Laboratory Report

Environet

LTM Red Hill Bulk Fuel Storage Facility

ARF 65208

Samples collected: July 21, 2011

APPL, Inc.

Data Validation Package
for
LTM Red Hill Bulk Fuel Storage Facility
ARF 65208

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: 65208

Project: LTM Red Hill Bulk Fuel Storage Facility

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 22, 2011, at 3.0°C and 2.5°C. The sample group was assigned Analytical Request Form (ARF) number 65208. The sample numbers and requested analyses were compared to the chain of custody. The client notified APPL that the HCl was rinsed from the vials. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES042	AY42541	WATER	07/21/11	07/22/11
ES043	AY42542	WATER	07/21/11	07/22/11
ES044	AY42543	WATER	07/21/11	07/22/11
ES045	AY42544	WATER	07/21/11	07/22/11

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

EPA Method 8015B

Total Petroleum Hydrocarbons – Diesel and Lube Oil

Sample Preparation:

The water samples was 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 ES043 was designated by the client for MS/MSD analysis. Diesel fuel recovered below the 61% lower recovery limit at 56.5% and at 60.5%. All other acceptance criteria were met

Surrogates:

The surrogate recoveries are summarized on the form 2 & 8. All 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 ES043 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. All vials used for analysis had a pH greater than 2; the samples were analyzed within seven days of collection. All holding times were met. Manual integrations were performed in accordance with APPL's SOP. Chromatograms of before and after manual integration 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 blank.

Spikes:

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

Sample ES043 was designated by the client for MS/MSD analysis. Three analytes recovered below their lower control limit: 1,1-Dichloroethane recovered below 70% at 68.3% and 66.2%, Acetone below 40% at 33.1% in the MS with a 36.9% RPD, and Gasoline below 75% at 60.3% and 70.3%. 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 ES043 was designated by the client for MS/MSD analysis. All acceptance criteria were met in the MS/MSD, PDS, and dilution test.

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.

9-8-11

Sharon Dehmlow, Laboratory Director / Date

CHAIN OF CUSTODY

AND ARF

APPL - Analysis Request Form 65208

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** # **34945**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **2 WEEKS**

Received by: **TBV**
Date Received: **07/22/11** Time: **10:55**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **Y**
Chest Temp(s): **3.0,2.5°C**
Color: **VOA,B-RED,P-ORGN**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark**
QC Report Type: **DVP4/ADRDOD/HI**
Due Date: **08/05/11**

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
VOCs: include gasoline by 8260B

Sample Distribution:
GC: 3-$SIMHC12W, 3-$TPETD2
Extractions: 3-_SEP004S, 3-_SEP011
VOA: 4-$86RHBF
Metals: 3-$602D(Pb)
Other: 3-_M3015

Charges:

Invoice To:
same

	Client ID		APPL ID	Sampled	Analyses Requested
1.	ES042		AY42541W	07/21/11 08:00	$86RHBF -- non-preserved
2.	ES043	MS/MSD	AY42542W	07/21/11 11:20	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
3.	ES044		AY42543W	07/21/11 13:15	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2
4.	ES045		AY42544W	07/21/11 14:00	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2

APPL Sample Receipt Form

ARF# **65208**

Sample	Container Type	Count	pH
AY42541	[15] VOAs - NP	4	NA
AY42542	[6] PL 500mL - HNO3	3	1.7
	[13] VOAs - HCL	11	NA
	[17] Amber Liter	9	NA
AY42543	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA
AY42544	[6] PL 500mL - HNO3	1	1.7
	[13] VOAs - HCL	4	NA
	[17] Amber Liter	3	NA

Sample	Container Type	Count	pH

Stephane Maupas

From: Stacey A. Fineran [SFineran@environetinc.com]
Sent: Tuesday, July 26, 2011 5:23 PM
To: Stephane Maupas
Cc: Vilma C. Dupra
Subject: RE: Sample group 65208

Hello Stephane-

The VOA vials we sent you are indeed unpreserved. We used VOAs from a previous bottle order for the project and rinsed out the HCl. We do need VOCs and TPH-gas for ESO42. I apologize for the mistake in the COC. Thank you for bringing this to my attention.

Best regards,
Stacey Fineran

From: Stephane Maupas [mailto:smaupas@applinc.com]
Sent: Tuesday, July 26, 2011 6:51 AM
To: Stacey A. Fineran
Cc: Vilma C. Dupra
Subject: Sample group 65208
Importance: High

Hello Ms. Fineran,
I have a question about the sample group we received on 7-22-11. The last bottle order we sent you, only had 10 unpreserved VOA vials for trip blanks. Are the VOA vials you sent us preserved? Also, I want to confirm that you need VOCs only for sample ES042 and not VOCs and TPH-gas.
I attached the COC for your review.
Thank you for your help.

Sincerely,
Stephane Maupas
Project Manager
smaupas@applinc.com

65208

APPL LABS

CHAIN OF CUSTODY RECORD

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

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

C.O.C. 34945

Report to: PLEASE PRINT
Company Name: Envirotect Inc Phone: 808 833-2225
Address: 650 Iwilei Rd Suite 206 Honolulu, HI Fax: 808 833-2231
Attn: Stacey Fineran

Invoice to: PLEASE PRINT
Company Name: Envirotect Phone: 808 8332225
Address: 650 Iwilei Rd Suite 206 Honolulu, HI 96817 Fax: 8088332231
Attn: ~~Alan~~ Alvin

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

Date Shipped: 7/21/11
Carrier: Fed EX
Waybill No.:
Comments:

Sample Identification	Location	Date Collected	Time Collected	No. of Containers	Matrix: Aq	Sed.	Soil	VOCs	TPH-GRO	TPH-DRO	PAHs	Dissolved Lead
ES042	RHSF	7/21/11	0800	4	X			X	X	see as per email 7/26/11		
ES043 MS/MSD	RHSF	7/21/11	1120	23	X			X	X	X	X	X
ES044	RHSF	7/21/11	1315	8	X			X	X	X	X	X
ES045	RHSF	7/21/11	1400	8	X			X	X	X	X	X

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	7/21/11	1500	Fed Ex				
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					7/22/11	1055	[signature]

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: 7/22/11
2) Coolers: Number of Coolers: 2
3) YES NO Were coolers and samples screened for radioactivity?
4) YES NO Were custody seals on outside of cooler? How many? 2 Date on seal? 7/21/11
5) Name on seal? SF
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:
8) Shipping slip numbers: 1) 8748 0067 1586 misc 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 wrap, 2 blue bags, 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) 3.0°C 2) 2.5°C 3) 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: AP42541 vol-WM, AP 42542 vol- VH,

Preservation & Hold time:

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? Trip Blanks were not preserved
38) YES NO NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF?

Lab notified if pH was not adequate:
Deficiencies:

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
Date 7/21/11
Initials SF

EPA 8015 Modified
Total Petroleum Hydrocarbons

EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary

Method Blank
TPH Diesel Water

Blank Name/QCG: **110727W-42542 - 158148**
Batch ID: #TPETD-110727A

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	07/27/11	08/12/11
BLANK	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/27/11	08/12/11
BLANK	SURROGATE: OCTACOSANE (S)	69.9	28-142			%	07/27/11	08/12/11
BLANK	SURROGATE: ORTHO-TERPHEN	66.4	57-132			%	07/27/11	08/12/11

Quant Method: TPHNS727.M
Run #: 811022
Instrument: Apollo
Sequence: 110811
Initials: LA

GC SC-Blank-REG MDLs
Printed: 08/25/11 12:42:38 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 Date Analyzed: 08/12/11

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)	SURROGATE: ORTHO-TERPHENYL (S)
110727A-BLK	Blank	69.9	66.4
110727A-LCS	Lab Control Spike	92.0	111
AY42542-MSD	Matrix SpikeD	72.7	75.3
AY42542-MS	Matrix Spike	76.0	79.3
AY42542	ES043	74.9	71.6
AY42543	ES044	79.4	74.6
AY42544	ES045	80.4	78.3

Comments: Batch: #TPETD-110727A

Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **110727W-42542 LCS - 158148**
Batch ID: #TPETD-110727A

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	1400	70.0	61-143
LUBE OIL	2000	1410	70.5	61-143
SURROGATE: OCTACOSANE (S)	150	138	92.0	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	166	111	57-132

Comments:

Primary	SPK
Quant Method :	TPHNS727.M
Extraction Date :	07/27/11
Analysis Date :	08/12/11
Instrument :	Apollo
Run :	811023
Initials :	LA

Printed: 09/09/11 2:19:37 PM

APPL Standard LCS

Matrix Spike Recoveries

TPH Diesel Water

APPL ID: **110727W-42542 MS - 158148**
Batch ID: #TPETD-110727A
Sample ID: AY42542
Client ID: ES043

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	1130	1210	56.5 #	60.5 #	61-143	6.8	30
LUBE OIL	2000	ND	1270	1300	63.5	65.0	61-143	2.3	30
SURROGATE: OCTACOSANE (S)	150	NA	114	109	76.0	72.7	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	119	113	79.3	75.3	57-132		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	TPHNS727.M	TPHNS727.M
Extraction Date :	07/27/11	07/27/11
Analysis Date :	08/12/11	08/12/11
Instrument :	Apollo	Apollo
Run :	811027	811026
Initials :	LA	

