Laboratory Report

Environet

LTM Red Hill Bulk Fuel Storage Facility

ARF 65187

Samples collected: July 19 & 20, 2011

APPL, Inc.

Data Validation Package
for
LTM Red Hill Bulk Fuel Storage Facility
ARF 65187
TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

CASE NARRATIVE

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

Case Narrative

ARF: 65187

Project: LTM Red Hill Bulk Fuel Storage Facility

California State Certification Number: CA1312 (DW & WW)

NELAP Certification number: 05233CA (HW)

DoD-ELAP Certificate number: ADE-1410

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.

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.

Sample Receipt Information:

The water samples were received on July 21, 2011, at 2.5°C, 2.5°C, and 2.5°C. The sample group was assigned Analytical Request Form (ARF) number 65187. The sample numbers and requested analyses were compared to the chain of custody. One vial labeled ES039 was received broken; the client was notified. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES035	AY42271	WATER	07/19/11	07/21/11
ES036	AY42272	WATER	07/19/11	07/21/11
ES037	AY42273	WATER	07/19/11	07/21/11
ES038	AY42274	WATER	07/19/11	07/21/11
ES039	AY42275	WATER	07/19/11	07/21/11
ES040	AY42276	WATER	07/20/11	07/21/11
ES041	AY42277	WATER	07/20/11	07/21/11

All samples were screened for J-value responses between the LOQ and DL.

EPA Method 8015B

Total Petroleum Hydrocarbons – Diesel

Sample Preparation:

The water samples were extracted according to EPA method 3510C. The samples were extracted within holding time.

Sample Analysis Information:

The samples were analyzed according to the method using a Hewlett Packard Gas Chromatograph with a flame ionization detector.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

No target analyte was detected above the detection limit in the method blank.

Spikes:

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

Sample ES039 was designated by the client for MS/MSD analysis. All acceptance criteria were met

Surrogates:

The surrogate recoveries are summarized on the form 2 & 8. Sample ES038 recovers Octacosane above the 142% upper recovery limit at 159% and Ortho-terphenyl above the 132% upper recovery limit at 156%. The high recoveries may be attributed to the sample matrix. All other surrogate recoveries were within control limits.

Summary:

No other problem was encountered

EPA Method 8270D SIM
Polynuclear Aromatic Hydrocarbons

Sample Preparation:

The water samples were extracted according to EPA method 3510C. All holding times were met.

Sample Analysis Information:

The samples were analyzed according to EPA method 8270D using a Hewlett Packard Gas Chromatograph with a mass spectrometer detector in selective ion monitoring mode.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

No target analyte was detected above the detection limits in the method blank.

Spikes:

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

Sample ES039 was designated by the client for MS/MSD analysis. All acceptance criteria were met

Surrogates

Surrogate recoveries are summarized on the forms 2&8. All surrogate recoveries were within control limits.

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 8270. All method criteria were met.

Summary:

No problem was encountered.

EPA Method 8270D SIM

Polynuclear Aromatic Hydrocarbons

Sample Preparation:

The water samples were extracted according to EPA method 3510C. All holding times were met.

Sample Analysis Information:

The samples were analyzed according to EPA method 8270D using a Hewlett Packard Gas Chromatograph with a mass spectrometer detector in selective ion monitoring mode.

Quality Control/Assurance

Calibrations:

Initial and continuing calibrations were performed according to the method. All calibration criteria were met.

Blanks:

No target analyte was detected above the detection limits in the method blank.

Spikes:

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

Sample ES039 was designated by the client for MS/MSD analysis. All acceptance criteria were met

Surrogates

Surrogate recoveries are summarized on the forms 2&8. All surrogate recoveries were within control limits.

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 8270. All method criteria were met.

Summary:

No problem was encountered.

EPA Method 8260B
Volatile Organic Analysis

Sample Preparation:

The water samples were purged according to EPA method 5030B. All holding times were met.

Sample Analysis Information:

The samples were analyzed according to the method using a Hewlett Packard Gas Chromatograph with a mass spectrometer detector. The samples arrived in a container with a "preservative" sticker on them. The pH was taken after the samples were run and all of them had a pH of greater than 2. One sample, ES039, was run 2 days outside of the 7 days hold time for non-preserved samples. All of the other samples were run within holding time for all constituents except gasoline. Samples ES035, ES036, ES037 and ES038 were run two days past holding time and samples ES040 and ES041 were run one day past holding time for gasoline. The client was contacted and informed of the problem. Manual integrations were performed in accordance to APPL's SOP. Chromatograms of prior to and after manual integrations are enclosed.

Quality Control/Assurance:

Calibrations:

Initial and continuing calibrations were performed according to the method. All system performance check compounds and calibration check compounds met DoD acceptance criteria. All calibration criteria were met.

Blanks:

No target analyte was detected above the detection limits in the method blanks.

Spikes:

Laboratory Control Spikes (LCS) were used for quality assurance. A second-source standard was used for the LCS. All LCS criteria were met.

Sample ES039 was designated by the client for MS/MSD analysis. 1,1-Dichloroethane recovered below the 70% lower control limit at 66.4% and 68.0%. All other acceptance criteria were met

Surrogates:

Surrogate recoveries are summarized on Form 2 & 8. All surrogate recoveries were within the acceptance limits.

Tuning:

The instrument was tuned using BFB. 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. The data generated are acceptable.

EPA Method 6020
Lead

Digestion Information:

The water samples were digested according to EPA methods 3015. All holding times were met.

Analysis Information:

Samples:

The samples were analyzed for dissolved lead according to EPA method 6020 using an Agilent 7500CX ICP-MS.

Calibrations:

The initial and continuing calibrations were analyzed according to the DoD QSM. The initial calibration verification is prepared from a second source standard.

Blanks:

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

Spikes:

Laboratory Control Spike (LCS), matrix spikes (MS/MSD), post digestion spike (PDS), and serial dilution were used for quality assurance. All LCS recoveries were within the acceptance limits.

Sample ES039 was designated by the client for MS/MSD analysis. All acceptance criteria were met. The PDS and serial dilution were performed on sample ES043 for the analytical batch.

Summary:

No analytical exception is noted.

CERTIFICATION

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 his designee, as verified by the following signature.

8-25-11

Sharon Dehmlow, Laboratory Director / Date

CHAIN OF CUSTODY

AND ARF

APPL - Analysis Request Form 65187

Client: **Environet, Inc.**
Address: **650 Iwilei Rd, #204**
Honolulu, HI 96817
Attn: **Vilma Dupra**
Phone: **808-833-2225** Fax: **808-833-2231**
Job: **LTM Red Hill Bulk Fuel Storage Facility**
PO #: **1022-015**
Chain of Custody (Y/N): **Y** # **34091**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **2 WEEKS**

Received by: **TBV**
Date Received: **07/21/11** Time: **09:30**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **Y**
Chest Temp(s): **2.5,2.5,2.5°C**
Color: **VOA,A-GRN,R-ORGYELL**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark** sign for cc
QC Report Type: **DVP4/ADRDOD/HI**
Due Date: **08/04/11**

W

Comments:
14 day TAT for Form 1s & 30 day TAT for full package. VDupra@environetinc.com
1 pdf on CD or FTP (no hard copy), NO hard copy to LDC per Stacy 2-24-11
Guidance: DOD QSM, EDD: Exce & ADR
DoD Forms, J flag to DL, U flag at LOD
EDD ADR A1/A3 (ADR 8.3a unchecked) to VDupra@ & sfineran@environetinc.com
metals 6020: report Lead with 0.5ug/L RL
TPH-Diesel only; Sample breakage see CRF
VOCs: include gasoline by 8260B
emailed 7/25/11 sm.

8/22
Sample Distribution:
GC: 6-$SIMHC12W, 6-$TPETD2
Extractions: 6-_SEP004S, 6-_SEP011
VOA: 7-$86RHBF 8/16
Metals: 6-$602D(Pb) 8/15
Other: 6-_M3015

Charges:

Invoice To:
same

	Client ID		APPL ID	Sampled		Analyses Requested
1.	ES035		AY42271W	07/19/11	09:45	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
2.	ES036		AY42272W	07/19/11	08:00	$86RHBF -- non-preserved VOA
3.	ES037		AY42273W	07/19/11	11:10	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
4.	ES038		AY42274W	07/19/11	09:00	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
5.	ES039	MS/MSD	AY42275W	07/19/11	14:25	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
6.	ES040		AY42276W	07/20/11	09:10	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
7.	ES041		AY42277W	07/20/11	12:00	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2

APPL Sample Receipt Form

ARF# **65187**

Sample	Container Type	Count	pH
AY42271	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA
AY42272	[15] VOAs - NP	3	NA
AY42273	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA
AY42274	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA
AY42275	[6] PL 500mL - HNO3	3	1.7
	[13] VOAs - HCL	10	NA
	[17] Amber Liter	9	NA
AY42276	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA
AY42277	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA

Sample	Container Type	Count	pH

65187
2.5

CHAIN OF CUSTODY RECORD

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

C.O.C. 34091

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Enviroret Inc.	Phone: 808 833-2225	Company Name: Enviroret Inc.	Phone: 808 833-2225
Address: 650 Iwilei Rd #206 Honolulu, Hi 96822	Fax: 808-833-2231	Address: 650 Iwilei Rd Suite 206 Honolulu, Hi	Fax:
Attn: Stacey Fineran		Attn: Alvin	

Project Name/Number	Sampler (Print)	Purchase Order Number	Sampler (Signature)
RHSF/1022-015	Stacey Fineran		

Sample Identification	Location	Date Collected	Time Collected	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	VOCs	TPH-GRO	TPH-DRO	Dissolved Pb	PAHs
ES035	RHSF	7/19/2011	945	8	X			X	X	X	X	X
ES036	RHSF	7/19/11	0800	3	X			X				
ES037	RHSF	7/19/11	1110	8	X			X	X	X	X	X
ES038	RHSF	7/19/11	0900	8	X			X	X	X	X	X
ES039 MS/MSD	RHSF	7/19/11	1425	23	X			X	X	X	X	X
ES040	RHSF	7/20/11	0910	8	X			X	X	X	X	X
ES041	RHSF	7/20/11	1200	8	X			X	X	X	X	X

Analysis Requested/Method Number

Date Shipped:
Carrier:
Waybill No.:
Comments:

15

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE
☒ Standard (2-3 week) ☐ One week ☐ 24-48 hour

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

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Stacey Fineran	7/20/11	1900	Fed Ex				
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					7/21/11	0930	

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

See reverse side for Container Preservative and Sampling Information

COOLER RECEIPT FORM

1) Project: RHSF/1022-015 Date Received: 7/21/11

2) Coolers: Number of Coolers: 3

3) YES NO Were coolers and samples screened for radioactivity?

4) YES NO Were custody seals on outside of cooler? How many? 3 Date on seal? 7/20/11

5) Name on seal? See Label

6) YES NO NA Were custody seals unbroken and intact at the time of arrival?

7) YES NO Did the cooler come with a shipping slip (air bill, etc.)? Carrier name: Fed Ex

8) Shipping slip numbers: 1) 879800671564 2) 3)

9) YES NO NA Was the shipping slip scanned into the database?

10) YES NO NA If cooler belongs to APPL, has it been logged into the ice chest database?

11) Describe type of packing in cooler (bubble wrap, popcorn, type of ice, etc.): bubble bag, Ziploc, in wet ice

12) YES NO NA For hand delivered samples was sufficient ice present to start the cooling process?

13) YES NO Was a temperature blank included in the cooler?

14) Serial number of certified NIST thermometer used: A39267 Correction factor: 0

15) Cooler temp(s): 1) 2.5°C 2) 2.5°C 3) 2.5°C 4) 5) 6) 7) 8)

Chain of custody:

16) YES NO Was a chain of custody received?

17) YES NO Were the custody papers signed in the appropriate places?

18) YES NO Was the project identifiable from custody papers?

19) YES NO Did the chain of custody include date and time of sampling?

20) YES NO Is location where sample was taken listed on the chain of custody?

Sample Labels:

21) YES NO Were container labels in good condition?

22) YES NO Was the client ID on the label?

23) YES NO Was the date of sampling on the label?

24) YES NO Was the time of sampling on the label?

25) YES NO Did all container labels agree with custody papers?

Sample Containers:

26) YES NO Were all containers sealed in separate bags?

27) YES NO Did all containers arrive unbroken?

28) YES NO Was there any leakage from samples?

29) YES NO Were any of the lids cracked or broken?

30) YES NO Were correct containers used for the tests indicated?

31) YES NO Was a sufficient amount of sample sent for tests indicated?

32) YES NO NA Were bubbles present in volatile samples? If yes, the following were received with air bubbles:

Larger than a pea:

Smaller than a pea: AY42271W01-W04, AY42272W01-W03, AY42273W01-W04, AY42274W01-W04

Preservation & Hold time: AY42276W03-W04; AY42277W02-W04

33) YES NO NA Was a sufficient amount of holding time remaining to analyze the samples?

34) YES NO NA Do the sample containers contain the same preservative as what is stated on the COC?

35) YES NO NA Was the pH taken of all non-VOA preserved samples and written on the sample container?

36) YES NO NA Was the pH of acid preserved non-VOA samples < 2 & sodium hydroxide preserved samples > 10?

37) YES NO NA Unpreserved VOA Vials received?

38) YES NO NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

Y2 7/21/11 Y2 7/21/11

Lab notified if pH was not adequate:

Deficiencies: Received broken 1 voa vial from Sample ES039 ms/msd, 10 voa vial left.

Signature of personnel receiving samples: Second reviewer:

Signature of project manager notified: Date and Time of notification:

Name of client notified: Date and Time of notification:

Information given to client:

by whom (initials):

CUSTODY SEAL

APPL, Inc. (559) 275-2175

Initials SF Date 7/20/11

EPA 8015 Modified
Total Petroleum Hydrocarbons

EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary

Method Blank
TPH Diesel Water

Blank Name/QCG: **110726W-42275 - 158155**
Batch ID: #TPETD-110726A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	07/26/11	08/01/11
BLANK	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
BLANK	SURROGATE: OCTACOSANE (S)	88.4	28-142			%	07/26/11	08/01/11
BLANK	SURROGATE: ORTHO-TERPHEN	82.0	57-132			%	07/26/11	08/01/11

Quant Method: TPHNS727.M
Run #: 801012
Instrument: Apollo
Sequence: 110801
Initials: LA

GC SC-Blank-REG MDLs
Printed: 08/25/11 11:18:39 AM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 08/01/11

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)		SURROGATE: ORTHO-TERPHENYL (S)	
110726A-BLK	Blank	88.4		82.0	
110726A-LCS	Lab Control Spike	98.0		101	
AY42271	ES035	108		99.5	
AY42273	ES037	95.5		95.1	
AY42274	ES038	159	#	156	#
AY42275-MS	Matrix Spike	86.0		85.3	
AY42275-MSD	Matrix SpikeD	100		103	
AY42275	ES039	95.3		86.3	
AY42276	ES040	98.3		89.1	
AY42277	ES041	92.6		87.9	

Comments: Batch: #TPETD-110726A

Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **110726W-42275 LCS - 158155**
Batch ID: #TPETD-110726A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
DIESEL FUEL	2000	1490	74.5	61-143
LUBE OIL	2000	1670	83.5	61-143
SURROGATE: OCTACOSANE (S)	150	147	98.0	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	151	101	57-132

Comments:

Primary	SPK
Quant Method :	TPHNS727.M
Extraction Date :	07/26/11
Analysis Date :	08/01/11
Instrument :	Apollo
Run :	801013
Initials :	LA

Printed: 08/25/11 11:23:01 AM

APPL Standard LCS

Matrix Spike Recoveries
TPH Diesel Water

APPL ID: **110726W-42275 MS - 158155**
Batch ID: #TPETD-110726A
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL FUEL	2000	ND	1390	1690	69.5	84.5	61-143	19.5	30
LUBE OIL	2000	ND	1450	1290	72.5	64.5	61-143	11.7	30
SURROGATE: OCTACOSANE (S)	150	NA	129	150	86.0	100	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	128	155	85.3	103	57-132		

Comments:

Primary	SPK	DUP
Quant Method :	TPHNS727.M	TPHNS727.M
Extraction Date :	07/26/11	07/26/11
Analysis Date :	08/01/11	08/01/11
Instrument :	Apollo	Apollo
Run :	801022	801023
Initials :	LA	

Printed: 08/25/11 11:18:19 AM
APPL MSD SCII

EPA 8015B-e

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 08/01/11

Matrix: WATER Instrument: Apollo

Blank ID: 110726A-BLK Time Analyzed: 1424

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110726A-BLK	Blank	801012	08/01/11 1424
110726A-LCS	Lab Control Spike	801013	08/01/11 1448
AY42271	ES035	801019	08/01/11 1714
AY42273	ES037	801020	08/01/11 1738
AY42274	ES038	801021	08/01/11 1802
110726A-MS	Matrix Spike	801022	08/01/11 1826
110726A-MSD	Matrix SpikeD	801023	08/01/11 1850
AY42275	ES039	801029	08/01/11 2116
AY42276	ES040	801030	08/01/11 2141
AY42277	ES041	801031	08/01/11 2205

Comments: Batch: #TPETD-110726A

EPA 8015 Modified
Total Petroleum Hydrocarbons
Sample Data

TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES035

APPL ID: AY42271

Sample Collection Date: 07/19/11

QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	108	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	99.5	57-132			%	07/26/11	08/01/11

Quant Method: TPHNS727.M
Run #: 801019
Instrument: Apollo
Sequence: 110801
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 11:18:35 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801019.D Vial: 19
Acq On : 8-1-11 17:14:06 Operator: LAC
Sample : AY42271W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:27 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

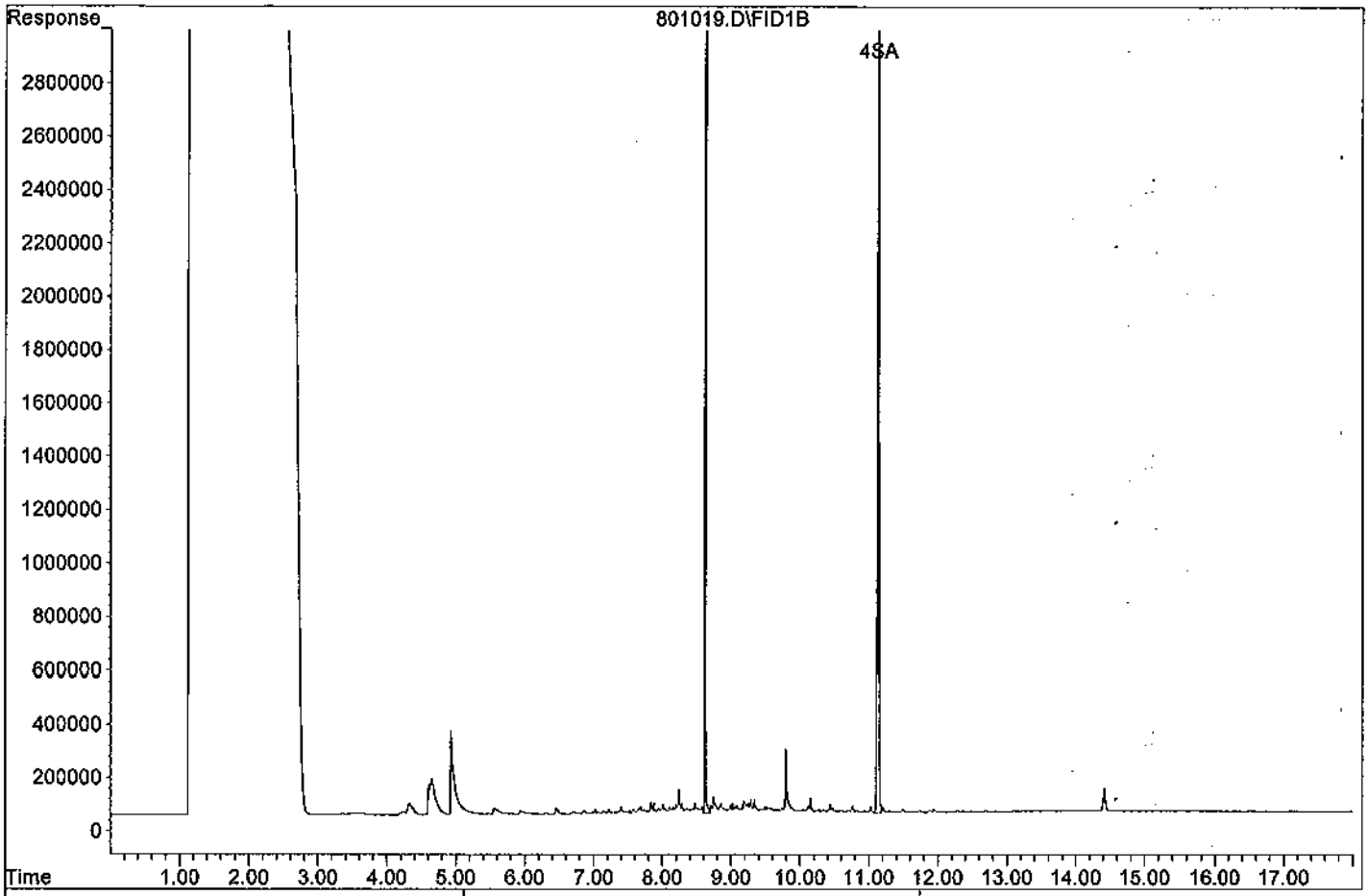
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

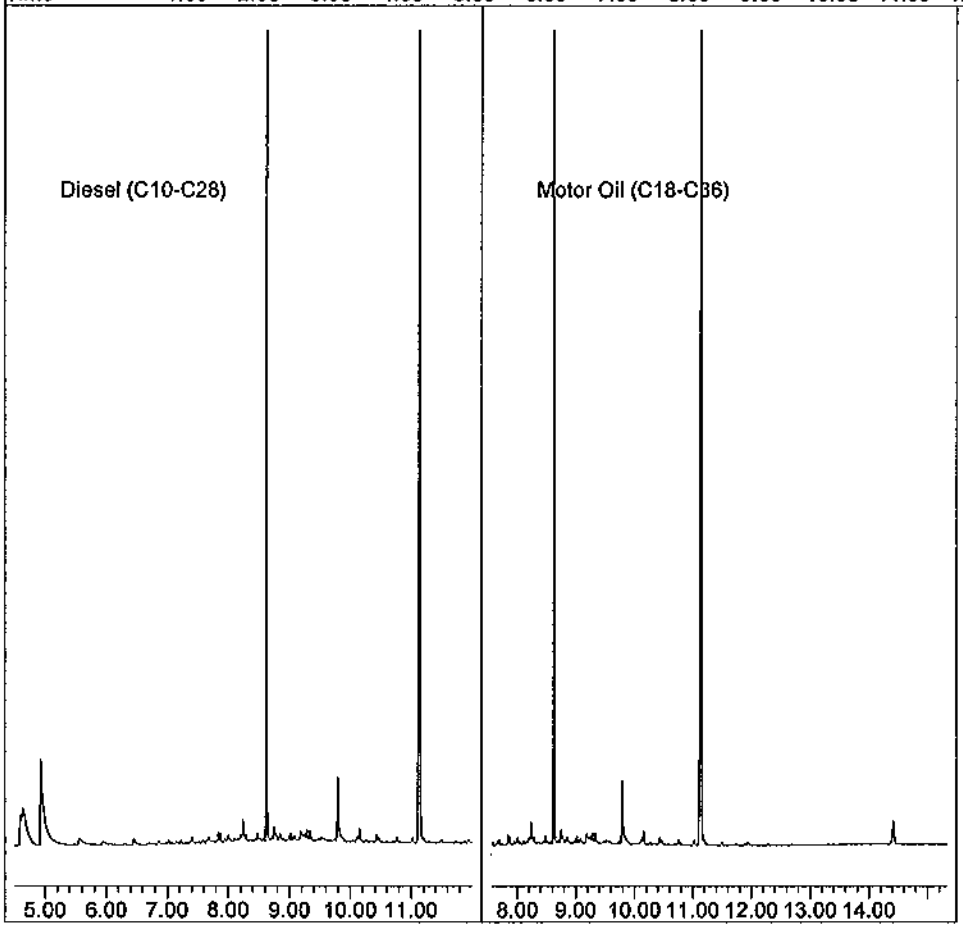
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	43503516	87.267 ppb
Surrogate Spike 144.231		Recovery =	60.51%
4) SA Octacosane(S)	11.14	46576596	143.480 ppb
Surrogate Spike 144.231		Recovery =	99.48%
Target Compounds			

Not Used LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801019.D
Sample : AY42271W05 5/1040





Quantitation Report (Not Reviewed)

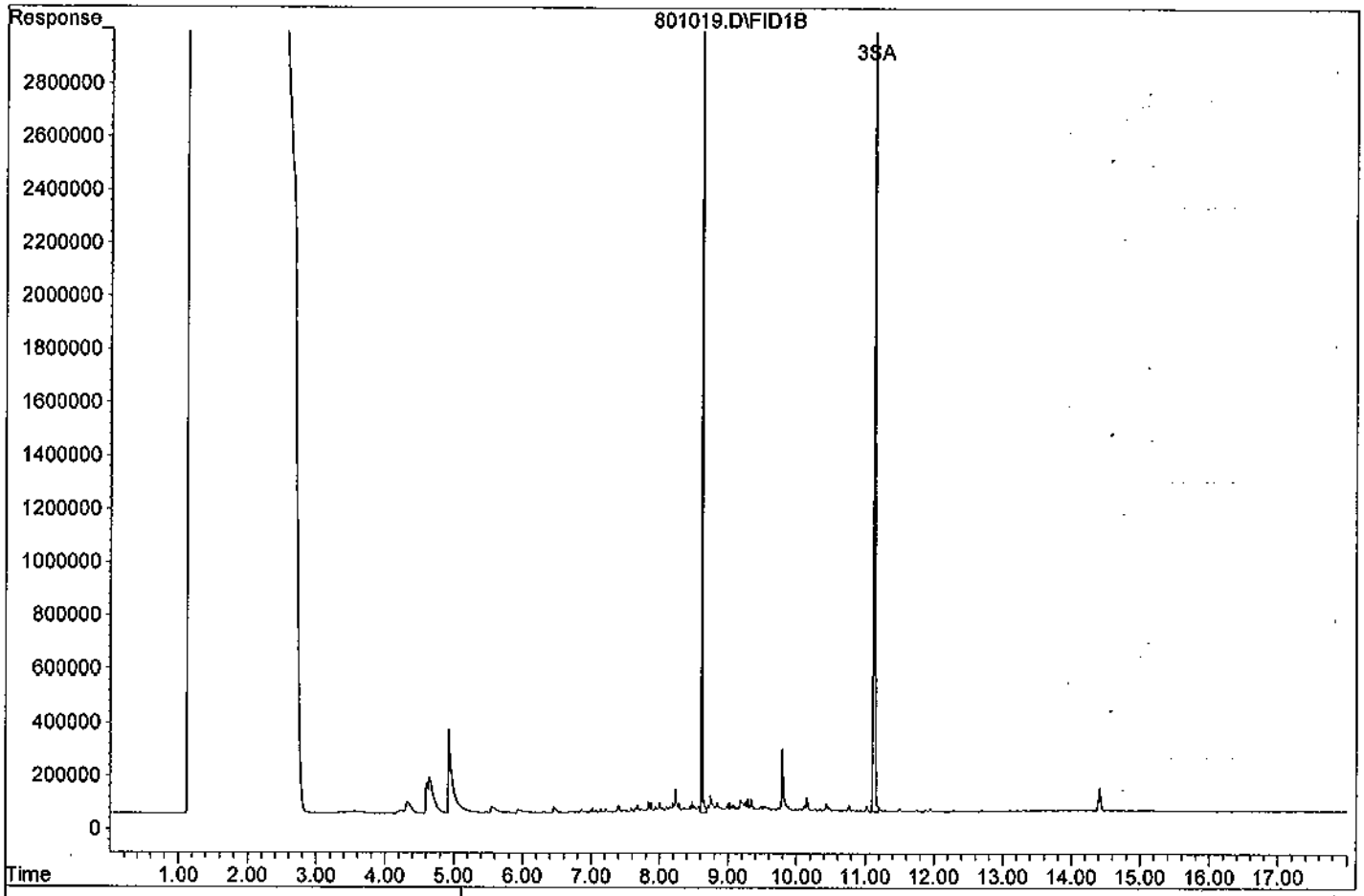
Data File : G:\APOLLO\DATA\110801\801019.D Vial: 19
Acq On : 8-1-11 17:14:06 Operator: LAC
Sample : AY42271W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:28 2011 Quant Results File: THCSUR81.RES

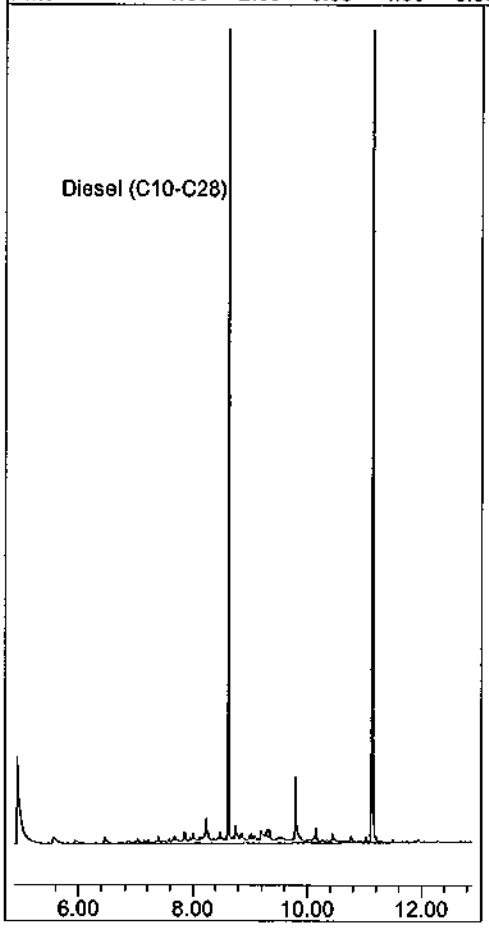
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	43503516	143.512 ppb
Surrogate Spike 144.231		Recovery =	99.50%
3) SA Octacosane(S)	11.14	46576596	156.038 ppb
Surrogate Spike 144.231		Recovery =	108.19%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801019.D
Sample : AY42271W05 5/1040





TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES037

APPL ID: AY42273

Sample Collection Date: 07/19/11

QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	1100 ++	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	95.5	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	95.1	57-132			%	07/26/11	08/01/11

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method:	TPHNS727.M
Run #:	801020
Instrument:	Apollo
Sequence:	110801
Dilution Factor:	1
Initials:	LA

Printed: 08/25/11 11:18:35 AM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801020.D Vial: 20
Acq On : 8-1-11 17:38:14 Operator: LAC
Sample : AY42273W07 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:28 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

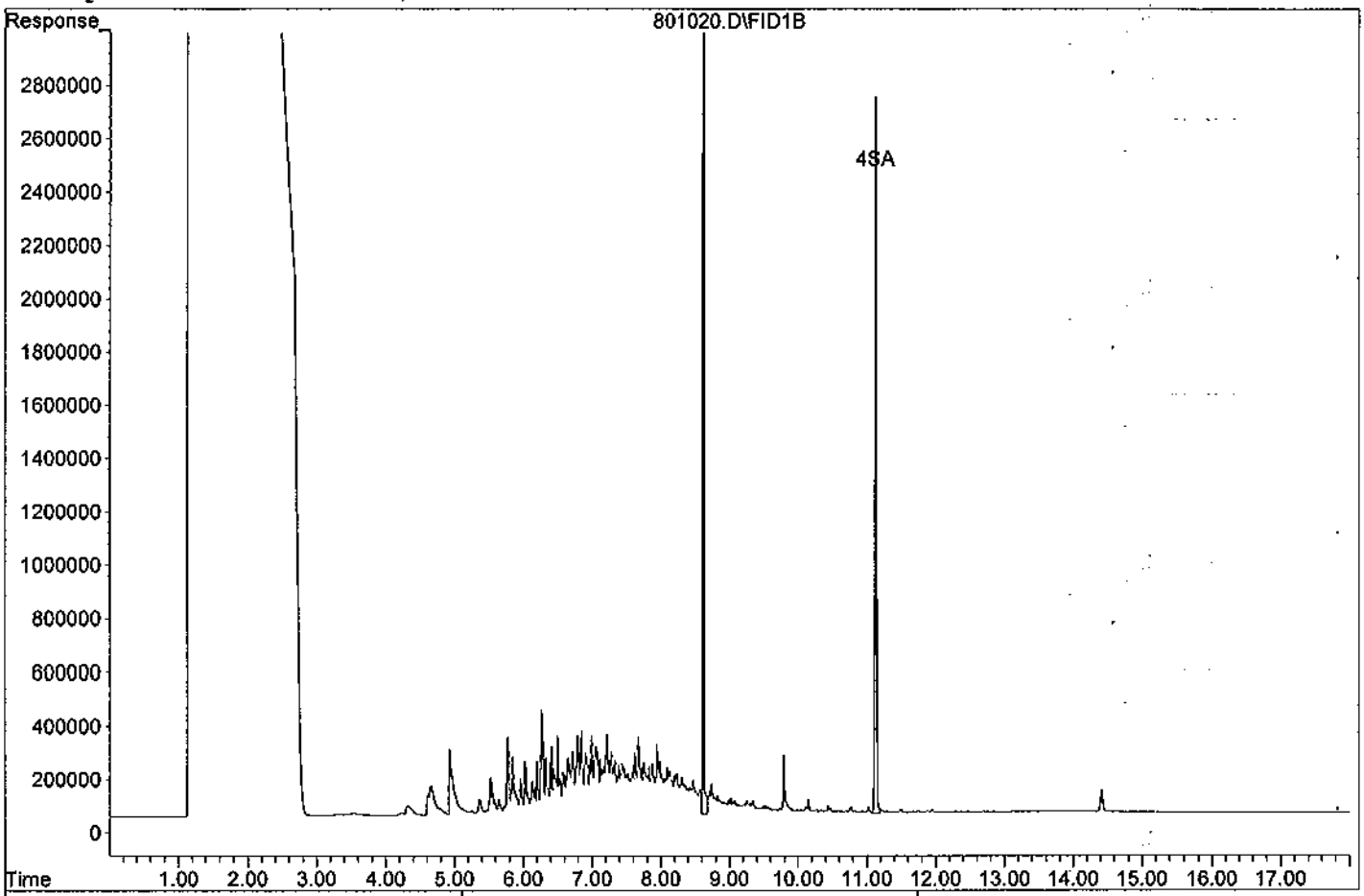
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	41579365	84.217 ppb
Surrogate Spike 145.631		Recovery =	57.83%
4) SA Octacosane(S)	11.13	41126311	127.920 ppb
Surrogate Spike 145.631		Recovery =	87.84%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	287341864	1064.204 ppb

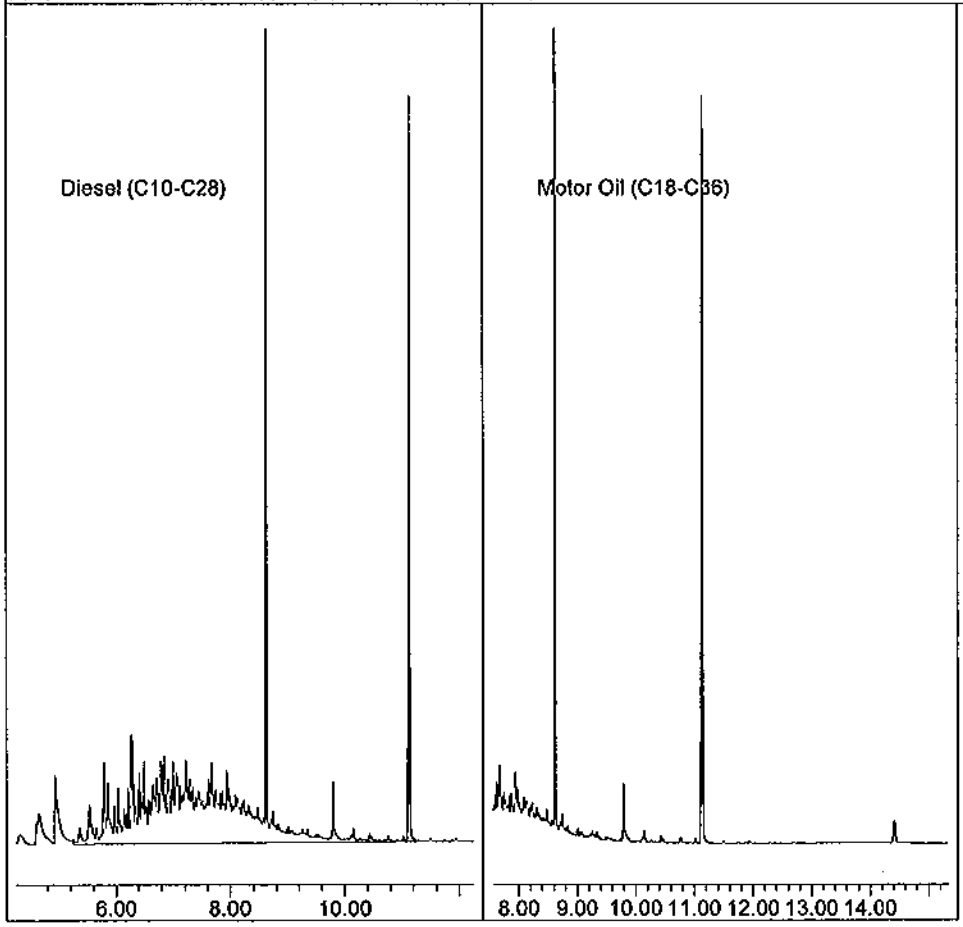
Not Used LAC 8/25/11

T6 LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801020.D
Sample : AY42273W07 5/1030





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801020.D Vial: 20
Acq On : 8-1-11 17:38:14 Operator: LAC
Sample : AY42273W07 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:28 2011 Quant Results File: THCSUR81.RES

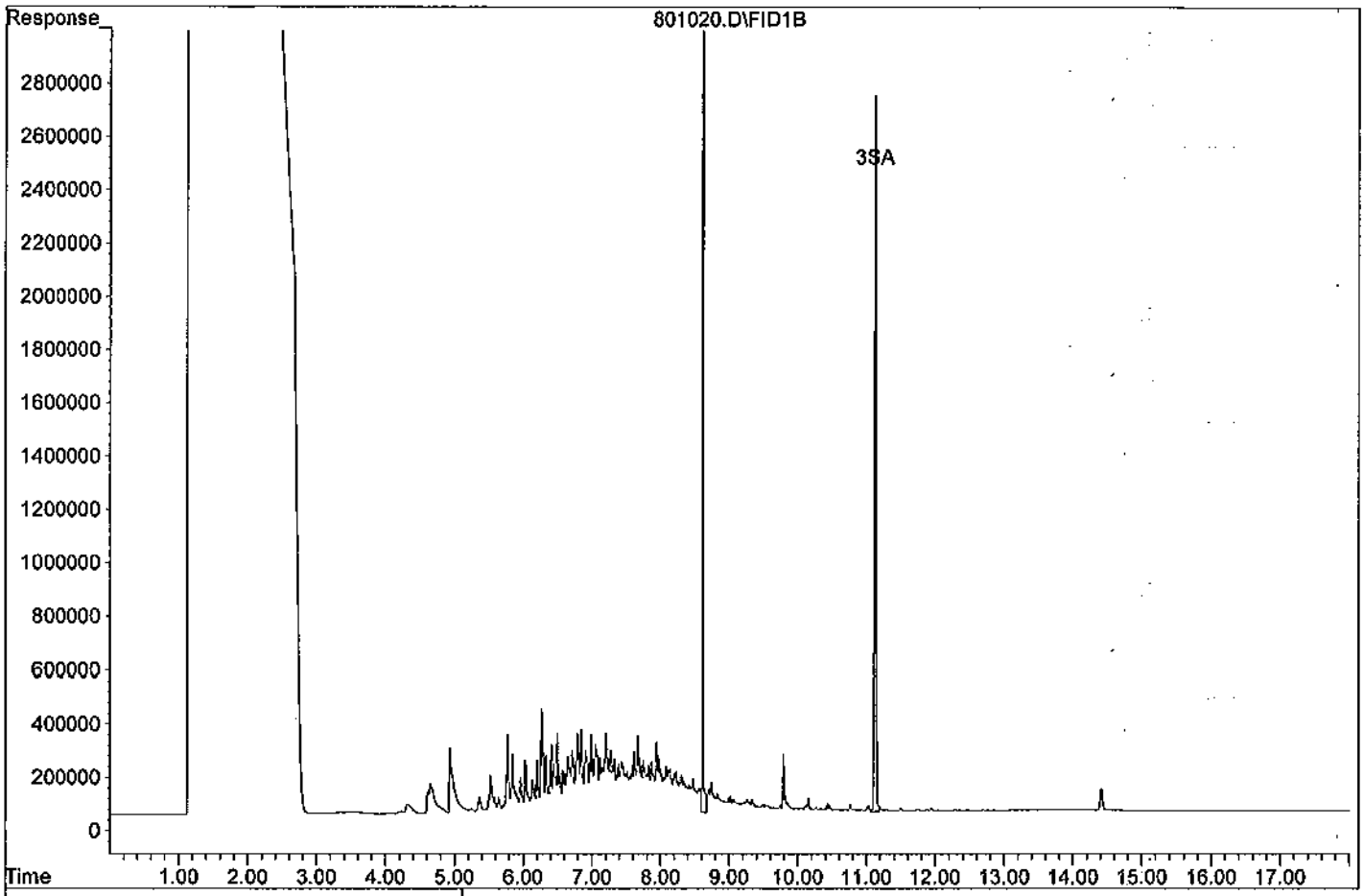
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

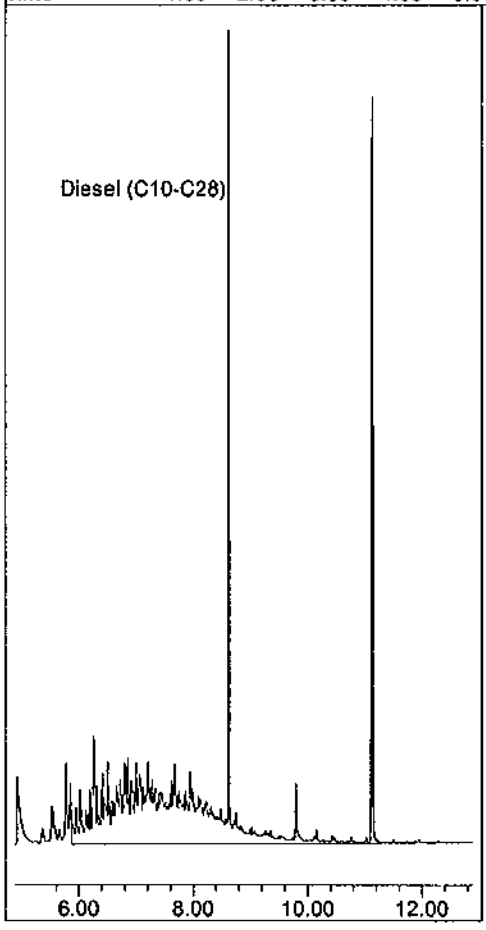
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	41579365	138.496 ppb
Surrogate Spike 145.631		Recovery =	95.10%
3) SA Octacosane(S)	11.13	41126311	139.116 ppb
Surrogate Spike 145.631		Recovery =	95.53%
Target Compounds			

(f)=RT Delta > 1/2 Window 33 (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801020.D
Sample : AY42273W07 5/1030





TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES038

APPL ID: AY42274

Sample Collection Date: 07/19/11

QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	1800 ++	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	159 #	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	156 #	57-132			%	07/26/11	08/01/11

= Recovery (or RPD) is outside QC limits.
++(T5) The analyst has noted that the chromatogram of this sample contains a recognizable contaminant peak(s) that has been removed from quantitation.

Quant Method: TPHNS727.M
Run #: 801021
Instrument: Apollo
Sequence: 110801
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 11:18:35 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801021.D Vial: 21
Acq On : 8-1-11 18:02:48 Operator: LAC
Sample : AY42274W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:29 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.63	68217110	136.841 ppb
Surrogate Spike 144.231		Recovery =	94.88%
4) SA Octacosane(S)	11.14	68300836	210.402 ppb
Surrogate Spike 144.231		Recovery =	145.88%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	496689509	1821.857 ppb

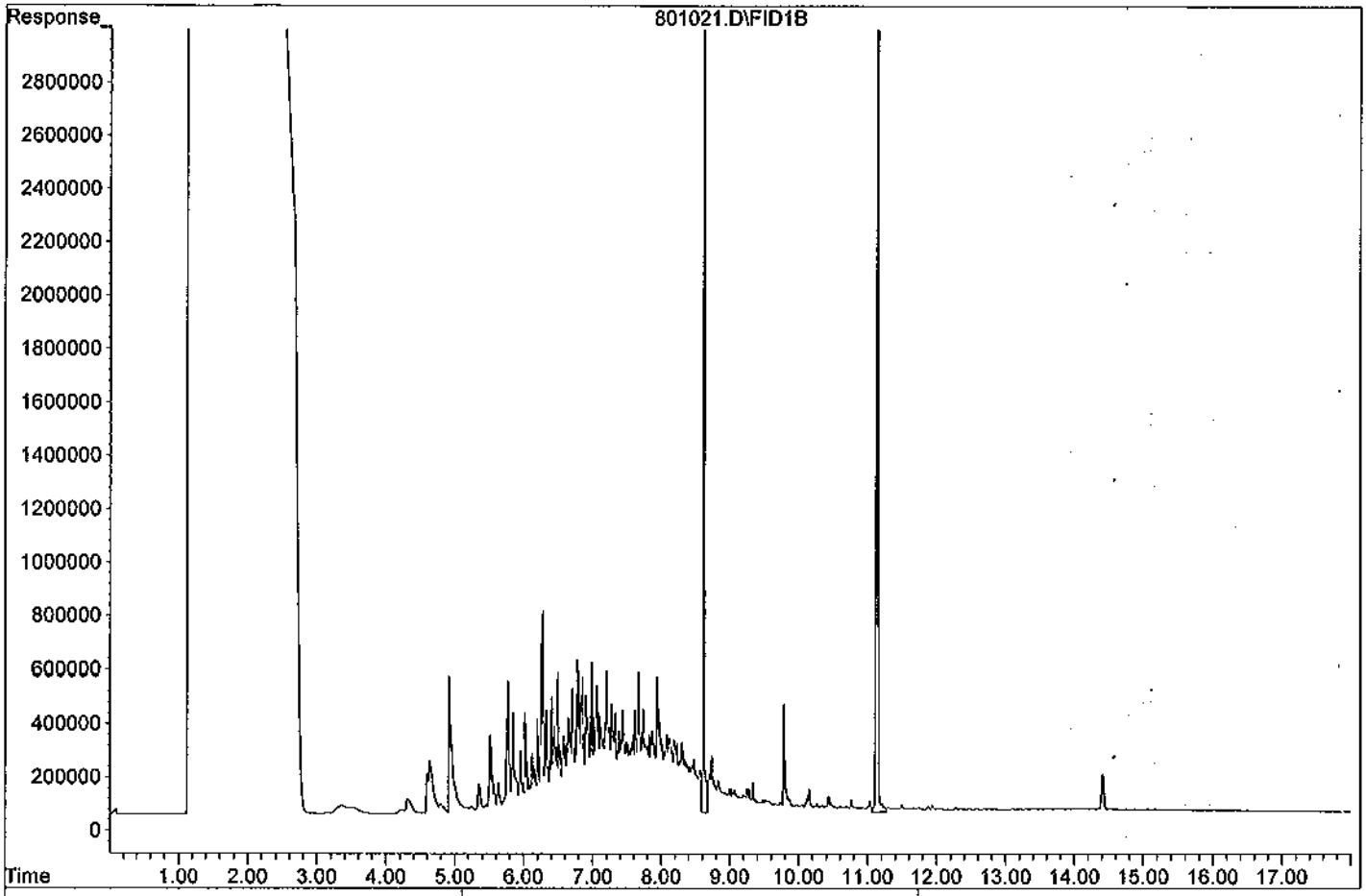
Not Used LAC 8/25/11

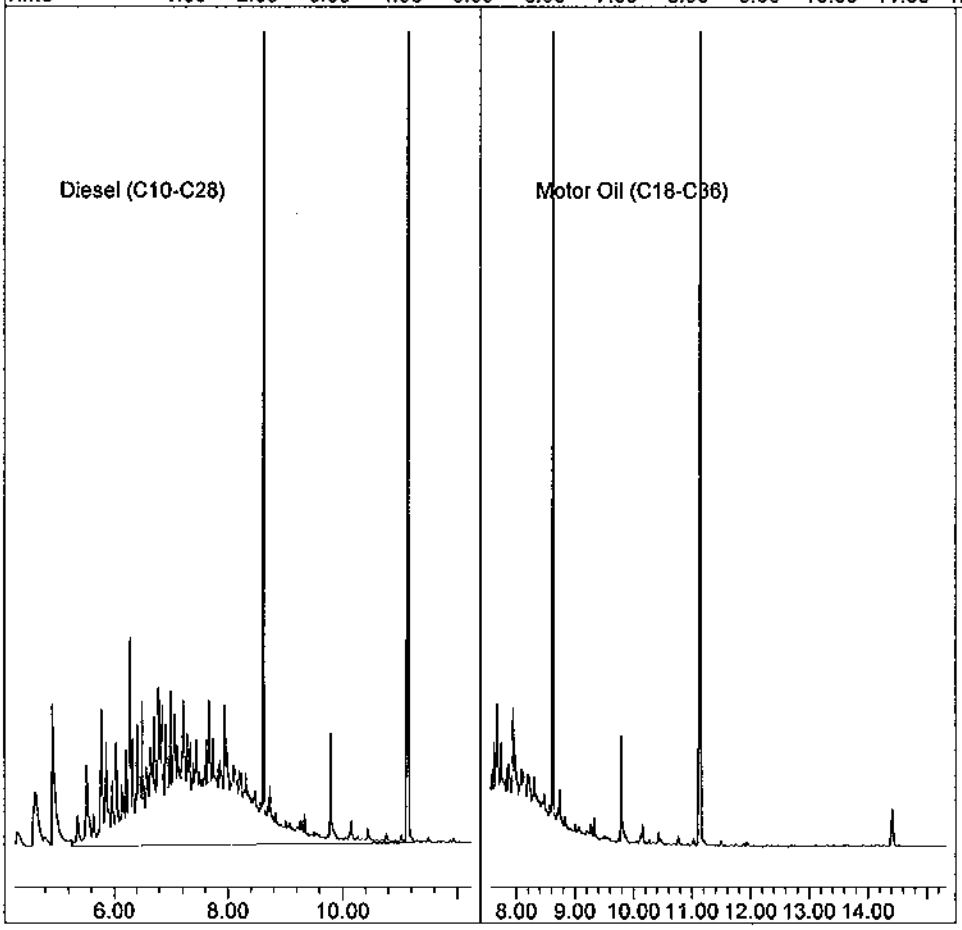
LAC 8/25/11

TB

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801021.D
Sample : AY42274W05 5/1040





Quantitation Report (Not Reviewed)

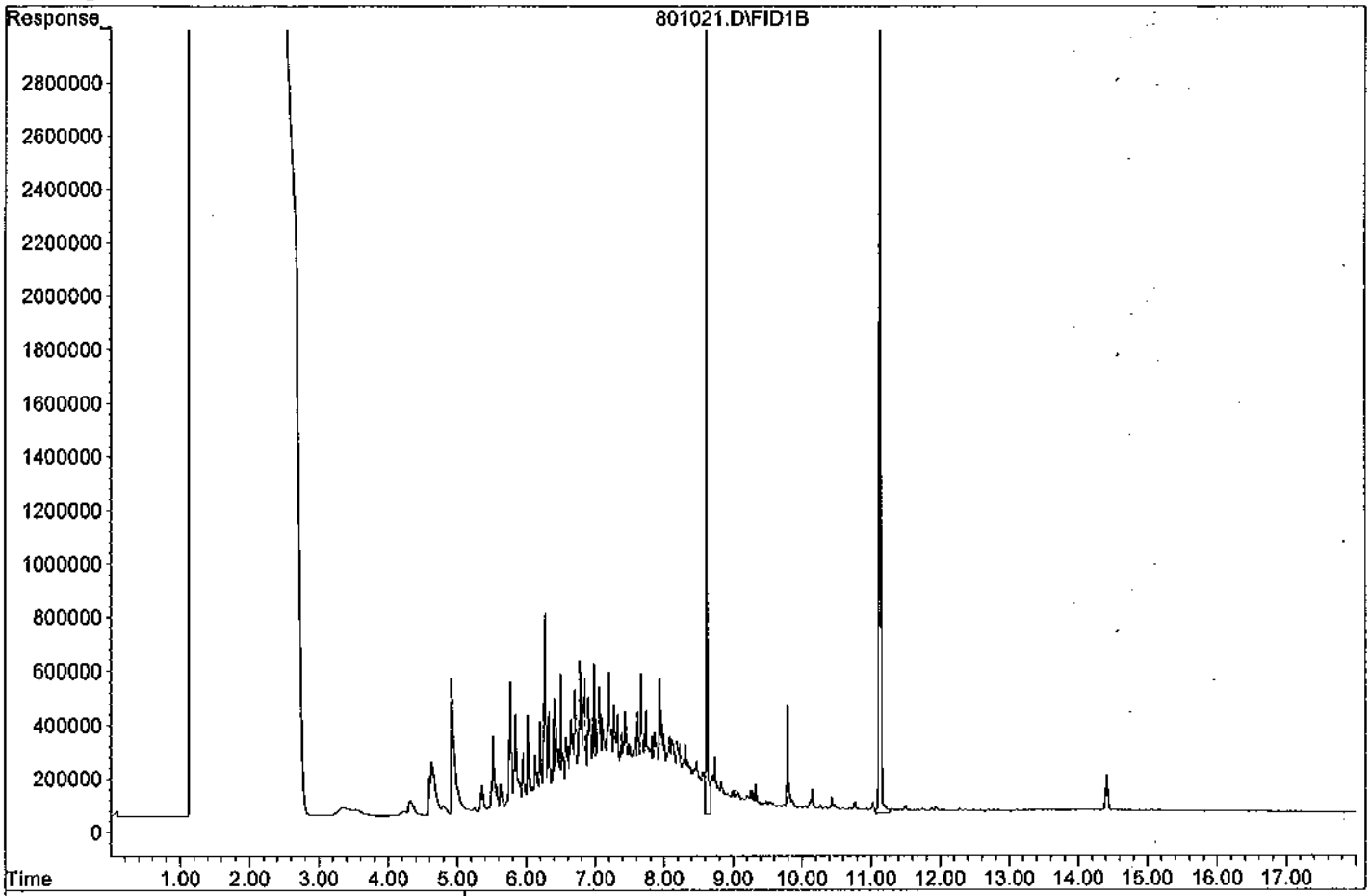
Data File : G:\APOLLO\DATA\110801\801021.D Vial: 21
Acq On : 8-1-11 18:02:48 Operator: LAC
Sample : AY42274W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:29 2011 Quant Results File: THCSUR81.RES

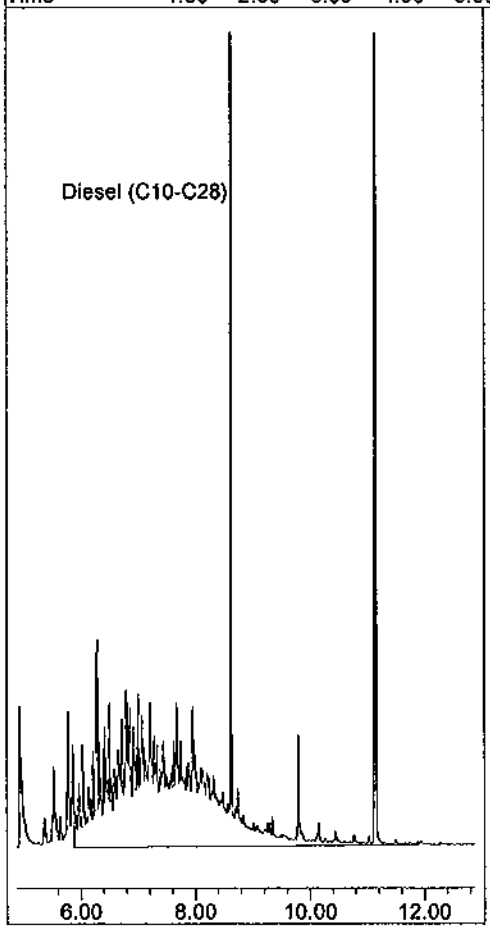
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.63	68217110	225.038 ppb
Surrogate Spike 144.231		Recovery =	156.03%
3) SA Octacosane(S)	11.14	68300836	228.817 ppb
Surrogate Spike 144.231		Recovery =	158.65%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801021.D
Sample : AY42274W05 5/1040





TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES039
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42275
QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	95.3	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	86.3	57-132			%	07/26/11	08/01/11

Quant Method: TPHNS727.M
Run #: 801029
Instrument: Apollo
Sequence: 110801
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 11:18:35 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801029.D Vial: 29
Acq On : 8-1-11 21:16:47 Operator: LAC
Sample : AY42275W12 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:31 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

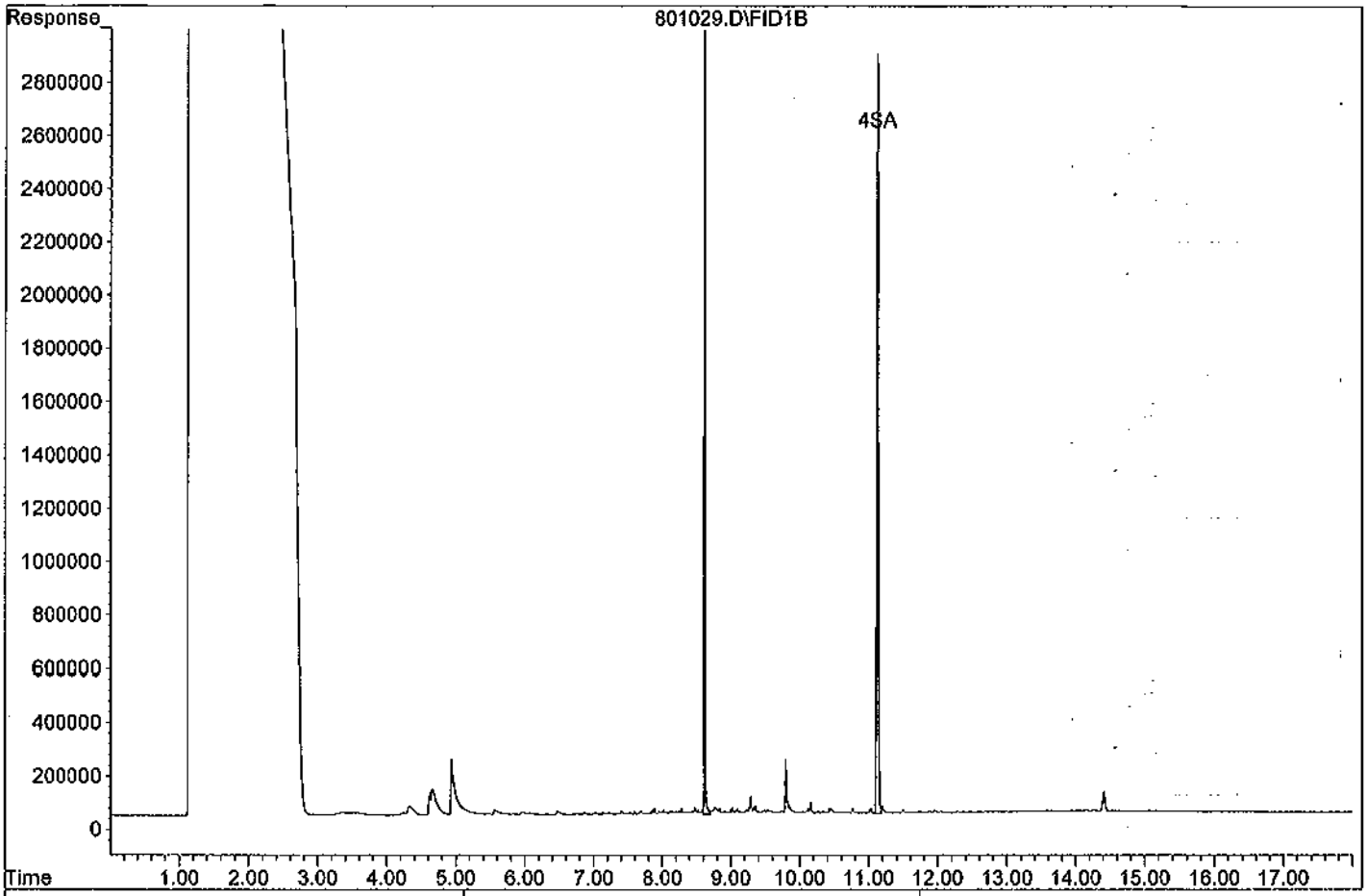
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

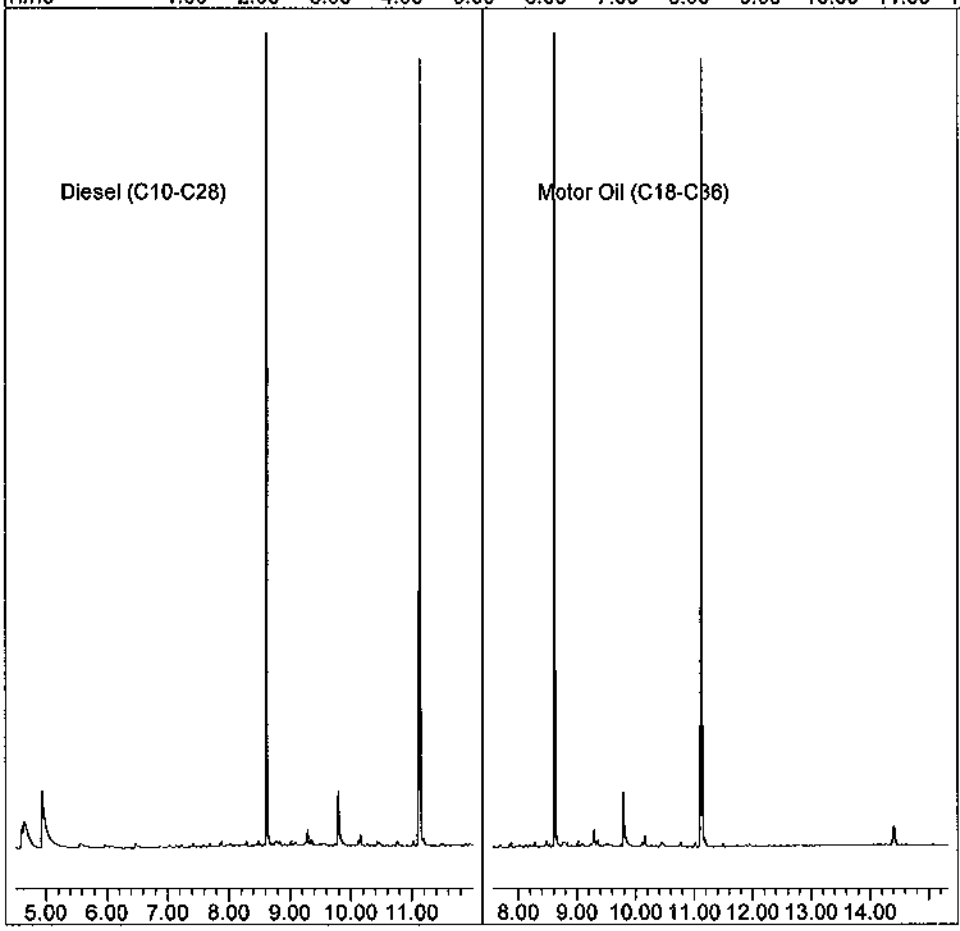
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	37750496	75.726 ppb
Surrogate Spike 144.231		Recovery =	52.50%
4) SA Octacosane(S)	11.13	41013864	126.344 ppb
Surrogate Spike 144.231		Recovery =	87.60%
Target Compounds			

Not Used LAC 8/25/11

(f)=RT Delta > 1/2 Window 41 (m)=manual int.
801029.D TPHNS727.M Fri Aug 12 14:31:57 2011 Page 1

Data File: G:\APOLLO\DATA\110801\801029.D
Sample : AY42275W12 5/1040





Quantitation Report (Not Reviewed)

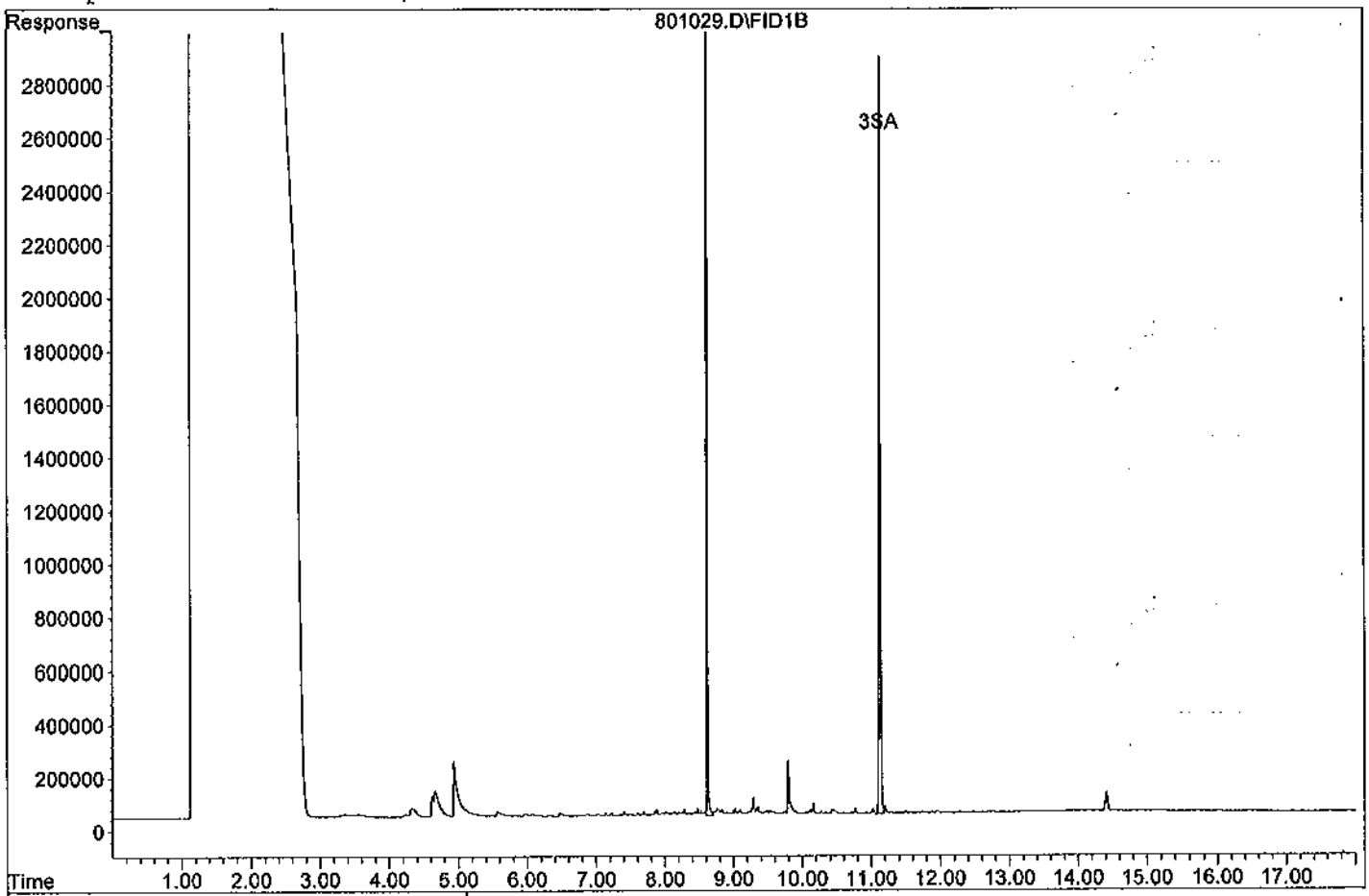
Data File : G:\APOLLO\DATA\110801\801029.D Vial: 29
Acq On : 8-1-11 21:16:47 Operator: LAC
Sample : AY42275W12 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:32 2011 Quant Results File: THCSUR81.RES

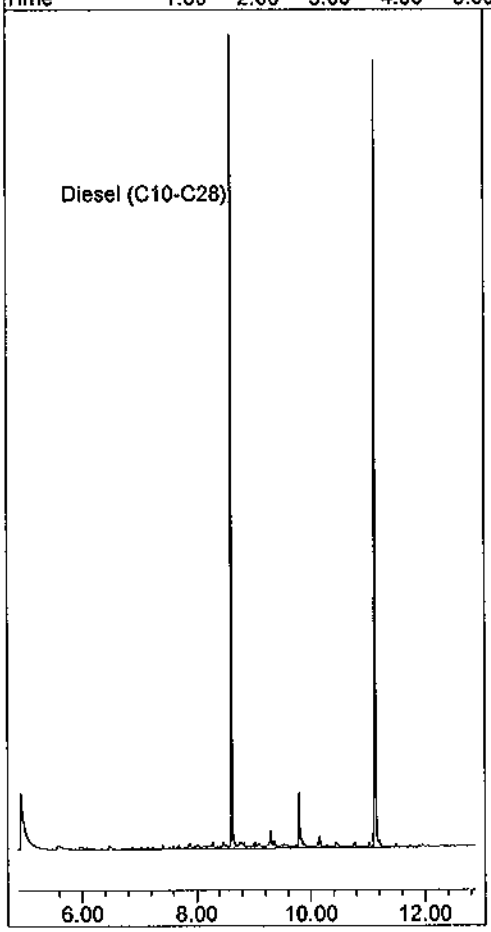
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	37750496	124.533 ppb
Surrogate Spike 144.231		Recovery =	86.34%
3) SA Octacosane(S)	11.13	41013864	137.402 ppb
Surrogate Spike 144.231		Recovery =	95.27%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801029.D
Sample : AY42275W12 5/1040





TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES040

APPL ID: AY42276

Sample Collection Date: 07/20/11

QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	98.3	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	89.1	57-132			%	07/26/11	08/01/11

Quant Method: TPHNS727.M
Run #: 801030
Instrument: Apollo
Sequence: 110801
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 11:18:35 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801030.D Vial: 30
Acq On : 8-1-11 21:41:03 Operator: LAC
Sample : AY42276W05 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:32 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

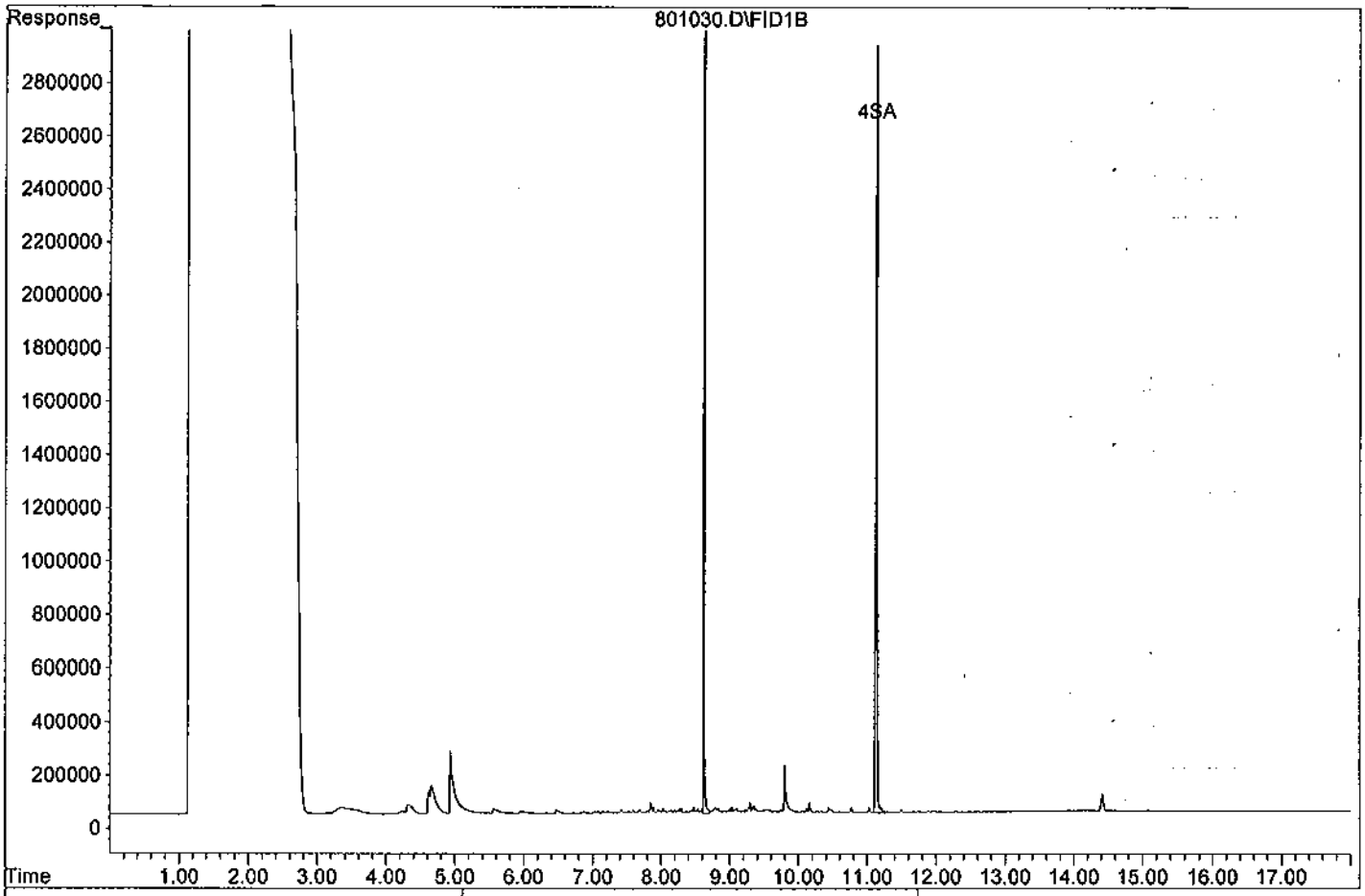
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

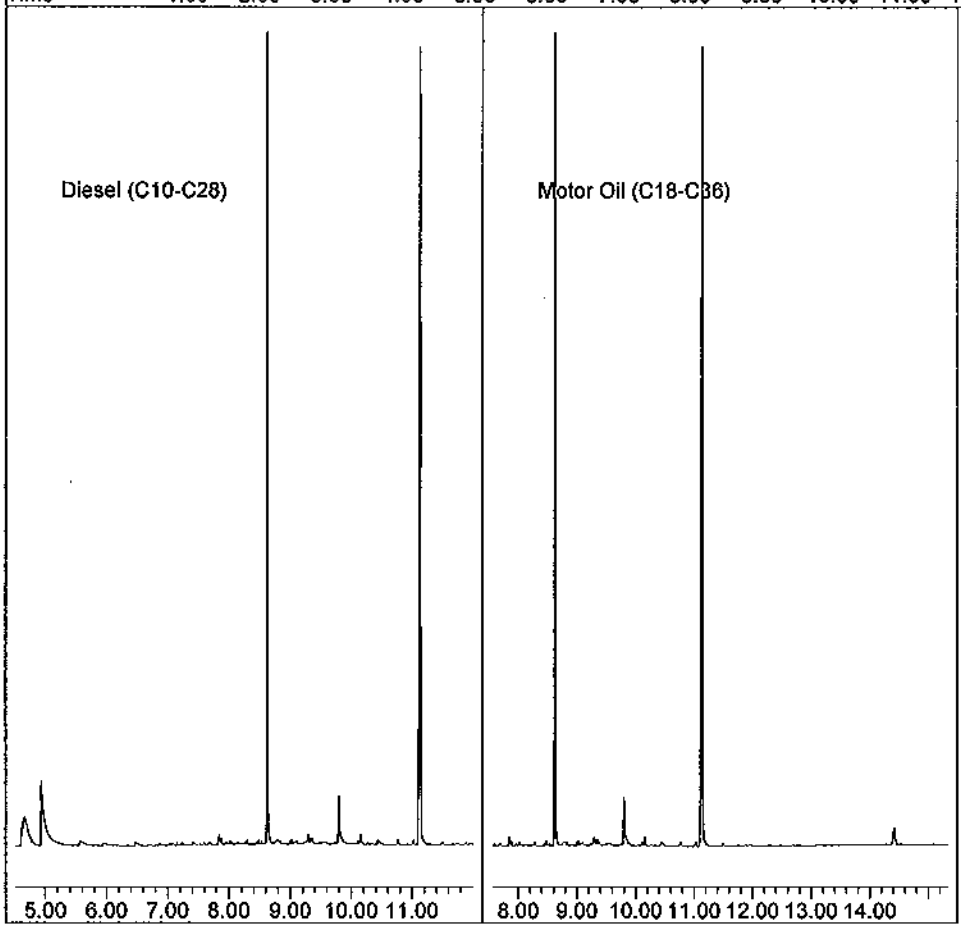
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	38945926	79.656 ppb
Surrogate Spike 147.059		Recovery =	54.17%
4) SA Octacosane(S)	11.13	42298206	132.855 ppb
Surrogate Spike 147.059		Recovery =	90.34%
Target Compounds			

Not Used
LAC 8/25/11

(f)=RT Delta > 1/2 Window 46 (m)=manual int.
801030.D TPHNS727.M Fri Aug 12 14:32:25 2011 Page 1

Data File: G:\APOLLO\DATA\110801\801030.D
Sample : AY42276W05 5/1020





Quantitation Report (Not Reviewed)

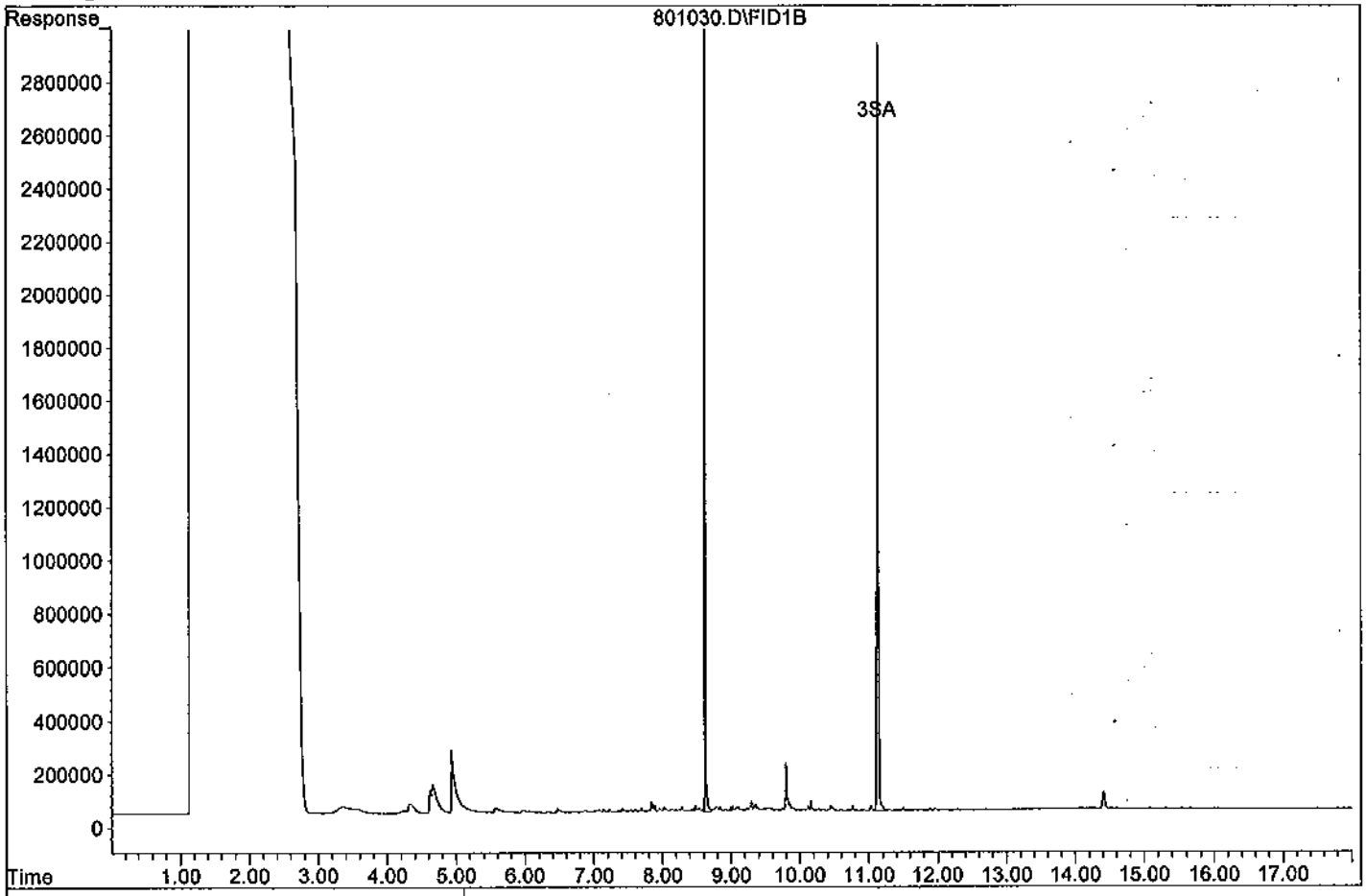
Data File : G:\APOLLO\DATA\110801\801030.D Vial: 30
Acq On : 8-1-11 21:41:03 Operator: LAC
Sample : AY42276W05 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:32 2011 Quant Results File: THCSUR81.RES

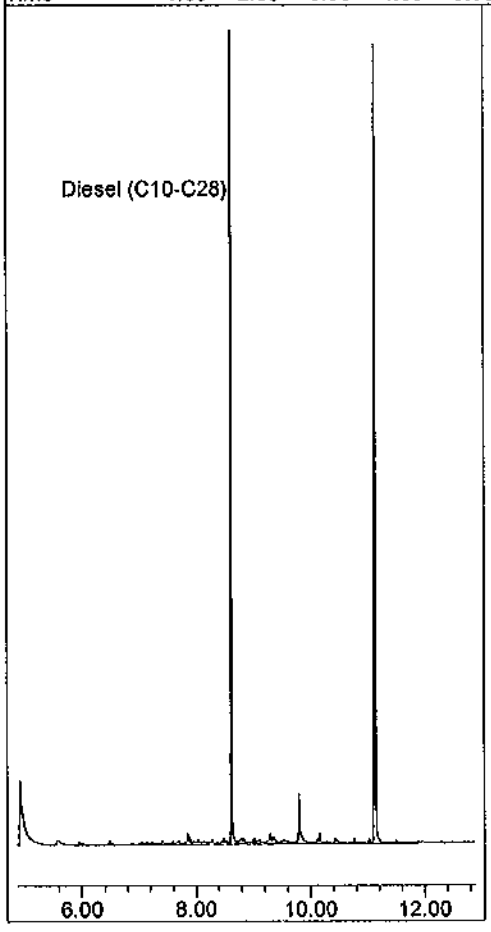
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	38945926	130.996 ppb
Surrogate Spike 147.059		Recovery =	89.08%
3) SA Octacosane(S)	11.13	42298206	144.483 ppb
Surrogate Spike 147.059		Recovery =	98.25%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801030.D
Sample : AY42276W05 5/1020





TPH Diesel Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES041

APPL ID: AY42277

Sample Collection Date: 07/20/11

QCG: #TPETD-110726A-158155

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	290 ++	150	80.8	40.4	ug/L	07/26/11	08/01/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	92.6	28-142			%	07/26/11	08/01/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	87.9	57-132			%	07/26/11	08/01/11

++(T6) The analyst has noted that the chromatogram of this sample is mainly a match to hydrocarbons within the range of diesel fuel.

Quant Method: TPHNS727.M
Run #: 801031
Instrument: Apollo
Sequence: 110801
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 11:18:35 AM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801031.D Vial: 31
Acq On : 8-1-11 22:05:22 Operator: LAC
Sample : AY42277W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:33 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

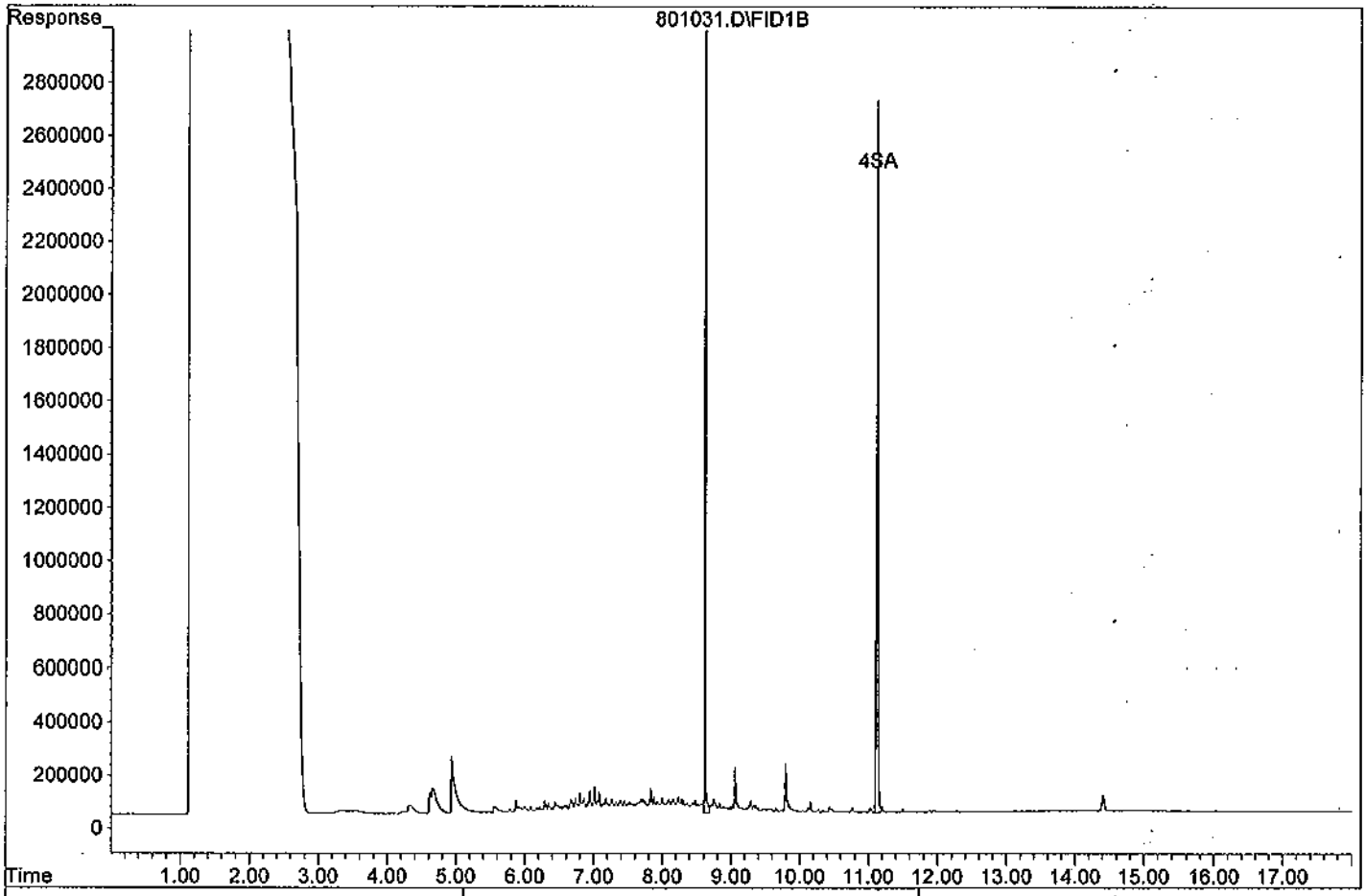
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	38435786	77.101 ppb
Surrogate Spike 144.231		Recovery =	53.46%
4) SA Octacosane(S)	11.13	39842841	122.737 ppb
Surrogate Spike 144.231		Recovery =	85.10%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	79099113	290.136 ppb

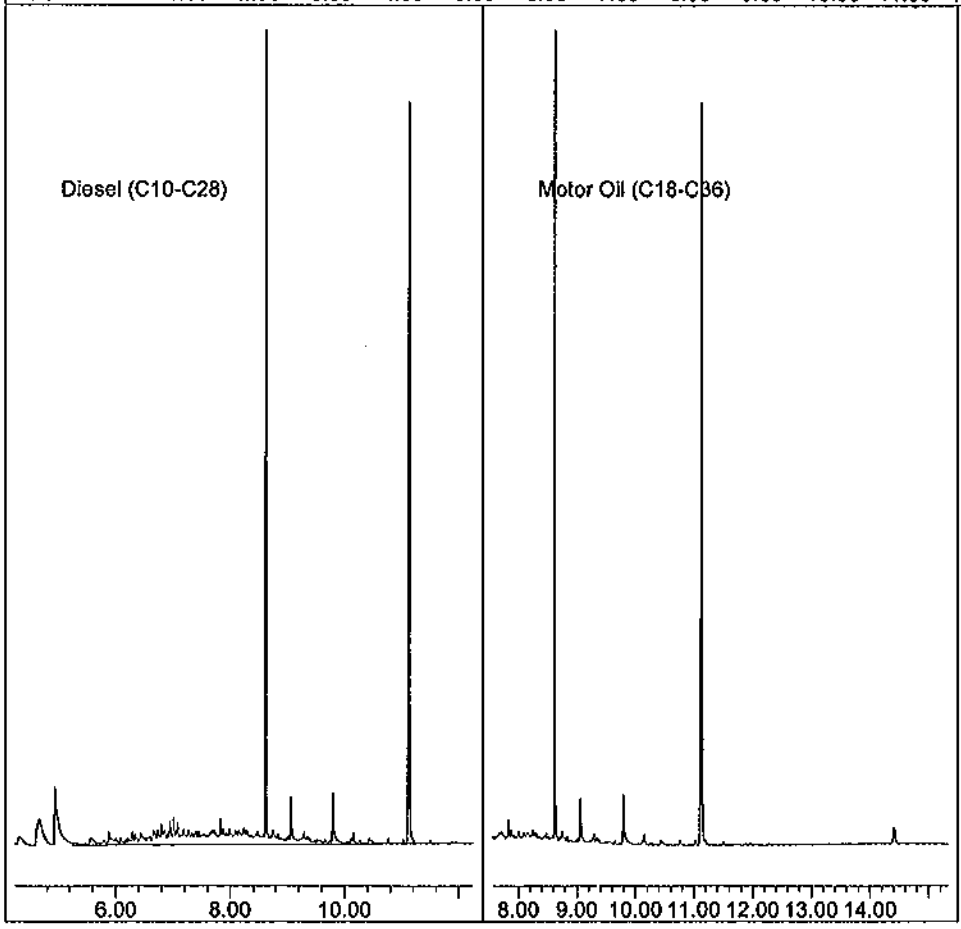
Not Used LAC 8/25/11

T6 LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801031.D
Sample : AY42277W05 5/1040





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801031.D Vial: 31
Acq On : 8-1-11 22:05:22 Operator: LAC
Sample : AY42277W05 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:33 2011 Quant Results File: THCSUR81.RES

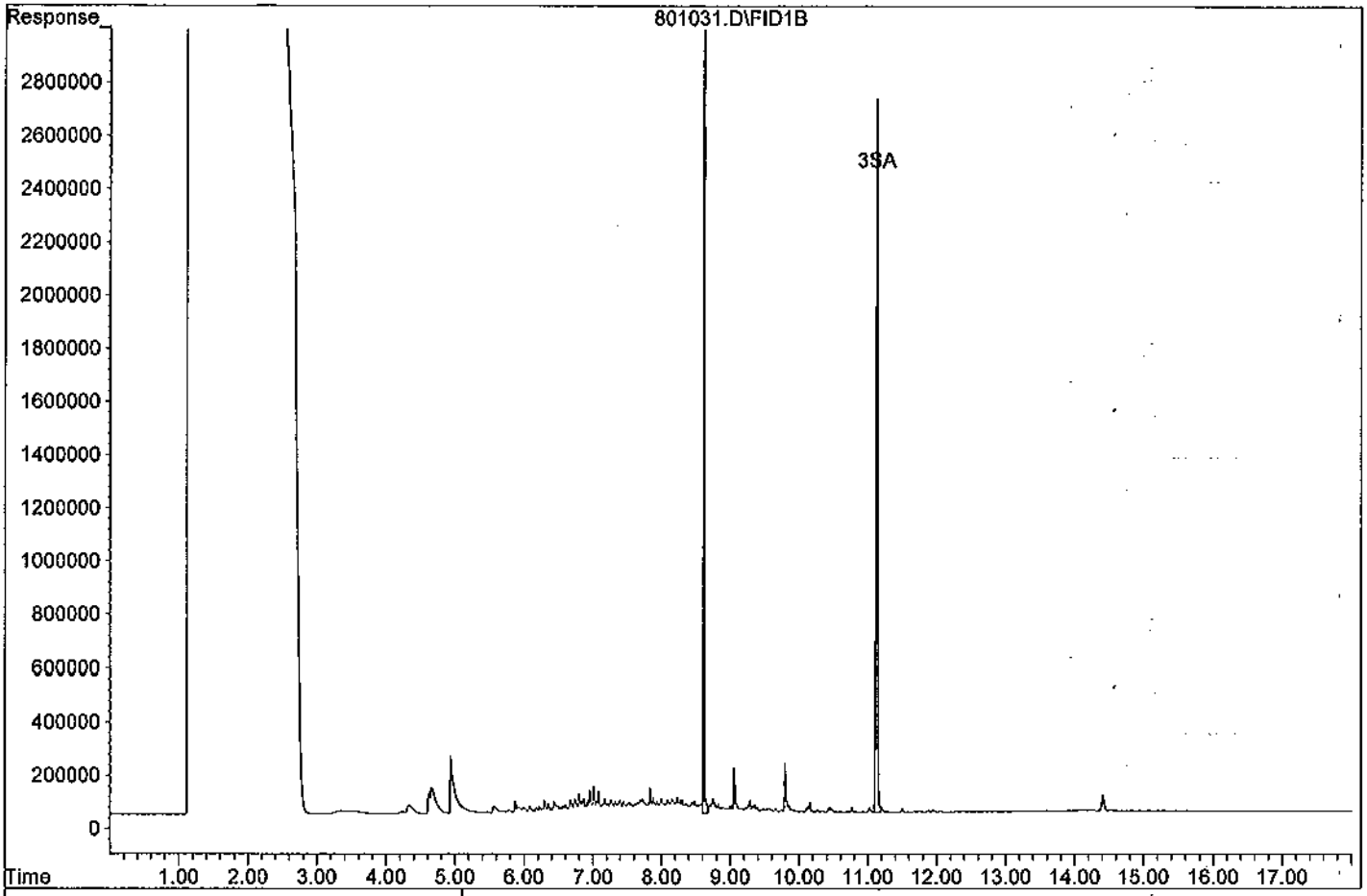
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

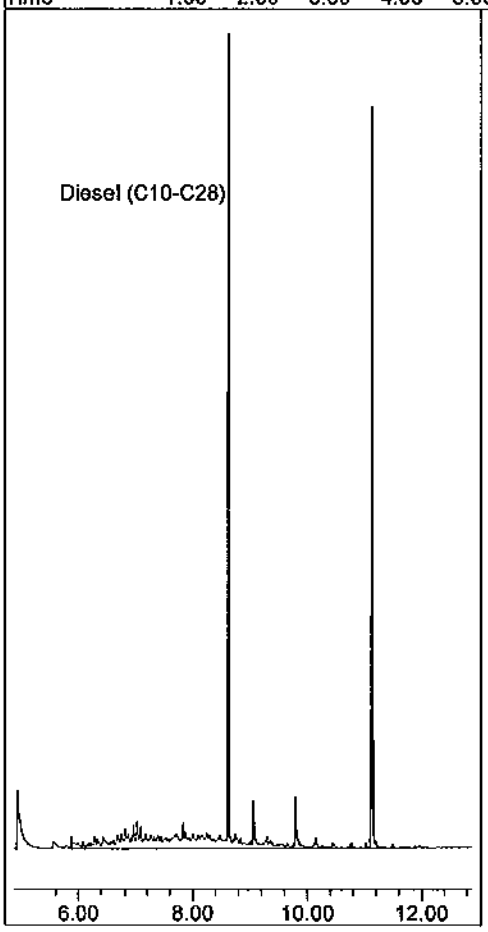
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	38435786	126.794 ppb
Surrogate Spike 144.231		Recovery =	87.91%
3) SA Octacosane(S)	11.13	39842841	133.479 ppb
Surrogate Spike 144.231		Recovery =	92.55%
Target Compounds			

(f)=RT Delta > 1/2 Window 53 (m)=manual int.
801031.D THCSUR81.M Fri Aug 12 14:33:22 2011 Page 1

Data File: G:\APOLLO\DATA\110801\801031.D
Sample : AY42277W05 5/1040





EPA 8015 Modified
Total Petroleum Hydrocarbons

Calibration Data

TPH Extractables
TPHNS727

Form 6
Initial Calibration

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

SDG No: 65187
Initial Cal. Date: 07/27/11
Instrument: Apollo

Initials: LAC

			727006.D	727007.D	727008.D	727009.D	727010.D	727011.D								
		Compound	1	2	3	4	5	6					Avg	%RSD		
1	HATM	Diesel (C10-C28)	467469	625097	706872	756111	731614	644972					655356	16	HATM	
2	HBTM	Motor Oil (C18-C36)	475986	426915	546860	581769	485734	501604					503145	11	HBTM	
3																
4																
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0.7674977

Quantitation Report (Not Reviewed)

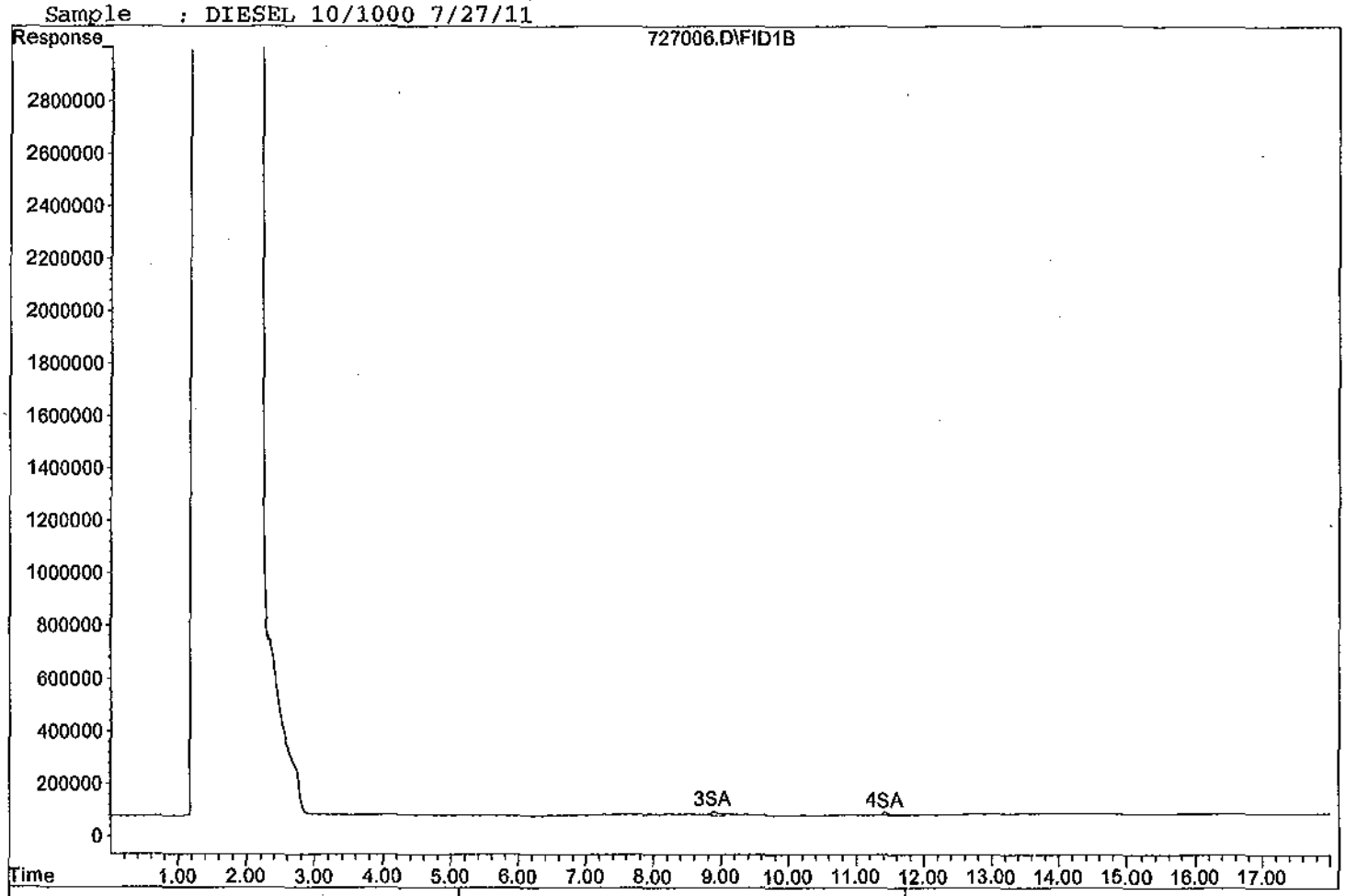
Data File : G:\APOLLO\DATA\110727\727006.D Vial: 6
Acq On : 7-27-11 14:30:09 Operator: LAC
Sample : DIESEL 10/1000 7/27/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:31 2011 Quant Results File: TPHNS727.RES

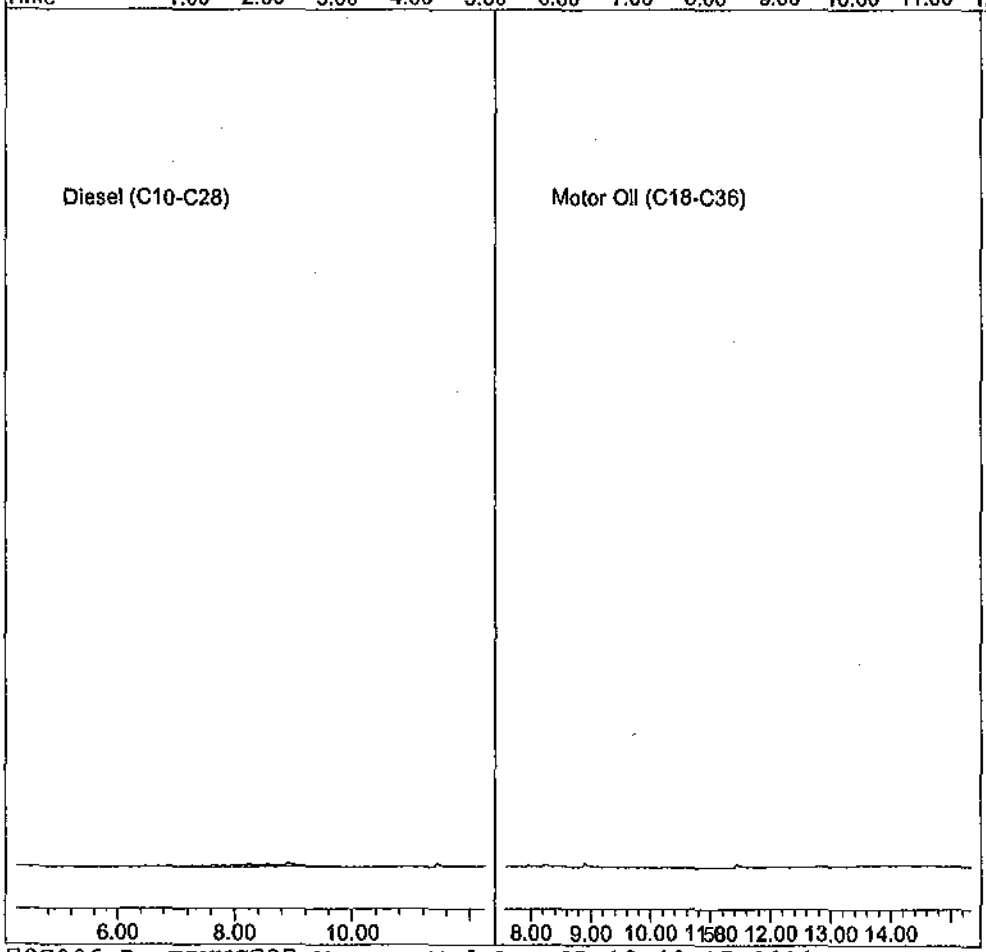
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.88	1192652	0.498 ppb
Surrogate Spike 30.000	Recovery	=	1.66%
4) SA Octacosane(S)	11.43	760116	0.487 ppb
Surrogate Spike 30.000	Recovery	=	1.62%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	9349385	7.923 ppb

Data File: G:\APOLLO\DATA\110727\727006.D
Sample : DIESEL 10/1000 7/27/11





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727007.D Vial: 7
Acq On : 7-27-11 14:55:33 Operator: LAC
Sample : DIESEL 100/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:32 2011 Quant Results File: TPHNS727.RES

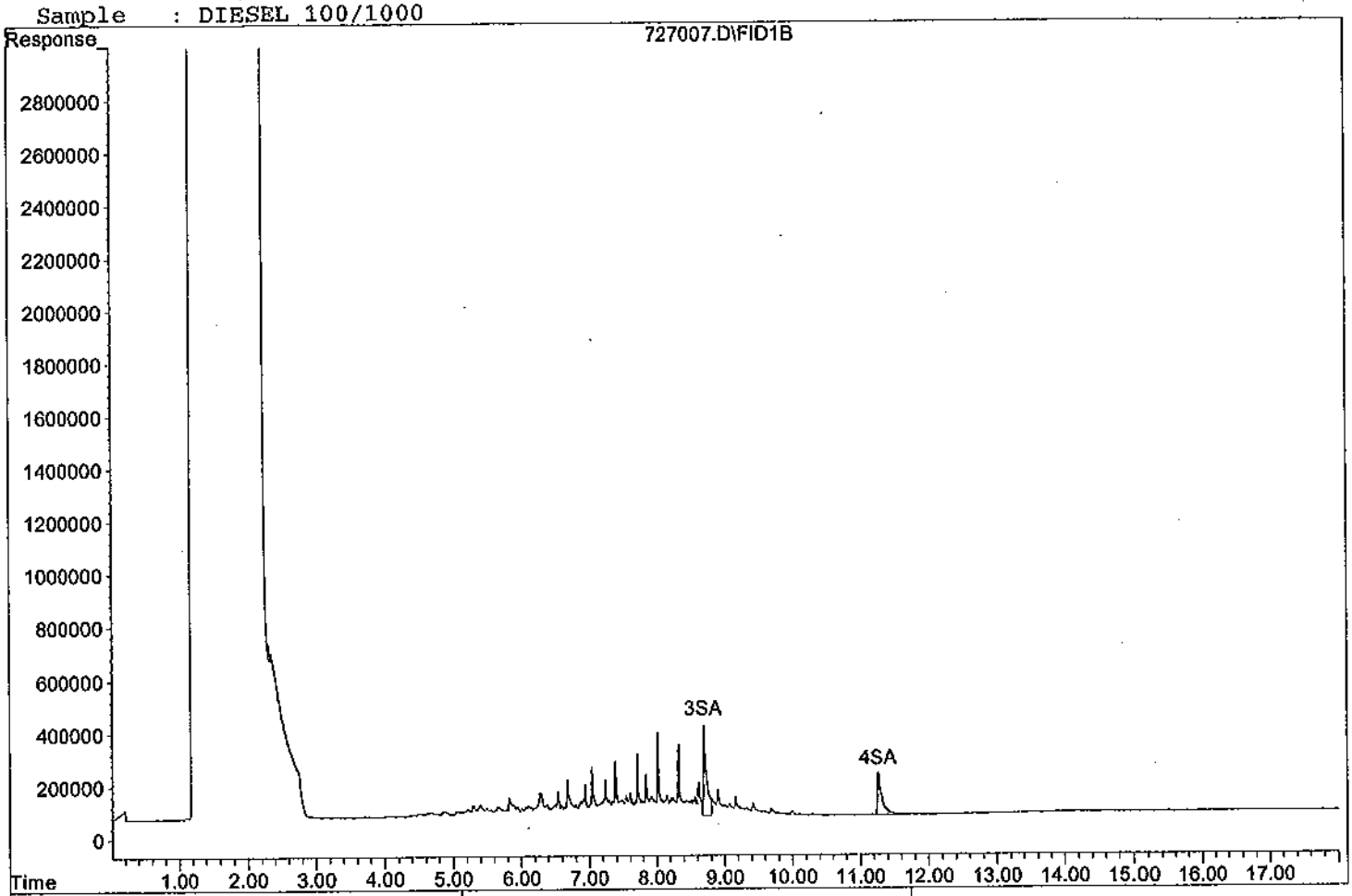
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

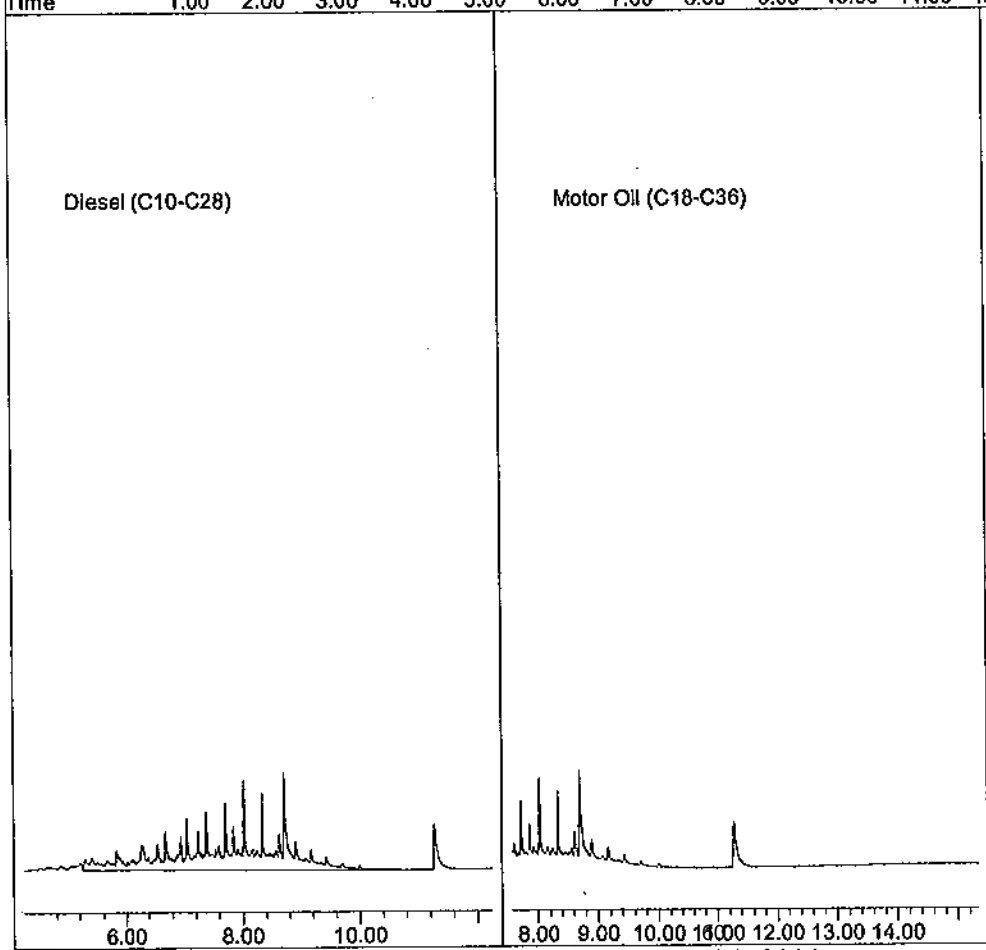
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.69	10620102	4.431 ppb
Surrogate Spike 30.000	Recovery =		14.77%
4) SA Octacosane(S)	11.27	7170007	4.594 ppb
Surrogate Spike 30.000	Recovery =		15.31%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	125019327	106.968 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727007.D
Sample : DIESEL 100/1000





727007.D TPHNS727.M Wed Aug 03 10:40:25 2011

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727008.D Vial: 8
Acq On : 7-27-11 15:21:22 Operator: LAC
Sample : DIESEL 400/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:32 2011 Quant Results File: TPHNS727.RES

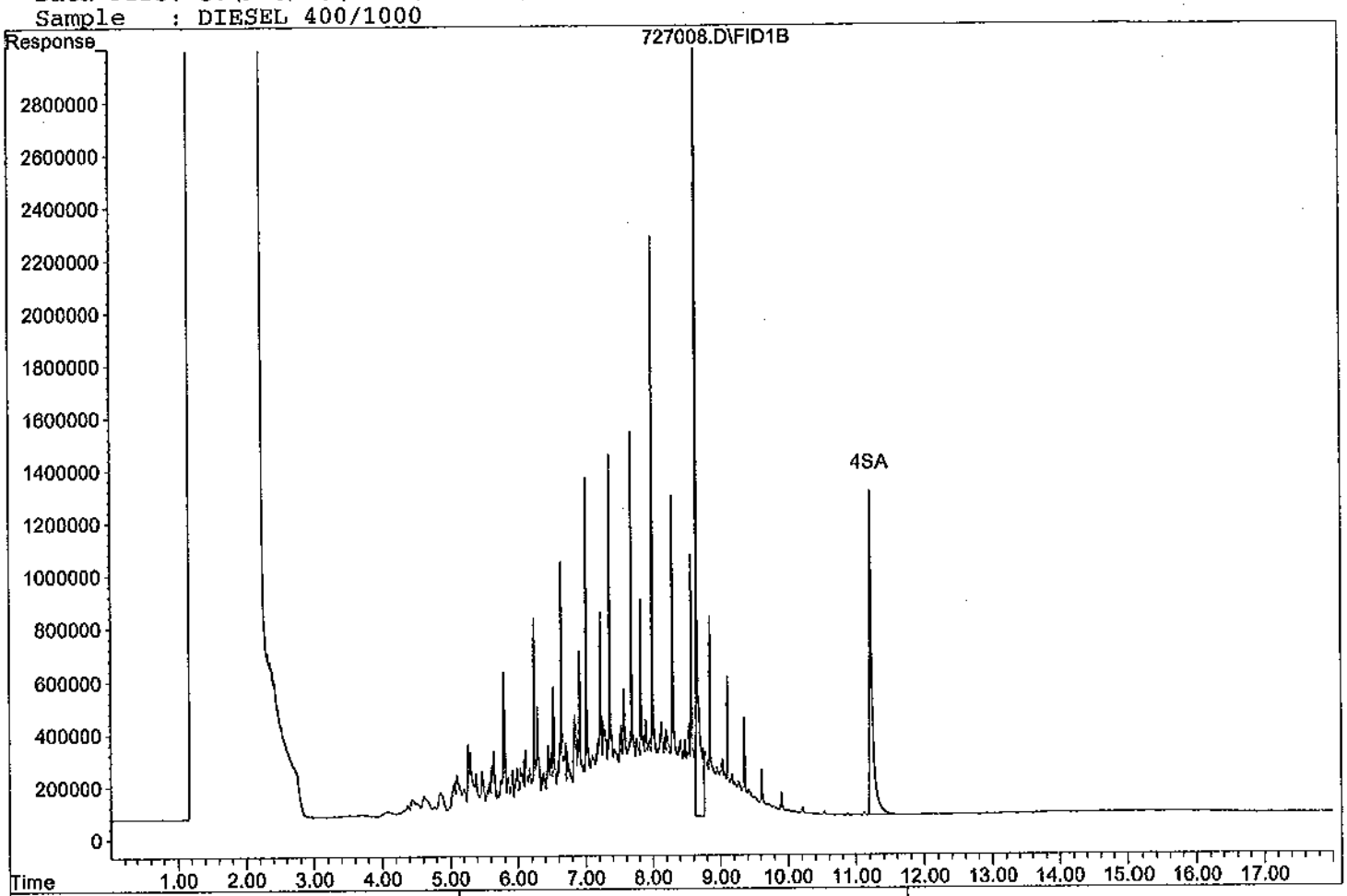
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

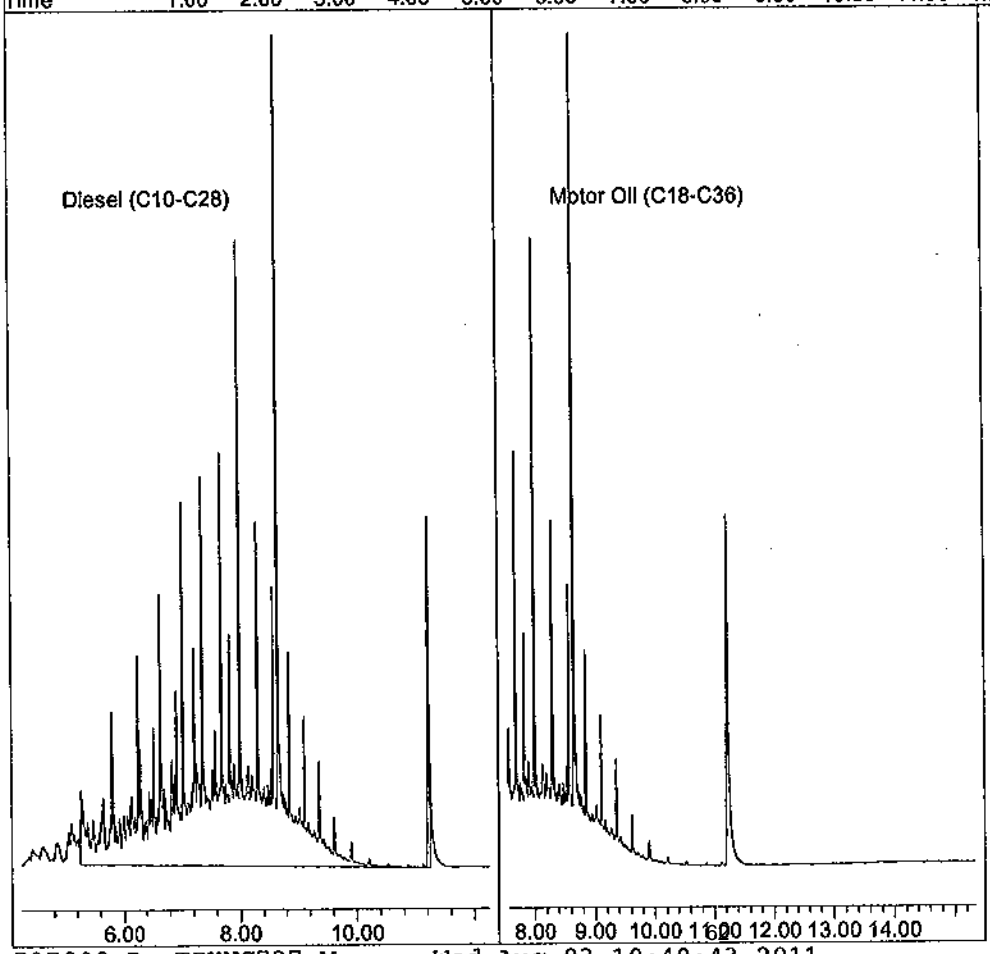
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.65	52421365	21.872 ppb
Surrogate Spike 30.000	Recovery =		72.91%
4) SA Octacosane(S)	11.22	32165788	20.610 ppb
Surrogate Spike 30.000	Recovery =		68.70%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	565497201	469.098 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727008.D
Sample : DIESEL 400/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727009.D Vial: 9
Acq On : 7-27-11 15:47:06 Operator: LAC
Sample : DIESEL 600/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:33 2011 Quant Results File: TPHNS727.RES

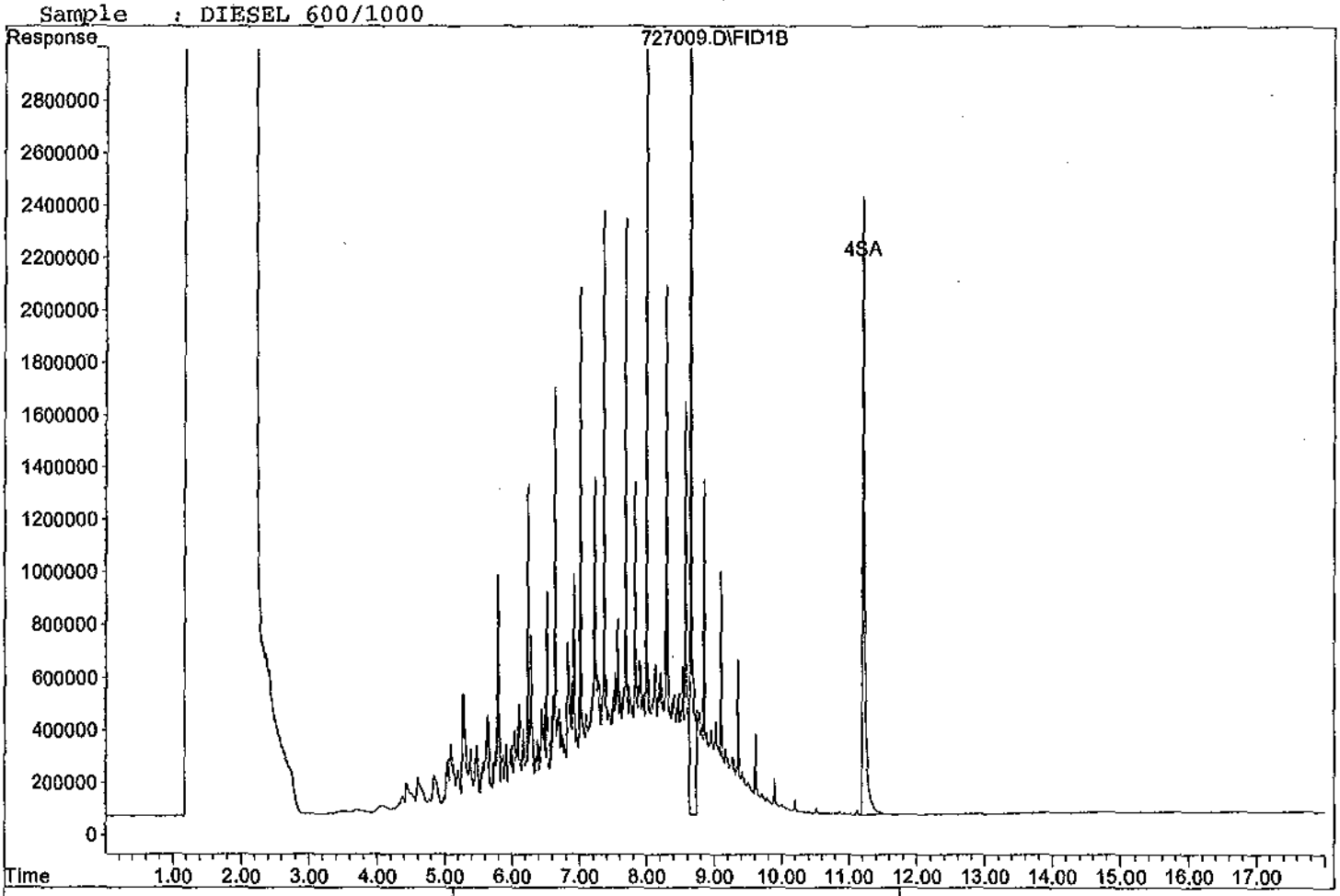
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

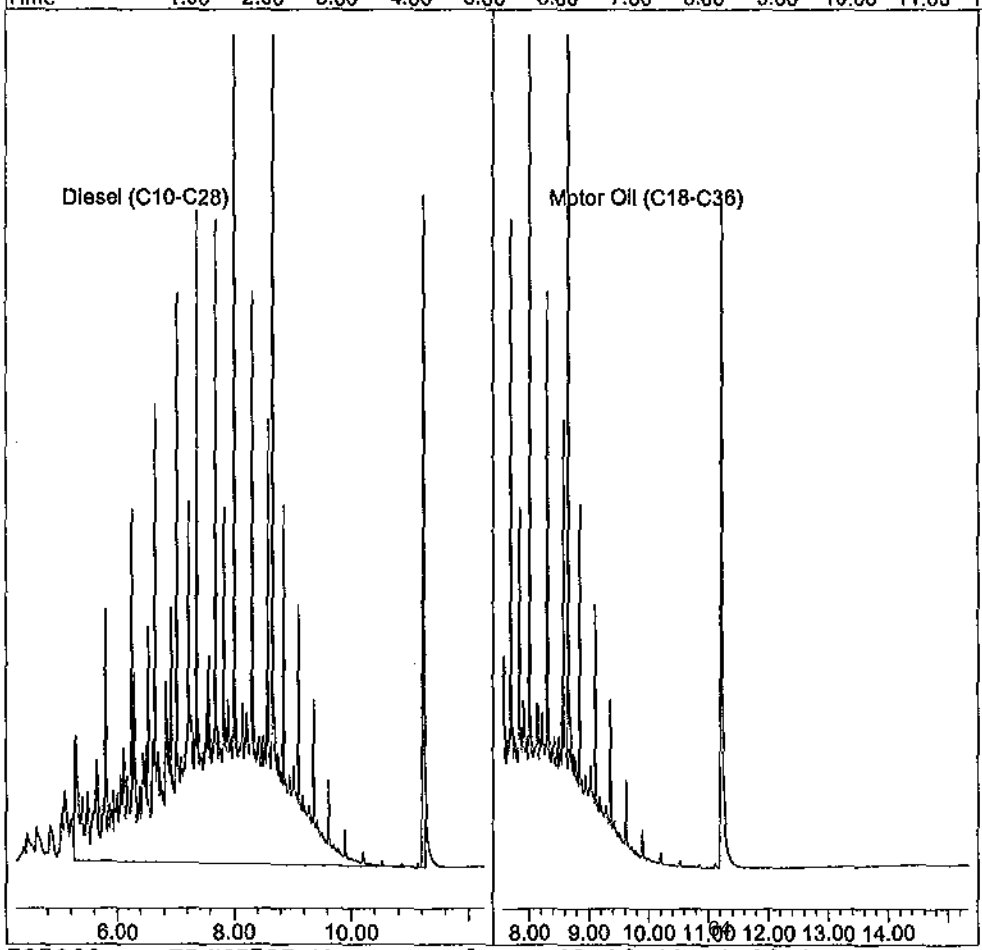
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.65	78364229	32.697 ppb
Surrogate Spike 30.000	Recovery =		108.99%
4) SA Octacosane(S)	11.22	51044217	32.706 ppb
Surrogate Spike 30.000	Recovery =		109.02%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	907332650	735.982 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727009.D
Sample : DIESEL 600/1000





727009.D TPHNS727.M Wed Aug 03 10:40:50 2011

Quantitation Report (Not Reviewed)

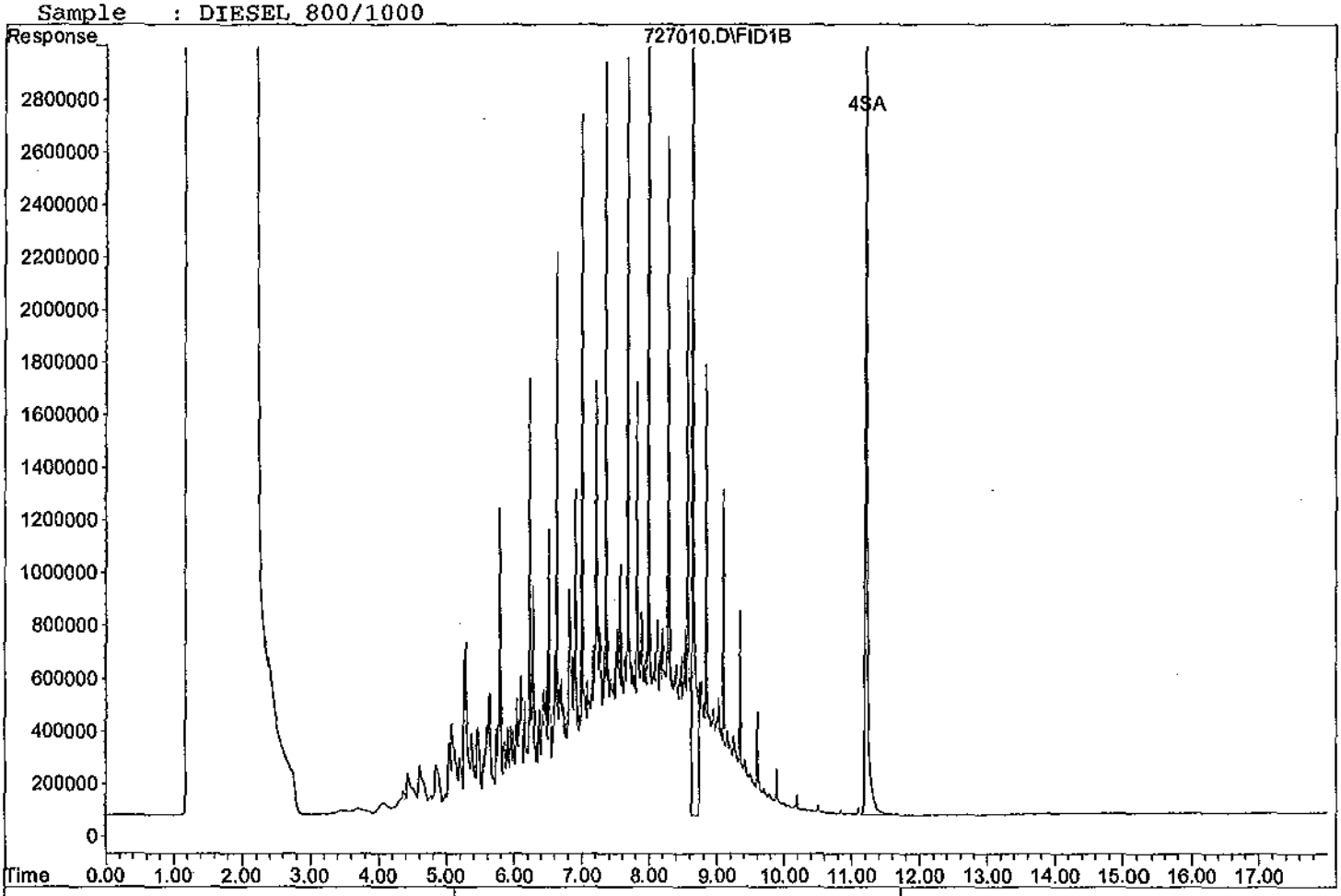
Data File : G:\APOLLO\DATA\110727\727010.D Vial: 10
Acq On : 7-27-11 16:12:59 Operator: LAC
Sample : DIESEL 800/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:34 2011 Quant Results File: TPHNS727.RES

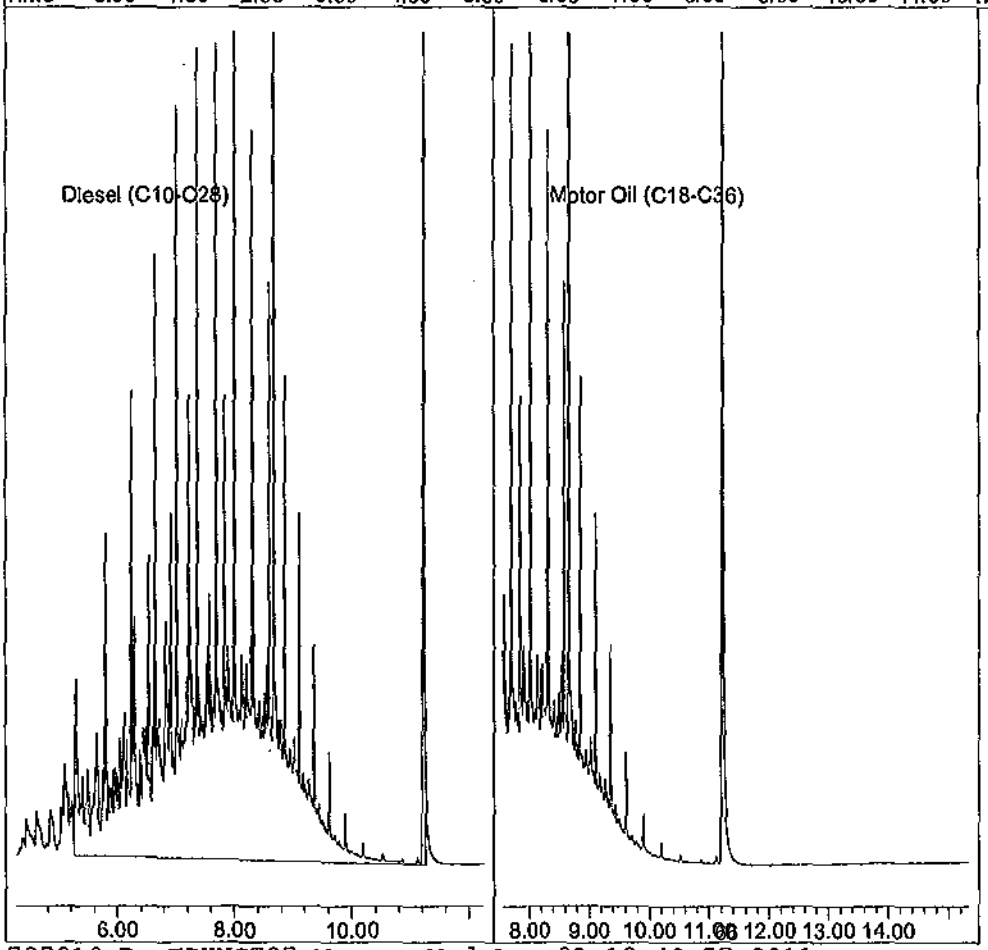
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.65	100003598	41.726	ppb
Surrogate Spike 30.000	Recovery =		139.09%	
4) SA Octacosane(S)	11.22	65962201	42.265	ppb
Surrogate Spike 30.000	Recovery =		140.88%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	1170582283	928.388	ppb

Data File: G:\APOLLO\DATA\110727\727010.D
Sample : DIESEL 800/1000





Quantitation Report (Not Reviewed)

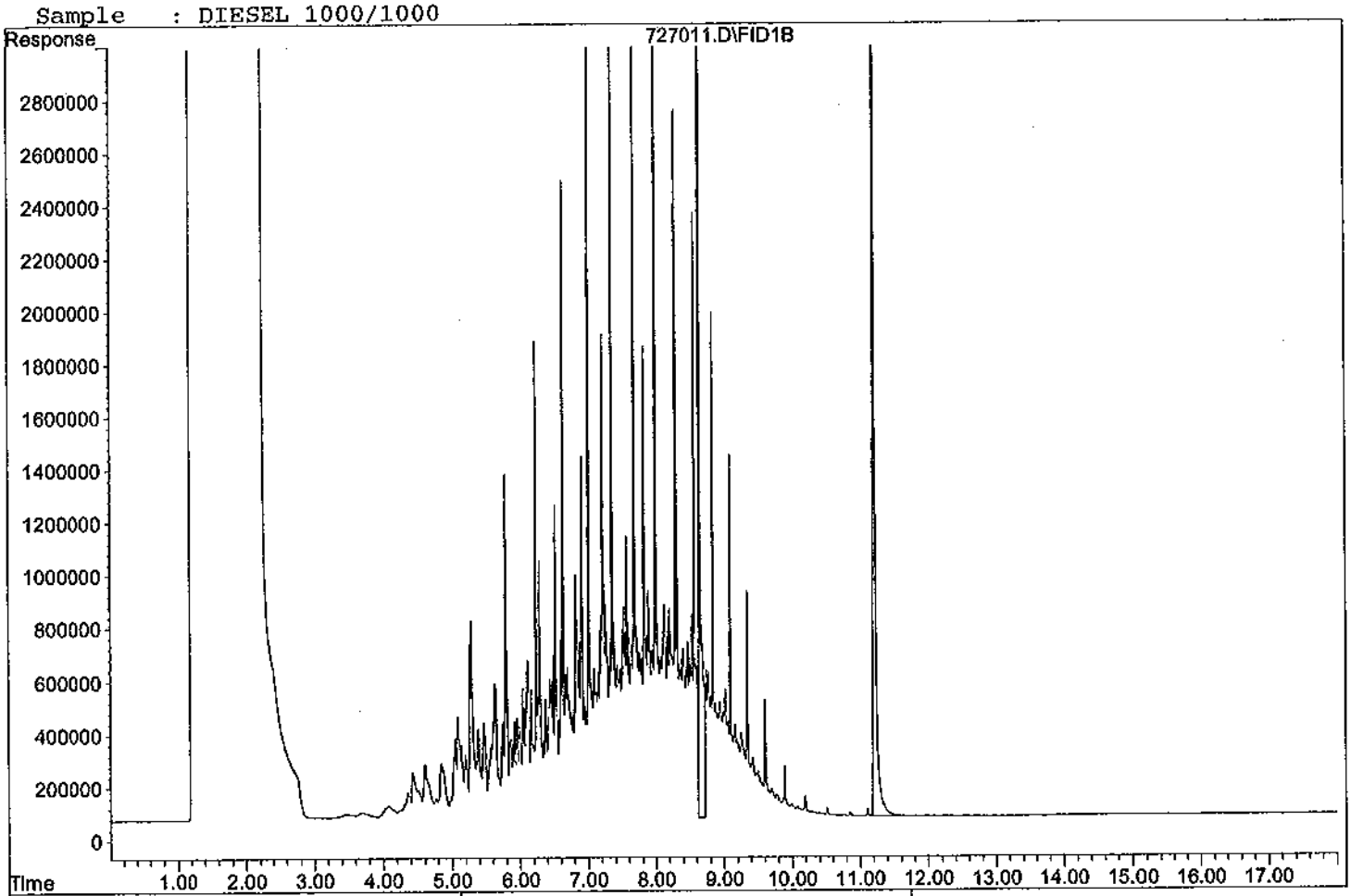
Data File : G:\APOLLO\DATA\110727\727011.D Vial: 11
Acq On : 7-27-11 16:38:59 Operator: LAC
Sample : DIESEL 1000/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:34 2011 Quant Results File: TPHNS727.RES

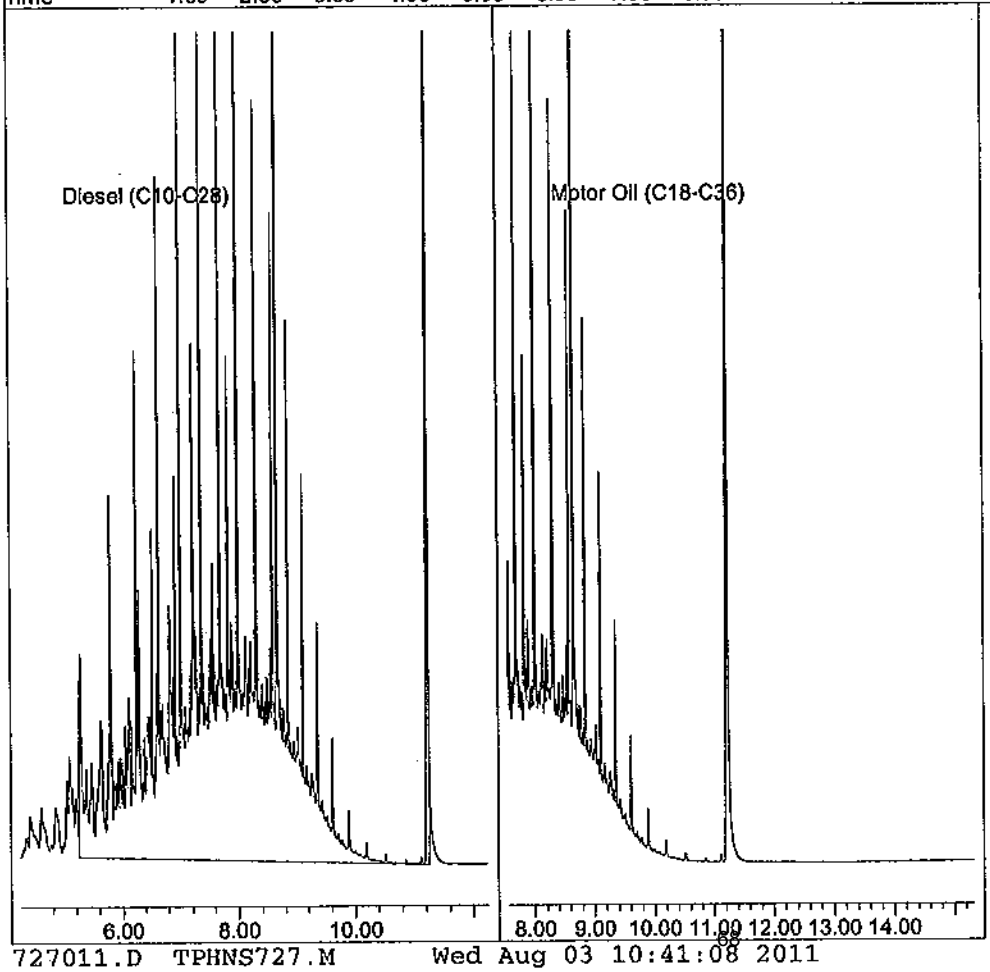
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.66	106876401	44.593	ppb
Surrogate Spike 30.000		Recovery =	148.64%	
4) SA Octacosane(S)	11.22	72550485	46.487	ppb
Surrogate Spike 30.000		Recovery =	154.96%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	1289944231	1001.657	ppb

Data File: G:\APOLLO\DATA\110727\727011.D
Sample : DIESEL 1000/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727012.D Vial: 12
Acq On : 7-27-11 17:04:51 Operator: LAC
Sample : MOTOR OIL 50/1000 7/27/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

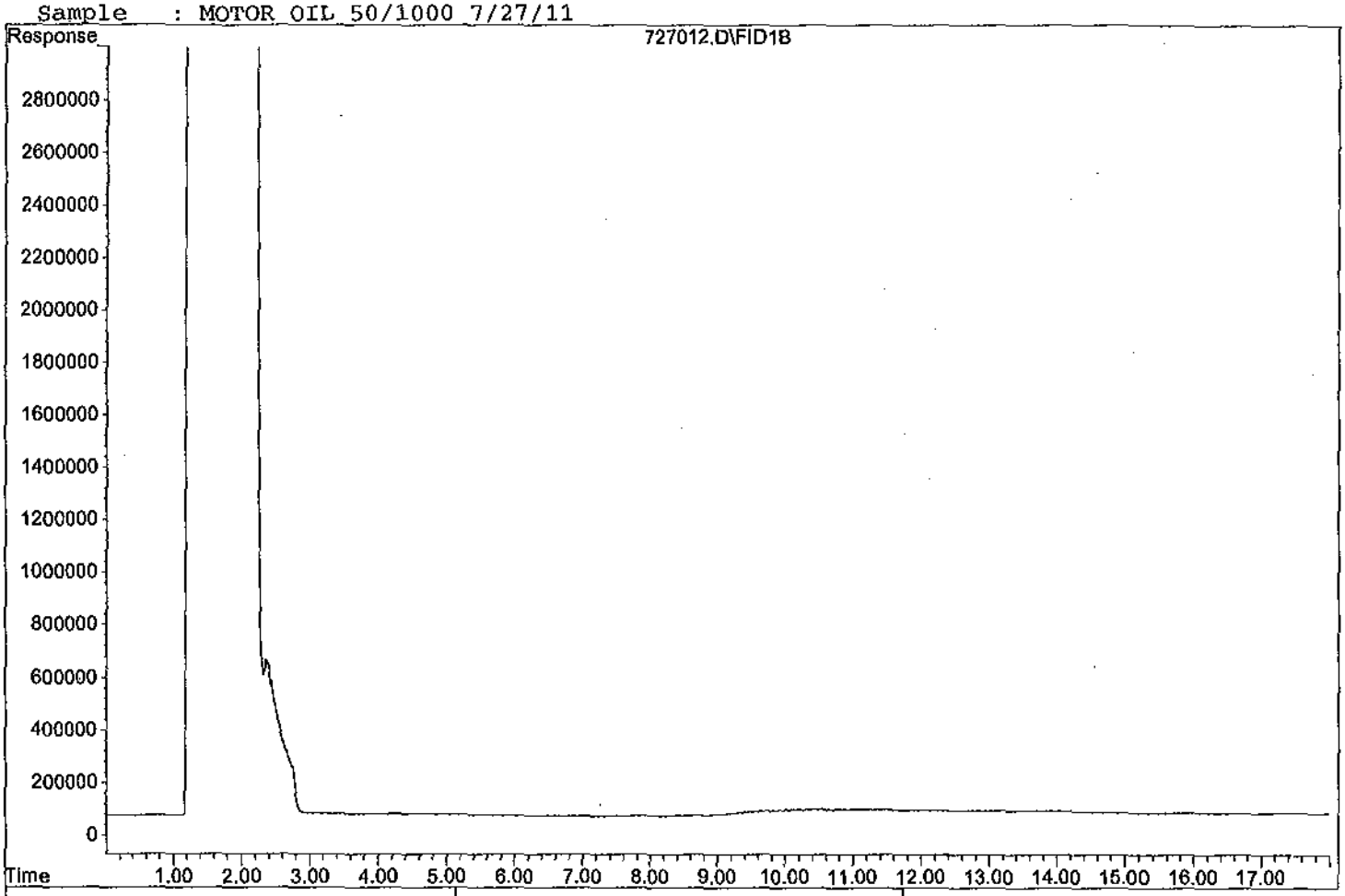
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

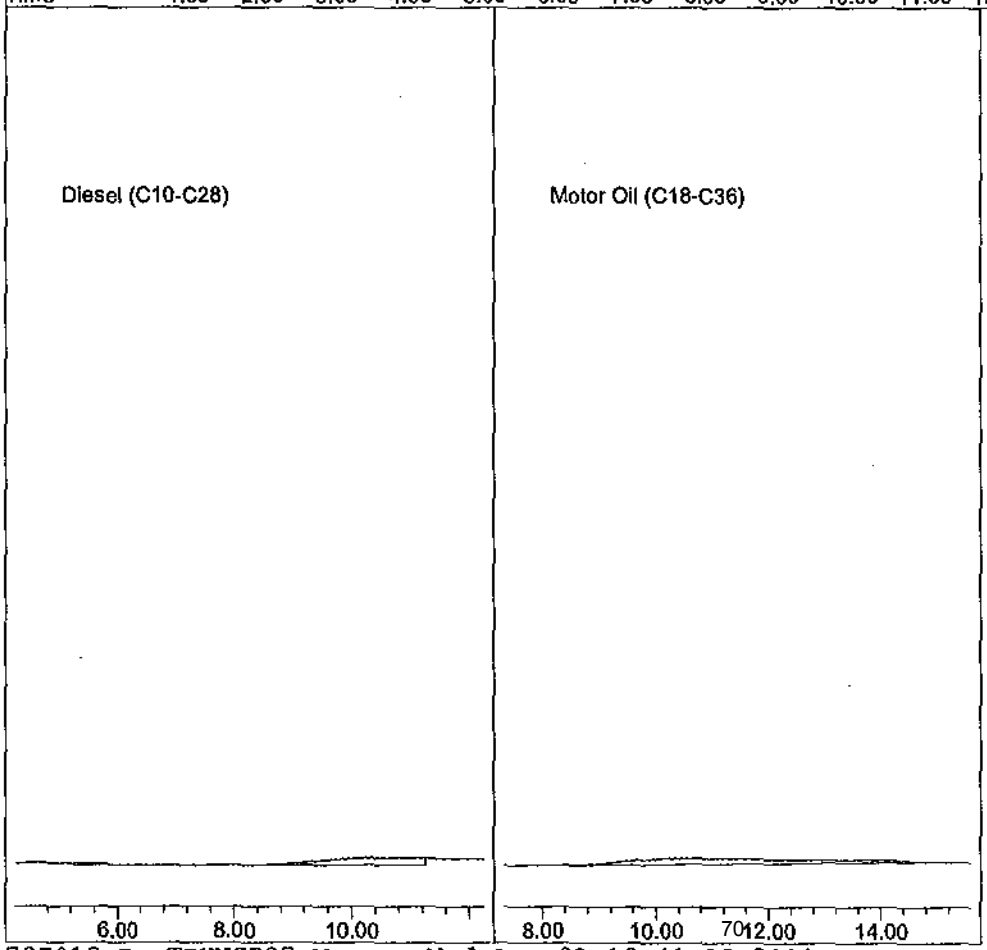
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	30731108	23.446 ppb
2) HBTM Motor Oil (C18-C36)	11.45	47598573	47.301 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727012.D
Sample : MOTOR OIL 50/1000 7/27/11





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727013.D Vial: 13
Acq On : 7-27-11 17:30:41 Operator: LAC
Sample : MOTOR OIL 100/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

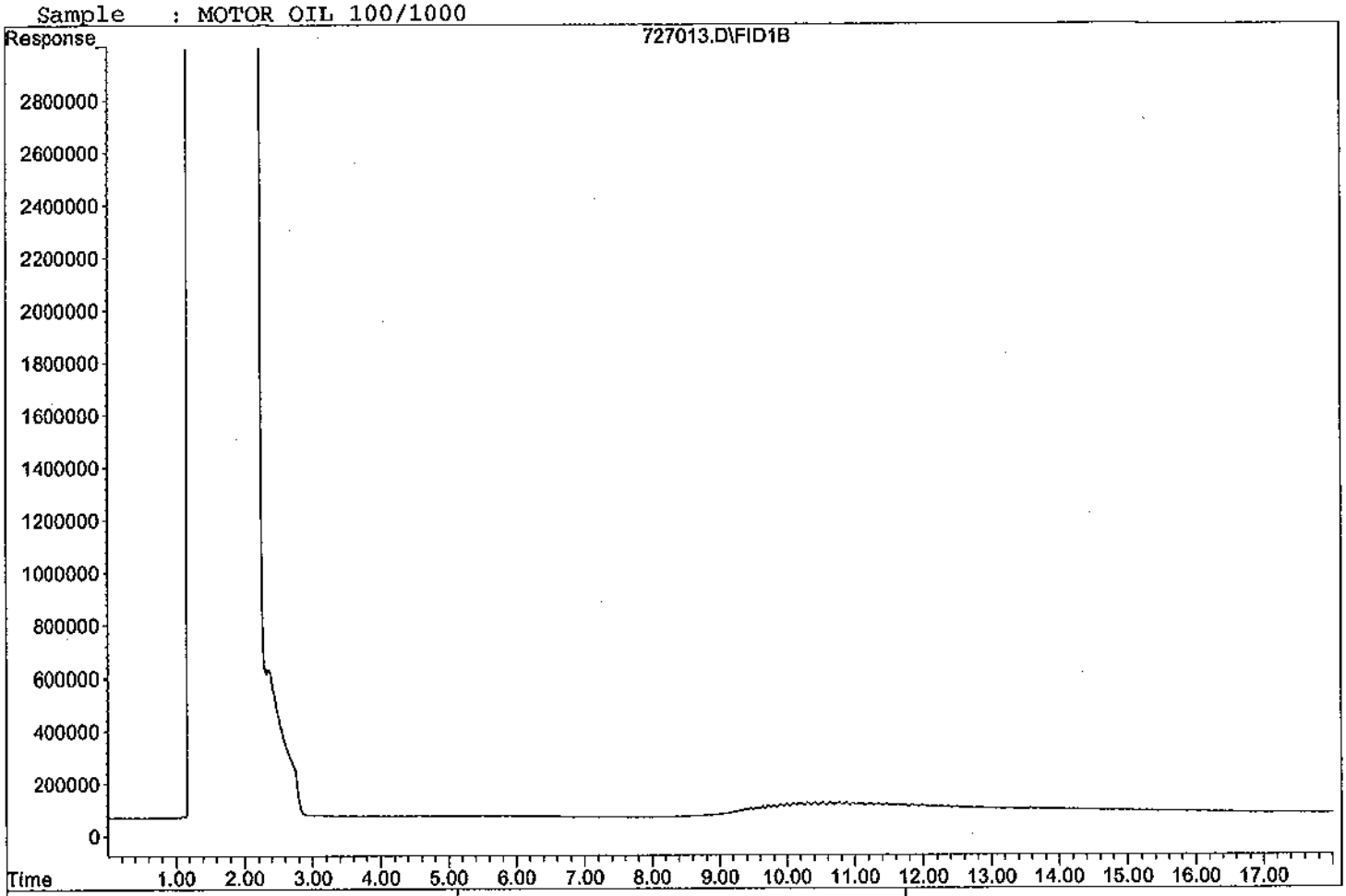
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

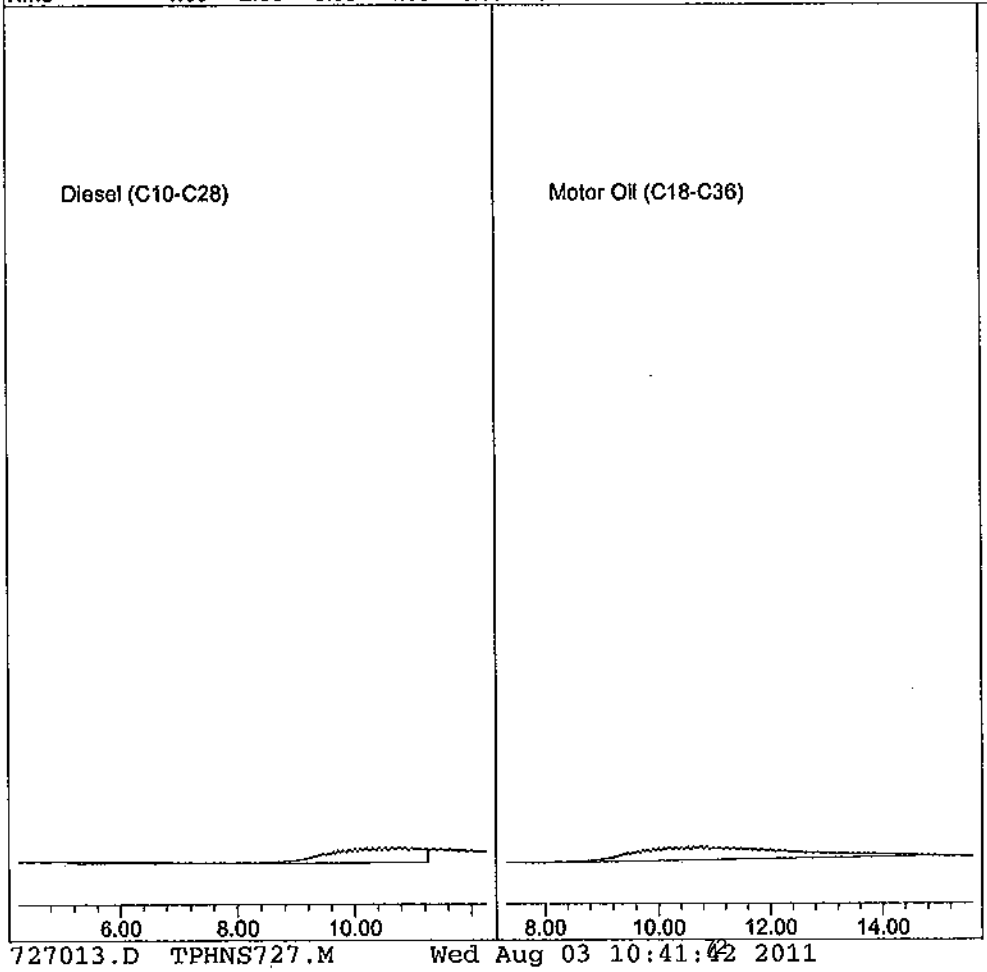
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	58191679	44.397 ppb
2) HBTM Motor Oil (C18-C36)	11.45	85383048	84.849 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727013.D
Sample : MOTOR OIL 100/1000





Quantitation Report (Not Reviewed)

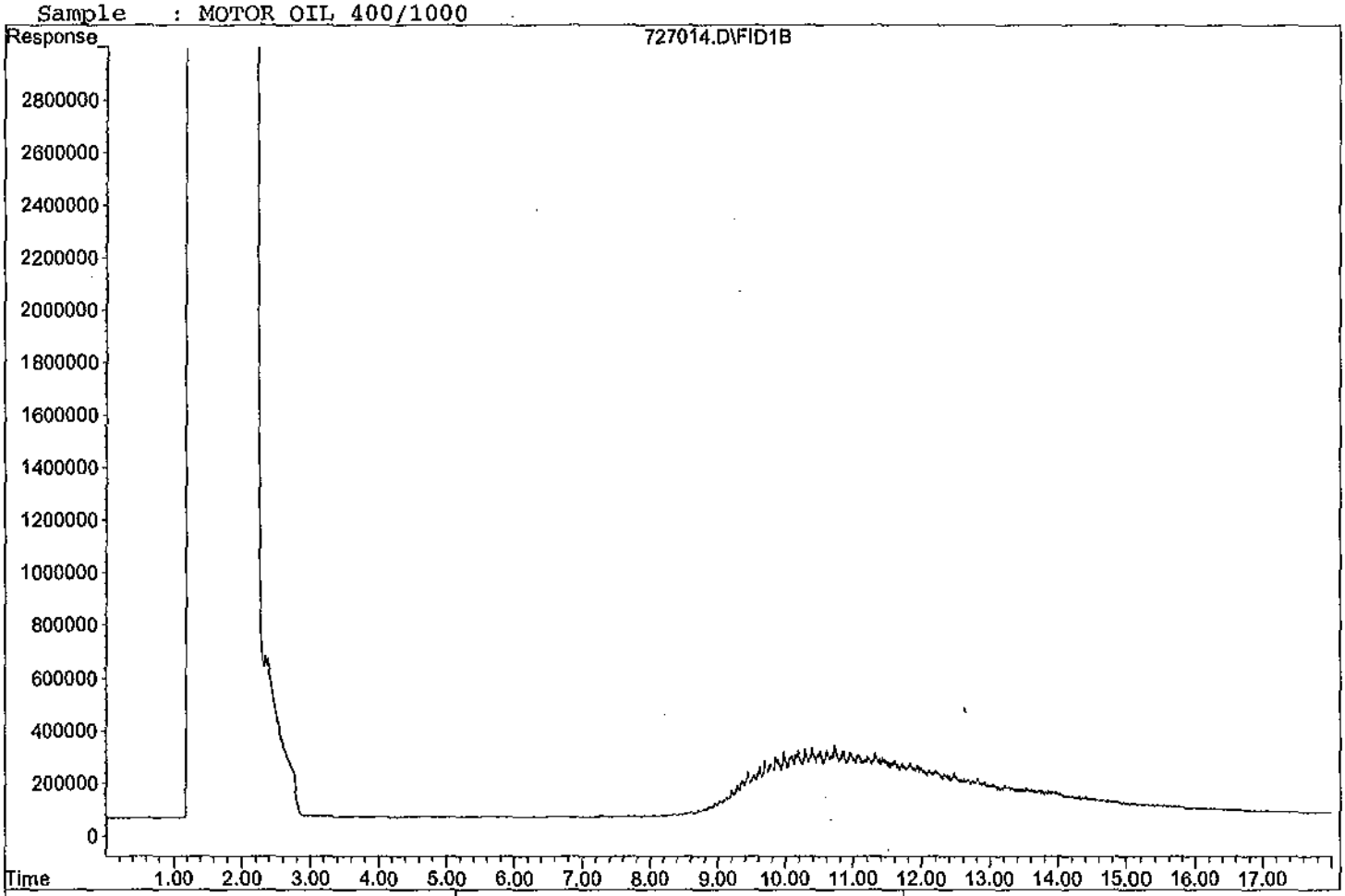
Data File : G:\APOLLO\DATA\110727\727014.D Vial: 14
Acq On : 7-27-11 17:56:35 Operator: LAC
Sample : MOTOR OIL 400/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

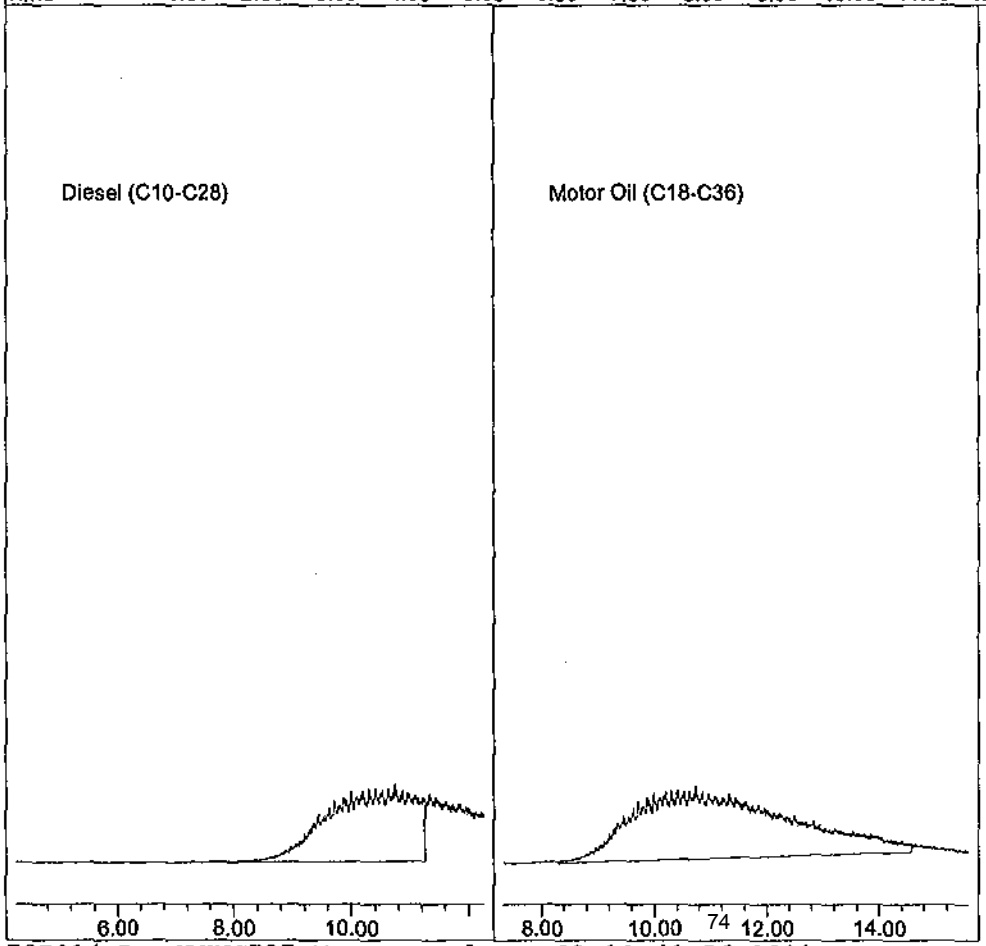
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	242623893	185.109 ppb
2) HBTM Motor Oil (C18-C36)	11.45	437488007	434.754 ppb

Data File: G:\APOLLO\DATA\110727\727014.D
Sample : MOTOR OIL 400/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727015.D Vial: 15
Acq On : 7-27-11 18:22:34 Operator: LAC
Sample : MOTOR OIL 600/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

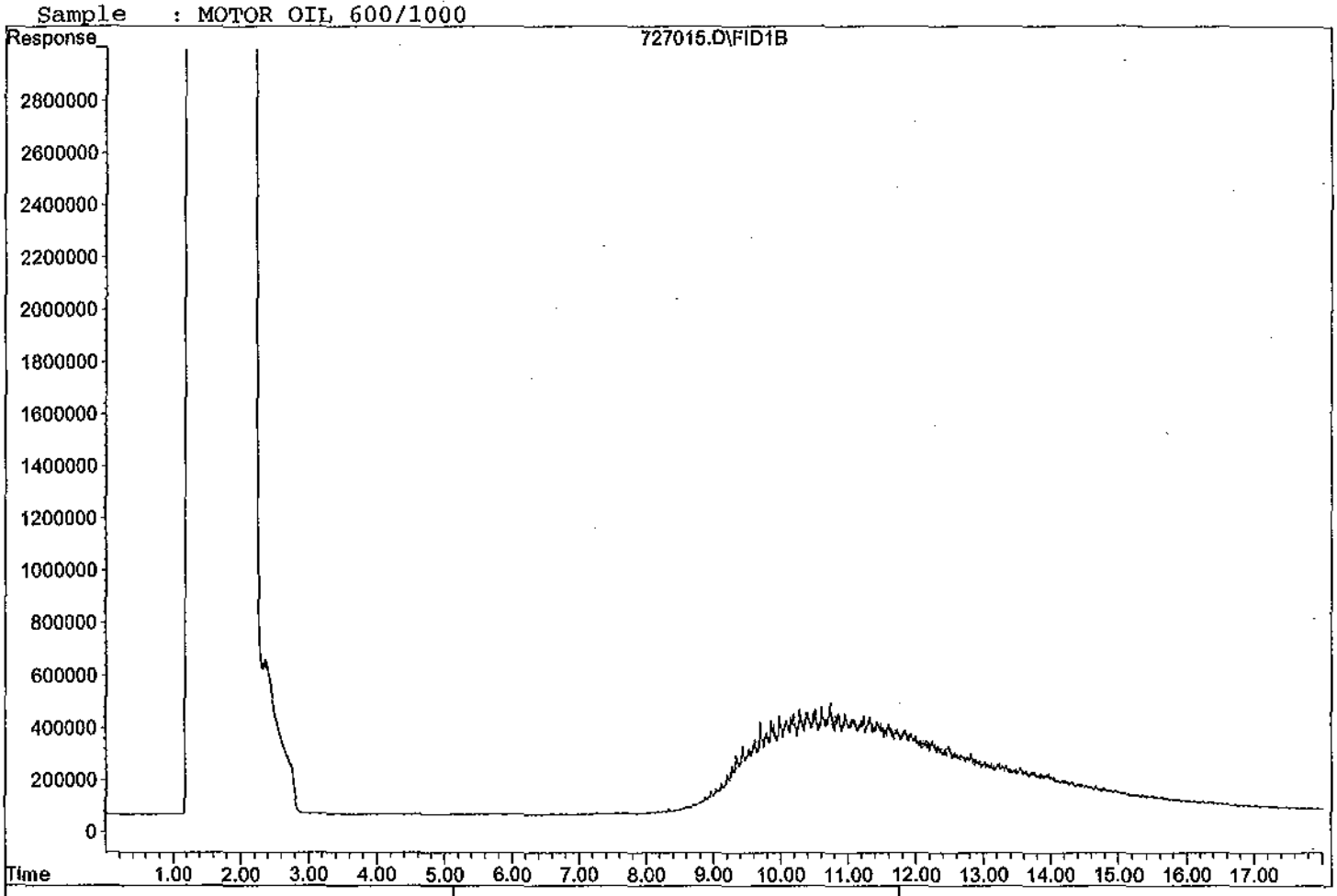
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

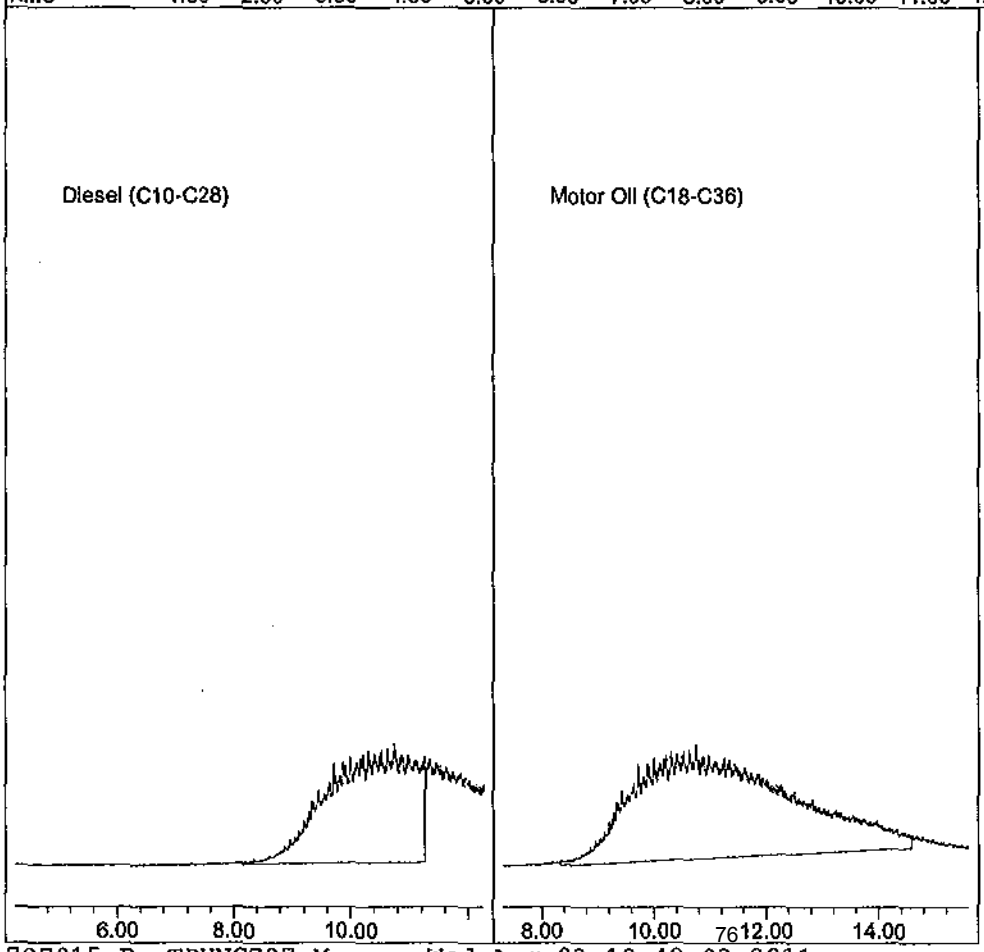
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	381693319	291.211 ppb
2) HBTM Motor Oil (C18-C36)	11.45	698123115	693.760 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727015.D
Sample : MOTOR OIL 600/1000





Quantitation Report (Not Reviewed)

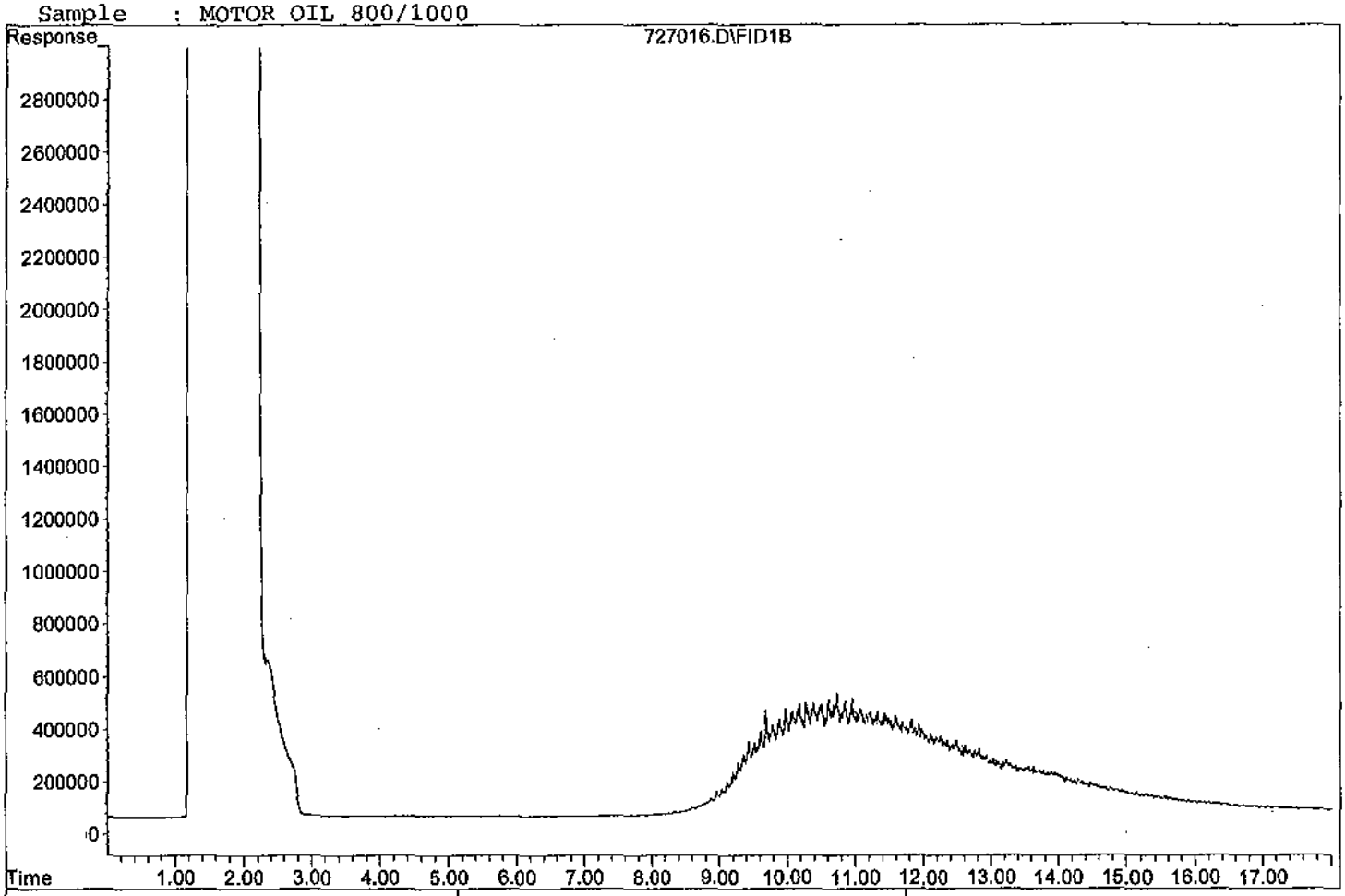
Data File : G:\APOLLO\DATA\110727\727016.D Vial: 16
Acq On : 7-27-11 18:48:14 Operator: LAC
Sample : MOTOR OIL 800/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

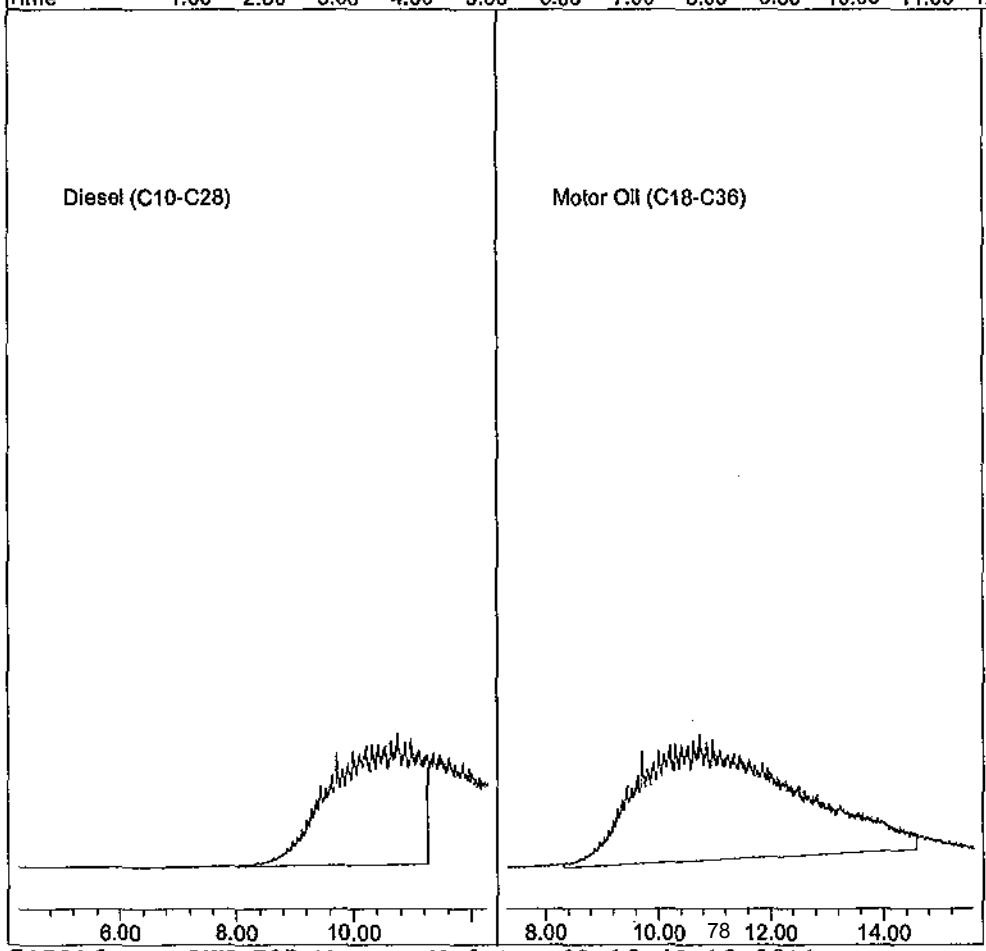
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	420097102	320.511	ppb
2) HBTM Motor Oil (C18-C36)	11.45	777174683	772.317	ppb

Data File: G:\APOLLO\DATA\110727\727016.D
Sample : MOTOR OIL 800/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727017.D Vial: 17
Acq On : 7-27-11 19:13:54 Operator: LAC
Sample : MOTOR OIL 1000/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

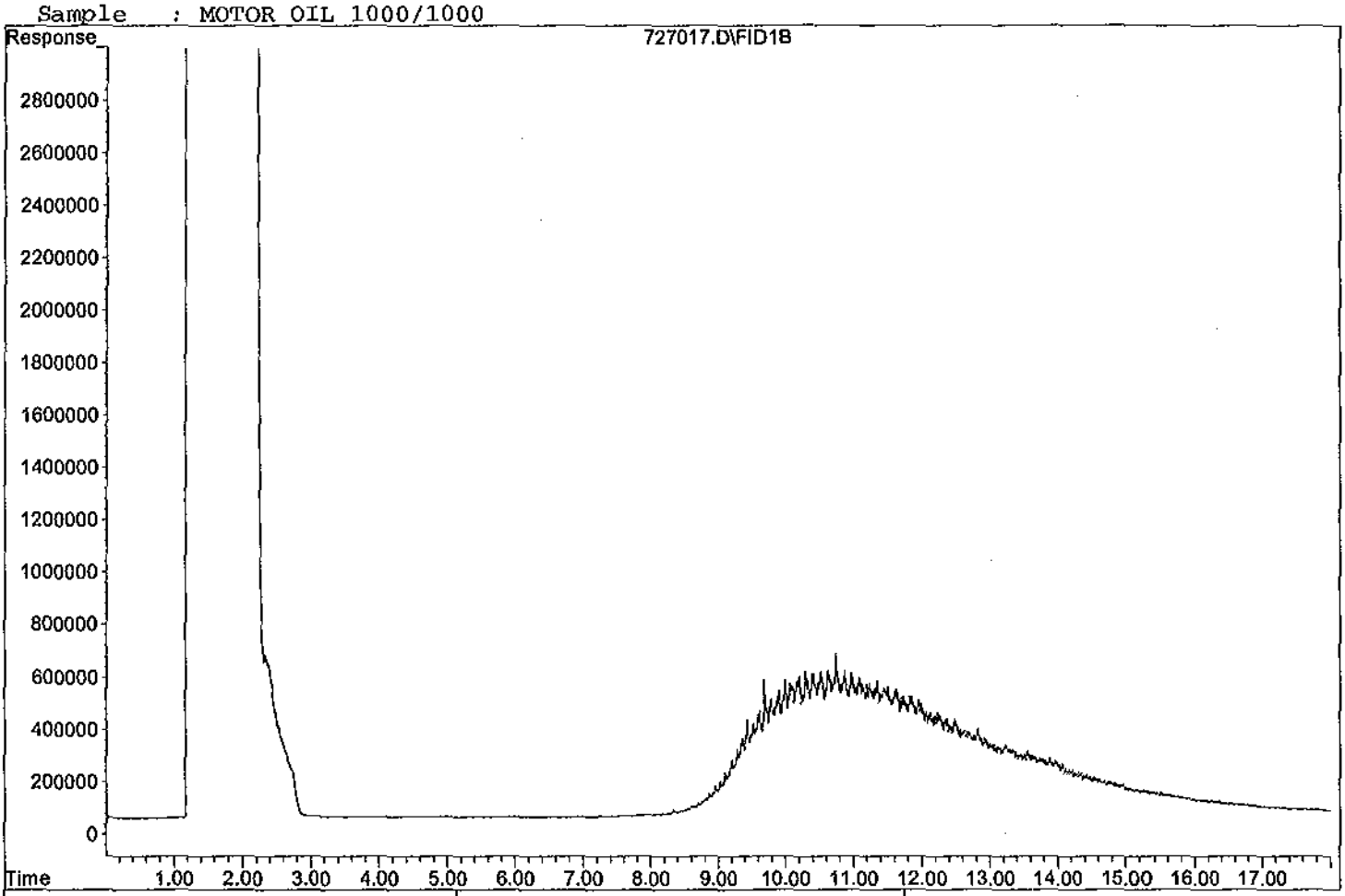
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

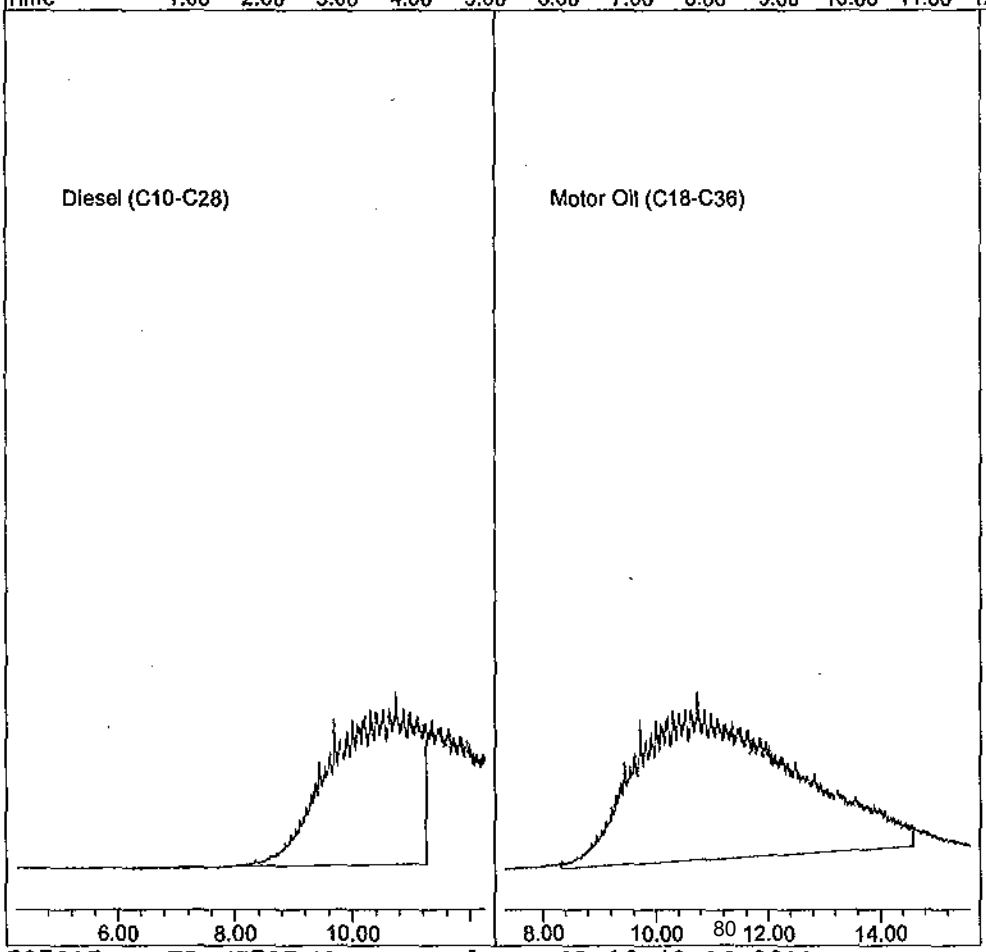
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	538248631	410.654 ppb
2) HBTM Motor Oil (C18-C36)	11.45	1003207471	996.937 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727017.D
Sample : MOTOR OIL 1000/1000





TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/27/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 727018.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	655356	705177	7.6	HATM	
2							
3							
4							
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37							
38							
39							
40							
		Average			7.6		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110727\727018.D Vial: 18
Acq On : 7-27-11 19:39:27 Operator: LAC
Sample : DIESEL 400/1000 2ND SRC 7/27/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:36 2011 Quant Results File: TPHNS727.RES

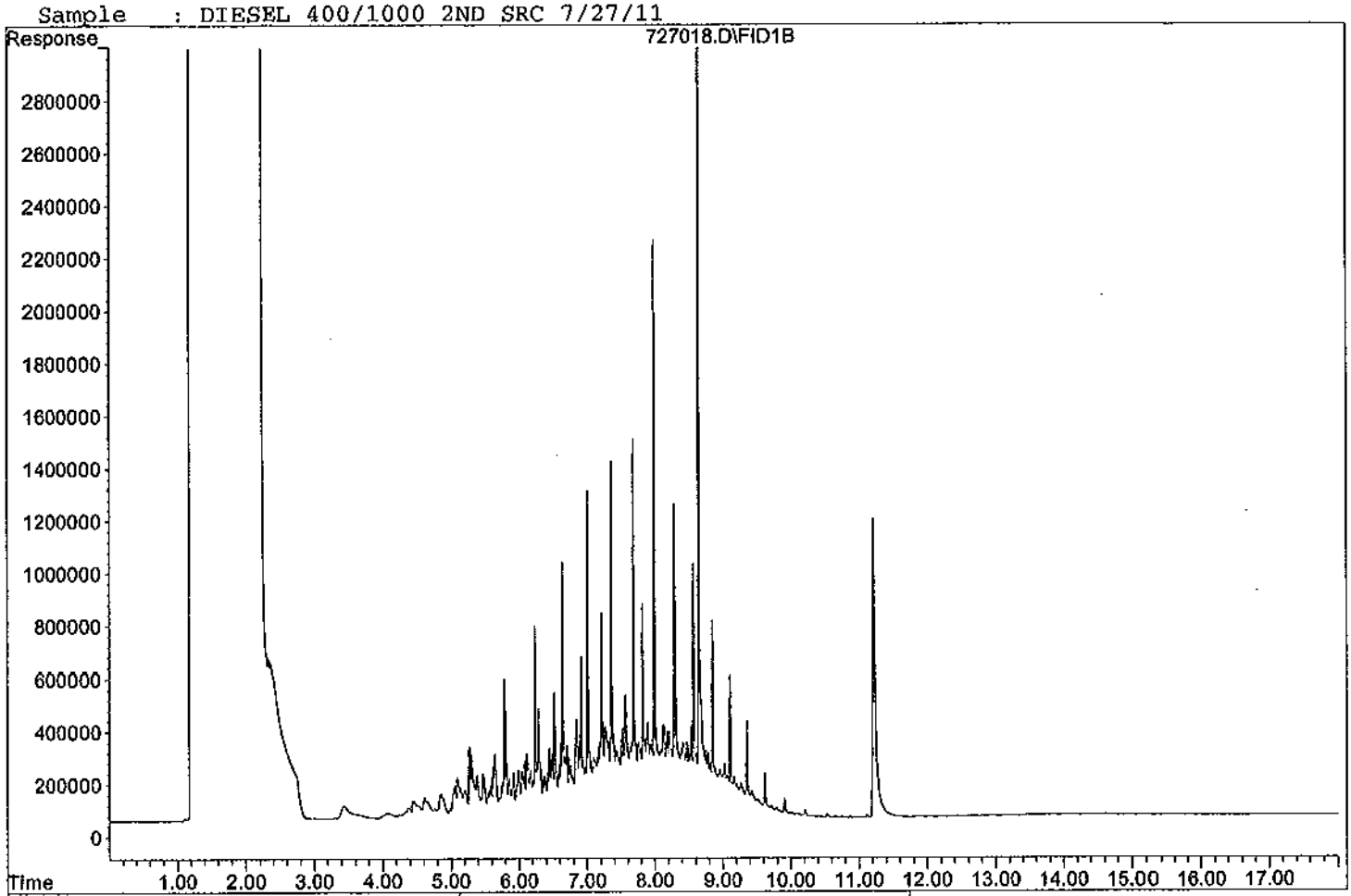
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

