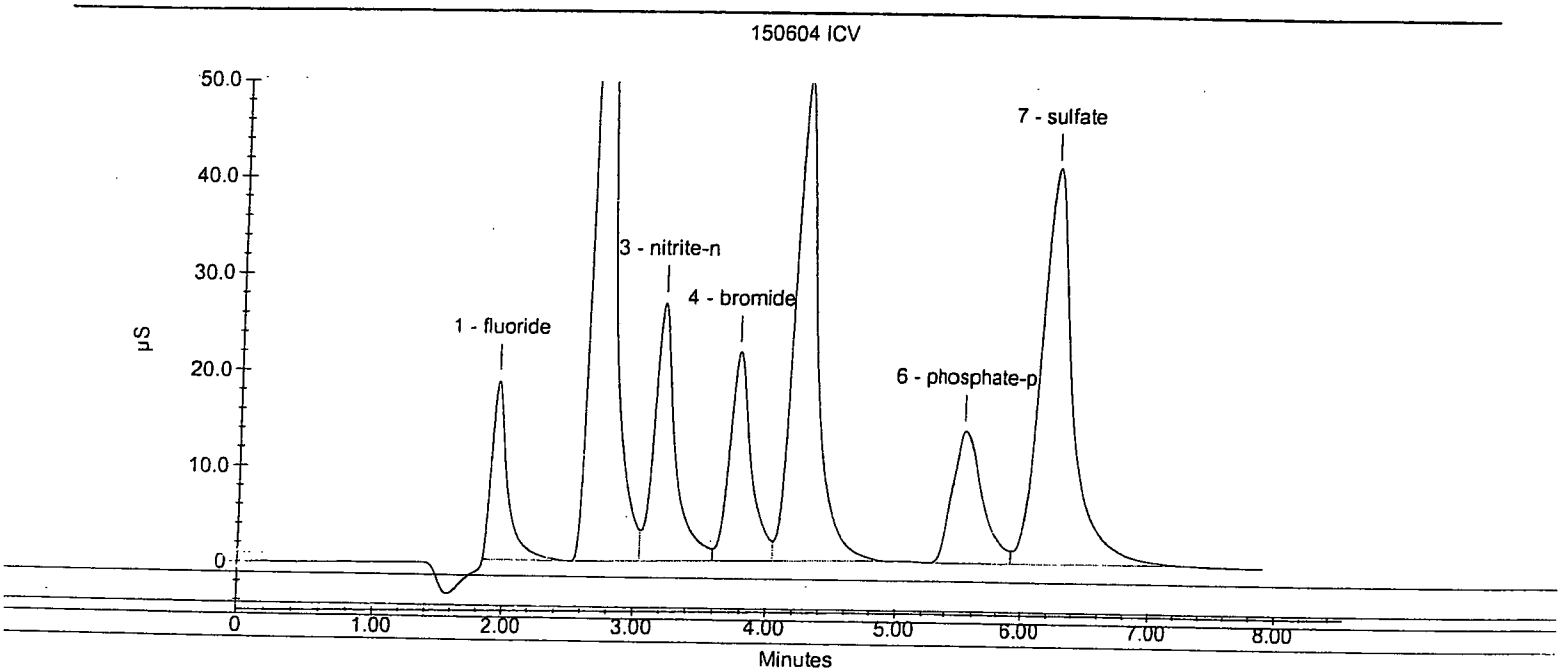
Sample Analysis Report

Sample Name : 150604 ICV
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_033.DXD

Method File Name : I:\DIONEX\D1ANIONS\METHODS\ANIONS 150604A.met
Date Time Collected : 6/4/15 14:52:30
System Operator : DT
Injection Number : 33
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	2.5030	1599821	185817
2	2.68	chloride	18.5472	9907866	1085827
3	3.19	nitrite-n	2.8492	2973632	268429
4	3.75	bromide	11.9465	2460301	216840
5	4.21	nitrate-n	4.8244	6168865	496531
6	5.51	phosphate-p	4.8656	2244450	137228
7	6.19	sulfate	18.5542	7074471	408451



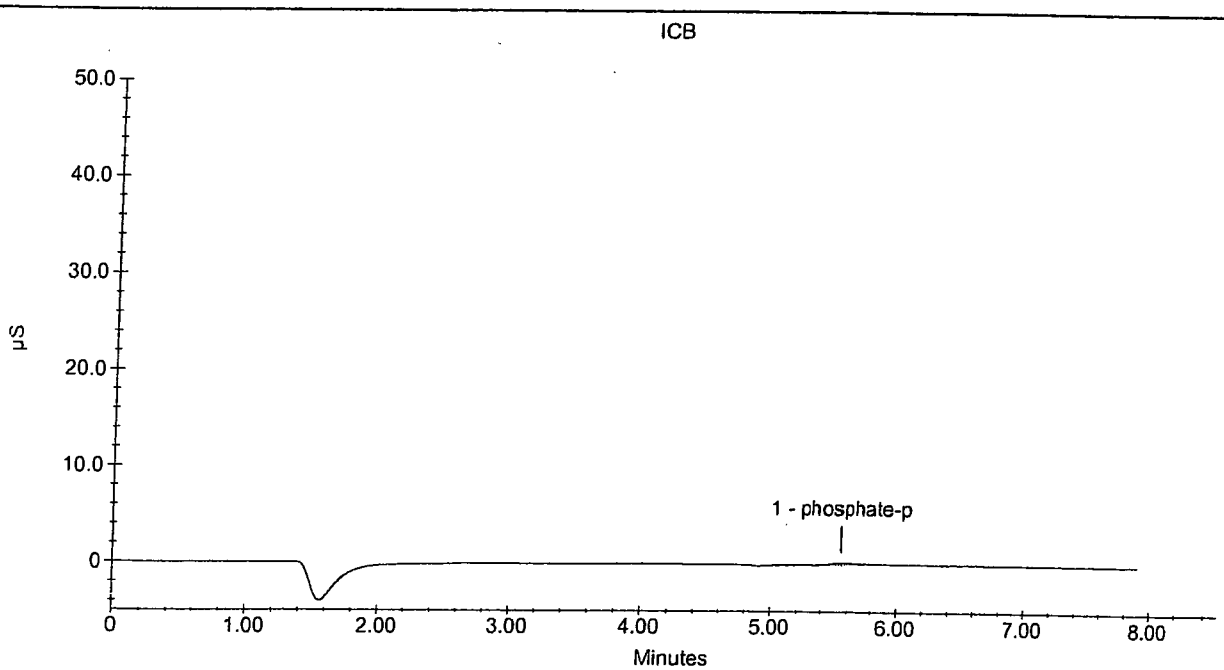
Sample Analysis Report

Sample Name : ICB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150604A\150604a_034.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/4/15 15:03:25
System Operator : DT
Injection Number : 34
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	5.55	phosphate-p	-0.1768	53577	1920



A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76687 SDG: 76687

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 06/18/15

Analyte	Calibration Verification									M
	True CCV1	Found 14:13	%R(1)	True CCV1	Found 16:53	%R(1)	True CCV1	Found 17:26	%R(1)	
chloride	25	23.1890	92.8	25	23.8829	95.5	25	24.9151	99.7	
Nitrate(NO3)	22.1	20.9676	94.9	22.1	22.3116	101	22.1	22.4913	102	
Nitrite(NO2)	8.211	8.16598	99.5	8.211	8.37904	102	8.211	8.59874	105	
sulfate	25	23.5298	94.1	25	24.0124	96.0	25	25.0104	100	

(1) Control Limits: 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: 76687 SDG: 76687

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 06/19/15

Analyte	Calibration Verification									M
	True CCV1	Found 19:12	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
chloride	25	24.3778	97.5							
Nitrate(NO3)	22.1	22.0403	99.7							
Nitrite(NO2)	8.211	8.42751	103							
sulfate	25	24.8336	99.3							

(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.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 06/18/15 14:24	C	CCB 06/18/15 17:03	C	CCB 06/19/15 17:37	C	CCB 06/19/15 19:23	C		C	
chloride	1.120	*	1.000	U	1.410	*	1.170	*			*
Nitrate(NO3)	.500	U	.500	U	.500	U	.500	U			
Nitrite(NO2)	.300	U	.300	U	.300	U	.300	U			
sulfate	1.000	U	1.000	U	1.000	U	1.000	U			

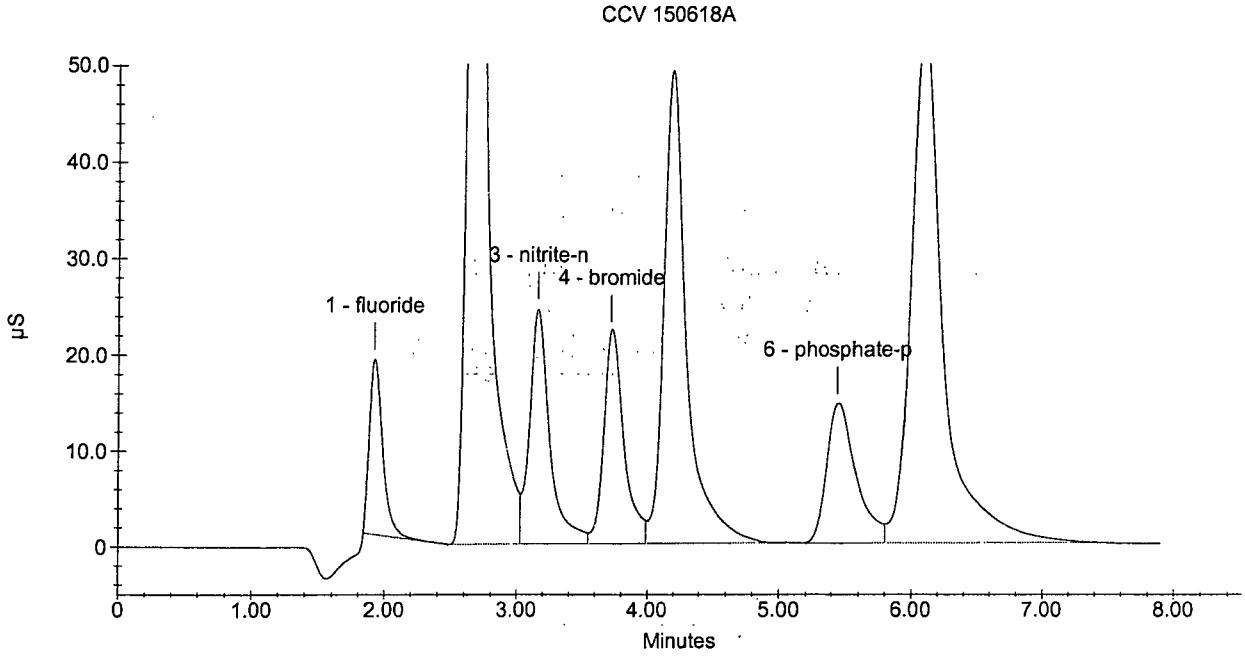
Sample Analysis Report

Sample Name : CCV 150618A
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_038.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/18/15 14:13:56
System Operator : EM
Injection Number : 38
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.92	fluoride	2.0147	1288355	181447
2	2.67	chloride	23.1891	12543193	1463227
3	3.16	nitrite-n	2.4861	2588671	243289
4	3.72	bromide	11.5415	2375583	219740
5	4.19	nitrate-n	4.7346	6050543	489855
6	5.44	phosphate-p	4.9210	2268502	144867
7	6.09	sulfate	23.5298	9022957	540863