Printed: 08/25/11 12:42:26 PM
APPL MSD SCII

EPA 8015B-e

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 Date Analyzed: 08/12/11

Matrix: WATER Instrument: Apollo

Blank ID: 110727A-BLK Time Analyzed: 0130

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110727A-BLK	Blank	811022	08/12/11 0130
110727A-LCS	Lab Control Spike	811023	08/12/11 0155
110727A-MSD	Matrix SpikeD	811026	08/12/11 0307
110727A-MS	Matrix Spike	811027	08/12/11 0332
AY42542	ES043	811029	08/12/11 0421
AY42543	ES044	811030	08/12/11 0445
AY42544	ES045	811031	08/12/11 0509

Comments: Batch: #TPETD-110727A

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: 65208

Sample ID: ES043

APPL ID: AY42542

Sample Collection Date: 07/21/11

QCG: #TPETD-110727A-158148

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	07/27/11	08/12/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/27/11	08/12/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	74.9	28-142			%	07/27/11	08/12/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	71.6	57-132			%	07/27/11	08/12/11

Quant Method: TPHNS727.M
Run #: 811029
Instrument: Apollo
Sequence: 110811
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 12:42:35 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110811\811029.D Vial: 29
Acq On : 8-12-11 4:21:13 Operator: LAC
Sample : AY42542W13 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:24 2011 Quant Results File: TPHNS727.RES

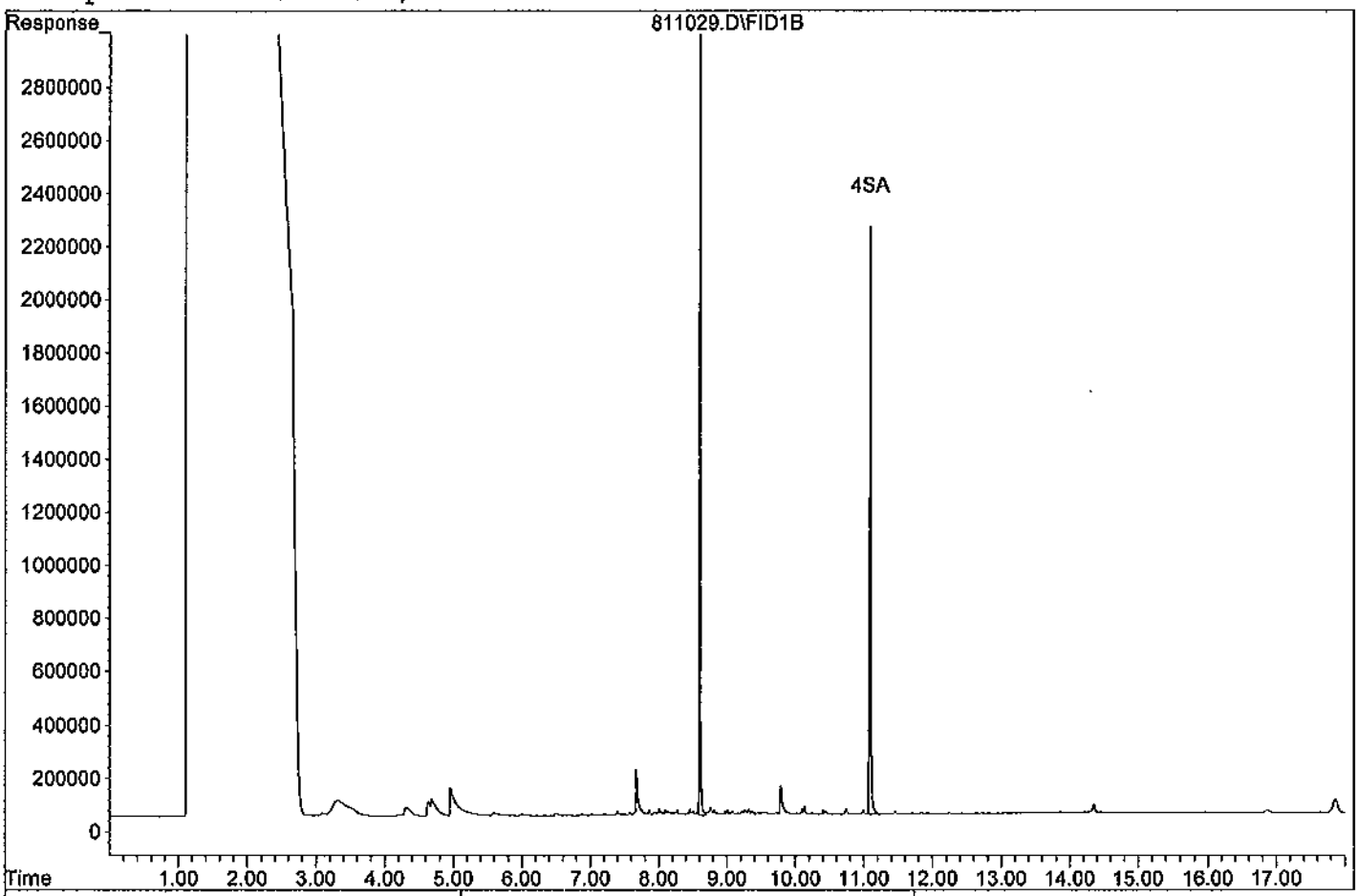
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

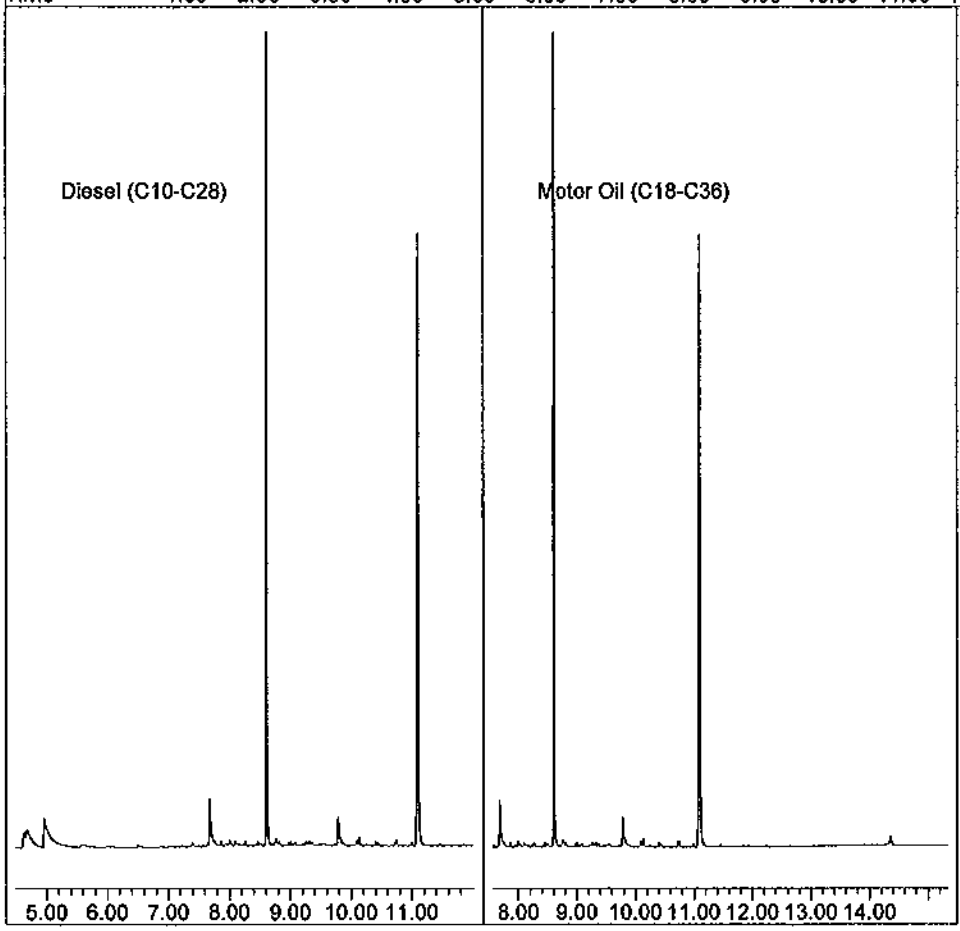
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	31324052	64.067 ppb
Surrogate Spike 147.059		Recovery =	43.57%
4) SA Octacosane(S)	11.09	32243699	101.275 ppb
Surrogate Spike 147.059		Recovery =	68.87%
Target Compounds			

Not Used
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811029.D
Sample : AY42542W13 5/1020





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811029.D Vial: 29
Acq On : 8-12-11 4:21:13 Operator: LAC
Sample : AY42542W13 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