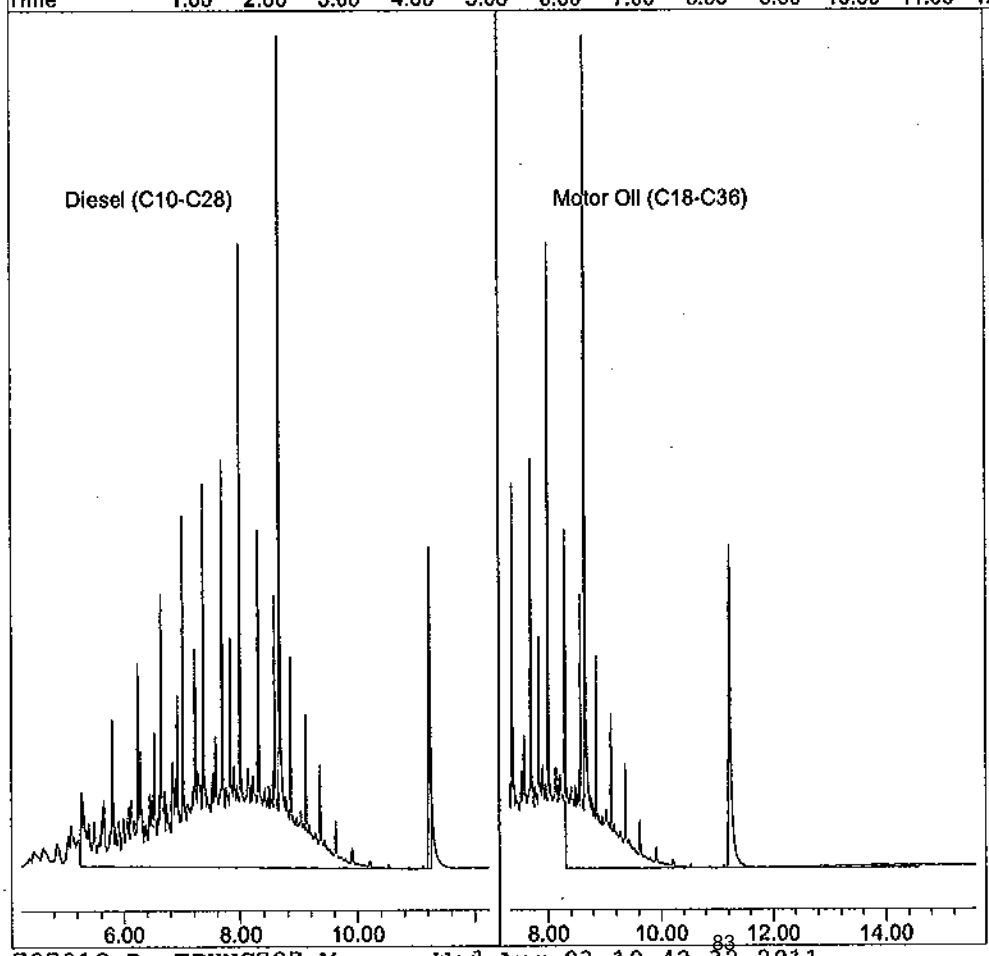
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	564141250	430.408 ppb
2) HBTM Motor Oil (C18-C36)	11.45	154594155	153.628 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\110727\727018.D
Sample : DIESEL 400/1000 2ND SRC 7/27/11





TPH Extractables
THCSUR81

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 65187
Case No: Initial Cal. Date: 08/01/11
Matrix: Water Instrument: Apollo Initials: LAC

			801007.D	801008.D	801009.D	801010.D	801006.D									
		Compound	2	3	4	5	6						Avg	%RSD		
1	SA	Ortho-Terphenyl(S)	734586	808024	739736	671459	689650						728691	7.3	SA	
2	SA	Octacosane(S)	728669	803952	736067	654104	664893						717537	8.5	SA	
3																
4																
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0.4495751

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801006.D Vial: 6
Acq On : 8-1-11 11:59:38 Operator: LAC
Sample : THC SURR 1000/1000 8/1/11 Inst : Apollo
Misc : MIX(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

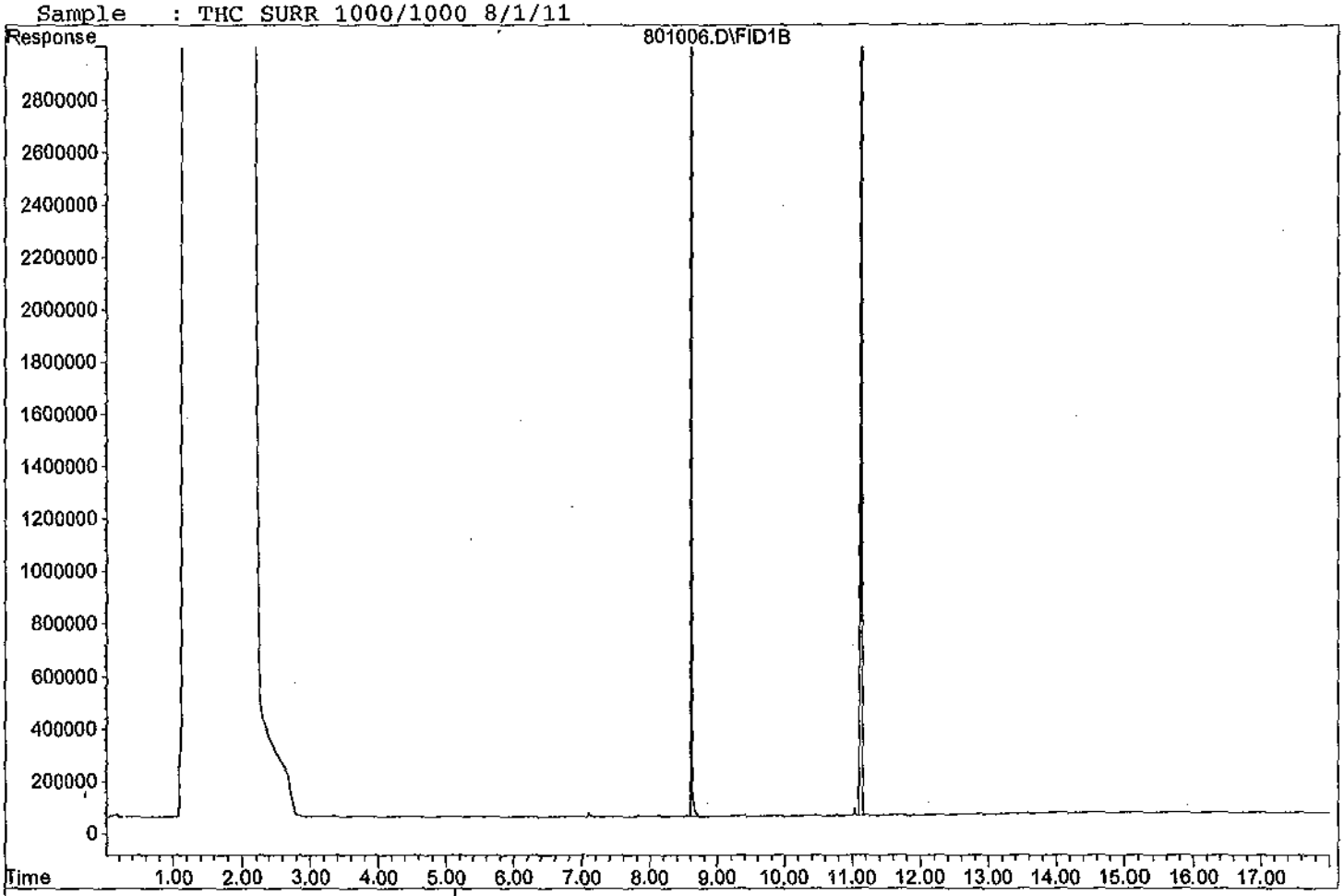
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

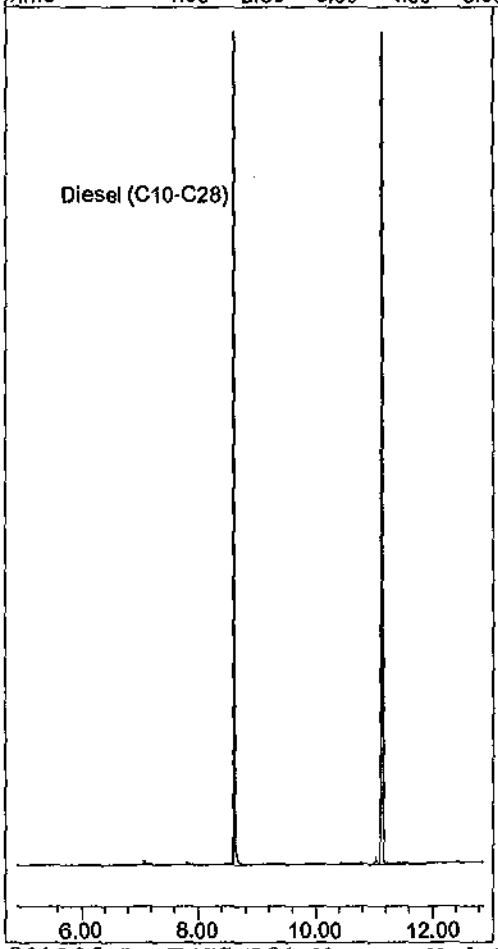
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) SA Ortho-Terphenyl(S)	8.63	67145856	46.073	ppb
Surrogate Spike 30.000	Recovery =		153.58%	
3) SA Octacosane(S)	11.14	65410422	45.580	ppb
Surrogate Spike 30.000	Recovery =		151.93%	
Target Compounds				

Quantitation Report

Data File: G:\APOLLO\DATA\110801\801006.D
Sample : THC SURR 1000/1000 8/1/11





Quantitation Report (Not Reviewed)

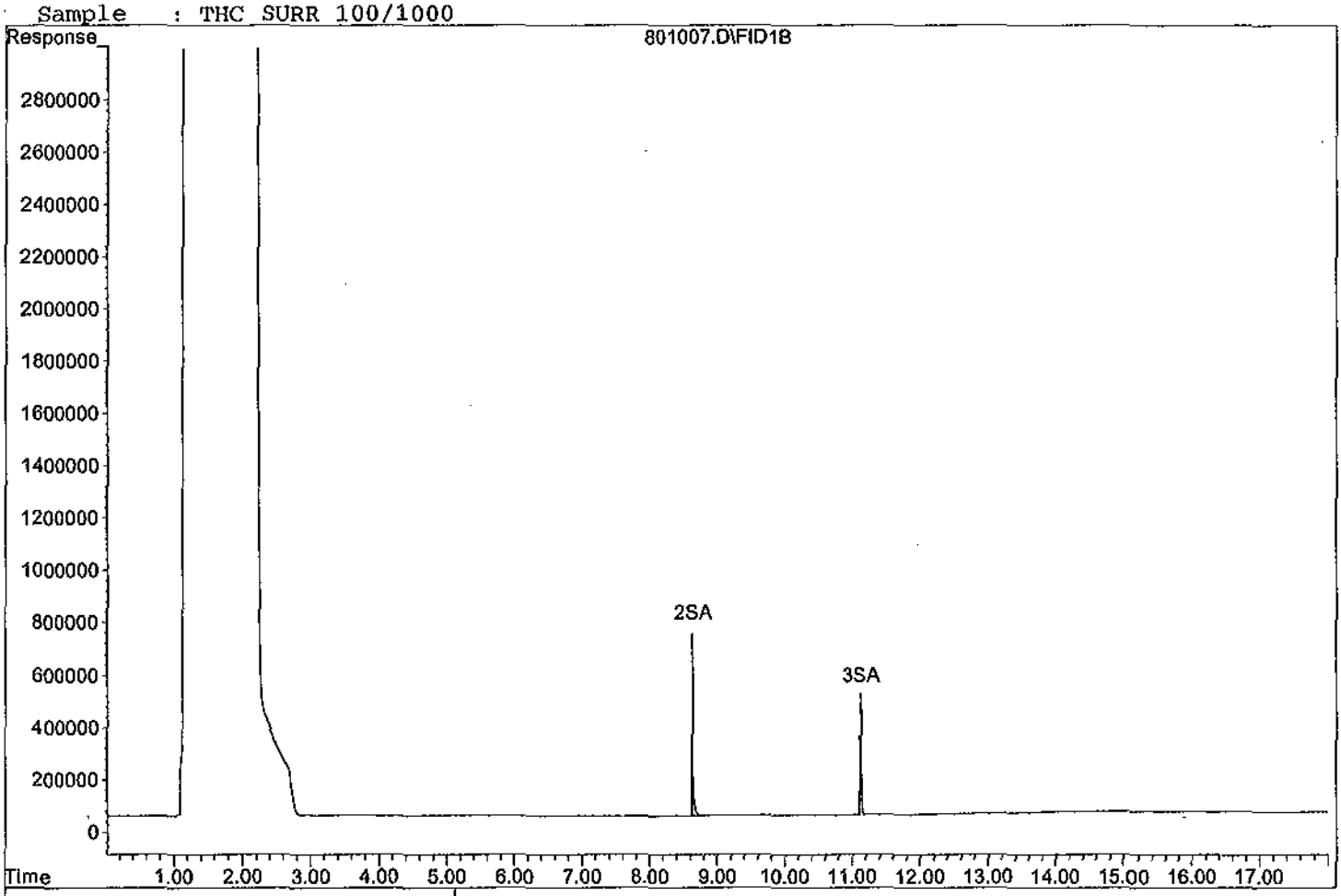
Data File : G:\APOLLO\DATA\110801\801007.D Vial: 7
Acq On : 8-1-11 12:23:50 Operator: LAC
Sample : THC SURR 100/1000 Inst : Apollo
Misc : MIX(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

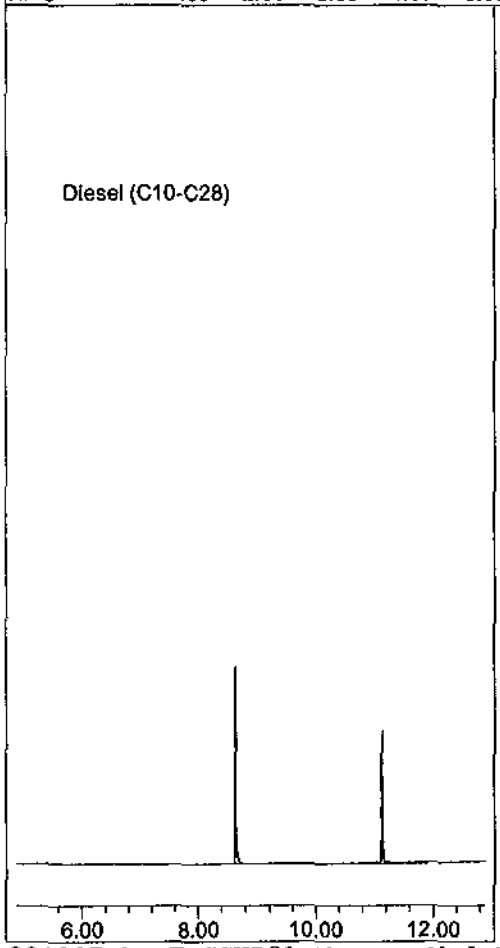
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
2) SA Ortho-Terphenyl(S)	8.62	6896500	4.732	ppb
Surrogate Spike 30.000	Recovery =		15.77%	
3) SA Octacosane(S)	11.12	6648929	4.633	ppb
Surrogate Spike 30.000	Recovery =		15.44%	
Target Compounds				

Data File: G:\APOLLO\DATA\110801\801007.D
Sample : THC SURR 100/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801008.D Vial: 8
Acq On : 8-1-11 12:47:56 Operator: LAC
Sample : THC SURR 400/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

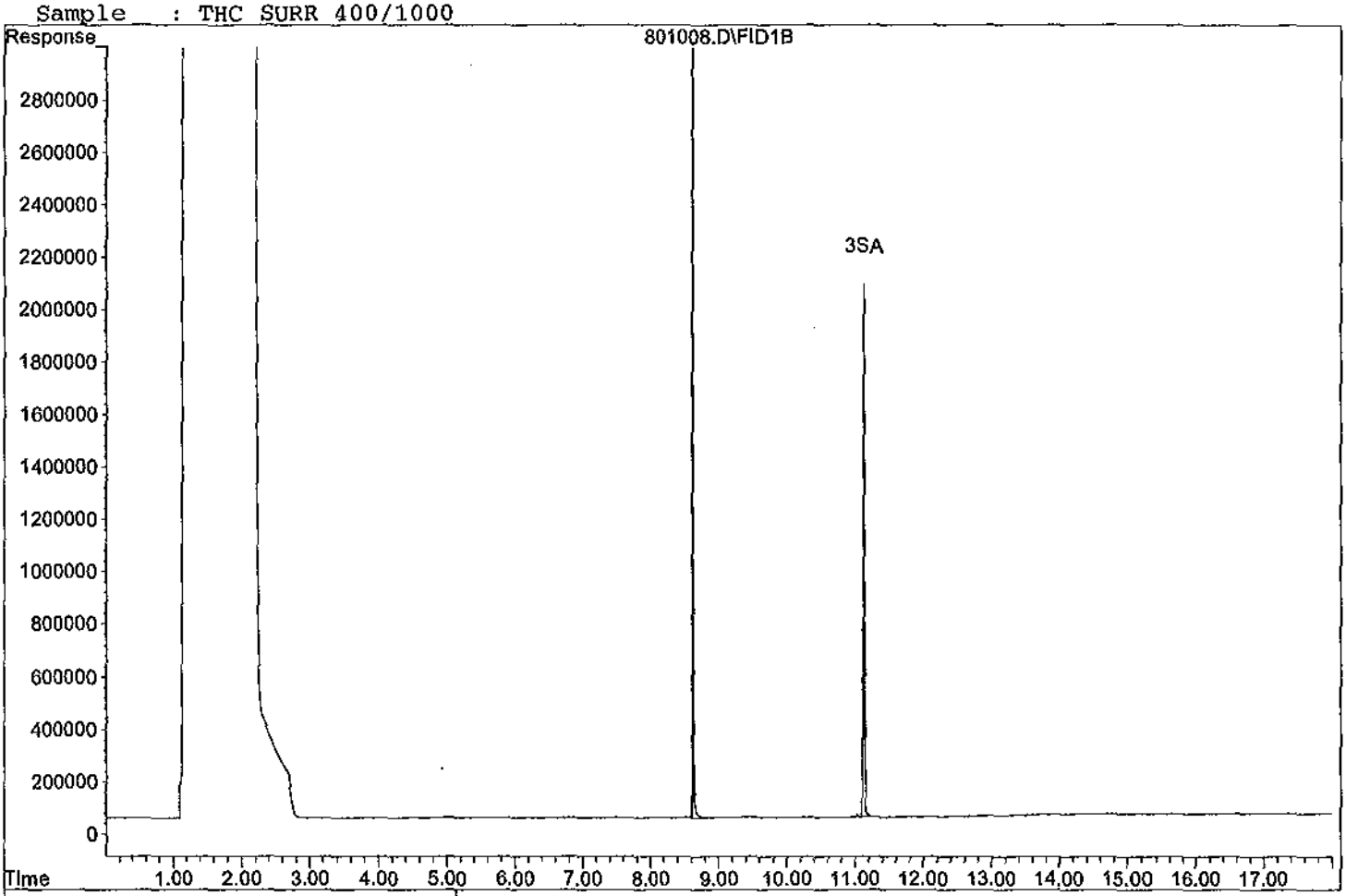
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

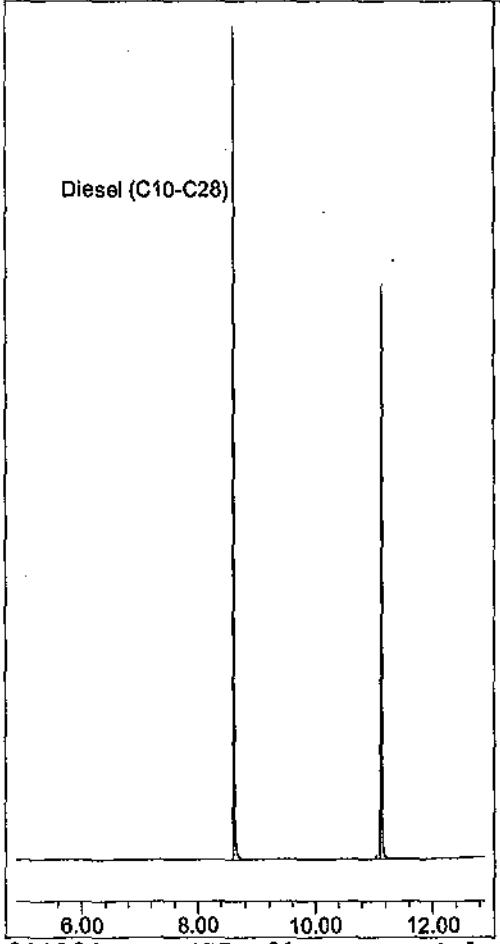
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	29383442	403.236 ppb
Surrogate Spike 600.000		Recovery =	67.21%
3) SA Octacosane(S)	11.13	29146764	406.206 ppb
Surrogate Spike 600.000		Recovery =	67.70%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\110801\801008.D
Sample : THC SURR 400/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801009.D Vial: 9
Acq On : 8-1-11 13:12:04 Operator: LAC
Sample : THC SURR 600/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:40 2011 Quant Results File: THCSUR81.RES

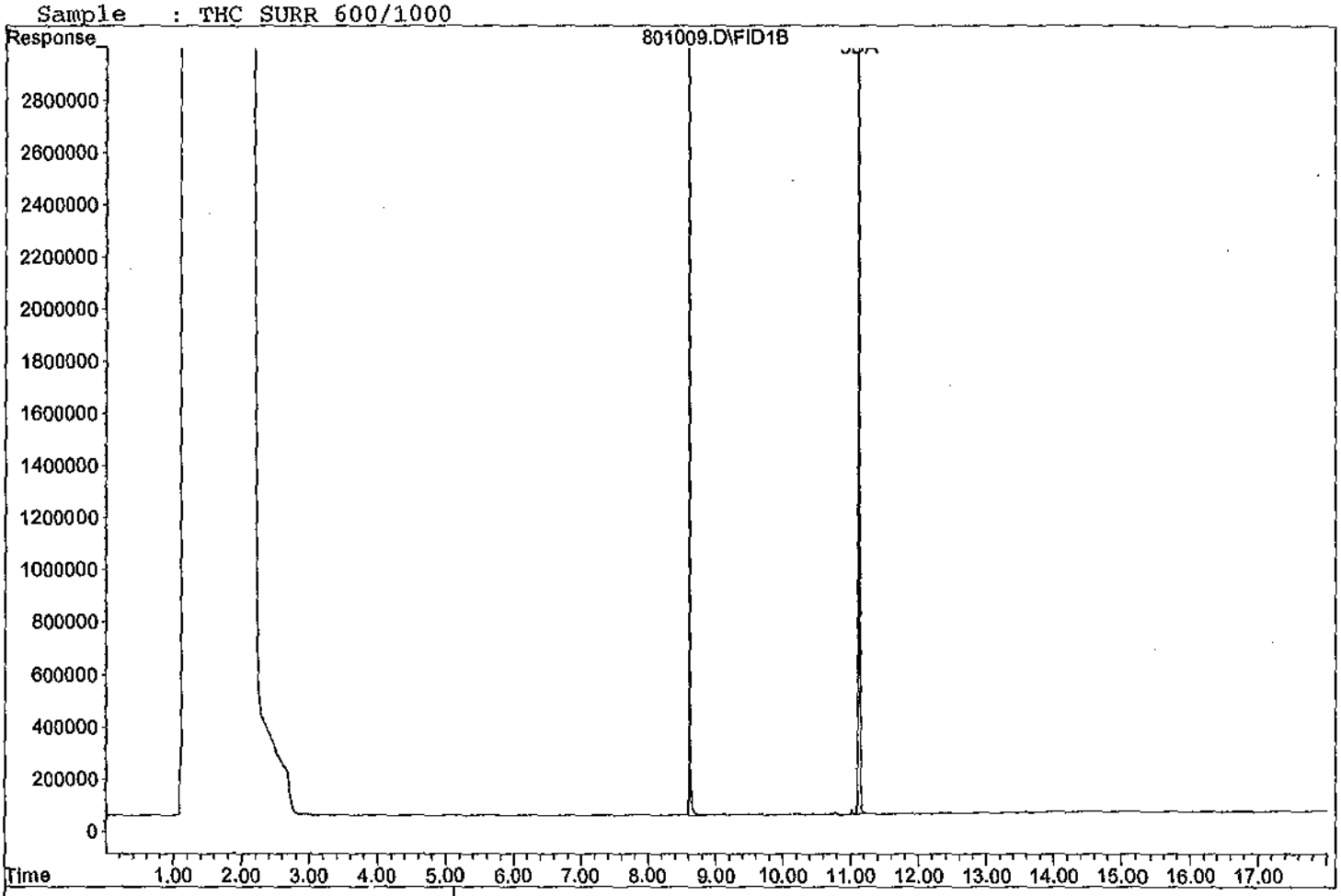
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

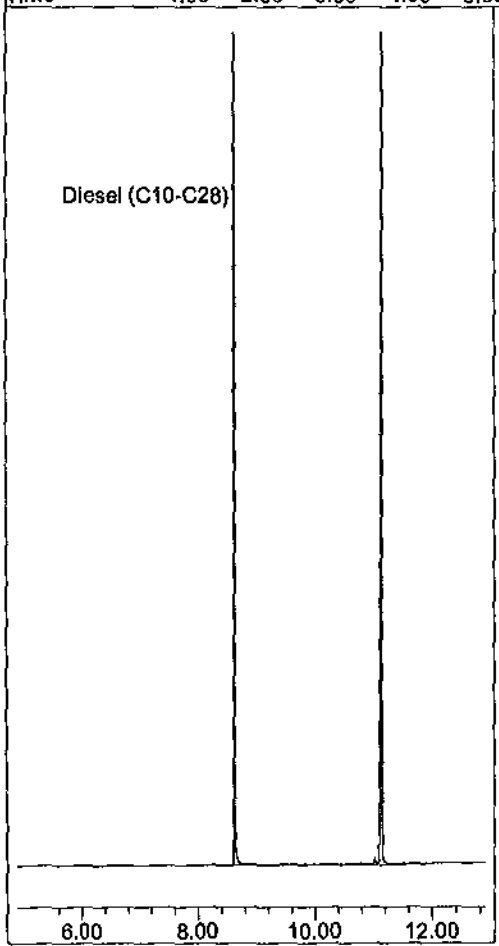
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	48481467	665.323 ppb
Surrogate Spike 600.000		Recovery =	110.89%
3) SA Octacosane(S)	11.14	48237106	672.259 ppb
Surrogate Spike 600.000		Recovery =	112.04%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\110801\801009.D
Sample : THC SURR 600/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801010.D Vial: 10
Acq On : 8-1-11 13:36:15 Operator: LAC
Sample : THC SURR 800/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:40 2011 Quant Results File: THCSUR81.RES

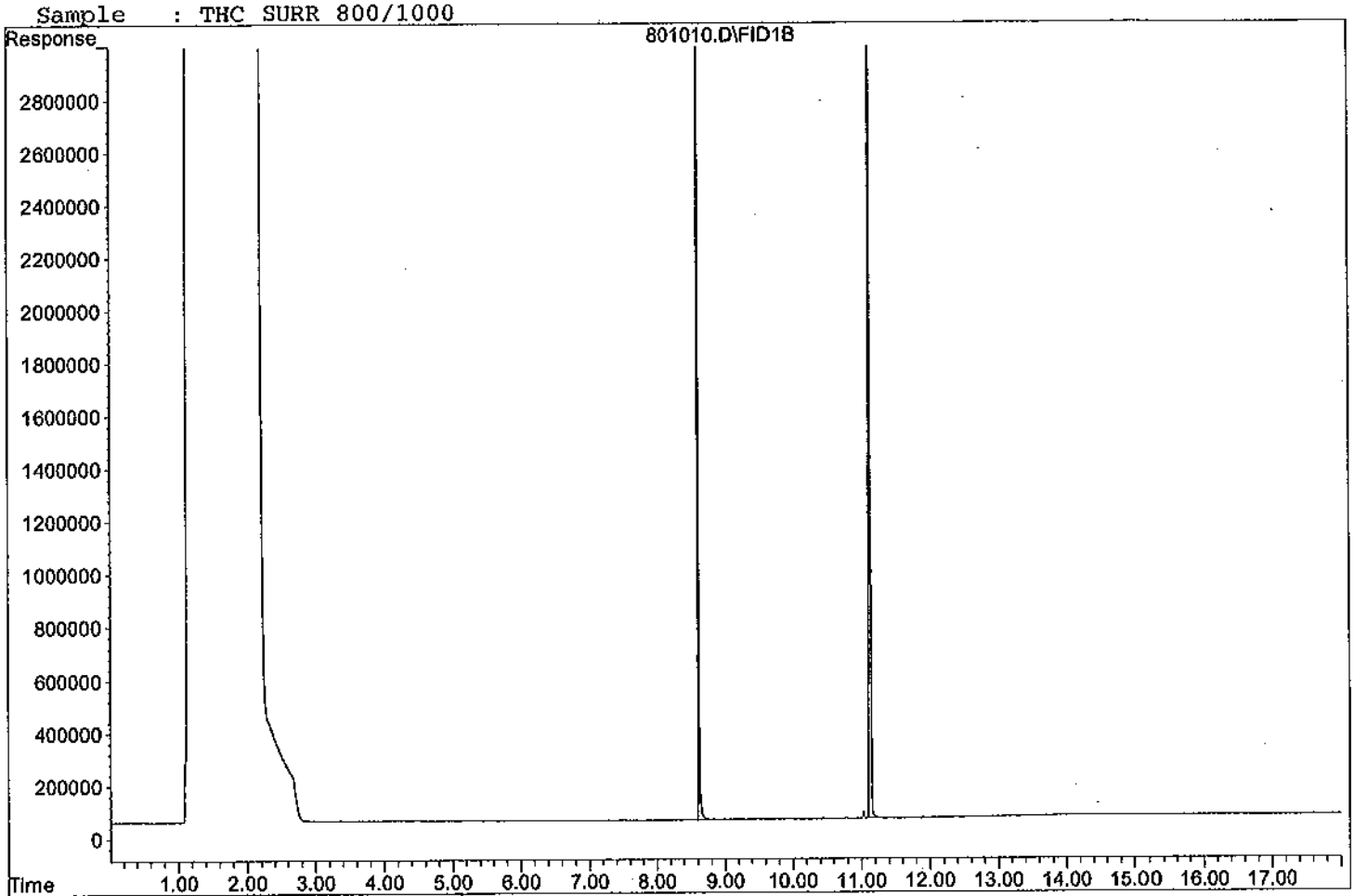
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

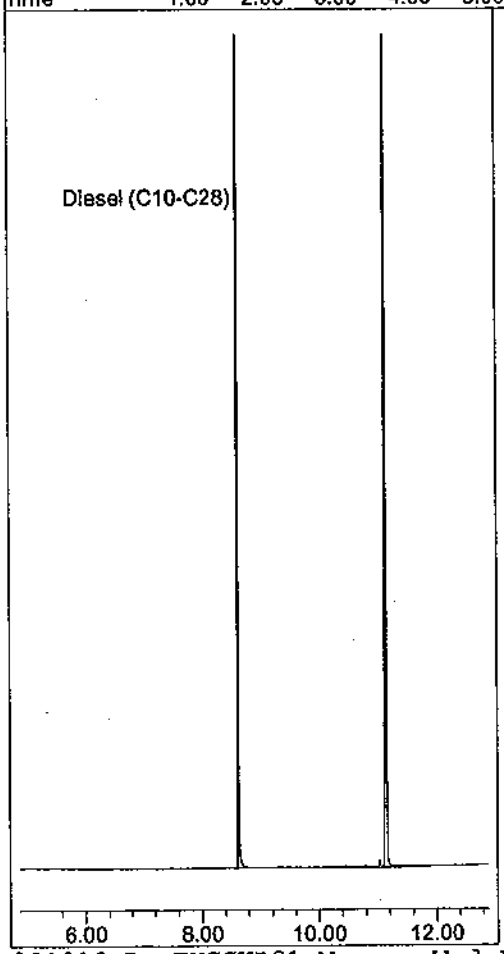
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.63	59178911	812.126 ppb
Surrogate Spike 600.000		Recovery =	135.35%
3) SA Octacosane(S)	11.14	58885367	820.660 ppb
Surrogate Spike 600.000		Recovery =	136.78%
Target Compounds			

Quantitation Report

Data File: G:\APOLLO\DATA\110801\801010.D
Sample : THC SURR 800/1000





TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 08/01/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 801003,04.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C28)	655356	602263	8.1	HATM	
2	HBTM	Motor Oil (C18-C36)	503145	492302	2.2	HBTM	
3							
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40							
		Average			5.2		

Quantitation Report (Not Reviewed)

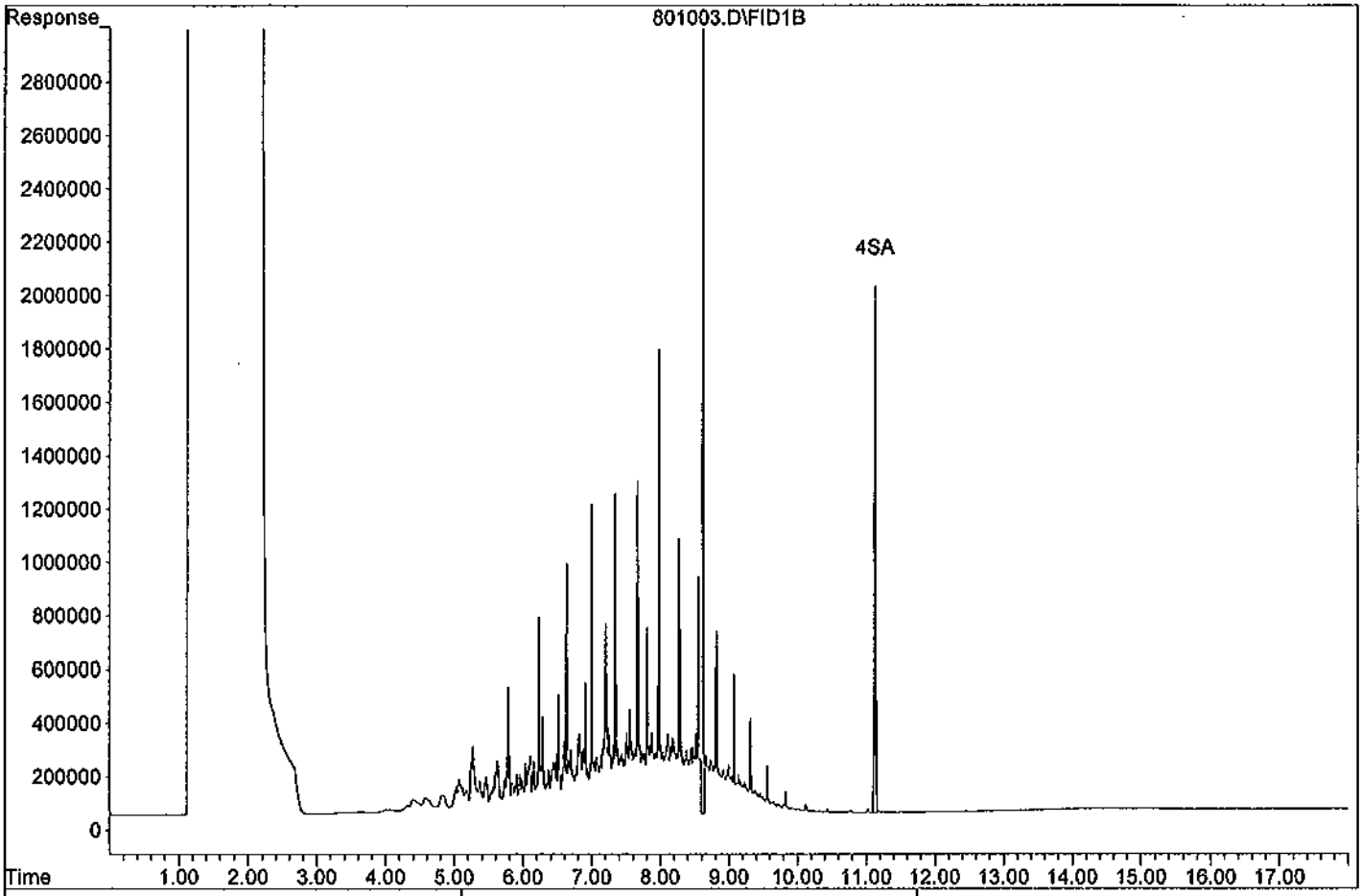
Data File : G:\APOLLO\DATA\110801\801003.D Vial: 3
Acq On : 8-1-11 10:45:44 Operator: LAC
Sample : DIESEL 400/1000 7/27/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

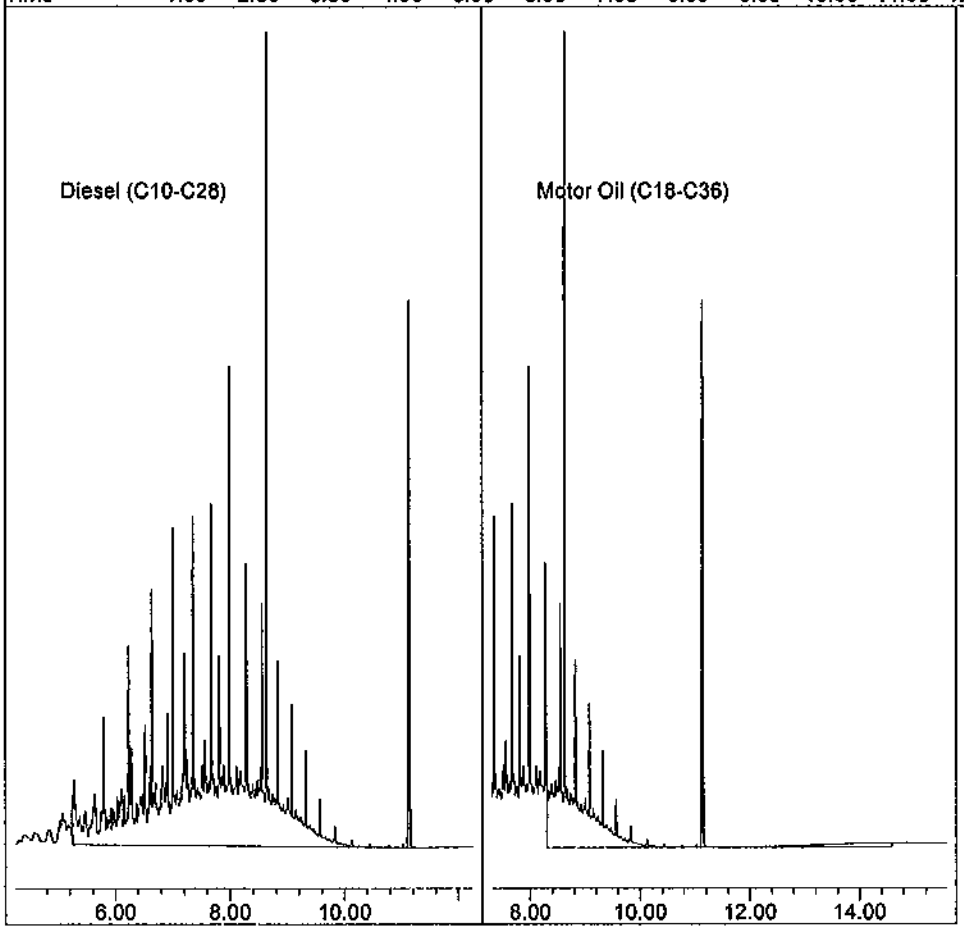
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	33747963	14.081 ppb
Surrogate Spike 30.000	Recovery =		46.94%
4) SA Octacosane(S)	11.13	28435105	18.220 ppb
Surrogate Spike 30.000	Recovery =		60.73%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	481810554	367.595 ppb
2) HBTM Motor Oil (C18-C36)	11.45	137887511	137.026 ppb

Data File: G:\APOLLO\DATA\110801\801003.D
Sample : DIESEL 400/1000 7/27/11





Quantitation Report (Not Reviewed)

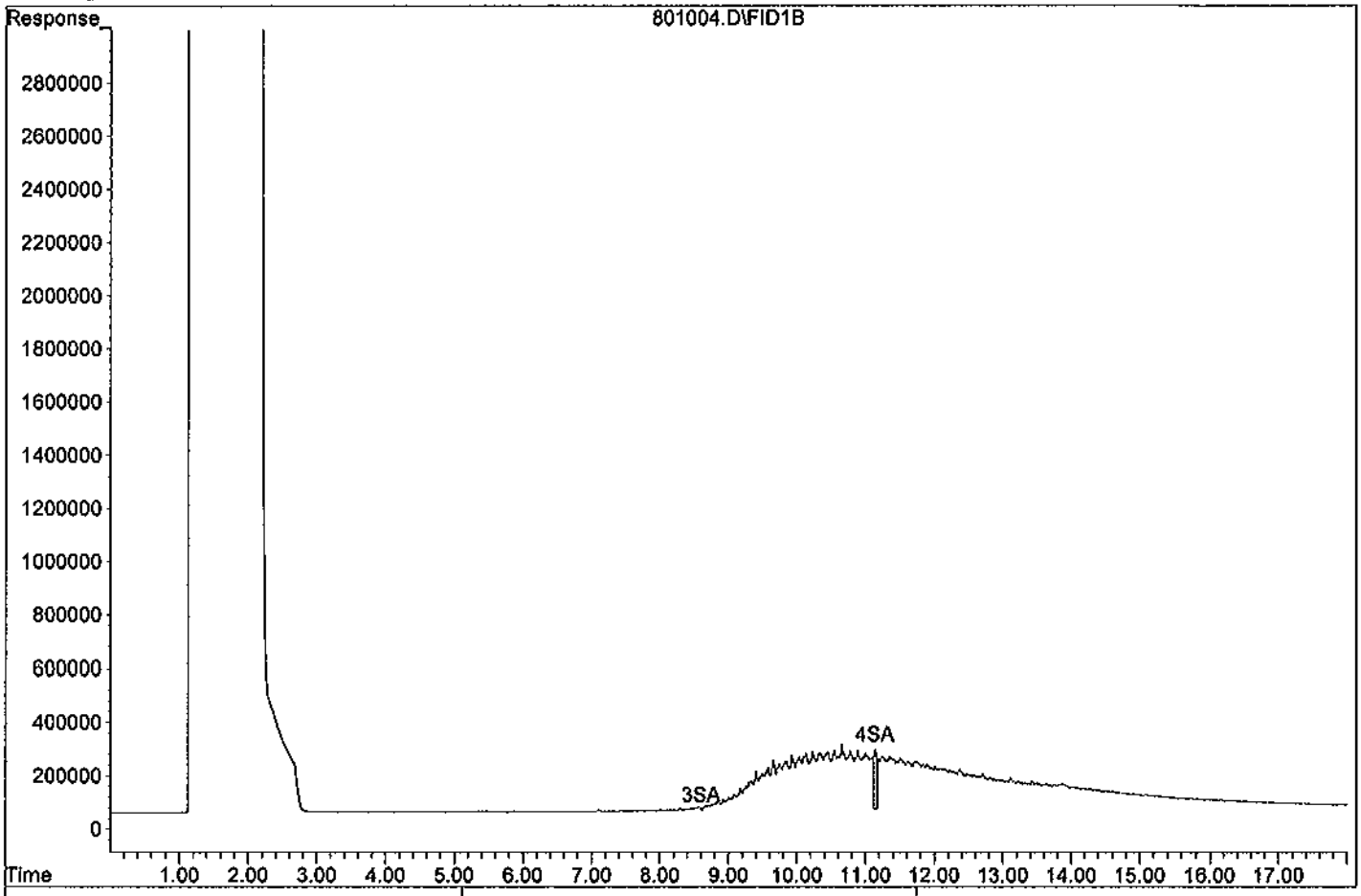
Data File : G:\APOLLO\DATA\110801\801004.D Vial: 4
Acq On : 8-1-11 11:10:14 Operator: LAC
Sample : MOTOR OIL 400/1000 7/27/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

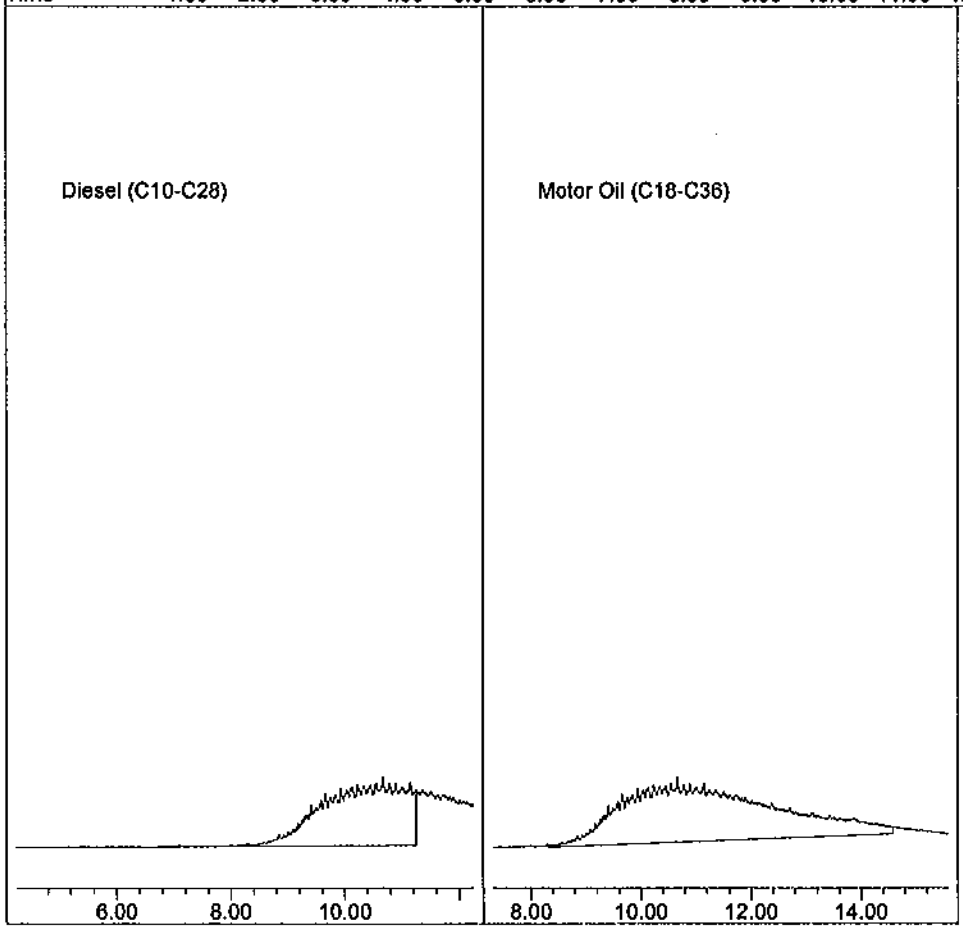
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	160010	0.067 ppb
Surrogate Spike 30.000	Recovery =		0.22%
4) SA Octacosane(S)	11.14	7169153	4.594 ppb
Surrogate Spike 30.000	Recovery =		15.31%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	225760073	172.242 ppb
2) HBTM Motor Oil (C18-C36)	11.45	393841545	391.380 ppb

Data File: G:\APOLLO\DATA\110801\801004.D
Sample : MOTOR OIL 400/1000 7/27/11





TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 08/01/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 801026,27.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	655356	639510	2.4	HATM	
2	HBTM	Motor Oil (C18-C36)	503145	496692	1.3	HBTM	
3							
4							
5							
6							
7							
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30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			1.9		

Quantitation Report (Not Reviewed)

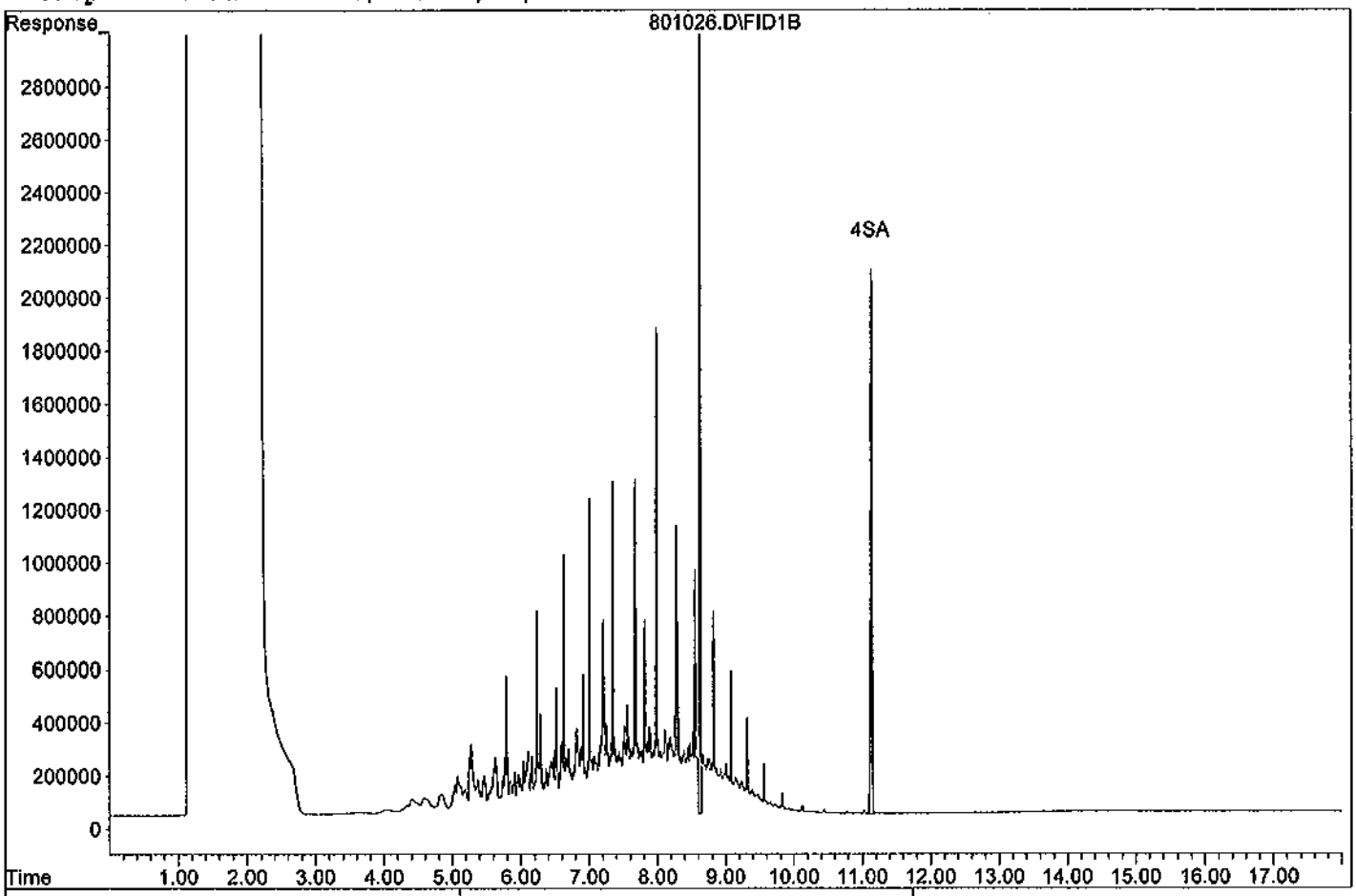
Data File : G:\APOLLO\DATA\110801\801026.D Vial: 26
Acq On : 8-1-11 20:03:49 Operator: LAC
Sample : DIESEL 400/1000 7/27/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

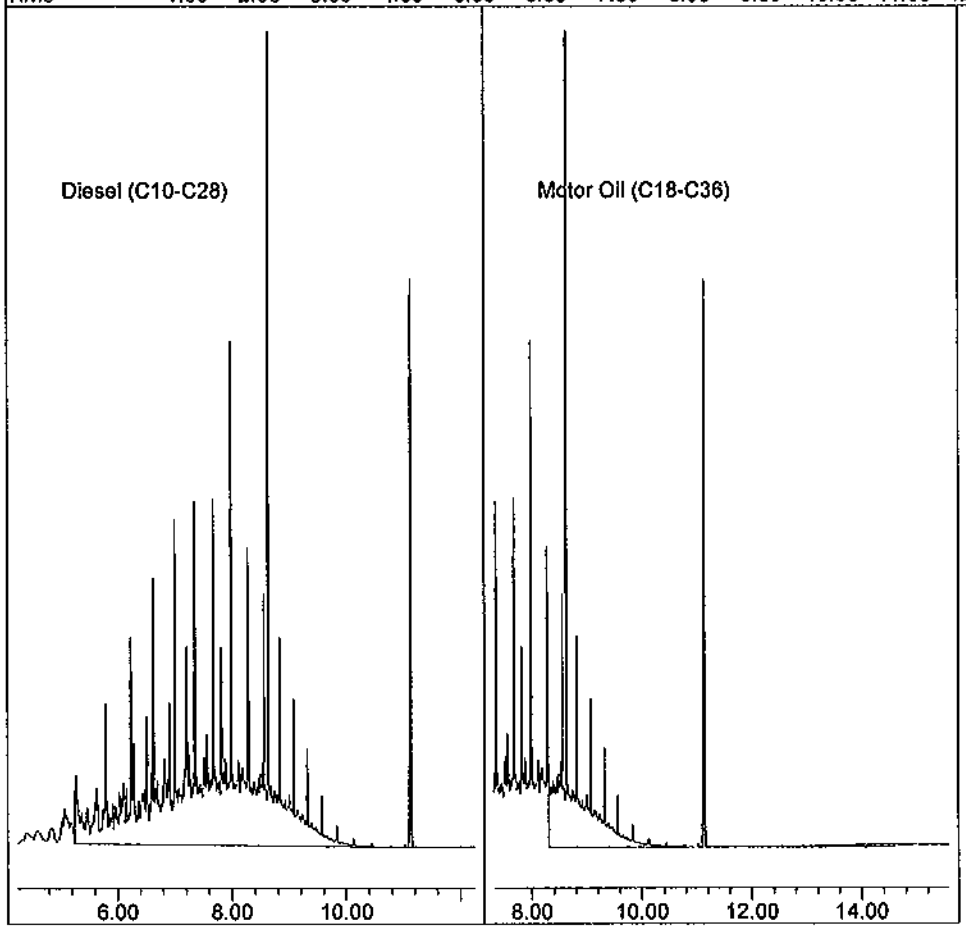
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	35469660	14.799 ppb
Surrogate Spike 30.000	Recovery =		49.33%
4) SA Octacosane(S)	11.13	29858369	19.132 ppb
Surrogate Spike 30.000	Recovery =		63.77%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	511607670	390.328 ppb
2) HBTM Motor Oil (C18-C36)	11.45	139740616	138.867 ppb

Data File: G:\APOLLO\DATA\110801\801026.D
Sample : DIESEL 400/1000 7/27/11





Quantitation Report (Not Reviewed)

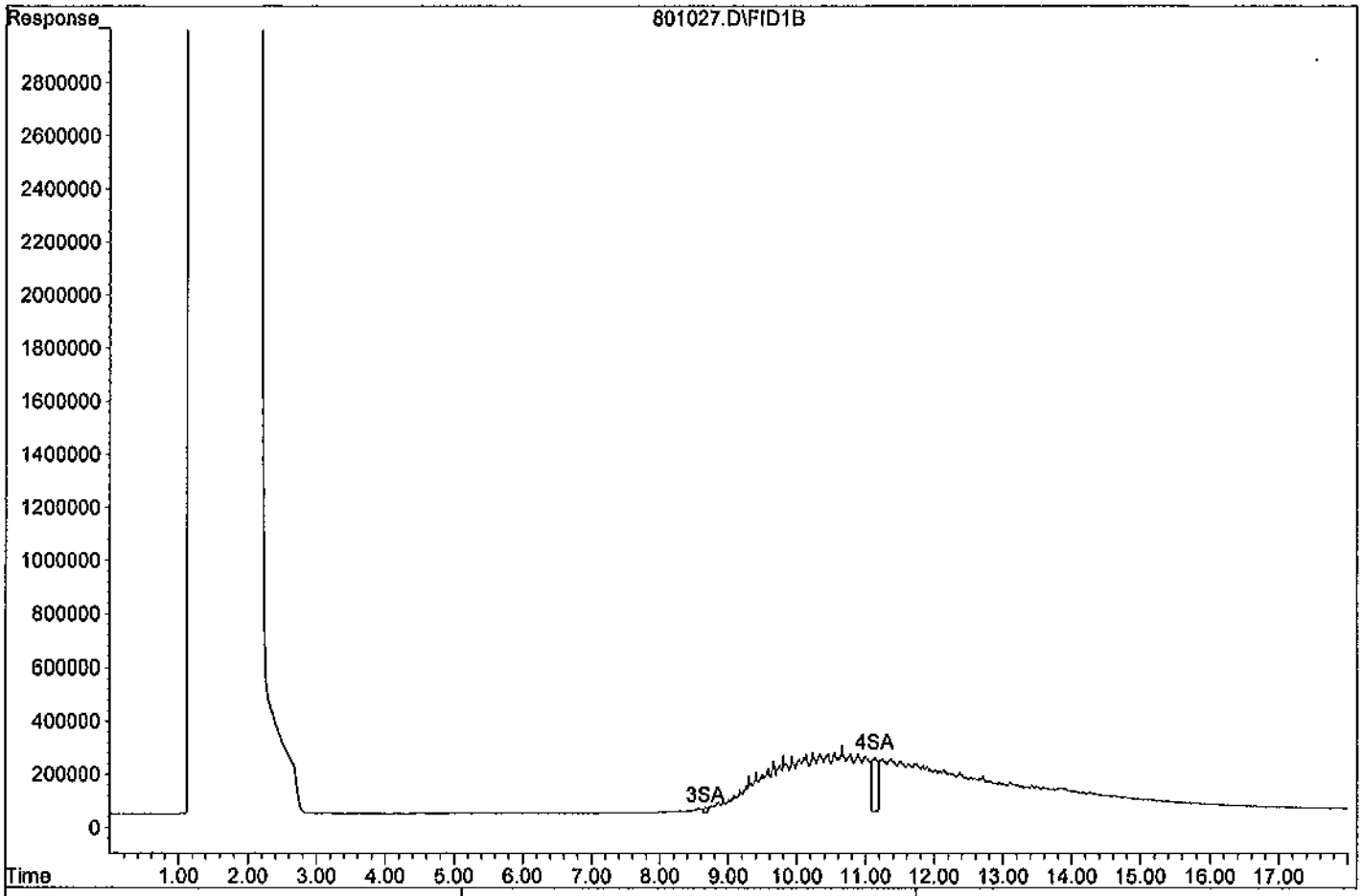
Data File : G:\APOLLO\DATA\110801\801027.D Vial: 27
Acq On : 8-1-11 20:28:13 Operator: LAC
Sample : MOTOR OIL 400/1000 7/27/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

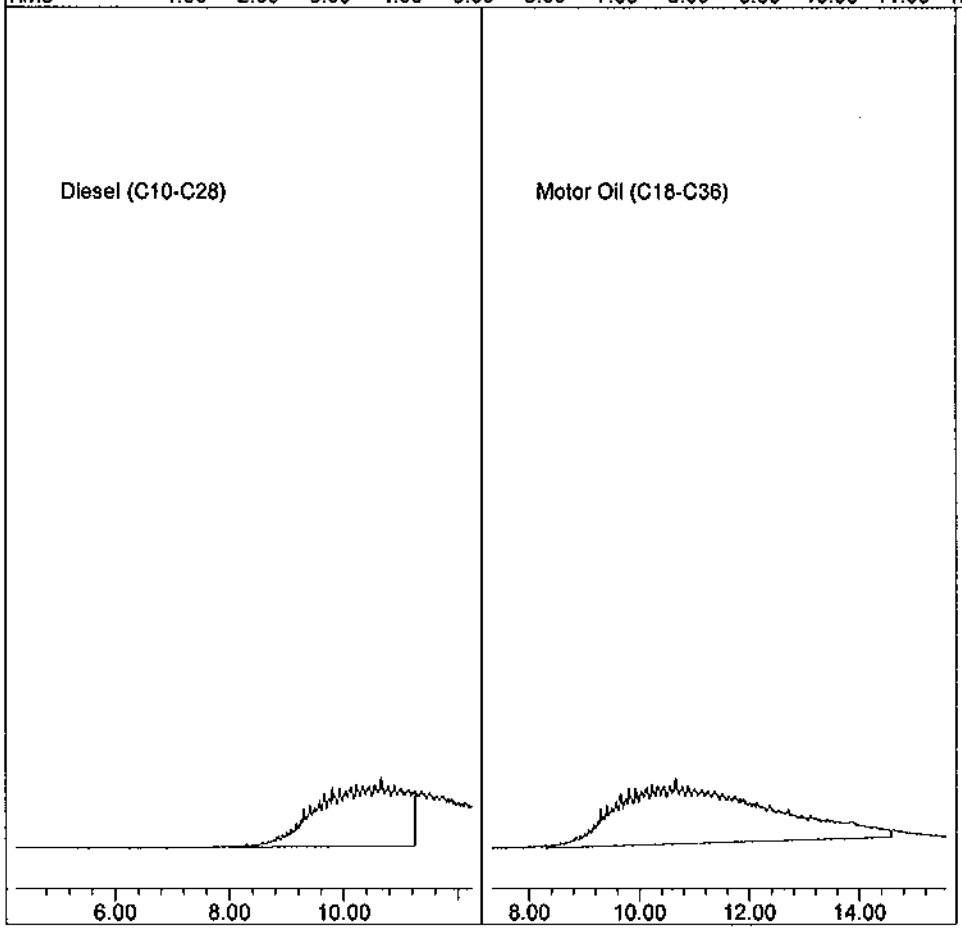
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.67	653467	0.273	ppb
Surrogate Spike 30.000	Recovery =		0.91%	
4) SA Octacosane(S)	11.14	11904713	7.628	ppb
Surrogate Spike 30.000	Recovery =		25.43%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	221622014	169.085	ppb
2) HBTM Motor Oil (C18-C36)	11.45	397353333	394.870	ppb

Data File: G:\APOLLO\DATA\110801\801027.D
Sample : MOTOR OIL 400/1000 7/27/11





TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 08/02/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 801041,42.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	655356	680678	3.9	HATM	
2	HBTM	Motor Oil (C18-C36)	503145	513878	2.1	HBTM	
3							
4							
5							
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29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.0		

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801041.D Vial: 41
Acq On : 8-2-11 2:07:55 Operator: LAC
Sample : DIESEL 600/1000 7/27/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:22 2011 Quant Results File: TPHNS727.RES

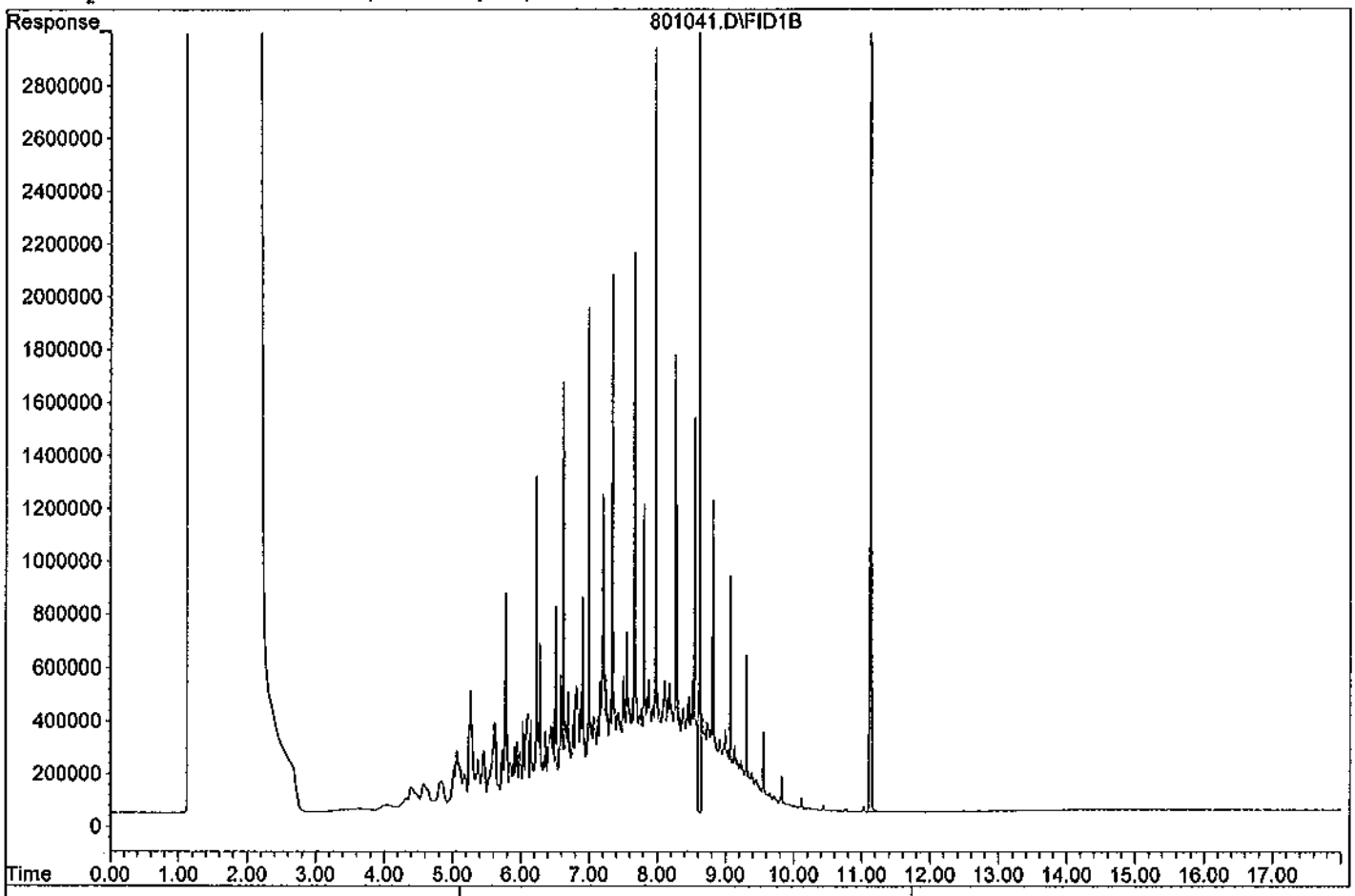
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

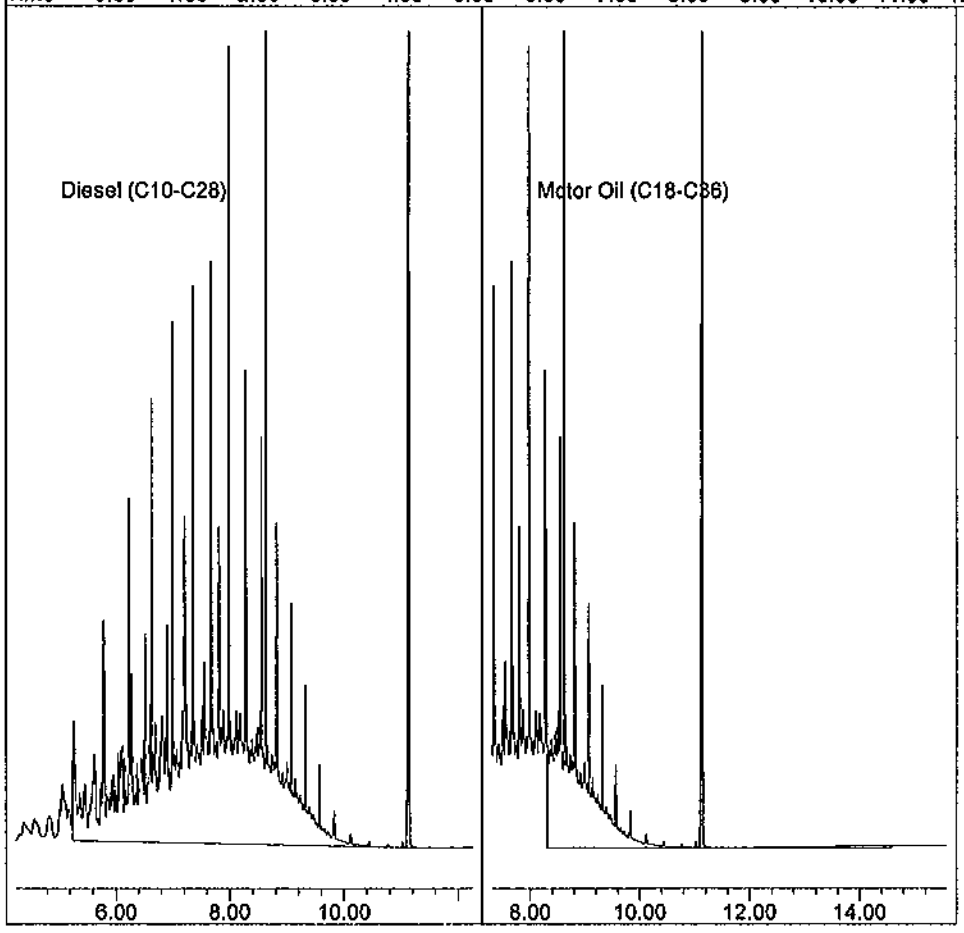
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.63	57596211	24.032 ppb
Surrogate Spike 30.000	Recovery =		80.11%
4) SA Octacosane(S)	11.13	49146455	31.490 ppb
Surrogate Spike 30.000	Recovery =		104.97%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	816814104	623.184 ppb
2) HBTM Motor Oil (C18-C36)	11.45	220963966	219.583 ppb

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801041.D
Sample : DIESEL 600/1000 7/27/11





Quantitation Report (Not Reviewed)

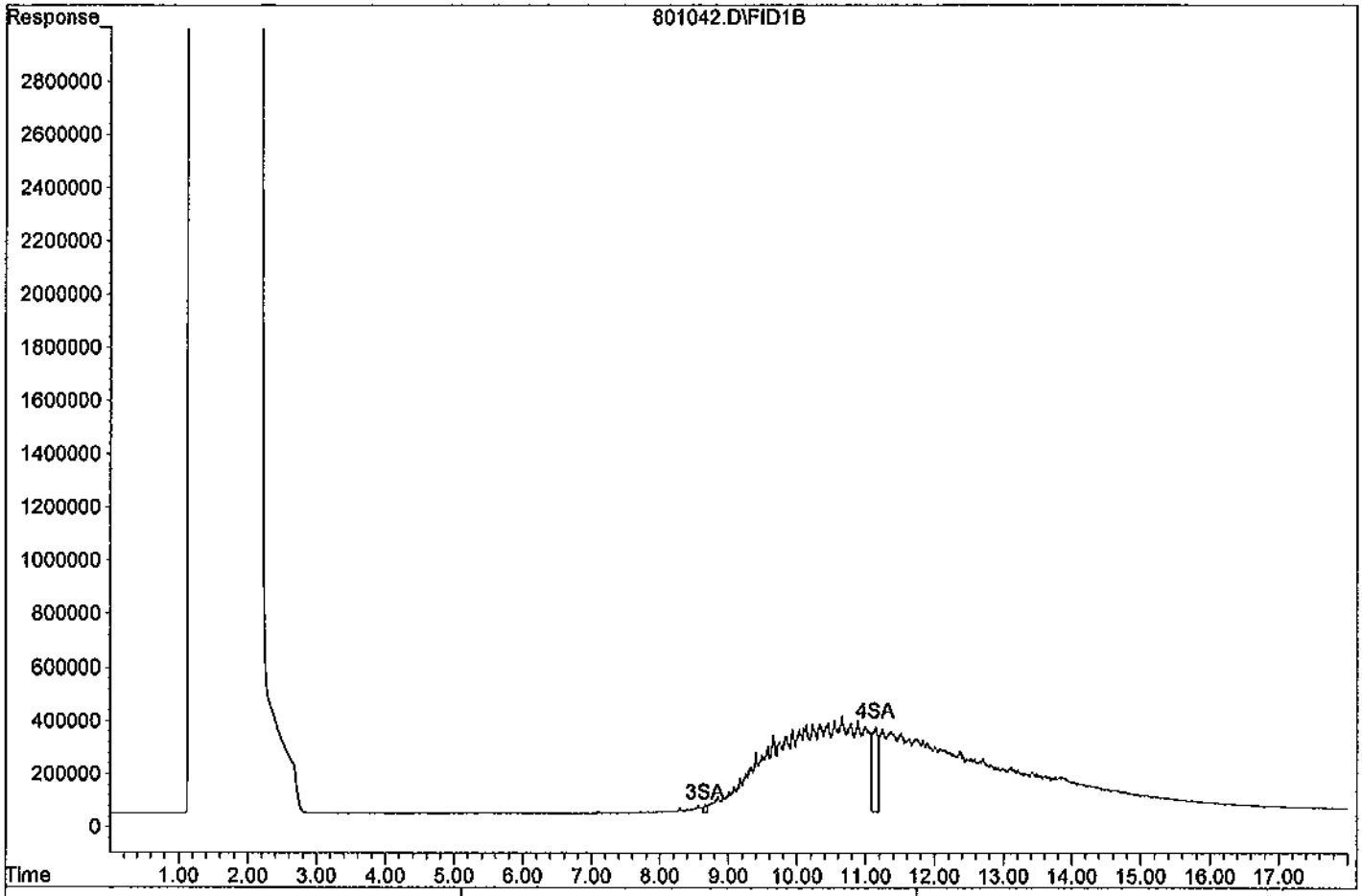
Data File : G:\APOLLO\DATA\110801\801042.D Vial: 42
Acq On : 8-2-11 2:32:24 Operator: LAC
Sample : MOTOR OIL 600/1000 7/27/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 14:22 2011 Quant Results File: TPHNS727.RES

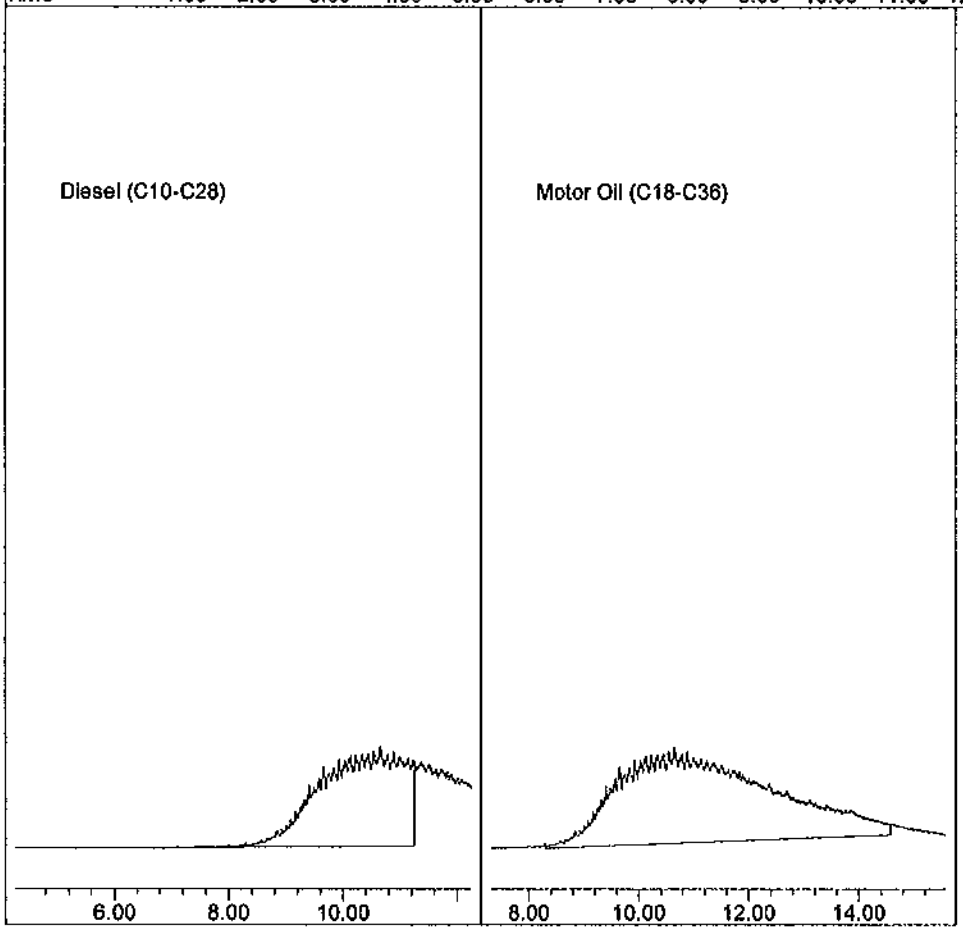
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.67	918877	0.383 ppb
Surrogate Spike 30.000	Recovery =		1.28%
4) SA Octacosane(S)	11.14	19002414	12.176 ppb
Surrogate Spike 30.000	Recovery =		40.59%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	333979845	254.808 ppb
2) HBTM Motor Oil (C18-C36)	11.45	616653610	612.799 ppb

Data File: G:\APOLLO\DATA\110801\801042.D
Sample : MOTOR OIL 600/1000 7/27/11





EPA 8015 Modified
Total Petroleum Hydrocarbons
Raw Data

Method Blank
TPH Diesel Water

Blank Name/QCG: **110726W-42275 - 158155**
Batch ID: #TPETD-110726A

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	07/26/11	08/01/11
BLANK	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/26/11	08/01/11
BLANK	SURROGATE: OCTACOSANE (S)	88.4	28-142			%	07/26/11	08/01/11
BLANK	SURROGATE: ORTHO-TERPHEN	82.0	57-132			%	07/26/11	08/01/11

Quant Method: TPHNS727.M
Run #: 801012
Instrument: Apollo
Sequence: 110801
Initials: LA

GC SC-Blank-REG MDLs
Printed: 08/25/11 11:18:38 AM

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110801\801012.D Vial: 12
Acq On : 8-1-11 14:24:36 Operator: LAC
Sample : 110726A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 14:25 2011 Quant Results File: TPHNS727.RES

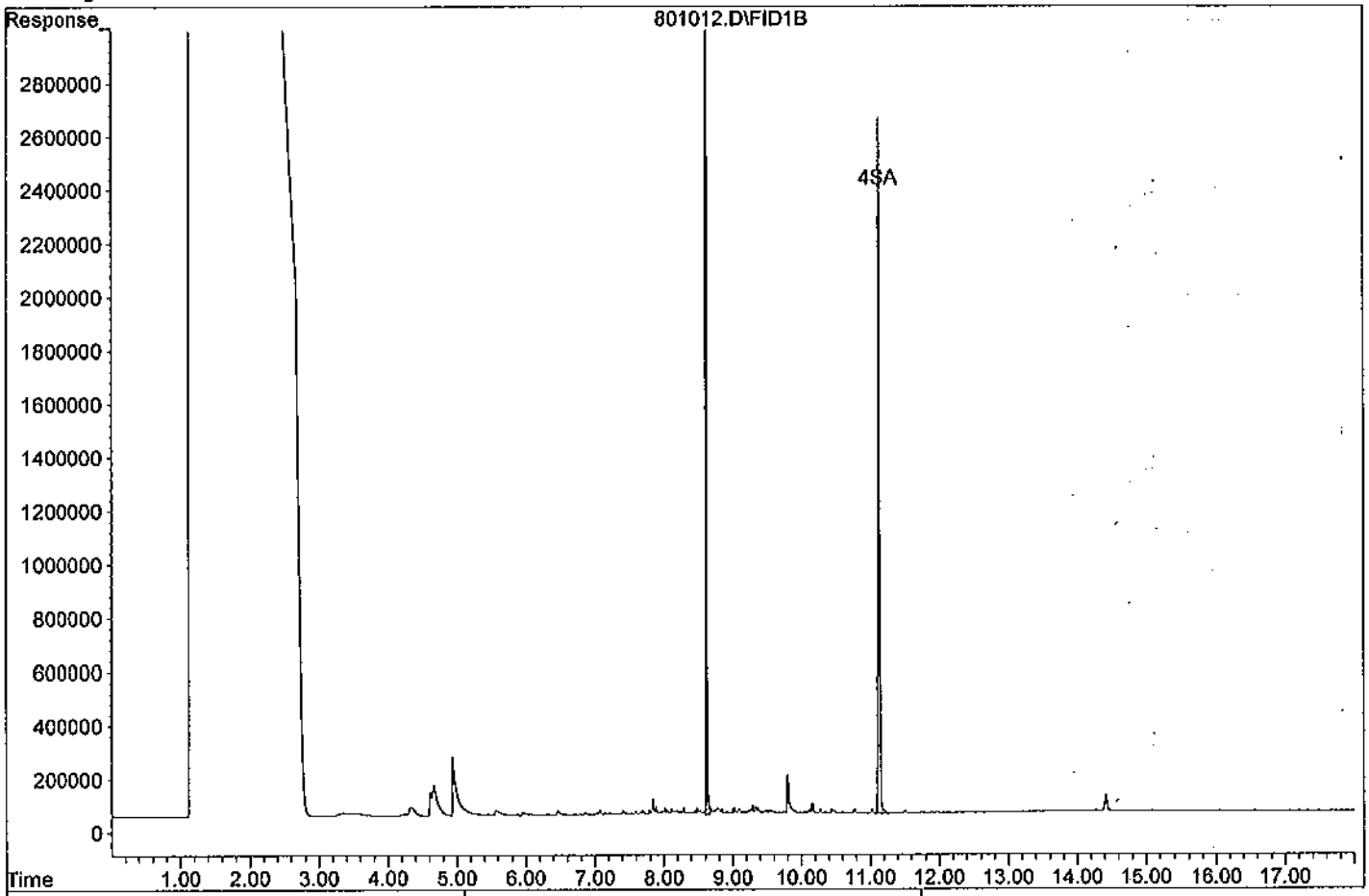
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

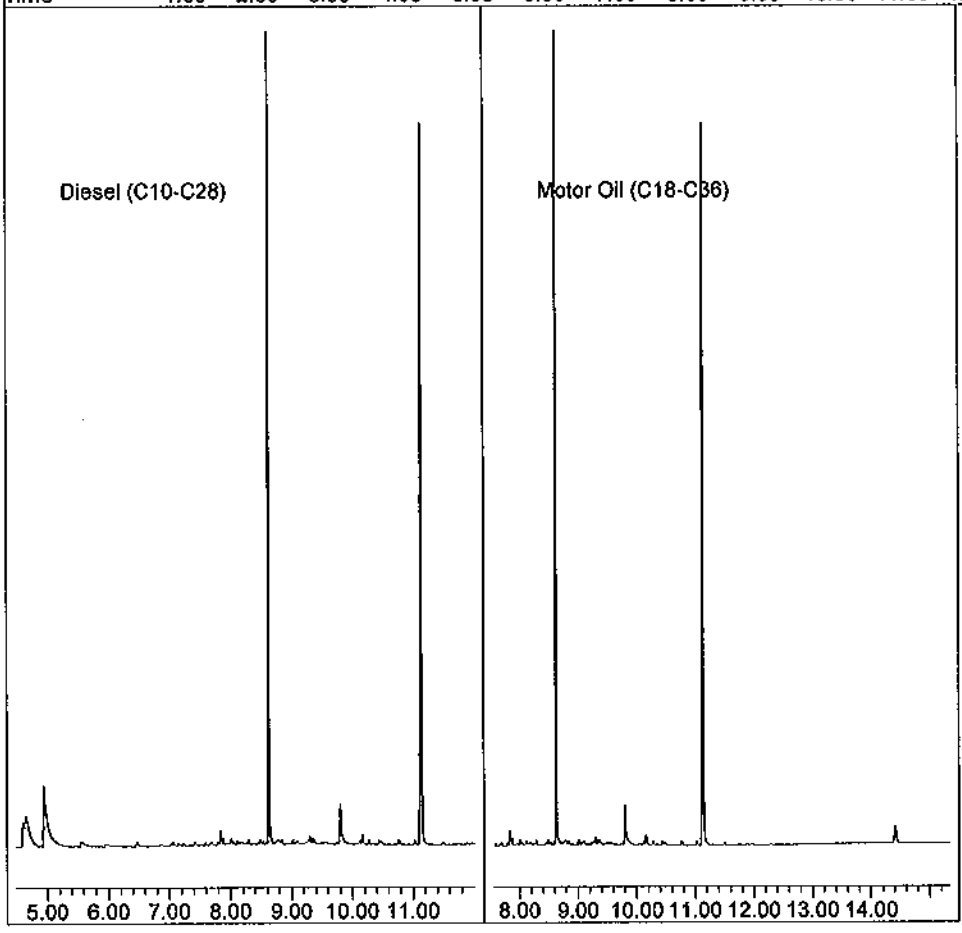
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	35851505	74.794 ppb
Surrogate Spike 150.000		Recovery =	49.86%
4) SA Octacosane(S)	11.13	38063129	121.944 ppb
Surrogate Spike 150.000		Recovery =	81.30%
Target Compounds			

Not Used
LAC 8/25/11

Data File: G:\APOLLO\DATA\110801\801012.D
Sample : 110726A BLK 5/1000





Quantitation Report (Not Reviewed)

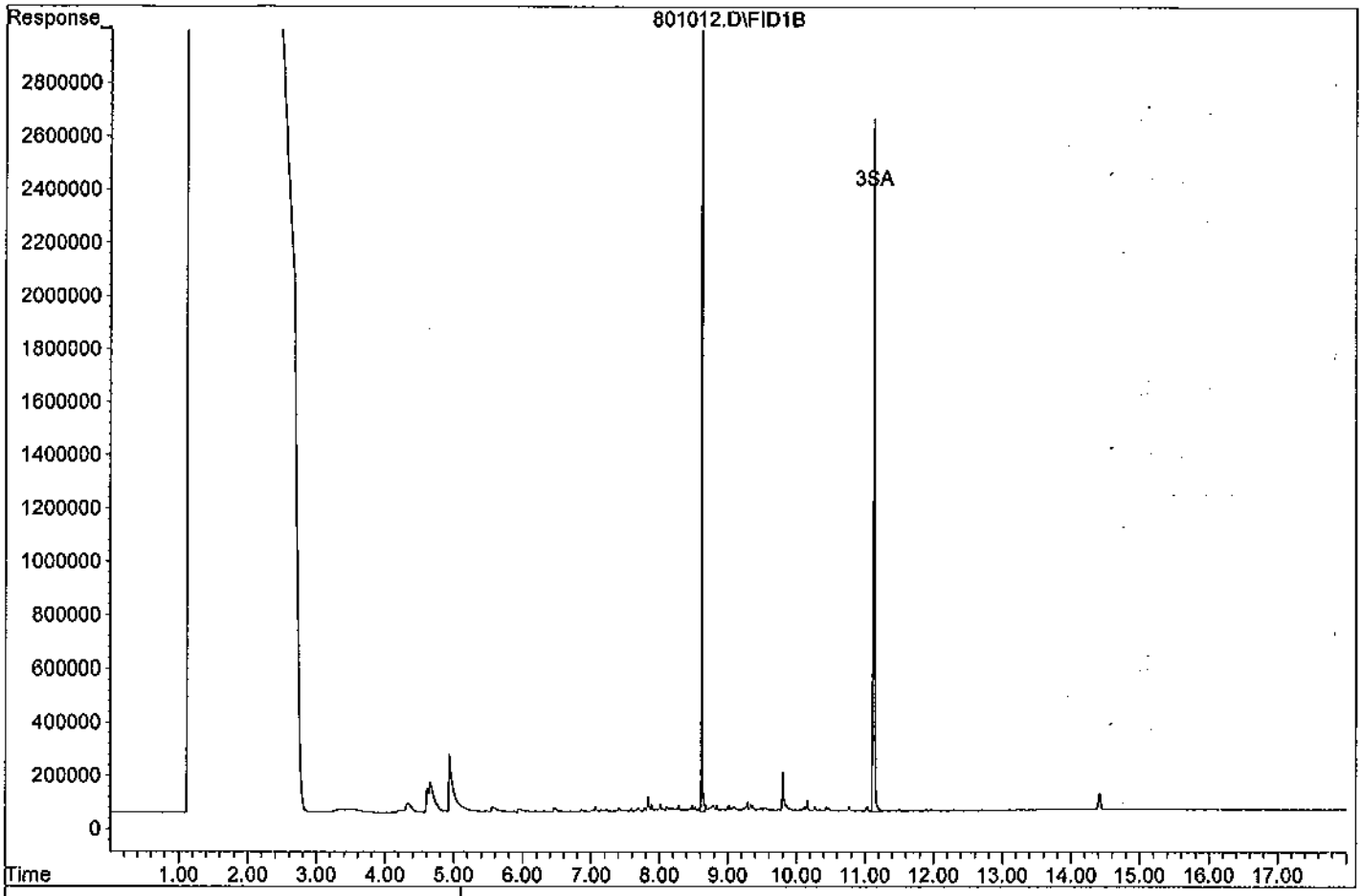
Data File : G:\APOLLO\DATA\110801\801012.D Vial: 12
Acq On : 8-1-11 14:24:36 Operator: LAC
Sample : 110726A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 14:25 2011 Quant Results File: THCSUR81.RES

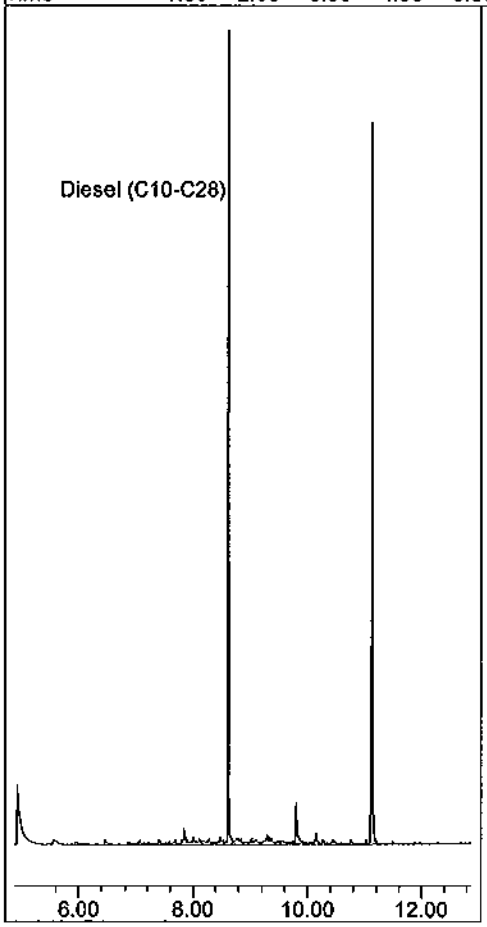
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	35851505	123.000 ppb
Surrogate Spike 150.000		Recovery =	82.00%
3) SA Octacosane(S)	11.13	38063129	132.617 ppb
Surrogate Spike 150.000		Recovery =	88.41%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801012.D
Sample : 110726A BLK 5/1000





Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **110726W-42275 LCS - 158155**
Batch ID: #TPETD-110726A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
DIESEL FUEL	2000	1490	74.5	61-143
LUBE OIL	2000	1670	83.5	61-143
SURROGATE: OCTACOSANE (S)	150	147	98.0	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	151	101	57-132

Comments:

Primary	SPK
Quant Method :	TPHNS727.M
Extraction Date :	07/26/11
Analysis Date :	08/01/11
Instrument :	Apollo
Run :	801013
Initials :	LA

Printed: 08/25/11 11:23:02 AM

APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801013.D
Acq On : 8-1-11 14:48:41
Sample : 110726A LCS-1 5/1000
Misc : Water
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

Vial: 13
Operator: LAC
Inst : Apollo
Multiplr: 5.00

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

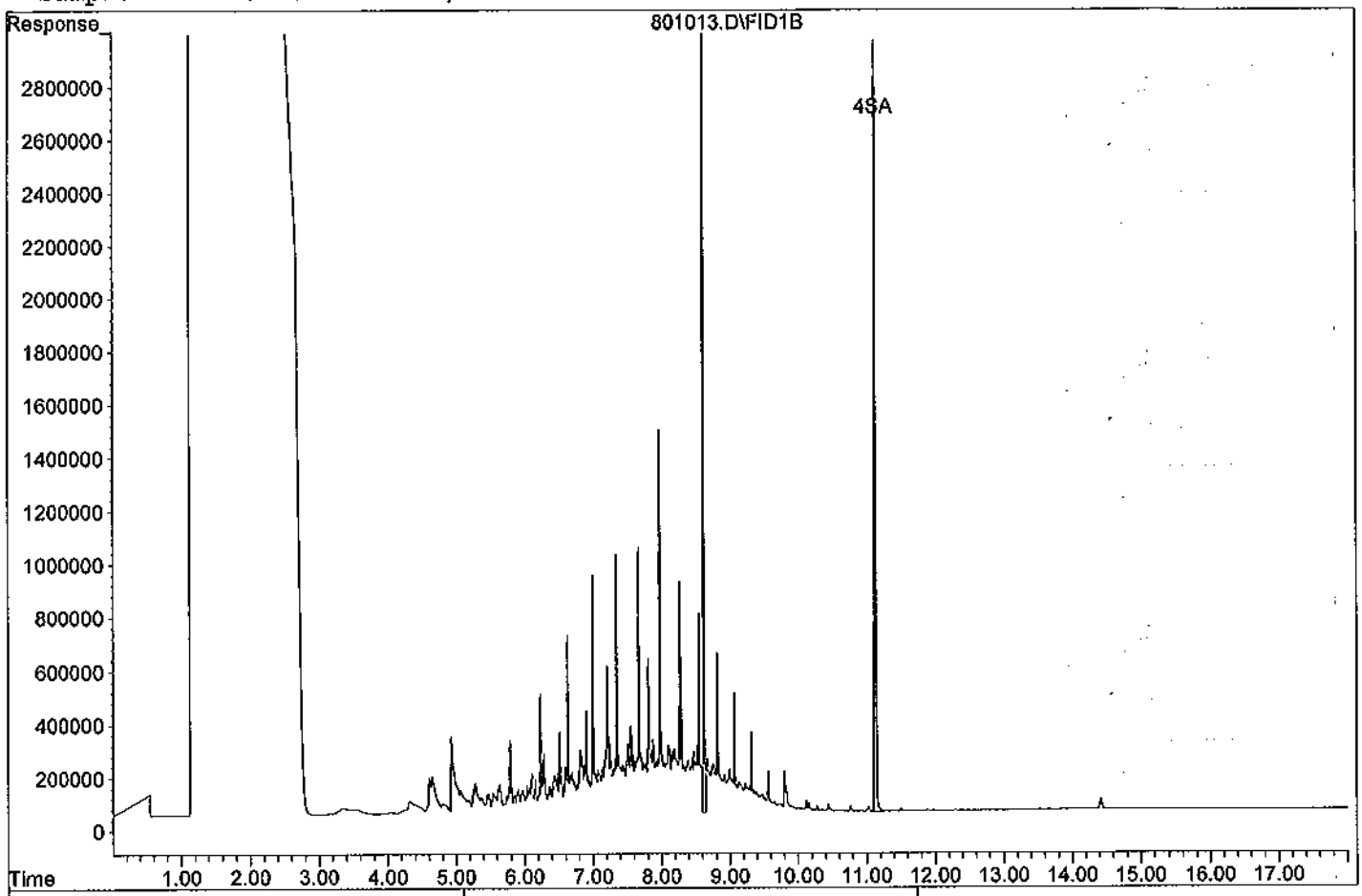
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	44000986	91.795 ppb
Surrogate Spike 150.000		Recovery =	61.20%
4) SA Octacosane(S)	11.13	42096684	134.867 ppb
Surrogate Spike 150.000		Recovery =	89.91%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	390112576	1488.171 ppb
2) HBTM Motor Oil (C18-C36)	11.45	121562166	604.012 ppb

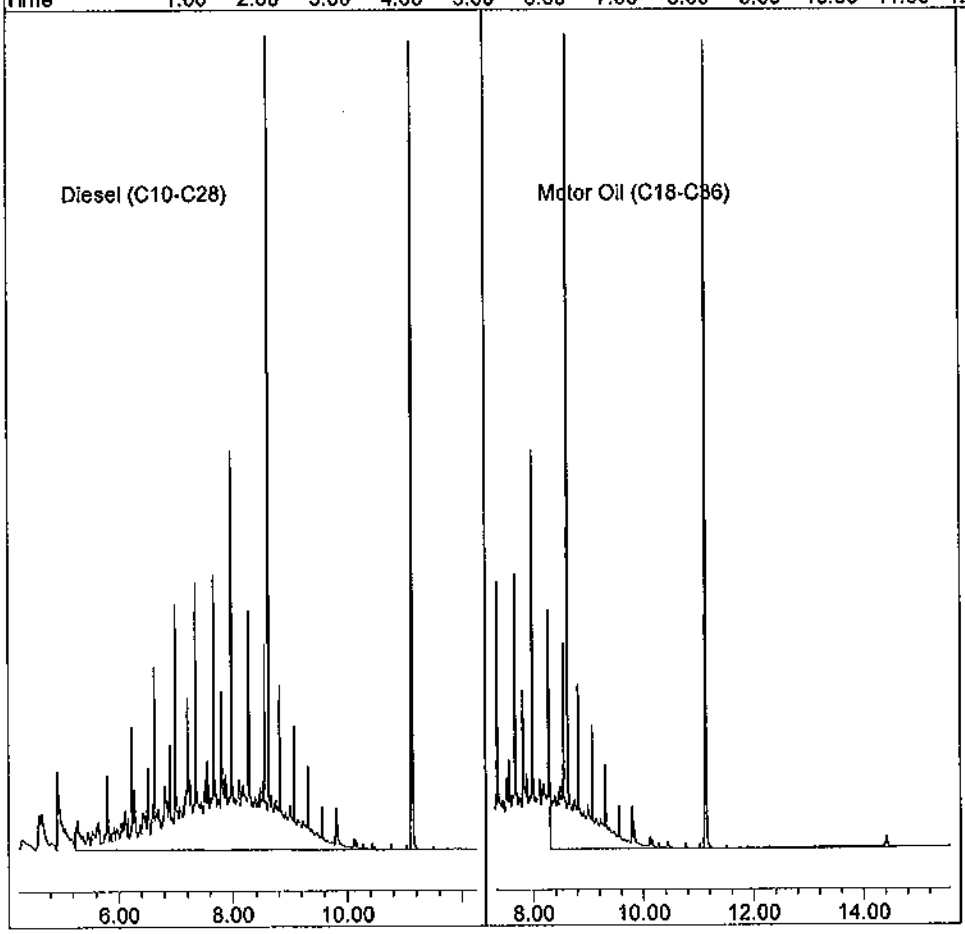
Not Used LAC 8/25/11

Algorithm Check: $\frac{(390112576)(5)}{(655356)(2)} = 1488.17046$ LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801013.D
Sample : 110726A LCS-1 5/1000





Quantitation Report (Not Reviewed)

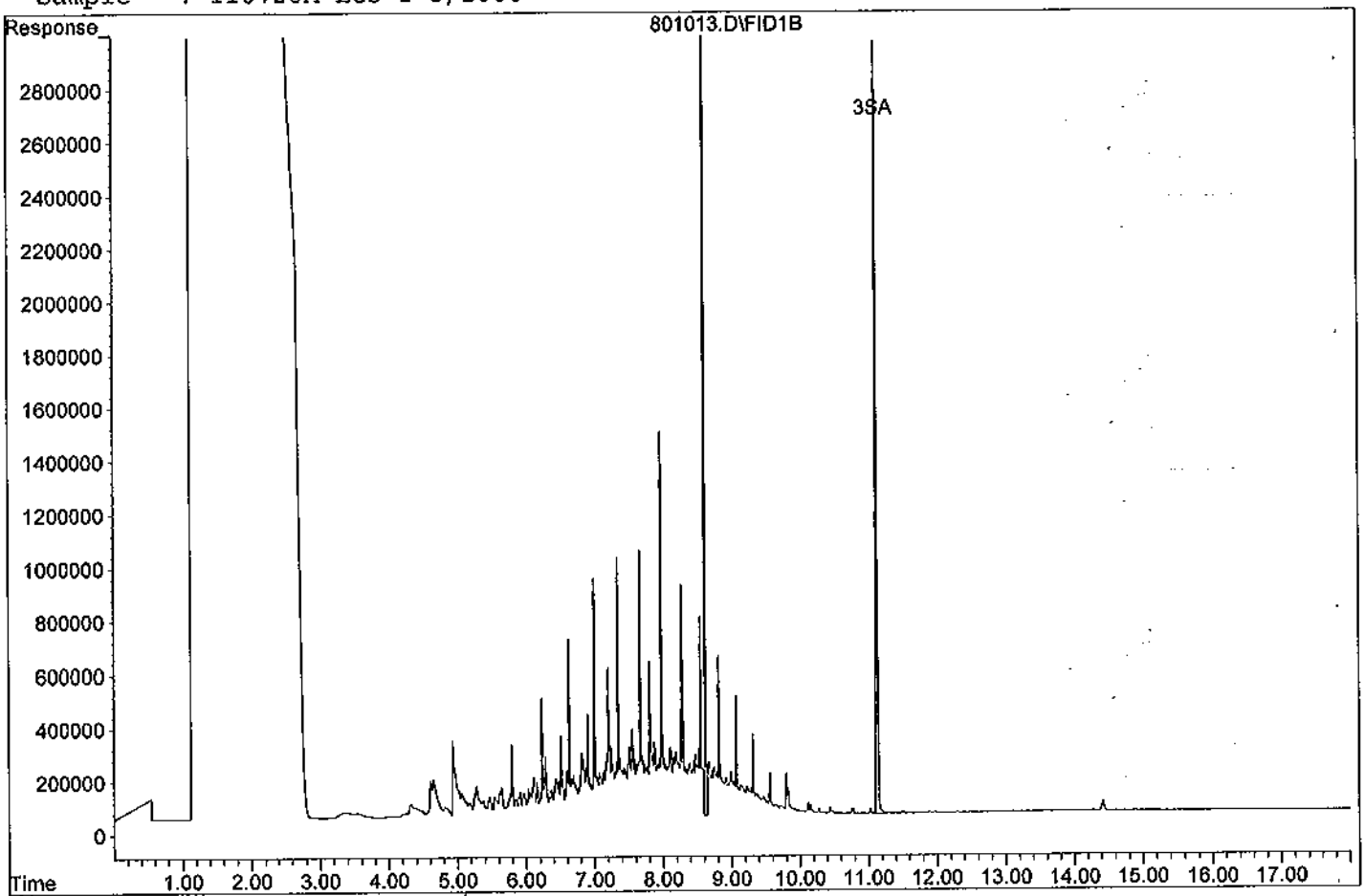
Data File : G:\APOLLO\DATA\110801\801013.D Vial: 13
Acq On : 8-1-11 14:48:41 Operator: LAC
Sample : 110726A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 14:26 2011 Quant Results File: THCSUR81.RES

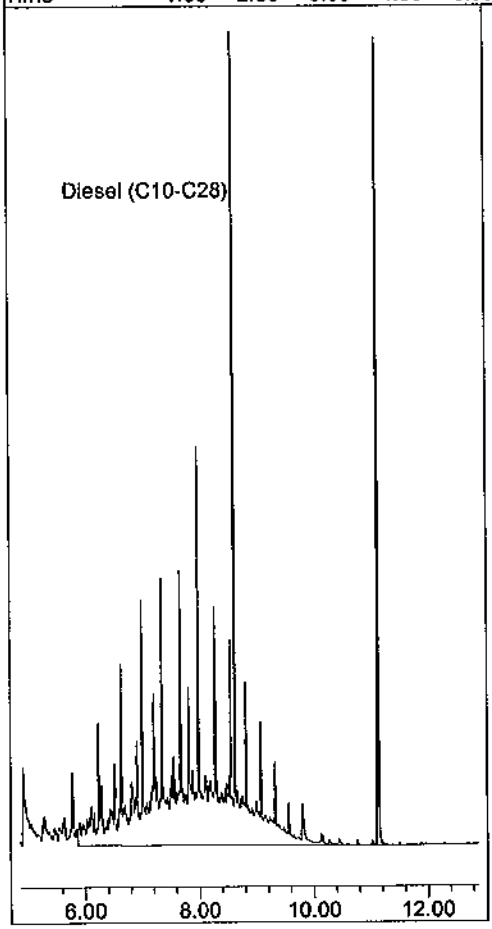
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	44000986	150.959 ppb
Surrogate Spike 150.000		Recovery =	100.64%
3) SA Octacosane(S)	11.13	42096684	146.671 ppb
Surrogate Spike 150.000		Recovery =	97.78%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801013.D
Sample : 110726A LCS-1 5/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801014.D Vial: 14
Acq On : 8-1-11 15:12:49 Operator: LAC
Sample : 110726A LCS-2 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

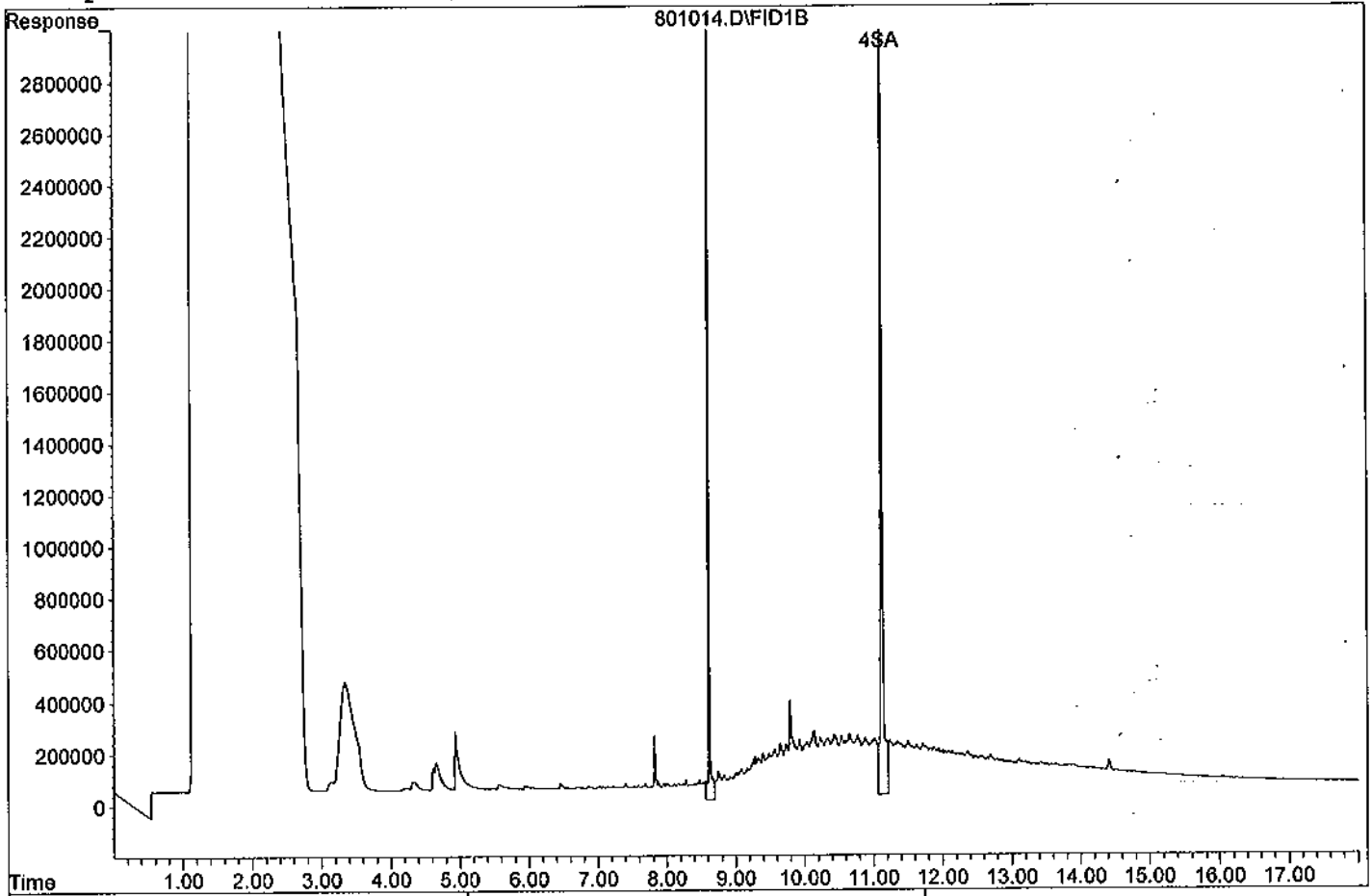
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

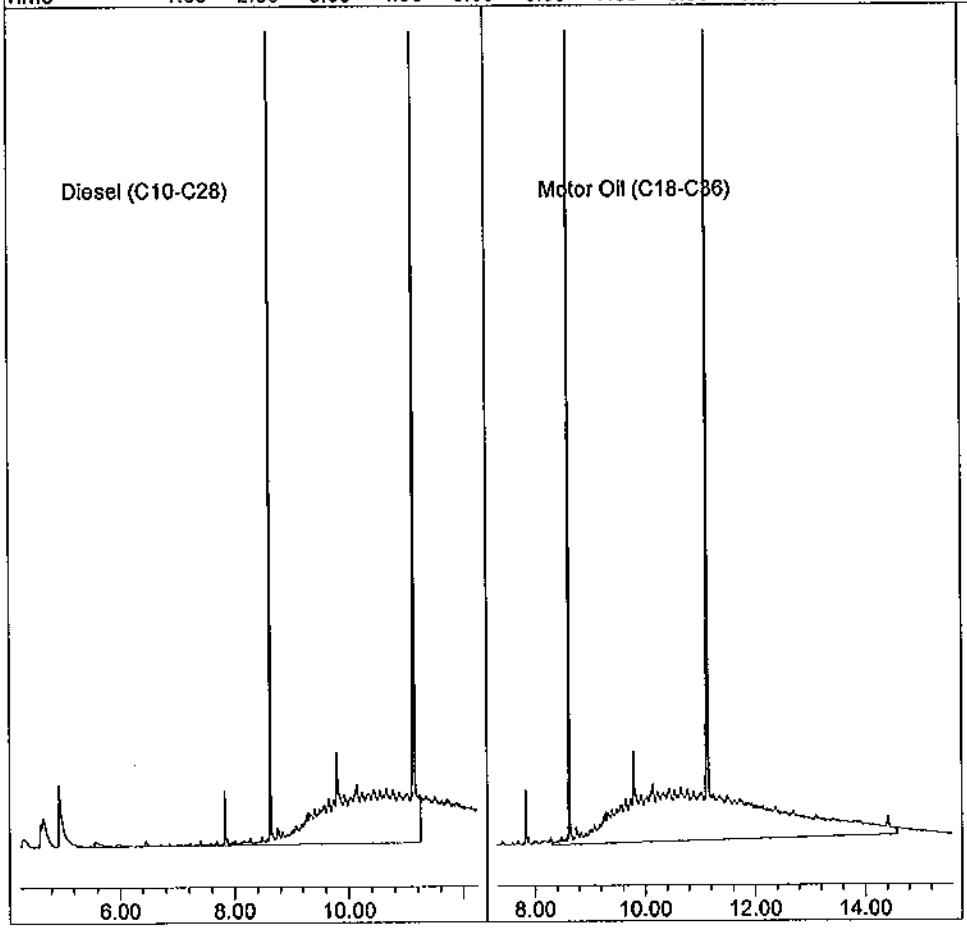
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	44676895	93.205 ppb
Surrogate Spike 150.000		Recovery =	62.14%
4) SA Octacosane(S)	11.14	61128857	195.841 ppb
Surrogate Spike 150.000		Recovery =	130.56%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	191218991	729.447 ppb
2) HBTM Motor Oil (C18-C36)	11.45	335812357	1668.568 ppb

Not Used
LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801014.D
Sample : 110726A LCS-2 5/1000





Quantitation Report (Not Reviewed)

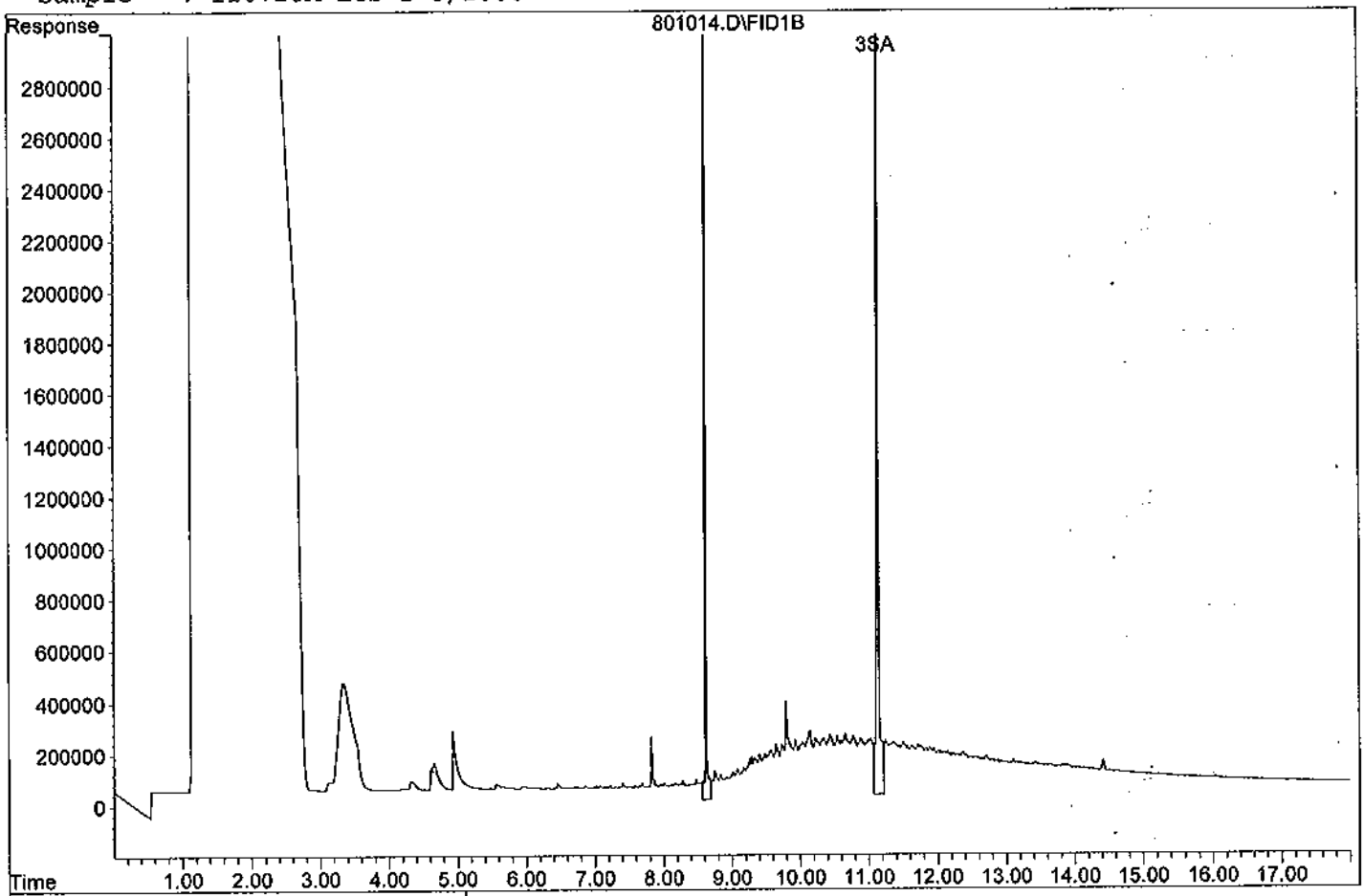
Data File : G:\APOLLO\DATA\110801\801014.D Vial: 14
Acq On : 8-1-11 15:12:49 Operator: LAC
Sample : 110726A LCS-2 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 14:26 2011 Quant Results File: THCSUR81.RES

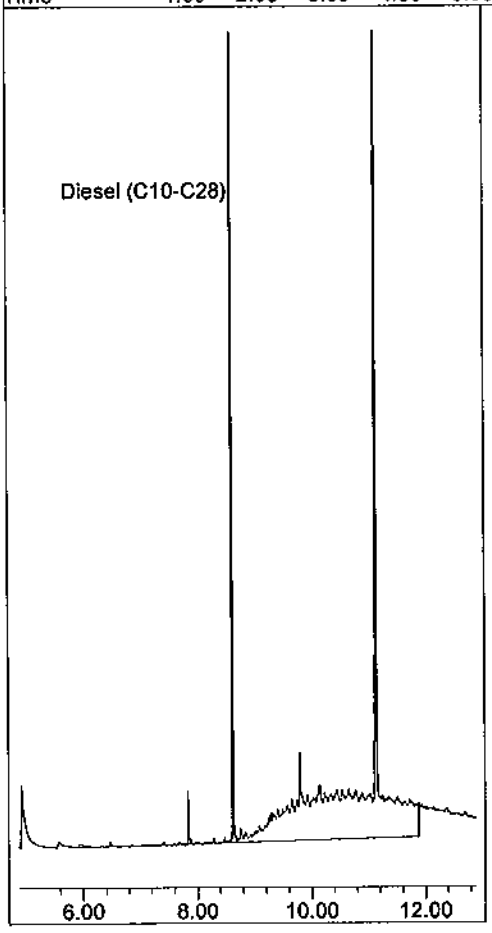
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	44676895	153.278 ppb
Surrogate Spike 150.000		Recovery =	102.19%
3) SA Octacosane(S)	11.14	61128857	212.982 ppb
Surrogate Spike 150.000		Recovery =	141.99%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801014.D
Sample : 110726A LCS-2 5/1000





Matrix Spike Recoveries
TPH Diesel Water

APPL ID: **110726W-42275 MS - 158155**
Batch ID: #TPETD-110726A
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL FUEL	2000	ND	1390	1690	69.5	84.5	61-143	19.5	30
LUBE OIL	2000	ND	1450	1290	72.5	64.5	61-143	11.7	30
SURROGATE: OCTACOSANE (S)	150	NA	129	150	86.0	100	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	128	155	85.3	103	57-132		

Comments:

Primary	SPK	DUP
Quant Method :	TPHNS727.M	TPHNS727.M
Extraction Date :	07/26/11	07/26/11
Analysis Date :	08/01/11	08/01/11
Instrument :	Apollo	Apollo
Run :	801022	801023
Initials :	LA	

Printed: 08/25/11 11:18:20 AM
APPL MSD SCII

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801022.D Vial: 22
Acq On : 8-1-11 18:26:52 Operator: LAC
Sample : AY42275W16 MS-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

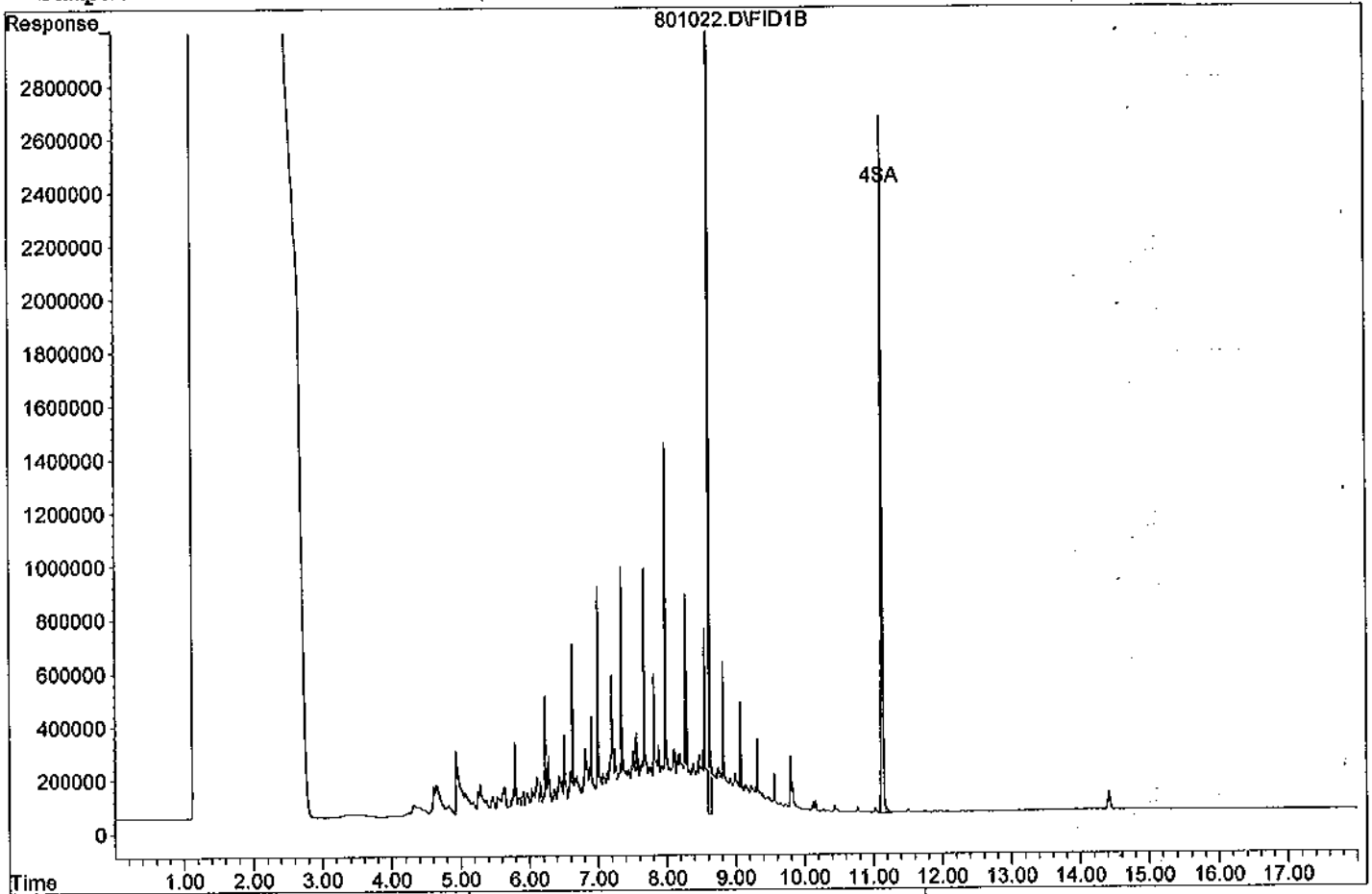
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

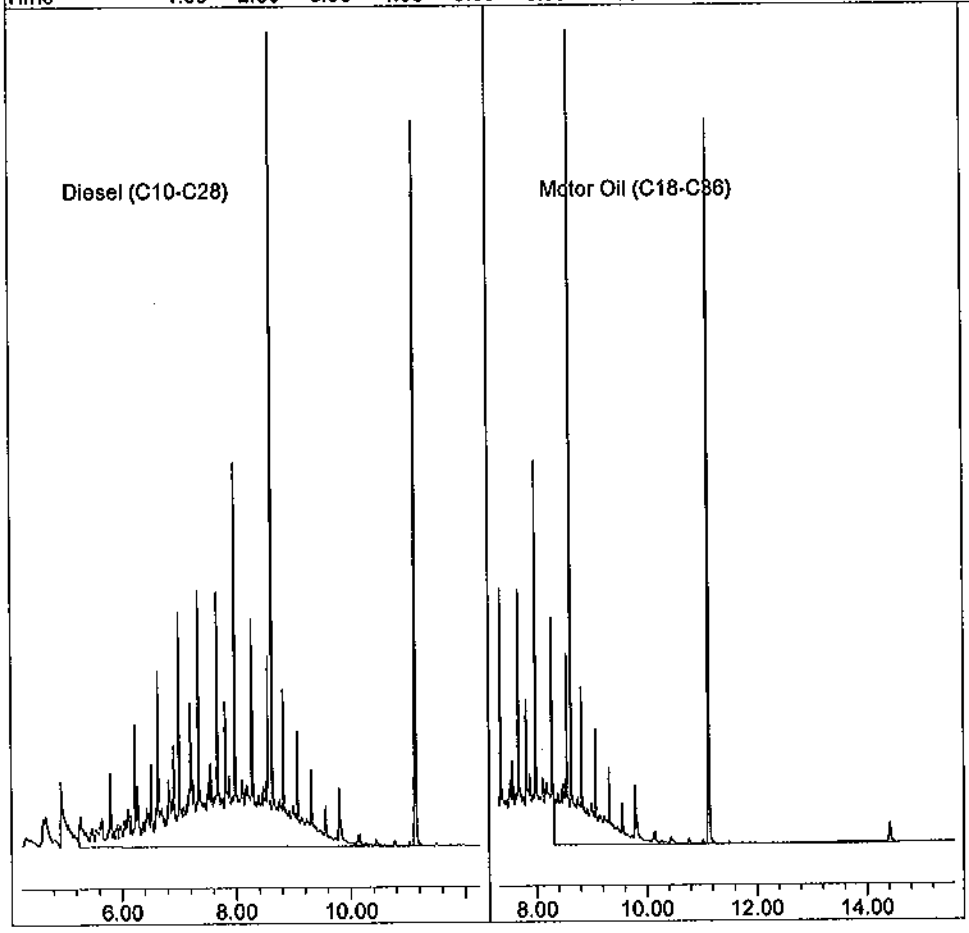
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	38483198	77.946 ppb
Surrogate Spike 145.631		Recovery =	53.52%
4) SA Octacosane(S)	11.13	38010851	118.230 ppb
Surrogate Spike 145.631		Recovery =	81.18%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	376461830	1394.270 ppb
2) HBTM Motor Oil (C18-C36)	11.45	119102684	574.555 ppb

Not Used
LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801022.D
Sample : AY42275W16 MS-1 5/1030





Quantitation Report (Not Reviewed)

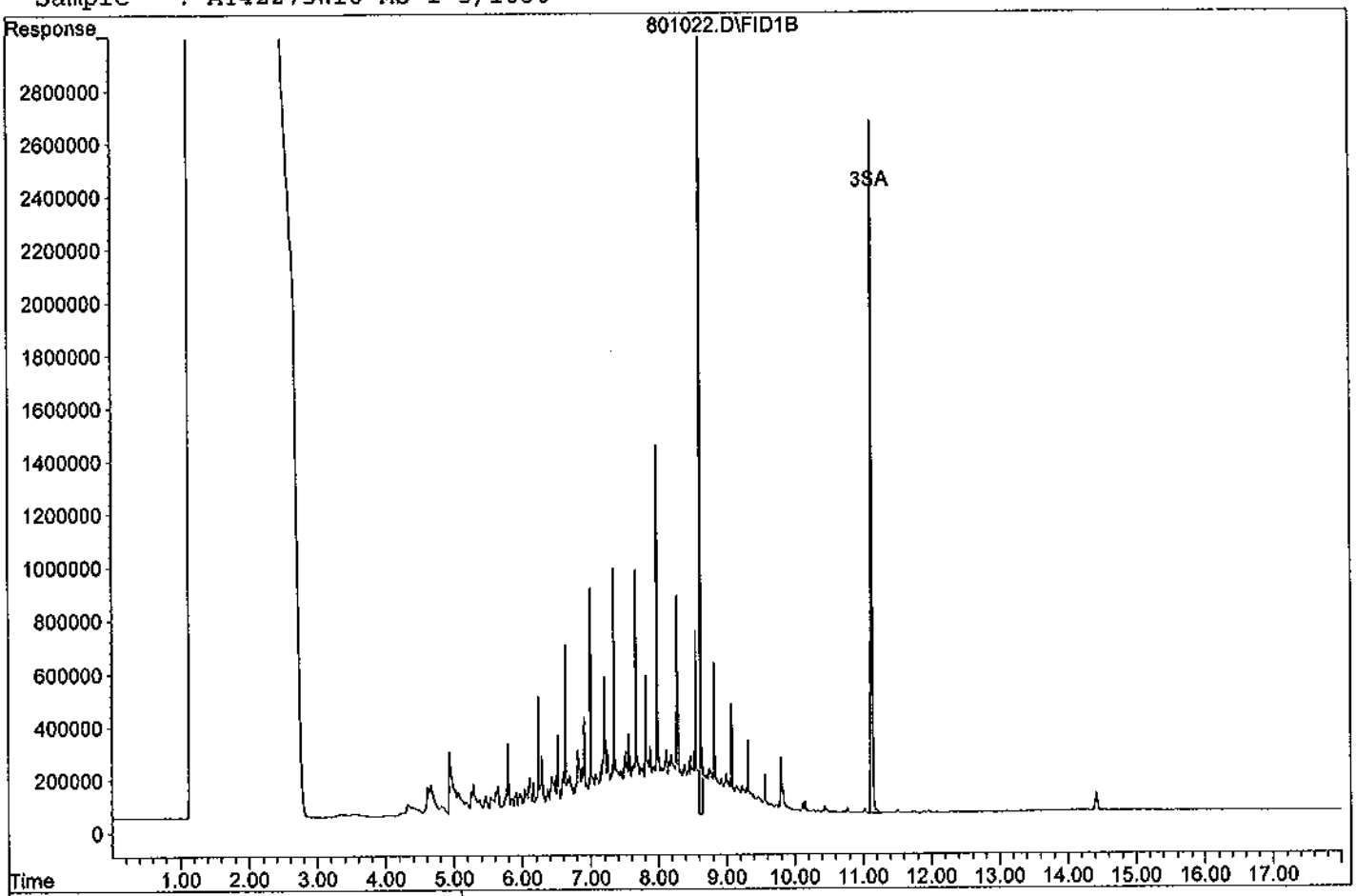
Data File : G:\APOLLO\DATA\110801\801022.D Vial: 22
Acq On : 8-1-11 18:26:52 Operator: LAC
Sample : AY42275W16 MS-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:29 2011 Quant Results File: THCSUR81.RES

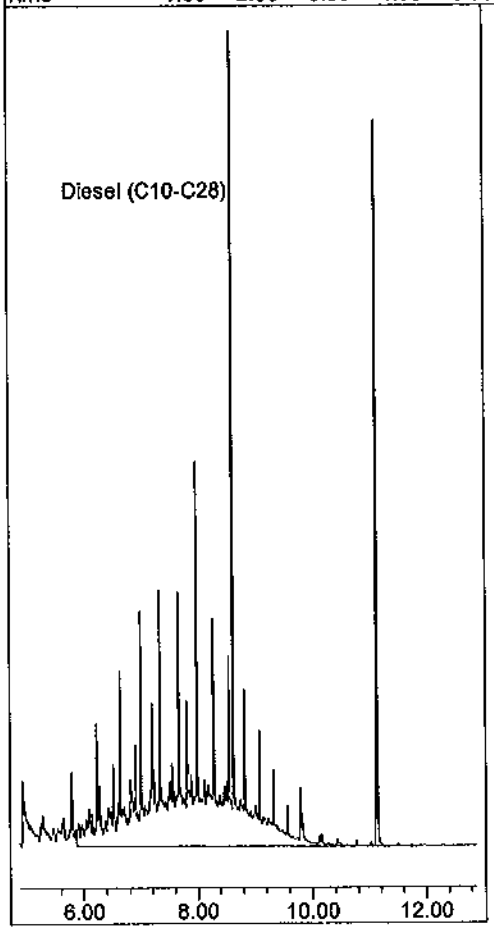
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	38483198	128.183 ppb
Surrogate Spike 145.631		Recovery =	88.02%
3) SA Octacosane(S)	11.13	38010851	128.578 ppb
Surrogate Spike 145.631		Recovery =	88.29%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801022.D
Sample : AY42275W16 MS-1 5/1030





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801023.D Vial: 23
Acq On : 8-1-11 18:50:52 Operator: LAC
Sample : AY42275W13 MSD-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

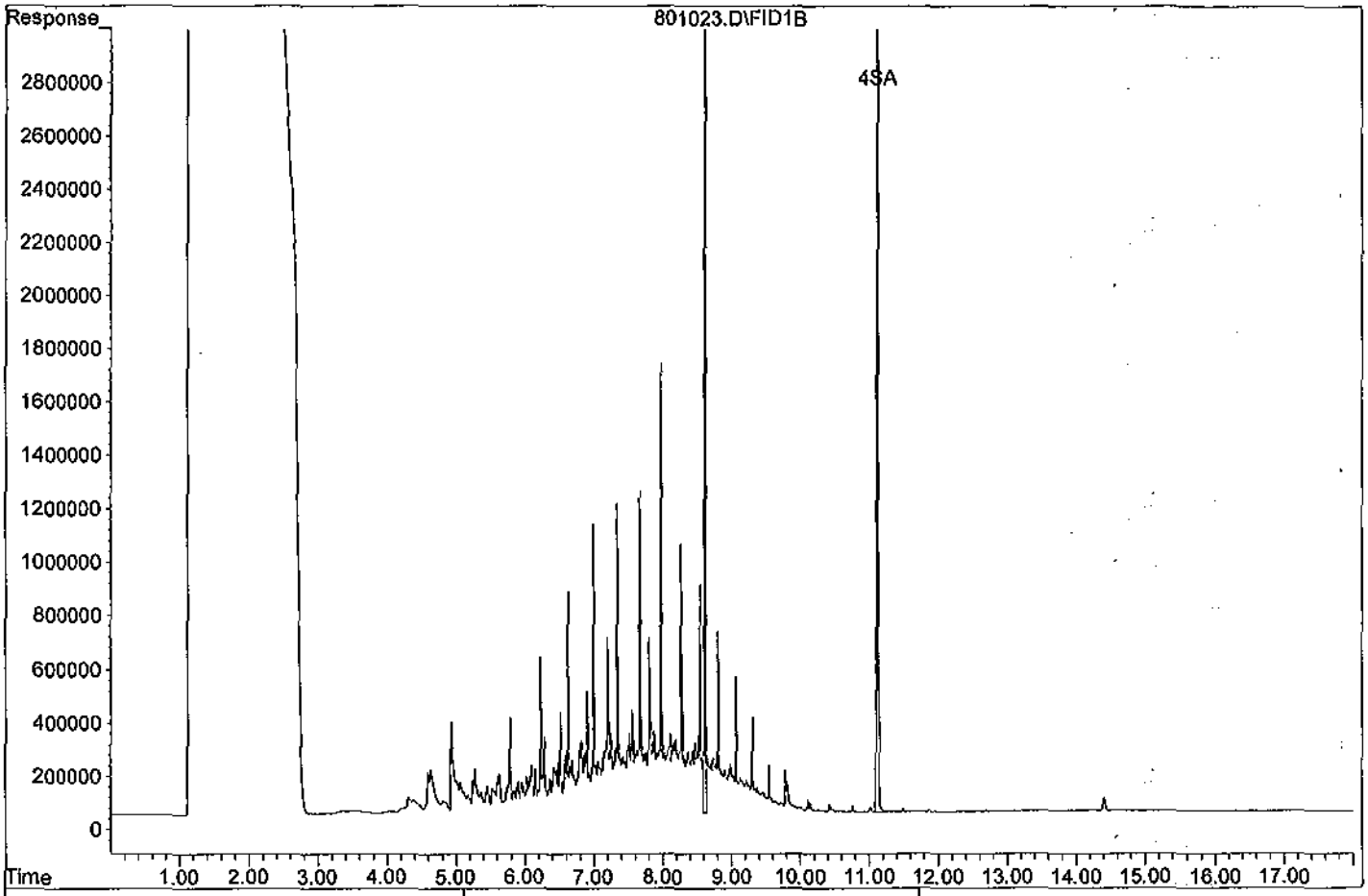
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

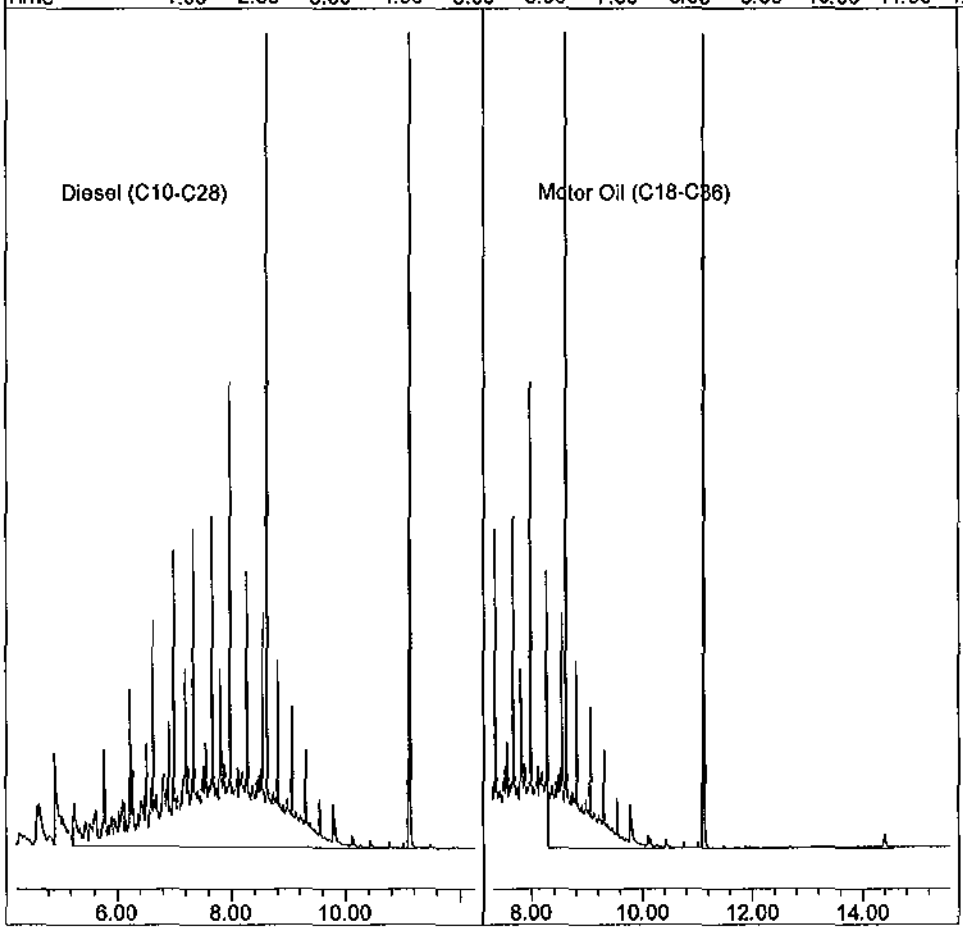
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	46619819	94.426 ppb
Surrogate Spike 145.631		Recovery =	64.84%
4) SA Octacosane(S)	11.13	44474298	138.394 ppb
Surrogate Spike 145.631		Recovery =	94.99%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	457490934	1694.370 ppb
2) HBTM Motor Oil (C18-C36)	11.45	138025726	665.840 ppb

Not Used LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801023.D
Sample : AY42275W13 MSD-1 5/1030





Quantitation Report (Not Reviewed)

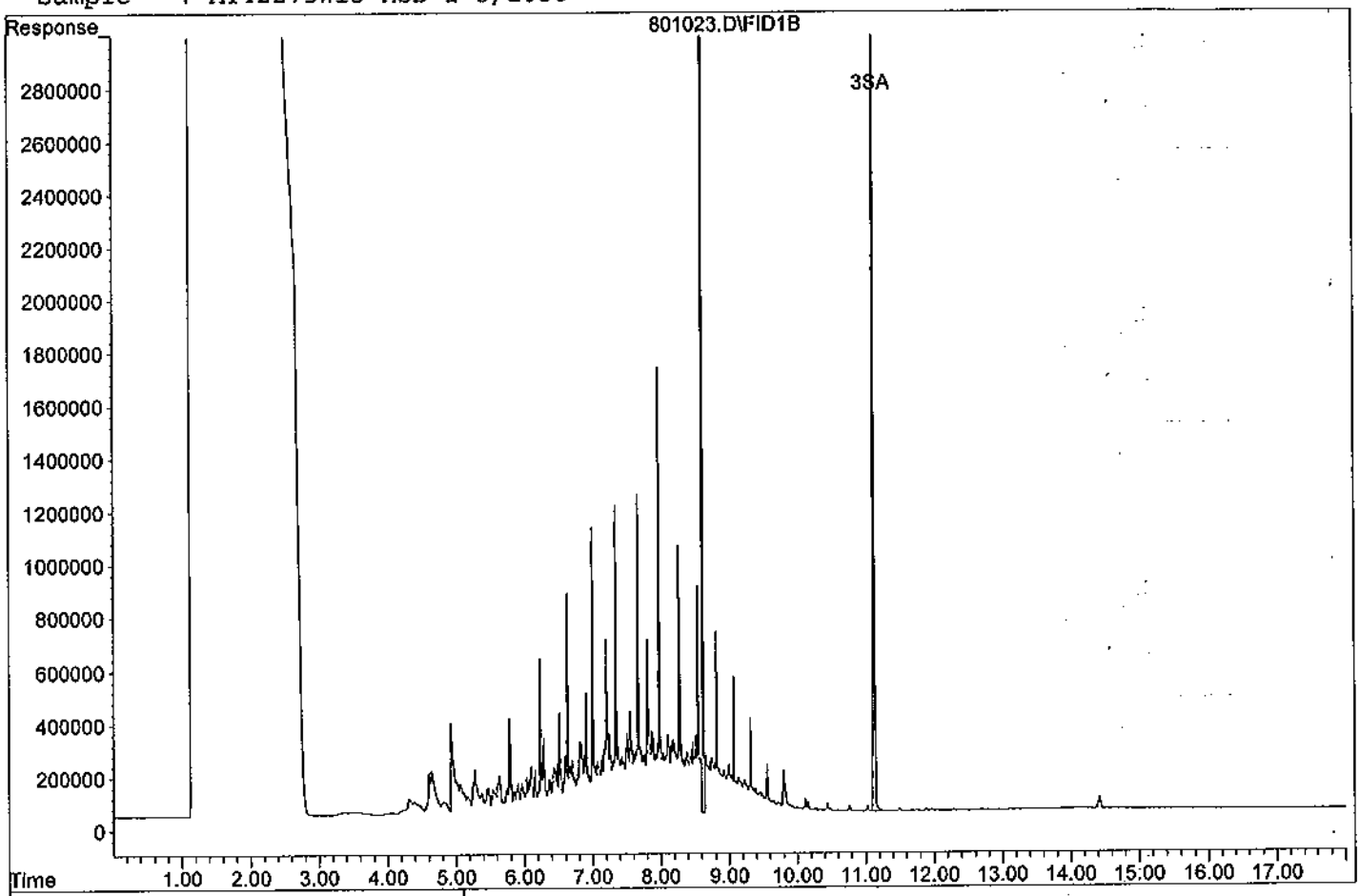
Data File : G:\APOLLO\DATA\110801\801023.D Vial: 23
Acq On : 8-1-11 18:50:52 Operator: LAC
Sample : AY42275W13 MSD-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: Aug 12 14:30 2011 Quant Results File: THCSUR81.RES

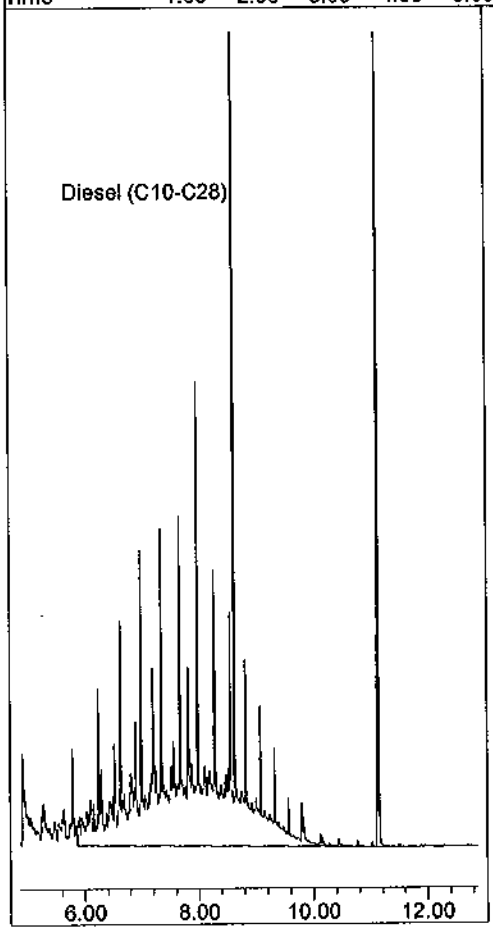
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	46619819	155.285 ppb
Surrogate Spike 145.631		Recovery =	106.63%
3) SA Octacosane(S)	11.13	44474298	150.442 ppb
Surrogate Spike 145.631		Recovery =	103.30%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801023.D
Sample : AY42275W13 MSD-1 5/1030





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801024.D Vial: 24
Acq On : 8-1-11 19:15:23 Operator: LAC
Sample : AY42275W17 MS-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

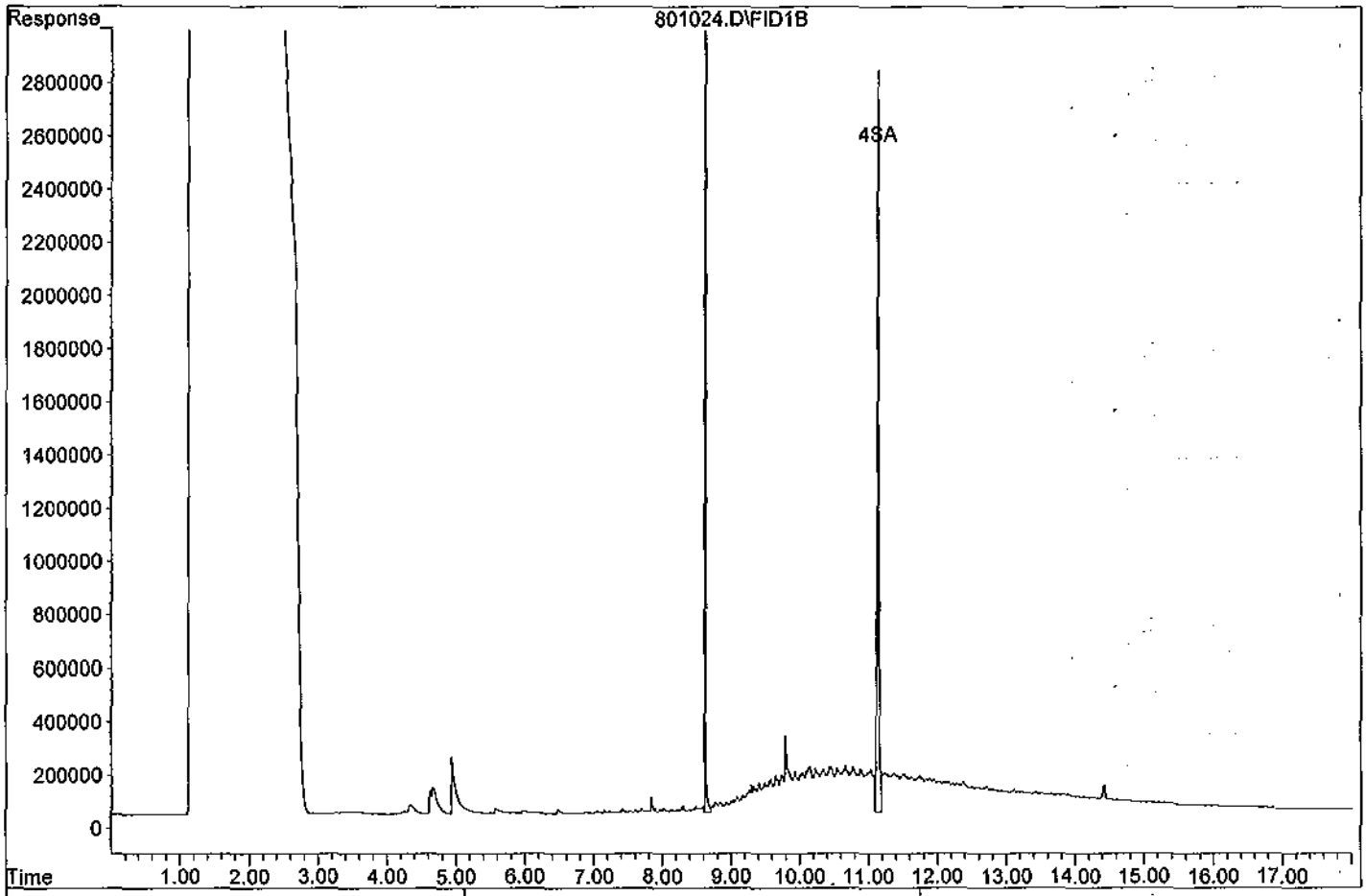
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

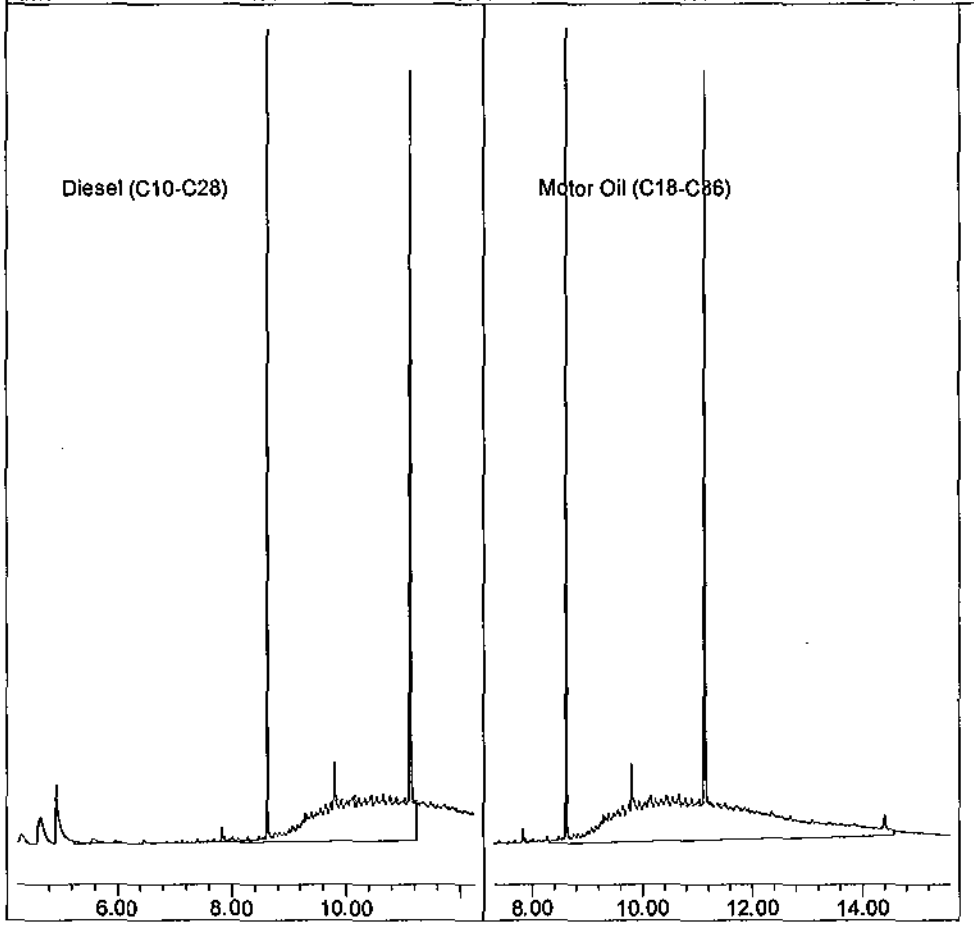
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	36488375	74.630 ppb
Surrogate Spike 147.059		Recovery =	50.75%
4) SA Octacosane(S)	11.13	46739741	146.806 ppb
Surrogate Spike 147.059		Recovery =	99.83%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	171293047	640.623 ppb
2) HBTM Motor Oil (C18-C36)	11.45	297114319	1447.340 ppb

Not Used LAC 8/25/11

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File: G:\APOLLO\DATA\110801\801024.D
Sample : AY42275W17 MS-2 5/1020





Quantitation Report (Not Reviewed)

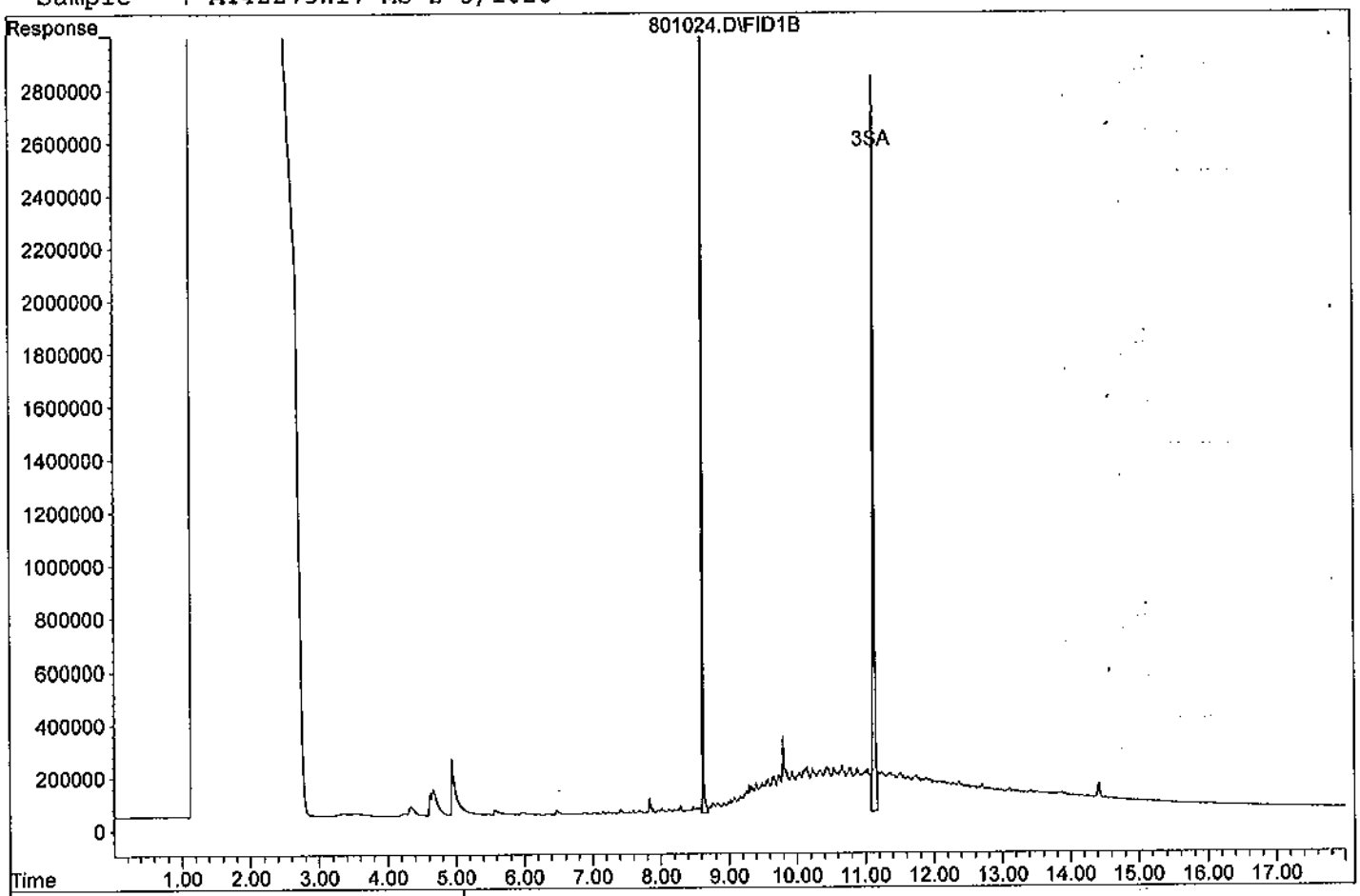
Data File : G:\APOLLO\DATA\110801\801024.D Vial: 24
Acq On : 8-1-11 19:15:23 Operator: LAC
Sample : AY42275W17 MS-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:30 2011 Quant Results File: THCSUR81.RES

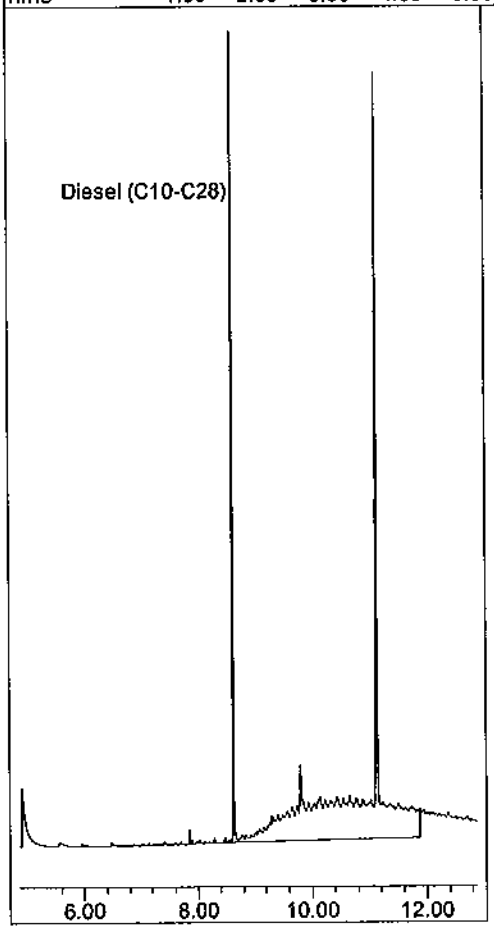
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	36488375	122.730 ppb
Surrogate Spike 147.059		Recovery =	83.46%
3) SA Octacosane(S)	11.13	46739741	159.655 ppb
Surrogate Spike 147.059		Recovery =	108.57%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801024.D
Sample : AY42275W17 MS-2 5/1020





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110801\801028.D Vial: 28
Acq On : 8-1-11 20:52:39 Operator: LAC
Sample : AY42275W18 MSD-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:21 2011 Quant Results File: TPHNS727.RES

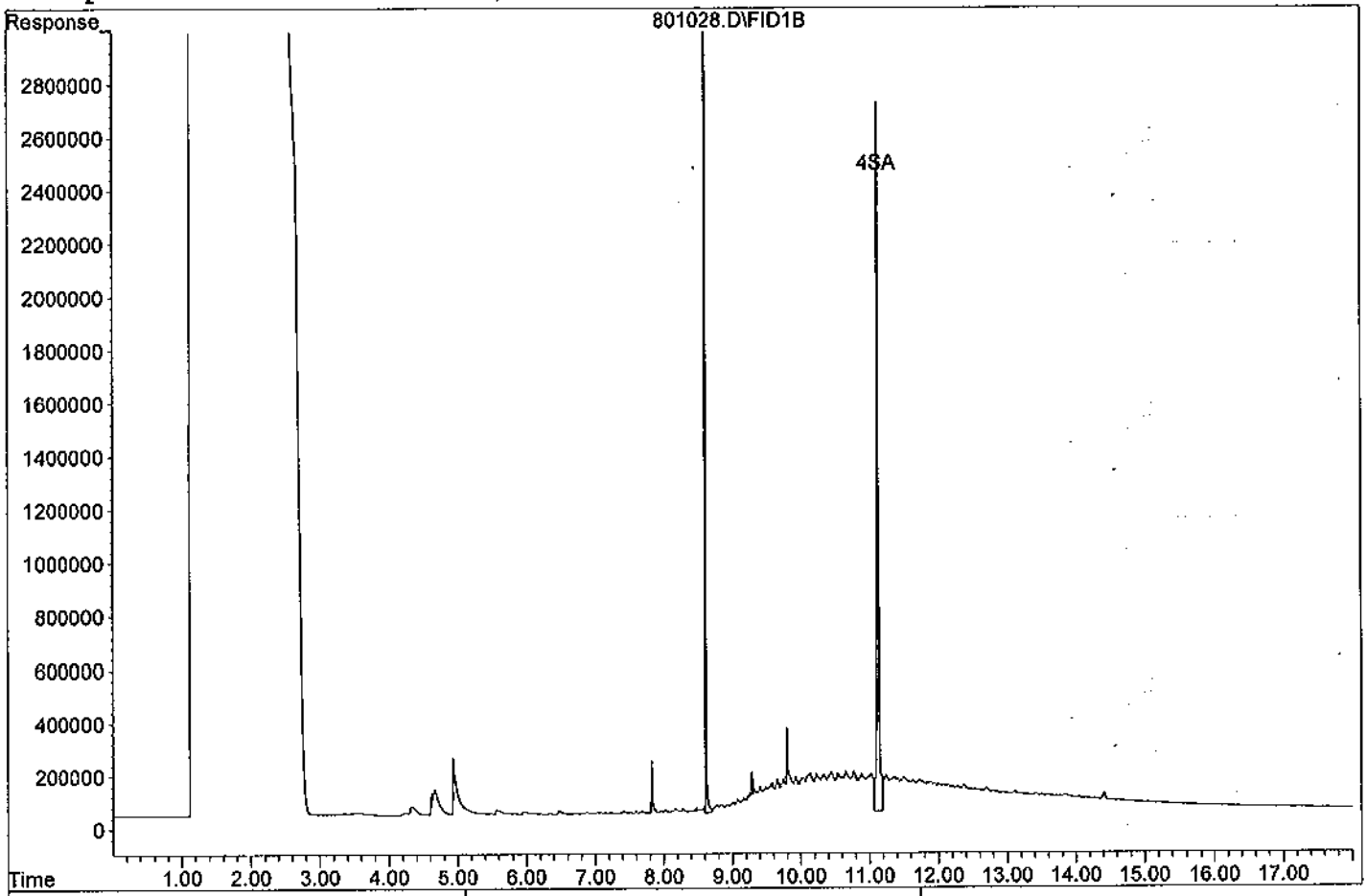
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 12:41:11 2011
Response via : Multiple Level Calibration

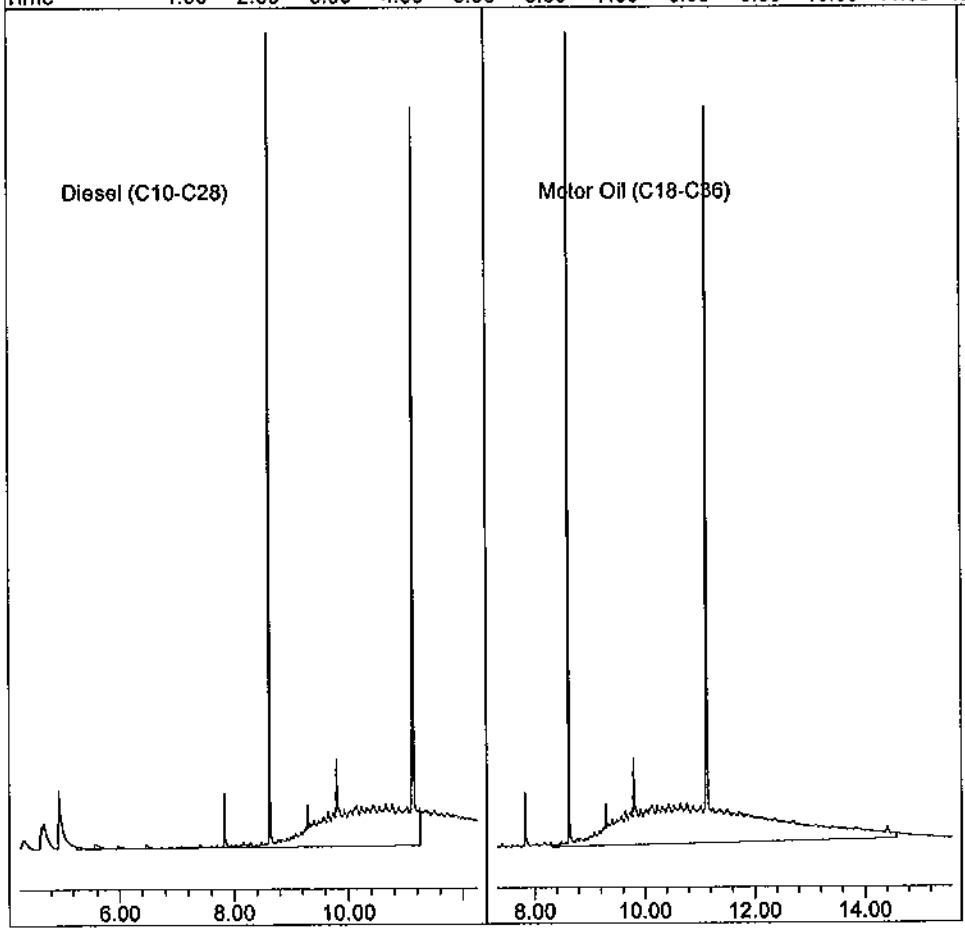
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.62	34839150	71.257 ppb
Surrogate Spike 147.059		Recovery =	48.45%
4) SA Octacosane(S)	11.13	46003733	144.494 ppb
Surrogate Spike 147.059		Recovery =	98.26%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	154291350	577.038 ppb
2) HBTM Motor Oil (C18-C36)	11.45	264809387	1289.972 ppb

Not Used LAC 8/25/11

Data File: G:\APOLLO\DATA\110801\801028.D
Sample : AY42275W18 MSD-2 5/1020





Quantitation Report (Not Reviewed)

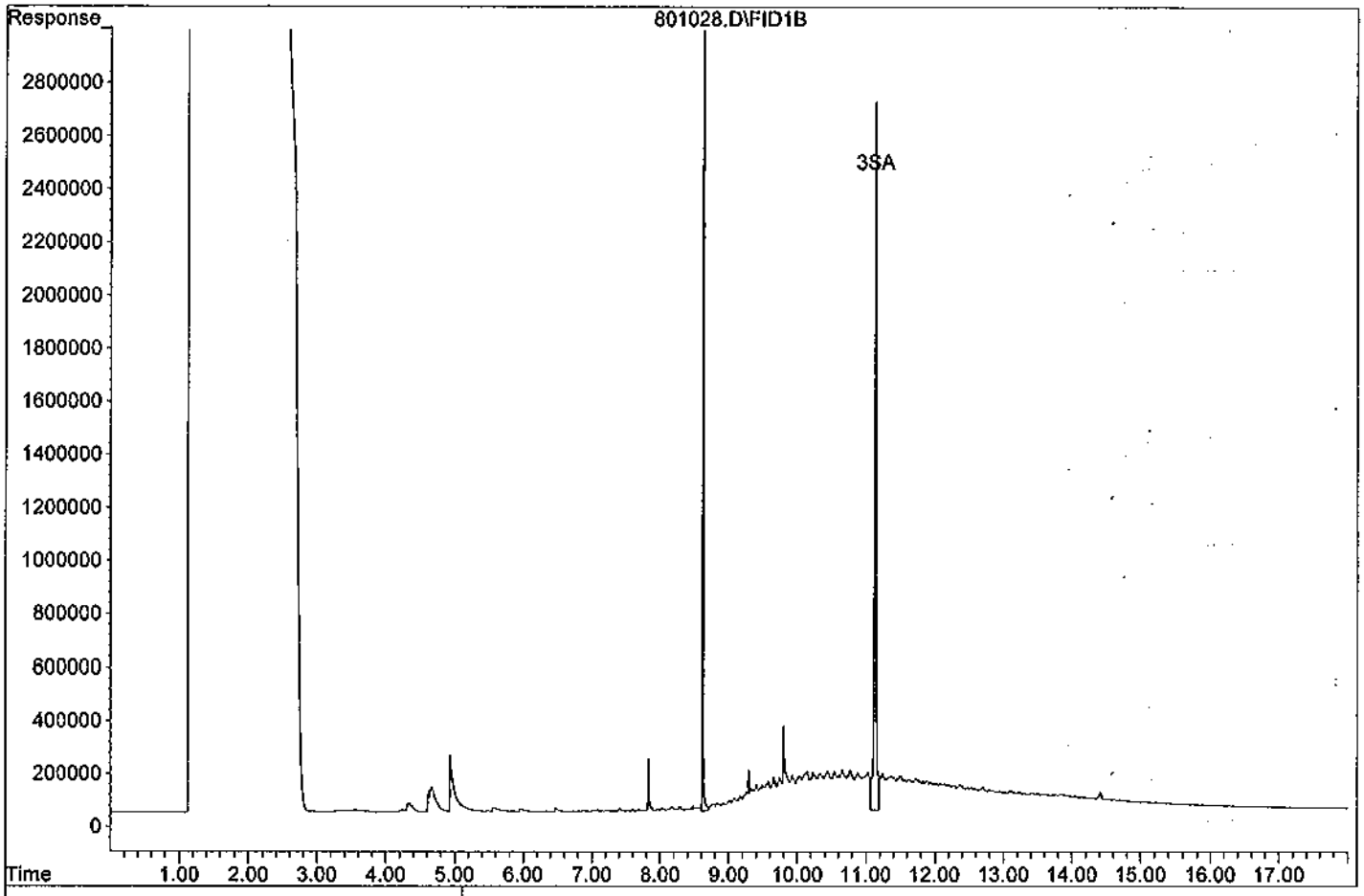
Data File : G:\APOLLO\DATA\110801\801028.D Vial: 28
Acq On : 8-1-11 20:52:39 Operator: LAC
Sample : AY42275W18 MSD-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 14:31 2011 Quant Results File: THCSUR81.RES

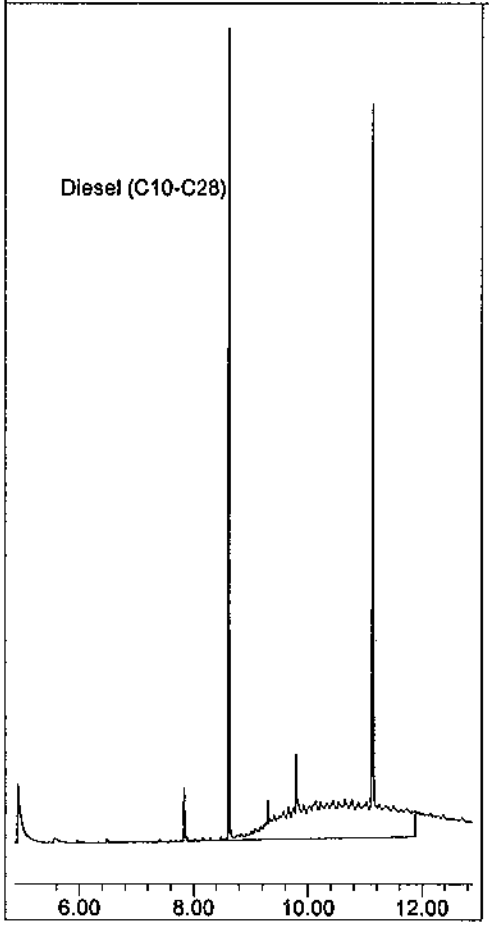
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.62	34839150	117.183 ppb
Surrogate Spike 147.059		Recovery =	79.68%
3) SA Octacosane(S)	11.13	46003733	157.141 ppb
Surrogate Spike 147.059		Recovery =	106.86%
Target Compounds			

Data File: G:\APOLLO\DATA\110801\801028.D
Sample : AY42275W18 MSD-2 5/1020

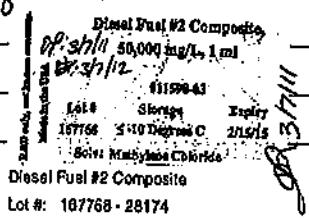




STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	LOT #	INITIALS
042							

DIESEL 2ND SOURCE STD

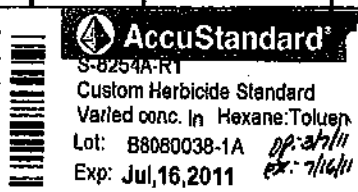
DIESEL FUEL #2	50,000ug/ml	D251	1000ul	50mL	1000ug/ml	MC #110510F	3/7/11 ex: 9/7/11
OTERPHENYL OXYFLUORFENE	600ug/ml	D251	4170ul		50ug/ml	CAT: 110316-05 LOT: 164819-28058 RP: 3/2/11 EX: 3/2/12	



HERB SPIKE

Analytes:	Conc. In mix (ug/ml)	Conc. In Stock (ug/ml)	Aliqoute (uL)	Final Vol. STOCK SRC (ml)	Final Vol. Solvent (mL)
Dalapon	6.4	320	1000		50
3,5 Dichlorobenzoic Acid	0.64	32		Source: Accustd	MTBE
4-Nitrophenol	1.6	80		Cat #: S-8254A-R1	Lot #
2,4-DCAA (S)	3.2	160		LOT#: B8080038-1A	50112
Dicamba	0.64	32		-26959	
MCPP	640	32000		OPEN: 1/28/11	
MCPA	640	32000		EXP: 7/16/11	
2,4-DP	3.2	160			
2,4-D	3.2	160			
DNOC	1.28	64			
PCP	0.64	32			
2,4,5-TP	0.64	32			
Chloramben	3.2	160			
2,4,5-T	0.64	32			
Dinoseb	1.6	80			
2,4-DB	6.4	320			
Bentazon	3.2	160			
Picloram	0.64	32			
Dacthal	0.64	32			
Acifluorfen	1.6	80			

3/7/11 ex: 6/7/11



HERB 200/1000 CCV LEVEL 4

SEE PB 026.	VARIOUS HERB STD.	200ul	1ML	200ug/ml	MTBE #50112	3/7/11 ex: 8/9/11	
	PREP: 2/9/11 EX: 8/9/11						

	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE / INITIALS
LAB# 004							

7/6/11

PREP:	07/06/11											
PAC ECO CURVE												
EXP:	09/03/11											
	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		07/06/11	09/03/11	2	10	50	200	500	700	1000
VWR	Hexane		010711A			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

7/6/11
EX: 9/3/11

THC SURROGATE (*GIVEN TO EXTRACTION)

O-TERPHENYL OCTACOSANE	60.2mg/mL	O2SI	N/A	25mL	600mg/mL	N/A

CAT: 110816-05
LOTS: 170258-28808-28812
OP: 7/7/11
EX: 7/7/12

7/7/11
EX: 7/7/12

7/7/11

PREP:	07/07/11											
PAC ECO CURVE												
EXP:	09/03/11											
	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		07/06/11	09/03/11	2	10	50	200	500	700	1000
VWR	Hexane		010711A			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

7/7/11
EX: 9/3/11

OCL 2ND SRC

VARIOUS ANALYTES:	10ng/µL	OCL 2nd Src Stk	100mL	10mL	0.1ng/µL	HEXANE #010711A

prep: 6/23/11
EX: 6/23/12

7/8/11
EX: 1/8/12

TOX 2nd SRC Stock

7/8/11

STANDARD	INIT CONC.	SOURCE DATE	ALIQUOT	FINAL VOL.	FINAL CONC.	SOLVENT
TOXAPHENE	1000 µg/mL	O2SI	100 µL	10 mL	10 µg/mL	Hexane
	Cat:	030279-08				010711A
	Lot:	171033-28588				
	Op:	06/09/11				
	Exp:	06/09/12				

7/8/11
EX: 6/9/12

TOX SECOND SOURCE

7/8/11

STANDARD	INIT CONC.	SOURCE DATE	ALIQUOT	FINAL VOL.	FINAL CONC.	SOLVENT
TOXAPHENE	10 ug/ml	Tox 2nd Src Stk	500 µL	10 mL	0.5µg/mL	Hexane
		Prep: 7/8/11				Lot#
		Exp: 6/9/12				010711A

7/8/11
EX: 1/8/12

007

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIALS
			DIESEL SPIKE				
DIESEL FUEL #2	50,000mg/l	.0251	2000ul	50mL	2000mg/l	MC # 032811C	7/12/11 EX: 10/12/11
			MOTOR OIL SPIKE				
MOTOR OIL	50,000mg/l	0251	2000ul	50mL	2000mg/l	MC # 032811C	7/12/11 EX: 10/12/11

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
#11598-43
Lot # 167769 Storage ≤-10 Degrees C Expiry 2/15/15
Solv: Methylene Chloride
Diesel Fuel #2 Composite
Lot #: 167769 - 28184
Rec: 1/20/11 MFR exp. 02/15/15

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
#11598-43
Lot # 167769 Storage ≤-10 Degrees C Expiry 2/15/15
Solv: Methylene Chloride
Diesel Fuel #2 Composite
Lot #: 167769 - 28185
Rec: 1/20/11 MFR exp. 02/15/15

7/12/11

Motor Oil Composite, 50,000 mg/L, 1 ml
116390-03
Lot # 171363 Storage ≤-10 Degrees C Expiry 4/9/14
Solv: Methylene Chloride
Motor oil composite
Lot #: 171363 - 28638
Rec: 4/20/11 MFR exp. 04/09/14

Motor Oil Composite, 50,000 mg/L, 1 ml
116390-03
Lot # 171363 Storage ≤-10 Degrees C Expiry 4/9/14
Solv: Methylene Chloride
Motor oil composite
Lot #: 171363 - 28637
Rec: 4/20/11 MFR exp. 04/09/14

7/12/11

PREP DATE:	07/12/11					
OP 2ND SOURCE						
EXP:	12/16/11					
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL
	OP 2ND SRC	5		06/16/11	12/16/11	500
VWR	HEXANE		010711A			500
					Final VOL.	1000

7/12/11 EX: 12/16/11

PREP DATE:	07/12/11											
OPF CURVE												
EXP:	12/16/11											
						IA	1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	OPF STD	5		06/16/11	12/16/11	2	10	50	200	500	700	1000
	Hexane		010711A			998	990	950	800	500	300	NA
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

7/12/11 EX: 12/16/11

PREP DATE:	07/12/11										
OPC CURVE											
EXP:	10/19/11										
						1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
	OPC STD	5		06/22/11	10/19/11	10	50	200	500	700	1000
	Hexane		010711A			990	950	800	500	300	NA
					Final VOL.	1000	1000	1000	1000	1000	1000

7/12/11 EX: 10/19/11

7/12/11

STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE IN

7/20/11

PREP:	07/20/11					
PAC ECO 2ND SRC						
EXP:	12/17/11					
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL
	PAC ECO 2ND SRC	5		07/20/11	12/17/11	500
VWR	Hexane		010711A			500
					Final VOL.	1000

7/20/11
EX: 12/17/11

PREP:	07/20/11											
PAC ECO CURVE												
EXP:	09/03/11											
	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	6		07/20/11	09/03/11	2	10	50	200	500	700	1000
VWR	Hexane		010711A			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

7/20/11
EX: 9/3/11

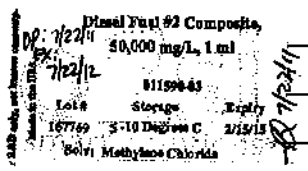
7/21/11

TNRCC CAL CURVE											
SUPPLIER	STOCK	[µg/mL]	LOT #	DATE	EXP DATE	µL	µL	µL	µL	µL	µL
	TNRCC STD.	1000		07/12/11	01/12/12	50	100	400	600	800	1000
VWR	PENTANE		J04E19			950	900	600	400	200	--
				FINAL VOLUME		1mL	1mL	1mL	1mL	1mL	1mL

7/21/11
EX: 1/12/12

DIESEL STANDARD

DIESEL FUEL #2 | 50,000mg/L | 0281 | 1000mL | 50mL | 1000mg/L | MC | # 032811C | 7/22/11 EX: 1/22/12



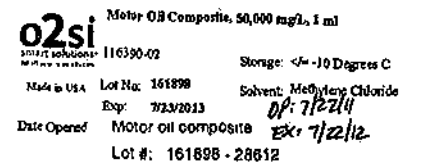
Diesel Fuel #2 Composite
Lot #: 167769 - 28186
Rec: 1/20/11 MFR exp. 02/15/15

O-TERPHENYL / OCTACOSANE | 1000mg/L | 0251 | 4170mL | 5mg/L

CAT: 110316-05
LOT: 170258-28811
DP:
EX:

MOTOR OIL STANDARD

MOTOR OIL | 50,000mg/L | 0251 | 1000mL | 50mL | 1000mg/L | MC | # 032811C | 7/22/11 EX: 1/22/12



STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIALS

025

TCH SURROGATE CURVE

STD ~~Std~~	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC ~~SURR~~	~~600/AC~~	170258	7/7/2011	7/7/2012		100	400	600	800	1000
MC	50	032811C				900	600	400	200	NA
				Final VOL.		1000	1,000	1000	1000	1000

LAC
8/1/11
exp
2/1/12

THC Surrogate Cal. Std.