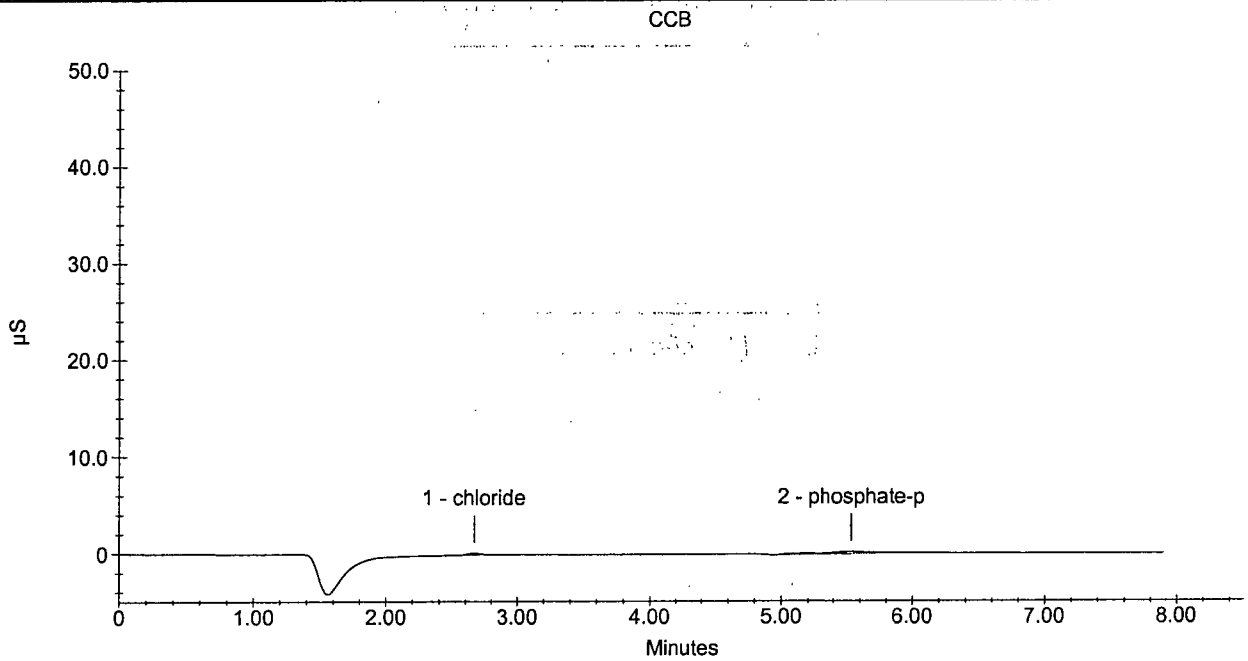
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_039.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/18/15 14:24:41
System Operator : EM
Injection Number : 39
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	2.67	chloride	1.1169	12196	1863
2	5.53	phosphate-p	-0.1546	63244	2055



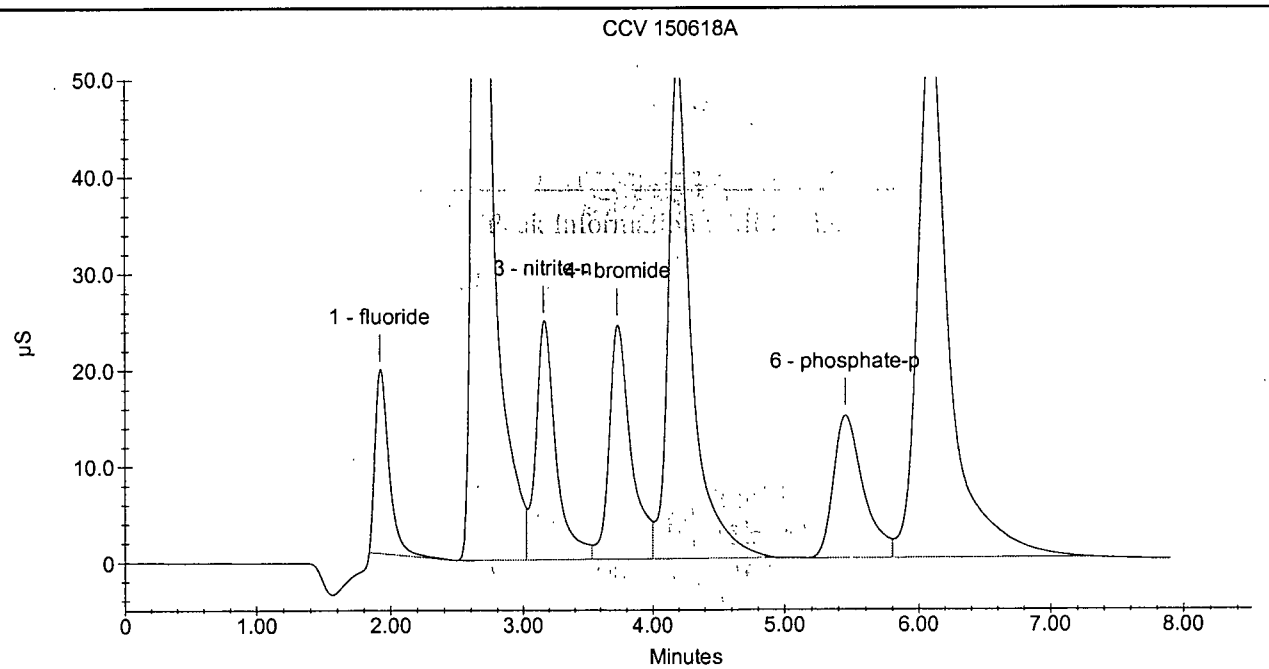
Sample Analysis Report

Sample Name : CCV 150618A
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_053.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/18/15 16:53:05
System Operator : EM
Injection Number : 53
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.92	fluoride	2.1809	1394372	188566
2	2.67	chloride	23.8829	12937109	1484314
3	3.16	nitrite-n	2.5510	2657455	245316
4	3.73	bromide	13.5951	2805172	242264
5	4.19	nitrate-n	5.0381	6450569	508076
6	5.45	phosphate-p	4.9651	2287674	148120
7	6.09	sulfate	24.0124	9211933	554425



APPL, Inc.

Current Date : 6/18/15
Current Time : 17:03:39

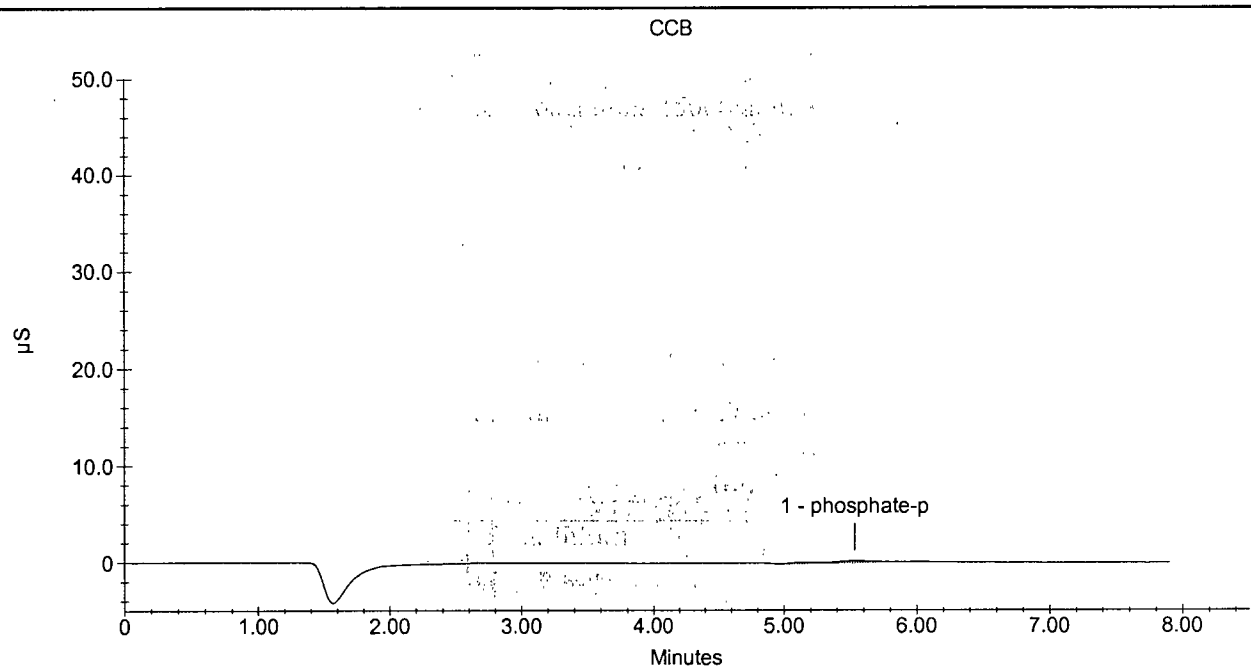
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_054.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/18/15 17:03:44
System Operator : EM
Injection Number : 54
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	5.53	phosphate-p	-0.1915	47194	1850