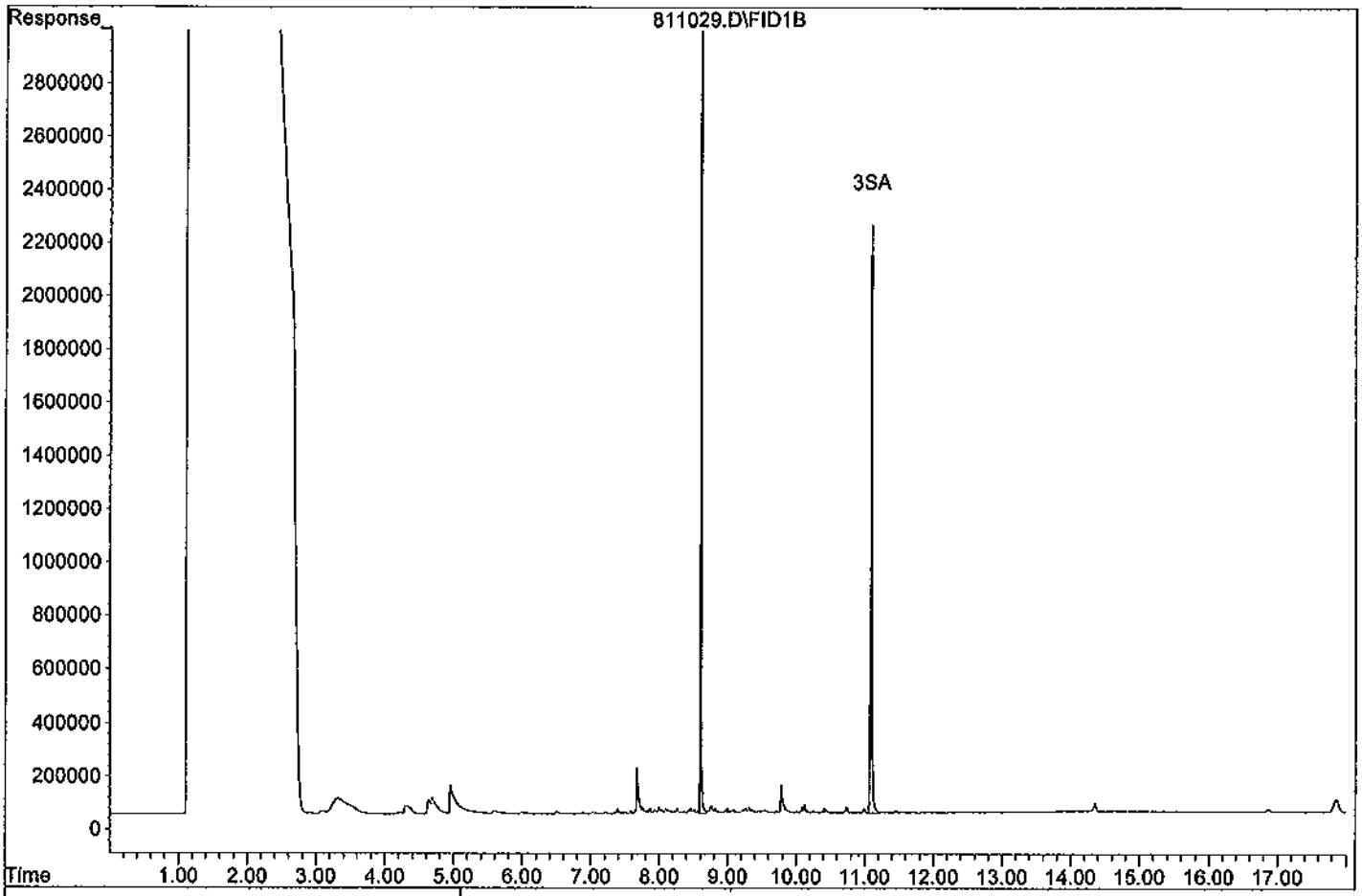
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

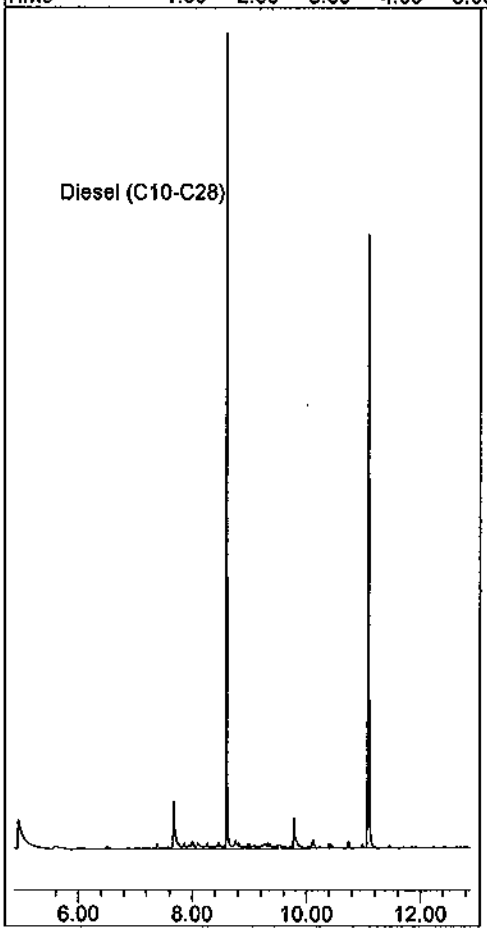
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	31324052	105.360 ppb
Surrogate Spike 147.059		Recovery =	71.64%
3) SA Octacosane(S)	11.09	32243699	110.139 ppb
Surrogate Spike 147.059		Recovery =	74.89%
Target Compounds			

(f)=RT Delta > 1/2 Window 28 (m)=manual int.

Data File: G:\APOLLO\DATA\110811\811029.D
Sample : AY42542W13 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
Sample ID: ES044
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42543
QCG: #TPETD-110727A-158148

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	07/27/11	08/12/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/27/11	08/12/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	79.4	28-142			%	07/27/11	08/12/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	74.6	57-132			%	07/27/11	08/12/11

Quant Method: TPHNS727.M
Run #: 811030
Instrument: Apollo
Sequence: 110811
Dilution Factor: 1
Initials: LA

Printed: 08/25/11 12:42:35 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110811\811030.D Vial: 30
Acq On : 8-12-11 4:45:35 Operator: LAC
Sample : AY42543W05 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:24 2011 Quant Results File: TPHNS727.RES

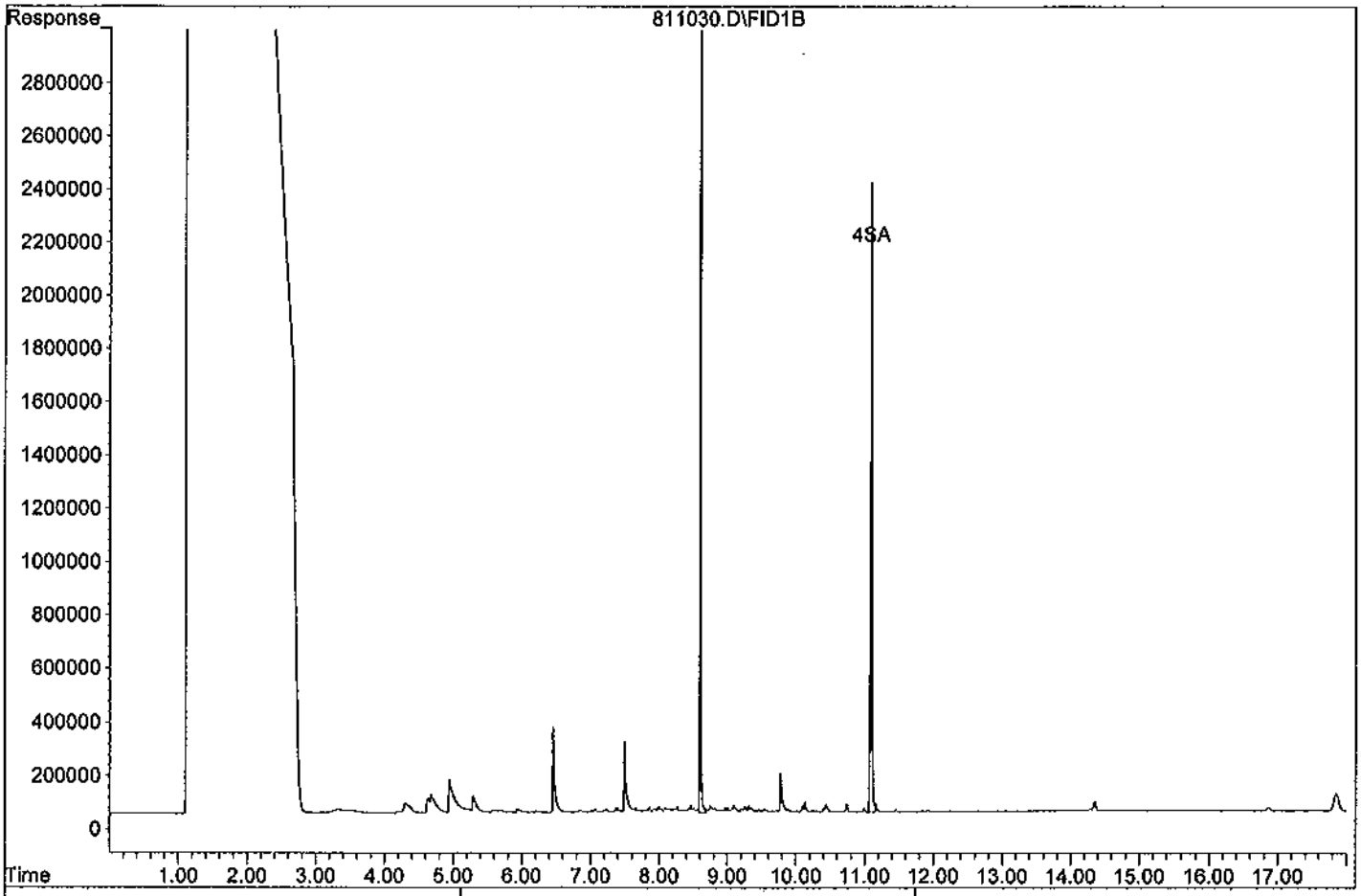
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