THC Surrogate	600µg/mL	025I 170258-2811 cp: 7/7/11 LAC exp 7/7/12	417µl	5mL	50µg/mL	MC 032811C	LAC 8/1/11 2/1/11

INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT / LOT#	DATE / INITIALS

TIN METHOD STANDARD 1µg/mL

COMPOUND	CONC IN MIX	CONC OF STOCK	ALIQUOT	STOCK SOURCE	FINAL VOL.
Tetrabutylin chloride	1 ug/ml	20 ug/ml	50 ul	TIN M. STD.20ug/ml	1ml
Dibutylin chloride				prep. 9/21/10	MC
Butylin chloride				exp. 9/21/11	032811C
Tetra-n-propyltin					

7/28/11

ex: 9/21/11

TIN CALIBRATION CURVE

COMPOUND	CONC IN MIX (ug/ml)	CONC OF STOCK (ug/ml)	ALIQUOT (uL)	STOCK SOURCE	FINAL VOL. SOLVENT (ml)
Tetrabutylin chloride	0.05	1	50µL	TIN M. STD 1ug/ml	1
Dibutylin chloride	0.1	1	100µL	PREP: ~~7/28/11~~ 7/28/11	MC
Butylin chloride	0.5	1	500µL	EXP 9/21/11	#032811C
Tetra-n-propyltin	1	1	1000µL		
	5	20	250 µL	TIN M. STD 20ug/ml	
	20	20	1000µL	prep:9/21/10	
				exp. 9/21/11	

7/28/11

ex: 9/21/11

7/28/11

* Not Recorded on 7/27/11

LAC 7/27/11

DIESEL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
DIESEL	1000		07/22/11	01/22/12	10	100	400	600	800	1000
MC		010611B			990	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

LAC 7/27/11

exp 1/22/12

MOTOR OIL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		07/22/11	01/22/12	50	100	400	600	800	1000
MC		010611B			950	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

DIESEL 2ND SOURCE

STD	Init. Conc	Source	Aliquot	Final Vol.	Final Conc.	Solvent
DIESEL STD.	1000µg/ml	O2SI	400µL	1 mL	400 µg/mL	MC
	Prep:	03/07/11				010611B
	Exp:	09/07/11				

* Not Recorded on 7/27/11

LAC 7/28/11

DIESEL CCV 400ug/ml

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
DIESEL STD.	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	MC
		07/22/11	01/22/12			032811C

LAC 7/27/11

exp 1/22/12

MOTOR OIL CCV 400UG/ML

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MOTOR OIL STD	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	MC
		07/22/11	01/22/12			032811C

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE / INITIALS
024							

* Not Recorded on 7/27/11 LAC 7/28/11

LAC 7/29/11

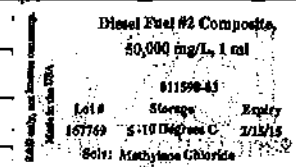
DIESEL CCV 600ug/ml						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
DIESEL STD.	1000UG/ML	O2SI	600µL	1 mL	600 µg/ml	MC
		07/22/11	01/22/12			032811C

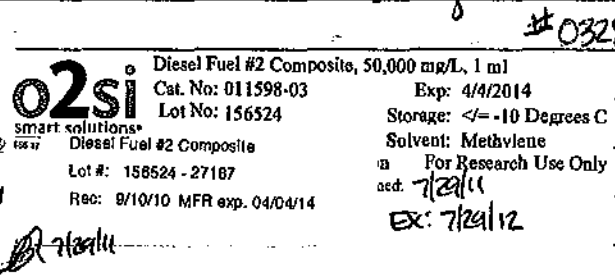
Exp 1/22/12

MOTOR OIL CCV 600UG/ML						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MOTOR OIL STD	1000UG/ML	O2SI	600µL	1mL	600 µg/ml	MC
		07/22/11	01/22/12			032811C

DIESEL SPIKE

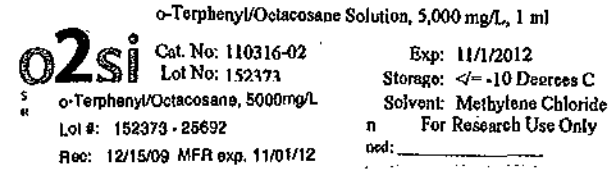
DIESEL FUEL #2 — 50,000mg/L | O2SI | 2000mL | 50ML | 2000mg/L | MC | #032811C | 7/29/11 | EX: 10/29/11

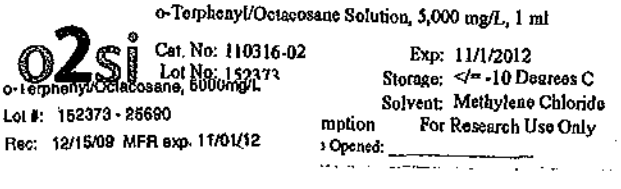


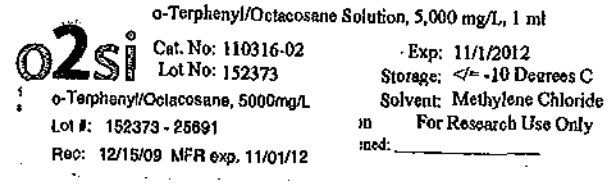


THC SURROGATE

O-TERPHENYL OCTACOSANE — 5000mg/L | O2SI | 3000mL | 25mL | 600mg/L | MC | #070111B | 8/1/11 | EX: 11/1/11







_SEP011

Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	110726A	Extraction Method	SEP011	Units	mL

Spiked ID 1	Diesel Spike 7/12/11 BX 10/12/11		Surrogate ID 1	THC Surrogate 170258-28808	
Spiked ID 2	Motor Oil Spike 7/12/11 BX 10/12/11		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:		
Spiked ID 8			Ext. End Time:		
			GC Requires Extract By:	08/10/11 0:00	

pH1			W Bath Temp	80 °C
pH2				
pH3				

Spiked By: HM **Date** 07/26/11 **Witnessed By:** CC **Date** 07/26/11

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	110726A Blk				0.250	1	1000	5	7	07/26/11 7:40	
2	110726A LCS-1		1	1	0.250	1	1000	5	7	07/26/11 7:40	
3	110726A LCS-2		1	2	0.250	1	1000	5	7	07/26/11 7:40	
4	AY42185	AY42185W07			0.250	1	880	5	7	07/26/11 7:40	65169 -- Amber Liter
5	AY42186	AY42186W07			0.250	1	830	5	7	07/26/11 7:40	65169 -- Amber Liter
6	AY42187	AY42187W08			0.250	1	1000	5	7	07/26/11 7:40	65169 -- Amber Liter
7	AY42206	AY42206W12			0.250	1	1010	5	7	07/26/11 7:40	65166 -- Amber Liter
8	AY42271	AY42271W05			0.250	1	1040	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
9	AY42273	AY42273W07			0.250	1	1030	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
10	AY42274	AY42274W05			0.250	1	1040	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
11	AY42275 MS-1	AY42275W16	1	1	0.250	1	1030	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter -- Amber Liter
12	AY42275 MSD-1	AY42275W13	1	1	0.250	1	1030	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
13	AY42275 MS-2	AY42275W17	1	2	0.250	1	1020	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
14	AY42275 MSD-2	AY42275W18	1	2	0.250	1	1020	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
15	AY42275	AY42275W12			0.250	1	1040	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter -- Amber Liter
16	AY42276	AY42276W05			0.250	1	1020	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter
17	AY42277	AY42277W05			0.250	1	1040	5	7	07/26/11 7:40	65187-2 WEEK RUSH -- Amber Liter

Solvent and Lot#	
MC	VWR 070111B
Na2SO4	0280C529

Extraction COC Transfer	
Extraction lab employee Initials	HM
GC analyst's initials	AC
Date	7/29/11
Time	16:30
Refrigerator	Hold #1

	Technician's Initials
Scanned By	DL
Sample Preparation	DL
Extraction	DL/HM/JL
Concentration	DL

Modified	07/25/11 3:39:55 PM

Reviewed By: HM **Date** 07/26/11

Injection Log

Directory: G:\APOLLO\DATA\110727\110801

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	6	727006.D	1	DIESEL 10/1000 7/27/11	Mix(A)	7-27-11 14:30:09
2	7	727007.D	1	DIESEL 100/1000	Mix(A)	7-27-11 14:55:33
3	8	727008.D	1	DIESEL 400/1000	Mix(A)	7-27-11 15:21:22
4	9	727009.D	1	DIESEL 600/1000	Mix(A)	7-27-11 15:47:06
5	10	727010.D	1	DIESEL 800/1000	Mix(A)	7-27-11 16:12:59
6	11	727011.D	1	DIESEL 1000/1000	Mix(A)	7-27-11 16:38:59
7	12	727012.D	1	MOTOR OIL 50/1000 7/27/11	Mix(B)	7-27-11 17:04:51
8	13	727013.D	1	MOTOR OIL 100/1000	Mix(B)	7-27-11 17:30:41
9	14	727014.D	1	MOTOR OIL 400/1000	Mix(B)	7-27-11 17:56:35
10	15	727015.D	1	MOTOR OIL 600/1000	Mix(B)	7-27-11 18:22:34
11	16	727016.D	1	MOTOR OIL 800/1000	Mix(B)	7-27-11 18:48:14
12	17	727017.D	1	MOTOR OIL 1000/1000	Mix(B)	7-27-11 19:13:54
13	18	727018.D	1	DIESEL 400/1000 2ND SRC 7/27/11	Mix(A)	7-27-11 19:39:27
14	3	801003.D	1	DIESEL 400/1000 7/27/11	Mix(A)	8-1-11 10:45:44
15	4	801004.D	1	MOTOR OIL 400/1000 7/27/11	Mix(B)	8-1-11 11:10:14
16	6	801006.D	1	THC SURR 1000/1000 8/1/11	MIX(C)	8-1-11 11:59:38
17	7	801007.D	1	THC SURR 100/1000	MIX(C)	8-1-11 12:23:50
18	8	801008.D	1	THC SURR 400/1000	Mix(C)	8-1-11 12:47:56
19	9	801009.D	1	THC SURR 600/1000	Mix(C)	8-1-11 13:12:04
20	10	801010.D	1	THC SURR 800/1000	Mix(C)	8-1-11 13:36:15
21	12	801012.D	5	110726A BLK 5/1000	Water	8-1-11 14:24:36
22	13	801013.D	5	110726A LCS-1 5/1000	Water	8-1-11 14:48:41
23	14	801014.D	5	110726A LCS-2 5/1000	Water	8-1-11 15:12:49
24	19	801019.D	4.80769	AY42271W05 5/1040	Water	8-1-11 17:14:06
25	20	801020.D	4.85437	AY42273W07 5/1030	Water	8-1-11 17:38:14
26	21	801021.D	4.80769	AY42274W05 5/1040	Water	8-1-11 18:02:48
27	22	801022.D	4.85437	AY42275W16 MS-1 5/1030	Water	8-1-11 18:26:52
28	23	801023.D	4.85437	AY42275W13 MSD-1 5/1030	Water	8-1-11 18:50:52
29	24	801024.D	4.90196	AY42275W17 MS-2 5/1020	Water	8-1-11 19:15:23
30	26	801026.D	1	DIESEL 400/1000 7/27/11	Mix(A)	8-1-11 20:03:49
31	27	801027.D	1	MOTOR OIL 400/1000 7/27/11	Mix(B)	8-1-11 20:28:13
32	28	801028.D	4.90196	AY42275W18 MSD-2 5/1020	Water	8-1-11 20:52:39
33	29	801029.D	4.80769	AY42275W12 5/1040	Water	8-1-11 21:16:47
34	30	801030.D	4.90196	AY42276W05 5/1020	Water	8-1-11 21:41:03
35	31	801031.D	4.80769	AY42277W05 5/1040	Water	8-1-11 22:05:22
36	41	801041.D	1	DIESEL 600/1000 7/27/11	Mix(A)	8-2-11 2:07:55
37	42	801042.D	1	MOTOR OIL 600/1000 7/27/11	Mix(B)	8-2-11 2:32:24

EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons

APPL, INC.

EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
QC Summary

APPL, INC.

Method Blank
EPA 8270D SIM

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **110726W-42275 - 157858**
Batch ID: #SIMHC-110726A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	SURROGATE: 2-FLUORBIPHENY	70.7	50-110			%	07/26/11	07/30/11
BLANK	SURROGATE: NITROBENZENE-	54.7	40-110			%	07/26/11	07/30/11
BLANK	SURROGATE: TERPHENYL-D14 (	65.4	50-135			%	07/26/11	07/30/11

Quant Method:SIM2.M
Run #:0730L007
Instrument:Linus
Sequence:L110621
Initials:LF

GC SC-Blank-REG MDLs
Printed: 08/05/11 1:59:43 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/30/11

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)	SURROGATE: NITROBENZENE-D5 (S)
110726A-BLK	Blank	70.7	54.7
110726A-LCS	Lab Control Spike	66.5	57.0
AY42271	ES035	56.9	65.7
AY42273	ES037	50.9	70.7
AY42274	ES038	72.6	86.1
AY42275-MS	Matrix Spike	57.1	58.6
AY42275-MSD	Matrix SpikeD	66.7	70.7
AY42275	ES039	67.0	71.1
AY42276	ES040	66.2	64.8
AY42277	ES041	51.2	62.2

Comments: Batch: #SIMHC-110726A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/30/11

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)
110726A-BLK	Blank	65.4
110726A-LCS	Lab Control Spike	64.0
AY42271	ES035	64.8
AY42273	ES037	61.2
AY42274	ES038	80.8
AY42275-MS	Matrix Spike	66.7
AY42275-MSD	Matrix SpikeD	68.2
AY42275	ES039	79.2
AY42276	ES040	68.9
AY42277	ES041	64.4

Comments: Batch: #SIMHC-110726A

Laboratory Control Spike Recovery
EPA 8270D SIM

APPL ID: **110726W-42275 LCS - 157858**
Batch ID: #SIMHC-110726A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1-METHYLNAPHTHALENE	4.00	2.25	56.3	45-105
2-METHYLNAPHTHALENE	4.00	2.01	50.2	45-105
ACENAPHTHENE	4.00	2.36	59.0	45-110
ACENAPHTHYLENE	4.00	2.64	66.0	50-105
ANTHRACENE	4.00	3.64	91.0	55-110
BENZO(A)ANTHRACENE	4.00	2.36	59.0	55-110
BENZO(A)PYRENE	4.00	2.37	59.3	55-110
BENZO(B)FLUORANTHENE	4.00	2.09	52.3	45-120
BENZO(GHI)PERYLENE	4.00	2.16	54.0	40-125
BENZO(K)FLUORANTHENE	4.00	3.45	86.3	45-125
CHRYSENE	4.00	2.92	73.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.15	53.8	40-125
FLUORANTHENE	4.00	3.56	89.0	55-115
FLUORENE	4.00	2.80	70.0	50-110
INDENO(1,2,3-CD)PYRENE	4.00	2.27	56.8	45-125
NAPHTHALENE	4.00	2.23	55.8	40-100
PHENANTHRENE	4.00	2.97	74.3	50-115
PYRENE	4.00	2.75	68.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.33	66.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.14	57.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.28	64.0	50-135

Comments:

Primary	SPK
Quant Method :	SIM2.M
Extraction Date :	07/26/11
Analysis Date :	07/30/11
Instrument :	Linus
Run :	0730L008
Initials :	LF

Printed: 08/05/11 1:59:51 PM

APPL Standard LCS

Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **110726W-42275 MS - 157858**
Batch ID: #SIMHC-110726A
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	3.96	ND	2.78	3.31	70.2	83.6	45-105	17.4	25
2-METHYLNAPHTHALENE	3.96	ND	2.56	2.99	64.6	75.5	45-105	15.5	25
ACENAPHTHENE	3.96	ND	2.65	2.96	66.9	74.7	45-110	11.1	25
ACENAPHTHYLENE	3.96	ND	2.79	3.21	70.5	81.1	50-105	14.0	25
ANTHRACENE	3.96	ND	3.00	3.63	75.8	91.7	55-110	19.0	25
BENZO(A)ANTHRACENE	3.96	ND	2.53	2.59	63.9	65.4	55-110	2.3	25
BENZO(A)PYRENE	3.96	ND	2.45	2.60	61.9	65.7	55-110	5.9	25
BENZO(B)FLUORANTHENE	3.96	ND	2.32	2.39	58.6	60.4	45-120	3.0	25
BENZO(GHI)PERYLENE	3.96	ND	2.32	2.44	58.6	61.6	40-125	5.0	25
BENZO(K)FLUORANTHENE	3.96	ND	3.48	3.76	87.9	94.9	45-125	7.7	25
CHRYSENE	3.96	ND	2.97	3.18	75.0	80.3	55-110	6.8	25
DIBENZ(A,H)ANTHRACENE	3.96	ND	2.20	2.46	55.6	62.1	40-125	11.2	25
FLUORANTHENE	3.96	ND	3.65	3.99	92.2	101	55-115	8.9	25
FLUORENE	3.96	ND	3.16	3.67	79.8	92.7	50-110	14.9	25
INDENO(1,2,3-CD)PYRENE	3.96	ND	2.25	2.49	56.8	62.9	45-125	10.1	25
NAPHTHALENE	3.96	ND	2.69	3.17	67.9	80.1	40-100	16.4	25
PHENANTHRENE	3.96	ND	3.20	3.40	80.8	85.9	50-115	6.1	25
PYRENE	3.96	ND	2.85	2.98	72.0	75.3	50-130	4.5	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.98	NA	1.13	1.32	57.1	66.7	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.98	NA	1.16	1.40	58.6	70.7	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.98	NA	1.32	1.35	66.7	68.2	50-135		

Comments:

Primary	SPK	DUP
Quant Method :	SIM2.M	SIM2.M
Extraction Date :	07/26/11	07/26/11
Analysis Date :	07/31/11	07/31/11
Instrument :	Linus	Linus
Run :	0730L042	0730L043
Initials :	LF	

Printed: 08/05/11 1:59:55 PM
APPL MSD SCII

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/30/11

Matrix: WATER Instrument: Linus

Blank ID: 110726A-BLK Time Analyzed: 1238

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110726A-BLK	Blank	0730L007	07/30/11 1238
110726A-LCS	Lab Control Spike	0730L008	07/30/11 1305
AY42271	ES035	0730L039	07/31/11 0228
AY42273	ES037	0730L040	07/31/11 0254
AY42274	ES038	0730L041	07/31/11 0320
110726A-MS	Matrix Spike	0730L042	07/31/11 0345
110726A-MSD	Matrix SpikeD	0730L043	07/31/11 0411
AY42275	ES039	0730L044	07/31/11 0437
AY42276	ES040	0730L045	07/31/11 0502
AY42277	ES041	0730L046	07/31/11 0528

Comments: Batch: #SIMHC-110726A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 65187
Matrix: Water
ID: SVTUNE 04-14-11

SDG No: 65187
Date Analyzed: 07/30/11
Instrument: Linus
Time Analyzed: 10:09

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	110726A BLK 1/1000	0730L007.D	07/30/11 12:38
2	Lab Control Spike	110726A LCS-1 1/1000	0730L008.D	07/30/11 13:05
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	49.7
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.6
127	40 - 60% of mass 198	52.9
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.2
275	10 - 30% of mass 198	22.8
365	1 - 100% of mass 198	2.2
441	0.01 - 100% of mass 443	74.3
442	40 - 150% of mass 198	72.2
443	17 - 23% of mass 442	19.7

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 65187
Matrix: Water
ID: SVTUNE 04-14-11

SDG No: 65187
Date Analyzed: 07/30/11
Instrument: Linus
Time Analyzed: 22:14

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	ES035	AY42271W06 1/1030	0730L039.D	07/31/11 2:28
2	ES037	AY42273W05 1/1030	0730L040.D	07/31/11 2:54
3	ES038	AY42274W06 1/1020	0730L041.D	07/31/11 3:20
4	Marix Spike	AY42275W19 MS-1 1/10	0730L042.D	07/31/11 3:45
5	Marix Spike Dup	AY42275W14 MSD-1 1/1	0730L043.D	07/31/11 4:11
6	ES039	AY42275W20 1/1010	0730L044.D	07/31/11 4:37
7	ES040	AY42276W07 1/1010	0730L045.D	07/31/11 5:02
8	ES041	AY42277W06 1/1040	0730L046.D	07/31/11 5:28
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
51	29.95 - 60% of mass 198	53.3
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.0
127	40 - 60% of mass 198	54.0
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.2
275	10 - 30% of mass 198	23.2
365	1 - 100% of mass 198	2.4
441	0.01 - 100% of mass 443	75.9
442	40 - 150% of mass 198	79.1
443	17 - 23% of mass 442	19.8

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 65187

Lab File ID (Standard): 0621L006.D Date Analyzed: 06/21/11

Instrument ID: Linus Time Analyzed: 22:00

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	1396	6.13	596	8.13	938	9.86
	UPPER LIMIT	2792	6.63	1192	8.63	1876	10.36
	LOWER LIMIT	698	5.63	298	7.63	469	9.36
	SAMPLE NO.						
01	110726A BLK 1/1000	1506	6.12	722	8.13	1136	9.86
02	110726A LCS-1 1/1000	1378	6.12	649	8.13	1036	9.86
03	AY42271W06 1/1030	1372	6.12	656	8.13	1138	9.86
04	AY42273W05 1/1030	1561	6.12	818	8.13	1335	9.86
05	AY42274W06 1/1020	1767	6.12	827	8.13	1516	9.86
06	AY42275W19 MS-1 1/1(	1706	6.12	832	8.13	1391	9.86
07	AY42275W14 MSD-1 1/	1511	6.12	718	8.13	1255	9.86
08	AY42275W20 1/1010	1359	6.12	664	8.13	1149	9.86
09	AY42276W07 1/1010	1551	6.12	704	8.13	1152	9.86
10	AY42277W06 1/1040	1436	6.12	704	8.13	1183	9.86
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.: 65187

Lab File ID (Standard): 0621L006.D Date Analyzed: 06/21/11

Instrument ID: Linus Time Analyzed: 22:00

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

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1118	12.94	929	14.55		
	UPPER LIMIT	2236	13.44	1858	15.05		
	LOWER LIMIT	559	12.44	465	14.05		
	SAMPLE NO.						
01	110726A BLK 1/1000	1703	12.95	1356	14.56		
02	110726A LCS-1 1/1000	1582	12.94	1282	14.56		
03	AY42271W06 1/1030	1750	12.95	1406	14.56		
04	AY42273W05 1/1030	1961	12.94	1566	14.56		
05	AY42274W06 1/1020	2192	12.94	1727	14.56		
06	AY42275W19 MS-1 1/1(	2171	12.94	1724	14.56		
07	AY42275W14 MSD-1 1/	1966	12.94	1568	14.56		
08	AY42275W20 1/1010	1643	12.95	1311	14.57		
09	AY42276W07 1/1010	1780	12.95	1376	14.57		
10	AY42277W06 1/1040	1737	12.95	1402	14.57		
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 8270
Polynuclear Aromatic Hydrocarbons
Sample Data

APPL, INC.

EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES035
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42271
QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	56.9	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	65.7	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	64.8	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L039
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L039.D Vial: 39
Acq On : 31 Jul 11 2:28 Operator: LF
Sample : AY42271W06 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:34 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1372	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	656	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1138	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1750	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.56	264	1406	2.50000 ppb	0.01
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.34	82	348	1.27623 ppb	0.00
Spiked Amount 1.942			Recovery = 65.714%		
7) Surrogate Recovery (FBP)	7.37	172	693	1.10415 ppb	0.00
Spiked Amount 1.942			Recovery = 56.856%		
17) Surrogate Recovery (TPH)	11.74	244	1150	1.25828 ppb	0.00
Spiked Amount 1.942			Recovery = 64.787%		
Target Compounds					Qvalue

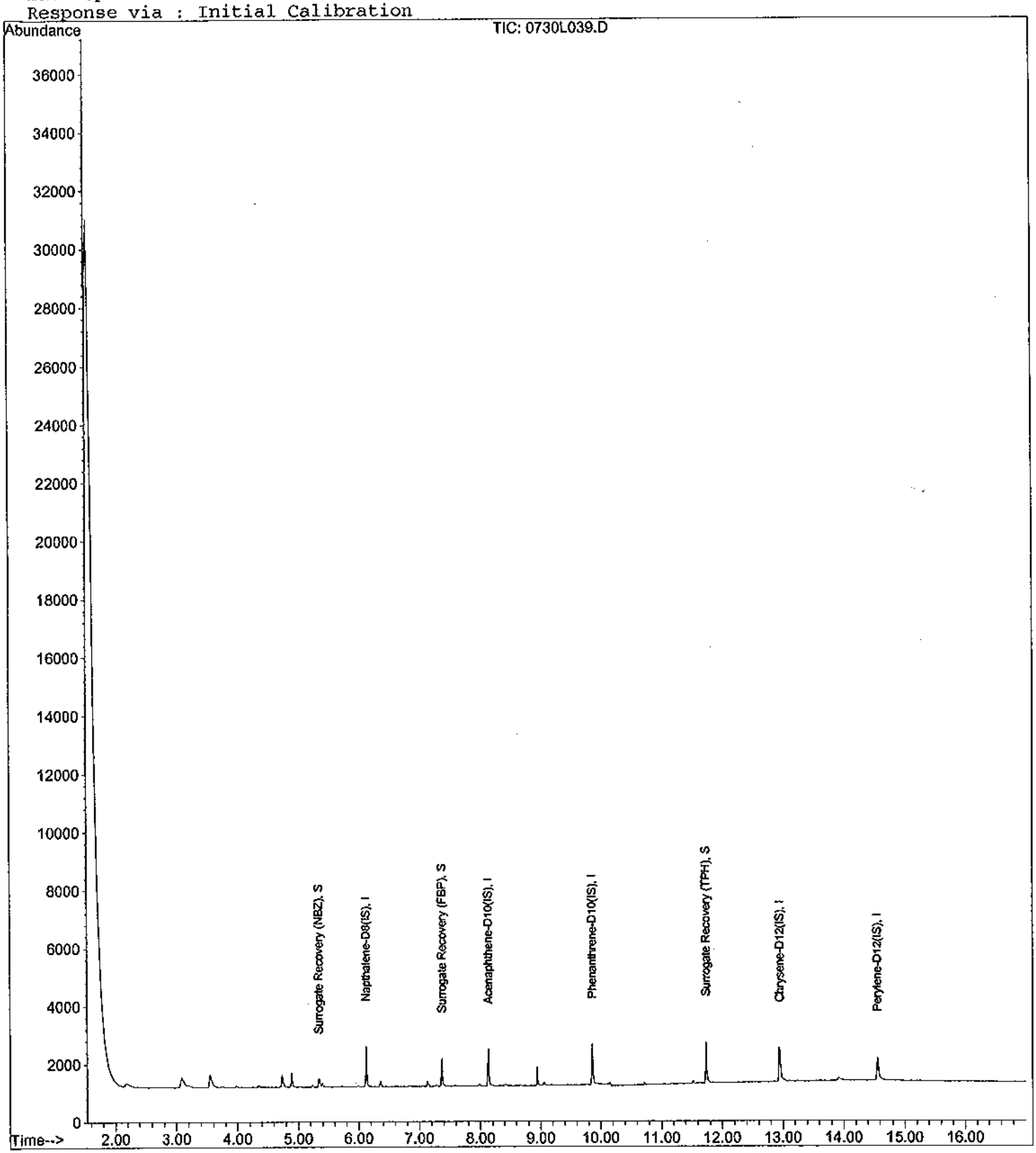
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L039.D Vial: 39
Acq On : 31 Jul 11 2:28 Operator: LF
Sample : AY42271W06 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:34 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES037
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42273
QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.85	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.16 J	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.31	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.088 J	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	2.2	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	50.9	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	70.7	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	61.2	50-135			%	07/26/11	07/31/11

J = Estimated value.

Quant Method: SIM2.M
Run #: 0730L040
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L040.D
Acq On : 31 Jul 11 2:54
Sample : AY42273W05 1/1030
Misc :

Vial: 40
Operator: LF
Inst : Linus
Multiplr: 0.97

Quant Time: Aug 2 11:36 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1561	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	818	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1335	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.94	240	1961	2.50000 ppb	0.00
21) Perylene-D12(IS)	14.56	264	1566	2.50000 ppb	0.01
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.34	82	426	1.37313 ppb	0.00
Spiked Amount 1.942			Recovery = 70.710%		
7) Surrogate Recovery (FBP)	7.37	172	774	0.98898 ppb	0.00
Spiked Amount 1.942			Recovery = 50.934%		
17) Surrogate Recovery (TPH)	11.74	244	1217	1.18832 ppb	0.00
Spiked Amount 1.942			Recovery = 61.182%		
Target Compounds					Qvalue
3) Naphthalene	6.14	128	2167	2.15218 ppb #	91
4) 2-Methylnaphthalene	6.94	142	101	0.16007 ppb	95
5) 1-Methylnaphthalene	7.05	142	486	0.85358 ppb	99
9) Acenaphthene	8.17	154	188	0.30826 ppb	92
10) Fluorene	8.77	166	60	0.08804 ppb	93

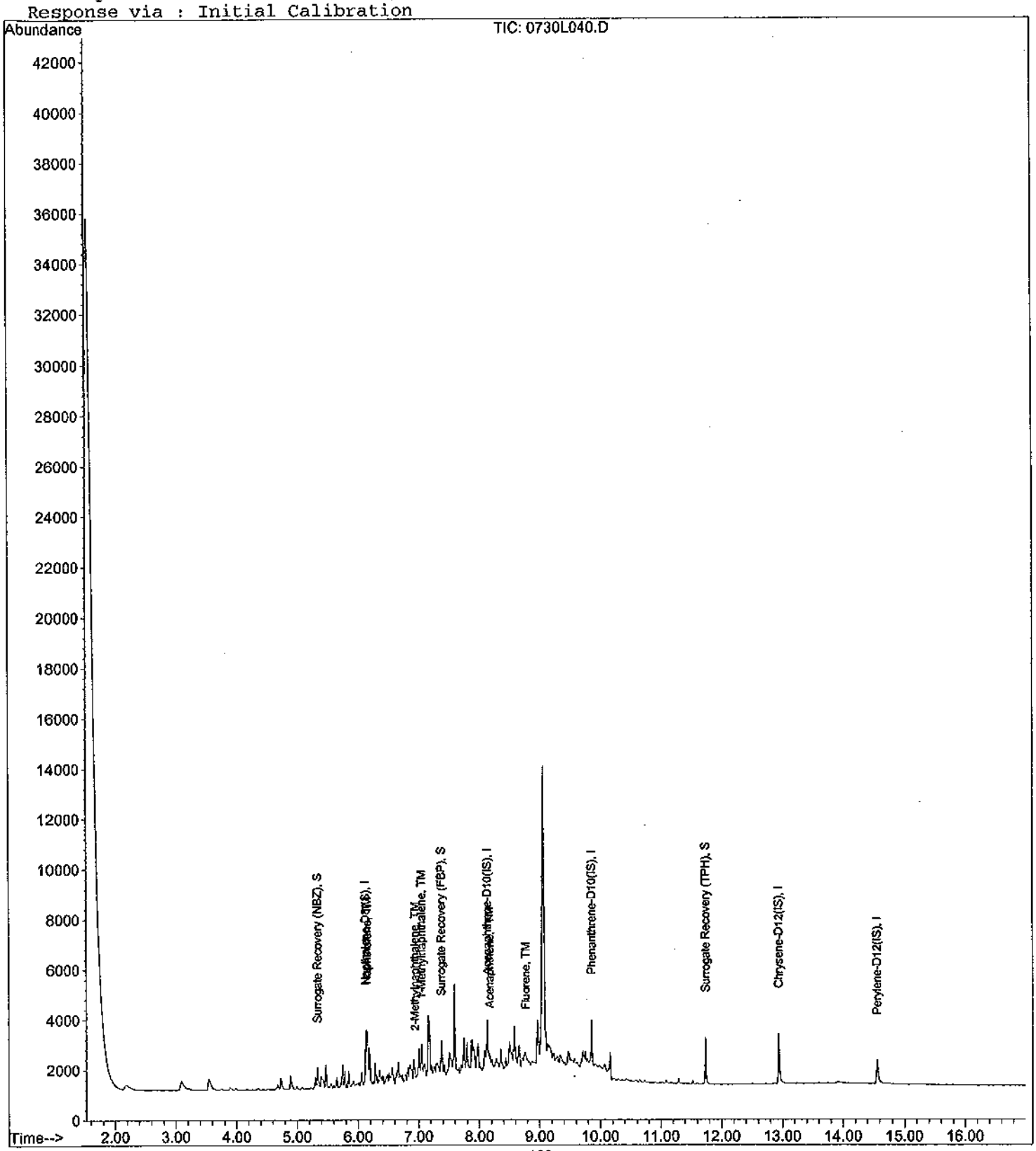
(#) = qualifier out of range (m) = manual integration

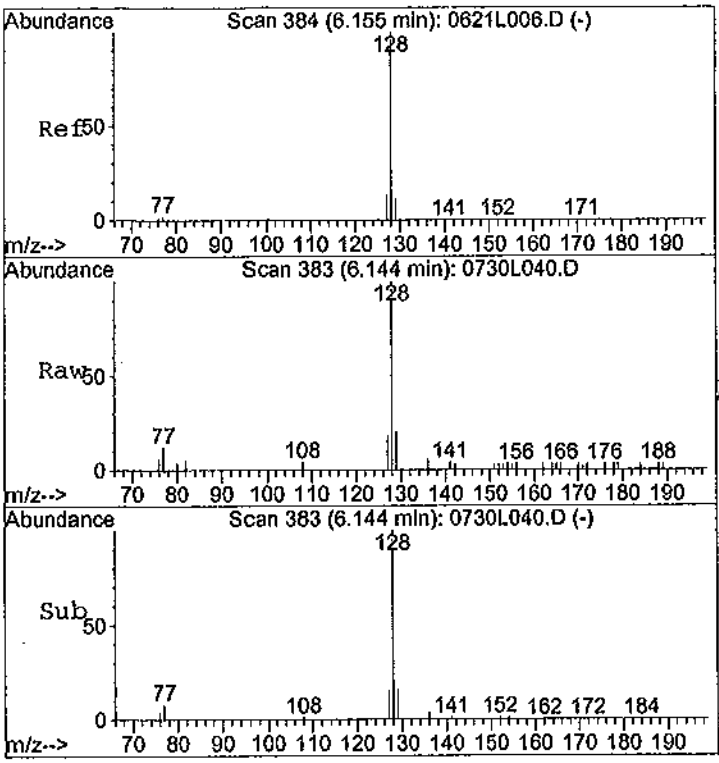
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L040.D Vial: 40
Acq On : 31 Jul 11 2:54 Operator: LF
Sample : AY42273W05 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:36 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration

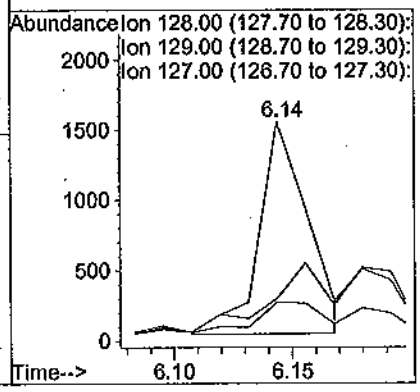


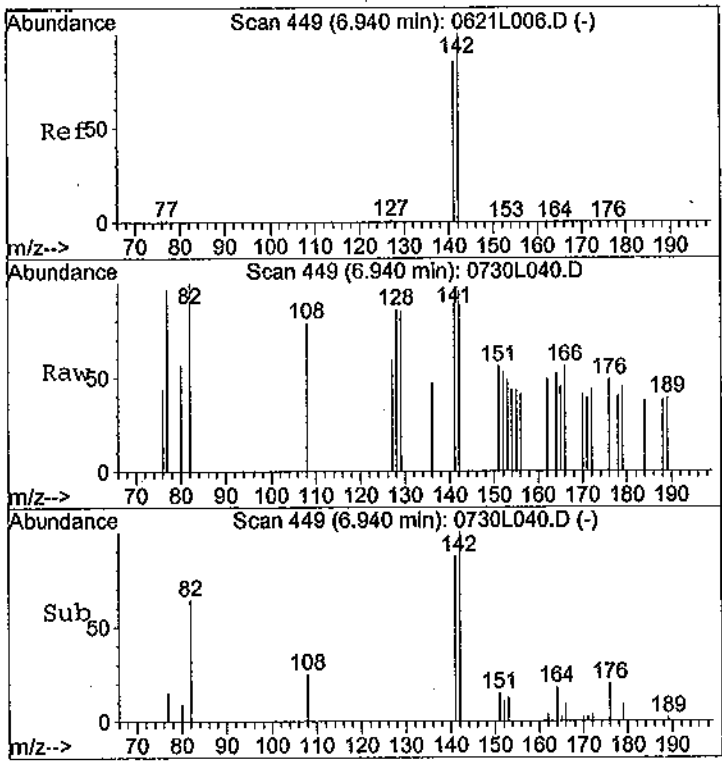


#3
Naphthalene
Concen: 2.15218 ppb
RT: 6.14 min Scan# 383
Delta R.T. -0.01 min
Lab File: 0730L040.D
Acq: 31 Jul 11 2:54

Tgt Ion:128 Resp: 2167

Ion	Ratio	Lower	Upper
128	100		
129	16.2	7.7	14.3#
127	14.3	8.8	16.4

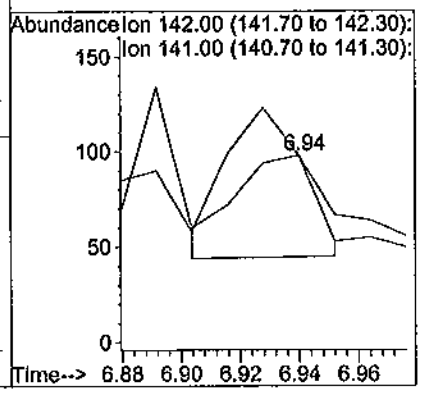


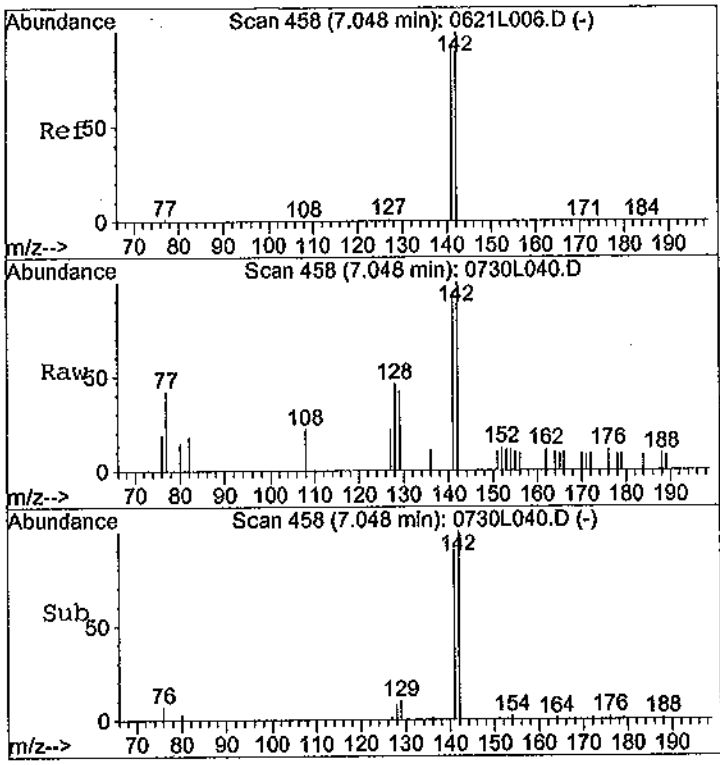


#4
2-Methylnaphthalene
Concen: 0.16007 ppb
RT: 6.94 min Scan# 449
Delta R.T. 0.00 min
Lab File: 0730L040.D
Acq: 31 Jul 11 2:54

Tgt Ion:142 Resp: 101

Ion	Ratio	Lower	Upper
142	100		
141	88.9	59.3	110.1

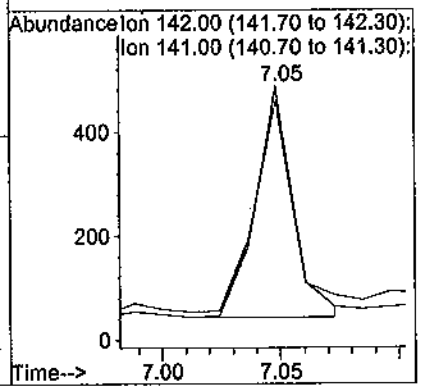


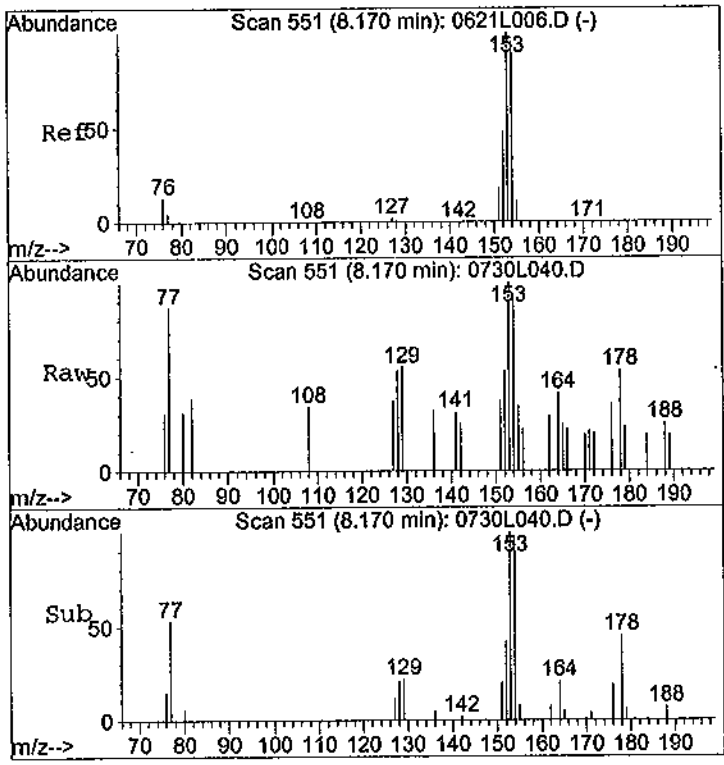


#5
1-Methylnaphthalene
Concen: 0.85358 ppb
RT: 7.05 min Scan# 458
Delta R.T. 0.00 min
Lab File: 0730L040.D
Acq: 31 Jul 11 2:54

Tgt Ion:142 Resp: 486

Ion	Ratio	Lower	Upper
142	100		
141	91.4	63.6	118.2

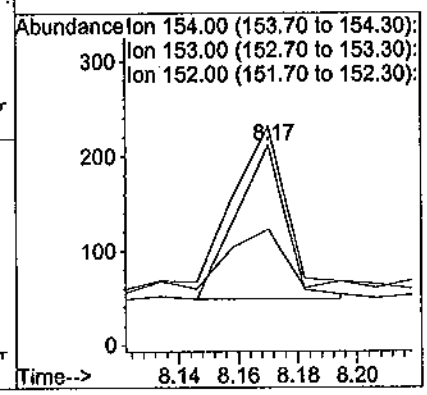


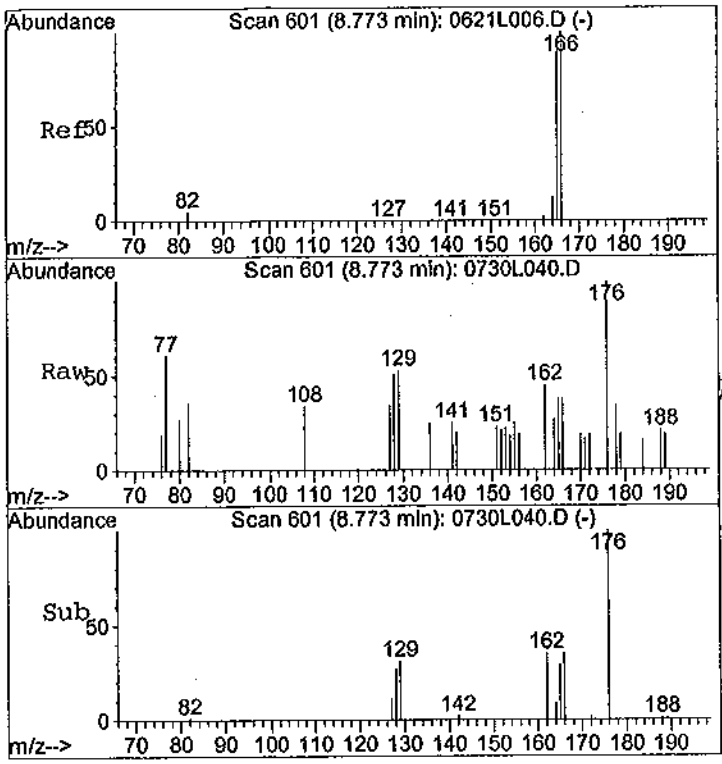


#9
Acenaphthene
Concen: 0.30826 ppb
RT: 8.17 min Scan# 551
Delta R.T. 0.00 min
Lab File: 0730L040.D
Acq: 31 Jul 11 2:54

Tgt Ion:154 Resp: 188

Ion	Ratio	Lower	Upper
154	100		
153	101.2	73.4	136.4
152	38.7	35.0	65.0

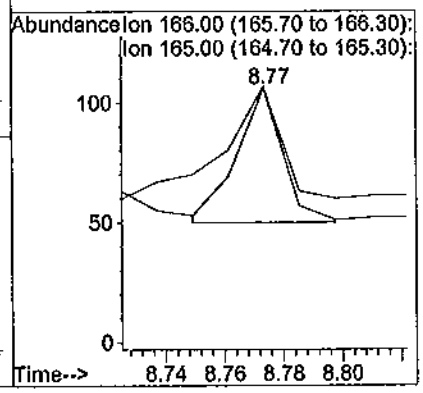




#10
Fluorene
Concen: 0.08804 ppb
RT: 8.77 min Scan# 601
Delta R.T. 0.00 min
Lab File: 0730L040.D
Acq: 31 Jul 11 2:54

Tgt Ion:166 Resp: 60

Ion	Ratio	Lower	Upper
166	100		
165	85.5	64.8	120.3



EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES038
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42274
QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.90	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 J	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.46	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.099 J	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.11 J	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	2.7	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	72.6	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	86.1	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	80.8	50-135			%	07/26/11	07/31/11

J = Estimated value.

Quant Method: SIM2.M
Run #: 0730L041
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L041.D Vial: 41
Acq On : 31 Jul 11 3:20 Operator: LF
Sample : AY42274W06 1/1020 Inst : Linus
Misc : Multiplr: 0.98

Quant Time: Aug 2 11:37 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1767	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	827	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1516	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.94	240	2192	2.50000 ppb	0.00
21) Perylene-D12(IS)	14.56	264	1727	2.50000 ppb	0.01
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.34	82	587	1.68788 ppb	0.00
Spiked Amount 1.961			Recovery = 86.088%		
7) Surrogate Recovery (FBP)	7.37	172	1115	1.42300 ppb	0.00
Spiked Amount 1.961			Recovery = 72.573%		
17) Surrogate Recovery (TPH)	11.74	244	1797	1.58513 ppb	0.00
Spiked Amount 1.961			Recovery = 80.835%		
Target Compounds					Qvalue
3) Naphthalene	6.14	128	3069	2.71907 ppb #	90
4) 2-Methylnaphthalene	6.93	142	82	0.11594 ppb #	12
5) 1-Methylnaphthalene	7.05	142	575	0.90090 ppb	100
8) Acenaphthylene	7.97	152	102	0.09873 ppb #	1
9) Acenaphthene	8.17	154	278	0.45530 ppb	92
10) Fluorene	8.77	166	76	0.11138 ppb	88

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

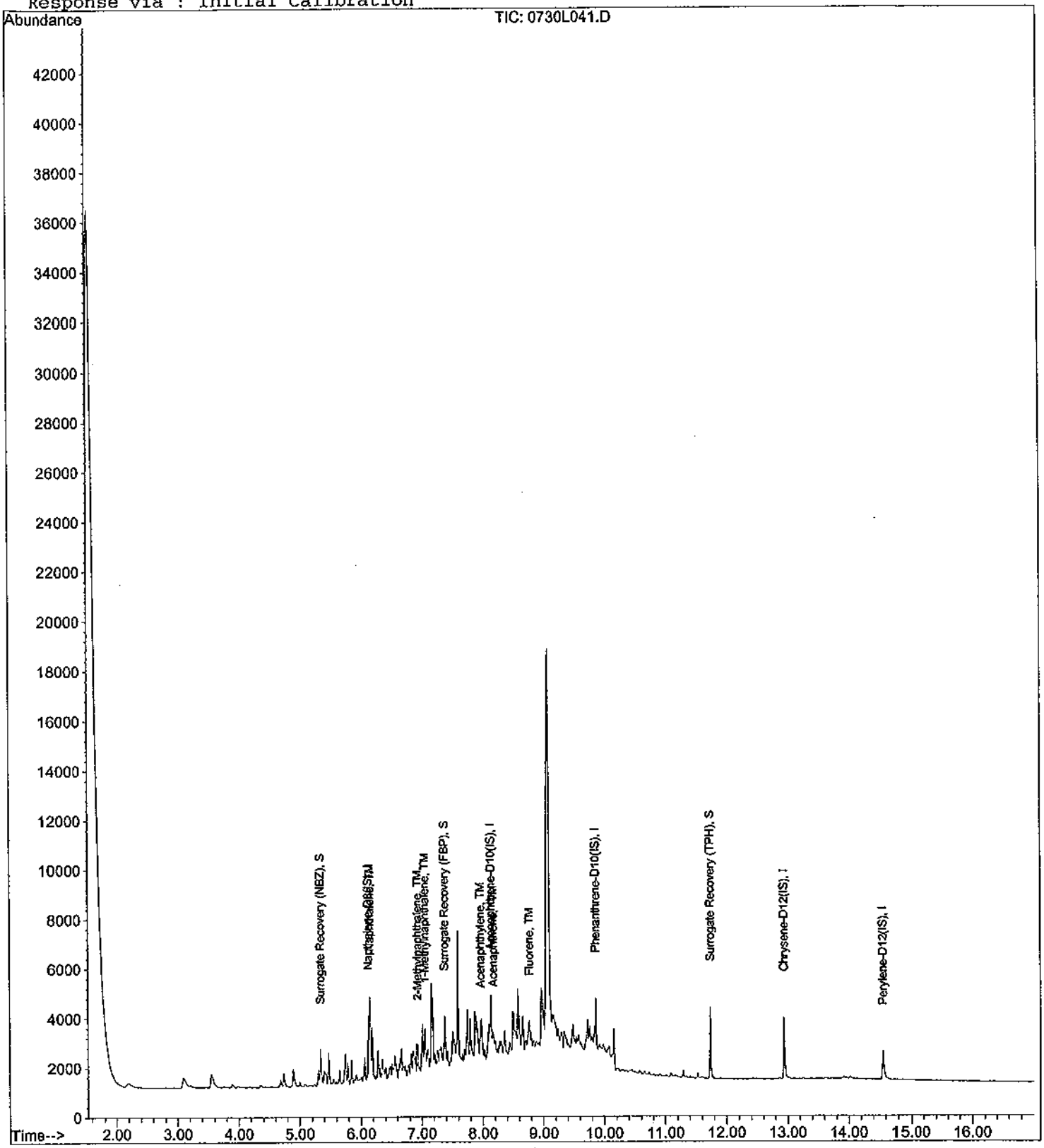
Quantitation Report

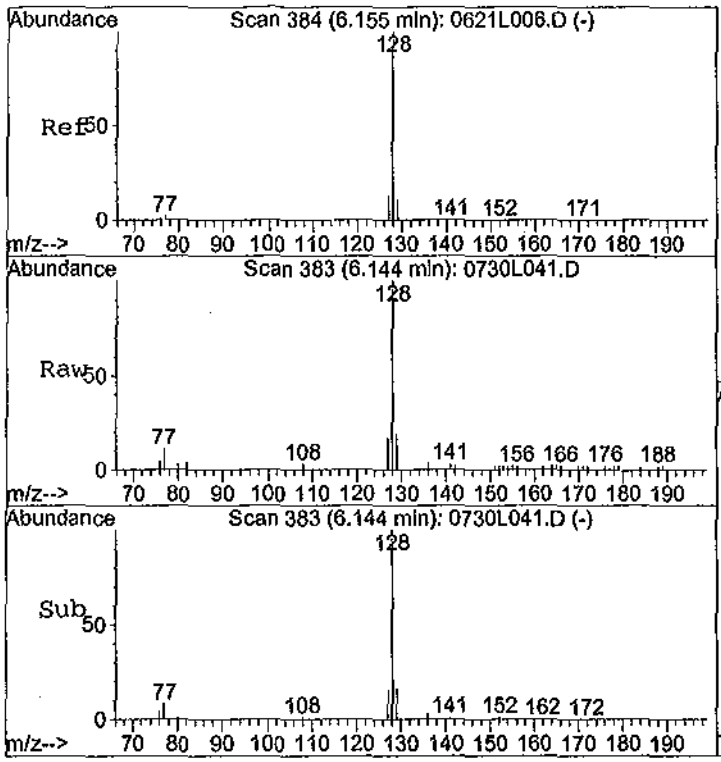
Data File : M:\LINUS\DATA\L110621\0730L041.D
Acq On : 31 Jul 11 3:20
Sample : AY42274W06 1/1020
Misc :

Vial: 41
Operator: LF
Inst : Linus
Multiplr: 0.98

Quant Time: Aug 2 11:37 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration

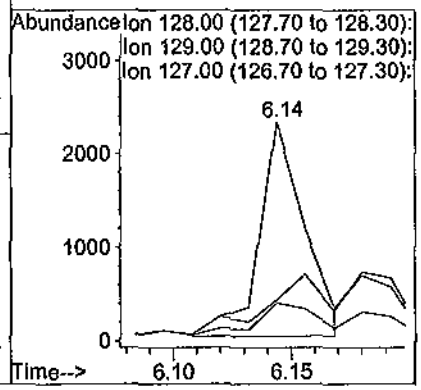


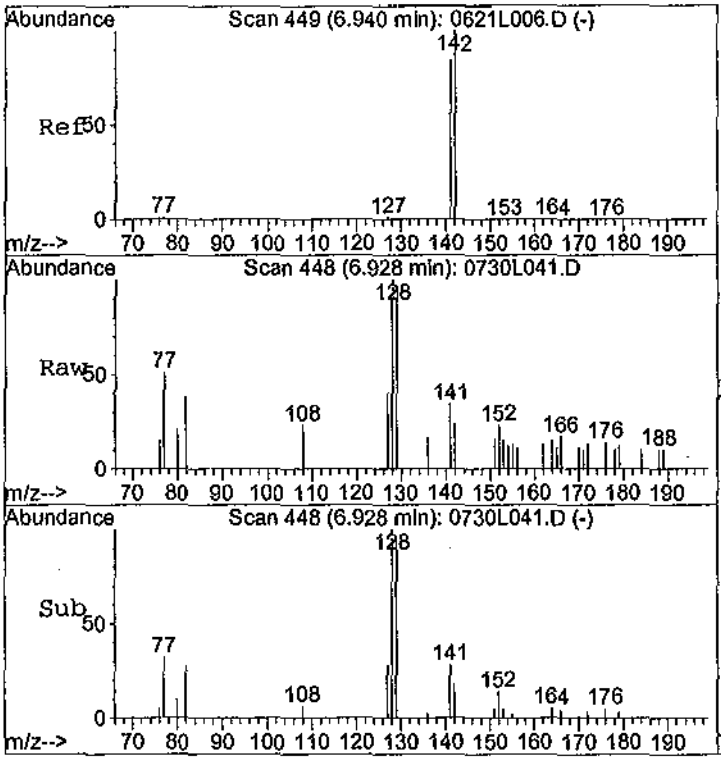


#3
Naphthalene
Concen: 2.71907 ppb
RT: 6.14 min Scan# 383
Delta R.T. -0.01 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:128 Resp: 3069

Ion	Ratio	Lower	Upper
128	100		
129	16.2	7.7	14.3#
127	15.1	8.8	16.4

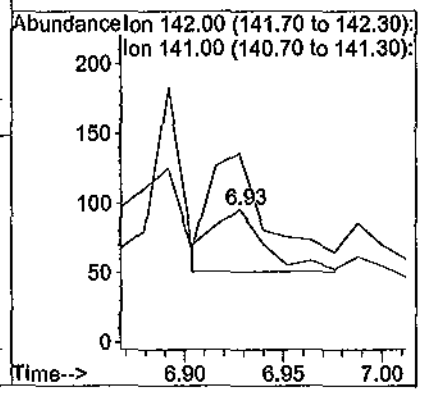


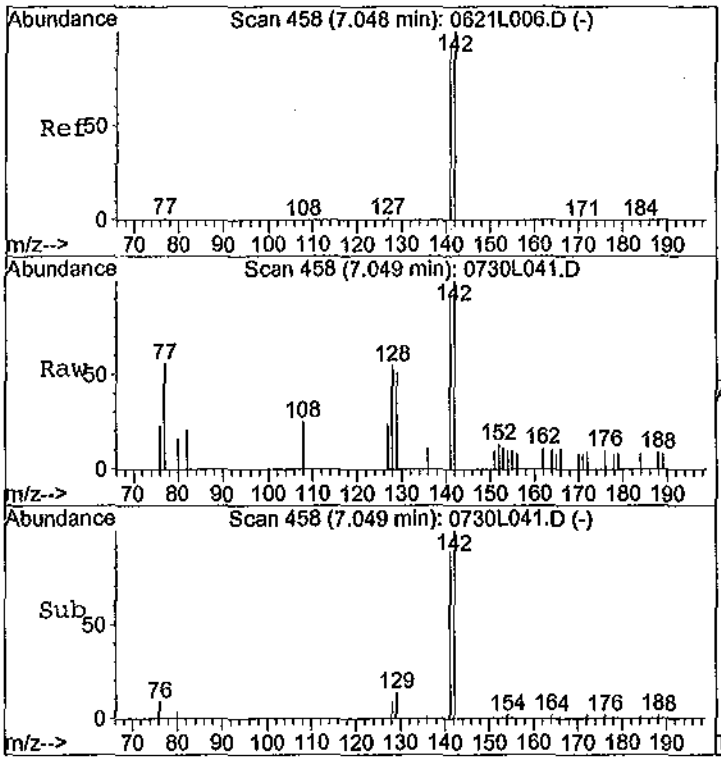


#4
2-Methylnaphthalene
Concen: 0.11594 ppb
RT: 6.93 min Scan# 448
Delta R.T. -0.01 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:142 Resp: 82

Ion	Ratio	Lower	Upper
142	100		
141	165.1	59.3	110.1#

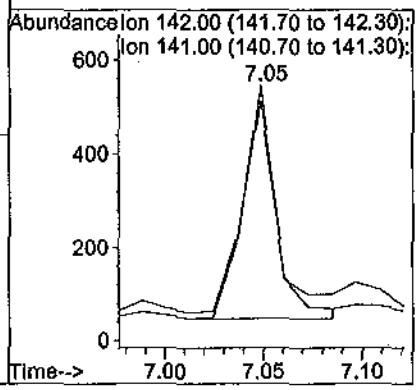


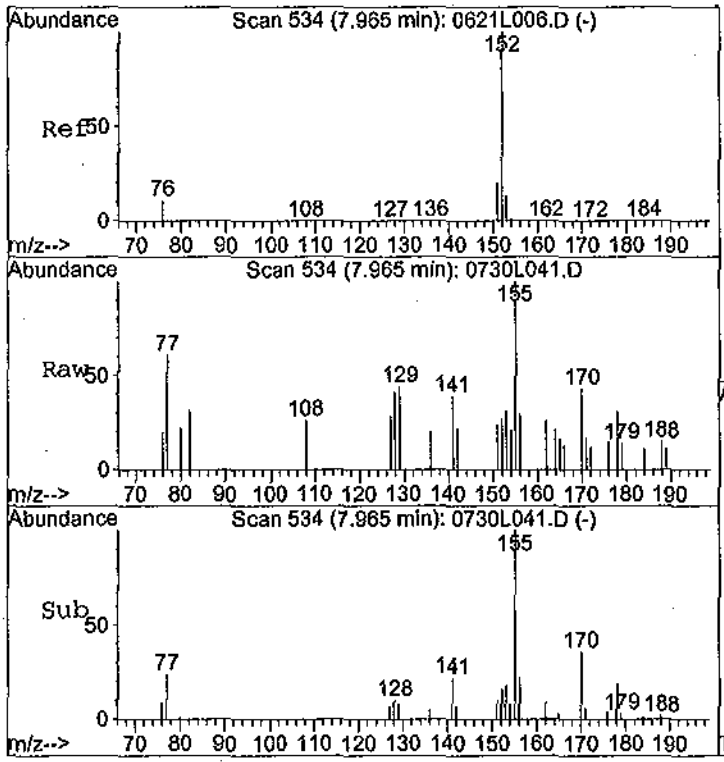


#5
1-Methylnaphthalene
Concen: 0.90090 ppb
RT: 7.05 min Scan# 458
Delta R.T. 0.00 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:142 Resp: 575

Ion	Ratio	Lower	Upper
142	100		
141	90.6	63.6	118.2

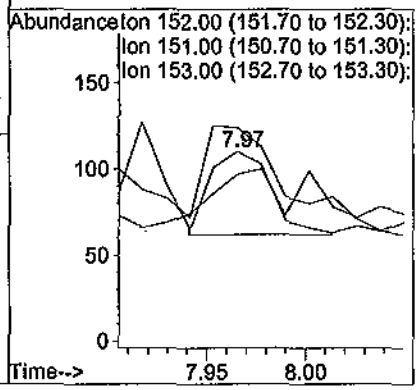


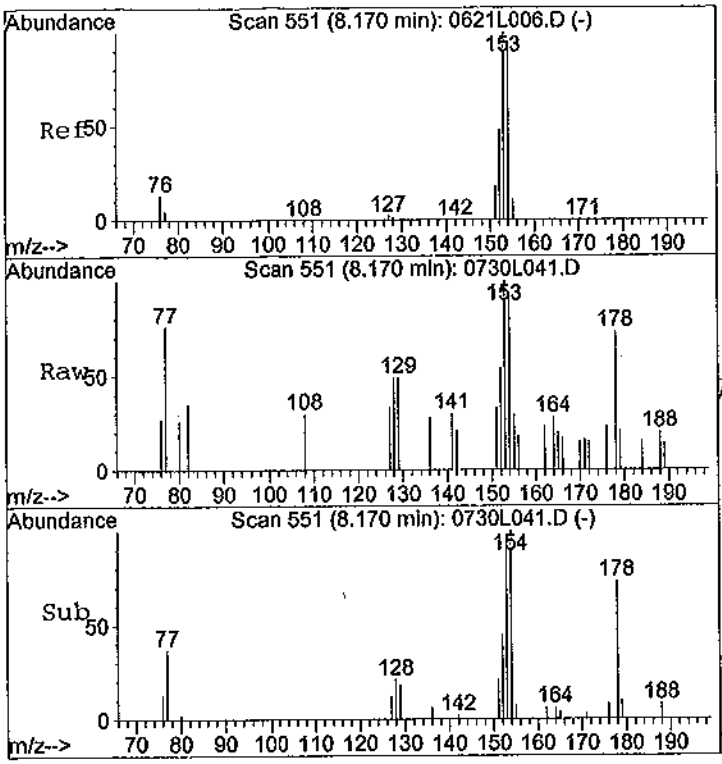


#8
Acenaphthylene
Concen: 0.09873 ppb
RT: 7.97 min Scan# 534
Delta R.T. 0.00 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:152 Resp: 102

Ion	Ratio	Lower	Upper
152	100		
151	48.9	13.9	25.9#
153	110.6	9.2	17.0#

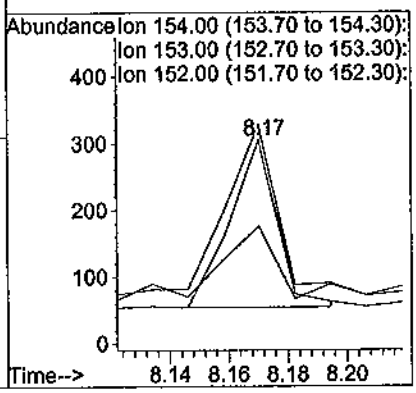


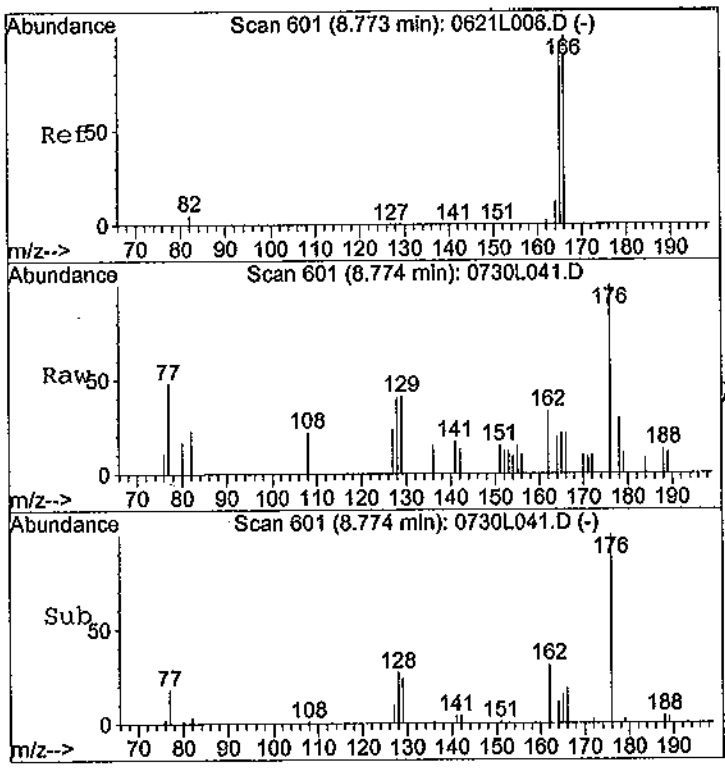


#9
Acenaphthene
Concen: 0.45530 ppb
RT: 8.17 min Scan# 551
Delta R.T. 0.00 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:154 Resp: 278

Ion	Ratio	Lower	Upper
154	100		
153	98.4	73.4	136.4
152	42.2	35.0	65.0

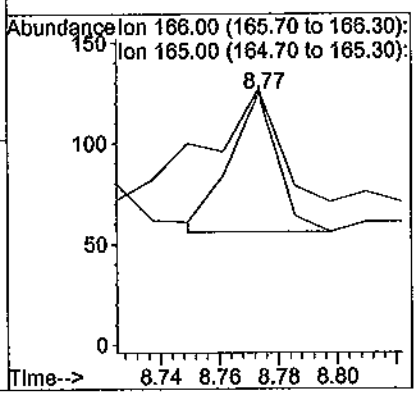




#10
Fluorene
Concen: 0.11138 ppb
RT: 8.77 min Scan# 601
Delta R.T. 0.00 min
Lab File: 0730L041.D
Acq: 31 Jul 11 3:20

Tgt Ion:166 Resp: 76

Ion	Ratio	Lower	Upper
166	100		
165	81.2	64.8	120.3



EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES039

APPL ID: AY42275

Sample Collection Date: 07/19/11

QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	67.0	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	71.1	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	79.2	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L044
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L044.D Vial: 44
Acq On : 31 Jul 11 4:37 Operator: LF
Sample : AY42275W20 1/1010 Inst : Linus
Misc : Multiplr: 0.99

Quant Time: Aug 2 11:38 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1359	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	664	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1149	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1643	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.57	264	1311	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.35	82	373	1.40835 ppb	0.01
Spiked Amount 1.980			Recovery =	71.104%	
7) Surrogate Recovery (FBP)	7.37	172	826	1.32596 ppb	0.00
Spiked Amount 1.980			Recovery =	66.963%	
17) Surrogate Recovery (TPH)	11.74	244	1319	1.56763 ppb	0.00
Spiked Amount 1.980			Recovery =	79.184%	
Target Compounds					Qvalue

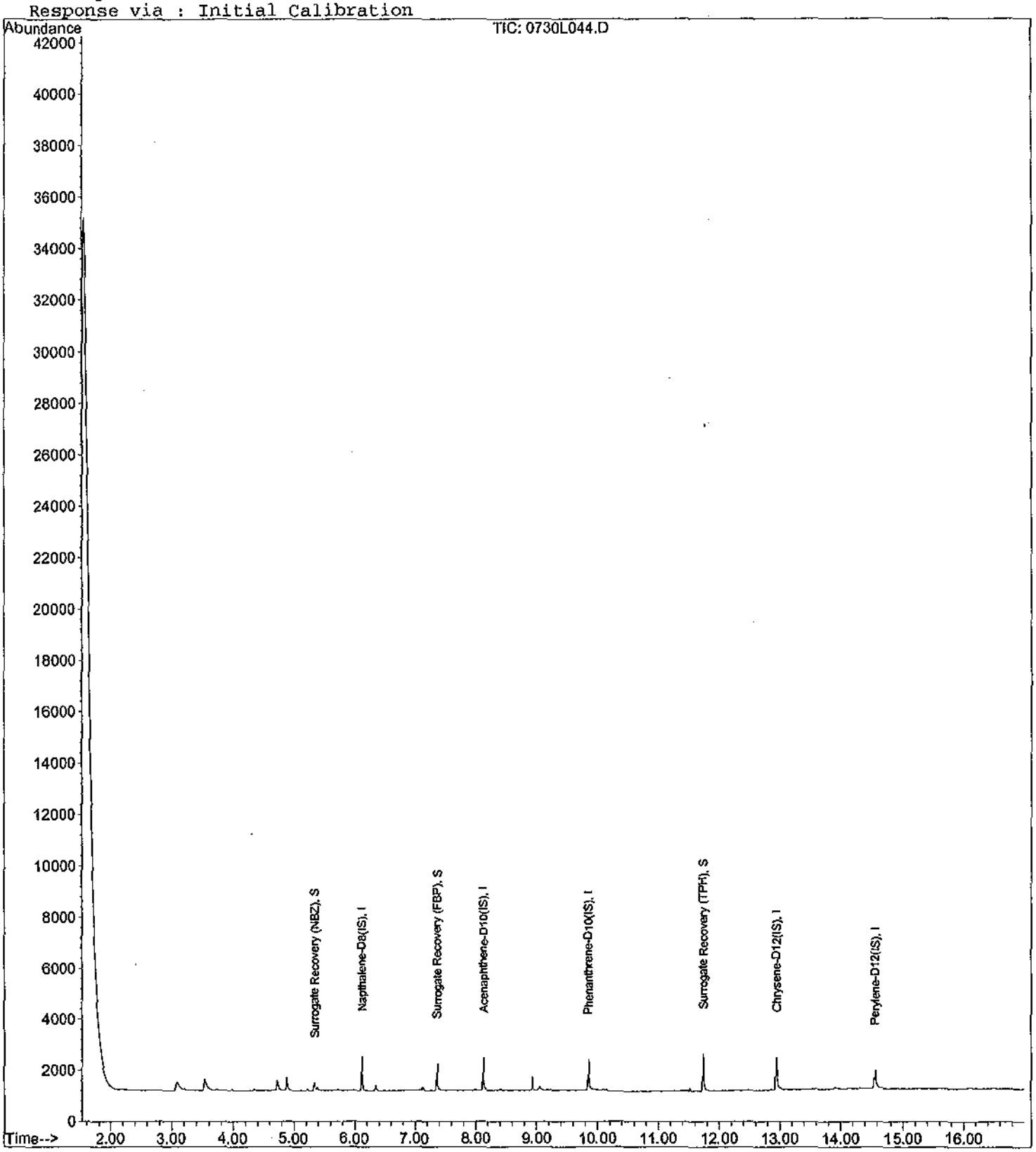
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L044.D Vial: 44
Acq On : 31 Jul 11 4:37 Operator: LF
Sample : AY42275W20 1/1010 Inst : Linus
Misc : Multiplr: 0.99

Quant Time: Aug 2 11:38 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES040

APPL ID: AY42276

Sample Collection Date: 07/20/11

QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	66.2	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	64.8	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	68.9	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L045
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L045.D
Acq On : 31 Jul 11 5:02
Sample : AY42276W07 1/1010
Misc :

Vial: 45
Operator: LF
Inst : Linus
Multiplr: 0.99

Quant Time: Aug 2 11:38 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1551	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	704	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1152	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1780	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.57	264	1376	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.35	82	388	1.28363 ppb	0.01
Spiked Amount 1.980			Recovery = 64.842%		
7) Surrogate Recovery (FBP)	7.37	172	866	1.31118 ppb	0.00
Spiked Amount 1.980			Recovery = 66.206%		
17) Surrogate Recovery (TPH)	11.74	244	1243	1.36360 ppb	0.00
Spiked Amount 1.980			Recovery = 68.882%		

Target Compounds Qvalue

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

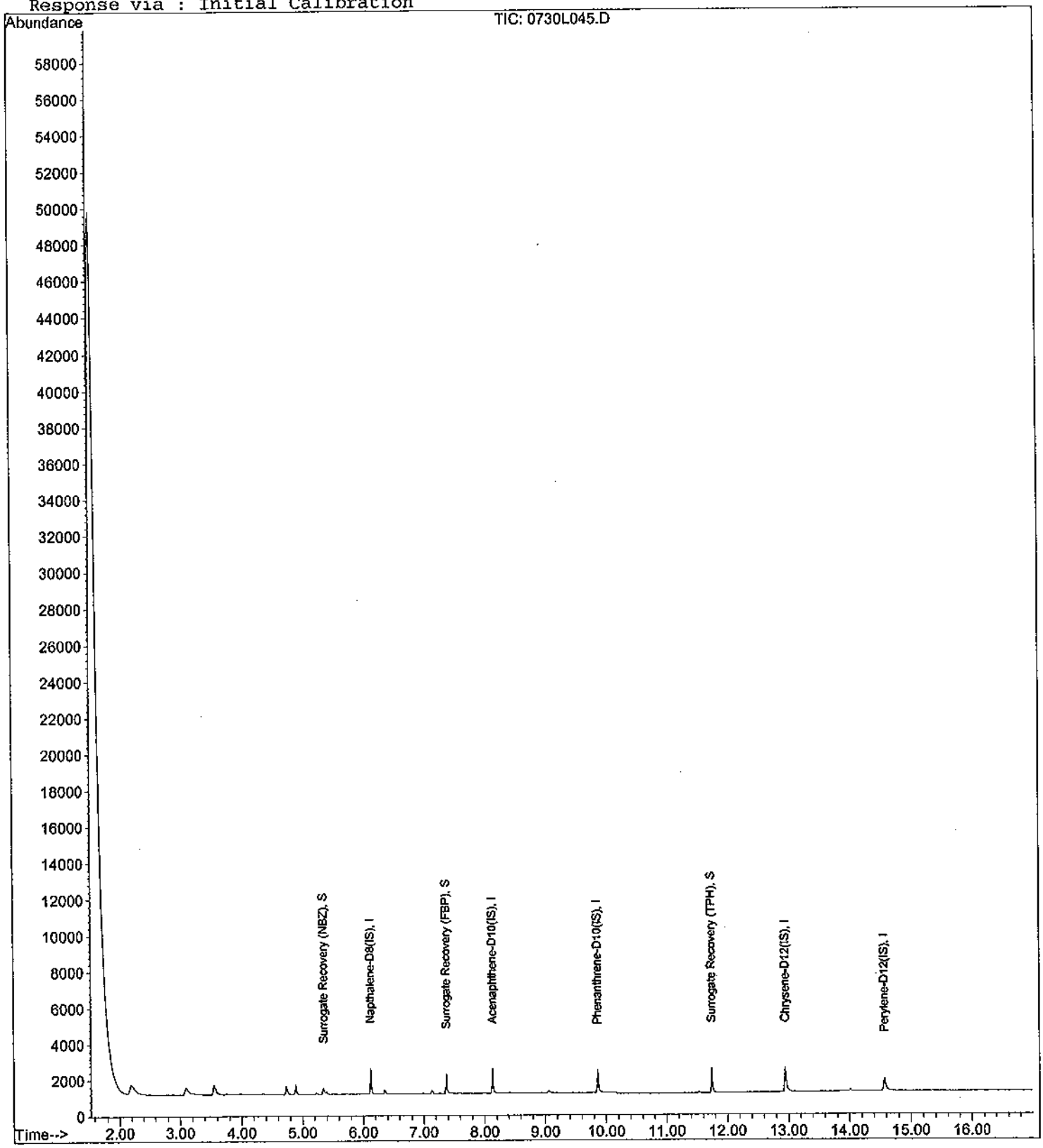
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L045.D
Acq On : 31 Jul 11 5:02
Sample : AY42276W07 1/1010
Misc :

Vial: 45
Operator: LF
Inst : Linus
Multiplr: 0.99

Quant Time: Aug 2 11:38 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



EPA 8270D SIM

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES041
Sample Collection Date: 07/20/11

ARF: 65187
APPL ID: AY42277
QCG: #SIMHC-110726A-157858

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/31/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	NAPHTHALENE	0.12 J	0.2	0.10	0.05	ug/L	07/26/11	07/31/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/31/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/31/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	51.2	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	62.2	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	64.4	50-135			%	07/26/11	07/31/11

J = Estimated value.

Quant Method: SIM2.M
Run #: 0730L046
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/05/11 2:00:01 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L046.D Vial: 46
Acq On : 31 Jul 11 5:28 Operator: LF
Sample : AY42277W06 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: Aug 2 11:39 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1436	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	704	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1183	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1737	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.57	264	1402	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.35	82	345	1.19722 ppb	0.01
Spiked Amount 1.923			Recovery = 62.244%		
7) Surrogate Recovery (FBP)	7.37	172	669	0.98369 ppb	0.00
Spiked Amount 1.923			Recovery = 51.168%		
17) Surrogate Recovery (TPH)	11.74	244	1135	1.23914 ppb	0.00
Spiked Amount 1.923			Recovery = 64.428%		
Target Compounds					Qvalue
3) Naphthalene	6.16	128	111	0.11869 ppb	# 1

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

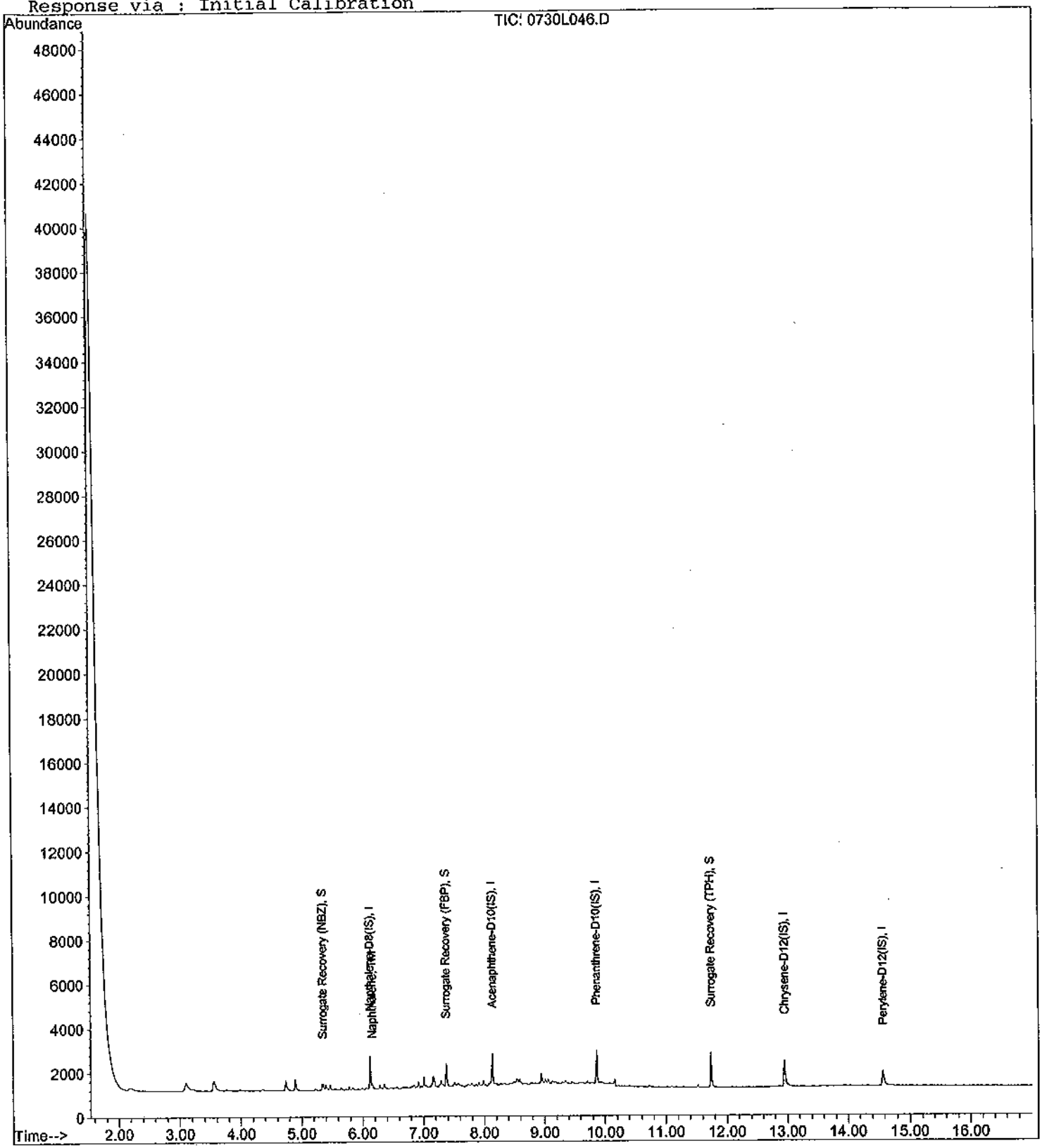
Quantitation Report

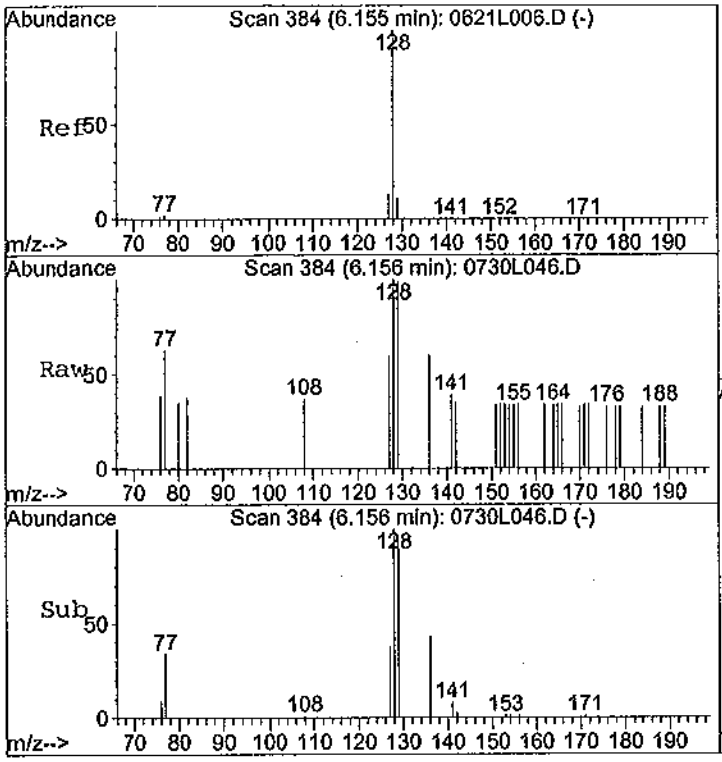
Data File : M:\LINUS\DATA\L110621\0730L046.D
Acq On : 31 Jul 11 5:28
Sample : AY42277W06 1/1040
Misc :

Vial: 46
Operator: LF
Inst : Linus
Multiplr: 0.96

Quant Time: Aug 2 11:39 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration

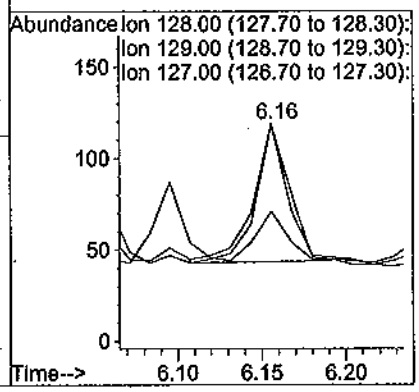




#3
Naphthalene
Concen: 0.11869 ppb
RT: 6.16 min Scan# 384
Delta R.T. 0.00 min
Lab File: 0730L046.D
Acq: 31 Jul 11 5:28

Tgt Ion:128 Resp: 111

Ion	Ratio	Lower	Upper
128	100		
129	101.4	7.7	14.3#
127	35.1	8.8	16.4#



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Calibration Data

APPL, INC.

EPA 8270C SIM

Form 6
Initial Calibration

65187

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 06/21/11
Matrix: Instrument: Linus
Initials:

			0621L002.D	0621L003.D	0621L004.D	0621L005.D	0621L006.D	0621L007.D	0621L008.D	0621L009.D						
		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD		
1	I	Napthalene-D8(IS)														
2	S	Surrogate Recovery (NBZ)	0.5156	0.4885	0.5546	0.5400	0.4341	0.4458	0.4367	0.4440			0.48	10	S	
3	TM	Naphthalene	1.698	1.728	1.817	1.855	1.457	1.406	1.278	1.286			1.6	15	TM	
4	TM	2-Methylnaphthalene	1.157	1.018	1.085	1.175	0.9212	0.9018	0.8078	0.7824			0.98	15	TM	
5	TM	1-Methylnaphthalene	0.9683	0.8741	1.037	1.078	0.8653	0.8339	0.7174	0.7079			0.89	15	TM	
6	I	Acenaphthene-D10(IS)														
7	S	Surrogate Recovery (FBP)	2.429	2.417	2.794	2.774	2.198	2.116	1.982	1.868			2.3	15	S	
8	TM	Acenaphthylene	3.221	3.033	3.560	3.533	2.891	2.915	2.674	2.668			3.1	11	TM	
9	*TM	Acenaphthene	1.954	1.846	2.128	2.098	1.721	1.689	1.554	1.489			1.8	13	*TM	
10	TM	Fluorene	2.270	1.947	2.350	2.333	1.953	1.909	1.732	1.684			2.0	13	TM	
11	I	Phenanthrene-D10(IS)														
12	TM	Phenanthrene	2.031	1.861	2.067	2.047	1.747	1.675	1.430	1.408			1.8	15	TM	
13	TM	Anthracene	1.763	1.725	1.892	1.806	1.654	1.601	1.396	1.390			1.7	11	TM	
14	*TM	Fluoranthene	2.849	2.913	2.895	2.771	2.491	2.464	2.280	2.310			2.6	10	*TM	
15	I	Chrysene-D12(IS)														
16	TM	Pyrene	2.542	2.545	2.653	2.573	2.205	2.102	1.881	1.848			2.3	14	TM	
17	S	Surrogate Recovery (TPH)	1.430	1.330	1.479	1.487	1.218	1.164	1.031	1.002			1.3	15	S	
18	TM	Benz (a) anthracene	2.080	2.283	2.248	2.085	1.884	1.749	1.586	1.571			1.9	15	TM	
19	TM	Chrysene	2.080	2.180	2.137	2.206	1.774	1.671	1.536	1.554			1.9	15	TM	
20	TM	Indeno (1,2,3-cd) pyrene	2.224	1.957	2.022	2.173	1.784	1.684	1.581	1.602			1.9	13	TM	
21	I	Perylene-D12(IS)														
22	TM	Benzo (b) fluoranthene	2.389	2.287	2.220	2.701	2.290	2.054	1.751	2.112			2.2	12	TM	
23	TM	Benzo (k) fluoranthene	1.824	1.842	2.118	2.202	1.932	2.000	1.987	1.574			1.9	10	TM	
24	*TM	Benzo (a) pyrene	2.502	2.350	2.331	2.350	2.051	1.963	1.820	1.799			2.1	13	*TM	
25	TM	Dibenz (a,h) anthracene	2.098	2.120	2.143	1.961	1.757	1.732	1.616	1.603			1.9	12	TM	
26	TM	Benzo (g,h,i) perylene	2.276	2.280	2.267	2.175	1.847	1.791	1.658	1.662			2.0	14	TM	
27																
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L002.D
Acq On : 21 Jun 11 20:15
Sample : 0.1ug/ml PAH 06-21-11
Misc :

Vial: 2
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 11:33 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1988	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	947	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1588	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1731	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.55	264	1549	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	41	0.08764 ppb		0.00
Spiked Amount 2.000			Recovery	= 4.400%		
7) Surrogate Recovery (FBP)	7.37	172	92	0.08878 ppb		0.00
Spiked Amount 2.000			Recovery	= 4.450%		
17) Surrogate Recovery (TPH)	11.74	244	99	0.09503 ppb		0.00
Spiked Amount 2.000			Recovery	= 4.750%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	135	0.08896 ppb		98
4) 2-Methylnaphthalene	6.94	142	92	0.10253 ppb		94
5) 1-Methylnaphthalene	7.05	142	77	0.09040 ppb		98
8) Acenaphthylene	7.97	152	122	0.08853 ppb		97
9) Acenaphthene	8.17	154	74	0.09245 ppb		98
10) Fluorene	8.77	166	86	0.09603 ppb		88
12) Phenanthrene	9.88	178	129	0.09785 ppb		100
13) Anthracene	9.94	178	112	0.09234 ppb		98
14) Fluoranthene	11.26	202	181	0.09448 ppb	#	71
16) Pyrene	11.53	202	176	0.09422 ppb		95
18) Benz (a) anthracene	12.93	228	144	0.09169 ppb		97
19) Chrysene	12.96	228	144	0.08942 ppb		93
20) Indeno (1,2,3-cd) pyrene	16.02	276	154	0.09596 ppb		92
22) Benzo (b) fluoranthene	14.10	252	148	0.09087 ppb		97
23) Benzo (k) fluoranthene	14.14	252	113	0.07365 ppb		95
24) Benzo (a) pyrene	14.48	252	155	0.10098 ppb		98
25) Dibenz (a,h) anthracene	16.05	278	130	0.09683 ppb		95
26) Benzo (g,h,i) perylene	16.45	276	141	0.09419 ppb		97

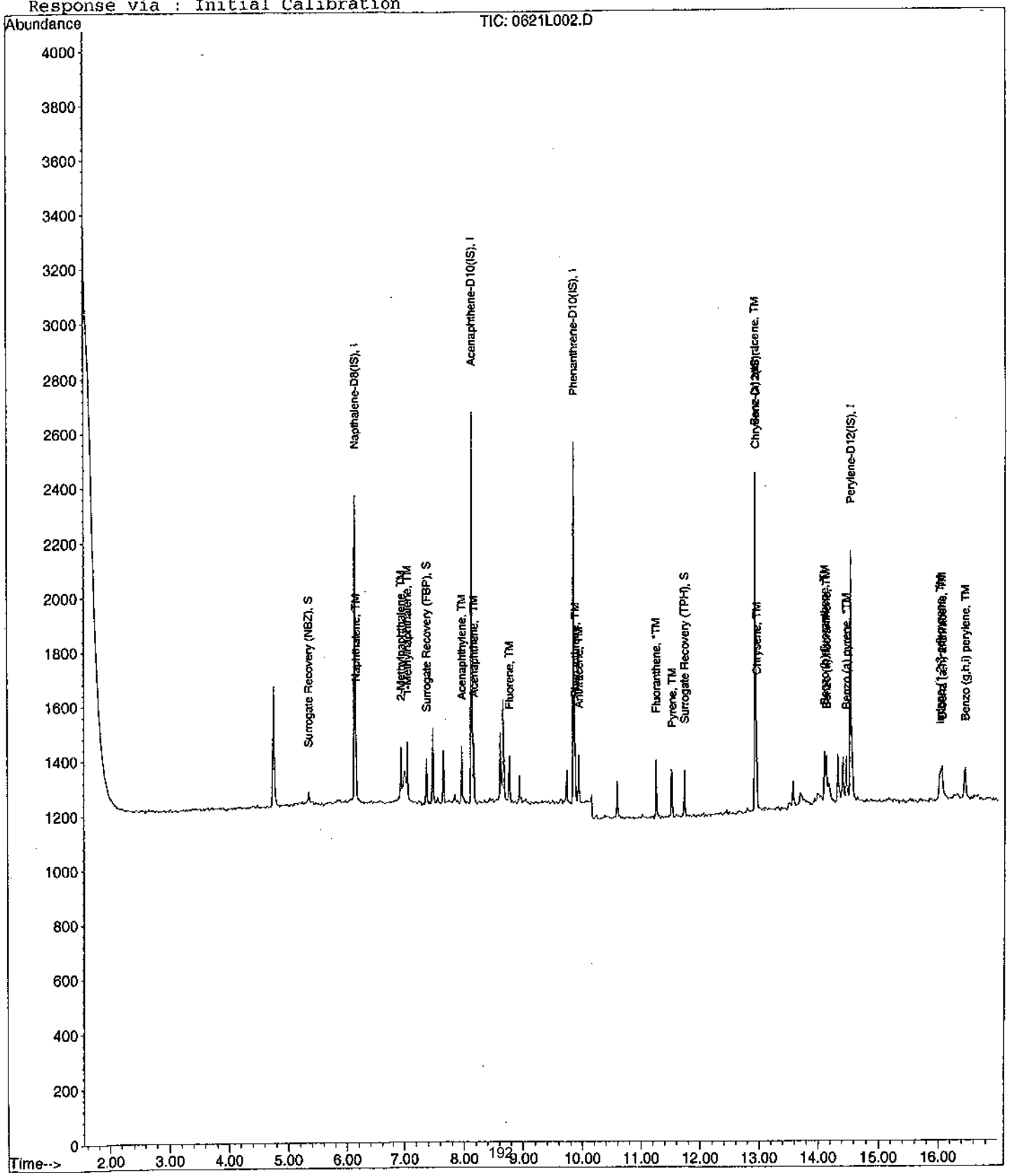
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L002.D
Acq On : 21 Jun 11 20:15
Sample : 0.1ug/ml PAH 06-21-11
Misc :

Vial: 2
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 11:33 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L003.D
Acq On : 21 Jun 11 20:41
Sample : 0.2ug/ml PAH
Misc :

Vial: 3
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 11:31 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.13	136	2431	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.13	164	1117	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1652	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.94	240	1955	2.50000 ppb	0.00
21) Perylene-D12(IS)	14.55	264	1798	2.50000 ppb	0.00
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.35	82	95	0.16606 ppb	0.01
Spiked Amount 2.000			Recovery =	8.300%	
7) Surrogate Recovery (FBP)	7.37	172	216	0.17673 ppb	0.00
Spiked Amount 2.000			Recovery =	8.850%	
17) Surrogate Recovery (TPH)	11.74	244	208	0.17679 ppb	0.00
Spiked Amount 2.000			Recovery =	8.850%	
Target Compounds					Qvalue
3) Naphthalene	6.14	128	336	0.18107 ppb	97
4) 2-Methylnaphthalene	6.94	142	198	0.18045 ppb	96
5) 1-Methylnaphthalene	7.05	142	170	0.16322 ppb	98
8) Acenaphthylene	7.97	152	271	0.16672 ppb	99
9) Acenaphthene	8.17	154	165	0.17477 ppb	95
10) Fluorene	8.77	166	174	0.16473 ppb	93
12) Phenanthrene	9.88	178	246	0.17936 ppb	98
13) Anthracene	9.94	178	228	0.18070 ppb	99
14) Fluoranthene	11.26	202	385	0.19317 ppb	75
16) Pyrene	11.53	202	398	0.18865 ppb	93
18) Benz (a) anthracene	12.93	228	357	0.20127 ppb	96
19) Chrysene	12.96	228	341	0.18749 ppb	91
20) Indeno (1,2,3-cd) pyrene	16.02	276	306	0.16883 ppb	94
22) Benzo (b) fluoranthene	14.10	252	329	0.17402 ppb	95
23) Benzo (k) fluoranthene	14.14	252	265	0.14880 ppb	96
24) Benzo (a) pyrene	14.48	252	338	0.18970 ppb	95
25) Dibenz (a,h) anthracene	16.05	278	305	0.19571 ppb	94
26) Benzo (g,h,i) perylene	16.45	276	328	0.18877 ppb	94

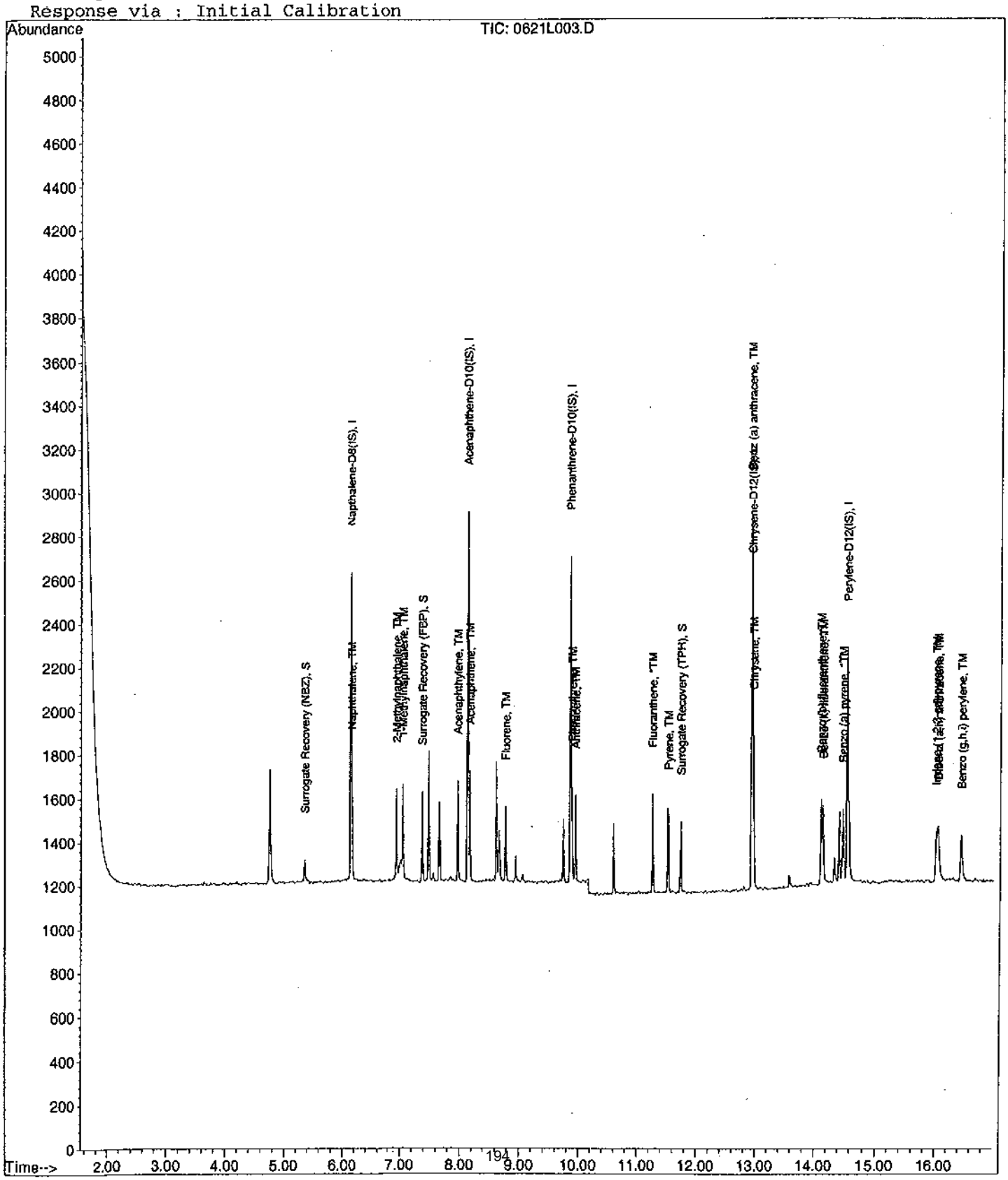
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L003.D
Acq On : 21 Jun 11 20:41
Sample : 0.2ug/ml PAH
Misc :

Vial: 3
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 11:31 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L004.D
Acq On : 21 Jun 11 21:08
Sample : 0.5ug/ml PAH
Misc :

Vial: 4
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 11:30 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1668	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	698	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1171	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1308	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.55	264	1171	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.35	82	185	0.47130 ppb		0.01
Spiked Amount 2.000			Recovery	= 23.550%		
7) Surrogate Recovery (FBP)	7.37	172	390	0.51063 ppb		0.00
Spiked Amount 2.000			Recovery	= 25.550%		
17) Surrogate Recovery (TPH)	11.74	244	387	0.49163 ppb		0.00
Spiked Amount 2.000			Recovery	= 24.600%		
Target Compounds						Qvalue
3) Naphthalene	6.16	128	606	0.47595 ppb		100
4) 2-Methylnaphthalene	6.94	142	362	0.48084 ppb		99
5) 1-Methylnaphthalene	7.05	142	346	0.48417 ppb		100
8) Acenaphthylene	7.97	152	497	0.48929 ppb		99
9) Acenaphthene	8.17	154	297	0.50344 ppb		99
10) Fluorene	8.77	166	328	0.49692 ppb		97
12) Phenanthrene	9.88	178	484	0.49785 ppb		98
13) Anthracene	9.94	178	443	0.49531 ppb		99
14) Fluoranthene	11.26	202	678	0.47992 ppb	#	68
16) Pyrene	11.53	202	694	0.49167 ppb		99
18) Benz (a) anthracene	12.93	228	588	0.49549 ppb		98
19) Chrysene	12.96	228	559	0.45938 ppb		97
20) Indeno (1,2,3-cd) pyrene	16.02	276	529	0.43623 ppb		95
22) Benzo (b) fluoranthene	14.10	252	520	0.42232 ppb		98
23) Benzo (k) fluoranthene	14.14	252	496	0.42764 ppb		98
24) Benzo (a) pyrene	14.48	252	546	0.47053 ppb		98
25) Dibenz (a,h) anthracene	16.05	278	502	0.49461 ppb		97
26) Benzo (g,h,i) perylene	16.45	276	531	0.46924 ppb		99

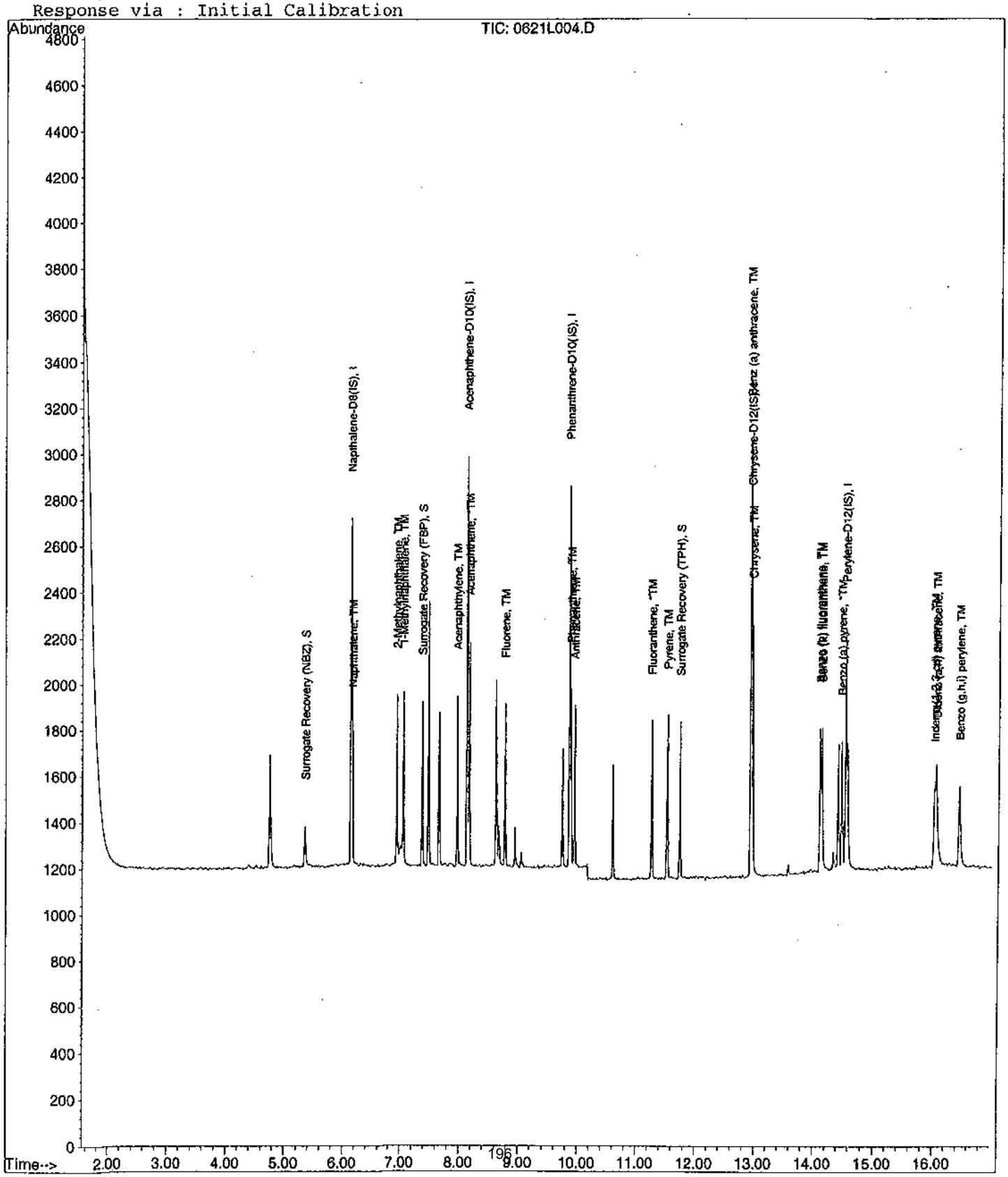
(#) = qualifier out of range (m) = manual integration
0621L004.D SIM2.M Wed Jun 22 11:43:00 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L004.D Vial: 4
Acq On : 21 Jun 11 21:08 Operator: LF
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 11:30 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L005.D Vial: 5
Acq On : 21 Jun 11 21:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1602	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	702	2.50000	ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1164	2.50000	ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1337	2.50000	ppb		0.00
21) Perylene-D12(IS)	14.55	264	1168	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.35	82	346	0.91777	ppb		0.01
Spiked Amount 2.000			Recovery	= 45.900%			
7) Surrogate Recovery (FBP)	7.37	172	779	1.01415	ppb		0.00
Spiked Amount 2.000			Recovery	= 50.700%			
17) Surrogate Recovery (TPH)	11.74	244	795	0.98804	ppb		0.00
Spiked Amount 2.000			Recovery	= 49.400%			
Target Compounds							Qvalue
3) Naphthalene	6.16	128	1189	0.97232	ppb		99
4) 2-Methylnaphthalene	6.94	142	753	1.04140	ppb		100
5) 1-Methylnaphthalene	7.05	142	691	1.00678	ppb		100
8) Acenaphthylene	7.97	152	992	0.97105	ppb		99
9) Acenaphthene	8.17	154	589	0.99271	ppb		98
10) Fluorene	8.77	166	655	0.98668	ppb		99
12) Phenanthrene	9.88	178	953	0.98616	ppb		100
13) Anthracene	9.94	178	841	0.94595	ppb		99
14) Fluoranthene	11.26	202	1290	0.91860	ppb	#	61
16) Pyrene	11.53	202	1376	0.95369	ppb		99
18) Benz (a) anthracene	12.93	228	1115	0.91920	ppb		98
19) Chrysene	12.96	228	1180	0.94867	ppb		98
20) Indeno (1,2,3-cd) pyrene	16.02	276	1162	0.93744	ppb	#	99
22) Benzo (b) fluoranthene	14.10	252	1262	1.02757	ppb		99
23) Benzo (k) fluoranthene	14.14	252	1029	0.88947	ppb		98
24) Benzo (a) pyrene	14.48	252	1098	0.94866	ppb		99
25) Dibenz (a,h) anthracene	16.05	278	916	0.90483	ppb		98
26) Benzo (g,h,i) perylene	16.45	276	1016	0.90014	ppb		98

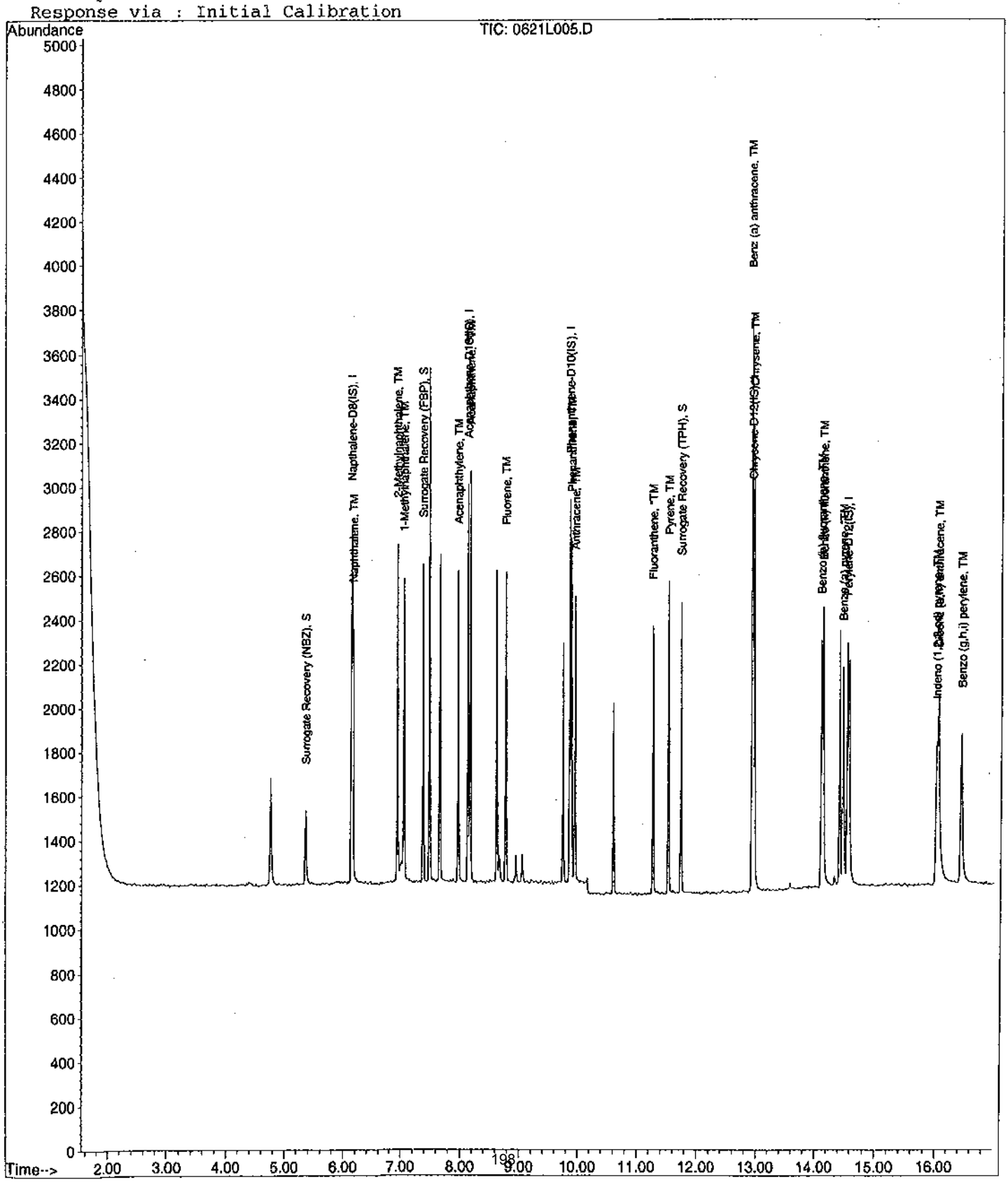
(#) = qualifier out of range (m) = manual integration
0621L005.D SIM2.M Wed Jun 22 11:43:01 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L005.D Vial: 5
Acq On : 21 Jun 11 21:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L006.D Vial: 6
Acq On : 21 Jun 11 22:00 Operator: LF
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1396	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	596	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	938	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1118	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.55	264	929	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	1212	3.68925 ppb		0.00
Spiked Amount 2.000			Recovery	= 184.450%		
7) Surrogate Recovery (FBP)	7.37	172	2620	4.01749 ppb		0.00
Spiked Amount 2.000			Recovery	= 200.850%		
17) Surrogate Recovery (TPH)	11.74	244	2723	4.04711 ppb		0.00
Spiked Amount 2.000			Recovery	= 202.350%		
Target Compounds						Qvalue
3) Naphthalene	6.16	128	4069	3.81848 ppb		100
4) 2-Methylnaphthalene	6.94	142	2572	4.08197 ppb		100
5) 1-Methylnaphthalene	7.05	142	2416	4.03951 ppb		100
8) Acenaphthylene	7.96	152	3446	3.97315 ppb		100
9) Acenaphthene	8.17	154	2051	4.07157 ppb		100
10) Fluorene	8.77	166	2328	4.13055 ppb		100
12) Phenanthrene	9.88	178	3278	4.20933 ppb		100
13) Anthracene	9.94	178	3103	4.33117 ppb		100
14) Fluoranthene	11.27	202	4674	4.13026 ppb		100
16) Pyrene	11.53	202	4930	4.08626 ppb		100
18) Benz (a) anthracene	12.93	228	4213	4.15354 ppb		100
19) Chrysene	12.96	228	3966	3.81307 ppb		100
20) Indeno (1,2,3-cd) pyrene	16.02	276	3988	3.84751 ppb	#	100
22) Benzo (b) fluoranthene	14.10	252	4255	4.35589 ppb		100
23) Benzo (k) fluoranthene	14.14	252	3590	3.90154 ppb		100
24) Benzo (a) pyrene	14.48	252	3811	4.13975 ppb		100
25) Dibenz (a,h) anthracene	16.05	278	3264	4.05366 ppb		100
26) Benzo (g,h,i) perylene	16.45	276	3432	3.82288 ppb		100

(#) = qualifier out of range (m) = manual integration
0621L006.D SIM2.M Wed Jun 22 11:43:02 2011 Page 1

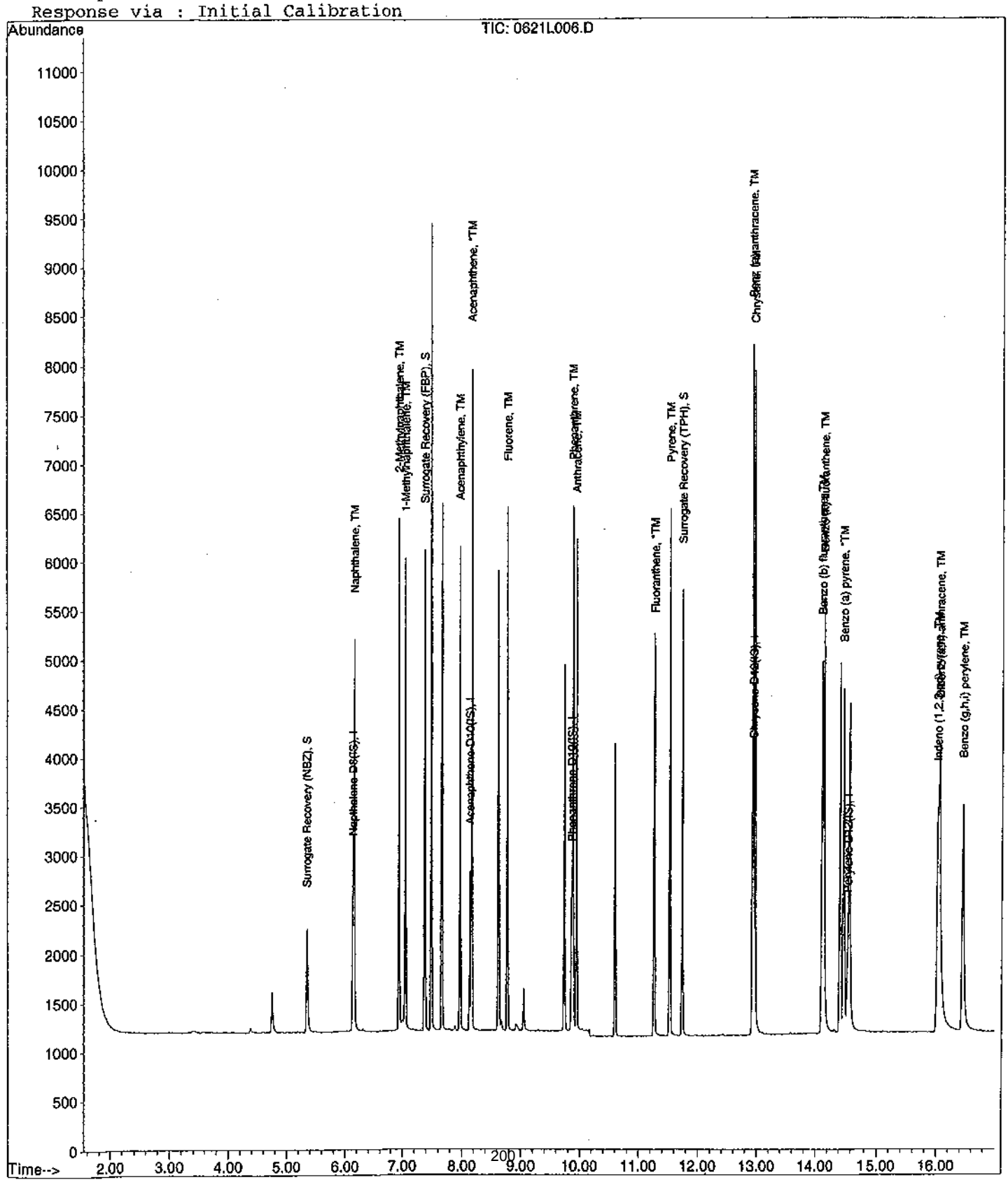
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L006.D
Acq On : 21 Jun 11 22:00
Sample : 5.0ug/ml PAH
Misc :

Vial: 6
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L007.D
Acq On : 21 Jun 11 22:26
Sample : 10ug/ml PAH
Misc :

Vial: 7
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1719	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	724	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1181	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1496	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.55	264	1193	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	3065	7.57662 ppb		0.00
Spiked Amount 2.000			Recovery	= 378.850%		
7) Surrogate Recovery (FBP)	7.37	172	6128	7.73535 ppb		0.00
Spiked Amount 2.000			Recovery	= 386.750%		
17) Surrogate Recovery (TPH)	11.74	244	6965	7.73622 ppb		0.00
Spiked Amount 2.000			Recovery	= 386.800%		
Target Compounds						Qvalue
3) Naphthalene	6.16	128	9666	7.36647 ppb		100
4) 2-Methylnaphthalene	6.94	142	6201	7.99228 ppb		99
5) 1-Methylnaphthalene	7.05	142	5734	7.78573 ppb		98
8) Acenaphthylene	7.97	152	8443	8.01354 ppb		100
9) Acenaphthene	8.17	154	4890	7.99122 ppb		98
10) Fluorene	8.77	166	5528	8.07422 ppb		98
12) Phenanthrene	9.88	178	7915	8.07250 ppb		100
13) Anthracene	9.94	178	7565	8.38659 ppb		100
14) Fluoranthene	11.27	202	11638	8.16808 ppb		99
16) Pyrene	11.53	202	12580	7.79238 ppb		97
18) Benz (a) anthracene	12.93	228	10464	7.70965 ppb		99
19) Chrysene	12.96	228	10002	7.18653 ppb		99
20) Indeno (1,2,3-cd) pyrene	16.02	276	10076	7.26479 ppb	#	98
22) Benzo (b) fluoranthene	14.12	252	9801	7.81309 ppb	#	90
23) Benzo (k) fluoranthene	14.14	252	9545	8.07780 ppb		98
24) Benzo (a) pyrene	14.48	252	9367	7.92339 ppb		96
25) Dibenz (a,h) anthracene	16.05	278	8264	7.99214 ppb		98
26) Benzo (g,h,i) perylene	16.45	276	8545	7.41193 ppb		98

(#) = qualifier out of range (m) = manual integration
0621L007.D SIM2.M Wed Jun 22 11:43:02 2011 Page 1

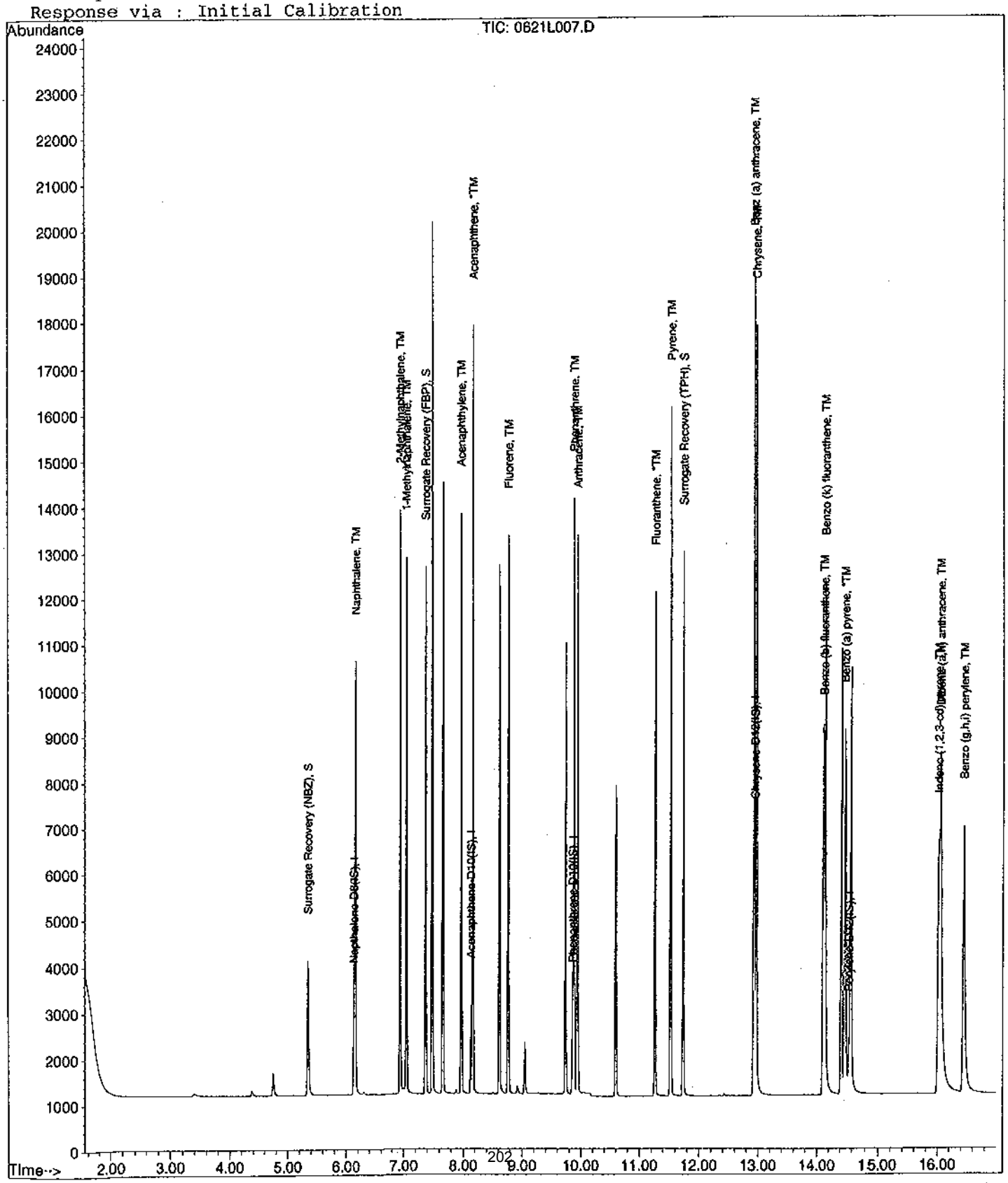
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L007.D
Acq On : 21 Jun 11 22:26
Sample : 10ug/ml PAH
Misc :

Vial: 7
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L008.D Vial: 8
Acq On : 21 Jun 11 22:52 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1616	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	646	2.50000	ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1086	2.50000	ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1352	2.50000	ppb		0.00
21) Perylene-D12(IS)	14.55	264	1087	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.34	82	14113	37.11067	ppb		0.00
Spiked Amount 2.000			Recovery	= 1855.550%			
7) Surrogate Recovery (FBP)	7.37	172	25609	36.22931	ppb		0.00
Spiked Amount 2.000			Recovery	= 1811.450%			
17) Surrogate Recovery (TPH)	11.74	244	27878	34.26292	ppb		0.00
Spiked Amount 2.000			Recovery	= 1713.150%			
Target Compounds							Qvalue
3) Naphthalene	6.16	128	41315	33.49308	ppb		99
4) 2-Methylnaphthalene	6.94	142	26107	35.79318	ppb		99
5) 1-Methylnaphthalene	7.05	142	23185	33.48754	ppb		100
8) Acenaphthylene	7.97	152	34549	36.75100	ppb		99
9) Acenaphthene	8.17	154	20076	36.76946	ppb		98
10) Fluorene	8.77	166	22373	36.62374	ppb		99
12) Phenanthrene	9.88	178	31068	34.45802	ppb		99
13) Anthracene	9.94	178	30324	36.55804	ppb		100
14) Fluoranthene	11.27	202	49519	37.79494	ppb		97
16) Pyrene	11.53	202	50855	34.85602	ppb	#	89
18) Benz (a) anthracene	12.93	228	42892	34.96777	ppb		98
19) Chrysene	12.97	228	41535	33.02185	ppb	#	89
20) Indeno (1,2,3-cd) pyrene	16.03	276	42762	34.11520	ppb	#	99
22) Benzo (b) fluoranthene	14.12	252	38066	33.30434	ppb	#	93
23) Benzo (k) fluoranthene	14.15	252	43199	40.12379	ppb	#	94
24) Benzo (a) pyrene	14.49	252	39565	36.73097	ppb		95
25) Dibenz (a,h) anthracene	16.06	278	35135	37.29266	ppb		99
26) Benzo (g,h,i) perylene	16.46	276	36035	34.30478	ppb		92

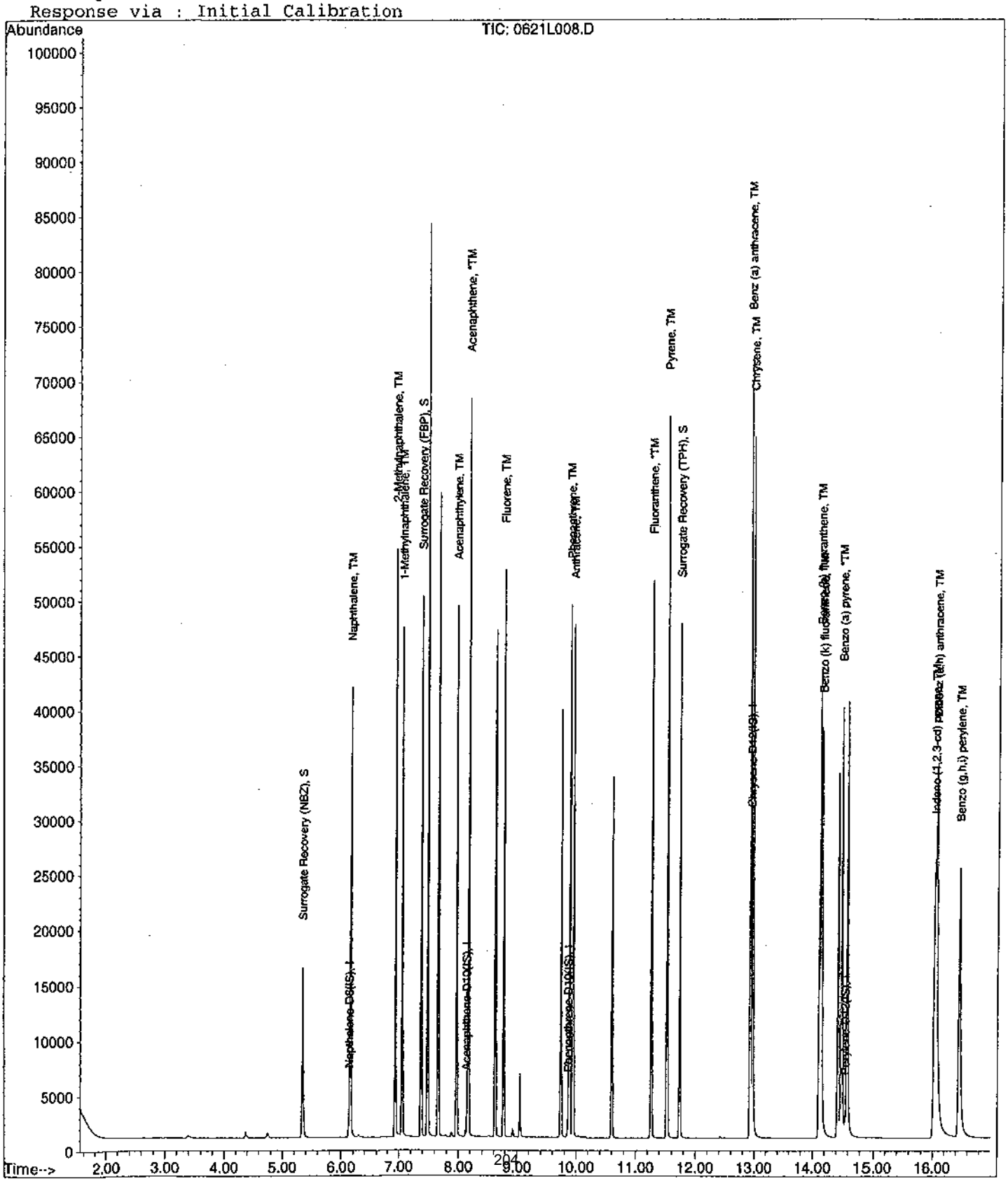
(#) = qualifier out of range (m) = manual integration
0621L008.D SIM2.M Wed Jun 22 11:43:03 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L008.D Vial: 8
Acq On : 21 Jun 11 22:52 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L009.D
Acq On : 21 Jun 11 23:19
Sample : 100ug/ml PAH
Misc :

Vial: 9
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 07:42:35 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1312	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	531	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	879	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1107	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	900	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	23302	75.47102 ppb		0.00
Spiked Amount 2.000			Recovery	= 3773.550%		
7) Surrogate Recovery (FBP)	7.37	172	39671	68.27766 ppb		0.00
Spiked Amount 2.000			Recovery	= 3413.900%		
17) Surrogate Recovery (TPH)	11.74	244	44388	66.62809 ppb		0.00
Spiked Amount 2.000			Recovery	= 3331.400%		
Target Compounds						Qvalue
3) Naphthalene	6.16	128	67483	67.38283 ppb		99
4) 2-Methylnaphthalene	6.94	142	41062	69.34113 ppb		99
5) 1-Methylnaphthalene	7.05	142	37150	66.09102 ppb		100
8) Acenaphthylene	7.97	152	56661	73.32566 ppb		99
9) Acenaphthene	8.17	154	31621	70.45691 ppb		97
10) Fluorene	8.77	166	35775	71.24527 ppb		98
12) Phenanthrene	9.88	178	49515	67.85077 ppb		99
13) Anthracene	9.94	178	48879	72.80474 ppb		99
14) Fluoranthene	11.27	202	81231	76.59925 ppb	#	89
16) Pyrene	11.53	202	81846	68.51264 ppb	#	80
18) Benz (a) anthracene	12.93	228	69555	69.25467 ppb		96
19) Chrysene	12.97	228	68809	66.81308 ppb		95
20) Indeno (1,2,3-cd) pyrene	16.04	276	70921	69.10252 ppb	#	96
22) Benzo (b) fluoranthene	14.12	252	76026	80.33647 ppb		98
23) Benzo (k) fluoranthene	14.15	252	56653	63.55331 ppb		99
24) Benzo (a) pyrene	14.49	252	64770	72.62434 ppb		95
25) Dibenz (a,h) anthracene	16.08	278	57690	73.95559 ppb		94
26) Benzo (g,h,i) perylene	16.47	276	59814	68.77331 ppb		95

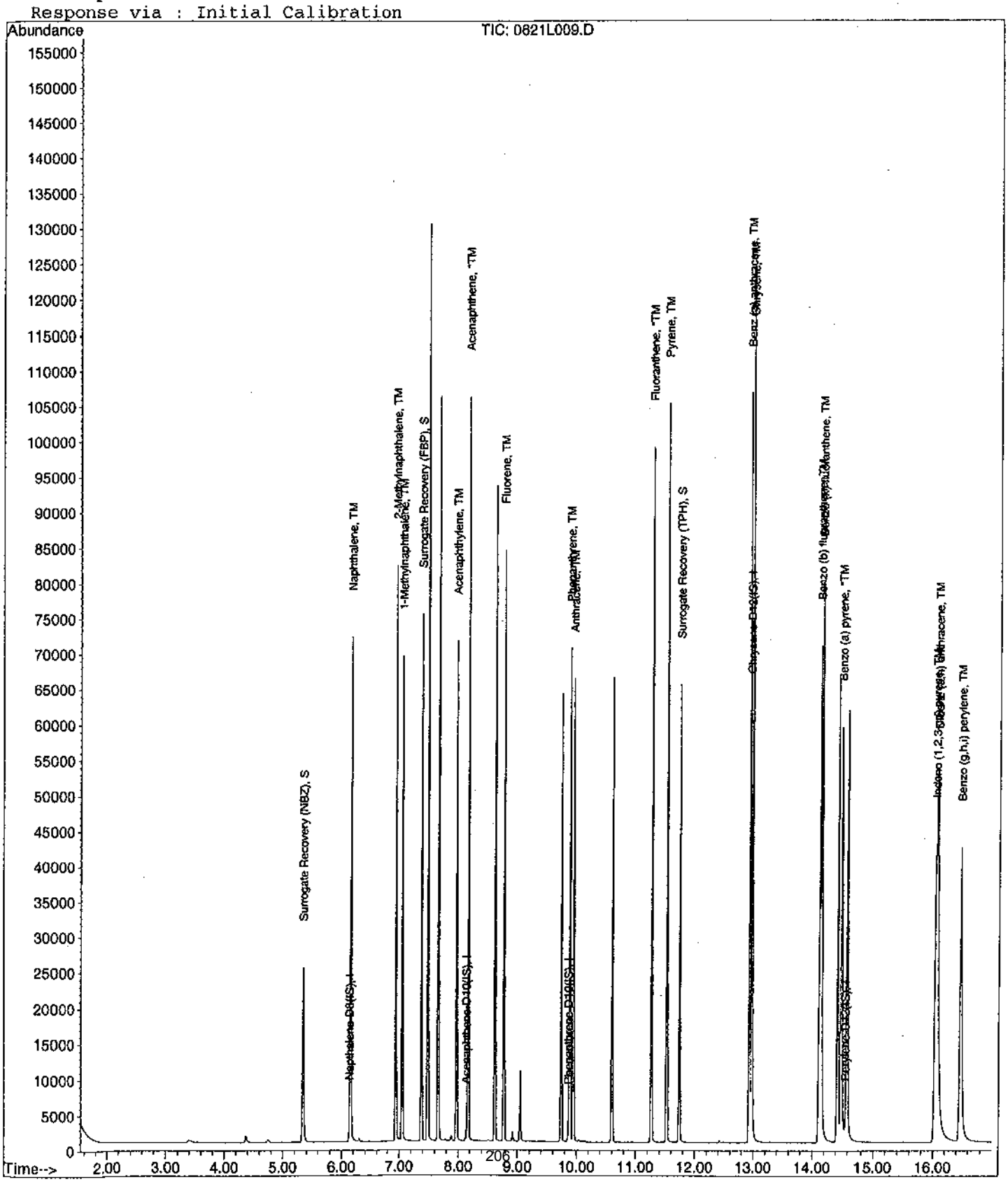
(#) = qualifier out of range (m) = manual integration
0621L009.D SIM2.M Wed Jun 22 11:43:04 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L009.D Vial: 9
Acq On : 21 Jun 11 23:19 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 8:01 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Form 7

Second Source Calibration

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

SDG No: 65987
Date Analyzed: 06/21/11
Instrument: Linus
Initial Cal. Date: 06/21/11
Data File: 0621L010.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	1.666	1.399	11	TM	
3	TM	2-Methylnaphthalene	0.9811	0.8664	12	TM	
4	TM	1-Methylnaphthalene	0.8853	0.8188	7.5	TM	
5	I	Acenaphthene-D10(IS)	ISTD			I	
6	TM	Acenaphthylene	3.062	2.896	5.4	TM	
7	*TM	Acenaphthene	1.810	1.726	4.6	*TM	
8	TM	Fluorene	2.022	1.893	6.4	TM	
9	I	Phenanthrene-D10(IS)	ISTD			I	
10	TM	Phenanthrene	1.783	1.713	4.0	TM	
11	TM	Anthracene	1.654	1.566	5.3	TM	
12	*TM	Fluoranthene	2.622	2.372	9.5	*TM	
13	I	Chrysene-D12(IS)	ISTD			I	
14	TM	Pyrene	2.294	2.046	11	TM	
15	TM	Benz (a) anthracene	1.936	1.707	12	TM	
16	TM	Chrysene	1.892	1.653	13	TM	
17	TM	Indeno (1,2,3-cd) pyrene	1.878	1.660	12	TM	
18	I	Perylene-D12(IS)	ISTD			I	
19	TM	Benzo (b) fluoranthene	2.226	2.059	7.5	TM	
20	TM	Benzo (k) fluoranthene	1.935	2.061	6.5	TM	
21	*TM	Benzo (a) pyrene	2.146	1.997	6.9	*TM	
22	TM	Dibenz (a,h) anthracene	1.879	1.716	8.7	TM	
23	TM	Benzo (g,h,i) perylene	1.994	1.868	6.3	TM	
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			8.3		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0621L010.D Vial: 10
Acq On : 21 Jun 11 23:45 Operator: LF
Sample : 5.0ug/ml PAH SS 6-21-11 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 11:34 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1344	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	549	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	874	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1065	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.55	264	832	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000 ppb		
Spiked Amount 2.000			Recovery	= 0.000%		
7) Surrogate Recovery (FBP)	0.00	172	0d	0.00000 ppb		
Spiked Amount 2.000			Recovery	= 0.000%		
17) Surrogate Recovery (TPH)	0.00	244	0d	0.00000 ppb		
Spiked Amount 2.000			Recovery	= 0.000%		
Target Compounds						Qvalue
3) Naphthalene	6.16	128	3761	4.46854 ppb		99
4) 2-Methylnaphthalene	6.94	142	2329	4.41584 ppb		98
5) 1-Methylnaphthalene	7.05	142	2201	4.62454 ppb		99
8) Acenaphthylene	7.96	152	3180	4.72953 ppb		99
9) Acenaphthene	8.17	154	1895	4.76861 ppb		98
10) Fluorene	8.77	166	2079	4.68166 ppb		99
12) Phenanthrene	9.88	178	2994	4.80212 ppb		99
13) Anthracene	9.94	178	2736	4.73305 ppb		99
14) Fluoranthene	11.27	202	4146	4.52353 ppb		100
16) Pyrene	11.53	202	4357	4.45926 ppb		96
18) Benz (a) anthracene	12.93	228	3636	4.40959 ppb		100
19) Chrysene	12.96	228	3520	4.36657 ppb		99
20) Indeno (1,2,3-cd) pyrene	16.02	276	3535	4.41799 ppb	#	100
22) Benzo (b) fluoranthene	14.12	252	3426	4.62564 ppb	#	91
23) Benzo (k) fluoranthene	14.14	252	3429	5.32494 ppb		98
24) Benzo (a) pyrene	14.48	252	3323	4.65335 ppb		97
25) Dibenz (a,h) anthracene	16.05	278	2855	4.56626 ppb		97
26) Benzo (g,h,i) perylene	16.45	276	3108	4.68271 ppb		99

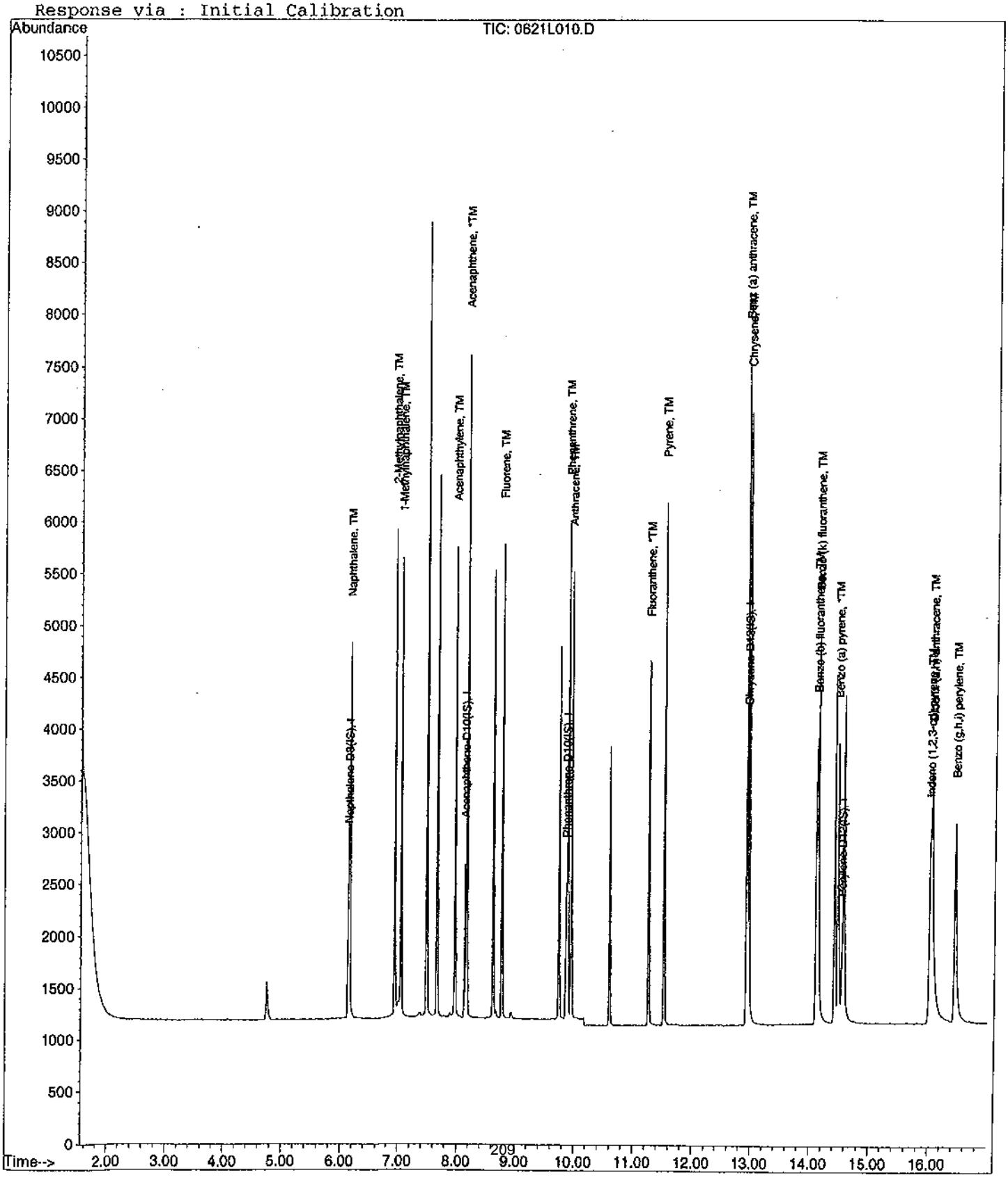
(#) = qualifier out of range (m) = manual integration
0621L010.D SIM2.M Wed Jun 22 11:43:18 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L010.D Vial: 10
Acq On : 21 Jun 11 23:45 Operator: LF
Sample : 5.0ug/ml PAH SS 6-21-11 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Jun 22 11:34 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 65197
Date Analyzed: 07/30/11
Instrument: Linus
Initial Cal. Date: 06/21/11
Data File: 0730L002.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.4824	0.4148	14	S	
3	TM	Naphthalene	1.566	1.531	2.2	TM	
4	TM	2-Methylnaphthalene	0.9811	0.9520	3.0	TM	
5	TM	1-Methylnaphthalene	0.8853	0.8962	1.2	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	2.322	2.045	12	S	
8	TM	Acenaphthylene	3.062	3.161	3.2	TM	
9	*TM	Acenaphthene	1.810	1.746	3.5	*TM	
10	TM	Fluorene	2.022	2.064	2.1	TM	
11	I	Phenanthrene-D10(IS)	ISTD			I	
12	TM	Phenanthrene	1.783	1.590	11	TM	
13	TM	Anthracene	1.654	1.591	3.8	TM	
14	*TM	Fluoranthene	2.622	2.499	4.7	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	2.294	2.447	6.7	TM	
17	S	Surrogate Recovery (TPH)	1.268	1.316	3.8	S	
18	TM	Benz (a) anthracene	1.936	1.856	4.1	TM	
19	TM	Chrysene	1.892	2.123	12	TM	
20	TM	Indeno (1,2,3-cd) pyrene	1.878	1.654	12	TM	
21	I	Perylene-D12(IS)	ISTD			I	
22	TM	Benzo (b) fluoranthene	2.226	2.089	6.1	TM	
23	TM	Benzo (k) fluoranthene	1.935	2.159	12	TM	
24	*TM	Benzo (a) pyrene	2.146	2.145	0.03	*TM	
25	TM	Dibenz (a,h) anthracene	1.879	1.632	13	TM	
26	TM	Benzo (g,h,i) perylene	1.994	1.795	10	TM	
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			6.7		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L002.D Vial: 2
Acq On : 30 Jul 11 10:28 Operator: LF
Sample : 5.0ug/ml PAH 06-21-11 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 10:16 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1585	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	711	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1286	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1385	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1089	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	1315	4.29971 ppb		0.00
Spiked Amount 2.000			Recovery	= 215.000%		
7) Surrogate Recovery (FBP)	7.37	172	2908	4.40314 ppb		0.00
Spiked Amount 2.000			Recovery	= 220.150%		
17) Surrogate Recovery (TPH)	11.74	244	3645	5.19046 ppb		0.00
Spiked Amount 2.000			Recovery	= 259.500%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	4854	4.89026 ppb		99
4) 2-Methylnaphthalene	6.94	142	3018	4.85214 ppb		95
5) 1-Methylnaphthalene	7.05	142	2841	5.06162 ppb		94
8) Acenaphthylene	7.97	152	4495	5.16207 ppb		99
9) Acenaphthene	8.17	154	2483	4.82461 ppb		96
10) Fluorene	8.77	166	2935	5.10336 ppb		98
12) Phenanthrene	9.88	178	4089	4.45727 ppb		100
13) Anthracene	9.94	178	4093	4.81212 ppb		99
14) Fluoranthene	11.27	202	6427	4.76570 ppb		97
16) Pyrene	11.53	202	6777	5.33351 ppb		96
18) Benz (a) anthracene	12.93	228	5141	4.79427 ppb		98
19) Chrysene	12.97	228	5880	5.60887 ppb	#	91
20) Indeno (1,2,3-cd) pyrene	16.04	276	4581	4.40246 ppb		95
22) Benzo (b) fluoranthene	14.12	252	4550	4.69344 ppb	#	94
23) Benzo (k) fluoranthene	14.15	252	4703	5.57979 ppb		96
24) Benzo (a) pyrene	14.49	252	4672	4.99843 ppb		97
25) Dibenz (a,h) anthracene	16.08	278	3555	4.34400 ppb		99
26) Benzo (g,h,i) perylene	16.47	276	3909	4.49963 ppb		95

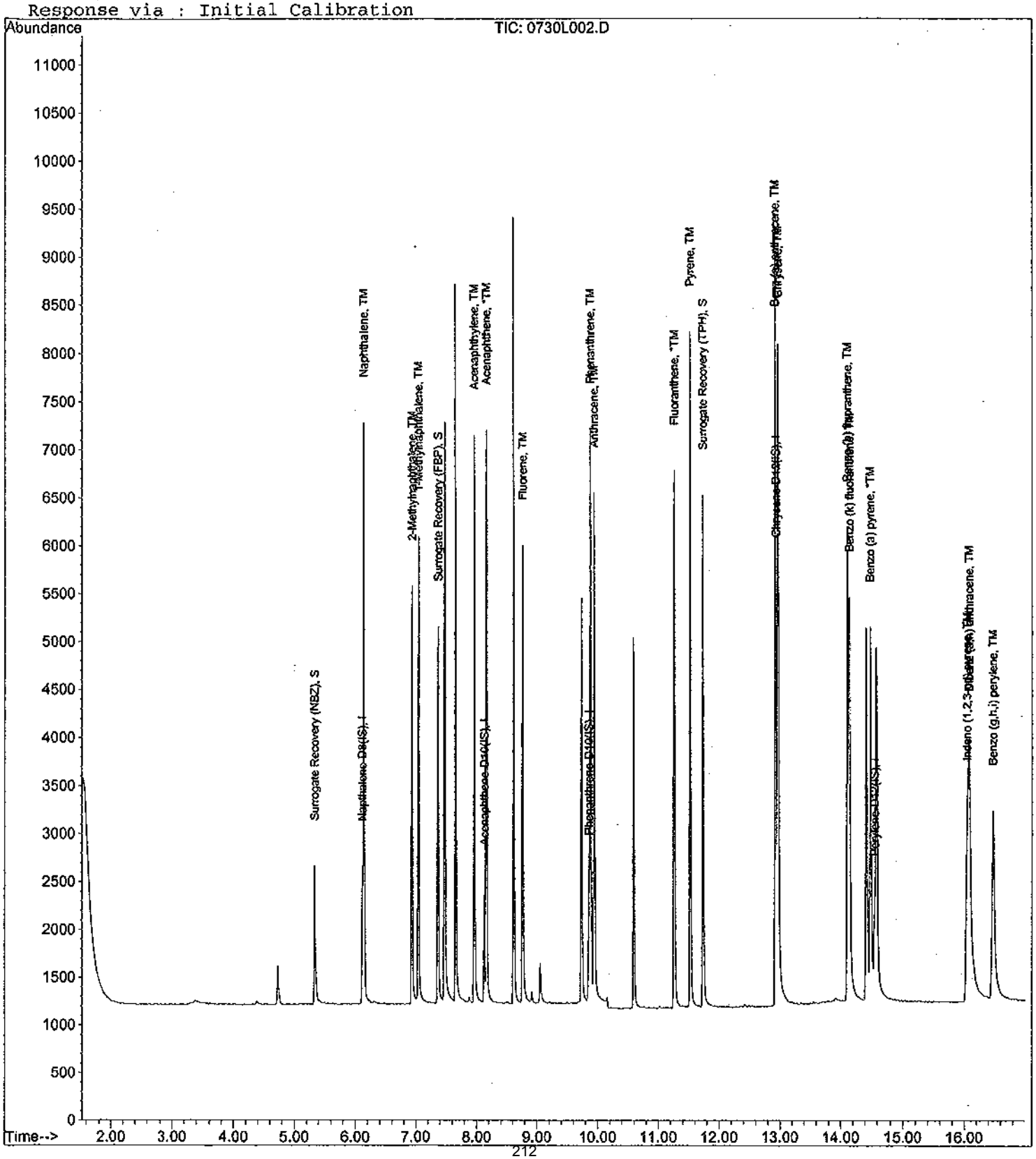
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L002.D Vial: 2
Acq On : 30 Jul 11 10:28 Operator: LF
Sample : 5.0ug/ml PAH 06-21-11 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 10:16 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/30/11
Instrument: Linus
Initial Cal. Date: 06/21/11
Data File: 0730L030.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.4824	0.4232	12	S	
3	TM	Naphthalene	1.566	1.569	0.23	TM	
4	TM	2-Methylnaphthalene	0.9811	0.9551	2.6	TM	
5	TM	1-Methylnaphthalene	0.8853	0.9345	5.6	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	2.322	2.056	11	S	
8	TM	Acenaphthylene	3.062	3.189	4.2	TM	
9	*TM	Acenaphthene	1.810	1.765	2.5	*TM	
10	TM	Fluorene	2.022	2.093	3.5	TM	
11	I	Phenanthrene-D10(IS)	ISTD			I	
12	TM	Phenanthrene	1.783	1.696	4.9	TM	
13	TM	Anthracene	1.654	1.716	3.8	TM	
14	*TM	Fluoranthene	2.622	2.792	6.5	*TM	
15	I	Chrysene-D12(IS)	ISTD			I	
16	TM	Pyrene	2.294	2.443	6.5	TM	
17	S	Surrogate Recovery (TPH)	1.268	1.270	0.23	S	
18	TM	Benz (a) anthracene	1.936	1.775	8.3	TM	
19	TM	Chrysene	1.892	2.064	9.1	TM	
20	TM	Indeno (1,2,3-cd) pyrene	1.878	1.616	14	TM	
21	I	Perylene-D12(IS)	ISTD			I	
22	TM	Benzo (b) fluoranthene	2.226	1.894	15	TM	
23	TM	Benzo (k) fluoranthene	1.935	2.055	6.2	TM	
24	*TM	Benzo (a) pyrene	2.146	2.092	2.5	*TM	
25	TM	Dibenz (a,h) anthracene	1.879	1.612	14	TM	
26	TM	Benzo (g,h,i) perylene	1.994	1.763	12	TM	
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			6.9		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L030.D Vial: 30
Acq On : 30 Jul 11 22:33 Operator: LF
Sample : 5.0ug/ml PAH 06-21-11 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 11:27 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1459	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	665	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1161	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1379	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1087	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	1235	4.38686 ppb		0.00
Spiked Amount 2.000			Recovery	= 219.350%		
7) Surrogate Recovery (FBP)	7.37	172	2735	4.42765 ppb		0.00
Spiked Amount 2.000			Recovery	= 221.400%		
17) Surrogate Recovery (TPH)	11.74	244	3504	5.01139 ppb		0.00
Spiked Amount 2.000			Recovery	= 250.550%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	4579	5.01160 ppb		99
4) 2-Methylnaphthalene	6.94	142	2787	4.86771 ppb		96
5) 1-Methylnaphthalene	7.05	142	2727	5.27809 ppb		95
8) Acenaphthylene	7.97	152	4242	5.20850 ppb		99
9) Acenaphthene	8.17	154	2347	4.87581 ppb		97
10) Fluorene	8.77	166	2784	5.17565 ppb		98
12) Phenanthrene	9.88	178	3937	4.75364 ppb		100
13) Anthracene	9.94	178	3984	5.18828 ppb		100
14) Fluoranthene	11.27	202	6484	5.32562 ppb	#	94
16) Pyrene	11.53	202	6738	5.32589 ppb		94
18) Benz (a) anthracene	12.93	228	4896	4.58566 ppb		98
19) Chrysene	12.97	228	5692	5.45316 ppb	#	91
20) Indeno (1,2,3-cd) pyrene	16.05	276	4456	4.30096 ppb	#	100
22) Benzo (b) fluoranthene	14.12	252	4118	4.25564 ppb	#	94
23) Benzo (k) fluoranthene	14.15	252	4467	5.30955 ppb		98
24) Benzo (a) pyrene	14.49	252	4547	4.87365 ppb		99
25) Dibenz (a,h) anthracene	16.08	278	3505	4.29078 ppb		97
26) Benzo (g,h,i) perylene	16.47	276	3833	4.42027 ppb		94

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

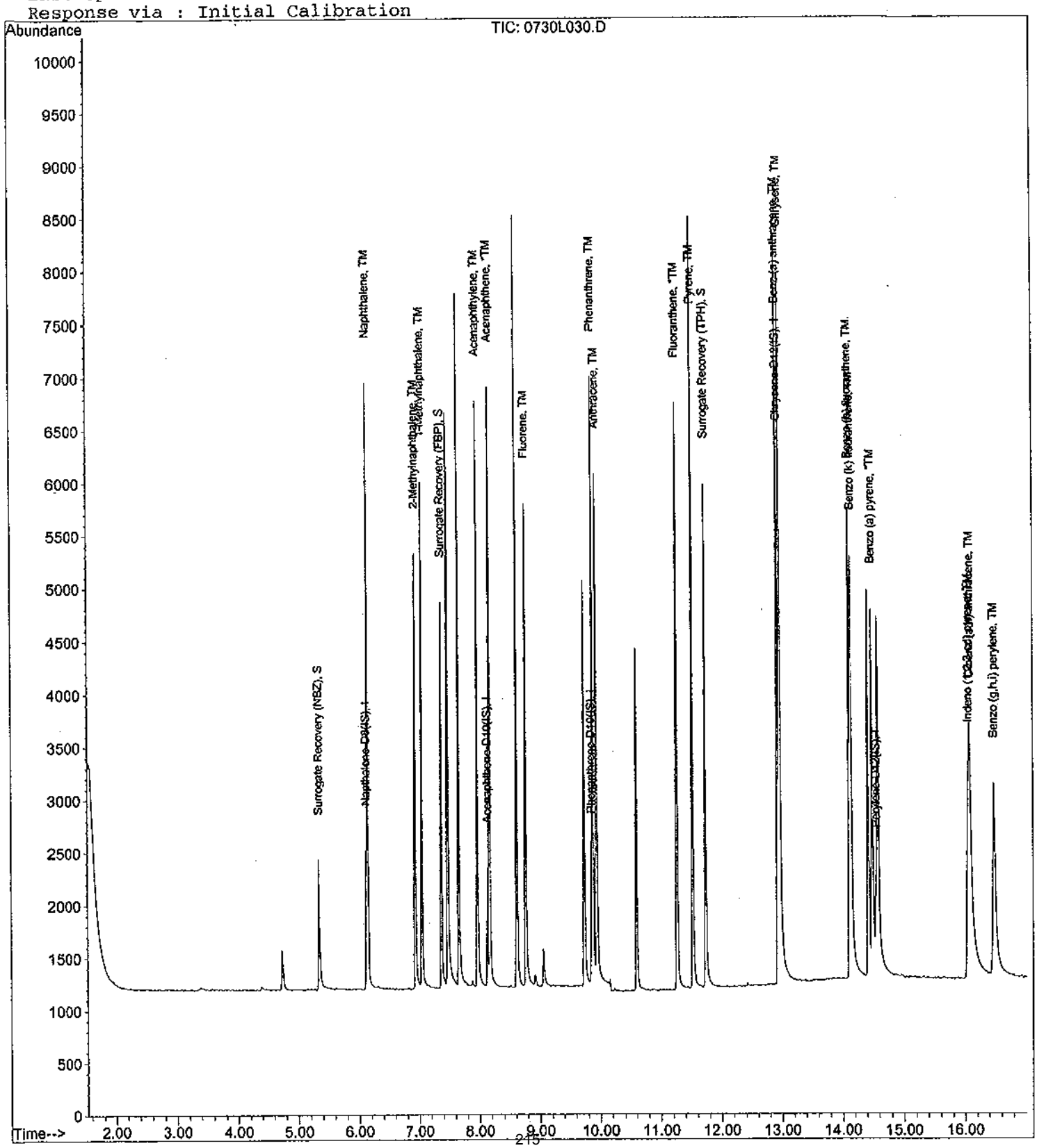
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L030.D
Acq On : 30 Jul 11 22:33
Sample : 5.0ug/ml PAH 06-21-11
Misc :

Vial: 30
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Aug 2 11:27 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Raw Data

APPL, INC.

Method Blank
EPA 8270D SIM

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **110726W-42275 - 157858**
Batch ID: #SIMHC-110726A

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	07/26/11	07/30/11
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	07/26/11	07/30/11
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	07/26/11	07/30/11
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	07/26/11	07/30/11
BLANK	SURROGATE: 2-FLUORBIPHENY	70.7	50-110			%	07/26/11	07/30/11
BLANK	SURROGATE: NITROBENZENE-	54.7	40-110			%	07/26/11	07/30/11
BLANK	SURROGATE: TERPHENYL-D14 (	65.4	50-135			%	07/26/11	07/30/11

Quant Method:SIM2.M
Run #:0730L007
Instrument:Linus
Sequence:L110621
Initials:LF

GC SC-Blank-REG MDLs
Printed: 08/05/11 2:00:04 PM

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L007.D
Acq On : 30 Jul 11 12:38
Sample : 110726A BLK 1/1000
Misc :

Vial: 7
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Aug 2 10:21 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1506	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	722	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1136	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1703	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.56	264	1356	2.50000 ppb	0.01
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.34	82	318	1.09432 ppb	0.00
Spiked Amount 2.000			Recovery = 54.700%		
7) Surrogate Recovery (FBP)	7.37	172	948	1.41354 ppb	0.00
Spiked Amount 2.000			Recovery = 70.700%		
17) Surrogate Recovery (TPH)	11.74	244	1129	1.30749 ppb	0.00
Spiked Amount 2.000			Recovery = 65.350%		

Target Compounds Qvalue

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

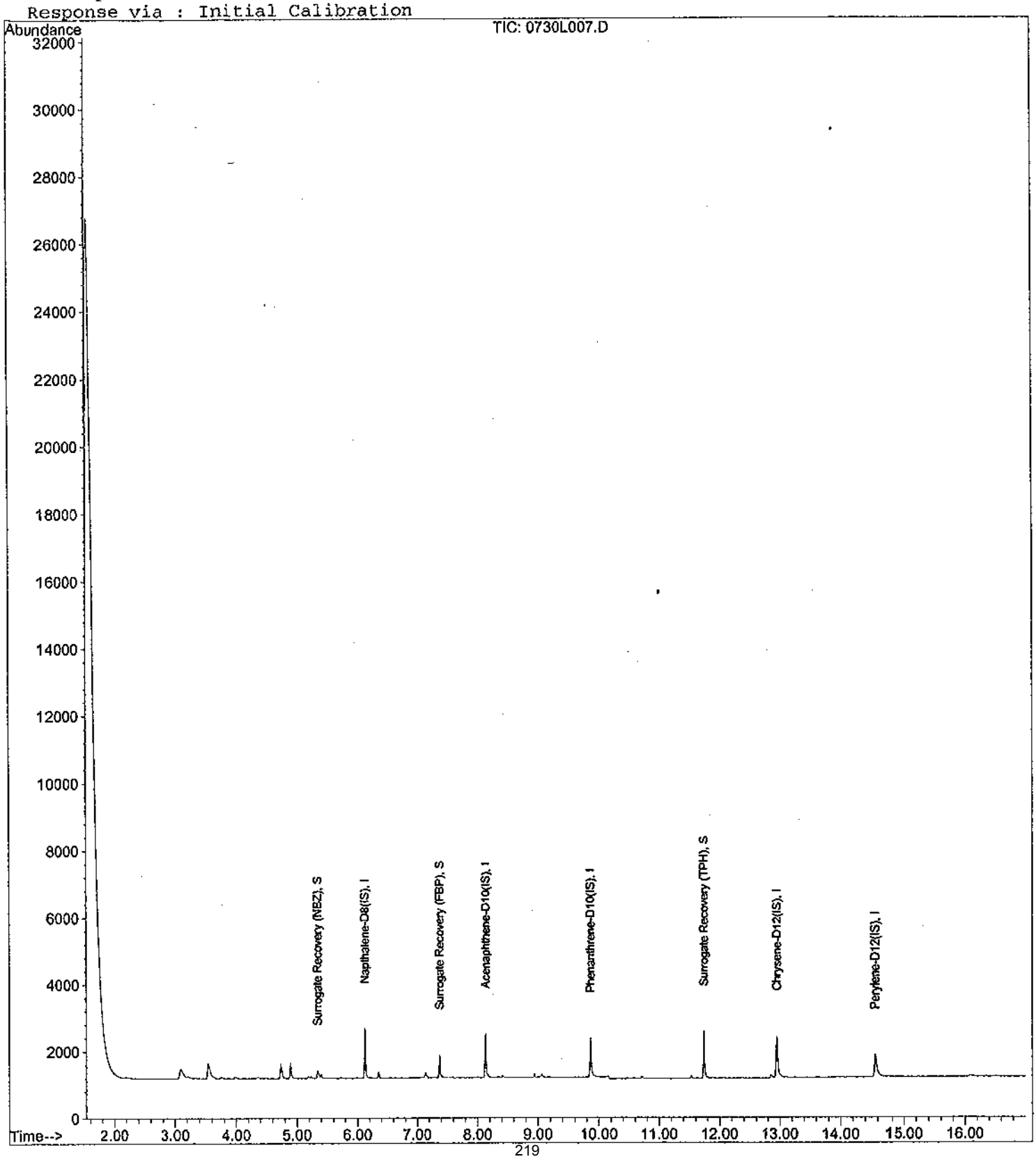
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L007.D
Acq On : 30 Jul 11 12:38
Sample : 110726A BLK 1/1000
Misc :

Vial: 7
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Aug 2 10:21 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D SIM

APPL ID: **110726W-42275 LCS - 157858**
Batch ID: #SIMHC-110726A

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1-METHYLNAPHTHALENE	4.00	2.25	56.3	45-105
2-METHYLNAPHTHALENE	4.00	2.01	50.2	45-105
ACENAPHTHENE	4.00	2.36	59.0	45-110
ACENAPHTHYLENE	4.00	2.64	66.0	50-105
ANTHRACENE	4.00	3.64	91.0	55-110
BENZO(A)ANTHRACENE	4.00	2.36	59.0	55-110
BENZO(A)PYRENE	4.00	2.37	59.3	55-110
BENZO(B)FLUORANTHENE	4.00	2.09	52.3	45-120
BENZO(GHI)PERYLENE	4.00	2.16	54.0	40-125
BENZO(K)FLUORANTHENE	4.00	3.45	86.3	45-125
CHRYSENE	4.00	2.92	73.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.15	53.8	40-125
FLUORANTHENE	4.00	3.56	89.0	55-115
FLUORENE	4.00	2.80	70.0	50-110
INDENO(1,2,3-CD)PYRENE	4.00	2.27	56.8	45-125
NAPHTHALENE	4.00	2.23	55.8	40-100
PHENANTHRENE	4.00	2.97	74.3	50-115
PYRENE	4.00	2.75	68.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.33	66.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.14	57.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.28	64.0	50-135

Comments: _____

Primary	SPK
Quant Method :	SIM2.M
Extraction Date :	07/26/11
Analysis Date :	07/30/11
Instrument :	Linus
Run :	0730L008
Initials :	LF

Printed: 08/05/11 2:00:07 PM

APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L008.D
Acq On : 30 Jul 11 13:05
Sample : 110726A LCS-1 1/1000
Misc :

Vial: 8
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Aug 2 10:21 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1378	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	649	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1036	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1582	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1282	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	304	1.14332 ppb		0.00
Spiked Amount 2.000			Recovery	= 57.150%		
7) Surrogate Recovery (FBP)	7.37	172	801	1.32870 ppb		0.00
Spiked Amount 2.000			Recovery	= 66.450%		
17) Surrogate Recovery (TPH)	11.74	244	1024	1.27659 ppb		0.00
Spiked Amount 2.000			Recovery	= 63.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	1924	2.22955 ppb		99
4) 2-Methylnaphthalene	6.94	142	1087	2.01013 ppb		96
5) 1-Methylnaphthalene	7.05	142	1100	2.25419 ppb		95
8) Acenaphthylene	7.97	152	2097	2.63826 ppb		99
9) Acenaphthene	8.17	154	1109	2.36071 ppb		96
10) Fluorene	8.77	166	1468	2.79640 ppb		98
12) Phenanthrene	9.88	178	2197	2.97278 ppb		100
13) Anthracene	9.94	178	2495	3.64122 ppb		100
14) Fluoranthene	11.27	202	3869	3.56122 ppb	#	95
16) Pyrene	11.53	202	3995	2.75255 ppb		94
18) Benz (a) anthracene	12.93	228	2896	2.36438 ppb		98
19) Chrysene	12.97	228	3501	2.92370 ppb	#	92
20) Indeno (1,2,3-cd) pyrene	16.05	276	2699	2.27081 ppb		96
22) Benzo (b) fluoranthene	14.12	252	2388	2.09245 ppb		96
23) Benzo (k) fluoranthene	14.15	252	3421	3.44775 ppb		98
24) Benzo (a) pyrene	14.49	252	2612	2.37380 ppb		99
25) Dibenz (a,h) anthracene	16.09	278	2071	2.14966 ppb		99
26) Benzo (g,h,i) perylene	16.48	276	2206	2.15703 ppb		99

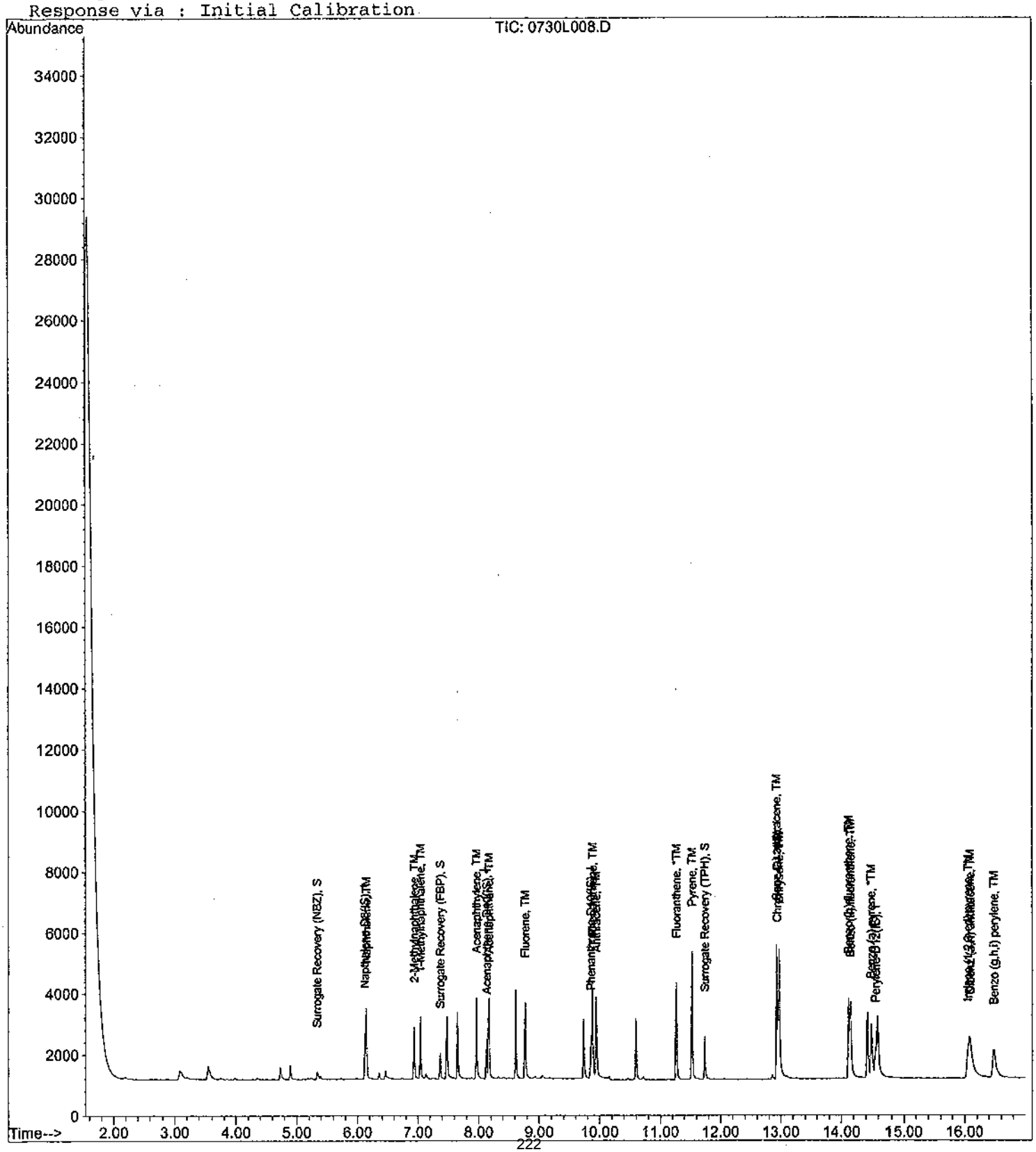
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L008.D Vial: 8
Acq On : 30 Jul 11 13:05 Operator: LF
Sample : 110726A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 10:21 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **110726W-42275 MS - 157858**
Batch ID: #SIMHC-110726A
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	3.96	ND	2.78	3.31	70.2	83.6	45-105	17.4	25
2-METHYLNAPHTHALENE	3.96	ND	2.56	2.99	64.6	75.5	45-105	15.5	25
ACENAPHTHENE	3.96	ND	2.65	2.96	66.9	74.7	45-110	11.1	25
ACENAPHTHYLENE	3.96	ND	2.79	3.21	70.5	81.1	50-105	14.0	25
ANTHRACENE	3.96	ND	3.00	3.63	75.8	91.7	55-110	19.0	25
BENZO(A)ANTHRACENE	3.96	ND	2.53	2.59	63.9	65.4	55-110	2.3	25
BENZO(A)PYRENE	3.96	ND	2.45	2.60	61.9	65.7	55-110	5.9	25
BENZO(B)FLUORANTHENE	3.96	ND	2.32	2.39	58.6	60.4	45-120	3.0	25
BENZO(GHI)PERYLENE	3.96	ND	2.32	2.44	58.6	61.6	40-125	5.0	25
BENZO(K)FLUORANTHENE	3.96	ND	3.48	3.76	87.9	94.9	45-125	7.7	25
CHRYSENE	3.96	ND	2.97	3.18	75.0	80.3	55-110	6.8	25
DIBENZ(A,H)ANTHRACENE	3.96	ND	2.20	2.46	55.6	62.1	40-125	11.2	25
FLUORANTHENE	3.96	ND	3.65	3.99	92.2	101	55-115	8.9	25
FLUORENE	3.96	ND	3.16	3.67	79.8	92.7	50-110	14.9	25
INDENO(1,2,3-CD)PYRENE	3.96	ND	2.25	2.49	56.8	62.9	45-125	10.1	25
NAPHTHALENE	3.96	ND	2.69	3.17	67.9	80.1	40-100	16.4	25
PHENANTHRENE	3.96	ND	3.20	3.40	80.8	85.9	50-115	6.1	25
PYRENE	3.96	ND	2.85	2.98	72.0	75.3	50-130	4.5	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.98	NA	1.13	1.32	57.1	66.7	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.98	NA	1.16	1.40	58.6	70.7	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.98	NA	1.32	1.35	66.7	68.2	50-135		

Comments: _____

Primary	SPK	DUP
Quant Method :	SIM2.M	SIM2.M
Extraction Date :	07/26/11	07/26/11
Analysis Date :	07/31/11	07/31/11
Instrument :	Linus	Linus
Run :	0730L042	0730L043
Initials :	LF	

Printed: 08/05/11 2:00:08 PM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L042.D Vial: 42
Acq On : 31 Jul 11 3:45 Operator: LF
Sample : AY42275W19 MS-1 1/1010 Inst : Linus
Misc : Multiplr: 0.99

Quant Time: Aug 2 9:59 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1706	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	832	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1391	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	2171	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1724	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.35	82	387	1.16400 ppb		0.01
Spiked Amount 1.980			Recovery = 58.782%			
7) Surrogate Recovery (FBP)	7.37	172	879	1.12611 ppb		0.00
Spiked Amount 1.980			Recovery = 56.863%			
17) Surrogate Recovery (TPH)	11.74	244	1473	1.32489 ppb		0.00
Spiked Amount 1.980			Recovery = 66.912%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	2902	2.68942 ppb		100
4) 2-Methylnaphthalene	6.94	142	1732	2.56148 ppb		99
5) 1-Methylnaphthalene	7.05	142	1694	2.77626 ppb		94
8) Acenaphthylene	7.96	152	2873	2.79161 ppb		99
9) Acenaphthene	8.17	154	1611	2.64854 ppb		96
10) Fluorene	8.77	166	2151	3.16456 ppb		99
12) Phenanthrene	9.88	178	3203	3.19596 ppb		100
13) Anthracene	9.94	178	2787	2.99934 ppb		99
14) Fluoranthene	11.27	202	5384	3.65440 ppb		97
16) Pyrene	11.53	202	5727	2.84690 ppb		98
18) Benz (a) anthracene	12.93	228	4290	2.52697 ppb		99
19) Chrysene	12.97	228	4923	2.96617 ppb	#	92
20) Indeno (1,2,3-cd) pyrene	16.05	276	3714	2.25448 ppb	#	98
22) Benzo (b) fluoranthene	14.12	252	3590	2.31603 ppb	#	94
23) Benzo (k) fluoranthene	14.15	252	4690	3.48005 ppb		96
24) Benzo (a) pyrene	14.49	252	3656	2.44628 ppb		100
25) Dibenz (a,h) anthracene	16.08	278	2874	2.19637 ppb		98
26) Benzo (g,h,i) perylene	16.47	276	3219	2.31741 ppb		95

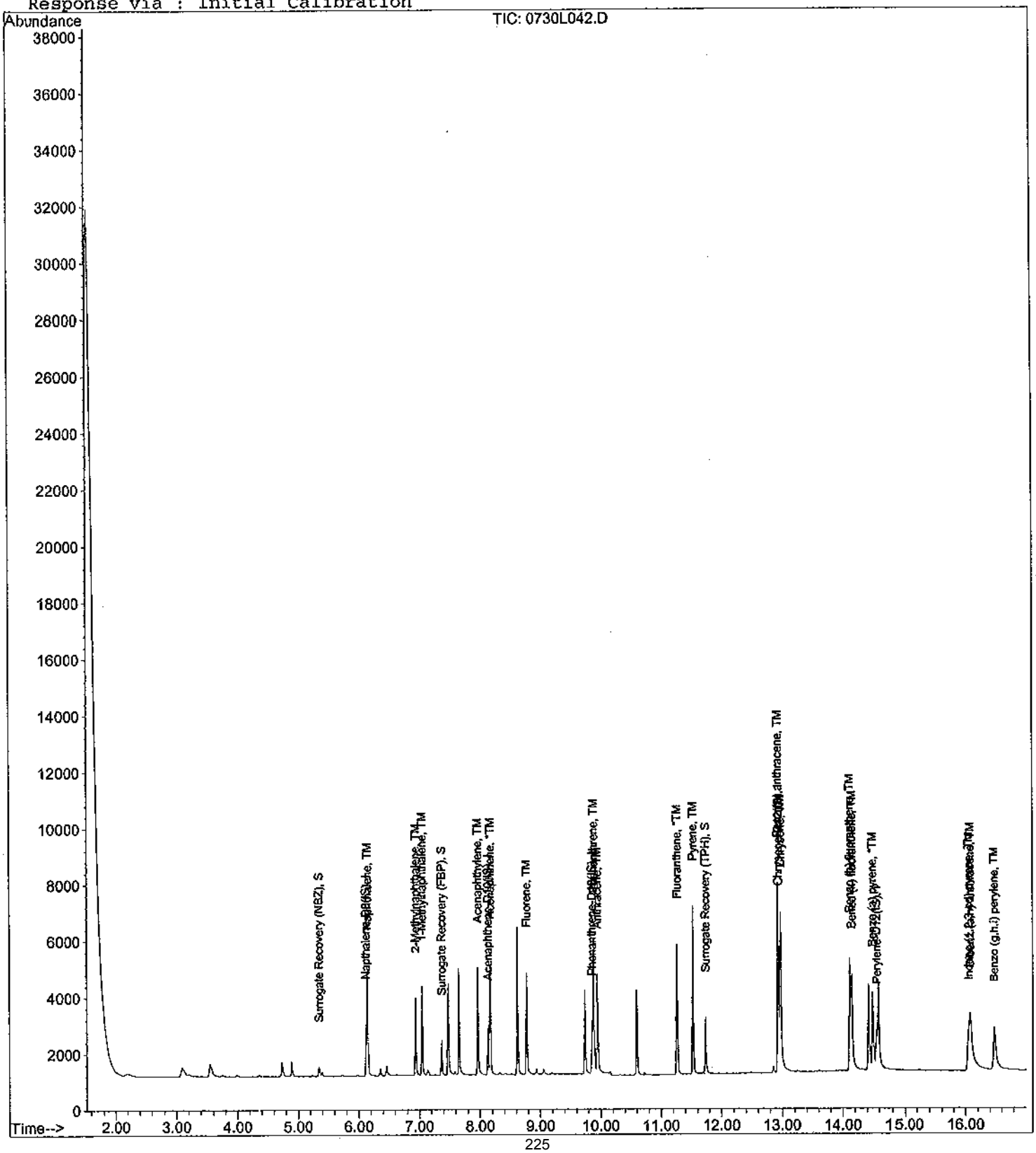
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L042.D Vial: 42
Acq On : 31 Jul 11 3:45 Operator: LF
Sample : AY42275W19 MS-1 1/1010 Inst : Linus
Misc : Multiplr: 0.99

Quant Time: Aug 2 9:59 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L043.D Vial: 43
Acq On : 31 Jul 11 4:11 Operator: LF
Sample : AY42275W14 MSD-1 1/1010 Inst : Linus
Misc : Multiplr: 0.99

Quant Time: Aug 2 9:59 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	1511	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	718	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1255	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1966	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1568	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.35	82	411	1.39572 ppb		0.01
Spiked Amount 1.980			Recovery = 70.498%			
7) Surrogate Recovery (FBP)	7.37	172	892	1.32421 ppb		0.00
Spiked Amount 1.980			Recovery = 66.862%			
17) Surrogate Recovery (TPH)	11.74	244	1360	1.35080 ppb		0.00
Spiked Amount 1.980			Recovery = 68.226%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	3028	3.16834 ppb		99
4) 2-Methylnaphthalene	6.94	142	1791	2.99057 ppb		98
5) 1-Methylnaphthalene	7.05	142	1788	3.30849 ppb		95
8) Acenaphthylene	7.97	152	2850	3.20895 ppb		100
9) Acenaphthene	8.17	154	1554	2.96047 ppb		98
10) Fluorene	8.77	166	2153	3.67042 ppb		98
12) Phenanthrene	9.88	178	3070	3.39521 ppb		100
13) Anthracene	9.94	178	3041	3.62734 ppb		99
14) Fluoranthene	11.27	202	5300	3.98723 ppb	#	96
16) Pyrene	11.53	202	5433	2.98236 ppb		96
18) Benz (a) anthracene	12.93	228	3984	2.59143 ppb		98
19) Chrysene	12.97	228	4787	3.18498 ppb	#	92
20) Indeno (1,2,3-cd) pyrene	16.05	276	3716	2.49090 ppb	#	99
22) Benzo (b) fluoranthene	14.12	252	3371	2.39111 ppb		96
23) Benzo (k) fluoranthene	14.15	252	4604	3.75612 ppb		98
24) Benzo (a) pyrene	14.49	252	3539	2.60359 ppb		100
25) Dibenz (a,h) anthracene	16.09	278	2929	2.46111 ppb		99
26) Benzo (g,h,i) perylene	16.48	276	3084	2.44111 ppb		99

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

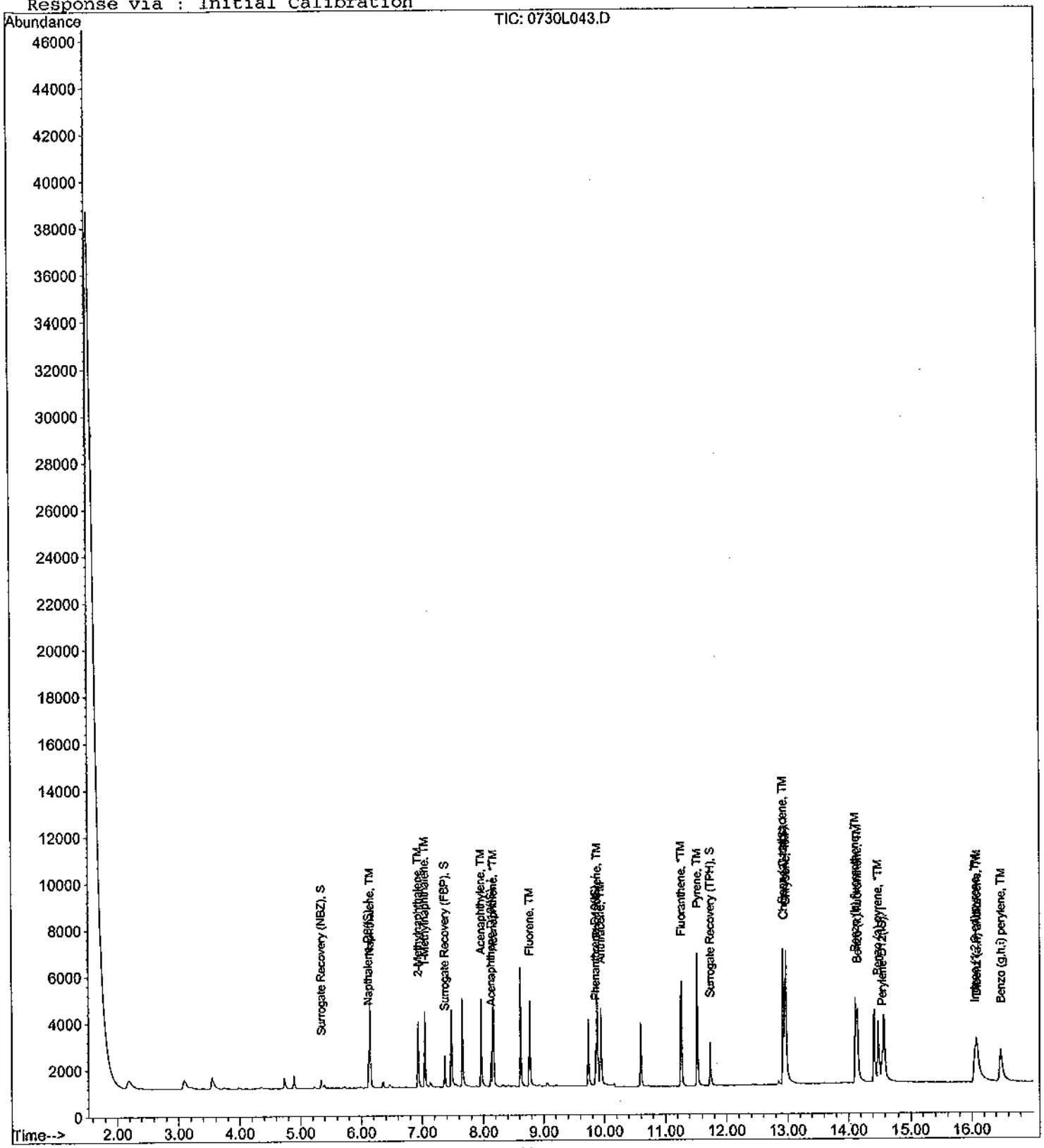
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L043.D
Acq On : 31 Jul 11 4:11
Sample : AY42275W14 MSD-1 1/1010
Misc :

Vial: 43
Operator: LF
Inst : Linus
Multiplr: 0.99

Quant Time: Aug 2 9:59 2011 Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C
Last Update : Wed Jun 22 08:01:39 2011
Response via : Initial Calibration

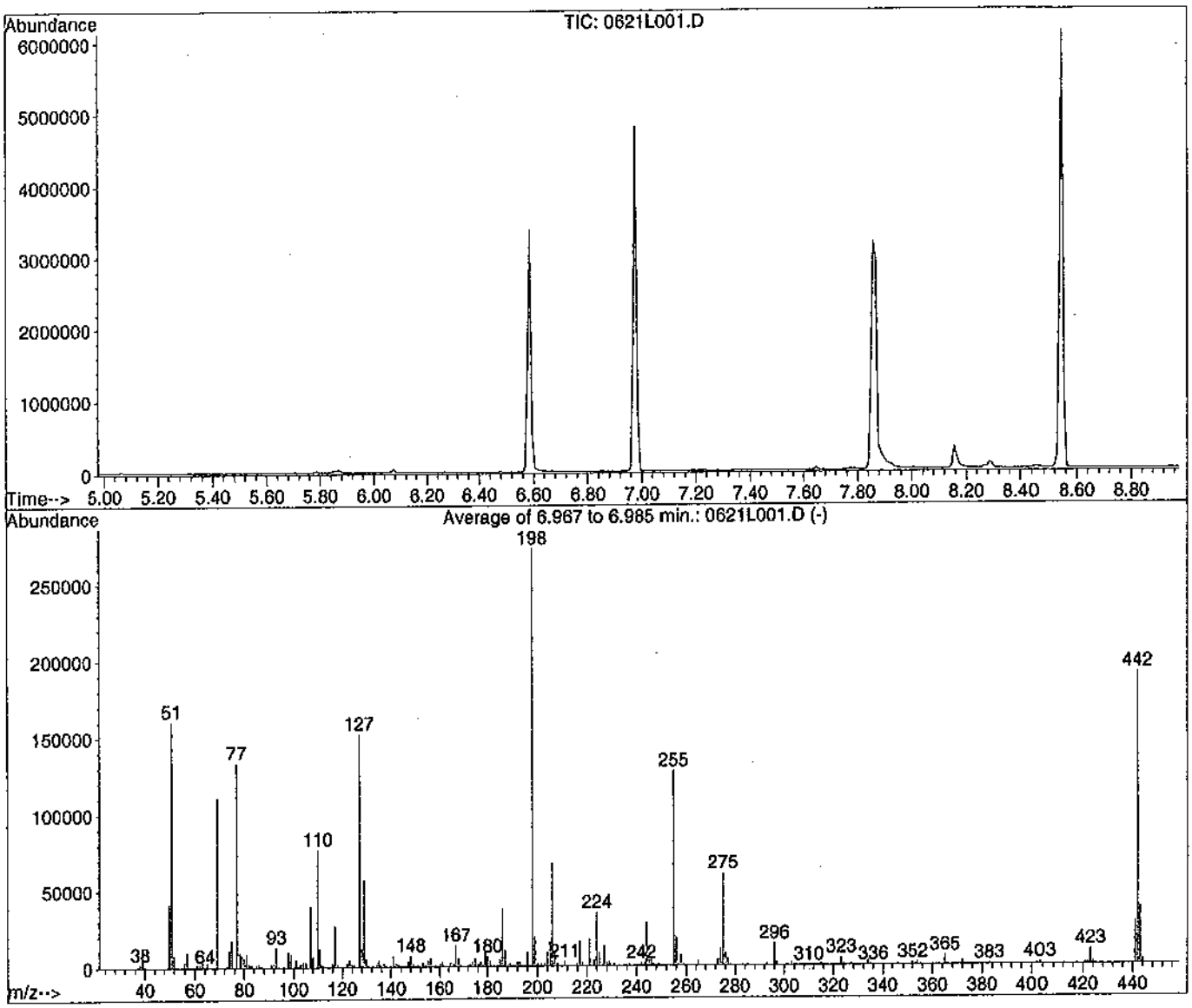


DFTPP

Data File : M:\LINUS\DATA\L110621\0621L001.D
Acq On : 21 Jun 11 19:57
Sample : SVTUNE 04-14-11
Misc :

Vial: 1
Operator: LF
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 473, 474, 475; Background Corrected with Scan 470

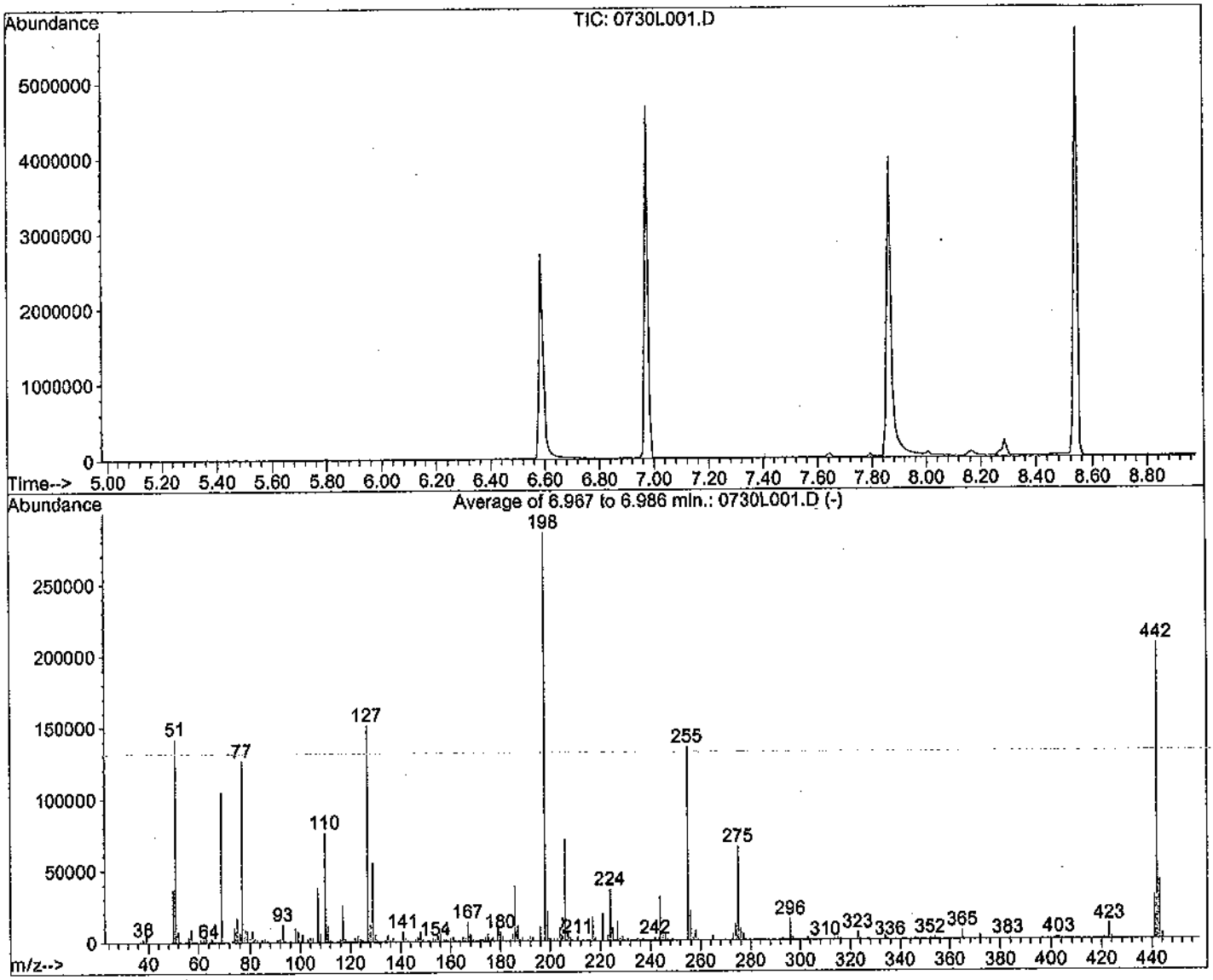
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.8	160807	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.4	497	PASS
127	198	40	60	55.7	152360	PASS
197	198	0.00	1	0.0	129	PASS
198	198	100	100	100.0	273309	PASS
199	198	5	9	7.1	19414	PASS
275	198	10	30	22.0	60208	PASS
365	198	1	100	2.2	5952	PASS
441	443	0.01	100	75.4	28197	PASS
442	198	40	150	69.6	190189	PASS
443	442	17	23	19.7	37419	PASS

0621L001.D SIM2.M Wed Jun 22 11:44:56 2011

Data File : M:\LINUS\DATA\L110621\0730L001.D
Acq On : 30 Jul 11 10:09
Sample : SVTUNE 04-14-11
Misc :

Vial: 1
Operator: LF
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C



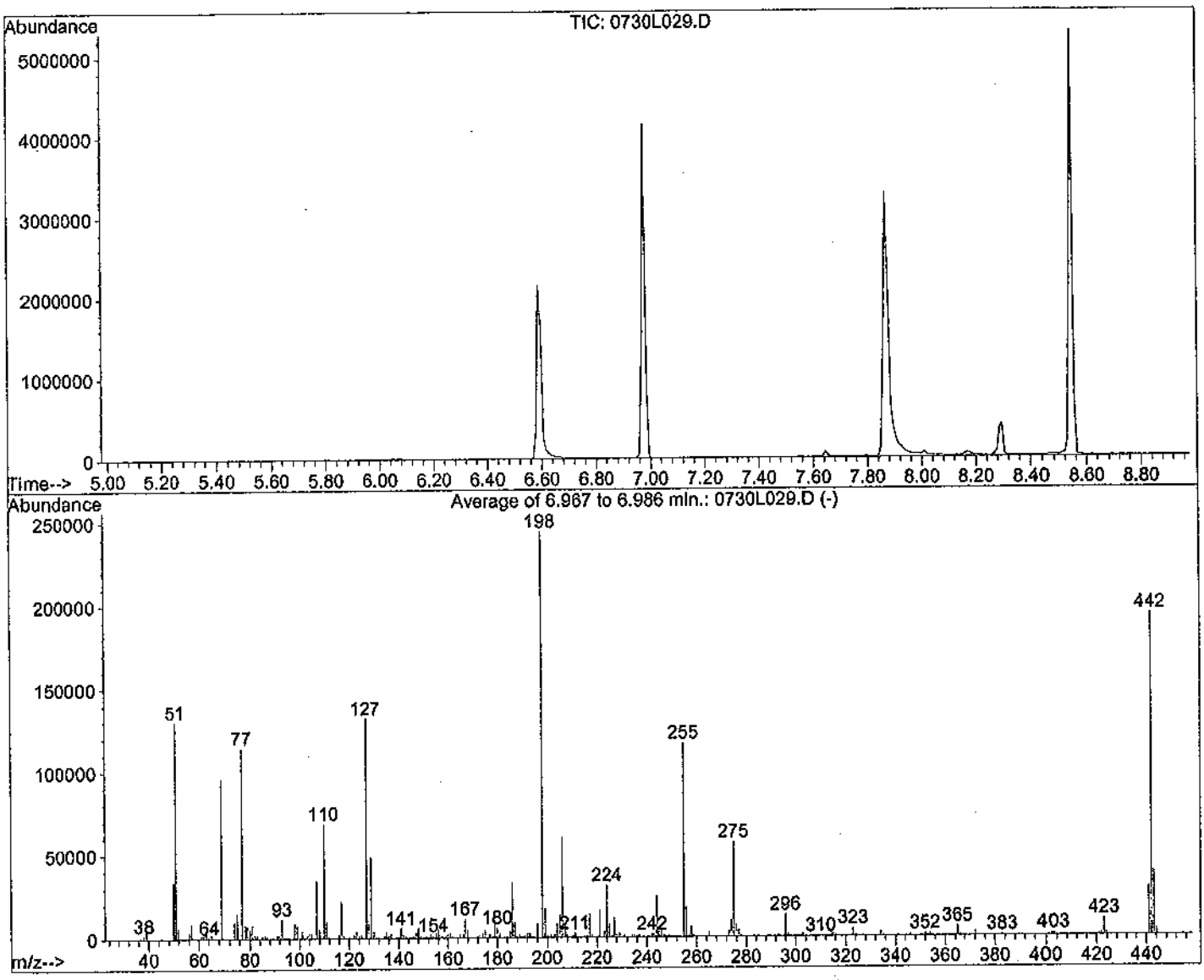
AutoFind: Scans 473, 474, 475; Background Corrected with Scan 470

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.7	141821	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	618	PASS
127	198	40	60	52.9	151162	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	285579	PASS
199	198	5	9	7.2	20477	PASS
275	198	10	30	22.8	65155	PASS
365	198	1	100	2.2	6371	PASS
441	443	0.01	100	74.3	30204	PASS
442	198	40	150	72.2	206197	PASS
443	442	17	23	19.7	40665	PASS

Data File : M:\LINUS\DATA\L110621\0730L029.D
Acq On : 30 Jul 11 22:14
Sample : SVTUNE 04-14-11
Misc :

Vial: 29
Operator: LF
Inst : Linus
Multiplr: 1.00

Method : M:\LINUS\DATA\L110621\SIM2.M (RTE Integrator)
Title : EPA 8270C



AutoFind: Scans 473, 474, 475; Background Corrected with Scan 470

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.3	130032	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	54.0	131860	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	244109	PASS
199	198	5	9	7.2	17582	PASS
275	198	10	30	23.2	56533	PASS
365	198	1	100	2.4	5777	PASS
441	443	0.01	100	75.9	29025	PASS
442	198	40	150	79.1	193210	PASS
443	442	17	23	19.8	38225	PASS

GC/MS STANDARD PREPARATION LOG # J PAGE # 90

UF 3/28/11

8270 BN:A (200:400) Surrogate Solution, 1 ml

110004-17

Storage <= -10 Degrees C

Made in USA Lot No 160538

Solvent Methylene Chloride

Exp 8/28/2012

Date Opened

8270 BN:A (200:400) Surrogate Solution

Lot #: 160538 - 27574

Rec: 10/18/10 MFR exp. 06/10/12

UF exp 3/28/12

UF 3/28/11

PREP DATE:	03-28-11															
8270T STANDARD CURVE																
Exp:	04-27-11					0.1	0.2	1	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	µL
	8270T Stock	200		03/23/11	05-29-11	0	0	0	5	5	10	20	25	30	40	50
	5.0ug/mL			03/28/11		0	0	20	0	0	0	0	0	0	0	0
	1.0ug mL			03/28/11		10	20	0	0	0	0	0	0	0	0	0
	Surrogate Stock	VAR	160538-27574	03/28/11	03-28-12	0	0	0	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47080			90	80	80	190	90	80	60	50	40	20	0
					Final Vol.			100	200	100	100	100	100	100	100	100

UF 3/28/11

PREP DATE:	03-28-11					
8270 Second Source (SS) 50ug/mL						50 UF
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10-06-10	10-06-11	25
EM Science	Methylene Chloride		47080			75
					Final Vol.	100

UF 4/18/11

GCM-160-1

Lot CF-2995

Exp 08/31/2011

Semi-Volatiles GC/MS Tuning Standard

4 analyte(s) at 1000 µg/mL in dichloromethane

250 Smith St, No Kingstown, RI 02852 USA

ULTRA 1 mL

Semi-volatiles GC/MS Tuning Standard

Lot #: CF-2995 - 26131

Rec: 2/17/10 MFR exp. 08/31/11

UF exp 8/31/11

UF 4/13/11

PREP DATE:	04-13-11					
8V Tune Mix 50ug/ml						
Exp:	08-31-11					
		Conc.		Date	CODE:	B
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
U. Scientific	GCM-150	1000	CF-2995-26131	04/13/11	08-31-11	1000
EM Science	MeCl2		47080			19000
					Final Vol	20000

exp 8/31/11

UF 4/20/11

8270D PAH SIM Solution, 200 mg/L, 1 ml

110780-01

Lot # 170253 Storage <-10 Degrees C Expiry 3/3/13

Solv Methylene Chloride

UF exp 4/20/12

8270D PAH SIM

Lot # 170253 - 28485

Rec: 3/10/11 MFR exp 3/3/2013

UR 4/20/11

8270D PAH SIM Solution, Second Source, 200 mg/L, 1 ml

110780-01-SS

Lot # 170256 Storage <-10 Degrees C Expiry 3/3/13

Solv Methylene Chloride

UF exp 4/20/12

8270D PAH SIM (SS)

Lot # 170256 - 28487

PREP DATE:	05-31-11					
8270C Stock/Spike Standard						
Exp:	11/30/11					
		Conc.		Date	CODE:	P
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	10001	2000	042910-28439	05/31/11	04-29-13	1000
Absolute	10001	2000	042910-28436	05/31/11	04-29-13	1000
Absolute	10002	2000	073109-28444	05/31/11	07-31-12	1000
Absolute	10002	2000	073109-28447	05/31/11	07-31-12	1000
Absolute	10004	2000	101509-28452	05/31/11	10-15-14	1000
Absolute	10004	2000	101509-28448	05/31/11	10-15-14	1000
Absolute	10005	2000	061209-28456	05/31/11	06-12-14	1000
Absolute	10005	2000	061209-28457	05/31/11	06-12-14	1000
Absolute	10006	2000	120810-28465	05/31/11	12-08-13	1000
Absolute	10006	2000	120810-28460	05/31/11	12-08-13	1000
Absolute	10007	2000	100909-28470	05/31/11	10-09-14	1000
Absolute	10007	2000	100909-28471	05/31/11	10-09-14	1000
Absolute	10018	2000	073109-28411	05/31/11	07-31-14	1000
Absolute	10018	2000	073109-28409	05/31/11	07-31-14	1000
Absolute	70023	1000	080310-28415	05/31/11	08-03-15	1000
Absolute	70023	1000	080310-28419	05/31/11	08-03-15	1000
Absolute	82705	2000	121010-28427	05/31/11	12-10-13	1000
Absolute	82705	2000	121010-28429	05/31/11	12-10-13	1000
Absolute	94552	2000	030411-28424	05/31/11	03-04-14	1000
Absolute	94552	2000	030411-28420	05/31/11	03-04-14	1000
					Final Vol	20000

PREP DATE:	06-05-11															
8270T STANDARD CURVE																
Exp:	07-05-11					0.1	0.2	1	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	µL
	8270T Stock	200		05/31/11	11-30-11	0	0	0	5	5	10	20	25	30	40	50
	5.0ug/mL			06/05/11		0	0	20	0	0	0	0	0	0	0	0
	1.0ug/mL			06/05/11		10	20	0	0	0	0	0	0	0	0	0
	Surrogate Stock	VAR	160538-27574	03/28/11	03-28-12	0	0	0	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47080			90	80	80	190	90	80	60	50	40	20	0
					Final Vol.			100	200	100	100	100	100	100	100	100

PREP DATE:	06-05-11					
8270 Second Source (SS) 50ug/mL						
						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/06/10	10-06-11	25
EM Science	Methylene Chloride		47080			75
					Final Vol.	100

PREP DATE:	06-21-11												
8270 SIM STANDARD CURVE													
						0.10	0.20	0.50	1.00	5.00	10.00	50.00	100.00
		Conc.		Date	CODE:	A	A	C	D	E	F	G	H
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL
	8270D PAH SIM	200	170253-2845	04/20/11	04-20-12	0	0	0	0	5	5	25	50
	5.0ug/mL	5		06/21/11		0	0	10	20	0	0	0	0
	1.0ug/mL	1		06/21/11		10	20	0	0	0	0	0	0
	Surrogate Stock	VAR	160538-27574	03/28/11	03-28-12	0	0	0	0	5	5	25	50
EM Science	Methylene Chloride		47080			90	80	90	80	190	90	50	0
					Final Vol.	100	100	100	100	200	100	100	100

PREP DATE:	06-21-11					
SIM 8270 Second Source (5µg/mL)						
Exp:	07-05-11					
				Conc.	Date	CODE:	
Supplier	ID #		Lot #	µg/mL	Code	Exp.Date	µL
	8270D PAH SIM (SS)		170256-28487	200	04/20/11	04-20-12	5
	MeCl2			Lot#47080			195
					Final Volume		200

VF 6/27/11

PREP DATE:	06-22-11												
8270 STANDARD CURVE													
Exp:	06-29-11						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
	8270T Stock	200		05/31/11	11-30-11		5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	160538-27570	03/28/11	03-28-12		5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47080				190	90	80	60	50	40	20	0
					Final Vol.		200	100	100	100	100	100	100	100

VF 6/28/11

PREP DATE:	06-22-11					
8270 Second Source (SS) 50ug/mL						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/06/10	10-06-11	25
EM Science	Methylene Chloride		47080			75
					Final Vol.	100

VF 7/3/11

PREP DATE:	07-03-11												
8270 STANDARD CURVE													
Exp:	07-10-11						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
	8270T Stock	200		05/31/11	11-30-11		5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	160538-27570	03/28/11	03-28-12		5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47080				190	90	80	60	50	40	20	0
					Final Vol.		200	100	100	100	100	100	100	100

VF 7/3/11

PREP DATE:	07-03-11					
8270 Second Source (SS) 50ug/mL						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/06/10	10-06-11	25
EM Science	Methylene Chloride		47080			75
					Final Vol.	100

VF 7/26/11

Part #: 10001 Laboratory Use Only - See MSDS
Lot #: 042910 Exp: 042913 Storage 0 °C
CLP Semi-Volatiles Base/Neutrals Mix #1
14 components
2000 ug/mL in methyl
ABSOLUTE STANDARD
CLP Semi-Volatiles Base/Neutrals Mix #1
Lot #: 042910 - 28438
Rec: 3/8/11 MFR exp. 4/29/2013

VF 7/26/11

Part #: 10001 Laboratory Use Only - See MSDS
Lot #: 042910 Exp: 042913 Storage 0 °C
CLP Semi-Volatiles Base/Neutrals Mix #1
14 components
2000 ug/mL in methyl
ABSOLUTE STANDARDS
CLP Semi-Volatiles Base/Neutrals Mix #1
Lot #: 042910 - 28437
Rec: 3/8/11 MFR exp. 4/29/2013

VF 7/26/11

Part #: 10002 Laboratory Use Only - See MSDS
Lot #: 073109 Exp: 073112 Storage 4 °C
CLP Semi-Volatiles Base/Neutrals Mix #2
14 components
2000 ug/mL in meth
ABSOLUTE STANDARI
CLP Semi-Volatiles Base/Neutrals Mix #2
Lot #: 073109 - 28443
Rec: 3/8/11 MFR exp. 7/31/2012

VF 7/26/11

Part #: 10002 Laboratory Use Only - See MSDS
Lot #: 073109 Exp: 073112 Storage 4 °C.
CLP Semi-Volatiles Base/Neutrals Mix #2
14 components
2000 ug/mL in methy
ABSOLUTE STANDARD
CLP Semi-Volatiles Base/Neutrals Mix #2
Lot #: 073109 - 28442

_SEP004S

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	110726A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 170253-28573	Surrogate ID 1	8270 SIM Surrogate 164394-27492
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:	
Spiked ID 8		Ext. End Time:	
		GC Requires Extract By:	08/04/11 0:00

pH1	2	07/26/11 4:05:00 PM	W Bath Temp	80 °C
pH2	14	07/26/11 4:50:00 PM		
pH3				

Spiked By: DL **Date** 07/26/11 **Witnessed By:** JL **Date** 07/26/11

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	110726A Blk				0.025	1	1000	1	2/14	07/26/11 16:00	
2	110726A LCS-1		0.025	1	0.025	1	1000	1	2/14	07/26/11 16:00	
3	AY42271	AY42271W06			0.025	1	1030	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
4	AY42273	AY42273W05			0.025	1	1030	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
5	AY42274	AY42274W06			0.025	1	1020	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
6	AY42275 MS-1	AY42275W19	0.025	1	0.025	1	1010	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
7	AY42275 MSD-1	AY42275W14	0.025	1	0.025	1	1010	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
8	AY42275	AY42275W20			0.025	1	1010	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
9	AY42276	AY42276W07			0.025	1	1010	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
10	AY42277	AY42277W06			0.025	1	1040	1	2/14	07/26/11 16:00	65187-2 WEEK RUSH -- Amber Liter
11	AY42542 MS-1	AY42542W17	0.025	1	0.025	1	1030	1	2/14	07/26/11 16:00	65208-2 WEEK RUSH -- Amber Liter
12	AY42542 MSD-1	AY42542W12	0.025	1	0.025	1	1030	1	2/14	07/26/11 16:00	65208-2 WEEK RUSH -- Amber Liter
13	AY42542	AY42542W14			0.025	1	1000	1	2/14	07/26/11 16:00	65208-2 WEEK RUSH -- Amber Liter
14	AY42543	AY42543W07			0.025	1	1040	1	2/14	07/26/11 16:00	65208-2 WEEK RUSH -- Amber Liter
15	AY42544	AY42544W06			0.025	1	1020	1	2/14	07/26/11 16:00	65208-2 WEEK RUSH -- Amber Liter
16	AY42765	AY42765W11			0.025	1	1020		2/14	07/26/11 16:00	65232-2 WEEK · Hot RUSH -- Amber Liter
17	AY42766	AY42766W10			0.025	1	1000		2/14	07/26/11 16:00	65232-2 WEEK · Hot RUSH -- Amber Liter
18	AY42767	AY42767W11			0.025	1	1000		2/14	07/26/11 16:00	65232-2 WEEK · Hot RUSH -- Amber Liter

Solvent and Lot#	
MC	VWR 070111B
Na2SO4	0280C529
10N NaOH	06/24/11
1+1 Acid	06/09/11
A. Na2SO4	07/11/11

Extraction COC Transfer	
Extraction lab employee Initials	HM
GC analyst's initials	JF
Date	7/30/11
Time	800
Refrigerator	HM

	Technician's Initials
Scanned By	DL
Sample Preparation	DL/JL
Extraction	DL/JL
Concentration	HM

Modified	07/26/11 3:13:50 PM

234

Reviewed By: HM **Date** 07/26/11

Injection Log

Directory: M:\LINUS\DATA\L110621\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0621L001.D	1	SVTUNE 04-14-11		21 Jun 11 19:57
2	2	0621L002.D	1	0.1ug/ml PAH 06-21-11		21 Jun 11 20:15
3	3	0621L003.D	1	0.2ug/ml PAH		21 Jun 11 20:41
4	4	0621L004.D	1	0.5ug/ml PAH		21 Jun 11 21:08
5	5	0621L005.D	1	1.0ug/ml PAH		21 Jun 11 21:34
6	6	0621L006.D	1	5.0ug/ml PAH		21 Jun 11 22:00
7	7	0621L007.D	1	10ug/ml PAH		21 Jun 11 22:26
8	8	0621L008.D	1	50ug/ml PAH		21 Jun 11 22:52
9	9	0621L009.D	1	100ug/ml PAH		21 Jun 11 23:19
10	10	0621L010.D	1	5.0ug/ml PAH SS 6-21-11		21 Jun 11 23:45
11	1	0730L001.D	1	SVTUNE 04-14-11		30 Jul 11 10:09
12	2	0730L002.D	1	5.0ug/ml PAH 06-21-11		30 Jul 11 10:28
13	7	0730L007.D	1	110726A BLK 1/1000		30 Jul 11 12:38
14	8	0730L008.D	1	110726A LCS-1 1/1000		30 Jul 11 13:05
15	29	0730L029.D	1	SVTUNE 04-14-11		30 Jul 11 22:14
16	30	0730L030.D	1	5.0ug/ml PAH 06-21-11		30 Jul 11 22:33
17	39	0730L039.D	0.97087	AY42271W06 1/1030		31 Jul 11 2:28
18	40	0730L040.D	0.97087	AY42273W05 1/1030		31 Jul 11 2:54
19	41	0730L041.D	0.98039	AY42274W06 1/1020		31 Jul 11 3:20
20	42	0730L042.D	0.9901	AY42275W19 MS-1 1/1010		31 Jul 11 3:45
21	43	0730L043.D	0.9901	AY42275W14 MSD-1 1/1010		31 Jul 11 4:11
22	44	0730L044.D	0.9901	AY42275W20 1/1010		31 Jul 11 4:37
23	45	0730L045.D	0.9901	AY42276W07 1/1010		31 Jul 11 5:02
24	46	0730L046.D	0.96154	AY42277W06 1/1040		31 Jul 11 5:28

EPA METHOD 8260B
Volatile Organic Compounds

EPA METHOD 8260B
Volatile Organic Compounds
QC Summary

APPL, INC.