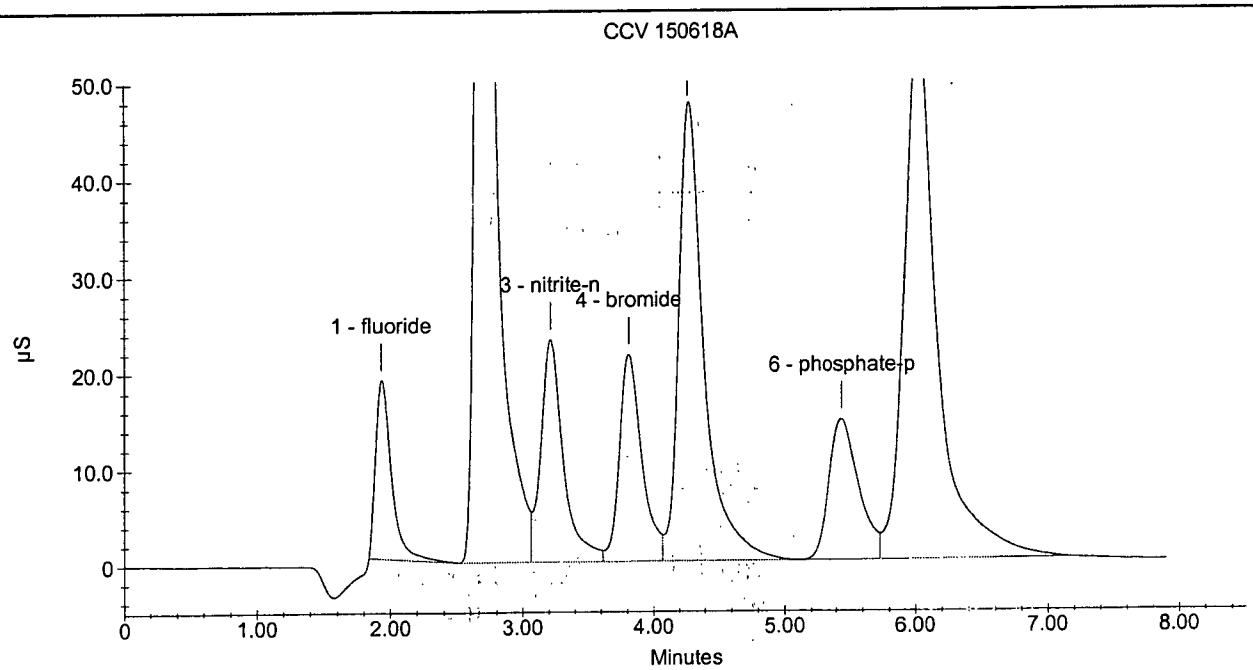
Sample Analysis Report

Sample Name : CCV 150618A
Data File Name : C:\DATA_A036.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 17:26:37
System Operator : EM
Injection Number : 36
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	2.4354	1556689	185465
2	2.69	chloride	24.9151	13523112	1398830
3	3.21	nitrite-n	2.6179	2728387	231080
4	3.81	bromide	12.3569	2546161	215105
5	4.27	nitrate-n	5.0787	6504072	470876
6	5.44	phosphate-p	5.1070	2349300	146698
7	6.03	sulfate	25.0105	9602793	547775



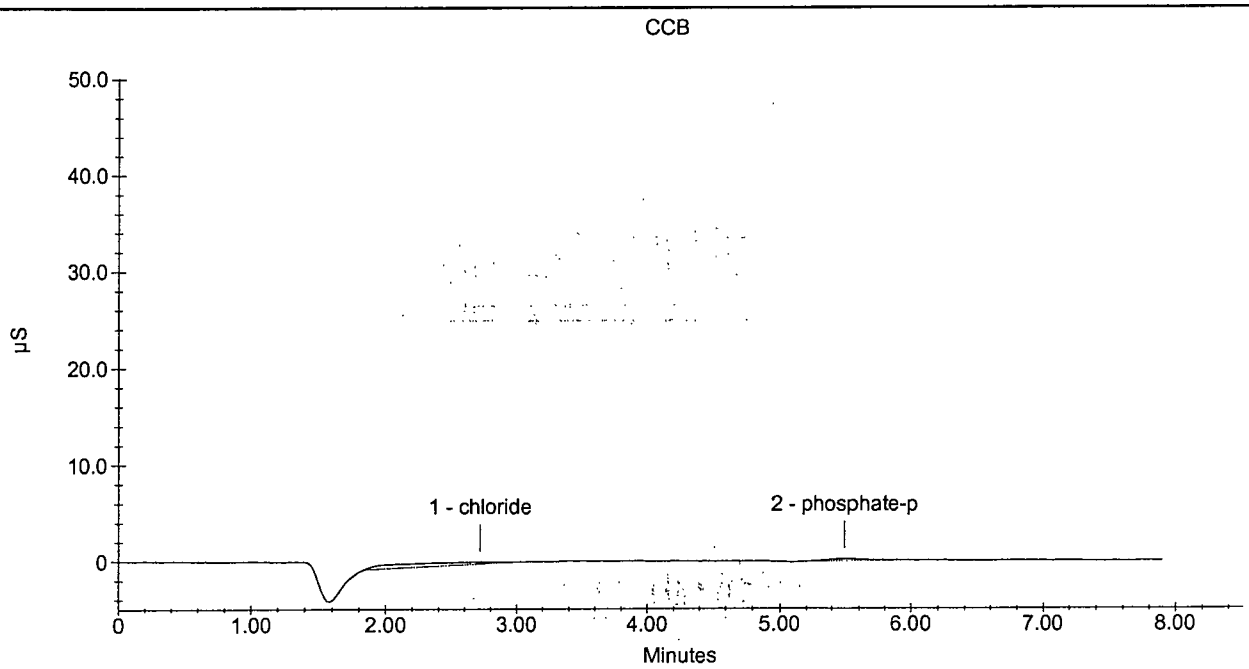
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150619a_037.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 17:37:17
System Operator : EM
Injection Number : 37
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	2.72	~~chloride~~ wrong RT	1.4149	181381	2098
2	5.49	phosphate-p DS 6/22/15	-0.2010	43071	2246



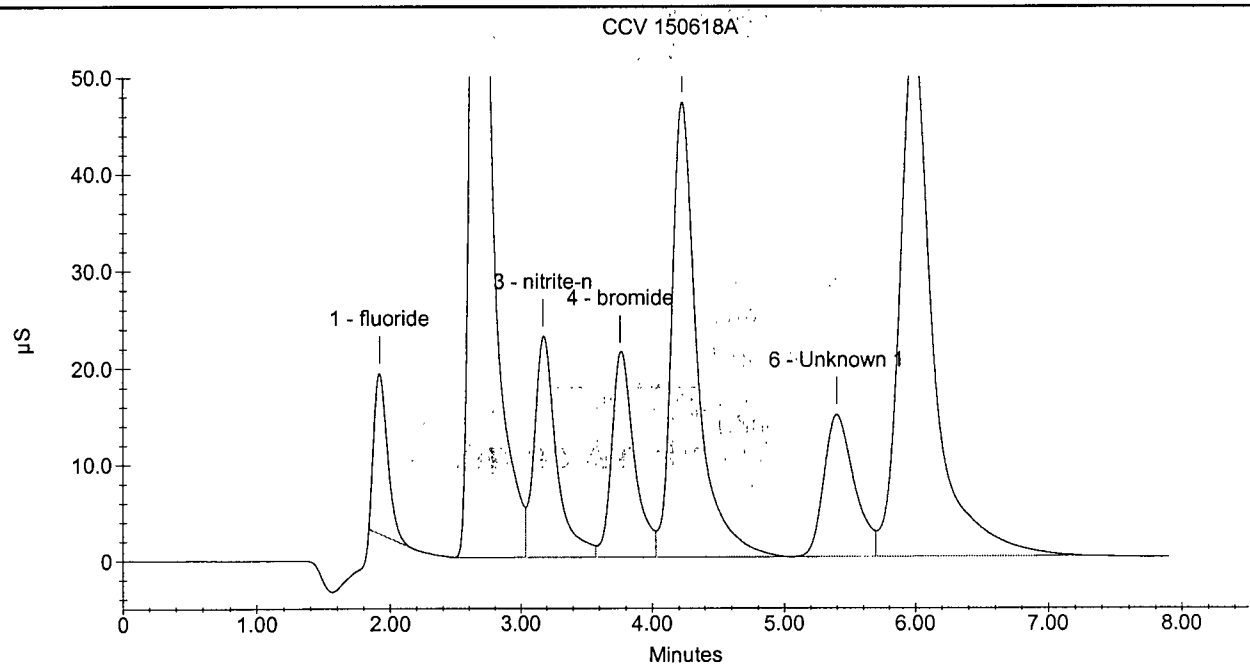
Sample Analysis Report

Sample Name : CCV 150618A
Data File Name : C:\DATA_046.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 19:12:34
System Operator : EM
Injection Number : 46
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.92	fluoride	1.8646	1192593	166517
2	2.67	chloride	24.3778	13218063	1378224
3	3.17	nitrite-n	2.5658	2673106	228717
4	3.76	bromide	12.2110	2515622	212050
5	4.23	nitrate-n	4.9768	6369830	470050
6	5.40	Unknown 1	0.0000	2363580	147793
7	5.99	sulfate	24.8336	9533530	541216



APPL, Inc.