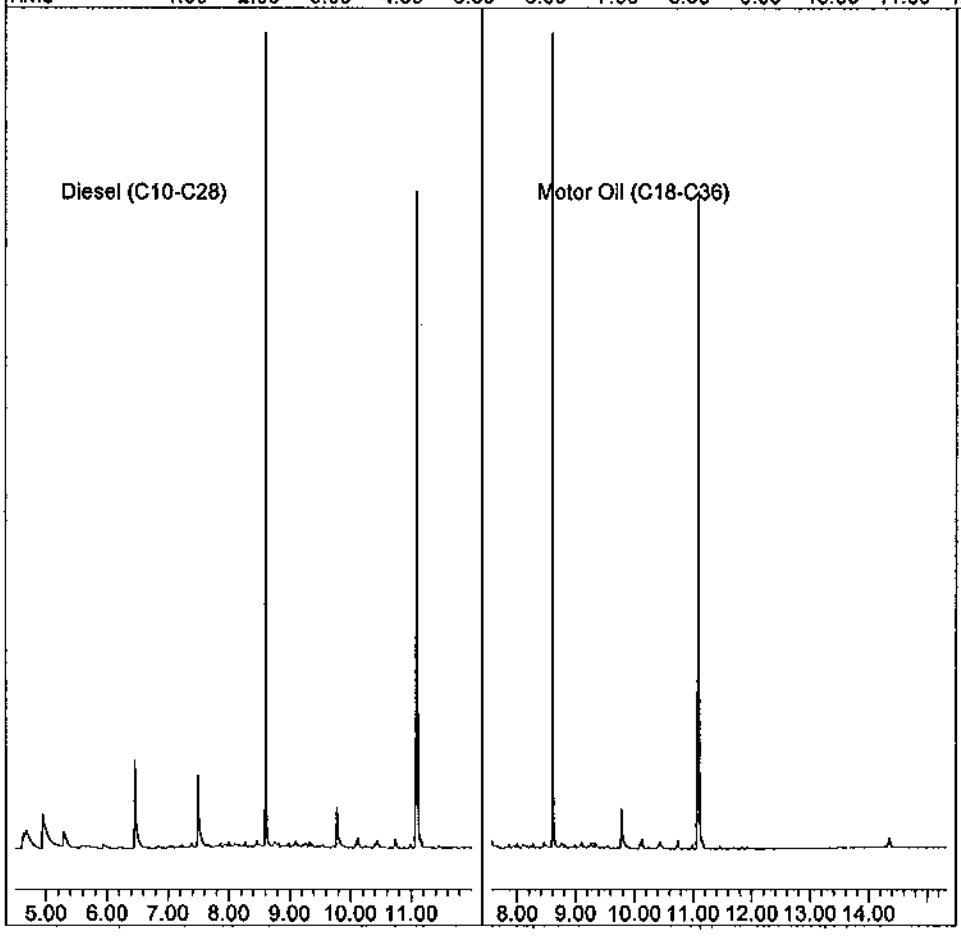
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	32613808	68.039 ppb
Surrogate Spike 150.000		Recovery =	45.36%
4) SA Octacosane(S)	11.09	34165716	109.458 ppb
Surrogate Spike 150.000		Recovery =	72.97%
Target Compounds			

Not Used
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811030.D
Sample : AY42543W05 5/1000





Quantitation Report (Not Reviewed)

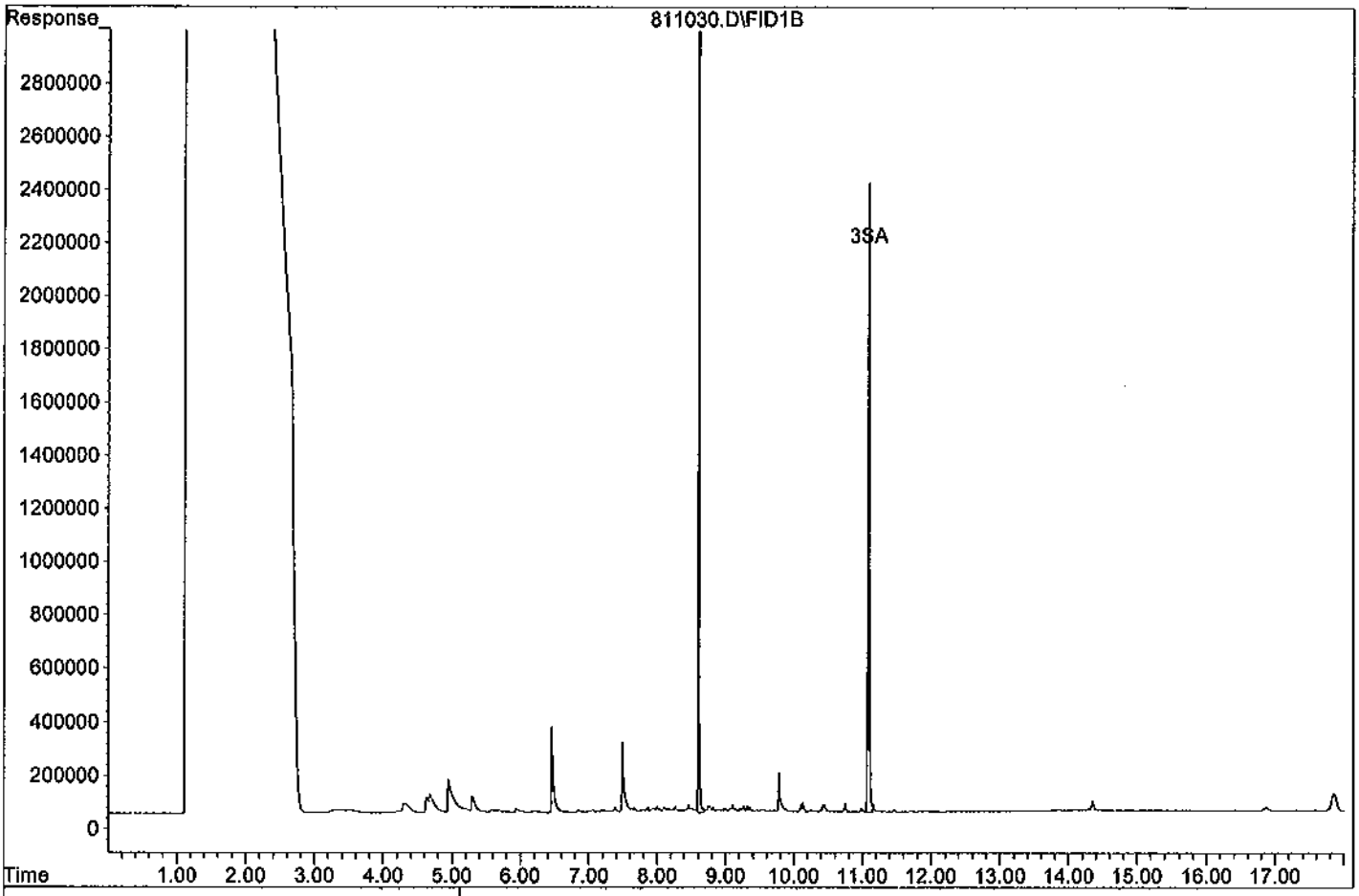
Data File : G:\APOLLO\DATA\110811\811030.D Vial: 30
Acq On : 8-12-11 4:45:35 Operator: LAC
Sample : AY42543W05 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