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110724W-42271 - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
BLANK	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H05
Instrument: Hewey
Sequence: H110721
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:49:03 PM

Method Blank
EPA 8260B VOCs + Gas Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **110724W-42271 - 158145**
Batch ID: #86RHB-110724AH

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11
BLANK	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	SURROGATE: 1,2-DICHLOROET	115	70-120			%	07/24/11	07/24/11
BLANK	SURROGATE: 4-BROMOFLUOR	95.3	75-120			%	07/24/11	07/24/11
BLANK	SURROGATE: DIBROMOFLUOR	108	85-115			%	07/24/11	07/24/11
BLANK	SURROGATE: TOLUENE-D8 (S)	97.5	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H05
Instrument: Hewey
Sequence: H110721
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:49:03 PM

Method Blank

EPA 8260B VOCS + GAS WATER

Blank Name/QCG: **110727W-42275 - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/28/11	07/28/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/28/11	07/28/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/28/11	07/28/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	07/28/11	07/28/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/28/11	07/28/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/28/11	07/28/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/28/11	07/28/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/28/11	07/28/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/28/11	07/28/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/28/11	07/28/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/28/11	07/28/11
BLANK	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/28/11	07/28/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T39
Instrument: Thor
Sequence: T110727
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:49:03 PM

Method Blank
EPA 8260B VOCS + GAS WATER

Blank Name/QCG: **110727W-42275 - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/28/11	07/28/11
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/28/11	07/28/11
BLANK	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/28/11	07/28/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	SURROGATE: 1,2-DICHLOROET	111	70-120			%	07/28/11	07/28/11
BLANK	SURROGATE: 4-BROMOFLUOR	94.2	75-120			%	07/28/11	07/28/11
BLANK	SURROGATE: DIBROMOFLUOR	106	85-115			%	07/28/11	07/28/11
BLANK	SURROGATE: TOLUENE-D8 (S)	99.2	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T39
Instrument: Thor
Sequence: T110727
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:49:03 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/24/11

Matrix: WATER Instrument: Hewey

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)	SURROGATE: 4-BROMOFLUOROBENZENE (S)
110724AH-LCS	Lab Control Spike	110	96.9
110724AH-BLK	Blank	115	95.3
AY42272	ES036	108	94.6
AY42271	ES035	107	98.8
AY42273	ES037	108	103
AY42274	ES038	95.0	99.4
AY42277	ES041	92.0	96.2
AY42276	ES040	87.0	98.0

Comments: Batch: #86RHB-110724AH

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/24/11

Matrix: WATER Instrument: Hewey

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)	SURROGATE: TOLUENE-D8 (S)
110724AH-LCS	Lab Control Spike	106	95.7
110724AH-BLK	Blank	108	97.5
AY42272	ES036	101	94.2
AY42271	ES035	103	99.1
AY42273	ES037	106	100
AY42274	ES038	97.1	100
AY42277	ES041	93.5	99.3
AY42276	ES040	90.4	101

Comments: Batch: #86RHB-110724AH

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/27/11

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)	SURROGATE: 4-BROMOFLUOROBENZENE (S)
110727AT2-LCS	Lab Control Spike	99.3	109
110727AT2-BLK	Blank	111	94.2
AY42272	ES036	104	98.0
AY42271	ES035	109	84.9
AY42273	ES037	103	101
AY42274	ES038	101	97.1
AY42275	ES039	102	98.9
AY42276	ES040	101	92.9
AY42277	ES041	105	98.4
AY42275-MS	Matrix Spike	98.6	113
AY42275-MSD	Matrix SpikeD	99.6	104

Comments: Batch: #86RHB-110727AT

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/27/11

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)	SURROGATE: TOLUENE-D8 (S)
110727AT2-LCS	Lab Control Spike	102	103
110727AT2-BLK	Blank	106	99.2
AY42272	ES036	98.4	100
AY42271	ES035	108	88.5
AY42273	ES037	102	96.0
AY42274	ES038	105	92.8
AY42275	ES039	103	99.0
AY42276	ES040	99.9	98.1
AY42277	ES041	104	100
AY42275-MS	Matrix Spike	98.0	105
AY42275-MSD	Matrix SpikeD	102	101

Comments: Batch: #86RHB-110727AT

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **110724W-42271 LCS - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1,1,2-TETRACHLOROETHANE	10.00	9.65	96.5	80-130
1,1,1-TRICHLOROETHANE	10.00	10.4	104	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.21	92.1	65-130
1,1,2-TRICHLOROETHANE	10.00	9.95	99.5	75-125
1,1-DICHLOROETHANE	10.00	9.75	97.5	70-135
1,1-DICHLOROETHENE	10.00	9.56	95.6	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.41	94.1	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.10	91.0	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	8.57	85.7	50-130
1,2-DIBROMOETHANE	10.00	9.14	91.4	70-130
1,2-DICHLOROBENZENE	10.00	9.28	92.8	70-120
1,2-DICHLOROETHANE	10.00	9.69	96.9	70-130
1,2-DICHLOROPROPANE	10.00	9.95	99.5	75-125
1,3-DICHLOROBENZENE	10.00	9.41	94.1	75-125
1,4-DICHLOROBENZENE	10.00	9.30	93.0	75-125
2-BUTANONE	10.00	9.97	99.7	30-150
4-METHYL-2-PENTANONE	10.00	8.47	84.7	60-135
ACETONE	10.00	8.78	87.8	40-140
BENZENE	10.00	9.85	98.5	80-120
BROMODICHLOROMETHANE	10.00	10.2	102	75-120
BROMOFORM	10.00	8.53	85.3	70-130
BROMOMETHANE	10.00	8.85	88.5	30-145
CARBON TETRACHLORIDE	10.00	10.4	104	65-140
CHLOROBENZENE	10.00	9.30	93.0	80-120
CHLORODIBROMOMETHANE	10.00	9.61	96.1	60-135
CHLOROETHANE	10.00	9.34	93.4	60-135

Comments: _____

Primary	SPK
Quant Method :	H86SHW.M
Extraction Date :	07/24/11
Analysis Date :	07/24/11
Instrument :	Hewey
Run :	0724H03
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **110724W-42271 LCS - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROFORM	10.00	9.92	99.2	65-135
CHLOROMETHANE	10.00	8.65	86.5	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.23	92.3	70-125
ETHYLBENZENE	10.00	9.47	94.7	75-125
HEXACHLOROBUTADIENE	10.00	9.01	90.1	50-140
METHYL TERT-BUTYL ETHER	10.00	9.66	96.6	65-125
METHYLENE CHLORIDE	10.00	9.58	95.8	55-140
STYRENE	10.00	9.93	99.3	65-135
TETRACHLOROETHENE	10.00	9.98	99.8	45-150
TOLUENE	10.00	9.99	99.9	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.15	91.5	60-140
TRICHLOROETHENE	10.00	9.87	98.7	70-125
VINYL CHLORIDE	10.00	9.42	94.2	50-145
SURROGATE: 1,2-DICHLOROETHANE-D	20.2	22.2	110	70-120
SURROGATE: 4-BROMOFLUOROBENZ	23.9	23.2	96.9	75-120
SURROGATE: DIBROMOFLUOROMETH	21.7	23.0	106	85-115
SURROGATE: TOLUENE-D8 (S)	23.8	22.8	95.7	85-120

Comments: _____

Primary	SPK
Quant Method :	H86SHW.M
Extraction Date :	07/24/11
Analysis Date :	07/24/11
Instrument :	Hewey
Run :	0724H03
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCS + GAS WATER

APPL ID: **110727W-42275 LCS - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1,1,2-TETRACHLOROETHANE	10.00	9.31	93.1	80-130
1,1,1-TRICHLOROETHANE	10.00	8.65	86.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.61	96.1	65-130
1,1,2-TRICHLOROETHANE	10.00	9.40	94.0	75-125
1,1-DICHLOROETHANE	10.00	9.17	91.7	70-135
1,1-DICHLOROETHENE	10.00	8.97	89.7	70-130
1,2,3-TRICHLOROPROPANE	10.00	10.5	105	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.70	97.0	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	9.09	90.9	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	10.4	104	70-120
1,2-DICHLOROETHANE	10.00	9.78	97.8	70-130
1,2-DICHLOROPROPANE	10.00	10.1	101	75-125
1,3-DICHLOROBENZENE	10.00	9.75	97.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.7	98.5	70-130
1,4-DICHLOROBENZENE	10.00	9.74	97.4	75-125
2-BUTANONE	10.00	8.74	87.4	30-150
4-METHYL-2-PENTANONE	10.00	10.6	106	60-135
ACETONE	10.00	10.6	106	40-140
BENZENE	10.00	9.99	99.9	80-120
BROMODICHLOROMETHANE	10.00	9.31	93.1	75-120
BROMOFORM	10.00	8.94	89.4	70-130
BROMOMETHANE	10.00	11.6	116	30-145
CARBON TETRACHLORIDE	10.00	8.72	87.2	65-140
CHLOROBENZENE	10.00	9.79	97.9	80-120
CHLORODIBROMOMETHANE	10.00	9.73	97.3	60-135

Comments: _____

Primary	SPK
Quant Method :	T86DODW.M
Extraction Date :	07/27/11
Analysis Date :	07/27/11
Instrument :	Thor
Run :	0727T30
Initials :	DA

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APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCS + GAS WATER

APPL ID: **110727W-42275 LCS - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROETHANE	10.00	9.26	92.6	60-135
CHLOROFORM	10.00	8.43	84.3	65-135
CHLOROMETHANE	10.00	9.01	90.1	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.11	91.1	70-125
ETHYLBENZENE	10.00	9.78	97.8	75-125
GASOLINE	300	350	117	75-125
HEXACHLOROBUTADIENE	10.00	9.41	94.1	50-140
METHYL TERT-BUTYL ETHER	10.00	9.86	98.6	65-125
METHYLENE CHLORIDE	10.00	9.74	97.4	55-140
STYRENE	10.00	9.37	93.7	65-135
TETRACHLOROETHENE	10.00	9.01	90.1	45-150
TOLUENE	10.00	10.3	103	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.49	94.9	60-140
TRICHLOROETHENE	10.00	9.86	98.6	70-125
VINYL CHLORIDE	10.00	8.42	84.2	50-145
XYLENES (TOTAL)	30.0	28.9	96.3	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	27.9	99.3	70-120
SURROGATE: 4-BROMOFLUOROBENZ	28.2	30.8	109	75-120
SURROGATE: DIBROMOFLUOROMETH	30.4	30.9	102	85-115
SURROGATE: TOLUENE-D8 (S)	34.6	35.6	103	85-120

Comments: _____

Primary	SPK
Quant Method :	T86DODW.M
Extraction Date :	07/27/11
Analysis Date :	07/27/11
Instrument :	Thor
Run :	0727T30
Initials :	DA

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APPL Standard LCS

Matrix Spike Recoveries

EPA 8260B VOCS + GAS WATER

APPL ID: **110728W-42275 MS - 158162**
Batch ID: #86RHB-110727AT2
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,1,1,2-TETRACHLOROETHANE	10.00	ND	10.2	8.34	102	83.4	80-130	20.1	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.14	9.22	91.4	92.2	65-130	0.87	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	9.07	8.93	90.7	89.3	65-130	1.6	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.36	9.31	93.6	93.1	75-125	0.54	30
1,1-DICHLOROETHANE	10.00	ND	6.64	6.80	66.4 #	68.0 #	70-135	2.4	30
1,1-DICHLOROETHENE	10.00	ND	7.68	7.48	76.8	74.8	70-130	2.6	30
1,2,3-TRICHLOROPROPANE	10.00	ND	10.4	9.43	104	94.3	75-125	9.8	30
1,2,4-TRICHLOROBENZENE	10.00	ND	8.75	9.05	87.5	90.5	65-135	3.4	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	8.06	8.80	80.6	88.0	50-130	8.8	30
1,2-DIBROMOETHANE	10.00	ND	9.84	9.36	98.4	93.6	70-130	5.0	30
1,2-DICHLOROBENZENE	10.00	ND	10.0	10.0	100	100	70-120	0.0	30
1,2-DICHLOROETHANE	10.00	ND	9.96	9.44	99.6	94.4	70-130	5.4	30
1,2-DICHLOROPROPANE	10.00	ND	10.1	9.96	101	99.6	75-125	1.4	30
1,3-DICHLOROBENZENE	10.00	ND	10.2	9.76	102	97.6	75-125	4.4	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	16.8	17.2	84.0	86.0	70-130	2.4	30
1,4-DICHLOROBENZENE	10.00	ND	9.35	9.29	93.5	92.9	75-125	0.64	30
2-BUTANONE	10.00	ND	8.44	8.42	84.4	84.2	30-150	0.24	30
4-METHYL-2-PENTANONE	10.00	ND	9.71	9.80	97.1	98.0	60-135	0.92	30
ACETONE	10.00	ND	5.53	5.24	55.3	52.4	40-140	5.4	30
BENZENE	10.00	ND	10.0	9.89	100	98.9	80-120	1.1	30
BROMODICHLOROMETHANE	10.00	ND	9.97	9.38	99.7	93.8	75-120	6.1	30
BROMOFORM	10.00	ND	9.58	9.26	95.8	92.6	70-130	3.4	30
BROMOMETHANE	10.00	ND	9.15	8.70	91.5	87.0	30-145	5.0	30
CARBON TETRACHLORIDE	10.00	ND	9.65	9.28	96.5	92.8	65-140	3.9	30
CHLOROBENZENE	10.00	ND	10.2	9.00	102	90.0	80-120	12.5	30

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	T86DODW.M	T86DODW.M
Extraction Date :	07/28/11	07/28/11
Analysis Date :	07/28/11	07/28/11
Instrument :	Thor	Thor
Run :	0727T51	0727T52
Initials :	DA	

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APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCS + GAS WATER

APPL ID: **110728W-42275 MS - 158162**
Batch ID: #86RHB-110727AT2
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
CHLORODIBROMOMETHANE	10.00	ND	10.2	9.55	102	95.5	60-135	6.6	30
CHLOROETHANE	10.00	ND	7.09	8.04	70.9	80.4	60-135	12.6	30
CHLOROFORM	10.00	ND	8.99	9.07	89.9	90.7	65-135	0.89	30
CHLOROMETHANE	10.00	ND	8.12	7.74	81.2	77.4	40-125	4.8	30
CIS-1,2-DICHLOROETHENE	10.00	ND	8.67	8.75	86.7	87.5	70-125	0.92	30
ETHYLBENZENE	10.00	ND	10.7	9.68	107	96.8	75-125	10.0	30
GASOLINE	300	ND	270	273	90.0	91.0	75-125	1.1	30
HEXACHLOROBUTADIENE	10.00	ND	9.58	9.25	95.8	92.5	50-140	3.5	30
METHYL TERT-BUTYL ETHER	10.00	ND	6.87	6.68	68.7	66.8	65-125	2.8	30
METHYLENE CHLORIDE	10.00	ND	8.00	7.52	80.0	75.2	55-140	6.2	30
STYRENE	10.00	ND	9.57	8.75	95.7	87.5	65-135	9.0	30
TETRACHLOROETHENE	10.00	ND	9.27	9.23	92.7	92.3	45-150	0.43	30
TOLUENE	10.00	ND	10.4	10.3	104	103	75-120	0.97	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	7.18	7.42	71.8	74.2	60-140	3.3	30
TRICHLOROETHENE	10.00	ND	10.4	10.7	104	107	70-125	2.8	30
VINYL CHLORIDE	10.00	ND	7.96	7.20	79.6	72.0	50-145	10.0	30
XYLENES (TOTAL)	30.0	ND	31.0	27.7	103	92.3	80-120	11.2	30
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	NA	27.7	28.0	98.6	99.6	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	28.2	NA	32.0	29.4	113	104	75-120		
SURROGATE: DIBROMOFLUOROMETH	30.4	NA	29.8	31.0	98.0	102	85-115		
SURROGATE: TOLUENE-D8 (S)	34.6	NA	36.4	34.9	105	101	85-120		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	T86DODW.M	T86DODW.M
Extraction Date :	07/28/11	07/28/11
Analysis Date :	07/28/11	07/28/11
Instrument :	Thor	Thor
Run :	0727T51	0727T52
Initials :	DA	

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APPL MSD SCII

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/24/11

Matrix: WATER Instrument: Hewey

Blank ID: 110724AH-BLK Time Analyzed: 1551

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110724AH-LCS	Lab Control Spike	0724H03	07/24/11 1325
110724AH-BLK	Blank	0724H05	07/24/11 1551
AY42272	ES036	0724H06	07/24/11 1627
AY42271	ES035	0724H07	07/24/11 1704
AY42273	ES037	0724H08	07/24/11 1741
AY42274	ES038	0724H09	07/24/11 1817
AY42277	ES041	0724H10	07/24/11 1854
AY42276	ES040	0724H11	07/24/11 1930

Comments: Batch: #86RHB-110724AH

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65187

Case No: 65187 Date Analyzed: 07/28/11

Matrix: WATER Instrument: Thor

Blank ID: 110727AT2-BLK Time Analyzed: 0248

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110727AT2-LCS	Lab Control Spike	0727T30	07/27/11 2255
110727AT2-BLK	Blank	0727T39	07/28/11 0248
AY42272	ES036	0727T40	07/28/11 0314
AY42271	ES035	0727T42	07/28/11 0406
AY42273	ES037	0727T43	07/28/11 0432
AY42274	ES038	0727T44	07/28/11 0458
AY42275	ES039	0727T45	07/28/11 0524
AY42276	ES040	0727T46	07/28/11 0550
AY42277	ES041	0727T47	07/28/11 0616
110727AT2-MS	Matrix Spike	0727T51	07/28/11 0800
110727AT2-MSD	Matrix SpikeD	0727T52	07/28/11 0826

Comments: Batch: #86RHB-110727AT

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0721H00T.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11B

SDG No: Hewey
Date Analyzed: 07/21/11
Instrument: Hewey
Time Analyzed: 9:46

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		Vol Std 07-21-11@0.5	0721H05W.D	07/21/11 12:32
2		Vol Std 07-21-11@1.0	0721H06W.D	07/21/11 13:09
3		Vol Std 07-21-11@2.0	0721H07W.D	07/21/11 13:45
4		Vol Std 07-21-11@5.0	0721H08W.D	07/21/11 14:22
5		Vol Std 07-21-11@10u	0721H09W.D	07/21/11 14:58
6		Vol Std 07-21-11@20u	0721H10W.D	07/21/11 15:35
7		Vol Std 07-21-11@40u	0721H11W.D	07/21/11 16:11
8		Vol Std 07-21-11@100	0721H12W.D	07/21/11 16:48
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	18.3
75	30 - 60% of mass 95	43.1
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	8.2
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	71.7
175	5 - 9% of mass 174	7.5
176	95 - 101% of mass 174	96.5
177	5 - 9% of mass 176	6.7

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0721H15W.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11B

SDG No: 65187
Date Analyzed: 07/21/11
Instrument: Hewey
Time Analyzed: 18:38

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		Vol Std 07-21-11@10u	0721H16W.D	07/21/11 19:14
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	16.8
75	30 - 60% of mass 95	38.2
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	79.7
175	5 - 9% of mass 174	7.9
176	95 - 101% of mass 174	99.8
177	5 - 9% of mass 176	7.1

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0724H00T.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11B

SDG No: 65187
Date Analyzed: 07/24/11
Instrument: Hewey
Time Analyzed: 11:52

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		110724A LSC-1WH	0724H02W.D	07/24/11 12:47
2	Blank	110724A BLK-1WH	0724H05W.D	07/24/11 15:51
3	ES036	AY42272W02	0724H06W.D	07/24/11 16:27
4	ES035	AY42271W02	0724H07W.D	07/24/11 17:04
5	ES037	AY42273W02	0724H08W.D	07/24/11 17:41
6	ES038	AY42274W02	0724H09W.D	07/24/11 18:17
7	ES041	AY42277W01	0724H10W.D	07/24/11 18:54
8	ES040	AY42276W01	0724H11W.D	07/24/11 19:30
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	16.7
75	30 - 60% of mass 95	42.9
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	7.7
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	60.8
175	5 - 9% of mass 174	5.9
176	95 - 101% of mass 174	95.8
177	5 - 9% of mass 176	8.1

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0727T00T.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11C

SDG No: Thor
Date Analyzed: 07/27/11
Instrument: Thor
Time Analyzed: 10:05

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		Vol Std 07-27-11@20u	0727T05W.D	07/27/11 12:06
2		Vol Std 07-27-11@50u	0727T06W.D	07/27/11 12:32
3		Vol Std 07-27-11@100	0727T07W.D	07/27/11 12:58
4		Vol Std 07-27-11@300	0727T08W.D	07/27/11 13:24
5		Vol Std 07-27-11@600	0727T09W.D	07/27/11 13:50
6		Vol Std 07-27-11@800	0727T10W.D	07/27/11 14:16
7		Vol Std 07-27-11@100	0727T11W.D	07/27/11 14:42
8		Vol Std 07-27-11@0.3	0727T15W.D	07/27/11 16:25
9		Vol Std 07-27-11@0.5	0727T16W.D	07/27/11 16:51
10		Vol Std 07-27-11@1.0	0727T17W.D	07/27/11 17:17
11		Vol Std 07-27-11@2.0	0727T18W.D	07/27/11 17:43
12		Vol Std 07-27-11@5.0	0727T19W.D	07/27/11 18:09
13		Vol Std 07-27-11@10u	0727T20W.D	07/27/11 18:35
14		Vol Std 07-27-11@20u	0727T21W.D	07/27/11 19:01
15		Vol Std 07-27-11@40u	0727T22W.D	07/27/11 19:27
16		Vol Std 07-27-11@100	0727T23W.D	07/27/11 19:53
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	24.9
75	30 - 60% of mass 95	59.1
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.8
173	0 - 2% of mass 174	1.2
174	50 - 100% of mass 95	63.2
175	5 - 9% of mass 174	7.2
176	95 - 101% of mass 174	97.9
177	5 - 9% of mass 176	6.5

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 65187
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11C

SDG No: 65187
Date Analyzed: 07/27/11
Instrument: Thor
Time Analyzed: 22:29

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Lab Control Spike	110727A LCS-1WT (SS)	0727T30W.D	07/27/11 22:55
2		Gas 300ug/L (SS)	0727T33W.D	07/28/11 0:13
3	Lab Control Spike	Gas 300ug/L LCS-1WT	0727T34W.D	07/28/11 0:39
4	Blank	110727A BLK-1WT	0727T39W.D	07/28/11 2:48
5	ES036	AY42272W03	0727T40W.D	07/28/11 3:14
6	ES035	AY42271W03	0727T42W.D	07/28/11 4:06
7	ES037	AY42273W03	0727T43W.D	07/28/11 4:32
8	ES038	AY42274W03	0727T44W.D	07/28/11 4:58
9	ES039	AY42275W01	0727T45W.D	07/28/11 5:24
10	ES040	AY42276W02	0727T46W.D	07/28/11 5:50
11	ES041	AY42277W02	0727T47W.D	07/28/11 6:16
12		AY42275W345 MS-1WT	0727T51W.D	07/28/11 8:00
13		AY42275W345 MSD-1WT	0727T52W.D	07/28/11 8:26
14		AY42275W567 MS-1WT (	0727T53W.D	07/28/11 8:52
15		AY42275W567 MSD-1WT	0727T54W.D	07/28/11 9:18
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	19.8
75	30 - 60% of mass 95	55.1
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2% of mass 174	1.2
174	50 - 100% of mass 95	70.2
175	5 - 9% of mass 174	7.8
176	95 - 101% of mass 174	98.0
177	5 - 9% of mass 176	6.4

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 65187

Lab File ID (Standard): 0721H09W.D Date Analyzed: 07/21/11

Instrument ID: Hewey Time Analyzed: 14:58

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

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	508096	11.59	407808	16.71	195776	20.97
	UPPER LIMIT	1016192	12.09	815616	17.21	391552	21.47
	LOWER LIMIT	254048	11.09	203904	16.21	97888	20.47
	SAMPLE NO.						
01	Vol Std 07-21-11@10ug/L	561152	11.60	448832	16.72	212544	20.98
02	110724A LSC-1WH	525694	11.56	426496	16.68	204672	20.95
03	110724A BLK-1WH	472832	11.56	407872	16.69	196672	20.95
04	AY42272W02	501144	11.57	405056	16.69	192064	20.94
05	AY42271W02	487488	11.56	390336	16.70	195776	20.95
06	AY42273W02	477952	11.57	390720	16.69	207808	20.94
07	AY42274W02	607744	11.57	476672	16.69	224896	20.95
08	AY42277W01	629696	11.57	479424	16.69	231168	20.95
09	AY42276W01	648976	11.57	484480	16.69	230656	20.95
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.: 65187

Lab File ID (Standard): 0727T21W.D Date Analyzed: 07/27/11

Instrument ID: Thor Time Analyzed: 19:01

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

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	112240	6.72	107600	10.61	73272	12.42
	UPPER LIMIT	224480	7.22	215200	11.11	146544	12.92
	LOWER LIMIT	56120	6.22	53800	10.11	36636	11.92
	SAMPLE NO.						
01	110727A LCS-1WT (SS	112320	6.72	88552	10.60	65672	12.43
02	110727A BLK-1WT	106016	6.73	80304	10.61	53520	12.43
03	AY42272W03	102800	6.73	75672	10.61	57768	12.43
04	AY42271W03	93440	6.72	84352	10.61	55728	12.43
05	AY42273W03	99568	6.72	76880	10.60	52872	12.43
06	AY42274W03	102624	6.73	83328	10.61	59504	12.43
07	AY42275W01	101936	6.72	80976	10.61	59264	12.43
08	AY42276W02	103200	6.72	77960	10.61	49496	12.43
09	AY42277W02	98816	6.73	78776	10.61	55344	12.43
10	AY42275W345 MS-1WT	100728	6.73	73832	10.61	56984	12.42
11	AY42275W345 MSD-1W	100736	6.73	81496	10.61	57696	12.43
12	AY42275W567 MS-1WT	101840	6.73	79368	10.61	58928	12.43
13	AY42275W567 MSD-1W	93856	6.73	73328	10.61	56880	12.43
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.: 65187

Lab File ID (Standard): 0727T08W.D Date Analyzed: 07/27/11

Instrument ID: Thor Time Analyzed: 13:24

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

		Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	258612	6.73	374760	10.61	525627	12.43
	UPPER LIMIT	517224	7.23	749520	11.11	1051254	12.93
	LOWER LIMIT	129306	6.23	187380	10.11	262814	11.93
	SAMPLE NO.						
01	Gas 300ug/L (SS)	257896	6.73	328931	10.61	420592	12.42
02	Gas 300ug/L LCS-1WT	263950	6.73	321714	10.61	429942	12.43
03	110727A BLK-1WT	259114	6.73	303929	10.61	398312	12.43
04	AY42272W03	245056	6.73	291018	10.61	376119	12.43
05	AY42271W03	233807	6.73	301296	10.61	382138	12.43
06	AY42273W03	236724	6.72	281797	10.61	395281	12.43
07	AY42274W03	243008	6.73	306891	10.61	423727	12.43
08	AY42275W01	246061	6.72	290909	10.61	395343	12.43
09	AY42276W02	253656	6.72	289937	10.61	368733	12.42
10	AY42277W02	241875	6.73	298816	10.61	373919	12.43
11	AY42275W567 MS-1WT (Gas)	242701	6.73	280984	10.61	395455	12.43
12	AY42275W567 MSD-1WT (Gas)	236696	6.73	277064	10.61	416523	12.43
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 8260B
Volatile Organic Compounds
Sample Data

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES035
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42271
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H07
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES035

APPL ID: AY42271

Sample Collection Date: 07/19/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	107	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.8	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	103	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	99.1	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H07
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES035
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42271
QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	109	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	84.9	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	108	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	88.5	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T42
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H07W.D Vial: 7
Acq On : 24 Jul 11 17:04 Operator: SV
Sample : AY42271W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:03 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.56	96	487488	25.00000 ppb	-0.02
35) Chlorobenzene-D5 (IS)	16.70	117	390336	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	195776	25.00000 ppb	-0.02
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.19	111	413458	22.31789 ppb	-0.02
Spiked Amount 21.666			Recovery = 103.009%		
23) 1,2-DCA-D4(S)	10.97	65	361464	21.58148 ppb	-0.02
Spiked Amount 20.215			Recovery = 106.757%		
36) Toluene-D8(S)	14.18	98	1216679	23.59307 ppb	-0.01
Spiked Amount 23.814			Recovery = 99.072%		
43) 4-Bromofluorobenzene(S)	18.81	95	484654	23.64366 ppb	-0.02
Spiked Amount 23.932			Recovery = 98.797%		

Target Compounds Qvalue

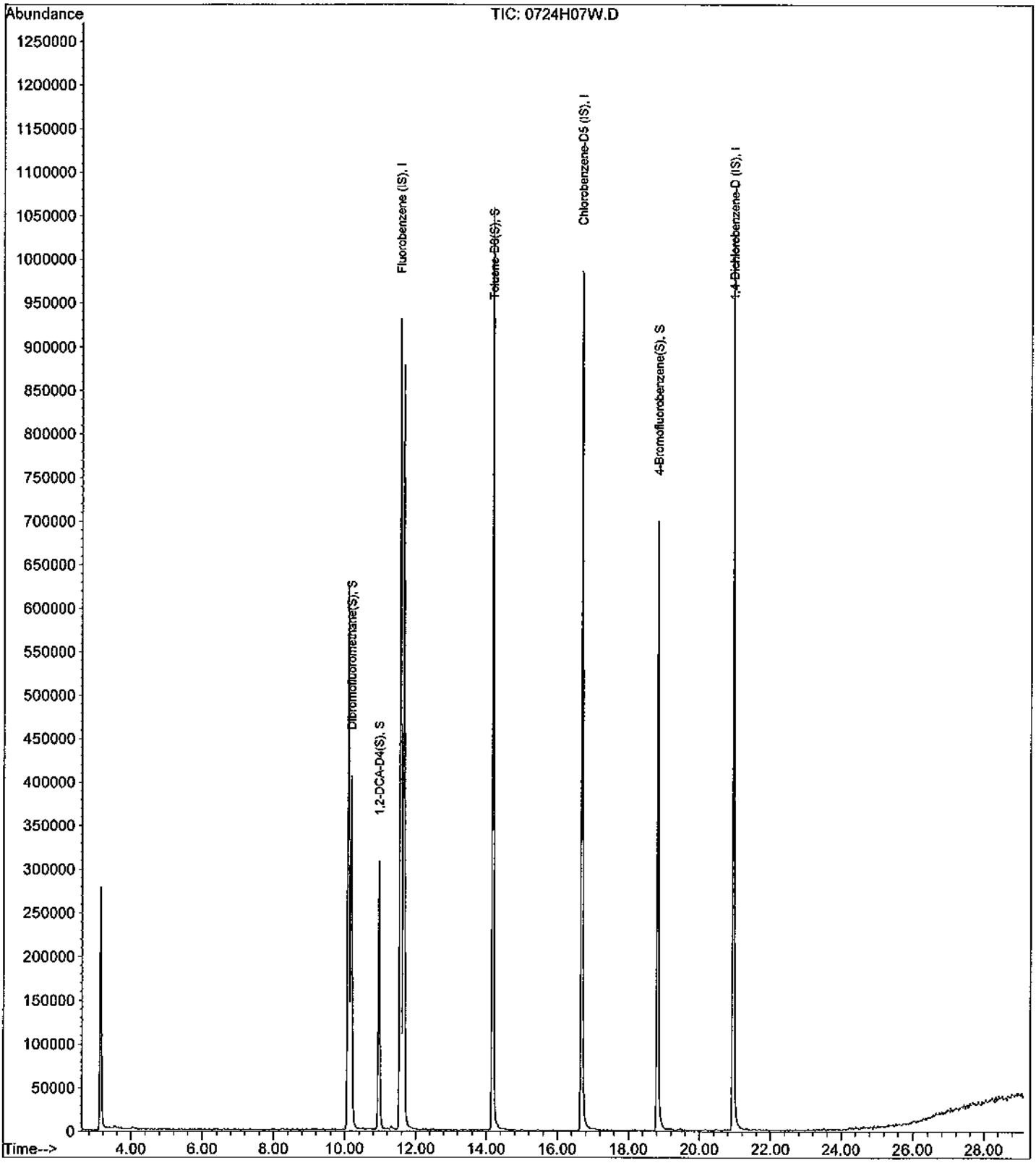
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H07W.D Vial: 7
Acq On : 24 Jul 11 17:04 Operator: SV
Sample : AY42271W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:03 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T42W.D Vial: 42
Acq On : 28 Jul 11 4:06 Operator: RP
Sample : AY42271W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:55 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	96	93440	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	84352	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	55728	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	43063	32.90834 ppb	0.00
Spiked Amount 30.441			Recovery = 108.103%		
24) 1,2-DCA-D4(S)	6.34	65	78384	30.60044 ppb	0.00
Spiked Amount 28.084			Recovery = 108.958%		
39) Toluene-D8(S)	8.79	98	142970	30.63944 ppb	0.00
Spiked Amount 34.610			Recovery = 88.526%		
46) 4-Bromofluorobenzene(S)	11.62	95	64346	23.93770 ppb	0.00
Spiked Amount 28.184			Recovery = 84.934%		

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T42W.D Vial: 42
Acq On : 28 Jul 11 4:06 Operator: RP
Sample : AY42271W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:09 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	233807	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	301296	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	382138	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

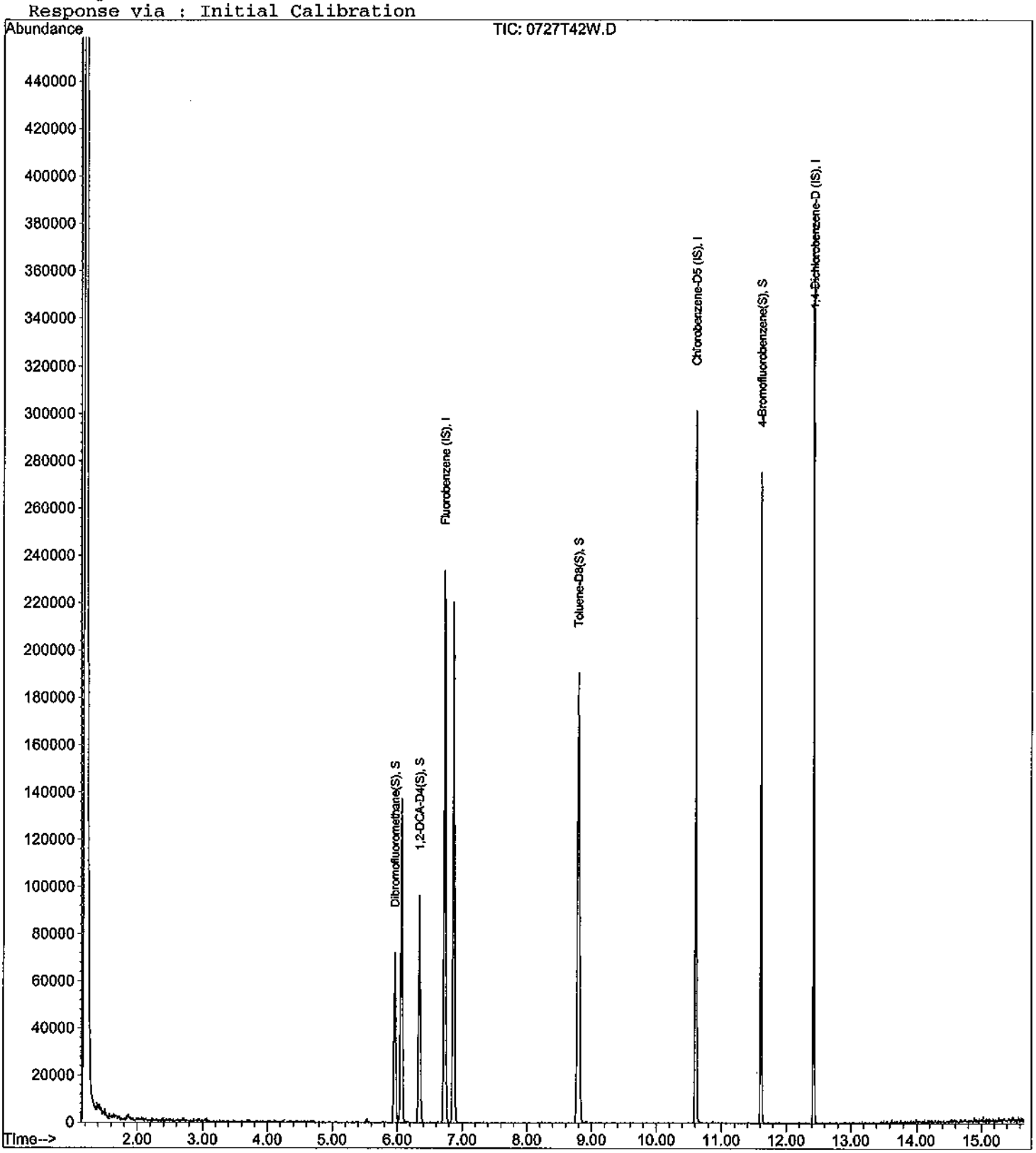
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T42W.D Vial: 42
Acq On : 28 Jul 11 4:06 Operator: RP
Sample : AY42271W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:55 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES036

APPL ID: AY42272

Sample Collection Date: 07/19/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H06
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
ARF: 65187
Sample ID: ES036
APPL ID: AY42272
Sample Collection Date: 07/19/11
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	108	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	94.6	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	101	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.2	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H06
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES036

APPL ID: AY42272

Sample Collection Date: 07/19/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	104	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.0	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	98.4	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T40
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H06W.D Vial: 6
Acq On : 24 Jul 11 16:27 Operator: SV
Sample : AY42272W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:02 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	96	501144	25.00000 ppb	-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	405056	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.94	152	192064	25.00000 ppb	-0.02
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.18	111	418493	21.97411 ppb	-0.02
Spiked Amount 21.666			Recovery = 101.422%		
23) 1,2-DCA-D4(S)	10.97	65	377348	21.91592 ppb	-0.01
Spiked Amount 20.215			Recovery = 108.415%		
36) Toluene-D8(S)	14.18	98	1200066	22.42524 ppb	-0.02
Spiked Amount 23.814			Recovery = 94.167%		
43) 4-Bromofluorobenzene(S)	18.82	95	481800	22.65026 ppb	-0.02
Spiked Amount 23.932			Recovery = 94.643%		

Target Compounds Qvalue

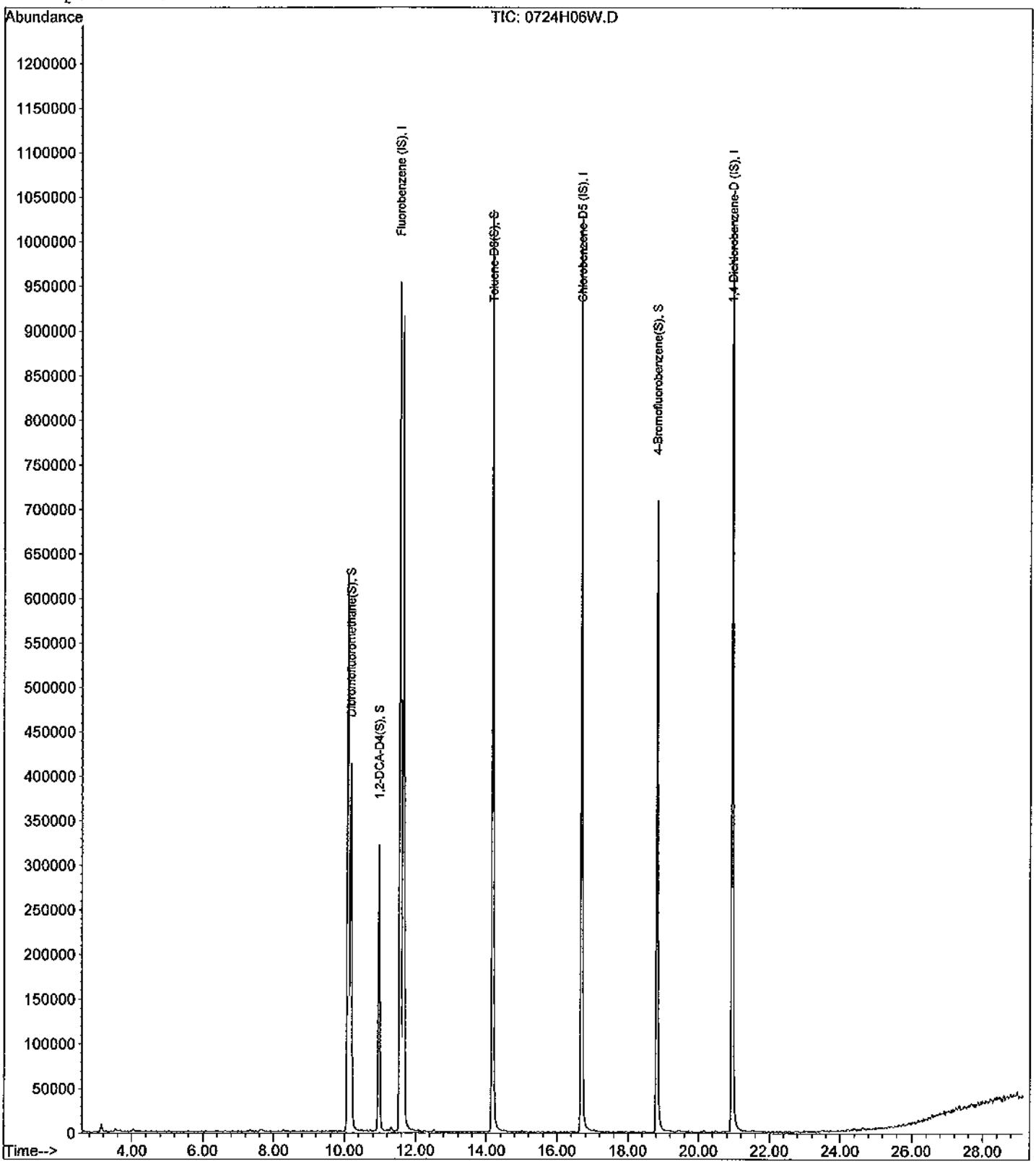
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H06W.D Vial: 6
Acq On : 24 Jul 11 16:27 Operator: SV
Sample : AY42272W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:02 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T40W.D Vial: 40
Acq On : 28 Jul 11 3:14 Operator: RP
Sample : AY42272W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:55 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	96	102800	25.00000	ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	75672	25.00000	ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	57768	25.00000	ppb	0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	43102	29.93911	ppb	0.00
Spiked Amount 30.441			Recovery = 98.350%			
24) 1,2-DCA-D4(S)	6.34	65	82013	29.10199	ppb	0.00
Spiked Amount 28.084			Recovery = 103.624%			
39) Toluene-D8(S)	8.79	98	144987	34.63579	ppb	0.00
Spiked Amount 34.610			Recovery = 100.075%			
46) 4-Bromofluorobenzene(S)	11.61	95	66638	27.63396	ppb	0.00
Spiked Amount 28.184			Recovery = 98.047%			

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T40W.D Vial: 40
Acq On : 28 Jul 11 3:14 Operator: RP
Sample : AY42272W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:09 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	245056	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	291018	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	376119	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

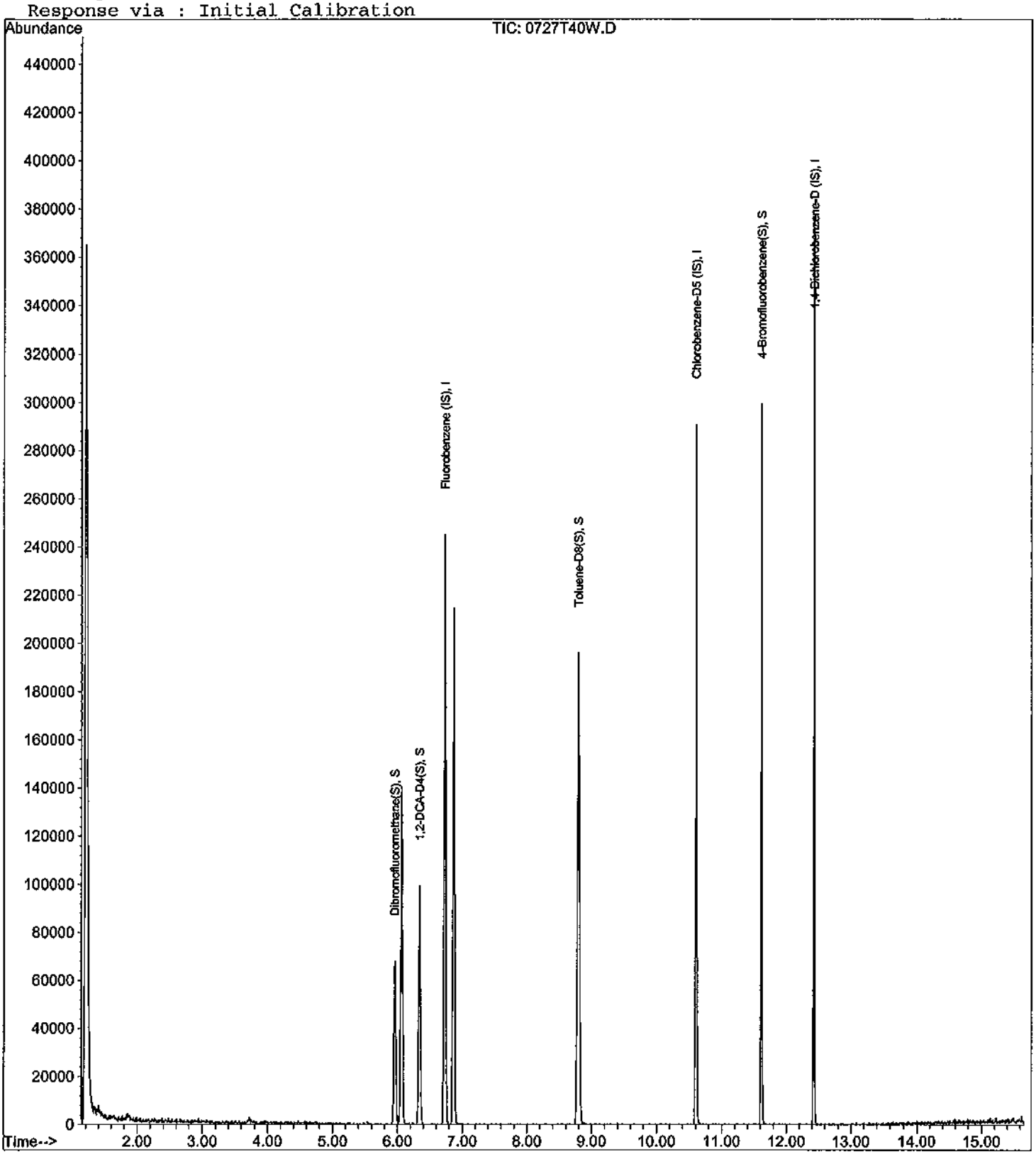
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T40W.D Vial: 40
Acq On : 28 Jul 11 3:14 Operator: RP
Sample : AY42272W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:55 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES037
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42273
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H08
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES037

APPL ID: AY42273

Sample Collection Date: 07/19/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	108	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	106	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H08
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES037

APPL ID: AY42273

Sample Collection Date: 07/19/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	103	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	101	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	102	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	96.0	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T43
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H08W.D Vial: 8
Acq On : 24 Jul 11 17:41 Operator: SV
Sample : AY42273W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:04 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	96	477952	25.00000 ppb	-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	390720	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.94	152	207808	25.00000 ppb	-0.02
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.18	111	418846	23.05981 ppb	-0.02
Spiked Amount 21.666			Recovery	= 106.434%	
23) 1,2-DCA-D4(S)	10.97	65	357428	21.76629 ppb	-0.01
Spiked Amount 20.215			Recovery	= 107.673%	
36) Toluene-D8(S)	14.18	98	1230891	23.84520 ppb	-0.02
Spiked Amount 23.814			Recovery	= 100.130%	
43) 4-Bromofluorobenzene(S)	18.82	95	505769	24.64950 ppb	-0.02
Spiked Amount 23.932			Recovery	= 102.996%	
Target Compounds					Qvalue
41) o-Xylene	17.81	106	2921	0.11523 ppb	82
48) Ethylbenzene	16.90	91	8017	0.13740 ppb	85
52) Isopropylbenzene	18.44	105	253013	3.56552 ppb	100
56) n-Propylbenzene	19.17	91	186499	2.38944 ppb	97
60) Tert-Butylbenzene	20.09	119	44975	0.75242 ppb	98
62) Sec-Butylbenzene	20.47	105	351073	4.61503 ppb	99
66) n-Butylbenzene	21.46	91	126875	2.67833 ppb	95
71) Naphthalene	24.72	128	88958	2.68316 ppb	100

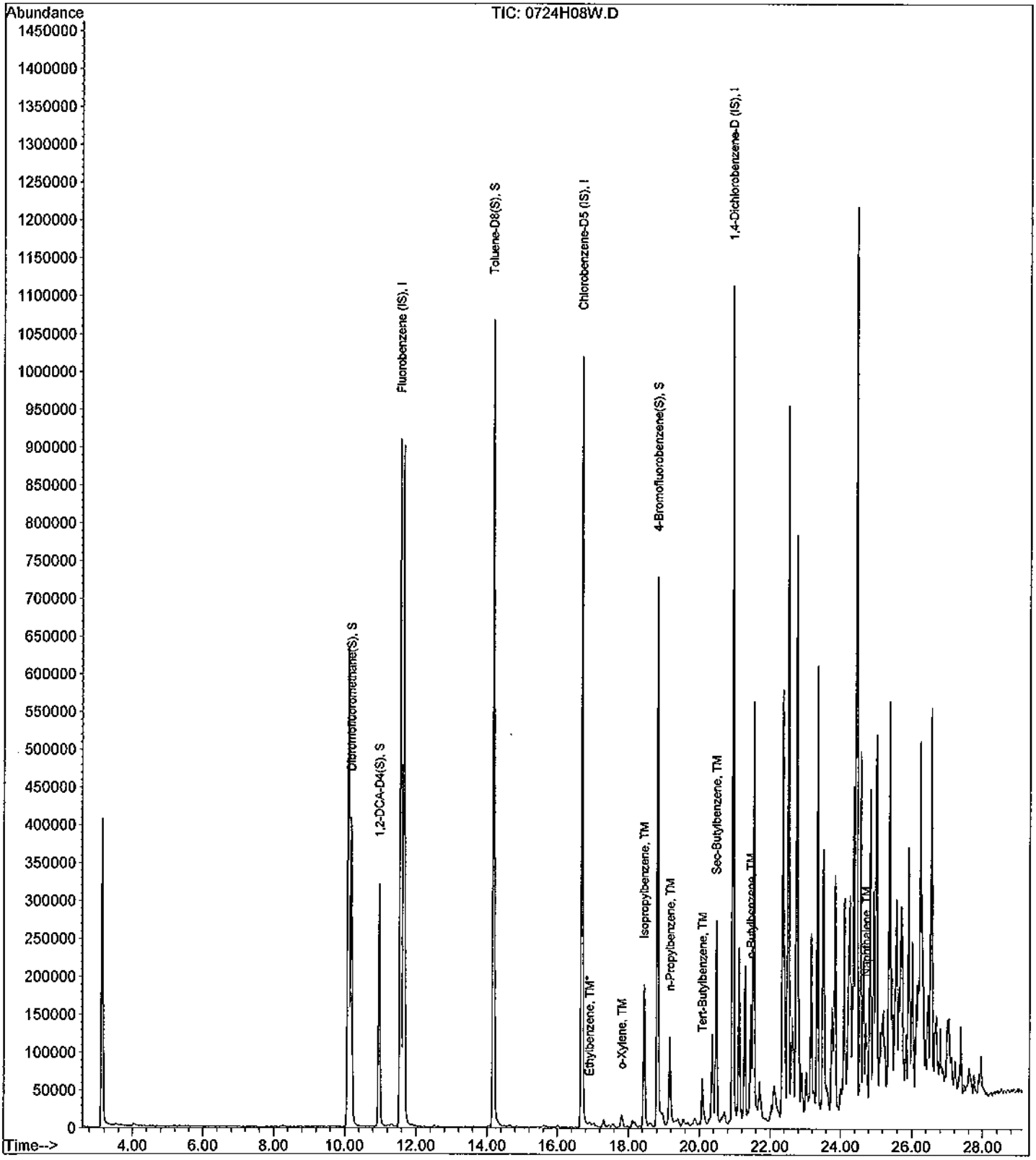
(#) = qualifier out of range (m) = manual integration

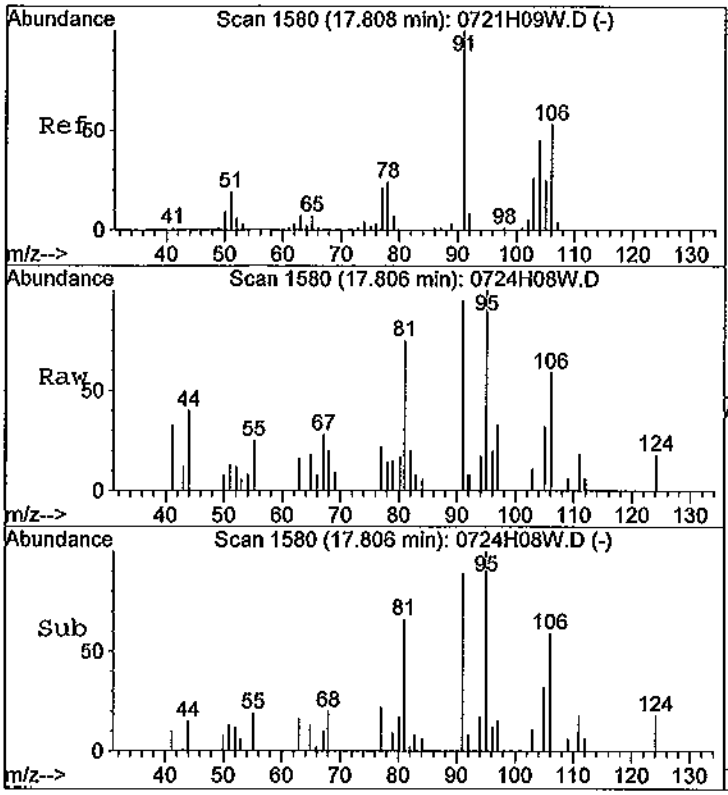
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H08W.D Vial: 8
Acq On : 24 Jul 11 17:41 Operator: SV
Sample : AY42273W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:04 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration

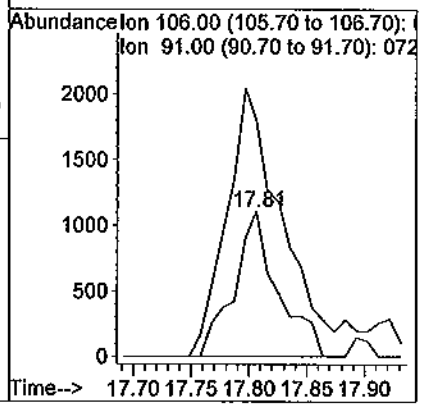


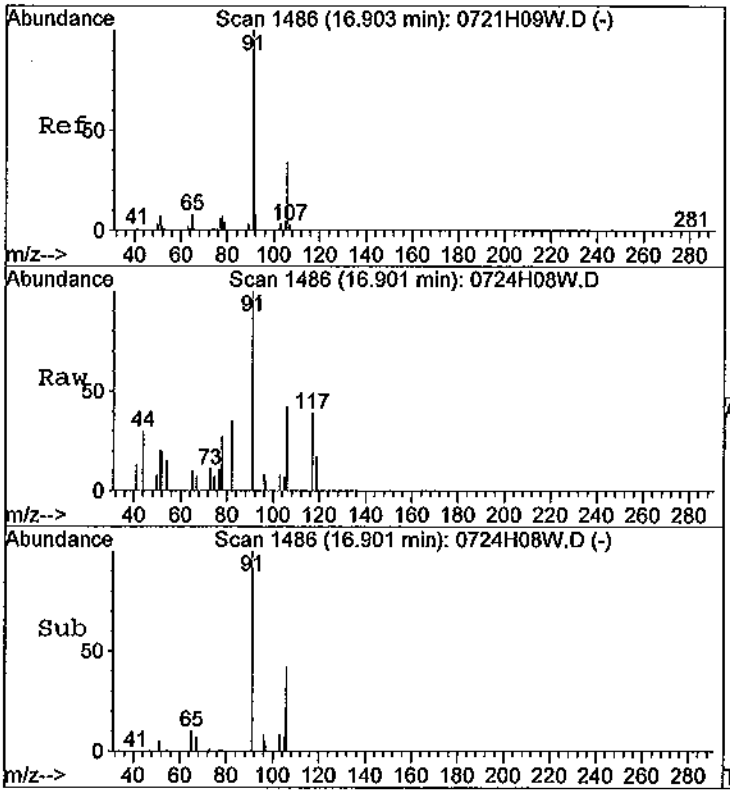


#41
o-Xylene
Concen: 0.11523 ppb
RT: 17.81 min Scan# 1580
Delta R.T. -0.00 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion:106 Resp: 2921

Ion	Ratio	Lower	Upper
106	100		
91	161.5	131.0	243.4

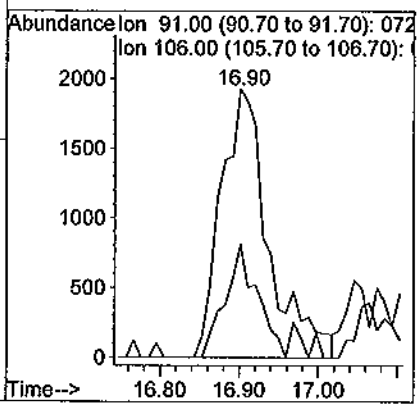


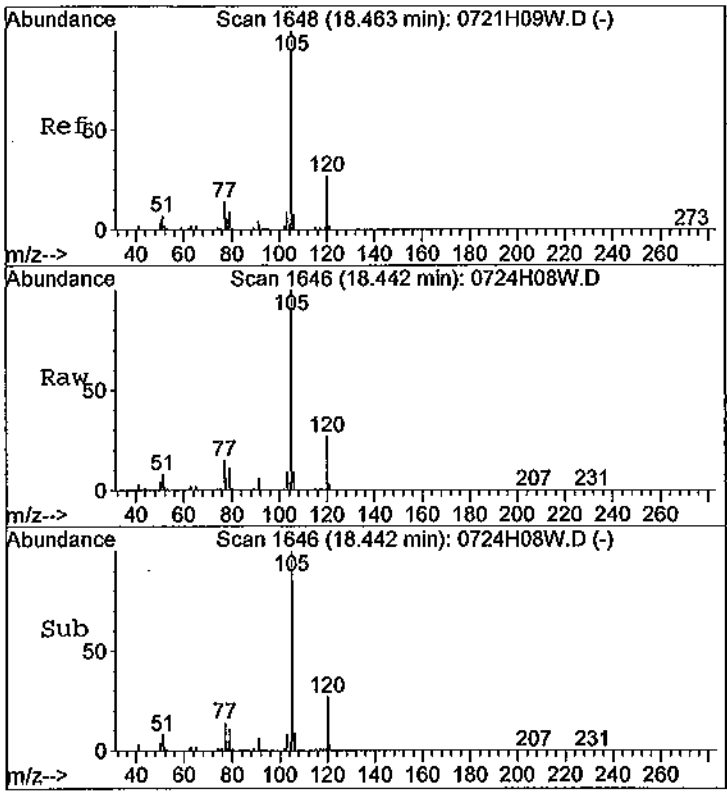


#48
Ethylbenzene
Concen: 0.13740 ppb
RT: 16.90 min Scan# 1486
Delta R.T. -0.00 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion: 91 Resp: 8017

Ion	Ratio	Lower	Upper
91	100		
106	42.2	23.7	43.9

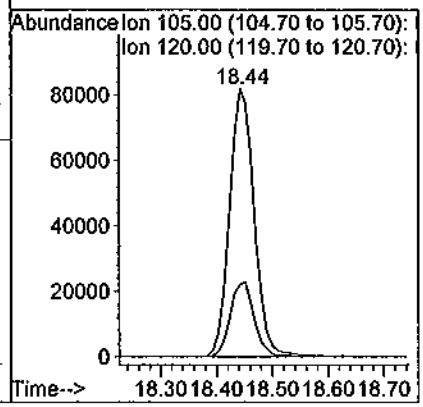


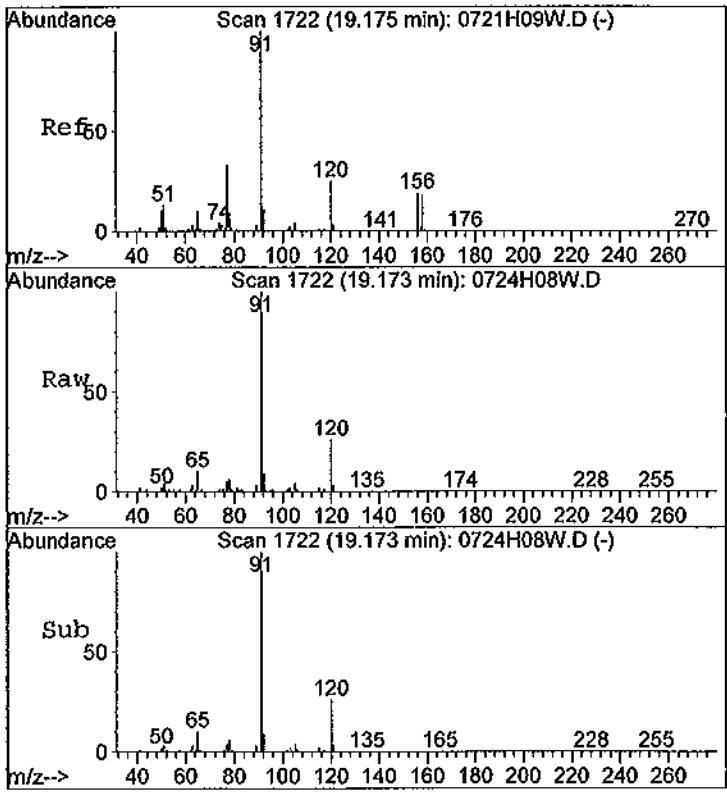


#52
Isopropylbenzene
Concen: 3.56552 ppb
RT: 18.44 min Scan# 1646
Delta R.T. -0.02 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion:105 Resp: 253013

Ion	Ratio	Lower	Upper
105	100		
120	26.8	21.4	32.0

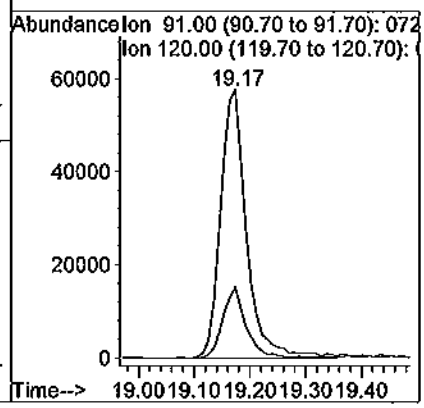


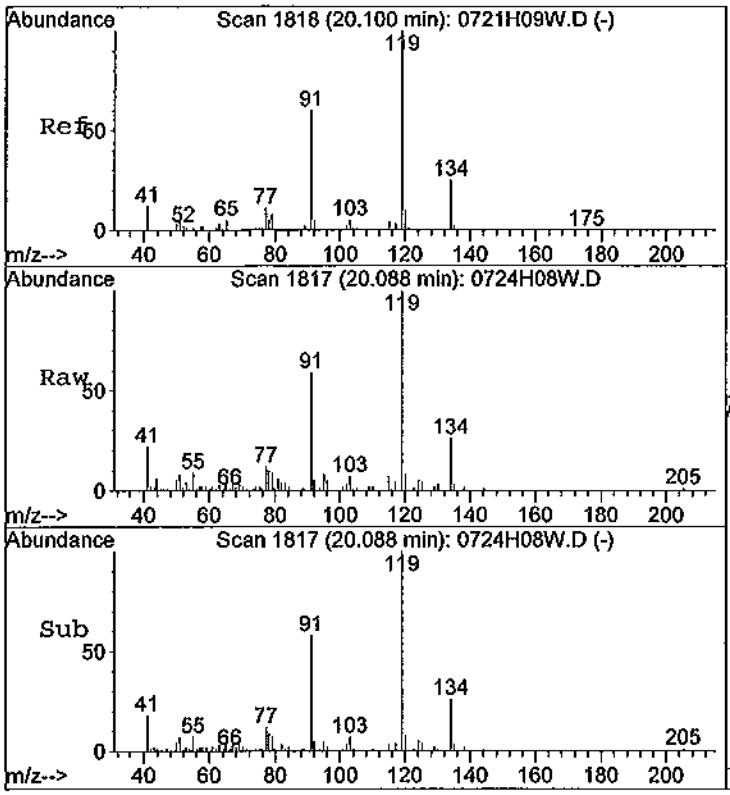


#56
n-Propylbenzene
Concen: 2.38944 ppb
RT: 19.17 min Scan# 1722
Delta R.T. -0.00 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion: 91 Resp: 186499

Ion	Ratio	Lower	Upper
91	100		
120	26.4	17.3	32.1

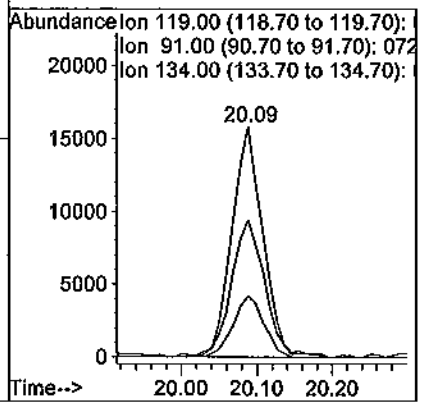


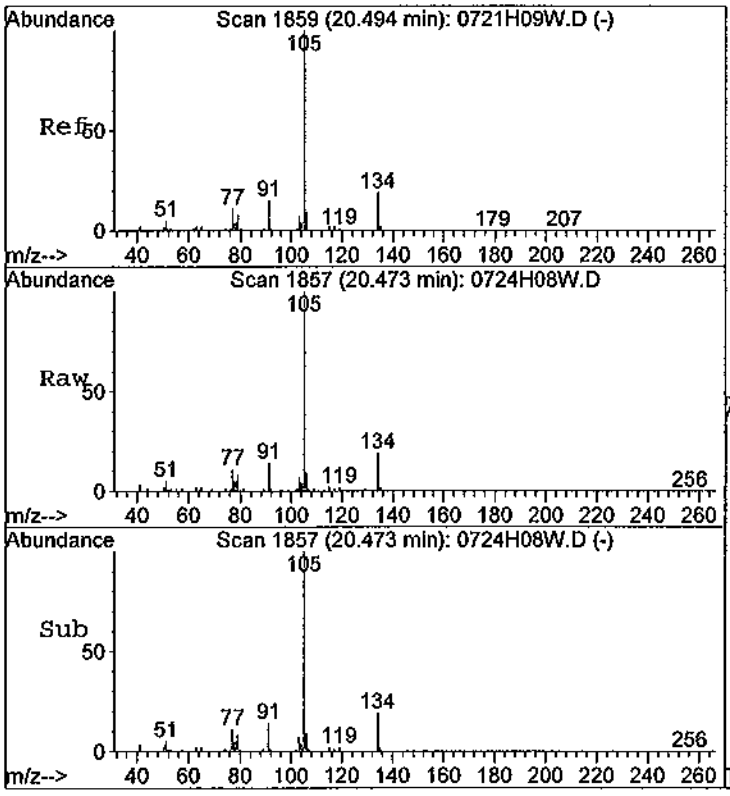


#60
Tert-Butylbenzene
Concen: 0.75242 ppb
RT: 20.09 min Scan# 1817
Delta R.T. -0.01 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion:119 Resp: 44975

Ion	Ratio	Lower	Upper
119	100		
91	59.4	42.2	78.4
134	26.4	17.6	32.8

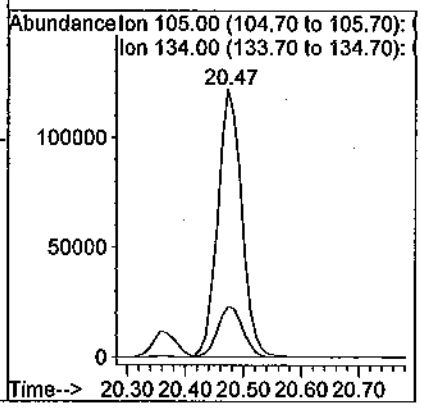


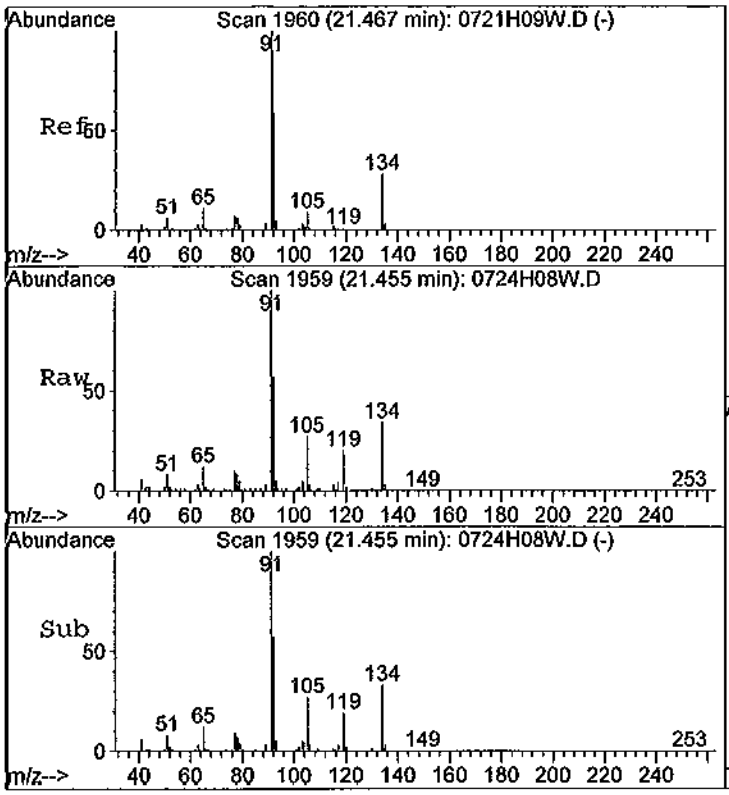


#62
Sec-Butylbenzene
Concen: 4.61503 ppb
RT: 20.47 min Scan# 1857
Delta R.T. -0.02 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion:105 Resp: 351073

Ion	Ratio	Lower	Upper
105	100		
134	18.7	13.5	25.1

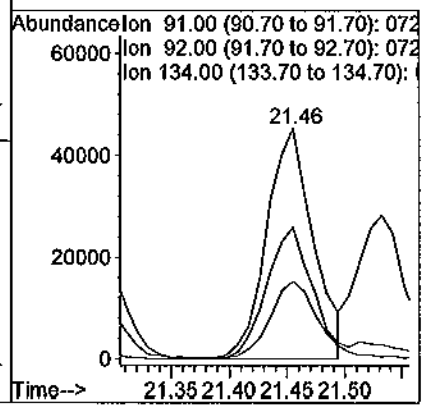


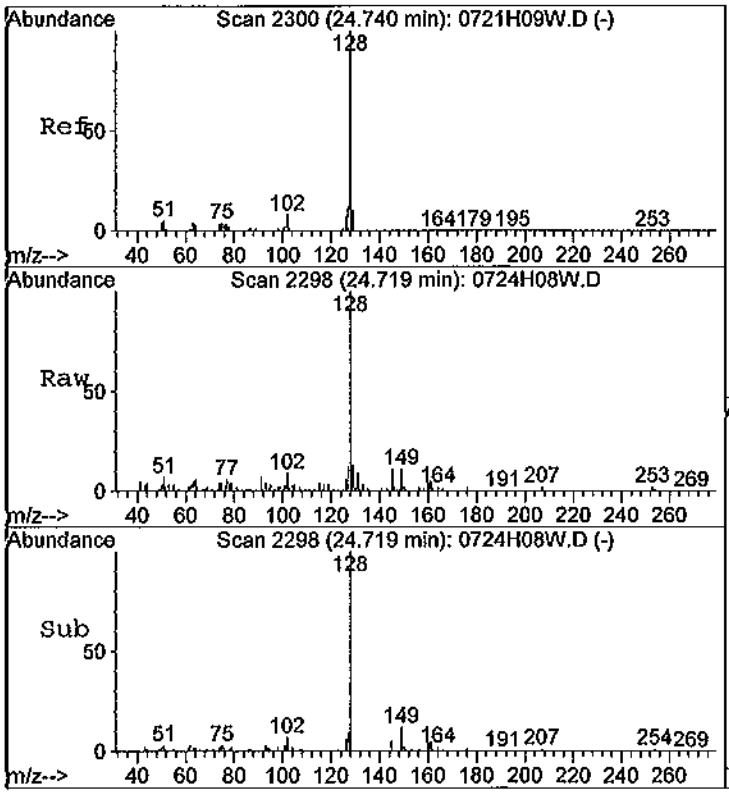


#66
n-Butylbenzene
Concen: 2.67833 ppb
RT: 21.46 min Scan# 1959
Delta R.T. -0.01 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion: 91 Resp: 126875

Ion	Ratio	Lower	Upper
91	100		
92	57.1	41.5	77.1
134	33.1	19.9	36.9

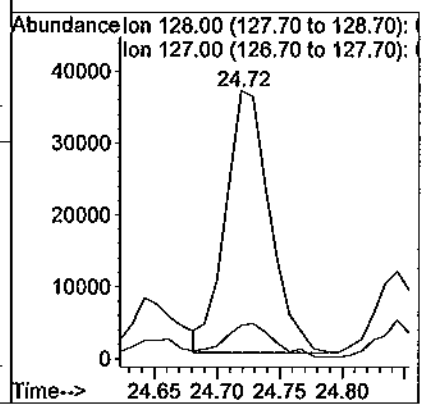




#71
Naphthalene
Concen: 2.68316 ppb
RT: 24.72 min Scan# 2298
Delta R.T. -0.02 min
Lab File: 0724H08W.D
Acq: 24 Jul 11 17:41

Tgt Ion:128 Resp: 88958

Ion	Ratio	Lower	Upper
128	100		
127	12.1	8.6	16.0



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T43W.D Vial: 43
Acq On : 28 Jul 11 4:32 Operator: RP
Sample : AY42273W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:09 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	96	99568	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.60	117	76880	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	52872	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.95	111	43473	31.17700 ppb	-0.01
Spiked Amount 30.441			Recovery	= 102.417%	
24) 1,2-DCA-D4(S)	6.33	65	78709	28.83618 ppb	0.00
Spiked Amount 28.084			Recovery	= 102.677%	
39) Toluene-D8(S)	8.79	98	141307	33.22627 ppb	0.00
Spiked Amount 34.610			Recovery	= 96.001%	
46) 4-Bromofluorobenzene(S)	11.61	95	69966	28.55815 ppb	0.00
Spiked Amount 28.184			Recovery	= 101.326%	
Target Compounds					Qvalue
53) Isopropylbenzene	11.50	105	5306	2.79237 ppb #	68
57) n-Propylbenzene	11.81	91	3120	1.38938 ppb	96
61) Tert-Butylbenzene	12.17	119	2719	1.46744 ppb	91
63) Sec-Butylbenzene	12.32	105	3766	2.05977 ppb	90
64) p-Isopropyltoluene	12.55	119	21193	4.64737 ppb	94

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T43W.D Vial: 43
Acq On : 28 Jul 11 4:32 Operator: RP
Sample : AY42273W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:10 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	TIC	236724	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	281797	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	395281	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

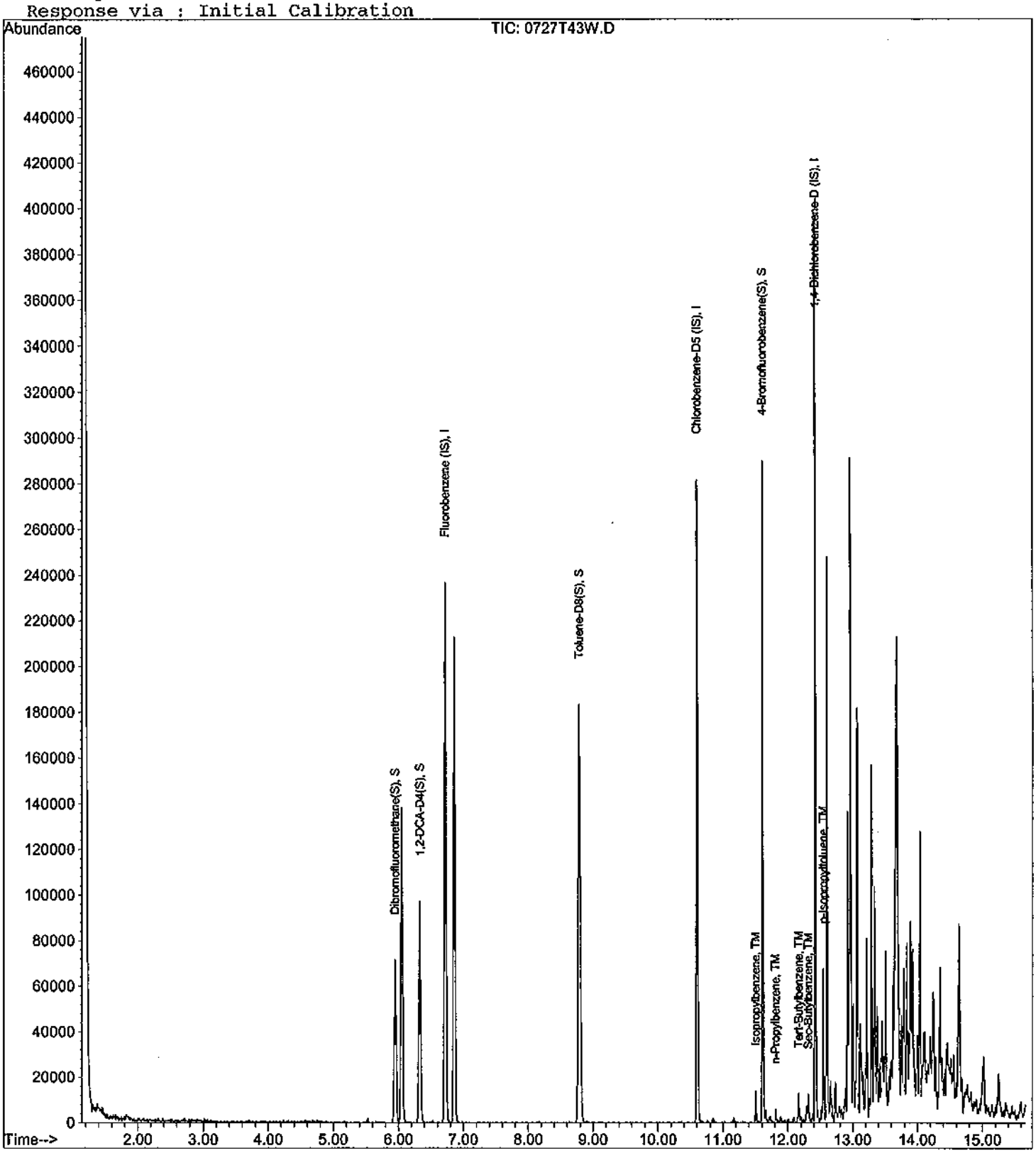
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T43W.D Vial: 43
Acq On : 28 Jul 11 4:32 Operator: RP
Sample : AY42273W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:09 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES038
Sample Collection Date: 07/19/11

ARF: 65187
APPL ID: AY42274
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H09
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES038

APPL ID: AY42274

Sample Collection Date: 07/19/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	95.0	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	99.4	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	97.1	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H09
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES038

APPL ID: AY42274

Sample Collection Date: 07/19/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	101	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	97.1	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	92.8	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T44
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H09W.D Vial: 9
Acq On : 24 Jul 11 18:17 Operator: SV
Sample : AY42274W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:06 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.57	96	607744	25.00000 ppb		-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	476672	25.00000 ppb		-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	224896	25.00000 ppb		-0.02
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.19	111	485884	21.03767 ppb		-0.02
Spiked Amount 21.666			Recovery = 97.101%			
23) 1,2-DCA-D4(S)	10.97	65	400970	19.20310 ppb		0.00
Spiked Amount 20.215			Recovery = 94.994%			
36) Toluene-D8(S)	14.18	98	1505011	23.89830 ppb		-0.02
Spiked Amount 23.814			Recovery = 100.353%			
43) 4-Bromofluorobenzene(S)	18.82	95	595575	23.79240 ppb		-0.02
Spiked Amount 23.932			Recovery = 99.415%			
Target Compounds						Qvalue
41) o-Xylene	17.80	106	3517	0.11372 ppb		87
48) Ethylbenzene	16.90	91	9298	0.13062 ppb	#	77
52) Isopropylbenzene	18.45	105	291029	3.78963 ppb		99
56) n-Propylbenzene	19.17	91	214265	2.53660 ppb		96
60) Tert-Butylbenzene	20.09	119	52794	0.81612 ppb		96
62) Sec-Butylbenzene	20.48	105	432792	5.25698 ppb		98
66) n-Butylbenzene	21.46	91	141923	2.76835 ppb		94
71) Naphthalene	24.73	128	101588	2.83129 ppb		99

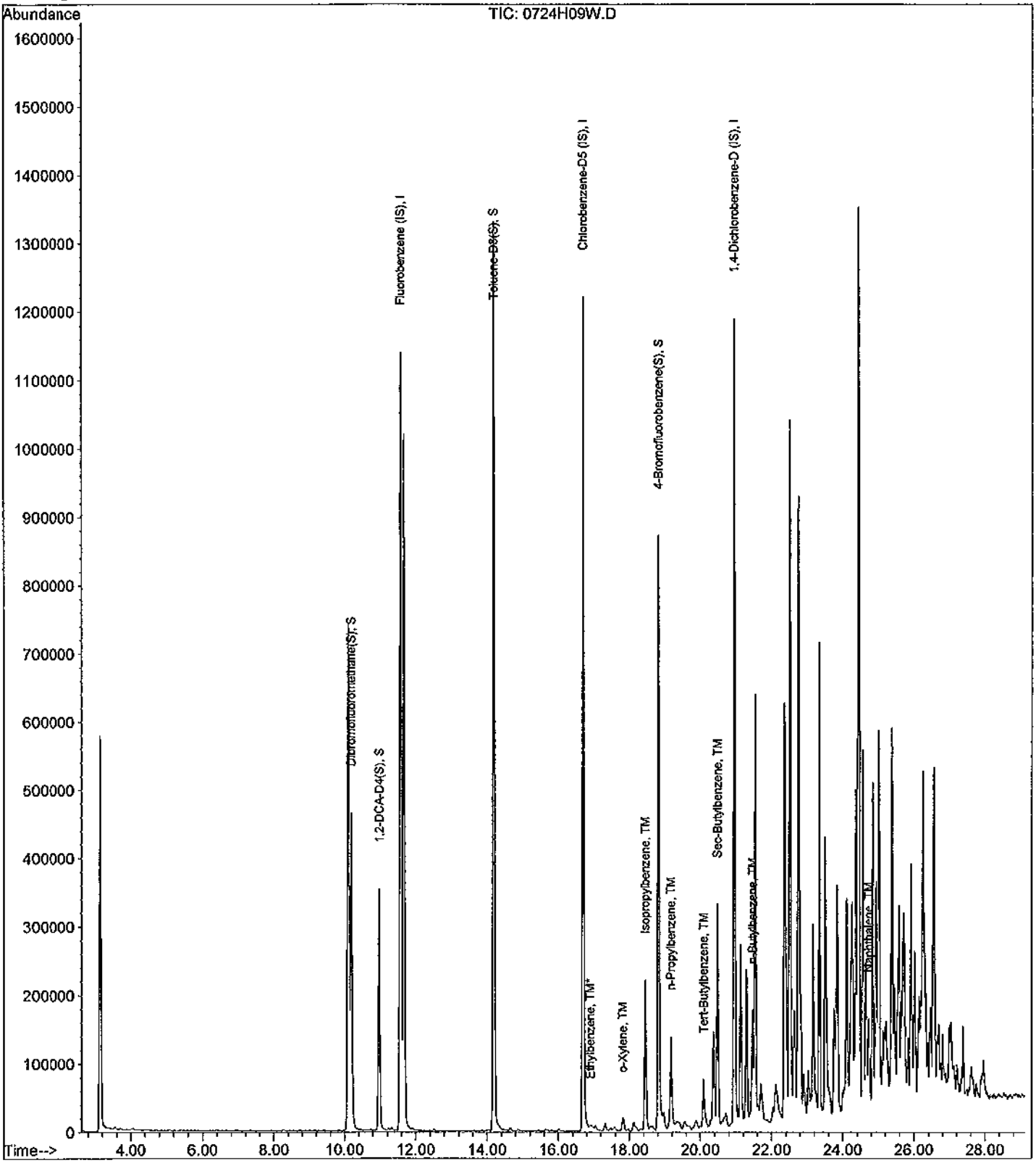
(#) = qualifier out of range (m) = manual integration

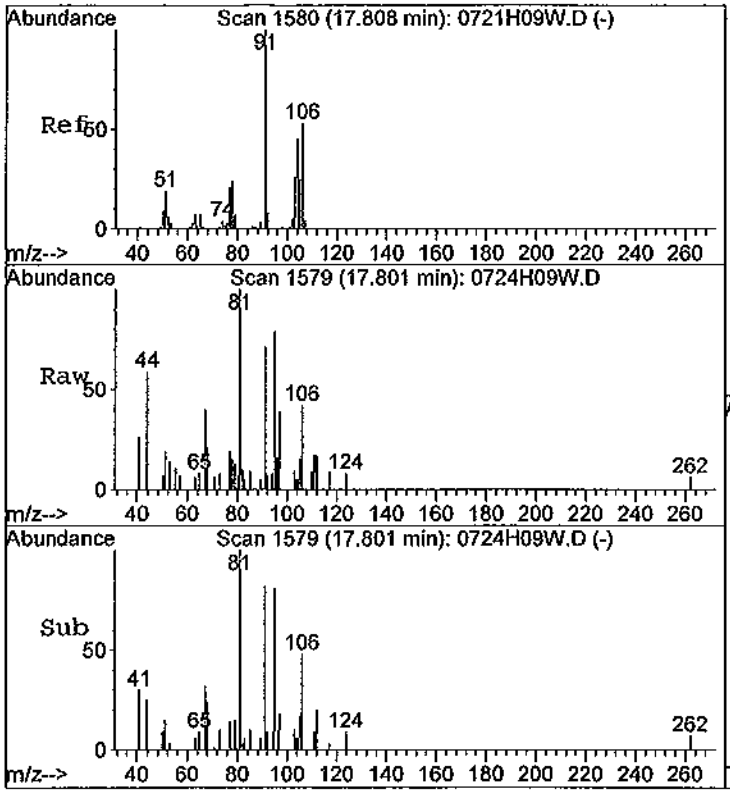
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H09W.D Vial: 9
Acq On : 24 Jul 11 18:17 Operator: SV
Sample : AY42274W02 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:06 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration

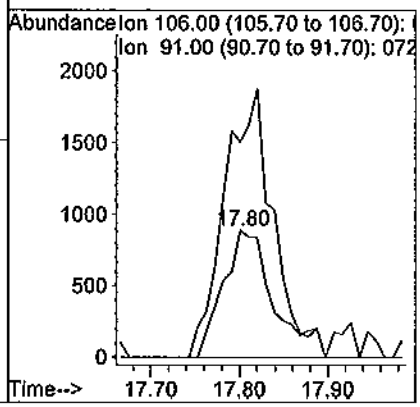


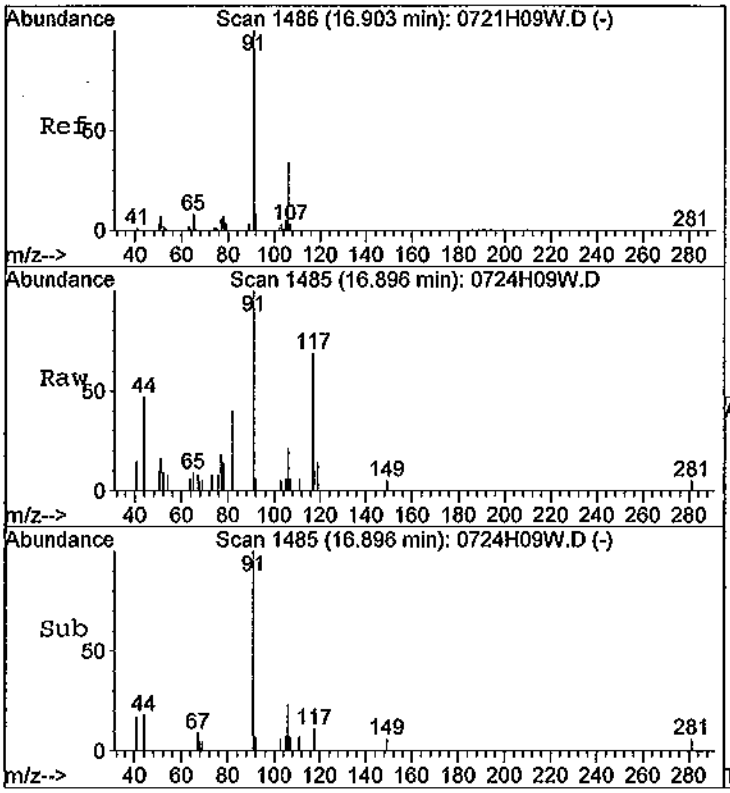


#41
o-Xylene
Concen: 0.11372 ppb
RT: 17.80 min Scan# 1579
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion:106 Resp: 3517

Ion	Ratio	Lower	Upper
106	100		
91	168.9	131.0	243.4

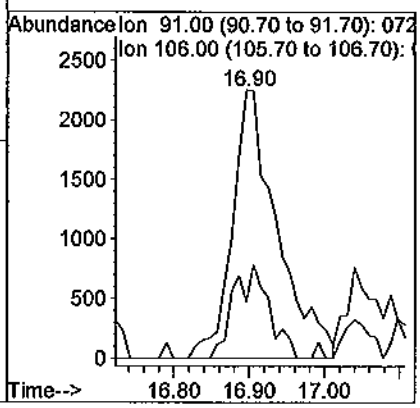


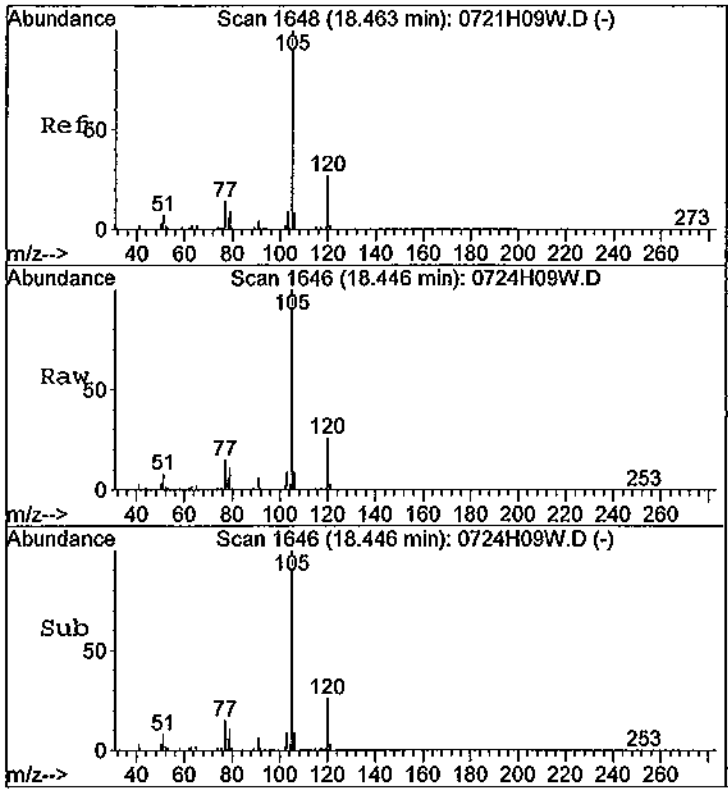


#48
Ethylbenzene
Concen: 0.13062 ppb
RT: 16.90 min Scan# 1485
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion: 91 Resp: 9298

Ion	Ratio	Lower	Upper
91	100		
106	20.8	23.7	43.9#

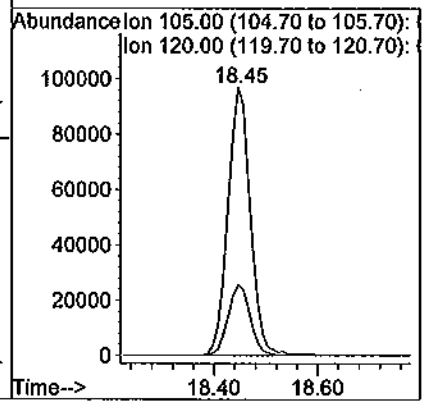


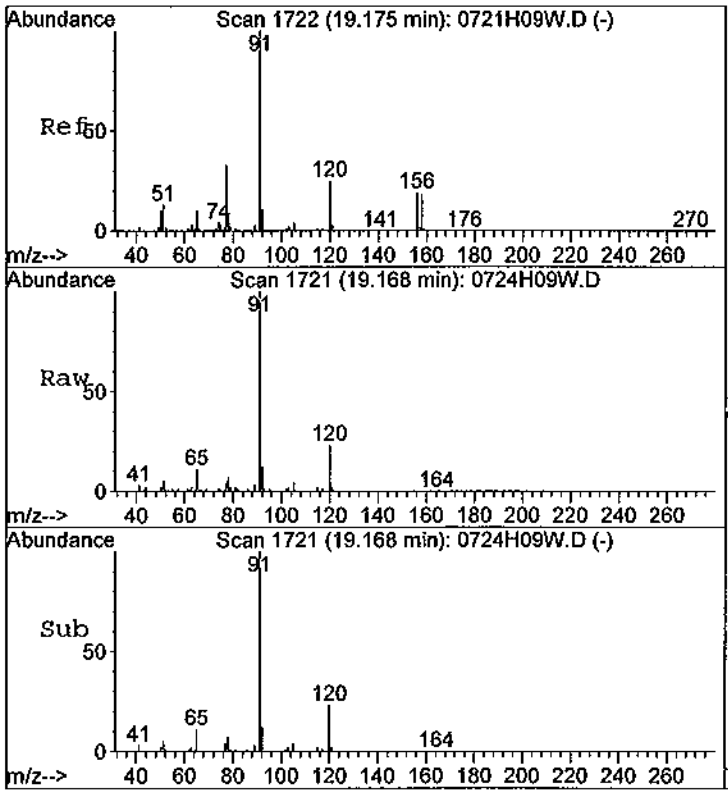


#52
Isopropylbenzene
Concen: 3.78963 ppb
RT: 18.45 min Scan# 1646
Delta R.T. -0.02 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion:105 Resp: 291029

Ion	Ratio	Lower	Upper
105	100		
120	26.3	21.4	32.0

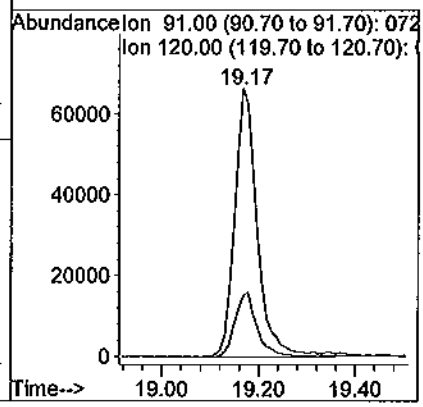


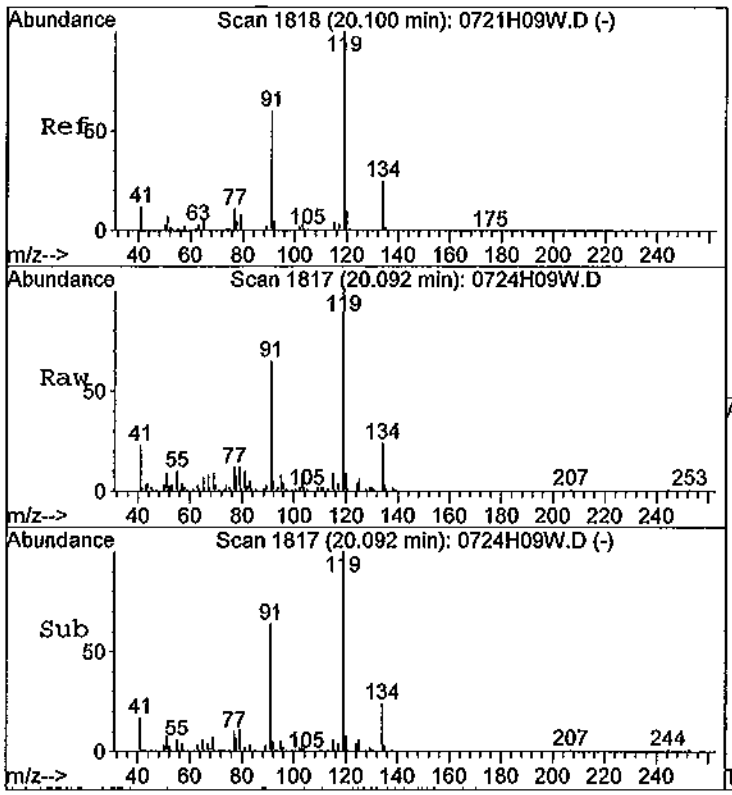


#56
n-Propylbenzene
Concen: 2.53660 ppb
RT: 19.17 min Scan# 1721
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion: 91 Resp: 214265

Ion	Ratio	Lower	Upper
91	100		
120	22.8	17.3	32.1

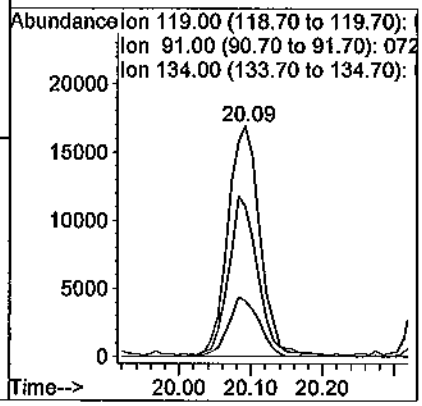


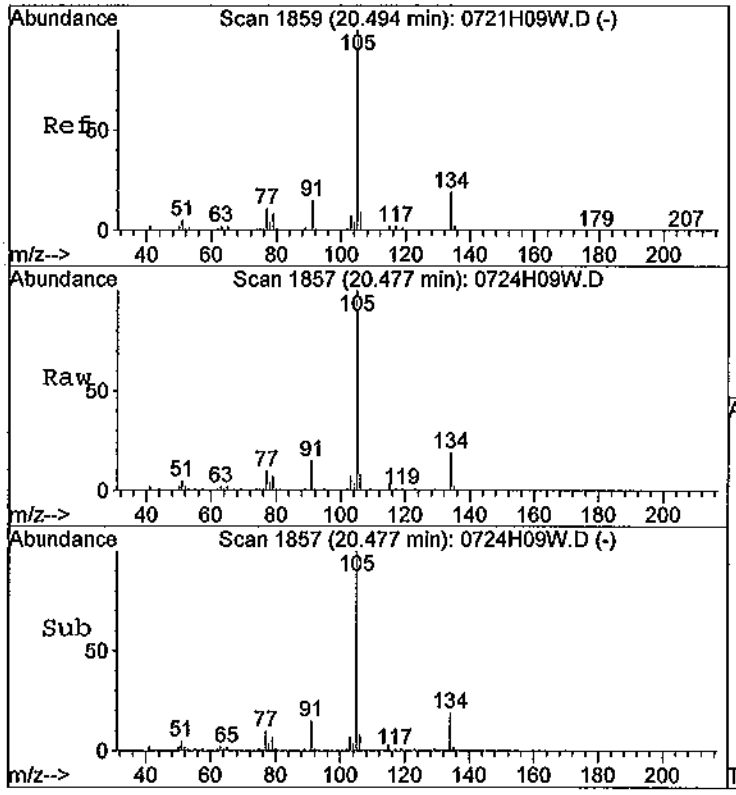


#60
Tert-Butylbenzene
Concen: 0.81612 ppb
RT: 20.09 min Scan# 1817
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion:119 Resp: 52794

Ion	Ratio	Lower	Upper
119	100		
91	64.1	42.2	78.4
134	24.3	17.6	32.8

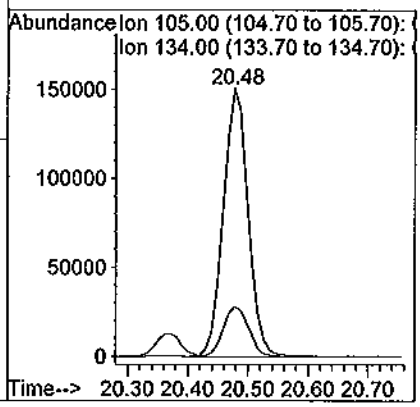


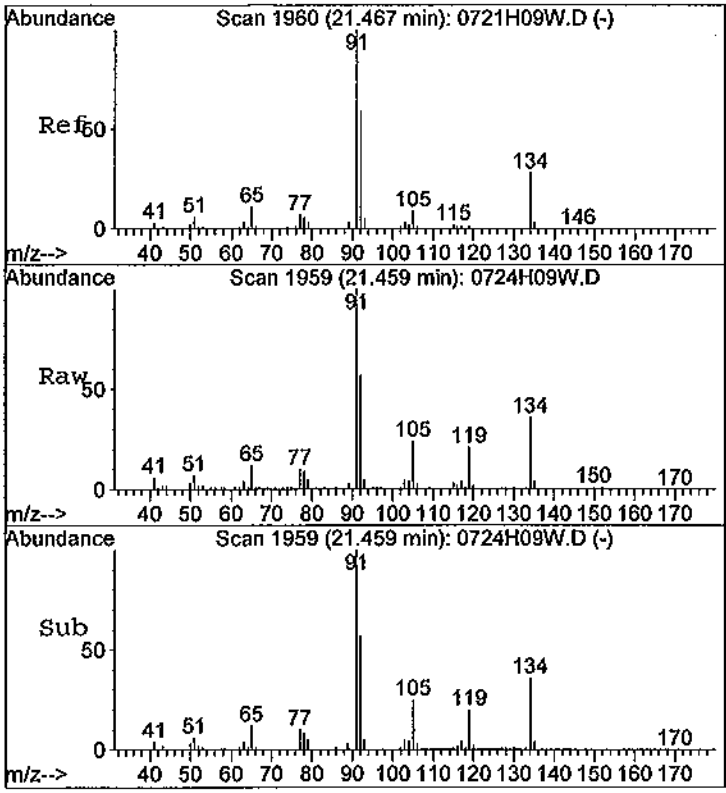


#62
Sec-Butylbenzene
Concen: 5.25698 ppb
RT: 20.48 min Scan# 1857
Delta R.T. -0.02 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion:105 Resp: 432792

Ion	Ratio	Lower	Upper
105	100		
134	18.5	13.5	25.1

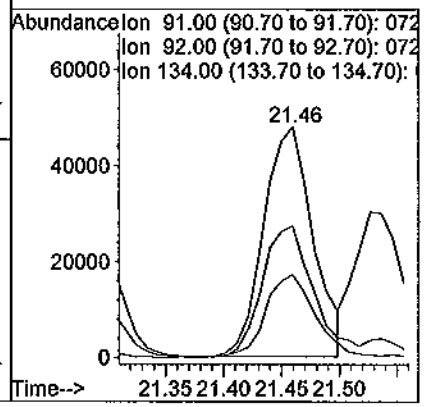


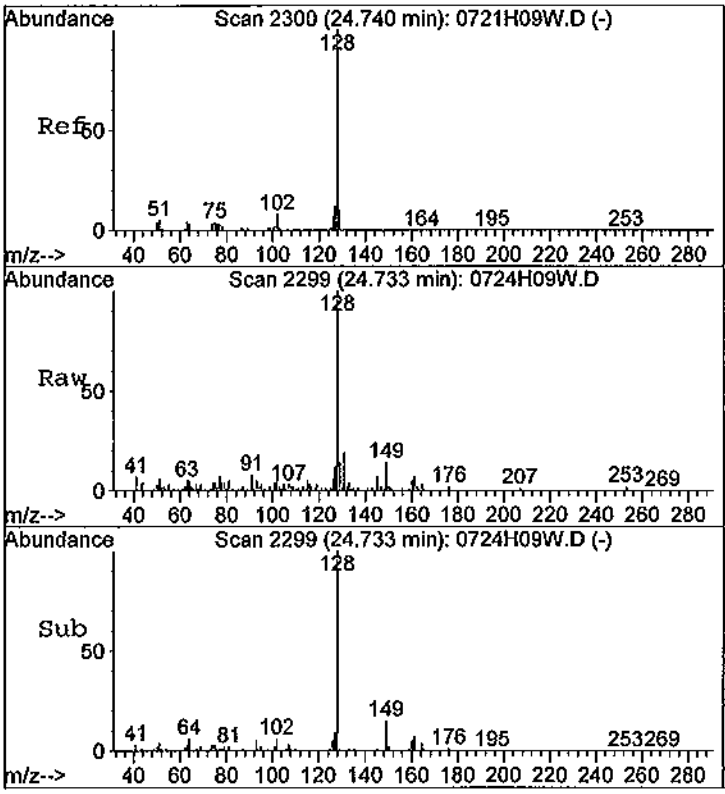


#66
n-Butylbenzene
Concen: 2.76835 ppb
RT: 21.46 min Scan# 1959
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion: 91 Resp: 141923

Ion	Ratio	Lower	Upper
91	100		
92	57.2	41.5	77.1
134	35.5	19.9	36.9

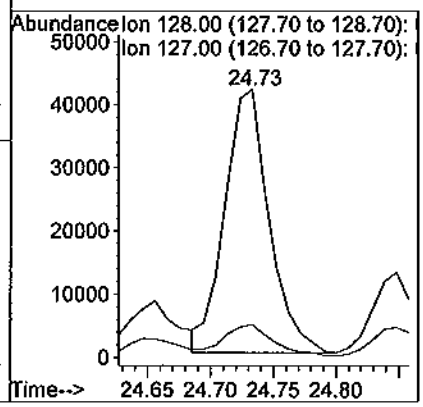




#71
Naphthalene
Concen: 2.83129 ppb
RT: 24.73 min Scan# 2299
Delta R.T. -0.01 min
Lab File: 0724H09W.D
Acq: 24 Jul 11 18:17

Tgt Ion:128 Resp: 101588

Ion	Ratio	Lower	Upper
128	100		
127	11.8	8.6	16.0



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T44W.D Vial: 44
Acq On : 28 Jul 11 4:58 Operator: RP
Sample : AY42274W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:09 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	96	102624	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	83328	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	59504	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	45775	31.85033 ppb	0.00
Spiked Amount 30.441			Recovery	= 104.628%	
24) 1,2-DCA-D4(S)	6.34	65	79714	28.33471 ppb	0.00
Spiked Amount 28.084			Recovery	= 100.893%	
39) Toluene-D8(S)	8.79	98	148123	32.13385 ppb	0.00
Spiked Amount 34.610			Recovery	= 92.846%	
46) 4-Bromofluorobenzene(S)	11.61	95	72662	27.36357 ppb	0.00
Spiked Amount 28.184			Recovery	= 97.089%	
Target Compounds					Qvalue
61) Tert-Butylbenzene	12.16	119	2158	1.30198 ppb #	92
72) Naphthalene	13.78	128	7468	3.80934 ppb	92

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T44W.D Vial: 44
Acq On : 28 Jul 11 4:58 Operator: RP
Sample : AY42274W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:11 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	243008	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	306891	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	423727	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

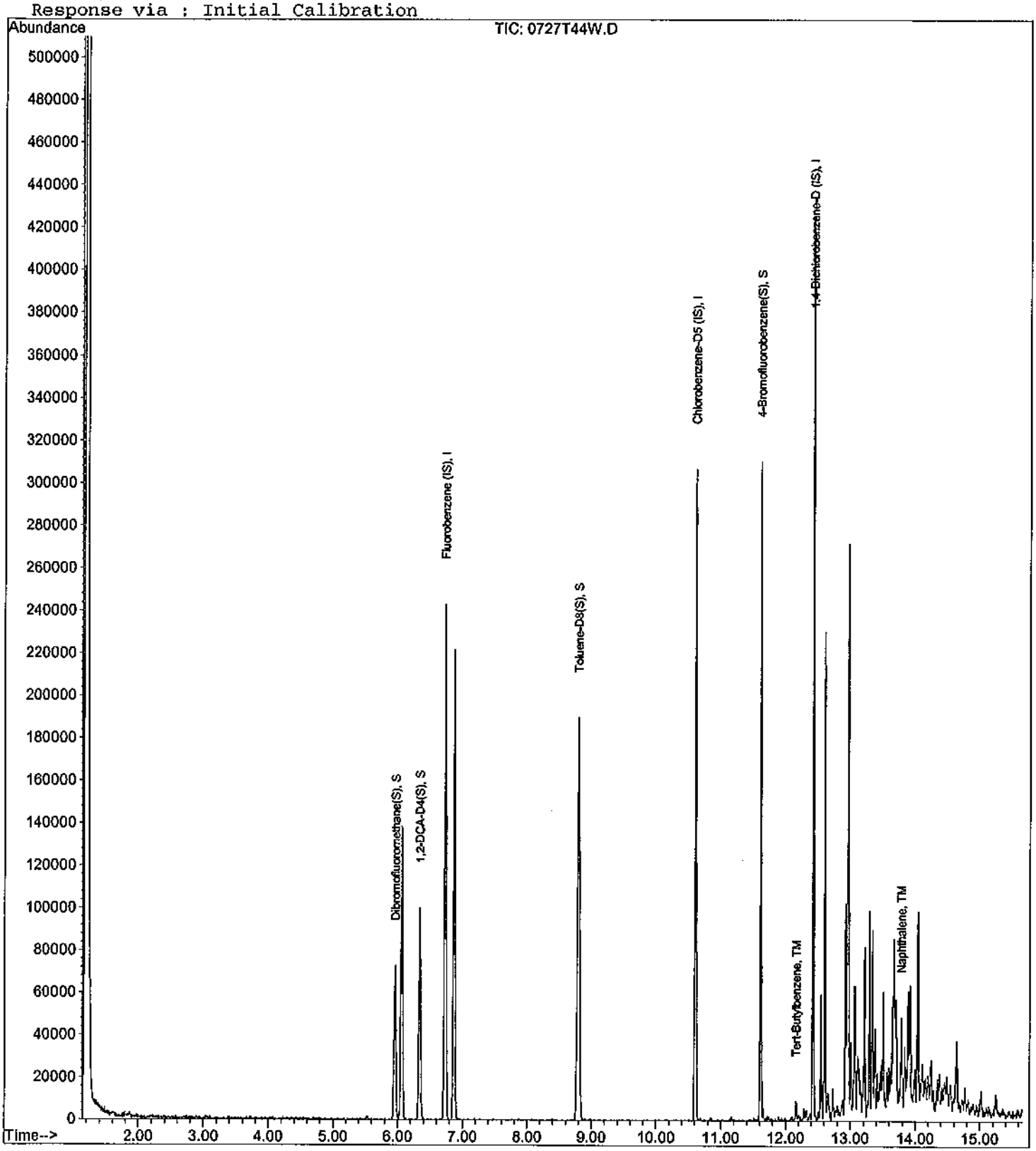
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T44W.D Vial: 44
Acq On : 28 Jul 11 4:58 Operator: RP
Sample : AY42274W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:09 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES039

APPL ID: AY42275

Sample Collection Date: 07/19/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/28/11	07/28/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/28/11	07/28/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/28/11	07/28/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/28/11	07/28/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/28/11	07/28/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/28/11	07/28/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/28/11	07/28/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/28/11	07/28/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/28/11	07/28/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/28/11	07/28/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/28/11	07/28/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/28/11	07/28/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T45
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES039

APPL ID: AY42275

Sample Collection Date: 07/19/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/28/11	07/28/11
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/28/11	07/28/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	102	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.9	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	103	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	99.0	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T45
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T45W.D Vial: 45
Acq On : 28 Jul 11 5:24 Operator: RP
Sample : AY42275W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:59 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	96	101936	25.00000 ppb	-0.01
38) Chlorobenzene-D5 (IS)	10.61	117	80976	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	59264	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.95	111	44871	31.43205 ppb	-0.02
Spiked Amount 30.441			Recovery = 103.254%		
24) 1,2-DCA-D4(S)	6.33	65	79751	28.53919 ppb	0.00
Spiked Amount 28.084			Recovery = 101.620%		
39) Toluene-D8(S)	8.79	98	153544	34.27739 ppb	-0.01
Spiked Amount 34.610			Recovery = 99.038%		
46) 4-Bromofluorobenzene(S)	11.61	95	71912	27.86772 ppb	0.00
Spiked Amount 28.184			Recovery = 98.877%		

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T45W.D Vial: 45
Acq On : 28 Jul 11 5:24 Operator: RP
Sample : AY42275W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:11 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	TIC	246061	25.00000	ppb	-0.01
3) Chlorobenzene-D5 (IS)	10.61	TIC	290909	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	395343	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

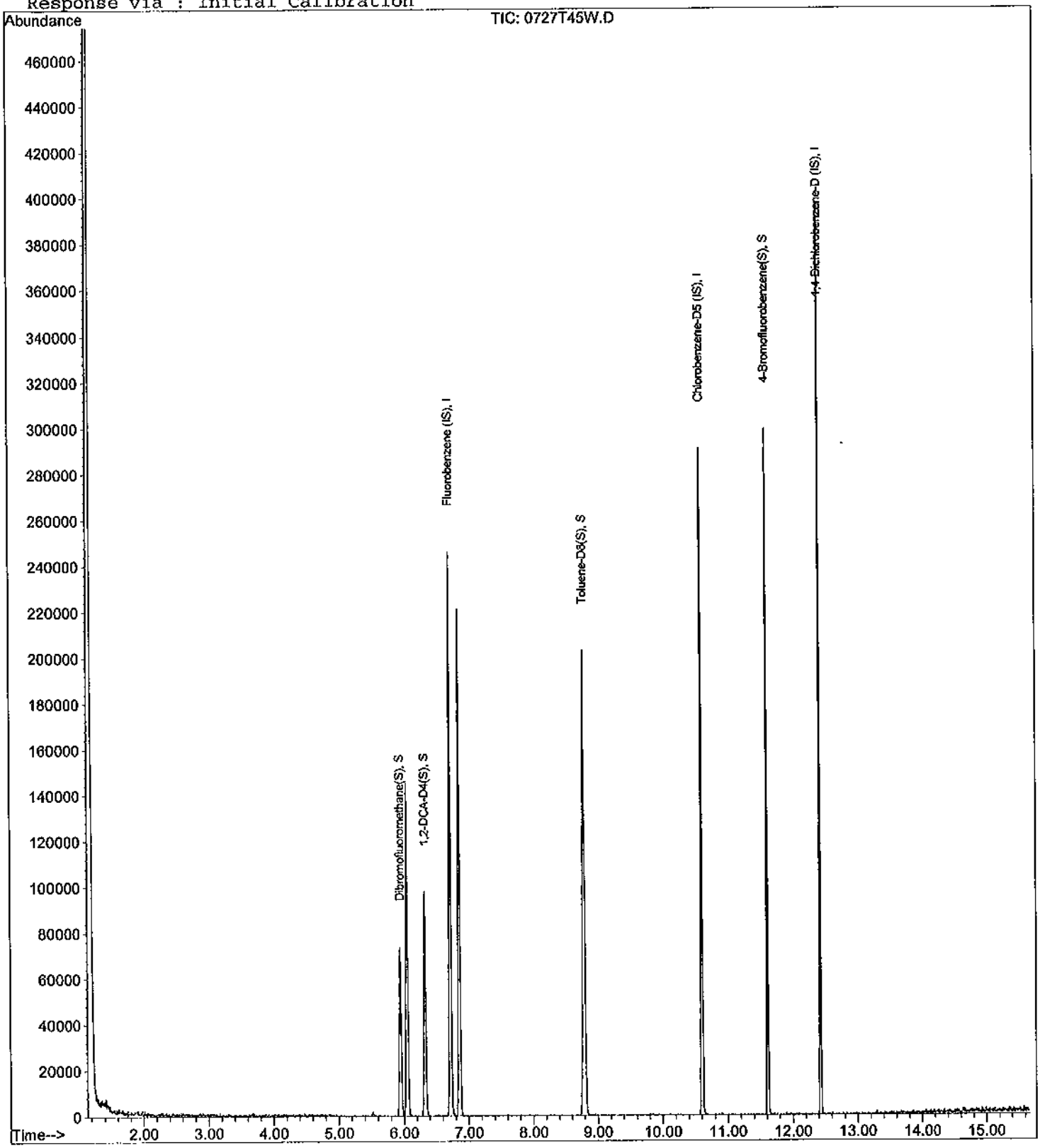
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T45W.D Vial: 45
Acq On : 28 Jul 11 5:24 Operator: RP
Sample : AY42275W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:59 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES040
Sample Collection Date: 07/20/11

ARF: 65187
APPL ID: AY42276
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H11
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES040

APPL ID: AY42276

Sample Collection Date: 07/20/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	87.0	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.0	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	90.4	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	101	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H11
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES040

APPL ID: AY42276

Sample Collection Date: 07/20/11

QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	101	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	92.9	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	99.9	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	98.1	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T46
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H11W.D Vial: 11
Acq On : 24 Jul 11 19:30 Operator: SV
Sample : AY42276W01 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:07 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	96	648976	25.00000 ppb	-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	484480	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	230656	25.00000 ppb	-0.02
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.18	111	483187	19.59171 ppb	-0.02
Spiked Amount 21.666			Recovery =	90.427%	
23) 1,2-DCA-D4(S)	10.97	65	392158	17.58784 ppb	0.00
Spiked Amount 20.215			Recovery =	87.005%	
36) Toluene-D8(S)	14.18	98	1532279	23.93916 ppb	-0.02
Spiked Amount 23.814			Recovery =	100.525%	
43) 4-Bromofluorobenzene(S)	18.82	95	596502	23.44540 ppb	-0.02
Spiked Amount 23.932			Recovery =	97.965%	

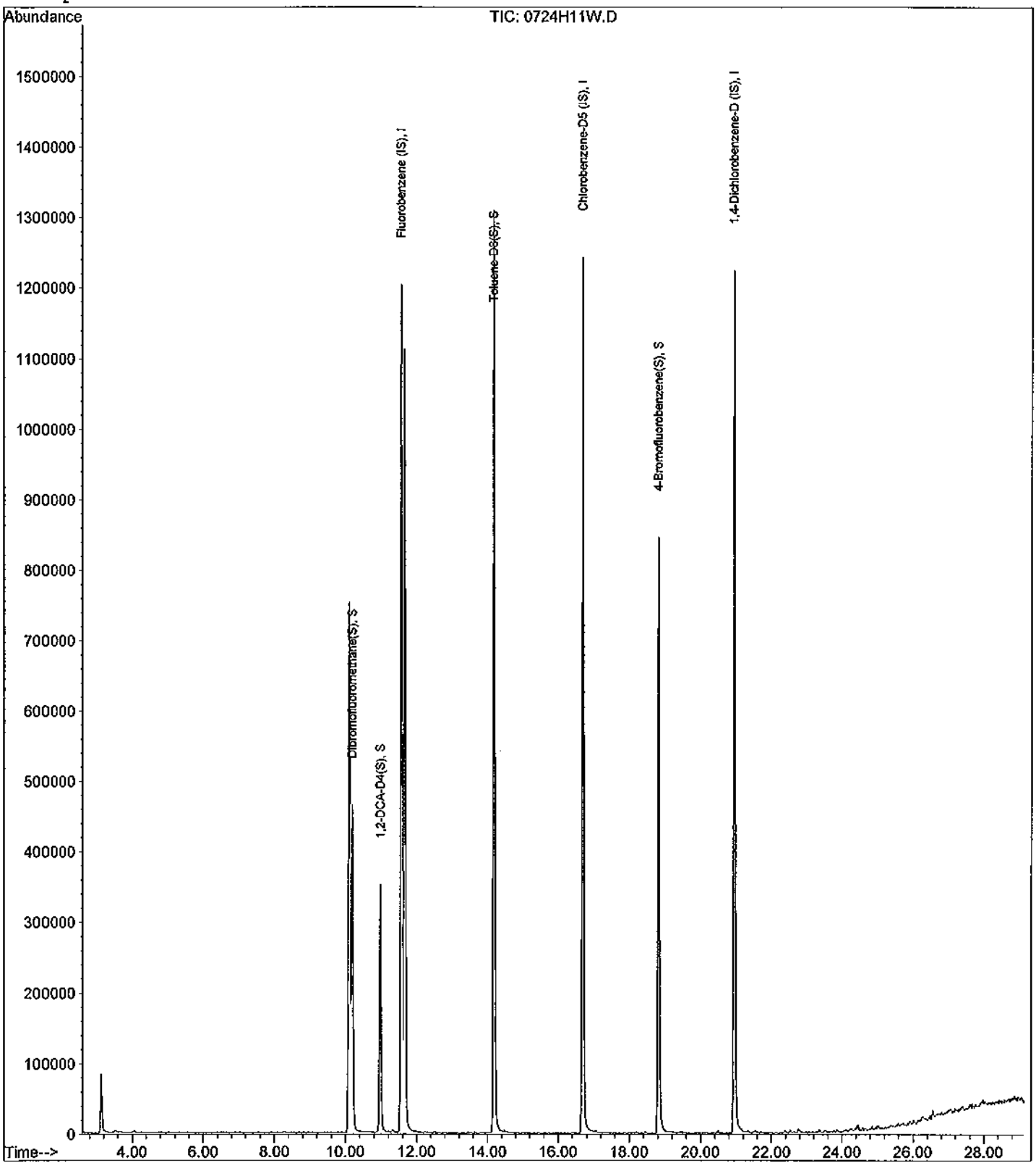
Target Compounds Qvalue

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

Data File : M:\HEWEY\DATA\H110721\0724H11W.D Vial: 11
Acq On : 24 Jul 11 19:30 Operator: SV
Sample : AY42276W01 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:07 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T46W.D Vial: 46
Acq On : 28 Jul 11 5:50 Operator: RP
Sample : AY42276W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:00 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	96	103200	25.00000	ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	77960	25.00000	ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	49496	25.00000	ppb	0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	43932	30.39736	ppb	0.00
Spiked Amount 30.441			Recovery = 99.854%			
24) 1,2-DCA-D4(S)	6.34	65	80118	28.31936	ppb	0.00
Spiked Amount 28.084			Recovery = 100.836%			
39) Toluene-D8(S)	8.79	98	146413	33.94994	ppb	0.00
Spiked Amount 34.610			Recovery = 98.093%			
46) 4-Bromofluorobenzene(S)	11.61	95	65036	26.17811	ppb	0.00
Spiked Amount 28.184			Recovery = 92.881%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T46W.D Vial: 46
Acq On : 28 Jul 11 5:50 Operator: RP
Sample : AY42276W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:12 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	TIC	253656	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	289937	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.42	TIC	368733	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

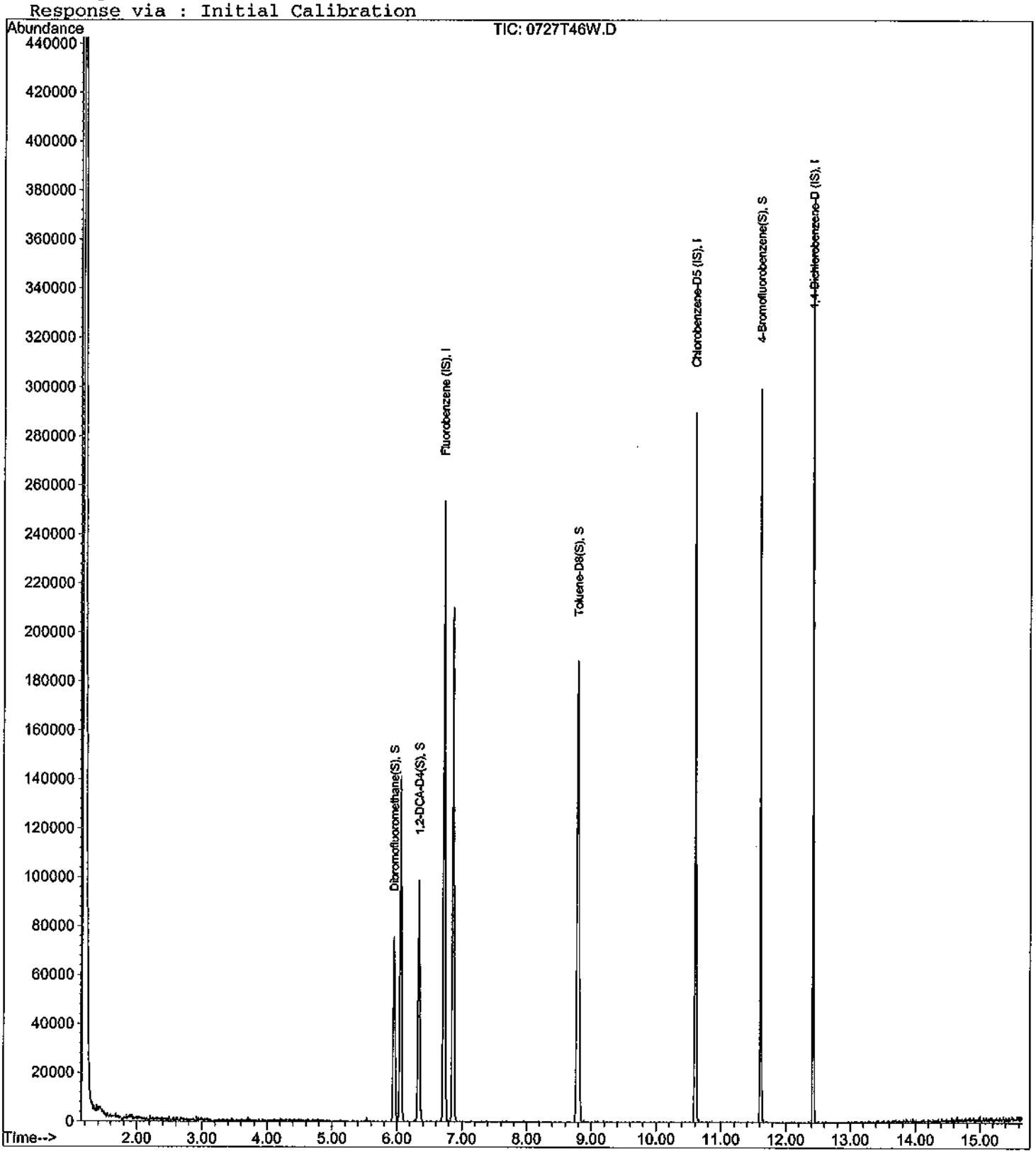
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T46W.D Vial: 46
Acq On : 28 Jul 11 5:50 Operator: RP
Sample : AY42276W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:00 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 65187

Sample ID: ES041

APPL ID: AY42277

Sample Collection Date: 07/20/11

QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
EPA 8260B	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H10
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

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APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCs + Gas Water

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES041
Sample Collection Date: 07/20/11

ARF: 65187
APPL ID: AY42277
QCG: #86RHB-110724AH-158145

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	92.0	70-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	96.2	75-120			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	93.5	85-115			%	07/24/11	07/24/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	99.3	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H10
Instrument: Hewey
Sequence: H110721
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

EPA 8260B VOCS + GAS WATER

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Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES041
Sample Collection Date: 07/20/11

ARF: 65187
APPL ID: AY42277
QCG: #86RHB-110727AT2-158162

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	105	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.4	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	104	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T47
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 4:48:56 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H10W.D Vial: 10
Acq On : 24 Jul 11 18:54 Operator: SV
Sample : AY42277W01 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:06 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	96	629696	25.00000 ppb	-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	479424	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	231168	25.00000 ppb	-0.01
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.19	111	484682	20.25404 ppb	-0.01
Spiked Amount 21.666			Recovery =	93.483%	
23) 1,2-DCA-D4(S)	10.97	65	402233	18.59203 ppb	-0.01
Spiked Amount 20.215			Recovery =	91.971%	
36) Toluene-D8(S)	14.19	98	1498525	23.65872 ppb	-0.01
Spiked Amount 23.814			Recovery =	99.349%	
43) 4-Bromofluorobenzene(S)	18.83	95	579375	23.01238 ppb	-0.01
Spiked Amount 23.932			Recovery =	96.156%	
Target Compounds					Qvalue
60) Tert-Butylbenzene	20.10	119	10627	0.15982 ppb	90
62) Sec-Butylbenzene	20.48	105	18758	0.22167 ppb	89

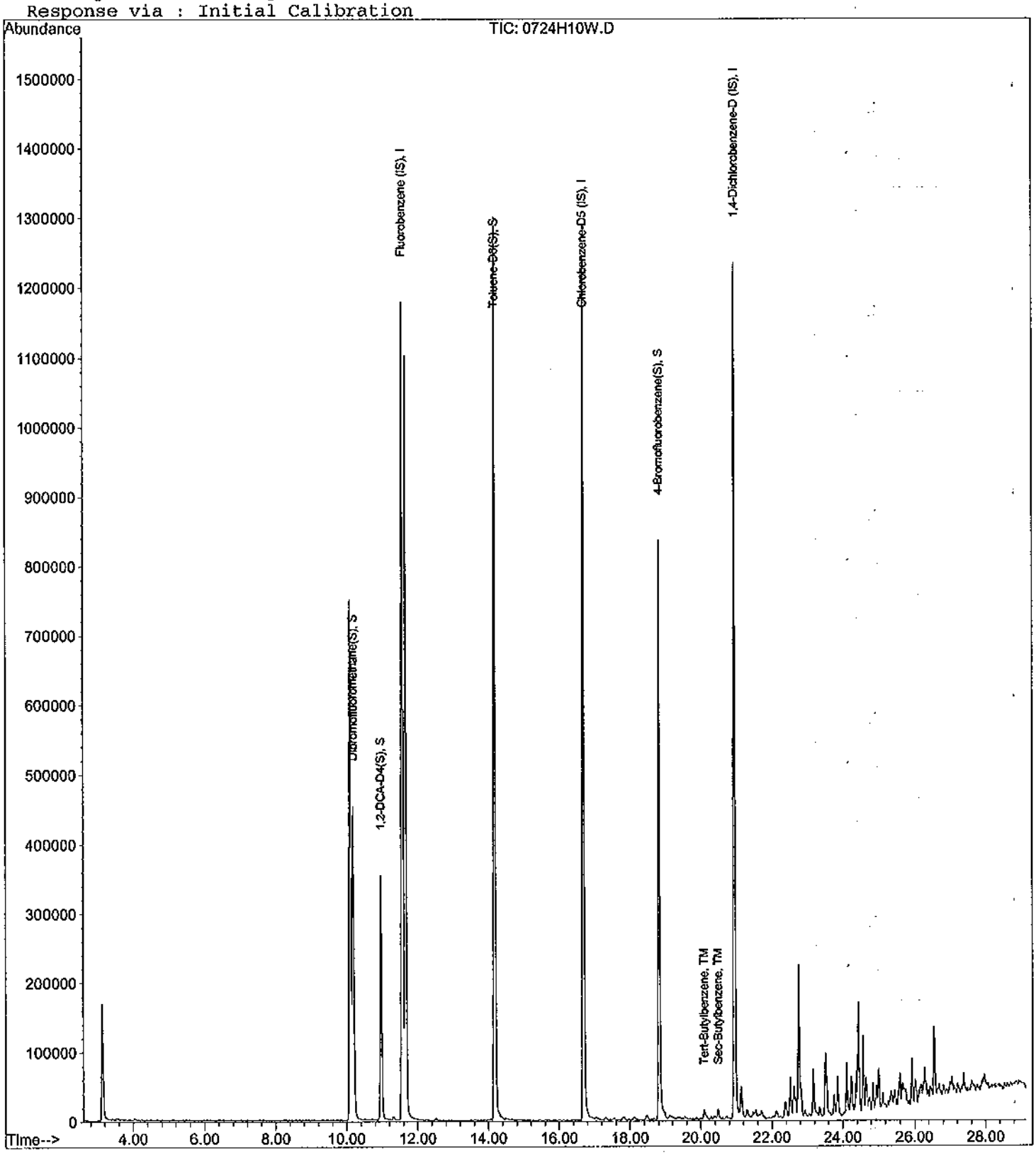
(#) = qualifier out of range (m) = manual integration

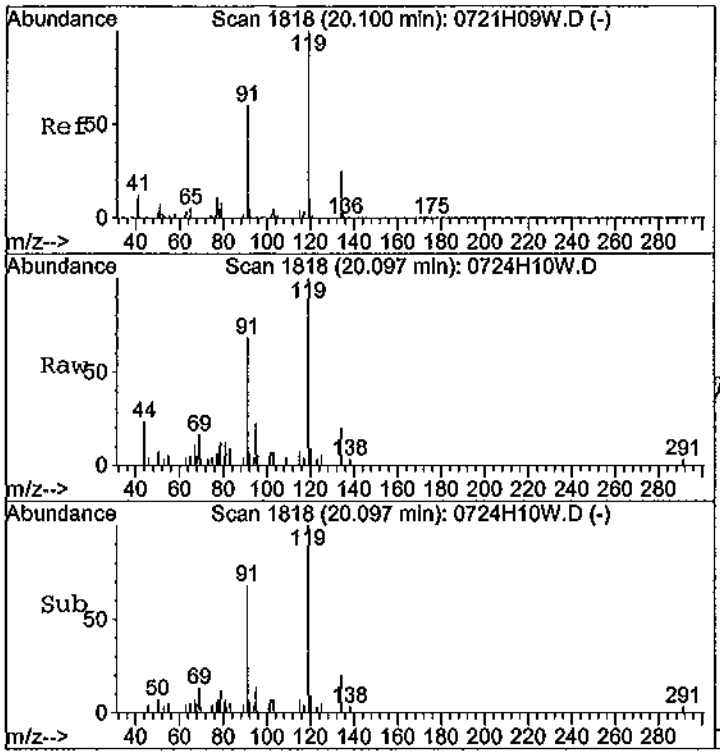
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H10W.D Vial: 10
Acq On : 24 Jul 11 18:54 Operator: SV
Sample : AY42277W01 Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 26 14:06 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:16:25 2011
Response via : Initial Calibration

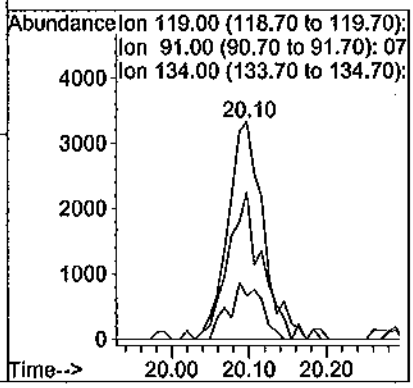


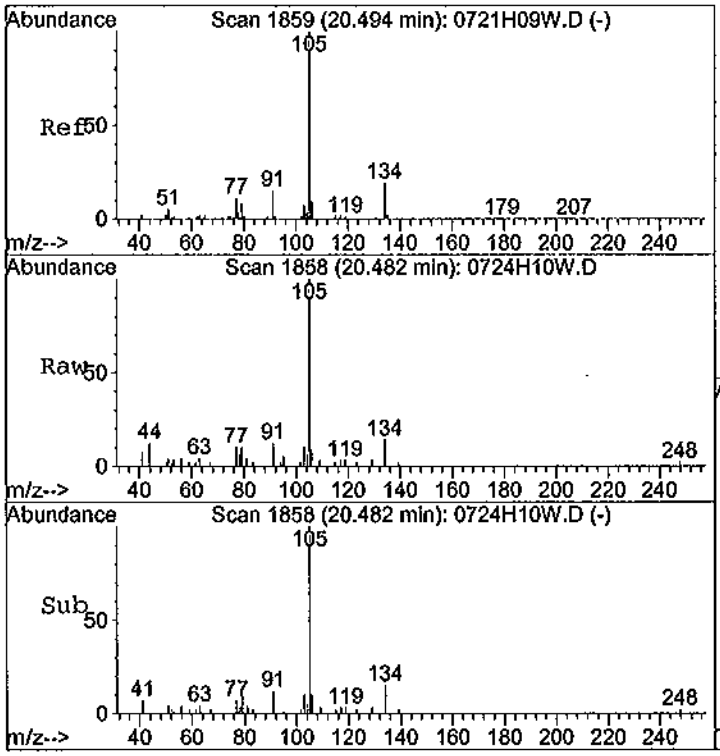


#60
Tert-Butylbenzene
Concen: 0.15982 ppb
RT: 20.10 min Scan# 1818
Delta R.T. -0.00 min
Lab File: 0724H10W.D
Acq: 24 Jul 11 18:54

Tgt Ion:119 Resp: 10627

Ion	Ratio	Lower	Upper
119	100		
91	67.8	42.2	78.4
134	20.2	17.6	32.8

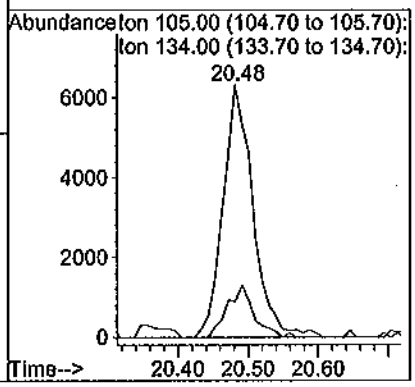




#62
Sec-Butylbenzene
Concen: 0.22167 ppb
RT: 20.48 min Scan# 1858
Delta R.T. -0.01 min
Lab File: 0724H10W.D
Acq: 24 Jul 11 18:54

Tgt Ion:105 Resp: 18758

Ion	Ratio	Lower	Upper
105	100		
134	14.3	13.5	25.1



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T47W.D Vial: 47
Acq On : 28 Jul 11 6:16 Operator: RP
Sample : AY42277W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:01 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	96	98816	25.00000	ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	78776	25.00000	ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	55344	25.00000	ppb	0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.97	111	43797	31.64839	ppb	0.00
Spiked Amount 30.441			Recovery = 103.964%			
24) 1,2-DCA-D4(S)	6.34	65	79593	29.38196	ppb	0.00
Spiked Amount 28.084			Recovery = 104.621%			
39) Toluene-D8(S)	8.80	98	151442	34.75231	ppb	0.00
Spiked Amount 34.610			Recovery = 100.410%			
46) 4-Bromofluorobenzene(S)	11.61	95	69593	27.72222	ppb	0.00
Spiked Amount 28.184			Recovery = 98.359%			

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T47W.D Vial: 47
Acq On : 28 Jul 11 6:16 Operator: RP
Sample : AY42277W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:12 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	241875	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	298816	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	373919	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

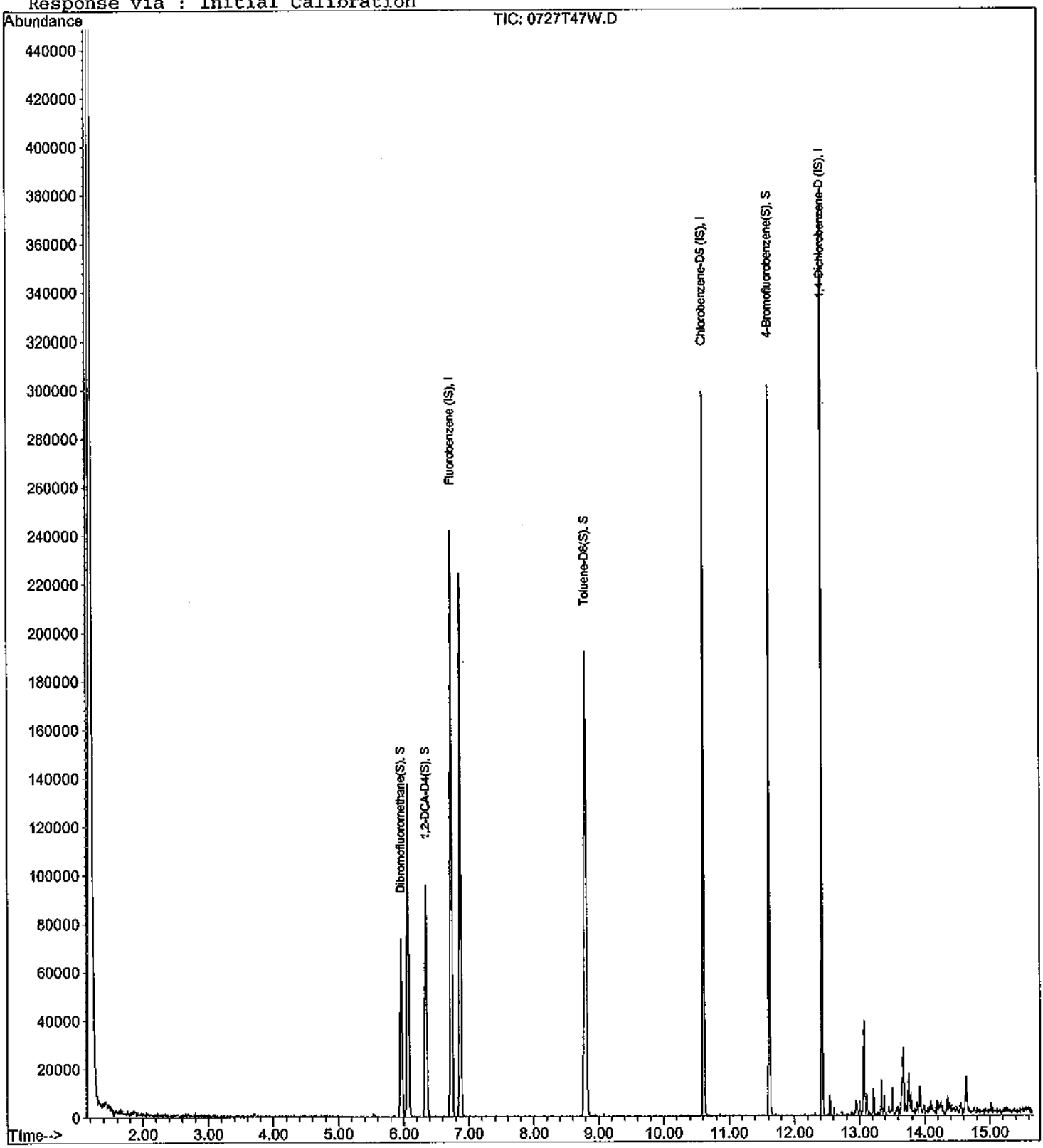
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T47W.D Vial: 47
Acq On : 28 Jul 11 6:16 Operator: RP
Sample : AY42277W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:01 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



EPA METHOD 8260B
Volatile Organic Compounds
Calibration Data

APPL, INC.