Current Date : 6/19/15
Current Time : 19:23:10

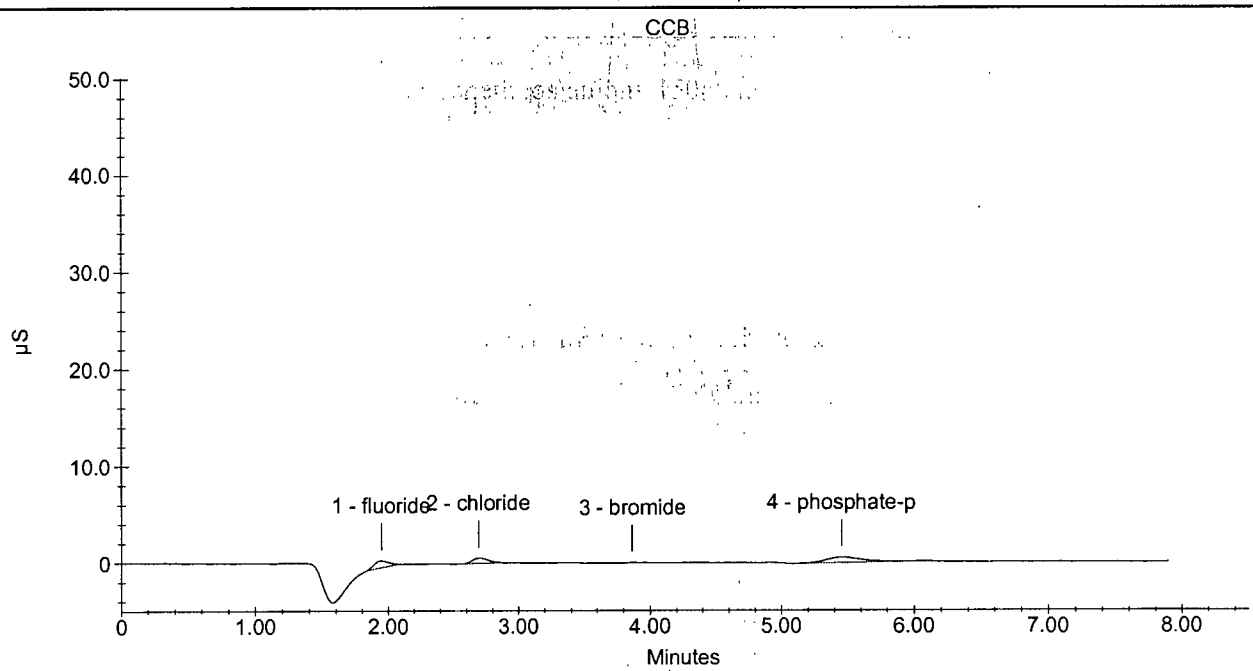
Sample Analysis Report

Sample Name : CCB
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150619a_047.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 19:23:14
System Operator : EM
Injection Number : 47
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.95	fluoride	0.0811	54958	7161
2	2.69	chloride	1.1730	44031	5359
3	3.87	bromide	0.2140	6010	582
4	5.45	phosphate-p	-0.0580	105200	5726



Calibration Report Print Date/Time: 2015/07/08 15:52:43

Cal. Curve ID: 150623I9
Created: 2015/06/24 07:34
Calibration Factor (m): 1.011e+05
Y Intercept (b): 7103
r-squared: 0.99977

Standard ID	Y Raw Data	X Expected ug C	Measured ug C	Message	Date & Time
DI WATER	14316	0.000	0.071		2015/06/23 13:49
autocal1	28925	0.250	0.216		2015/06/23 14:15
autocal2	37616	0.500	0.302		2015/06/23 14:41
autocal3	259139	2.500	2.493		2015/06/23 15:09
autocal4	518954	5.000	5.062		2015/06/23 15:39
autocal5	1294106	12.500	12.728		2015/06/23 16:38
autocal6	2522764	25.000	24.879		2015/06/23 17:09

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: 06/24/15

Analyte	Calibration Verification									M
	True ICV	Found 9:50	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Total Organic Carbon	10	9.82345	98.2							

(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 06/24/15 10:15	C		C		C		C		C	
Total Organic Carbon	.500	U									

Detailed Analysis Report Print Date/Time: 2015/07/08 15:54:17

Sample ID: DI WATER
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 13:49
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			15536	58.980	59.178	96
2			13927	59.050	59.249	96
3			14812	59.107	59.304	96
4			12990	59.178	59.378	97

<<<Statistics>>> Mean: 14316 Std Dev: 1102 RSD: 7.70

Sample ID: autocal1
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 14:15
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			26095	59.187	59.387	109
2			29517	59.199	59.399	110
3			26421	59.278	59.477	109
4			33667	59.285	59.485	114

<<<Statistics>>> Mean: 28925 Std Dev: 3517 RSD: 12.16

Sample ID: autocal2
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 14:41
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			39288	59.276	59.475	115
2			36049	59.373	59.572	112
3			37420	59.491	59.687	118
4			37705	59.636	59.833	117

<<<Statistics>>> Mean: 37616 Std Dev: 1329 RSD: 3.53

Sample ID: autocal3
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 15:09
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			273241	60.083	60.278	178
2			251339	60.296	60.496	159
3			254133	60.505	60.703	145
4			257844	60.594	60.788	154

<<<Statistics>>> Mean: 259139 Std Dev: 9771 RSD: 3.77

Sample ID: autocal4
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 15:39
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			539285	60.695	60.893	203
2			523132	60.967	61.167	182
3			512417	61.212	61.410	158
4			500981	61.338	61.537	166

<<<Statistics>>> Mean: 518954 Std Dev: 16295 RSD: 3.14

Sample ID: autocal5
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT

Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 16:38
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1322848	61.197	61.395	189
2			1307295	61.503	61.701	177
3			1274729	61.817	62.014	163
4			1271551	61.915	62.114	167

<<<Statistics>>> Mean: 1294106 Std Dev: 25062 RSD: 1.94

Sample ID: autocal6
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT

Mode: TOC
Filename: 06231241
Timestamp: 2015/06/23 17:09
Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			2571981	61.789	61.987	192
2			2547419	61.942	62.140	190
3			2460559	62.555	62.754	194
4			2511094	62.421	62.620	191

<<<Statistics>>> Mean: 2522763 Std Dev: 48428 RSD: 1.92

Detailed Analysis Report Print Date/Time: 2015/07/08 15:55:01

Sample ID: ICV
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06240735
Timestamp: 2015/06/24 09:50
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.6592	5.3296	577452	60.430	60.629	213
2	9.8191	4.9095	534976	60.811	61.008	174
3	9.5586	4.7793	521807	60.959	61.159	175
4	9.2569	4.6285	506554	61.129	61.326	168

<<<Statistics>>> Mean: 9.8235 Std Dev: 0.6027 RSD: 6.13

Sample ID: ICB
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 06240735
Timestamp: 2015/06/24 10:15
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.2247	-0.1124	27175	60.277	60.476	96
2	-0.2864	-0.1432	24059	60.221	60.420	97
3	-0.2753	-0.1376	24620	60.254	60.453	97
4	-0.3205	-0.1602	22334	60.339	60.534	97

<<<Statistics>>> Mean: -0.2767 Std Dev: 0.0397 RSD: -14.33

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Tetra Tech

ARF No: 76687 SDG: 76687

Initial Calibration Source: o2si

Continuing Calibration Source: o2si

Analysis Date: 07/01/15

Analyte	Calibration Verification									M
	True CCV1	Found 12:58	%R(1)	True CCV2	Found 19:30	%R(1)	True	Found	%R(1)	
Total Organic Carbon	10	9.8027	98.0	5	5.16625	103				

(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.: 76687 SDG: 76687

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): mg/L

Analyte	Calibration Blanks										M
	CCB 07/01/15 13:23	C	CCB 07/01/15 19:54	C		C		C		C	
Total Organic Carbon	.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	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	0.13 U	0.3	0.13	0.03	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	CHLORIDE	1.4	1.0	0.20	0.08	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	NITRATE	0.18 U	0.5	0.18	0.04	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
EPA 300.0	SULFATE	0.20 U	1.0	0.20	0.09	mg/L	06/19/15	06/19/15	ǂ300WD-150619B1-AZ17907
SW846 90	TOTAL ORGANIC C	0.35 U	0.5	0.35	0.13	mg/L	07/01/15	07/01/15	#906-150701A-AZ17694

Wetlab SC-Blank-REG MDLs
Printed: 07/13/15 3:55:09 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	18.9	94.5	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.9	99.1	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	SULFATE	20.0	19.6	98.0	90-110	06/19/15	06/19/15	#300WD-150619B1-AZ17907
EPA 300.0	NITRATE	22.1	21.0	95.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	NITRITE	9.98	9.27	92.9	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
EPA 300.0	SULFATE	20.0	18.8	94.0	90-110	06/18/15	06/18/15	#300W-150618B1-AZ17907
SW846 906	TOTAL ORGANIC CARBON	10.00	10.2	102	90-110	07/01/15	07/01/15	#906-150701A-AZ17694

Comments: _____

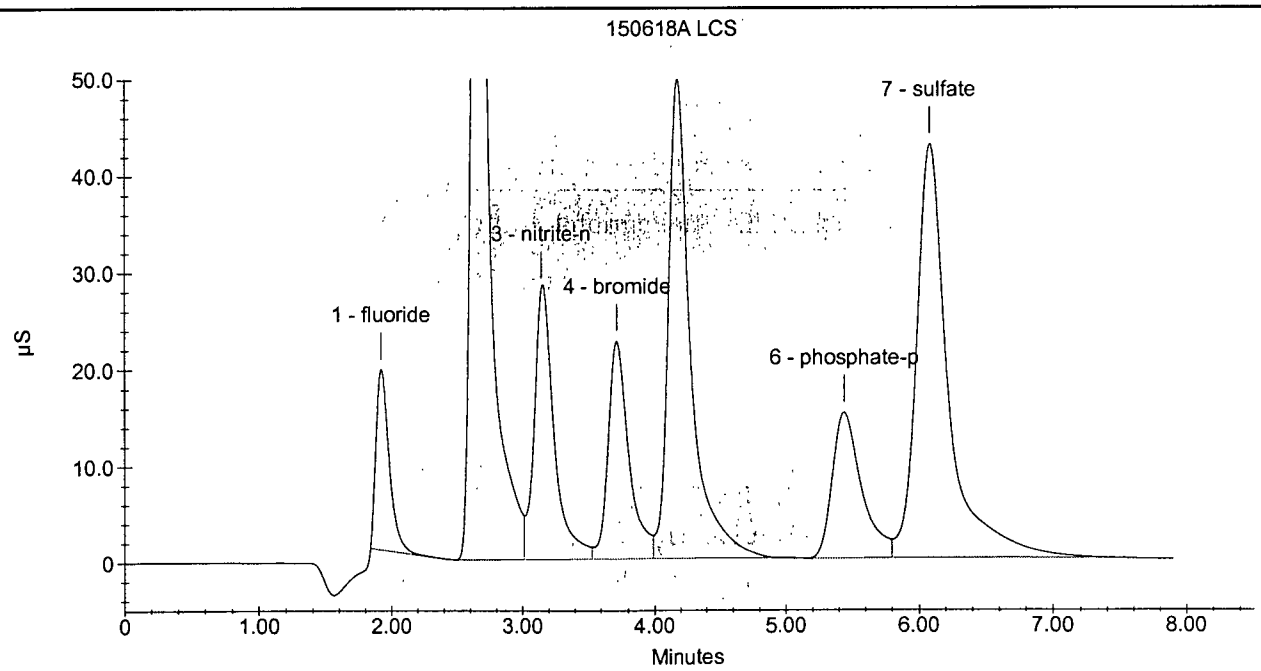
Sample Analysis Report

Sample Name : 150618A LCS
Data File Name : I:\DIONEX\D1ANIONS\DATA\150618A\150618a_040.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/18/15 14:35:18
System Operator : EM
Injection Number : 40
Multiplier : 1.00