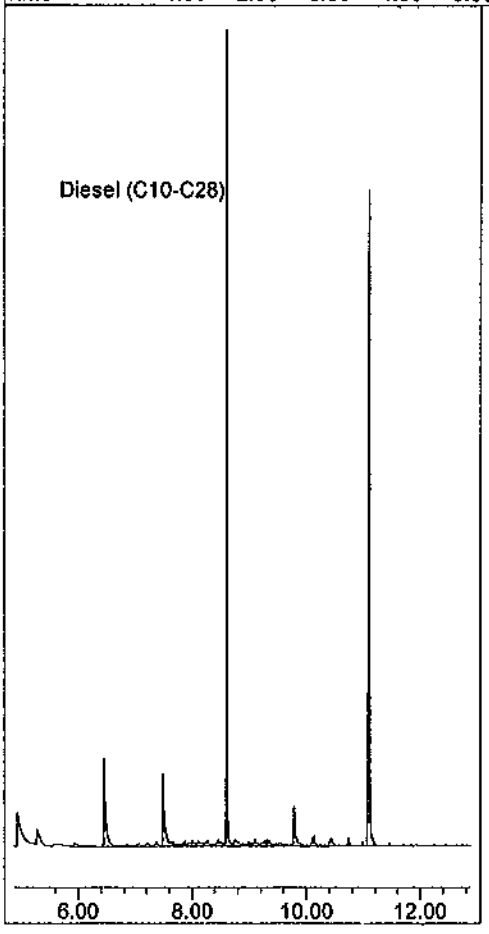
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	32613808	111.892 ppb
Surrogate Spike 150.000		Recovery =	74.59%
3) SA Octacosane(S)	11.09	34165716	119.038 ppb
Surrogate Spike 150.000		Recovery =	79.36%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811030.D
Sample : AY42543W05 5/1000





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: 65208

Sample ID: ES045

APPL ID: AY42544

Sample Collection Date: 07/21/11

QCG: #TPETD-110727A-158148

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	07/27/11	08/12/11
EPA 8015B-	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/27/11	08/12/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	80.4	28-142			%	07/27/11	08/12/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	78.3	57-132			%	07/27/11	08/12/11

Quant Method:	TPHNS727.M
Run #:	811031
Instrument:	Apollo
Sequence:	110811
Dilution Factor:	1
Initials:	LA

Printed: 08/25/11 12:42:36 PM

APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110811\811031.D Vial: 31
Acq On : 8-12-11 5:09:56 Operator: LAC
Sample : AY42544W05 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:24 2011 Quant Results File: TPHNS727.RES

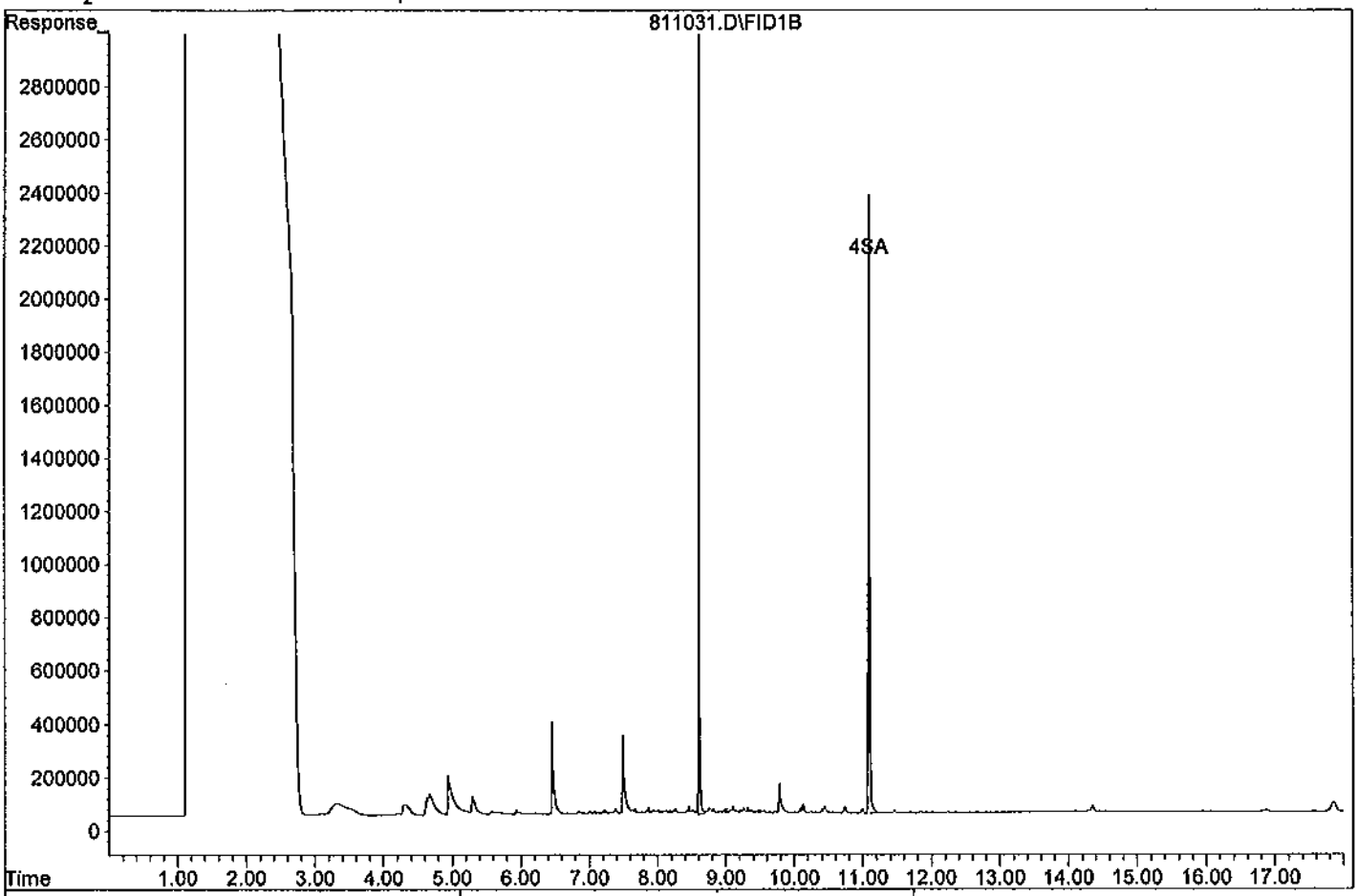
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

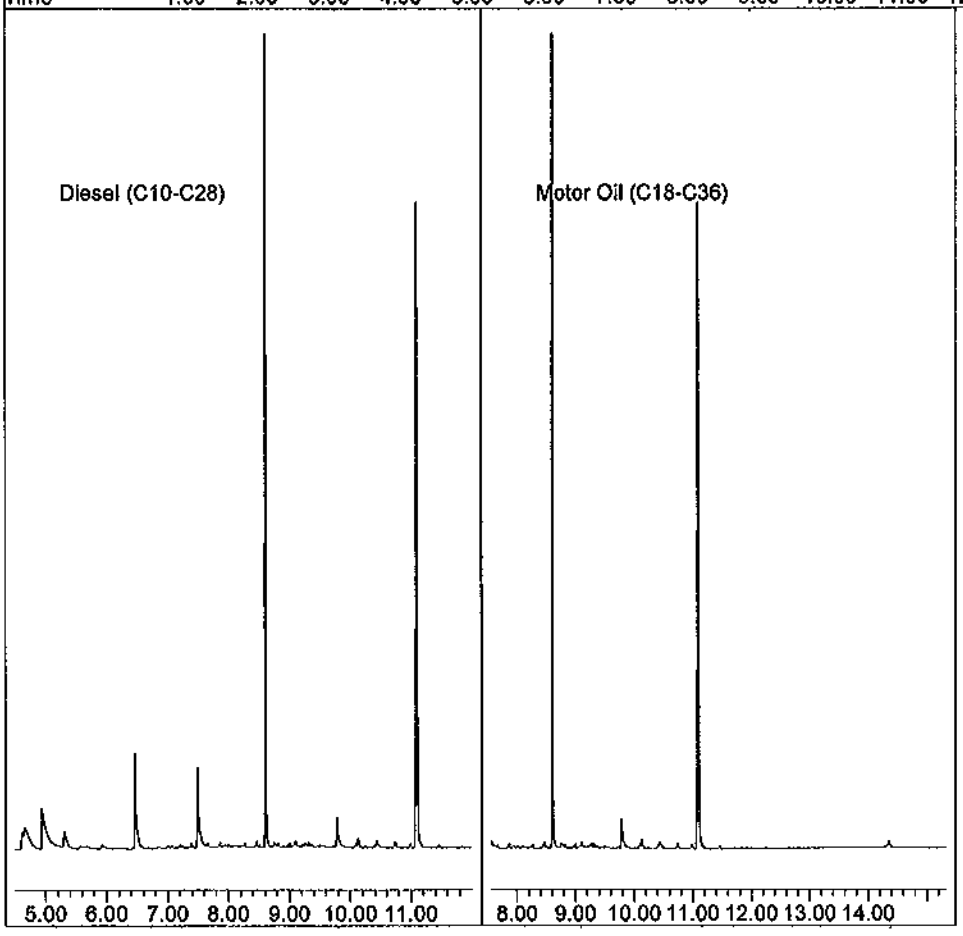
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	34243054	71.438 ppb
Surrogate Spike 150.000		Recovery =	47.63%
4) SA Octacosane(S)	11.09	34632400	110.953 ppb
Surrogate Spike 150.000		Recovery =	73.97%
Target Compounds			

Not Used
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811031.D
Sample : AY42544W05 5/1000