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 07/21/11
Matrix: Instrument: Hewey
Initials:

		Compound	0721H05W.D 0.5	0721H06W.D 1	0721H07W.D 2	0721H08W.D 5	0721H09W.D 10	0721H10W.D 20	0721H11W.D 40	0721H12W.D 100			Avg	%RSD		
1	I	Fluorobenzene (IS)	ISTD													
2	TM	Dichlorodifluoromethane	0.7907	0.8681	0.9144	0.7525	0.8836	0.8855	0.9521				0.86	8.0	TM	
3	TM**	Chloromethane	0.7495	0.6887	0.6424	0.6575	0.6524	0.6525	0.7522				0.69	6.9	TM**	
4	TM*	Vinyl chloride	0.6156	0.5830	0.6059	0.5856	0.5967	0.5746	0.4384				0.57	11	TM*	
5	TML	Bromomethane	0.3906	0.4116	0.4527	0.5156	0.5900						0.47	17	TML	0.997
6	TM	Chloroethane	0.4127	0.4045	0.4080	0.4101	0.4236	0.4161	0.4162				0.41	1.5	TM	
7	TM	Trichlorofluoromethane	1.087	1.155	1.120	1.116	1.110	1.111	1.100				1.1	1.9	TM	
8	TML	Acetone	0.2595	0.2743	0.2517	0.1704	0.1365	0.1341	0.1284	0.1354			0.19	34	TML	0.999
9	TM*	1,1-DCE	0.5271	0.5016	0.5404	0.5591	0.5580	0.5304	0.5169	0.5100			0.53	4.0	TM*	
10	TML	Methylene chloride	0.8252	0.6356	0.5587	0.5692	0.5129	0.5159	0.4700	0.4729			0.57	20	TML	1.000
11	TM	Carbon disulfide	1.862	1.739	1.780	1.862	1.870	1.899	1.795	1.973			1.8	4.0	TM	
12	TM	Methyl t-butyl ether (MtBE)	1.724	1.431	1.430	1.645	1.532	1.541	1.433	1.466			1.5	7.2	TM	
13	TM	Trans-1,2-DCE	0.5622	0.5304	0.4575	0.5159	0.4675	0.4682	0.4253	0.4486			0.48	9.6	TM	
14	TM**	1,1-DCA	0.8692	0.8401	0.9108	0.9142	0.8721	0.8645	0.8143	0.8462			0.87	3.9	TM**	
15	TM	MEK (2-Butanone)	0.2745	0.3379	0.3544	0.3673	0.3443	0.3683	0.3436	0.3478			0.34	8.6	TM	
16	TM	Cis-1,2-DCE	0.8679	0.7445	0.7220	0.7588	0.7064	0.7129	0.6435	0.6795			0.73	9.1	TM	
17	TM	2,2-Dichloropropane	0.9732	0.9034	0.8897	0.9469	0.9164	0.9142	0.8446	0.8136			0.90	5.7	TM	
18	TM*	Chloroform	1.223	1.269	1.248	1.341	1.242	1.243	1.135	1.131			1.2	5.6	TM*	
19	TM	Bromochloromethane	0.3522	0.2856	0.3082	0.3266	0.3068	0.2936	0.2595	0.2521			0.30	11	TM	
20	S	Dibromofluoromethane(S)	1.008	1.043	0.9992	0.9545	0.9113	0.9400	0.8733	0.8713			0.95	6.7	S	
21	TM	1,1,1-TCA	1.034	0.9807	0.9601	1.047	1.028	1.001	0.9410	0.9195			0.99	4.7	TM	
22	TM	1,1-Dichloropropene	0.6506	0.6036	0.5864	0.6336	0.5976	0.5992	0.5572	0.5652			0.60	5.2	TM	
23	S	1,2-DCA-D4(S)	0.9202	0.9049	0.9423	0.8770	0.8446	0.8636	0.7752	0.7436			0.86	8.1	S	
24	TM	Carbon Tetrachloride	0.7068	0.7775	0.7583	0.7690	0.7530	0.7393	0.7030	0.6787			0.74	4.8	TM	
25	TM	1,2-DCA	0.8855	0.7976	0.8083	0.8621	0.8251	0.8241	0.7242	0.6934			0.80	8.1	TM	
26	TM	Benzene	1.812	1.903	1.908	2.040	1.922	1.837	1.677	1.801			1.9	5.7	TM	
27	TM	TCE	0.6792	0.6491	0.5863	0.6356	0.6310	0.6083	0.5643	0.5693			0.62	6.6	TM	
28	TM*	1,2-Dichloropropane	0.5004	0.5262	0.4525	0.5285	0.4845	0.4843	0.4477	0.4658			0.49	6.3	TM*	
29	TM	Bromodichloromethane	0.9450	0.8909	0.8732	0.9816	0.9645	0.9972	0.9367	0.9240			0.94	4.5	TM	
30	TM	Dibromomethane	0.3724	0.4141	0.3961	0.4528	0.4310	0.4148	0.3732	0.3115			0.40	11	TM	
31	TM	Cis-1,3-Dichloropropene	0.7391	0.7234	0.7914	0.9498	0.8852	0.9340	0.8784	0.9057			0.85	10	TM	
32	TM*	Toluene	1.358	1.377	1.415	1.569	1.502	1.536	1.414	1.471			1.5	5.2	TM*	
33	TM	Trans-1,3-Dichloropropene	0.1989	0.2140	0.2009	0.2239	0.2498	0.2510	0.2509	0.2660			0.23	11	TM	
34	TM	1,1,2-TCA	0.4109	0.3828	0.4022	0.4678	0.4296	0.4454	0.4065	0.4168			0.42	6.4	TM	
35	I	Chlorobenzene-D5 (IS)	ISTD													

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 07/21/11
Matrix: Instrument: Hewey Initials:

		Compound	0.5	1	2	5	10	20	40	100			Avg	%RSD		
36	S	Toluene-D8(S)	3.605	3.308	3.380	3.230	3.304	3.301	3.006	3.289			3.3	5.0	S	
37	TM	1,2-EDB	0.6528	0.6004	0.6334	0.7254	0.7338	0.7245	0.6979	0.7465			0.69	7.8	TM	
38	TM	Tetrachloroethene	0.6333	0.5844	0.5888	0.6079	0.6308	0.6242	0.5847	0.6042			0.61	3.4	TM	
39	TM	1,1,1,2-Tetrachloroethane	0.9385	0.9181	0.8735	0.9690	0.9923	0.9717	0.9265	0.9363			0.94	4.0	TM	
40	TM	m&p-Xylene	1.583	1.535	1.499	1.600	1.633	1.610	1.487	1.590			1.6	3.4	TM	
41	TM	o-Xylene	1.592	1.653	1.486	1.659	1.726	1.656	1.555	1.650			1.6	4.6	TM	
42	TM	Styrene	2.568	2.508	2.452	2.832	2.947	2.865	2.722	2.893			2.7	7.0	TM	
43	S	4-Bromofluorobenzene(S)	1.493	1.351	1.282	1.289	1.317	1.305	1.195	1.272			1.3	6.5	S	
44	TML	2-Hexanone				0.1829	0.2260	0.2389	0.2535	0.3173			0.24	20	TML	0.995
45	TM	1,3-Dichloropropane	0.9009	0.8843	0.9680	1.023	1.088	0.9599	0.9516	1.030			0.98	7.0	TM	
46	TM	Dibromochloromethane	0.8043	0.6763	0.7036	0.8800	0.9045	0.8929	0.8549	0.8902			0.83	11	TM	
47	TM**	Chlorobenzene	2.897	2.575	2.450	2.592	2.657	2.543	2.372	2.542			2.6	6.0	TM**	
48	TM*	Ethylbenzene	3.867	3.605	3.601	3.778	3.927	3.785	3.545	3.757			3.7	3.7	TM*	
49	TM**L	Bromoform	0.4033	0.3520	0.3730	0.4616	0.4995	0.5186	0.5147	0.5612			0.46	17	TM**L	0.999
50	I	1,4-Dichlorobenzene-D (IS)	ISTD													
51	TM	MIBK (methyl isobutyl ketone)			0.7284	0.8095	0.9081	0.8333	0.7963	1.043			0.85	13	TM	
52	TM	Isopropylbenzene	8.215	8.502	8.402	8.851	9.005	8.502	7.569	9.249			8.5	6.1	TM	
53	TM**	1,1,2,2-Tetrachloroethane	1.538	1.344	1.412	1.638	1.588	1.450	1.365	1.609			1.5	7.7	TM**	
54	TM	1,2,3-Trichloropropane	0.5327	0.5139	0.4715	0.5668	0.5711	0.5323	0.4790	0.5408			0.53	6.9	TM	
55	TM	Bromobenzene	2.297	2.336	2.266	2.480	2.494	2.321	2.170	2.395			2.3	4.6	TM	
56	TM	n-Propylbenzene	9.216	9.153	9.064	9.538	9.932	9.344	8.884	9.989			9.4	4.3	TM	
57	TM	2-Chlorotoluene	6.445	6.600	6.279	6.899	6.882	6.585	5.880	6.644			6.5	5.1	TM	
58	TM	1,3,5-Trimethylbenzene	7.655	7.508	7.009	7.332	7.280	6.920	6.309	7.119			7.1	5.8	TM	
59	TM	4-Chlorotoluene	6.590	5.821	5.839	6.280	6.318	5.773	5.360	6.061			6.0	6.4	TM	
60	TM	Tert-Butylbenzene	7.070	6.976	6.895	7.319	7.684	7.067	6.892	7.625			7.2	4.4	TM	
61	TM	1,2,4-Trimethylbenzene	6.607	6.696	6.581	7.146	7.496	6.898	6.527	7.405			6.9	5.6	TM	
62	TM	Sec-Butylbenzene	8.860	8.677	8.931	9.357	9.606	8.984	9.072	9.727			9.2	4.1	TM	
63	TM	p-Isopropyltoluene	7.235	7.214	7.069	7.673	7.769	7.371	7.205	8.141			7.5	4.9	TM	
64	TM	1,3-DCB	4.070	4.133	4.004	4.273	4.318	4.086	3.891	4.241			4.1	3.5	TM	
65	TM	1,4-DCB	4.555	4.338	4.202	4.424	4.448	4.075	3.975	4.261			4.3	4.6	TM	
66	TM	n-Butylbenzene	4.844	5.296	5.256	6.000	6.004	5.808	5.882	6.500			5.7	9.3	TM	
67	TM	1,2-DCB	4.119	3.920	3.688	4.108	4.072	3.728	3.648	3.972			3.9	5.0	TM	
68	TM	1,2-Dibromo-3-chloropropane	0.3034	0.2332	0.2055	0.2928	0.3005	0.3088	0.2964	0.3343			0.28	15	TM	
69	TM	1,2,4-Trichlorobenzene	2.165	2.144	2.091	2.246	2.262	2.211	2.209	2.365			2.2	3.8	TM	
70	TM	Hexachlorobutadiene	0.5741	0.5040	0.5012	0.5079	0.4923	0.4657	0.4639	0.4804			0.50	7.0	TM	

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

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

SDG No:
Initial Cal. Date: 07/21/11
Instrument: Hewey

Initials:

		Compound	0.5	1	2	5	10	20	40	100			Avg	%RSD		
71	TM	Naphthalene	3.268	3.371	3.464	4.297	4.516	4.480	4.523				4.0	15	TM	
72	TM	1,2,3-Trichlorobenzene	2.024	2.011	1.834	2.041	2.017	1.973	1.916	2.023			2.0	3.6	TM	
73																
74																
75																
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Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H05W.D Vial: 5
Acq On : 21 Jul 11 12:32 Operator: SV
Sample : Vol Std 07-21-11@0.5ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.58	96	512175	25.00000 ppb		-0.01
35) Chlorobenzene-D5 (IS)	16.70	117	396736	25.00000 ppb		-0.01
50) 1,4-Dichlorobenzene-D (IS)	20.96	152	192128	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.20	111	20650	1.06093 ppb		0.00
Spiked Amount 21.666			Recovery =	4.897%		
23) 1,2-DCA-D4(S)	10.99	65	18852	1.07132 ppb		0.00
Spiked Amount 20.215			Recovery =	5.298%		
36) Toluene-D8(S)	14.21	98	57206	1.09141 ppb		0.00
Spiked Amount 23.814			Recovery =	4.581%		
43) 4-Bromofluorobenzene(S)	18.84	95	23688	1.13697 ppb		0.00
Spiked Amount 23.932			Recovery =	4.751%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.48	85	8100	0.45768 ppb		93
3) Chloromethane	3.88	50	7678	0.54710 ppb		93
4) Vinyl chloride	4.10	62	6306	0.53866 ppb	#	76
5) Bromomethane	4.87	94	4001	0.70883 ppb		77
6) Chloroethane	5.05	64	4227	0.49956 ppb		84
7) Trichlorofluoromethane	5.59	101	11139	0.48799 ppb		97
8) Acetone	6.27	43	2658	0.32851 ppb		97
9) 1,1-DCE	6.64	61	5399	0.49682 ppb		84
10) Methylene chloride	7.36	84	8453	0.14563 ppb		89
11) Carbon disulfide	7.44	76	19075	0.50398 ppb		94
12) Methyl t-butyl ether (MtBE	7.78	73	17664	0.56518 ppb	#	76
13) Trans-1,2-DCE	7.96	96	5759	0.58024 ppb		74
14) 1,1-DCA	8.62	63	8904	0.50162 ppb	#	88
15) MEK (2-Butanone)	9.26	43	2812	0.40104 ppb	#	72
16) Cis-1,2-DCE	9.60	96	8890	0.59489 ppb	#	79
17) 2,2-Dichloropropane	9.60	77	9969	0.54053 ppb		99
18) Chloroform	9.87	83	12527	0.49750 ppb		88
19) Bromochloromethane	10.09	128	3608	0.59084 ppb		94
21) 1,1,1-TCA	10.60	97	10593	0.52286 ppb		94
22) 1,1-Dichloropropene	10.86	75	6664	0.54289 ppb		97
24) Carbon Tetrachloride	11.04	117	7240	0.48035 ppb		90
25) 1,2-DCA	11.14	62	9071	0.55170 ppb	#	91
26) Benzene	11.25	78	18566	0.48659 ppb	#	92
27) TCE	12.26	95	6957	0.55183 ppb		81
28) 1,2-Dichloropropane	12.48	63	5126	0.51458 ppb	#	62
29) Bromodichloromethane	12.83	83	9680	0.50311 ppb		92
30) Dibromomethane	12.89	93	3815	0.47056 ppb		85
31) Cis-1,3-Dichloropropene	13.72	75	7571	0.43432 ppb		94
32) Toluene	14.34	92	13908	0.46654 ppb		98
33) Trans-1,3-Dichloropropene	14.51	77	2037	0.42871 ppb	#	44
34) 1,1,2-TCA	14.78	83	4209	0.48888 ppb		94
37) 1,2-EDB	16.01	107	5180	0.47351 ppb	#	82
38) Tetrachloroethene	15.47	164	5025	0.52141 ppb	#	90
39) 1,1,1,2-Tetrachloroethane	16.84	131	7447	0.49883 ppb		82
40) m&p-Xylene	17.06	106	25117	1.01010 ppb		94
41) o-Xylene	17.82	106	12632	0.49075 ppb		92
42) Styrene	17.84	104	20375	0.47146 ppb	#	95
44) 2-Hexanone	14.82	43	123	4.48390 ppb	#	40
45) 1,3-Dichloropropane	15.19	76	7148	0.46167 ppb		84

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

Data File : M:\HEWEY\DATA\H110721\0721H05W.D Vial: 5
Acq On : 21 Jul 11 12:32 Operator: SV
Sample : Vol Std 07-21-11@0.5ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Dibromochloromethane	15.64	129	6382	0.48696	ppb		96
47)	Chlorobenzene	16.78	112	22986	0.56174	ppb		90
48)	Ethylbenzene	16.90	91	30687	0.51797	ppb		88
49)	Bromoform	18.34	173	3200	1.35673	ppb		93
51)	MIBK (methyl isobutyl keto	13.37	43	766	0.11683	ppb	#	37
52)	Isopropylbenzene	18.47	105	31567	0.48116	ppb	#	86
53)	1,1,2,2-Tetrachloroethane	18.63	83	5909	0.51501	ppb		83
54)	1,2,3-Trichloropropane	18.90	110	2047	0.50637	ppb		88
55)	Bromobenzene	19.19	156	8826	0.48976	ppb		92
56)	n-Propylbenzene	19.18	91	35412	0.49073	ppb		96
57)	2-Chlorotoluene	19.46	91	24764	0.49370	ppb		96
58)	1,3,5-Trimethylbenzene	19.46	105	29415	0.53595	ppb		83
59)	4-Chlorotoluene	19.56	91	25321	0.54865	ppb		96
60)	Tert-Butylbenzene	20.10	119	27166	0.49157	ppb		92
61)	1,2,4-Trimethylbenzene	20.17	105	25389	0.47744	ppb		90
62)	Sec-Butylbenzene	20.49	105	34044	0.48405	ppb		96
63)	p-Isopropyltoluene	20.73	119	27802	0.48497	ppb	#	91
64)	1,3-DCB	20.86	146	15641	0.49315	ppb		90
65)	1,4-DCB	21.02	146	17502	0.53151	ppb		87
66)	n-Butylbenzene	21.47	91	18614	0.42501	ppb		91
67)	1,2-DCB	21.69	146	15828	0.52715	ppb		87
68)	1,2-Dibromo-3-chloropropan	22.97	157	1166	0.53356	ppb	#	85
69)	1,2,4-Trichlorobenzene	24.41	180	8321	0.48957	ppb		95
70)	Hexachlorobutadiene	24.65	223	2206	0.57561	ppb		84
71)	Naphthalene	24.75	128	12557	0.40966	ppb		98
72)	1,2,3-Trichlorobenzene	25.10	180	7777	0.51120	ppb		97

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

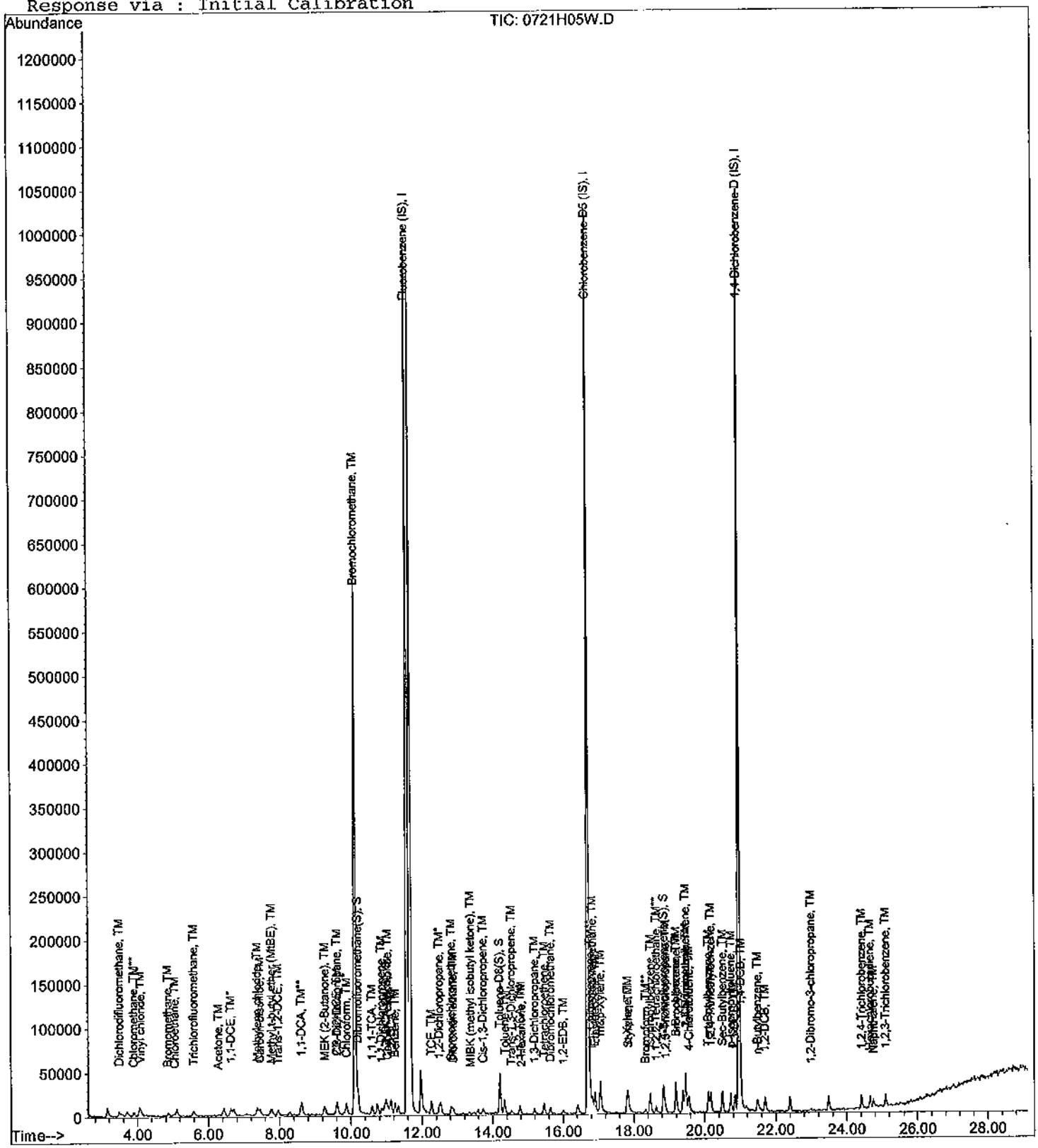
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H05W.D
Acq On : 21 Jul 11 12:32
Sample : Vol Std 07-21-11@0.5ug/L
Misc : Water 10ml w/IS: 07-21-11

Vial: 5
Operator: SV
Inst : Hewey
Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H06W.D Vial: 6
Acq On : 21 Jul 11 13:09 Operator: SV
Sample : Vol Std 07-21-11@1.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.58	96	487744	25.00000 ppb		-0.01
35) Chlorobenzene-D5 (IS)	16.71	117	404288	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.96	152	188608	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.20	111	40699	2.19572 ppb		0.00
Spiked Amount 21.666			Recovery = 10.136%			
23) 1,2-DCA-D4(S)	10.98	65	35310	2.10710 ppb		0.00
Spiked Amount 20.215			Recovery = 10.423%			
36) Toluene-D8(S)	14.20	98	107001	2.00329 ppb		0.00
Spiked Amount 23.814			Recovery = 8.411%			
43) 4-Bromofluorobenzene(S)	18.85	95	43681	2.05742 ppb		0.00
Spiked Amount 23.932			Recovery = 8.595%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	16937	1.00495 ppb		98
3) Chloromethane	3.87	50	13437	1.00542 ppb		89
4) Vinyl chloride	4.09	62	11375	1.02032 ppb		91
5) Bromomethane	4.85	94	8030	1.06772 ppb	#	67
6) Chloroethane	5.03	64	7892	0.97941 ppb		94
7) Trichlorofluoromethane	5.58	101	22538	1.03683 ppb		95
8) Acetone	6.30	43	5352	1.41297 ppb		94
9) 1,1-DCE	6.62	61	9787	0.94571 ppb		89
10) Methylene chloride	7.37	84	12401	0.62073 ppb		94
11) Carbon disulfide	7.44	76	33921	0.94112 ppb	#	92
12) Methyl t-butyl ether (MtBE	7.77	73	27920	0.93808 ppb	#	86
13) Trans-1,2-DCE	7.96	96	10348	1.09482 ppb	#	83
14) 1,1-DCA	8.62	63	16390	0.96961 ppb		97
15) MEK (2-Butanone)	9.28	43	6592	0.98723 ppb	#	72
16) Cis-1,2-DCE	9.60	96	14525	1.02065 ppb		90
17) 2,2-Dichloropropane	9.60	77	17625	1.00351 ppb		96
18) Chloroform	9.87	83	24756	1.03240 ppb		96
19) Bromochloromethane	10.10	128	5572	0.95817 ppb	#	20
21) 1,1,1-TCA	10.59	97	19134	0.99175 ppb		92
22) 1,1-Dichloropropene	10.86	75	11776	1.00739 ppb		94
24) Carbon Tetrachloride	11.04	117	15169	1.05682 ppb		98
25) 1,2-DCA	11.12	62	15561	0.99384 ppb		95
26) Benzene	11.24	78	37122	1.02165 ppb		93
27) TCE	12.26	95	12664	1.05483 ppb		96
28) 1,2-Dichloropropane	12.49	63	10267	1.08228 ppb		96
29) Bromodichloromethane	12.83	83	17381	0.94862 ppb		87
30) Dibromomethane	12.87	93	8079	1.04642 ppb		79
31) Cis-1,3-Dichloropropene	13.73	75	14114	0.85023 ppb	#	77
32) Toluene	14.32	92	26871	0.94654 ppb		96
33) Trans-1,3-Dichloropropene	14.52	77	4175	0.92268 ppb		76
34) 1,1,2-TCA	14.77	83	7469	0.91100 ppb		97
37) 1,2-EDB	16.00	107	9710	0.87103 ppb	#	76
38) Tetrachloroethene	15.47	164	9451	0.96235 ppb		93
39) 1,1,1,2-Tetrachloroethane	16.83	131	14847	0.97593 ppb		89
40) m&p-Xylene	17.06	106	49631	1.95866 ppb		82
41) o-Xylene	17.81	106	26731	1.01908 ppb		97
42) Styrene	17.84	104	40552	0.92080 ppb	#	93
44) 2-Hexanone	14.85	43	114	4.48175 ppb	#	40
45) 1,3-Dichloropropane	15.19	76	14300	0.90634 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H06W.D Vial: 6
Acq On : 21 Jul 11 13:09 Operator: SV
Sample : Vol Std 07-21-11@1.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Dibromochloromethane	15.64	129	10937	0.81894	ppb		87
47)	Chlorobenzene	16.78	112	41641	0.99863	ppb		93
48)	Ethylbenzene	16.90	91	58306	0.96577	ppb		97
49)	Bromoform	18.34	173	5692	1.62463	ppb		87
51)	MIBK (methyl isobutyl keto	13.44	43	6443	1.00105	ppb	#	68
52)	Isopropylbenzene	18.46	105	64144	0.99595	ppb		98
53)	1,1,2,2-Tetrachloroethane	18.63	83	10136	0.89991	ppb		99
54)	1,2,3-Trichloropropane	18.88	110	3877	0.97696	ppb	#	60
55)	Bromobenzene	19.19	156	17620	0.99599	ppb		96
56)	n-Propylbenzene	19.18	91	69050	0.97473	ppb		99
57)	2-Chlorotoluene	19.46	91	49789	1.01114	ppb		96
58)	1,3,5-Trimethylbenzene	19.46	105	56639	1.05125	ppb		93
59)	4-Chlorotoluene	19.55	91	43919	0.96939	ppb		97
60)	Tert-Butylbenzene	20.11	119	52631	0.97014	ppb		99
61)	1,2,4-Trimethylbenzene	20.16	105	50519	0.96774	ppb		95
62)	Sec-Butylbenzene	20.49	105	65464	0.94816	ppb		98
63)	p-Isopropyltoluene	20.73	119	54422	0.96704	ppb		97
64)	1,3-DCB	20.85	146	31180	1.00143	ppb		98
65)	1,4-DCB	21.01	146	32725	1.01235	ppb		94
66)	n-Butylbenzene	21.47	91	39958	0.92938	ppb		95
67)	1,2-DCB	21.69	146	29575	1.00338	ppb		98
68)	1,2-Dibromo-3-chloropropan	22.98	157	1759	0.81994	ppb	#	65
69)	1,2,4-Trichlorobenzene	24.41	180	16173	0.96930	ppb		89
70)	Hexachlorobutadiene	24.65	223	3802	1.01057	ppb		85
71)	Naphthalene	24.75	128	25434	0.84524	ppb		94
72)	1,2,3-Trichlorobenzene	25.10	180	15169	1.01571	ppb		86

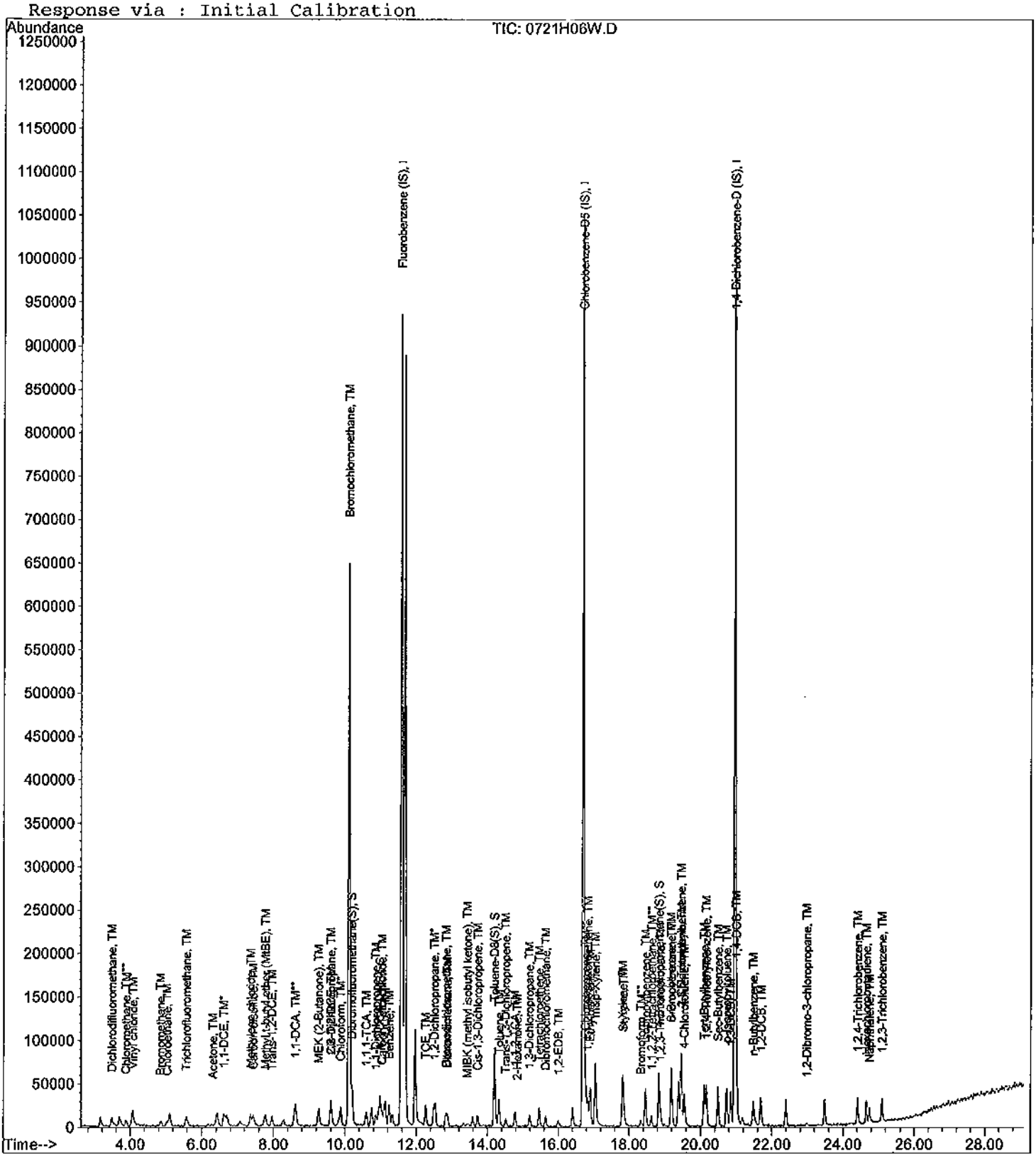
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H06W.D Vial: 6
Acq On : 21 Jul 11 13:09 Operator: SV
Sample : Vol Std 07-21-11@1.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H07W.D Vial: 7
Acq On : 21 Jul 11 13:45 Operator: SV
Sample : Vol Std 07-21-11@2.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.59	96	494784	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.71	117	417472	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.96	152	197376	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.20	111	79099	4.20669 ppb		0.00
Spiked Amount 21.666			Recovery	= 19.418%		
23) 1,2-DCA-D4(S)	10.99	65	74600	4.38837 ppb		0.00
Spiked Amount 20.215			Recovery	= 21.707%		
36) Toluene-D8(S)	14.19	98	225770	4.09342 ppb		0.00
Spiked Amount 23.814			Recovery	= 17.187%		
43) 4-Bromofluorobenzene(S)	18.84	95	85618	3.90534 ppb		0.00
Spiked Amount 23.932			Recovery	= 16.317%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	36194	2.11700 ppb		100
3) Chloromethane	3.88	50	25426	1.87542 ppb		92
4) Vinyl chloride	4.07	62	23985	2.12081 ppb		95
5) Bromomethane	4.85	94	17920	1.88714 ppb		93
6) Chloroethane	5.02	64	16148	1.97548 ppb		91
7) Trichlorofluoromethane	5.59	101	44321	2.00992 ppb		95
8) Acetone	6.27	43	9964	3.13157 ppb		90
9) 1,1-DCE	6.64	61	21392	2.03768 ppb		95
10) Methylene chloride	7.37	84	22113	1.64681 ppb		87
11) Carbon disulfide	7.44	76	70465	1.92720 ppb		94
12) Methyl t-butyl ether (MtBE	7.76	73	56617	1.87520 ppb		98
13) Trans-1,2-DCE	7.97	96	18111	1.88888 ppb		89
14) 1,1-DCA	8.62	63	36051	2.10239 ppb		94
15) MEK (2-Butanone)	9.28	43	14028	2.07097 ppb	#	85
16) Cis-1,2-DCE	9.61	96	28579	1.97964 ppb		96
17) 2,2-Dichloropropane	9.60	77	35216	1.97656 ppb	#	87
18) Chloroform	9.88	83	49407	2.03111 ppb		99
19) Bromochloromethane	10.10	128	12201	2.06825 ppb	#	61
21) 1,1,1-TCA	10.60	97	38005	1.94184 ppb		100
22) 1,1-Dichloropropene	10.86	75	23210	1.95728 ppb		96
24) Carbon Tetrachloride	11.04	117	30016	2.06146 ppb		92
25) 1,2-DCA	11.13	62	31996	2.01442 ppb	#	87
26) Benzene	11.25	78	75508	2.04852 ppb		98
27) TCE	12.27	95	23207	1.90549 ppb		87
28) 1,2-Dichloropropane	12.48	63	17911	1.86120 ppb		96
29) Bromodichloromethane	12.83	83	34565	1.85965 ppb		90
30) Dibromomethane	12.88	93	15678	2.00178 ppb		93
31) Cis-1,3-Dichloropropene	13.72	75	31325	1.86018 ppb		90
32) Toluene	14.33	92	55992	1.94427 ppb		100
33) Trans-1,3-Dichloropropene	14.52	77	7954	1.73284 ppb		94
34) 1,1,2-TCA	14.77	83	15919	1.91402 ppb		96
37) 1,2-EDB	15.99	107	21153	1.83760 ppb	#	88
38) Tetrachloroethene	15.46	164	19664	1.93905 ppb		93
39) 1,1,1,2-Tetrachloroethane	16.84	131	29174	1.85713 ppb		95
40) m&p-Xylene	17.04	106	100117	3.82628 ppb		97
41) o-Xylene	17.80	106	49619	1.83192 ppb		93
42) Styrene	17.83	104	81889	1.80071 ppb		95
44) 2-Hexanone	14.85	43	365	4.52713 ppb	#	40
45) 1,3-Dichloropropane	15.19	76	32330	1.98438 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H07W.D Vial: 7
Acq On : 21 Jul 11 13:45 Operator: SV
Sample : Vol Std 07-21-11@2.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Dibromochloromethane	15.63	129	23499	1.70398	ppb		91
47)	Chlorobenzene	16.77	112	81809	1.89998	ppb		94
48)	Ethylbenzene	16.90	91	120274	1.92927	ppb		97
49)	Bromoform	18.32	173	12458	2.32689	ppb		96
51)	MIBK (methyl isobutyl keto	13.42	43	11502	1.70768	ppb	#	80
52)	Isopropylbenzene	18.46	105	132676	1.96852	ppb		99
53)	1,1,2,2-Tetrachloroethane	18.63	83	22290	1.89108	ppb		93
54)	1,2,3-Trichloropropane	18.89	110	7445	1.79272	ppb		94
55)	Bromobenzene	19.19	156	35784	1.93288	ppb		99
56)	n-Propylbenzene	19.18	91	143124	1.93063	ppb		98
57)	2-Chlorotoluene	19.46	91	99151	1.92415	ppb		99
58)	1,3,5-Trimethylbenzene	19.46	105	110666	1.96277	ppb		92
59)	4-Chlorotoluene	19.55	91	92202	1.94469	ppb		90
60)	Tert-Butylbenzene	20.11	119	108867	1.91758	ppb		95
61)	1,2,4-Trimethylbenzene	20.16	105	103908	1.90204	ppb		96
62)	Sec-Butylbenzene	20.49	105	141019	1.95174	ppb		97
63)	p-Isopropyltoluene	20.73	119	111616	1.89524	ppb		94
64)	1,3-DCB	20.85	146	63225	1.94043	ppb		98
65)	1,4-DCB	21.02	146	66355	1.96151	ppb		98
66)	n-Butylbenzene	21.47	91	82997	1.84467	ppb		97
67)	1,2-DCB	21.69	146	58227	1.88770	ppb		95
68)	1,2-Dibromo-3-chloropropan	22.98	157	3245	1.44544	ppb	#	72
69)	1,2,4-Trichlorobenzene	24.41	180	33020	1.89109	ppb		88
70)	Hexachlorobutadiene	24.66	223	7914	2.01010	ppb		76
71)	Naphthalene	24.75	128	54702	1.73713	ppb		99
72)	1,2,3-Trichlorobenzene	25.10	180	28955	1.85269	ppb		99

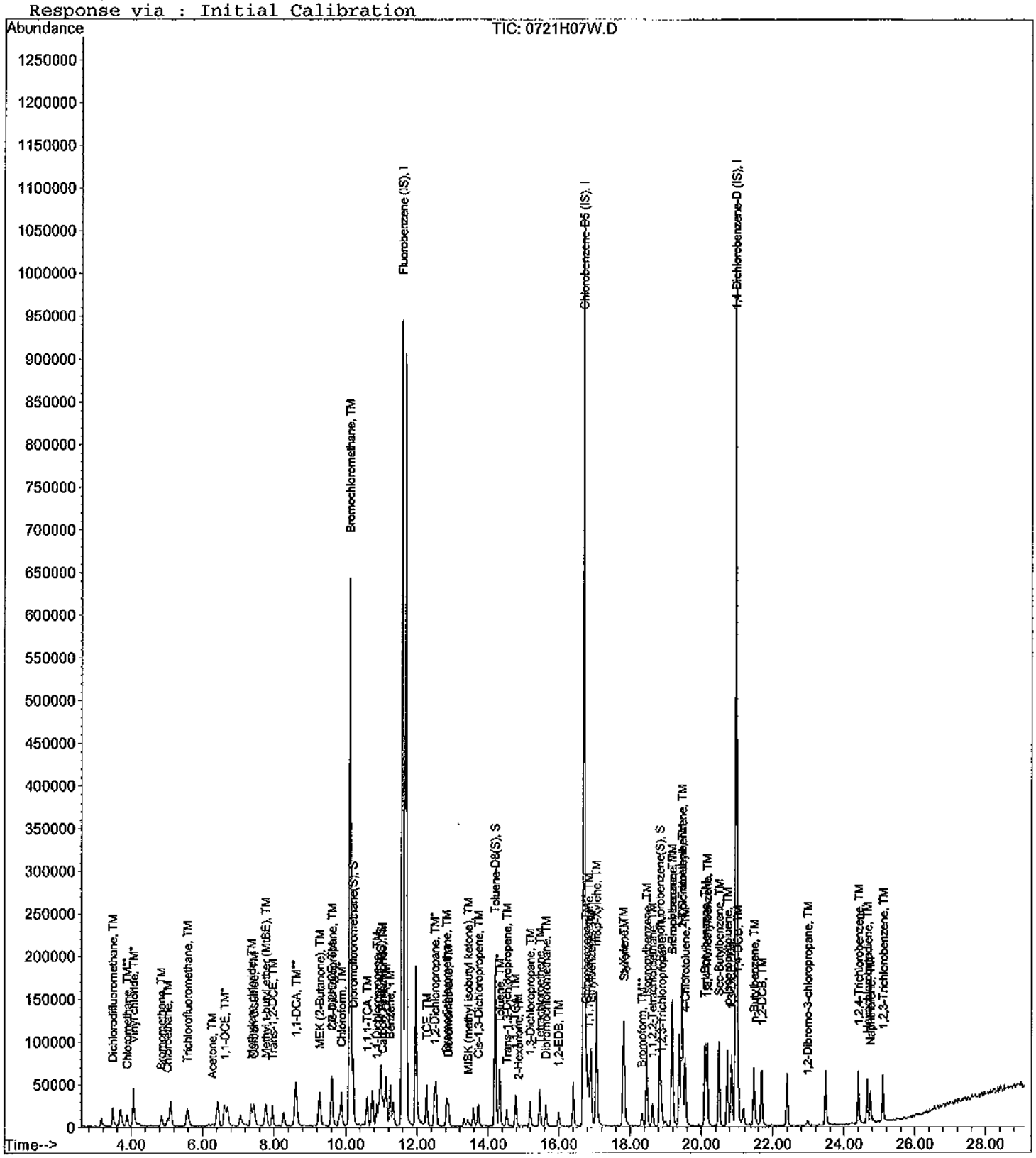
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H07W.D Vial: 7
Acq On : 21 Jul 11 13:45 Operator: SV
Sample : Vol Std 07-21-11@2.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H08W.D Vial: 8
Acq On : 21 Jul 11 14:22 Operator: SV
Sample : Vol Std 07-21-11@5.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.59	96	496256	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.71	117	421632	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.96	152	199104	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.20	111	189472	10.04673 ppb		0.00
Spiked Amount 21.666			Recovery = 46.372%			
23) 1,2-DCA-D4(S)	10.99	65	174096	10.21088 ppb		0.00
Spiked Amount 20.215			Recovery = 50.512%			
36) Toluene-D8(S)	14.19	98	544750	9.77936 ppb		0.00
Spiked Amount 23.814			Recovery = 41.064%			
43) 4-Bromofluorobenzene(S)	18.84	95	217315	9.81471 ppb		0.00
Spiked Amount 23.932			Recovery = 41.012%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	74687	4.35551 ppb		99
3) Chloromethane	3.89	50	65253	4.79879 ppb		94
4) Vinyl chloride	4.08	62	58121	5.12394 ppb		90
5) Bromomethane	4.86	94	51169	4.66190 ppb		99
6) Chloroethane	5.03	64	40706	4.96504 ppb		92
7) Trichlorofluoromethane	5.58	101	110733	5.00674 ppb		92
8) Acetone	6.27	43	16908	5.74422 ppb		97
9) 1,1-DCE	6.62	61	55495	5.27046 ppb		95
10) Methylene chloride	7.37	84	56495	5.32945 ppb		91
11) Carbon disulfide	7.45	76	184778	5.03863 ppb		99
12) Methyl t-butyl ether (MtBE	7.77	73	163284	5.39205 ppb		99
13) Trans-1,2-DCE	7.97	96	51206	5.32468 ppb		90
14) 1,1-DCA	8.63	63	90733	5.27560 ppb		95
15) MEK (2-Butanone)	9.27	43	36454	5.36578 ppb	#	90
16) Cis-1,2-DCE	9.62	96	75311	5.20124 ppb		94
17) 2,2-Dichloropropane	9.60	77	93984	5.25936 ppb		99
18) Chloroform	9.88	83	133108	5.45581 ppb		96
19) Bromochloromethane	10.10	128	32413	5.47818 ppb		95
21) 1,1,1-TCA	10.60	97	103872	5.29153 ppb		96
22) 1,1-Dichloropropene	10.86	75	62882	5.28706 ppb		96
24) Carbon Tetrachloride	11.04	117	76322	5.22614 ppb		93
25) 1,2-DCA	11.13	62	85562	5.37087 ppb		98
26) Benzene	11.25	78	202480	5.47695 ppb		98
27) TCE	12.26	95	63080	5.16404 ppb		96
28) 1,2-Dichloropropane	12.49	63	52454	5.43453 ppb		99
29) Bromodichloromethane	12.83	83	97424	5.22601 ppb	#	95
30) Dibromomethane	12.89	93	44936	5.72044 ppb		95
31) Cis-1,3-Dichloropropene	13.71	75	94264	5.58110 ppb		97
32) Toluene	14.33	92	155715	5.39103 ppb		91
33) Trans-1,3-Dichloropropene	14.51	77	22225	4.82752 ppb		80
34) 1,1,2-TCA	14.78	83	46425	5.56534 ppb		95
37) 1,2-EDB	16.00	107	61170	5.26151 ppb	#	96
38) Tetrachloroethene	15.46	164	51265	5.00532 ppb		93
39) 1,1,1,2-Tetrachloroethane	16.83	131	81709	5.15002 ppb		96
40) m&p-Xylene	17.04	106	269786	10.20899 ppb		98
41) o-Xylene	17.81	106	139891	5.11378 ppb		87
42) Styrene	17.83	104	238798	5.19928 ppb		98
44) 2-Hexanone	14.85	43	15420	7.26216 ppb	#	88
45) 1,3-Dichloropropane	15.19	76	86254	5.24194 ppb		91

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H08W.D Vial: 8
Acq On : 21 Jul 11 14:22 Operator: SV
Sample : Vol Std 07-21-11@5.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Dibromochloromethane	15.64	129	74210	5.32808	ppb		96
47)	Chlorobenzene	16.77	112	218542	5.02546	ppb		99
48)	Ethylbenzene	16.90	91	318568	5.05962	ppb		98
49)	Bromoform	18.33	173	38925	5.11047	ppb		92
51)	MIBK (methyl isobutyl keto	13.42	43	32236	4.74447	ppb		97
52)	Isopropylbenzene	18.46	105	352437	5.18375	ppb		98
53)	1,1,2,2-Tetrachloroethane	18.62	83	65223	5.48549	ppb		99
54)	1,2,3-Trichloropropane	18.89	110	22571	5.38783	ppb		86
55)	Bromobenzene	19.19	156	98771	5.28884	ppb		95
56)	n-Propylbenzene	19.18	91	379810	5.07888	ppb		99
57)	2-Chlorotoluene	19.46	91	274731	5.28524	ppb		95
58)	1,3,5-Trimethylbenzene	19.46	105	291969	5.13341	ppb		96
59)	4-Chlorotoluene	19.55	91	250068	5.22857	ppb		95
60)	Tert-Butylbenzene	20.11	119	291432	5.08872	ppb		99
61)	1,2,4-Trimethylbenzene	20.16	105	284562	5.16370	ppb		100
62)	Sec-Butylbenzene	20.49	105	372585	5.11192	ppb		97
63)	p-Isopropyltoluene	20.73	119	305530	5.14288	ppb		98
64)	1,3-DCB	20.85	146	170152	5.17679	ppb		98
65)	1,4-DCB	21.02	146	176175	5.16268	ppb		98
66)	n-Butylbenzene	21.47	91	238929	5.26428	ppb		98
67)	1,2-DCB	21.69	146	163578	5.25711	ppb		97
68)	1,2-Dibromo-3-chloropropan	22.98	157	11658	5.14781	ppb	#	78
69)	1,2,4-Trichlorobenzene	24.41	180	89457	5.07882	ppb		99
70)	Hexachlorobutadiene	24.66	223	20226	5.09267	ppb		96
71)	Naphthalene	24.74	128	171112	5.38672	ppb		99
72)	1,2,3-Trichlorobenzene	25.10	180	81257	5.15410	ppb		99

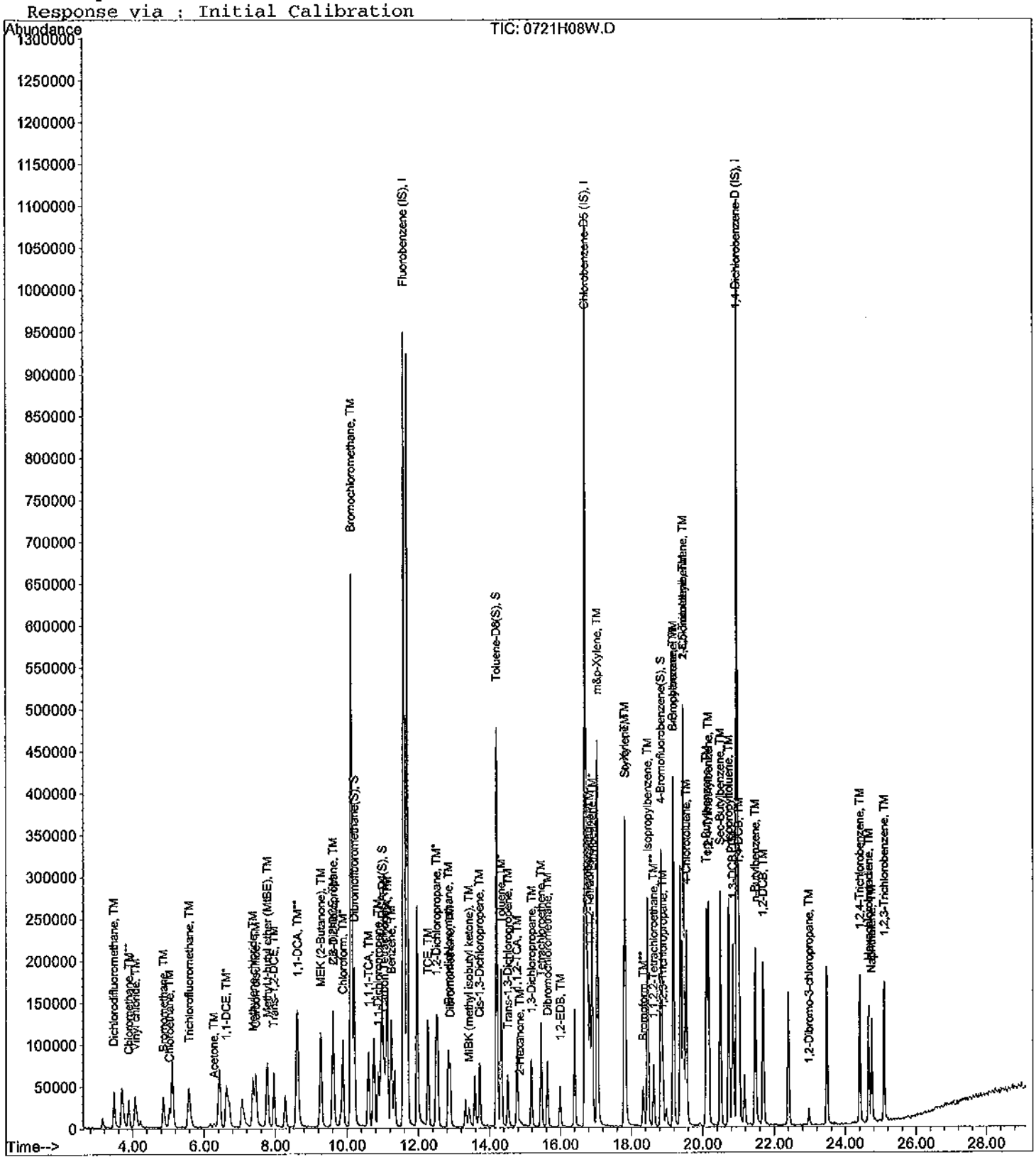
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H08W.D Vial: 8
Acq On : 21 Jul 11 14:22 Operator: SV
Sample : Vol Std 07-21-11@5.0ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H09W.D Vial: 9
Acq On : 21 Jul 11 14:58 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.59	96	508096	25.00000 ppb	0.00
35) Chlorobenzene-D5 (IS)	16.71	117	407808	25.00000 ppb	0.00
50) 1,4-Dichlorobenzene-D (IS)	20.97	152	195776	25.00000 ppb	0.00
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.20	111	463038	23.98040 ppb	0.00
Spiked Amount 21.666			Recovery	= 110.680%	
23) 1,2-DCA-D4(S)	10.98	65	429126	24.58211 ppb	0.00
Spiked Amount 20.215			Recovery	= 121.603%	
36) Toluene-D8(S)	14.20	98	1347576	25.01177 ppb	0.00
Spiked Amount 23.814			Recovery	= 105.031%	
43) 4-Bromofluorobenzene(S)	18.84	95	537135	25.08125 ppb	0.00
Spiked Amount 23.932			Recovery	= 104.801%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.47	85	179579	10.22843 ppb	100
3) Chloromethane	3.89	50	132599	9.52426 ppb	100
4) Vinyl chloride	4.07	62	121279	10.44279 ppb	100
5) Bromomethane	4.86	94	119912	10.17441 ppb	100
6) Chloroethane	5.03	64	86083	10.25514 ppb	100
7) Trichlorofluoromethane	5.58	101	225534	9.95979 ppb	100
8) Acetone	6.26	43	27741	9.59331 ppb	100
9) 1,1-DCE	6.63	61	113403	10.51912 ppb	100
10) Methylene chloride	7.36	84	104242	10.19274 ppb	100
11) Carbon disulfide	7.44	76	380023	10.12120 ppb	100
12) Methyl t-butyl ether (MtBE	7.78	73	311448	10.04513 ppb	100
13) Trans-1,2-DCE	7.96	96	95022	9.65065 ppb	100
14) 1,1-DCA	8.63	63	177245	10.06562 ppb	100
15) MEK (2-Butanone)	9.26	43	69965	10.05840 ppb	100
16) Cis-1,2-DCE	9.61	96	143567	9.68419 ppb	100
17) 2,2-Dichloropropane	9.61	77	186238	10.17905 ppb	100
18) Chloroform	9.88	83	252428	10.10538 ppb	100
19) Bromochloromethane	10.10	128	62345	10.29150 ppb	100
21) 1,1,1-TCA	10.60	97	208928	10.39536 ppb	100
22) 1,1-Dichloropropene	10.87	75	121458	9.97410 ppb	100
24) Carbon Tetrachloride	11.04	117	153047	10.23568 ppb	100
25) 1,2-DCA	11.14	62	167699	10.28145 ppb	100
26) Benzene	11.24	78	390698	10.32186 ppb	100
27) TCE	12.26	95	128241	10.25379 ppb	100
28) 1,2-Dichloropropane	12.48	63	98459	9.96319 ppb	100
29) Bromodichloromethane	12.83	83	196017	10.26970 ppb	100
30) Dibromomethane	12.88	93	87590	10.89055 ppb	100
31) Cis-1,3-Dichloropropene	13.72	75	179898	10.40304 ppb	100
32) Toluene	14.32	92	305215	10.32065 ppb	100
33) Trans-1,3-Dichloropropene	14.52	77	50772	10.77125 ppb	100
34) 1,1,2-TCA	14.78	83	87304	10.22195 ppb	100
37) 1,2-EDB	15.99	107	119697	10.64469 ppb	100
38) Tetrachloroethene	15.46	164	102897	10.38703 ppb	100
39) 1,1,1,2-Tetrachloroethane	16.84	131	161863	10.54786 ppb	100
40) m&p-Xylene	17.05	106	532624	20.83828 ppb	100
41) o-Xylene	17.81	106	281512	10.63963 ppb	100
42) Styrene	17.83	104	480741	10.82185 ppb	100
44) 2-Hexanone	14.83	43	36863	11.38569 ppb	100
45) 1,3-Dichloropropane	15.18	76	177432	11.14867 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H09W.D Vial: 9
Acq On : 21 Jul 11 14:58 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Dibromochloromethane	15.63	129	147540	10.95207	ppb	100
47)	Chlorobenzene	16.77	112	433487	10.30611	ppb	100
48)	Ethylbenzene	16.90	91	640648	10.51993	ppb	100
49)	Bromoform	18.34	173	81477	9.89866	ppb	100
51)	MIBK (methyl isobutyl keto	13.41	43	71114	10.64443	ppb	100
52)	Isopropylbenzene	18.46	105	705146	10.54780	ppb	100
53)	1,1,2,2-Tetrachloroethane	18.63	83	124381	10.63872	ppb	100
54)	1,2,3-Trichloropropane	18.89	110	44726	10.85785	ppb	100
55)	Bromobenzene	19.19	156	195332	10.63715	ppb	100
56)	n-Propylbenzene	19.18	91	777787	10.57750	ppb	100
57)	2-Chlorotoluene	19.46	91	538957	10.54463	ppb	100
58)	1,3,5-Trimethylbenzene	19.46	105	570107	10.19404	ppb	100
59)	4-Chlorotoluene	19.55	91	494772	10.52083	ppb	100
60)	Tert-Butylbenzene	20.10	119	601776	10.68629	ppb	100
61)	1,2,4-Trimethylbenzene	20.16	105	587002	10.83288	ppb	100
62)	Sec-Butylbenzene	20.49	105	752280	10.49685	ppb	100
63)	p-Isopropyltoluene	20.74	119	608381	10.41474	ppb	100
64)	1,3-DCB	20.85	146	338117	10.46191	ppb	100
65)	1,4-DCB	21.02	146	348361	10.38200	ppb	100
66)	n-Butylbenzene	21.47	91	470204	10.53603	ppb	100
67)	1,2-DCB	21.69	146	318895	10.42295	ppb	100
68)	1,2-Dibromo-3-chloropropan	22.98	157	23529	10.56629	ppb	100
69)	1,2,4-Trichlorobenzene	24.40	180	177159	10.22898	ppb	100
70)	Hexachlorobutadiene	24.66	223	38552	9.87196	ppb	100
71)	Naphthalene	24.74	128	353651	11.32243	ppb	100
72)	1,2,3-Trichlorobenzene	25.10	180	157929	10.18767	ppb	100

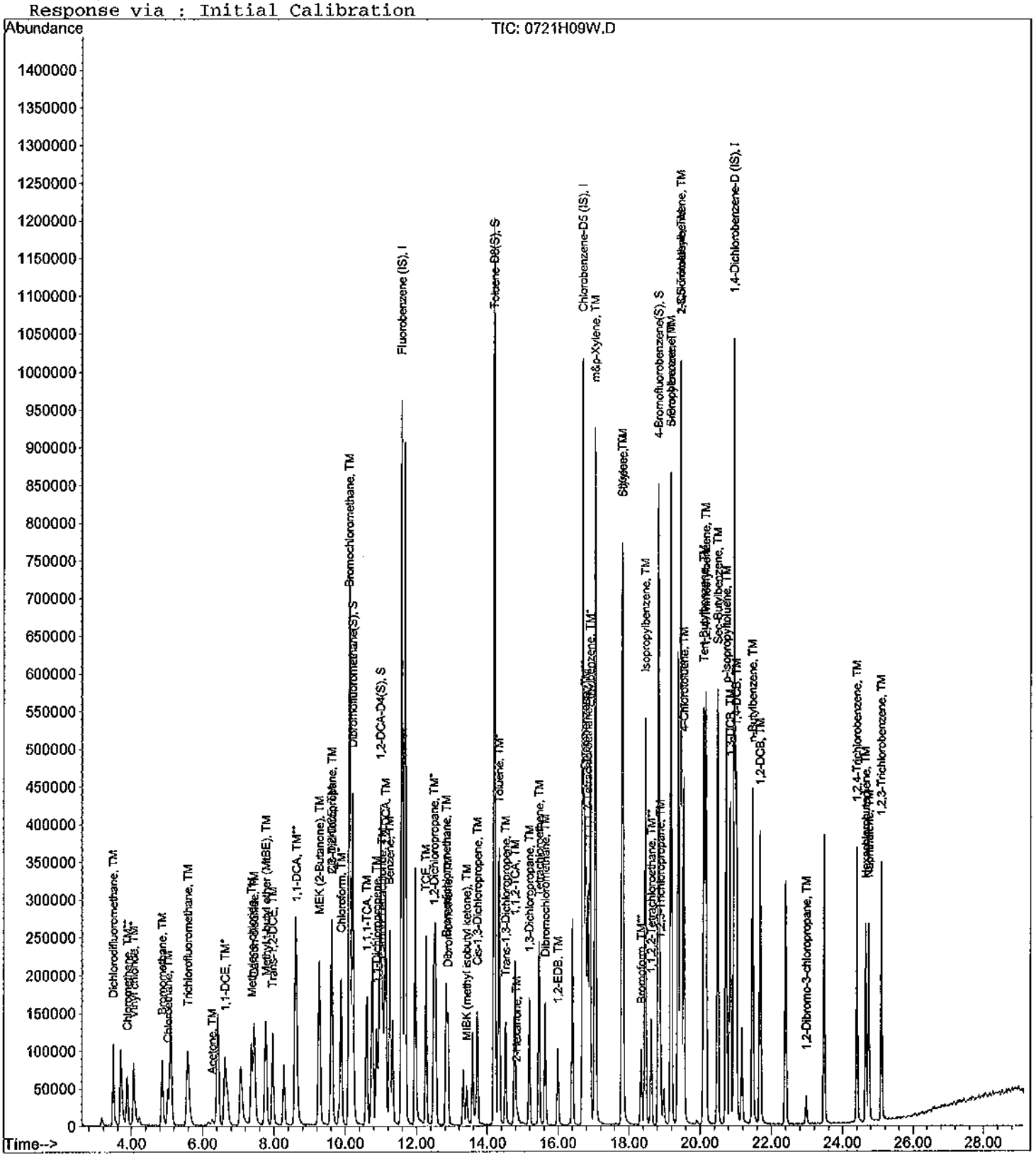
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H09W.D Vial: 9
Acq On : 21 Jul 11 14:58 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H10W.D Vial: 10
Acq On : 21 Jul 11 15:35 Operator: SV
Sample : Vol Std 07-21-11@20ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.59	96	516416	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.71	117	431808	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.96	152	211584	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.20	111	776680	39.57565 ppb		0.00
Spiked Amount 21.666			Recovery = 182.664%			
23) 1,2-DCA-D4(S)	10.99	65	713573	40.21785 ppb		0.00
Spiked Amount 20.215			Recovery = 198.951%			
36) Toluene-D8(S)	14.19	98	2280332	39.97186 ppb		0.00
Spiked Amount 23.814			Recovery = 167.851%			
43) 4-Bromofluorobenzene(S)	18.84	95	901635	39.76139 ppb		0.00
Spiked Amount 23.932			Recovery = 166.142%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	365839	20.50169 ppb		98
3) Chloromethane	3.88	50	269556	19.04961 ppb		99
4) Vinyl chloride	4.06	62	237404	20.11246 ppb		100
5) Bromomethane	4.87	94	270245	22.09214 ppb		100
6) Chloroethane	5.03	64	171894	20.14796 ppb		87
7) Trichlorofluoromethane	5.58	101	459194	19.95172 ppb		99
8) Acetone	6.27	43	55416	19.47740 ppb		96
9) 1,1-DCE	6.63	61	219137	19.99939 ppb		96
10) Methylene chloride	7.37	84	213125	21.24533 ppb		95
11) Carbon disulfide	7.45	76	784616	20.56011 ppb		99
12) Methyl t-butyl ether (MtBE	7.76	73	636838	20.20902 ppb		97
13) Trans-1,2-DCE	7.97	96	193419	19.32758 ppb		96
14) 1,1-DCA	8.63	63	357142	19.95508 ppb		99
15) MEK (2-Butanone)	9.27	43	152171	21.52415 ppb		98
16) Cis-1,2-DCE	9.62	96	294530	19.54719 ppb		91
17) 2,2-Dichloropropane	9.60	77	377678	20.30985 ppb		97
18) Chloroform	9.88	83	513619	20.23030 ppb		94
19) Bromochloromethane	10.10	128	121286	19.69854 ppb		96
21) 1,1,1-TCA	10.59	97	413609	20.24784 ppb		97
22) 1,1-Dichloropropene	10.86	75	247555	20.00163 ppb		98
24) Carbon Tetrachloride	11.04	117	305447	20.09896 ppb		98
25) 1,2-DCA	11.13	62	340479	20.53810 ppb		95
26) Benzene	11.24	78	758826	19.72445 ppb		98
27) TCE	12.27	95	251319	19.77102 ppb		96
28) 1,2-Dichloropropane	12.49	63	200095	19.92166 ppb		95
29) Bromodichloromethane	12.83	83	411981	21.23672 ppb		96
30) Dibromomethane	12.88	93	171352	20.96190 ppb		94
31) Cis-1,3-Dichloropropene	13.71	75	385853	21.95341 ppb		99
32) Toluene	14.33	92	634399	21.10618 ppb		96
33) Trans-1,3-Dichloropropene	14.51	77	103694	21.64421 ppb		83
34) 1,1,2-TCA	14.77	83	184010	21.19763 ppb		96
37) 1,2-EDB	16.00	107	250263	21.01897 ppb	#	99
38) Tetrachloroethene	15.46	164	215634	20.55753 ppb		95
39) 1,1,1,2-Tetrachloroethane	16.83	131	335662	20.65780 ppb		97
40) m&p-Xylene	17.04	106	1112643	41.11137 ppb		99
41) o-Xylene	17.81	106	572002	20.41702 ppb		95
42) Styrene	17.83	104	989597	21.03845 ppb		94
44) 2-Hexanone	14.83	43	82538	19.10491 ppb	#	92
45) 1,3-Dichloropropane	15.19	76	331582	19.67646 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H10W.D Vial: 10
Acq On : 21 Jul 11 15:35 Operator: SV
Sample : Vol Std 07-21-11@20ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Dibromochloromethane	15.64	129	308455	21.62436	ppb	99
47)	Chlorobenzene	16.78	112	878551	19.72653	ppb	98
48)	Ethylbenzene	16.90	91	1307640	20.27901	ppb	100
49)	Bromoform	18.33	173	179143	19.48081	ppb	96
51)	MIBK (methyl isobutyl keto	13.41	43	141052	19.53544	ppb	99
52)	Isopropylbenzene	18.46	105	1439084	19.91800	ppb	99
53)	1,1,2,2-Tetrachloroethane	18.62	83	245479	19.42792	ppb	95
54)	1,2,3-Trichloropropane	18.89	110	90101	20.23904	ppb	96
55)	Bromobenzene	19.19	156	392927	19.79886	ppb	100
56)	n-Propylbenzene	19.18	91	1581585	19.90176	ppb	100
57)	2-Chlorotoluene	19.46	91	1114636	20.17841	ppb	98
58)	1,3,5-Trimethylbenzene	19.46	105	1171350	19.37997	ppb	97
59)	4-Chlorotoluene	19.55	91	977164	19.22600	ppb	99
60)	Tert-Butylbenzene	20.11	119	1196261	19.65598	ppb	97
61)	1,2,4-Trimethylbenzene	20.16	105	1167582	19.93740	ppb	96
62)	Sec-Butylbenzene	20.49	105	1520656	19.63302	ppb	99
63)	p-Isopropyltoluene	20.73	119	1247694	19.76321	ppb	99
64)	1,3-DCB	20.85	146	691698	19.80329	ppb	97
65)	1,4-DCB	21.02	146	689766	19.02086	ppb	97
66)	n-Butylbenzene	21.47	91	983156	20.38401	ppb	99
67)	1,2-DCB	21.69	146	631048	19.08455	ppb	99
68)	1,2-Dibromo-3-chloropropan	22.98	157	52269	21.71899	ppb	90
69)	1,2,4-Trichlorobenzene	24.41	180	374208	19.99212	ppb	97
70)	Hexachlorobutadiene	24.66	223	78835	18.67893	ppb	96
71)	Naphthalene	24.74	128	758364	22.46566	ppb	100
72)	1,2,3-Trichlorobenzene	25.10	180	333886	19.92910	ppb	100

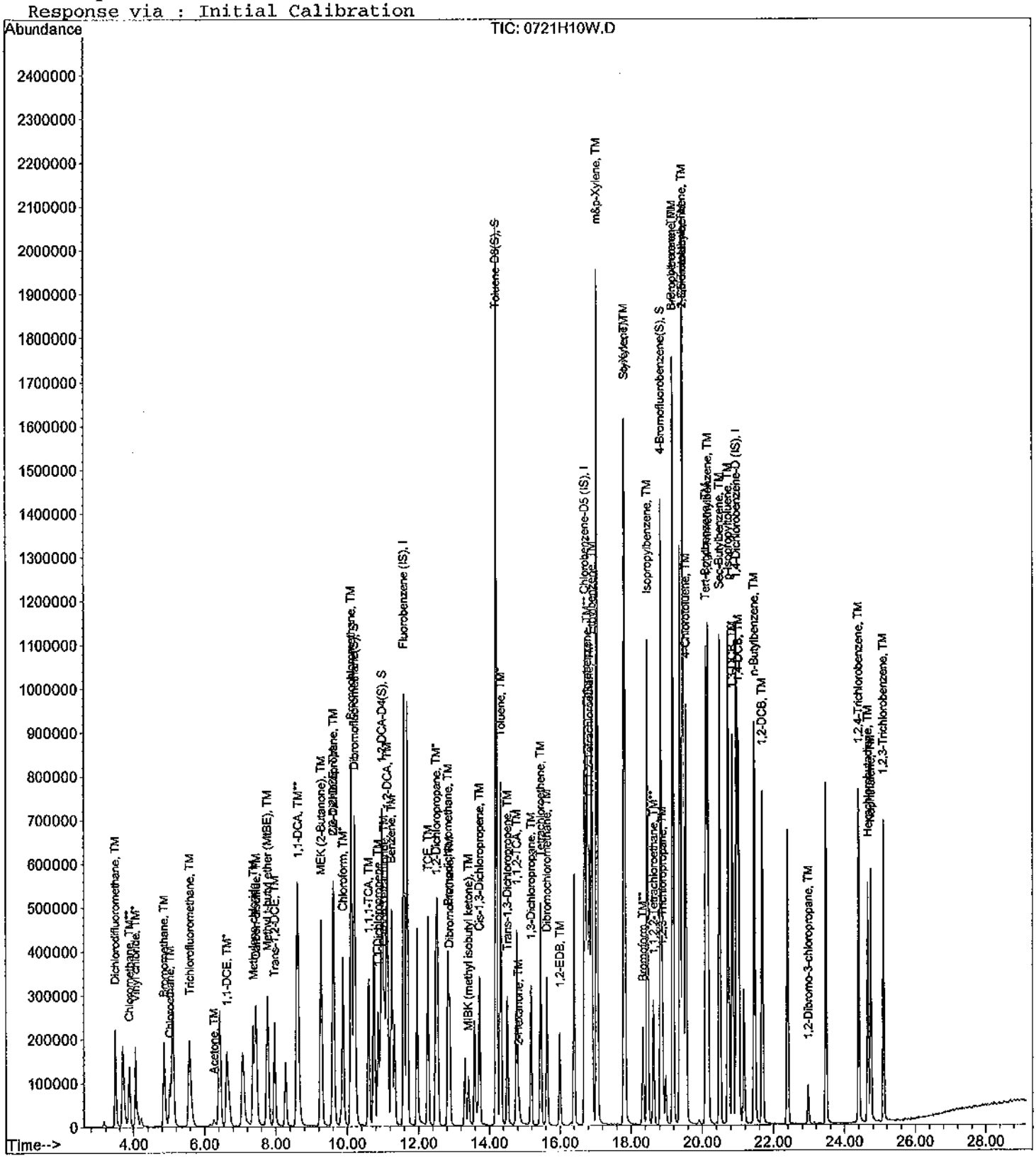
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H10W.D Vial: 10
Acq On : 21 Jul 11 15:35 Operator: SV
Sample : Vol Std 07-21-11@20ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H11W.D Vial: 11
Acq On : 21 Jul 11 16:11 Operator: SV
Sample : Vol Std 07-21-11@40ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.59	96	558863	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.71	117	465216	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.97	152	235264	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.21	111	1561787	73.53635 ppb		0.00
Spiked Amount 21.666			Recovery = 339.407%			
23) 1,2-DCA-D4(S)	10.99	65	1386296	72.19893 ppb		0.00
Spiked Amount 20.215			Recovery = 357.156%			
36) Toluene-D8(S)	14.20	98	4474760	72.80515 ppb		0.00
Spiked Amount 23.814			Recovery = 305.724%			
43) 4-Bromofluorobenzene(S)	18.84	95	1778665	72.80497 ppb		0.00
Spiked Amount 23.932			Recovery = 304.216%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	851352	44.08624 ppb		99
3) Chloromethane	3.88	50	672564	43.92027 ppb		99
4) Vinyl chloride	4.06	62	392047	30.69090 ppb		98
5) Bromomethane	4.86	94	659443	49.33119 ppb		95
6) Chloroethane	5.02	64	372200	40.31263 ppb		93
7) Trichlorofluoromethane	5.59	101	983646	39.49274 ppb		95
8) Acetone	6.26	43	114827	37.88323 ppb		99
9) 1,1-DCE	6.63	61	462181	38.97692 ppb		98
10) Methylene chloride	7.37	84	420309	39.31917 ppb		91
11) Carbon disulfide	7.45	76	1605219	38.86843 ppb		97
12) Methyl t-butyl ether (MtBE	7.77	73	1281692	37.58324 ppb		97
13) Trans-1,2-DCE	7.97	96	380321	35.11746 ppb		99
14) 1,1-DCA	8.63	63	728142	37.59438 ppb		98
15) MEK (2-Butanone)	9.26	43	307218	40.15457 ppb		94
16) Cis-1,2-DCE	9.62	96	575367	35.28533 ppb		95
17) 2,2-Dichloropropane	9.60	77	755184	37.52599 ppb		98
18) Chloroform	9.88	83	1014904	36.93860 ppb		98
19) Bromochloromethane	10.10	128	232018	34.82085 ppb		99
21) 1,1,1-TCA	10.60	97	841391	38.06107 ppb		99
22) 1,1-Dichloropropene	10.86	75	498215	37.19674 ppb		97
24) Carbon Tetrachloride	11.05	117	628609	38.22194 ppb		97
25) 1,2-DCA	11.13	62	647570	36.09532 ppb		97
26) Benzene	11.25	78	1499385	36.01391 ppb		98
27) TCE	12.27	95	504561	36.67851 ppb		97
28) 1,2-Dichloropropane	12.49	63	400301	36.82733 ppb		100
29) Bromodichloromethane	12.84	83	837569	39.89562 ppb		98
30) Dibromomethane	12.89	93	333716	37.72357 ppb		91
31) Cis-1,3-Dichloropropene	13.72	75	785475	41.29589 ppb		100
32) Toluene	14.33	92	1264361	38.86983 ppb		96
33) Trans-1,3-Dichloropropene	14.51	77	224354	43.27293 ppb		93
34) 1,1,2-TCA	14.77	83	363477	38.69164 ppb		93
37) 1,2-EDB	16.00	107	519493	40.49772 ppb	#	96
38) Tetrachloroethene	15.47	164	435221	38.51231 ppb		96
39) 1,1,1,2-Tetrachloroethane	16.84	131	689621	39.39385 ppb		100
40) m&p-Xylene	17.05	106	2213061	75.89891 ppb		99
41) o-Xylene	17.81	106	1157468	38.34774 ppb		98
42) Styrene	17.83	104	2026225	39.98334 ppb		93
44) 2-Hexanone	14.82	43	188677	35.53317 ppb		93
45) 1,3-Dichloropropane	15.19	76	708340	39.01520 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H11W.D Vial: 11
Acq On : 21 Jul 11 16:11 Operator: SV
Sample : Vol Std 07-21-11@40ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Dibromochloromethane	15.64	129	636314	41.40559	ppb	100
47)	Chlorobenzene	16.78	112	1765577	36.79649	ppb	99
48)	Ethylbenzene	16.90	91	2638593	37.98106	ppb	99
49)	Bromoform	18.34	173	383080	37.68406	ppb	98
51)	MIBK (methyl isobutyl keto	13.42	43	299727	37.33336	ppb	96
52)	Isopropylbenzene	18.46	105	2849221	35.46608	ppb	98
53)	1,1,2,2-Tetrachloroethane	18.63	83	513876	36.57612	ppb	94
54)	1,2,3-Trichloropropane	18.88	110	180291	36.42182	ppb	97
55)	Bromobenzene	19.19	156	816855	37.01696	ppb	100
56)	n-Propylbenzene	19.18	91	3344002	37.84364	ppb	98
57)	2-Chlorotoluene	19.46	91	2213474	36.03758	ppb	100
58)	1,3,5-Trimethylbenzene	19.46	105	2375020	35.33956	ppb	97
59)	4-Chlorotoluene	19.55	91	2017725	35.70351	ppb	99
60)	Tert-Butylbenzene	20.11	119	2594353	38.33763	ppb	99
61)	1,2,4-Trimethylbenzene	20.16	105	2456899	37.73077	ppb	97
62)	Sec-Butylbenzene	20.49	105	3414843	39.65102	ppb	99
63)	p-Isopropyltoluene	20.73	119	2711952	38.63303	ppb	99
64)	1,3-DCB	20.85	146	1464494	37.70819	ppb	99
65)	1,4-DCB	21.02	146	1496275	37.10796	ppb	98
66)	n-Butylbenzene	21.47	91	2214073	41.28445	ppb	98
67)	1,2-DCB	21.69	146	1373279	37.35129	ppb	99
68)	1,2-Dibromo-3-chloropropan	22.98	157	111571	41.69406	ppb	84
69)	1,2,4-Trichlorobenzene	24.40	180	831350	39.94451	ppb	97
70)	Hexachlorobutadiene	24.66	223	174611	37.20762	ppb	99
71)	Naphthalene	24.74	128	1702585	45.36048	ppb	99
72)	1,2,3-Trichlorobenzene	25.10	180	721140	38.71119	ppb	98

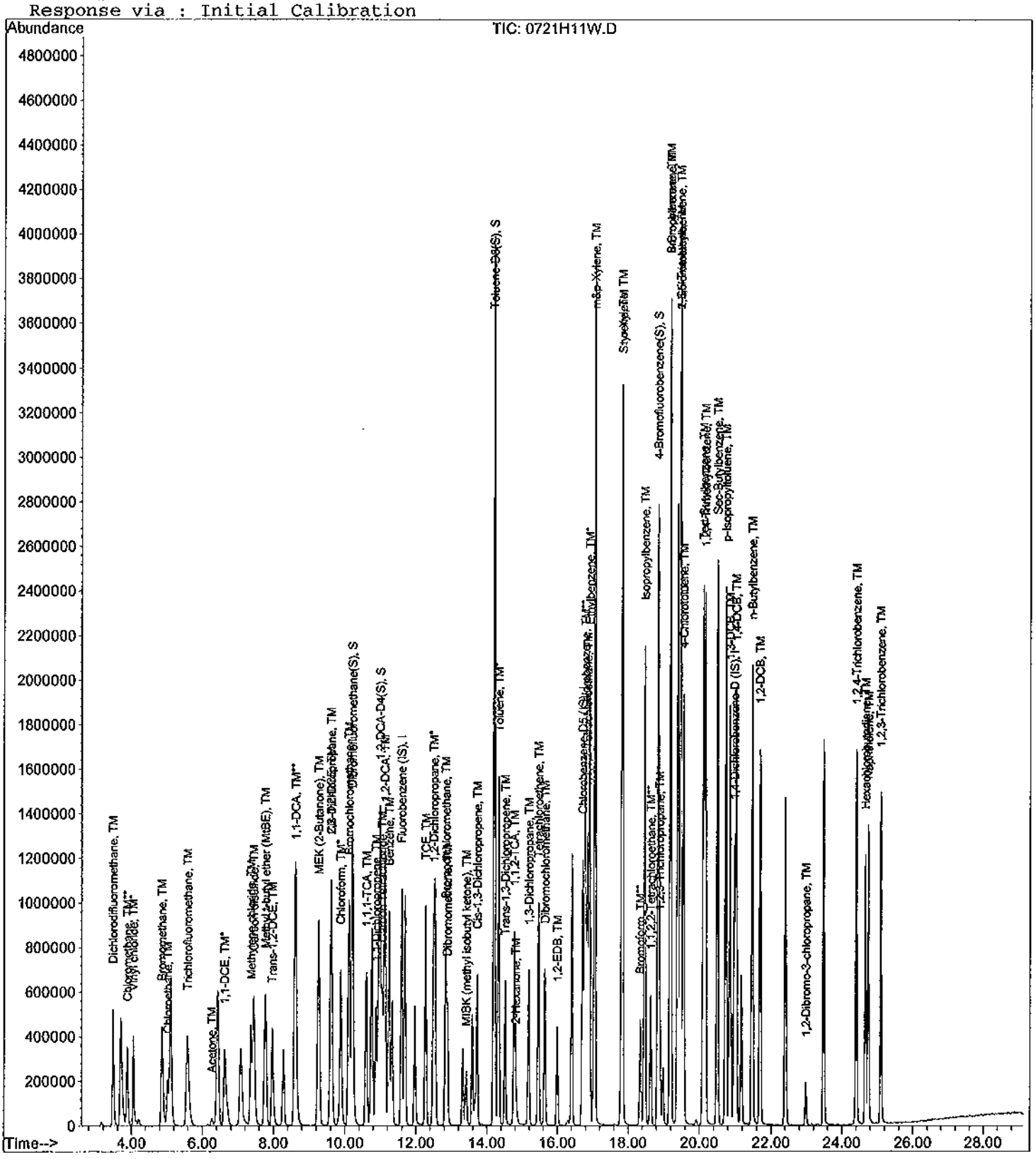
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H11W.D Vial: 11
Acq On : 21 Jul 11 16:11 Operator: SV
Sample : Vol Std 07-21-11@40ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H12W.D Vial: 12
Acq On : 21 Jul 11 16:48 Operator: SV
Sample : Vol Std 07-21-11@100ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.59	96	615360	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.71	117	486080	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.97	152	221504	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.21	111	2144548	91.70482 ppb		0.01
Spiked Amount 21.666			Recovery = 423.267%			
23) 1,2-DCA-D4(S)	10.99	65	1830339	86.57299 ppb		0.00
Spiked Amount 20.215			Recovery = 428.261%			
36) Toluene-D8(S)	14.20	98	6395047	99.58249 ppb		0.00
Spiked Amount 23.814			Recovery = 418.166%			
43) 4-Bromofluorobenzene(S)	18.84	95	2473915	96.91668 ppb		0.00
Spiked Amount 23.932			Recovery = 404.968%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	1047019	49.24074 ppb		98
3) Chloromethane	3.88	50	899083	53.32210 ppb		97
4) Vinyl chloride	4.05	62	511944	36.39737 ppb		99
5) Bromomethane	4.85	94	1206446	81.71042 ppb		92
6) Chloroethane	5.02	64	501063	49.28709 ppb		93
7) Trichlorofluoromethane	5.57	101	1319337	48.10722 ppb		99
8) Acetone	6.26	43	333329	100.92878 ppb		92
9) 1,1-DCE	6.63	61	1255279	96.14170 ppb		94
10) Methylene chloride	7.36	84	1163957	100.00015 ppb		93
11) Carbon disulfide	7.44	76	4855499	106.77576 ppb		97
12) Methyl t-butyl ether (MtBE	7.78	73	3608611	96.10074 ppb		99
13) Trans-1,2-DCE	7.97	96	1104172	92.59458 ppb		97
14) 1,1-DCA	8.63	63	2082831	97.66454 ppb		99
15) MEK (2-Butanone)	9.26	43	856022	101.61302 ppb		98
16) Cis-1,2-DCE	9.62	96	1672613	93.15814 ppb		96
17) 2,2-Dichloropropane	9.61	77	2002565	90.37370 ppb		95
18) Chloroform	9.88	83	2784393	92.03693 ppb		99
19) Bromochloromethane	10.10	128	620537	84.57878 ppb		95
21) 1,1,1-TCA	10.60	97	2263336	92.98401 ppb		98
22) 1,1-Dichloropropene	10.87	75	1391289	94.33688 ppb		98
24) Carbon Tetrachloride	11.05	117	1670462	92.24542 ppb		96
25) 1,2-DCA	11.14	62	1706643	86.39388 ppb		94
26) Benzene	11.24	78	4431890	96.67677 ppb		99
27) TCE	12.26	95	1401188	92.50613 ppb		95
28) 1,2-Dichloropropane	12.49	63	1146554	95.79751 ppb		100
29) Bromodichloromethane	12.83	83	2274478	98.39261 ppb		99
30) Dibromomethane	12.89	93	766819	78.72356 ppb		90
31) Cis-1,3-Dichloropropene	13.72	75	2229298	106.44339 ppb		98
32) Toluene	14.33	92	3620718	101.09096 ppb		98
33) Trans-1,3-Dichloropropene	14.52	77	654693	114.68226 ppb		96
34) 1,1,2-TCA	14.78	83	1025898	99.17918 ppb		98
37) 1,2-EDB	15.99	107	1451516	108.29779 ppb		97
38) Tetrachloroethene	15.46	164	1174696	99.48602 ppb		97
39) 1,1,1,2-Tetrachloroethane	16.84	131	1820526	99.53177 ppb		100
40) m&p-Xylene	17.05	106	6182520	202.93388 ppb		100
41) o-Xylene	17.81	106	3207971	101.72042 ppb		100
42) Styrene	17.83	104	5625244	106.23793 ppb		94
44) 2-Hexanone	14.82	43	617015	101.71407 ppb	#	89
45) 1,3-Dichloropropane	15.19	76	2002583	105.56732 ppb		100

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H12W.D Vial: 12
Acq On : 21 Jul 11 16:48 Operator: SV
Sample : Vol Std 07-21-11@100ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
46) Dibromochloromethane	15.63	129	1730894	107.79654 ppb	97
47) Chlorobenzene	16.78	112	4943019	98.59590 ppb	98
48) Ethylbenzene	16.90	91	7304200	100.62693 ppb	99
49) Bromoform	18.34	173	1091246	101.01776 ppb	95
51) MIBK (methyl isobutyl keto	13.41	43	924233	122.27187 ppb	98
52) Isopropylbenzene	18.46	105	8194556	108.33938 ppb	98
53) 1,1,2,2-Tetrachloroethane	18.63	83	1425621	107.77483 ppb	96
54) 1,2,3-Trichloropropane	18.89	110	479143	102.80795 ppb	93
55) Bromobenzene	19.19	156	2121667	102.11907 ppb	96
56) n-Propylbenzene	19.19	91	8850230	106.37873 ppb	100
57) 2-Chlorotoluene	19.46	91	5887029	101.80082 ppb	100
58) 1,3,5-Trimethylbenzene	19.46	105	6307799	99.68863 ppb	98
59) 4-Chlorotoluene	19.55	91	5370217	100.92869 ppb	99
60) Tert-Butylbenzene	20.11	119	6755614	106.03151 ppb	97
61) 1,2,4-Trimethylbenzene	20.17	105	6561164	107.01957 ppb	96
62) Sec-Butylbenzene	20.49	105	8618366	106.28755 ppb	99
63) p-Isopropyltoluene	20.74	119	7212981	109.13535 ppb	98
64) 1,3-DCB	20.85	146	3757680	102.76419 ppb	99
65) 1,4-DCB	21.02	146	3775146	99.44050 ppb	98
66) n-Butylbenzene	21.47	91	5758710	114.04957 ppb	97
67) 1,2-DCB	21.69	146	3519538	101.67319 ppb	99
68) 1,2-Dibromo-3-chloropropan	22.98	157	296215	117.57197 ppb	91
69) 1,2,4-Trichlorobenzene	24.40	180	2095008	106.91356 ppb	99
70) Hexachlorobutadiene	24.66	223	425618	96.32837 ppb	98
71) Naphthalene	24.74	128	4568171	129.26623 ppb	100
72) 1,2,3-Trichlorobenzene	25.10	180	1792011	102.17190 ppb	100

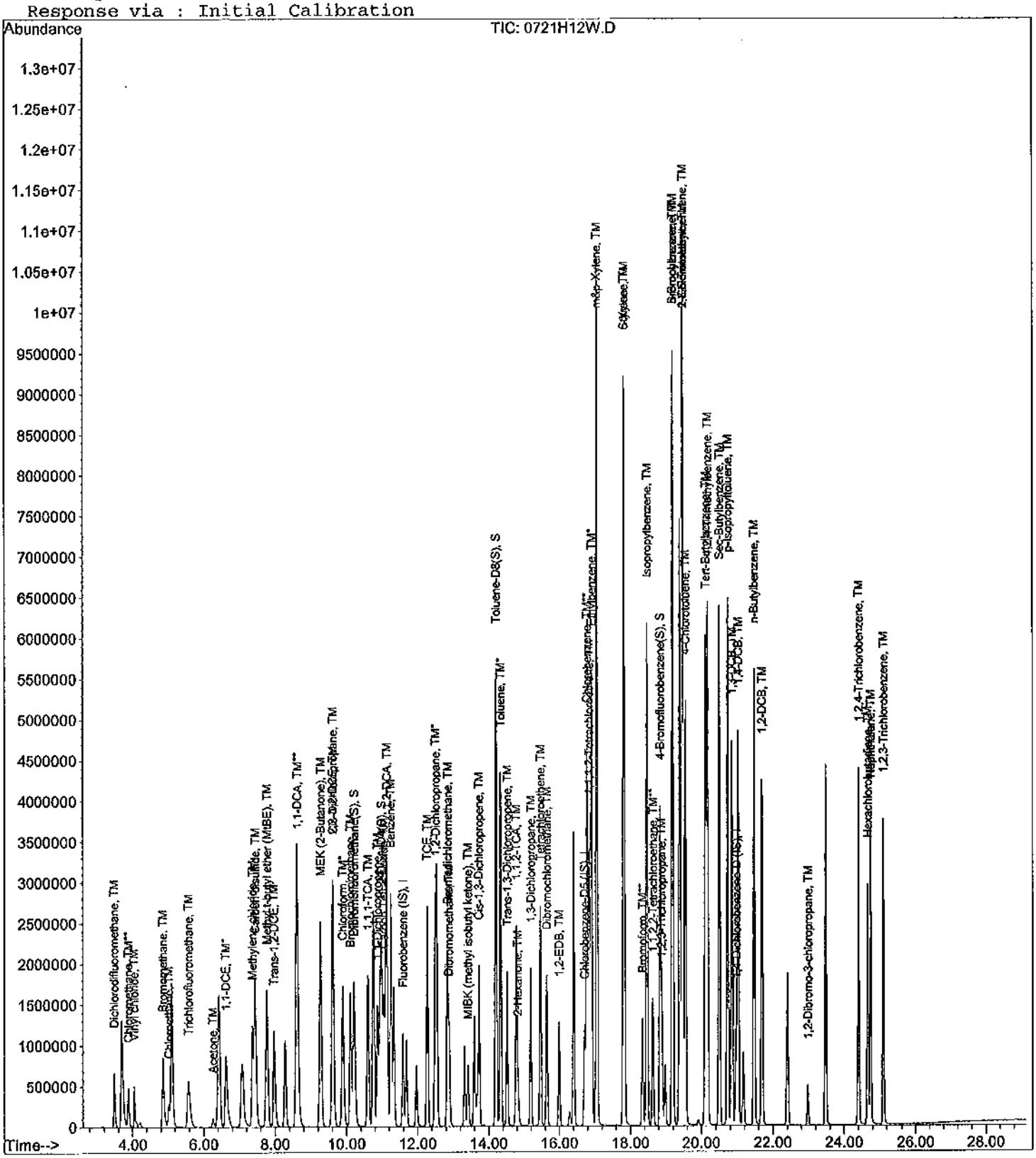
(#) = qualifier out of range (m) = manual integration

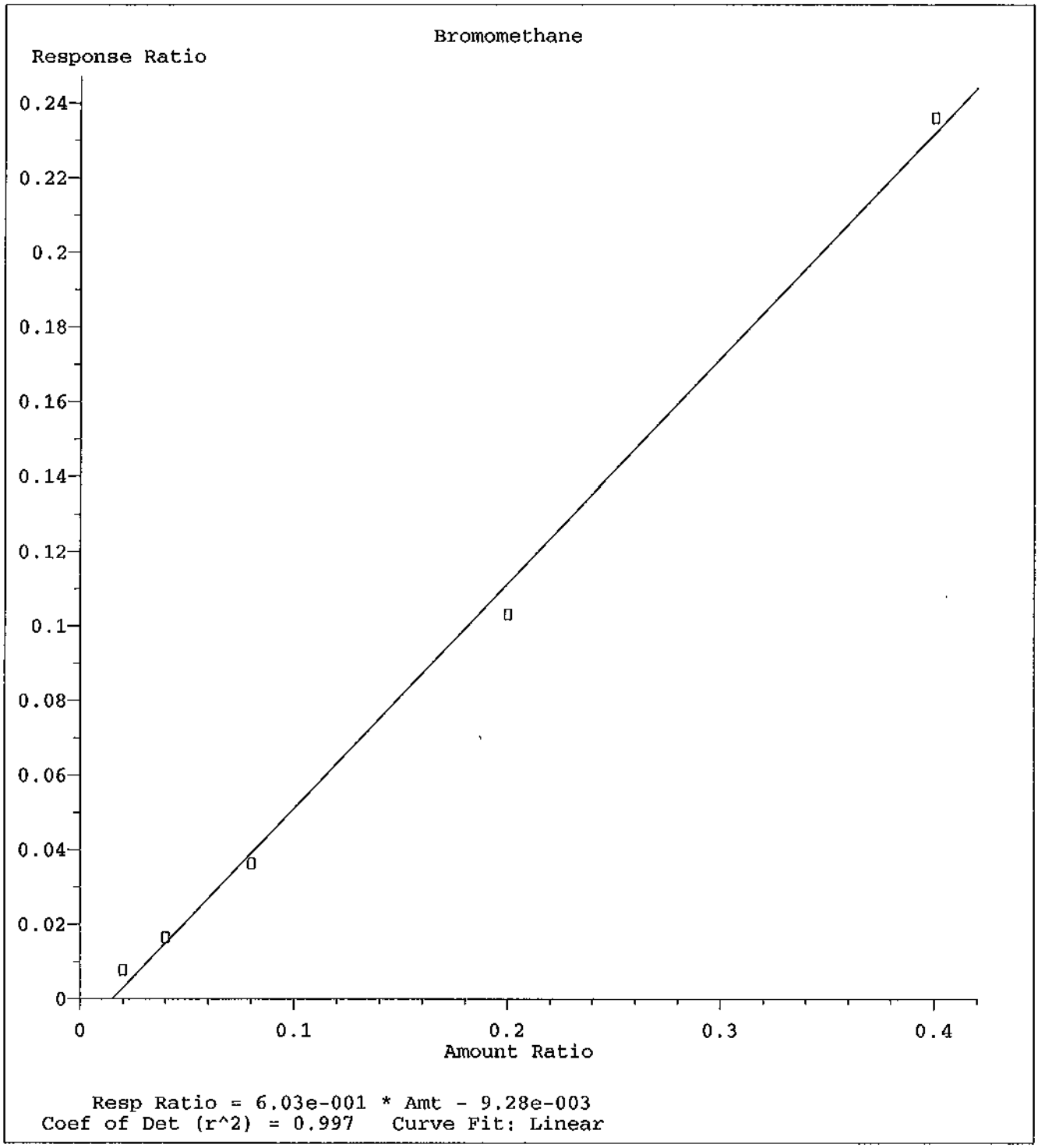
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H12W.D Vial: 12
Acq On : 21 Jul 11 16:48 Operator: SV
Sample : Vol Std 07-21-11@100ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

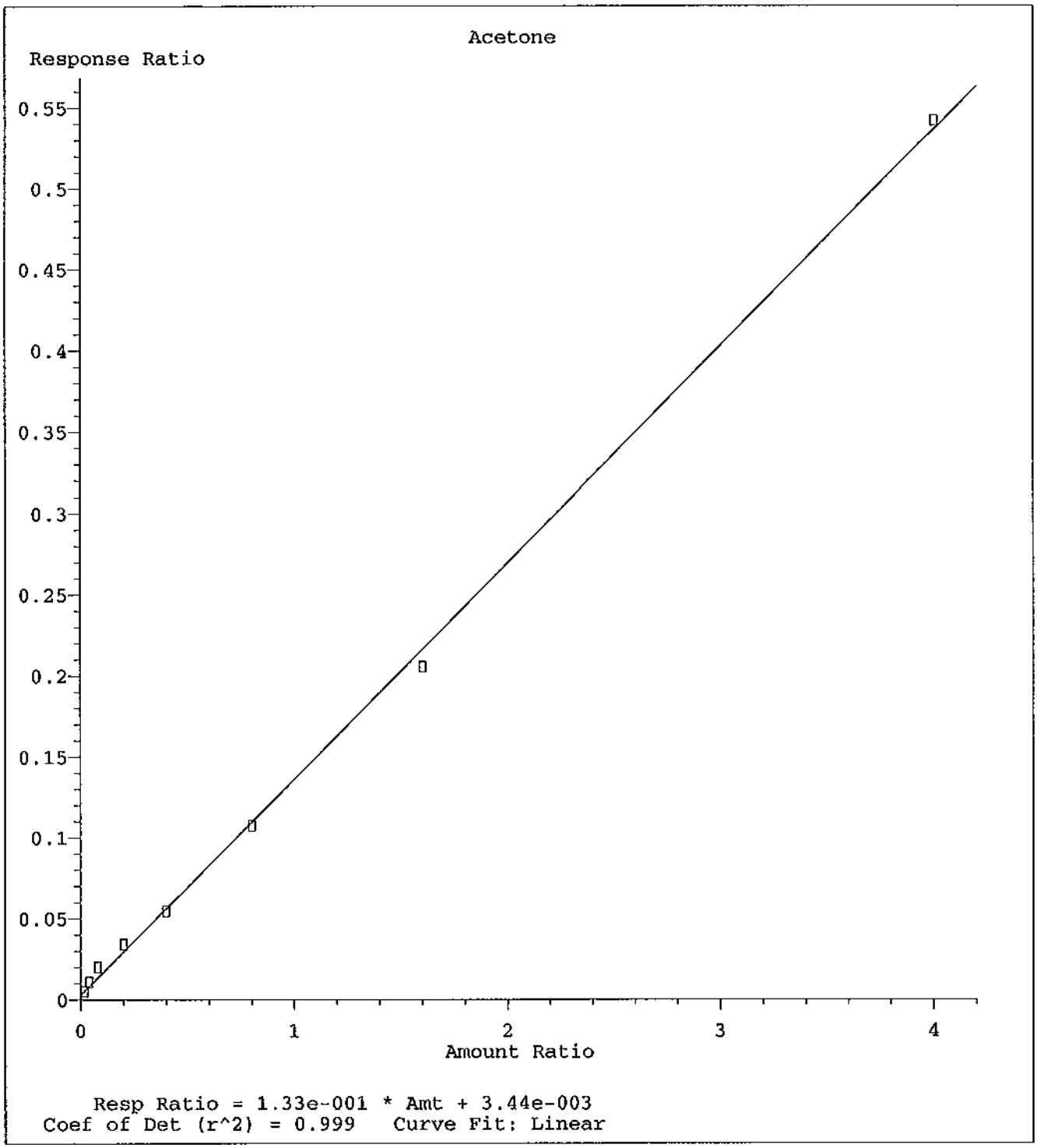
Quant Time: Jul 25 10:45 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration

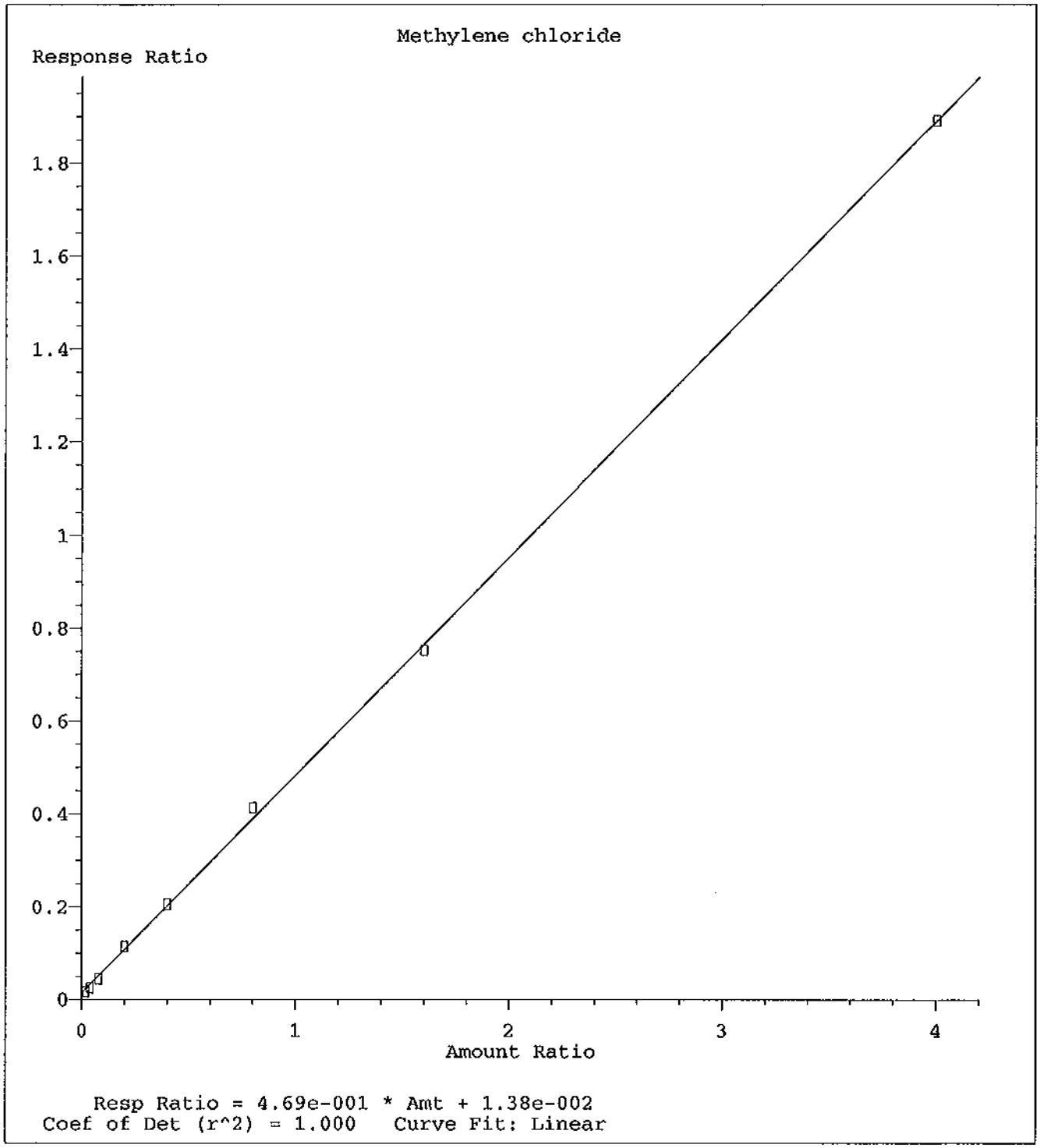




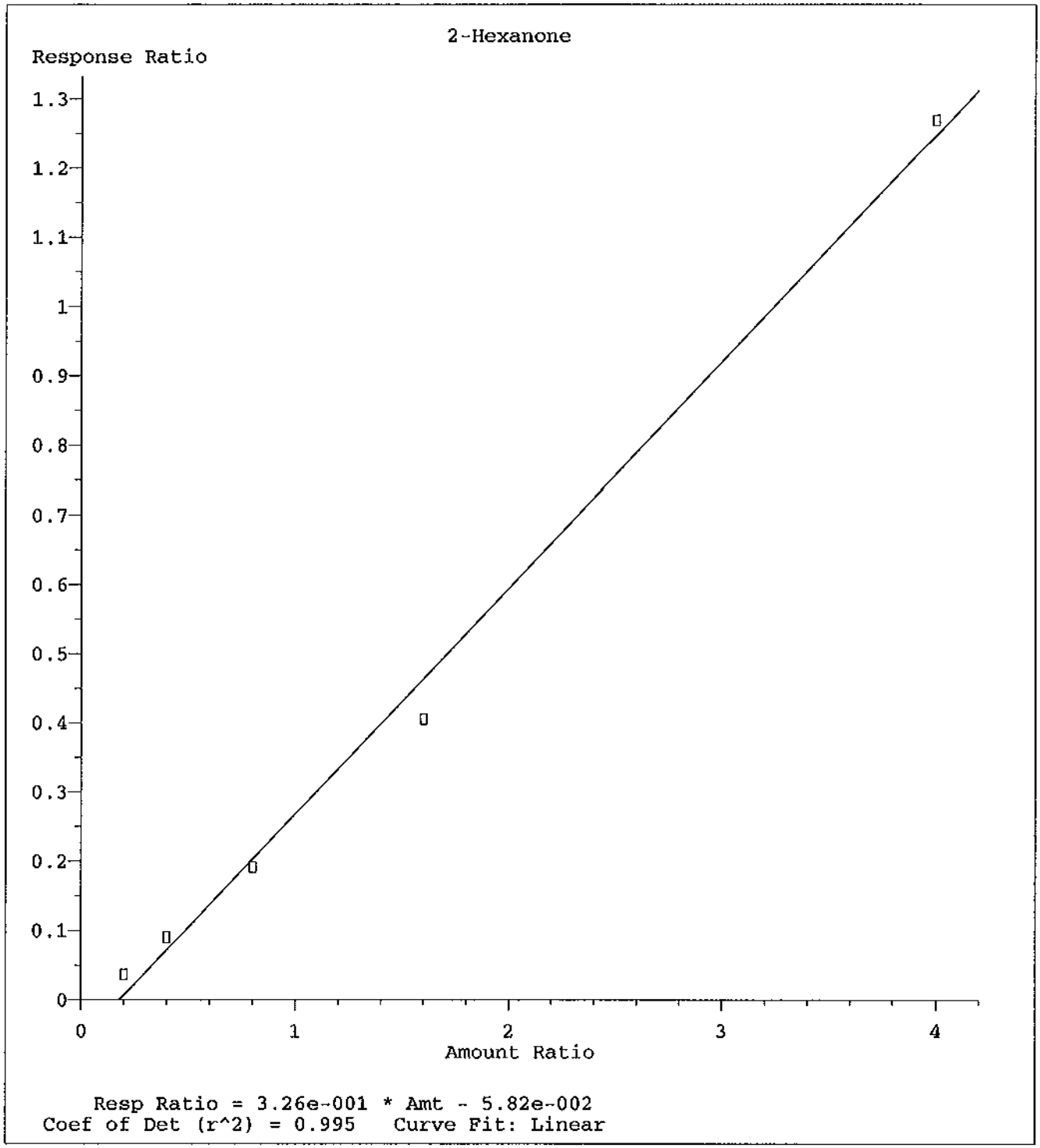
Method Name: M:\HEWEY\DATA\H110721\H86SHW.M
Calibration Table Last Updated: Mon Jul 25 10:44:06 2011



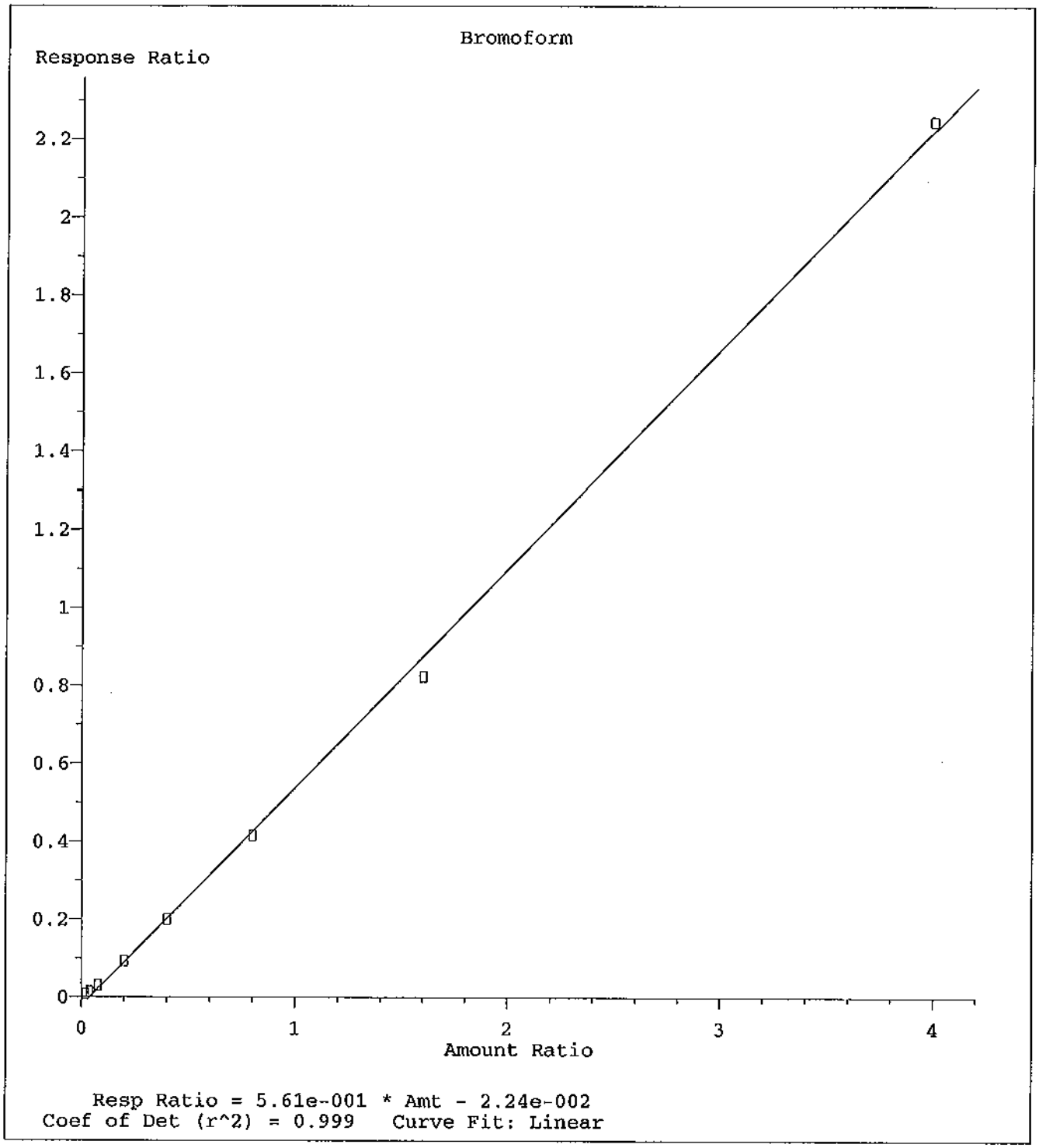
Method Name: M:\HEWEY\DATA\H110721\H86SHW.M
Calibration Table Last Updated: Mon Jul 25 10:44:06 2011



Method Name: M:\HEWEY\DATA\H110721\H86SHW.M
Calibration Table Last Updated: Mon Jul 25 10:44:06 2011



Method Name: M:\HEWEY\DATA\H110721\H86SHW.M
Calibration Table Last Updated: Mon Jul 25 10:44:06 2011



Method Name: M:\HEWEY\DATA\H110721\H86SHW.M
Calibration Table Last Updated: Mon Jul 25 10:44:06 2011

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/24/11
Instrument: Hewey
Initial Cal. Date: 07/21/11
Data File: 0724H03W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.8639	0.8335	3.5	TM	
3	TM**	Chloromethane	0.6850	0.5926	13	TM**	
4	TM*	Vinyl chloride	0.5714	0.5385	5.8	TM*	
5	TML	Bromomethane	0.4721	0.5105	8.1	TML	11
6	TM	Chloroethane	0.4130	0.3856	6.6	TM	
7	TM	Trichlorofluoromethane	1.114	1.173	5.3	TM	
8	TML	Acetone	0.1863	0.1257	33	TML	12
9	TM*	1,1-DCE	0.5304	0.5071	4.4	TM*	
10	TML	Methylene chloride	0.5701	0.4844	15	TML	4.2
11	TM	Carbon disulfide	1.847	1.673	9.5	TM	
12	TM	Methyl t-butyl ether (MtBE)	1.526	1.474	3.4	TM	
13	TM	Trans-1,2-DCE	0.4845	0.4433	8.5	TM	
14	TM**	1,1-DCA	0.8664	0.8449	2.5	TM**	
15	TM	MEK (2-Butanone)	0.3423	0.3411	0.34	TM	
16	TM	Cis-1,2-DCE	0.7294	0.6735	7.7	TM	
17	TM	2,2-Dichloropropane	0.9002	0.8811	2.1	TM	
18	TM*	Chloroform	1.229	1.220	0.76	TM*	
19	TM	Bromochloromethane	0.2981	0.2894	2.9	TM	
20	S	Dibromofluoromethane(S)	0.9501	1.008	6.1	S	
21	TM	1,1,1-TCA	0.9889	1.027	3.8	TM	
22	TM	1,1-Dichloropropene	0.5992	0.5877	1.9	TM	
23	S	1,2-DCA-D4(S)	0.8589	0.9430	9.8	S	
24	TM	Carbon Tetrachloride	0.7357	0.7624	3.6	TM	
25	TM	1,2-DCA	0.8025	0.7780	3.1	TM	
26	TM	Benzene	1.862	1.834	1.5	TM	
27	TM	TCE	0.6154	0.6075	1.3	TM	
28	TM*	1,2-Dichloropropane	0.4862	0.4836	0.53	TM*	
29	TM	Bromodichloromethane	0.9391	0.9547	1.7	TM	
30	TM	Dibromomethane	0.3957	0.3934	0.60	TM	
31	TM	Cis-1,3-Dichloropropene	0.8509	0.8624	1.4	TM	
32	TM*	Toluene	1.455	1.454	0.09	TM*	
33	TM	Trans-1,3-Dichloropropene	0.2319	0.2152	7.2	TM	
34	TM	1,1,2-TCA	0.4202	0.4182	0.48	TM	
35	I	Chlorobenzene-D5 (IS)	ISTD			I	
36	S	Toluene-D8(S)	3.303	3.160	4.3	S	
37	TM	1,2-EDB	0.6893	0.6304	8.6	TM	
38	TM	Tetrachloroethene	0.6073	0.6060	0.22	TM	
39	TM	1,1,1,2-Tetrachloroethane	0.9407	0.9082	3.5	TM	
40	TM	m&p-Xylene	1.567	1.496	4.5	TM	
		Average			5.2		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/24/11
Instrument: Hewey
Cal. Date: 07/21/11
Data File: 0724H03W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	o-Xylene	1.622	1.600	1.4	TM	
42	TM	Styrene	2.723	2.705	0.69	TM	
43	S	4-Bromofluorobenzene(S)	1.313	1.270	3.2	S	
44	TML	2-Hexanone	0.2437	0.1714	30	TML	2.9
45	TM	1,3-Dichloropropane	0.9756	0.9474	2.9	TM	
46	TM	Dibromochloromethane	0.8258	0.7935	3.9	TM	
47	TM**	Chlorobenzene	2.578	2.398	7.0	TM**	
48	TM*	Ethylbenzene	3.733	3.534	5.3	TM*	
49	TM**L	Bromoform	0.4605	0.4229	8.2	TM**L	15
50	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
51	TM	MIBK (methyl isobutyl ketone)	0.8531	0.7226	15	TM	
52	TM	Isopropylbenzene	8.537	8.178	4.2	TM	
53	TM**	1,1,2,2-Tetrachloroethane	1.493	1.375	7.9	TM**	
54	TM	1,2,3-Trichloropropane	0.5260	0.4950	5.9	TM	
55	TM	Bromobenzene	2.345	2.230	4.9	TM	
56	TM	n-Propylbenzene	9.390	8.919	5.0	TM	
57	TM	2-Chlorotoluene	6.527	6.410	1.8	TM	
58	TM	1,3,5-Trimethylbenzene	7.142	6.657	6.8	TM	
59	TM	4-Chlorotoluene	6.005	5.506	8.3	TM	
60	TM	Tert-Butylbenzene	7.191	7.058	1.9	TM	
61	TM	1,2,4-Trimethylbenzene	6.920	6.840	1.1	TM	
62	TM	Sec-Butylbenzene	9.152	8.863	3.2	TM	
63	TM	p-Isopropyltoluene	7.459	7.154	4.1	TM	
64	TM	1,3-DCB	4.127	3.883	5.9	TM	
65	TM	1,4-DCB	4.285	3.987	7.0	TM	
66	TM	n-Butylbenzene	5.699	5.592	1.9	TM	
67	TM	1,2-DCB	3.907	3.626	7.2	TM	
68	TM	1,2-Dibromo-3-chloropropane	0.2844	0.2436	14	TM	
69	TM	1,2,4-Trichlorobenzene	2.212	2.012	9.0	TM	
70	TM	Hexachlorobutadiene	0.4987	0.4491	9.9	TM	
71	TM	Naphthalene	3.989	3.834	3.9	TM	
72	TM	1,2,3-Trichlorobenzene	1.980	1.762	11	TM	
73							
74							
75							
76							
77							
78							
79							
80							
		Average			6.5		

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	11.57	96	535936	25.00000	ppb		-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	455744	25.00000	ppb		-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	219520	25.00000	ppb		-0.02
System Monitoring Compounds							
20) Dibromofluoromethane(S)	10.18	111	468050	22.98079	ppb		-0.02
Spiked Amount 21.666			Recovery = 106.069%				
23) 1,2-DCA-D4(S)	10.97	65	408638	22.19249	ppb		0.00
Spiked Amount 20.215			Recovery = 109.780%				
36) Toluene-D8(S)	14.18	98	1372013	22.78685	ppb		-0.02
Spiked Amount 23.814			Recovery = 95.687%				
43) 4-Bromofluorobenzene(S)	18.82	95	554172	23.15502	ppb		-0.02
Spiked Amount 23.932			Recovery = 96.753%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.46	85	178687	9.64893	ppb		99
3) Chloromethane	3.87	50	127036	8.65069	ppb		100
4) Vinyl chloride	4.06	62	115442	9.42384	ppb		99
5) Bromomethane	4.84	94	109434	8.85488	ppb		92
6) Chloroethane	5.01	64	82663	9.33616	ppb		100
7) Trichlorofluoromethane	5.56	101	251556	10.53187	ppb		98
8) Acetone	6.25	43	26945	8.78298	ppb	#	80
9) 1,1-DCE	6.62	61	108704	9.55946	ppb		97
10) Methylene chloride	7.35	84	103834	9.58462	ppb		93
11) Carbon disulfide	7.42	76	358542	9.05305	ppb		95
12) Methyl t-butyl ether (MtBE	7.76	73	316005	9.66267	ppb		99
13) Trans-1,2-DCE	7.95	96	95031	9.15020	ppb		95
14) 1,1-DCA	8.61	63	181135	9.75218	ppb		99
15) MEK (2-Butanone)	9.26	43	73120	9.96591	ppb	#	89
16) Cis-1,2-DCE	9.60	96	144380	9.23312	ppb		99
17) 2,2-Dichloropropane	9.59	77	188889	9.78765	ppb		93
18) Chloroform	9.87	83	261477	9.92388	ppb		99
19) Bromochloromethane	10.09	128	62033	9.70807	ppb		96
21) 1,1,1-TCA	10.58	97	220105	10.38258	ppb		95
22) 1,1-Dichloropropene	10.85	75	125980	9.80804	ppb		98
24) Carbon Tetrachloride	11.03	117	163430	10.36230	ppb		99
25) 1,2-DCA	11.12	62	166781	9.69400	ppb		100
26) Benzene	11.22	78	393126	9.84649	ppb		97
27) TCE	12.24	95	130228	9.87176	ppb		91
28) 1,2-Dichloropropane	12.47	63	103682	9.94671	ppb		99
29) Bromodichloromethane	12.81	83	204665	10.16578	ppb		98
30) Dibromomethane	12.86	93	84328	9.94031	ppb		95
31) Cis-1,3-Dichloropropene	13.71	75	184881	10.13583	ppb		100
32) Toluene	14.31	92	311645	9.99066	ppb		95
33) Trans-1,3-Dichloropropene	14.50	77	46143	9.28070	ppb		81
34) 1,1,2-TCA	14.76	83	89659	9.95237	ppb		95
37) 1,2-EDB	15.97	107	114916	9.14461	ppb	#	97
38) Tetrachloroethene	15.44	164	110468	9.97838	ppb		99
39) 1,1,1,2-Tetrachloroethane	16.82	131	165559	9.65394	ppb		98
40) m&p-Xylene	17.03	106	545468	19.09612	ppb		100
41) o-Xylene	17.79	106	291593	9.86147	ppb		97
42) Styrene	17.82	104	493029	9.93110	ppb		95
44) 2-Hexanone	14.83	43	31246	9.71297	ppb		96
45) 1,3-Dichloropropane	15.17	76	172710	9.71054	ppb		98

Algorithm Check: $\frac{(178687)(25)}{(535936)(0.863855)}$ Cl) = 9.648930635 ✓

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Dibromochloromethane	15.61	129	144654	9.60841	ppb	95
47)	Chlorobenzene	16.76	112	437126	9.29951	ppb	96
48)	Ethylbenzene	16.88	91	644254	9.46641	ppb	99
49)	Bromoform	18.32	173	77090	8.53354	ppb	93
51)	MIBK (methyl isobutyl keto	13.40	43	63450	8.47002	ppb	97
52)	Isopropylbenzene	18.44	105	718124	9.58005	ppb	99
53)	1,1,2,2-Tetrachloroethane	18.62	83	120746	9.21072	ppb	99
54)	1,2,3-Trichloropropane	18.88	110	43466	9.41063	ppb	85
55)	Bromobenzene	19.18	156	195797	9.50918	ppb	99
56)	n-Propylbenzene	19.17	91	783124	9.49813	ppb	97
57)	2-Chlorotoluene	19.45	91	562869	9.82132	ppb	98
58)	1,3,5-Trimethylbenzene	19.45	105	584526	9.32136	ppb	100
59)	4-Chlorotoluene	19.53	91	483444	9.16804	ppb	99
60)	Tert-Butylbenzene	20.09	119	619729	9.81475	ppb	99
61)	1,2,4-Trimethylbenzene	20.15	105	600617	9.88524	ppb	99
62)	Sec-Butylbenzene	20.48	105	778263	9.68482	ppb	98
63)	p-Isopropyltoluene	20.72	119	628196	9.59077	ppb	99
64)	1,3-DCB	20.83	146	340986	9.40949	ppb	99
65)	1,4-DCB	21.01	146	350062	9.30426	ppb	94
66)	n-Butylbenzene	21.45	91	491056	9.81312	ppb	98
67)	1,2-DCB	21.67	146	318367	9.28018	ppb	98
68)	1,2-Dibromo-3-chloropropan	22.97	157	21390	8.56673	ppb	91
69)	1,2,4-Trichlorobenzene	24.39	180	176666	9.09720	ppb	99
70)	Hexachlorobutadiene	24.64	223	39434	9.00560	ppb	96
71)	Naphthalene	24.73	128	336636	9.61193	ppb	100
72)	1,2,3-Trichlorobenzene	25.09	180	154749	8.90279	ppb	96

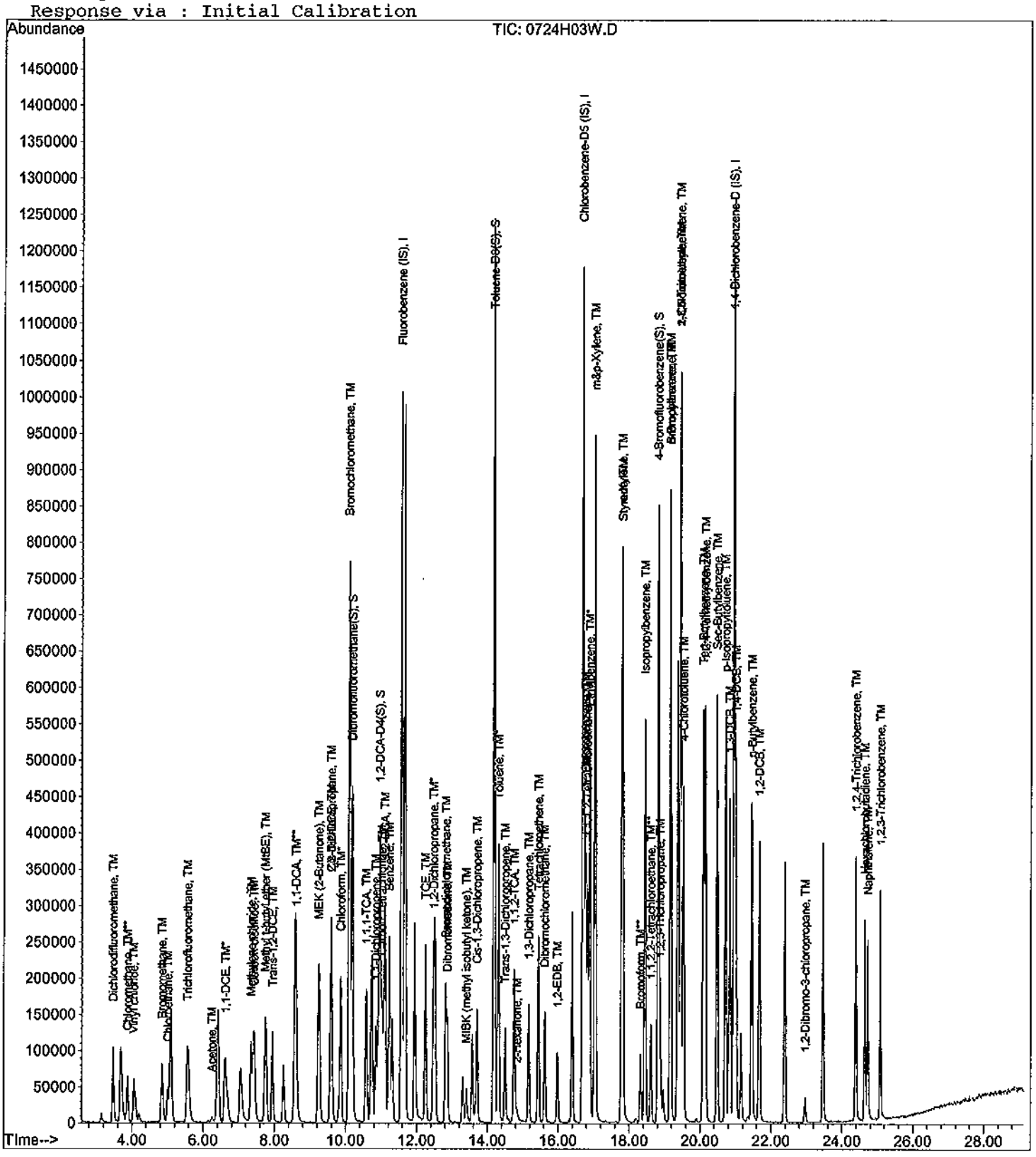
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/21/11
Instrument: Hewey
Initial Cal. Date: 07/21/11
Data File: 0721H16W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.8639	0.9357	8.3	TM	
3	TM**	Chloromethane	0.6850	0.6767	1.2	TM**	
4	TM*	Vinyl chloride	0.5714	0.5874	2.8	TM*	
5	TML	Bromomethane	0.4721	0.4848	2.7	TML	19
6	TM	Chloroethane	0.4130	0.4119	0.27	TM	
7	TM	Trichlorofluoromethane	1.114	1.137	2.0	TM	
8	TML	Acetone	0.1863	0.1280	31	TML	10
9	TM*	1,1-DCE	0.5304	0.5288	0.32	TM*	
10	TML	Methylene chloride	0.5701	0.5495	3.6	TML	9.7
11	TM	Carbon disulfide	1.847	1.892	2.4	TM	
12	TM	Methyl t-butyl ether (MtBE)	1.526	1.469	3.7	TM	
13	TM	Trans-1,2-DCE	0.4845	0.4787	1.2	TM	
14	TM**	1,1-DCA	0.8664	0.8862	2.3	TM**	
15	TM	MEK (2-Butanone)	0.3423	0.3439	0.48	TM	
16	TM	Cis-1,2-DCE	0.7294	0.7160	1.8	TM	
17	TM	2,2-Dichloropropane	0.9002	0.9316	3.5	TM	
18	TM*	Chloroform	1.229	1.230	0.11	TM*	
19	TM	Bromochloromethane	0.2981	0.2931	1.7	TM	
20	S	Dibromofluoromethane(S)	0.9501	0.9865	3.8	S	
21	TM	1,1,1-TCA	0.9889	0.9867	0.22	TM	
22	TM	1,1-Dichloropropene	0.5992	0.6271	4.7	TM	
23	S	1,2-DCA-D4(S)	0.8589	0.9483	10	S	
24	TM	Carbon Tetrachloride	0.7357	0.7347	0.14	TM	
25	TM	1,2-DCA	0.8025	0.7865	2.0	TM	
26	TM	Benzene	1.862	1.931	3.7	TM	
27	TM	TCE	0.6154	0.6160	0.11	TM	
28	TM*	1,2-Dichloropropane	0.4862	0.4932	1.4	TM*	
29	TM	Bromodichloromethane	0.9391	0.9358	0.36	TM	
30	TM	Dibromomethane	0.3957	0.3916	1.0	TM	
31	TM	Cis-1,3-Dichloropropene	0.8509	0.8658	1.8	TM	
32	TM*	Toluene	1.455	1.520	4.5	TM*	
33	TM	Trans-1,3-Dichloropropene	0.2319	0.2245	3.2	TM	
34	TM	1,1,2-TCA	0.4202	0.4161	0.98	TM	
35	I	Chlorobenzene-D5 (IS)	ISTD			I	
36	S	Toluene-D8(S)	3.303	3.528	6.8	S	
37	TM	1,2-EDB	0.6893	0.6694	2.9	TM	
38	TM	Tetrachloroethene	0.6073	0.6301	3.8	TM	
39	TM	1,1,1,2-Tetrachloroethane	0.9407	0.9158	2.7	TM	
40	TM	m&p-Xylene	1.567	1.637	4.5	TM	
		Average			3.4		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/21/11
Instrument: Hewey
Cal. Date: 07/21/11
Data File: 0721H16W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	o-Xylene	1.622	1.731	6.7	TM	
42	TM	Styrene	2.723	2.855	4.8	TM	
43	S	4-Bromofluorobenzene(S)	1.313	1.357	3.3	S	
44	TML	2-Hexanone	0.2437	0.1915	21	TML	13
45	TM	1,3-Dichloropropane	0.9756	1.004	2.9	TM	
46	TM	Dibromochloromethane	0.8258	0.8322	0.77	TM	
47	TM**	Chlorobenzene	2.578	2.623	1.7	TM**	
48	TM*	Ethylbenzene	3.733	3.883	4.0	TM*	
49	TM**L	Bromoform	0.4605	0.4640	0.75	TM**L	0.75
50	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
51	TM	MIBK (methyl isobutyl ketone)	0.8531	0.8242	3.4	TM	
52	TM	Isopropylbenzene	8.537	8.973	5.1	TM	
53	TM**	1,1,2,2-Tetrachloroethane	1.493	1.524	2.1	TM**	
54	TM	1,2,3-Trichloropropane	0.5260	0.5282	0.42	TM	
55	TM	Bromobenzene	2.345	2.392	2.0	TM	
56	TM	n-Propylbenzene	9.390	10.0	6.6	TM	
57	TM	2-Chlorotoluene	6.527	6.878	5.4	TM	
58	TM	1,3,5-Trimethylbenzene	7.142	7.262	1.7	TM	
59	TM	4-Chlorotoluene	6.005	6.019	0.22	TM	
60	TM	Tert-Butylbenzene	7.191	7.607	5.8	TM	
61	TM	1,2,4-Trimethylbenzene	6.920	7.381	6.7	TM	
62	TM	Sec-Butylbenzene	9.152	9.823	7.3	TM	
63	TM	p-Isopropyltoluene	7.459	7.836	5.0	TM	
64	TM	1,3-DCB	4.127	4.181	1.3	TM	
65	TM	1,4-DCB	4.285	4.246	0.92	TM	
66	TM	n-Butylbenzene	5.699	6.124	7.5	TM	
67	TM	1,2-DCB	3.907	3.924	0.44	TM	
68	TM	1,2-Dibromo-3-chloropropane	0.2844	0.2705	4.9	TM	
69	TM	1,2,4-Trichlorobenzene	2.212	2.202	0.45	TM	
70	TM	Hexachlorobutadiene	0.4987	0.4904	1.7	TM	
71	TM	Naphthalene	3.989	4.309	8.0	TM	
72	TM	1,2,3-Trichlorobenzene	1.980	2.008	1.5	TM	
73							
74							
75							
76							
77							
78							
79							
80							
		Average			4.0		

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H16W.D Vial: 16
Acq On : 21 Jul 11 19:14 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 23 13:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Jul 23 13:12:17 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.60	96	561152	25.00000 ppb		0.00
35) Chlorobenzene-D5 (IS)	16.72	117	448832	25.00000 ppb		0.00
50) 1,4-Dichlorobenzene-D (IS)	20.98	152	212544	25.00000 ppb		0.00
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.21	111	479747	22.49663 ppb		0.00
Spiked Amount 21.666			Recovery = 103.836%			
23) 1,2-DCA-D4(S)	11.00	65	430309	22.31927 ppb		0.02
Spiked Amount 20.215			Recovery = 110.408%			
36) Toluene-D8(S)	14.21	98	1508390	25.43764 ppb		0.00
Spiked Amount 23.814			Recovery = 106.820%			
43) 4-Bromofluorobenzene(S)	18.85	95	582895	24.73022 ppb		0.00
Spiked Amount 23.932			Recovery = 103.334%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.48	85	210033	11.56578 ppb		99
3) Chloromethane	3.90	50	151885	10.49012 ppb		97
4) Vinyl chloride	4.09	62	131839	11.16652 ppb		95
5) Bromomethane	4.87	96	108815	8.06355 ppb		100
6) Chloroethane	5.03	64	92456	10.64796 ppb		93
7) Trichlorofluoromethane	5.59	101	255137	10.90945 ppb		98
8) Acetone	6.29	43	28739	8.95883 ppb	#	84
9) 1,1-DCE	6.65	61	118684	9.96810 ppb		98
10) Methylene chloride	7.38	84	123348	10.97294 ppb		100
11) Carbon disulfide	7.46	76	424709	10.24186 ppb		98
12) Methyl t-butyl ether (MtBE	7.78	73	329747	9.62978 ppb		96
13) Trans-1,2-DCE	7.97	96	107439	9.88006 ppb		95
14) 1,1-DCA	8.64	63	198915	10.22820 ppb		99
15) MEK (2-Butanone)	9.28	43	77194	10.04840 ppb		94
16) Cis-1,2-DCE	9.62	96	160710	9.81560 ppb		97
17) 2,2-Dichloropropane	9.61	77	209116	10.34884 ppb		95
18) Chloroform	9.89	83	276196	10.01147 ppb		95
19) Bromochloromethane	10.11	128	65797	9.83442 ppb		95
21) 1,1,1-TCA	10.61	97	221473	9.97766 ppb		98
22) 1,1-Dichloropropene	10.88	75	140767	10.46680 ppb		98
24) Carbon Tetrachloride	11.06	117	164904	9.98592 ppb		95
25) 1,2-DCA	11.15	62	176549	9.80064 ppb		96
26) Benzene	11.25	78	433373	10.36678 ppb		99
27) TCE	12.27	95	138279	10.01104 ppb		94
28) 1,2-Dichloropropane	12.49	63	110702	10.14294 ppb		97
29) Bromodichloromethane	12.84	83	210051	9.96447 ppb		98
30) Dibromomethane	12.89	93	87903	9.89611 ppb		96
31) Cis-1,3-Dichloropropene	13.73	75	194331	10.17516 ppb		97
32) Toluene	14.34	92	341245	10.44799 ppb		97
33) Trans-1,3-Dichloropropene	14.52	77	50384	9.67832 ppb		84
34) 1,1,2-TCA	14.78	83	93405	9.90228 ppb		96
37) 1,2-EDB	16.00	107	120181	9.71086 ppb		98
38) Tetrachloroethene	15.47	164	113121	10.37537 ppb		95
39) 1,1,1,2-Tetrachloroethane	16.85	131	164411	9.73463 ppb		94
40) m&p-Xylene	17.06	106	587687	20.89099 ppb		97
41) o-Xylene	17.82	106	310846	10.67448 ppb		97
42) Styrene	17.84	104	512529	10.48288 ppb		98
44) 2-Hexanone	14.85	43	34379	8.72530 ppb	#	78
45) 1,3-Dichloropropane	15.20	76	180254	10.29077 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0721H16W.D Vial: 16
Acq On : 21 Jul 11 19:14 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 23 13:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Jul 23 13:12:17 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46) Dibromochloromethane	15.64	129	149406	10.07689 ppb		98
47) Chlorobenzene	16.79	112	470878	10.17183 ppb		96
48) Ethylbenzene	16.91	91	697085	10.40043 ppb		100
49) Bromoform	18.35	173	83295	10.07541 ppb		99
51) MIBK (methyl isobutyl keto	13.42	43	70068	9.88819 ppb		89
52) Isopropylbenzene	18.47	105	762838	10.51056 ppb		99
53) 1,1,2,2-Tetrachloroethane	18.64	83	129556	10.20713 ppb		97
54) 1,2,3-Trichloropropane	18.90	110	44910	10.19171 ppb	#	74
55) Bromobenzene	19.20	156	203342	10.19975 ppb		94
56) n-Propylbenzene	19.19	91	851272	10.66354 ppb		100
57) 2-Chlorotoluene	19.47	91	584734	10.53771 ppb		96
58) 1,3,5-Trimethylbenzene	19.47	105	617431	10.16925 ppb		99
59) 4-Chlorotoluene	19.56	91	511679	10.02197 ppb		99
60) Tert-Butylbenzene	20.11	119	646701	10.57807 ppb		96
61) 1,2,4-Trimethylbenzene	20.18	105	627528	10.66714 ppb		95
62) Sec-Butylbenzene	20.50	105	835095	10.73312 ppb		98
63) p-Isopropyltoluene	20.74	119	666170	10.50433 ppb		98
64) 1,3-DCB	20.86	146	355495	10.13184 ppb		99
65) 1,4-DCB	21.03	146	360943	9.90834 ppb		98
66) n-Butylbenzene	21.48	91	520628	10.34632 ppb		95
67) 1,2-DCB	21.70	146	333635	10.04443 ppb		98
68) 1,2-Dibromo-3-chloropropan	22.99	157	22993	9.51098 ppb		95
69) 1,2,4-Trichlorobenzene	24.41	180	187174	9.95464 ppb		98
70) Hexachlorobutadiene	24.66	223	41694	9.83423 ppb		99
71) Naphthalene	24.75	128	366306	9.66439 ppb		98
72) 1,2,3-Trichlorobenzene	25.11	180	170742	10.14528 ppb		99

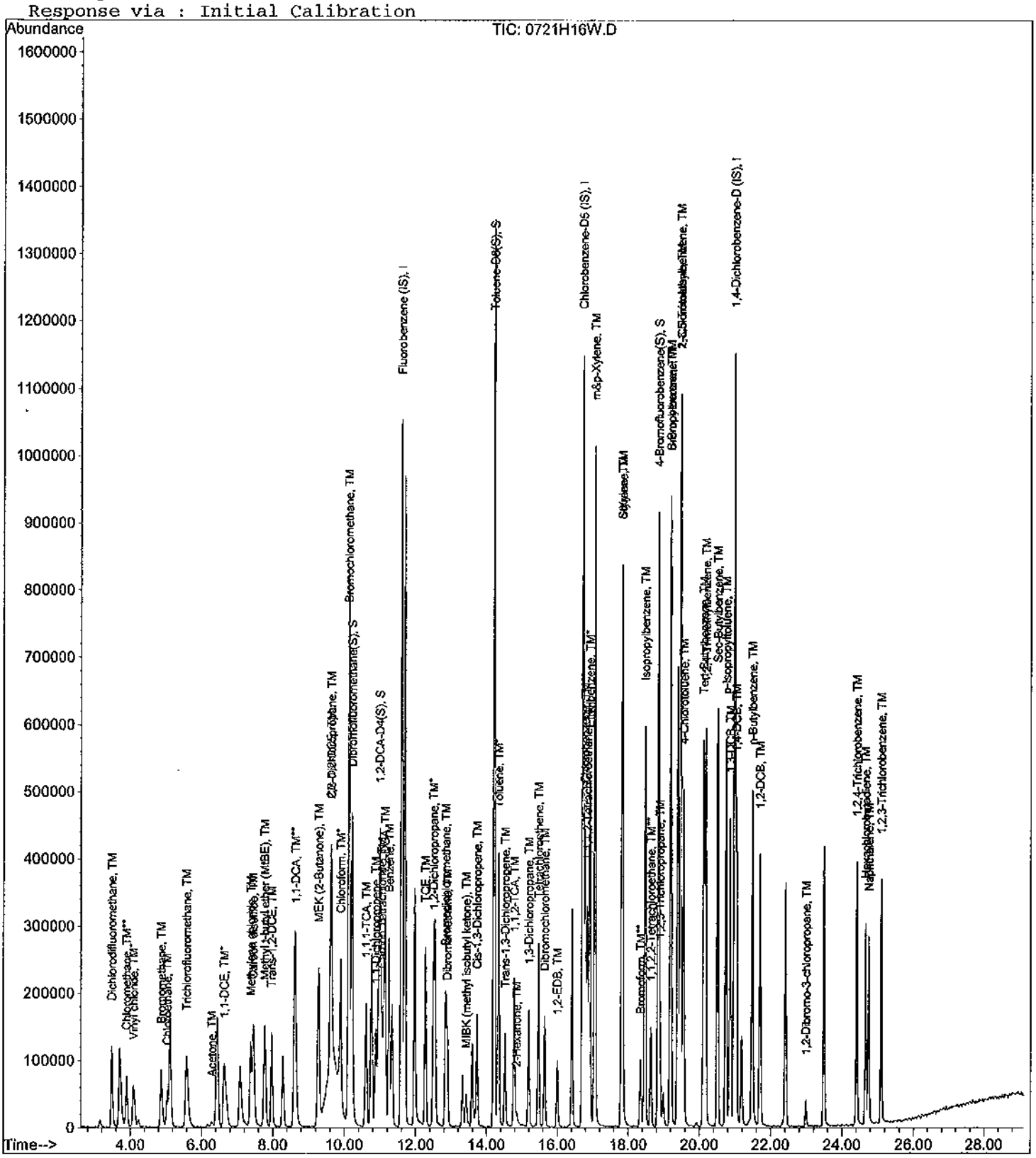
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0721H16W.D Vial: 16
Acq On : 21 Jul 11 19:14 Operator: SV
Sample : Vol Std 07-21-11@10ug/L Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 23 13:12 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 07/27/11
Matrix: Instrument: Thor
Initials:

			0727T17W.D	0727T18W.D	0727T19W.D	0727T20W.D	0727T21W.D	0727T22W.D	0727T23W.D							
		Compound	1	2	5	10	20	40	100				Avg	%RSD		
1	I	Fluorobenzene (IS)	ISTD													
2	TM	Dichlorodifluoromethane	0.5258	0.4356	0.4856	0.4886	0.5598	0.5452	0.5683				0.52	9.3	TM	
3	TM**L	Chloromethane	0.7397	0.5531	0.3174	0.4727	0.4767	0.4694	0.4450				0.50	26	TM**L	0.999
4	TM*	Vinyl chloride	0.1236	0.1609	0.1497	0.1957	0.1765	0.1834	0.1841				0.17	15	TM*	
5	TM	Bromomethane	0.2686	0.3853	0.3466	0.3436	0.3159	0.2888	0.3084				0.32	12	TM	
6	TML	Chloroethane	0.0687	0.4030	0.4308	0.4191	0.3734	0.3572	0.3877				0.35	36	TML	0.999
7	TM	Trichlorofluoromethane	0.5312	0.4460	0.4419	0.3827	0.4007	0.3793					0.43	13	TM	
8	TML	Acetone	0.9029	0.2463	0.3095	0.2062	0.1794	0.1597	0.1619				0.31	86	TML	0.998
9	TM*	1,1-DCE	0.3451	0.3310	0.3564	0.3661	0.3588	0.3419	0.3710				0.35	4.0	TM*	
10	TML	Freon-113	0.2848	0.2573	0.3985	0.3996	0.3848	0.3673	0.4021				0.36	17	TML	0.999
11	TML	Methylene chloride	0.2460	0.4939	0.5251	0.5070	0.4584	0.4523	0.4667				0.45	21	TML	1.000
12	TM	Carbon disulfide	2.049	1.758	2.119	2.197	2.080	2.153	2.330				2.1	8.4	TM	
13	TM	Methyl t-butyl ether (MtBE)	3.003	2.858	3.015	2.901	2.825	2.744	3.008				2.9	3.6	TM	
14	TML	Trans-1,2-DCE	1.079	0.4677	0.9959	1.024	0.9676	0.9208	1.024				0.93	22	TML	0.998
15	TM**	1,1-DCA	1.211	1.208	1.214	1.171	1.135	1.132	1.183				1.2	3.0	TM**	
16	TML	MEK (2-Butanone)	0.1161	0.2104	0.1833	0.2139	0.2148	0.1631	0.2131				0.19	20	TML	0.990
17	TML	Cis-1,2-DCE	0.5817	0.3076	0.4802	0.4769	0.4396	0.4333	0.4996				0.46	18	TML	0.997
18	TM	2,2-Dichloropropane	0.8785	0.7037	0.9176	0.9240	0.8770	0.7378	0.8665				0.84	10	TM	
19	TM*	Chloroform	1.182	0.8954	1.002	0.9142	1.034	0.8835	0.9575				0.98	11	TM*	
20	TM	Bromochloromethane	0.4636	0.4357	0.6169	0.5021	0.5864	0.4516	0.5242				0.51	13	TM	
21	S	Dibromofluoromethane(S)		0.3331	0.3512	0.3594	0.3688	0.3381					0.35	4.2	S	
22	TM	1,1,1-TCA	0.8246	0.7467	0.8260	0.8236	0.8986	0.7849	0.8305				0.82	5.7	TM	
23	TML	1,1-Dichloropropene	0.2415	0.4417	0.5084	0.5384	0.5201	0.5356	0.5777				0.48	24	TML	0.999
24	S	1,2-DCA-D4(S)	0.7487	0.6795	0.6633	0.7000	0.6712	0.6494					0.69	5.2	S	
25	TM	Carbon Tetrachloride	0.6697	0.5192	0.6013	0.5776	0.6172	0.5795	0.6306				0.60	7.9	TM	
26	TM	1,2-DCA	0.7764	0.8067	0.9365	0.8765	0.8758	0.8427	0.9106				0.86	6.5	TM	
27	TM	Benzene	1.327	1.348	1.595	1.620	1.546	1.582	1.737				1.5	9.7	TM	
28	TM	TCE	0.3334	0.3612	0.3389	0.3806	0.3709	0.3710	0.4172				0.37	7.6	TM	
29	TM*	1,2-Dichloropropane	0.5122	0.4928	0.5729	0.5301	0.5226	0.5110	0.5317				0.52	4.8	TM*	
30	TM	Bromodichloromethane	0.6374	0.6931	0.7837	0.7599	0.7024	0.7181	0.8774				0.74	10	TM	
31	TM	Dibromomethane		0.2481	0.2441	0.2536	0.2405	0.2336	0.2736				0.25	5.6	TM	
32	TML	MIBK (methyl isobutyl ketone)		0.2641	0.2130	0.3154	0.3367	0.3617	0.4135				0.32	22	TML	0.998
33	TML	Cis-1,3-Dichloropropene	0.2894	0.4732	0.5563	0.5980	0.6353	0.6641	0.7403				0.57	26	TML	0.998
34	TM*	Toluene	1.183	1.159	1.504	1.539	1.558	1.563	1.681				1.5	14	TM*	
35	TML	Trans-1,3-Dichloropropene	0.5716	0.4504	0.5238	0.5950	0.6959	0.6505	0.8240				0.62	20	TML	0.994

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 07/27/11
Matrix: Instrument: Thor Initials:

		Compound	1	2	5	10	20	40	100				Avg	%RSD		
36	TM	1,1,2-TCA	0.2530	0.2468	0.2851	0.2737	0.3255	0.2834	0.3400				0.29	12	TM	
37	TMQ	2-Hexanone		0.1368	0.1634	0.2177	0.3189	0.2475	0.3549				0.24	36	TMQ	0.996
38	I	Chlorobenzene-D5 (IS)	ISTD													
39	S	Toluene-D8(S)		1.292	1.423	1.367	1.214	1.618					1.4	11	S	
40	TM	1,2-EDB	0.3238	0.3277	0.3967	0.3603	0.3555	0.4198	0.4035				0.37	10	TM	
41	TML	Tetrachloroethene	0.1472	0.3034	0.3582	0.2681	0.2659	0.3229	0.3041				0.28	24	TML	0.998
42	TM	1,1,1,2-Tetrachloroethane	0.4723	0.5323	0.5383	0.4886	0.4532	0.4955	0.4766				0.49	6.4	TM	
43	TML	m&p-Xylene	0.6058	0.7608	0.9853	0.9034	0.8169	0.9494	0.9718				0.86	16	TML	0.999
44	TML	o-Xylene	0.5630	0.6106	0.8823	0.8450	0.7793	1.006	0.9363				0.80	20	TML	0.998
45	TML	Styrene	0.9962	1.128	1.724	1.635	1.446	1.847	1.692				1.5	21	TML	0.997
46	S	4-Bromofluorobenzene(S)		0.6667	0.7822	0.8840	0.7341	0.9165					0.80	13	S	
47	TM	1,3-Dichloropropane	0.5805	0.7365	0.8385	0.7389	0.7799	0.8727	0.8362				0.77	13	TM	
48	TML	Dibromochloromethane	0.2488	0.4604	0.4284	0.3912	0.3950	0.4748	0.4577				0.41	19	TML	0.999
49	TM**	Chlorobenzene	1.214	1.172	1.350	1.286	1.153	1.291	1.219				1.2	5.7	TM**	
50	TM*	Ethylbenzene	1.716	2.010	2.498	2.640	2.339	2.743	2.742				2.4	16	TM*	
51	TM**	Bromoform	0.2310	0.2788	0.3311	0.3262	0.2715	0.3521	0.3329				0.30	14	TM**	
52	I	1,4-Dichlorobenzene-D (IS)	ISTD													
53	TML	Isopropylbenzene	1.603	1.798	2.312	2.514	2.862	2.851	3.304				2.5	25	TML	0.997
54	TM**	1,1,2,2-Tetrachloroethane	0.8682	0.6577	0.7807	0.7204	0.7021	0.6900	0.7257				0.73	9.5	TM**	
55	TML	1,2,3-Trichloropropane	0.1333	0.1570	0.2210	0.2528	0.2463	0.2413	0.2483				0.21	23	TML	1.000
56	TM	Bromobenzene	0.5164	0.5696	0.6232	0.6513	0.6361	0.6961	0.6829				0.63	10	TM	
57	TML	n-Propylbenzene	2.611	2.649	3.613	3.813	3.925	4.178	4.310				3.6	19	TML	1.000
58	TML	2-Chlorotoluene	2.227	2.064	2.754	2.743	3.070	3.088	3.115				2.7	16	TML	1.000
59	TML	1,3,5-Trimethylbenzene	2.050	2.219	2.859	2.963	2.935	3.044	3.221				2.8	16	TML	1.000
60	TML	4-Chlorotoluene	2.463	2.064	3.403	3.607	3.526	3.573	3.728				3.2	20	TML	1.000
61	TML	Tert-Butylbenzene	1.249	1.212	1.636	1.808	2.058	2.435	2.247				1.8	26	TML	0.998
62	TML	1,2,4-Trimethylbenzene	1.758	1.872	2.871	2.937	3.050	3.127	3.189				2.7	23	TML	1.00
63	TML	Sec-Butylbenzene	1.858	2.040	2.582	2.785	3.080	3.287	3.496				2.7	23	TML	0.999
64	TML	p-Isopropyltoluene	1.511	1.825	2.373	2.377	2.655	2.717	2.851				2.3	21	TML	1.000
65	TM	1,3-DCB	0.9819	1.058	1.195	1.171	1.196	1.248	1.264				1.2	8.9	TM	
66	TM	1,4-DCB	1.301	1.168	1.176	1.189	1.297	1.195	1.284				1.2	4.9	TM	
67	TML	n-Butylbenzene	1.684	1.735	2.322	2.400	2.758	2.994	2.969				2.4	23	TML	1.000
68	TM	1,2-DCB	1.188	1.025	1.205	1.071	1.156	1.176	1.144				1.1	5.8	TM	
69	TM	1,2-Dibromo-3-chloropropane		0.1017	0.1104	0.1172	0.1088	0.1068	0.1184				0.11	5.8	TM	
70	TML	1,2,4-Trichlorobenzene	0.6470	0.6837	0.8567	0.7730	0.8890	0.9821	1.020				0.84	17	TML	0.999

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 07/27/11
Matrix: Instrument: Thor Initials:

		Compound	1	2	5	10	20	40	100				Avg	%RSD		
71	TM	Hexachlorobutadiene	0.4700	0.5328	0.5546	0.5374	0.5882	0.5994	0.5887				0.55	8.2	TM	
72	TML	Naphthalene	1.163	0.8813	1.174	1.313	1.555	1.628	1.827				1.4	24	TML	0.998
73	TM	1,2,3-Trichlorobenzene	0.7389	0.6518	0.7527	0.7498	0.8503	0.9360	0.9735				0.81	14	TM	
74																
75																
76																
77																
78																
79																
80																
81																
82																
83																
84																
85																
86																
87																
88																
89																
90	320															
91																
92																
93																
94																
95																
96																
97																
98																
99																
100																
101																
102																
103																
104																
105																

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T17W.D Vial: 17
Acq On : 27 Jul 11 17:17 Operator: RP
Sample : Vol Std 07-27-11@1.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	96048	25.00000 ppb		-0.01
38) Chlorobenzene-D5 (IS)	10.61	117	79976	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	54944	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.95	111	2741	2.03777 ppb		0.00
Spiked Amount 30.441			Recovery =	6.695%		
24) 1,2-DCA-D4(S)	6.32	65	5753	2.18494 ppb		-0.01
Spiked Amount 28.084			Recovery =	7.780%		
39) Toluene-D8(S)	8.78	98	7170	1.62066 ppb		-0.02
Spiked Amount 34.610			Recovery =	4.684%		
46) 4-Bromofluorobenzene(S)	11.61	95	3616	1.41881 ppb		0.00
Spiked Amount 28.184			Recovery =	5.035%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.42	85	2020	1.01983 ppb	#	82
3) Chloromethane	1.48	50	2842	1.64635 ppb		98
4) Vinyl chloride	1.57	64	475	0.73725 ppb	#	1
5) Bromomethane	1.87	96	1032	0.83300 ppb	#	61
6) Chloroethane	1.97	64	264	0.48867 ppb	#	67
7) Trichlorofluoromethane	2.25	101	2041	1.23454 ppb		93
8) Acetone	2.92	43	3469	2.62874 ppb	#	74
9) 1,1-DCE	2.82	96	1326	0.97799 ppb	#	26
10) Freon-113	2.84	103	1094	1.42344 ppb	#	24
11) Methylene chloride	3.45	84	945	0.48403 ppb	#	35
12) Carbon disulfide	3.05	76	7874	0.97694 ppb		98
13) Methyl t-butyl ether (MtBE	3.92	73	11539	1.03290 ppb	#	88
14) Trans-1,2-DCE	3.86	61	4146	1.87734 ppb	#	90
15) 1,1-DCA	4.50	63	4651	1.02662 ppb	#	76
16) MEK (2-Butanone)	5.42	43	446	1.67330 ppb	#	74
17) Cis-1,2-DCE	5.35	96	120	1.21759 ppb	#	41
18) 2,2-Dichloropropane	5.31	77	3375	1.04136 ppb	#	86
19) Chloroform	5.74	83	4540	1.20434 ppb	#	58
20) Bromochloromethane	5.62	49	1781	0.90628 ppb		89
22) 1,1,1-TCA	5.94	97	3168	1.00648 ppb		90
23) 1,1-Dichloropropene	6.16	75	928	1.50354 ppb	#	74
25) Carbon Tetrachloride	6.14	117	2573	1.11751 ppb	#	64
26) 1,2-DCA	6.41	62	2983	0.90205 ppb	#	82
27) Benzene	6.39	78	5098	0.86368 ppb		95
28) TCE	7.12	95	1281	0.90706 ppb	#	66
29) 1,2-Dichloropropane	7.38	63	1968	0.97614 ppb	#	87
30) Bromodichloromethane	7.74	83	2449	0.86273 ppb	#	84
31) Dibromomethane	7.49	93	127	0.13279 ppb	#	53
32) MIBK (methyl isobutyl ket	8.65	43	443	3.06668 ppb	#	49
33) Cis-1,3-Dichloropropene	8.37	75	1112	2.15552 ppb	#	45
34) Toluene	8.90	91	4546	0.81313 ppb	#	68
35) Trans-1,3-Dichloropropene	9.28	75	2196	3.18067 ppb	#	76
36) 1,1,2-TCA	9.52	83	972	0.88220 ppb	#	29
37) 2-Hexanone	9.89	43	607	0.35927 ppb	#	37
40) 1,2-EDB	10.11	107	1036	0.87619 ppb	#	57
41) Tetrachloroethene	9.70	164	471	0.80955 ppb	#	52
42) 1,1,1,2-Tetrachloroethane	10.72	131	1511	0.95649 ppb		85
43) m&p-Xylene	10.87	106	3876	3.03903 ppb	#	58
44) o-Xylene	11.21	106	1801	1.33719 ppb	#	36

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T17W.D Vial: 17
Acq On : 27 Jul 11 17:17 Operator: RP
Sample : Vol Std 07-27-11@1.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Styrene	11.21	104	3187	0.98684 ppb	#	71
47) 1,3-Dichloropropane	9.73	76	1857	0.75484 ppb	#	79
48) Dibromochloromethane	10.00	129	796	1.28045 ppb	#	72
49) Chlorobenzene	10.64	112	3883	0.97830 ppb	#	66
50) Ethylbenzene	10.75	91	5488	0.71962 ppb	#	84
51) Bromoform	11.34	173	739	0.76146 ppb		92
53) Isopropylbenzene	11.50	105	3522	2.51935 ppb	#	88
54) 1,1,2,2-Tetrachloroethane	11.73	83	1908	1.18125 ppb	#	79
55) 1,2,3-Trichloropropane	11.76	110	293	1.01352 ppb		96
56) Bromobenzene	11.72	156	1135	0.82616 ppb		95
57) n-Propylbenzene	11.81	91	5738	1.65101 ppb	#	81
58) 2-Chlorotoluene	11.86	91	4895	1.35347 ppb		99
59) 1,3,5-Trimethylbenzene	11.94	105	4505	1.61847 ppb		92
60) 4-Chlorotoluene	11.95	91	5414	1.41551 ppb		100
61) Tert-Butylbenzene	12.17	119	2744	1.45124 ppb	#	84
62) 1,2,4-Trimethylbenzene	12.20	105	3863	1.30087 ppb		99
63) Sec-Butylbenzene	12.31	105	4084	2.08176 ppb		99
64) p-Isopropyltoluene	12.41	119	3320	1.68204 ppb		97
65) 1,3-DCB	12.39	146	2158	0.84718 ppb		94
66) 1,4-DCB	12.44	146	2859	1.05765 ppb	#	85
67) n-Butylbenzene	12.67	91	3702	1.62821 ppb	#	69
68) 1,2-DCB	12.68	146	2611	1.04404 ppb	#	80
69) 1,2-Dibromo-3-chloropropan	13.16	157	34	0.13993 ppb	#	29
70) 1,2,4-Trichlorobenzene	13.64	180	1422	2.04046 ppb		97
71) Hexachlorobutadiene	13.74	225	1033	0.84994 ppb	#	71
72) Naphthalene	13.79	128	2555	2.73763 ppb	#	91
73) 1,2,3-Trichlorobenzene	13.92	180	1624	0.91501 ppb	#	78

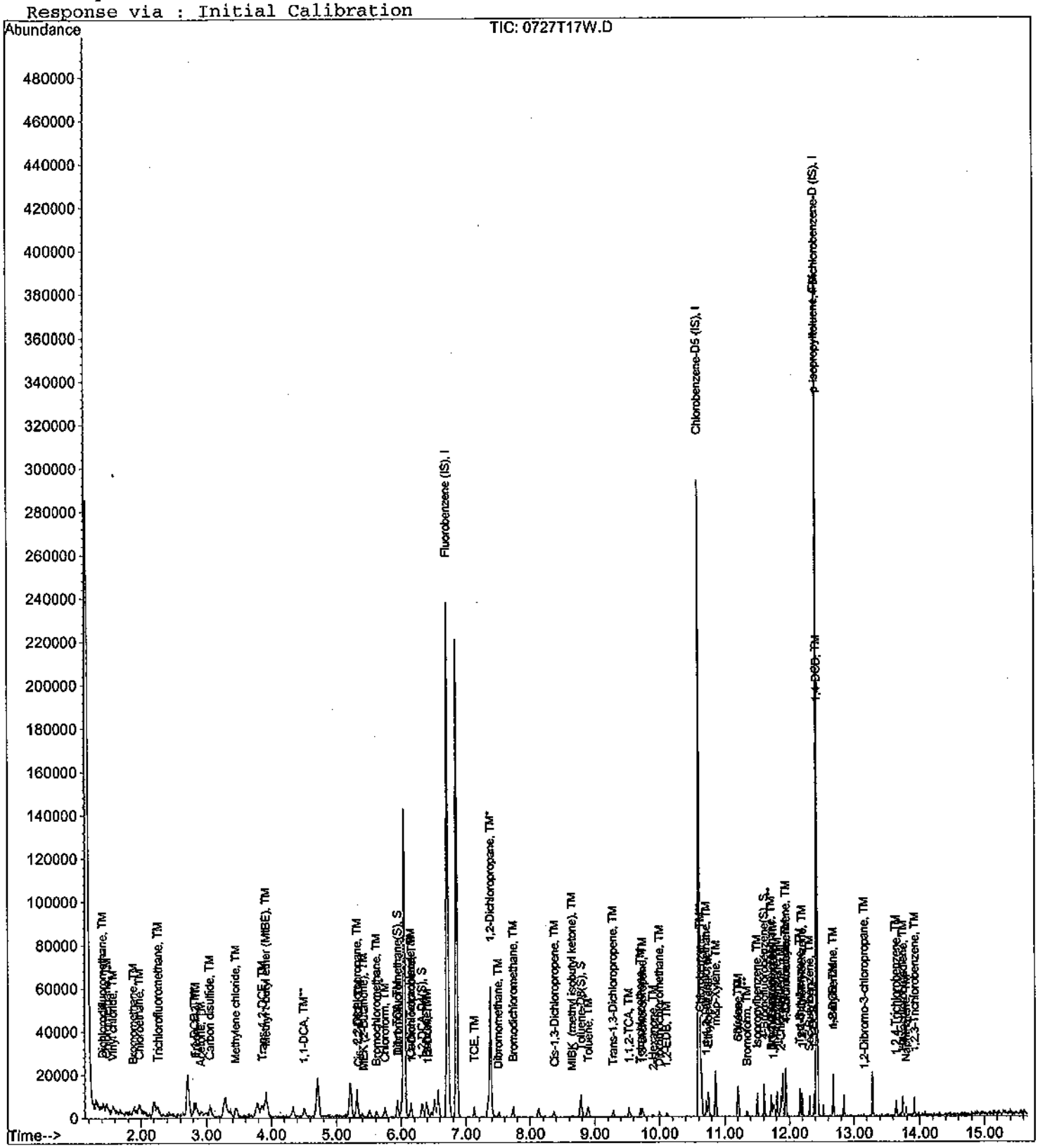
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T17W.D Vial: 17
Acq On : 27 Jul 11 17:17 Operator: RP
Sample : Vol Std 07-27-11@1.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T18W.D Vial: 18
Acq On : 27 Jul 11 17:43 Operator: RP
Sample : Vol Std 07-27-11@2.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.73	96	102328	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	73168	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	59144	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	5453	3.80518 ppb		0.00
Spiked Amount 30.441			Recovery	= 12.499%		
24) 1,2-DCA-D4(S)	6.34	65	11125	3.96587 ppb		0.00
Spiked Amount 28.084			Recovery	= 14.122%		
39) Toluene-D8(S)	8.79	98	15126	3.73709 ppb		0.00
Spiked Amount 34.610			Recovery	= 10.797%		
46) 4-Bromofluorobenzene(S)	11.61	95	7805	3.34740 ppb		0.00
Spiked Amount 28.184			Recovery	= 11.875%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.47	85	3566	1.68986 ppb		91
3) Chloromethane	1.51	50	4528	2.46206 ppb	#	82
4) Vinyl chloride	1.61	64	1317	1.91866 ppb	#	62
5) Bromomethane	1.93	96	3154	2.38957 ppb		87
6) Chloroethane	2.03	64	3299	2.40204 ppb	#	72
7) Trichlorofluoromethane	2.29	101	3651	2.07284 ppb		86
9) 1,1-DCE	2.87	96	2710	1.87609 ppb	#	17
10) Freon-113	2.89	103	2106	1.99630 ppb		73
11) Methylene chloride	3.50	84	4043	2.08033 ppb	#	70
12) Carbon disulfide	3.10	76	14388	1.67558 ppb		98
13) Methyl t-butyl ether (MtBE	3.96	73	23395	1.96565 ppb	#	87
14) Trans-1,2-DCE	3.90	61	3829	1.73660 ppb	#	78
15) 1,1-DCA	4.54	63	9890	2.04905 ppb	#	94
16) MEK (2-Butanone)	5.44	43	1722	3.12448 ppb	#	74
17) Cis-1,2-DCE	5.36	96	904	1.59912 ppb	#	47
18) 2,2-Dichloropropane	5.33	77	5761	1.66848 ppb		98
19) Chloroform	5.77	83	7330	1.82512 ppb	#	72
20) Bromochloromethane	5.65	49	3567	1.70371 ppb		90
22) 1,1,1-TCA	5.96	97	6113	1.82292 ppb		97
23) 1,1-Dichloropropene	6.17	75	3616	2.61236 ppb	#	44
25) Carbon Tetrachloride	6.16	117	4250	1.73258 ppb	#	78
26) 1,2-DCA	6.42	62	6604	1.87447 ppb	#	82
27) Benzene	6.40	78	11032	1.75430 ppb	#	81
28) TCE	7.14	95	2957	1.96531 ppb	#	59
29) 1,2-Dichloropropane	7.39	63	4034	1.87809 ppb	#	87
30) Bromodichloromethane	7.74	83	5674	1.87616 ppb	#	86
31) Dibromomethane	7.52	93	2031	1.99334 ppb	#	71
32) MIBK (methyl isobutyl ket	8.67	43	2162	4.04991 ppb	#	73
33) Cis-1,3-Dichloropropene	8.38	75	3874	3.03815 ppb		89
34) Toluene	8.90	91	9489	1.59311 ppb		95
35) Trans-1,3-Dichloropropene	9.28	75	3687	3.58000 ppb		100
36) 1,1,2-TCA	9.53	83	2020	1.72085 ppb	#	59
37) 2-Hexanone	9.90	43	1120	0.90546 ppb	#	37
40) 1,2-EDB	10.12	107	1918	1.77306 ppb	#	65
41) Tetrachloroethene	9.72	164	1776	2.30840 ppb	#	57
42) 1,1,1,2-Tetrachloroethane	10.72	131	3116	2.15600 ppb	#	51
43) m&p-Xylene	10.87	106	8907	4.91587 ppb		100
44) o-Xylene	11.20	106	3574	2.03028 ppb		99
45) Styrene	11.21	104	6605	1.72232 ppb	#	83

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T18W.D Vial: 18
Acq On : 27 Jul 11 17:43 Operator: RP
Sample : Vol Std 07-27-11@2.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	1,3-Dichloropropane	9.75	76	4311	1.91541	ppb	#	77
48)	Dibromochloromethane	10.01	129	2695	2.73410	ppb	#	66
49)	Chlorobenzene	10.64	112	6860	1.88914	ppb		75
50)	Ethylbenzene	10.75	91	11767	1.68653	ppb		91
51)	Bromoform	11.35	173	1632	1.83807	ppb		90
53)	Isopropylbenzene	11.50	105	8506	3.11967	ppb		90
54)	1,1,2,2-Tetrachloroethane	11.72	83	3112	1.78983	ppb	#	78
55)	1,2,3-Trichloropropane	11.76	110	743	1.73936	ppb		84
56)	Bromobenzene	11.72	156	2695	1.82238	ppb	#	62
57)	n-Propylbenzene	11.81	91	12535	2.27024	ppb	#	87
58)	2-Chlorotoluene	11.87	91	9765	1.95952	ppb		91
59)	1,3,5-Trimethylbenzene	11.94	105	10500	2.35755	ppb	#	76
60)	4-Chlorotoluene	11.87	91	9765	1.86051	ppb		94
61)	Tert-Butylbenzene	12.17	119	5735	1.96453	ppb	#	88
62)	1,2,4-Trimethylbenzene	12.20	105	8856	1.91970	ppb		84
63)	Sec-Butylbenzene	12.31	105	9654	2.71199	ppb	#	80
64)	p-Isopropyltoluene	12.41	119	8634	2.42733	ppb		95
65)	1,3-DCB	12.38	146	5008	1.82640	ppb		87
66)	1,4-DCB	12.44	146	5528	1.89979	ppb		93
67)	n-Butylbenzene	12.67	91	8211	2.22249	ppb	#	85
68)	1,2-DCB	12.68	146	4851	1.80199	ppb	#	87
69)	1,2-Dibromo-3-chloropropan	13.16	157	481	1.83908	ppb		88
70)	1,2,4-Trichlorobenzene	13.64	180	3235	2.73998	ppb	#	68
71)	Hexachlorobutadiene	13.73	225	2521	1.92696	ppb		88
72)	Naphthalene	13.78	128	4170	3.06325	ppb	#	77
73)	1,2,3-Trichlorobenzene	13.92	180	3084	1.61422	ppb	#	68

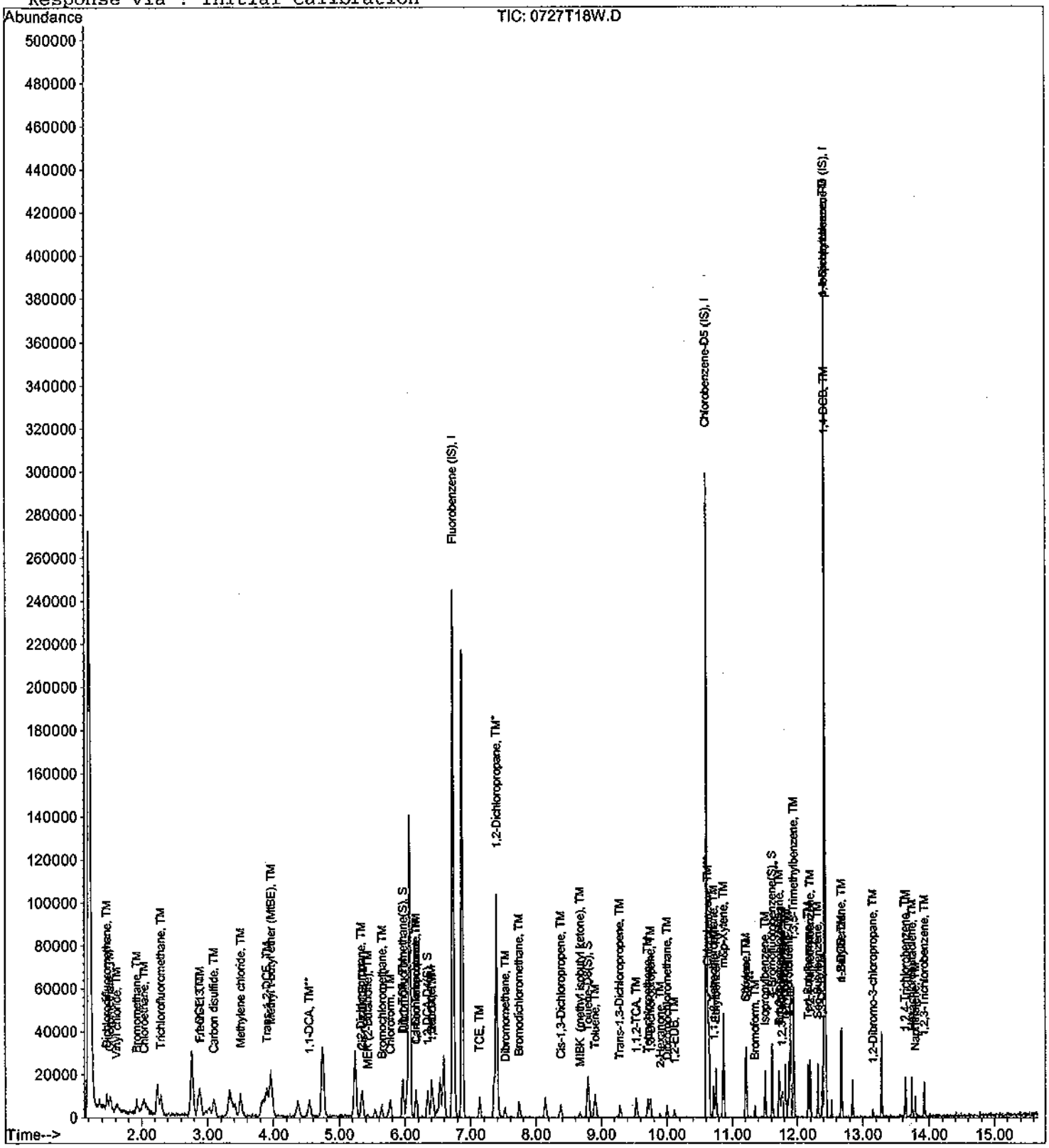
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T18W.D Vial: 18
Acq On : 27 Jul 11 17:43 Operator: RP
Sample : Vol Std 07-27-11@2.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T19W.D Vial: 19
Acq On : 27 Jul 11 18:09 Operator: RP
Sample : Vol Std 07-27-11@5.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	104952	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	77296	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	67600	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	14745	10.03203 ppb		0.00
Spiked Amount 30.441			Recovery = 32.955%			
24) 1,2-DCA-D4(S)	6.34	65	27847	9.67878 ppb		0.00
Spiked Amount 28.084			Recovery = 34.464%			
39) Toluene-D8(S)	8.80	98	44009	10.29238 ppb		0.00
Spiked Amount 34.610			Recovery = 29.737%			
46) 4-Bromofluorobenzene(S)	11.61	95	24183	9.81769 ppb		0.00
Spiked Amount 28.184			Recovery = 34.835%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.47	85	10192	4.70905 ppb		85
3) Chloromethane	1.51	50	10719	5.68264 ppb		99
4) Vinyl chloride	1.62	64	3143	4.46438 ppb		91
5) Bromomethane	1.92	96	7276	5.37471 ppb	#	64
6) Chloroethane	2.03	64	9042	5.90000 ppb		88
7) Trichlorofluoromethane	2.29	101	9275	5.13419 ppb		97
8) Acetone	2.96	43	6497	6.76922 ppb	#	71
9) 1,1-DCE	2.86	96	7480	5.04882 ppb	#	87
10) Freon-113	2.88	103	8364	5.68083 ppb	#	74
11) Methylene chloride	3.49	84	11023	5.60518 ppb	#	62
12) Carbon disulfide	3.09	76	44483	5.05083 ppb		99
13) Methyl t-butyl ether (MtBE	3.96	73	63290	5.18469 ppb		93
14) Trans-1,2-DCE	3.90	61	20905	5.69830 ppb	#	85
15) 1,1-DCA	4.54	63	25491	5.14927 ppb	#	94
16) MEK (2-Butanone)	5.41	43	3847	5.48579 ppb	#	89
17) Cis-1,2-DCE	5.35	96	10079	5.98538 ppb	#	88
18) 2,2-Dichloropropane	5.33	77	19261	5.43882 ppb		92
19) Chloroform	5.77	83	21026	5.10445 ppb	#	74
20) Bromochloromethane	5.64	49	12950	6.03066 ppb	#	90
22) 1,1,1-TCA	5.96	97	17338	5.04100 ppb		95
23) 1,1-Dichloropropene	6.17	75	10671	5.47722 ppb	#	83
25) Carbon Tetrachloride	6.16	117	12622	5.01690 ppb	#	89
26) 1,2-DCA	6.43	62	19657	5.43992 ppb		97
27) Benzene	6.40	78	33475	5.19007 ppb		95
28) TCE	7.13	95	7113	4.60930 ppb		92
29) 1,2-Dichloropropane	7.38	63	12026	5.45891 ppb	#	76
30) Bromodichloromethane	7.74	83	16450	5.30335 ppb	#	74
31) Dibromomethane	7.52	93	5123	4.90230 ppb		89
32) MIBK (methyl isobutyl ket	8.67	43	4470	5.32765 ppb	#	63
33) Cis-1,3-Dichloropropene	8.38	75	11677	5.50332 ppb		94
34) Toluene	8.90	91	31573	5.16827 ppb		90
35) Trans-1,3-Dichloropropene	9.30	75	10995	5.66439 ppb	#	76
36) 1,1,2-TCA	9.54	83	5985	4.97119 ppb	#	82
37) 2-Hexanone	9.89	43	3430	3.42005 ppb	#	80
40) 1,2-EDB	10.12	107	6132	5.36589 ppb	#	99
41) Tetrachloroethene	9.70	164	5537	6.16982 ppb	#	67
42) 1,1,1,2-Tetrachloroethane	10.72	131	8321	5.44994 ppb		99
43) m&p-Xylene	10.87	106	30463	11.89293 ppb		88
44) o-Xylene	11.20	106	13640	5.38994 ppb		81

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T19W.D Vial: 19
Acq On : 27 Jul 11 18:09 Operator: RP
Sample : Vol Std 07-27-11@5.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Styrene	11.22	104	26651	5.43484 ppb	#	77
47) 1,3-Dichloropropane	9.75	76	12963	5.45196 ppb		98
48) Dibromochloromethane	10.01	129	6623	5.37590 ppb	#	68
49) Chlorobenzene	10.63	112	20874	5.44140 ppb		92
50) Ethylbenzene	10.75	91	38615	5.23899 ppb		96
51) Bromoform	11.35	173	5118	5.45640 ppb	#	74
53) Isopropylbenzene	11.51	105	31263	5.51935 ppb		97
54) 1,1,2,2-Tetrachloroethane	11.73	83	10555	5.31122 ppb	#	93
55) 1,2,3-Trichloropropane	11.75	110	2988	4.91571 ppb		83
56) Bromobenzene	11.72	156	8426	4.98500 ppb		92
57) n-Propylbenzene	11.81	91	48847	5.21154 ppb		95
58) 2-Chlorotoluene	11.87	91	37231	5.03420 ppb		91
59) 1,3,5-Trimethylbenzene	11.94	105	38654	5.40756 ppb		95
60) 4-Chlorotoluene	11.94	91	46006	5.30625 ppb		94
61) Tert-Butylbenzene	12.17	119	22113	4.47663 ppb		98
62) 1,2,4-Trimethylbenzene	12.20	105	38817	5.22684 ppb		89
63) Sec-Butylbenzene	12.32	105	34904	5.21524 ppb		98
64) p-Isopropyltoluene	12.41	119	32078	5.28929 ppb		96
65) 1,3-DCB	12.38	146	16150	5.15309 ppb		94
66) 1,4-DCB	12.44	146	15894	4.77898 ppb		96
67) n-Butylbenzene	12.67	91	31387	4.92946 ppb		99
68) 1,2-DCB	12.68	146	16294	5.29558 ppb		97
69) 1,2-Dibromo-3-chloropropan	13.16	157	1493	4.99435 ppb	#	49
70) 1,2,4-Trichlorobenzene	13.64	180	11583	5.57166 ppb		93
71) Hexachlorobutadiene	13.73	225	7498	5.01428 ppb	#	65
72) Naphthalene	13.78	128	15872	5.29190 ppb		95
73) 1,2,3-Trichlorobenzene	13.92	180	10176	4.66005 ppb	#	75

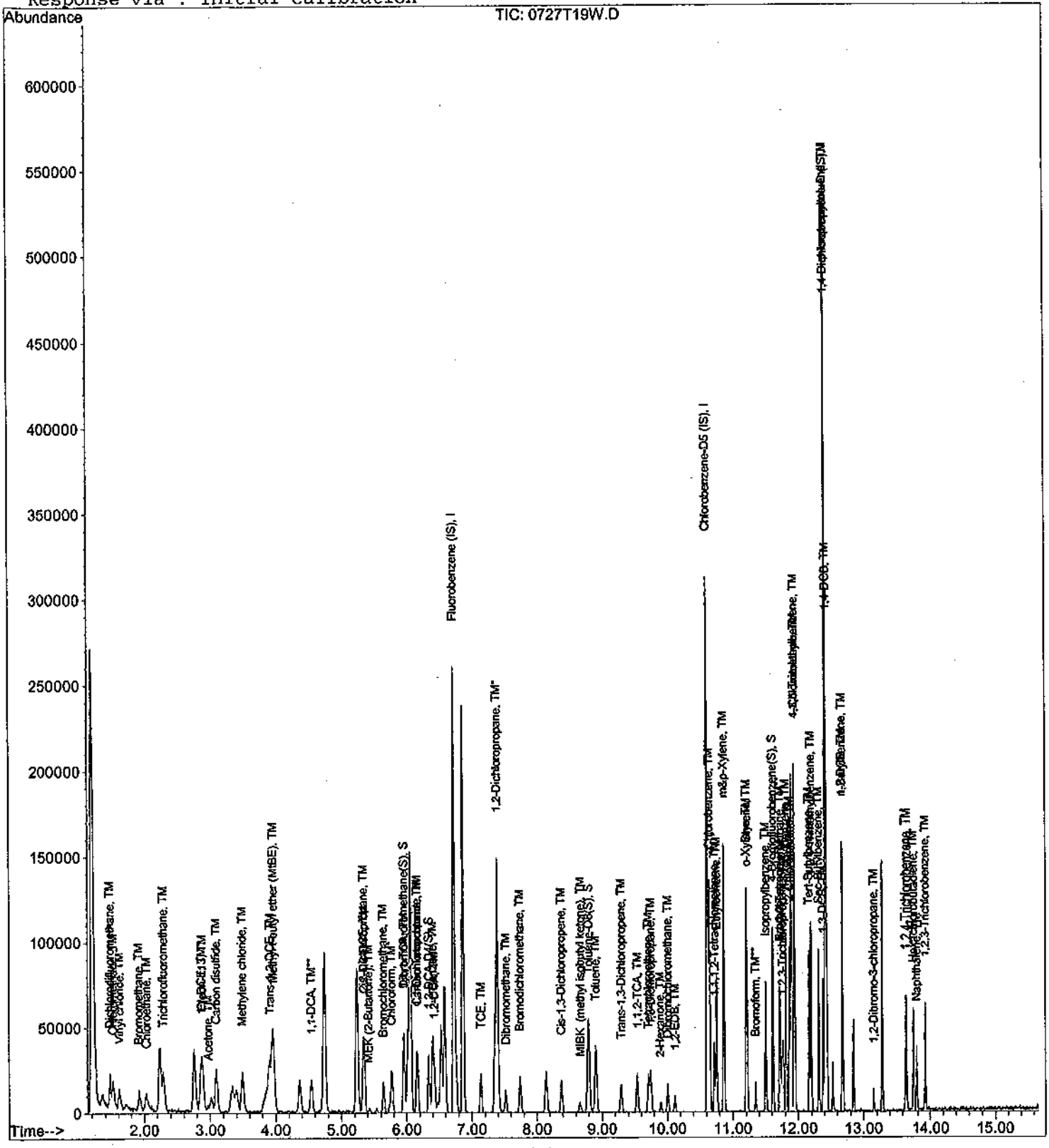
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T19W.D Vial: 19
Acq On : 27 Jul 11 18:09 Operator: RP
Sample : Vol Std 07-27-11@5.0ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T20W.D Vial: 20
Acq On : 27 Jul 11 18:35 Operator: RP
Sample : Vol Std 07-27-11@10ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	96	103280	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	87912	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	72768	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	37121	25.66481 ppb	0.00
Spiked Amount 30.441			Recovery = 84.310%		
24) 1,2-DCA-D4(S)	6.33	65	72293	25.53366 ppb	0.00
Spiked Amount 28.084			Recovery = 90.920%		
39) Toluene-D8(S)	8.80	98	120195	24.71550 ppb	0.00
Spiked Amount 34.610			Recovery = 71.413%		
46) 4-Bromofluorobenzene(S)	11.61	95	77713	27.73971 ppb	0.00
Spiked Amount 28.184			Recovery = 98.423%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.47	85	20185	9.47713 ppb	100
3) Chloromethane	1.51	50	19528	10.52029 ppb	100
4) Vinyl chloride	1.61	64	8086	11.67146 ppb	100
5) Bromomethane	1.92	96	14195	10.65546 ppb	100
6) Chloroethane	2.03	64	17312	11.18567 ppb	100
7) Trichlorofluoromethane	2.29	101	15812	8.89446 ppb	100
8) Acetone	2.97	43	8518	10.07207 ppb	100
9) 1,1-DCE	2.86	96	15125	10.37428 ppb	100
10) Freon-113	2.88	103	16509	10.67685 ppb	100
11) Methylene chloride	3.50	84	20945	10.86509 ppb	100
12) Carbon disulfide	3.10	76	90750	10.47105 ppb	100
13) Methyl t-butyl ether (MtBE	3.96	73	119864	9.97817 ppb	100
14) Trans-1,2-DCE	3.91	61	42292	10.84864 ppb	100
15) 1,1-DCA	4.54	63	48392	9.93361 ppb	100
16) MEK (2-Butanone)	5.42	43	8835	11.30843 ppb	100
17) Cis-1,2-DCE	5.35	96	19700	10.74936 ppb	100
18) 2,2-Dichloropropane	5.34	77	38171	10.95302 ppb	100
19) Chloroform	5.78	83	37766	9.31682 ppb	100
20) Bromochloromethane	5.64	49	20741	9.81520 ppb	100
22) 1,1,1-TCA	5.97	97	34025	10.05288 ppb	100
23) 1,1-Dichloropropene	6.17	75	22244	10.38749 ppb	100
25) Carbon Tetrachloride	6.17	117	23860	9.63724 ppb	100
26) 1,2-DCA	6.43	62	36210	10.18306 ppb	100
27) Benzene	6.40	78	66933	10.54550 ppb	100
28) TCE	7.13	95	15724	10.35428 ppb	100
29) 1,2-Dichloropropane	7.38	63	21899	10.10145 ppb	100
30) Bromodichloromethane	7.74	83	31392	10.28437 ppb	100
31) Dibromomethane	7.52	93	10478	10.18892 ppb	100
32) MIBK (methyl isobutyl ket	8.67	43	13029	10.30229 ppb	100
33) Cis-1,3-Dichloropropene	8.38	75	24706	9.80058 ppb	100
34) Toluene	8.90	91	63572	10.57474 ppb	100
35) Trans-1,3-Dichloropropene	9.29	75	24580	9.70489 ppb	100
36) 1,1,2-TCA	9.54	83	11306	9.54289 ppb	100
37) 2-Hexanone	9.90	43	8993	9.37753 ppb	100
40) 1,2-EDB	10.12	107	12669	9.74745 ppb	100
41) Tetrachloroethene	9.70	164	9426	9.07130 ppb	100
42) 1,1,1,2-Tetrachloroethane	10.72	131	17180	9.89346 ppb	100
43) m&p-Xylene	10.87	106	63534	20.31003 ppb	100
44) o-Xylene	11.20	106	29715	9.64273 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T20W.D Vial: 20
Acq On : 27 Jul 11 18:35 Operator: RP
Sample : Vol Std 07-27-11@10ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) Styrene	11.22	104	57482	9.94300	ppb	100
47) 1,3-Dichloropropane	9.74	76	25982	9.60791	ppb	100
48) Dibromochloromethane	10.00	129	13758	9.20545	ppb	100
49) Chlorobenzene	10.63	112	45222	10.36487	ppb	100
50) Ethylbenzene	10.76	91	92846	11.07550	ppb	100
51) Bromoform	11.35	173	11472	10.75359	ppb	100
53) Isopropylbenzene	11.50	105	73171	9.60904	ppb	100
54) 1,1,2,2-Tetrachloroethane	11.73	83	20968	9.80165	ppb	100
55) 1,2,3-Trichloropropane	11.75	110	7357	10.62827	ppb	100
56) Bromobenzene	11.72	156	18958	10.41940	ppb	100
57) n-Propylbenzene	11.81	91	110979	9.83399	ppb	100
58) 2-Chlorotoluene	11.86	91	79843	9.39108	ppb	100
59) 1,3,5-Trimethylbenzene	11.94	105	86259	10.15419	ppb	100
60) 4-Chlorotoluene	11.94	91	104979	10.40068	ppb	100
61) Tert-Butylbenzene	12.17	119	52635	8.80132	ppb	100
62) 1,2,4-Trimethylbenzene	12.20	105	85476	9.90476	ppb	100
63) Sec-Butylbenzene	12.32	105	81070	9.45293	ppb	100
64) p-Isopropyltoluene	12.41	119	69184	9.43767	ppb	100
65) 1,3-DCB	12.38	146	34076	10.10067	ppb	100
66) 1,4-DCB	12.44	146	34595	9.66321	ppb	100
67) n-Butylbenzene	12.67	91	69850	9.05134	ppb	100
68) 1,2-DCB	12.68	146	31168	9.41024	ppb	100
69) 1,2-Dibromo-3-chloropropan	13.15	157	3411	10.60004	ppb	100
70) 1,2,4-Trichlorobenzene	13.64	180	22499	8.91781	ppb	100
71) Hexachlorobutadiene	13.73	225	15641	9.71703	ppb	100
72) Naphthalene	13.78	128	38226	9.23297	ppb	100
73) 1,2,3-Trichlorobenzene	13.92	180	21824	9.28441	ppb	100

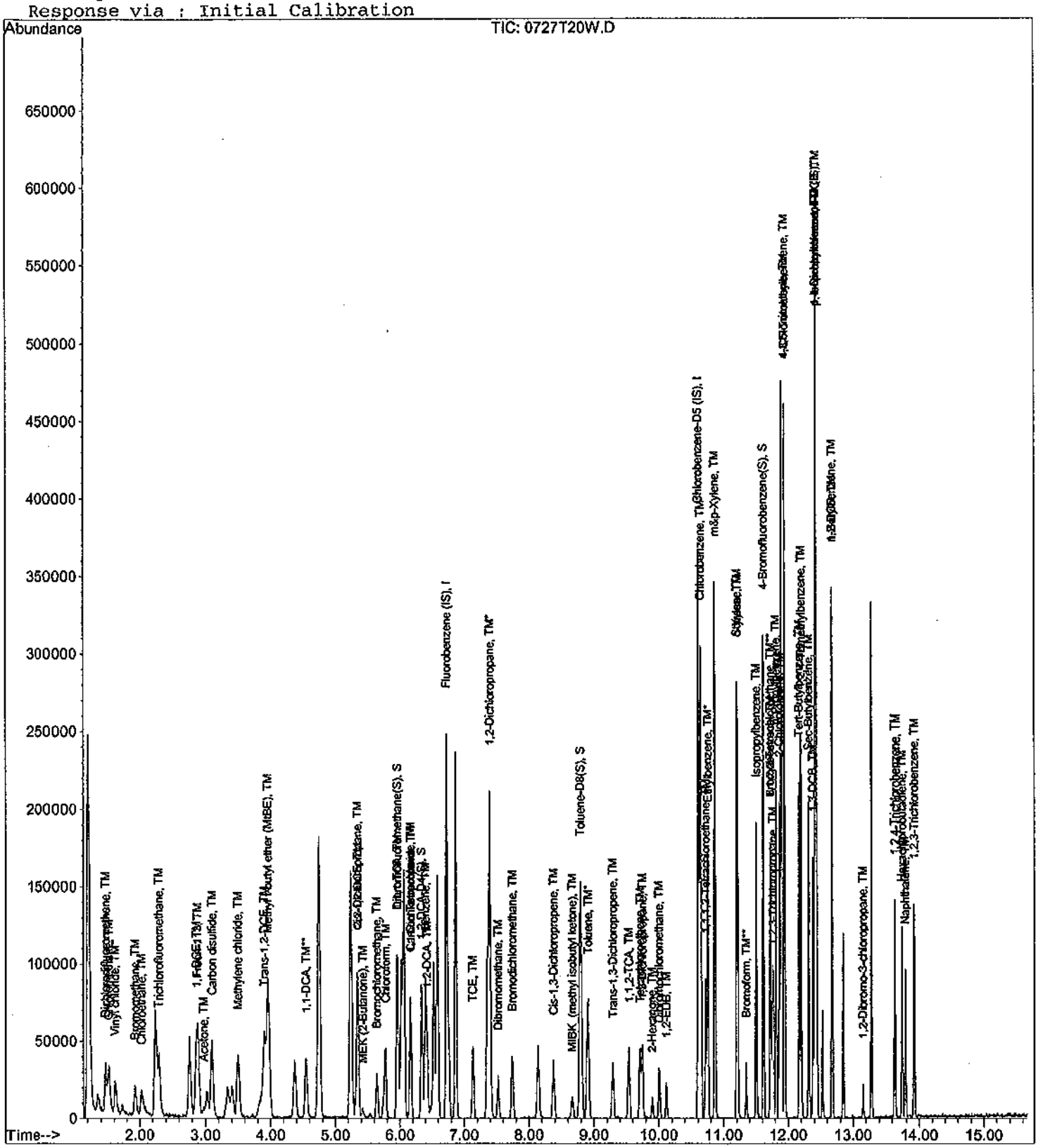
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T20W.D Vial: 20
Acq On : 27 Jul 11 18:35 Operator: RP
Sample : Vol Std 07-27-11@10ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T21W.D Vial: 21
Acq On : 27 Jul 11 19:01 Operator: RP
Sample : Vol Std 07-27-11@20ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	112240	25.00000	ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	107600	25.00000	ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.42	152	73272	25.00000	ppb		0.00
System Monitoring Compounds							
21) Dibromofluoromethane(S)	5.96	111	66224	42.13105	ppb		0.00
Spiked Amount 30.441			Recovery = 138.401%				
24) 1,2-DCA-D4(S)	6.34	65	120531	39.17276	ppb		0.00
Spiked Amount 28.084			Recovery = 139.485%				
39) Toluene-D8(S)	8.79	98	208955	35.10522	ppb		0.00
Spiked Amount 34.610			Recovery = 101.430%				
46) 4-Bromofluorobenzene(S)	11.61	95	126376	36.85604	ppb		0.00
Spiked Amount 28.184			Recovery = 130.767%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.47	85	50266	21.71655	ppb		95
3) Chloromethane	1.51	50	42800	21.21693	ppb		97
4) Vinyl chloride	1.61	64	15848	21.04915	ppb	#	64
5) Bromomethane	1.92	96	28365	19.59243	ppb	#	57
6) Chloroethane	2.02	64	33532	19.69343	ppb		91
7) Trichlorofluoromethane	2.29	101	35984	18.62562	ppb		87
8) Acetone	2.97	43	16106	19.86987	ppb	#	73
9) 1,1-DCE	2.86	96	32214	20.33179	ppb	#	80
10) Freon-113	2.88	103	34556	19.90359	ppb	#	80
11) Methylene chloride	3.49	84	41163	19.68508	ppb		96
12) Carbon disulfide	3.09	76	186738	19.82644	ppb	#	92
13) Methyl t-butyl ether (MtBE	3.96	73	253634	19.42844	ppb		97
14) Trans-1,2-DCE	3.91	61	86882	19.77736	ppb	#	91
15) 1,1-DCA	4.54	63	101875	19.24287	ppb		96
16) MEK (2-Butanone)	5.42	43	19288	21.58683	ppb		96
17) Cis-1,2-DCE	5.34	96	39469	18.84305	ppb	#	89
18) 2,2-Dichloropropane	5.33	77	78748	20.79259	ppb		97
19) Chloroform	5.77	83	92881	21.08445	ppb		93
20) Bromochloromethane	5.64	49	52652	22.92731	ppb	#	89
22) 1,1,1-TCA	5.97	97	80690	21.93717	ppb		94
23) 1,1-Dichloropropene	6.16	75	46698	19.05402	ppb	#	87
25) Carbon Tetrachloride	6.15	117	55416	20.59614	ppb	#	88
26) 1,2-DCA	6.42	62	78639	20.34963	ppb	#	93
27) Benzene	6.39	78	138826	20.12642	ppb		93
28) TCE	7.13	95	33300	20.17761	ppb		92
29) 1,2-Dichloropropane	7.38	63	46929	19.91909	ppb	#	92
30) Bromodichloromethane	7.74	83	63073	19.01389	ppb	#	97
31) Dibromomethane	7.52	93	21599	19.32644	ppb	#	84
32) MIBK (methyl isobutyl ket	8.66	43	30232	18.82734	ppb		92
33) Cis-1,3-Dichloropropene	8.38	75	57045	18.83575	ppb		83
34) Toluene	8.90	91	139871	21.40919	ppb		99
35) Trans-1,3-Dichloropropene	9.29	75	62485	19.37051	ppb		95
36) 1,1,2-TCA	9.54	83	29231	22.70299	ppb	#	70
37) 2-Hexanone	9.90	43	28634	25.53718	ppb		92
40) 1,2-EDB	10.12	107	30603	19.23750	ppb	#	100
41) Tetrachloroethene	9.70	164	22886	17.67082	ppb		88
42) 1,1,1,2-Tetrachloroethane	10.72	131	39008	18.35333	ppb		79
43) m&p-Xylene	10.86	106	140646	35.28031	ppb		94
44) o-Xylene	11.20	106	67079	17.15621	ppb		83

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T21W.D
Acq On : 27 Jul 11 19:01
Sample : Vol Std 07-27-11@20ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 21
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Styrene	11.21	104	124434	17.27398 ppb		93
47) 1,3-Dichloropropane	9.74	76	67134	20.28312 ppb		87
48) Dibromochloromethane	10.01	129	33998	17.82941 ppb		77
49) Chlorobenzene	10.64	112	99288	18.59288 ppb		98
50) Ethylbenzene	10.75	91	201331	19.62216 ppb		97
51) Bromoform	11.35	173	23373	17.90048 ppb		87
53) Isopropylbenzene	11.50	105	167790	19.28165 ppb		90
54) 1,1,2,2-Tetrachloroethane	11.72	83	41154	19.10542 ppb	#	94
55) 1,2,3-Trichloropropane	11.76	110	14440	20.26335 ppb		89
56) Bromobenzene	11.72	156	37286	20.35160 ppb		79
57) n-Propylbenzene	11.81	91	230093	19.13715 ppb		96
58) 2-Chlorotoluene	11.87	91	179971	20.22586 ppb		96
59) 1,3,5-Trimethylbenzene	11.94	105	172045	19.14809 ppb		99
60) 4-Chlorotoluene	11.94	91	206704	19.61501 ppb		92
61) Tert-Butylbenzene	12.17	119	120632	18.87635 ppb		96
62) 1,2,4-Trimethylbenzene	12.20	105	178776	19.76246 ppb		100
63) Sec-Butylbenzene	12.32	105	180519	19.02064 ppb		93
64) p-Isopropyltoluene	12.41	119	155633	19.65831 ppb		93
65) 1,3-DCB	12.38	146	70103	20.63672 ppb		86
66) 1,4-DCB	12.44	146	76009	21.08509 ppb		90
67) n-Butylbenzene	12.67	91	161660	19.41768 ppb		96
68) 1,2-DCB	12.68	146	67766	20.31918 ppb		95
69) 1,2-Dibromo-3-chloropropan	13.16	157	6376	19.67780 ppb	#	55
70) 1,2,4-Trichlorobenzene	13.64	180	52110	18.67639 ppb		94
71) Hexachlorobutadiene	13.73	225	34479	21.27288 ppb		92
72) Naphthalene	13.78	128	91159	18.98396 ppb		99
73) 1,2,3-Trichlorobenzene	13.92	180	49845	21.05930 ppb		92

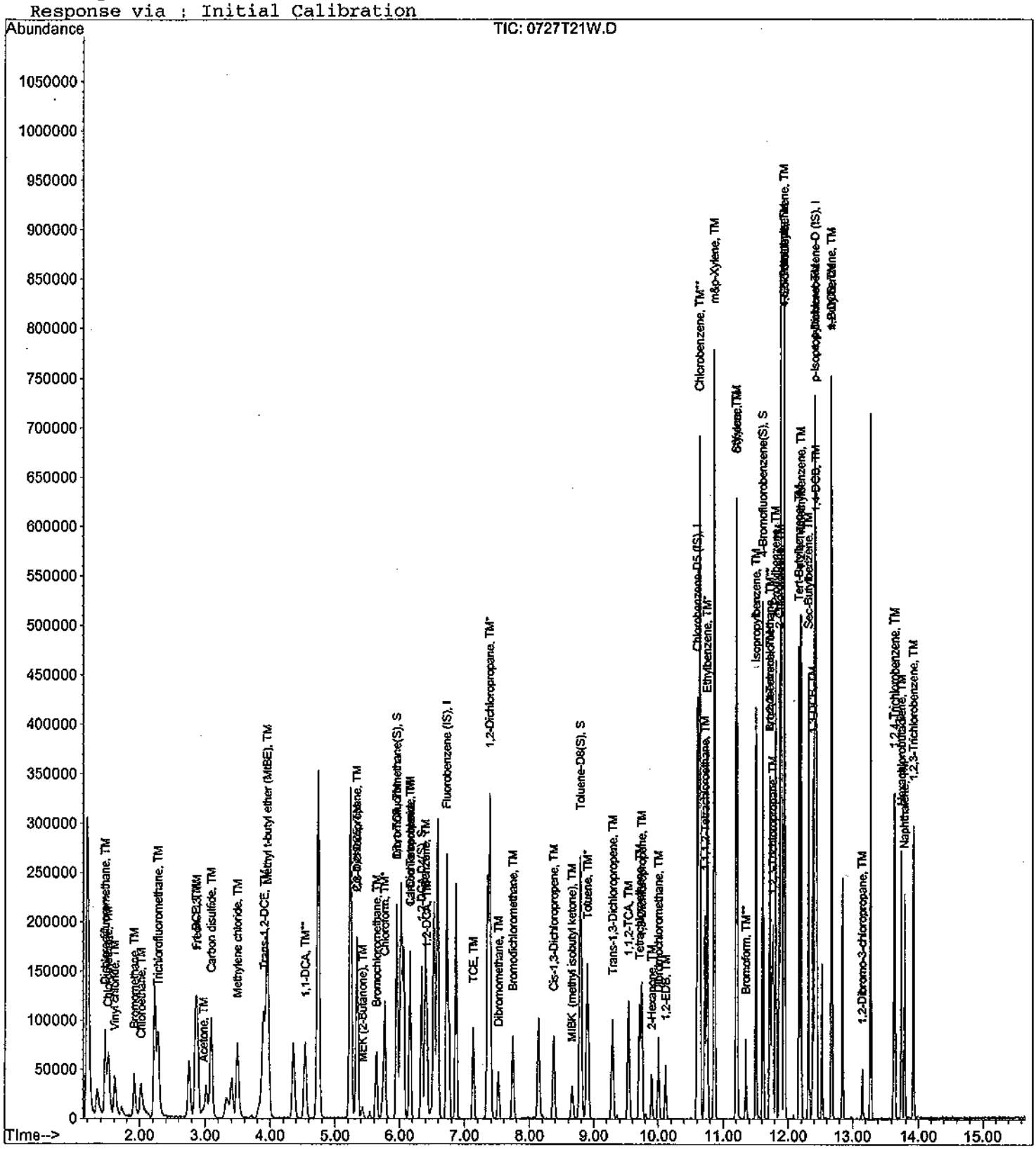
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T21W.D Vial: 21
Acq On : 27 Jul 11 19:01 Operator: RP
Sample : Vol Std 07-27-11@20ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T22W.D Vial: 22
Acq On : 27 Jul 11 19:27 Operator: RP
Sample : Vol Std 07-27-11@40ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.73	96	116736	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	85208	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	74232	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	126291	77.25065 ppb		0.00
Spiked Amount 30.441			Recovery = 253.770%			
24) 1,2-DCA-D4(S)	6.34	65	242577	75.80152 ppb		0.00
Spiked Amount 28.084			Recovery = 269.911%			
39) Toluene-D8(S)	8.79	98	441279	93.61902 ppb		0.00
Spiked Amount 34.610			Recovery = 270.496%			
46) 4-Bromofluorobenzene(S)	11.61	95	249896	92.03124 ppb		0.00
Spiked Amount 28.184			Recovery = 326.532%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.46	85	101834	42.30115 ppb		100
3) Chloromethane	1.51	50	87676	41.78903 ppb		91
4) Vinyl chloride	1.61	64	34249	43.73718 ppb		99
5) Bromomethane	1.92	96	53944	35.82543 ppb		85
6) Chloroethane	2.02	64	66720	37.39228 ppb		99
7) Trichlorofluoromethane	2.28	101	70848	35.25914 ppb		98
8) Acetone	2.97	43	29827	37.85494 ppb		96
9) 1,1-DCE	2.86	96	63868	38.75763 ppb	#	94
10) Freon-113	2.88	103	68601	37.34266 ppb	#	80
11) Methylene chloride	3.49	84	84471	38.88419 ppb		90
12) Carbon disulfide	3.09	76	402039	41.04148 ppb	#	90
13) Methyl t-butyl ether (MtBE	3.97	73	512447	37.74178 ppb		97
14) Trans-1,2-DCE	3.90	61	171984	36.90086 ppb		86
15) 1,1-DCA	4.54	63	211494	38.40990 ppb		99
16) MEK (2-Butanone)	5.43	43	30468	32.20482 ppb	#	90
17) Cis-1,2-DCE	5.34	96	80938	36.03065 ppb		92
18) 2,2-Dichloropropane	5.33	77	137797	34.98256 ppb		99
19) Chloroform	5.77	83	165026	36.01891 ppb		97
20) Bromochloromethane	5.64	49	84358	35.31892 ppb	#	86
22) 1,1,1-TCA	5.96	97	146598	38.32056 ppb		86
23) 1,1-Dichloropropene	6.16	75	100034	38.09343 ppb	#	89
25) Carbon Tetrachloride	6.15	117	108246	38.68169 ppb		79
26) 1,2-DCA	6.43	62	157396	39.16111 ppb		98
27) Benzene	6.40	78	295404	41.17701 ppb		98
28) TCE	7.14	95	69290	40.36815 ppb		97
29) 1,2-Dichloropropane	7.38	63	95437	38.94824 ppb		97
30) Bromodichloromethane	7.74	83	134117	38.87355 ppb		99
31) Dibromomethane	7.52	93	43631	37.53672 ppb		79
32) MIBK (methyl isobutyl ket	8.66	43	67554	37.24315 ppb	#	90
33) Cis-1,3-Dichloropropene	8.38	75	124039	37.45230 ppb		94
34) Toluene	8.90	91	291851	42.95133 ppb		97
35) Trans-1,3-Dichloropropene	9.29	75	121498	34.05126 ppb		98
36) 1,1,2-TCA	9.54	83	52934	39.52911 ppb	#	70
37) 2-Hexanone	9.90	43	46232	37.28157 ppb	#	86
40) 1,2-EDB	10.12	107	57232	45.43134 ppb	#	92
41) Tetrachloroethene	9.71	164	44027	42.45694 ppb	#	86
42) 1,1,1,2-Tetrachloroethane	10.72	131	67555	40.13752 ppb		94
43) m&p-Xylene	10.87	106	258870	79.62042 ppb		96
44) o-Xylene	11.20	106	137105	43.10441 ppb		93

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T22W.D Vial: 22
Acq On : 27 Jul 11 19:27 Operator: RP
Sample : Vol Std 07-27-11@40ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Styrene	11.22	104	251782	43.50697	ppb	#	94
47)	1,3-Dichloropropane	9.74	76	118974	45.39167	ppb		90
48)	Dibromochloromethane	10.01	129	64737	41.82901	ppb		87
49)	Chlorobenzene	10.63	112	175992	41.61738	ppb		97
50)	Ethylbenzene	10.76	91	373915	46.01940	ppb		98
51)	Bromoform	11.35	173	47996	46.41809	ppb		86
53)	Isopropylbenzene	11.50	105	338592	36.38621	ppb		93
54)	1,1,2,2-Tetrachloroethane	11.73	83	81947	37.55126	ppb		90
55)	1,2,3-Trichloropropane	11.76	110	28663	39.24333	ppb		87
56)	Bromobenzene	11.72	156	82678	44.54403	ppb		75
57)	n-Propylbenzene	11.81	91	496168	39.54896	ppb		96
58)	2-Chlorotoluene	11.87	91	366822	40.04097	ppb		93
59)	1,3,5-Trimethylbenzene	11.94	105	361484	38.65483	ppb		98
60)	4-Chlorotoluene	11.95	91	424337	38.96963	ppb		95
61)	Tert-Butylbenzene	12.17	119	289254	43.43827	ppb		95
62)	1,2,4-Trimethylbenzene	12.20	105	371415	39.73514	ppb		98
63)	Sec-Butylbenzene	12.32	105	390389	38.83780	ppb		98
64)	p-Isopropyltoluene	12.41	119	322645	39.01769	ppb		96
65)	1,3-DCB	12.38	146	148198	43.06190	ppb		95
66)	1,4-DCB	12.44	146	141977	38.87544	ppb		88
67)	n-Butylbenzene	12.67	91	355614	40.91116	ppb		99
68)	1,2-DCB	12.68	146	139648	41.33101	ppb		94
69)	1,2-Dibromo-3-chloropropan	13.16	157	12688	38.65167	ppb	#	56
70)	1,2,4-Trichlorobenzene	13.64	180	116646	39.55758	ppb		96
71)	Hexachlorobutadiene	13.73	225	71193	43.35666	ppb		85
72)	Naphthalene	13.78	128	193343	37.43936	ppb		97
73)	1,2,3-Trichlorobenzene	13.92	180	111170	46.36143	ppb		88