Peak Information : All Peaks

Peak Number	Peak Retention Time	Component Name	Component Amount (mg/L)	Peak Area	Peak Height
1	1.92	fluoride	2.0445	1307316	186106
2	2.67	chloride	18.3000	9767504	1143780
3	3.15	nitrite-n	2.8209	2943709	279518
4	3.72	bromide	11.6631	2401027	224857
5	4.17	nitrate-n	4.7318	6046858	494496
6	5.44	phosphate-p	5.1096	2350447	151352
7	6.08	sulfate	18.7963	7169265	427303



$(9.43 \times 10^{-7} \cdot 2943709) + .04501 = 2.82$

algorithm check RS 7.14.15

APPL, Inc.

Current Date : 6/18/15
Current Time : 14:45:53

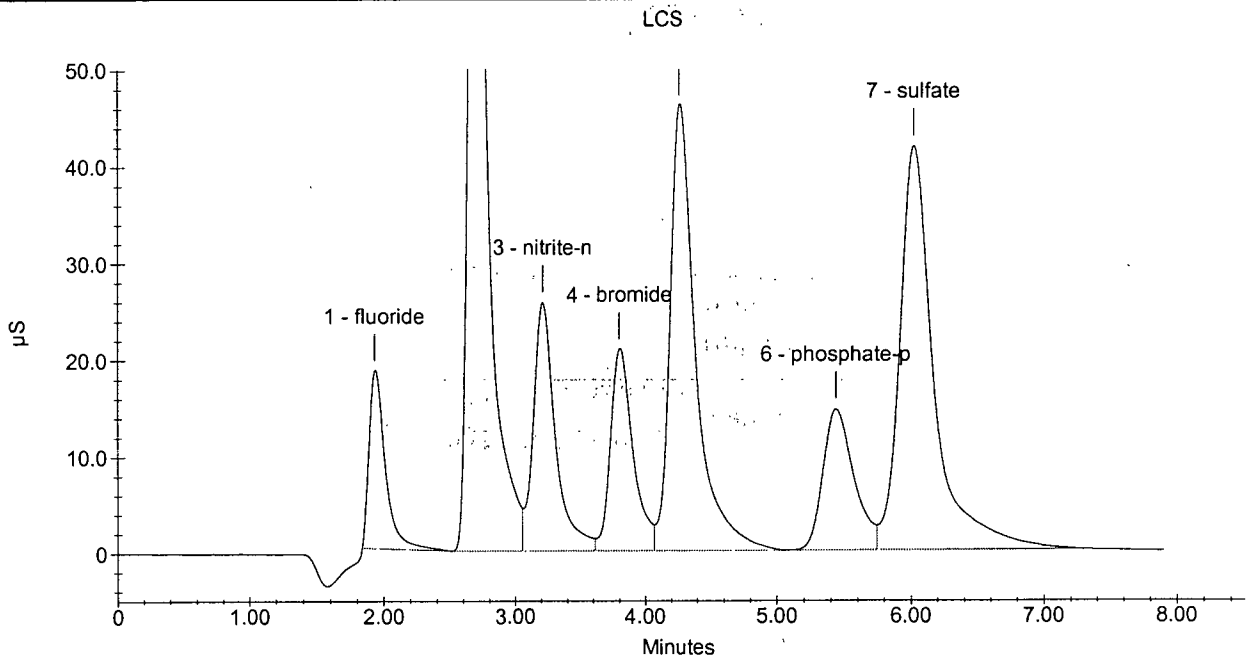
Sample Analysis Report

Sample Name : LCS
Data File Name : I:\DIONEX\D1ANIONS\DATA\150619A\150609a_038.DXD

Method File Name : i:\dionex\d1anions\methods\anions 150604a.met
Date Time Collected : 6/19/15 17:47:50
System Operator : EM
Injection Number : 38
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	2.4558	1569701	182985
2	2.69	chloride	18.8665	10089147	1038710
3	3.21	nitrite-n	2.8886	3015418	256740
4	3.80	bromide	12.1115	2494809	207922
5	4.27	nitrate-n	4.9487	6332768	459933
6	5.44	phosphate-p	5.1252	2357240	146112
7	6.03	sulfate	19.5645	7470108	417180



algorithm check 07.14.15
$(7.586 \times 10^{-7} \times 6332768) + .1446 = 4.95$

APPL, Inc.

Current Date : 6/19/15
Current Time : 17:58:26

Detailed Analysis Report Print Date/Time: 2015/07/13 15:57:54

Sample ID: CCV1 10PPM
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 12:58
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.0408	5.0204	546185	60.334	60.532	187
2	9.7800	4.8900	532998	60.486	60.685	181
3	9.9101	4.9551	539579	60.469	60.666	187
4	9.4799	4.7399	517827	60.642	60.842	174

<<<Statistics>>> Mean: 9.8027 Std Dev: 0.2401 RSD: 2.45

Sample ID: CCB
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 13:23
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.4238	-0.2119	17111	59.952	60.148	93
2	-0.4441	-0.2220	16086	59.952	60.152	94
3	-0.5186	-0.2593	12318	60.099	60.298	94
4	-0.4522	-0.2261	15676	60.127	60.326	93

<<<Statistics>>> Mean: -0.4597 Std Dev: 0.0411 RSD: -8.93

Sample ID: 150701A LCS
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 13:52
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.3880	5.1940	563741	60.255	60.454	162
2	10.1634	5.0817	552384	60.543	60.743	145
3	10.2210	5.1105	555298	60.643	60.843	171
4	10.1831	5.0915	553378	60.728	60.926	164

<<<Statistics>>> Mean: 10.2389 Std Dev: 0.1022 RSD: 1.00

algorithm check 07.14.15

$\frac{(563741 - 38535)}{101100} \times 2 = 10.4$

Sample ID: AZ17907W04
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 17:33
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.2857	0.1428	52982	61.008	61.206	128
2	-0.0097	-0.0049	38046	61.032	61.232	124
3	0.2377	0.1188	50554	61.083	61.282	141
4	0.0289	0.0145	40001	61.239	61.437	132

<<<Statistics>>> Mean: 0.1357 Std Dev: 0.1477 RSD: 108.89

Sample ID: AZ17909W04
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT
Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 17:59
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.0989	0.0495	43539	61.252	61.450	113
2	0.1253	0.0627	44875	61.185	61.385	117
3	0.1625	0.0812	46751	61.255	61.454	122
4	0.1054	0.0527	43866	61.340	61.539	117

<<<Statistics>>> Mean: 0.1230 Std Dev: 0.0286 RSD: 23.26

5 ds 7.14.15

Sample ID: CCV1 ~~10~~PPM
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT

Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 19:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.2703	2.6352	304996	61.145	61.340	172
2	4.9365	2.4683	288122	61.320	61.520	165
3	5.3499	2.6750	309022	61.430	61.628	186
4	5.1083	2.5542	296806	61.789	61.989	172

<<<Statistics>>> Mean: 5.1663 Std Dev: 0.1832 RSD: 3.55

Sample ID: CCB
Method: TOC 0 - 20 ppmC
Cal. Curve: 150623I9
Operator ID: DT

Mode: TOC
Filename: 07011213
Timestamp: 2015/07/01 19:54
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	-0.6107	-0.3054	7661	61.919	62.115	90
2	-0.4906	-0.2453	13734	61.853	62.053	93
3	-0.5661	-0.2830	9917	61.907	62.106	91
4	-0.6532	-0.3266	5512	61.920	62.120	89

<<<Statistics>>> Mean: -0.5802 Std Dev: 0.0695 RSD: -11.98

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	06/23/15	07/24/15	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 1° STD**				
UPPLIER		**mg/L**	**LOT #**	**open**	**EXP.**	**mL**
)2SI	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 1° STD	100	06/23/15	07/24/15	10	5
Brought up with milipore water to Final Volume of:				100	100
			Final Conc (mg/L)	10	5

ETHOD 5310B/9060		**TOC INTERMEDIATE 2° STD**				
UPPLIER		**mg/L**	**LOT #**	**open**	**EXP.**	**mL**
LTRA 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 2° STD	100	06/23/15	07/24/15	10
Brought up with milipore water to Final Volume of:				100
			Final Conc (mg/L)	10

150619

		ANION CCV				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
O2SI	F-	1,000	1053804	05/27/15	0.125	2.50
O2SI	Cl-	5,000	1069557	07/08/16	0.25	25.0
O2SI	NO2-N	1,000	1062905	01/10/16	0.125	2.5
Ultra Scientific	Br-	1,000	p00939	10/31/16	0.625	12.50
O2SI	NO3-N	1,000	1057207	08/30/15	0.25	5.0
O2SI	PO4-P	1,000	1072004	09/03/16	0.25	5.0
Ultra Scientific	SO4	5,000	t00419	05/31/16	0.25	25.0
Brought up with milipore water to Final Volume of:					50	