Quantitation Report (Not Reviewed)

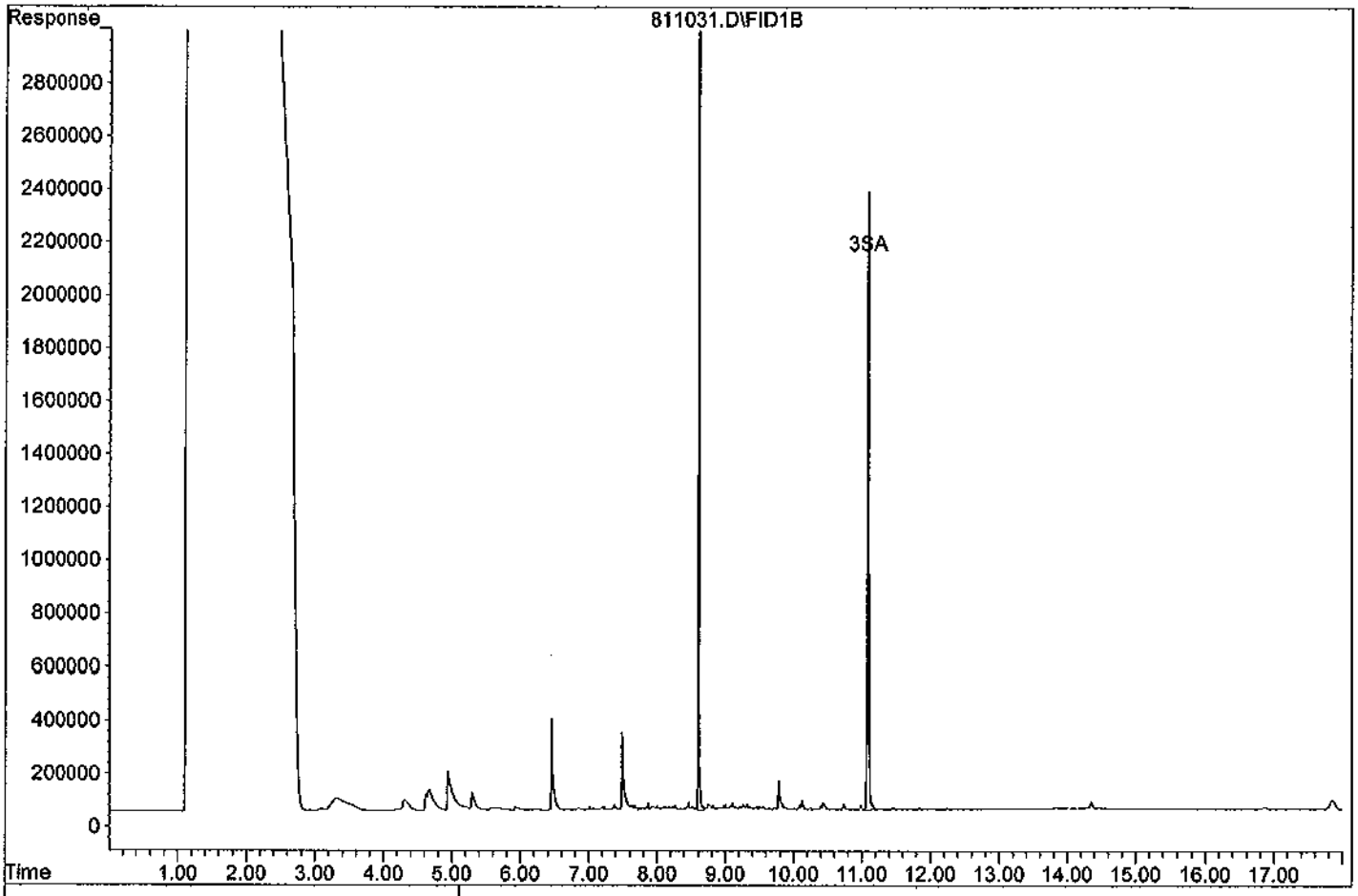
Data File : G:\APOLLO\DATA\110811\811031.D Vial: 31
Acq On : 8-12-11 5:09:56 Operator: LAC
Sample : AY42544W05 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

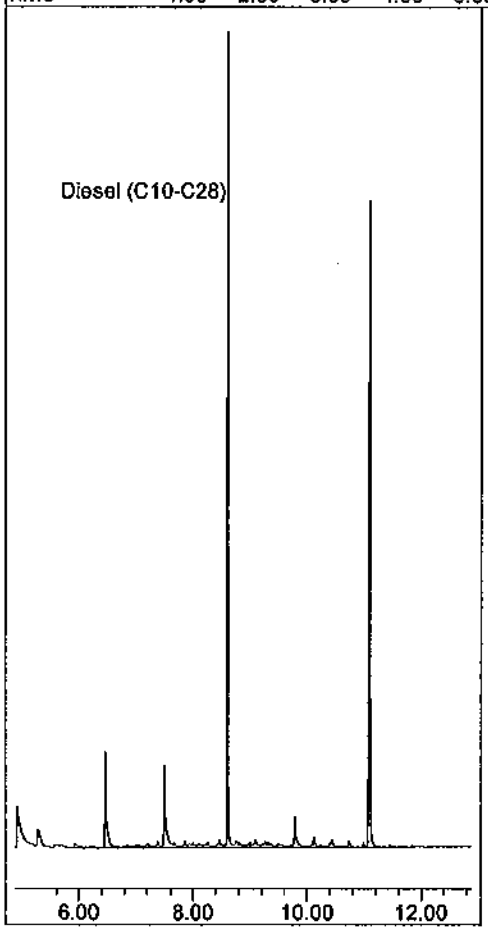
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	34243054	117.481 ppb
Surrogate Spike 150.000		Recovery =	78.32%
3) SA Octacosane(S)	11.09	34632400	120.664 ppb
Surrogate Spike 150.000		Recovery =	80.44%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811031.D
Sample : AY42544W05 5/1000





EPA 8015 Modified
Total Petroleum Hydrocarbons

Calibration Data

TPH Extractables
TPHNS727

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 65208
Case No: Initial Cal. Date: 07/27/11
Matrix: 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																
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6																
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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

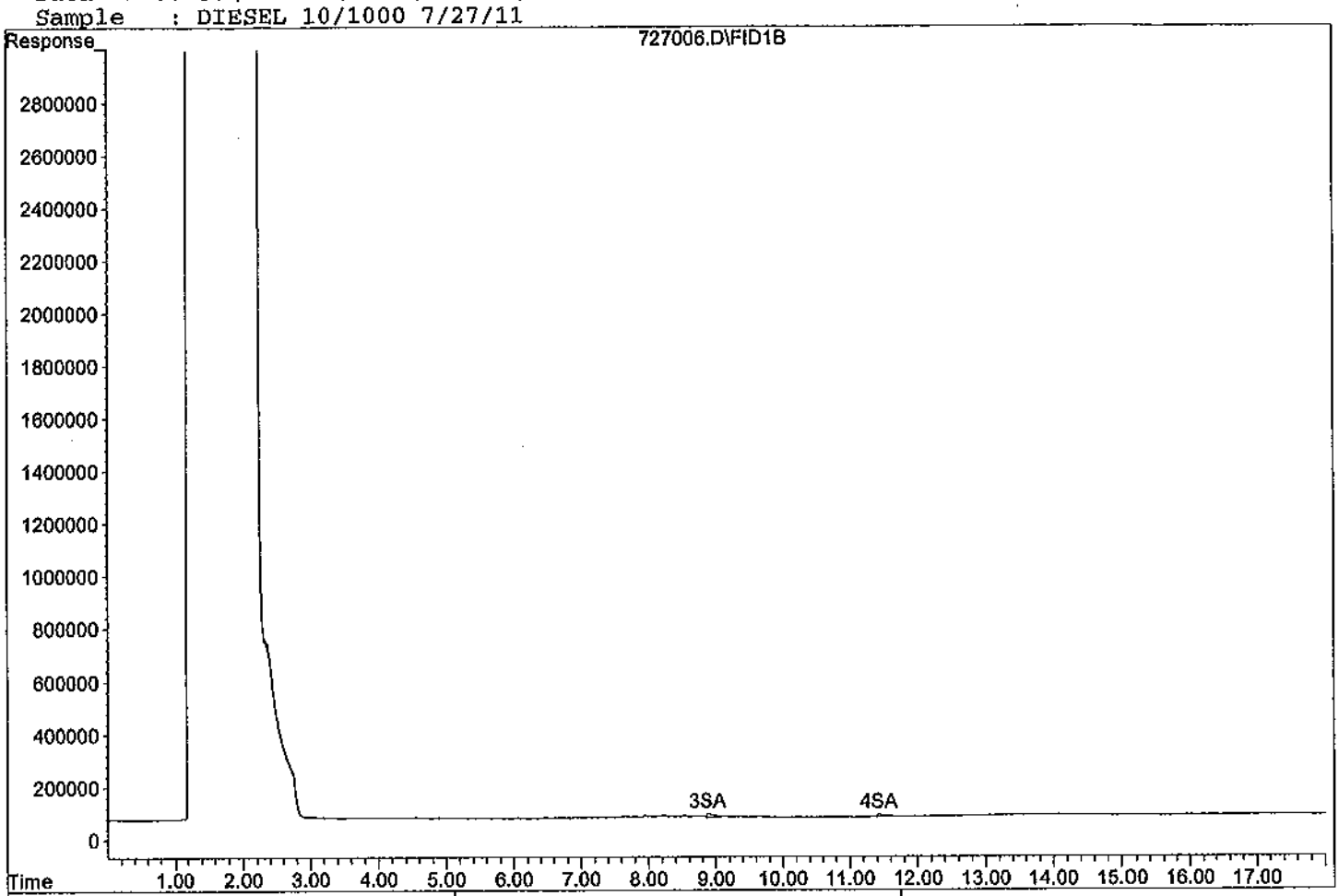
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