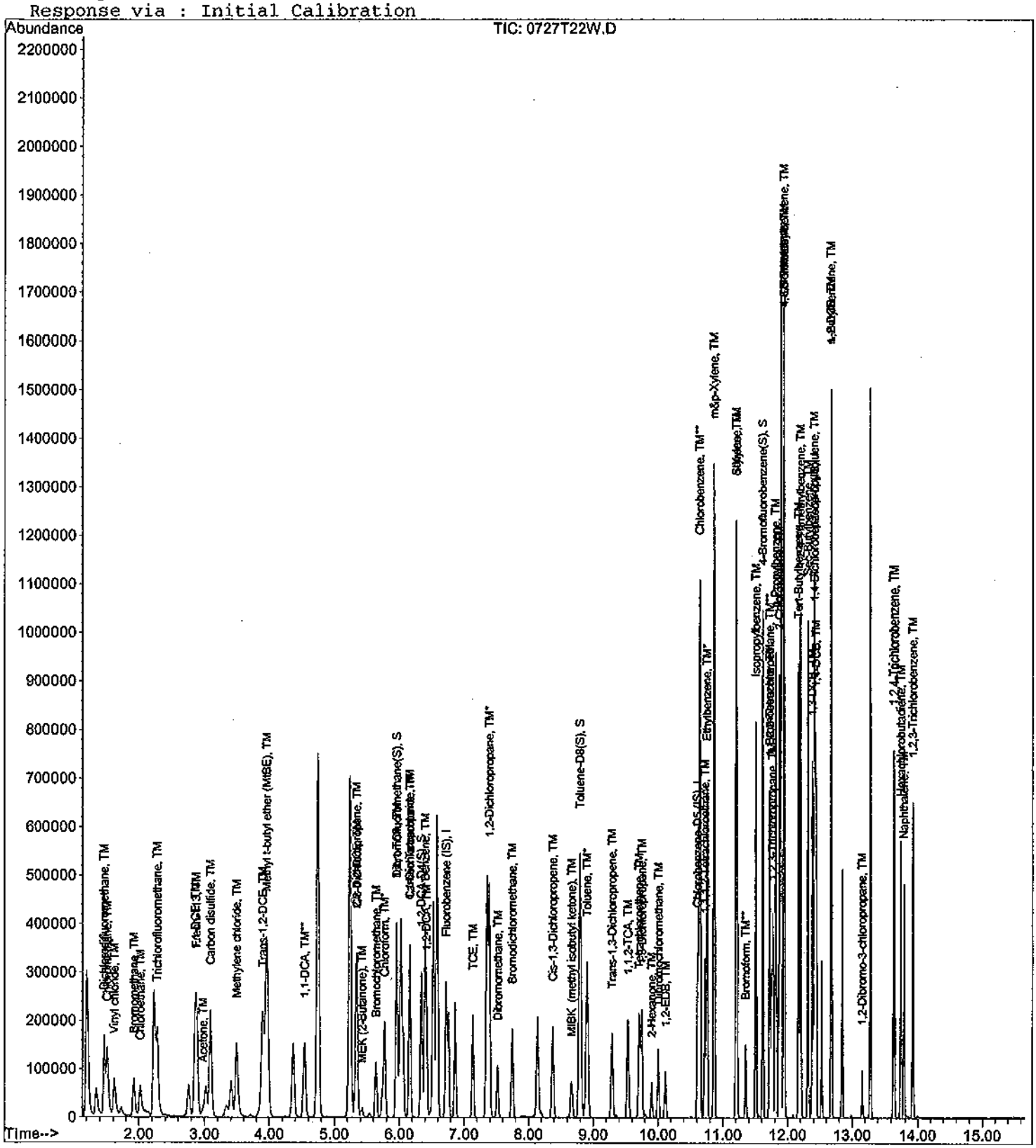
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T22W.D Vial: 22
Acq On : 27 Jul 11 19:27 Operator: RP
Sample : Vol Std 07-27-11@40ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T23W.D Vial: 23
Acq On : 27 Jul 11 19:53 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	113048	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	103800	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	76424	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	3227	2.03831 ppb		0.00
Spiked Amount 30.441			Recovery = 6.695%			
24) 1,2-DCA-D4(S)	6.34	65	6414	2.06966 ppb		0.00
Spiked Amount 28.084			Recovery = 7.371%			
39) Toluene-D8(S)	8.79	98	11883	2.06947 ppb		0.00
Spiked Amount 34.610			Recovery = 5.978%			
46) 4-Bromofluorobenzene(S)	11.61	95	7709	2.33054 ppb		0.00
Spiked Amount 28.184			Recovery = 8.271%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.46	85	256994	110.23622 ppb		94
3) Chloromethane	1.51	50	201241	99.04668 ppb		90
4) Vinyl chloride	1.61	64	83227	109.75115 ppb		79
5) Bromomethane	1.92	96	139470	95.64692 ppb		75
6) Chloroethane	2.02	64	175335	100.93791 ppb		88
7) Trichlorofluoromethane	2.26	101	178368	91.66488 ppb		98
8) Acetone	2.97	43	73211	100.81224 ppb		92
9) 1,1-DCE	2.84	96	167760	105.12456 ppb	#	78
10) Freon-113	2.88	103	181845	100.97633 ppb	#	84
11) Methylene chloride	3.49	84	211057	100.39609 ppb	#	71
12) Carbon disulfide	3.08	76	1053603	111.06412 ppb	#	94
13) Methyl t-butyl ether (MtBE	3.97	73	1360309	103.45534 ppb		98
14) Trans-1,2-DCE	3.89	61	463179	101.16090 ppb	#	86
15) 1,1-DCA	4.53	63	534963	100.32537 ppb		99
16) MEK (2-Butanone)	5.43	43	96340	102.61635 ppb	#	89
17) Cis-1,2-DCE	5.34	96	225909	101.67382 ppb		84
18) 2,2-Dichloropropane	5.33	77	391810	102.71392 ppb		97
19) Chloroform	5.77	83	432965	97.58271 ppb		94
20) Bromochloromethane	5.63	49	237055	102.48779 ppb		92
22) 1,1,1-TCA	5.96	97	375545	101.36960 ppb		92
23) 1,1-Dichloropropene	6.16	75	261209	100.87193 ppb	#	85
25) Carbon Tetrachloride	6.15	117	285157	105.22514 ppb		90
26) 1,2-DCA	6.42	62	411763	105.79144 ppb		96
27) Benzene	6.40	78	785647	113.08574 ppb		97
28) TCE	7.13	95	188649	113.49187 ppb		96
29) 1,2-Dichloropropane	7.38	63	240432	101.32234 ppb	#	96
30) Bromodichloromethane	7.74	83	396770	118.75477 ppb		95
31) Dibromomethane	7.52	93	123734	109.92389 ppb	#	78
32) MIBK (methyl isobutyl ket	8.67	43	186963	101.24966 ppb	#	88
33) Cis-1,3-Dichloropropene	8.38	75	334748	101.21439 ppb		92
34) Toluene	8.90	91	759980	115.49402 ppb		95
35) Trans-1,3-Dichloropropene	9.29	75	372620	102.44828 ppb		97
36) 1,1,2-TCA	9.54	83	153733	118.54721 ppb	#	75
37) 2-Hexanone	9.90	43	160499	100.16299 ppb	#	87
40) 1,2-EDB	10.12	107	167534	109.16981 ppb	#	96
41) Tetrachloroethene	9.70	164	126273	99.51317 ppb		86
42) 1,1,1,2-Tetrachloroethane	10.72	131	197872	96.50735 ppb		92
43) m&p-Xylene	10.87	106	806972	200.94141 ppb		90
44) o-Xylene	11.20	106	388748	99.33925 ppb		83

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T23W.D Vial: 23
Acq On : 27 Jul 11 19:53 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Styrene	11.22	104	702561	99.13206	ppb	#	90
47)	1,3-Dichloropropane	9.74	76	347177	108.73217	ppb		98
48)	Dibromochloromethane	10.00	129	190028	99.74569	ppb		89
49)	Chlorobenzene	10.63	112	506027	98.22872	ppb		99
50)	Ethylbenzene	10.76	91	1138449	115.01769	ppb		94
51)	Bromoform	11.35	173	138228	109.73907	ppb		94
53)	Isopropylbenzene	11.51	105	1010042	101.56473	ppb		94
54)	1,1,2,2-Tetrachloroethane	11.73	83	221835	98.73769	ppb		90
55)	1,2,3-Trichloropropane	11.75	110	75909	100.19646	ppb		87
56)	Bromobenzene	11.72	156	208771	109.25244	ppb		79
57)	n-Propylbenzene	11.81	91	1317502	100.34709	ppb		99
58)	2-Chlorotoluene	11.87	91	952352	99.99490	ppb		93
59)	1,3,5-Trimethylbenzene	11.94	105	984717	100.65932	ppb		96
60)	4-Chlorotoluene	11.95	91	1139539	100.43240	ppb		95
61)	Tert-Butylbenzene	12.17	119	686761	98.99166	ppb		95
62)	1,2,4-Trimethylbenzene	12.20	105	975006	100.15023	ppb		92
63)	Sec-Butylbenzene	12.32	105	1068582	100.67964	ppb		97
64)	p-Isopropyltoluene	12.41	119	871463	100.48766	ppb		99
65)	1,3-DCB	12.39	146	386399	109.05567	ppb		97
66)	1,4-DCB	12.44	146	392612	104.41966	ppb		92
67)	n-Butylbenzene	12.67	91	907601	99.83966	ppb		99
68)	1,2-DCB	12.68	146	349797	100.55849	ppb		94
69)	1,2-Dibromo-3-chloropropan	13.16	157	36209	107.14034	ppb	#	64
70)	1,2,4-Trichlorobenzene	13.64	180	311939	100.49612	ppb		94
71)	Hexachlorobutadiene	13.73	225	179949	106.44599	ppb		85
72)	Naphthalene	13.78	128	558546	101.25093	ppb		99
73)	1,2,3-Trichlorobenzene	13.93	180	297584	120.54250	ppb		93

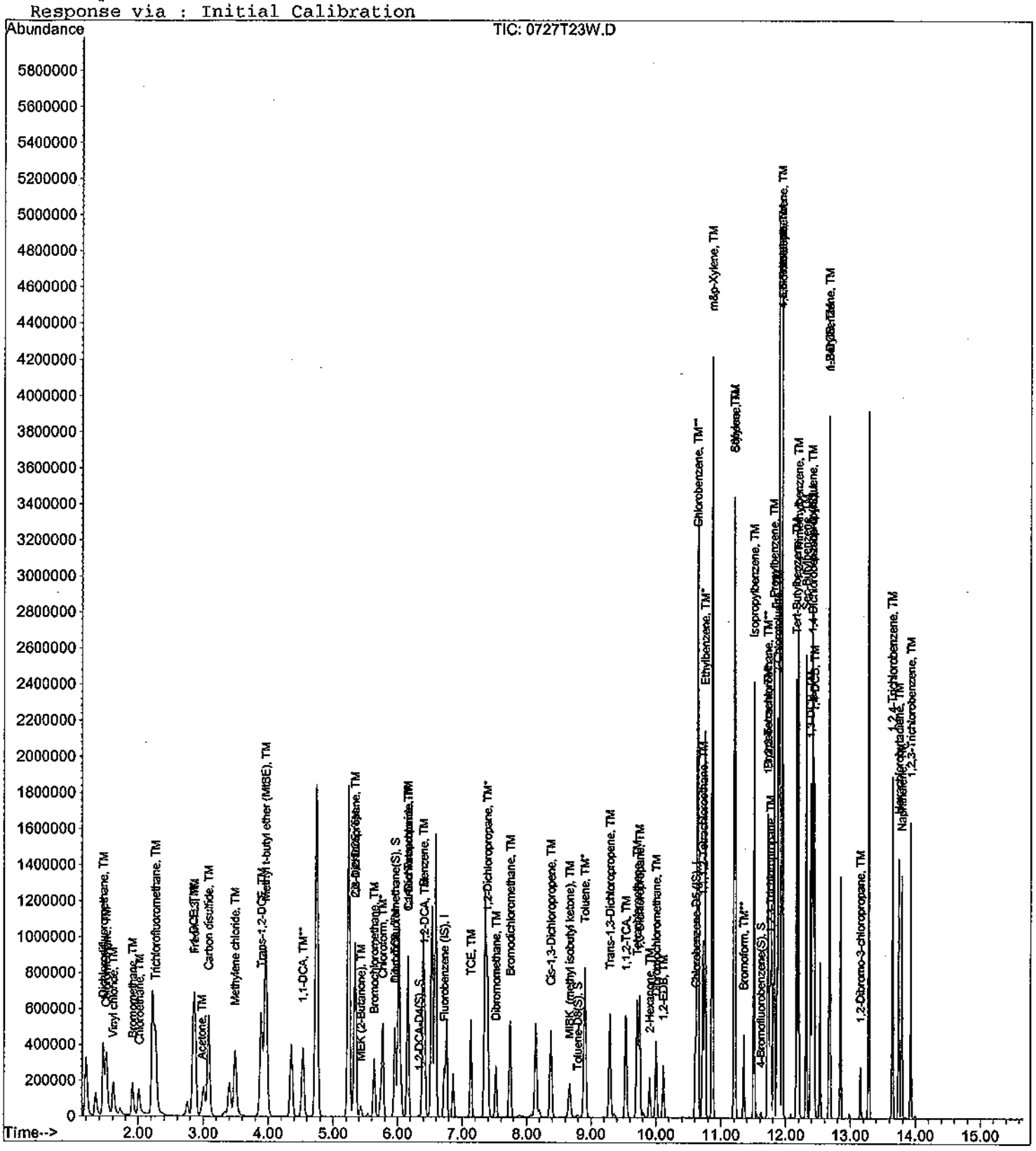
(#) = qualifier out of range (m) = manual integration

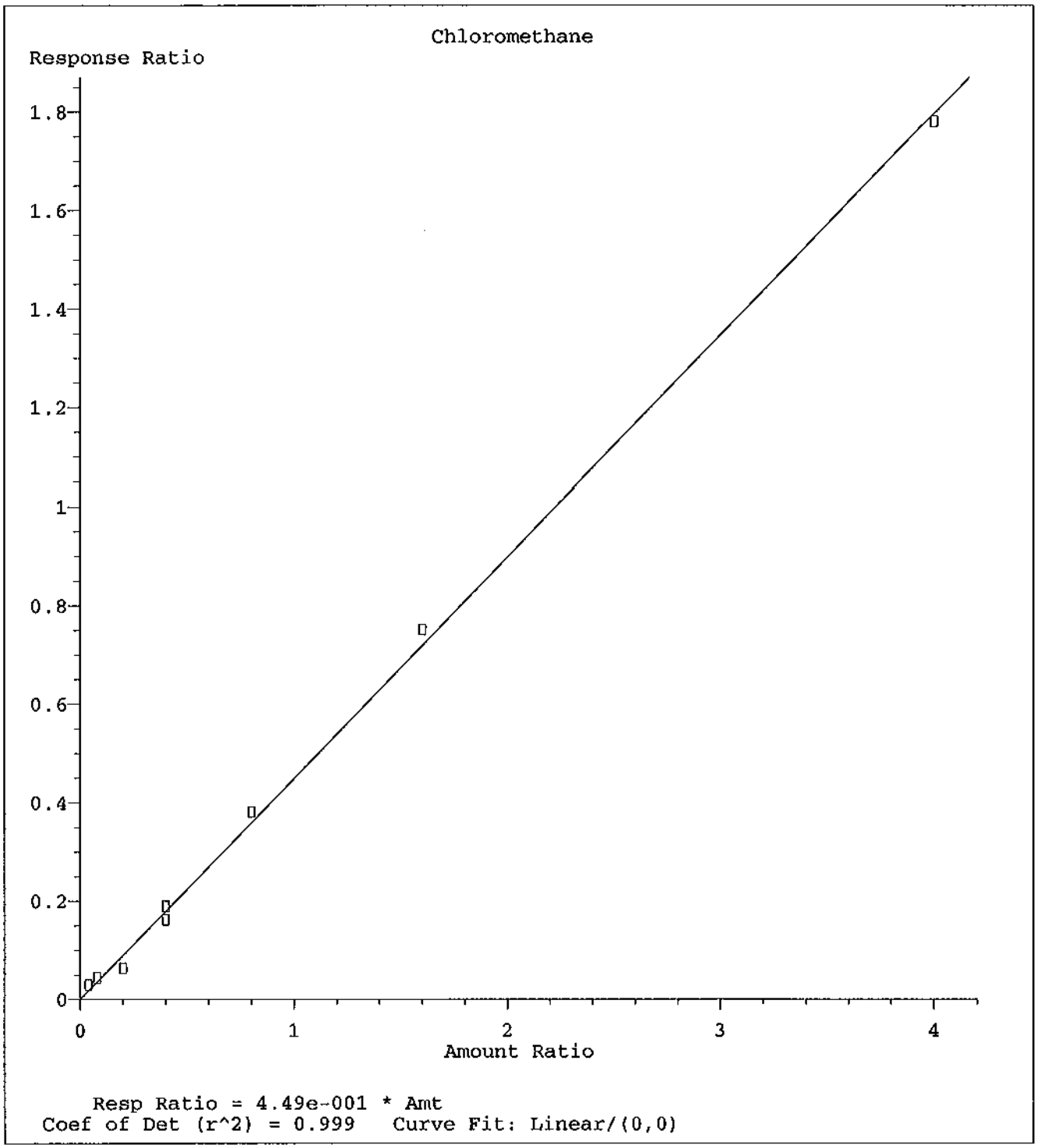
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T23W.D Vial: 23
Acq On : 27 Jul 11 19:53 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

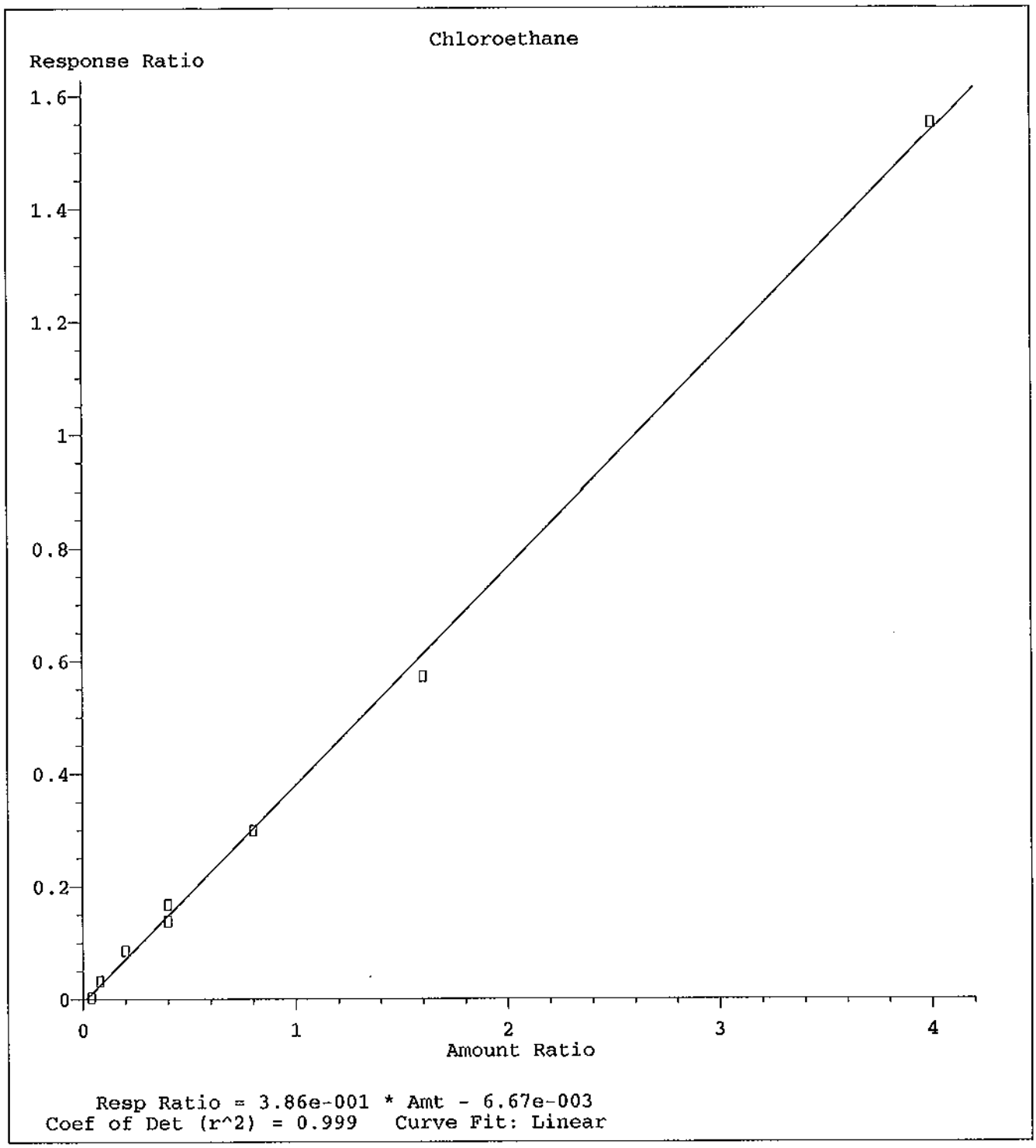
Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration





Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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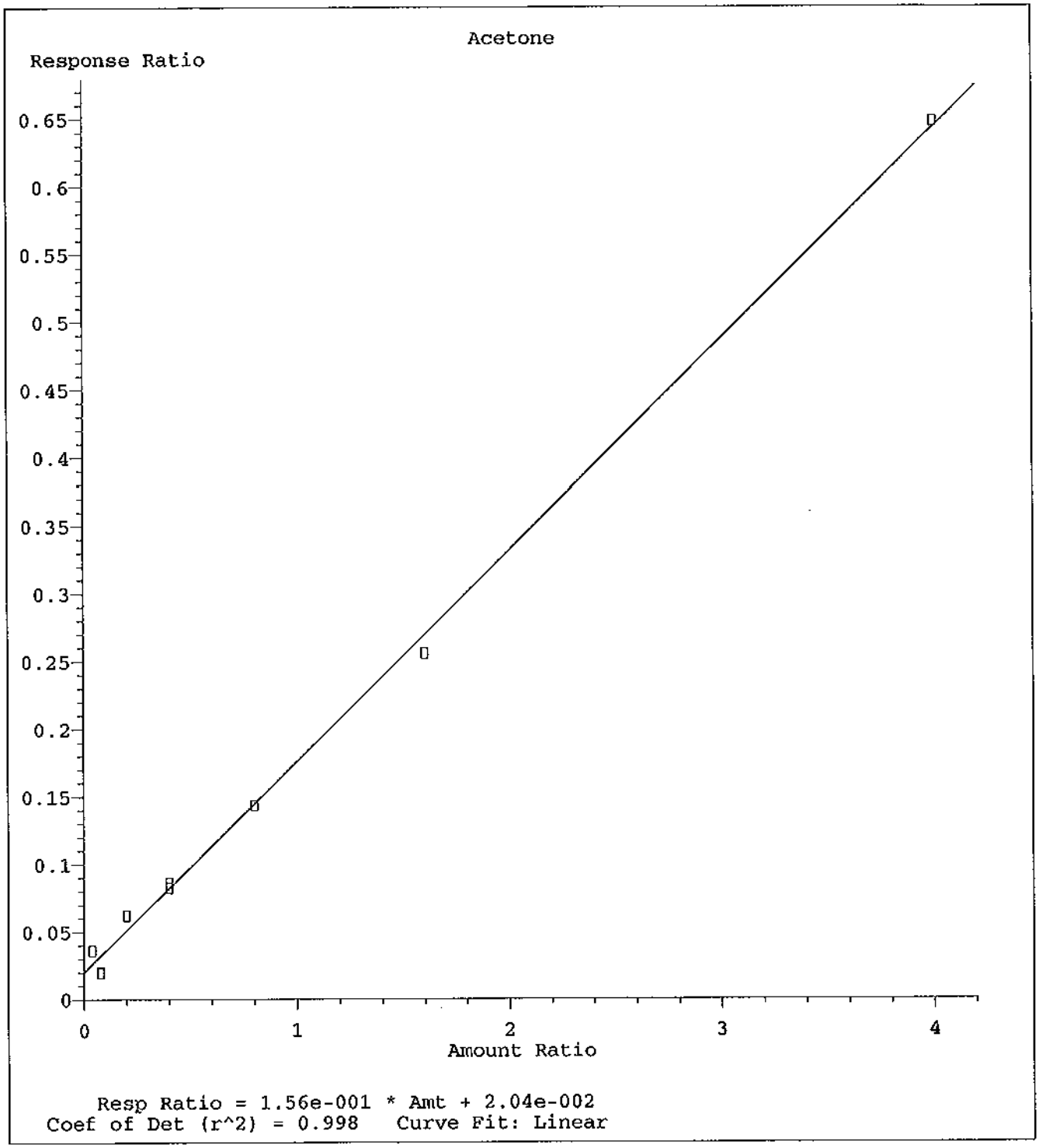
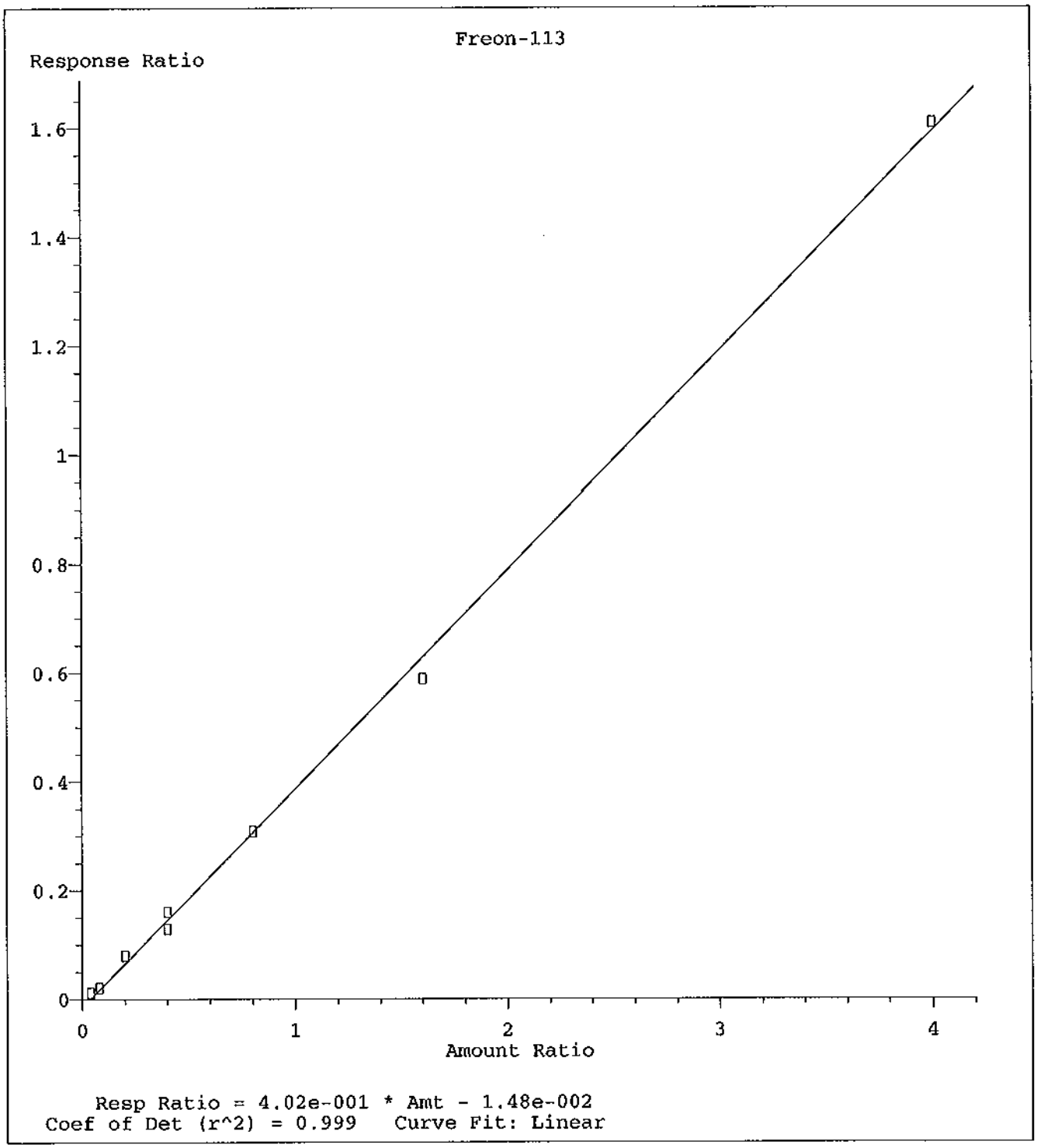
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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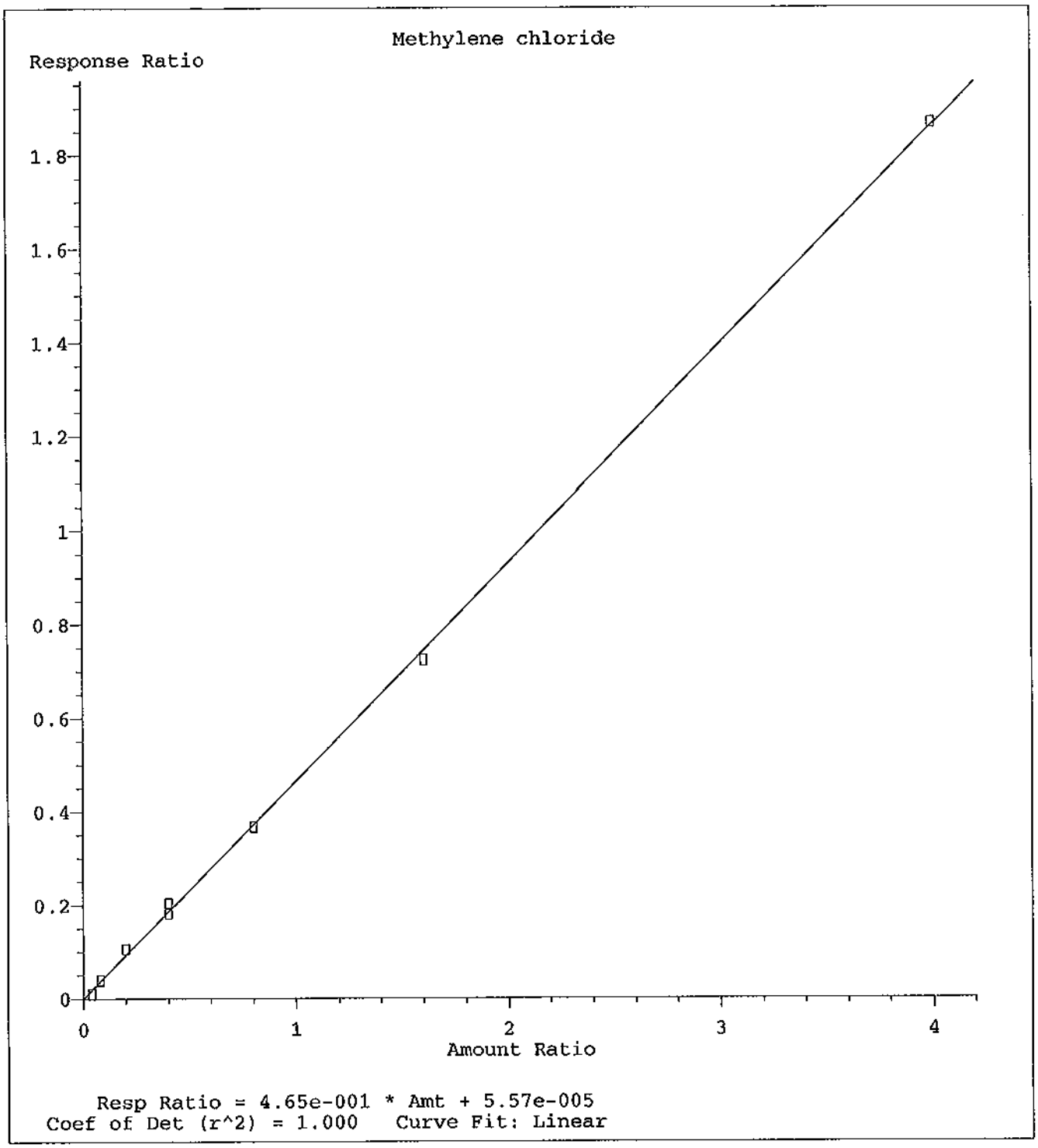
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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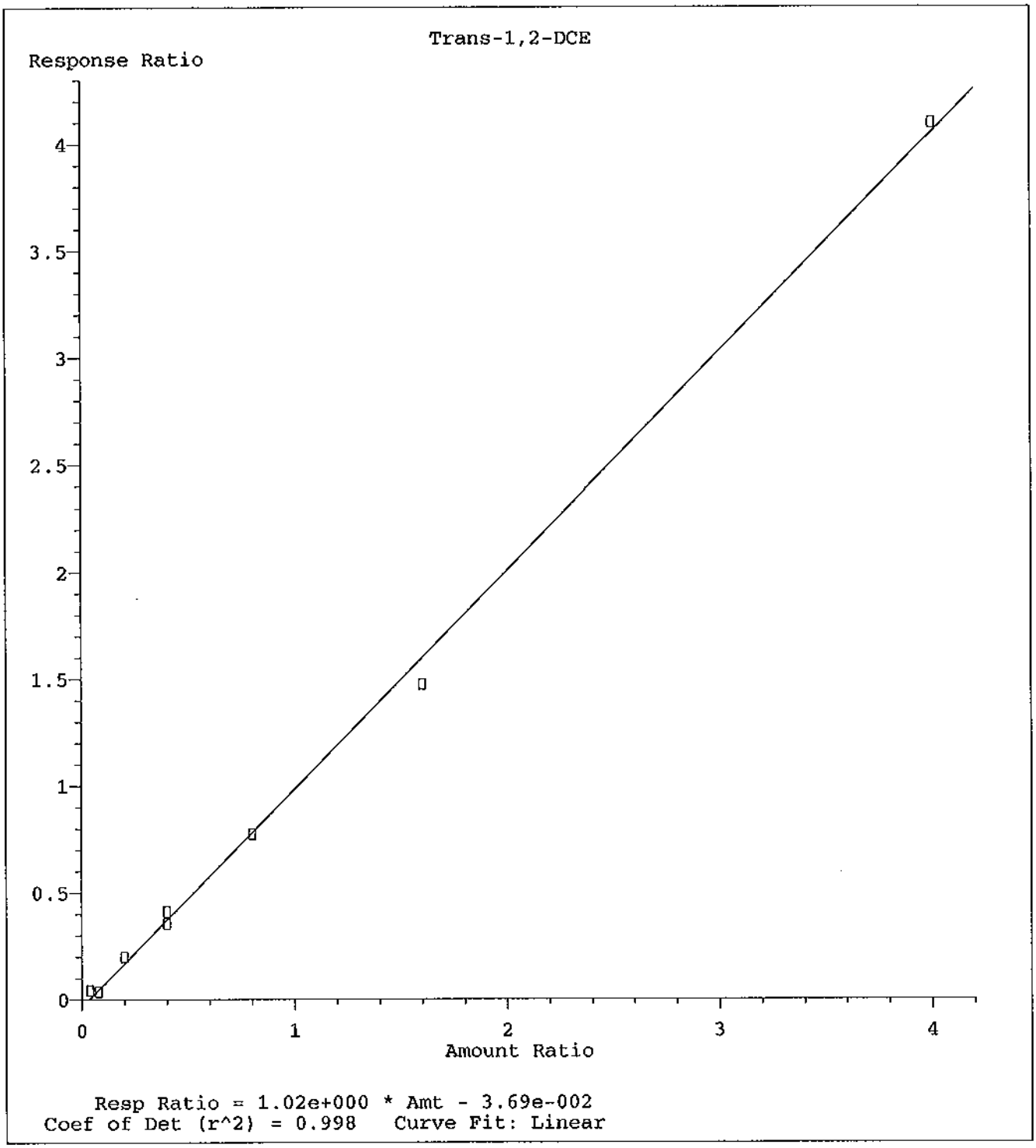
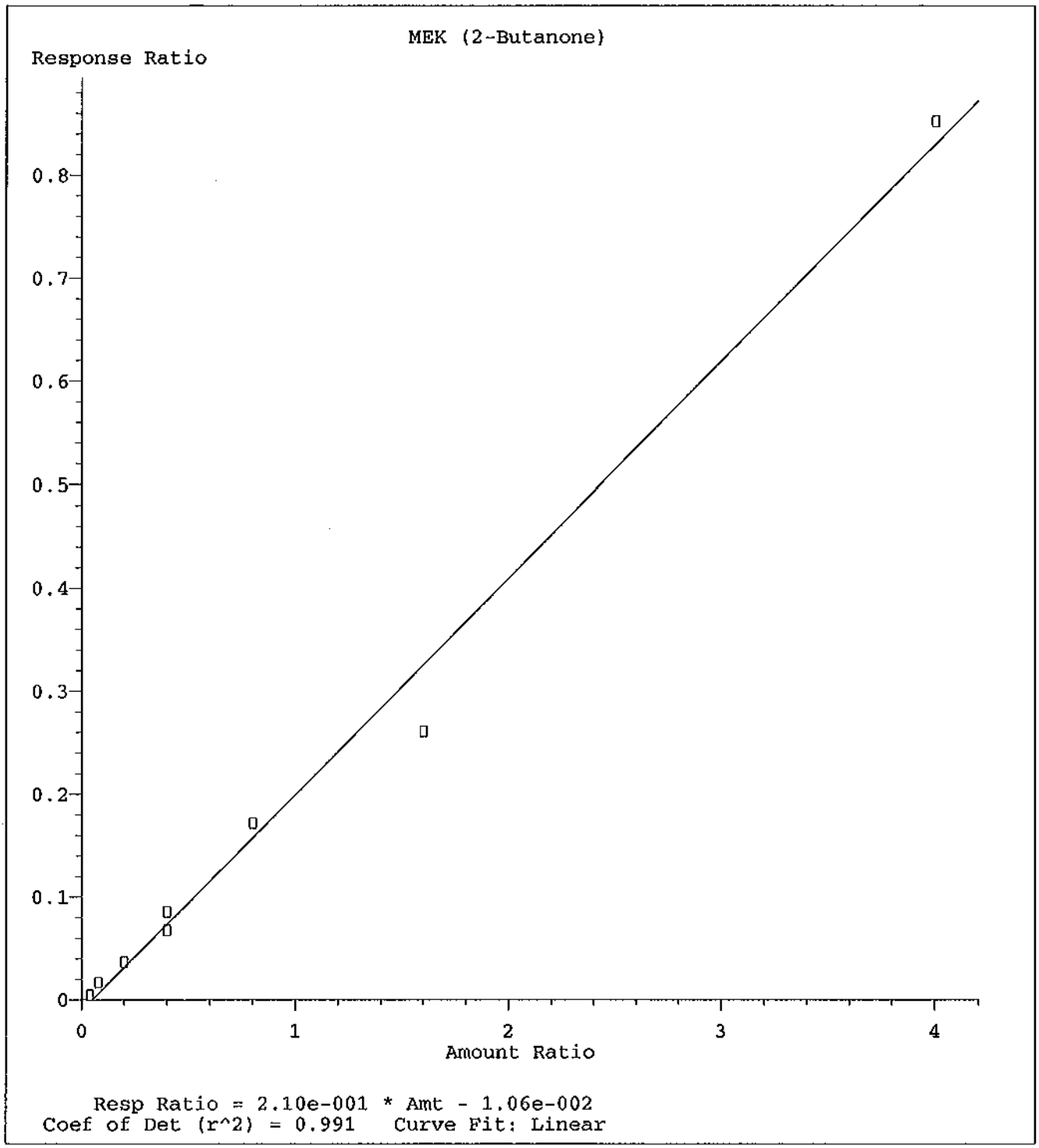
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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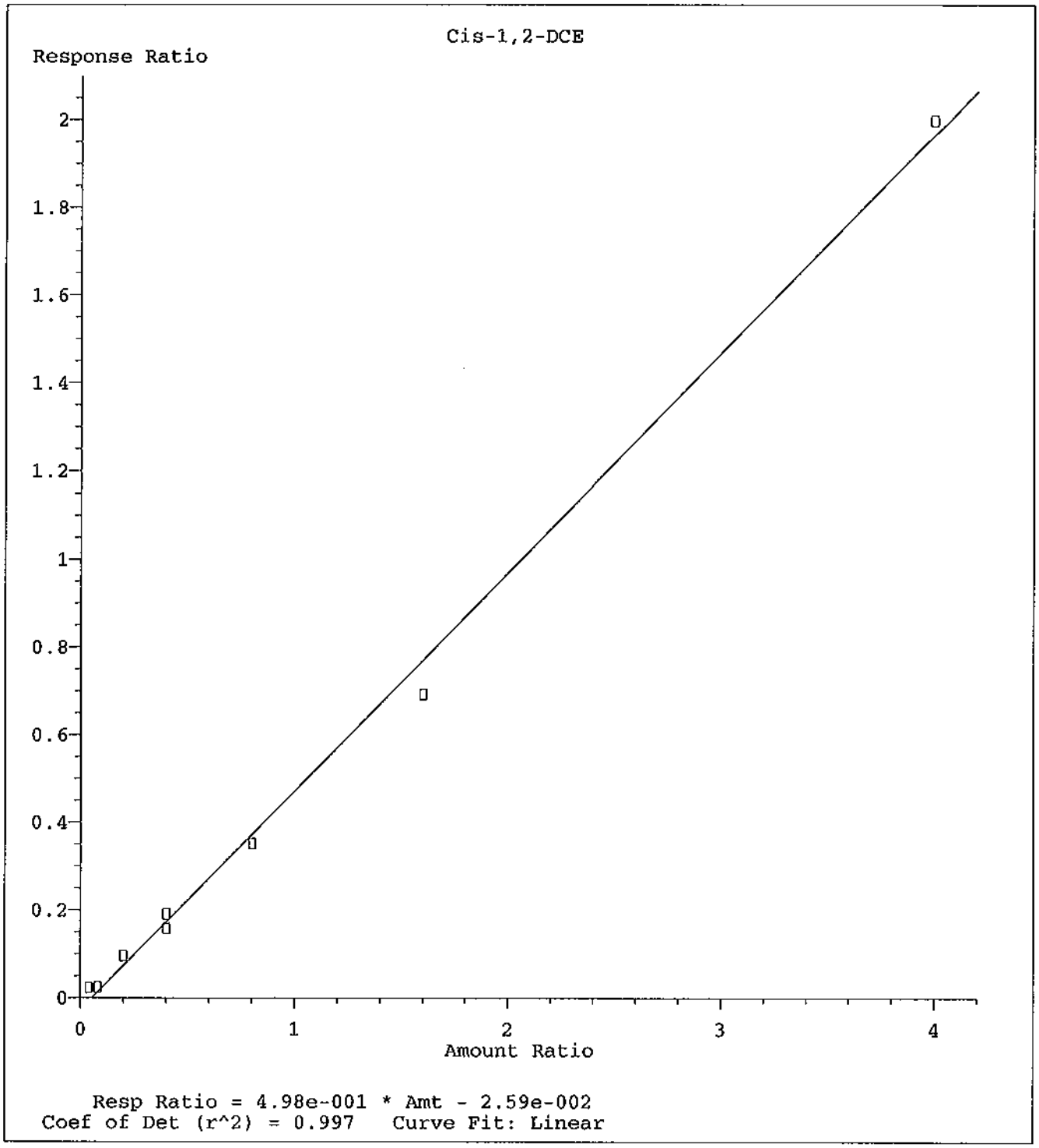
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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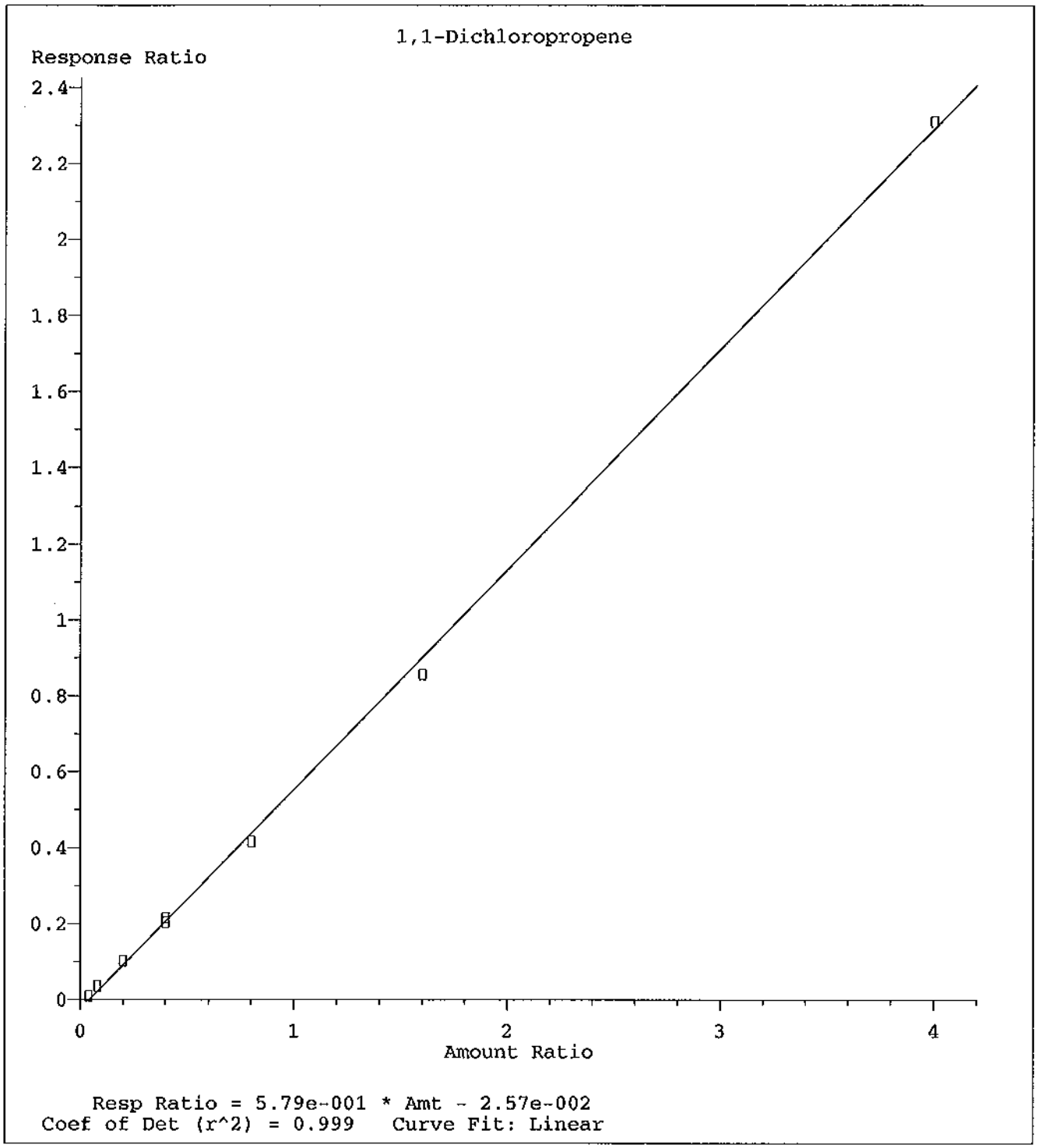
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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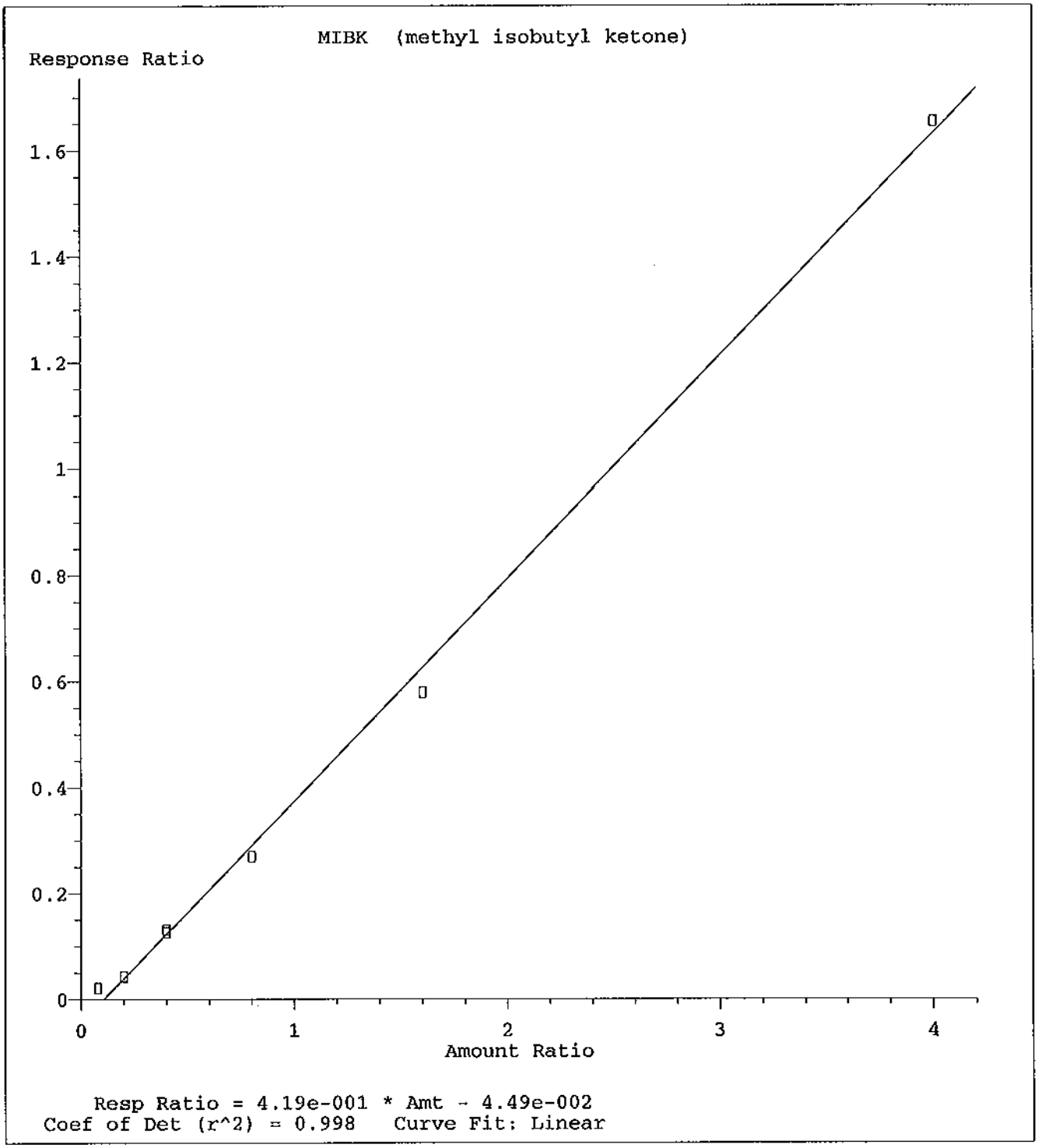
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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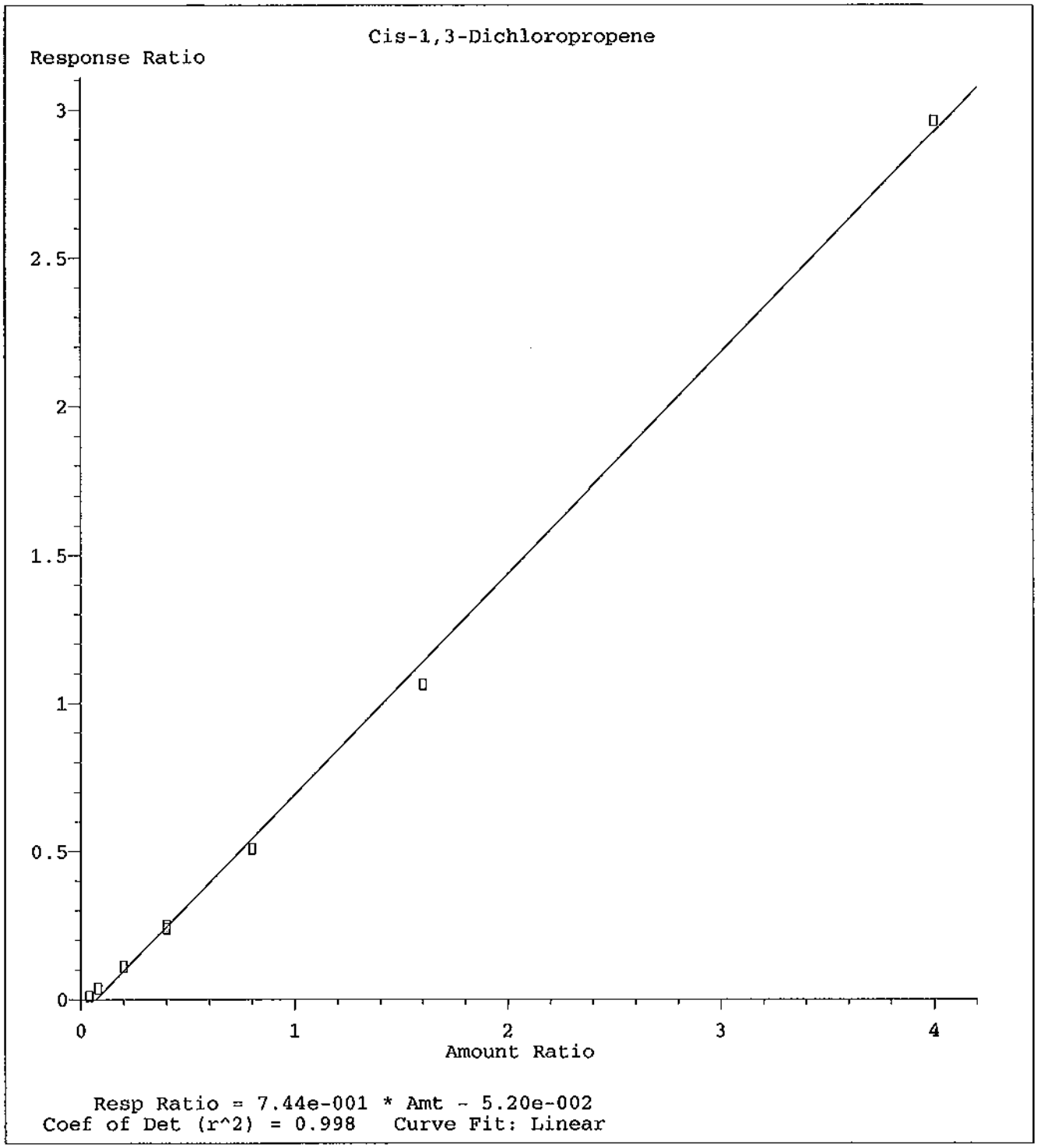
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



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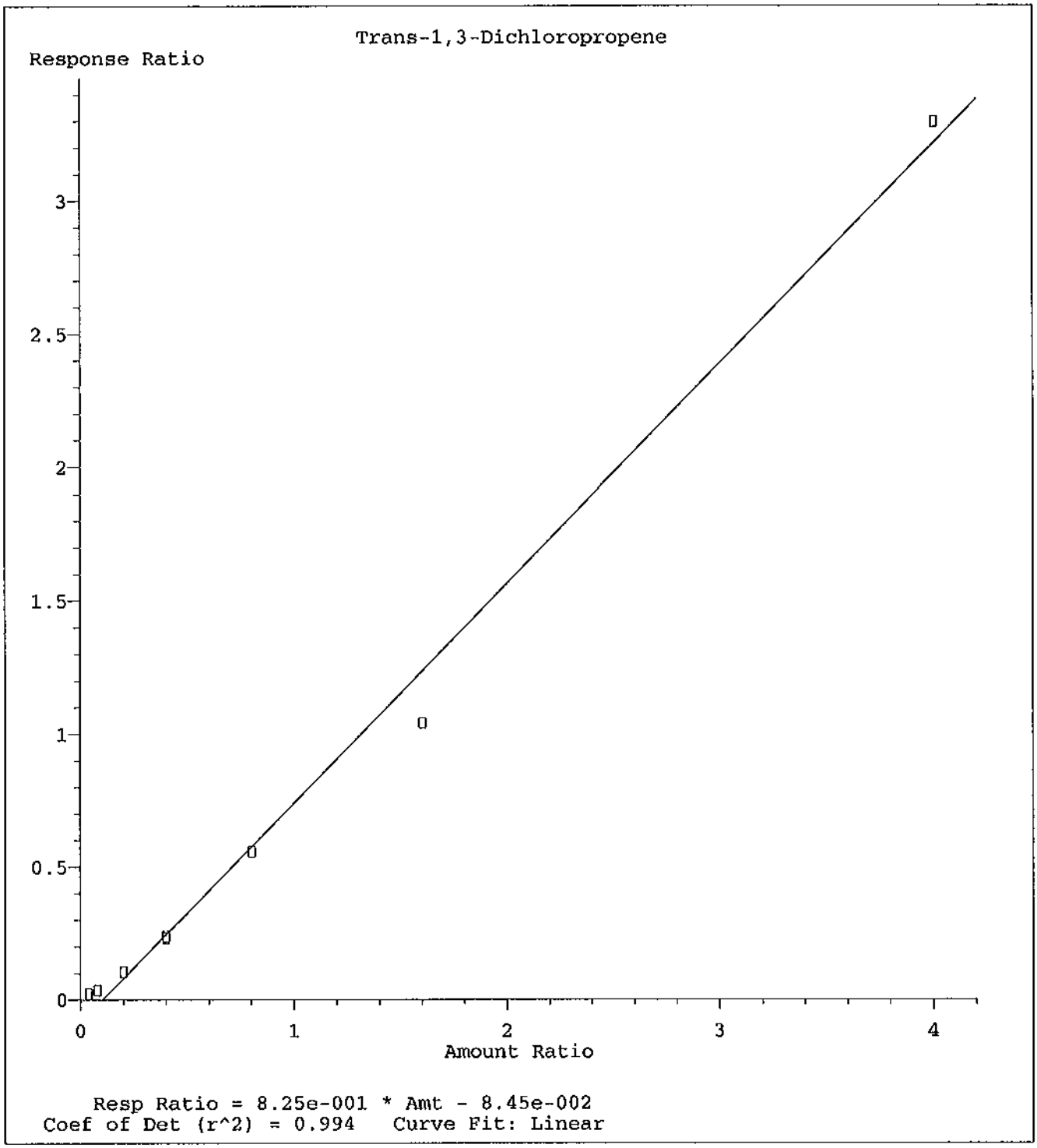
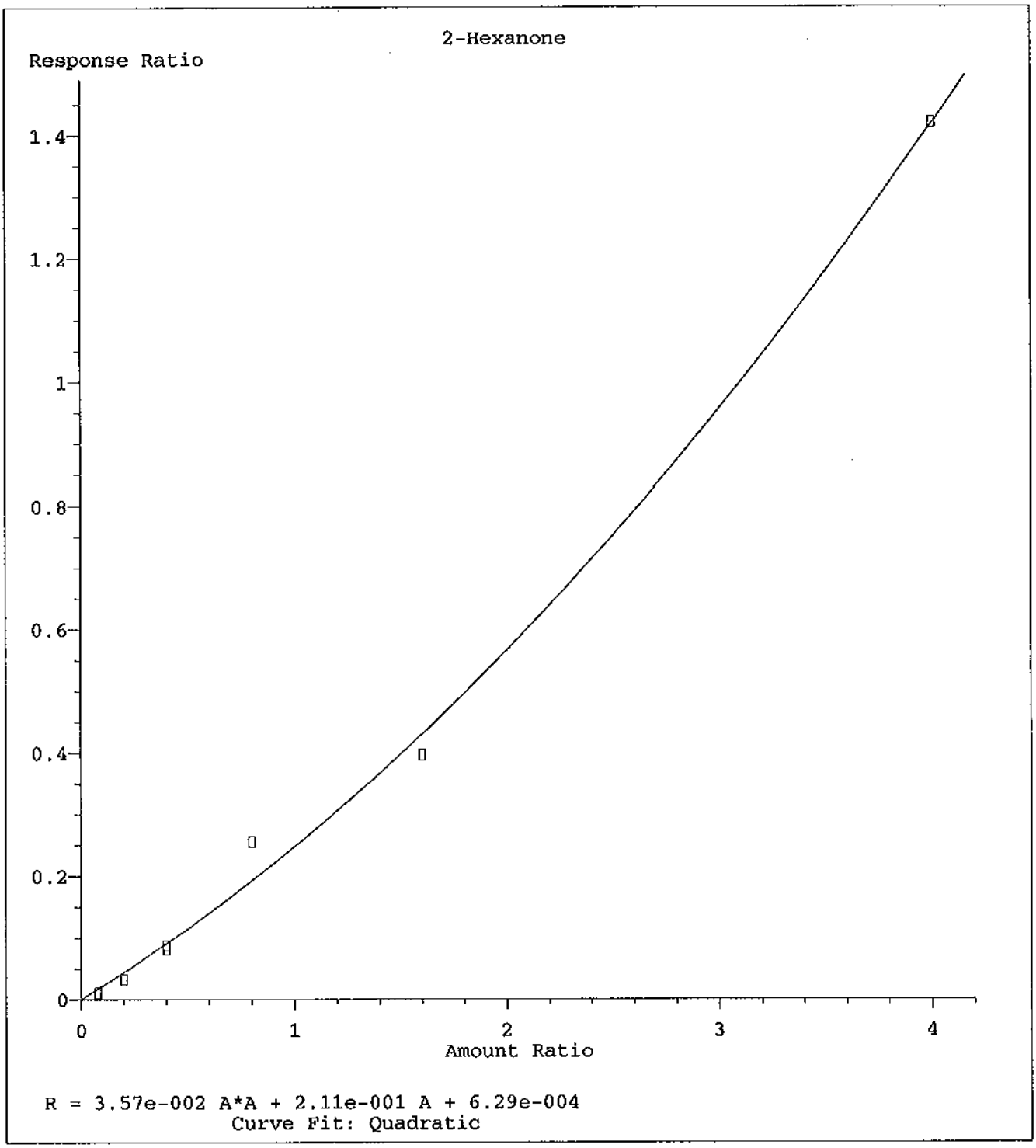
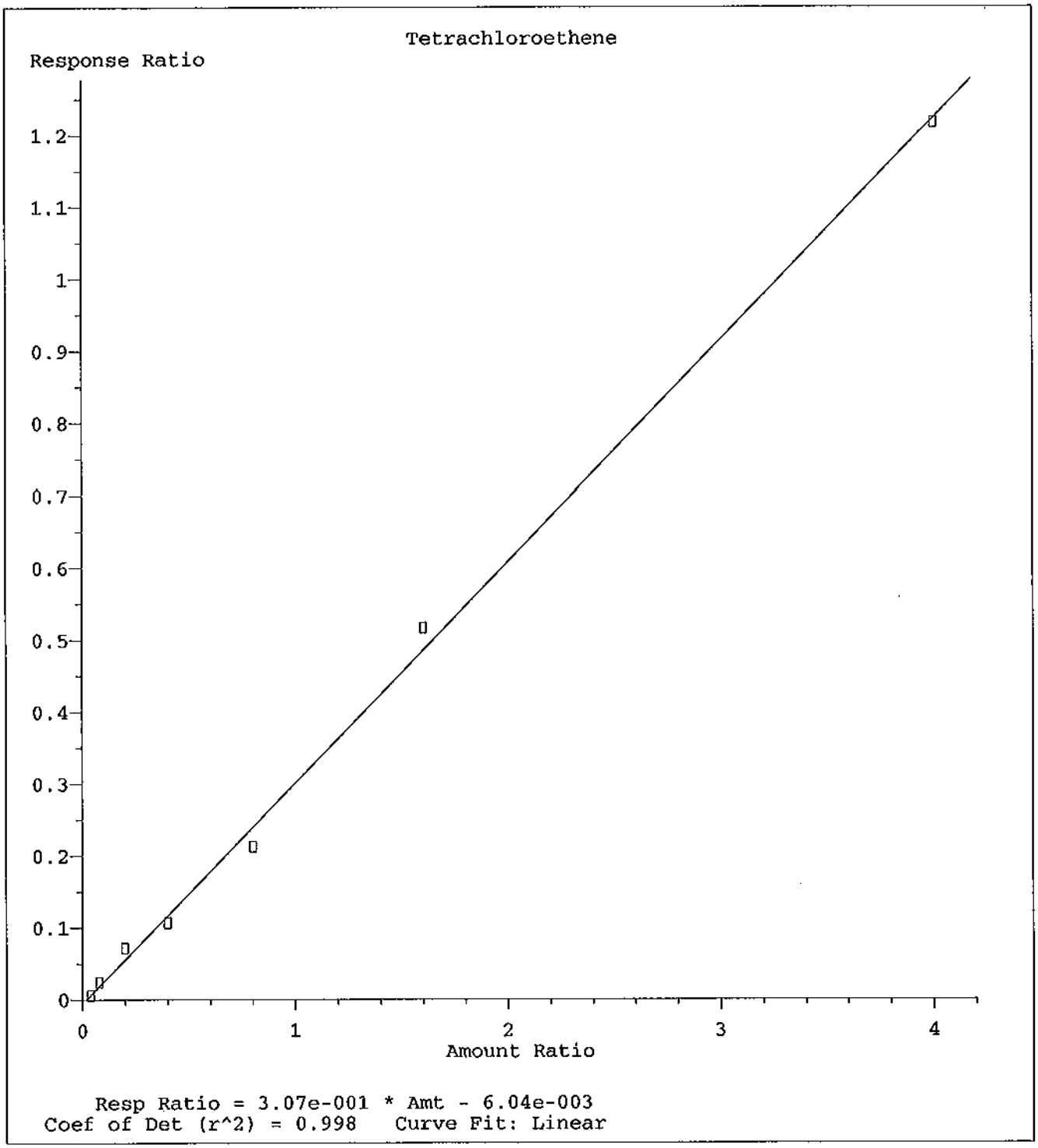
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



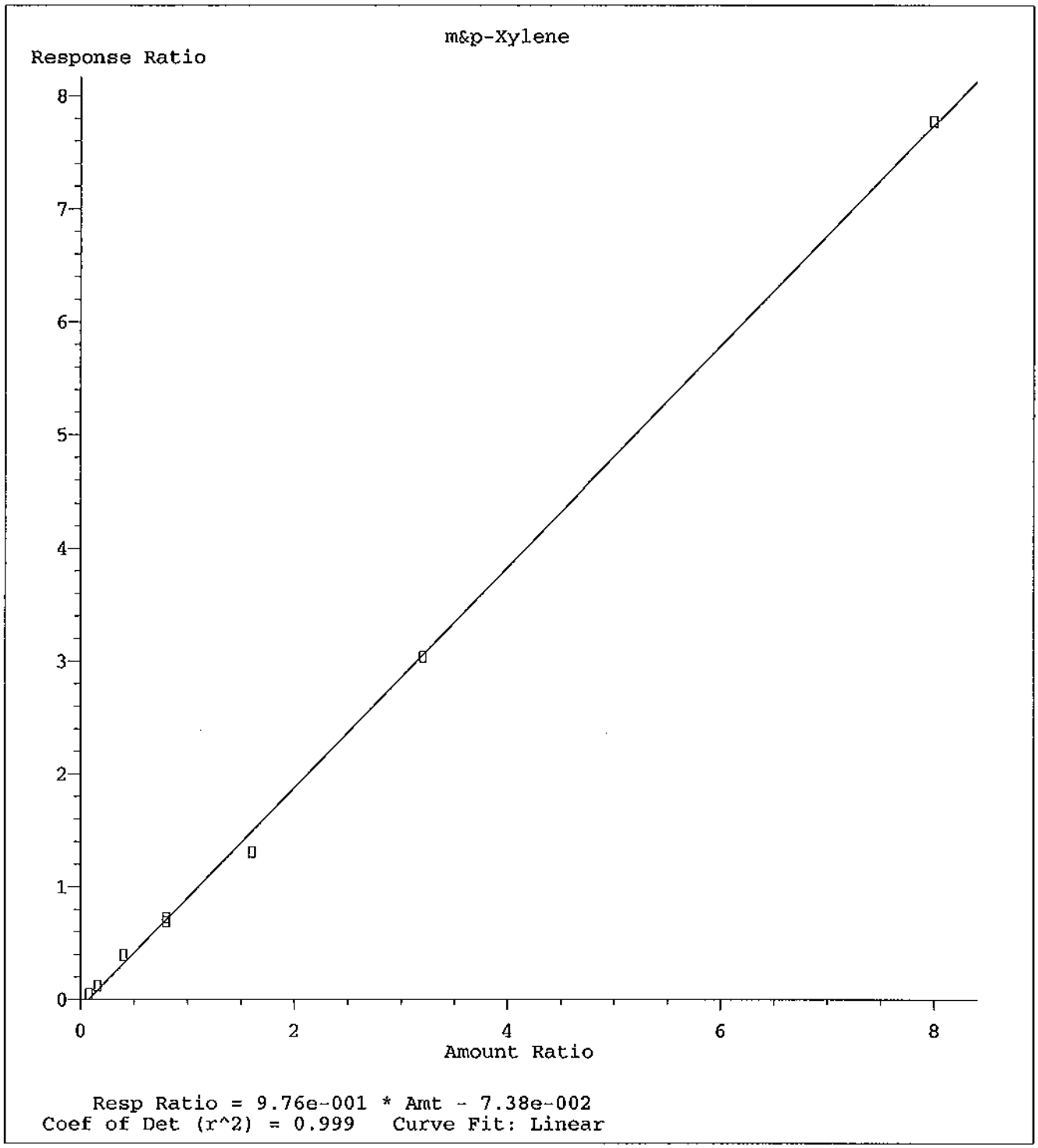
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



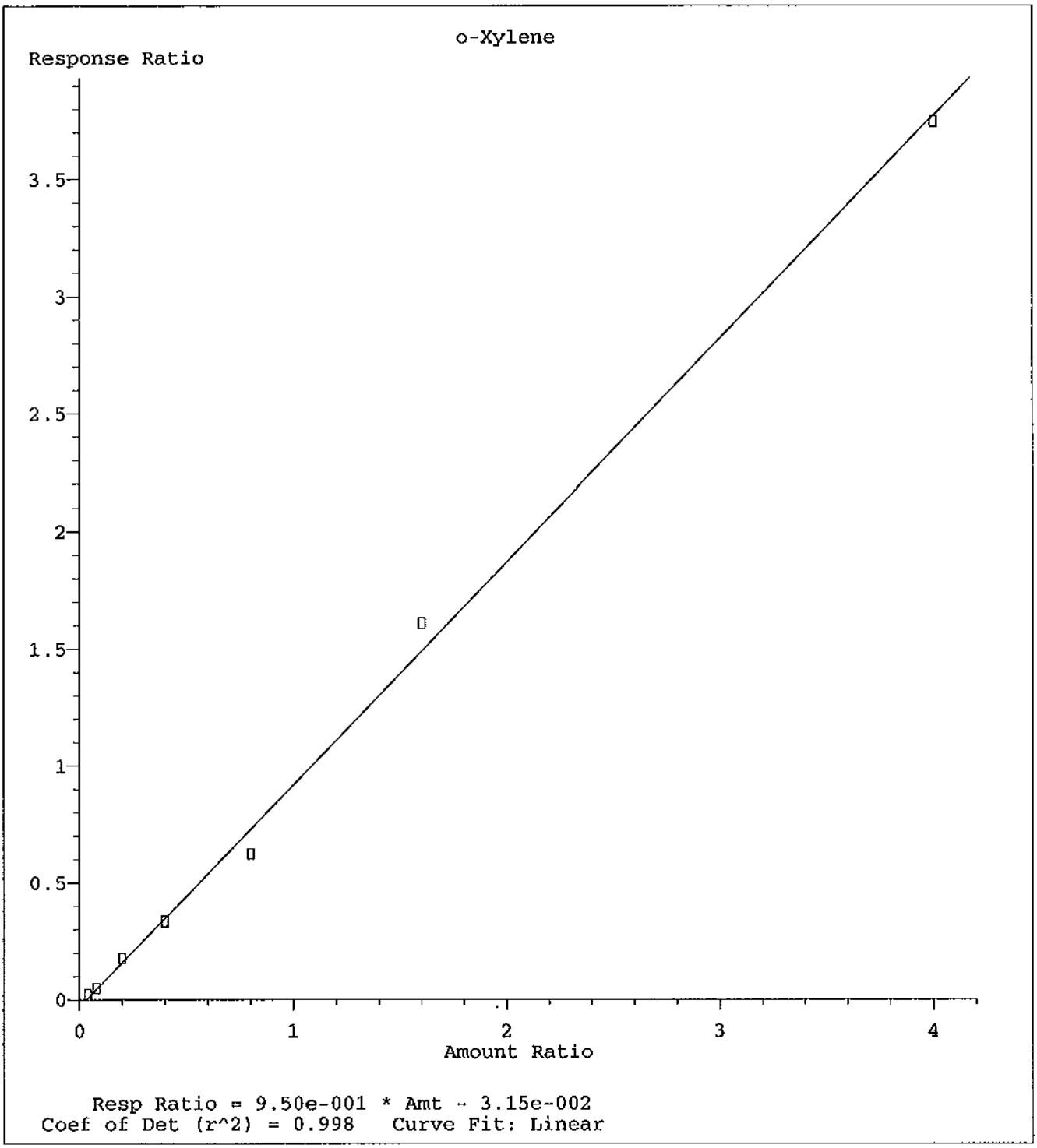
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



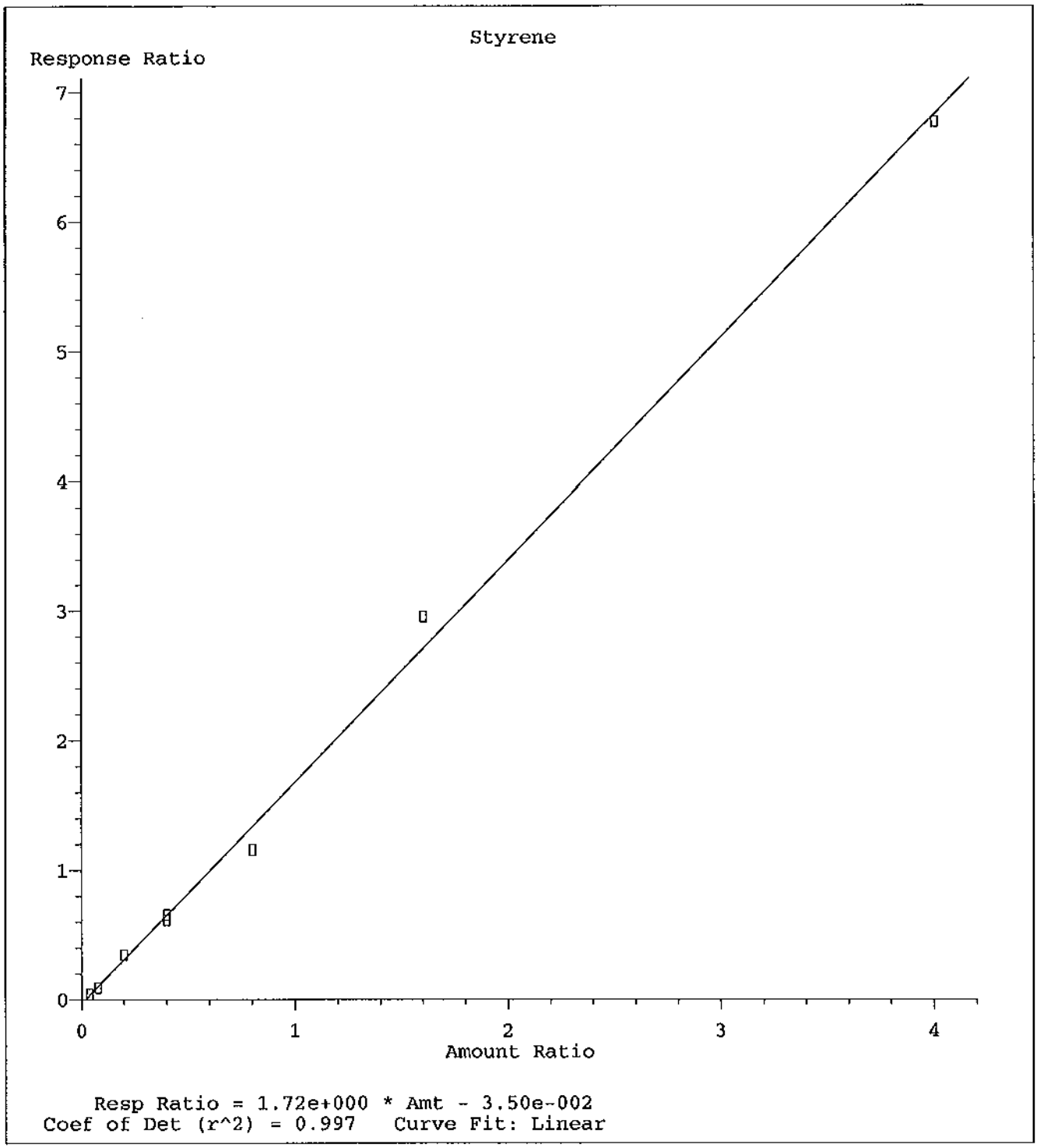
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



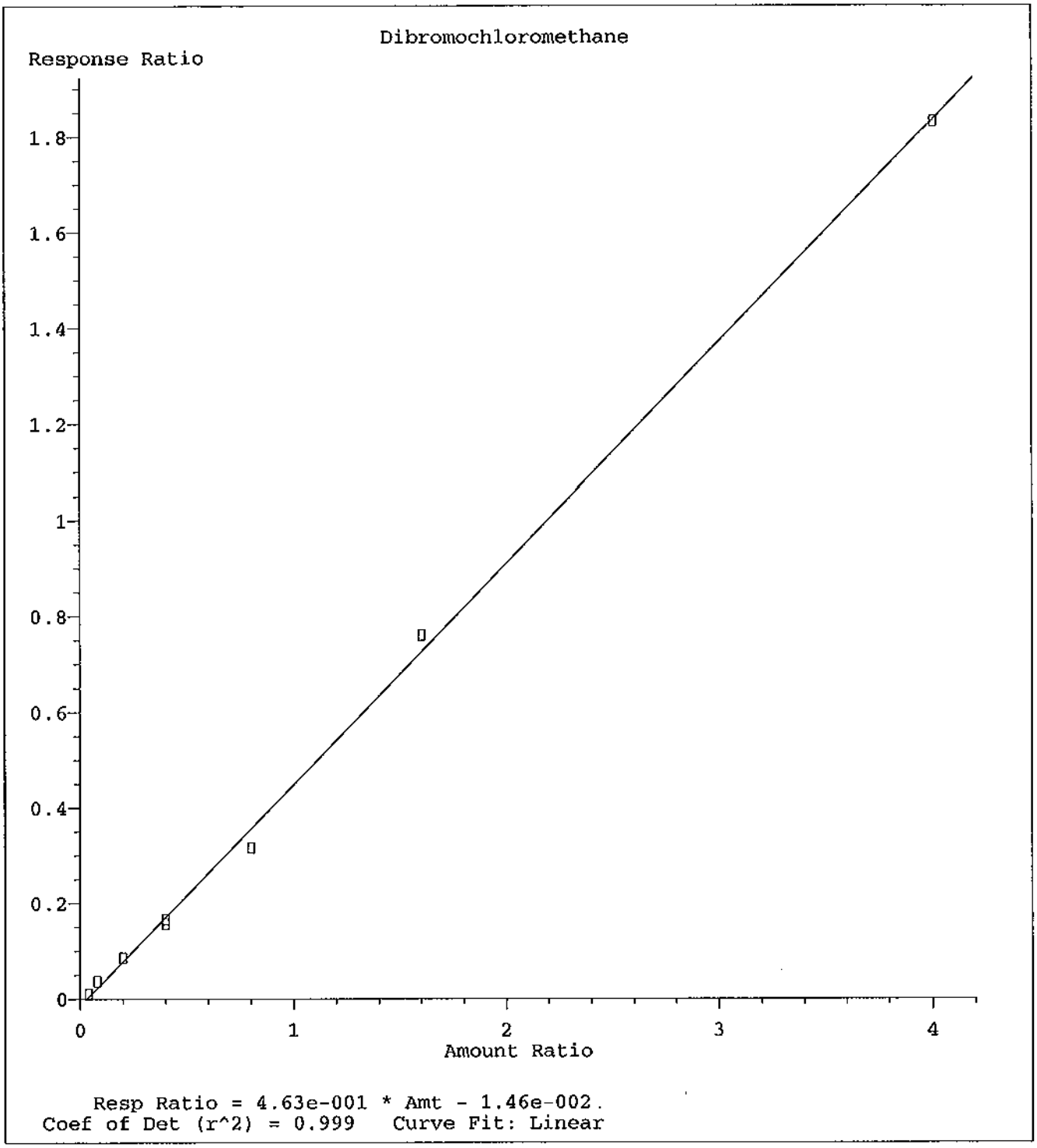
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



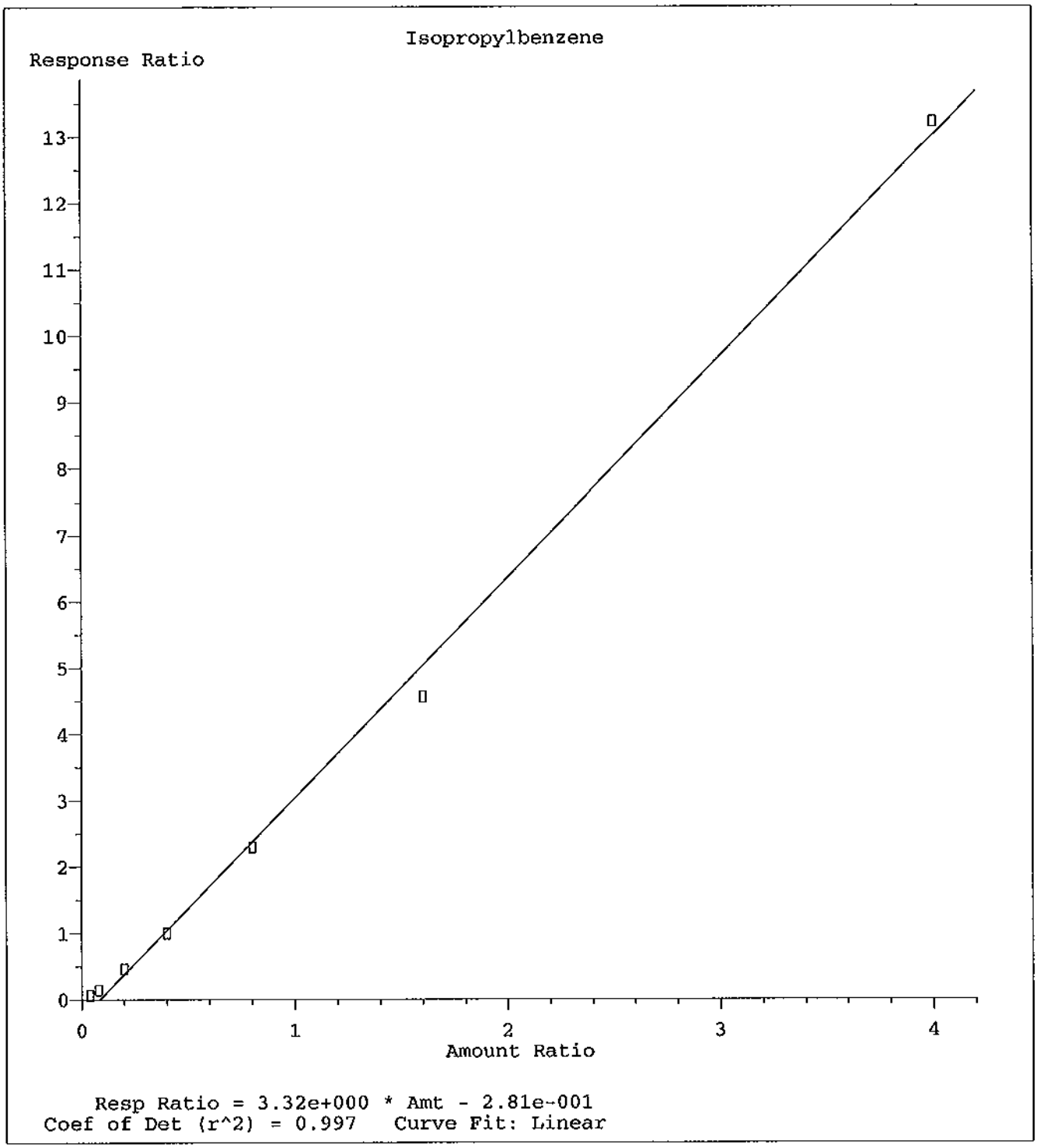
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



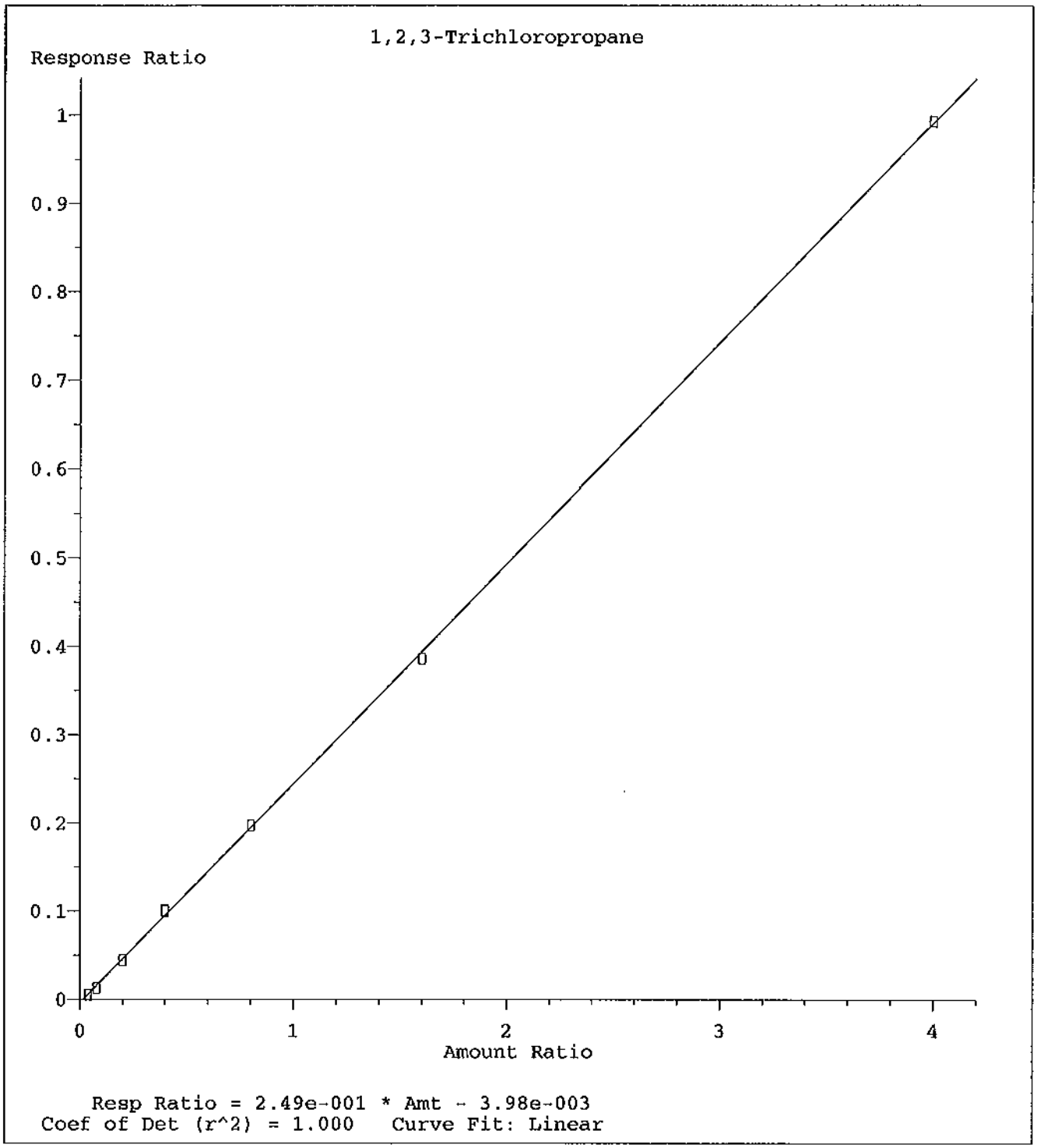
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



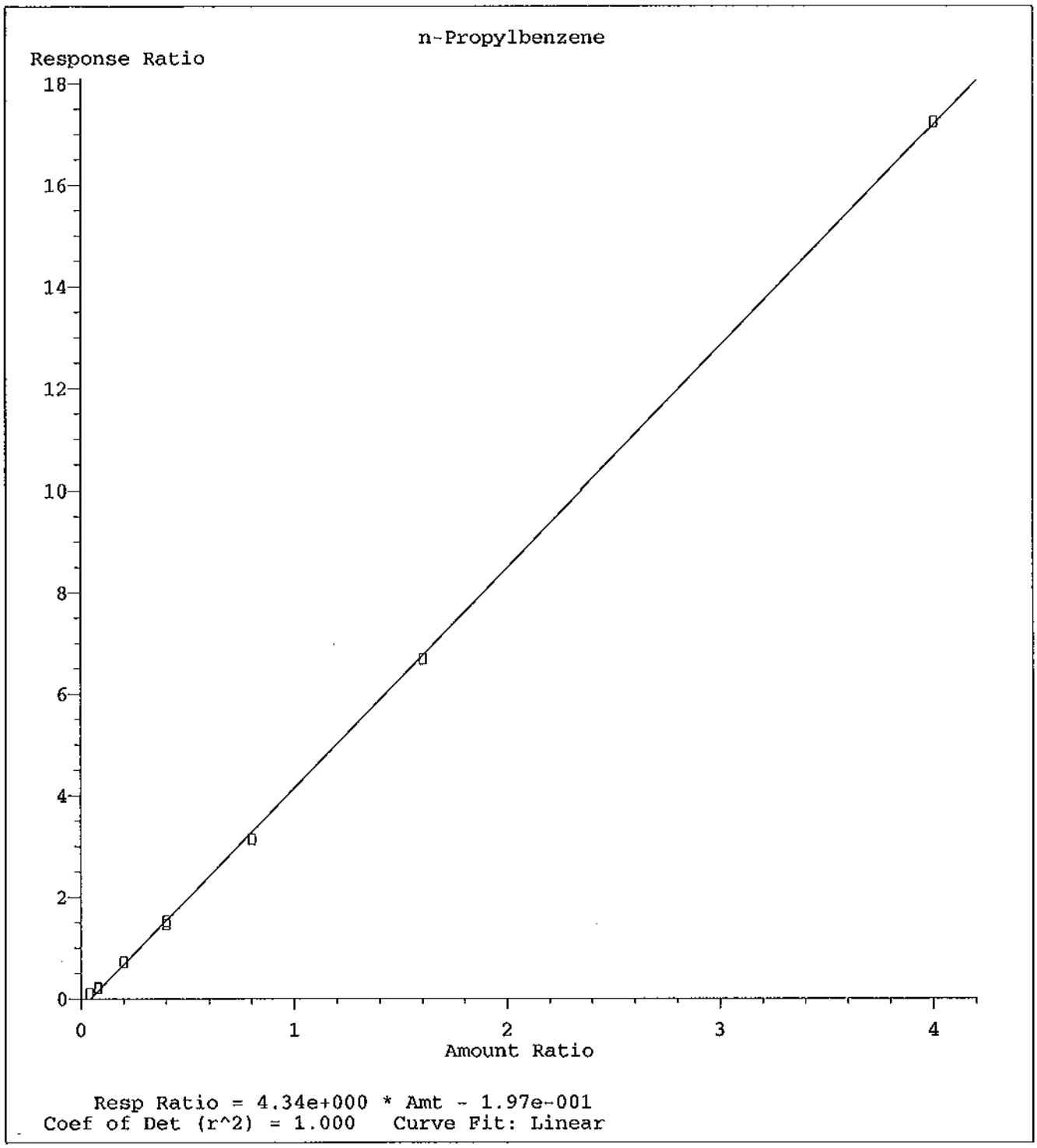
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



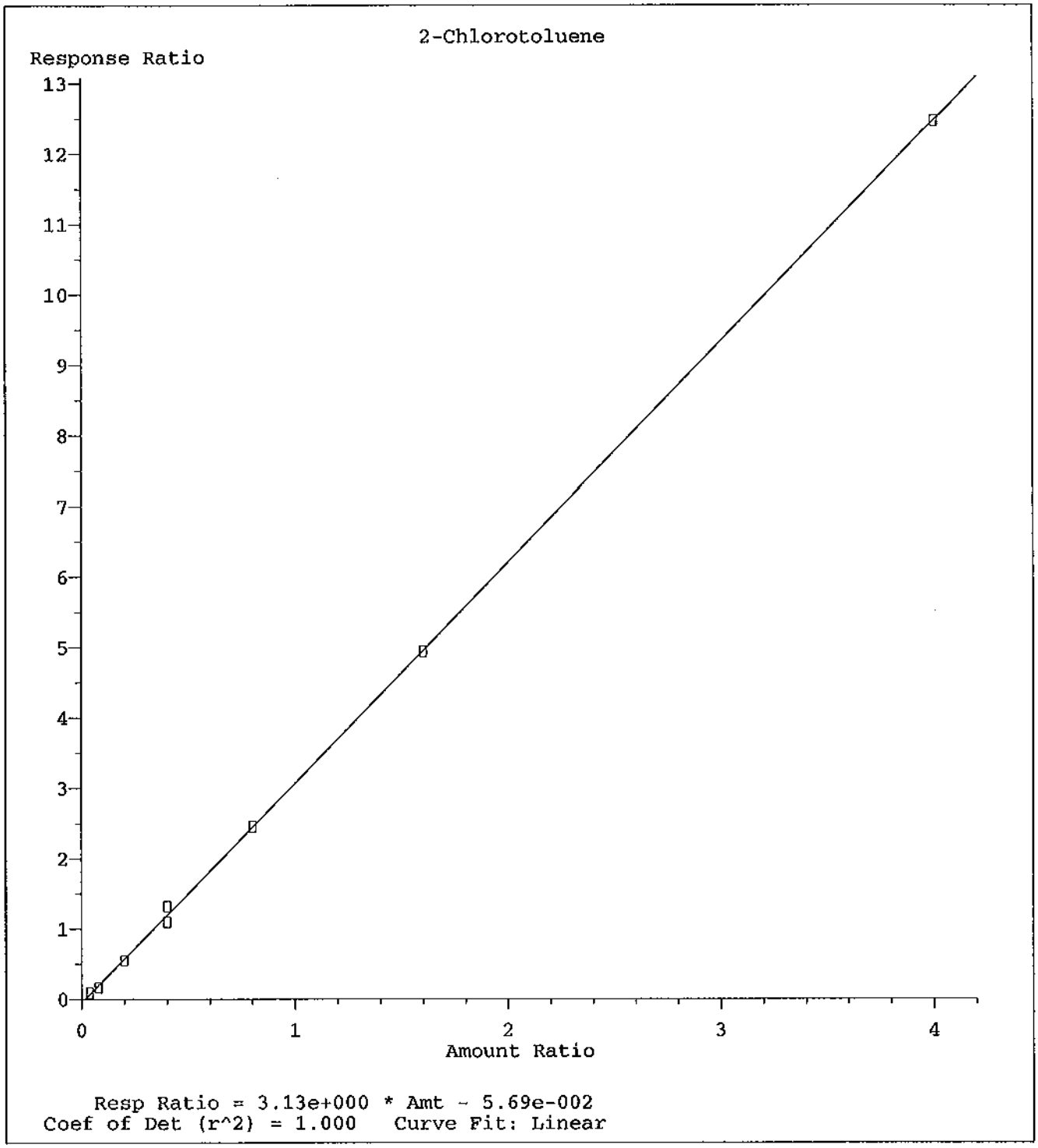
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



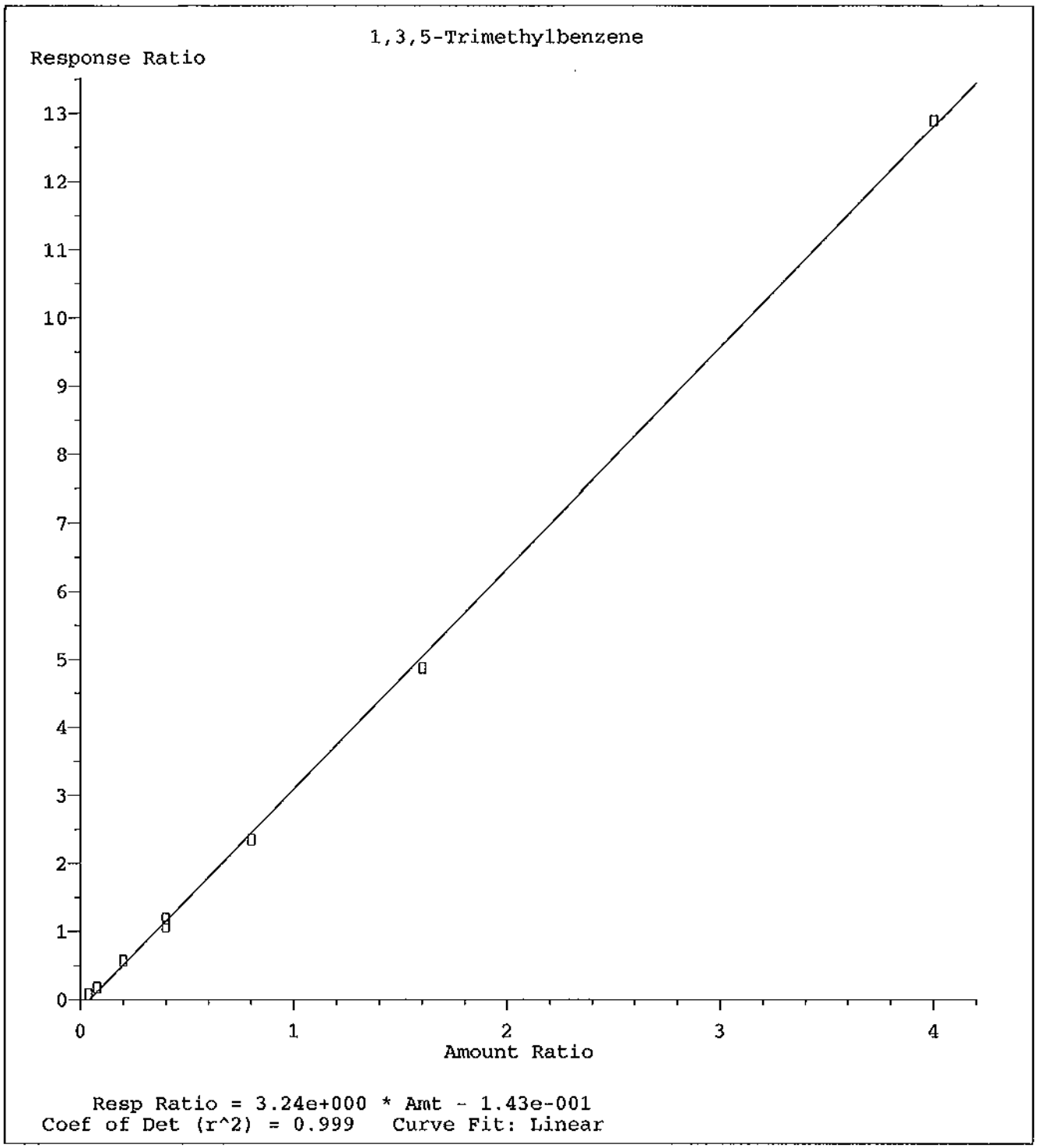
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



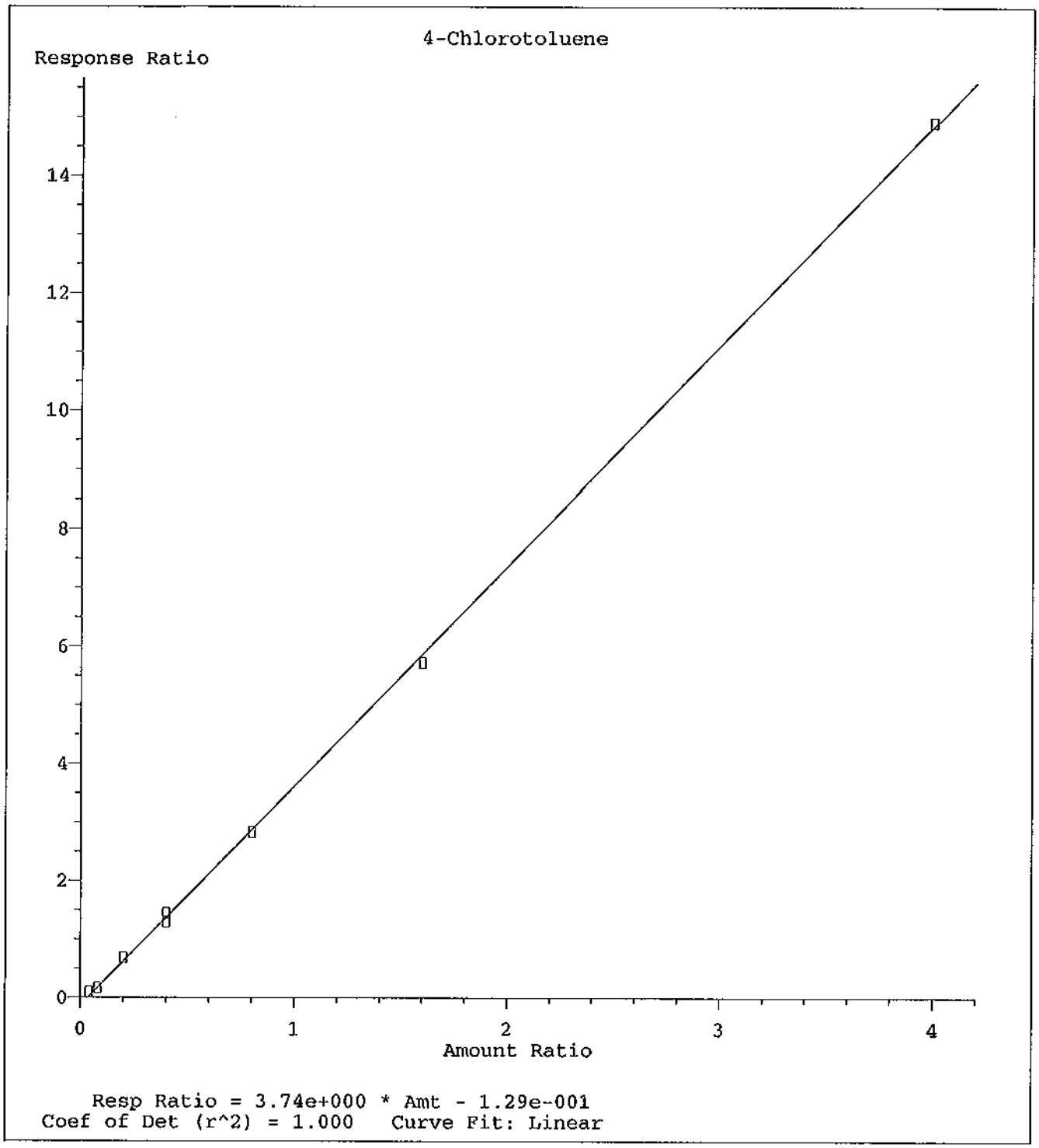
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



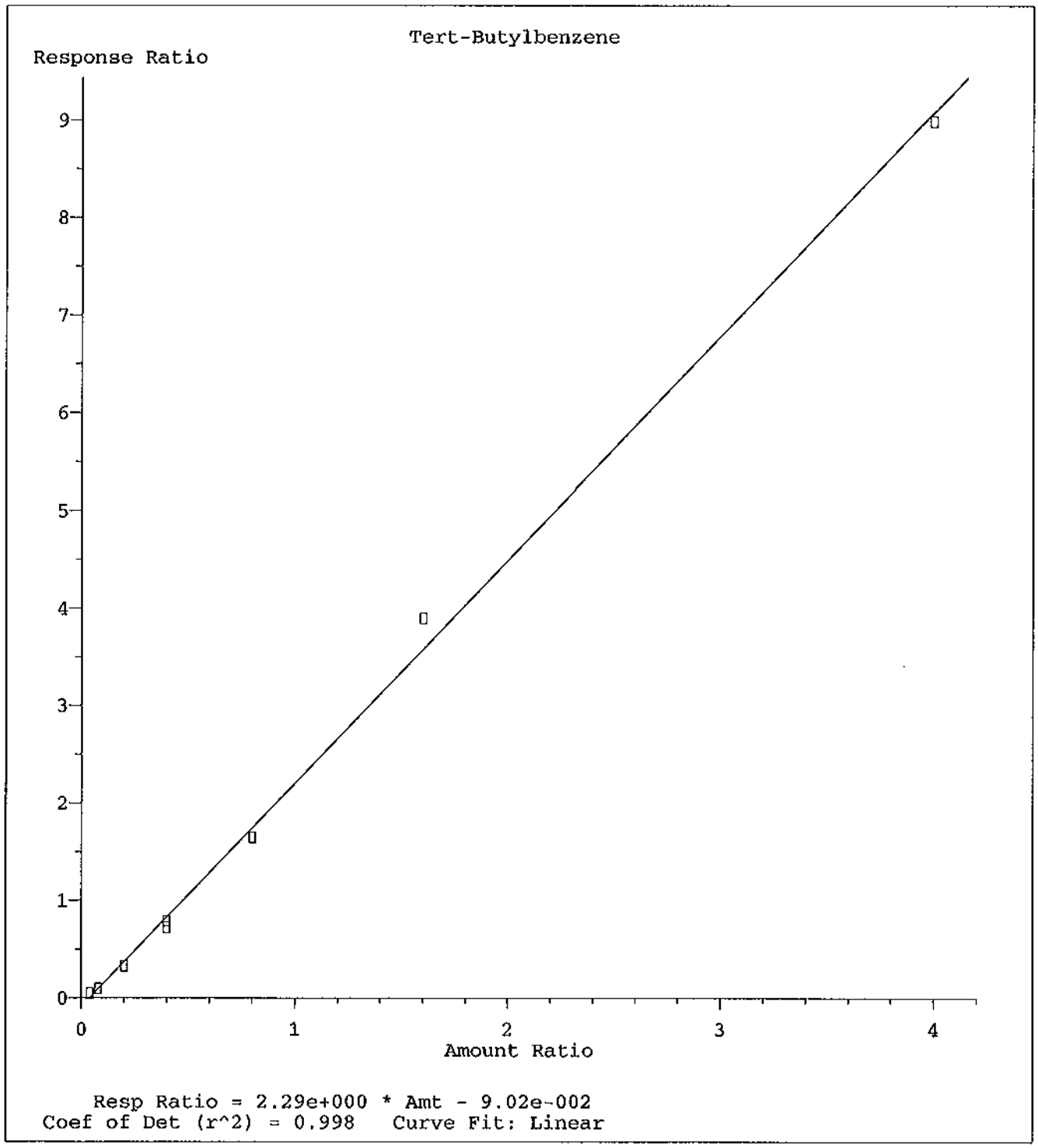
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



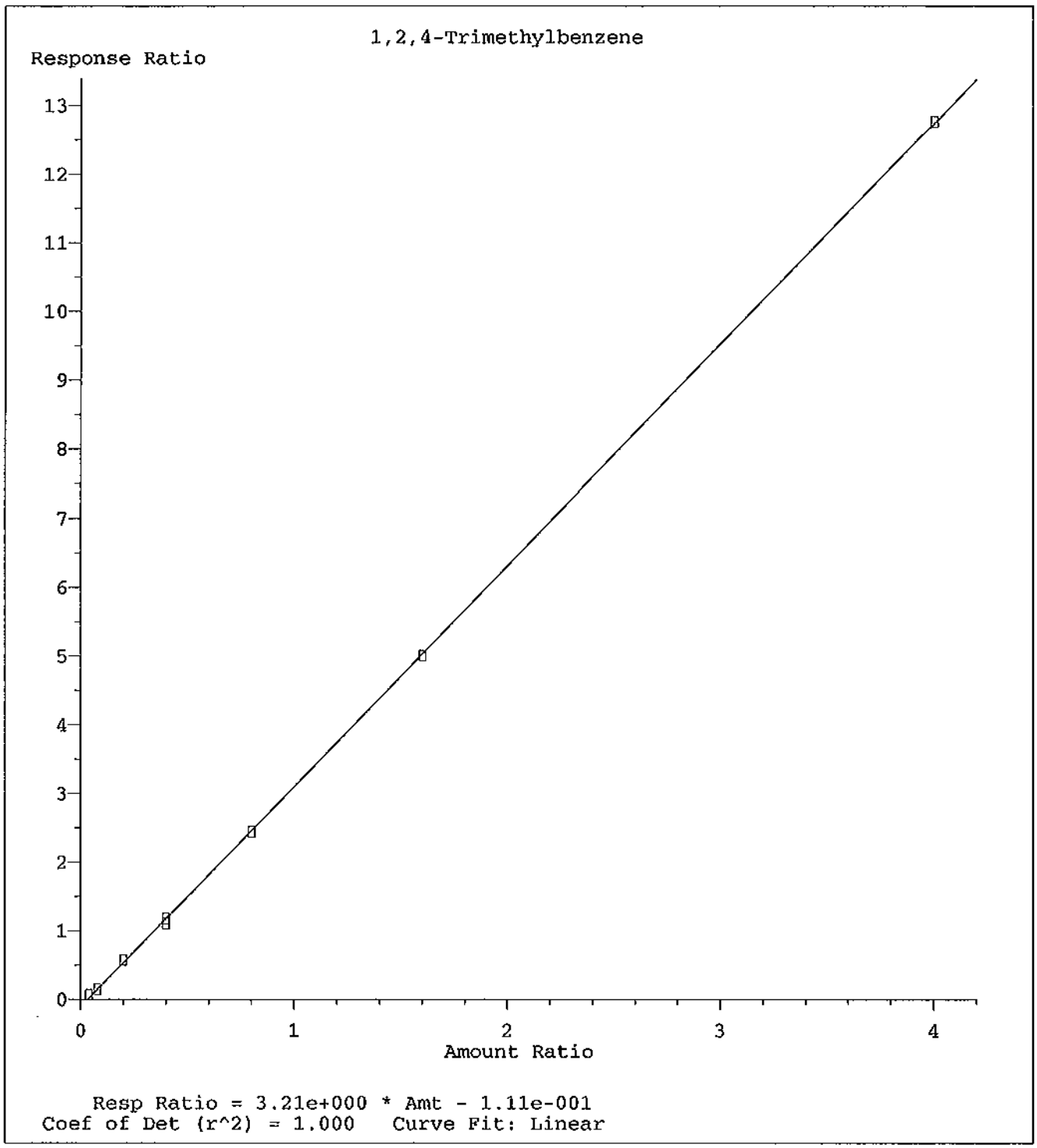
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



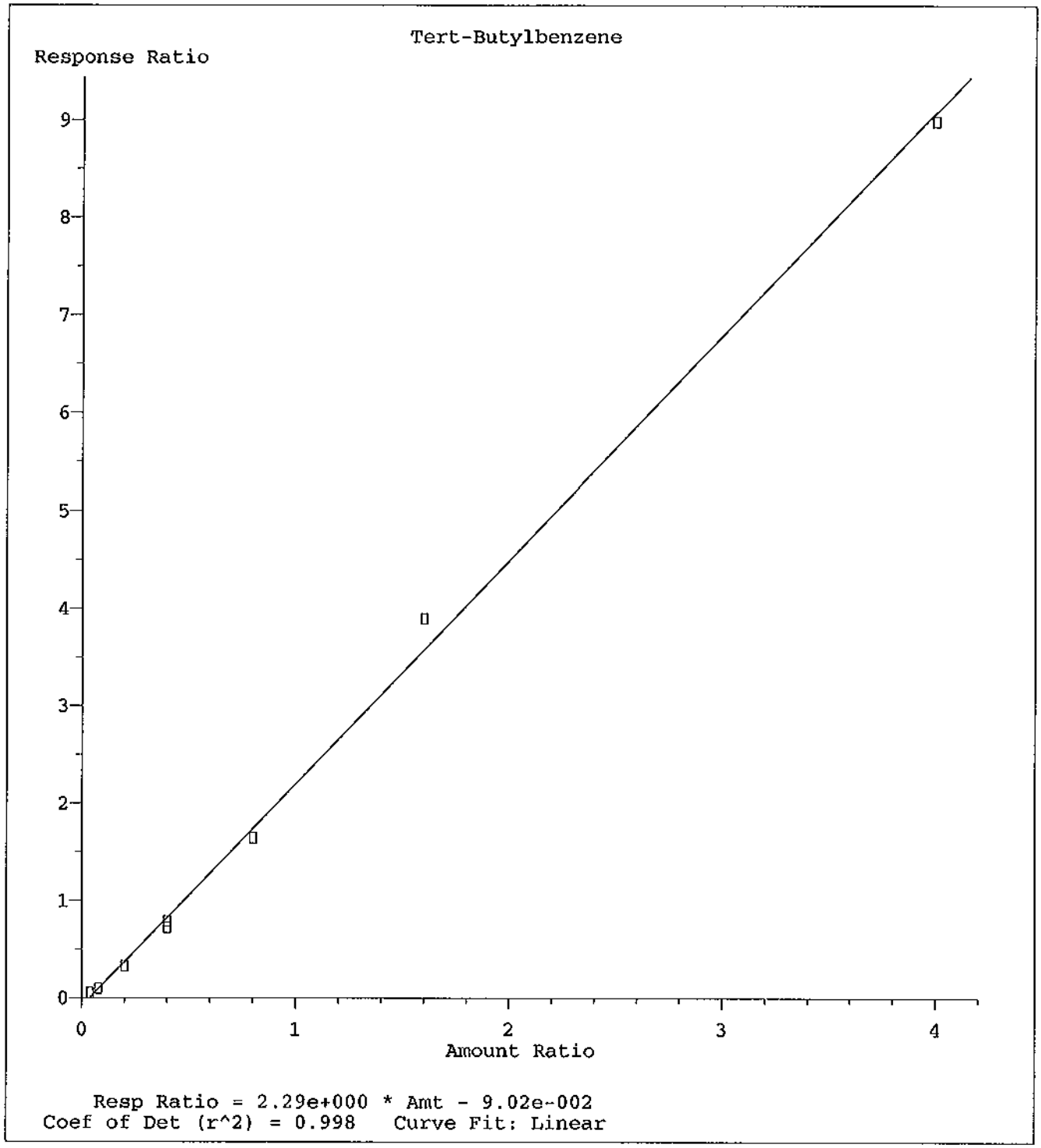
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



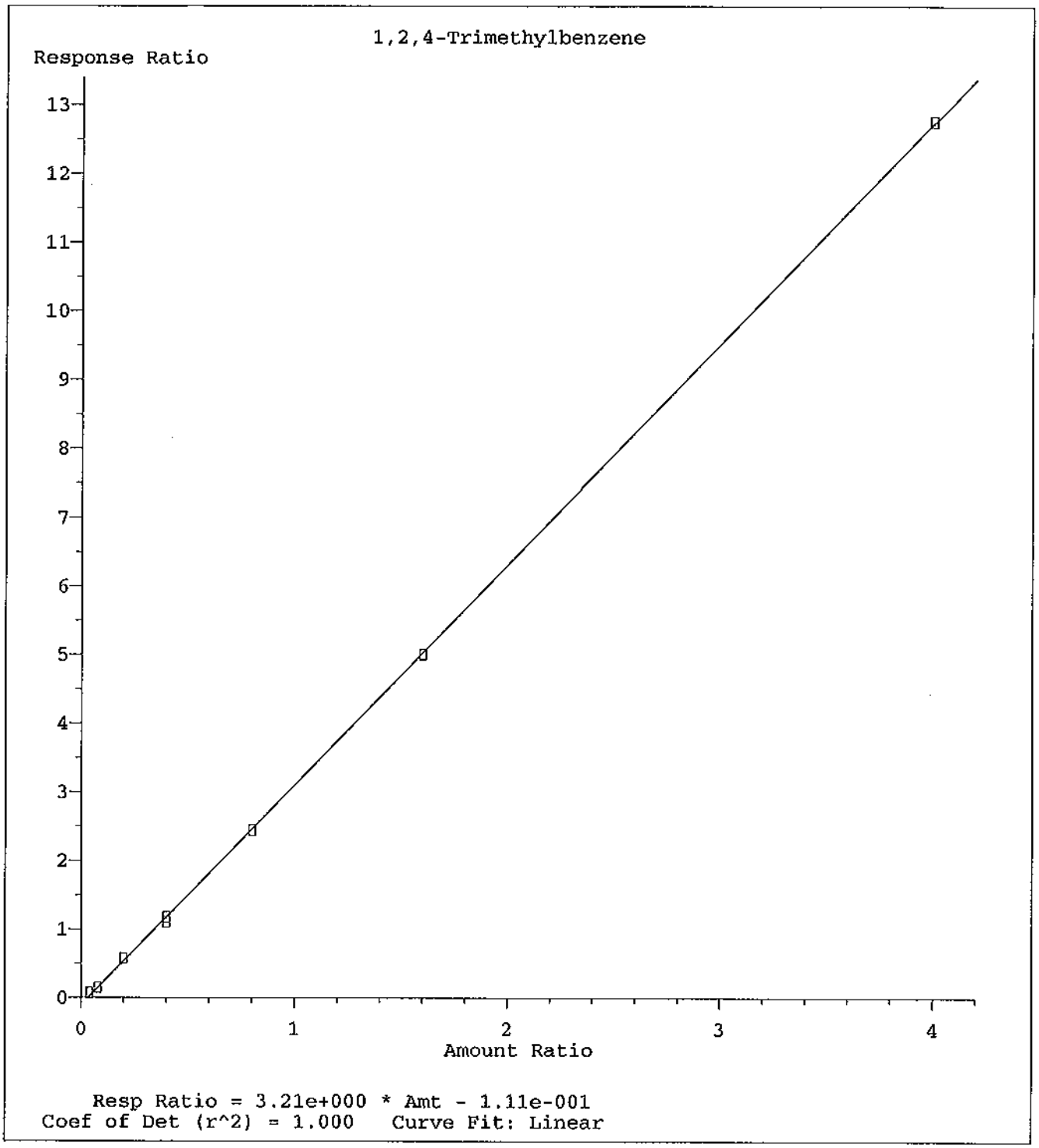
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



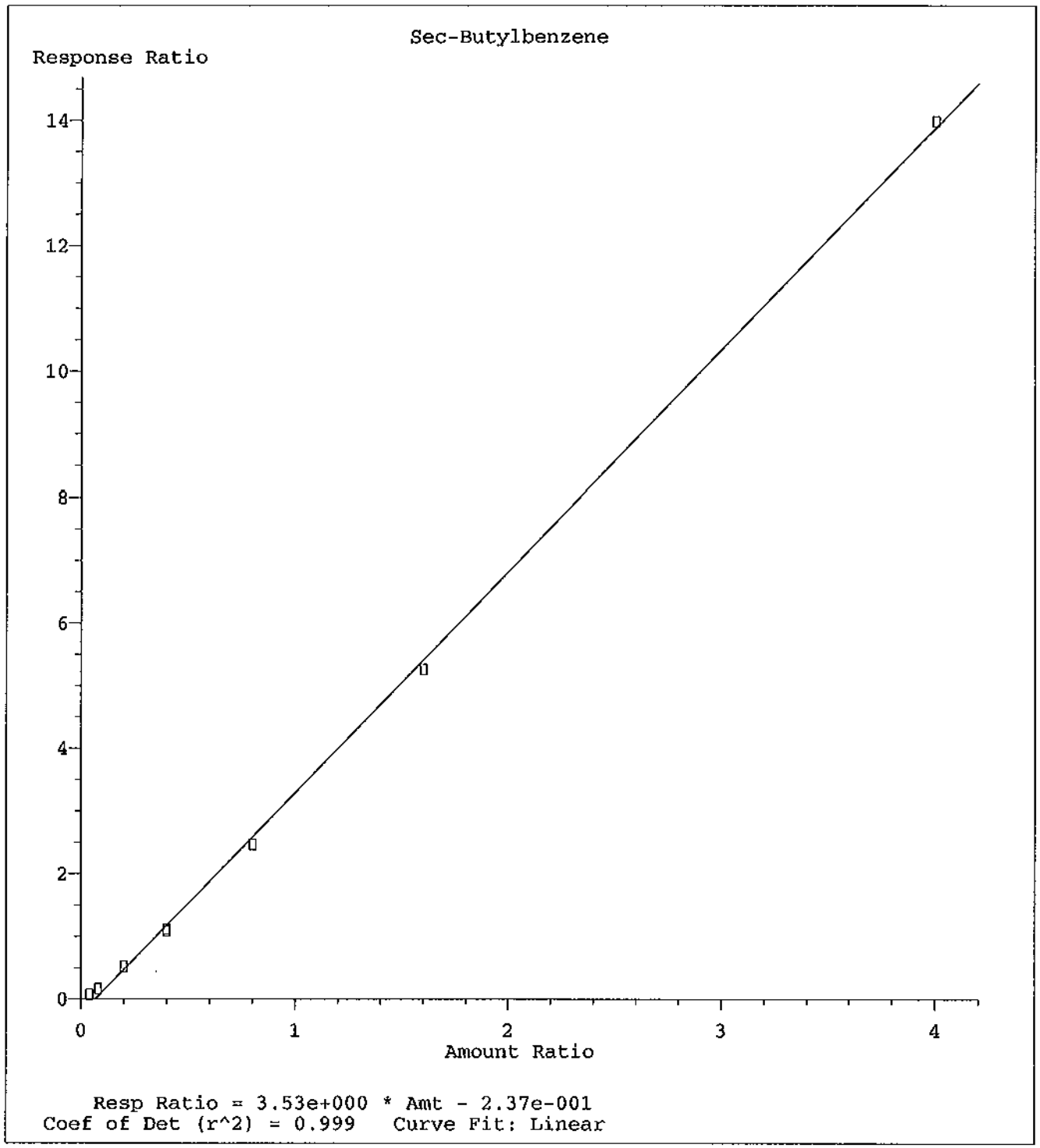
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



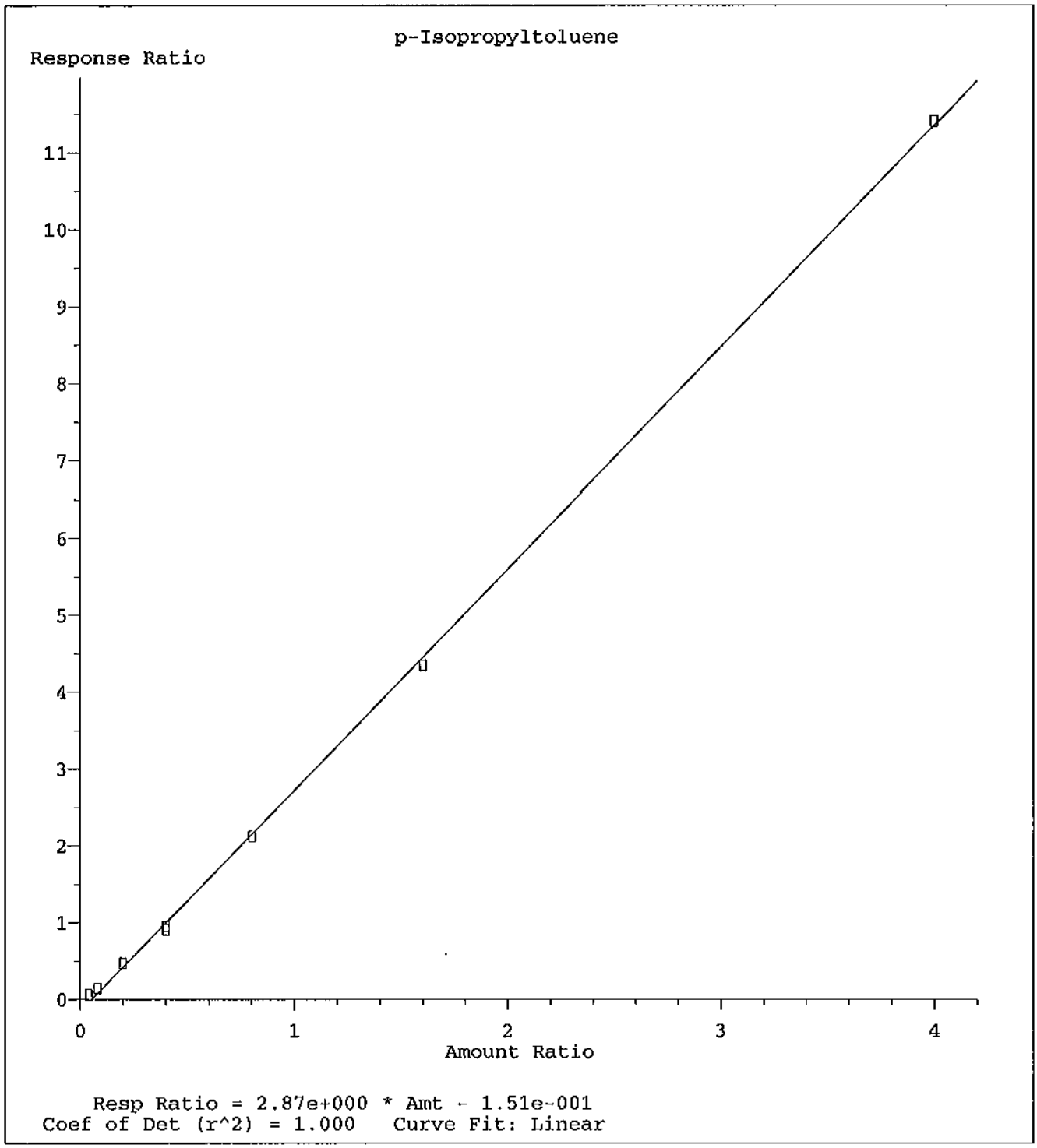
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



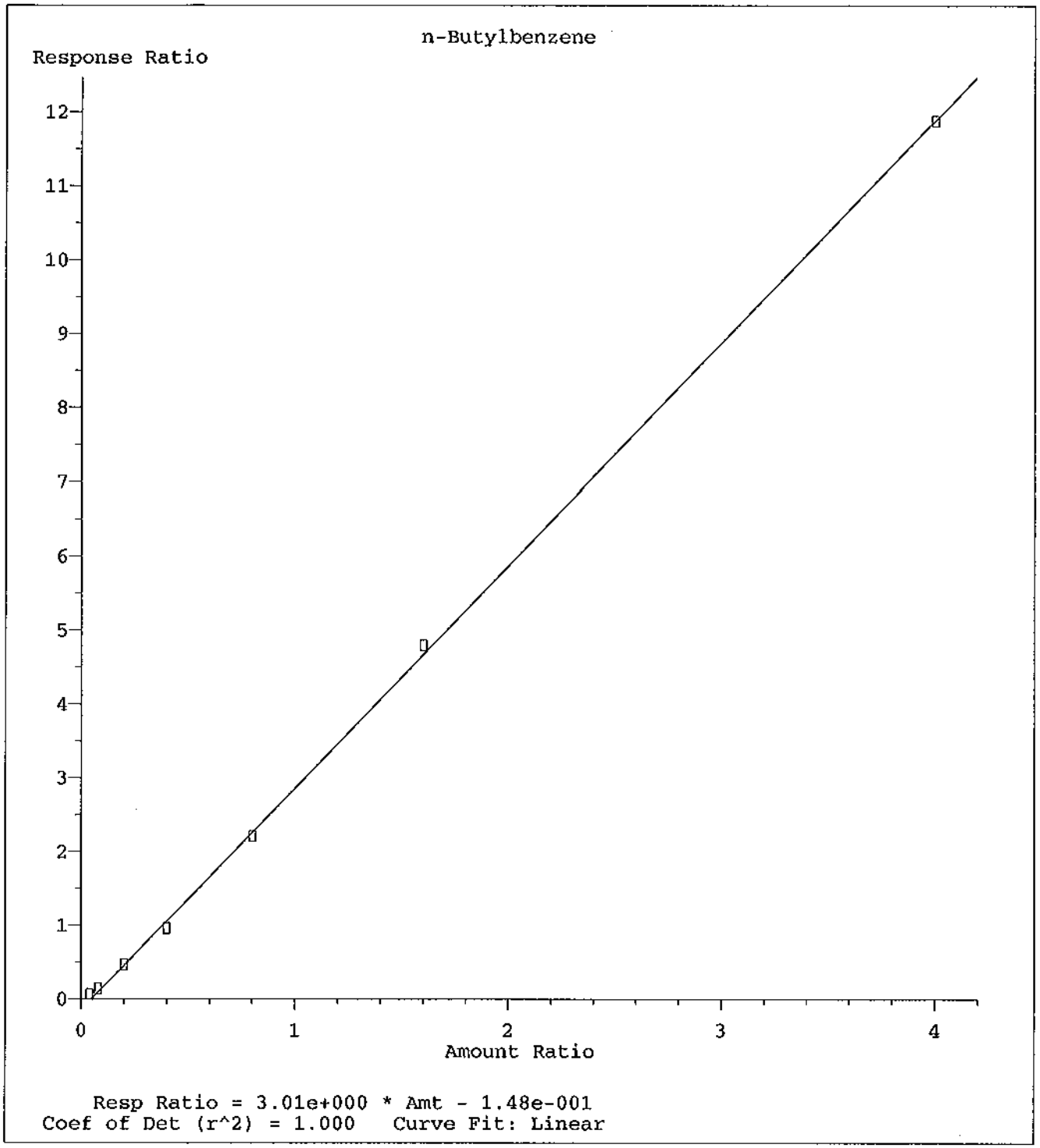
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



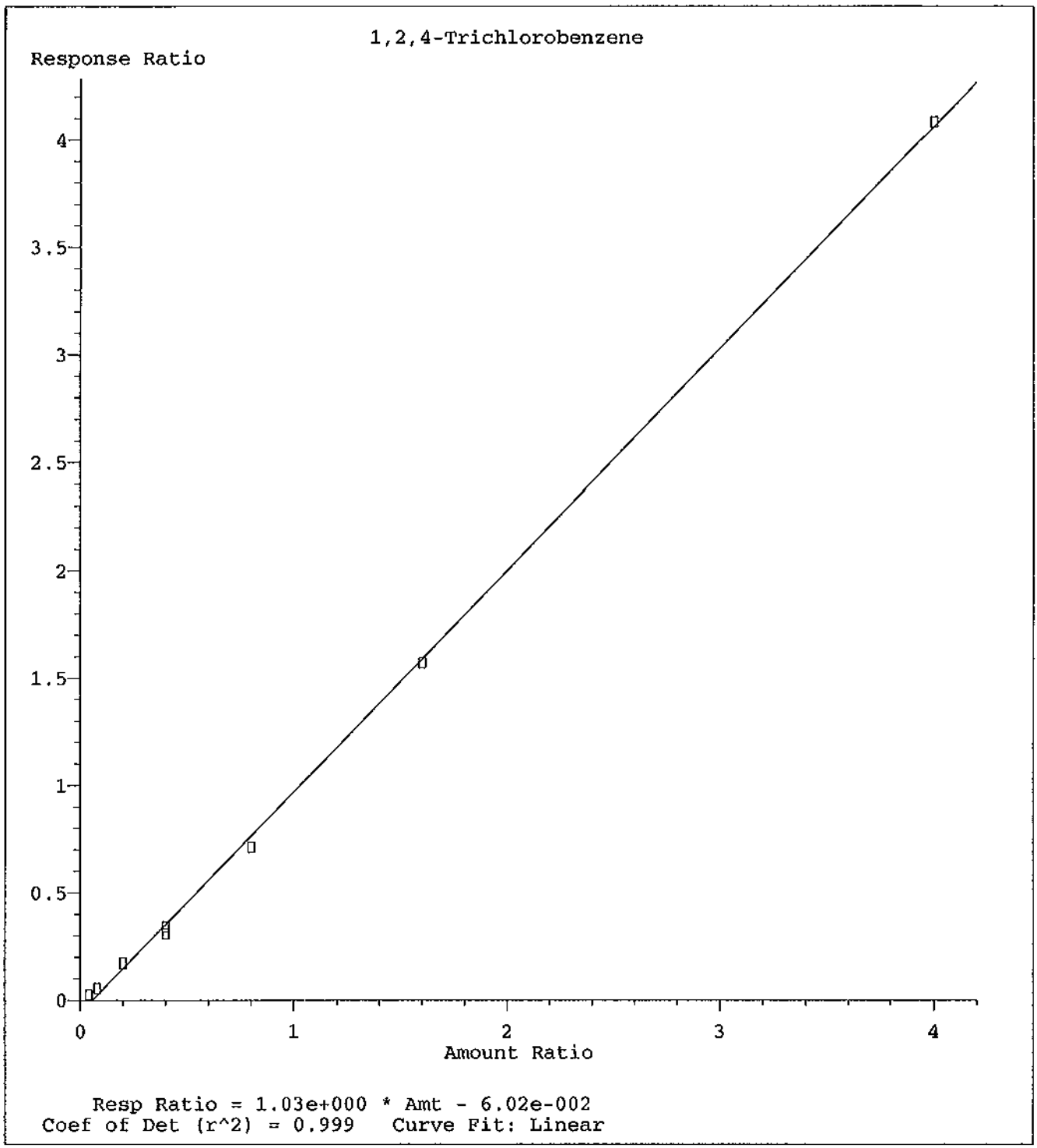
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



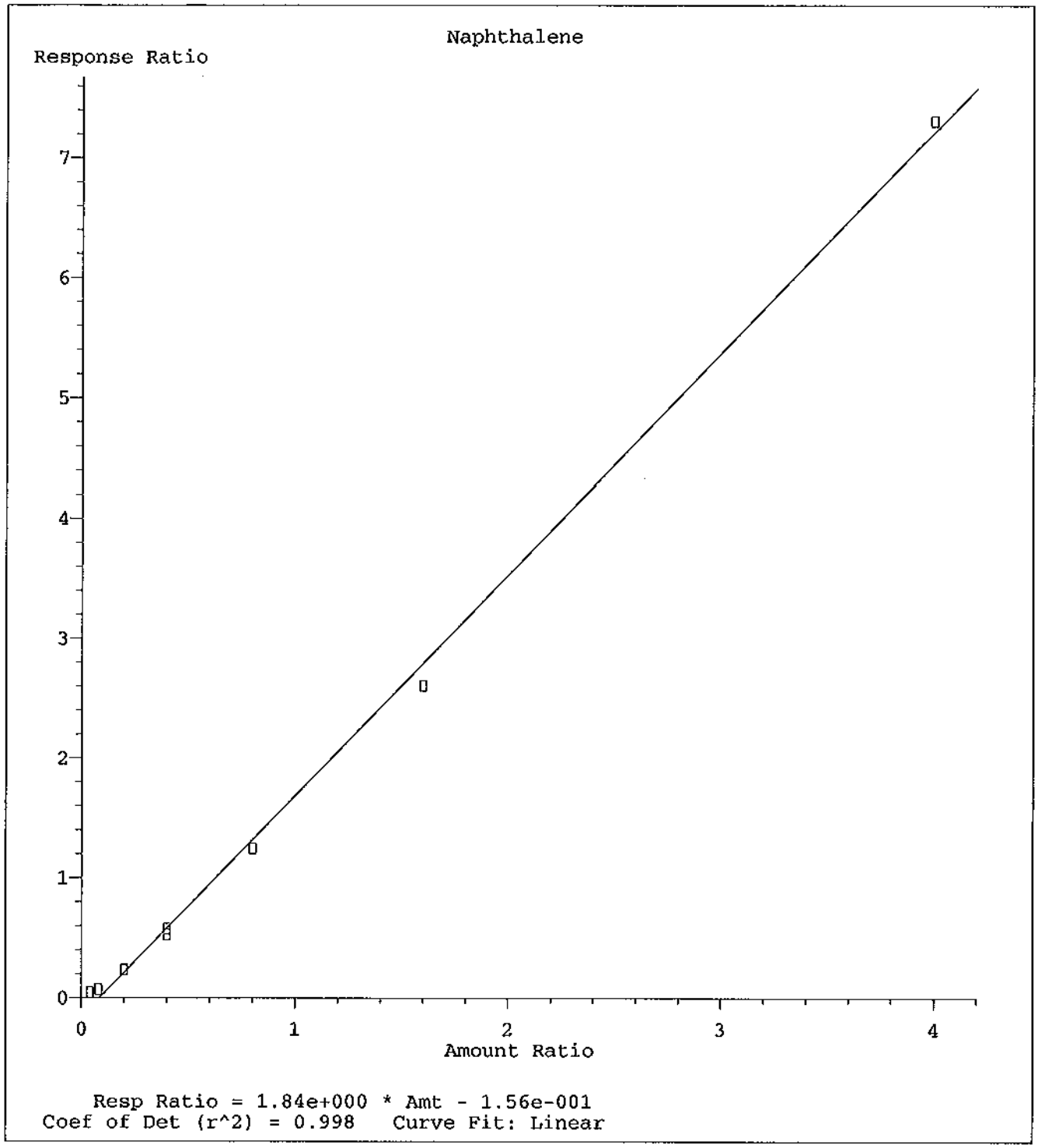
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Mon Aug 15 16:01:44 2011

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

Lab Name: APPL, Inc. SDG No: 65187
Case No: Date Analyzed: 07/27/11
Matrix: Water Instrument: Thor
Initial Cal. Date: 07/27/11
Data File: 0727T30W.D

		Compound	MEAN	CCRF	%D	%Drift		
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.5156	0.4442	14	TM		
3	TM**L	Chloromethane	0.4963	0.4049	18	TM**L	9.9	
4	TM*	Vinyl chloride	0.1677	0.1413	16	TM*		
5	TM	Bromomethane	0.3225	0.3729	16	TM		
6	TML	Chloroethane	0.3486	0.3449	1.0	TML	7.4	
7	TM	Trichlorofluoromethane	0.4303	0.3367	22	TM		*NT
8	TML	Acetone	0.3094	0.2151	30	TML	6.5	
9	TM*	1,1-DCE	0.3529	0.3165	10	TM*		
10	TML	Freon-113	0.3563	0.3222	9.6	TML	13	
11	TML	Methylene chloride	0.4499	0.4549	1.1	TML	2.6	
12	TM	Carbon disulfide	2.098	2.049	2.3	TM		
13	TM	Methyl t-butyl ether (MtBE)	2.908	2.868	1.4	TM		
14	TML	Trans-1,2-DCE	0.9256	0.8849	4.4	TML	5.1	
15	TM**	1,1-DCA	1.179	1.082	8.3	TM**		
16	TML	MEK (2-Butanone)	0.1878	0.1688	10	TML	8.4	
17	TML	Cis-1,2-DCE	0.4598	0.3955	14	TML	8.9	
18	TM	2,2-Dichloropropane	0.8436	0.5400	36	TM		*NT
19	TM*	Chloroform	0.9812	0.8268	16	TM*		
20	TM	Bromochloromethane	0.5115	0.4738	7.4	TM		
21	S	Dibromofluoromethane(S)	0.3501	0.3555	1.5	S		
22	TM	1,1,1-TCA	0.8193	0.7090	13	TM		
23	TML	1,1-Dichloropropene	0.4805	0.5079	5.7	TML	1.4	
24	S	1,2-DCA-D4(S)	0.6853	0.6813	0.59	S		
25	TM	Carbon Tetrachloride	0.5993	0.5224	13	TM		
26	TM	1,2-DCA	0.8607	0.8420	2.2	TM		
27	TM	Benzene	1.536	1.535	0.11	TM		
28	TM	TCE	0.3676	0.3624	1.4	TM		
29	TM*	1,2-Dichloropropane	0.5248	0.5302	1.0	TM*		
30	TM	Bromodichloromethane	0.7389	0.6878	6.9	TM		
31	TM	Dibromomethane	0.2489	0.2431	2.4	TM		
32	TML	MIBK (methyl isobutyl ketone)	0.3174	0.3276	3.2	TML	5.9	
33	TML	Cis-1,3-Dichloropropene	0.5652	0.6221	10	TML	1.2	
34	TM*	Toluene	1.455	1.500	3.1	TM*		
35	TML	Trans-1,3-Dichloropropene	0.6159	0.5812	5.6	TML	4.6	
36	TM	1,1,2-TCA	0.2868	0.2697	6.0	TM		
37	TMQ	2-Hexanone	0.2399	0.2027	15	TMQ	13	
38	I	Chlorobenzene-D5 (IS)	ISTD			I		
39	S	Toluene-D8(S)	1.383	1.424	3.0	S		
40	TM	1,2-EDB	0.3696	0.3801	2.8	TM		
		Average			8.8			

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

Lab Name: APPL, Inc. SDG No: 65187
Case No: Date Analyzed: 07/27/11
Matrix: Water Instrument: Thor
Cal. Date: 07/27/11
Data File: 0727T30W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TML	Tetrachloroethene	0.2814	0.2663	5.4	TML	9.9
42	TM	1,1,1,2-Tetrachloroethane	0.4938	0.4596	6.9	TM	
43	TML	m&p-Xylene	0.8562	0.8607	0.53	TML	2.8
44	TML	o-Xylene	0.8032	0.8303	3.4	TML	5.1
45	TML	Styrene	1.495	1.536	2.7	TML	6.3
46	S	4-Bromofluorobenzene(S)	0.7967	0.8715	9.4	S	
47	TM	1,3-Dichloropropane	0.7690	0.7888	2.6	TM	
48	TML	Dibromochloromethane	0.4081	0.4153	1.8	TML	2.7
49	TM**	Chlorobenzene	1.241	1.215	2.1	TM**	
50	TM*	Ethylbenzene	2.384	2.331	2.2	TM*	
51	TM**	Bromoform	0.3034	0.2711	11	TM**	
52	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
53	TML	Isopropylbenzene	2.463	2.485	0.89	TML	4.8
54	TM**	1,1,2,2-Tetrachloroethane	0.7349	0.7065	3.9	TM**	
55	TML	1,2,3-Trichloropropane	0.2143	0.2488	16	TML	4.7
56	TM	Bromobenzene	0.6251	0.6537	4.6	TM	
57	TML	n-Propylbenzene	3.586	3.654	1.9	TML	5.3
58	TML	2-Chlorotoluene	2.723	3.293	21	TML	11
59	TML	1,3,5-Trimethylbenzene	2.756	2.682	2.7	TML	7.2
60	TML	4-Chlorotoluene	3.195	3.224	0.92	TML	6.2
61	TML	Tert-Butylbenzene	1.806	1.975	9.3	TML	4.7
62	TML	1,2,4-Trimethylbenzene	2.686	2.758	2.7	TML	6.5
63	TML	Sec-Butylbenzene	2.733	2.713	0.71	TML	7.5
64	TML	p-Isopropyltoluene	2.330	2.265	2.8	TML	9.5
65	TM	1,3-DCB	1.159	1.130	2.5	TM	
66	TM	1,4-DCB	1.230	1.198	2.6	TM	
67	TML	n-Butylbenzene	2.409	2.384	1.0	TML	10
68	TM	1,2-DCB	1.138	1.188	4.4	TM	
69	TM	1,2-Dibromo-3-chloropropane	0.1106	0.1005	9.1	TM	
70	TML	1,2,4-Trichlorobenzene	0.8360	0.8536	2.1	TML	3.0
71	TM	Hexachlorobutadiene	0.5530	0.5205	5.9	TM	
72	TML	Naphthalene	1.363	1.437	5.5	TML	0.94
73	TM	1,2,3-Trichlorobenzene	0.8076	0.8204	1.6	TM	
74							
75							
76							
77							
78							
79							
80							
		Average			4.7		

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T30W.D
Acq On : 27 Jul 11 22:55
Sample : 110727A LCS-1WT (SS)
Misc : 10ml w/5ul of IS&S: 07-26-11

Vial: 30
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	112320	25.00000 ppb		-0.01
38) Chlorobenzene-D5 (IS)	10.60	117	88552	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	65672	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.95	111	48622	30.91080 ppb		-0.01
Spiked Amount 30.441			Recovery = 101.543%			
24) 1,2-DCA-D4(S)	6.33	65	85964	27.91854 ppb		0.00
Spiked Amount 28.084			Recovery = 99.412%			
39) Toluene-D8(S)	8.78	98	174628	35.64895 ppb		-0.01
Spiked Amount 34.610			Recovery = 103.002%			
46) 4-Bromofluorobenzene(S)	11.61	95	87003	30.83133 ppb		0.00
Spiked Amount 28.184			Recovery = 109.390%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.44	85	19958	8.61637 ppb		95
3) Chloromethane	1.48	50	18190	9.01077 ppb	#	83
4) Vinyl chloride	1.57	64	6347	8.42401 ppb	#	62
5) Bromomethane	1.88	96	16753	11.56348 ppb		90
6) Chloroethane	1.98	64	15496	9.26139 ppb		98
7) Trichlorofluoromethane	2.25	101	15127	7.82428 ppb		83
8) Acetone	2.91	43	9666	10.64735 ppb		94
9) 1,1-DCE	2.82	96	14221	8.96916 ppb	#	84
10) Freon-113	2.85	103	14474	8.74565 ppb	#	77
11) Methylene chloride	3.46	84	20439	9.74461 ppb		99
12) Carbon disulfide	3.06	76	92054	9.76664 ppb	#	80
13) Methyl t-butyl ether (MtBE	3.92	73	128849	9.86284 ppb		94
14) Trans-1,2-DCE	3.87	61	39756	9.48856 ppb	#	89
15) 1,1-DCA	4.51	63	48592	9.17186 ppb		97
16) MEK (2-Butanone)	5.39	43	7583	9.16088 ppb	#	91
17) Cis-1,2-DCE	5.33	96	17768	9.11192 ppb		80
18) 2,2-Dichloropropane	5.31	77	24261	6.40130 ppb	#	85
19) Chloroform	5.75	83	37146	8.42632 ppb		96
20) Bromochloromethane	5.61	49	21286	9.26239 ppb	#	84
22) 1,1,1-TCA	5.95	97	31853	8.65370 ppb		90
23) 1,1-Dichloropropene	6.15	75	22820	9.86036 ppb		97
25) Carbon Tetrachloride	6.14	117	23470	8.71675 ppb		90
26) 1,2-DCA	6.42	62	37830	9.78240 ppb	#	92
27) Benzene	6.39	78	68950	9.98896 ppb		93
28) TCE	7.12	95	16280	9.85758 ppb	#	88
29) 1,2-Dichloropropane	7.37	63	23822	10.10408 ppb	#	95
30) Bromodichloromethane	7.74	83	30901	9.30873 ppb	#	96
31) Dibromomethane	7.51	93	10920	9.76408 ppb		94
32) MIBK (methyl isobutyl ket	8.65	43	14720	10.59411 ppb		94
33) Cis-1,3-Dichloropropene	8.36	75	27950	10.12396 ppb		82
34) Toluene	8.89	91	67376	10.30548 ppb		99
35) Trans-1,3-Dichloropropene	9.28	75	26110	9.53709 ppb		92
36) 1,1,2-TCA	9.53	83	12117	9.40427 ppb	#	54
37) 2-Hexanone	9.90	43	9109	8.74424 ppb		95
40) 1,2-EDB	10.11	107	13463	10.28349 ppb	#	82
41) Tetrachloroethene	9.70	164	9432	9.01365 ppb	#	92
42) 1,1,1,2-Tetrachloroethane	10.72	131	16278	9.30628 ppb		99
43) m&p-Xylene	10.86	106	60976	19.43627 ppb		99
44) o-Xylene	11.20	106	29411	9.48804 ppb		97

Algorithm Check: $\frac{(19958)(25)}{(112326)(0.515556)}(1) = 8.616364975$ ✓

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T30W.D Vial: 30
Acq On : 27 Jul 11 22:55 Operator: RP
Sample : 110727A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45) Styrene	11.21	104	54408	9.36771 ppb		98
47) 1,3-Dichloropropane	9.74	76	27939	10.25692 ppb		90
48) Dibromochloromethane	10.00	129	14711	9.72629 ppb	#	61
49) Chlorobenzene	10.63	112	43026	9.79027 ppb		81
50) Ethylbenzene	10.75	91	82550	9.77613 ppb	#	84
51) Bromoform	11.35	173	9602	8.93565 ppb		84
53) Isopropylbenzene	11.50	105	65285	9.52295 ppb		99
54) 1,1,2,2-Tetrachloroethane	11.73	83	18559	9.61296 ppb		90
55) 1,2,3-Trichloropropane	11.75	110	6537	10.47146 ppb	#	51
56) Bromobenzene	11.72	156	17171	10.45698 ppb		96
57) n-Propylbenzene	11.81	91	95998	9.46923 ppb		95
58) 2-Chlorotoluene	11.87	91	86491	11.14340 ppb		92
59) 1,3,5-Trimethylbenzene	11.94	105	70448	9.28257 ppb		92
60) 4-Chlorotoluene	11.94	91	84699	9.37840 ppb		91
61) Tert-Butylbenzene	12.17	119	51874	9.52793 ppb		92
62) 1,2,4-Trimethylbenzene	12.20	105	72443	9.34744 ppb		84
63) Sec-Butylbenzene	12.32	105	71272	9.24865 ppb		99
64) p-Isopropyltoluene	12.41	119	59503	9.04843 ppb		96
65) 1,3-DCB	12.38	146	29683	9.74921 ppb		90
66) 1,4-DCB	12.44	146	31480	9.74323 ppb		95
67) n-Butylbenzene	12.67	91	62623	8.99871 ppb		97
68) 1,2-DCB	12.68	146	31204	10.43909 ppb		98
69) 1,2-Dibromo-3-chloropropan	13.15	157	2639	9.08710 ppb	#	46
70) 1,2,4-Trichlorobenzene	13.64	180	22422	9.70034 ppb		94
71) Hexachlorobutadiene	13.73	225	13674	9.41293 ppb		94
72) Naphthalene	13.78	128	37758	9.90630 ppb		98
73) 1,2,3-Trichlorobenzene	13.92	180	21550	10.15845 ppb		92

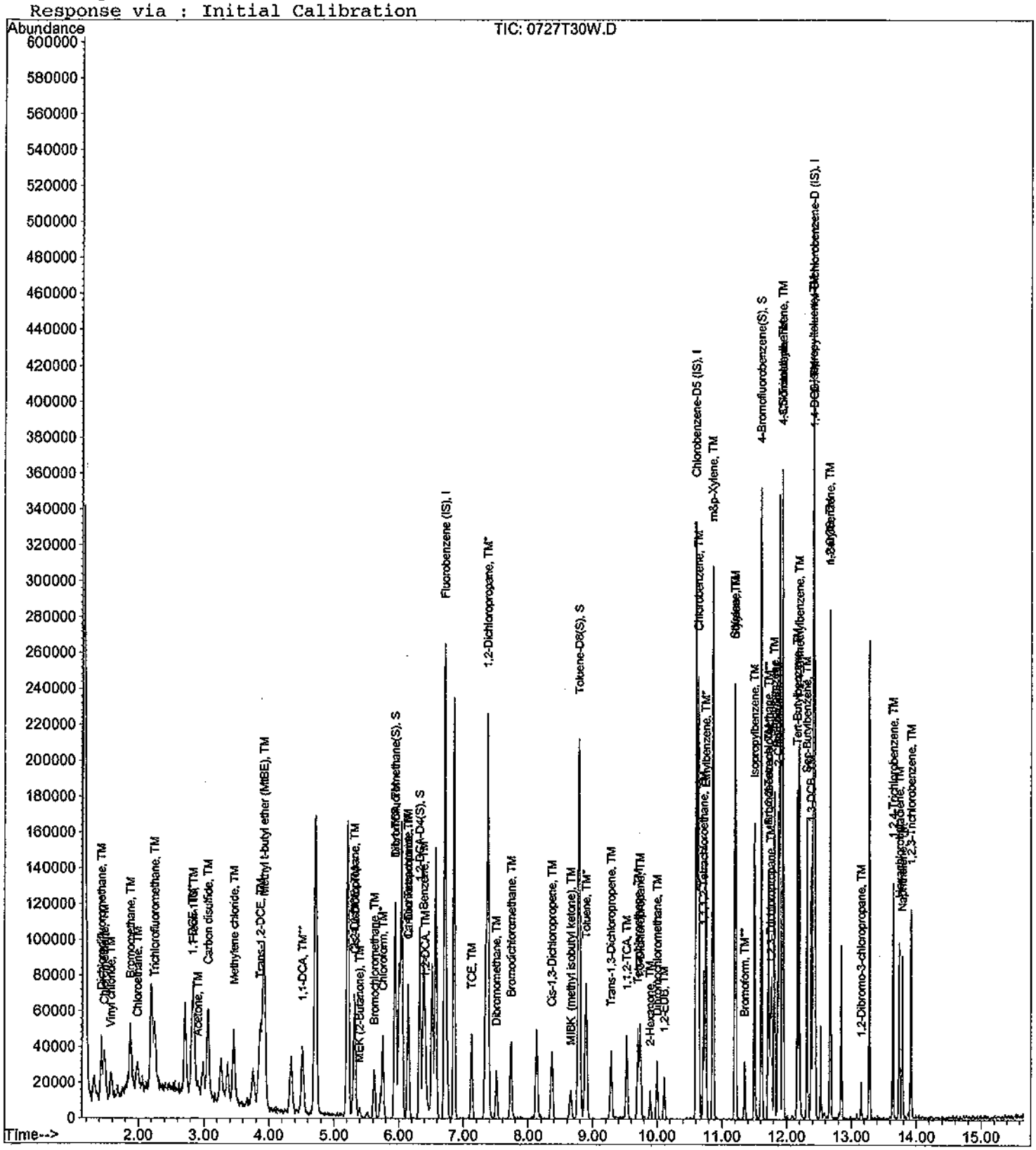
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T30W.D Vial: 30
Acq On : 27 Jul 11 22:55 Operator: RP
Sample : 110727A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: -
Case No: Initial Cal. Date: 07/27/11
Matrix: Instrument: Thor
Initials:

		Compound	0727T05W.D	0727T06W.D	0727T07W.D	0727T08W.D	0727T09W.D	0727T10W.D	0727T11W.D				Avg	%RSD		
			0.5	1	5	10	20	40	100							
1	I	Fluorobenzene (IS)	ISTD													
2	TMHBL	Gasoline	9.996	4.292	2.634	1.625	1.293	1.269	1.248				3.2	100	TMHBL	0.999
3	I	Chlorobenzene-D5 (IS)	ISTD													
4	I	1,4-Dichlorobenzene-D (IS)	ISTD													
5																
6																
7																
8																
9																
10																
11																
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Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T05W.D Vial: 5
Acq On : 27 Jul 11 12:06 Operator: RP
Sample : Vol Std 07-27-11@20ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:47 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.72	TIC	257027	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	385692	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	474023	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	10.61	TIC	2055478m	34.97453	ppb	100

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

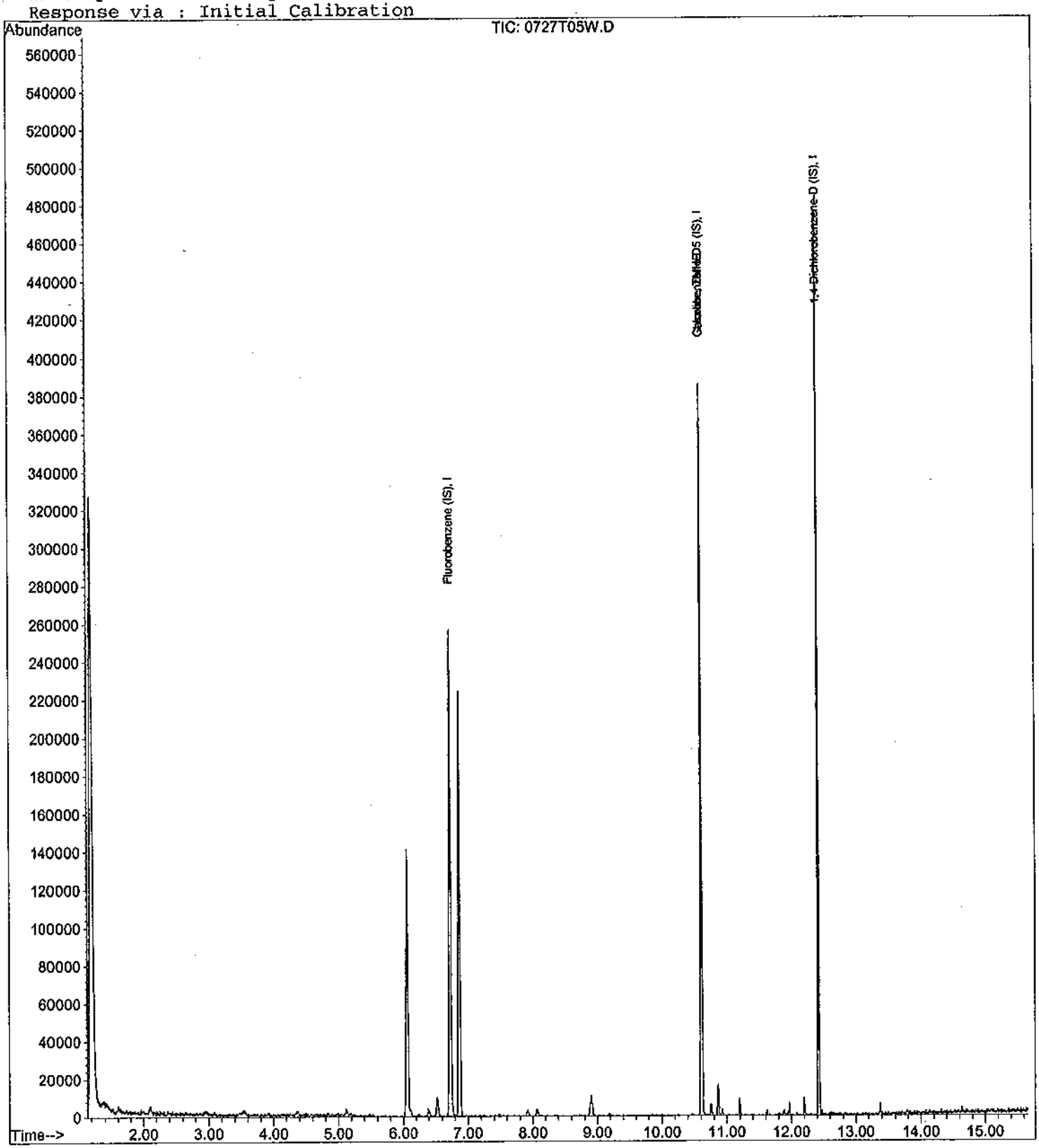
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T05W.D
Acq On : 27 Jul 11 12:06
Sample : Vol Std 07-27-11@20ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 5
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:47 2011 Quant Results File: TGAS.RES

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

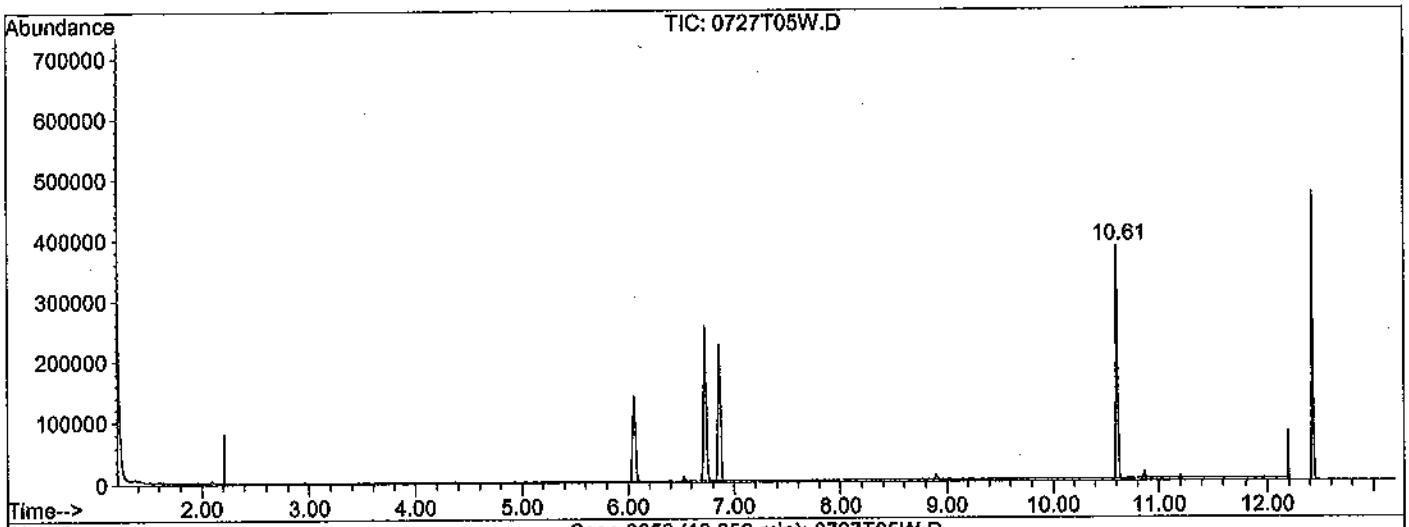


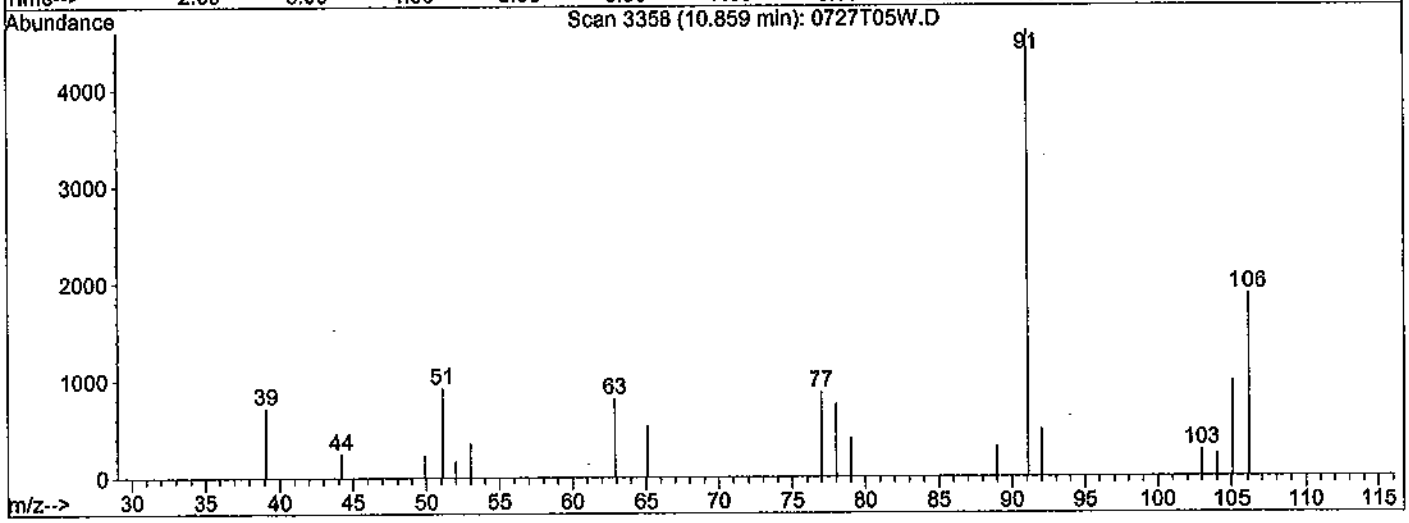
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T05W.D
Acq On : 27 Jul 11 12:06
Sample : Vol Std 07-27-11@20ug/L
Misc : 10ml w/5ul of IS: 07-26-11
Quant Time: Aug 12 10:46 2011

Vial: 5
Operator: RP
Inst : Thor
Multiplr: 1.00
Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration





TIC: 0727T05W.D

(2) Gasoline (TMHB)

10.86min -53.0288ppb m

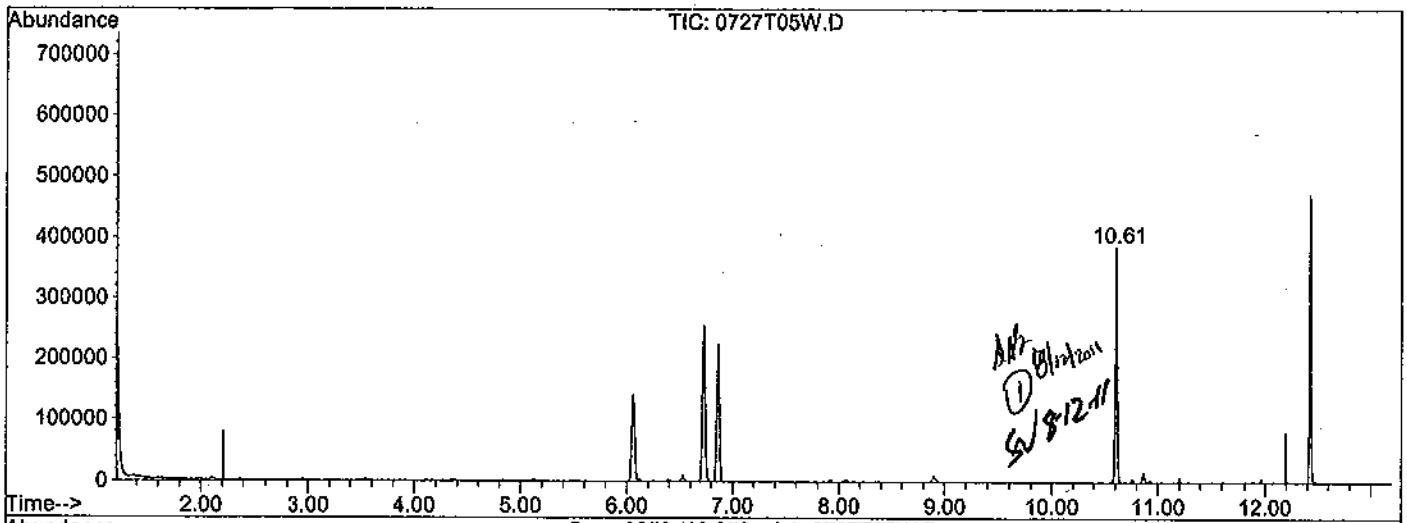
response 1090414

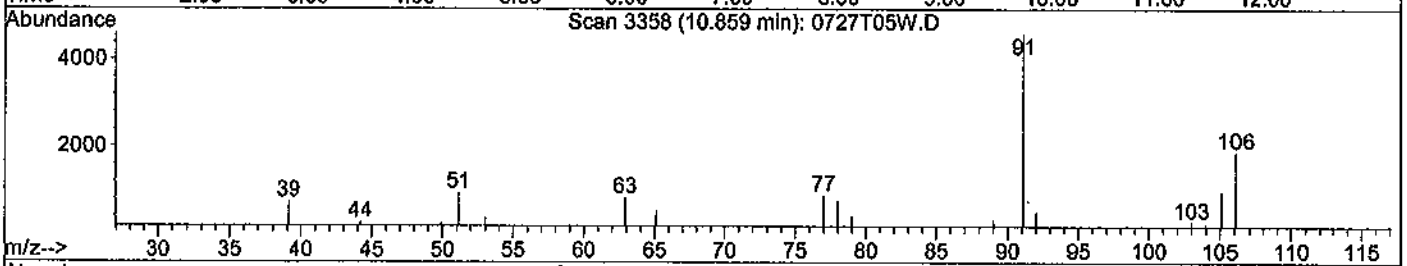
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	3.90#
0.00	0.00	8.45#
0.00	0.00	0.00

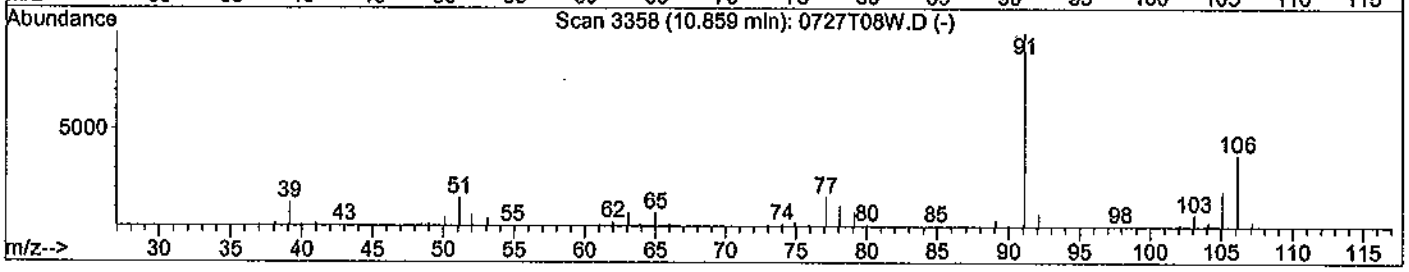
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T05W.D Vial: 5
Acq On : 27 Jul 11 12:06 Operator: RP
Sample : Vol Std 07-27-11@20ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:47 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration







TIC: 0727T05W.D

(2) Gasoline (TMHB)

10.61min 34.9745ppb m

response 2055478

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	2.07#
0.00	0.00	4.48#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T06W.D Vial: 6
Acq On : 27 Jul 11 12:32 Operator: RP
Sample : Vol Std 07-27-11@50ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:48 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	268474	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	393382	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	493039	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	10.61	TIC	2304449m	48.71815	ppb	100

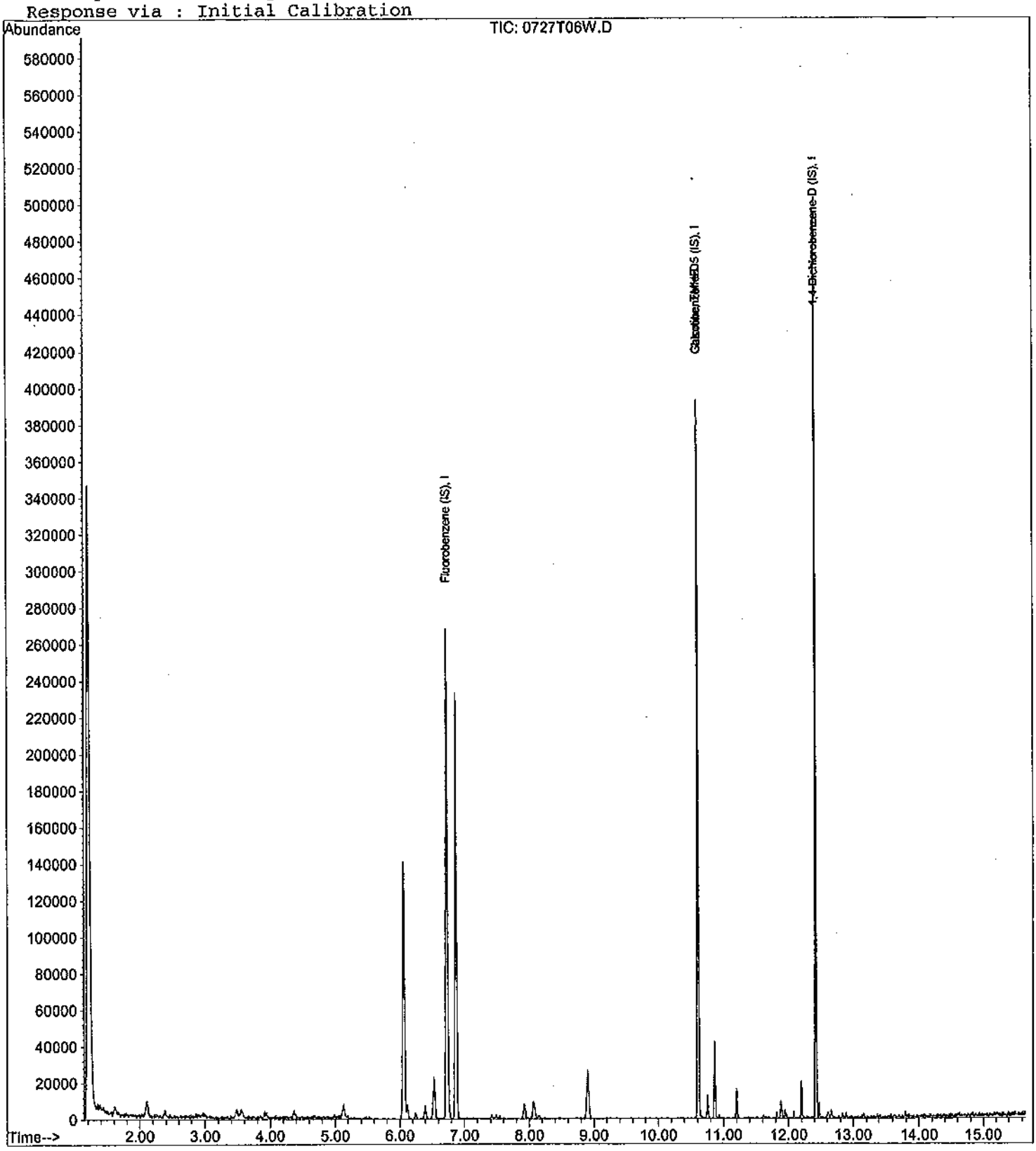
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T06W.D Vial: 6
Acq On : 27 Jul 11 12:32 Operator: RP
Sample : Vol Std 07-27-11@50ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:48 2011 Quant Results File: TGAS.RES

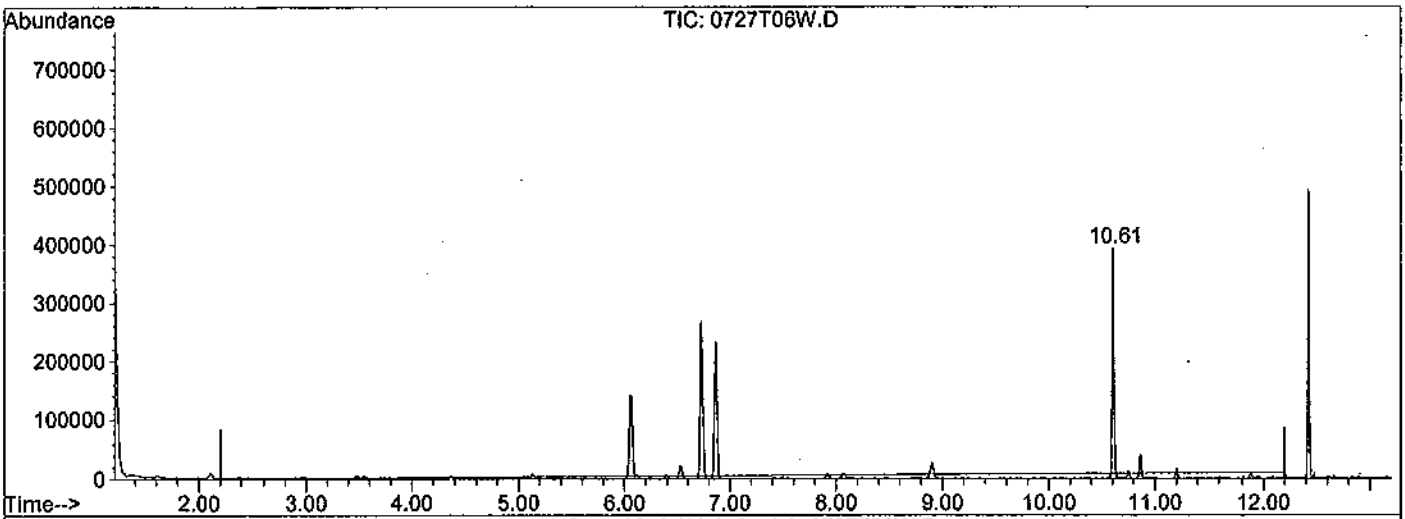
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

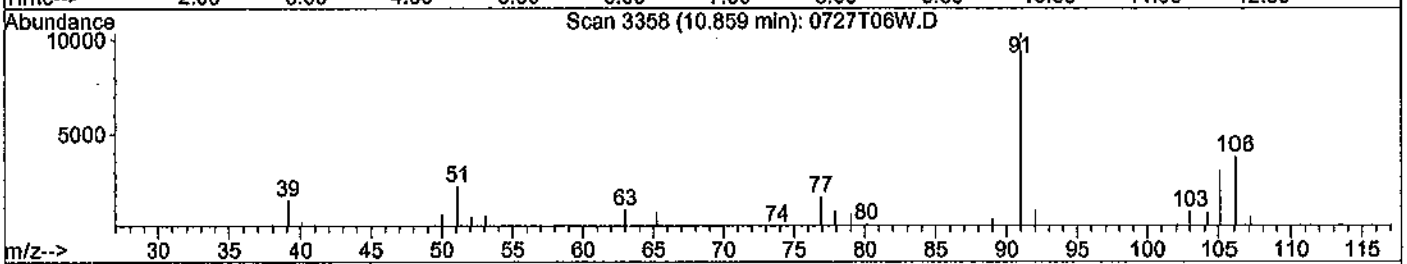


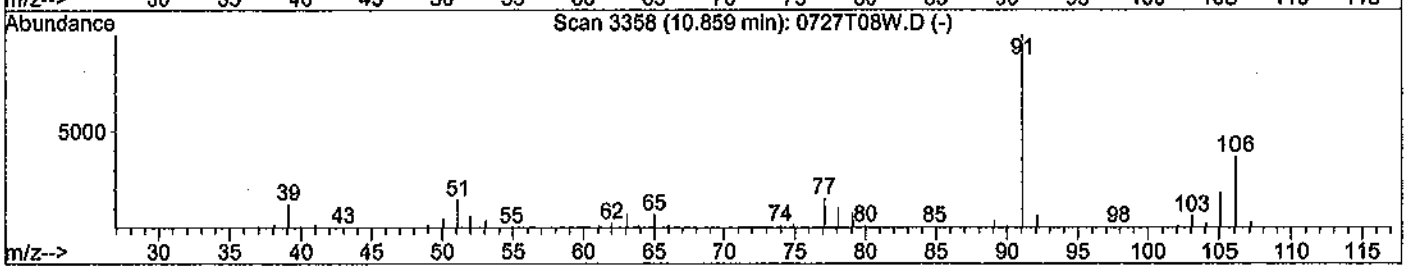
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T06W.D Vial: 6
Acq On : 27 Jul 11 12:32 Operator: RP
Sample : Vol Std 07-27-11@50ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration







TIC: 0727T06W.D

(2) Gasoline (TMHB)

10.86min -37.1434ppb m

response 1320938

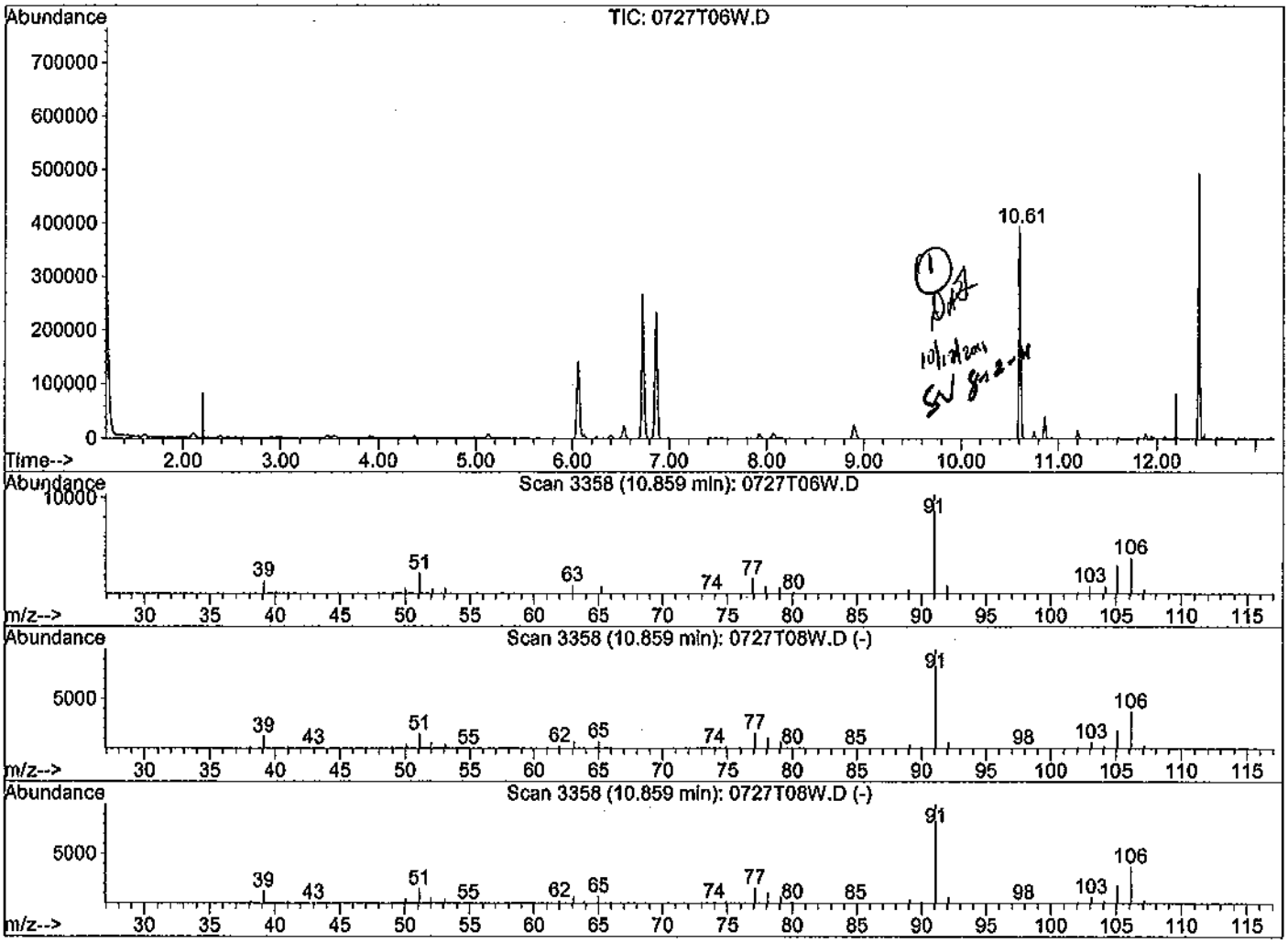
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	3.54#
0.00	0.00	7.27#
0.00	0.00	0.00

0727T06W.D TGAS.M Fri Aug 12 10:47:56 2011

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T06W.D Vial: 6
Acq On : 27 Jul 11 12:32 Operator: RP
Sample : Vol Std 07-27-11@50ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:48 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T06W.D

(2) Gasoline (TMHB)

10.61min 48.7181ppb m

response 2304449

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	2.03#
0.00	0.00	4.17#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T07W.D Vial: 7
Acq On : 27 Jul 11 12:58 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:48 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	252099	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	309351	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	539608	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	10.61	TIC	2655872m	94.45815	ppb	100

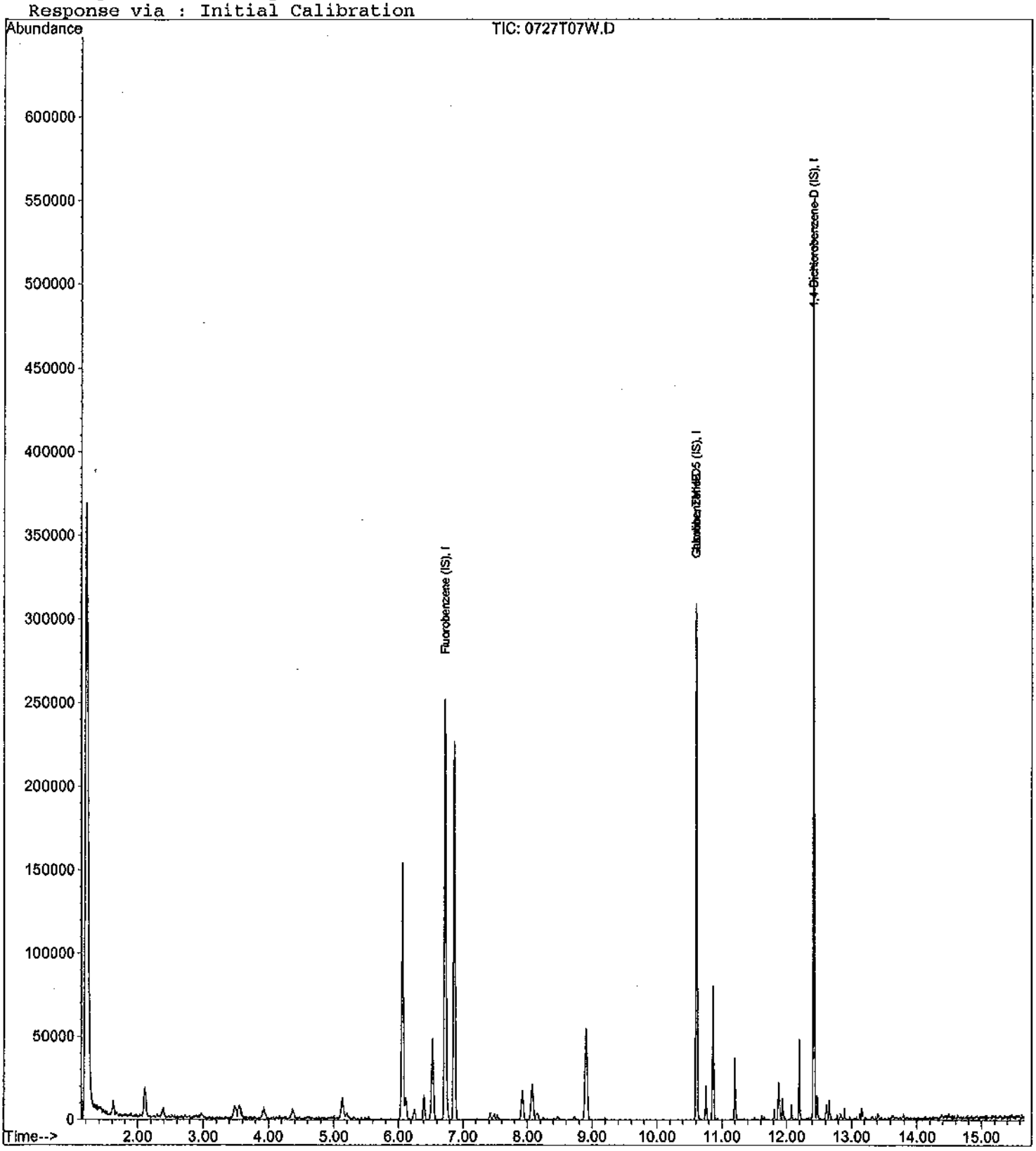
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T07W.D Vial: 7
Acq On : 27 Jul 11 12:58 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:48 2011 Quant Results File: TGAS.RES