METHOD 300 / 9056		ANION MS/MSD				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	13G095	05/27/15	0.125	2.50
CPI	Cl-	1,000	15D270	10/30/16	1.00	20.00
CPI	NO2-N	304	15C058	12/08/16	0.50	3.04
CPI	Br-	1,000	14H100	03/19/16	0.63	12.50
CPI	NO3-N	1,000	13L102	11/22/15	0.25	5.00
CPI	PO4-P	1,000	14L003	07/25/15	0.25	5.00
CPI	SO4	1,000	15D051	10/17/16	1.00	20.00
Final Volume of Sample: (mL)					50	

METHOD 300 / 9056		ANION LCS				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	13G095	05/27/15	0.125	2.50
CPI	Cl-	1,000	15D270	10/30/16	1.00	20.00
CPI	NO2-N	304	15C058	12/08/16	0.50	3.04
CPI	Br-	1,000	14H100	03/19/16	0.63	12.50
CPI	NO3-N	1,000	13L102	11/22/15	0.25	5.00
CPI	PO4-P	1,000	14L003	07/25/15	0.25	5.00
CPI	SO4	1,000	15D051	10/17/16	1.00	20.00
Brought up with milipore water to Final Volume of:					50	

150618

		ANION CCV				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
O2SI	F-	1,000	1053804	05/27/15	0.125	2.50
O2SI	Cl-	5,000	1069557	07/08/16	0.25	25.0
O2SI	NO2-N	1,000	1062905	01/10/16	0.125	2.5
Ultra Scientific	Br-	1,000	p00939	10/31/16	0.625	12.50
O2SI	NO3-N	1,000	1057207	08/30/15	0.25	5.0
O2SI	PO4-P	1,000	1072004	09/03/16	0.25	5.0
Ultra Scientific	SO4	5,000	t00419	05/31/16	0.25	25.0
Brought up with milipore water to Final Volume of:					50	

METHOD 300 / 9056		ANION MS/MSD				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	13G095	05/27/15	0.125	2.50
CPI	Cl-	1,000	15D270	10/30/16	1.00	20.00
CPI	NO2-N	304	15C058	12/08/16	0.50	3.04
CPI	Br-	1,000	14H100	03/19/16	0.63	12.50
CPI	NO3-N	1,000	13L102	11/22/15	0.25	5.00
CPI	PO4-P	1,000	14L003	07/25/15	0.25	5.00
CPI	SO4	1,000	15D051	10/17/16	1.00	20.00
Final Volume of Sample: (mL)					50	

METHOD 300 / 9056		ANION LCS				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	13G095	05/27/15	0.125	2.50
CPI	Cl-	1,000	15D270	10/30/16	1.00	20.00
CPI	NO2-N	304	15C058	12/08/16	0.50	3.04
CPI	Br-	1,000	14H100	03/19/16	0.63	12.50
CPI	NO3-N	1,000	13L102	11/22/15	0.25	5.00
CPI	PO4-P	1,000	14L003	07/25/15	0.25	5.00
CPI	SO4	1,000	15D051	10/17/16	1.00	20.00
Brought up with milipore water to Final Volume of:					50	

METHOD 300 / 9056		ANION STOCK				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
O2SI	F-	1,000	1053804	05/27/15	0.25	5
O2SI	Cl-	5,000	1069557	07/08/16	0.5	50
O2SI	NO2-N	1,000	1062905	01/10/16	0.25	5
Ultra Scientific	Br-	1,000	p00939	10/31/16	1.25	25
O2SI	NO3-N	1,000	1057207	08/30/15	0.5	10
O2SI	PO4-P	1,000	1072004	09/03/16	0.5	10
Ultra Scientific	SO4	5,000	t00419	05/31/16	0.5	50
Brought up with milipore water to Final Volume of:					50	

METHOD 300 / 9056		ANION ICV / LCS/MS/MSD				
SUPPLIER		mg/L	LOT #	EXP.	mL	Final Conc (mg/L)
CPI	F-	1,000	13G095	05/27/15	0.125	2.50
CPI	Cl-	1,000	15D270	10/30/16	1.00	20.00
CPI	NO2-N	304	15C058	12/08/16	0.50	3.04
CPI	Br-	1,000	14H100	03/19/16	0.625	12.50
CPI	NO3-N	1,000	13L102	11/22/15	0.25	5.00
CPI	PO4-P	1,000	14L003	07/25/15	0.25	5.00
CPI	SO4	1,000	15D051	10/17/16	1.00	20.00
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

415/9060 Injection Log

Directory: I:\Tekmar\uploadrun\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	23 Jun 2015	13:49	DI WATER		150624A9-T	1.
2	23 Jun 2015	14:15	autocal1		150624A9-T	1.
3	23 Jun 2015	14:41	autocal2		150624A9-T	1.
4	23 Jun 2015	15:09	autocal3		150624A9-T	1.
5	23 Jun 2015	15:39	autocal4		150624A9-T	1.
6	23 Jun 2015	16:38	autocal5		150624A9-T	1.
7	23 Jun 2015	17:09	autocal6		150624A9-T	1.

415/9060 Injection Log

Directory: I:\Tekmar\uploadrun\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
8	24 Jun 2015	09:50	ICV		150624A9-T	1.
9	24 Jun 2015	10:15	ICB		150624A9-T	1.

300/9056A Injection Log

Directory: I:\Dionex\D1Anions\data\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
23	04 Jun 2015	12:53	CAL STD #1 05/05/15		150604a	1.
24	04 Jun 2015	13:03	CAL STD #2		150604a	1.
25	04 Jun 2015	13:14	CAL STD #3		150604a	1.
26	04 Jun 2015	13:25	CAL STD #4		150604a	1.
27	04 Jun 2015	13:35	CAL STD #5		150604a	1.
28	04 Jun 2015	13:46	CAL STD #6		150604a	1.
29	04 Jun 2015	13:57	CAL STD #7		150604a	1.
~~32~~ 33	04 Jun 2015	14:52	150604 ICV		150604a	1.
~~33~~ 34	04 Jun 2015	15:03	ICB		150604a	1.

JD 6.15.15

300/9056A Injection Log

Directory: I:\Dionex\D1Anions\data\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
38	18 Jun 2015	14:13	CCV 150618A		150619a	1.
39	18 Jun 2015	14:24	CCB		150619a	1.
40	18 Jun 2015	14:35	150618A LCS		150619a	1.
43	18 Jun 2015	15:07	AZ17907W02		150619a	1.
44	18 Jun 2015	15:17	AZ17909W02		150619a	1.
53	18 Jun 2015	16:53	CCV 150618A		150619a	1.
54	18 Jun 2015	17:03	CCB		150619a	1.

300/9056A Injection Log

Directory: I:\Dionex\D1Anions\data\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
96	19 Jun 2015	17:26	CCV 150618A		150619a	1.
97	19 Jun 2015	17:37	CCB		150619a	1.
98	19 Jun 2015	17:47	LCS		150619a	1.
103	19 Jun 2015	18:40	AZ17907W02 1/10		150619a	10.
104	19 Jun 2015	18:51	AZ17909W02 1/2		150619a	2.
105	19 Jun 2015	19:02	AZ17909W02 1/10		150619a	10.
106	19 Jun 2015	19:12	CCV 150618A		150619a	1.
107	19 Jun 2015	19:23	CCB		150619a	1.

415/9060 Injection Log

Directory: I:\Tekmar\uploadrun\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	01 Jul 2015	12:58	CCV1 10PPM		150701A9-T	1.
2	01 Jul 2015	13:23	CCB		150701A9-T	1.
3	01 Jul 2015	13:52	150701A LCS		150701A9-T	1.
11	01 Jul 2015	17:33	AZ17907W04		150701A9-T	1.
12	01 Jul 2015	17:59	AZ17909W04		150701A9-T	1.
15	01 Jul 2015	19:30	CCV2 5PPM		150701A9-T	1.
16	01 Jul 2015	19:54	CCB		150701A9-T	1.

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July 15, 2015

Analytical Report for Service Request No: K1507175

Renee Patterson
Agriculture and Priority Pollutants Lab, Inc.
908 North Temperance Ave.
Clovis, CA 93611

RE:

Dear Renee,

Enclosed are the results of the sample(s) submitted to our laboratory July 02, 2015
For your reference, these analyses have been assigned our service request number **K1507175.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3275. You may also contact me via email at Chris.Leaf@ALSGlobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Chris Leaf
Project Manager

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    General Chemistry

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

* The result is an outlier. See case narrative

\# The control limit criteria is not applicable. See case narrative.

B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.

E The result is an estimate amount because the value exceeded the instrument calibration range.

J The result is an estimated value.

U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.

i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.

X See case narrative.

Q See case narrative. One or more quality control criteria was outside the limits.

H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

\# The control limit criteria is not applicable. See case narrative.

J The result is an estimated value.

E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.

M The duplicate injection precision was not met.

N The Matrix Spike sample recovery is not within control limits. See case narrative.

S The reported value was determined by the Method of Standard Additions (MSA).

U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.

W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.

i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference

X See case narrative.

\+ The correlation coefficient for the MSA is less than 0.995.

Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

* The result is an outlier. See case narrative.

\# The control limit criteria is not applicable. See case narrative.

A A tentatively identified compound, a suspected aldol-condensation product.

B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.

C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.

D The reported result is from a dilution.

E The result is an estimated value.

J The result is an estimated value.

N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.

P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.

U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.

i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.

X See case narrative.

Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.

L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.

H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.

O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard

Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.

Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

ALS Environmental

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	Agriculture & Priority Pollutant Labs, Inc.	**Service Request No.:**	K1507175
Project:	NA	**Date Received:**	07/02/15
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One soil sample was received for analysis at ALS Environmental on 07/02/15. The sample was received in good condition and consistent with the accompanying chain of custody form, except where noted on the cooler receipt and preservation form included in this report. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of this sample were observed.

Approved by _____

ALS Environmental

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

SUBCONTRACT ORDER

APPL, Inc.