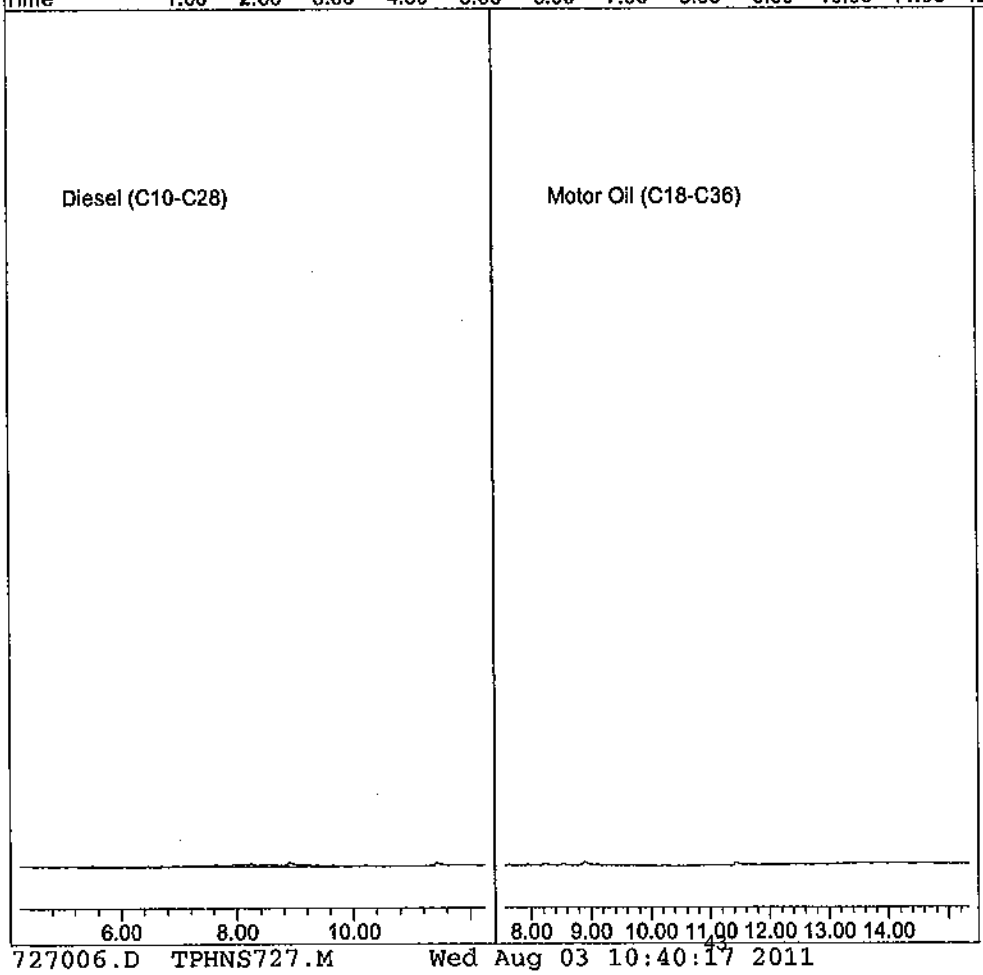
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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

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

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

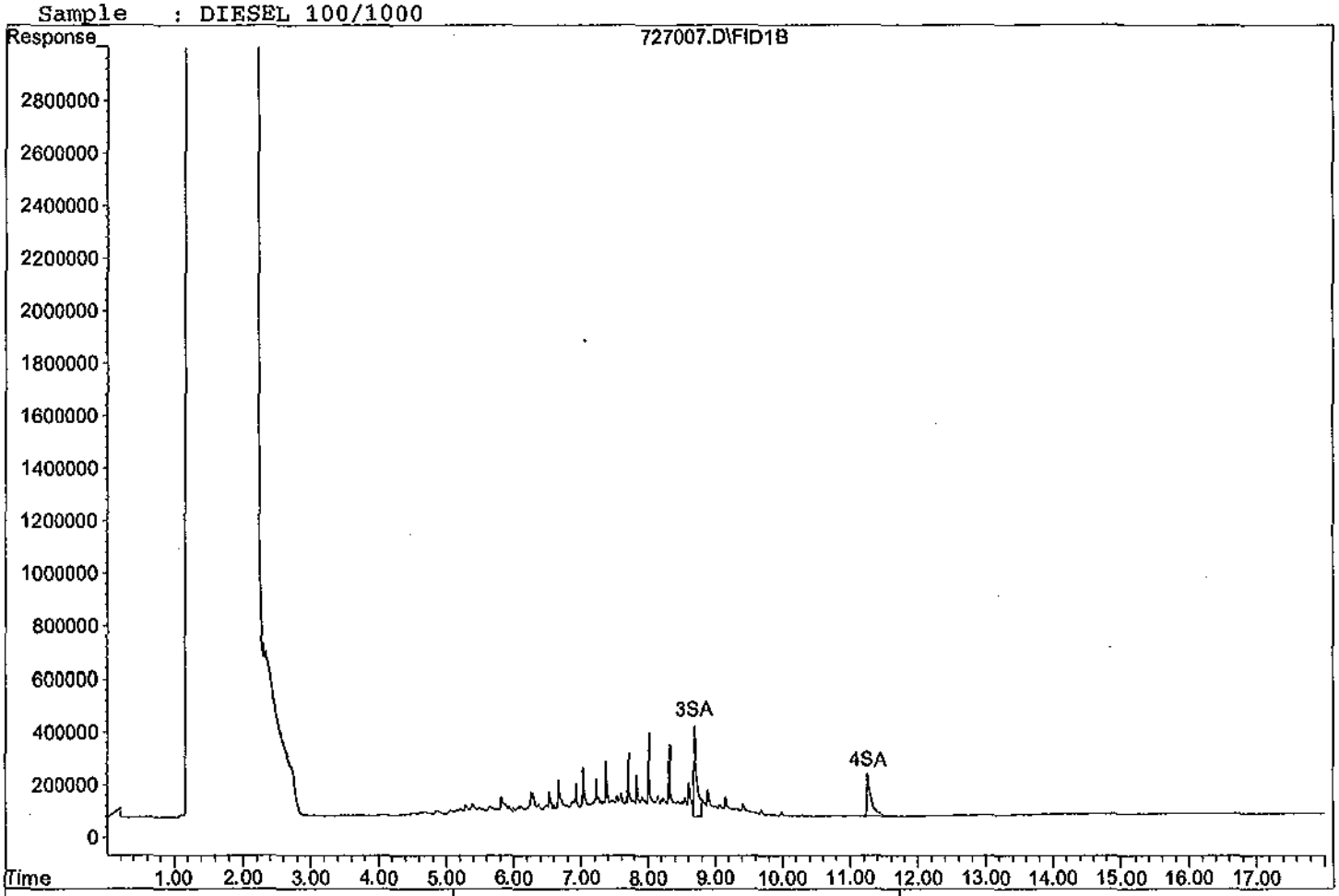
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