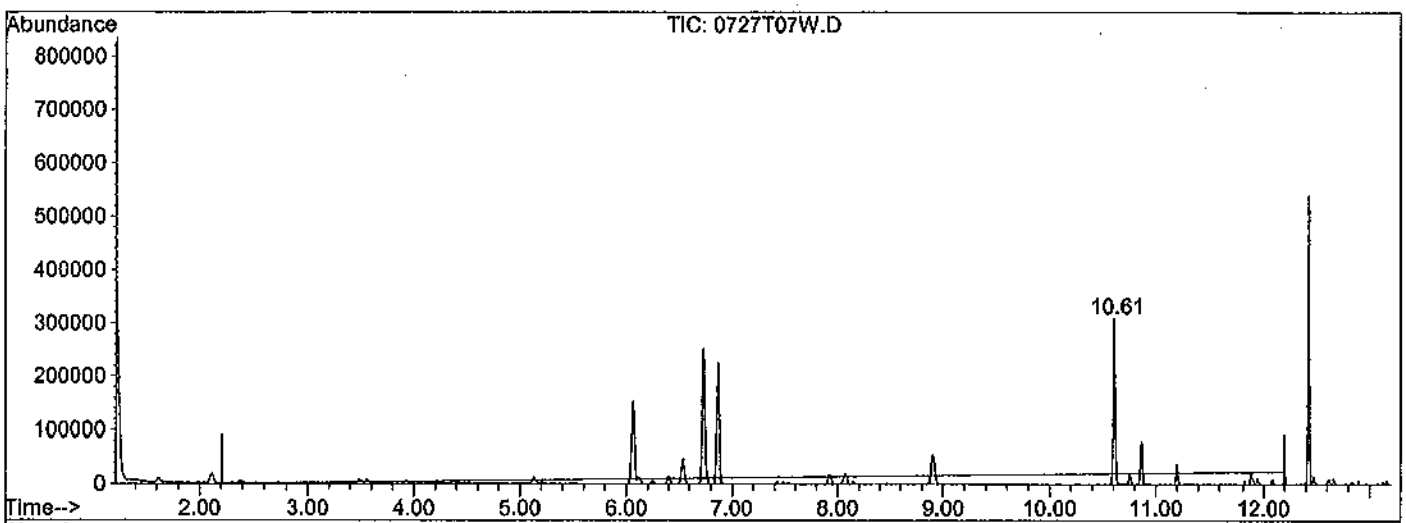
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T07W.D Vial: 7
Acq On : 27 Jul 11 12:58 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T07W.D

(2) Gasoline (TMHB)

10.86min 11.5503ppb m

response 1764118

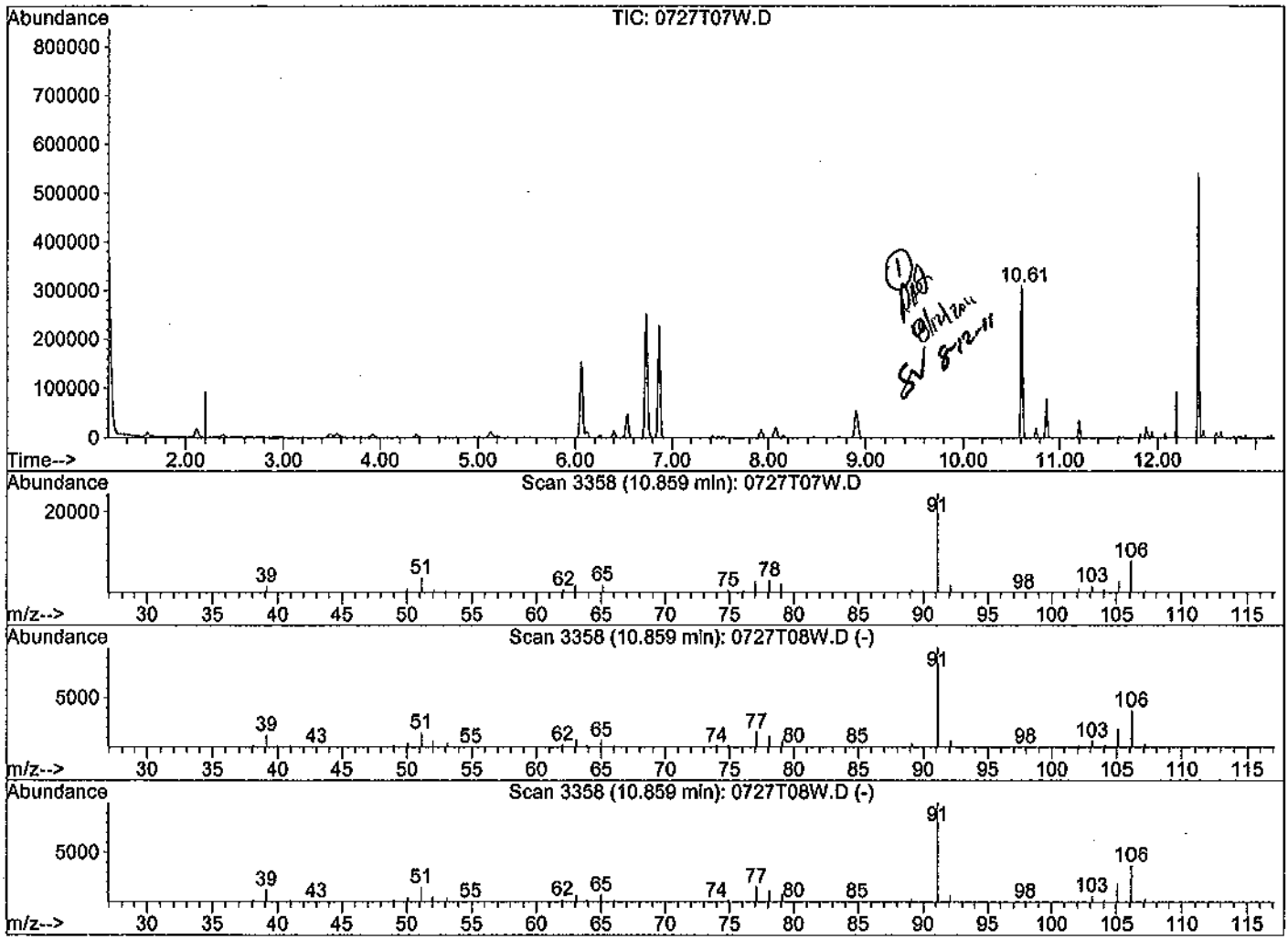
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	2.99#
0.00	0.00	5.91#
0.00	0.00	0.00

0727T07W.D TGAS.M Fri Aug 12 10:48:33 2011

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T07W.D Vial: 7
Acq On : 27 Jul 11 12:58 Operator: RP
Sample : Vol Std 07-27-11@100ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:48 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T07W.D

(2) Gasoline (TMHB)

10.61min 94.4581ppb m

response 2655872

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	1.98#
0.00	0.00	3.93#
0.00	0.00	0.00

0727T07W.D TGAS.M Fri Aug 12 10:48:54 2011

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T08W.D
Acq On : 27 Jul 11 13:24
Sample : Vol Std 07-27-11@300ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 8
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:49 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	258612	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	374760	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	525627	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	10.61	TIC	5043848m	304.66236	ppb	100

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

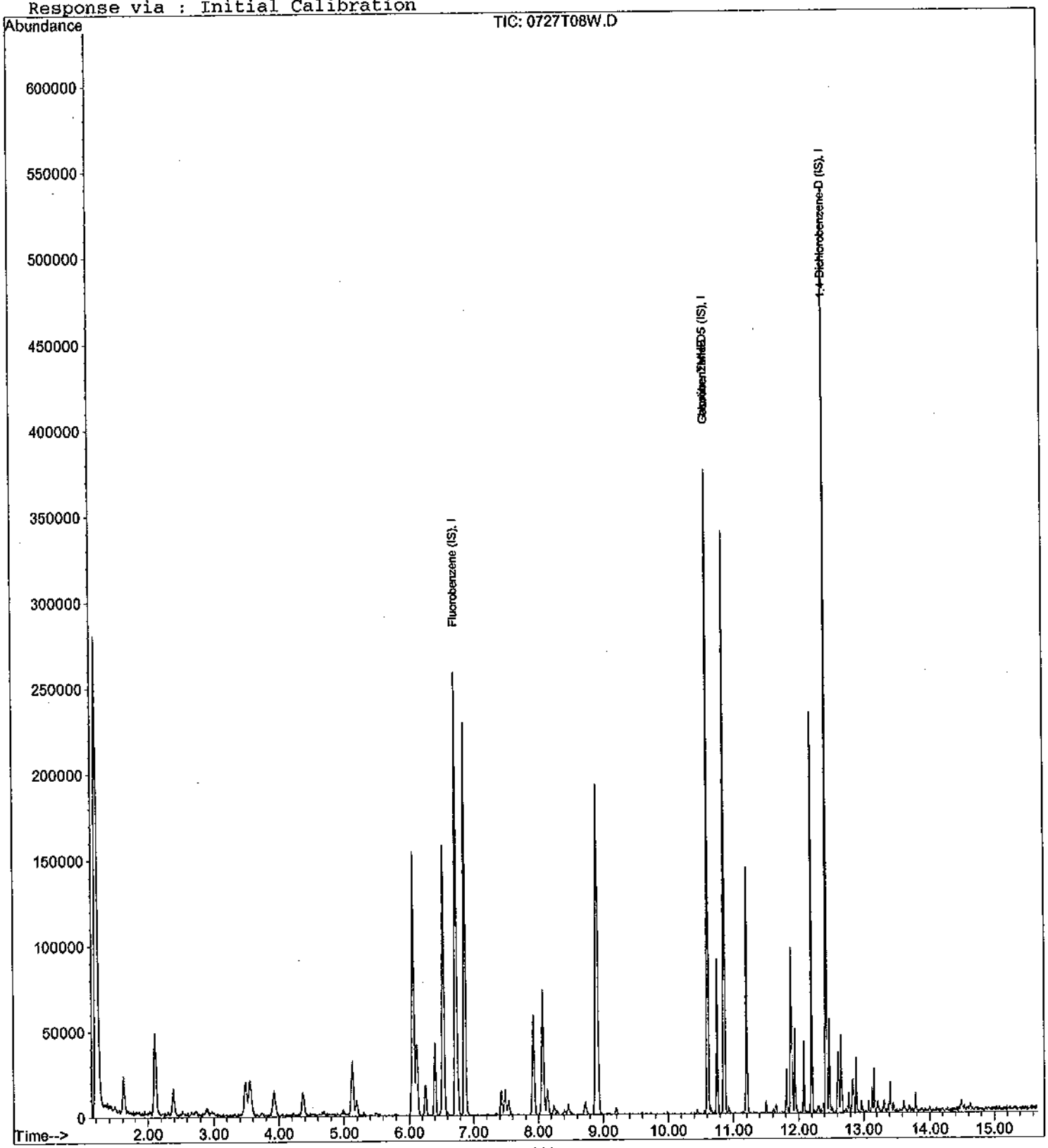
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T08W.D
Acq On : 27 Jul 11 13:24
Sample : Vol Std 07-27-11@300ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 8
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:49 2011 Quant Results File: TGAS.RES

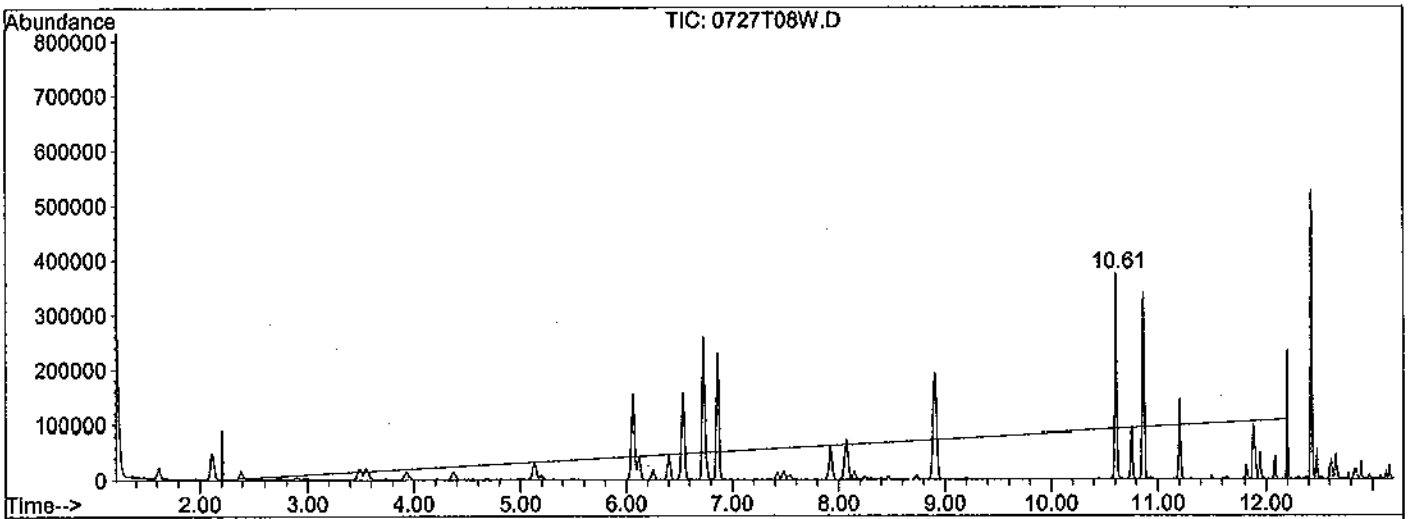
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

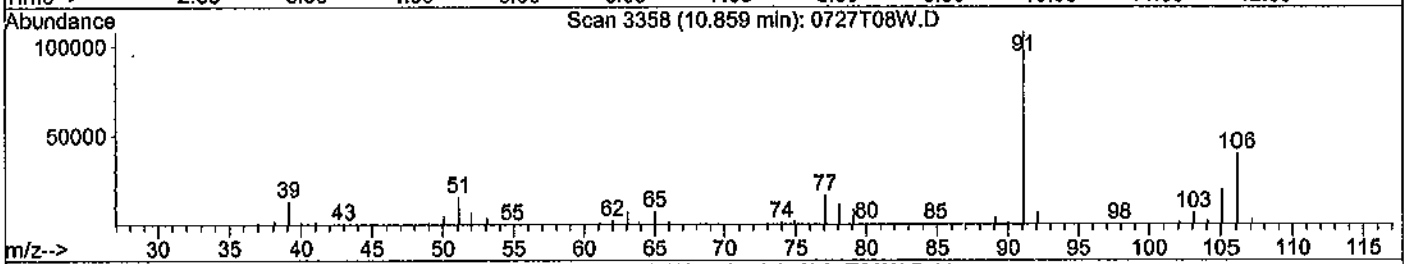


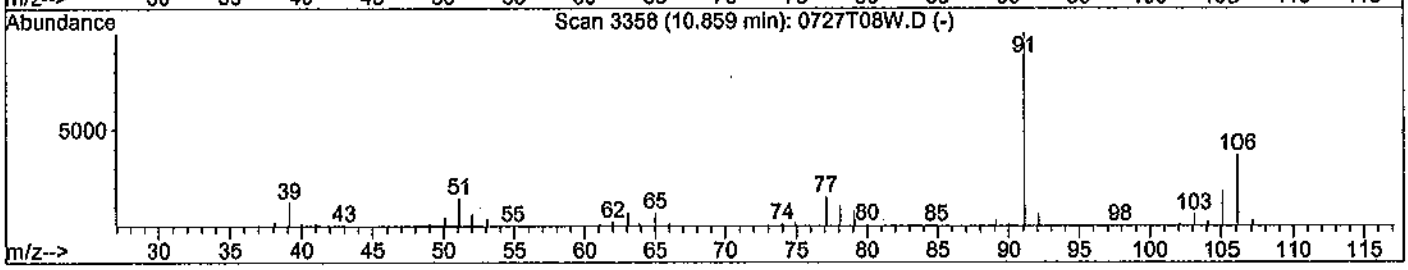
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T08W.D Vial: 8
Acq On : 27 Jul 11 13:24 Operator: RP
Sample : Vol Std 07-27-11@300ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration







TIC: 0727T08W.D

(2) Gasoline (TMHB)

10.86min 191.2676ppb m

response 3792668

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	1.24#
0.00	0.00	2.71#
0.00	0.00	0.00

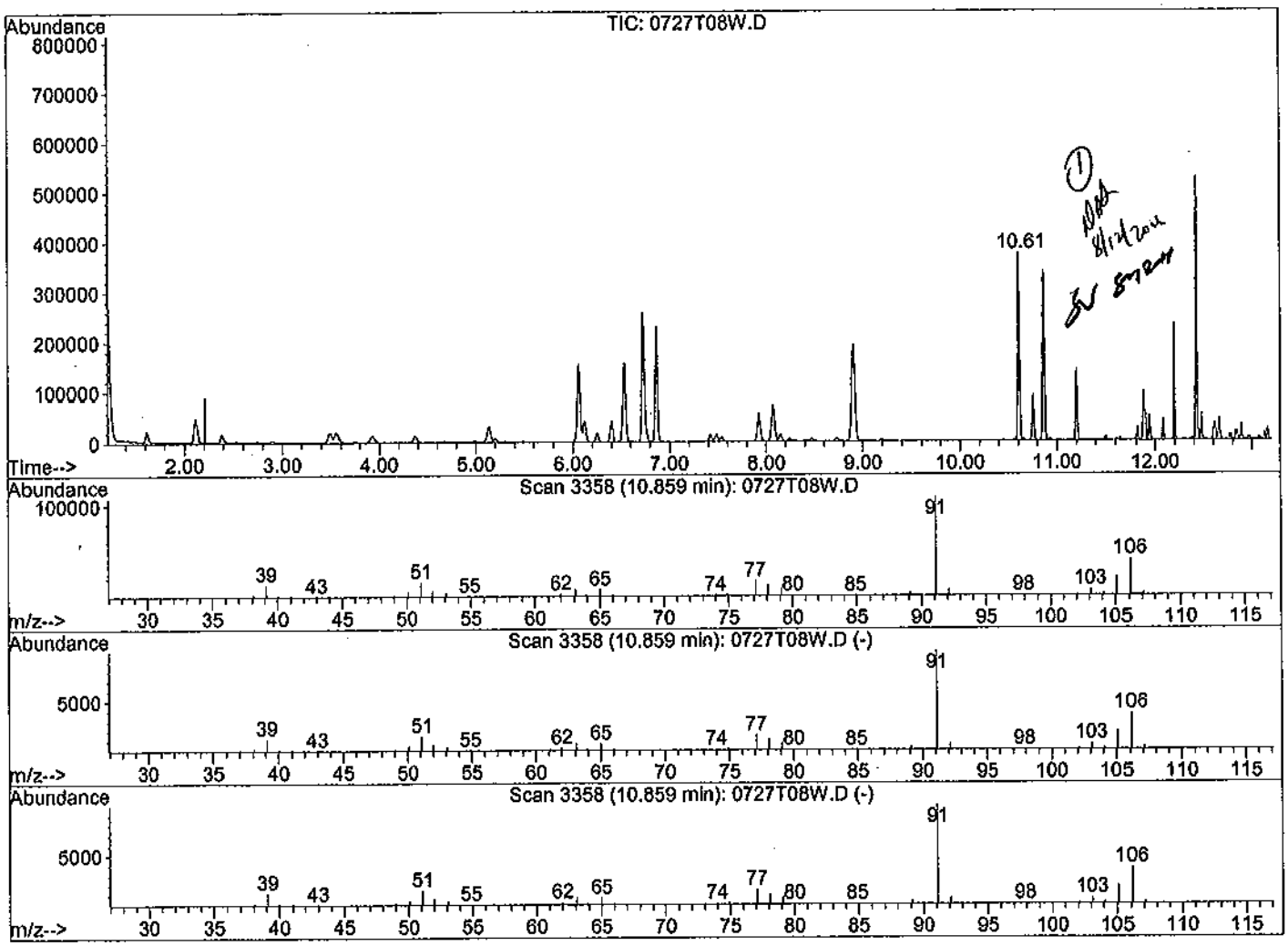
0727T08W.D TGAS.M Fri Aug 12 10:49:09 2011

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T08W.D
Acq On : 27 Jul 11 13:24
Sample : Vol Std 07-27-11@300ug/L
Misc : 10ml w/5ul of IS: 07-26-11
Quant Time: Aug 12 10:49 2011

Vial: 8
Operator: RP
Inst : Thor
Multiplr: 1.00
Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T08W.D

(2) Gasoline (TMHB)

10.61min 304.6624ppb m

response 5043848

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.93#
0.00	0.00	2.04#
0.00	0.00	0.00

0727T08W.D TGAS.M Fri Aug 12 10:49:18 2011

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T09W.D Vial: 9
Acq On : 27 Jul 11 13:50 Operator: RP
Sample : Vol Std 07-27-11@600ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:54 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	271179	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	331314	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	466351	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	10.86	TIC	8416978m	575.01860	ppb	100

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

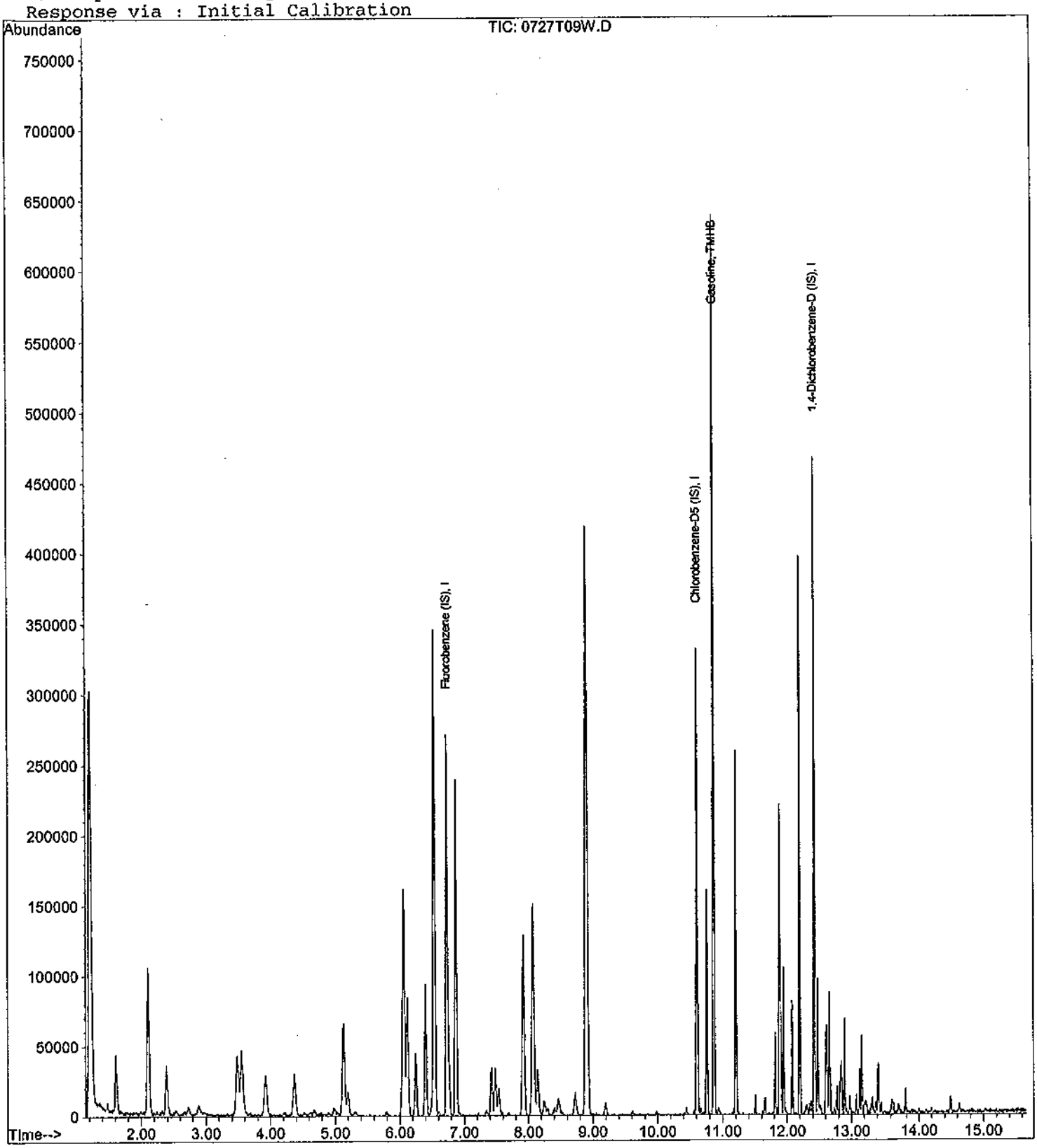
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T09W.D
Acq On : 27 Jul 11 13:50
Sample : Vol Std 07-27-11@600ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 9
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:54 2011 Quant Results File: TGAS.RES

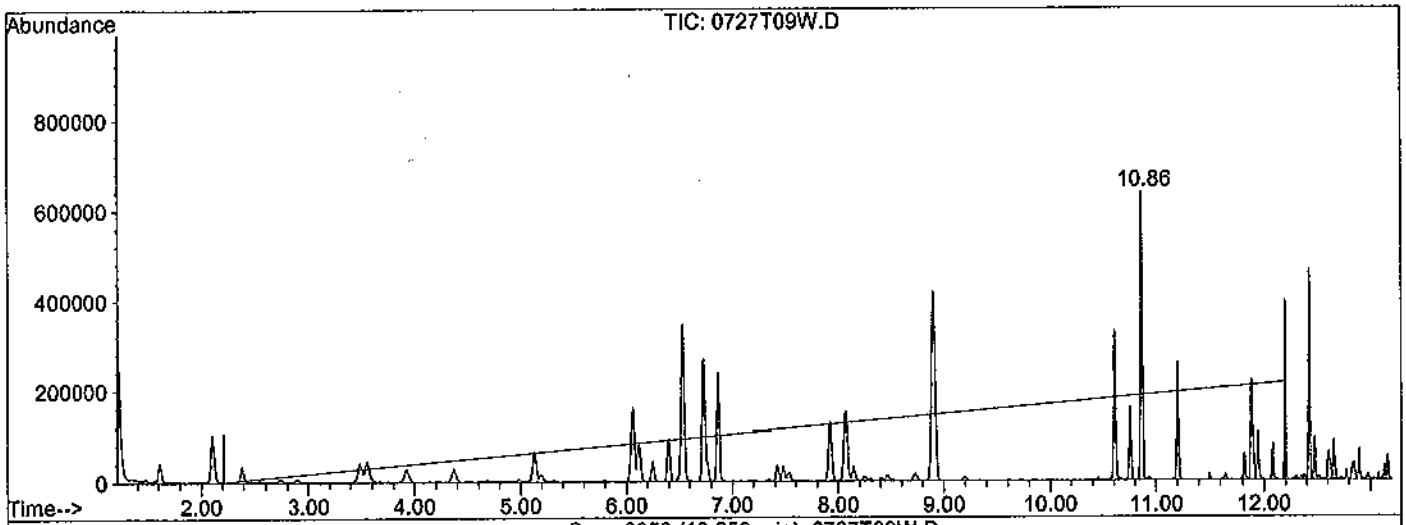
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

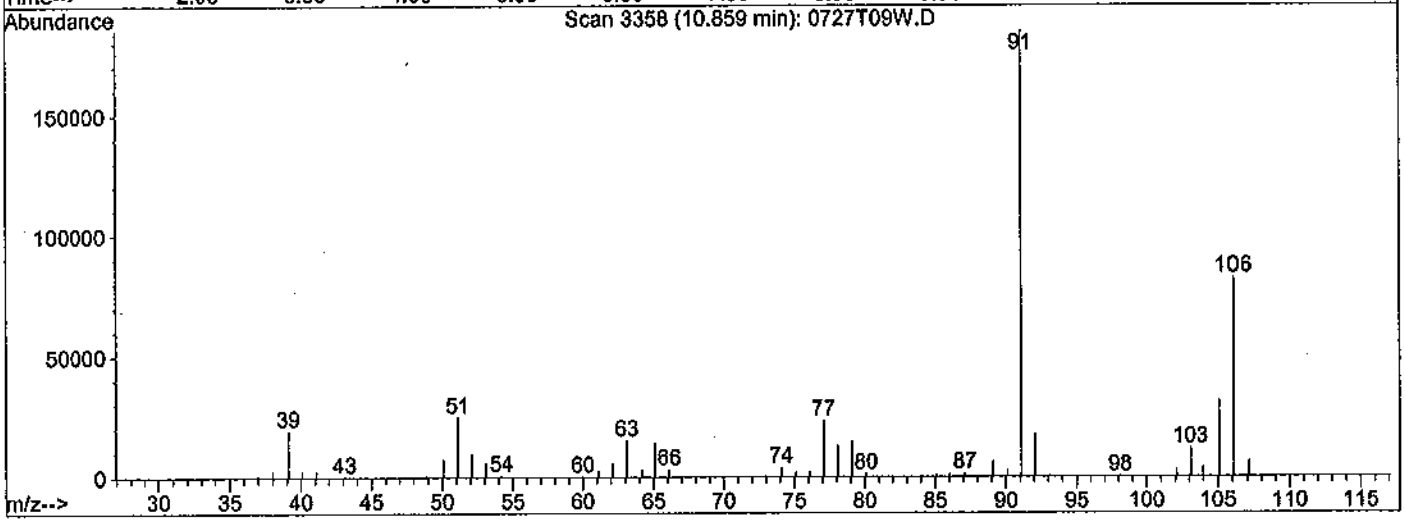


Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T09W.D Vial: 9
Acq On : 27 Jul 11 13:50 Operator: RP
Sample : Vol Std 07-27-11@600ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration





TIC: 0727T09W.D

(2) Gasoline (TMHB)

10.86min 448.6846ppb m

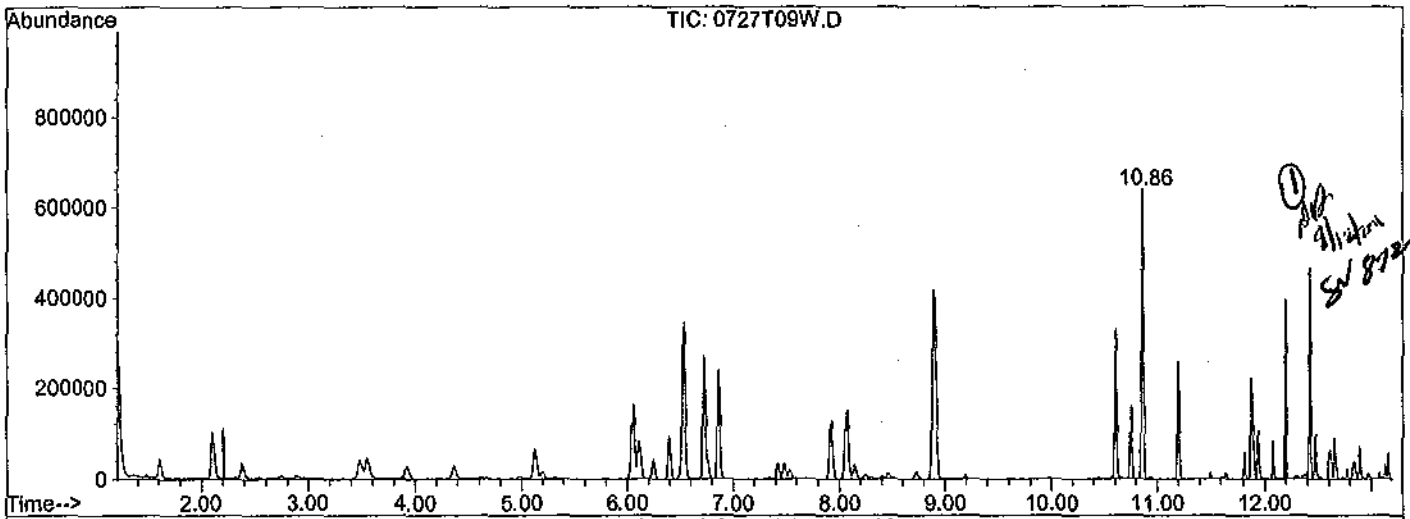
response 6955290

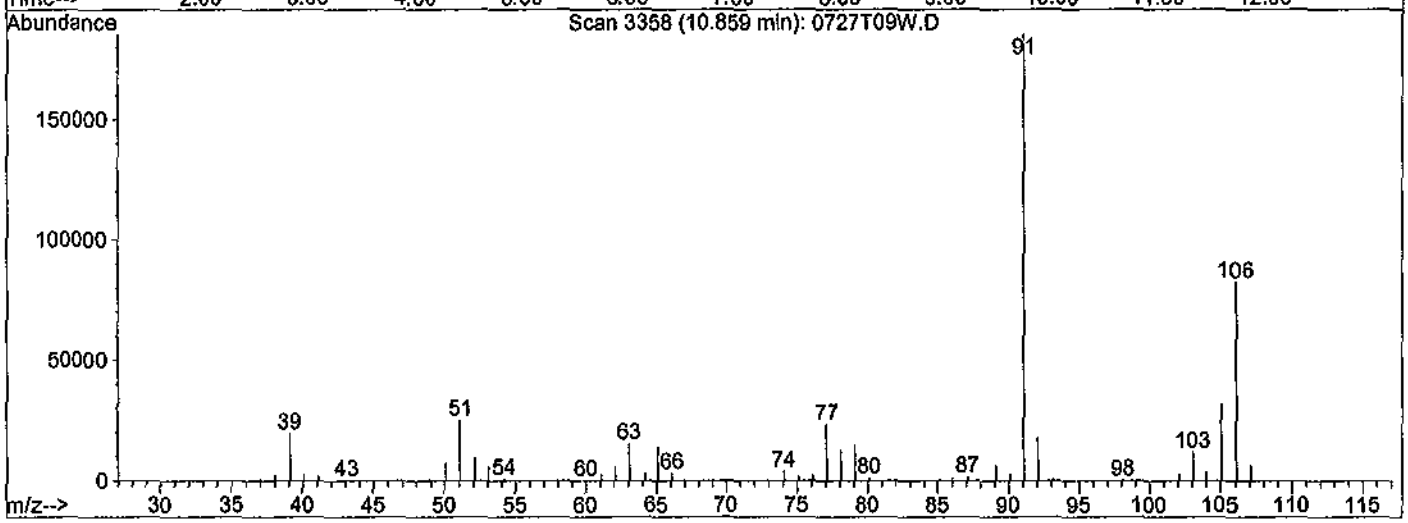
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.67#
0.00	0.00	1.32#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T09W.D Vial: 9
Acq On : 27 Jul 11 13:50 Operator: RP
Sample : Vol Std 07-27-11@600ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:54 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration





TIC: 0727T09W.D

(2) Gasoline (TMHB)

10.86min 575.0186ppb m

response 8416978

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.56#
0.00	0.00	1.09#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T10W.D Vial: 10
Acq On : 27 Jul 11 14:16 Operator: RP
Sample : Vol Std 07-27-11@800ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:54 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	265265	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	337159	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	473607	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	10.87	TIC	10775326m	799.61448	ppb	100

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

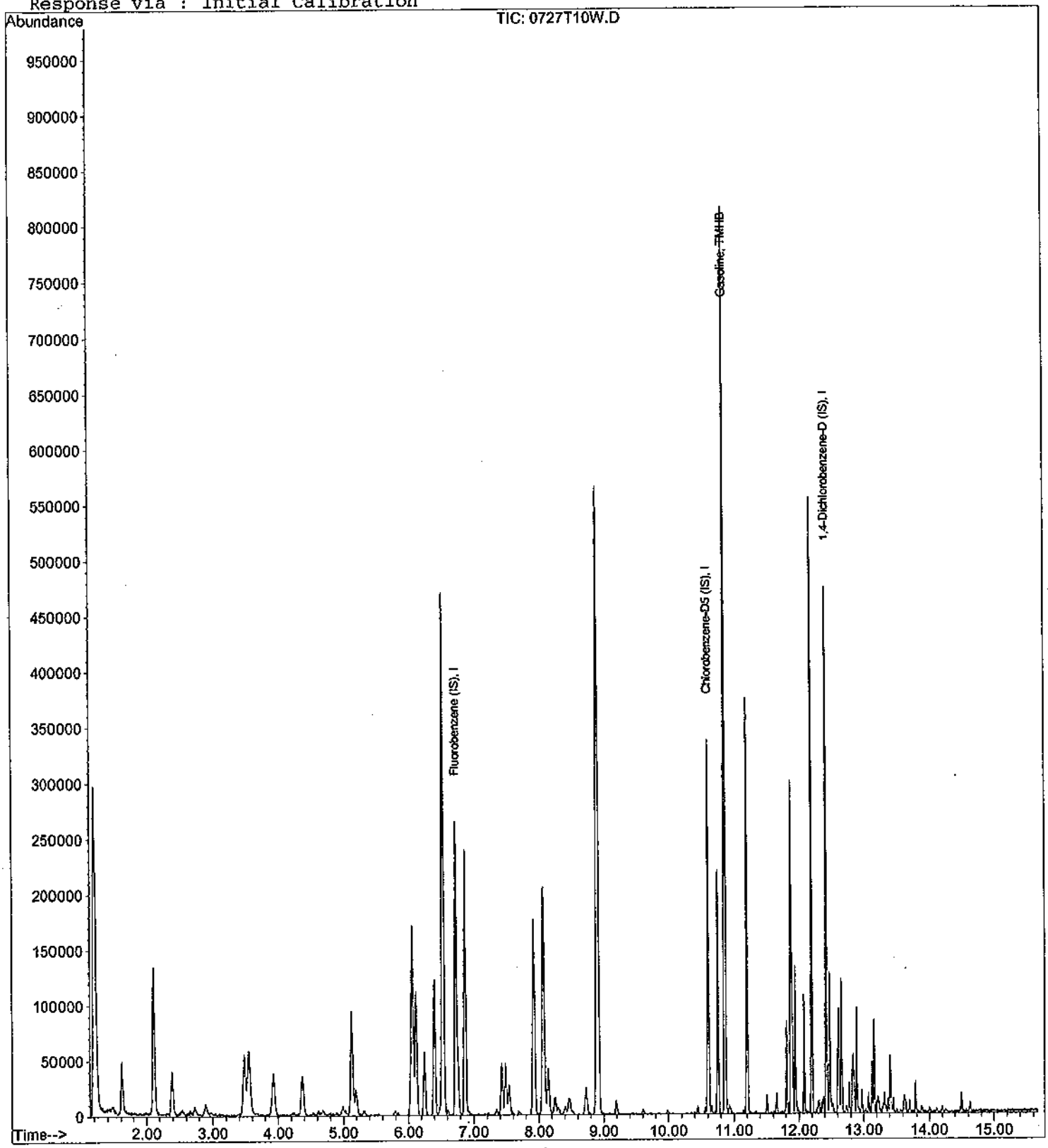
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T10W.D
Acq On : 27 Jul 11 14:16
Sample : Vol Std 07-27-11@800ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 10
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:54 2011 Quant Results File: TGAS.RES

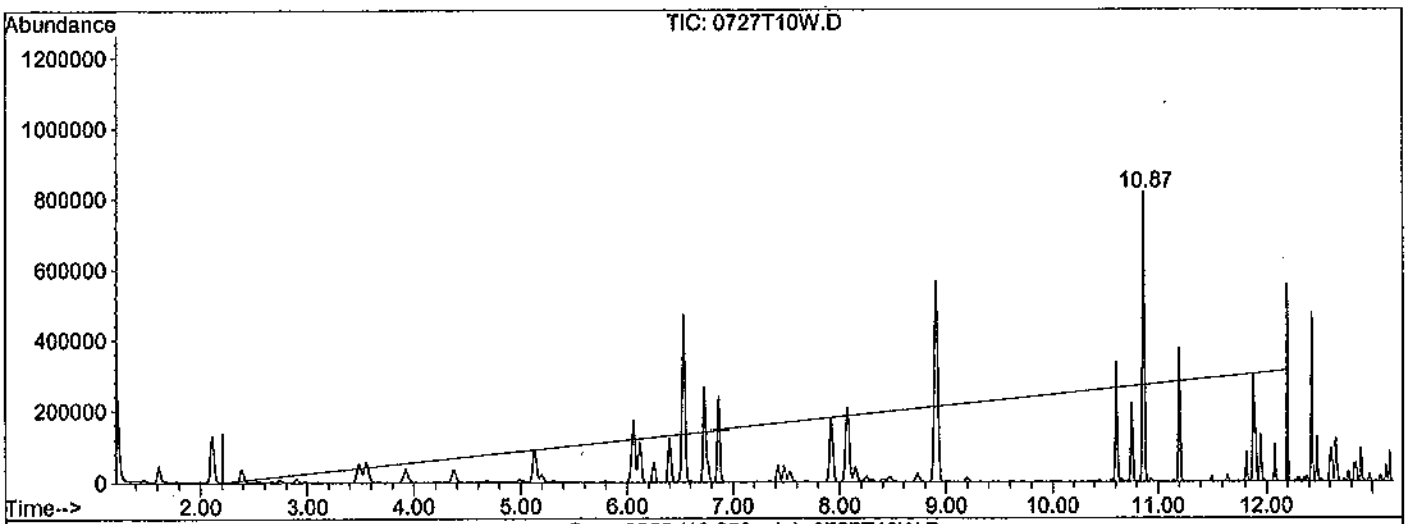
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

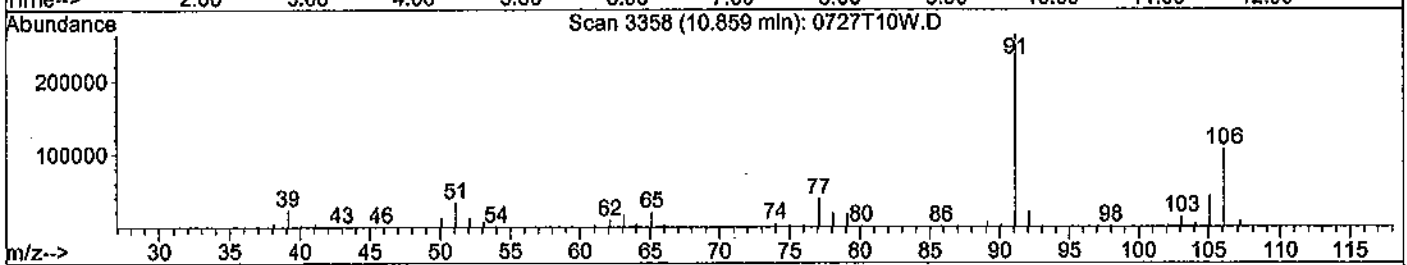


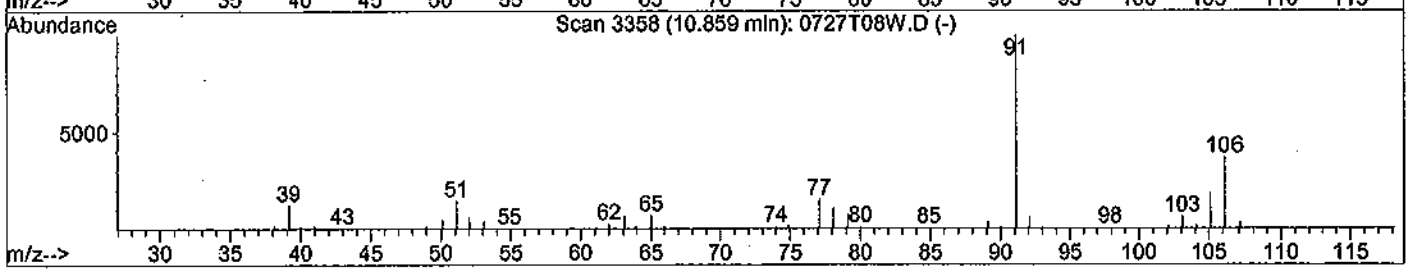
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T10W.D Vial: 10
Acq On : 27 Jul 11 14:16 Operator: RP
Sample : Vol Std 07-27-11@800ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration







TIC: 0727T10W.D

(2) Gasoline (TMHB)

10.86min 642.2594ppb m

response 8994428

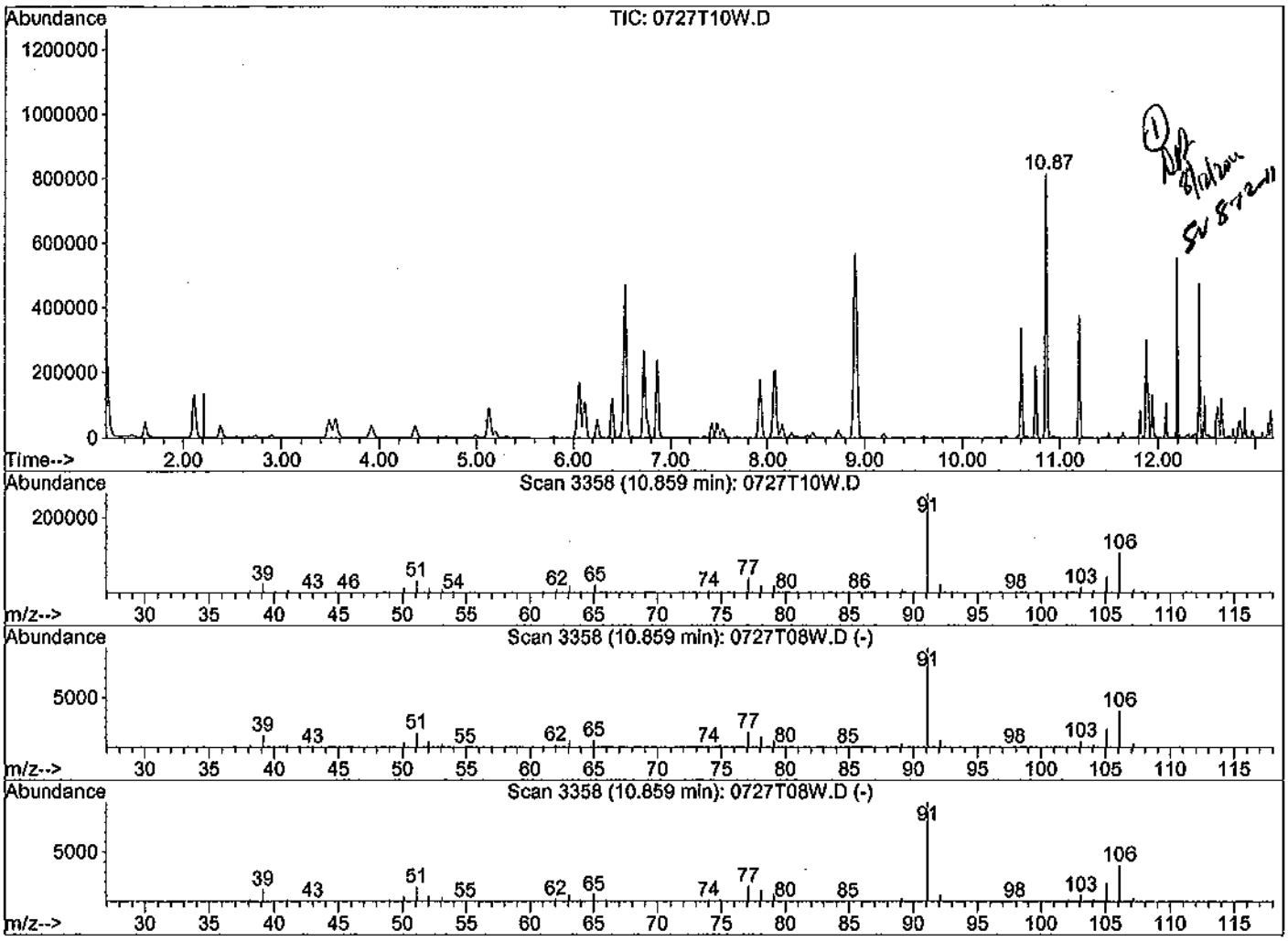
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.57#
0.00	0.00	1.12#
0.00	0.00	0.00

0727T10W.D TGAS.M Fri Aug 12 10:54:40 2011

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T10W.D Vial: 10
Acq On : 27 Jul 11 14:16 Operator: RP
Sample : Vol Std 07-27-11@800ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:54 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T10W.D

(2) Gasoline (TMHB)

10.87min 799.6145ppb m

response 10775326

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.47#
0.00	0.00	0.94#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T11W.D
Acq On : 27 Jul 11 14:42
Sample : Vol Std 07-27-11@1000ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 11
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 10:55 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	289990	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	410971	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	573669	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	10.86	TIC	14470585m	1017.10335	ppb	100

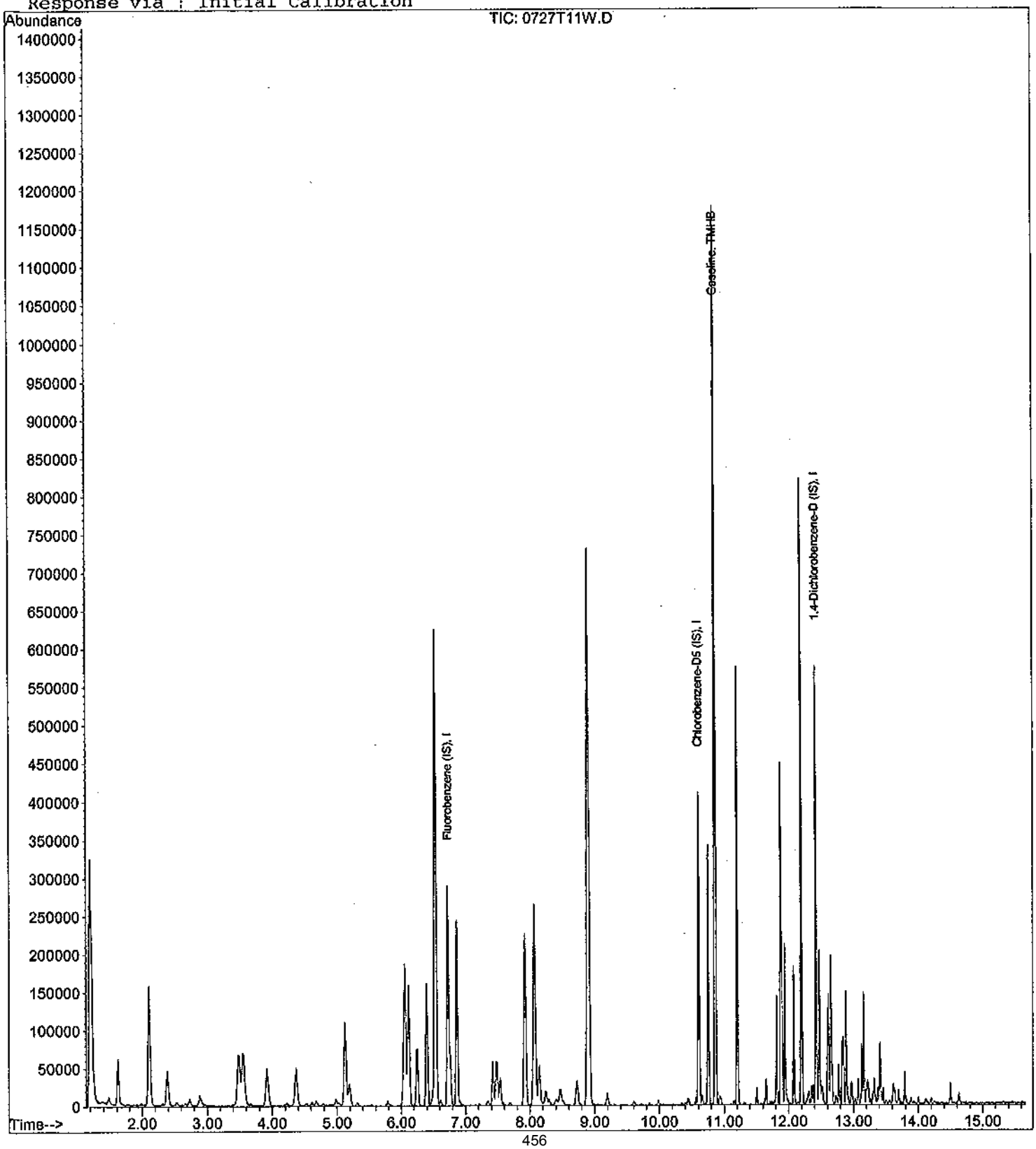
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T11W.D Vial: 11
Acq On : 27 Jul 11 14:42 Operator: RP
Sample : Vol Std 07-27-11@1000ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 10:55 2011 Quant Results File: TGAS.RES

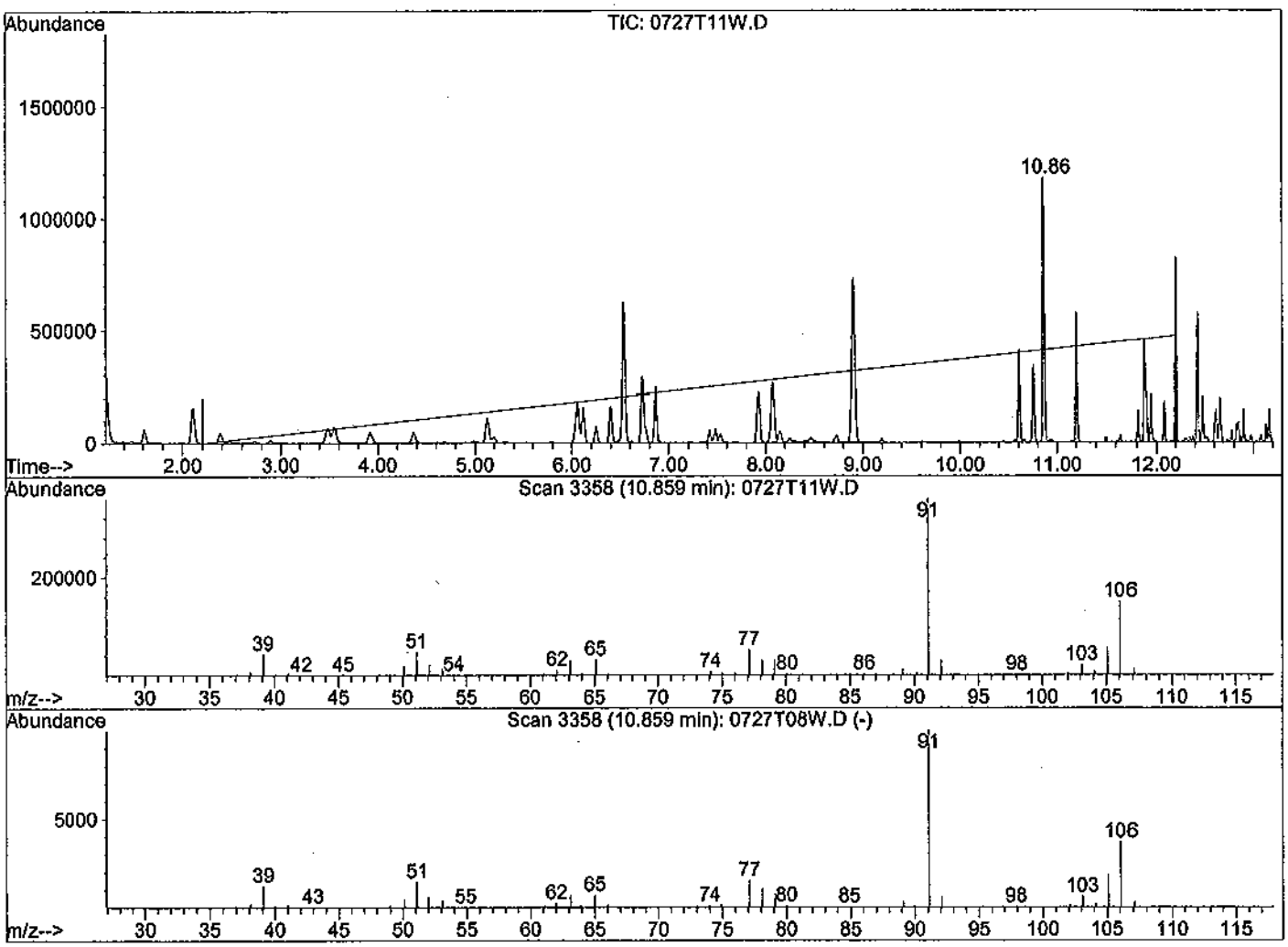
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T11W.D Vial: 11
Acq On : 27 Jul 11 14:42 Operator: RP
Sample : Vol Std 07-27-11@1000ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



TIC: 0727T11W.D

(2) Gasoline (TMHB)

10.86min 842.6991ppb m

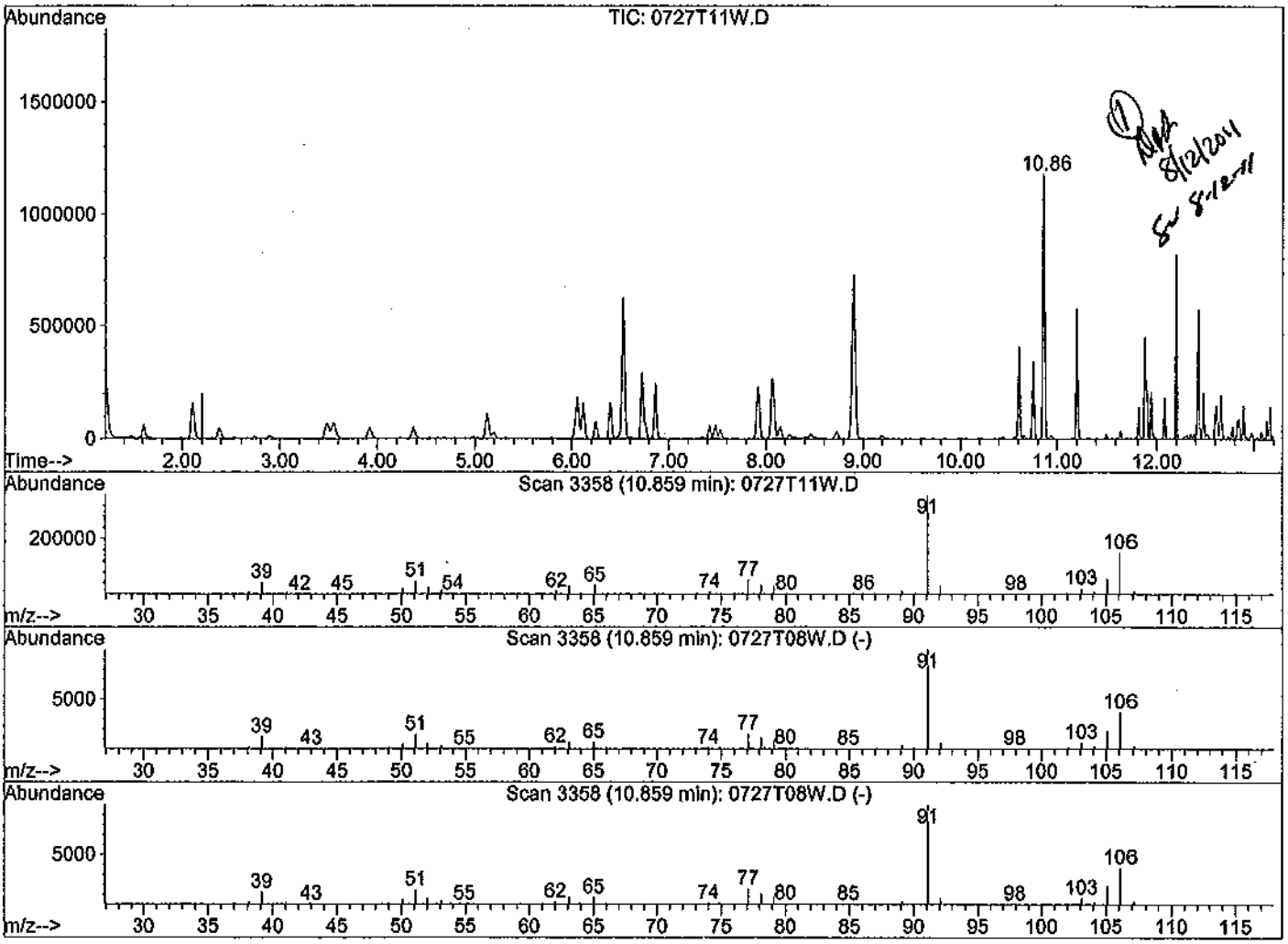
response 12312749

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.46#
0.00	0.00	0.90#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T11W.D Vial: 11
Acq On : 27 Jul 11 14:42 Operator: RP
Sample : Vol Std 07-27-11@1000ug/L Inst : Thor
Misc : 10ml w/5ul of IS: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:55 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:46:03 2011
Response via : Multiple Level Calibration



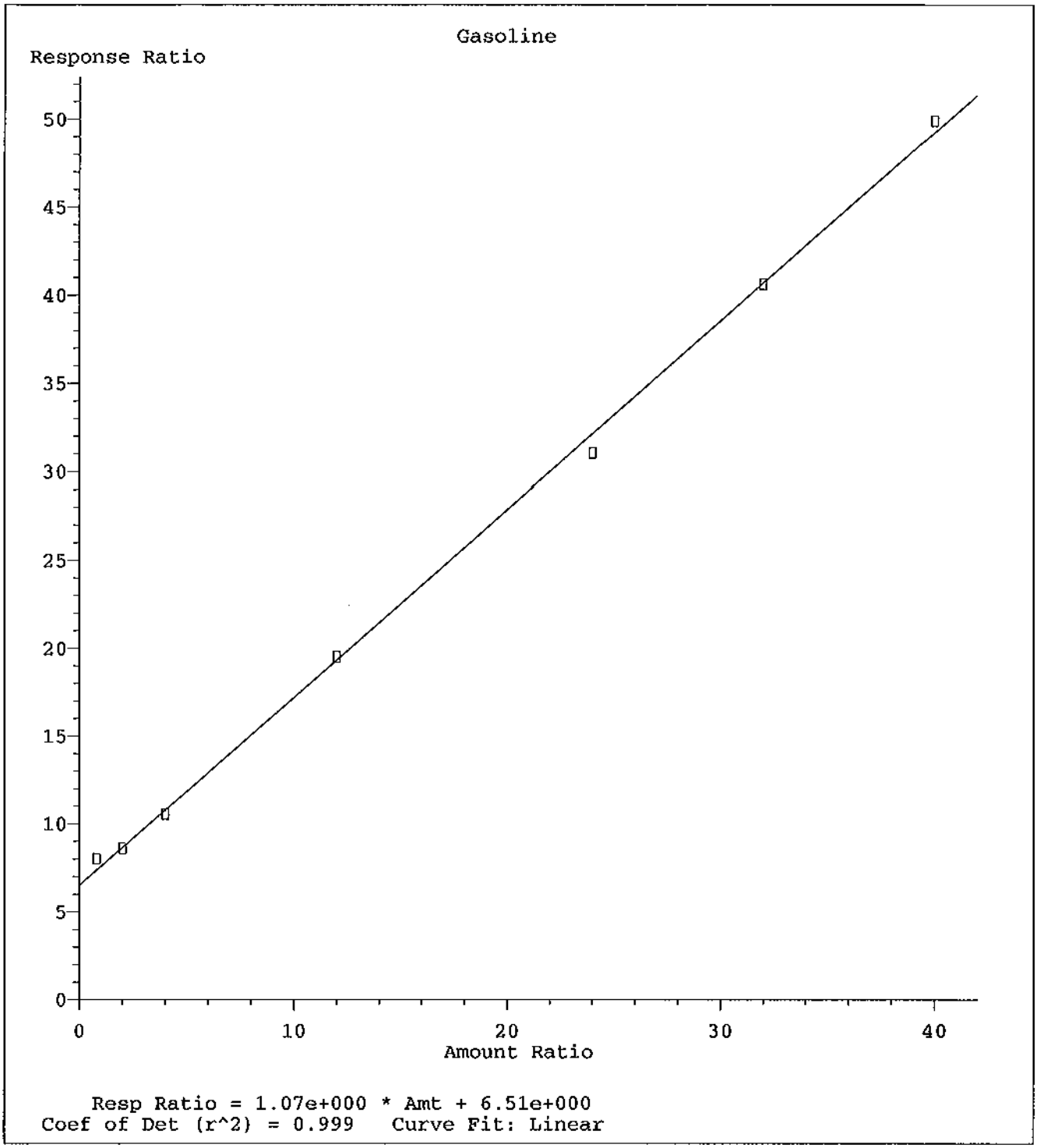
TIC: 0727T11W.D

(2) Gasoline (TMHB)

10.86min 1017.1033ppb m

response 14470585

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.39#
0.00	0.00	0.77#
0.00	0.00	0.00



Method Name: M:\THOR\DATA\T110727\TGAS.M
Calibration Table Last Updated: Fri Aug 12 10:55:32 2011

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/ Continuing Calibration

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

SDG No: 65187
Date Analyzed: 07/28/11
Instrument: Thor
Initial Cal. Date: 07/27/11
Data File: 0727T33W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	3.194	1.674	48	TMHBL	6.0
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
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11							
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35							
36							
37							
38							
39							
40							
		Average			48.0		

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T33W.D Vial: 33
Acq On : 28 Jul 11 00:13 Operator: RP
Sample : Gas 300ug/L (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:00 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	257896	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	328931	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.42	TIC	420592	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	11.61	TIC	5181154m	317.86169	ppb	100

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

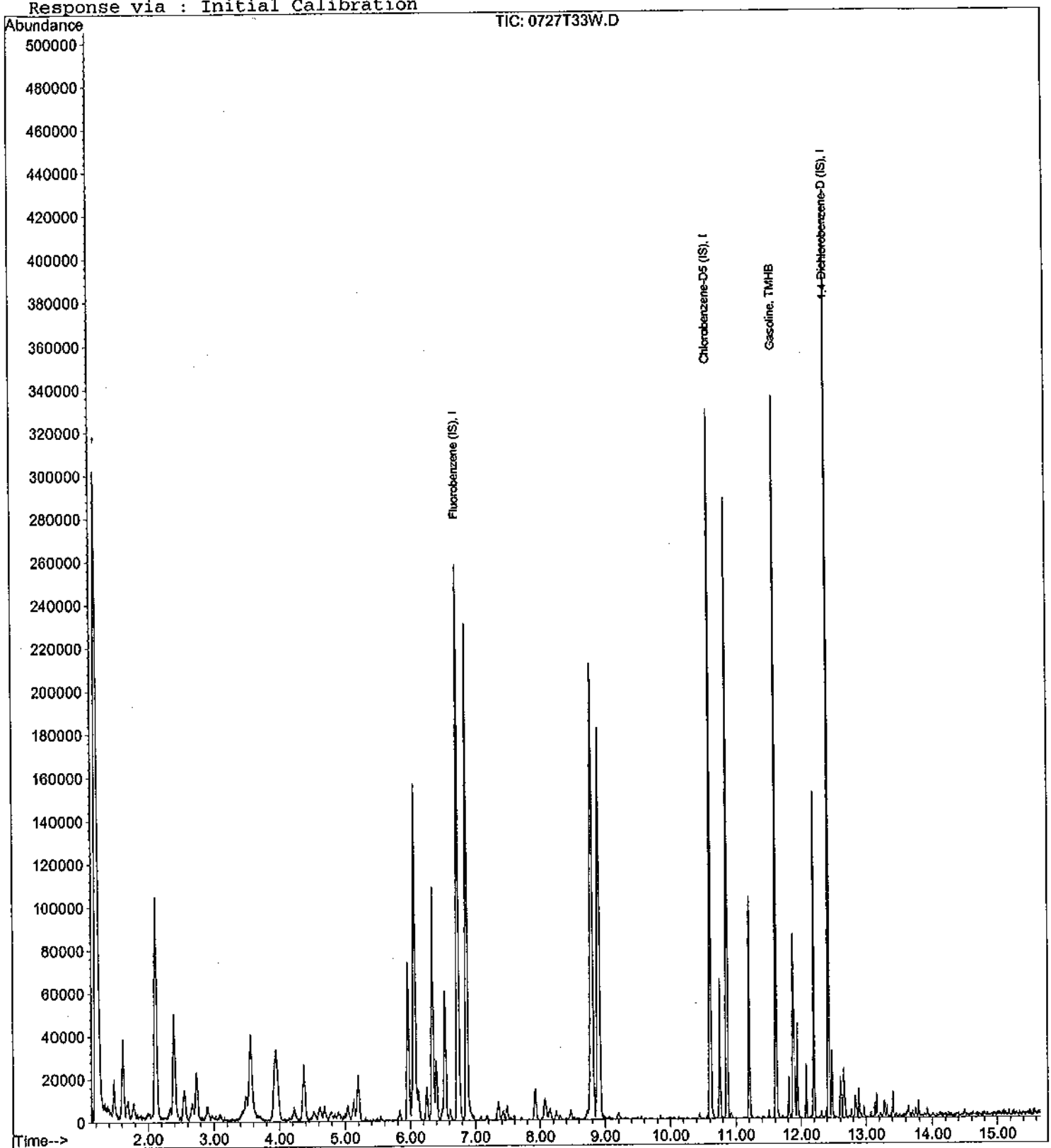
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T33W.D
Acq On : 28 Jul 11 00:13
Sample : Gas 300ug/L (SS)
Misc : 10ml w/5ul of IS&S: 07-26-11

Vial: 33
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Aug 12 11:00 2011 Quant Results File: TGAS.RES

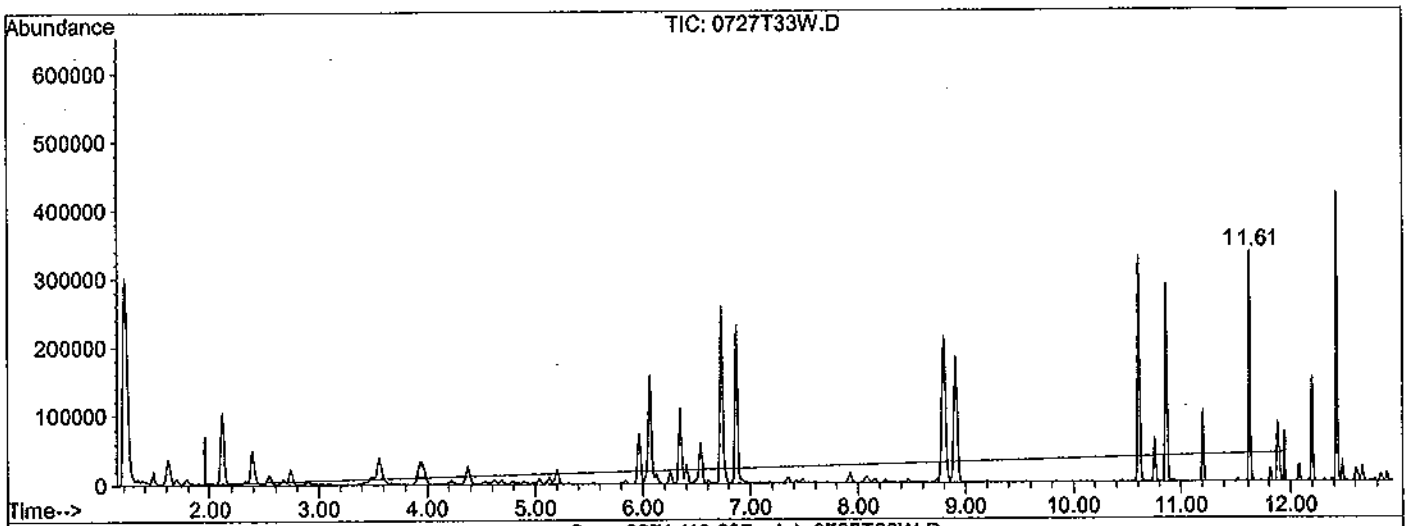
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

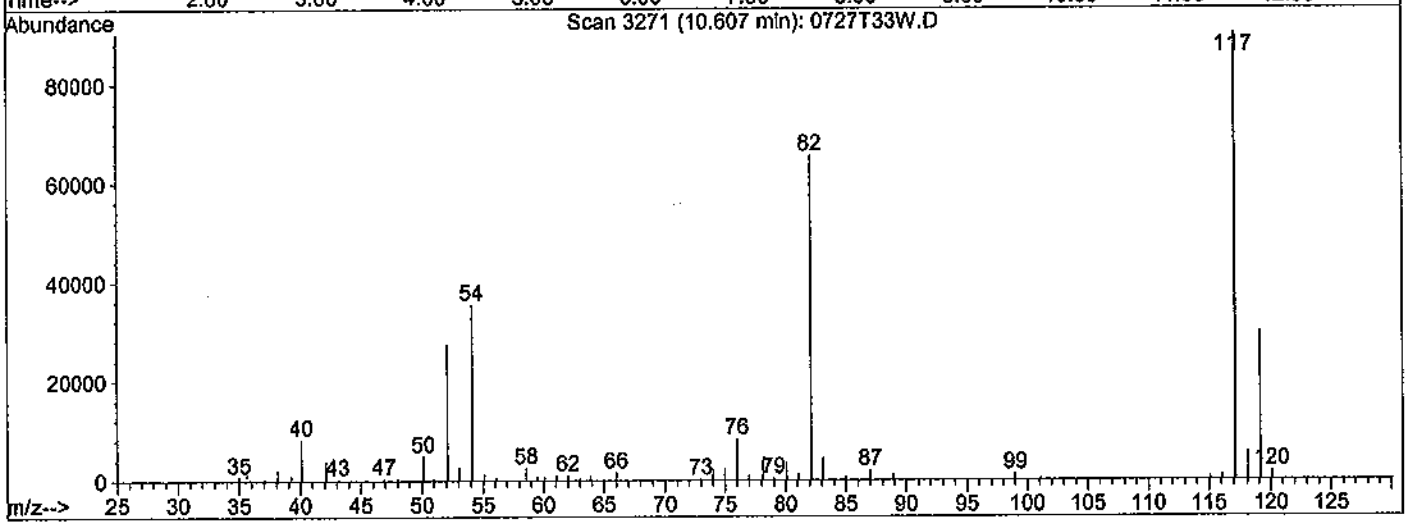


Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T33W.D Vial: 33
Acq On : 28 Jul 11 00:13 Operator: RP
Sample : Gas 300ug/L (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:58 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration





TIC: 0727T33W.D

(2) Gasoline (TMHB)

10.61min 277.7618ppb m

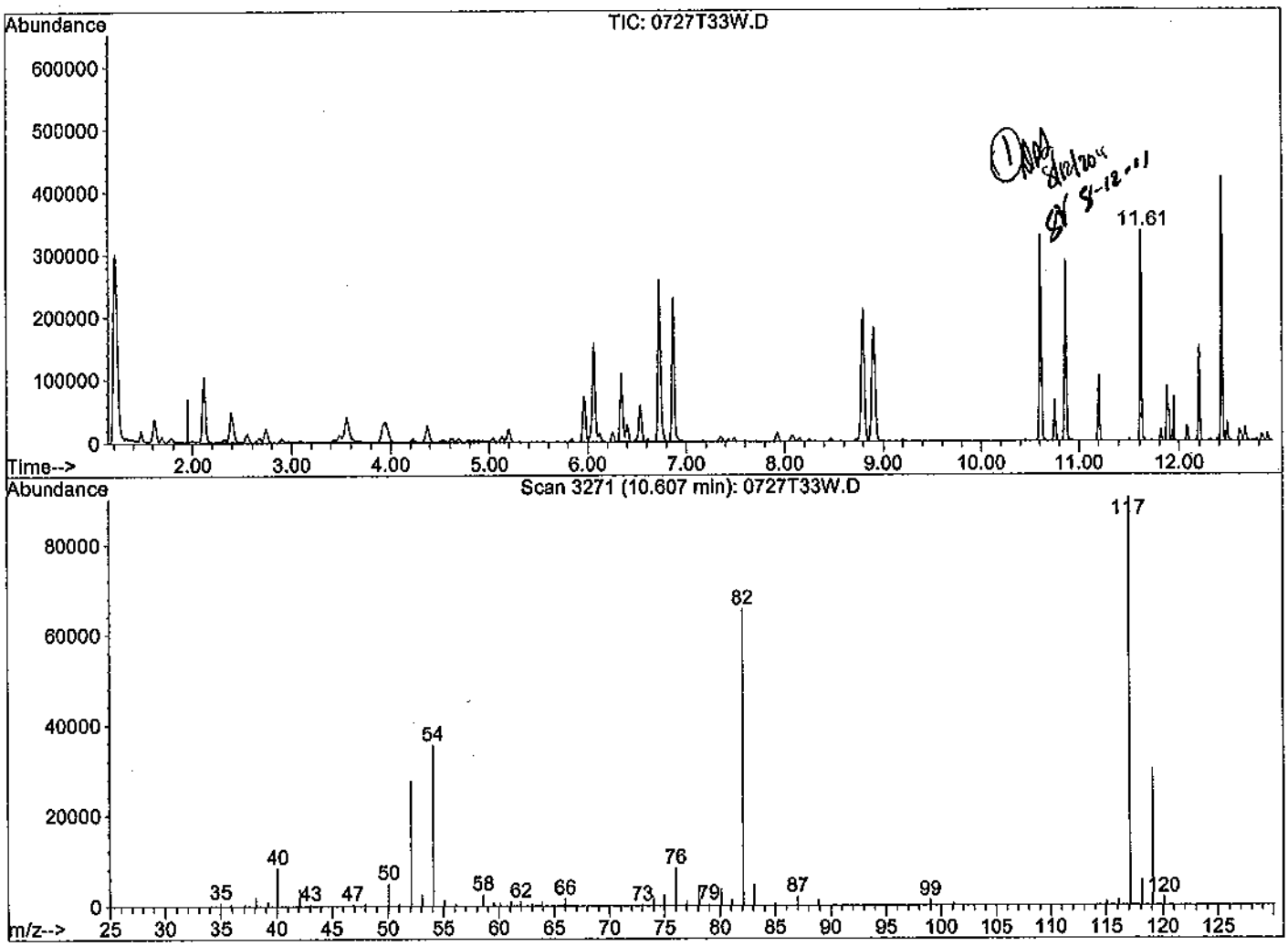
response 4739437

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.96#
0.00	0.00	1.99#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T33W.D Vial: 33
Acq On : 28 Jul 11 00:13 Operator: RP
Sample : Gas 300ug/L (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 11:00 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration



TIC: 0727T33W.D

(2) Gasoline (TMHB)

11.61min 317.8617ppb m

response 5181154

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.88#
0.00	0.00	1.82#
0.00	0.00	0.00

EPA METHOD 8260B
Volatile Organic Compounds
Raw Data

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110724W-42271 - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/24/11	07/24/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/24/11	07/24/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/24/11	07/24/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	07/24/11	07/24/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/24/11	07/24/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/24/11	07/24/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/24/11	07/24/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/24/11	07/24/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/24/11	07/24/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/24/11	07/24/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/24/11	07/24/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/24/11	07/24/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/24/11	07/24/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/24/11	07/24/11
BLANK	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/24/11	07/24/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H05
Instrument: Hewey
Sequence: H110721
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:56:20 PM

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110724W-42271 - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/24/11	07/24/11
BLANK	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/24/11	07/24/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/24/11	07/24/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/24/11	07/24/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/24/11	07/24/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/24/11	07/24/11
BLANK	SURROGATE: 1,2-DICHLOROET	115	70-120			%	07/24/11	07/24/11
BLANK	SURROGATE: 4-BROMOFLUOR	95.3	75-120			%	07/24/11	07/24/11
BLANK	SURROGATE: DIBROMOFLUOR	108	85-115			%	07/24/11	07/24/11
BLANK	SURROGATE: TOLUENE-D8 (S)	97.5	85-120			%	07/24/11	07/24/11

Quant Method: H86SHW.M
Run #: 0724H05
Instrument: Hewey
Sequence: H110721
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:56:20 PM

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H05W.D Vial: 5
Acq On : 24 Jul 11 15:51 Operator: SV
Sample : 110724A BLK-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:46 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	11.56	96	472832	25.00000 ppb	-0.03
35) Chlorobenzene-D5 (IS)	16.69	117	407872	25.00000 ppb	-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	196672	25.00000 ppb	-0.02
System Monitoring Compounds					
20) Dibromofluoromethane(S)	10.18	111	421760	23.47168 ppb	-0.02
Spiked Amount 21.666			Recovery = 108.336%		
23) 1,2-DCA-D4(S)	10.96	65	378627	23.30692 ppb	-0.02
Spiked Amount 20.215			Recovery = 115.296%		
36) Toluene-D8(S)	14.18	98	1251703	23.22867 ppb	-0.02
Spiked Amount 23.814			Recovery = 97.543%		
43) 4-Bromofluorobenzene(S)	18.82	95	488637	22.81308 ppb	-0.02
Spiked Amount 23.932			Recovery = 95.324%		

Target Compounds Qvalue

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

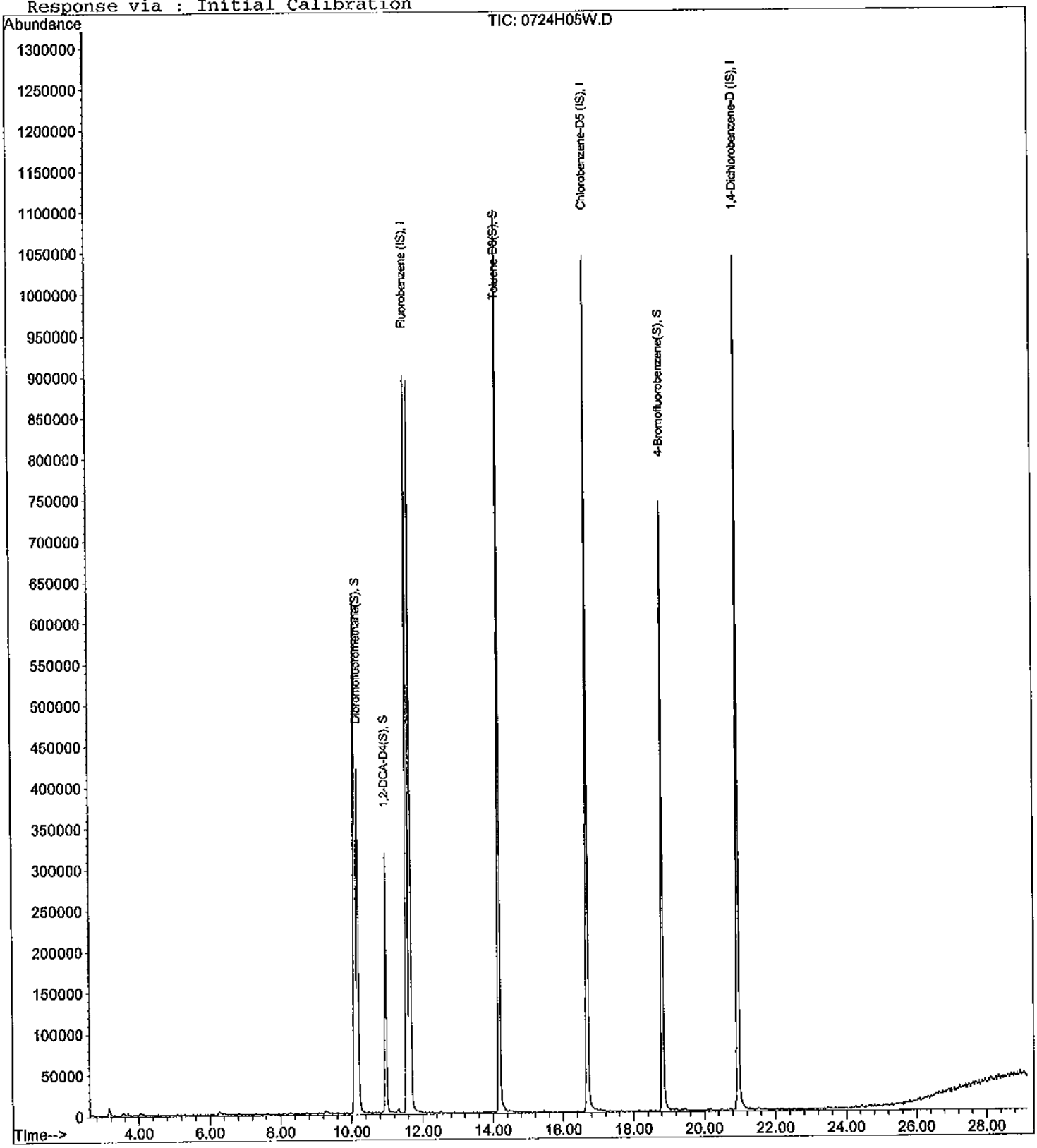
Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H05W.D
Acq On : 24 Jul 11 15:51
Sample : 110724A BLK-1WH
Misc : Water 10ml w/IS&S: 07-21-11

Vial: 5
Operator: SV
Inst : Hewey
Multiplr: 1.00

Quant Time: Aug 12 13:46 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:16:25 2011
Response via : Initial Calibration



Method Blank

EPA 8260B VOCS + GAS WATER

Blank Name/QCG: **110727W-42275 - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	1,1,1,2-TETRACHLOROETHANE	0.26 U	1.0	0.26	0.13	ug/L	07/28/11	07/28/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	07/28/11	07/28/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	07/28/11	07/28/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	07/28/11	07/28/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	07/28/11	07/28/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	07/28/11	07/28/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	07/28/11	07/28/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	07/28/11	07/28/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	07/28/11	07/28/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	07/28/11	07/28/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	07/28/11	07/28/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	07/28/11	07/28/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	07/28/11	07/28/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	07/28/11	07/28/11
BLANK	CHLOROMETHANE	0.62 U	1.0	0.62	0.31	ug/L	07/28/11	07/28/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	07/28/11	07/28/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	METHYL TERT-BUTYL ETHER	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T39
Instrument: Thor
Sequence: T110727
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:56:21 PM

Method Blank

EPA 8260B VOCS + GAS WATER

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **110727W-42275 - 158162**
Batch ID: #86RHB-110727AT2

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	07/28/11	07/28/11
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	07/28/11	07/28/11
BLANK	TETRACHLOROETHENE	0.30 U	1.0	0.30	0.15	ug/L	07/28/11	07/28/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	07/28/11	07/28/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	07/28/11	07/28/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	07/28/11	07/28/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	07/28/11	07/28/11
BLANK	SURROGATE: 1,2-DICHLOROET	111	70-120			%	07/28/11	07/28/11
BLANK	SURROGATE: 4-BROMOFLUOR	94.2	75-120			%	07/28/11	07/28/11
BLANK	SURROGATE: DIBROMOFLUOR	106	85-115			%	07/28/11	07/28/11
BLANK	SURROGATE: TOLUENE-D8 (S)	99.2	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T39
Instrument: Thor
Sequence: T110727
Initials: DA

GC SC-Blank-REG MDLs
Printed: 08/12/11 4:56:21 PM

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T39W.D Vial: 39
Acq On : 28 Jul 11 2:48 Operator: RP
Sample : 110726A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:52 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	96	106016	25.00000	ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	80304	25.00000	ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	53520	25.00000	ppb	0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	47875	32.24571	ppb	0.00
Spiked Amount 30.441			Recovery = 105.928%			
24) 1,2-DCA-D4(S)	6.34	65	90837	31.25536	ppb	0.00
Spiked Amount 28.084			Recovery = 111.291%			
39) Toluene-D8(S)	8.79	98	152580	34.34723	ppb	0.00
Spiked Amount 34.610			Recovery = 99.240%			
46) 4-Bromofluorobenzene(S)	11.61	95	67942	26.54957	ppb	0.00
Spiked Amount 28.184			Recovery = 94.201%			

Target Compounds Qvalue

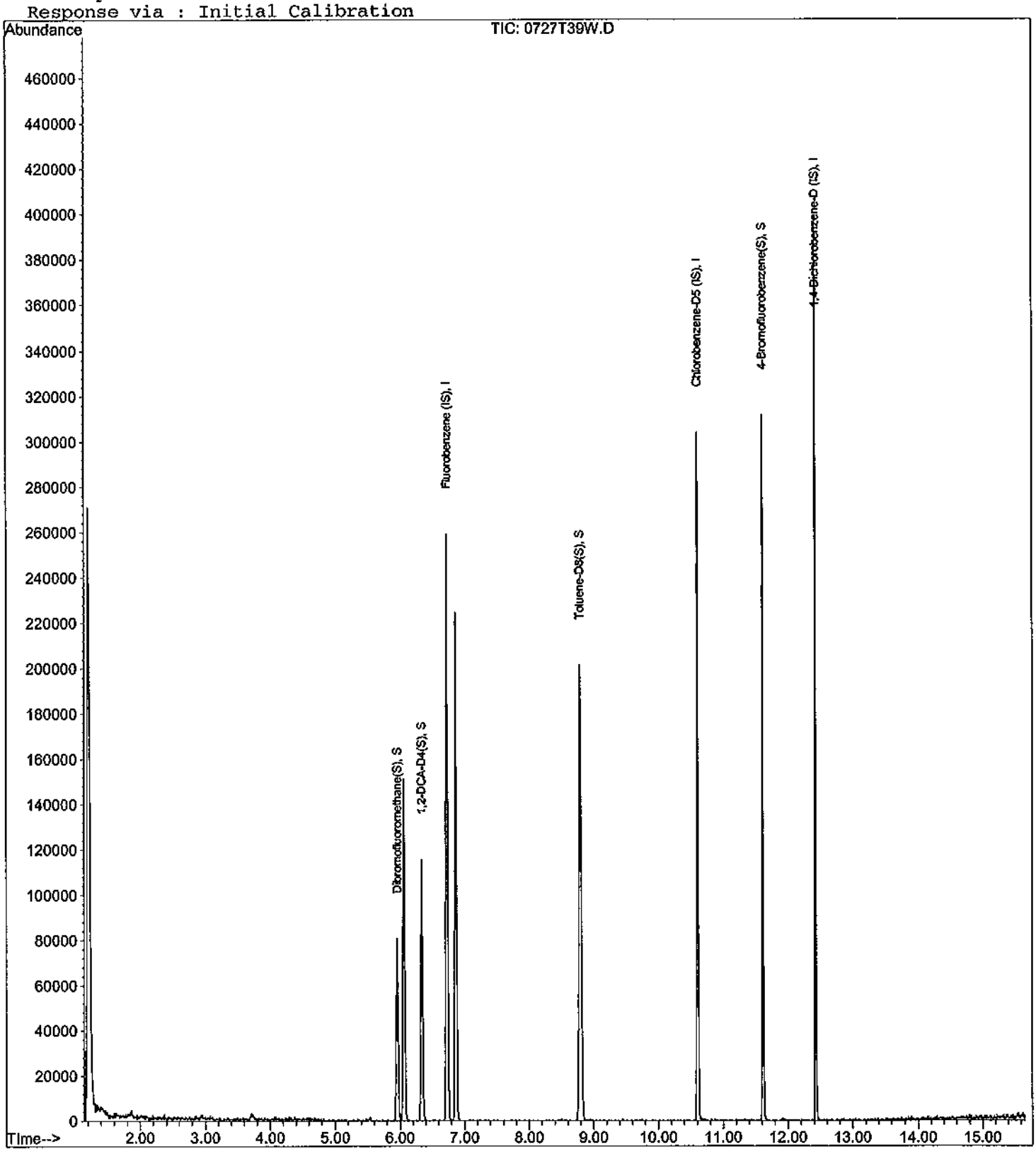
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T39W.D Vial: 39
Acq On : 28 Jul 11 2:48 Operator: RP
Sample : 110726A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:52 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **110724W-42271 LCS - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1,1,2-TETRACHLOROETHANE	10.00	9.65	96.5	80-130
1,1,1-TRICHLOROETHANE	10.00	10.4	104	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.21	92.1	65-130
1,1,2-TRICHLOROETHANE	10.00	9.95	99.5	75-125
1,1-DICHLOROETHANE	10.00	9.75	97.5	70-135
1,1-DICHLOROETHENE	10.00	9.56	95.6	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.41	94.1	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.10	91.0	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	8.57	85.7	50-130
1,2-DIBROMOETHANE	10.00	9.14	91.4	70-130
1,2-DICHLOROBENZENE	10.00	9.28	92.8	70-120
1,2-DICHLOROETHANE	10.00	9.69	96.9	70-130
1,2-DICHLOROPROPANE	10.00	9.95	99.5	75-125
1,3-DICHLOROBENZENE	10.00	9.41	94.1	75-125
1,4-DICHLOROBENZENE	10.00	9.30	93.0	75-125
2-BUTANONE	10.00	9.97	99.7	30-150
4-METHYL-2-PENTANONE	10.00	8.47	84.7	60-135
ACETONE	10.00	8.78	87.8	40-140
BENZENE	10.00	9.85	98.5	80-120
BROMODICHLOROMETHANE	10.00	10.2	102	75-120
BROMOFORM	10.00	8.53	85.3	70-130
BROMOMETHANE	10.00	8.85	88.5	30-145
CARBON TETRACHLORIDE	10.00	10.4	104	65-140
CHLOROBENZENE	10.00	9.30	93.0	80-120
CHLORODIBROMOMETHANE	10.00	9.61	96.1	60-135
CHLOROETHANE	10.00	9.34	93.4	60-135

Comments: _____

Primary	SPK
Quant Method :	H86SHW.M
Extraction Date :	07/24/11
Analysis Date :	07/24/11
Instrument :	Hewey
Run :	0724H03
Initials :	DA

Printed: 08/12/11 4:32:13 PM

APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **110724W-42271 LCS - 158145**
Batch ID: #86RHB-110724AH

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROFORM	10.00	9.92	99.2	65-135
CHLOROMETHANE	10.00	8.65	86.5	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.23	92.3	70-125
ETHYLBENZENE	10.00	9.47	94.7	75-125
HEXACHLOROBUTADIENE	10.00	9.01	90.1	50-140
METHYL TERT-BUTYL ETHER	10.00	9.66	96.6	65-125
METHYLENE CHLORIDE	10.00	9.58	95.8	55-140
STYRENE	10.00	9.93	99.3	65-135
TETRACHLOROETHENE	10.00	9.98	99.8	45-150
TOLUENE	10.00	9.99	99.9	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.15	91.5	60-140
TRICHLOROETHENE	10.00	9.87	98.7	70-125
VINYL CHLORIDE	10.00	9.42	94.2	50-145
SURROGATE: 1,2-DICHLOROETHANE-D	20.2	22.2	110	70-120
SURROGATE: 4-BROMOFLUOROBENZ	23.9	23.2	96.9	75-120
SURROGATE: DIBROMOFLUOROMETH	21.7	23.0	106	85-115
SURROGATE: TOLUENE-D8 (S)	23.8	22.8	95.7	85-120

Comments:

Primary	SPK
Quant Method :	H86SHW.M
Extraction Date :	07/24/11
Analysis Date :	07/24/11
Instrument :	Hewey
Run :	0724H03
Initials :	DA

Printed: 08/12/11 4:32:13 PM

APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	11.57	96	535936	25.00000 ppb		-0.02
35) Chlorobenzene-D5 (IS)	16.69	117	455744	25.00000 ppb		-0.02
50) 1,4-Dichlorobenzene-D (IS)	20.95	152	219520	25.00000 ppb		-0.02
System Monitoring Compounds						
20) Dibromofluoromethane(S)	10.18	111	468050	22.98079 ppb		-0.02
Spiked Amount 21.666			Recovery = 106.069%			
23) 1,2-DCA-D4(S)	10.97	65	408638	22.19249 ppb		0.00
Spiked Amount 20.215			Recovery = 109.780%			
36) Toluene-D8(S)	14.18	98	1372013	22.78685 ppb		-0.02
Spiked Amount 23.814			Recovery = 95.687%			
43) 4-Bromofluorobenzene(S)	18.82	95	554172	23.15502 ppb		-0.02
Spiked Amount 23.932			Recovery = 96.753%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.46	85	178687	9.64893 ppb		99
3) Chloromethane	3.87	50	127036	8.65069 ppb		100
4) Vinyl chloride	4.06	62	115442	9.42384 ppb		99
5) Bromomethane	4.84	94	109434	8.85488 ppb		92
6) Chloroethane	5.01	64	82663	9.33616 ppb		100
7) Trichlorofluoromethane	5.56	101	251556	10.53187 ppb		98
8) Acetone	6.25	43	26945	8.78298 ppb	#	80
9) 1,1-DCE	6.62	61	108704	9.55946 ppb		97
10) Methylene chloride	7.35	84	103834	9.58462 ppb		93
11) Carbon disulfide	7.42	76	358542	9.05305 ppb		95
12) Methyl t-butyl ether (MtBE	7.76	73	316005	9.66267 ppb		99
13) Trans-1,2-DCE	7.95	96	95031	9.15020 ppb		95
14) 1,1-DCA	8.61	63	181135	9.75218 ppb		99
15) MEK (2-Butanone)	9.26	43	73120	9.96591 ppb	#	89
16) Cis-1,2-DCE	9.60	96	144380	9.23312 ppb		99
17) 2,2-Dichloropropane	9.59	77	188889	9.78765 ppb		93
18) Chloroform	9.87	83	261477	9.92388 ppb		99
19) Bromochloromethane	10.09	128	62033	9.70807 ppb		96
21) 1,1,1-TCA	10.58	97	220105	10.38258 ppb		95
22) 1,1-Dichloropropene	10.85	75	125980	9.80804 ppb		98
24) Carbon Tetrachloride	11.03	117	163430	10.36230 ppb		99
25) 1,2-DCA	11.12	62	166781	9.69400 ppb		100
26) Benzene	11.22	78	393126	9.84649 ppb		97
27) TCE	12.24	95	130228	9.87176 ppb		91
28) 1,2-Dichloropropane	12.47	63	103682	9.94671 ppb		99
29) Bromodichloromethane	12.81	83	204665	10.16578 ppb		98
30) Dibromomethane	12.86	93	84328	9.94031 ppb		95
31) Cis-1,3-Dichloropropene	13.71	75	184881	10.13583 ppb		100
32) Toluene	14.31	92	311645	9.99066 ppb		95
33) Trans-1,3-Dichloropropene	14.50	77	46143	9.28070 ppb		81
34) 1,1,2-TCA	14.76	83	89659	9.95237 ppb		95
37) 1,2-EDB	15.97	107	114916	9.14461 ppb	#	97
38) Tetrachloroethene	15.44	164	110468	9.97838 ppb		99
39) 1,1,1,2-Tetrachloroethane	16.82	131	165559	9.65394 ppb		98
40) m&p-Xylene	17.03	106	545468	19.09612 ppb		100
41) o-Xylene	17.79	106	291593	9.86147 ppb		97
42) Styrene	17.82	104	493029	9.93110 ppb		95
44) 2-Hexanone	14.83	43	31246	9.71297 ppb		96
45) 1,3-Dichloropropane	15.17	76	172710	9.71054 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Quant Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon Jul 25 10:44:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
46)	Dibromochloromethane	15.61	129	144654	9.60841 ppb	95
47)	Chlorobenzene	16.76	112	437126	9.29951 ppb	96
48)	Ethylbenzene	16.88	91	644254	9.46641 ppb	99
49)	Bromoform	18.32	173	77090	8.53354 ppb	93
51)	MIBK (methyl isobutyl keto	13.40	43	63450	8.47002 ppb	97
52)	Isopropylbenzene	18.44	105	718124	9.58005 ppb	99
53)	1,1,2,2-Tetrachloroethane	18.62	83	120746	9.21072 ppb	99
54)	1,2,3-Trichloropropane	18.88	110	43466	9.41063 ppb	85
55)	Bromobenzene	19.18	156	195797	9.50918 ppb	99
56)	n-Propylbenzene	19.17	91	783124	9.49813 ppb	97
57)	2-Chlorotoluene	19.45	91	562869	9.82132 ppb	98
58)	1,3,5-Trimethylbenzene	19.45	105	584526	9.32136 ppb	100
59)	4-Chlorotoluene	19.53	91	483444	9.16804 ppb	99
60)	Tert-Butylbenzene	20.09	119	619729	9.81475 ppb	99
61)	1,2,4-Trimethylbenzene	20.15	105	600617	9.88524 ppb	99
62)	Sec-Butylbenzene	20.48	105	778263	9.68482 ppb	98
63)	p-Isopropyltoluene	20.72	119	628196	9.59077 ppb	99
64)	1,3-DCB	20.83	146	340986	9.40949 ppb	99
65)	1,4-DCB	21.01	146	350062	9.30426 ppb	94
66)	n-Butylbenzene	21.45	91	491056	9.81312 ppb	98
67)	1,2-DCB	21.67	146	318367	9.28018 ppb	98
68)	1,2-Dibromo-3-chloropropan	22.97	157	21390	8.56673 ppb	91
69)	1,2,4-Trichlorobenzene	24.39	180	176666	9.09720 ppb	99
70)	Hexachlorobutadiene	24.64	223	39434	9.00560 ppb	96
71)	Naphthalene	24.73	128	336636	9.61193 ppb	100
72)	1,2,3-Trichlorobenzene	25.09	180	154749	8.90279 ppb	96

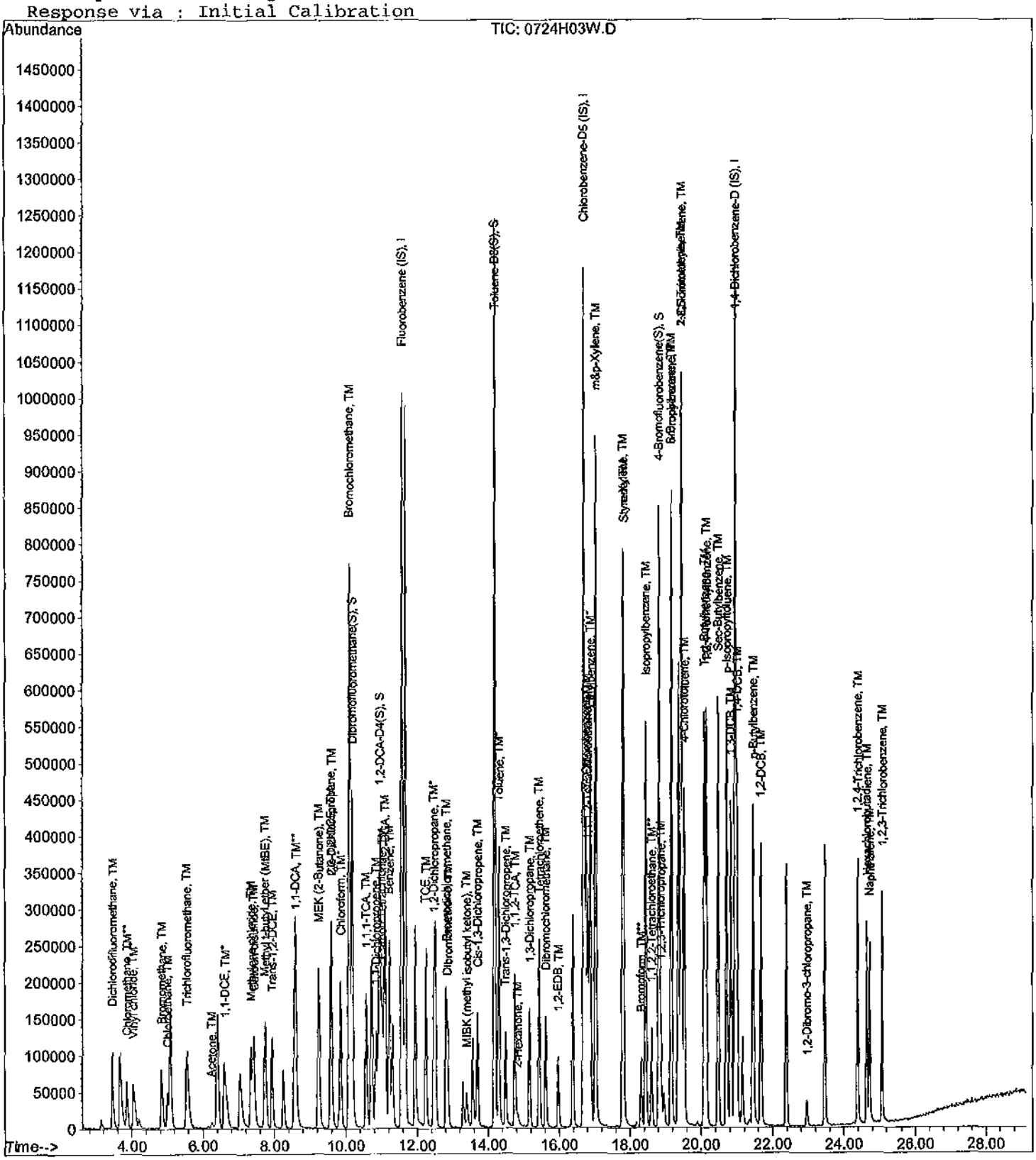
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110721\0724H03W.D Vial: 3
Acq On : 24 Jul 11 13:25 Operator: SV
Sample : 110724A LCS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Jul 25 11:12 2011 Quant Results File: H86SHW.RES

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:16:25 2011
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8260B VOCS + GAS WATER

APPL ID: **110727W-42275 LCS - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1,1,1,2-TETRACHLOROETHANE	10.00	9.31	93.1	80-130
1,1,1-TRICHLOROETHANE	10.00	8.65	86.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.61	96.1	65-130
1,1,2-TRICHLOROETHANE	10.00	9.40	94.0	75-125
1,1-DICHLOROETHANE	10.00	9.17	91.7	70-135
1,1-DICHLOROETHENE	10.00	8.97	89.7	70-130
1,2,3-TRICHLOROPROPANE	10.00	10.5	105	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.70	97.0	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	9.09	90.9	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	10.4	104	70-120
1,2-DICHLOROETHANE	10.00	9.78	97.8	70-130
1,2-DICHLOROPROPANE	10.00	10.1	101	75-125
1,3-DICHLOROBENZENE	10.00	9.75	97.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.7	98.5	70-130
1,4-DICHLOROBENZENE	10.00	9.74	97.4	75-125
2-BUTANONE	10.00	8.74	87.4	30-150
4-METHYL-2-PENTANONE	10.00	10.6	106	60-135
ACETONE	10.00	10.6	106	40-140
BENZENE	10.00	9.99	99.9	80-120
BROMODICHLOROMETHANE	10.00	9.31	93.1	75-120
BROMOFORM	10.00	8.94	89.4	70-130
BROMOMETHANE	10.00	11.6	116	30-145
CARBON TETRACHLORIDE	10.00	8.72	87.2	65-140
CHLOROBENZENE	10.00	9.79	97.9	80-120
CHLORODIBROMOMETHANE	10.00	9.73	97.3	60-135

Comments: _____

Primary	SPK
Quant Method :	T86DODW.M
Extraction Date :	07/27/11
Analysis Date :	07/27/11
Instrument :	Thor
Run :	0727T30
Initials :	DA

Printed: 08/12/11 4:32:13 PM

APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCS + GAS WATER

APPL ID: **110727W-42275 LCS - 158162**
Batch ID: #86RHB-110727AT2

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROETHANE	10.00	9.26	92.6	60-135
CHLOROFORM	10.00	8.43	84.3	65-135
CHLOROMETHANE	10.00	9.01	90.1	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.11	91.1	70-125
ETHYLBENZENE	10.00	9.78	97.8	75-125
GASOLINE	300	350	117	75-125
HEXACHLOROBUTADIENE	10.00	9.41	94.1	50-140
METHYL TERT-BUTYL ETHER	10.00	9.86	98.6	65-125
METHYLENE CHLORIDE	10.00	9.74	97.4	55-140
STYRENE	10.00	9.37	93.7	65-135
TETRACHLOROETHENE	10.00	9.01	90.1	45-150
TOLUENE	10.00	10.3	103	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.49	94.9	60-140
TRICHLOROETHENE	10.00	9.86	98.6	70-125
VINYL CHLORIDE	10.00	8.42	84.2	50-145
XYLENES (TOTAL)	30.0	28.9	96.3	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	27.9	99.3	70-120
SURROGATE: 4-BROMOFLUOROBENZ	28.2	30.8	109	75-120
SURROGATE: DIBROMOFLUOROMETH	30.4	30.9	102	85-115
SURROGATE: TOLUENE-D8 (S)	34.6	35.6	103	85-120

Comments: _____

Primary	SPK
Quant Method :	T86DODW.M
Extraction Date :	07/27/11
Analysis Date :	07/27/11
Instrument :	Thor
Run :	0727T30
Initials :	DA

Printed: 08/12/11 4:32:13 PM

APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T30W.D Vial: 30
Acq On : 27 Jul 11 22:55 Operator: RP
Sample : 110727A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.72	96	112320	25.00000 ppb		-0.01
38) Chlorobenzene-D5 (IS)	10.60	117	88552	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	65672	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.95	111	48622	30.91080 ppb		-0.01
Spiked Amount 30.441			Recovery = 101.543%			
24) 1,2-DCA-D4(S)	6.33	65	85964	27.91854 ppb		0.00
Spiked Amount 28.084			Recovery = 99.412%			
39) Toluene-D8(S)	8.78	98	174628	35.64895 ppb		-0.01
Spiked Amount 34.610			Recovery = 103.002%			
46) 4-Bromofluorobenzene(S)	11.61	95	87003	30.83133 ppb		0.00
Spiked Amount 28.184			Recovery = 109.390%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.44	85	19958	8.61637 ppb		95
3) Chloromethane	1.48	50	18190	9.01077 ppb	#	83
4) Vinyl chloride	1.57	64	6347	8.42401 ppb	#	62
5) Bromomethane	1.88	96	16753	11.56348 ppb		90
6) Chloroethane	1.98	64	15496	9.26139 ppb		98
7) Trichlorofluoromethane	2.25	101	15127	7.82428 ppb		83
8) Acetone	2.91	43	9666	10.64735 ppb		94
9) 1,1-DCE	2.82	96	14221	8.96916 ppb	#	84
10) Freon-113	2.85	103	14474	8.74565 ppb	#	77
11) Methylene chloride	3.46	84	20439	9.74461 ppb		99
12) Carbon disulfide	3.06	76	92054	9.76664 ppb	#	80
13) Methyl t-butyl ether (MtBE	3.92	73	128849	9.86284 ppb		94
14) Trans-1,2-DCE	3.87	61	39756	9.48856 ppb	#	89
15) 1,1-DCA	4.51	63	48592	9.17186 ppb		97
16) MEK (2-Butanone)	5.39	43	7583	9.16088 ppb	#	91
17) Cis-1,2-DCE	5.33	96	17768	9.11192 ppb		80
18) 2,2-Dichloropropane	5.31	77	24261	6.40130 ppb	#	85
19) Chloroform	5.75	83	37146	8.42632 ppb		96
20) Bromochloromethane	5.61	49	21286	9.26239 ppb	#	84
22) 1,1,1-TCA	5.95	97	31853	8.65370 ppb		90
23) 1,1-Dichloropropene	6.15	75	22820	9.86036 ppb		97
25) Carbon Tetrachloride	6.14	117	23470	8.71675 ppb		90
26) 1,2-DCA	6.42	62	37830	9.78240 ppb	#	92
27) Benzene	6.39	78	68950	9.98896 ppb		93
28) TCE	7.12	95	16280	9.85758 ppb	#	88
29) 1,2-Dichloropropane	7.37	63	23822	10.10408 ppb	#	95
30) Bromodichloromethane	7.74	83	30901	9.30873 ppb	#	96
31) Dibromomethane	7.51	93	10920	9.76408 ppb		94
32) MIBK (methyl isobutyl ket	8.65	43	14720	10.59411 ppb		94
33) Cis-1,3-Dichloropropene	8.36	75	27950	10.12396 ppb		82
34) Toluene	8.89	91	67376	10.30548 ppb		99
35) Trans-1,3-Dichloropropene	9.28	75	26110	9.53709 ppb		92
36) 1,1,2-TCA	9.53	83	12117	9.40427 ppb	#	54
37) 2-Hexanone	9.90	43	9109	8.74424 ppb		95
40) 1,2-EDB	10.11	107	13463	10.28349 ppb	#	82
41) Tetrachloroethene	9.70	164	9432	9.01365 ppb	#	92
42) 1,1,1,2-Tetrachloroethane	10.72	131	16278	9.30628 ppb		99
43) m&p-Xylene	10.86	106	60976	19.43627 ppb		99
44) o-Xylene	11.20	106	29411	9.48804 ppb		97

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T30W.D Vial: 30
Acq On : 27 Jul 11 22:55 Operator: RP
Sample : 110727A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Styrene	11.21	104	54408	9.36771	ppb		98
47)	1,3-Dichloropropane	9.74	76	27939	10.25692	ppb		90
48)	Dibromochloromethane	10.00	129	14711	9.72629	ppb	#	61
49)	Chlorobenzene	10.63	112	43026	9.79027	ppb		81
50)	Ethylbenzene	10.75	91	82550	9.77613	ppb	#	84
51)	Bromoform	11.35	173	9602	8.93565	ppb		84
53)	Isopropylbenzene	11.50	105	65285	9.52295	ppb		99
54)	1,1,2,2-Tetrachloroethane	11.73	83	18559	9.61296	ppb		90
55)	1,2,3-Trichloropropane	11.75	110	6537	10.47146	ppb	#	51
56)	Bromobenzene	11.72	156	17171	10.45698	ppb		96
57)	n-Propylbenzene	11.81	91	95998	9.46923	ppb		95
58)	2-Chlorotoluene	11.87	91	86491	11.14340	ppb		92
59)	1,3,5-Trimethylbenzene	11.94	105	70448	9.28257	ppb		92
60)	4-Chlorotoluene	11.94	91	84699	9.37840	ppb		91
61)	Tert-Butylbenzene	12.17	119	51874	9.52793	ppb		92
62)	1,2,4-Trimethylbenzene	12.20	105	72443	9.34744	ppb		84
63)	Sec-Butylbenzene	12.32	105	71272	9.24865	ppb		99
64)	p-Isopropyltoluene	12.41	119	59503	9.04843	ppb		96
65)	1,3-DCB	12.38	146	29683	9.74921	ppb		90
66)	1,4-DCB	12.44	146	31480	9.74323	ppb		95
67)	n-Butylbenzene	12.67	91	62623	8.99871	ppb		97
68)	1,2-DCB	12.68	146	31204	10.43909	ppb		98
69)	1,2-Dibromo-3-chloropropan	13.15	157	2639	9.08710	ppb	#	46
70)	1,2,4-Trichlorobenzene	13.64	180	22422	9.70034	ppb		94
71)	Hexachlorobutadiene	13.73	225	13674	9.41293	ppb		94
72)	Naphthalene	13.78	128	37758	9.90630	ppb		98
73)	1,2,3-Trichlorobenzene	13.92	180	21550	10.15845	ppb		92

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T34W.D Vial: 34
Acq On : 28 Jul 11 00:39 Operator: RP
Sample : Gas 300ug/L LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:00 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	263950	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	321714	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	429942	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	11.61	TIC	5665147m	350.00355	ppb	100

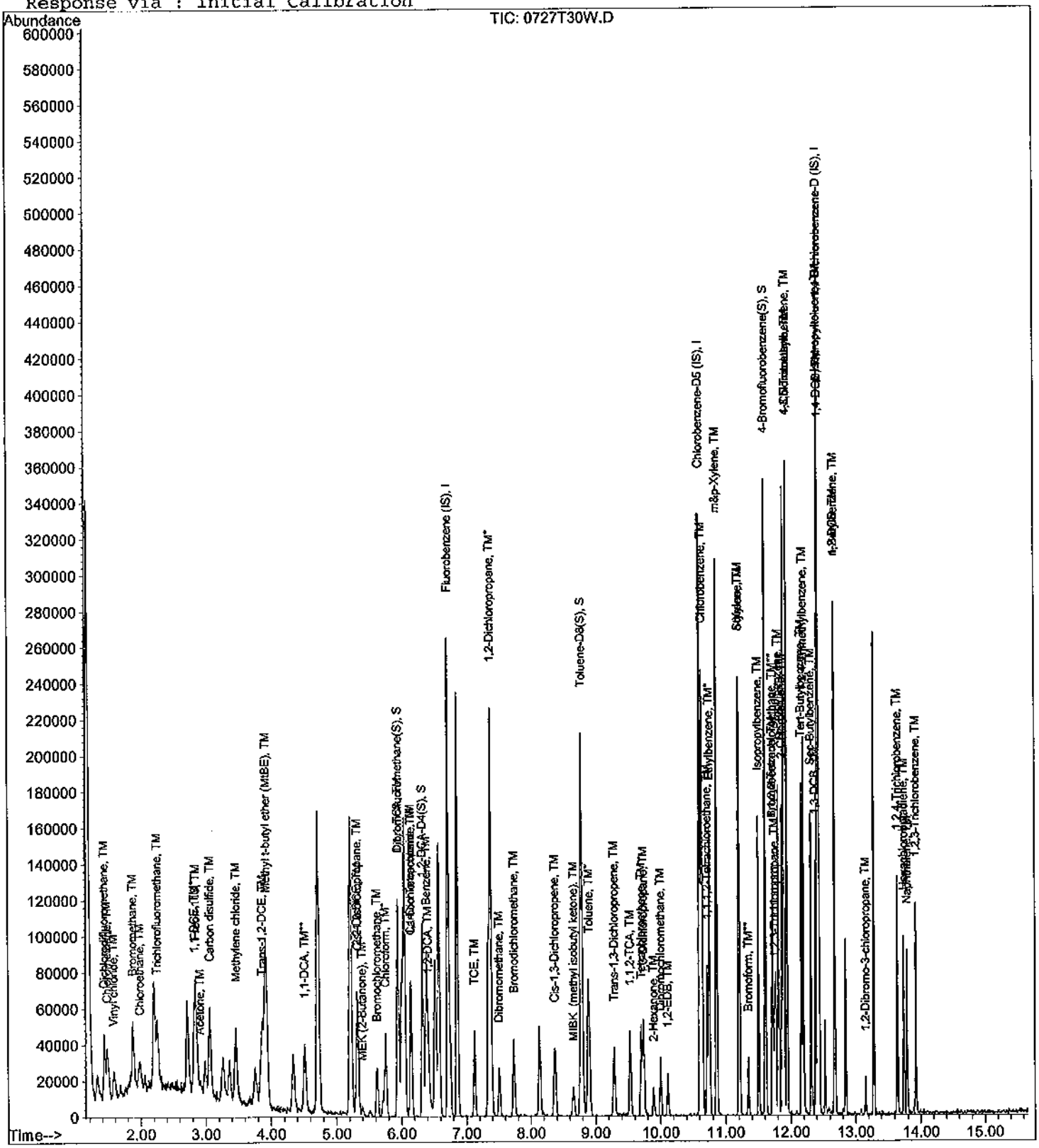
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T30W.D Vial: 30
Acq On : 27 Jul 11 22:55 Operator: RP
Sample : 110727A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Matrix Spike Recoveries

EPA 8260B VOCS + GAS WATER

APPL ID: **110728W-42275 MS - 158162**
Batch ID: #86RHB-110727AT2
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,1,1,2-TETRACHLOROETHANE	10.00	ND	10.2	8.34	102	83.4	80-130	20.1	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.14	9.22	91.4	92.2	65-130	0.87	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	9.07	8.93	90.7	89.3	65-130	1.6	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.36	9.31	93.6	93.1	75-125	0.54	30
1,1-DICHLOROETHANE	10.00	ND	6.64	6.80	66.4 #	68.0 #	70-135	2.4	30
1,1-DICHLOROETHENE	10.00	ND	7.68	7.48	76.8	74.8	70-130	2.6	30
1,2,3-TRICHLOROPROPANE	10.00	ND	10.4	9.43	104	94.3	75-125	9.8	30
1,2,4-TRICHLOROBENZENE	10.00	ND	8.75	9.05	87.5	90.5	65-135	3.4	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	8.06	8.80	80.6	88.0	50-130	8.8	30
1,2-DIBROMOETHANE	10.00	ND	9.84	9.36	98.4	93.6	70-130	5.0	30
1,2-DICHLOROBENZENE	10.00	ND	10.0	10.0	100	100	70-120	0.0	30
1,2-DICHLOROETHANE	10.00	ND	9.96	9.44	99.6	94.4	70-130	5.4	30
1,2-DICHLOROPROPANE	10.00	ND	10.1	9.96	101	99.6	75-125	1.4	30
1,3-DICHLOROBENZENE	10.00	ND	10.2	9.76	102	97.6	75-125	4.4	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	16.8	17.2	84.0	86.0	70-130	2.4	30
1,4-DICHLOROBENZENE	10.00	ND	9.35	9.29	93.5	92.9	75-125	0.64	30
2-BUTANONE	10.00	ND	8.44	8.42	84.4	84.2	30-150	0.24	30
4-METHYL-2-PENTANONE	10.00	ND	9.71	9.80	97.1	98.0	60-135	0.92	30
ACETONE	10.00	ND	5.53	5.24	55.3	52.4	40-140	5.4	30
BENZENE	10.00	ND	10.0	9.89	100	98.9	80-120	1.1	30
BROMODICHLOROMETHANE	10.00	ND	9.97	9.38	99.7	93.8	75-120	6.1	30
BROMOFORM	10.00	ND	9.58	9.26	95.8	92.6	70-130	3.4	30
BROMOMETHANE	10.00	ND	9.15	8.70	91.5	87.0	30-145	5.0	30
CARBON TETRACHLORIDE	10.00	ND	9.65	9.28	96.5	92.8	65-140	3.9	30
CHLOROBENZENE	10.00	ND	10.2	9.00	102	90.0	80-120	12.5	30

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	T86DODW.M	T86DODW.M
Extraction Date :	07/28/11	07/28/11
Analysis Date :	07/28/11	07/28/11
Instrument :	Thor	Thor
Run :	0727T51	0727T52
Initials :	DA	

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APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCS + GAS WATER

APPL ID: **110728W-42275 MS - 158162**
Batch ID: #86RHB-110727AT2
Sample ID: AY42275
Client ID: ES039

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
CHLORODIBROMOMETHANE	10.00	ND	10.2	9.55	102	95.5	60-135	6.6	30
CHLOROETHANE	10.00	ND	7.09	8.04	70.9	80.4	60-135	12.6	30
CHLOROFORM	10.00	ND	8.99	9.07	89.9	90.7	65-135	0.89	30
CHLOROMETHANE	10.00	ND	8.12	7.74	81.2	77.4	40-125	4.8	30
CIS-1,2-DICHLOROETHENE	10.00	ND	8.67	8.75	86.7	87.5	70-125	0.92	30
ETHYLBENZENE	10.00	ND	10.7	9.68	107	96.8	75-125	10.0	30
GASOLINE	300	ND	270	273	90.0	91.0	75-125	1.1	30
HEXACHLOROBUTADIENE	10.00	ND	9.58	9.25	95.8	92.5	50-140	3.5	30
METHYL TERT-BUTYL ETHER	10.00	ND	6.87	6.68	68.7	66.8	65-125	2.8	30
METHYLENE CHLORIDE	10.00	ND	8.00	7.52	80.0	75.2	55-140	6.2	30
STYRENE	10.00	ND	9.57	8.75	95.7	87.5	65-135	9.0	30
TETRACHLOROETHENE	10.00	ND	9.27	9.23	92.7	92.3	45-150	0.43	30
TOLUENE	10.00	ND	10.4	10.3	104	103	75-120	0.97	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	7.18	7.42	71.8	74.2	60-140	3.3	30
TRICHLOROETHENE	10.00	ND	10.4	10.7	104	107	70-125	2.8	30
VINYL CHLORIDE	10.00	ND	7.96	7.20	79.6	72.0	50-145	10.0	30
XYLENES (TOTAL)	30.0	ND	31.0	27.7	103	92.3	80-120	11.2	30
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	NA	27.7	28.0	98.6	99.6	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	28.2	NA	32.0	29.4	113	104	75-120		
SURROGATE: DIBROMOFLUOROMETH	30.4	NA	29.8	31.0	98.0	102	85-115		
SURROGATE: TOLUENE-D8 (S)	34.6	NA	36.4	34.9	105	101	85-120		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	T86DODW.M	T86DODW.M
Extraction Date :	07/28/11	07/28/11
Analysis Date :	07/28/11	07/28/11
Instrument :	Thor	Thor
Run :	0727T51	0727T52
Initials :	DA	

Printed: 08/12/11 4:32:08 PM
APPL MSD SCII

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T51W.D Vial: 51
Acq On : 28 Jul 11 8:00 Operator: RP
Sample : AY42275W345 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.73	96	100728	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	73832	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.42	152	56984	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	42083	29.83260 ppb		0.00
Spiked Amount 30.441			Recovery = 98.002%			
24) 1,2-DCA-D4(S)	6.33	65	76525	27.71317 ppb		0.00
Spiked Amount 28.084			Recovery = 98.679%			
39) Toluene-D8(S)	8.79	98	148550	36.37134 ppb		0.00
Spiked Amount 34.610			Recovery = 105.088%			
46) 4-Bromofluorobenzene(S)	11.61	95	75343	32.02245 ppb		0.00
Spiked Amount 28.184			Recovery = 113.616%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.46	85	18401	8.85840 ppb		93
3) Chloromethane	1.50	50	14704	8.12216 ppb		91
4) Vinyl chloride	1.61	64	5379	7.96084 ppb		99
5) Bromomethane	1.90	96	11894	9.15442 ppb		88
6) Chloroethane	2.01	64	10519	7.08575 ppb		98
7) Trichlorofluoromethane	2.28	101	11087	6.39459 ppb		93
8) Acetone	2.95	43	5455	5.52505 ppb	#	81
9) 1,1-DCE	2.85	96	10921	7.68052 ppb	#	76
10) Freon-113	2.89	103	10719	7.34642 ppb	#	81
11) Methylene chloride	3.48	84	15056	7.99618 ppb		86
12) Carbon disulfide	3.09	76	63573	7.52111 ppb	#	89
13) Methyl t-butyl ether (MtBE	3.95	73	80457	6.86739 ppb		92
14) Trans-1,2-DCE	3.90	61	26153	7.17882 ppb	#	72
15) 1,1-DCA	4.54	63	31542	6.63879 ppb		98
16) MEK (2-Butanone)	5.41	43	5943	8.14712 ppb	#	55
17) Cis-1,2-DCE	5.34	96	15048	8.66935 ppb	#	74
18) 2,2-Dichloropropane	5.34	77	12374	3.64063 ppb		94
19) Chloroform	5.78	83	35534	8.98829 ppb		100
20) Bromochloromethane	5.64	49	19335	9.38166 ppb		95
22) 1,1,1-TCA	5.97	97	30185	9.14428 ppb		89
23) 1,1-Dichloropropene	6.17	75	21048	10.11037 ppb	#	87
25) Carbon Tetrachloride	6.15	117	23302	9.65031 ppb		90
26) 1,2-DCA	6.42	62	34556	9.96413 ppb		100
27) Benzene	6.39	78	62115	10.03436 ppb		98
28) TCE	7.13	95	15337	10.35532 ppb		92
29) 1,2-Dichloropropane	7.38	63	21353	10.09914 ppb	#	95
30) Bromodichloromethane	7.74	83	29682	9.97053 ppb	#	82
31) Dibromomethane	7.52	93	9221	9.19377 ppb	#	73
32) MIBK (methyl isobutyl ket	8.66	43	11703	9.70886 ppb	#	97
33) Cis-1,3-Dichloropropene	8.38	75	20737	8.68078 ppb		82
34) Toluene	8.90	91	61166	10.43230 ppb		89
35) Trans-1,3-Dichloropropene	9.29	75	18576	8.08009 ppb		93
36) 1,1,2-TCA	9.54	83	10814	9.35887 ppb	#	83
37) 2-Hexanone	9.90	43	7879	8.43746 ppb	#	78
40) 1,2-EDB	10.12	107	10738	9.83730 ppb	#	87
41) Tetrachloroethene	9.70	164	8098	9.27192 ppb	#	70
42) 1,1,1,2-Tetrachloroethane	10.72	131	14937	10.24217 ppb		73
43) m&p-Xylene	10.86	106	54619	20.74739 ppb		94
44) o-Xylene	11.20	106	26629	10.23932 ppb		80

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T51W.D Vial: 51
Acq On : 28 Jul 11 8:00 Operator: RP
Sample : AY42275W345 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Styrene	11.21	104	46407	9.57382	ppb		98
47)	1,3-Dichloropropane	9.75	76	23940	10.54105	ppb		89
48)	Dibromochloromethane	10.01	129	12876	10.17339	ppb		82
49)	Chlorobenzene	10.63	112	37287	10.17595	ppb		96
50)	Ethylbenzene	10.75	91	75064	10.66192	ppb		99
51)	Bromoform	11.35	173	8587	9.58428	ppb		80
53)	Isopropylbenzene	11.50	105	58912	9.82212	ppb		92
54)	1,1,2,2-Tetrachloroethane	11.73	83	15198	9.07227	ppb		96
55)	1,2,3-Trichloropropane	11.75	110	5604	10.35131	ppb		79
56)	Bromobenzene	11.72	156	15265	10.71358	ppb		83
57)	n-Propylbenzene	11.81	91	83134	9.45265	ppb		94
58)	2-Chlorotoluene	11.94	91	72435	10.77770	ppb		95
59)	1,3,5-Trimethylbenzene	11.94	105	64236	9.70448	ppb		94
60)	4-Chlorotoluene	11.94	91	72435	9.25419	ppb		92
61)	Tert-Butylbenzene	12.16	119	49253	10.34040	ppb		92
62)	1,2,4-Trimethylbenzene	12.20	105	65736	9.74076	ppb		97
63)	Sec-Butylbenzene	12.32	105	63358	9.43711	ppb		95
64)	p-Isopropyltoluene	12.41	119	51919	9.09243	ppb		91
65)	1,3-DCB	12.39	146	26900	10.18219	ppb		93
66)	1,4-DCB	12.44	146	26221	9.35287	ppb		80
67)	n-Butylbenzene	12.67	91	48748	8.18278	ppb		92
68)	1,2-DCB	12.68	146	25948	10.00422	ppb		99
69)	1,2-Dibromo-3-chloropropan	13.16	157	2032	8.06375	ppb	#	63
70)	1,2,4-Trichlorobenzene	13.64	180	17236	8.75474	ppb		97
71)	Hexachlorobutadiene	13.73	225	12080	9.58349	ppb	#	79
72)	Naphthalene	13.78	128	27693	8.69937	ppb		99
73)	1,2,3-Trichlorobenzene	13.93	180	17903	9.72598	ppb		82

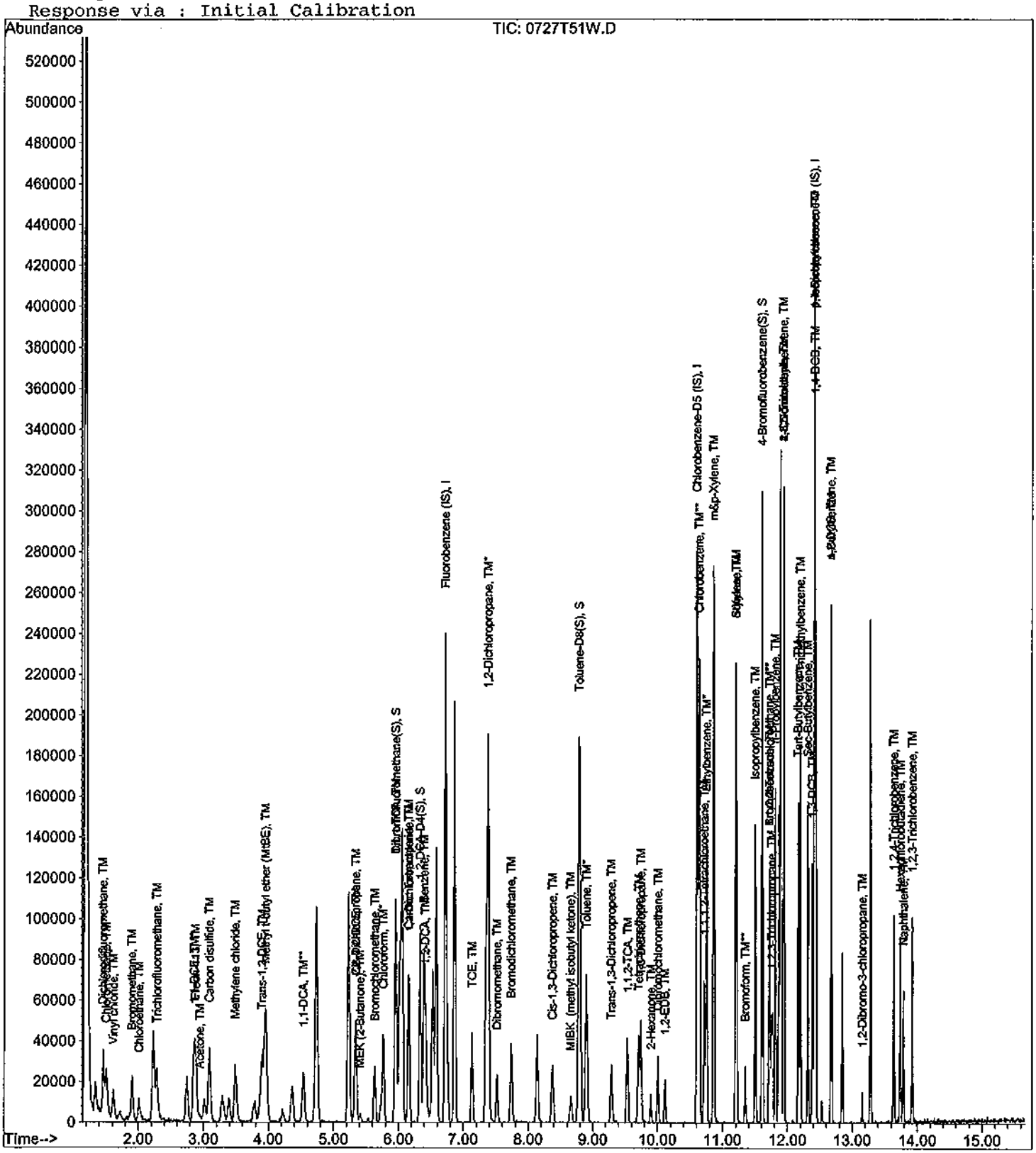
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T51W.D Vial: 51
Acq On : 28 Jul 11 8:00 Operator: RP
Sample : AY42275W345 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T52W.D Vial: 52
Acq On : 28 Jul 11 8:26 Operator: RP
Sample : AY42275W345 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.73	96	100736	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	81496	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	57696	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	43770	31.02604 ppb		0.00
Spiked Amount 30.441			Recovery = 101.921%			
24) 1,2-DCA-D4(S)	6.34	65	77394	28.02565 ppb		0.00
Spiked Amount 28.084			Recovery = 99.793%			
39) Toluene-D8(S)	8.79	98	157301	34.89204 ppb		0.00
Spiked Amount 34.610			Recovery = 100.815%			
46) 4-Bromofluorobenzene(S)	11.61	95	76299	29.37913 ppb		0.00
Spiked Amount 28.184			Recovery = 104.239%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.46	85	18176	8.74939 ppb		93
3) Chloromethane	1.51	50	14021	7.74427 ppb		94
4) Vinyl chloride	1.61	64	4865	7.19956 ppb		91
5) Bromomethane	1.92	96	11308	8.70270 ppb		99
6) Chloroethane	2.02	64	12002	8.04035 ppb	#	78
7) Trichlorofluoromethane	2.28	101	9922	5.72221 ppb		97
8) Acetone	2.96	43	5274	5.23586 ppb		87
9) 1,1-DCE	2.86	96	10642	7.48371 ppb	#	81
10) Freon-113	2.89	103	10708	7.33908 ppb		89
11) Methylene chloride	3.49	84	14170	7.52236 ppb		100
12) Carbon disulfide	3.09	76	61481	7.27304 ppb	#	85
13) Methyl t-butyl ether (MtBE	3.95	73	78306	6.68326 ppb	#	87
14) Trans-1,2-DCE	3.90	61	27165	7.42434 ppb	#	70
15) 1,1-DCA	4.54	63	32325	6.80305 ppb	#	94
16) MEK (2-Butanone)	5.41	43	5537	7.66656 ppb	#	80
17) Cis-1,2-DCE	5.35	96	15211	8.75015 ppb	#	71
18) 2,2-Dichloropropane	5.33	77	10284	3.02548 ppb	#	80
19) Chloroform	5.78	83	35855	9.06876 ppb		95
20) Bromochloromethane	5.64	49	18885	9.16259 ppb	#	87
22) 1,1,1-TCA	5.96	97	30443	9.22171 ppb		88
23) 1,1-Dichloropropene	6.17	75	20451	9.85372 ppb		93
25) Carbon Tetrachloride	6.16	117	22409	9.27975 ppb		93
26) 1,2-DCA	6.42	62	32734	9.43801 ppb		97
27) Benzene	6.39	78	61257	9.89497 ppb		96
28) TCE	7.14	95	15841	10.69476 ppb		82
29) 1,2-Dichloropropane	7.39	63	21054	9.95694 ppb	#	95
30) Bromodichloromethane	7.74	83	27918	9.37723 ppb	#	87
31) Dibromomethane	7.52	93	9891	9.86101 ppb		97
32) MIBK (methyl isobutyl ket	8.66	43	11866	9.80464 ppb	#	87
33) Cis-1,3-Dichloropropene	8.37	75	21040	8.78125 ppb		86
34) Toluene	8.91	91	60229	10.27167 ppb		93
35) Trans-1,3-Dichloropropene	9.28	75	19810	8.45114 ppb		86
36) 1,1,2-TCA	9.54	83	10762	9.31312 ppb	#	78
37) 2-Hexanone	9.90	43	7863	8.41984 ppb	#	93
40) 1,2-EDB	10.11	107	11282	9.36368 ppb	#	78
41) Tetrachloroethene	9.71	164	8901	9.23430 ppb		82
42) 1,1,1,2-Tetrachloroethane	10.71	131	13421	8.33723 ppb		92
43) m&p-Xylene	10.87	106	54524	18.93546 ppb		86
44) o-Xylene	11.20	106	24706	8.72521 ppb		83

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

Data File : M:\THOR\DATA\T110727\0727T52W.D Vial: 52
Acq On : 28 Jul 11 8:26 Operator: RP
Sample : AY42275W345 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Quant Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
45)	Styrene	11.22	104	46630	8.75154	ppb		97
47)	1,3-Dichloropropane	9.75	76	23485	9.36826	ppb		97
48)	Dibromochloromethane	10.01	129	13277	9.55256	ppb		75
49)	Chlorobenzene	10.64	112	36392	8.99771	ppb		96
50)	Ethylbenzene	10.75	91	75248	9.68294	ppb		94
51)	Bromoform	11.35	173	9159	9.26135	ppb		78
53)	Isopropylbenzene	11.50	105	59697	9.82851	ppb		94
54)	1,1,2,2-Tetrachloroethane	11.73	83	15148	8.93084	ppb	#	87
55)	1,2,3-Trichloropropane	11.75	110	5144	9.42904	ppb		76
56)	Bromobenzene	11.72	156	15117	10.47878	ppb		71
57)	n-Propylbenzene	11.81	91	85741	9.60921	ppb		94
58)	2-Chlorotoluene	11.94	91	74321	10.91325	ppb		98
59)	1,3,5-Trimethylbenzene	11.94	105	66170	9.85617	ppb		92
60)	4-Chlorotoluene	11.94	91	74321	9.36785	ppb		95
61)	Tert-Butylbenzene	12.17	119	44007	9.23152	ppb		88
62)	1,2,4-Trimethylbenzene	12.20	105	64220	9.42513	ppb		95
63)	Sec-Butylbenzene	12.32	105	63836	9.39857	ppb		95
64)	p-Isopropyltoluene	12.41	119	54863	9.43898	ppb		92
65)	1,3-DCB	12.38	146	26099	9.75709	ppb		94
66)	1,4-DCB	12.44	146	26373	9.29100	ppb	#	82
67)	n-Butylbenzene	12.67	91	52263	8.60167	ppb		96
68)	1,2-DCB	12.68	146	26285	10.00909	ppb		94
69)	1,2-Dibromo-3-chloropropan	13.16	157	2244	8.79515	ppb		82
70)	1,2,4-Trichlorobenzene	13.64	180	18153	9.04996	ppb		90
71)	Hexachlorobutadiene	13.73	225	11811	9.25445	ppb		89
72)	Naphthalene	13.78	128	30140	9.19336	ppb		99
73)	1,2,3-Trichlorobenzene	13.93	180	17854	9.57966	ppb		82

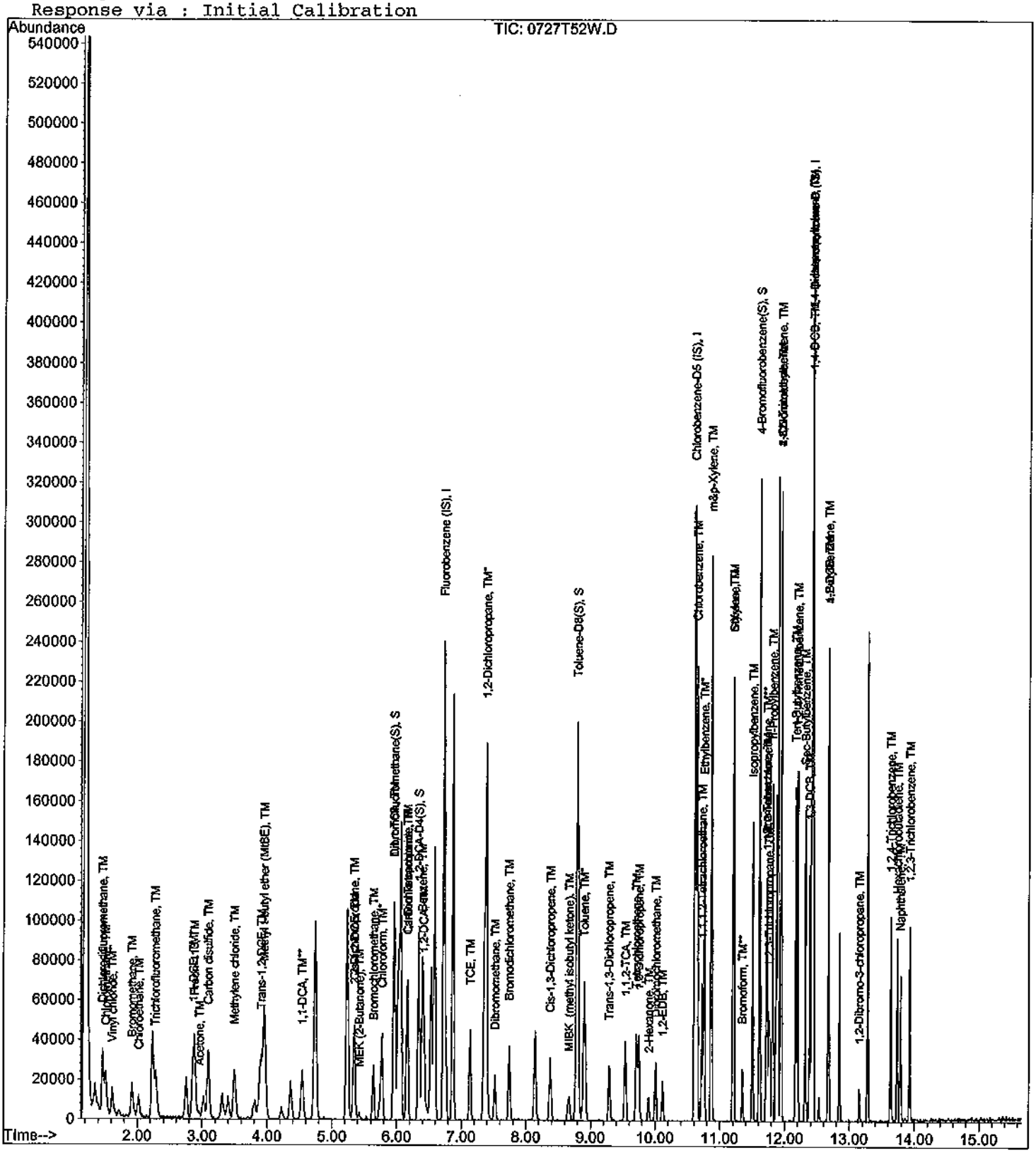
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T52W.D Vial: 52
Acq On : 28 Jul 11 8:26 Operator: RP
Sample : AY42275W345 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:45 2011 Quant Results File: T86DODW.RES

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T53W.D Vial: 53
Acq On : 28 Jul 11 8:52 Operator: RP
Sample : AY42275W567 MS-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:06 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	242701	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	280984	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	395455	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	11.61	TIC	4380302m	270.05505	ppb	100

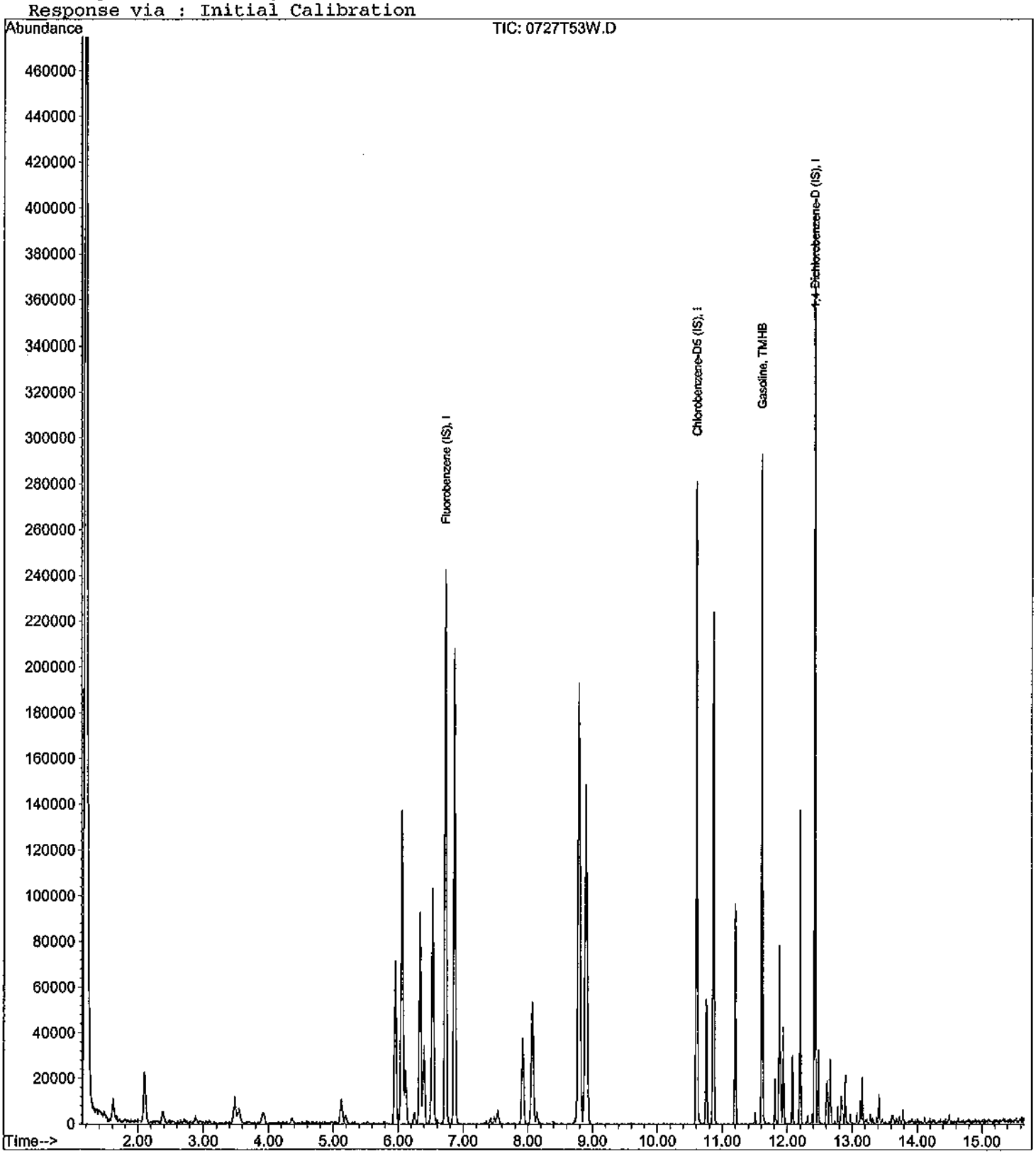
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T53W.D Vial: 53
Acq On : 28 Jul 11 8:52 Operator: RP
Sample : AY42275W567 MS-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:06 2011 Quant Results File: TGAS.RES

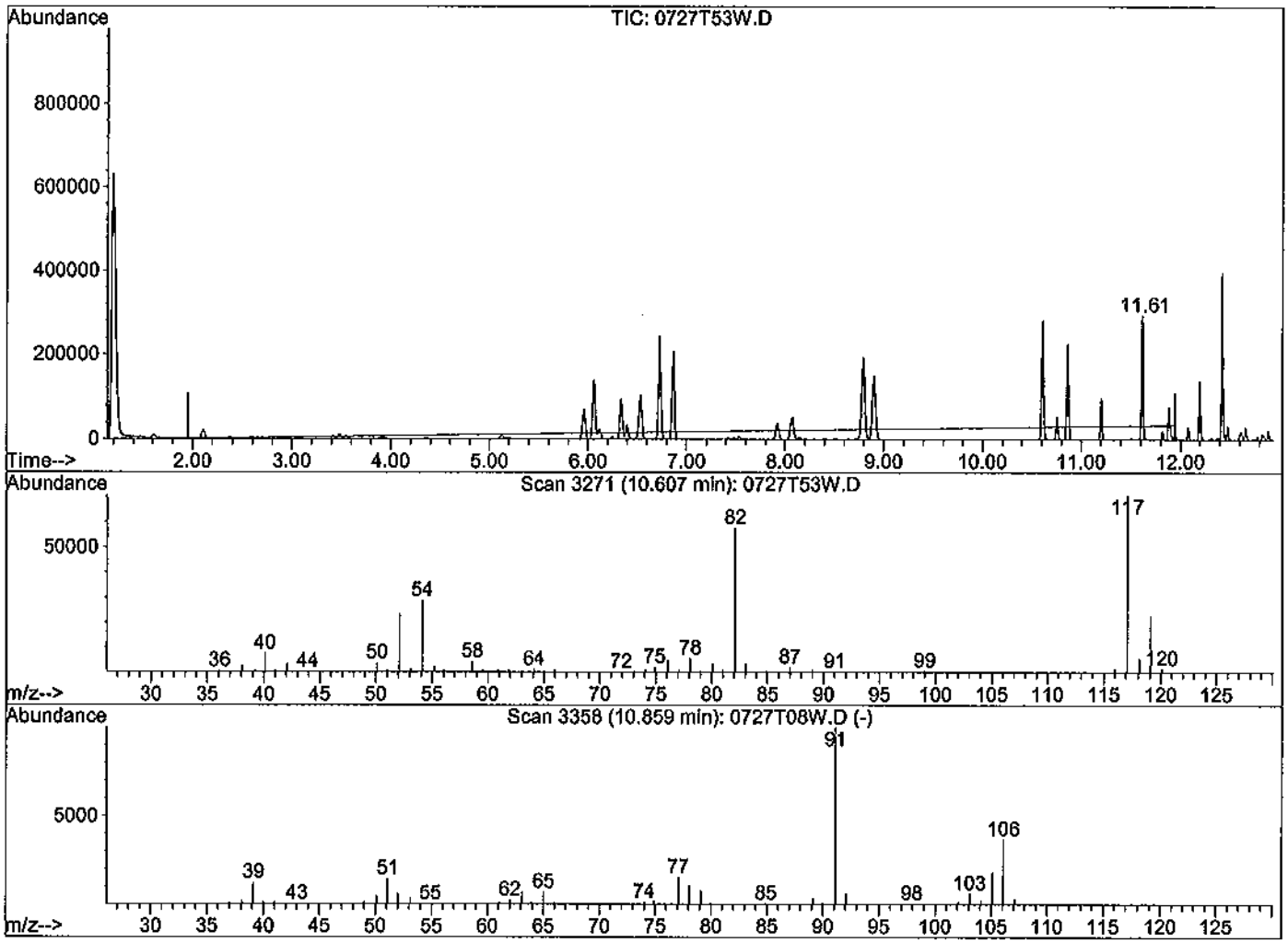
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T53W.D Vial: 53
Acq On : 28 Jul 11 8:52 Operator: RP
Sample : AY42275W567 MS-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:58 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration



TIC: 0727T53W.D

(2) Gasoline (TMHB)

10.61min 195.0336ppb m

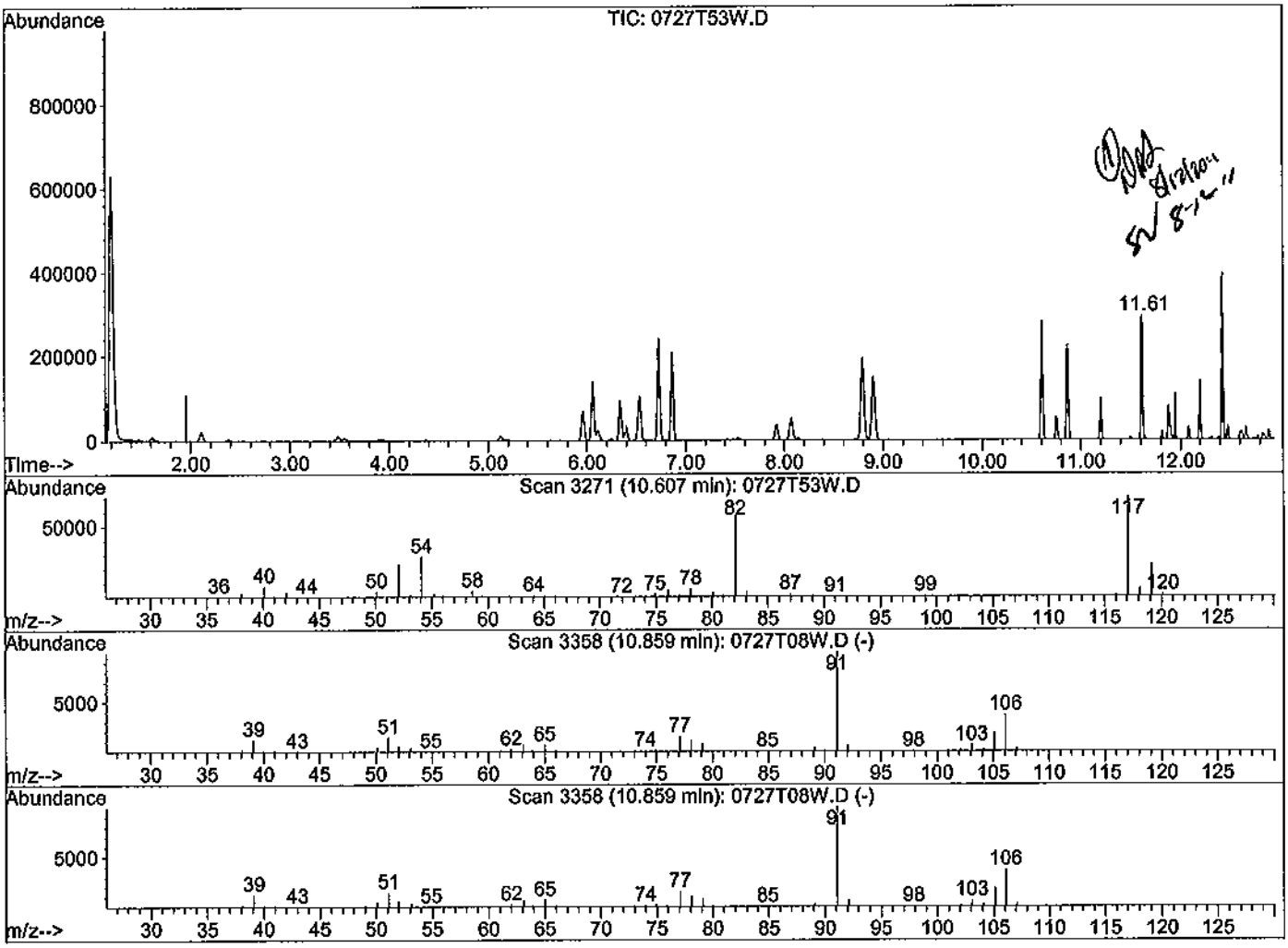
response 3602599

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	1.15#
0.00	0.00	2.56#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T53W.D Vial: 53
Acq On : 28 Jul 11 8:52 Operator: RP
Sample : AY42275W567 MS-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 11:06 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration



TIC: 0727T53W.D

(2) Gasoline (TMHB)

11.61min 270.0551ppb m

response 4380302

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.95#
0.00	0.00	2.10#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T54W.D Vial: 54
Acq On : 28 Jul 11 9:18 Operator: RP
Sample : AY42275W567 MSD-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:06 2011 Quant Results File: TGAS.RES

Quant Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration
DataAcq Meth : PT8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	6.73	TIC	236696	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	277064	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	416523	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	11.61	TIC	4300237m	272.85568	ppb	100

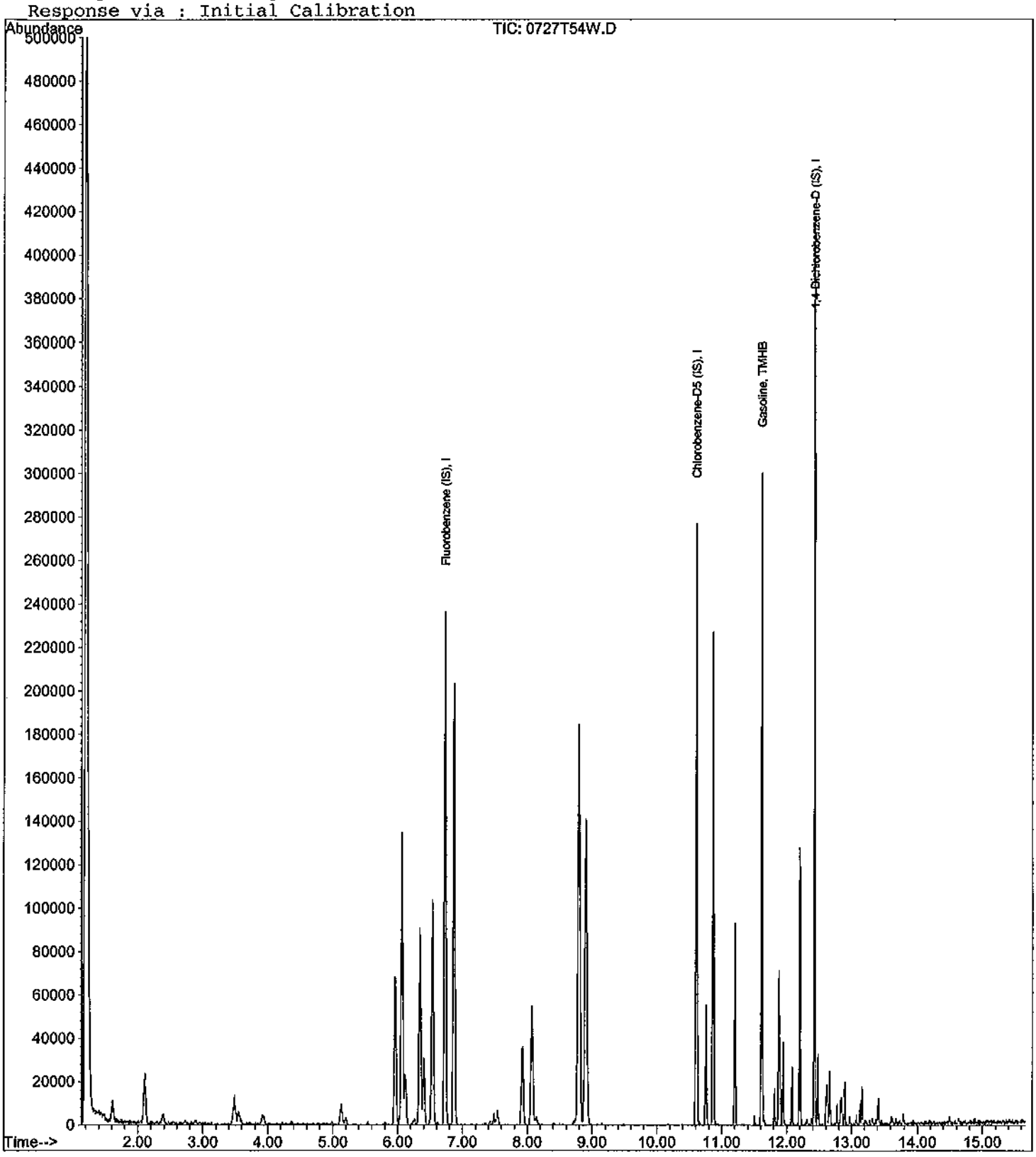
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T54W.D Vial: 54
Acq On : 28 Jul 11 9:18 Operator: RP
Sample : AY42275W567 MSD-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:06 2011 Quant Results File: TGAS.RES

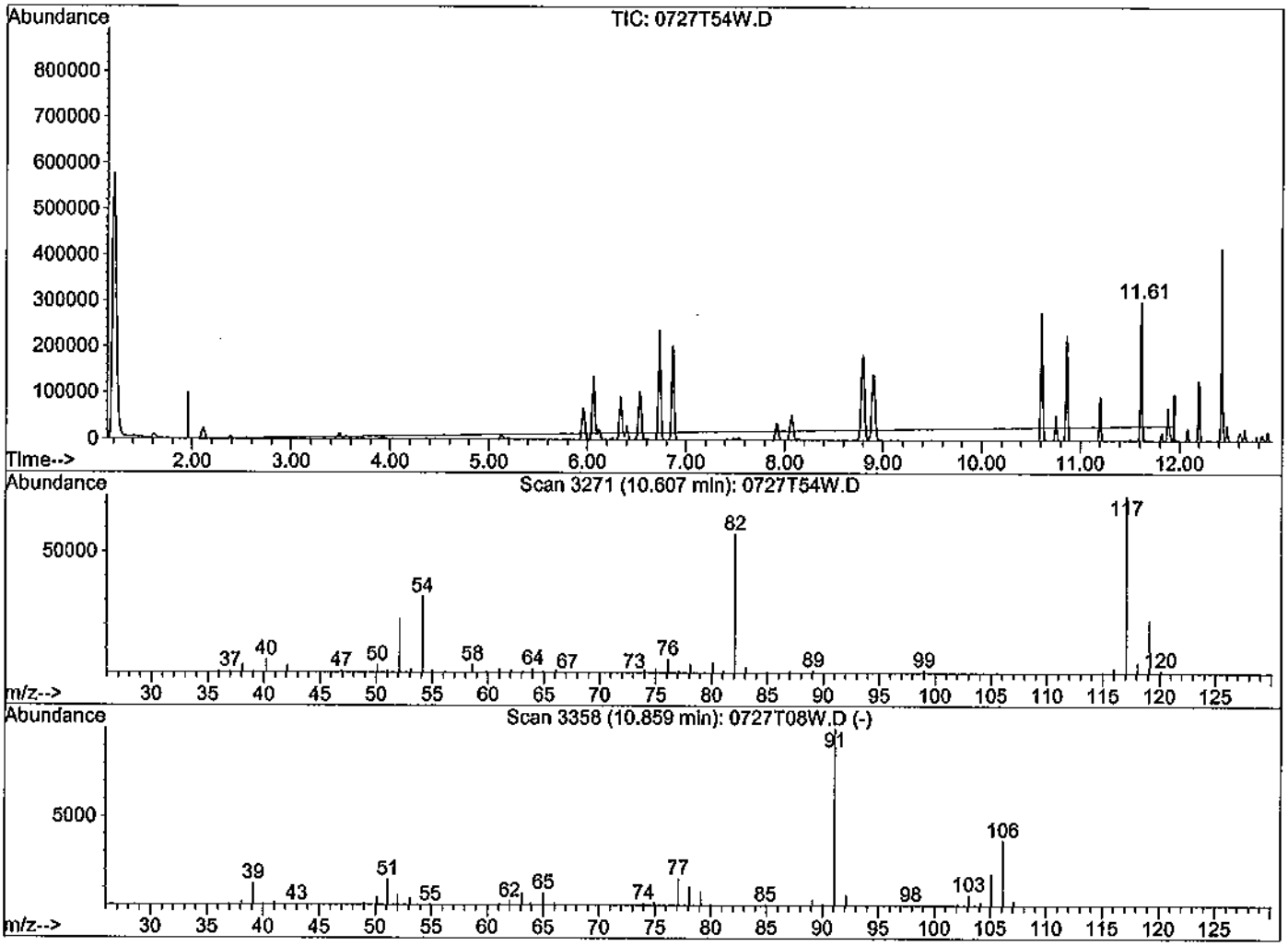
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T54W.D Vial: 54
Acq On : 28 Jul 11 9:18 Operator: RP
Sample : AY42275W567 MSD-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 10:58 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration



TIC: 0727T54W.D

(2) Gasoline (TMHB)

10.61min 201.9451ppb m

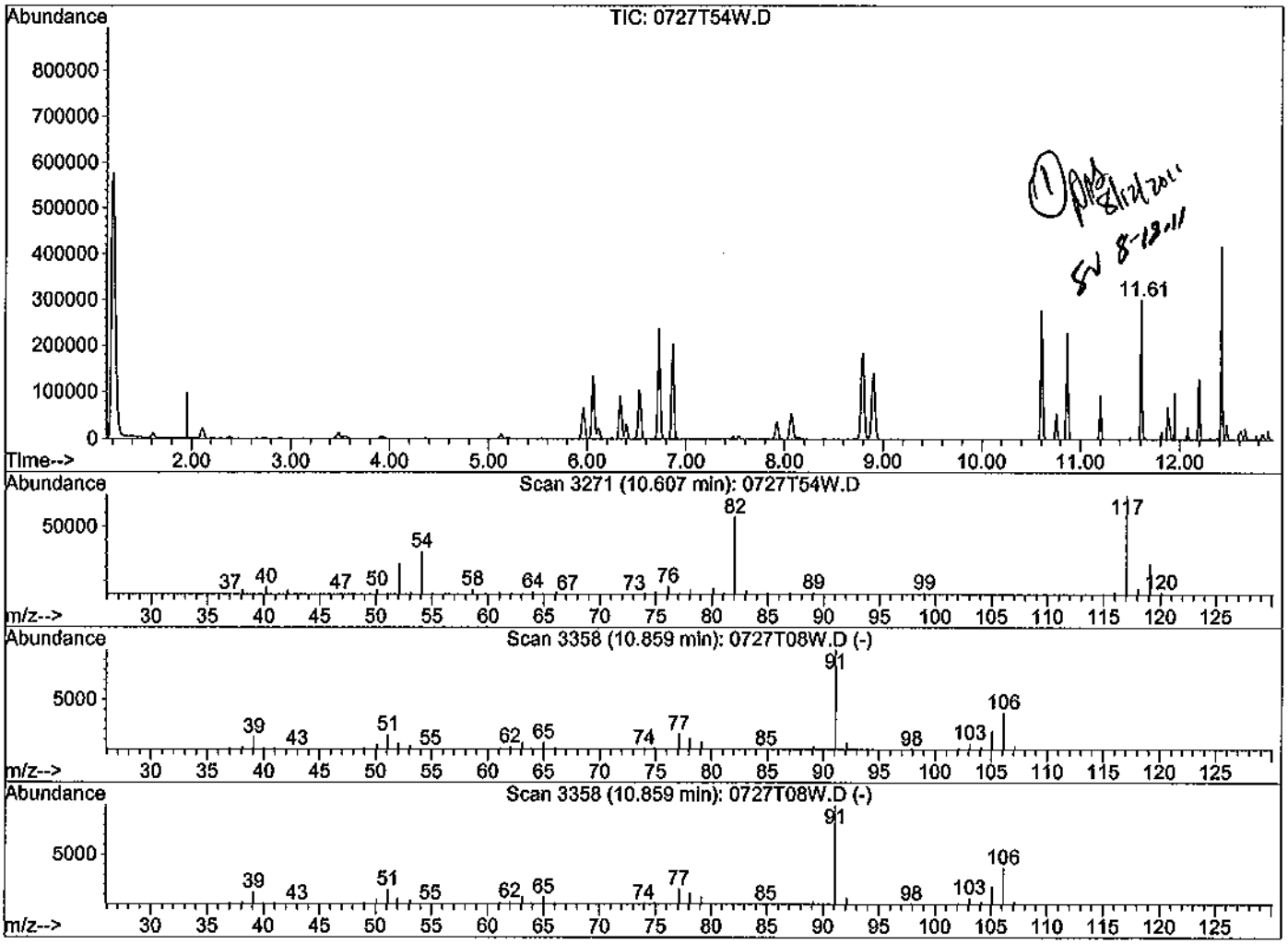
response 3583337

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	1.17#
0.00	0.00	2.64#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T54W.D Vial: 54
Acq On : 28 Jul 11 9:18 Operator: RP
Sample : AY42275W567 MSD-1WT (Gas) Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 12 11:06 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Multiple Level Calibration



TIC: 0727T54W.D

(2) Gasoline (TMHB)

11.61min 272.8557ppb m

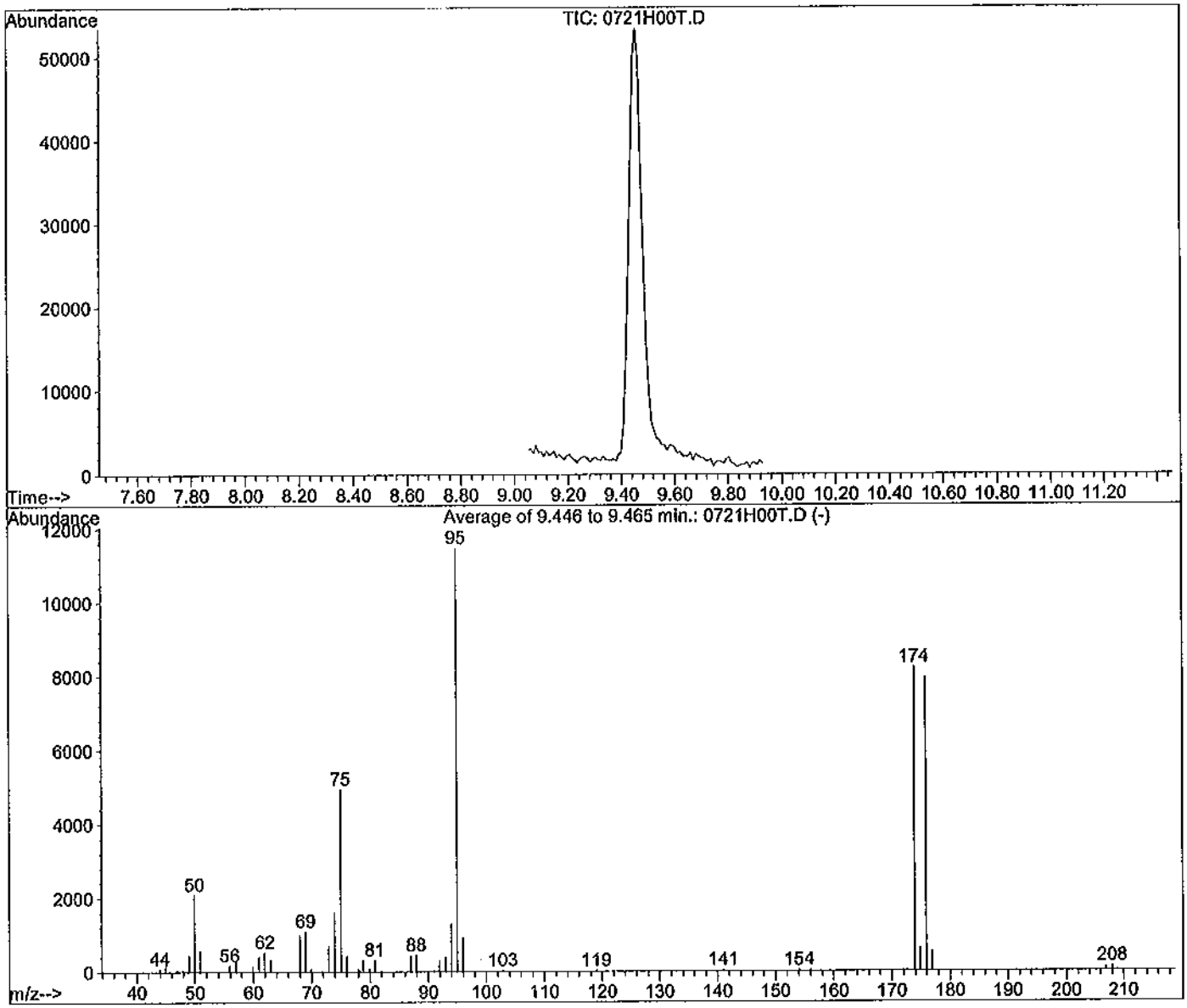
response 4300237

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.97#
0.00	0.00	2.20#
0.00	0.00	0.00

Data File : M:\HEWEY\DATA\H110721\0721H00T.D
Acq On : 21 Jul 11 9:46
Sample : 20ug/ml BFB Std 07-21-11B
Misc : 2ul

Vial: 1
Operator: SV
Inst : Hewey
Multiplr: 1.00

Method : M:\THOR\DATA\T110811\TALLW.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 42, 43, 44; Background Corrected with Scan 33

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	2097	PASS
75	95	30	60	43.1	4950	PASS
95	95	100	100	100.0	11482	PASS
96	95	5	9	8.2	944	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.7	8230	PASS
175	174	5	9	7.5	617	PASS
176	174	95	101	96.5	7945	PASS
177	176	5	9	6.7	529	PASS

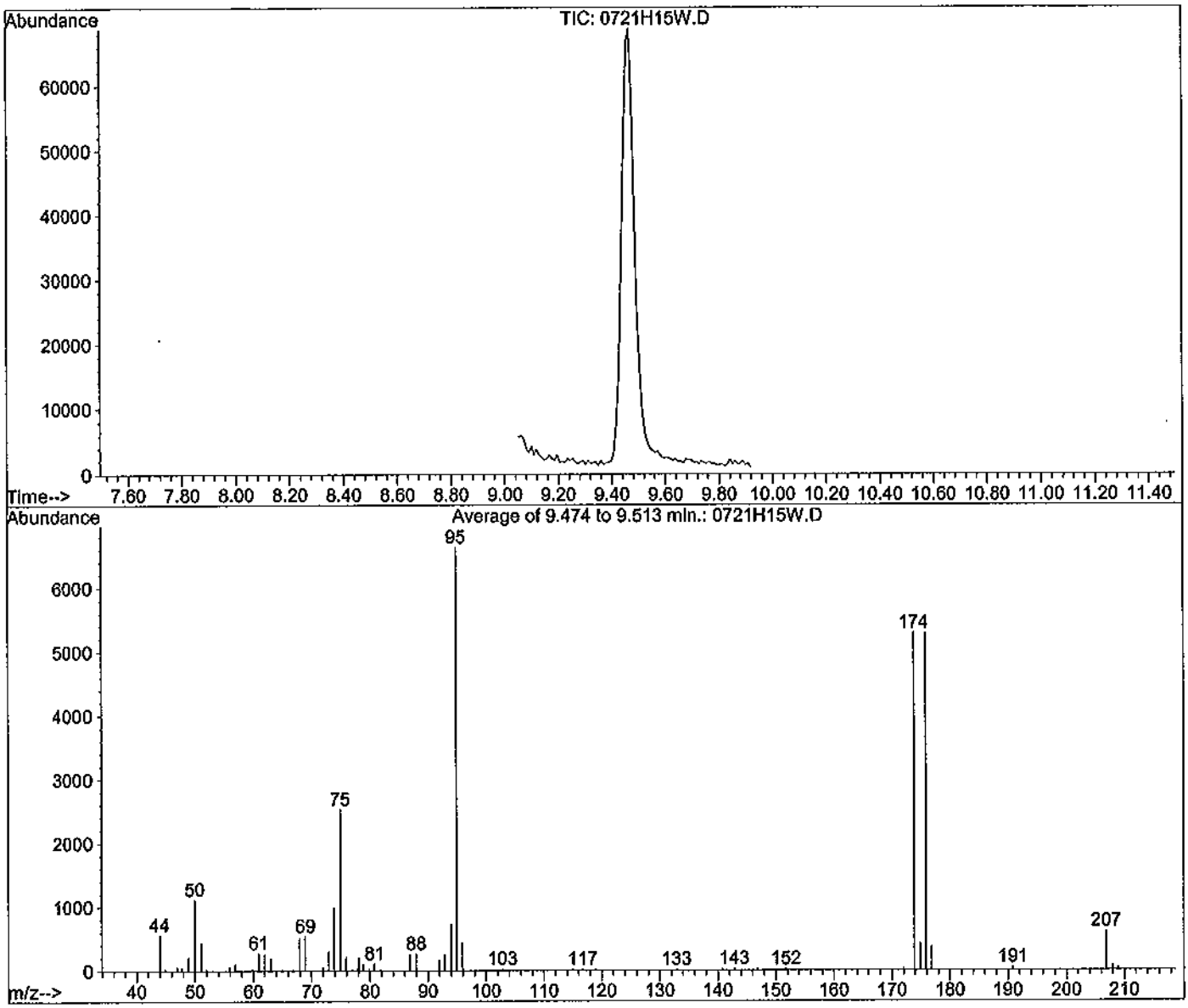
0721H00T.D TALLW.M Fri Aug 12 12:05:44 2011

BFB

Data File : M:\HEWEY\DATA\H110721\0721H15W.D
Acq On : 21 Jul 11 18:38
Sample : 20ug/ml BFB Std 07-21-11B
Misc : 2ul

Vial: 15
Operator: SV
Inst : Hewey
Multiplr: 1.00

Method : M:\HEWEY\DATA\H110721\H86SHW.M (RTE Integrator)
Title : METHOD 8260B



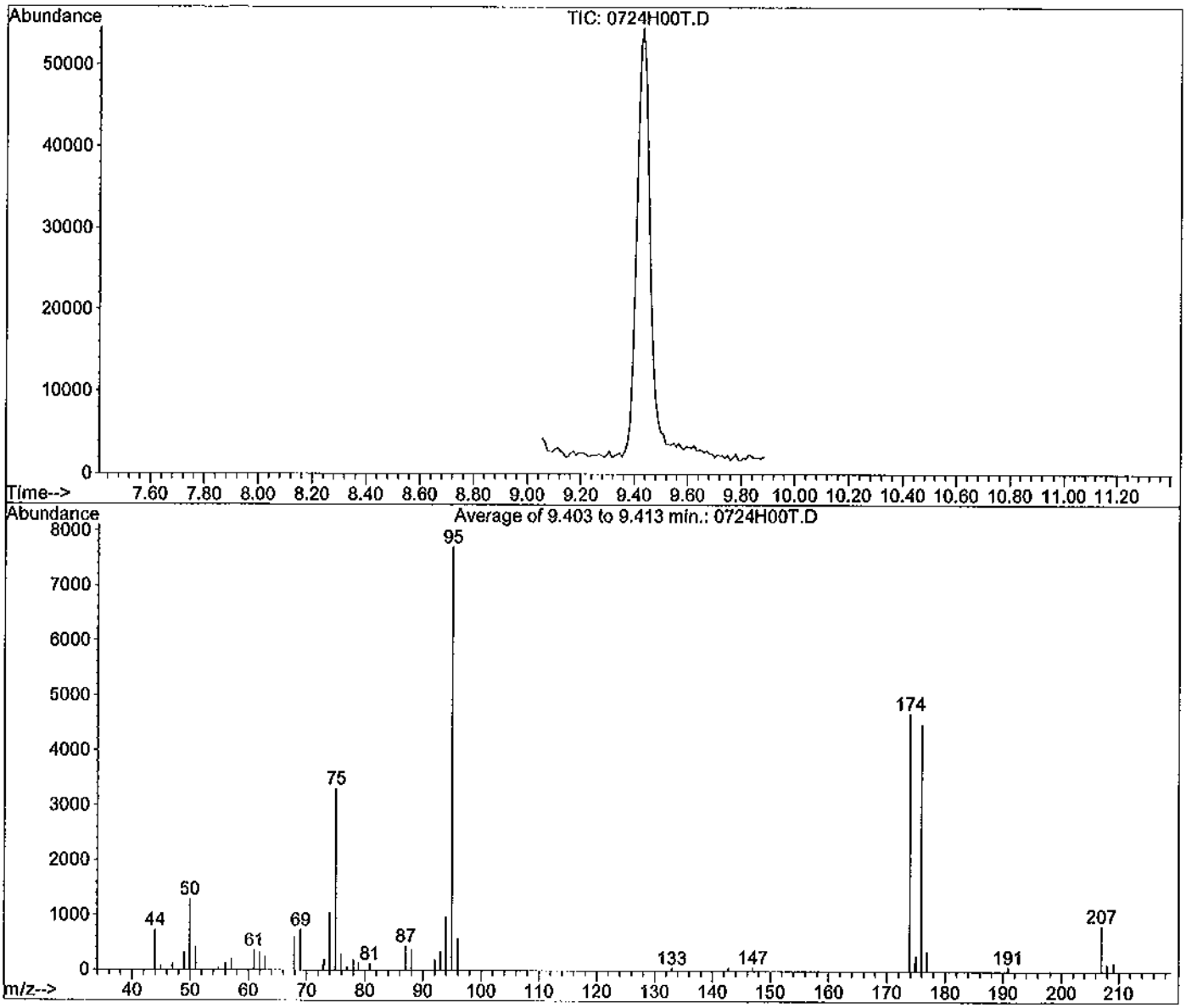
Spectrum Information: Average of 9.474 to 9.513 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	1117	PASS
75	95	30	60	38.2	2533	PASS
95	95	100	100	100.0	6633	PASS
96	95	5	9	6.6	436	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	79.7	5286	PASS
175	174	5	9	7.9	419	PASS
176	174	95	101	99.8	5274	PASS
177	176	5	9	7.1	372	PASS

Data File : M:\HEWEY\DATA\H110721\0724H00T.D
Acq On : 24 Jul 11 11:52
Sample : 20ug/ml BFB Std 07-21-11B
Misc : 2ul

Vial: 1
Operator: SV
Inst : Hewey
Multiplr: 1.00

Method : M:\HEWEY\DATA\H110721\H826AW.M (RTE Integrator)
Title : METHOD 8260B: 10ML PURGE

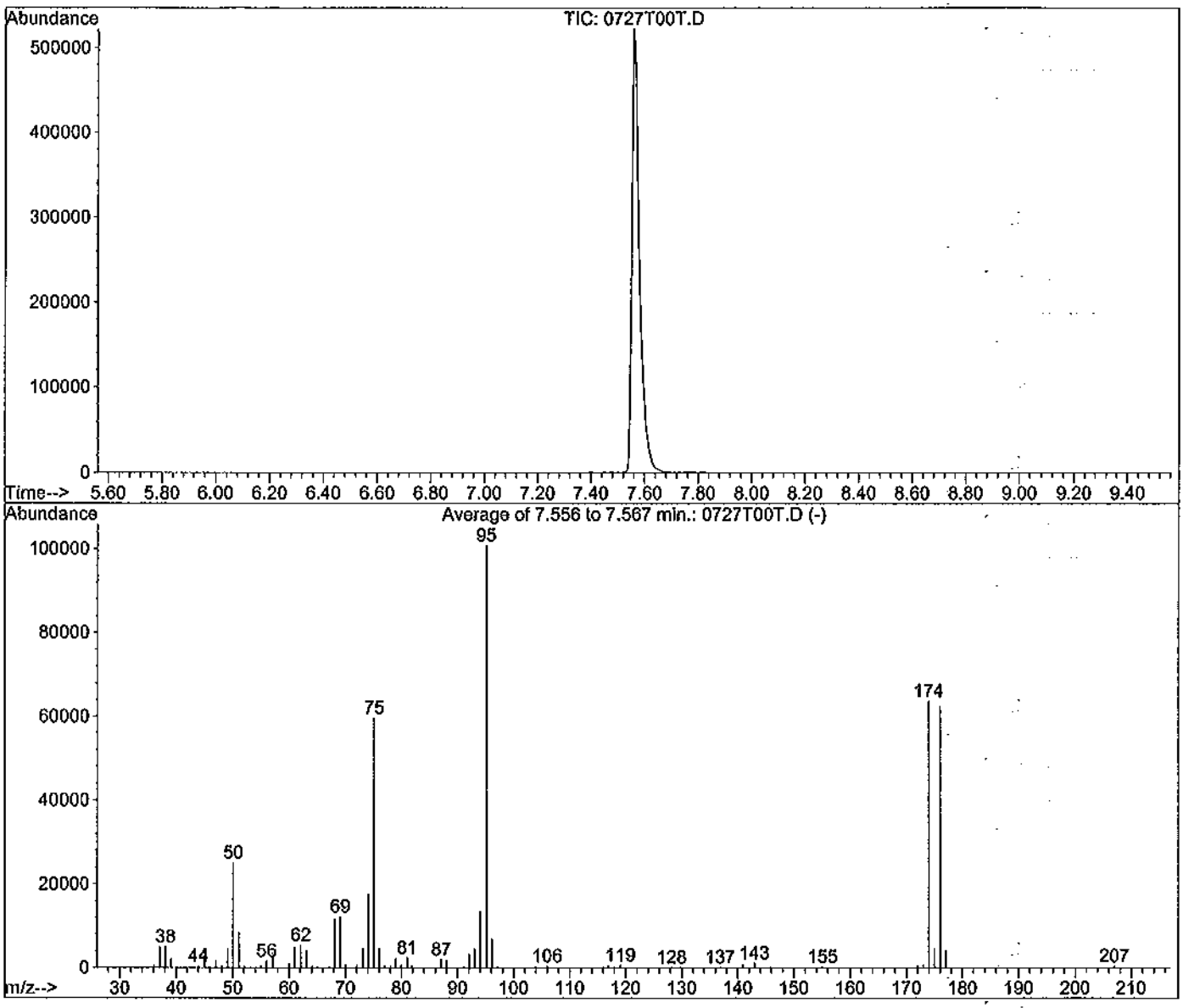


Spectrum Information: Average of 9.403 to 9.413 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	1289	PASS
75	95	30	60	42.9	3308	PASS
95	95	100	100	100.0	7710	PASS
96	95	5	9	7.7	591	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	60.8	4689	PASS
175	174	5	9	5.9	278	PASS
176	174	95	101	95.8	4492	PASS
177	176	5	9	8.1	364	PASS

Data File : M:\THOR\DATA\T110727\0727T00T.D Vial: 1
Acq On : 27 Jul 11 10:05 Operator: RP
Sample : 20ug/ml BFB Std 07-21-11C Inst : Thor
Misc : 2uL Multiplr: 1.00

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B

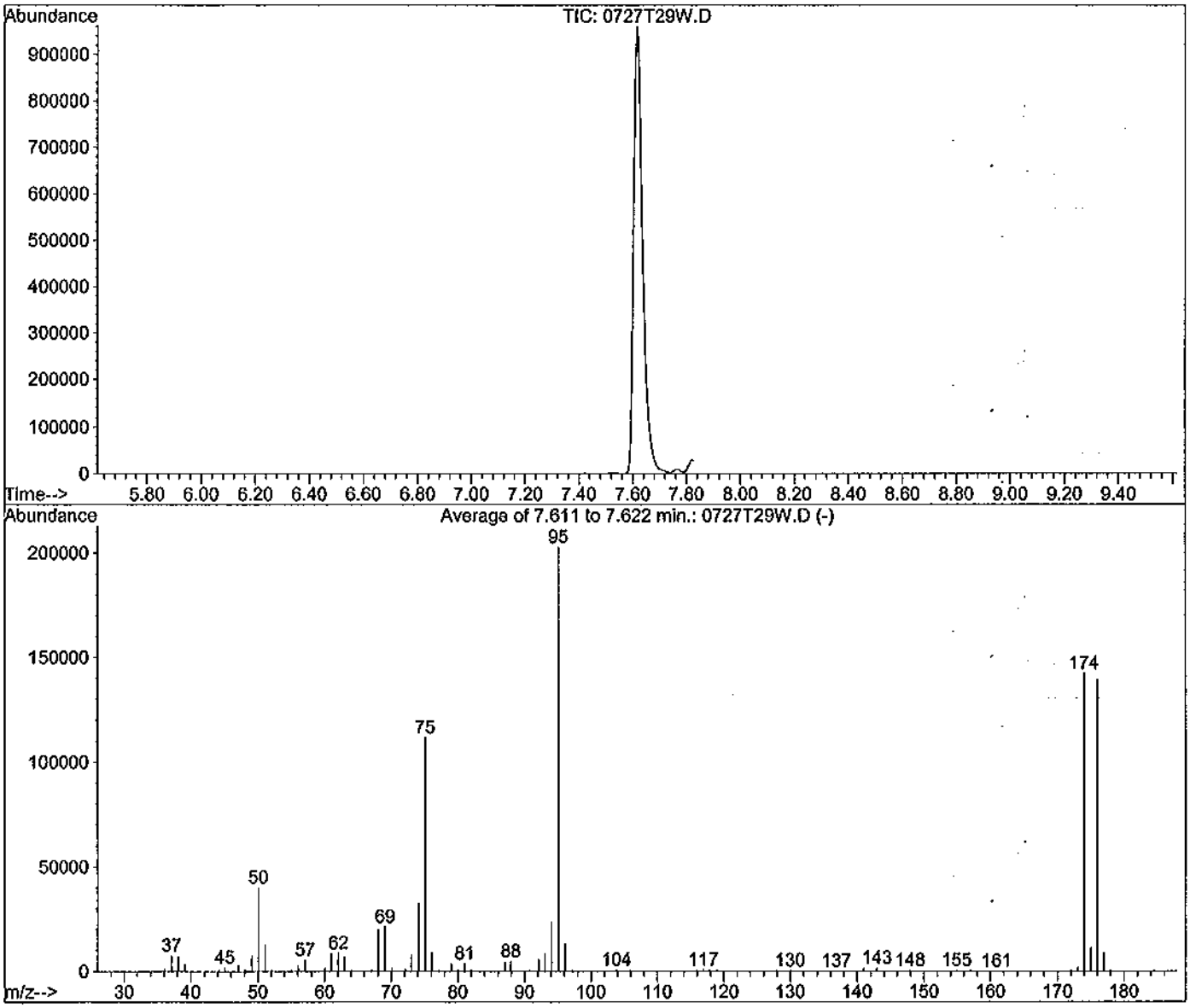


Spectrum Information: Average of 7.556 to 7.567 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.9	25083	PASS
75	95	30	60	59.1	59600	PASS
95	95	100	100	100.0	100792	PASS
96	95	5	9	6.8	6856	PASS
173	174	0.00	2	1.2	735	PASS
174	95	50	100	63.2	63672	PASS
175	174	5	9	7.2	4597	PASS
176	174	95	101	97.9	62347	PASS
177	176	5	9	6.5	4076	PASS

Data File : M:\THOR\DATA\T110727\0727T29W.D Vial: 29
Acq On : 27 Jul 11 22:29 Operator: RP
Sample : 20ug/ml BFB Std 07-21-11C Inst : Thor
Misc : 2uL Multiplr: 1.00

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 7.611 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	40240	PASS
75	95	30	60	55.1	111773	PASS
95	95	100	100	100.0	202816	PASS
96	95	5	9	6.6	13315	PASS
173	174	0.00	2	1.2	1662	PASS
174	95	50	100	70.2	142304	PASS
175	174	5	9	7.8	11070	PASS
176	174	95	101	98.0	139387	PASS
177	176	5	9	6.4	8990	PASS

GC/MS STANDARD PREPARATION BOOK # 57 PAGE

6-24-11 RS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-CHICO

Expiration Date: 06/25/11

Date Code	Conc. µg/L	5µg/mL Vol Std #9 06-23-11J Exp:06-30-11	5µg/mL Surr 06-23-11M Exp:06-30-11	50µg/mL Vol Std #7 06-23-11F Exp:06-30-11	50µg/mL Vol Std #8 06-23-11H Exp:06-30-11	50µg/mL Surr 06-23-11N Exp:06-30-11	5µg/mL Vol Std #10 06-23-11K Exp:06-30-11	50µg/mL Vol Std #1 06-23-11G Exp:06-30-11	50µg/mL Vol Std #2 06-23-11I Exp:06-30-11	5µg/mL Vol Std #11 06-23-11L Exp:06-30-11
06-24-11A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
06-24-11B	0.5	5	10	n/a	n/a	n/a	6	n/a	n/a	6
06-24-11C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
06-24-11D	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
06-24-11E	5	n/a	n/a	5	5	10	n/a	5	6	n/a
06-24-11F	10	n/a	n/a	10	10	25	n/a	10	10	n/a
06-24-11G	20	n/a	n/a	20	20	40	n/a	20	20	n/a
06-24-11H	40	n/a	n/a	40	40	80	n/a	40	40	n/a
06-24-11I	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

250µg/mL TAPD 06-23-11O Exp:06-30-11	Final Vol w/P&T H2O mL
3	50
6	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

6-25-11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-NEO

Expiration Date: 06/26/11

Date Code	Conc. µg/L	5µg/mL Vol Std #9 06-23-11J Exp:06-30-11	5µg/mL Surr 06-23-11M Exp:06-30-11	50µg/mL Vol Std #7 06-23-11F Exp:06-30-11	50µg/mL Vol Std #8 06-23-11H Exp:06-30-11	50µg/mL Surr 06-23-11N Exp:06-30-11	5µg/mL Vol Std #10 06-23-11K Exp:06-30-11	50µg/mL Vol Std #1 06-23-11G Exp:06-30-11	5µg/mL Vol Std #2 06-23-11I Exp:06-30-11	50µg/mL Vol Std #12 06-23-11L Exp:06-30-11
06-25-11A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
06-25-11B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
06-25-11C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
06-25-11D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
06-25-11E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
06-25-11F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
06-25-11G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA 06-23-11O Exp:06-30-11	Final Vol w/P&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

6-27-11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-NEO

Expiration Date: 06/27/11

Date Code	Conc. µg/L	5µg/mL Vol Std #9 06-23-11J Exp:06-30-11	5µg/mL Surr 06-23-11M Exp:06-30-11	50µg/mL Vol Std #7 06-23-11F Exp:06-30-11	50µg/mL Vol Std #8 06-23-11H Exp:06-30-11	50µg/mL Surr 06-23-11N Exp:06-30-11	5µg/mL Vol Std #10 06-23-11K Exp:06-30-11	50µg/mL Vol Std #1 06-23-11G Exp:06-30-11	5µg/mL Vol Std #2 06-23-11I Exp:06-30-11	50µg/mL Vol Std #12 06-23-11L Exp:06-30-11
06-26-11A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
06-26-11B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
06-26-11C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
06-26-11D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
06-26-11E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
06-26-11F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
06-26-11G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA 06-23-11O Exp:06-30-11	Final Vol w/P&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

6-27-11 RS. A-

o2si 4-Bromofluorobenzene Solution, 2,500 mg/L, 1 ml
Cat. No: 020135-03
Lot No: 143634
4-Bromofluorobenzene
Lot #: 143634 - 27080
Rec: 8/27/10 MFR exp. 02/25/12
Exp: 2/25/2012
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only

RS

6-27-11 RS.