ARF: 76687 **PO: 00-76687** K1507175

SENDING LABORATORY:	**RECEIVING LABORATORY:**
APPL Labs	Columbia Analytical - Kelso
908 North Temperance Ave.	1317 South 13th Avenue
Clovis, CA 93611	Kelso, WA 98626-2845
Phone: (559) 275-2175	Phone: (360) 577-7222x
Fax: (559) 275-4422	Fax: (360) 636-1068
Project Manager: Cynthia Clark (cclark@applinc.com)	DOD Expiration Date:

Comments: Level IV report and summary report to (cclark@applinc.com) and (rpatterson@applinc.com). Guidance: DoD QSM v4.2; EDD: Tetra Tech LEDD to (cclark@applinc.com).

	APPL ID	Sample ID	LOC ID	Matrix	Collected	Analysis	Price
1.	AZ17911	S67-SOIDW-061715		Soil	06/17/15 13:00	Ignitability SW-846 1020	

Released By	Date	Time	Received By	Date	Time
Yang Jin	6/30/15	15:00		7/2/15	0950

Upon receipt, please email signed COC to APPL Inc.
To ensure timely payment, please include the PO number on your invoice.

ALS

PC CL

Cooler Receipt and Preservation Form

Client / Project: Appl Service Request *K15* 07175

Received: 7/2/15 Opened: 7/2/15 By: KO Unloaded: 7/2/15 By: KO

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
18.7	18.8	19.0	19.1	+.1	359		5714 1986 8508	

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
~~Samp~~ A217911	1-4oz	X								

Notes, Discrepancies, & Resolutions: Sent email re: % TS & temperature exceedance - CL 7/6/15

Page ____ *of* ____

ALS Environmental

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1507175
Project:		**Date Collected:**	06/17/15
Sample Matrix:	Soil	**Date Received:**	07/2/15
Analysis Method:	1020A Modified	**Units:**	deg C
Prep Method:	None	**Basis:**	As Received

Flash Point

Sample Name	Lab Code	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
AZ17911/S67-SOIDW-061715	K1507175-001	**>110**	-	-	-	1	07/13/15 14:10	
Method Blank	K1507175-MB	**>110**	-	-	-	1	07/13/15 14:10	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1507175
Project		**Date Collected:**	06/17/15
Sample Matrix:	Soil	**Date Received:**	07/02/15
		Date Analyzed:	07/13/15

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	AZ17911/S67-SOIDW-061715	**Units:**	deg C
Lab Code:	K1507175-001	**Basis:**	As Received

Analyte Name	Analysis Method	LOQ	LOD	MDL	Sample Result	Duplicate Sample K1507175-001DUP Result	Average	RPD	RPD Limit
Flash Point	1020A Modified	-	-	-	>110	>110	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1507175
Project:		**Date Analyzed:**	07/13/15
Sample Matrix:	Soil	**Date Extracted:**	NA

Lab Control Sample Summary
Flash Point

Analysis Method:	1020A Modified	**Units:**	deg C
Prep Method:	None	**Basis:**	As Received
		Analysis Lot:	452872

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1507175-LCS	27.0	27.0	100	85-115

ALS Environmental

Raw Data

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General Chemistry

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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Work Request # (Original) K1507175

Tier: IV

Date Analyzed: 7-13-15

Analyst: MS

Analysis: Flash

Run # 452872

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
9.	Are results for methods blanks all ND?	yes/no/NA
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
11.	Are all exceptions explained?	yes/no/NA
12.	Have all applicable service requests been reviewed?	yes/no/NA
13.	Are all samples labeled correctly?	yes/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	yes/no/NA
15.	Are detection limits and units reported correctly?	yes/no/NA
16.	Is the unused space on the benchsheet crossed out?	yes/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Due 7-13-15

Final Approved by: _____ Date: 7/13/15

DQREPORT

Analytical Results Summary

Instrument Name: K-FlashPoint-01 **Analyst:** MSPECHT **Analysis Lot:** 452872 **Method/Testcode:** 1020A Modified/IgnitClosedCup

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K1507175-001	Flash Point	N/A		Soil	>110 deg C	g	>110 deg C	1					7/13/15 14:10:00	N	IV
KQ1507583-01	Flash Point	MB		Soil	>110 deg C	g	>110 deg C	1					7/13/15 14:10:00	N	IV
KQ1507583-02	Flash Point	LCS		Soil	27.00 deg C	g	27.0 deg C	1			100		7/13/15 14:10:00	N	IV
KQ1507583-03	Flash Point	DUP	K1507175-001	Soil	>110 deg C	g	>110 deg C	1				NC	7/13/15 14:10:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Columbia Analytical Services

Service Request: K1507175

Analysis For: Flashpoint

Method: EPA 1020

p-xylene STD 1

°C	Yes	No
20		X
25		X
30	X	
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
21		X
22		X
23		X
24		X
Verification		
25		X
26		X
27	X	
28		
29		
Obs. Flash =		27
Flashpoint =		27

1-butanol STD 2

°C	Yes	No
20		
25		
30		X
35		X
40	X	
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
31		X
32		X
33		X
34		X
Verification		
35		X
36		X
37		X
38	X	
39		
Obs. Flash =		38
Flashpoint =		38

DI Water Blank

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #: K7575-1

°C	Yes	No
20		
25		
30		
35		
40		X
45		
50		X
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #: K7575-1D

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Standard 1: **p-xylene T.V. = 27.0 °C ±0.5 °C** **Lot #:** **K12W031** **%REC=**

Standard 2: **1-butanol T.V. = 37.0 °C ±1.0 °C** **Lot #:** 71926 **%REC=**

Actual Flashpoint (°C) = Observed flashpoint + 0.03 (760 - Avg. barometric pressure (mm Hg))

Barometric Pressure

Beginning : 762

End : 762

Comments:

Instrument ID: K-Flashpoint-01

Analyst: MS	Date: 7/13/2015	Time: 14:10
Reviewed By:	Date: 7/13/15	

Revision 1-R:/WET/ANALYSES/FLASH/TEMPLATE/fpointF&C

ALS Environmental
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July 14, 2015 **Analytical Report for Service Request No:** K1506686

Cynthia Clark
Agriculture and Priority Pollutants Lab, Inc.
908 North Temperance Ave.
Clovis, CA 93611

RE:

Dear Cynthia,

Enclosed are the results of the sample(s) submitted to our laboratory June 19, 2015
For your reference, these analyses have been assigned our service request number **K1506686.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3275. You may also contact me via email at Chris.Leaf@ALSGlobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Chris Leaf
Project Manager

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable See case narrative
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

ALS Environmental

Case Narrative

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ALS ENVIRONMENTAL

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request No.:**	K1506686
Project:	NA	**Date Received:**	6/19/2015
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at ALS Environmental on 6/19/2015. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Corrosivity Towards Steel by EPA Method 1110:
The result for the fully submerged coupon was reported. The result for the Half Suspended coupon had a detection of 9.3 mm/year. The result for the Suspended coupon was 5.2 mm/yr.

No other anomalies associated with the analysis of this sample were observed.

Approved by _____

ALS Environmental

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

SUBCONTRACT ORDER

APPL, Inc.

ARF: 76687 **PO: 00.76687** 1C1506686

SENDING LABORATORY:	RECEIVING LABORATORY:
APPL Labs	Columbia Analytical - Kelso
908 North Temperance Ave.	1317 South 13th Avenue
Clovis, CA 93611	Kelso, WA 98626-2845
Phone: (559) 275-2175	Phone: (360) 577-7222x
Fax: (559) 275-4422	Fax: (360) 636-1068
Project Manager: Cynthia Clark (cclark@applinc.com)	DOD Expiration Date:

Comments: Level IV report and summary report to cclark@applinc.com and rpatterson@applinc.com. Guidance: DoD QSM v4.2; EDD: Tetra Tech LEDD to cclark@applinc.com

	APPL ID	Sample ID	LOC ID	Matrix	Collected	Analysis	Price
1.	AZ17910	S67-AQIDW-061715		Water	06/17/15 12:50	Corrosivity (towards steel) SW-846 1110A	
				Water	06/17/15 12:50	Ignitability SW-846 1020	

Released By	Date	Time	Received By	Date	Time
[signature]	6/18/15	13:20	[signature]	6/19/15	0940

Upon receipt, please email signed COC to APPL Inc.
To ensure timely payment, please include the PO number on your invoice.

PC CL

Cooler Receipt and Preservation Form

Client / Project: APPL Service Request *K15* 06686

Received: 6/19/15 Opened: 6/19/15 By: MM Unloaded: 6/19/15 By: MM

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
0.1	0.2	0.1	0.2	+0.1	359		5714 1986 7832	

4. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

*Notes, Discrepancies, & Resolutions:*_____

*Page*____ *of*____

ALS Environmental

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1506686
Project:		**Date Collected:**	06/17/15
Sample Matrix:	Water	**Date Received:**	06/19/15
Analysis Method:	1020A	**Units:**	deg C
Prep Method:	None	**Basis:**	NA

Flash Point

Sample Name	Lab Code	Result	LOQ	LOD	Dil.	Date Analyzed	Q
AZ17910	K1506686-001	**>110**	-	-	1	06/24/15 17:40	
Method Blank	K1506686-MB	**>110**	-	-	1	06/24/15 17:40	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1506686
Project		**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	06/24/15

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	Batch QC	**Units:**	deg C
Lab Code:	K1506211-007	**Basis:**	NA

Analyte Name	Analysis Method	LOQ	LOD	Sample Result	Duplicate Sample K1506211-007DUP Result	Average	RPD	RPD Limit
Flash Point	1020A	-	-	>110	>110	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1506686
Project:		**Date Analyzed:**	06/24/15
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Flash Point

Analysis Method:	1020A	**Units:**	deg C
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	450529

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K1506686-LCS	27.0	27.0	100	85-115

Analytical Report

Client:	Agriculture & Priority Pollutant Labs, Inc. (APPL)	**Service Request:**	K1506686
Project:		**Date Collected:**	06/17/15
Sample Matrix:	Water	**Date Received:**	06/19/15
Analysis Method:	1110	**Units:**	mm/yr
Prep Method:	None	**Basis:**	NA

Corrosivity Toward Steel

Sample Name	Lab Code	Result	LOQ	LOD	Dil.	Date Analyzed	Q
AZ17910	K1506686-001	**14.0**	6.2	-	1	06/24/15 20:00	
Method Blank	K1506686-MB	ND U	6.2	-	1	06/24/15 20:00	

ALS Environmental

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

ALS Environmental

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Work Request # Original (6211) 6505, 6686

Tier: V I IV

Date Analyzed: 6-24-15

Analyst: MS

Analysis: Flash

Run # 450529

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	(yes)/no/NA
5.	All quality control criteria met?	(yes)/no
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/(NA)
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
9.	Are results for methods blanks all ND?	(yes)/no/NA
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
11.	Are all exceptions explained?	(yes)/no/NA
12.	Have all applicable service requests been reviewed?	(yes)/no/NA
13.	Are all samples labeled correctly?	(yes)/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	(yes)/no/NA
15.	Are detection limits and units reported correctly?	(yes)/no/NA
16.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/(NA)

COMMENTS:

Due 6/26/15

Final Approved by: [signature] Date: 6/25/15 DQREPORT

Analytical Results Summary

Instrument Name: K-FlashPoint-01 **Analyst:** MSPECHT **Analysis Lot:** 450529 **Method/Testcode:** 1020A/IgnitClosedCup

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K1506211-007	Flash Point	N/A		Water	>110 deg C	2 mL	>110 deg C	1					6/24/15 17:40:00	N	V
K1506505-001	Flash Point	N/A		Oil	>110 deg C	2 mL	>110 deg C	1					6/24/15 17:40:00	N	I
K1506686-001	Flash Point	N/A		Water	>110 deg C	2 mL	>110 deg C	1					6/24/15 17:40:00	N	IV
KQ1506890-01	Flash Point	DUP	K1506211-007	Water	>110 deg C	2 mL	>110 deg C	1				NC	6/24/15 17:40:00	N	V
KQ1506890-02	Flash Point	MB		Water	>110 deg C	2 mL	>110 deg C	1					6/24/15 17:40:00	N	V
KQ1506890-03	Flash Point	LCS		Water	27.00 deg C	2 mL	27.0 deg C	1			100		6/24/15 17:40:00	N	V

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Columbia Analytical Services

Service Request: K1506211,6505,6686

Analysis For: Flashpoint Method: EPA 1020

p-xylene STD 1

°C	Yes	No
20		X
25		X
30	X	
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
21		X
22		X
23		X
24		X
Verification		
25		X
26		X
27	X	
28		
29		
Obs. Flash =		27
Flashpoint =		27

1-butanol STD 2

°C	Yes	No
20		
25		
30		X
35		X
40	X	
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
31		X
32		X
33		X
34		X
Verification		
35		X
36		X
37		X
38	X	
39		
Obs. Flash =		38
Flashpoint =		38

DI Water Blank

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #: K6505-1

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		X
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #: K6211-7

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Standard 1: **p-xylene T.V. = 27.0 °C ±0.5 °C** **Lot #:** **K12W031** **%REC=**

Standard 2: **1-butanol T.V. = 37.0 °C ±1.0 °C** **Lot #:** 71926 **%REC=**

Barometric Pressure

Beginning : 762

End : 761.238

Actual Flashpoint (°C) = Observed flashpoint + 0.03 (760 - Avg. barometric pressure (mm Hg))

Comments: Instrument ID: K-Flashpoint-01

Analyst: MS		Date: 6/24/2015	Time: 17:40
Reviewed By:		Date: 6/25/15	

Revision 1-R:/WET/ANALYSES/FLASH/TEMPLATE/fpointF&C

ALS ENVIRONMENTAL

Service Request: K1506211,6505,6686

Analysis For: Flashpoint Method: EPA 1020

Sample #: K6211-7D

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #: K6686-1

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		X
65		
70		X
75		
80		X
85		
90		X
95		
100		X
105		
110		X
Verification		
110		X
Obs. Flash =		>110
Flashpoint =		>110

Sample #:

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
Verification		
Obs. Flash =		
Flashpoint =		

Sample #:

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
Verification		
Obs. Flash =		
Flashpoint =		

Sample #:

°C	Yes	No
20		
25		
30		
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
Verification		
Obs. Flash =		
Flashpoint =		

Comments:

Analyst: MS		Date: 6/24/2015	Time 17:40
Reviewed By:		Date: 6/25/15	

Work Request # (Original) 1506247, 1506686

Tier: II IV

Date Analyzed: 6-24-15

Analyst: MS

Analysis: Corrosivity

Run # 1/50530

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no
6.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
9.	Are results for methods blanks all ND?	yes/no/NA
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
11.	Are all exceptions explained?	yes/no/NA
12.	Have all applicable service requests been reviewed?	yes/no/NA
13.	Are all samples labeled correctly?	yes/no/NA
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	yes/no/NA
15.	Are detection limits and units reported correctly?	yes/no/NA
16.	Is the unused space on the benchsheet crossed out?	yes/no/NA
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Due 6/26/15

Final Approved by: [signature] Date: 6/26/15

DQRFPORT

Analytical Results Summary

Instrument Name: K-Balance-05 **Analyst:** MSPECHT **Analysis Lot:** 450530 **Method/Testcode:** 1110/Corr Steel

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K1506247-001	Corrosivity Toward Steel	N/A		Water	15.10 mm/yr	1000 mL	15.1 mm/yr	1		6.2			6/24/15 20:00:00	N	II
K1506686-001	Corrosivity Toward Steel	N/A		Water	14.00 mm/yr	1000 mL	14.0 mm/yr	1		6.2			6/24/15 20:00:00	N	IV
KQ1506891-01	Corrosivity Toward Steel	MB		Water	2.50 mm/yr	1000 mL	6.2 mm/yr U	1		6.2			6/24/15 20:00:00	N	II

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

COLUMBIA ANALYTICAL SERVICES, INC.

Service Request No.: K1506686,6247 **Method:** SW-846/1110

Analysis for: **Corrosivity Toward Steel**

Sample No.	MB	Sample No.	K6686-1 F	Sample No.	K6686-1 1/2	Sample No.	K6686-1 V
Coupon No.	90	Coupon No.	161	Coupon No.	151	Coupon No.	159
D	1.475	D	1.484	D	1.4855	D	1.4920
d	0.3980	d	0.4015	d	0.4005	d	0.3995
t	0.1080	t	0.1030	t	0.1025	t	0.1055
Area (cm2)	3.8022	Area (cm2)	3.8143	Area (cm2)	3.8197	Area (cm2)	3.8709
Start Time	6/24/2015 20:00	Start Time	6/24/2015 20:00	Start Time	6/24/2015 20:00	Start Time	6/24/2015 20:00
Stop Time	6/25/2015 22:00	6/25/2015 22:00	6/25/2015 22:00	Stop Time	6/25/2015 22:00	Stop Time	6/25/2015 22:00
Elapsed Time (hr)	26.00	Elapsed Time (hr)	26.00	Elapsed Time (hr)	26.00	Elapsed Time (hr)	26.00
Initial wt (g)	23.3687	Initial wt (g)	23.0084	Initial wt (g)	22.8513	Initial wt (g)	23.9781
Final Wt (g)	23.3469	Final Wt (g)	22.8622	Final Wt (g)	22.7463	Final Wt (g)	23.9091
Initial Temp (Deg C)	55*	Initial Temp (Deg C)	55*	Initial Temp (Deg C)	55*	Initial Temp (Deg C)	55*
Final Temp (Deg C)	55*	Temp (Deg C)	55*	Temp (Deg C)	55*	Temp (Deg C)	55*
Weight Loss (mg)	21.8	Weight Loss (mg)	146.2	Weight Loss (mg)	105.0	Weight Loss (mg)	69.0
mm/year (mmpy)	2.5	mm/year (mmpy)	14.0	mm/year (mmpy)	9.3	mm/year (mmpy)	5.2

Sample No.	K6247-1 F	Sample No.	K6247-1 1/2	Sample No.	K6247-1 V	~~Sample No.~~	
Coupon No.	170	Coupon No.	187	Coupon No.	140	~~Coupon No.~~	
D	1.4870	D	1.4880	D	1.4810	~~D~~	
d	0.3945	d	0.3940	d	0.3960	~~d~~	
t	0.1045	t	0.0995	t	0.1005	~~t~~	
Area (cm2)	3.8446	Area (cm2)	3.8205	Area (cm2)	3.7897	~~Area (cm2)~~	
Start Time	6/24/2015 20:00	Start Time	6/24/2015 20:00	Start Time	6/24/2015 20:00	~~Start Time~~	~~6/24/2015 20:00~~
Stop Time	6/25/2015 22:00	Stop Time	6/25/2015 22:00	Stop Time	6/25/2015 22:00	~~Stop Time~~	~~6/25/2015 22:00~~
Elapsed Time (hr)	26.00	Elapsed Time (hr)	26	Elapsed Time (hr)	26	~~Elapsed Time (hr)~~	26
Initial wt (g)	23.2388	Initial wt (g)	22.2904	Initial wt (g)	22.2904	~~Initial wt (g)~~	
Final Wt (g)	23.0816	Final Wt (g)	22.0758	Final Wt (g)	22.2060	~~Final Wt (g)~~	
Initial Temp (Deg C)	55*	Initial Temp (Deg C)	55*	Initial Temp (Deg C)	55*	~~Initial Temp (Deg C)~~	55*
Final Temp (Deg C)	55*	Temp (Deg C)	55*	Temp (Deg C)	55*	~~Temp (Deg C)~~	55*
Weight Loss (mg)	157.2	Weight Loss (mg)	214.6	Weight Loss (mg)	84.4	~~Weight Loss (mg)~~	
mm/year (mmpy)	15.1	mm/year (mmpy)	21.6	mm/year (mmpy)	7.1	~~mm/year (mmpy)~~	

Comments: K1506686-001 AVG= 9.5

Thermometer: T-0111777 / 105625 K1506247-001 AVG= 14.6

Analyst:	MS	Date:	6/24/15
Reviewed By:		Date:	6/26/15

Revision 1-R:\WET\ANALYSES\CORR\CORR