06-27-11B							
20ug/ml BFB STD			Conc.		Date	EXP:	
EXP: 07-27-11			ug/ml	Lot#	CODE	Date	ul
02SI	020135-03	4-Bromofluorobenzene	2500	143634-27080	06-27-11A	11/11/11	16
J&T Baker		Purge & Trap MeOH		K07B34-00528	06/25/11	09/28/11	1980
06-27-11C							
20ug/ml BFB STD			Conc.		Date	EXP:	
EXP: 07-27-11			ug/ml	Lot#	CODE	Date	ul
02SI	020135-03	4-Bromofluorobenzene	2500	143634-27080	06-27-11A	11/11/11	16
J&T Baker		Purge & Trap MeOH		K07B34-00528	06/25/11	08/28/11	1980

H-

Method 8260B Surrogate Solution, 2,000 mg/L, 1 ml
120002-01
Lot# 164585 Storage ≤ 10 Degrees C Expiry 10/12/13
Solv: P/T Methanol

Method 8260B Surrogate
Lot #: 164585 - 28340
Rec: 2/17/11 MFR exp. 10/12/13

RS

07-13-11I							
250ug/ml 8260 Surrogate - Hewey			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	Surrogate Standard	2000	164585-28340	07-13-11H	09/16/11	500
B&J Brand		Purge & Trap MeOH		K07B34-00534	07/08/11	12/14/11	3500

RS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-HEWEY

Expiration Date: 07/14/11

Date Code	Conc. µg/L	5µg/mL Vol Std #9 07-12-11Q Exp:07-19-11	5µg/mL Surr 07-12-11U Exp:07-19-11	50µg/mL Vol Std #7 07-12-11M Exp:07-19-11	50µg/mL Vol Std #8 07-12-11O Exp:07-19-11	50µg/mL Surr 07-12-11T Exp:07-19-11	5µg/mL Vol Std #10 07-12-11R Exp:07-19-11	50µg/mL Vol Std #1 07-12-11N Exp:07-19-11	50µg/mL Vol Std #2 07-12-11P Exp:07-19-11	5µg/mL Vol Std #12 07-12-11S Exp:07-19-11
07-13-11V	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-13-11W	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-13-11X	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-13-11Y	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-13-11Z	5	n/a	n/a	5	5	10	n/a	5	5	n/a
07-13-11AA	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-13-11AB	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-13-11AC	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-13-11AD	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

250µg/mL TAPO 07-12-11V Exp:07-19-11	Final Vol w/P&T H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

S-

Method 8260 Internal Standard Solution, 2,000 mg/L, 1 ml
120302-03
Lot# 166255 Storage ≤ 10 Degrees C Expiry 11/18/12
Solv: P/T Methanol

Method 8260 Internal Standard
Lot #: 166255 - 27946
Rec: 12/15/10 MFR exp. 11/18/12

RS

Fluorobenzene Solution, 2,000 mg/L, 1 ml
020132-02
Lot# 161971 Storage ≤ 6 Degrees C Expiry 8/12/13
Solv: P/T Methanol

Fluorobenzene
Lot #: 162971 - 27548
Rec: 10/12/10 MFR exp. 08/12/13

RS

Sweetpea							
07-13-11U							
250ug/ml 8260 Internal Standard - Sweetpea			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120302-03	Internal Standard Mix	2000	166255-27946	07-13-11S	09/10/11	500
	020132-02	Fluorobenzene Standard	2000	162971-27548	07-13-11T	09/10/11	500
J.T. Baker		Purge & Trap MeOH		H45B36-00534	07/08/11	10/14/12	3000

RS

Sweetpea's 8260 H_2O curve on pg. 114 RS

Exp. Date	uL
9/23/11	500
9/23/11	500
1/14/12	3000

Exp. Date	uL
1/23/11	500
1/14/12	3500

7-19-11 A-
RS

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml

120016-03

Lot #	Storage	Expiry
167931	≤-10 Degrees C	1/17/14

Solv: P/T Methanol

Method 8260 Gases

Lot #: 167931 - 28280

Rec: 2/17/11 MFR exp. 01/17/14

7-19-11 B-
RS

Benzyl Chloride Solution, 1000 mg/L, 1 ml

020228-02

Lot #	Storage	Expiry
163373	≤-10 Degrees	8/29/12

Solv: P/T Methanol

Benzyl Chloride

Lot #: 163373 - 27869

Rec: 12/15/10 MFR exp. 08/29/12

2	50ug/mL Vol Std #12
	07-12-11AF
	Exp:07-19-11
	n/a
	n/a
	n/a
	n/a
	5
	10
	20

TBA/AI-11	Final Vol // w/P&T H2O
	mL
	5
	5
	5
	5
	5
	5

7-19-11 C-
RS

Hexachloroethane Solution, 1000 mg/L, 1 ml

02si

Cat. No: 020049-02

Lot No: 157911

Exp: 4/1/2012

Storage: <= -10 Degrees C

Solvent: P/T Methanol

For Research Use Only

Opened:

Hexachloroethane

Lot #: 157911 - 26710

Rec: 6/8/10 MFR exp. 04/01/12

#2	50ug/mL Vol Std #7
	07-12-11AF
	Exp:07-19-11
	n/a
	n/a
	n/a
	n/a
	5
	10
	20

TBA/AI-11	Final Vol // w/P&T H2O
	mL
	5
	5
	5
	5
	5
	5

7-19-11 D-
RS

Ketones Solution, 2,000 mg/L, 1 ml

121020-05

Lot #	Storage	Expiry
163375	≤-10 Degrees	8/29/12

Solv: P/T MeOH/Water 9/1

Ketones

Lot #: 163375 - 28312

Rec: 2/17/11 MFR exp. 08/29/12

#2	50ug/mL Vol Std #7
	07-12-11AF
	Exp:07-19-11
	n/a
	n/a
	n/a
	n/a
	5
	10
	20

TBA/AI-11	Final Vol // w/P&T H2O
	mL
	5
	5
	5
	5
	5
	5

7-19-11 E-
RS

07-19-11B							
50ug/ml Vol Work Std #7							
Exp:07/26/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	167931-28280	07-19-11A	08/04/11	100
02SI	020049-02	HEXACHLOROETHANE	1000	157911-26710	07-19-11B	08/14/11	200
02SI	020228-02	Benzyl Chloride	1000	163373-27869	07-19-11C	08/14/11	200
J&T Brand		Purge & Trap MeOH		K07B14-00534	07/06/12	10/14/11	3500
07-19-11F							
50ug/ml Vol Work Std #1							
Exp:07/26/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	160052-26632	07-12-11B	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/06/12	10/14/11	1950

GC/MS STANDARD PREPARATION BOOK # 57 PAGE

07-19-11G							
50ug/ml Vol Work Std #8							
Exp:07/26/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122019-02	Volatile Mix, 20-29	2000	148440-24741	06-17-11E	09/14/11	100
02SI	120023-03	VOC'S-54 COMP	2000	151805-25624	07-05-11D	10/14/11	100
02SI	020212-02	Vinyl Acetate	2000	173776-28887	07-05-11E	08/29/11	100
02SI	020620-02	n-Hexane	1000	163378-27885	07-12-11D	09/14/11	100
02SI	020546-02	Heptane	1000	149236-28330	07-12-11E	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3300
07-19-11H							
50ug/ml Vol Work Std #2							
Exp:07/26/11							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	KSL'S-Ketone Solution	2000	169173-28312	07-19-11D	08/07/11	1000
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3300
		07-19-11I	Exp:	07/26/11			
		5ug/ml Vol Work Std #9					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		07-19-11E	05/02/11	200	
		50ug/ml Vol Work Std #6		07-19-11G	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1600	
		07-19-11J	Exp:	07/26/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		07-12-11AA	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1600	
		07-19-11K	Exp:	07/26/11			
		5ug/ml Vol Work Std #12					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		07-12-11AC	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1600	
07-19-11L							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:07/26/11			ug/ml	Lot #	Code	Date	ul
02SI	120002-01	8260B Surr Solution	2000	164585-28342	07-12-11H	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3900
07-19-11M			Exp:	07/26/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		07-19-11L	05/02/11	200	
J&T Brand		Purge & Trap MeOH		07/08/12	06/08/12	1600	
07-19-11N							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:07/26/11			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	ul
02SI	120166-01	Volatile Mix 4-3	2000	166725-28703	07-12-11F	09/17/11	500
02SI	020229-09	Acrolein	10000	174414-28933	07-12-11G	07/23/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3400

7.19.11 RS

7.19.11 RS

7.20.11 RS

7.20.11 RS

07-19-11W							
50ug/ml VOC Std#5							
Exp:07/26/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	160736-27912	07-12-11I	08/04/11	50
O2SI	020145-02-02-S	2-CBVE	2000	152530-25456	06-17-11N	11/03/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	1900
07-19-11X							
50ug/ml VOC Std#5							
Exp:07/26/11							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	163271-27772	07-12-11J	11/14/11	50
O2SI	120296-01	Custom 8260 Solution	2000	165038-27770	07-12-11K	11/14/11	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	162127-26334	07-12-11L	08/29/11	50
O2SI	020620-02-SS	n-HEXANE	1000	150529-27171	04-16-11O	09/02/11	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	154535-25914	04-16-11P	12/29/11	100
O2SI	020546-02-SS	Heptane(SS)	1000	142276-23594	04-16-11Q	06/19/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	1550
07-19-11Y							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:07/26/11			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	152531-25467	06-17-11O	11/03/11	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	174436-28925	06-17-11L	07/23/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	1700

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

	Expiration Date:		07/20/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	5ug/mL Vol Std #2	50ug/mL Vol Std #12
Date	Conc.	07-19-11I	07-19-11M	07-19-11E	07-19-11G	07-19-11L	07-19-11J	07-19-11F	07-19-11H	07-19-11K
Code	ug/L	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11
07-19-11Z	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
07-19-11AA	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-19-11AB	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-19-11AC	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-19-11AD	50	n/a	n/a	5	5	5	5	6	n/a	5
07-19-11AE	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-19-11AF	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250ug/mL TBA	Final Vol
07-19-11N	w/P&T H2O
Exp:07-26-11	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Method 8260 Internal Standard Solution, 2,000 mg/L, 1 ml

o2si
Method 8260 Internal Standard

Cat. No: 120302-03
Lot No: 153416

Exp: 11/24/2011
Storage: <= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only

Lot #: 153416 - 27786
Rec: 11/24/10 MFR exp. 11/24/11

Fluorobenzene Solution, 2,000 mg/L, 1 ml

020132-02

Lot #	Storage	Expiry
162971	≤6 Degrees C	8/12/13

Solvent: P/T Methanol

Fluorobenzene
Lot #: 162971 - 27337
Rec: 9/21/10 MFR exp. 08/12/13

Neo

07-20-11C

50ug/ml 8260 Internal Standard			Conc.		Date	Exp.
Supplier	ID #		ug/ml	Lot #	Code	Date
02SI	120302-03	Internal Standard Mix	2000	153416-27786	07-20-11A	08/13/11
02SI	020132-02	Fluorobenzene Standard	2000	162971-27337	07-20-11B	08/13/11
J.T Baker		Purge & Trap MeOH		K07E34-00535	07/20/11	10/10/11

For Neo's "The One" Autosampler

07-20-11D

50ug/ml 8260B Surrogate- Neo			Conc.		Date	Exp.
Supplier	ID #		ug/ml	Lot #	Code	Date
02SI	8260B Surr	Surrogate Standards	2000	164585-28342	07-12-11H	07/13/11
J.T Baker		Purge & Trap MeOH		K07E34-00535	07/20/11	10/10/11

7.20.11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-NEO

	Expiration Date:		07/21/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	5ug/mL Vol Std #2	50ug/mL Vol Std #3
Date	Conc.	07-19-11I	07-19-11M	07-19-11E	07-19-11G	07-19-11L	07-19-11J	07-19-11F	07-19-11H	07-19-11K
Code	ug/L	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11
07-20-11E	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
07-20-11F	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-20-11G	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-20-11H	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-20-11I	50	n/a	n/a	5	5	5	n/a	5	n/a	5
07-20-11J	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-20-11K	200	n/a	n/a	20	20	20	n/a	20	n/a	20

7.20.11 RS.

RS

250ug/mL TBA 07-19-11N Exp:07-26-11	Final Vol 5g wP&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

7.21.11 RS

Hewey

07-21-11A

250ug/ml 8260 Internal Standard - Newey			Conc.		Date	Exp.
Supplier	ID #		ug/ml	Lot #	Code	Date
02SI	120302-03	Internal Standard Mix	2000	153416-27786	07-20-11A	09/16/11
02SI	020132-02	Fluorobenzene Standard	2000	162971-27337	07-20-11B	09/16/11
JT Baker		Purge & Trap MeOH		K07E34-00535	07/20/11	12/14/11

7.21.11 RS.

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-HEWEY

	Expiration Date:		07/22/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	50ug/mL Vol Std #2	5ug/mL Vol Std #3
Date	Conc.	07-19-11I	07-19-11M	07-19-11E	07-19-11G	07-19-11L	07-19-11J	07-19-11F	07-19-11H	07-19-11K
Code	ug/L	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11	Exp:07-26-11
07-21-11B	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-21-11C	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-21-11D	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-21-11E	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-21-11F	5	n/a	n/a	6	5	10	n/a	5	5	n/a
07-21-11G	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-21-11H	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-21-11I	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-21-11J	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

RS

250ug/mL TAPD 07-19-11N Exp:07-26-11	Final Vol 5g wP&T H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

7.22.11 RS

7-25-11 A-

RS

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml

120016-83

Lot #	Storage	Expiry
167931	≤-10 Degrees C	1/17/14

Solv: P/T Methanol

RS

Method 8260 Gases

Lot #: 167931 - 28278

Rec: 2/17/11 MFR exp. 01/17/14

7-25-11 B-

RS

Hexachloroethane Solution, 1000 mg/L, 1 ml

020049-02

Lot #	Storage	Expiry
164816	≤-10 Degrees C	10/14/12

Solv: P/T Methanol

RS

Hexachloroethane

Lot #: 164816 - 28689

Rec: 4/20/11 MFR exp. 10/14/12

7-25-11 C-

RS

Benzyl Chloride Solution, 1000 mg/L, 1 ml

020228-02

Lot #	Storage	Expiry
163373	≤-10 Degrees	8/29/12

Solv: P/T Methanol

RS

Benzyl Chloride

Lot #: 163373 - 27860

Rec: 12/15/10 MFR exp. 08/29/12

7-25-11 D-

RS

Volatile Mix, 20-29, 2,000 mg/L, 1 ml

o2si

Cat. No: 122039-02

Lot No: 158406

Exp: 4/20/2012

Storage: <= -10 Degrees C

Solvent: P/T Methanol

For Research Use Only

Volatile Mix, 20-29

Lot #: 158406 - 27132

Rec: 9/2/10 MFR exp. 04/20/12

7-25-11 E-

RS

Ketones Solution, 2,000 mg/L, 1 ml

121029-05

Lot #	Storage	Expiry
169173	≤-10 Degrees C	2/13/13

Solv: P/T MeOH:Water 9:1

RS

Ketones

Lot #: 169173 - 28303

Rec: 2/17/11 MFR exp. 02/13/13

7-25-11 RS.

Method 8260B Surrogate Solution, 2,000 mg/L, 1 ml

120002-01

Lot #	Storage	Expiry
164585	< 10 Degrees C	10/12/13

Solv.: P/T Methanol

Method 8260B Surrogate
Lot #: 164585 - 26343
Rec: 2/17/11 MFR exp. 10/12/13

RS

7-25-11 RS.

VOC Mix 4-3, 2,000 mg/L, 1 ml

110166-01

Lot #	Storage	Expiry
171714	≤6 Degrees C	4/11/13

Solv: P/T Methanol

VOC Mix 4-3, 2000mg/L
Lot #: 171714 - 28695
Rec: 4/20/11 MFR exp. 04/11/13

RS.

07-25-11H							
50ug/ml Vol Work Std #7							
Exp:08/02/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	167931-28278	07-25-11A	08/04/11	100
02SI	020049-02	HEXACHLOROETHANE	1000	164816-28689	07-25-11B	08/14/11	200
02SI	020228-02	Benzyl Chloride	1000	163373-27860	07-25-11C	08/14/11	200
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3600
07-25-11I							
50ug/ml Vol Work Std #1							
Exp:08/02/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	160092-26612	07-12-11B	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	1950
07-25-11J							
50ug/ml Vol Work Std #8							
Exp:08/02/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	156406-27132	07-25-11D	09/14/11	100
02SI	120023-03	VOC'S-54 COMP	2000	151805-25624	07-05-11D	10/14/11	100
02SI	020232-02	Vinyl Acetate	2000	173776-28867	07-05-11E	08/29/11	100
02SI	020520-02	n-Hexane	1000	163378-27886	07-12-11D	09/14/11	200
02SI	020546-02	Heptane	1000	149236-28330	07-12-11E	09/14/11	200
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3300
07-25-11K							
50ug/ml Vol Work Std #2							
Exp:08/02/11							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-28303	07-25-11E	08/07/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3500
		07-25-11L	Exp:	08/02/11			
		5ug/ml Vol Work Std #9					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		07-25-11H	05/02/11	200	
		50ug/ml Vol Work Std #8		07-25-11J	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1600	
		07-25-11M	Exp:	08/02/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		07-12-11AA	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	

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		07-25-11N	Exp:	08/02/11			
		5ug/ml Vol Work Std #12					
		SOURCE#	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		07-12-11AC	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	
07-25-11O							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:08/02/11			ug/ml	Lot #	Code	Date	uL
029I	120002-01	8260B Surr Solution	2000	164585-28343	07-25-11P	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3900
07-25-11P			Exp:	08/02/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		07-25-11O	05/02/11	200	
J&T Brand		Purge & Trap MeOH		07/08/12	06/08/12	1800	
07-25-11Q							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:08/02/11			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
029I	120166-01	Volatile Mix 4-3	2000	171714-28695	07-25-11G	09/17/11	500
029I	020229-09	Acrolein	10000	174434-28933	07-12-11G	07/23/11	100
T Brand		Purge & Trap MeOH		K07B34-00534	07/08/12	10/14/11	3400

1-25-11 RS

1-25-11 RS

1-25-11 RS

1-25-11 RS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-NEO

	Expiration Date:		07/26/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	50ug/mL Vol Std #2	5ug/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-25-11R	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-25-11S	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-25-11T	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-25-11U	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-25-11V	5	n/a	n/a	5	5	10	n/a	5	5	n/a
07-25-11W	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-25-11X	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-25-11Y	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-25-11Z	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

250ug/mL TAPD 07-25-11Q Exp:08-02-11	Final Vol w/PAT H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-HEWEY

	Expiration Date:		07/26/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	50ug/mL Vol Std #2	5ug/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-25-11AA	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-25-11AB	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-25-11AC	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-25-11AD	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-25-11AE	5	n/a	n/a	5	5	10	n/a	5	5	n/a
07-25-11AF	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-25-11AG	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-25-11AH	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-25-11AI	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

250ug/mL TAPD 07-25-11Q Exp:08-02-11	Final Vol w/PAT H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-MAX

	Expiration Date:		07/26/11							
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	5ug/mL Vol Std #2	50ug/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-25-11AJ	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
07-25-11AK	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-25-11AL	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-25-11AM	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-25-11AN	50	n/a	n/a	5	5	5	n/a	5	n/a	5
07-25-11AO	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-25-11AP	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250ug/mL TBA 07-25-11Q Exp:08-02-11	Final Vol w/PAT H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

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Volatile Standard Curve Prepatation for 10mL Purge (8260 water)-VEO

	Expiration Date:		07/25/11							
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	50ug/mL Vol Std #2	
Date	Conc	07-25-11I	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	
Code	ppb	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	
07-25-11AQ	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	
07-25-11AR	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	
07-25-11AS	1	10	20	n/a	n/a	n/a	10	n/a	n/a	
07-25-11AT	2	20	40	n/a	n/a	n/a	20	n/a	n/a	
07-25-11AU	5	n/a	n/a	5	5	10	n/a	5	5	
07-25-11AV	10	n/a	n/a	10	10	25	n/a	10	15	
07-25-11AW	20	n/a	n/a	20	20	40	n/a	20	20	
07-25-11AX	40	n/a	n/a	40	40	80	n/a	40	40	
07-25-11AY	100	n/a	n/a	100	100	n/a	n/a	100	100	

7-25-11 RS

250ug/mL TABD	Final Vol
07-25-11Q	wP&T H2O
Exp:08-02-11	mL
3	5
5	5
10	5
15	5
20	5
25	5
30	5
35	5
40	5

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

	Expiration Date:		07/25/11							
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	50ug/mL Vol Std #2	
Date	Conc.	07-25-11I	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	
Code	ug/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	
07-25-11AZ	2	2	2	n/a	n/a	n/a	2	n/a	2	
07-25-11BA	5	5	5	n/a	n/a	n/a	5	n/a	5	
07-25-11BB	10	10	10	n/a	n/a	n/a	10	n/a	10	
07-25-11BC	20	20	20	n/a	n/a	n/a	20	n/a	20	
07-25-11BD	50	n/a	n/a	5	5	5	n/a	5	n/a	
07-25-11BE	100	n/a	n/a	10	10	10	n/a	10	n/a	
07-25-11BF	200	n/a	n/a	20	20	20	n/a	20	n/a	

7-25-11 RS.

25ug/mL TBA	Final Vol
07-25-11Q	wP&T H2O
Exp:08-02-11	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

7-26-11 RS.

A-

Method 8260 Internal Standard Solution, 2,000 mg/L, 1 ml
120302-03
Lot# 166255 Storage 4 to 10 Degrees C Expiry 11/18/12
Solv: P/T Methanol

RS.

Method 8260 Internal Standard
Lot #: 166255 - 27941
Rec: 12/15/10 MFR exp. 11/18/12

7-26-11 RS.

B-

Fluorobenzene Solution, 2,000 mg/L, 1 ml
020132-02
Lot# 161971 Storage ≤ 6 Degrees C Expiry 6/12/13
Solv: P/T Methanol

RS.

Fluorobenzene
Lot #: 162971 - 27550
Rec: 10/12/10 MFR exp. 08/12/13

7-26-11 RS.

C-

EPA Method 502/524 Fortification Solution, 3-1, 1000 mg/L, 1 ml
122450-02
Lot # 166726 Storage 4 to 10 Degrees C Expiry 12/2/12
Solv: P/T-Methanol

RS.

EPA Method 502/524 Fortification
Lot #: 166726 - 27964
Rec: 12/15/10 MFR exp. 12/02/12

7-26-11 RS.

Thor							
07-26-11D							
50ug/ml 8260 Internal Standard			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120302-03	Internal Standard Mix	2000	166255-27941	07-26-11A	12/13/11	375
02SI	020132-02	Fluorobenzene Standard	2000	162971-27550	07-26-11B	12/13/11	375
J.T Baker		Purge & Trap MeOH		K07E34-00537	07/26/11	06/10/12	14250

CHICO							
07-26-11E							
50ug/ml 524 Internal Standard w/ Surrogate			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27964	07-26-11C	09/10/11	200
J&T Baker		Purge & Trap MeOH		K07E34-00537	02/09/11	10/22/12	3800

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

	Expiration Date:		07/27/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	5µg/mL Vol Std #2	50µg/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-26-11F	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
07-26-11G	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-26-11H	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-26-11I	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-26-11J	50	n/a	n/a	5	5	5	n/a	5	n/a	5
07-26-11K	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-26-11L	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA 07-25-11Q Exp:08-02-11	Final Vol w/P&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Volatile Standard Curve Preparation for 10mL Purge (524 water)-CHICO

	Expiration Date:		07/27/11				
		5µg/mL Vol Std #9	50µg/mL Vol Std #7	50µg/mL Vol Std #8	250µg/mL TAPD	Final Vol
Date	Conc.	07-25-11L	07-25-11H	07-25-11J	07-25-11Q	w/P&T H2O
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	mL
07-26-11M	0.2	2	n/a	n/a	2	50
07-26-11N	0.5	5	n/a	n/a	5	50
07-26-11O	2	20	n/a	n/a	15	50
07-26-11P	1	10	n/a	n/a	10	50
07-26-11Q	5	n/a	5	5	20	50
07-26-11R	10	n/a	10	10	25	50
07-26-11S	20	n/a	20	20	30	50
07-26-11T	40	n/a	40	40	35	50

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-NEO

	Expiration Date:		07/27/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	5µg/mL Vol Std #2	50µg/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-26-11U	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-26-11V	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-26-11W	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-26-11X	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-26-11Y	5	n/a	n/a	5	5	10	n/a	5	5	n/a
07-26-11Z	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-26-11AA	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-26-11AB	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-26-11AC	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

250µg/mL TAPD 07-25-11Q Exp:08-02-11	Final Vol w/P&T H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-MAX

	Expiration Date:		07/27/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	5µg/mL Vol Std #2	50µg/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-26-11AD	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
07-26-11AE	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-26-11AF	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-26-11AG	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-26-11AH	50	n/a	n/a	5	5	5	n/a	5	n/a	5
07-26-11AJ	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-26-11AJ	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA 07-25-11Q Exp:08-02-11	Final Vol w/P&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

GC/MS STANDARD PREPARATION BOOK # 57 PAGE # ____

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

Lot: LB61226 47516-U
EXP: SEP/2011 1 x 1ml
STORAGE: ROOM TEMP.

Gasoline
20000ug/ml in methanol

DANGER-TOXIC-MAY BE FATAL IF SWALLOWED
DANGER-EXTREMELY FLAMMABLE
POSSIBLE CANCER HAZARD IN HUMANS
REPORTED CANCER HAZARD IN LABORATORY ANIMALS

May cause headache, nausea, dizziness, blindness., corneal injury, leukemia. Reported mutagen.
CONTAINS MATERIAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND REPRODUCTIVE TOXICITY.

7-27-11 A- RS. P8

Gasoline 47516-U
Lot: LB61226 EXP: SEP/2011 STORAGE: ROOM TEMP. 1 x 1ml

For laboratory use only. Not for drug, household, or other use.

7-27-11 B- RS.

Catalog # 30205
Unleaded Gasoline Composite Standard
60,000 ug/ml each in Purge and Trap Methanol
Lot # A041961
Exp 1/13 Store: Freezer
Restek Corporation
110 Benner Circle - Bellefonte, PA 16823

FOR LABORATORY USE ONLY

Unleaded gasoline composite
Lot #: A041961 - 18071
Rec: 7/6/06 APPL exp. _____

Unleaded Gasoline Composite Standard
60,000 ug/ml each in Purge and Trap Methanol
Lot# A041961 Exp: 1/13 Store: Freezer
Restek Corporation - 110 Benner Circle - Bellefonte, PA 16823

RS.

07/27/11C							
2000ug/ml Gasoline						APPL	
			Conc.		Date	Exp.	
Supplier	Id #		ug/ml	Lot #	Code	Date	uL
Supelco	LB61226	Gasoline	20,000	LB61226-26324	10-29-10A	09/02/11	200
J&T Brand		Purge & Trap MeOH		K07834-00517	07/26/11	03/02/12	1800

7-27-11 RS.

07/27/11D							
2000ug/ml Unleaded Gasoline						APPL	
			Conc.		Date	Exp.	
Supplier	Id #		ug/ml	Lot #	Code	Date	uL
Supelco	30205	Unleaded Gasoline	60,000	A041961-18071	07-27-11B	11/30/12	60
J&T Brand		Purge & Trap MeOH		K07834-00517	07/26/11	03/02/12	1920

7-27-11 RS.

Method 8260B Surrogate Solution, 2,000 mg/L, 1 ml
120092-01
Lot # 164585 Storage ≤-10 Degrees C Expiry 10/12/13
Solv: PT Methanol

7-27-11 E- RS.

Method 8260B Surrogate
Lot #: 164585 - 28726
Rec: 4/20/11 MFR exp. 10/12/13

GC/MS STANDARD PREPARATION BOOK # 58 PAGE # 001

RS

07-27-11F							
50ug/ml 8260B Surrogate-Thor			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	8260B Surr	Surrogate Standards	2000	164585-28726	07-27-11E	12/13/11	375
J.T Baker		Purge & Trap MeOH		K07E34-00537	07/26/11	06/10/12	14625

7-27-11
RS.

Gasoline Curve Preparation for 100mL Purge (water)-THOR			
Expiration Date:			07/28/11
		1µg/mL Gasoline	Final Vol
Date	Conc.	07-27-11C	w/P&T H2O
Code	µg/L	Exp:12-27-11	mL
07-27-11G	20	1	100
07-27-11H	50	2.5	100
07-27-11I	100	5	100
07-27-11J	300	15	100
07-27-11K	600	30	100
07-27-11L	800	40	100
07-27-11M	1000	50	100

7-27-11
RS.

RS.

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-THOR

Expiration Date:			07/28/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-27-11N	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
07-27-11O	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
07-27-11P	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
07-27-11Q	2	20	40	n/a	n/a	n/a	20	n/a	n/a	20
07-27-11R	5	n/a	n/a	5	5	10	n/a	5	5	n/a
07-27-11S	10	n/a	n/a	10	10	25	n/a	10	10	n/a
07-27-11T	20	n/a	n/a	20	20	40	n/a	20	20	n/a
07-27-11U	40	n/a	n/a	40	40	80	n/a	40	40	n/a
07-27-11V	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a

7-27-11
RS.

RS

250ug/mL TAPD	Final Vol
07-25-11Q	w/P&T H2O
Exp:08-02-11	mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-MAX

Expiration Date:			07/28/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	5µg/mL Vol Std #2	50µg/mL Vol Std #12
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N
Code	µg/L	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11	Exp:08-02-11
07-27-11W	2	2	4	n/a	n/a	n/a	2	n/a	2	n/a
07-27-11X	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
07-27-11Y	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
07-27-11Z	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
07-27-11AA	50	n/a	n/a	5	5	5	n/a	5	n/a	5
07-27-11AB	100	n/a	n/a	10	10	10	n/a	10	n/a	10
07-27-11AC	200	n/a	n/a	20	20	20	n/a	20	n/a	20

7-27-11
RS.

RS

250ug/mL TBA	Final Vol
07-25-11Q	w/P&T H2O
Exp:08-02-11	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

7-27-11
RS

AD-

Method 8260 Internal
Standard Solution, 2,000
mg/L, 1 ml
120302-03
Lot # Storage Expiry
166255 5-10 Degrees C 11/18/12
Solv: P/T Methanol
Made in the USA

RS.

Method 8260 Internal Standard
Lot #: 166255 - 27944
Rec: 12/15/10 MFR exp. 11/18/12

7-27-11
RS.

AE-

Fluorobenzene Solution, 2,000
mg/L, 1 ml
020132-02
Lot # Storage Expiry
162971 ≤6 Degrees C 8/12/13
Solv: P/T Methanol
Made in the USA

RS.

Fluorobenzene
Lot #: 162971 - 27339
Rec: 9/21/10 MFR exp. 08/12/13

Injection Log

Directory: M:\HEWEY\DATA\H110721

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0721H00T.D	1	20ug/ml BFB Std 07-21-11B	2ul	07/21/2011 09:46
2	5	0721H05W.D	1	Vol Std 07-21-11@0.5ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 12:32
3	6	0721H06W.D	1	Vol Std 07-21-11@1.0ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 13:09
4	7	0721H07W.D	1	Vol Std 07-21-11@2.0ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 13:45
5	8	0721H08W.D	1	Vol Std 07-21-11@5.0ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 14:22
6	9	0721H09W.D	1	Vol Std 07-21-11@10ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 14:58
7	10	0721H10W.D	1	Vol Std 07-21-11@20ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 15:35
8	11	0721H11W.D	1	Vol Std 07-21-11@40ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 16:11
9	12	0721H12W.D	1	Vol Std 07-21-11@100ug/L	Water 10ml w/IS: 07-21-1	07/21/2011 16:48
10	15	0721H15W.D	1	20ug/ml BFB Std 07-21-11B	2ul	07/21/2011 18:38
11	16	0721H16W.D	1	Vol Std 07-21-11@10ug/L	Water 10ml w/IS&S: 07-2	07/21/2011 19:14
12	1	0724H00T.D	1	20ug/ml BFB Std 07-21-11B	2ul	07/24/2011 11:52
13	2	0724H02W.D	1	110724A LSC-1WH	Water 10ml w/IS&S: 07-2	07/24/2011 12:47
14	5	0724H05W.D	1	110724A BLK-1WH	Water 10ml w/IS&S: 07-2	07/24/2011 15:51
15	6	0724H06W.D	1	AY42272W02	Water 10ml w/IS&S: 07-2	07/24/2011 16:27
16	7	0724H07W.D	1	AY42271W02	Water 10ml w/IS&S: 07-2	07/24/2011 17:04
17	8	0724H08W.D	1	AY42273W02	Water 10ml w/IS&S: 07-2	07/24/2011 17:41
18	9	0724H09W.D	1	AY42274W02	Water 10ml w/IS&S: 07-2	07/24/2011 18:17
19	10	0724H10W.D	1	AY42277W01	Water 10ml w/IS&S: 07-2	07/24/2011 18:54
20	11	0724H11W.D	1	AY42276W01	Water 10ml w/IS&S: 07-2	07/24/2011 19:30

Injection Log

Directory: M:\THOR\DATA\T110727

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0727T00T.D	1	20ug/ml BFB Std 07-21-11C	2uL	07/27/2011 10:05
2	5	0727T05W.D	1	Vol Std 07-27-11@20ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 12:06
3	6	0727T06W.D	1	Vol Std 07-27-11@50ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 12:32
4	7	0727T07W.D	1	Vol Std 07-27-11@100ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 12:58
5	8	0727T08W.D	1	Vol Std 07-27-11@300ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 13:24
6	9	0727T09W.D	1	Vol Std 07-27-11@600ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 13:50
7	10	0727T10W.D	1	Vol Std 07-27-11@800ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 14:16
8	11	0727T11W.D	1	Vol Std 07-27-11@1000ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 14:42
9	16	0727T16W.D	1	Vol Std 07-27-11@0.5ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 16:51
10	17	0727T17W.D	1	Vol Std 07-27-11@1.0ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 17:17
11	18	0727T18W.D	1	Vol Std 07-27-11@2.0ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 17:43
12	19	0727T19W.D	1	Vol Std 07-27-11@5.0ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 18:09
13	20	0727T20W.D	1	Vol Std 07-27-11@10ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 18:35
14	21	0727T21W.D	1	Vol Std 07-27-11@20ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 19:01
15	22	0727T22W.D	1	Vol Std 07-27-11@40ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 19:27
16	23	0727T23W.D	1	Vol Std 07-27-11@100ug/L	10ml w/5ul of IS: 07-26-1	07/27/2011 19:53
17	29	0727T29W.D	1	20ug/ml BFB Std 07-21-11C	2uL	07/27/2011 22:29
18	30	0727T30W.D	1	110727A LCS-1WT (SS)	10ml w/5ul of IS&S: 07-2	07/27/2011 22:55
19	33	0727T33W.D	1	Gas 300ug/L (SS)	10ml w/5ul of IS&S: 07-2	07/28/2011 00:13
20	34	0727T34W.D	1	Gas 300ug/L LCS-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 00:39
21	39	0727T39W.D	1	110727A BLK-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 02:48
22	40	0727T40W.D	1	AY42272W03	10ml w/5ul of IS&S: 07-2	07/28/2011 03:14
23	42	0727T42W.D	1	AY42271W03	10ml w/5ul of IS&S: 07-2	07/28/2011 04:06
24	43	0727T43W.D	1	AY42273W03	10ml w/5ul of IS&S: 07-2	07/28/2011 04:32
25	44	0727T44W.D	1	AY42274W03	10ml w/5ul of IS&S: 07-2	07/28/2011 04:58
26	45	0727T45W.D	1	AY42275W01	10ml w/5ul of IS&S: 07-2	07/28/2011 05:24
27	46	0727T46W.D	1	AY42276W02	10ml w/5ul of IS&S: 07-2	07/28/2011 05:50
28	47	0727T47W.D	1	AY42277W02	10ml w/5ul of IS&S: 07-2	07/28/2011 06:16
29	51	0727T51W.D	1	AY42275W345 MS-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 08:00
30	52	0727T52W.D	1	AY42275W345 MSD-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 08:26
31	53	0727T53W.D	1	AY42275W567 MS-1WT (Gas)	10ml w/5ul of IS&S: 07-2	07/28/2011 08:52
32	54	0727T54W.D	1	AY42275W567 MSD-1WT (Gas)	10ml w/5ul of IS&S: 07-2	07/28/2011 09:18

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
6020	LEAD (PB) (DISSOL	0.22 U	0.5	0.22	0.11	ug/L	08/02/11	08/09/11	#602D-110802A-AY42275

Metals SC-Blank-REG MDLs
Printed: 8/15/2011 12:29:29 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
6020	LEAD (PB) (DISSOLVED)	250	250	100	80-120	8/2/2011	8/9/2011	#602D-110802A-AY42275

524

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **110802W-42275 MS - 158181**

Sample ID: AY42275

Client ID: ES039

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
6020	LEAD (PB) (DISSOLVE	250	0.24	230	230	91.9	91.9	0.0	20	80-120	8/2/2011	8/13/2011	8/2/2011	8/13/2011	158181	AY42275

525

Comments: _____

METALS
Sample Data

APPL, INC.

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES035
Sample Collection Date: 7/19/2011

ARF: 65187
APPL ID: AY42271

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.33 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/9/2011

J = Estimated value.

Printed: 8/15/2011 12:29:26 PM
APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\08SSMPL.D\08SSMPL.D#
Date Acquired: Aug 9 2011 06:45 pm
Operator: SDM
Sample Name: AY42271W08
Misc Info: 110802A-3015
Vial Number: 3503
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	-0.43 ug/l	-0.48	0.36	1000	
11 B	96.71 ug/l	107.44	0.12	1000	
23 Na	75830.00 ug/l	84247.13	0.85	25000	>Cal
24 Mg	24650.00 ug/l	27386.15	0.60	50000	
27 Al	2.28 ug/l	2.53	46.44	20000	
39 K	3270.00 ug/l	3632.97	0.87	20000	
44 Ca	21310.00 ug/l	23675.41	1.69	50000	
47 Ti	0.50 ug/l	0.56	55.26	1000	
51 V	17.32 ug/l	19.24	0.52	1000	
52 Cr	0.72 ug/l	0.80	1.79	1000	
55 Mn	87.42 ug/l	97.12	1.65	1000	
56 Fe	55.96 ug/l	62.17	1.52	20000	
59 Co	0.38 ug/l	0.42	5.35	1000	
60 Ni	2.81 ug/l	3.13	3.53	1000	
63 Cu	0.74 ug/l	0.82	6.34	1000	
65 Cu	0.65 ug/l	0.73	6.90	1000	
66 Zn	6.74 ug/l	7.48	2.25	1000	
75 As	0.73 ug/l	0.81	7.58	1000	
78 Se	0.32 ug/l	0.36	22.11	1000	
78 Se	0.45 ug/l	0.50	126.98	1000	
88 Sr	147.10 ug/l	163.43	1.71	1000	
88 Sr	149.00 ug/l	165.54	1.11	1000	
95 Mo	12.24 ug/l	13.60	0.96	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	0.00 ug/l	0.00	266.02	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	0.00 ug/l	0.00	696.12	1000	
118 Sn	0.92 ug/l	1.03	2.04	1000	
121 Sb	0.37 ug/l	0.42	4.62	1000	
137 Ba	12.17 ug/l	13.52	2.18	1000	
205 Tl	0.10 ug/l	0.11	6.82	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	0.30 ug/l	0.33	5.08	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2072355.60	0.83	3708234.80	55.9	70 - 120	IS Fai
45 Sc	703242.38	0.34	691573.50	101.7	70 - 120	
45 Sc	21305.89	1.13	26327.32	80.9	70 - 120	
45 Sc	1285545.80	1.27	1216587.10	105.7	70 - 120	
72 Ge	90481.37	0.39	115561.68	78.3	70 - 120	
72 Ge	7216.32	2.70	9112.21	79.2	70 - 120	
72 Ge	137525.80	0.41	173511.03	79.3	70 - 120	
115 In	742839.63	0.48	881005.81	84.3	70 - 120	
159 Tb	870034.13	0.54	1017279.40	85.5	70 - 120	
165 Ho	853796.13	0.51	990563.56	86.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES037
Sample Collection Date: 7/19/2011

ARF: 65187
APPL ID: AY42273

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	1.2	0.5	0.22	0.11	ug/L	1	8/2/2011	8/9/2011

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APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\086SMPL.D\086SMPL.D#
Date Acquired: Aug 9 2011 06:51 pm
Operator: SDM
Sample Name: AY42273W08
Misc Info: 110802A-3015
Vial Number: 3504
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	-0.43 ug/l	-0.47	0.68	1000	
11 B	72.41 ug/l	80.45	1.30	1000	
23 Na	73750.00 ug/l	81936.25	1.15	25000	>Cal
24 Mg	24200.00 ug/l	26886.20	1.61	50000	
27 Al	4.57 ug/l	5.07	11.59	20000	
39 K	2872.00 ug/l	3190.79	0.73	20000	
44 Ca	14120.00 ug/l	15687.32	1.55	50000	
47 Ti	1.75 ug/l	1.95	19.20	1000	
51 V	1.80 ug/l	2.00	1.96	1000	
52 Cr	0.39 ug/l	0.44	6.12	1000	
55 Mn	1422.00 ug/l	1579.84	1.04	1000	>Cal
56 Fe	1391.00 ug/l	1545.40	0.84	20000	
59 Co	0.51 ug/l	0.57	1.51	1000	
60 Ni	0.77 ug/l	0.85	11.97	1000	
63 Cu	0.18 ug/l	0.21	8.89	1000	
65 Cu	0.19 ug/l	0.21	20.36	1000	
66 Zn	9.81 ug/l	10.90	5.33	1000	
75 As	0.39 ug/l	0.44	12.66	1000	
78 Se	0.07 ug/l	0.08	25.36	1000	
78 Se	0.11 ug/l	0.12	260.77	1000	
88 Sr	128.70 ug/l	142.99	1.69	1000	
88 Sr	129.60 ug/l	143.99	0.61	1000	
95 Mo	0.23 ug/l	0.26	30.40	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	0.07 ug/l	0.08	3.76	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	0.00 ug/l	0.00	517.21	1000	
118 Sn	0.54 ug/l	0.59	9.39	1000	
121 Sb	0.10 ug/l	0.11	15.54	1000	
137 Ba	28.49 ug/l	31.65	1.14	1000	
205 Tl	0.07 ug/l	0.08	2.64	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	1.05 ug/l	1.16	3.77	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2095999.40	1.13	3708234.80	56.5	70 - 120	IS Fai
45 Sc	704722.31	4.15	691573.50	101.9	70 - 120	
45 Sc	21563.30	0.42	26327.32	81.9	70 - 120	
45 Sc	1297853.00	0.59	1216587.10	106.7	70 - 120	
72 Ge	90062.05	4.40	115561.68	77.9	70 - 120	
72 Ge	7147.02	0.58	9112.21	78.4	70 - 120	
72 Ge	136872.97	0.91	173511.03	78.9	70 - 120	
115 In	735352.13	0.30	881005.81	83.5	70 - 120	
159 Tb	859790.06	0.12	1017279.40	84.5	70 - 120	
165 Ho	844204.94	0.63	990563.56	85.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES038
Sample Collection Date: 7/19/2011

ARF: 65187
APPL ID: AY42274

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.49 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/9/2011

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\087SMPL.D\087SMPL.D#
Date Acquired: Aug 9 2011 06:57 pm
Operator: SDM
Sample Name: AY42274W08
Misc Info: 110802A-3015
Vial Number: 3505
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	-0.42 ug/l	-0.47	0.62	1000	
11 B	72.53 ug/l	80.58	0.87	1000	
23 Na	74810.00 ug/l	83113.91	0.93	25000	>Cal
24 Mg	24450.00 ug/l	27163.95	0.54	50000	
27 Al	2.70 ug/l	3.00	23.02	20000	
39 K	2858.00 ug/l	3175.24	1.03	20000	
44 Ca	13820.00 ug/l	15354.02	1.70	50000	
47 Ti	1.71 ug/l	1.90	18.34	1000	
51 V	1.72 ug/l	1.91	4.21	1000	
52 Cr	0.32 ug/l	0.36	6.44	1000	
55 Mn	1418.00 ug/l	1575.40	0.57	1000	>Cal
56 Fe	1392.00 ug/l	1546.51	0.69	20000	
59 Co	0.23 ug/l	0.26	13.05	1000	
60 Ni	0.61 ug/l	0.68	5.94	1000	
63 Cu	0.15 ug/l	0.16	5.26	1000	
65 Cu	0.19 ug/l	0.21	10.97	1000	
66 Zn	3.29 ug/l	3.66	2.90	1000	
75 As	0.37 ug/l	0.41	15.57	1000	
78 Se	0.04 ug/l	0.04	35.94	1000	
78 Se	0.14 ug/l	0.16	233.15	1000	
88 Sr	127.40 ug/l	141.54	0.64	1000	
88 Sr	129.30 ug/l	143.65	0.93	1000	
95 Mo	0.19 ug/l	0.21	31.66	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	0.01 ug/l	0.01	45.90	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	-0.01 ug/l	-0.01	165.45	1000	
118 Sn	0.36 ug/l	0.39	2.15	1000	
121 Sb	-0.02 ug/l	-0.03	80.23	1000	
137 Ba	28.66 ug/l	31.84	0.94	1000	
205 Tl	0.05 ug/l	0.06	9.80	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	0.44 ug/l	0.49	3.91	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2128413.50	1.41	3708234.80	57.4	70 - 120	IS Fai
45 Sc	745293.38	1.61	691573.50	107.8	70 - 120	
45 Sc	21514.38	0.55	26327.32	81.7	70 - 120	
45 Sc	1310899.00	1.95	1216587.10	107.8	70 - 120	
72 Ge	94585.86	2.26	115561.68	81.8	70 - 120	
72 Ge	7128.12	0.65	9112.21	78.2	70 - 120	
72 Ge	137379.36	0.61	173511.03	79.2	70 - 120	
115 In	734906.13	0.60	881005.81	83.4	70 - 120	
159 Tb	867195.13	1.09	1017279.40	85.2	70 - 120	
165 Ho	849165.13	1.16	990563.56	85.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES039
Sample Collection Date: 7/19/2011

ARF: 65187
APPL ID: AY42275

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.24 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\021SMPL.D\021SMPL.D#
Date Acquired: Aug 13 2011 01:14 pm
Operator: SDM
Sample Name: AY42275W21
Misc Info: 110802A-3015
Vial Number: 3103
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	-0.28	ug/l	-0.31	0.70	1000	
11 B	177.00	ug/l	196.65	0.73	1000	
23 Na	49130.00	ug/l	54583.43	1.16	25000	>Cal
24 Mg	12690.00	ug/l	14098.59	0.88	50000	
27 Al	1.51	ug/l	1.68	60.32	20000	
39 K	2061.00	ug/l	2289.77	0.96	20000	
44 Ca	9785.00	ug/l	10871.14	1.25	50000	
47 Ti	0.94	ug/l	1.05	12.19	1000	
51 V	23.03	ug/l	25.59	0.92	1000	
52 Cr	3.59	ug/l	3.99	0.88	1000	
55 Mn	0.78	ug/l	0.87	6.83	1000	
56 Fe	4.90	ug/l	5.44	5.10	20000	
59 Co	0.15	ug/l	0.17	19.35	1000	
60 Ni	1.06	ug/l	1.18	5.53	1000	
63 Cu	0.68	ug/l	0.75	5.06	1000	
65 Cu	0.71	ug/l	0.79	5.56	1000	
66 Zn	11.05	ug/l	12.28	2.43	1000	
75 As	0.40	ug/l	0.44	7.67	1000	
78 Se	0.12	ug/l	0.13	31.33	1000	
78 Se	0.31	ug/l	0.34	70.57	1000	
88 Sr	79.00	ug/l	87.77	0.69	1000	
88 Sr	87.48	ug/l	97.19	1.16	1000	
95 Mo	0.00	ug/l	0.00	8182.40	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	########	
107 Ag	-0.06	ug/l	-0.07	6.29	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	########	
111 Cd	-0.10	ug/l	-0.11	22.73	1000	
118 Sn	0.58	ug/l	0.65	6.83	1000	
121 Sb	2.00	ug/l	2.22	8.71	1000	
137 Ba	5.15	ug/l	5.72	1.71	1000	
205 Tl	0.00	ug/l	0.00	567.39	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	########	
207 (Pb)	--------	ug/l	#VALUE!	--------	########	
208 Pb	0.22	ug/l	0.24	1.94	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5150696.50	1.18	5314145.50	96.9	70 - 120	
45 Sc	966313.63	1.87	854699.00	113.1	70 - 120	
45 Sc	51488.50	3.35	51738.40	99.5	70 - 120	
45 Sc	2124780.00	1.92	1799310.60	118.1	70 - 120	
72 Ge	169208.31	1.24	178160.53	95.0	70 - 120	
72 Ge	17463.29	2.52	18616.22	93.8	70 - 120	
72 Ge	258832.50	1.04	275015.22	94.1	70 - 120	
115 In	1333912.00	0.66	1386546.60	96.2	70 - 120	
159 Tb	1735173.00	0.94	1710816.90	101.4	70 - 120	
165 Ho	1735122.10	0.65	1691823.60	102.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES040
Sample Collection Date: 7/20/2011

ARF: 65187
APPL ID: AY42276

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	1.9	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

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APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\024SMPL.D\024SMPL.D#
Date Acquired: Aug 13 2011 01:32 pm
Operator: SDM
Sample Name: AY42276W08
Misc Info: 110802A-3015
Vial Number: 3106
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	-0.28	ug/l	-0.31	0.24	1000	
11 B	46.04	ug/l	51.15	0.16	1000	
23 Na	46940.00	ug/l	52150.34	1.11	25000	>Cal
24 Mg	18600.00	ug/l	20664.60	0.65	50000	
27 Al	-10.27	ug/l	-11.41	11.51	20000	
39 K	2665.00	ug/l	2960.82	0.55	20000	
44 Ca	19740.00	ug/l	21931.14	0.81	50000	
47 Ti	0.32	ug/l	0.35	88.41	1000	
51 V	14.74	ug/l	16.38	0.97	1000	
52 Cr	2.06	ug/l	2.29	2.88	1000	
55 Mn	0.45	ug/l	0.50	13.93	1000	
56 Fe	-2.94	ug/l	-3.26	1.80	20000	
59 Co	0.07	ug/l	0.08	13.93	1000	
60 Ni	0.64	ug/l	0.72	8.41	1000	
63 Cu	0.18	ug/l	0.19	14.41	1000	
65 Cu	0.21	ug/l	0.24	18.13	1000	
66 Zn	10.12	ug/l	11.24	0.36	1000	
75 As	0.28	ug/l	0.32	27.51	1000	
78 Se	0.11	ug/l	0.13	9.42	1000	
78 Se	0.22	ug/l	0.24	91.77	1000	
88 Sr	144.00	ug/l	159.98	1.74	1000	
88 Sr	155.40	ug/l	172.65	0.59	1000	
95 Mo	-1.11	ug/l	-1.23	5.73	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	-0.07	ug/l	-0.07	5.18	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	-0.05	ug/l	-0.05	38.36	1000	
118 Sn	2.50	ug/l	2.78	2.67	1000	
121 Sb	-0.38	ug/l	-0.42	8.18	1000	
137 Ba	7.82	ug/l	8.69	2.05	1000	
205 Tl	-0.03	ug/l	-0.03	5.59	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	1.70	ug/l	1.89	1.04	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5327603.50	0.74	5314145.50	100.3	70 - 120	
45 Sc	1073166.80	2.22	854699.00	125.6	70 - 120	IS Fai
45 Sc	53069.23	4.02	51738.40	102.6	70 - 120	
45 Sc	2205647.80	1.29	1799310.60	122.6	70 - 120	IS Fai
72 Ge	182960.83	2.22	178160.53	102.7	70 - 120	
72 Ge	17812.26	3.72	18616.22	95.7	70 - 120	
72 Ge	270355.94	0.65	275015.22	98.3	70 - 120	
115 In	1373853.10	0.69	1386546.60	99.1	70 - 120	
159 Tb	1772105.90	1.55	1710816.90	103.6	70 - 120	
165 Ho	1764407.00	0.16	1691823.60	104.3	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Metals Analysis

Environet, Inc.
650 Iwilei Rd, #204
Honolulu, HI 96817

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Vilma Dupra
Project: LTM Red Hill Bulk Fuel Storage Facility
Sample ID: ES041
Sample Collection Date: 7/20/2011

ARF: 65187
APPL ID: AY42277

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.17 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

J = Estimated value.

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APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\025SMPL.D\025SMPL.D#
Date Acquired: Aug 13 2011 01:38 pm
Operator: SDM
Sample Name: AY42277W08
Misc Info: 110802A-3015
Vial Number: 3107
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	-0.28	ug/l	-0.31	0.42	1000	
11 B	56.76	ug/l	63.06	6.36	1000	
23 Na	37110.00	ug/l	41229.21	0.24	25000	>Cal
24 Mg	10260.00	ug/l	11398.86	0.82	50000	
27 Al	-11.72	ug/l	-13.02	5.07	20000	
39 K	1978.00	ug/l	2197.56	1.07	20000	
44 Ca	18780.00	ug/l	20864.58	1.04	50000	
47 Ti	0.58	ug/l	0.64	13.94	1000	
51 V	0.42	ug/l	0.46	2.30	1000	
52 Cr	0.09	ug/l	0.10	7.33	1000	
55 Mn	816.90	ug/l	907.58	0.57	1000	
56 Fe	427.70	ug/l	475.17	0.43	20000	
59 Co	0.85	ug/l	0.94	2.40	1000	
60 Ni	1.20	ug/l	1.33	7.17	1000	
63 Cu	0.40	ug/l	0.44	5.15	1000	
65 Cu	0.40	ug/l	0.44	5.11	1000	
66 Zn	7.35	ug/l	8.17	3.15	1000	
75 As	0.16	ug/l	0.17	20.93	1000	
78 Se	-0.26	ug/l	-0.29	3.00	1000	
78 Se	-0.48	ug/l	-0.53	4.70	1000	
88 Sr	103.50	ug/l	114.99	0.65	1000	
88 Sr	112.20	ug/l	124.65	1.06	1000	
95 Mo	-1.49	ug/l	-1.65	3.60	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	-0.10	ug/l	-0.11	1.85	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	-0.12	ug/l	-0.13	16.49	1000	
118 Sn	0.90	ug/l	1.00	3.95	1000	
121 Sb	-0.54	ug/l	-0.60	1.71	1000	
137 Ba	11.10	ug/l	12.33	3.02	1000	
205 Tl	-0.04	ug/l	-0.05	6.95	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.15	ug/l	0.17	1.50	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5305655.50	2.10	5314145.50	99.8	70 - 120	
45 Sc	1030089.80	0.42	854699.00	120.5	70 - 120	IS Fai
45 Sc	53113.88	3.44	51738.40	102.7	70 - 120	
45 Sc	2302708.30	2.52	1799310.60	128.0	70 - 120	IS Fai
72 Ge	174259.28	0.35	178160.53	97.8	70 - 120	
72 Ge	17617.95	2.90	18616.22	94.6	70 - 120	
72 Ge	269717.88	0.59	275015.22	98.1	70 - 120	
115 In	1405740.10	0.88	1386546.60	101.4	70 - 120	
159 Tb	1808692.10	0.92	1710816.90	105.7	70 - 120	
165 Ho	1811254.10	0.49	1691823.60	107.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

METALS
Calibration Data

APPL, INC.

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 65187 SDG: 65187

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 8/9/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 10:48	%R(1)	True CCV1	Found 11:19	%R(1)	True CCV1	Found 18:13	%R(1)	
Lead (Pb)	100	100.2	100	50	49.92	99.8	50	47.75	95.5	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: Environet, Inc.

ARF No: 65187 SDG: 65187

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 8/9/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 10:48	%R(1)	True CCV1	Found 19:04	%R(1)	True	Found	%R(1)	
Lead (Pb)	100	100.2	100	50	47.27	94.5				P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 65187 SDG: 65187

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 8/9/2011

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	11:13		11:31		18:26		19:10		18:32		
Lead (Pb)	.20	U	.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: Environet, Inc.

ARF No.: 65187 SDG: 65187

ICP ID Number: Optimus ICS Source: Environmental Express

Analysis Date: 8/9/2011 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 11:38	Sol AB 11:44	%R(1)
Lead (Pb)		500	3.075	467.6	93.5

(1) Control Limits: Metals 80-120

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 65187 SDG: 65187

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 8/13/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:07	%R(1)	True CCV1	Found 12:25	%R(1)	True CCV1	Found 13:56	%R(1)	
Lead (Pb)	100	95.89	95.9	50	49.67	99.3	50	47.68	95.4	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 65187 SDG: 65187

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 8/13/2011

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	12:19		12:38		14:08						
Lead (Pb)	.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:	Environet, Inc.
ARF No.:	65187	SDG:	65187
ICP ID Number:	Optimus	ICS Source:	Environmental Express

Analysis Date: 8/13/2011 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 12:44	Sol AB 12:50	%R(1)
Lead (Pb)		500	2.299	463	92.6

(1) Control Limits: Metals 80-120

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\11H09j00.B\004CAL
Date Acquired:	Aug 9 2011 10:16 am
Operator:	SDM
Sample Name:	Calibration Blank
Misc Info:	
Vial Number:	1102
Current Method:	C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File:	C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update:	Aug 09 2011 10:14 am
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2690384.00	A	34660.00	1.29
7	(Li)	186160.20	P	1511.00	0.81
9	Be	610.03	P	159.20	26.10
11	B	10259.40	P	329.10	3.21
23	Na	22512.10	P	218.60	0.97
24	Mg	193.34	P	3.33	1.72
27	Al	34.45	P	15.03	43.63
39	K	9525.61	P	91.75	0.96
44	Ca	66.57	P	6.77	10.17
45	Sc	511375.19	P	3123.00	0.61
45	Sc	23568.28	P	1107.00	4.70
45	Sc	1033626.00	A	10300.00	1.00
47	Ti	0.00	P	0.00	0.00
51	V	55.56	P	10.69	19.24
52	Cr	24.89	P	4.07	16.36
55	Mn	23.11	P	5.39	23.32
56	Fe	371.12	P	24.81	6.69
59	Co	158.23	P	4.07	2.57
60	Ni	19.56	P	4.68	23.95
63	Cu	259.12	P	17.40	6.72
65	Cu	115.56	P	4.07	3.52
66	Zn	68.00	P	8.33	12.25
72	Ge	87046.85	P	226.20	0.26
72	Ge	7936.32	P	266.00	3.35
72	Ge	155879.41	P	2701.00	1.73
75	As	3.00	P	1.16	38.50
78	Se	4.22	P	1.84	43.48
78	Se	0.44	P	0.51	114.57
88	Sr	6.67	P	6.67	100.00
88	Sr	397.80	P	16.78	4.22
95	Mo	78.89	P	25.46	32.27
106	(Cd)	8.89	P	5.09	57.28
107	Ag	23.33	P	10.00	42.86
108	(Cd)	17.78	P	1.93	10.83
111	Cd	5.03	P	6.92	137.44
115	In	790117.88	P	12820.00	1.62
118	Sn	68.89	P	12.62	18.32
121	Sb	58.89	P	6.94	11.78
137	Ba	38.89	P	7.70	19.79
159	Tb	891146.63	P	8466.00	0.95
165	Ho	874261.69	P	7980.00	0.91
205	Tl	62.22	P	18.36	29.51
206	(Pb)	455.58	P	15.03	3.30
207	(Pb)	386.69	P	45.10	11.66
208	Pb	1776.78	P	151.80	8.54

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\005CALS.D\005CALS.D#
Date Acquired: Aug 9 2011 10:23 am
Operator: SDM
Sample Name: 110808 Standard 1
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:20 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	2932083.00	A	21170.00	0.72	0.0000
7 (Li)	202356.30	P	1269.00	0.63	0.0000
9 Be	1318.99	P	134.90	10.23	0.0000
11 B	17036.81	P	692.10	4.06	0.0000
23 Na	18090.39	P	315.70	1.75	0.0000
24 Mg	1606.81	P	59.27	3.69	0.0000
27 Al	214.45	P	12.62	5.88	0.0000
39 K	10788.71	P	184.00	1.71	0.0000
44 Ca	78.31	P	4.01	5.12	0.0000
45 Sc	529682.38	P	2350.00	0.44	0.0000
45 Sc	24017.43	P	352.70	1.47	0.0000
45 Sc	1091368.00	A	6702.00	0.61	0.0000
47 Ti	6.67	P	4.81	72.10	0.0000
51 V	475.57	P	24.60	5.17	0.0000
52 Cr	149.78	P	16.88	11.27	0.0000
55 Mn	765.81	P	37.63	4.91	0.0000
56 Fe	3932.14	P	170.90	4.35	0.0000
59 Co	244.45	P	16.67	6.82	0.0000
60 Ni	97.33	P	13.13	13.49	0.0000
63 Cu	530.24	P	44.03	8.30	0.0000
65 Cu	275.12	P	19.43	7.06	0.0000
66 Zn	5077.40	P	52.55	1.04	0.0000
72 Ge	89738.77	P	379.60	0.42	0.0000
72 Ge	8012.67	P	108.30	1.35	0.0000
72 Ge	160432.70	P	1615.00	1.01	0.0000
75 As	14.11	P	2.78	19.67	0.0000
78 Se	15.67	P	2.40	15.35	0.0000
78 Se	2.56	P	1.39	54.31	0.0000
88 Sr	38.89	P	13.47	34.64	0.0000
88 Sr	1201.20	P	63.02	5.25	0.0000
95 Mo	255.57	P	5.09	1.99	0.0000
106 (Cd)	57.78	P	1.93	3.33	0.0000
107 Ag	253.34	P	17.64	6.96	0.0000
108 (Cd)	54.45	P	8.39	15.41	0.0000
111 Cd	226.06	P	44.84	19.84	0.0000
115 In	801990.19	P	6017.00	0.75	0.0000
118 Sn	682.26	P	22.69	3.33	0.0000
121 Sb	583.37	P	47.26	8.10	0.0000
137 Ba	145.56	P	27.15	18.65	0.0000
159 Tb	913912.69	P	8831.00	0.97	0.0000
165 Ho	891458.13	P	7482.00	0.84	0.0000
205 Tl	632.26	P	19.54	3.09	0.0000
206 (Pb)	553.37	P	37.57	6.79	0.0000
207 (Pb)	424.47	P	3.85	0.91	0.0000
208 Pb	2156.82	P	104.00	4.82	0.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	2932083.50	0.72	2690384.00	109.0	70 -	120	
45 Sc	529682.44	0.44	511375.16	103.6	70 -	120	
45 Sc	24017.43	1.47	23568.28	101.9	70 -	120	
45 Sc	1091368.00	0.61	1033626.30	105.6	70 -	120	
72 Ge	89738.77	0.42	87046.85	103.1	70 -	120	
72 Ge	8012.67	1.35	7936.32	101.0	70 -	120	
72 Ge	160432.70	1.01	155879.38	102.9	70 -	120	
115 In	801990.19	0.75	790117.94	101.5	70 -	120	
159 Tb	913912.75	0.97	891146.63	102.6	70 -	120	
165 Ho	891458.06	0.84	874261.69	102.0	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALS.D\004CALS.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\006CALS.D\006CALS.D#
Date Acquired: Aug 9 2011 10:29 am
Operator: SDM
Sample Name: 110808 Standard 2
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:27 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	2969461.00	A	22480.00	0.76	0.0000
7 (Li)	203269.59	P	1481.00	0.73	1.0000
9 Be	9731.20	P	142.70	1.47	1.0000
11 B	19855.89	P	77.25	0.39	1.0000
23 Na	19548.90	P	326.40	1.67	-1.0000
24 Mg	9892.50	P	116.80	1.18	1.0000
27 Al	1252.32	P	29.88	2.39	1.0000
39 K	12038.64	P	126.20	1.05	1.0000
44 Ca	217.44	P	20.41	9.39	1.0000
45 Sc	540569.50	P	4156.00	0.77	0.0000
45 Sc	24484.53	P	540.40	2.21	0.0000
45 Sc	1085238.00	A	15440.00	1.42	0.0000
47 Ti	24.00	P	10.07	41.96	1.0000
51 V	1113.84	P	24.05	2.16	1.0000
52 Cr	984.49	P	56.04	5.69	1.0000
55 Mn	420.90	P	30.24	7.18	1.0000
56 Fe	15850.54	P	94.28	0.59	1.0000
59 Co	1544.10	P	62.49	4.05	1.0000
60 Ni	442.24	P	15.57	3.52	1.0000
63 Cu	1449.87	P	60.03	4.14	1.0000
65 Cu	653.80	P	30.71	4.70	1.0000
66 Zn	199.12	P	15.91	7.99	1.0000
72 Ge	91203.87	P	495.90	0.54	0.0000
72 Ge	8038.24	P	85.20	1.06	0.0000
72 Ge	160876.70	P	1476.00	0.92	0.0000
75 As	59.11	P	2.78	4.70	1.0000
78 Se	130.11	P	11.44	8.79	1.0000
78 Se	4.56	P	0.77	16.90	1.0000
88 Sr	245.57	P	3.85	1.57	1.0000
88 Sr	9016.50	P	205.30	2.28	1.0000
95 Mo	1549.03	P	38.35	2.48	1.0000
106 (Cd)	113.34	P	18.56	16.38	1.0000
107 Ag	2034.66	P	25.91	1.27	1.0000
108 (Cd)	100.00	P	14.53	14.53	1.0000
111 Cd	879.01	P	91.56	10.42	1.0000
115 In	802902.00	P	8573.00	1.07	0.0000
118 Sn	2476.98	P	65.59	2.65	1.0000
121 Sb	2901.51	P	48.59	1.67	1.0000
137 Ba	1001.18	P	95.25	9.51	1.0000
159 Tb	919512.69	P	13750.00	1.50	0.0000
165 Ho	898898.81	P	10220.00	1.14	0.0000
205 Tl	5490.25	P	38.64	0.70	1.0000
206 (Pb)	2171.37	P	85.02	3.92	1.0000
207 (Pb)	1890.21	P	33.84	1.79	1.0000
208 Pb	8592.52	P	219.30	2.55	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	2569461.30	0.76	2690384.00	110.4	70 -	120	
45 Sc	540569.50	0.77	511375.16	105.7	70 -	120	
45 Sc	24484.53	2.21	23568.28	103.9	70 -	120	
45 Sc	1085237.60	1.42	1033626.30	105.0	70 -	120	
72 Ge	91203.87	0.54	87046.85	104.8	70 -	120	
72 Ge	8038.24	1.06	7936.32	101.3	70 -	120	
72 Ge	160876.66	0.92	155879.38	103.2	70 -	120	
115 In	802902.06	1.07	790117.94	101.6	70 -	120	
159 Tb	919512.69	1.50	891146.63	103.2	70 -	120	
165 Ho	898898.88	1.14	874261.69	102.8	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\007CALS.D\007CALS.D#
Date Acquired: Aug 9 2011 10:35 am
Operator: SDM
Sample Name: 110808 Standard 3
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:33 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	2994253.00	A	22080.00	0.74	0.0000
7 (Li)	203245.09	P	3027.00	1.49	0.6147
9 Be	483175.59	P	3303.00	0.68	0.9997
11 B	331511.69	P	2534.00	0.76	0.8044
23 Na	499680.19	P	13130.00	2.63	-0.3902
24 Mg	477977.19	P	8184.00	1.71	0.9989
27 Al	62230.73	P	800.20	1.29	0.9988
39 K	87048.77	P	1857.00	2.13	0.9020
44 Ca	8749.56	P	266.50	3.05	0.9997
45 Sc	543317.00	P	2981.00	0.55	0.0000
45 Sc	23633.39	P	2425.00	10.26	0.0000
45 Sc	1087265.00	A	10730.00	0.99	0.0000
47 Ti	1152.95	P	50.68	4.40	0.9821
51 V	35593.98	P	697.10	1.96	0.9485
52 Cr	45272.90	P	1154.00	2.55	0.9995
55 Mn	19798.87	P	441.00	2.23	0.1187
56 Fe	709901.00	P	8254.00	1.16	0.9909
59 Co	70518.82	P	1114.00	1.58	0.9993
60 Ni	20390.86	P	597.00	2.93	0.9963
63 Cu	53440.12	P	678.80	1.27	0.9919
65 Cu	25764.34	P	163.00	0.63	0.9797
66 Zn	5991.09	P	177.90	2.97	-0.3985
72 Ge	91403.91	P	359.90	0.39	0.0000
72 Ge	7830.73	P	722.90	9.23	0.0000
72 Ge	159993.70	P	2563.00	1.60	0.0000
75 As	2769.16	P	45.35	1.64	0.9953
78 Se	6468.58	P	58.76	0.91	1.0000
78 Se	193.45	P	4.86	2.51	0.9029
88 Sr	11340.45	P	153.80	1.36	0.9995
88 Sr	446148.69	P	5212.00	1.17	1.0000
95 Mo	74641.97	P	686.10	0.92	0.9998
106 (Cd)	4099.63	P	167.10	4.08	0.9227
107 Ag	100864.10	P	888.90	0.88	0.9999
108 (Cd)	2992.65	P	69.33	2.32	0.9322
111 Cd	42328.86	P	721.40	1.70	0.9880
115 In	803223.00	P	9542.00	1.19	0.0000
118 Sn	111844.50	P	1044.00	0.93	0.9878
121 Sb	116987.30	P	1267.00	1.08	0.9965
137 Ba	49547.32	P	480.00	0.97	0.9999
159 Tb	928338.38	P	17320.00	1.87	0.0000
165 Ho	912636.63	P	11820.00	1.30	0.0000
205 Tl	275514.19	P	1424.00	0.52	1.0000
206 (Pb)	92975.27	P	698.20	0.75	0.9992
207 (Pb)	81352.95	P	610.60	0.75	0.9976
208 Pb	370418.31	P	2665.00	0.72	0.9989

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	2994253.50	0.74	2690384.00	111.3	70 -	120	
45 Sc	543316.94	0.55	511375.16	106.2	70 -	120	
45 Sc	23633.39	10.26	23568.28	100.3	70 -	120	
45 Sc	1087265.00	0.99	1033626.30	105.2	70 -	120	
72 Ge	91403.91	0.39	87046.85	105.0	70 -	120	
72 Ge	7830.73	9.23	7936.32	98.7	70 -	120	
72 Ge	159993.75	1.60	155879.38	102.6	70 -	120	
115 In	803223.00	1.19	790117.94	101.7	70 -	120	
159 Tb	928338.44	1.87	891146.63	104.2	70 -	120	
165 Ho	912636.56	1.30	874261.69	104.4	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\008CALS.D\008CALS.D#
Date Acquired: Aug 9 2011 10:41 am
Operator: SDM
Sample Name: 110808 Standard 4
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:39 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	2977949.00	A	44860.00	1.51	0.0000
7 (Li)	202989.80	P	2696.00	1.33	0.3661
9 Be	856962.13	A	7106.00	0.83	1.0000
11 B	600141.00	A	7743.00	1.29	0.9999
23 Na	882596.63	A	19230.00	2.18	0.9997
24 Mg	864496.19	A	13300.00	1.54	1.0000
27 Al	124560.20	P	2296.00	1.84	1.0000
39 K	166203.59	P	3761.00	2.26	1.0000
44 Ca	17473.86	P	461.20	2.64	1.0000
45 Sc	549620.31	P	2851.00	0.52	0.0000
45 Sc	24260.08	P	431.70	1.78	0.0000
45 Sc	1093577.00	A	9878.00	0.90	0.0000
47 Ti	2287.32	P	122.40	5.35	1.0000
51 V	71930.43	P	968.70	1.35	1.0000
52 Cr	90936.52	P	1097.00	1.21	1.0000
55 Mn	40093.26	P	563.30	1.41	0.9994
56 Fe	1332707.00	A	28690.00	2.15	1.0000
59 Co	141625.91	P	2447.00	1.73	1.0000
60 Ni	40477.10	P	649.60	1.60	1.0000
63 Cu	106322.40	P	1921.00	1.81	1.0000
65 Cu	51251.99	P	1042.00	2.03	1.0000
66 Zn	11868.51	P	263.60	2.22	0.6805
72 Ge	92074.23	P	900.20	0.98	0.0000
72 Ge	8054.54	P	105.90	1.31	0.0000
72 Ge	161760.41	P	1929.00	1.19	0.0000
75 As	5597.32	P	53.87	0.96	1.0000
78 Se	13179.80	P	118.60	0.90	1.0000
78 Se	398.23	P	8.00	2.01	1.0000
88 Sr	22496.22	P	298.20	1.33	1.0000
88 Sr	898091.38	M	12570.00	1.40	1.0000
95 Mo	152139.50	P	603.40	0.40	1.0000
106 (Cd)	8081.48	P	206.80	2.56	1.0000
107 Ag	197764.50	P	2675.00	1.35	1.0000
108 (Cd)	5998.16	P	190.10	3.17	1.0000
111 Cd	84584.37	P	166.20	0.20	1.0000
115 In	803452.13	P	16210.00	2.02	0.0000
118 Sn	225832.80	P	1904.00	0.84	1.0000
121 Sb	252959.50	P	2028.00	0.80	1.0000
137 Ba	99053.30	P	530.00	0.54	1.0000
159 Tb	940797.00	P	12810.00	1.36	0.0000
165 Ho	921937.88	P	12960.00	1.41	0.0000
205 Tl	553198.81	P	5401.00	0.98	1.0000
206 (Pb)	184759.30	P	3255.00	1.76	1.0000
207 (Pb)	163609.50	P	2225.00	1.36	1.0000
208 Pb	737712.13	P	11160.00	1.51	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	2977948.80	1.51	2690384.00	110.7	70 -	120	
45 Sc	549620.31	0.52	511375.16	107.5	70 -	120	
45 Sc	24260.08	1.78	23568.28	102.9	70 -	120	
45 Sc	1093576.60	0.90	1033626.30	105.8	70 -	120	
72 Ge	92074.23	0.98	87046.05	105.8	70 -	120	
72 Ge	8054.54	1.31	7936.32	101.5	70 -	120	
72 Ge	161760.42	1.19	155879.38	103.8	70 -	120	
115 In	803452.13	2.02	790117.94	101.7	70 -	120	
159 Tb	940797.00	1.36	891146.63	105.6	70 -	120	
165 Ho	921937.88	1.41	874261.69	105.5	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

QCS QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\009_QCS.D\009_QCS.D#
Date Acquired: Aug 9 2011 10:48 am
Operator: SDM
Sample Name: ICV 110808
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:45 am
Sample Type: QCS
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)		Flag
7 (Li)	--------	ug/l	--------	100.00	90 -	110	
9 Be	97.84	ug/l	1.15	100.00	90 -	110	
11 B	100.90	ug/l	2.68	100.00	90 -	110	
23 Na	2466.00	ug/l	0.64	2500.00	90 -	110	
24 Mg	2695.00	ug/l	1.08	2500.00	90 -	110	
27 Al	2439.00	ug/l	2.43	2500.00	90 -	110	
39 K	2462.00	ug/l	2.06	2500.00	90 -	110	
44 Ca	2655.00	ug/l	2.63	2500.00	90 -	110	
47 Ti	98.11	ug/l	2.43	100.00	90 -	110	
51 V	98.69	ug/l	1.32	100.00	90 -	110	
52 Cr	99.76	ug/l	1.74	100.00	90 -	110	
55 Mn	101.00	ug/l	1.85	100.00	90 -	110	
56 Fe	2431.00	ug/l	2.03	2500.00	90 -	110	
59 Co	100.10	ug/l	0.80	100.00	90 -	110	
60 Ni	100.30	ug/l	1.17	100.00	90 -	110	
63 Cu	99.06	ug/l	0.28	100.00	90 -	110	
65 Cu	98.29	ug/l	0.51	100.00	90 -	110	
66 Zn	131.80	ug/l	0.82	100.00	90 -	110	Fail
75 As	97.65	ug/l	0.25	100.00	90 -	110	
78 Se	96.37	ug/l	1.23	100.00	90 -	110	
78 Se	97.73	ug/l	3.55	100.00	90 -	110	
88 Sr	98.82	ug/l	0.99	100.00	90 -	110	
88 Sr	101.30	ug/l	0.92	100.00	90 -	110	
95 Mo	100.30	ug/l	1.36	100.00	90 -	110	
106 (Cd)	--------	ug/l	--------	100.00	90 -	110	
107 Ag	48.82	ug/l	1.33	50.00	90 -	110	
108 (Cd)	--------	ug/l	--------	100.00	90 -	110	
111 Cd	101.10	ug/l	2.02	100.00	90 -	110	
118 Sn	42.98	ug/l	3.12	50.00	90 -	110	Fail
121 Sb	111.00	ug/l	0.79	100.00	90 -	110	Fail
137 Ba	99.62	ug/l	1.00	100.00	90 -	110	
205 Tl	98.46	ug/l	1.84	100.00	90 -	110	
206 (Pb)	--------	ug/l	--------	100.00	90 -	110	
207 (Pb)	--------	ug/l	--------	100.00	90 -	110	
208 Pb	100.20	ug/l	1.44	100.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	2931559.50	0.29	2690384.00	109.0	70 -	120	
45 Sc	578173.00	1.12	511375.16	113.1	70 -	120	
45 Sc	24582.08	0.19	23568.28	104.3	70 -	120	
45 Sc	1097671.40	1.12	1033626.30	106.2	70 -	120	
72 Ge	95567.45	1.12	87046.85	109.8	70 -	120	
72 Ge	8254.29	1.42	7936.32	104.0	70 -	120	
72 Ge	161860.22	0.80	155879.38	103.8	70 -	120	
115 In	810372.63	1.44	790117.94	102.6	70 -	120	
159 Tb	938888.50	1.59	891146.63	105.4	70 -	120	
165 Ho	913172.63	1.44	874261.69	104.5	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\013_CCB.D\013_CCB.D#
Date Acquired: Aug 9 2011 11:13 am
Operator: SDM
Sample Name: ICB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:45 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#VALUE!	
9 Be	-0.06 ug/l	2.35	0.12	
11 B	-0.37 ug/l	10.15	15.00	
23 Na	0.70 ug/l	1283.80	77.10	
24 Mg	0.36 ug/l	78.38	7.50	
27 Al	-0.18 ug/l	3.70	3.96	
39 K	4.59 ug/l	369.80	19.20	
44 Ca	-3.06 ug/l	153.06	90.00	
47 Ti	0.02 ug/l	173.20	0.78	
51 V	-0.01 ug/l	295.15	0.21	
52 Cr	0.01 ug/l	97.86	0.12	
55 Mn	0.00 ug/l	1661.60	0.18	
56 Fe	0.16 ug/l	24.60	40.80	
59 Co	-0.06 ug/l	9.05	0.09	
60 Ni	0.00 ug/l	347.02	0.48	
63 Cu	0.00 ug/l	843.28	0.39	
65 Cu	0.00 ug/l	1385.40	0.39	
66 Zn	0.03 ug/l	267.77	6.90	
75 As	-0.01 ug/l	117.38	0.27	
78 Se	0.03 ug/l	39.27	0.30	
78 Se	0.14 ug/l	78.97	0.30	
88 Sr	0.02 ug/l	174.73	0.03	
88 Sr	-0.01 ug/l	22.57	0.03	
95 Mo	0.06 ug/l	20.96	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	0.00 ug/l	131.98	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	0.02 ug/l	49.00	0.06	
118 Sn	0.00 ug/l	106.19	0.30	
121 Sb	0.14 ug/l	3.61	0.03	Fail
137 Ba	0.00 ug/l	535.44	0.12	
205 Tl	0.00 ug/l	78.68	0.03	
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.14 ug/l	8.36	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2803623.80	1.32	2690384.00	104.2	70 - 120	
45 Sc	524821.06	0.94	511375.16	102.6	70 - 120	
45 Sc	23902.89	13.44	23568.28	101.4	70 - 120	
45 Sc	1057622.80	1.11	1033626.30	102.3	70 - 120	
72 Ge	90473.32	1.17	87046.85	103.9	70 - 120	
72 Ge	8167.22	9.66	7936.32	102.9	70 - 120	
72 Ge	160901.64	1.17	155879.38	103.2	70 - 120	
115 In	820667.56	1.09	790117.94	103.9	70 - 120	
159 Tb	930958.50	0.85	891146.63	104.5	70 - 120	
165 Ho	910161.75	0.92	874261.69	104.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\014_CCV.D\014_CCV.D#
Date Acquired: Aug 9 2011 11:19 am
Operator: SDM
Sample Name: CCV 110808
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:45 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
7 (Li)	-------- ug/l	--------	50.00	90 - 110	
9 Be	54.81 ug/l	0.38	50.00	90 - 110	
11 B	51.87 ug/l	0.56	50.00	90 - 110	
23 Na	1312.00 ug/l	0.56	1250.00	90 - 110	
24 Mg	2647.00 ug/l	0.72	2500.00	90 - 110	
27 Al	972.30 ug/l	1.48	1000.00	90 - 110	
39 K	994.30 ug/l	0.26	1000.00	90 - 110	
44 Ca	2466.00 ug/l	1.18	2500.00	90 - 110	
47 Ti	48.83 ug/l	6.48	50.00	90 - 110	
51 V	48.94 ug/l	1.72	50.00	90 - 110	
52 Cr	48.75 ug/l	0.58	50.00	90 - 110	
55 Mn	48.84 ug/l	1.26	50.00	90 - 110	
56 Fe	1020.00 ug/l	0.96	1000.00	90 - 110	
59 Co	49.17 ug/l	0.84	50.00	90 - 110	
60 Ni	49.17 ug/l	2.36	50.00	90 - 110	
63 Cu	49.12 ug/l	0.10	50.00	90 - 110	
65 Cu	48.77 ug/l	0.45	50.00	90 - 110	
66 Zn	49.67 ug/l	0.42	50.00	90 - 110	
75 As	48.91 ug/l	0.90	50.00	90 - 110	
78 Se	48.57 ug/l	1.32	50.00	90 - 110	
78 Se	47.44 ug/l	1.81	50.00	90 - 110	
88 Sr	48.99 ug/l	2.57	50.00	90 - 110	
88 Sr	49.65 ug/l	0.48	50.00	90 - 110	
95 Mo	49.30 ug/l	0.98	50.00	90 - 110	
106 (Cd)	-------- ug/l	--------	50.00	90 - 110	
107 Ag	24.75 ug/l	1.19	25.00	90 - 110	
108 (Cd)	-------- ug/l	--------	50.00	90 - 110	
111 Cd	49.25 ug/l	0.53	50.00	90 - 110	
118 Sn	49.21 ug/l	1.04	50.00	90 - 110	
121 Sb	48.97 ug/l	2.10	50.00	90 - 110	
137 Ba	49.22 ug/l	1.78	50.00	90 - 110	
205 Tl	49.35 ug/l	0.88	50.00	90 - 110	
206 (Pb)	-------- ug/l	--------	50.00	90 - 110	
207 (Pb)	-------- ug/l	--------	50.00	90 - 110	
208 Pb	49.92 ug/l	0.26	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3034616.80	0.85	2690384.00	112.8	70 - 120	
45 Sc	561551.56	0.51	511375.16	109.8	70 - 120	
45 Sc	25604.19	1.32	23568.28	108.6	70 - 120	
45 Sc	1107701.80	0.78	1033626.30	107.2	70 - 120	
72 Ge	94962.56	0.25	87046.85	109.1	70 - 120	
72 Ge	8507.77	1.53	7936.32	107.2	70 - 120	
72 Ge	163877.47	0.57	155879.38	105.1	70 - 120	
115 In	816835.75	1.49	790117.94	103.4	70 - 120	
159 Tb	938645.75	0.91	891146.63	105.3	70 - 120	
165 Ho	920026.13	1.10	874261.69	105.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\016_CCB.D\016_CCB.D#
Date Acquired: Aug 9 2011 11:31 am
Operator: SDM
Sample Name: CCB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:45 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#VALUE!	
9 Be	-0.05	ug/l	15.86	0.12	
11 B	-0.46	ug/l	6.01	15.00	
23 Na	5.37	ug/l	194.15	77.10	
24 Mg	0.86	ug/l	31.50	7.50	
27 Al	-0.12	ug/l	123.65	3.96	
39 K	8.20	ug/l	193.41	19.20	
44 Ca	-4.91	ug/l	8.59	90.00	
47 Ti	0.14	ug/l	58.06	0.78	
51 V	0.03	ug/l	121.23	0.21	
52 Cr	0.01	ug/l	166.12	0.12	
55 Mn	-0.01	ug/l	81.70	0.18	
56 Fe	0.14	ug/l	51.19	40.80	
59 Co	-0.07	ug/l	7.33	0.09	
60 Ni	0.00	ug/l	3028.70	0.48	
63 Cu	0.01	ug/l	69.37	0.39	
65 Cu	0.02	ug/l	76.06	0.39	
66 Zn	-0.03	ug/l	161.80	6.90	
75 As	0.02	ug/l	86.61	0.27	
78 Se	0.04	ug/l	68.91	0.30	
78 Se	0.37	ug/l	59.70	0.30	Fail
88 Sr	0.06	ug/l	70.60	0.03	Fail
88 Sr	0.00	ug/l	110.64	0.03	
95 Mo	0.10	ug/l	6.24	0.21	
106 (Cd)	--------	ug/l	--------	#VALUE!	
107 Ag	0.00	ug/l	1758.80	0.09	
108 (Cd)	--------	ug/l	--------	#VALUE!	
111 Cd	0.02	ug/l	40.75	0.06	
118 Sn	0.01	ug/l	283.44	0.30	
121 Sb	0.14	ug/l	14.72	0.03	Fail
137 Ba	0.02	ug/l	43.28	0.12	
205 Tl	0.01	ug/l	5.32	0.03	
206 (Pb)	--------	ug/l	--------	#VALUE!	
207 (Pb)	--------	ug/l	--------	#VALUE!	
208 Pb	-0.14	ug/l	6.93	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2805088.50	0.60	2690384.00	104.3	70 - 120	
45 Sc	530673.44	0.23	511375.16	103.8	70 - 120	
45 Sc	22993.29	13.92	23568.28	97.6	70 - 120	
45 Sc	1055270.50	0.92	1033626.30	102.1	70 - 120	
72 Ge	90597.19	0.45	87046.85	104.1	70 - 120	
72 Ge	7947.14	9.63	7936.32	100.1	70 - 120	
72 Ge	160427.47	0.25	155879.38	102.9	70 - 120	
115 In	817383.56	1.10	790117.94	103.5	70 - 120	
159 Tb	923052.38	1.01	891146.63	103.6	70 - 120	
165 Ho	904354.81	1.03	874261.69	103.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\017SMPL.D\017SMPL.D#
Date Acquired: Aug 9 2011 11:38 am
Operator: SDM
Sample Name: ICSA 110808
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 10:45 am
Sample Type: Sample
Prep Dil Factor: 1.00
Total Dil Factor: 1.00

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	1.52	ug/l	1.52	0.04	1000	
11 B	1.13	ug/l	1.13	3.23	1000	
23 Na	92250.00	ug/l	92250.00	0.84	25000	>Cal
24 Mg	89240.00	ug/l	89240.00	0.38	50000	>Cal
27 Al	83160.00	ug/l	83160.00	1.15	20000	>Cal
39 K	85090.00	ug/l	85090.00	1.71	20000	>Cal
44 Ca	90720.00	ug/l	90720.00	1.65	50000	>Cal
47 Ti	1968.00	ug/l	1968.00	1.44	1000	>Cal
51 V	0.72	ug/l	0.72	6.56	1000	
52 Cr	1.04	ug/l	1.04	8.18	1000	
55 Mn	6.32	ug/l	6.32	0.80	1000	
56 Fe	86160.00	ug/l	86160.00	1.04	20000	>Cal
59 Co	11.29	ug/l	11.29	0.83	1000	
60 Ni	2.08	ug/l	2.08	2.87	1000	
63 Cu	1.53	ug/l	1.53	2.58	1000	
65 Cu	1.55	ug/l	1.55	4.76	1000	
66 Zn	18.67	ug/l	18.67	4.17	1000	
75 As	0.44	ug/l	0.44	21.29	1000	
78 Se	0.38	ug/l	0.38	8.29	1000	
78 Se	0.59	ug/l	0.59	17.04	1000	
88 Sr	1.30	ug/l	1.30	5.10	1000	
88 Sr	1.26	ug/l	1.26	0.79	1000	
95 Mo	1819.00	ug/l	1819.00	1.37	1000	>Cal
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.18	ug/l	0.18	9.62	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.82	ug/l	0.82	32.27	1000	
118 Sn	0.85	ug/l	0.85	5.79	1000	
121 Sb	1.54	ug/l	1.54	2.56	1000	
137 Ba	3.11	ug/l	3.11	3.90	1000	
205 Tl	0.49	ug/l	0.49	2.09	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	3.08	ug/l	3.08	0.17	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2864417.50	0.81	2690384.00	106.5	70 - 120	
45 Sc	540764.31	0.88	511375.16	105.7	70 - 120	
45 Sc	24042.32	1.66	23568.28	102.0	70 - 120	
45 Sc	1070366.80	0.23	1033626.30	103.6	70 - 120	
72 Ge	86740.20	1.14	87046.85	99.6	70 - 120	
72 Ge	7704.35	1.72	7936.32	97.1	70 - 120	
72 Ge	162849.66	0.63	155879.38	104.5	70 - 120	
115 In	731202.81	0.83	790117.94	92.5	70 - 120	
159 Tb	905240.94	1.40	891146.63	101.6	70 - 120	
165 Ho	884796.44	1.28	874261.69	101.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

8 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\018ICSB.D\018ICSB.D#
Date Acquired: Aug 9 2011 11:44 am
Acq. Method: 62A0809.M
Operator: SDM
Sample Name: ICSAB 110809
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal. Update: Aug 09 2011 10:45 am
Sample Type: ICSAB
Dilution Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
7 (Li)	---	3	---	---	---		-	
9 Be	45	3	215.80	0.61	250	86.3	80 - 120	
11 B	45	3	1.10	4.20	---		-	
23 Na	45	2	95590.00	0.35	---		-	
24 Mg	45	2	90900.00	0.65	---		-	
27 Al	45	2	83350.00	0.83	---		-	
39 K	45	2	85780.00	1.59	---		-	
44 Ca	45	2	91130.00	1.78	---		-	
47 Ti	45	2	1964.00	0.69	2000	98.2	80 - 120	
51 V	45	2	248.30	0.89	250	99.3	80 - 120	
52 Cr	45	2	237.70	1.37	250	95.1	80 - 120	
55 Mn	45	2	236.70	1.43	250	94.7	80 - 120	
56 Fe	45	2	87250.00	1.09	---		-	
59 Co	45	2	240.10	0.82	250	96.0	80 - 120	
60 Ni	45	2	441.30	1.19	500	88.3	80 - 120	
63 Cu	72	2	219.10	1.31	250	87.6	80 - 120	
65 Cu	72	2	216.50	1.50	250	86.6	80 - 120	
66 Zn	72	2	490.10	0.78	500	98.0	80 - 120	
75 As	72	2	232.10	1.85	250	92.8	80 - 120	
78 Se	72	1	209.50	2.98	250	83.8	80 - 120	
78 Se	72	2	201.70	0.16	250	80.7	80 - 120	
88 Sr	72	2	1.44	9.44	---		-	
88 Sr	72	3	1.34	2.99	---		-	
95 Mo	72	3	2050.00	1.14	2000	102.5	80 - 120	
106 (Cd)	---	3	---	---	---		-	
107 Ag	115	3	459.00	4.61	500	91.8	80 - 120	
108 (Cd)	---	3	---	---	---		-	
111 Cd	115	3	453.20	0.31	500	90.6	80 - 120	
118 Sn	115	3	0.96	4.06	---		-	
121 Sb	115	3	253.90	1.59	250	101.6	80 - 120	
137 Ba	115	3	260.30	1.02	250	104.1	80 - 120	
205 Tl	159	3	238.70	0.67	250	95.5	80 - 120	
206 (Pb)	---	3	---	---	---		-	
207 (Pb)	---	3	---	---	---		-	
208 Pb	159	3	467.60	1.28	500	93.5	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2995976	0.42	2690384	111.4	70 - 120	
45 Sc	1	640461	3.86	511375	125.2	70 - 120	IS Fail
45 Sc	2	23855	1.84	23568	101.2	70 - 120	
45 Sc	3	1099897	1.15	1033626	106.4	70 - 120	
72 Ge	1	99691	2.93	87047	114.5	70 - 120	
72 Ge	2	7916	0.57	7936	99.7	70 - 120	
72 Ge	3	162460	0.20	155879	104.2	70 - 120	
115 In	3	741063	0.58	790118	93.8	70 - 120	
159 Tb	3	917773	0.90	891147	103.0	70 - 120	
165 Ho	3	895618	0.58	874262	102.4	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\080_CCV.D\080_CCV.D#
Date Acquired: Aug 9 2011 06:13 pm
Operator: SDM
Sample Name: CCV 110808
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
7 (Li)	-------- ug/l	--------	50.00	90 - 110	
9 Be	43.33 ug/l	0.75	50.00	90 - 110	Fail
11 B	42.27 ug/l	2.51	50.00	90 - 110	Fail
23 Na	1431.00 ug/l	6.34	1250.00	90 - 110	Fail
24 Mg	2570.00 ug/l	6.53	2500.00	90 - 110	
27 Al	955.50 ug/l	7.65	1000.00	90 - 110	
39 K	1054.00 ug/l	7.94	1000.00	90 - 110	
44 Ca	2458.00 ug/l	8.54	2500.00	90 - 110	
47 Ti	49.73 ug/l	9.50	50.00	90 - 110	
51 V	50.92 ug/l	6.82	50.00	90 - 110	
52 Cr	48.91 ug/l	6.48	50.00	90 - 110	
55 Mn	49.86 ug/l	6.48	50.00	90 - 110	
56 Fe	1009.00 ug/l	6.58	1000.00	90 - 110	
59 Co	49.90 ug/l	7.03	50.00	90 - 110	
60 Ni	49.08 ug/l	6.28	50.00	90 - 110	
63 Cu	46.03 ug/l	4.64	50.00	90 - 110	
65 Cu	45.96 ug/l	5.02	50.00	90 - 110	
66 Zn	44.54 ug/l	6.10	50.00	90 - 110	Fail
75 As	48.09 ug/l	5.19	50.00	90 - 110	
78 Se	45.37 ug/l	0.21	50.00	90 - 110	
78 Se	45.16 ug/l	7.21	50.00	90 - 110	
88 Sr	50.32 ug/l	4.55	50.00	90 - 110	
88 Sr	50.53 ug/l	0.95	50.00	90 - 110	
95 Mo	48.07 ug/l	0.98	50.00	90 - 110	
106 (Cd)	-------- ug/l	--------	50.00	90 - 110	
107 Ag	23.36 ug/l	1.38	25.00	90 - 110	
108 (Cd)	-------- ug/l	--------	50.00	90 - 110	
111 Cd	46.58 ug/l	1.88	50.00	90 - 110	
118 Sn	47.71 ug/l	0.52	50.00	90 - 110	
121 Sb	49.15 ug/l	0.17	50.00	90 - 110	
137 Ba	49.06 ug/l	0.87	50.00	90 - 110	
205 Tl	46.81 ug/l	1.07	50.00	90 - 110	
206 (Pb)	-------- ug/l	--------	50.00	90 - 110	
207 (Pb)	-------- ug/l	--------	50.00	90 - 110	
208 Pb	47.75 ug/l	0.54	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2093101.50	0.92	3708234.80	56.4	70 - 120	IS Fail
45 Sc	558790.94	0.45	691573.50	80.8	70 - 120	
45 Sc	19639.92	5.72	26327.32	74.6	70 - 120	
45 Sc	911773.56	0.25	1216587.10	74.9	70 - 120	
72 Ge	95313.03	0.63	115561.68	82.5	70 - 120	
72 Ge	6994.76	4.31	9112.21	76.8	70 - 120	
72 Ge	139883.66	0.13	173511.03	80.6	70 - 120	
115 In	743925.50	0.70	881005.81	84.4	70 - 120	
159 Tb	853302.38	0.79	1017279.40	83.9	70 - 120	
165 Ho	829548.69	0.91	990563.56	83.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\082_CCB.D\082_CCB.D#
Date Acquired: Aug 9 2011 06:26 pm
Operator: SDM
Sample Name: CCB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#VALUE!	
9 Be	-0.41 ug/l	1.11	0.12	
11 B	-0.27 ug/l	3.80	15.00	
23 Na	86.80 ug/l	1.70	77.10	Fail
24 Mg	0.03 ug/l	533.53	7.50	
27 Al	-0.83 ug/l	74.64	3.96	
39 K	6.51 ug/l	41.28	19.20	
44 Ca	2.69 ug/l	286.68	90.00	
47 Ti	0.08 ug/l	164.92	0.78	
51 V	0.16 ug/l	9.18	0.21	
52 Cr	0.01 ug/l	173.60	0.12	
55 Mn	0.09 ug/l	13.44	0.18	
56 Fe	0.87 ug/l	5.92	40.80	
59 Co	-0.49 ug/l	1.78	0.09	
60 Ni	0.00 ug/l	505.66	0.48	
63 Cu	-0.02 ug/l	232.28	0.39	
65 Cu	-0.04 ug/l	90.11	0.39	
66 Zn	-0.01 ug/l	1055.70	6.90	
75 As	0.02 ug/l	130.22	0.27	
78 Se	0.01 ug/l	292.99	0.30	
78 Se	-0.16 ug/l	80.59	0.30	
88 Sr	0.03 ug/l	94.49	0.03	
88 Sr	0.08 ug/l	3.75	0.03	Fail
95 Mo	-0.23 ug/l	12.29	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	0.00 ug/l	427.44	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	0.00 ug/l	177.81	0.06	
118 Sn	0.01 ug/l	29.84	0.30	
121 Sb	-0.11 ug/l	5.78	0.03	
137 Ba	0.04 ug/l	67.09	0.12	
205 Tl	0.11 ug/l	16.60	0.03	Fail
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.05 ug/l	9.07	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2092851.30	1.02	3708234.80	56.4	70 - 120	IS Fail
45 Sc	578308.38	0.97	691573.50	83.6	70 - 120	
45 Sc	21427.15	1.09	26327.32	81.4	70 - 120	
45 Sc	946201.00	1.18	1216587.10	77.8	70 - 120	
72 Ge	98937.36	1.04	115561.68	85.6	70 - 120	
72 Ge	7775.50	1.16	9112.21	85.3	70 - 120	
72 Ge	146169.88	0.19	173511.03	84.2	70 - 120	
115 In	777554.13	0.44	881005.81	88.3	70 - 120	
159 Tb	867037.13	0.44	1017279.40	85.2	70 - 120	
165 Ho	840875.56	0.80	990563.56	84.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\088_CCV.D\088_CCV.D#
Date Acquired: Aug 9 2011 07:04 pm
Operator: SDM
Sample Name: CCV 110808
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
7 (Li)	-------- ug/l	--------	50.00	90 - 110	
9 Be	43.98 ug/l	0.99	50.00	90 - 110	Fail
11 B	43.76 ug/l	0.91	50.00	90 - 110	Fail
23 Na	1335.00 ug/l	1.25	1250.00	90 - 110	
24 Mg	2484.00 ug/l	0.75	2500.00	90 - 110	
27 Al	910.30 ug/l	1.66	1000.00	90 - 110	
39 K	980.00 ug/l	0.57	1000.00	90 - 110	
44 Ca	2316.00 ug/l	2.85	2500.00	90 - 110	
47 Ti	46.46 ug/l	2.28	50.00	90 - 110	
51 V	50.38 ug/l	0.52	50.00	90 - 110	
52 Cr	46.66 ug/l	0.32	50.00	90 - 110	
55 Mn	45.87 ug/l	1.64	50.00	90 - 110	
56 Fe	955.60 ug/l	0.98	1000.00	90 - 110	
59 Co	47.71 ug/l	0.90	50.00	90 - 110	
60 Ni	47.26 ug/l	0.58	50.00	90 - 110	
63 Cu	45.58 ug/l	2.01	50.00	90 - 110	
65 Cu	44.89 ug/l	0.80	50.00	90 - 110	Fail
66 Zn	43.79 ug/l	1.16	50.00	90 - 110	Fail
75 As	47.11 ug/l	4.41	50.00	90 - 110	
78 Se	43.43 ug/l	0.91	50.00	90 - 110	Fail
78 Se	41.33 ug/l	7.71	50.00	90 - 110	Fail
88 Sr	47.79 ug/l	3.57	50.00	90 - 110	
88 Sr	48.69 ug/l	0.95	50.00	90 - 110	
95 Mo	45.82 ug/l	1.16	50.00	90 - 110	
106 (Cd)	-------- ug/l	--------	50.00	90 - 110	
107 Ag	22.97 ug/l	0.84	25.00	90 - 110	
108 (Cd)	-------- ug/l	--------	50.00	90 - 110	
111 Cd	46.28 ug/l	0.86	50.00	90 - 110	
118 Sn	47.48 ug/l	1.46	50.00	90 - 110	
121 Sb	48.94 ug/l	1.07	50.00	90 - 110	
137 Ba	48.59 ug/l	0.75	50.00	90 - 110	
205 Tl	46.51 ug/l	1.54	50.00	90 - 110	
206 (Pb)	-------- ug/l	--------	50.00	90 - 110	
207 (Pb)	-------- ug/l	--------	50.00	90 - 110	
208 Pb	47.27 ug/l	0.96	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2356324.30	1.11	3708234.80	63.5	70 - 120	IS Fail
45 Sc	631006.56	0.53	691573.50	91.2	70 - 120	
45 Sc	21858.16	0.57	26327.32	83.0	70 - 120	
45 Sc	987858.06	0.08	1216587.10	81.2	70 - 120	
72 Ge	107623.65	1.09	115561.68	93.1	70 - 120	
72 Ge	7585.39	1.80	9112.21	83.2	70 - 120	
72 Ge	148693.75	0.99	173511.03	85.7	70 - 120	
115 In	757935.44	0.17	881005.81	86.0	70 - 120	
159 Tb	873424.75	1.20	1017279.40	85.9	70 - 120	
165 Ho	857687.25	0.16	990563.56	86.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

6 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\089_CCB.D\089_CCB.D#
Date Acquired: Aug 9 2011 07:10 pm
Operator: SDM
Sample Name: CCB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#VALUE!	
9 Be	-0.39 ug/l	1.05	0.12	
11 B	0.22 ug/l	30.14	15.00	
23 Na	63.06 ug/l	9.60	77.10	
24 Mg	1.92 ug/l	38.39	7.50	
27 Al	-0.83 ug/l	82.95	3.96	
39 K	10.00 ug/l	114.60	19.20	
44 Ca	3.45 ug/l	139.19	90.00	
47 Ti	-0.03 ug/l	157.52	0.78	
51 V	0.34 ug/l	12.23	0.21	Fail
52 Cr	0.00 ug/l	709.46	0.12	
55 Mn	0.14 ug/l	21.49	0.18	
56 Fe	1.36 ug/l	10.47	40.80	
59 Co	-0.48 ug/l	1.10	0.09	
60 Ni	0.02 ug/l	73.83	0.48	
63 Cu	-0.03 ug/l	38.78	0.39	
65 Cu	0.01 ug/l	952.73	0.39	
66 Zn	-0.05 ug/l	334.15	6.90	
75 As	0.06 ug/l	10.27	0.27	
78 Se	0.14 ug/l	19.62	0.30	
78 Se	0.16 ug/l	176.67	0.30	
88 Sr	0.11 ug/l	52.22	0.03	Fail
88 Sr	0.09 ug/l	6.42	0.03	Fail
95 Mo	-0.07 ug/l	85.81	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	0.00 ug/l	84.64	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	0.01 ug/l	28.32	0.06	
118 Sn	0.01 ug/l	18.43	0.30	
121 Sb	-0.03 ug/l	110.90	0.03	
137 Ba	0.06 ug/l	37.45	0.12	
205 Tl	0.10 ug/l	6.93	0.03	Fail
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.05 ug/l	20.40	0.53	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2314246.00	0.42	3708234.80	62.4	70 - 120	IS Fail
45 Sc	592122.31	1.56	691573.50	85.6	70 - 120	
45 Sc	20651.76	5.80	26327.32	78.4	70 - 120	
45 Sc	980949.81	1.72	1216587.10	80.6	70 - 120	
72 Ge	100901.13	0.69	115561.68	87.3	70 - 120	
72 Ge	7420.92	5.16	9112.21	81.4	70 - 120	
72 Ge	146589.28	1.01	173511.03	84.5	70 - 120	
115 In	777397.25	1.58	881005.81	88.2	70 - 120	
159 Tb	874553.63	0.99	1017279.40	86.0	70 - 120	
165 Ho	848227.38	1.30	990563.56	85.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\005CAL
Date Acquired: Aug 13 2011 11:37 am
Operator: SDM
Sample Name: Calibration Blank
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHOD8\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 11:34 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	4123711.00	A	43550.00	1.06
7	(Li)	297176.19	P	610.90	0.21
9	Be	335.57	P	42.47	12.66
11	B	3752.82	P	236.50	6.30
23	Na	33283.64	P	2222.00	6.68
24	Mg	333.35	P	76.89	23.07
27	Al	90.02	P	39.33	43.69
39	K	11150.14	P	94.15	0.84
44	Ca	107.52	P	13.49	12.55
45	Sc	815783.81	P	8096.00	0.99
45	Sc	44324.85	P	345.80	0.78
45	Sc	1557452.00	A	8611.00	0.55
47	Ti	0.00	P	0.00	0.00
51	V	81.78	P	14.87	18.18
52	Cr	36.89	P	7.34	19.91
55	Mn	880.48	P	3.36	0.38
56	Fe	532.91	P	16.99	3.19
59	Co	157.34	P	12.22	7.77
60	Ni	60.89	P	2.78	4.56
63	Cu	463.57	P	32.51	7.01
65	Cu	214.67	P	8.74	4.07
66	Zn	197.34	P	18.67	9.46
72	Ge	146964.50	P	711.20	0.48
72	Ge	16052.38	P	94.29	0.59
72	Ge	255474.30	P	643.60	0.25
75	As	6.11	P	0.19	3.15
78	Se	5.00	P	0.58	11.55
78	Se	1.56	P	0.77	49.49
88	Sr	17.78	P	5.09	28.64
88	Sr	404.47	P	45.99	11.37
95	Mo	122.23	P	10.71	8.76
106	(Cd)	36.67	P	6.67	18.18
107	Ag	30.00	P	3.33	11.11
108	(Cd)	35.56	P	15.03	42.27
111	Cd	-2.04	P	26.11	1277.00
115	In	1379279.00	A	6133.00	0.44
118	Sn	3764.39	P	1970.00	52.33
121	Sb	107.78	P	24.57	22.80
137	Ba	53.34	P	5.77	10.83
159	Tb	1872580.00	A	3166.00	0.17
165	Ho	1878025.00	A	7825.00	0.42
205	Tl	167.79	P	6.94	4.14
206	(Pb)	563.37	P	43.34	7.69
207	(Pb)	432.25	P	11.71	2.71
208	Pb	2110.15	P	85.06	4.03

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\11H13100.B\006CALS.D\006CALS.D
Date Acquired:	Aug 13 2011 11:43 am
Operator:	SDM
Sample Name:	110808 Standard 1
Misc Info:	
Vial Number:	1103
Current Method:	C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File:	C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update:	Aug 13 2011 11:40 am
Sample Type:	CalStd
Total Dil Factor:	1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4406456.00	A	32010.00	0.73	0.0000
7 (Li)	311913.19	P	3594.00	1.15	-0.3546
9 Be	1589.03	P	54.20	3.41	1.0000
11 B	5556.02	P	113.40	2.04	1.0000
23 Na	15289.41	P	200.40	1.31	0.9999
24 Mg	2192.46	P	28.35	1.29	1.0000
27 Al	397.80	P	68.67	17.26	1.0000
39 K	13290.87	P	251.60	1.89	0.9992
44 Ca	203.34	P	10.87	5.35	1.0000
45 Sc	792491.63	M	76360.00	9.64	0.0000
45 Sc	44217.52	P	385.60	0.87	0.0000
45 Sc	1568638.00	A	28020.00	1.79	0.0000
47 Ti	7.56	P	2.78	36.74	1.0000
51 V	747.59	P	33.13	4.43	1.0000
52 Cr	324.01	P	7.42	2.29	1.0000
55 Mn	281.79	P	37.75	13.40	0.9999
56 Fe	7630.99	P	214.40	2.81	0.9970
59 Co	509.35	P	10.07	1.98	1.0000
60 Ni	825.37	P	24.70	2.99	1.0000
63 Cu	1238.29	P	35.94	2.90	1.0000
65 Cu	605.36	P	21.46	3.55	1.0000
66 Zn	636.02	P	10.07	1.58	0.9999
72 Ge	145705.30	P	1657.00	1.14	0.0000
72 Ge	15243.37	P	129.50	0.85	0.0000
72 Ge	249395.30	P	2762.00	1.11	0.0000
75 As	30.00	P	4.98	16.59	1.0000
78 Se	23.67	P	1.67	7.04	1.0000
78 Se	2.00	P	0.33	16.67	0.9999
88 Sr	74.45	P	10.18	13.67	0.9999
88 Sr	2012.44	P	117.50	5.84	1.0000
95 Mo	621.15	P	45.51	7.33	0.9999
106 (Cd)	216.68	P	17.64	8.14	0.9995
107 Ag	400.02	P	46.67	11.67	1.0000
108 (Cd)	208.90	P	22.69	10.86	0.9997
111 Cd	101.25	P	38.11	37.64	1.0000
115 In	1332563.00	A	20950.00	1.57	0.0000
118 Sn	2545.88	P	98.31	3.86	1.0000
121 Sb	1244.55	P	82.63	6.64	0.9998
137 Ba	327.79	P	21.43	6.54	1.0000
159 Tb	1832147.00	A	24650.00	1.35	0.0000
165 Ho	1844451.00	A	26430.00	1.43	0.0000
205 Tl	1429.02	P	57.39	4.02	1.0000
206 (Pb)	1145.65	P	10.18	0.89	1.0000
207 (Pb)	987.85	P	64.76	6.56	0.9999
208 Pb	4498.25	P	160.20	3.56	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4406456.00	0.73	4123711.30	106.9	70 -	120	
45 Sc	792491.56	9.64	815783.81	97.1	70 -	120	
45 Sc	44217.52	0.87	44324.85	99.8	70 -	120	
45 Sc	1568638.10	1.79	1557452.00	100.7	70 -	120	
72 Ge	145705.25	1.14	146964.53	99.1	70 -	120	
72 Ge	15243.37	0.85	16052.38	95.0	70 -	120	
72 Ge	249395.31	1.11	255474.33	97.6	70 -	120	
115 In	1332562.60	1.57	1379278.80	96.6	70 -	120	
159 Tb	1832146.80	1.35	1872580.40	97.8	70 -	120	
165 Ho	1844450.90	1.43	1878025.40	98.2	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\007CALS.D\007CALS.D#
Date Acquired: Aug 13 2011 11:49 am
Operator: SDM
Sample Name: 110808 Standard 2
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 11:46 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4438828.00	A	57210.00	1.29	0.0000
7 (Li)	310415.31	P	1350.00	0.43	-0.6037
9 Be	14081.45	P	251.50	1.79	1.0000
11 B	12333.25	P	160.50	1.30	1.0000
23 Na	24731.26	P	474.40	1.92	0.9999
24 Mg	15626.52	P	626.30	4.01	1.0000
27 Al	2236.00	P	141.00	6.31	1.0000
39 K	14628.81	P	114.90	0.79	0.9993
44 Ca	349.75	P	23.58	6.74	1.0000
45 Sc	814714.31	P	8831.00	1.08	0.0000
45 Sc	44125.82	P	577.60	1.31	0.0000
45 Sc	1560274.00	A	13610.00	0.87	0.0000
47 Ti	45.33	P	6.93	15.28	1.0000
51 V	1849.03	P	96.80	5.24	1.0000
52 Cr	1823.70	P	43.14	2.37	1.0000
55 Mn	848.04	P	69.30	8.17	0.9999
56 Fe	27432.67	P	263.80	0.96	0.9970
59 Co	2993.24	P	84.73	2.83	1.0000
60 Ni	988.49	P	47.04	4.76	1.0000
63 Cu	2489.58	P	69.84	2.81	1.0000
65 Cu	1248.51	P	28.17	2.26	1.0000
66 Zn	430.68	P	21.95	5.10	0.9998
72 Ge	141829.91	P	1065.00	0.75	0.0000
72 Ge	15292.67	P	241.60	1.58	0.0000
72 Ge	248708.59	P	1476.00	0.59	0.0000
75 As	123.22	P	8.86	7.19	1.0000
78 Se	194.11	P	7.18	3.70	1.0000
78 Se	7.78	P	1.39	17.85	1.0000
88 Sr	462.25	P	57.39	12.42	0.9999
88 Sr	15508.91	P	193.90	1.25	1.0000
95 Mo	2791.49	P	33.56	1.20	0.9999
106 (Cd)	278.90	P	27.15	9.73	0.9993
107 Ag	3417.20	P	123.50	3.61	1.0000
108 (Cd)	234.45	P	31.51	13.44	0.9992
111 Cd	1430.47	P	71.59	5.00	1.0000
115 In	1340580.00	A	15570.00	1.16	0.0000
118 Sn	5442.39	P	309.40	5.69	1.0000
121 Sb	4687.62	P	286.50	6.11	0.9998
137 Ba	1983.55	P	48.43	2.44	1.0000
159 Tb	1834167.00	A	32050.00	1.75	0.0000
165 Ho	1823517.00	A	18280.00	1.00	0.0000
205 Tl	12889.00	P	150.10	1.16	1.0000
206 (Pb)	4849.95	P	117.70	2.43	1.0000
207 (Pb)	4298.64	P	10.72	0.25	0.9999
208 Pb	19355.10	P	242.00	1.25	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4438828.00	1.29	4123711.30	107.6	70 -	120	
45 Sc	814714.25	1.08	815783.81	99.9	70 -	120	
45 Sc	44125.82	1.31	44324.85	99.6	70 -	120	
45 Sc	1560273.80	0.87	1557452.00	100.2	70 -	120	
72 Ge	141829.94	0.75	146964.53	96.5	70 -	120	
72 Ge	15292.67	1.58	16052.38	95.3	70 -	120	
72 Ge	248708.64	0.59	255474.33	97.4	70 -	120	
115 In	1340579.50	1.16	1379278.80	97.2	70 -	120	
159 Tb	1834167.40	1.75	1872580.40	97.9	70 -	120	
165 Ho	1823516.90	1.00	1878025.40	97.1	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\008CALS.D\008CALS.D#
Date Acquired: Aug 13 2011 11:55 am
Operator: SDM
Sample Name: 110808 Standard 3
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 11:53 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4362532.00	A	29470.00	0.68	0.0000
7 (Li)	305280.19	P	3032.00	0.99	-0.9109
9 Be	629690.38	M	62620.00	9.94	1.0000
11 B	403463.41	P	3704.00	0.92	1.0000
23 Na	659501.13	A	11570.00	1.75	0.9999
24 Mg	761001.31	P	6275.00	0.82	1.0000
27 Al	100593.10	P	1241.00	1.23	1.0000
39 K	144313.50	P	2296.00	1.59	0.9998
44 Ca	15383.99	P	124.50	0.81	1.0000
45 Sc	798199.19	P	13640.00	1.71	0.0000
45 Sc	44295.96	P	588.80	1.33	0.0000
45 Sc	1569353.00	A	33080.00	2.11	0.0000
47 Ti	2124.18	P	40.08	1.89	1.0000
51 V	62841.98	P	1221.00	1.94	1.0000
52 Cr	80071.36	P	1149.00	1.44	1.0000
55 Mn	36732.51	P	631.90	1.72	0.9999
56 Fe	1145451.00	A	10300.00	0.90	0.9970
59 Co	126662.10	P	1103.00	0.87	1.0000
60 Ni	35963.75	P	525.40	1.46	1.0000
63 Cu	93811.75	P	1227.00	1.31	1.0000
65 Cu	45272.88	P	593.80	1.31	1.0000
66 Zn	10697.83	P	39.18	0.37	0.9998
72 Ge	140240.30	P	2548.80	1.82	0.0000
72 Ge	15470.61	P	141.60	0.92	0.0000
72 Ge	247863.59	P	866.20	0.35	0.0000
75 As	4996.10	P	40.79	0.82	1.0000
78 Se	9326.71	P	116.80	1.25	1.0000
78 Se	346.78	P	15.95	4.60	1.0000
88 Sr	23069.33	P	508.20	2.20	0.9999
88 Sr	699725.69	P	2595.00	0.37	1.0000
95 Mo	128652.80	P	1213.00	0.94	0.9999
106 (Cd)	6604.01	P	91.82	1.39	0.9993
107 Ag	168339.00	P	286.50	0.17	1.0000
108 (Cd)	4749.86	P	17.11	0.36	0.9992
111 Cd	68743.16	P	929.00	1.35	1.0000
115 In	1326394.00	A	14010.00	1.06	0.0000
118 Sn	203449.41	P	2243.00	1.10	1.0000
121 Sb	239747.20	P	760.40	0.32	0.9998
137 Ba	86635.21	P	586.00	0.68	1.0000
159 Tb	1803988.00	A	7523.00	0.42	0.0000
165 Ho	1824806.00	A	21800.00	1.19	0.0000
205 Tl	583027.50	P	5494.00	0.94	1.0000
206 (Pb)	198537.50	P	3093.00	1.56	0.9999
207 (Pb)	174260.80	P	1125.00	0.65	0.9999
208 Pb	793038.38	P	2595.00	0.33	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4362532.50	0.68	4123711.30	105.8	70 -	120	
45 Sc	798199.19	1.71	815783.81	97.8	70 -	120	
45 Sc	44295.96	1.33	44324.85	99.9	70 -	120	
45 Sc	1569352.90	2.11	1557452.00	100.8	70 -	120	
72 Ge	140260.30	1.82	146964.53	95.4	70 -	120	
72 Ge	15470.61	0.92	16052.38	96.4	70 -	120	
72 Ge	247863.58	0.35	255474.33	97.0	70 -	120	
115 In	1326394.10	1.06	1379278.80	96.2	70 -	120	
159 Tb	1803987.90	0.42	1872580.40	96.3	70 -	120	
165 Ho	1824806.50	1.19	1878025.40	97.2	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

--- ;Element Failures --- :Max. Number of Failures Allowed
0 ;ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\009CALS.D\009CALS.D#
Date Acquired: Aug 13 2011 12:01 pm
Operator: SDM
Sample Name: 110808 Standard 4
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 11:59 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4358081.00	A	44230.00	1.01	0.0000
7 (Li)	307367.19	P	2203.00	0.72	-0.8757
9 Be	1127893.00	A	11590.00	1.03	0.9998
11 B	709156.00	A	6898.00	0.97	0.9958
23 Na	1344626.00	A	27250.00	2.03	0.9962
24 Mg	1322840.00	A	18130.00	1.37	1.0000
27 Al	202246.59	P	4557.00	2.25	0.9999
39 K	283355.31	P	6598.00	2.33	0.9996
44 Ca	31044.31	P	915.10	2.95	0.9998
45 Sc	787491.50	M	69130.00	8.78	0.0000
45 Sc	45574.69	P	1013.00	2.22	0.0000
45 Sc	1587011.00	A	22730.00	1.43	0.0000
47 Ti	4230.89	P	49.45	1.17	0.9988
51 V	127757.50	P	2394.00	1.87	1.0000
52 Cr	163559.91	P	2758.00	1.69	0.9999
55 Mn	74167.84	P	1067.00	1.44	0.9994
56 Fe	2272242.00	A	43830.00	1.93	0.9981
59 Co	254274.00	P	3532.00	1.39	0.9996
60 Ni	72667.58	P	738.70	1.02	0.9996
63 Cu	188892.59	P	2501.00	1.32	0.9999
65 Cu	90738.08	P	1170.00	1.29	0.9999
66 Zn	21215.25	P	235.30	1.11	0.9993
72 Ge	146103.00	P	856.80	0.59	0.0000
72 Ge	15935.61	P	329.50	2.07	0.0000
72 Ge	251738.00	P	906.30	0.36	0.0000
75 As	10265.56	P	168.80	1.64	1.0000
78 Se	19324.86	P	139.10	0.72	0.9953
78 Se	719.35	P	25.26	3.51	0.9978
88 Sr	47321.90	P	1247.00	2.64	0.9998
88 Sr	1285159.00	A	7693.00	0.60	0.9998
98 Mo	255110.20	P	1285.00	0.50	0.9986
106 (Cd)	12737.28	P	252.70	1.98	0.8827
107 Ag	329772.50	P	2720.00	0.82	0.9970
108 (Cd)	9373.44	P	123.40	1.32	0.8869
111 Cd	136386.20	P	1084.00	0.79	0.9980
115 In	1320598.00	A	2441.00	0.18	0.0000
118 Sn	398157.69	P	6138.00	1.54	0.9973
121 Sb	484263.81	P	4828.00	1.00	0.9969
137 Ba	171190.09	P	1546.00	0.32	0.9998
159 Tb	1786771.00	A	21100.00	1.18	0.0000
165 Ho	1777720.00	A	30660.00	1.72	0.0000
205 Tl	1113679.00	A	17870.00	1.60	0.9993
206 (Pb)	373179.41	P	3546.00	0.95	0.8977
207 (Pb)	330399.69	P	5587.00	1.69	0.8986
208 Pb	1507512.00	P	13600.00	0.90	0.9992

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4358080.50	1.01	4123711.30	105.7	70 -	120	
45 Sc	787491.50	8.78	815783.81	96.5	70 -	120	
45 Sc	45574.69	2.22	44324.86	102.8	70 -	120	
45 Sc	1587010.90	1.43	1557452.00	101.9	70 -	120	
72 Ge	146103.03	0.59	146964.53	99.4	70 -	120	
72 Ge	15935.61	2.07	16052.38	99.3	70 -	120	
72 Ge	251738.05	0.36	255474.33	98.5	70 -	120	
115 In	1320598.40	0.18	1379278.80	95.7	70 -	120	
159 Tb	1786771.50	1.18	1872580.40	95.4	70 -	120	
165 Ho	1777719.60	1.72	1878025.40	94.7	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

QCS QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\010_QCS.D\010_QCS.D#
Date Acquired: Aug 13 2011 12:07 pm
Operator: SDM
Sample Name: ICV 110808
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 12:05 pm
Sample Type: QCS
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
7 (Li)	-------- ug/l	--------	100.00	90 - 110	
9 Be	93.98 ug/l	2.02	100.00	90 - 110	
11 B	92.53 ug/l	1.89	100.00	90 - 110	
23 Na	2500.00 ug/l	1.30	2500.00	90 - 110	
24 Mg	2796.00 ug/l	0.68	2500.00	90 - 110	Fail
27 Al	2459.00 ug/l	0.45	2500.00	90 - 110	
39 K	2469.00 ug/l	0.60	2500.00	90 - 110	
44 Ca	2708.00 ug/l	1.77	2500.00	90 - 110	
47 Ti	92.23 ug/l	1.86	100.00	90 - 110	
51 V	96.75 ug/l	0.71	100.00	90 - 110	
52 Cr	97.70 ug/l	0.51	100.00	90 - 110	
55 Mn	97.48 ug/l	0.72	100.00	90 - 110	
56 Fe	2443.00 ug/l	1.10	2500.00	90 - 110	
59 Co	97.75 ug/l	1.03	100.00	90 - 110	
60 Ni	97.33 ug/l	0.38	100.00	90 - 110	
63 Cu	96.98 ug/l	1.53	100.00	90 - 110	
65 Cu	97.39 ug/l	2.04	100.00	90 - 110	
66 Zn	95.34 ug/l	0.87	100.00	90 - 110	
75 As	95.65 ug/l	1.85	100.00	90 - 110	
78 Se	96.95 ug/l	0.20	100.00	90 - 110	
78 Se	97.13 ug/l	0.67	100.00	90 - 110	
88 Sr	96.32 ug/l	1.93	100.00	90 - 110	
88 Sr	95.67 ug/l	0.52	100.00	90 - 110	
95 Mo	91.92 ug/l	0.94	100.00	90 - 110	
106 (Cd)	-------- ug/l	--------	100.00	90 - 110	
107 Ag	46.04 ug/l	0.49	50.00	90 - 110	
108 (Cd)	-------- ug/l	--------	100.00	90 - 110	
111 Cd	97.03 ug/l	0.64	100.00	90 - 110	
118 Sn	43.21 ug/l	2.35	50.00	90 - 110	Fail
121 Sb	97.19 ug/l	0.69	100.00	90 - 110	
137 Ba	96.62 ug/l	0.77	100.00	90 - 110	
205 Tl	95.15 ug/l	0.30	100.00	90 - 110	
206 (Pb)	-------- ug/l	--------	100.00	90 - 110	
207 (Pb)	-------- ug/l	--------	100.00	90 - 110	
208 Pb	95.89 ug/l	0.70	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4343006.50	0.26	4123711.30	105.3	70 - 120	
45 Sc	791658.25	10.12	815783.81	97.0	70 - 120	
45 Sc	46211.38	1.17	44324.85	104.3	70 - 120	
45 Sc	1596224.40	1.01	1557452.00	102.5	70 - 120	
72 Ge	147215.00	0.63	146964.53	100.2	70 - 120	
72 Ge	16261.88	1.31	16052.38	101.3	70 - 120	
72 Ge	254788.63	0.41	255474.33	99.7	70 - 120	
115 In	1332318.90	0.54	1379278.80	96.6	70 - 120	
159 Tb	1781472.40	0.66	1872580.40	95.1	70 - 120	
165 Ho	1763123.40	0.08	1878025.40	93.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\012_CCB.D\012_CCB.D#
Date Acquired: Aug 13 2011 12:19 pm
Operator: SDM
Sample Name: ICB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 12:05 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#VALUE!	
9 Be	-0.01 ug/l	15.78	0.12	
11 B	0.20 ug/l	8.33	15.00	
23 Na	-4.40 ug/l	16.82	77.10	
24 Mg	-0.35 ug/l	18.70	7.50	
27 Al	-0.25 ug/l	78.16	3.96	
39 K	3.48 ug/l	16.90	19.20	
44 Ca	-1.32 ug/l	246.09	90.00	
47 Ti	0.04 ug/l	42.62	0.78	
51 V	-0.01 ug/l	60.03	0.21	
52 Cr	0.00 ug/l	783.49	0.12	
55 Mn	-0.07 ug/l	11.44	0.18	
56 Fe	0.04 ug/l	46.05	40.00	
59 Co	-0.04 ug/l	8.89	0.09	
60 Ni	-0.03 ug/l	39.61	0.48	
63 Cu	-0.06 ug/l	16.12	0.39	
65 Cu	-0.05 ug/l	37.93	0.39	
66 Zn	-0.06 ug/l	47.25	6.90	
75 As	0.01 ug/l	48.47	0.27	
78 Se	0.04 ug/l	22.52	0.30	
78 Se	0.03 ug/l	66.26	0.30	
88 Sr	-0.01 ug/l	212.38	0.03	
88 Sr	0.00 ug/l	59.82	0.03	
95 Mo	0.10 ug/l	27.53	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	0.00 ug/l	183.65	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	0.01 ug/l	185.46	0.06	
118 Sn	-0.63 ug/l	8.95	0.30	
121 Sb	0.04 ug/l	12.28	0.03	Fail
137 Ba	0.01 ug/l	63.24	0.12	
205 Tl	0.01 ug/l	3.79	0.03	
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.06 ug/l	5.02	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4037774.80	1.35	4123711.30	97.9	70 - 120	
45 Sc	820643.31	0.88	815783.81	100.6	70 - 120	
45 Sc	46340.03	1.50	44324.85	104.5	70 - 120	
45 Sc	1541004.00	0.98	1557452.00	98.9	70 - 120	
72 Ge	150049.11	0.32	146964.53	102.1	70 - 120	
72 Ge	16984.56	1.76	16052.38	105.8	70 - 120	
72 Ge	256103.64	0.69	255474.33	100.2	70 - 120	
115 In	1370994.40	1.47	1379278.80	99.4	70 - 120	
159 Tb	1781708.40	0.58	1872580.40	95.1	70 - 120	
165 Ho	1779989.60	0.43	1878025.40	94.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\013_CCV.D\013_CCV.D#
Date Acquired: Aug 13 2011 12:25 pm
Operator: SDM
Sample Name: CCV 110808
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 12:05 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)		Flag
7 (Li)	--------	ug/l	--------	50.00	90 -	110	
9 Be	52.05	ug/l	9.75	50.00	90 -	110	
11 B	54.18	ug/l	0.13	50.00	90 -	110	
23 Na	1211.00	ug/l	1.35	1250.00	90 -	110	
24 Mg	2665.00	ug/l	8.18	2500.00	90 -	110	
27 Al	996.30	ug/l	1.40	1000.00	90 -	110	
39 K	1008.00	ug/l	1.45	1000.00	90 -	110	
44 Ca	2485.00	ug/l	1.33	2500.00	90 -	110	
47 Ti	48.51	ug/l	5.51	50.00	90 -	110	
51 V	49.54	ug/l	0.87	50.00	90 -	110	
52 Cr	49.73	ug/l	1.70	50.00	90 -	110	
55 Mn	49.00	ug/l	1.81	50.00	90 -	110	
56 Fe	1003.00	ug/l	1.86	1000.00	90 -	110	
59 Co	49.59	ug/l	2.10	50.00	90 -	110	
60 Ni	49.61	ug/l	1.06	50.00	90 -	110	
63 Cu	50.15	ug/l	1.62	50.00	90 -	110	
65 Cu	50.31	ug/l	2.56	50.00	90 -	110	
66 Zn	50.62	ug/l	2.18	50.00	90 -	110	
75 As	50.44	ug/l	1.31	50.00	90 -	110	
78 Se	49.82	ug/l	0.51	50.00	90 -	110	
78 Se	49.69	ug/l	3.16	50.00	90 -	110	
88 Sr	50.01	ug/l	1.52	50.00	90 -	110	
88 Sr	53.91	ug/l	0.79	50.00	90 -	110	
95 Mo	50.60	ug/l	0.69	50.00	90 -	110	
106 (Cd)	--------	ug/l	--------	50.00	90 -	110	
107 Ag	25.27	ug/l	1.17	25.00	90 -	110	
108 (Cd)	--------	ug/l	--------	50.00	90 -	110	
111 Cd	49.70	ug/l	0.79	50.00	90 -	110	
118 Sn	50.20	ug/l	0.79	50.00	90 -	110	
121 Sb	49.94	ug/l	0.75	50.00	90 -	110	
137 Ba	49.82	ug/l	1.07	50.00	90 -	110	
205 Tl	49.26	ug/l	2.48	50.00	90 -	110	
206 (Pb)	--------	ug/l	--------	50.00	90 -	110	
207 (Pb)	--------	ug/l	--------	50.00	90 -	110	
208 Pb	49.67	ug/l	1.10	50.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4310326.00	1.77	4123711.30	104.5	70 -	120	
45 Sc	821113.06	1.12	815783.81	100.7	70 -	120	
45 Sc	46207.45	1.76	44324.85	104.2	70 -	120	
45 Sc	1574615.80	1.06	1557452.00	101.1	70 -	120	
72 Ge	143990.39	0.94	146964.53	98.0	70 -	120	
72 Ge	15973.04	1.36	16052.38	99.5	70 -	120	
72 Ge	249719.22	0.22	255474.33	97.7	70 -	120	
115 In	1307257.00	0.35	1379278.80	94.8	70 -	120	
159 Tb	1738084.00	1.55	1872580.40	92.8	70 -	120	
165 Ho	1731611.10	1.13	1878025.40	92.2	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\015_CCB.D\015_CCB.D#
Date Acquired: Aug 13 2011 12:38 pm
Operator: SDM
Sample Name: CCB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 12:05 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#VALUE!	
9 Be	-0.02 ug/l	13.24	0.12	
11 B	0.12 ug/l	26.12	15.00	
23 Na	-5.10 ug/l	25.39	77.10	
24 Mg	-0.37 ug/l	24.39	7.50	
27 Al	0.03 ug/l	422.57	3.96	
39 K	3.21 ug/l	91.21	19.20	
44 Ca	-2.28 ug/l	125.81	90.00	
47 Ti	0.00 ug/l	0.00	0.78	
51 V	-0.01 ug/l	38.75	0.21	
52 Cr	0.00 ug/l	208.09	0.12	
55 Mn	-0.04 ug/l	88.50	0.18	
56 Fe	0.04 ug/l	65.85	40.80	
59 Co	-0.04 ug/l	2.78	0.09	
60 Ni	-0.01 ug/l	7.59	0.48	
63 Cu	-0.02 ug/l	28.28	0.39	
65 Cu	-0.03 ug/l	97.19	0.39	
66 Zn	-0.09 ug/l	93.26	6.90	
75 As	0.00 ug/l	446.68	0.27	
78 Se	0.02 ug/l	24.32	0.30	
78 Se	0.07 ug/l	78.23	0.30	
88 Sr	-0.02 ug/l	70.06	0.03	
88 Sr	0.00 ug/l	23.57	0.03	
95 Mo	0.06 ug/l	29.09	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	0.00 ug/l	162.47	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	0.01 ug/l	98.84	0.06	
118 Sn	-0.48 ug/l	63.96	0.30	
121 Sb	0.09 ug/l	10.02	0.03	Fail
137 Ba	0.00 ug/l	136.56	0.12	
205 Tl	0.00 ug/l	72.19	0.03	
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.07 ug/l	8.09	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4092046.80	0.47	4123711.30	99.2	70 - 120	
45 Sc	802550.88	0.12	815783.81	98.4	70 - 120	
45 Sc	45672.70	0.82	44324.85	103.0	70 - 120	
45 Sc	1546802.60	0.67	1557452.00	99.3	70 - 120	
72 Ge	146618.64	1.02	146964.53	99.8	70 - 120	
72 Ge	16576.68	0.71	16052.38	103.3	70 - 120	
72 Ge	255231.38	0.85	255474.33	99.9	70 - 120	
115 In	1356951.00	0.92	1379278.80	98.4	70 - 120	
159 Tb	1782467.00	1.49	1872580.40	95.2	70 - 120	
165 Ho	1775191.10	2.28	1878025.40	94.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\016SMPL.D\016SMPL.D#
Date Acquired: Aug 13 2011 12:44 pm
Operator: SDM
Sample Name: ICSA 110808
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 12:05 pm
Sample Type: Sample
Prep Dil Factor: 1.00
Total Dil Factor: 1.00

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	-0.02 ug/l	-0.02	6.02	1000	
11 B	1.25 ug/l	1.25	2.32	1000	
23 Na	94310.00 ug/l	94310.00	0.37	25000	>Cal
24 Mg	88180.00 ug/l	88180.00	0.32	50000	>Cal
27 Al	80360.00 ug/l	80360.00	0.89	20000	>Cal
39 K	81430.00 ug/l	81430.00	0.46	20000	>Cal
44 Ca	91410.00 ug/l	91410.00	0.42	50000	>Cal
47 Ti	1899.00 ug/l	1899.00	0.29	1000	>Cal
51 V	0.49 ug/l	0.49	4.26	1000	
52 Cr	0.78 ug/l	0.78	3.08	1000	
55 Mn	4.83 ug/l	4.83	0.65	1000	
56 Fe	87780.00 ug/l	87780.00	0.30	20000	>Cal
59 Co	1.35 ug/l	1.35	0.83	1000	
60 Ni	2.00 ug/l	2.00	1.43	1000	
63 Cu	0.98 ug/l	0.98	3.74	1000	
65 Cu	0.99 ug/l	0.99	3.56	1000	
66 Zn	1.17 ug/l	1.17	10.81	1000	
75 As	0.38 ug/l	0.38	1.69	1000	
78 Se	0.14 ug/l	0.14	23.67	1000	
78 Se	0.30 ug/l	0.30	40.63	1000	
88 Sr	1.25 ug/l	1.25	9.10	1000	
88 Sr	1.27 ug/l	1.27	0.90	1000	
95 Mo	1568.00 ug/l	1568.00	1.04	1000	>Cal
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	0.11 ug/l	0.11	6.57	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.82 ug/l	0.82	20.08	1000	
118 Sn	-0.41 ug/l	-0.41	3.85	1000	
121 Sb	0.95 ug/l	0.95	2.73	1000	
137 Ba	2.94 ug/l	2.94	2.28	1000	
205 Tl	0.37 ug/l	0.37	2.48	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	2.30 ug/l	2.30	1.08	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4366706.50	1.54	4123711.30	105.9	70 - 120	
45 Sc	822008.06	1.24	815783.81	100.8	70 - 120	
45 Sc	47933.27	2.70	44324.85	108.1	70 - 120	
45 Sc	1662452.60	0.71	1557452.00	106.7	70 - 120	
72 Ge	138886.42	1.07	146964.53	94.5	70 - 120	
72 Ge	16249.99	2.37	16052.38	101.2	70 - 120	
72 Ge	261652.16	0.25	255474.33	102.4	70 - 120	
115 In	1191111.60	0.41	1379278.80	86.4	70 - 120	
159 Tb	1581964.60	1.24	1872580.40	84.5	70 - 120	
165 Ho	1565178.80	0.56	1878025.40	83.3	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

8 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\017ICSB.D\017ICSB.D#
Date Acquired: Aug 13 2011 12:50 pm
Acq. Method: 62A0813.M
Operator: SDM
Sample Name: ICSAB 110808
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal. Update: Aug 13 2011 12:05 pm
Sample Type: ICSAB
Dilution Factor: 1.00

Data Results:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
7 (Li)	---	3	--------	--------	---		-	
9 Be	45	3	234.00	0.89	250	93.6	80 - 120	
11 B	45	3	1.30	1.47	---		-	
23 Na	45	2	99320.00	0.68	---		-	
24 Mg	45	2	91170.00	0.53	---		-	
27 Al	45	2	80080.00	0.50	---		-	
39 K	45	2	81870.00	0.42	---		-	
44 Ca	45	2	91140.00	0.45	---		-	
47 Ti	45	2	1877.00	1.50	2000	93.9	80 - 120	
51 V	45	2	265.60	1.38	250	106.2	80 - 120	
52 Cr	45	2	254.40	0.94	250	101.8	80 - 120	
55 Mn	45	2	249.00	0.97	250	99.6	80 - 120	
56 Fe	45	2	87660.00	1.20	---		-	
59 Co	45	2	243.90	1.17	250	97.6	80 - 120	
60 Ni	45	2	470.40	0.61	500	94.1	80 - 120	
63 Cu	72	2	242.00	0.49	250	96.8	80 - 120	
65 Cu	72	2	241.20	1.11	250	96.5	80 - 120	
66 Zn	72	2	449.50	0.88	500	89.9	80 - 120	
75 As	72	2	261.20	0.44	250	104.5	80 - 120	
78 Se	72	1	261.20	0.42	250	104.5	80 - 120	
78 Se	72	2	242.10	2.65	250	98.8	80 - 120	
88 Sr	72	2	1.26	5.41	---		-	
88 Sr	72	3	1.36	1.08	---		-	
95 Mo	72	3	1789.00	1.04	2000	89.5	80 - 120	
106 (Cd)	---	3	--------	--------	---		-	
107 Ag	115	3	498.30	1.99	500	99.7	80 - 120	
108 (Cd)	---	3	--------	--------	---		-	
111 Cd	115	3	506.70	0.63	500	101.3	80 - 120	
118 Sn	115	3	-0.37	9.17	---		-	
121 Sb	115	3	238.30	1.13	250	95.3	80 - 120	
137 Ba	115	3	273.00	1.54	250	109.2	80 - 120	
205 Tl	159	3	233.00	0.98	250	93.2	80 - 120	
206 (Pb)	---	3	--------	--------	---		-	
207 (Pb)	---	3	--------	--------	---		-	
208 Pb	159	3	463.00	1.25	500	92.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	4521850	0.57	4123711	109.7	70 - 120	
45 Sc	1	792083	1.47	815784	97.1	70 - 120	
45 Sc	2	48179	3.22	44325	108.7	70 - 120	
45 Sc	3	1662164	0.62	1557452	106.7	70 - 120	
72 Ge	1	152659	1.90	146965	103.9	70 - 120	
72 Ge	2	16114	2.28	16052	100.4	70 - 120	
72 Ge	3	254833	0.79	255474	99.7	70 - 120	
115 In	3	1182590	1.26	1379279	85.7	70 - 120	
159 Tb	3	1565340	0.15	1872580	83.6	70 - 120	
165 Ho	3	1540562	0.60	1878025	82.0	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
Tune File# 2 c:\icpchem\1\7500\he.u
Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\005CALB.D\005CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\028_CCV.D\028_CCV.D#
Date Acquired: Aug 13 2011 01:56 pm
Operator: SDM
Sample Name: CCV 110808
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	Expected	QC Range(%)		Flag
7 (Li)	--------	ug/l	--------	50.00	90 -	110	
9 Be	53.06	ug/l	7.50	50.00	90 -	110	
11 B	59.42	ug/l	1.38	50.00	90 -	110	Fail
23 Na	1358.00	ug/l	0.53	1250.00	90 -	110	
24 Mg	2819.00	ug/l	9.05	2500.00	90 -	110	Fail
27 Al	967.40	ug/l	0.67	1000.00	90 -	110	
39 K	1014.00	ug/l	1.43	1000.00	90 -	110	
44 Ca	2457.00	ug/l	2.74	2500.00	90 -	110	
47 Ti	49.61	ug/l	1.84	50.00	90 -	110	
51 V	52.33	ug/l	1.19	50.00	90 -	110	
52 Cr	51.37	ug/l	1.38	50.00	90 -	110	
55 Mn	47.60	ug/l	1.01	50.00	90 -	110	
56 Fe	977.40	ug/l	1.22	1000.00	90 -	110	
59 Co	51.87	ug/l	0.82	50.00	90 -	110	
60 Ni	51.61	ug/l	0.92	50.00	90 -	110	
63 Cu	51.95	ug/l	0.88	50.00	90 -	110	
65 Cu	51.77	ug/l	1.22	50.00	90 -	110	
66 Zn	48.75	ug/l	1.10	50.00	90 -	110	
75 As	49.87	ug/l	1.45	50.00	90 -	110	
78 Se	49.45	ug/l	0.50	50.00	90 -	110	
78 Se	45.15	ug/l	1.04	50.00	90 -	110	
88 Sr	45.61	ug/l	0.11	50.00	90 -	110	
88 Sr	52.59	ug/l	0.29	50.00	90 -	110	
95 Mo	45.45	ug/l	0.60	50.00	90 -	110	
106 (Cd)	--------	ug/l	--------	50.00	90 -	110	
107 Ag	23.96	ug/l	0.19	25.00	90 -	110	
108 (Cd)	--------	ug/l	--------	50.00	90 -	110	
111 Cd	49.61	ug/l	0.03	50.00	90 -	110	
118 Sn	50.70	ug/l	1.33	50.00	90 -	110	
121 Sb	49.44	ug/l	1.47	50.00	90 -	110	
137 Ba	49.92	ug/l	1.45	50.00	90 -	110	
205 Tl	48.28	ug/l	0.80	50.00	90 -	110	
206 (Pb)	--------	ug/l	--------	50.00	90 -	110	
207 (Pb)	--------	ug/l	--------	50.00	90 -	110	
208 Pb	47.68	ug/l	0.16	50.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4900406.00	0.78	5314145.50	92.2	70 -	120	
45 Sc	829820.94	2.98	854699.00	97.1	70 -	120	
45 Sc	43574.79	2.62	51738.40	84.2	70 -	120	
45 Sc	1570602.30	1.59	1799310.60	87.3	70 -	120	
72 Ge	167206.31	2.15	178160.53	93.9	70 -	120	
72 Ge	15070.22	1.36	18616.22	81.0	70 -	120	
72 Ge	244141.00	0.75	275015.22	88.8	70 -	120	
115 In	1242832.30	1.24	1386546.60	89.6	70 -	120	
159 Tb	1662270.90	0.42	1710816.90	97.2	70 -	120	
165 Ho	1669342.30	0.57	1691823.60	98.7	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\030_CCB.D\030_CCB.D#
Date Acquired: Aug 13 2011 02:08 pm
Operator: SDM
Sample Name: CCB 110808
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#VALUE!	
9 Be	-0.28	ug/l	0.90	0.12	
11 B	0.60	ug/l	2.42	15.00	
23 Na	26.08	ug/l	2.13	77.10	
24 Mg	-23.14	ug/l	0.24	7.50	
27 Al	-19.13	ug/l	1.31	3.96	
39 K	-27.59	ug/l	16.76	19.20	
44 Ca	-12.79	ug/l	17.71	90.00	
47 Ti	-0.34	ug/l	18.91	0.78	
51 V	0.00	ug/l	345.02	0.21	
52 Cr	-0.05	ug/l	6.98	0.12	
55 Mn	1.02	ug/l	6.04	0.18	Fail
56 Fe	-10.85	ug/l	0.30	40.80	
59 Co	-0.25	ug/l	1.05	0.09	
60 Ni	-0.09	ug/l	17.70	0.48	
63 Cu	-0.11	ug/l	0.76	0.39	
65 Cu	-0.12	ug/l	19.91	0.39	
66 Zn	0.40	ug/l	22.94	6.90	
75 As	-0.14	ug/l	7.66	0.27	
78 Se	-0.30	ug/l	2.78	0.30	
78 Se	-0.58	ug/l	8.97	0.30	
88 Sr	0.00	ug/l	400.63	0.03	
88 Sr	0.01	ug/l	18.53	0.03	
95 Mo	-1.94	ug/l	0.27	0.21	
106 (Cd)	--------	ug/l	--------	#VALUE!	
107 Ag	-0.10	ug/l	4.13	0.09	
108 (Cd)	--------	ug/l	--------	#VALUE!	
111 Cd	-0.12	ug/l	6.12	0.06	
118 Sn	0.17	ug/l	33.58	0.30	
121 Sb	-0.76	ug/l	1.19	0.03	
137 Ba	-0.04	ug/l	22.64	0.12	
205 Tl	-0.05	ug/l	3.81	0.03	
206 (Pb)	--------	ug/l	--------	#VALUE!	
207 (Pb)	--------	ug/l	--------	#VALUE!	
208 Pb	-0.07	ug/l	6.64	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4825637.00	0.93	5314145.50	90.8	70 - 120	
45 Sc	860813.63	2.21	854699.00	100.7	70 - 120	
45 Sc	45294.98	2.32	51738.40	87.5	70 - 120	
45 Sc	1613105.80	2.20	1799310.60	89.7	70 - 120	
72 Ge	174671.42	2.64	178160.53	98.0	70 - 120	
72 Ge	16325.68	1.18	18616.22	87.7	70 - 120	
72 Ge	249420.36	1.23	275015.22	90.7	70 - 120	
115 In	1304708.50	1.33	1386546.60	94.1	70 - 120	
159 Tb	1714111.80	1.01	1710816.90	100.2	70 - 120	
165 Ho	1727446.90	1.18	1691823.60	102.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

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
6020	LEAD (PB) (DISSOL	0.22 U	0.5	0.22	0.11	ug/L	08/02/11	08/09/11	#602D-110802A-AY42275

Metals SC-Blank-REG MDLs
Printed: 8/15/2011 12:29:31 PM

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\083SMPL.D\083SMPL.D#
Date Acquired: Aug 9 2011 06:32 pm
Operator: SDM
Sample Name: 110802A-3015-BLK
Misc Info: 110802A-3015
Vial Number: 3501
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	-0.42 ug/l	-0.47	1.21	1000	
11 B	0.19 ug/l	0.21	29.52	1000	
23 Na	88.34 ug/l	98.15	5.18	25000	
24 Mg	-1.60 ug/l	-1.77	23.95	50000	
27 Al	-1.17 ug/l	-1.30	26.62	20000	
39 K	26.16 ug/l	29.06	11.74	20000	
44 Ca	-4.73 ug/l	-5.25	25.30	50000	
47 Ti	0.26 ug/l	0.29	63.48	1000	
51 V	3.29 ug/l	3.66	3.88	1000	
52 Cr	0.13 ug/l	0.15	10.70	1000	
55 Mn	0.04 ug/l	0.05	106.04	1000	
56 Fe	8.95 ug/l	9.94	2.82	20000	
59 Co	-0.50 ug/l	-0.56	0.67	1000	
60 Ni	0.06 ug/l	0.06	71.40	1000	
63 Cu	0.10 ug/l	0.11	34.41	1000	
65 Cu	0.09 ug/l	0.10	44.17	1000	
66 Zn	-0.01 ug/l	-0.01	1098.60	1000	
75 As	0.34 ug/l	0.38	14.82	1000	
78 Se	0.11 ug/l	0.12	12.12	1000	
78 Se	0.15 ug/l	0.17	97.54	1000	
88 Sr	-0.01 ug/l	-0.01	152.14	1000	
88 Sr	0.00 ug/l	-0.01	82.51	1000	
95 Mo	-0.09 ug/l	-0.10	27.85	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	0.00 ug/l	0.00	112.31	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.00 ug/l	0.00	366.84	1000	
118 Sn	0.26 ug/l	0.29	8.66	1000	
121 Sb	1.04 ug/l	1.16	6.53	1000	
137 Ba	0.03 ug/l	0.03	60.19	1000	
205 Tl	0.04 ug/l	0.05	13.16	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	-0.05 ug/l	-0.06	3.85	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2128268.30	0.25	3708234.80	57.4	70 - 120	IS Fai
45 Sc	567491.50	0.68	691573.50	82.1	70 - 120	
45 Sc	19895.77	1.40	26327.32	75.6	70 - 120	
45 Sc	885381.13	1.04	1216587.10	72.8	70 - 120	
72 Ge	99534.62	0.57	115561.68	86.1	70 - 120	
72 Ge	6993.61	0.72	9112.21	76.7	70 - 120	
72 Ge	142285.19	0.26	173511.03	82.0	70 - 120	
115 In	712596.69	1.47	881005.81	80.9	70 - 120	
159 Tb	821536.50	0.94	1017279.40	80.8	70 - 120	
165 Ho	801857.19	1.10	990563.56	80.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Fail

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
6020	LEAD (PB) (DISSOLVED)	250	250	100	80-120	8/2/2011	8/9/2011	#602D-110802A-AY42275

578

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H09j00.B\084SMPL.D\084SMPL.D#
Date Acquired: Aug 9 2011 06:39 pm
Operator: SDM
Sample Name: 110802A-3015-LCS
Misc Info: 110802A-3015
Vial Number: 3S02
Current Method: C:\ICPCHEM\1\METHODS\62A0809.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0809.C
Last Cal Update: Aug 09 2011 12:16 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	35.90 ug/l	39.88	0.75	1000	
11 B	177.10 ug/l	196.76	0.93	1000	
23 Na	22300.00 ug/l	24775.30	7.62	25000	
24 Mg	21640.00 ug/l	24042.04	8.94	50000	
27 Al	1854.00 ug/l	2059.79	7.94	20000	
39 K	4890.00 ug/l	5432.79	8.72	20000	
44 Ca	23970.00 ug/l	26630.67	8.58	50000	
47 Ti	239.90 ug/l	266.53	6.28	1000	
51 V	244.80 ug/l	271.97	7.36	1000	
52 Cr	235.50 ug/l	261.64	7.98	1000	
55 Mn	238.30 ug/l	264.75	8.19	1000	
56 Fe	978.80 ug/l	1087.45	8.32	20000	
59 Co	234.10 ug/l	260.09	8.25	1000	
60 Ni	223.10 ug/l	247.86	7.68	1000	
63 Cu	211.80 ug/l	235.31	7.16	1000	
65 Cu	210.90 ug/l	234.31	6.85	1000	
66 Zn	357.90 ug/l	397.63	7.53	1000	
75 As	196.80 ug/l	218.64	7.09	1000	
78 Se	162.50 ug/l	180.54	0.65	1000	
78 Se	166.90 ug/l	185.43	6.62	1000	
88 Sr	257.00 ug/l	285.53	6.91	1000	
88 Sr	251.50 ug/l	279.42	1.48	1000	
95 Mo	258.20 ug/l	286.86	0.99	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	87.47 ug/l	97.18	0.57	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	40.23 ug/l	44.70	1.76	1000	
118 Sn	236.10 ug/l	262.31	0.98	1000	
121 Sb	230.00 ug/l	255.53	1.32	1000	
137 Ba	241.60 ug/l	268.42	0.88	1000	
205 Tl	241.30 ug/l	268.08	0.99	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	225.00 ug/l	249.98	0.56	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2040454.50	1.13	3708234.80	55.0	70 - 120	IS Fai
45 Sc	541620.44	1.53	691573.50	78.3	70 - 120	
45 Sc	19610.67	7.34	26327.32	74.5	70 - 120	
45 Sc	923526.19	0.49	1216587.10	75.9	70 - 120	
72 Ge	87746.59	1.32	115561.68	75.9	70 - 120	
72 Ge	6761.65	6.68	9112.21	74.2	70 - 120	
72 Ge	133608.83	0.48	173511.03	77.0	70 - 120	
115 In	736537.06	0.77	881005.81	83.6	70 - 120	
159 Tb	866490.88	1.30	1017279.40	85.2	70 - 120	
165 Ho	852617.69	0.86	990563.56	86.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H09j00.B\022CALB.D\022CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Fail

Matrix Spike Recoveries

METALS

APPL ID: **110802W-42275 MS - 158181**

Sample ID: AY42275

Client ID: ES039

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
6020	LEAD (PB) (DISSOLVE	250	0.24	230	230	91.9	91.9	0.0	20	80-120	8/2/2011	8/13/2011	8/2/2011	8/13/2011	158181	AY42275

580

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\022SMPL.D\022SMPL.D#
Date Acquired: Aug 13 2011 01:20 pm
Operator: SDM
Sample Name: AY42275W23 MS
Misc Info: 110802A-3015
Vial Number: 3104
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	37.98 ug/l	42.20	0.47	1000	
11 B	334.20 ug/l	371.30	1.12	1000	
23 Na	72260.00 ug/l	80280.86	3.03	25000	>Cal
24 Mg	33810.00 ug/l	37562.91	1.97	50000	
27 Al	1753.00 ug/l	1947.58	1.92	20000	
39 K	5727.00 ug/l	6362.70	2.54	20000	
44 Ca	31830.00 ug/l	35363.13	2.48	50000	
47 Ti	220.10 ug/l	244.53	3.27	1000	
51 V	257.20 ug/l	285.75	1.16	1000	
52 Cr	231.50 ug/l	257.20	1.62	1000	
55 Mn	214.20 ug/l	237.98	1.57	1000	
56 Fe	882.30 ug/l	980.24	1.13	20000	
59 Co	223.60 ug/l	248.42	0.77	1000	
60 Ni	213.10 ug/l	236.75	1.30	1000	
63 Cu	223.40 ug/l	248.20	0.76	1000	
65 Cu	223.00 ug/l	247.75	0.63	1000	
66 Zn	381.10 ug/l	423.40	0.59	1000	
75 As	201.90 ug/l	224.31	1.54	1000	
78 Se	185.00 ug/l	205.54	0.25	1000	
78 Se	167.20 ug/l	185.76	3.89	1000	
88 Sr	297.70 ug/l	330.74	1.01	1000	
88 Sr	315.40 ug/l	350.41	0.19	1000	
95 Mo	225.80 ug/l	250.86	0.22	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	50.20 ug/l	55.77	0.78	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	41.93 ug/l	46.58	1.92	1000	
118 Sn	219.30 ug/l	243.64	3.65	1000	
121 Sb	210.70 ug/l	234.09	0.49	1000	
137 Ba	228.10 ug/l	253.42	0.57	1000	
205 Tl	209.70 ug/l	232.98	0.92	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	207.00 ug/l	229.98	1.37	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5092241.50	0.93	5314145.50	95.8	70 - 120	
45 Sc	984980.19	1.17	854699.00	115.2	70 - 120	
45 Sc	51147.63	2.98	51738.40	98.9	70 - 120	
45 Sc	2170686.30	0.92	1799310.60	120.6	70 - 120	IS Fai
72 Ge	167032.63	1.42	178160.53	93.8	70 - 120	
72 Ge	16920.09	2.91	18616.22	90.9	70 - 120	
72 Ge	256413.38	1.45	275015.22	93.2	70 - 120	
115 In	1333026.30	0.96	1386546.60	96.1	70 - 120	
159 Tb	1696439.50	1.97	1710816.90	99.2	70 - 120	
165 Ho	1703794.50	2.09	1691823.60	100.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\023SMPL.D\023SMPL.D#
Date Acquired: Aug 13 2011 01:26 pm
Operator: SDM
Sample Name: AY42275W23 MSD
Misc Info: 110802A-3015
Vial Number: 3105
Current Method: C:\ICPCHEM\1\METHODS\62A0813.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0813.C
Last Cal Update: Aug 13 2011 01:00 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	#VALUE!	--------	0	
9 Be	37.36 ug/l	41.51	0.22	1000	
11 B	331.60 ug/l	368.41	0.55	1000	
23 Na	71650.00 ug/l	79603.15	1.85	25000	>Cal
24 Mg	33540.00 ug/l	37262.94	1.46	50000	
27 Al	1743.00 ug/l	1936.47	1.57	20000	
39 K	5808.00 ug/l	6452.69	0.28	20000	
44 Ca	31800.00 ug/l	35329.80	0.40	50000	
47 Ti	211.10 ug/l	234.53	2.27	1000	
51 V	256.40 ug/l	284.86	1.11	1000	
52 Cr	229.50 ug/l	254.97	1.31	1000	
55 Mn	211.90 ug/l	235.42	1.40	1000	
56 Fe	875.90 ug/l	973.12	1.52	20000	
59 Co	222.40 ug/l	247.09	2.41	1000	
60 Ni	211.50 ug/l	234.98	2.02	1000	
63 Cu	220.70 ug/l	245.20	1.74	1000	
65 Cu	220.20 ug/l	244.64	1.90	1000	
66 Zn	366.50 ug/l	407.18	1.73	1000	
75 As	198.70 ug/l	220.76	1.14	1000	
78 Se	181.50 ug/l	201.65	0.76	1000	
78 Se	167.30 ug/l	185.87	0.90	1000	
88 Sr	292.60 ug/l	325.08	1.23	1000	
88 Sr	314.20 ug/l	349.08	1.17	1000	
95 Mo	216.00 ug/l	239.98	1.19	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	40.68 ug/l	45.20	0.51	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	42.04 ug/l	46.71	0.63	1000	
118 Sn	217.30 ug/l	241.42	0.19	1000	
121 Sb	203.00 ug/l	225.53	0.99	1000	
137 Ba	226.50 ug/l	251.64	0.25	1000	
205 Tl	206.30 ug/l	229.20	1.54	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	207.00 ug/l	229.98	1.01	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5124643.00	0.79	5314145.50	96.4	70 - 120	
45 Sc	1019491.80	1.78	854699.00	119.3	70 - 120	
45 Sc	52013.54	4.39	51738.40	100.5	70 - 120	
45 Sc	2217554.30	0.38	1799310.60	123.2	70 - 120	IS Fai
72 Ge	173088.39	2.28	178160.53	97.2	70 - 120	
72 Ge	17332.42	3.81	18616.22	93.1	70 - 120	
72 Ge	258828.94	0.54	275015.22	94.1	70 - 120	
115 In	1335729.30	0.37	1386546.60	96.3	70 - 120	
159 Tb	1693421.90	0.78	1710816.90	99.0	70 - 120	
165 Ho	1693774.30	0.45	1691823.60	100.1	70 - 120	

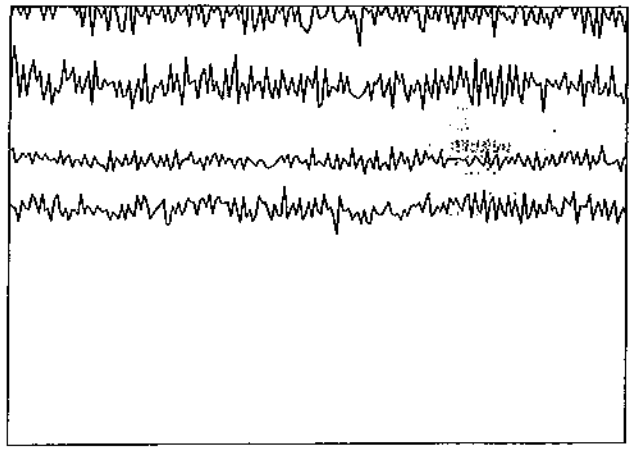
ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

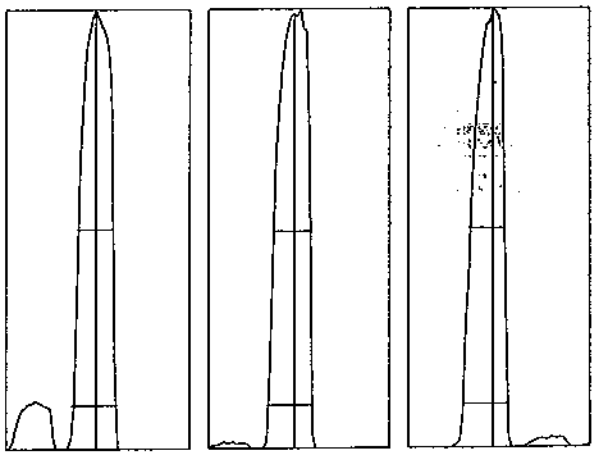
Tune Report

Tune File : nogas.u
Comment : 110809



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.309%
Doubly Charged:	70/140	1.801%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	32954.0	32353.4	2.09	0.10
89	10,000	10173.0	9910.3	3.34	1.20
205	10,000	5109.0	5376.4	3.65	5.30
156/140	2	1.300%	1.332%	10.61	
70/140	5	1.897%	1.778%	9.31	
140	10,000	8382.0	8192.1	3.61	4.40



m/z:	7	89	205
Height:	32,551	9,799	5,387
Axis:	7.00	88.95	204.95
W-50%:	0.60	0.65	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Aug 09, 2011 09:46:31
Printed : Aug 09, 2011 09:46:33

Tune Report

Tune File : nogas.u
Comment : 110809

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.7 V	Extract 2	:	-118 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias-ce	:	-24 V	Axis Gain	:	0.9997
Torch-H	:	0.1 mm	Omega Lens-ce	:	-2.4 V	Axis Offset	:	-0.02
Torch-V	:	0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	1.05 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.1 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1640 V
Sample Pump	:	--- rps	OctP RF	:	170 V	Pulse HV	:	1310 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

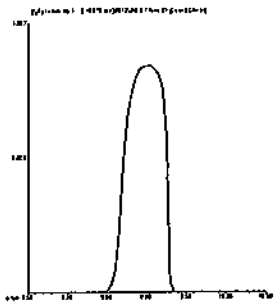
Generated : Aug 09, 2011 09:46:31
Printed : Aug 09, 2011 09:46:35

200.8 QC Tune Report

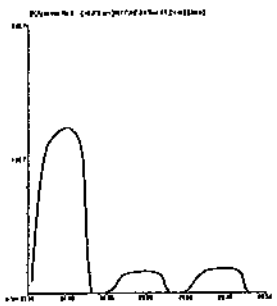
Data File: C:\ICPCHEM\1\DATA\11H09j00.B\001TUNE.D
Date Acquired: Aug 9 2011 09:59 am
Acq. Method: TN200_8.M
Operator: SDM
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

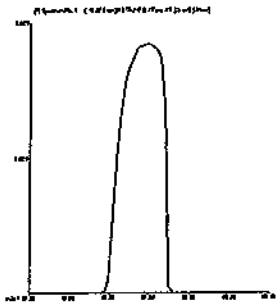
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	46766359	44546988	46762548	47104980	47499420	47917856	3.02	5.00	
24 Mg	71577709	68781704	70872152	71838048	72827168	73569472	2.69	5.00	
59 Co	55158706	52515060	54912544	55495248	56480984	56389692	3.14	5.00	
115 In	49998693	48266896	50316652	49683560	50248280	51478076	2.53	5.00	
208 Pb	20561272	19738926	20549440	20773574	20827340	20917076	2.26	5.00	



9 Be
Mass Calib.
Actual: 9.00
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



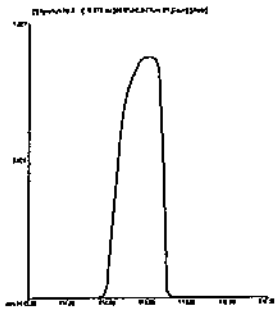
59 Co

Mass Calib.

Actual:	58.95		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



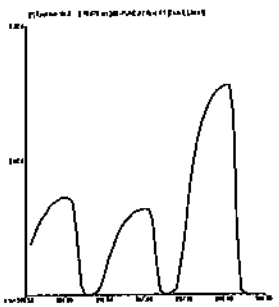
115 In

Mass Calib.

Actual:	115.00		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



208 Pb

Mass Calib.

Actual:	207.95		
Required:	207.90	-	208.10
Flag:			

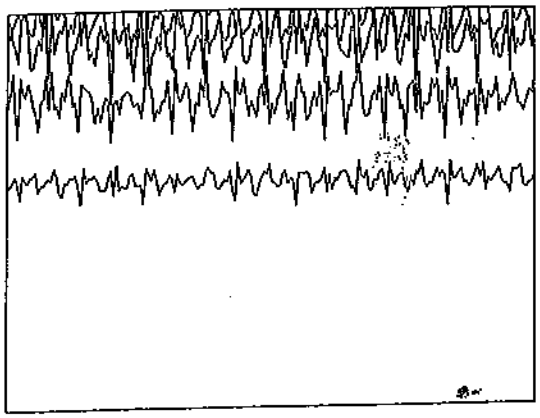
Peak Width

Actual:	0.55		
Required:	0.80		
Flag:			

Tune Result: Pass

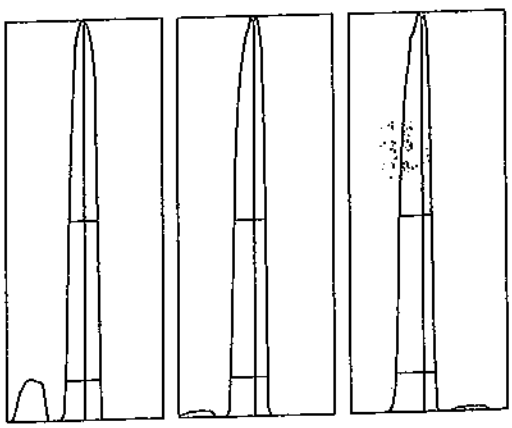
Tune Report

Tune File : nogas.u
Comment : 110813



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	1.508%
Doubly Charged:	70/140	1.408%

m/z	Range	Count	Mean	RSD%	Background
7	100,000	57975.0	57022.7	3.87	0.50
89	20,000	19167.0	19536.8	3.24	1.90
205	20,000	16445.0	15510.8	3.72	6.30
156/140	5	1.595%	1.524%	9.73	
70/140	2	1.528%	1.403%	9.72	
140	20,000	17872.0	18453.2	5.32	5.10



m/z:	7	89	205
Height:	57,085	19,430	15,449
Axis:	7.05	89.00	204.95
W-50%:	0.55	0.65	0.65
W-10%:	0.700	0.7500	0.800

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Aug 13, 2011 11:07:42
Printed : Aug 13, 2011 11:07:45

Tune Report

Tune File : nogas.u
Comment : 110813

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.7 V	Extract 2	:	-118 V	AMU Offset	:	127
Smpl Depth	:	9.5 mm	Omega Bias-ce	:	-24 V	Axis Gain	:	0.9997
Torch-H	:	0.1 mm	Omega Lens-ce	:	-2.6 V	Axis Offset	:	-0.02
Torch-V	:	0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	1.04 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.1 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.14 rps	===Octopole Parameters===			Analog HV	:	1630 V
Sample Pump	:	--- rps	OctP RF	:	170 V	Pulse HV	:	1340 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

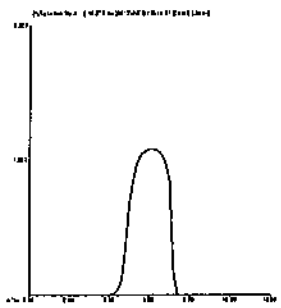
Generated : Aug 13, 2011 11:07:42
Printed : Aug 13, 2011 11:07:47

200.8 QC Tune Report

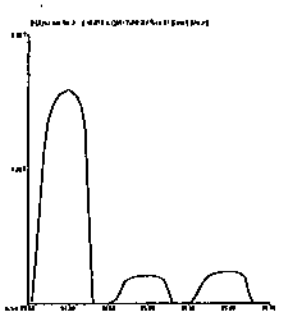
Data File: C:\ICPCHEM\1\DATA\11H13100.B\001TUNE.D
Date Acquired: Aug 13 2011 11:12 am
Acq. Method: TN200_8.M
Operator: SDM
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

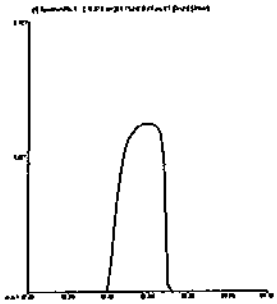
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	57022141	56739812	56954416	57199572	57053324	57163580	**0.37**	5.00	
24 Mg	89654242	88183504	89697960	89953680	90711768	89724296	**0.97**	5.00	
59 Co	73309373	72453248	73336984	73740008	74016296	73000328	**1.14**	5.00	
115 In	81471184	80777368	81076120	81746560	81555056	82200816	**0.75**	5.00	
208 Pb	46288988	45417760	46235904	46931220	46298608	46561448	**0.82**	5.00	



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



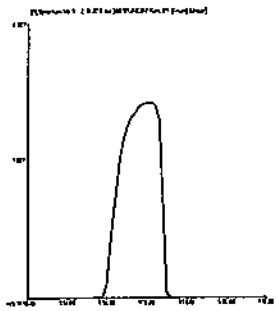
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



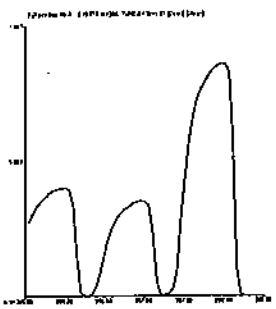
115 In

Mass Calib.

Actual:	115.00		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



208 Pb

Mass Calib.

Actual:	207.95		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.55		
Required:	0.80		
Flag:			

Tune Result: Pass

Metals Standards Log Book # 33 Page # 026

026

NBS 08/08/11

NBS 08/08/11
(A) 6020/6020A

NBS 08/08/11

ICP-MS STANDARDS 6020/6020A/3015/3051A
Today's Date: 8/8/2011
Expires: 8/15/2011
Prep Date 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL DI Water
Lot # 1110030
20mL HCL / 2000mL DI Water
Lot #4110060
Expires: 8/15/2011

Standard 4

Amount	STD	Manufacturer	Lot #
50 uL	CCV-A	Env. Express	1036407-28139
50 uL	CCV-B	Env. Express	1036410-28140
50 uL	CCV-C	Env. Express	1100309-28141

Prepared in 100 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 3 8/15/2011

Amount	STD	Manufacturer	Lot #
25 uL	CCV-A	Env. Express	1036407-28139
25 uL	CCV-B	Env. Express	1036410-28140
25 uL	CCV-C	Env. Express	1100309-28141

Prepared in 100 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 2 8/15/2011
Amount STD
500 uL Standard 4 8/8/2011
Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 1 8/15/2011
Amount STD
50 uL Standard 4 8/8/2011
Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

ICP-MS ICV 8/15/2011

Amount	STD		
50 uL	QCS ICV A	CPI	11C174-28548
50 uL	QCS ICV B	CPI	11C174-28549

Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

ICSA Prep: 8/15/2011

1 mL	ICSA	CPI	11C066-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 8/8/2011

ICSAB Prep: 8/15/2011

1mL	ICSA	CPI	11C066-28529
0.025mL	INT	O2SI	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 8/8/2011

ICP-LDR 8/15/2011

Amount	STD		
50 uL	CCV-A	Env. Express	1036407-28139
50 uL	CCV-B	Env. Express	1036410-28140
50 uL	CCV-C	Env. Express	1100309-28141

Prepared in 10 mL of 1% HNO3/1.0% HCL 8/8/2011

NBS 08/08/11

NBS 08/08/11
(A) 200.8

ICP-MS STANDARDS 200.8
Today's Date: 8/8/2011
Expires: 8/15/2011
Prep Date 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL DI Water
Lot # 1110030
10mL HCL / 200mL DI Water
Lot #4110060
Expires: 8/15/2011

Standard 4 8/15/2011

Amount	STD	Manufacturer	Lot #
50 uL	CCV-A	Env. Express	1036407-28139
50 uL	CCV-B	Env. Express	1036410-28140
50 uL	CCV-C	Env. Express	1100309-28141

Prepared in 100 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 3 8/15/2011

Amount	STD	Manufacturer	Lot #
25 uL	CCV-A	Env. Express	1036407-28139
25 uL	CCV-B	Env. Express	1036410-28140
25 uL	CCV-C	Env. Express	1100309-28141

Prepared in 100 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 2 8/15/2011
Amount STD
500 uL Standard 4 8/8/2011
Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

Standard 1 8/15/2011
Amount STD
50 uL Standard 4 8/8/2011
Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

ICP-MS ICV 8/15/2011

Amount	STD		
50 uL	QCS ICV A	CPI	11C174-28548
50 uL	QCS ICV B	CPI	11C174-28549

Prepared in 50 mL of 1% HNO3/1.0% HCL 8/8/2011

ICSA Prep: 8/15/2011

1 mL	ICSA	CPI	11C066-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 8/8/2011

ICSAB Prep: 8/15/2011

1mL	ICSA	CPI	11C066-28529
0.025mL	INT	O2SI	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 8/8/2011

ICP-LDR 8/15/2011

Amount	STD		
50 uL	CCV-A	Env. Express	1036407-28139
50 uL	CCV-B	Env. Express	1036410-28140
50 uL	CCV-C	Env. Express	1100309-28141

Prepared in 10 mL of 1% HNO3/1.0% HCL 8/8/2011

DP 8/9/11

DP 8/9/11

Hg WORKING STANDARD

1ml X 10ug/ml Hg STOCK STD. (07/27/11RJS)/200ml 1% HNO3 Lot#1110110
1ml X 10ug/ml Hg STOCK ICV (07/27/11RJS)/200ml 1% HNO3 Lot#1110110
Final concentration is 50 ug/L. Expires....8/9/11.....

_M3015

Metals Digestion Worksheet

Method Name 3015 Digestion **Prep Method** M3015 **Set** 110802A **Units** mL

Spikes	
Spiked ID 1	LCSW LOT# 11E255-28897
Spiked ID 2	LCSW LOT# 11E254-28898
Spiked ID 3	
Spiked ID 4	
Spiked By	nm Date: 08/02/11 11:50:00 AM
Witnessed By	dp Date: 08/02/11 11:50:00 AM

Starting Temp:	30°c
Ending Temp:	170°c
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	Yes
End Date/Time	8/2/11 13:15

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	110802A Blk				45mL	50mL	08/02/11 11:50	
2	110802A LCS		450uL	1+2	45mL	50mL	08/02/11 11:50	
3	AY42271	AY42271W08			45mL	50mL	08/02/11 11:50	
4	AY42273	AY42273W08			45mL	50mL	08/02/11 11:50	
5	AY42274	AY42274W08			45mL	50mL	08/02/11 11:50	
6	AY42275	AY42275W21			45mL	50mL	08/02/11 11:50	
7	AY42275 MS	AY42275W23	450uL	1+2	45mL	50mL	08/02/11 11:50	
8	AY42275 MSD	AY42275W23	450uL	1+2	45mL	50mL	08/02/11 11:50	
9	AY42276	AY42276W08			45mL	50mL	08/02/11 11:50	
10	AY42277	AY42277W08			45mL	50mL	08/02/11 11:50	
11	AY42542	AY42542W21			45mL	50mL	08/02/11 11:50	
12	AY42542 MS	AY42542W23	450uL	1+2	45mL	50mL	08/02/11 11:50	
13	AY42542 MSD	AY42542W23	450uL	1+2	45mL	50mL	08/02/11 11:50	
14	AY42543	AY42543W08			45mL	50mL	08/02/11 11:50	
15	AY42544	AY42544W08			45mL	50mL	08/02/11 11:50	

Solvent and Lot #
HNO3 BDH 1110110 0021

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	MDS
Date	8/2/11
Time	1700
Moved to	METALS

Technician's Initials	
Scanned By	nm
Sample Preparation	dp
Digestion	dp
Bring up to volume	nm
Modified	08/02/11 10:54:31 AM

Reviewed By: PDS **Date:** 8/2/11

6020/200.8 Injection Log

Directory: K:\ICP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
64	13 Aug 2011	11:37	Calibration Blank		110813A	1.
65	13 Aug 2011	11:43	110808 Standard 1		110813A	1.
66	13 Aug 2011	11:49	110808 Standard 2		110813A	1.
67	13 Aug 2011	11:55	110808 Standard 3		110813A	1.
68	13 Aug 2011	12:01	110808 Standard 4		110813A	1.
69	13 Aug 2011	12:07	ICV 110808		110813A	1.
71	13 Aug 2011	12:19	ICB 110808		110813A	1.
72	13 Aug 2011	12:25	CCV 110808		110813A	1.
73	13 Aug 2011	12:38	CCB 110808		110813A	1.
74	13 Aug 2011	12:44	ICSA 110808		110813A	1.
75	13 Aug 2011	12:50	ICSAB 110808		110813A	1.
78	13 Aug 2011	13:14	AY42275W21		110813A	1.
79	13 Aug 2011	13:20	AY42275W23 MS		110813A	1.
80	13 Aug 2011	13:26	AY42275W23 MSD		110813A	1.
81	13 Aug 2011	13:32	AY42276W08		110813A	1.
82	13 Aug 2011	13:38	AY42277W08		110813A	1.
85	13 Aug 2011	13:56	CCV 110808		110813A	1.
86	13 Aug 2011	14:08	CCB 110808		110813A	1.

6020/200.8 Injection Log

Directory: K:\ICP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	09 Aug 2011	10:16	Calibration Blank		110813A	1.
2	09 Aug 2011	10:23	110808 Standard 1		110813A	1.
3	09 Aug 2011	10:29	110808 Standard 2		110813A	1.
4	09 Aug 2011	10:35	110808 Standard 3		110813A	1.
5	09 Aug 2011	10:41	110808 Standard 4		110813A	1.
6	09 Aug 2011	10:48	ICV 110808		110813A	1.
9	09 Aug 2011	11:13	ICB 110808		110813A	1.
10	09 Aug 2011	11:19	CCV 110808		110813A	1.
11	09 Aug 2011	11:31	CCB 110808		110813A	1.
12	09 Aug 2011	11:38	ICSA 110808		110813A	1.
13	09 Aug 2011	11:44	ICSAB 110808		110813A	1.
55	09 Aug 2011	18:13	CCV 110808		110813A	1.
56	09 Aug 2011	18:26	CCB 110808		110813A	1.
57	09 Aug 2011	18:32	110802A-3015-BLK		110813A	1.
58	09 Aug 2011	18:39	110802A-3015-LCS		110813A	1.
59	09 Aug 2011	18:45	AY42271W08		110813A	1.
60	09 Aug 2011	18:51	AY42273W08		110813A	1.
61	09 Aug 2011	18:57	AY42274W08		110813A	1.
62	09 Aug 2011	19:04	CCV 110808		110813A	1.
63	09 Aug 2011	19:10	CCB 110808		110813A	1.