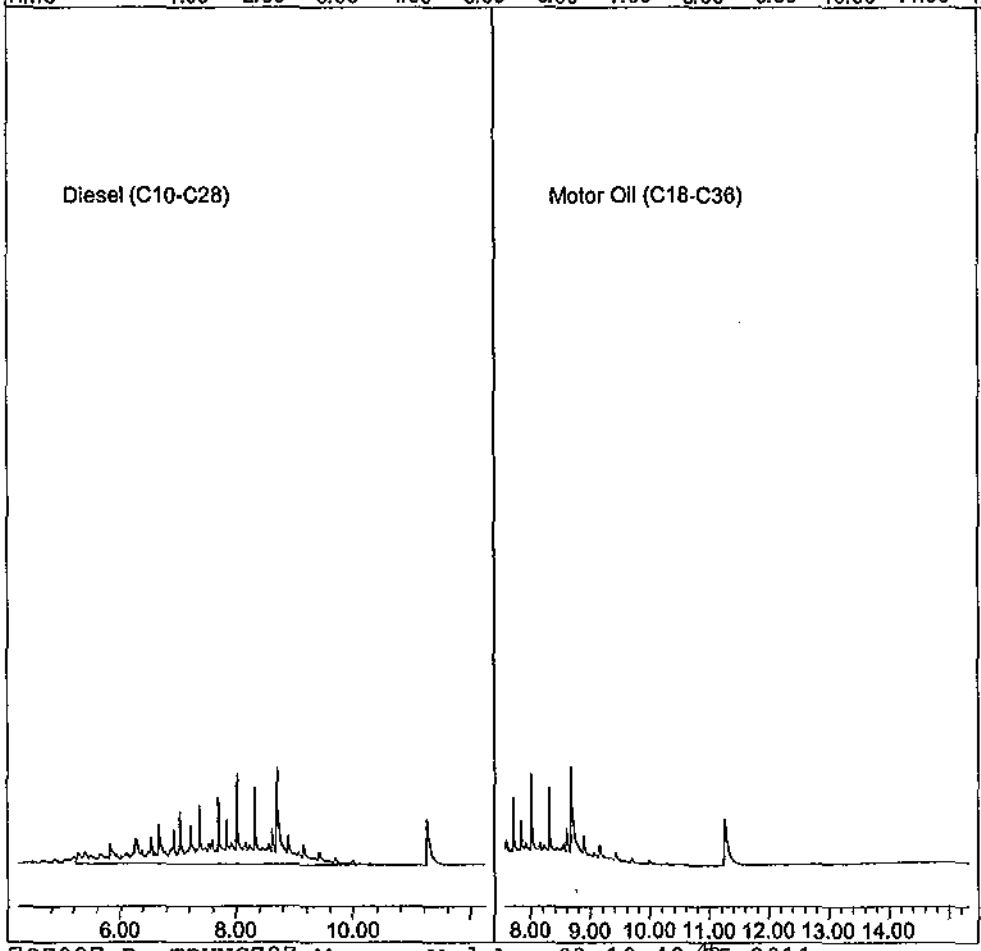
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.69	10620102	4.431	ppb
Surrogate Spike 30.000	Recovery =		14.77%	
4) SA Octacosane(S)	11.27	7170007	4.594	ppb
Surrogate Spike 30.000	Recovery =		15.31%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	125019327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

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

Quantitation Report

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





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

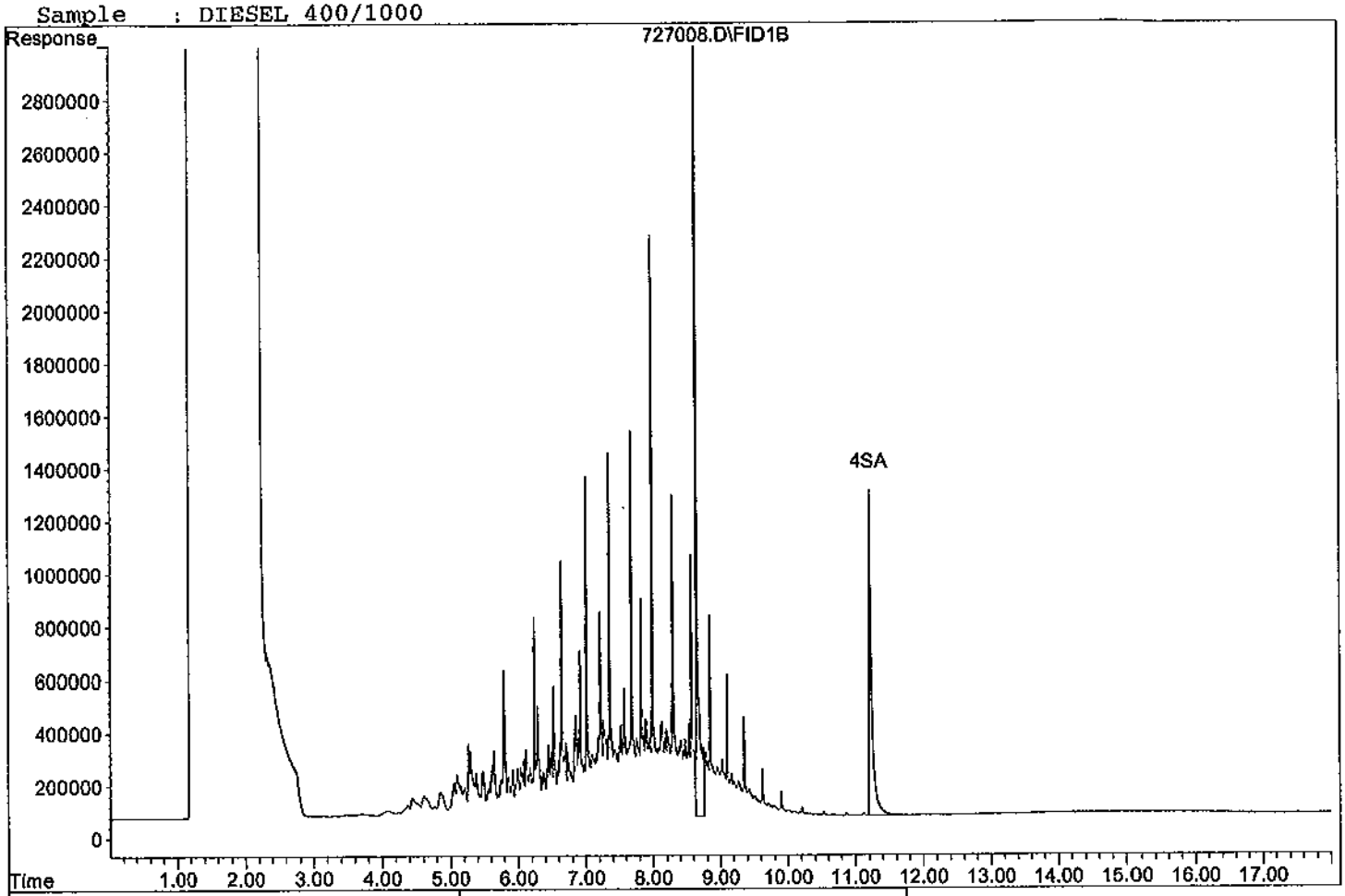
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

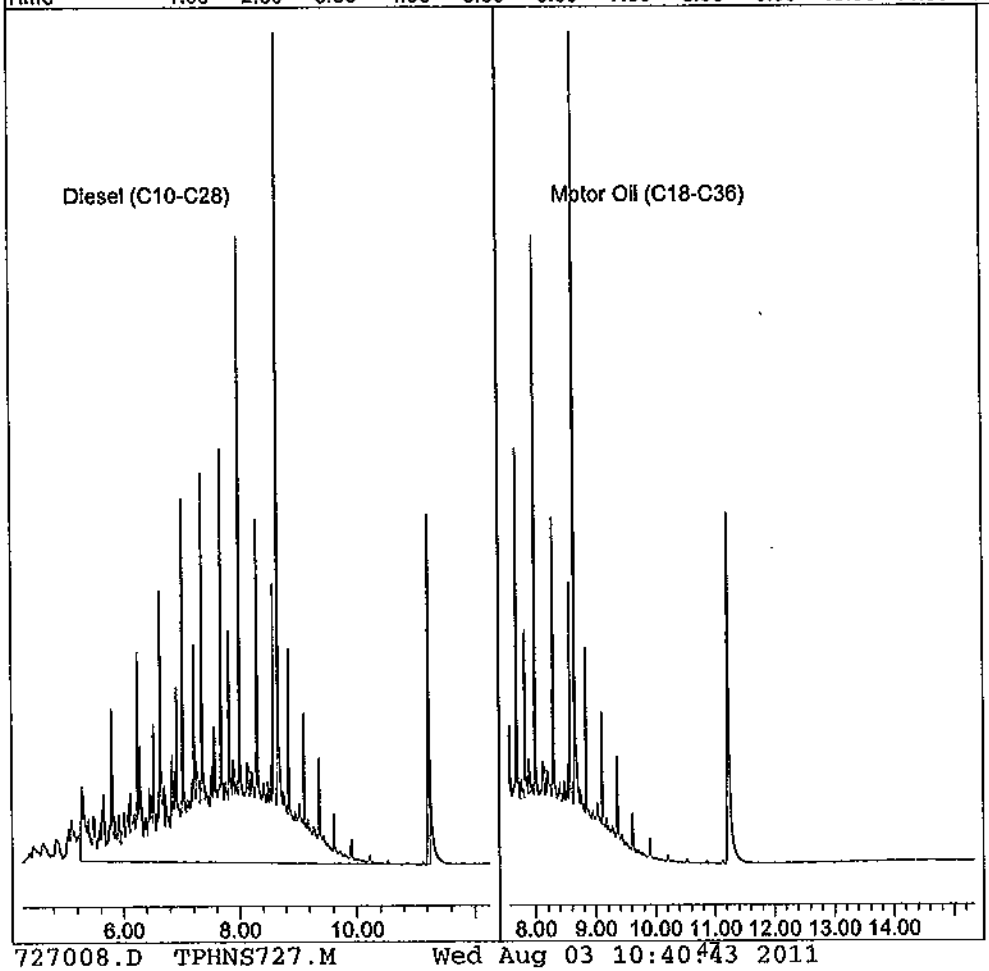
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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

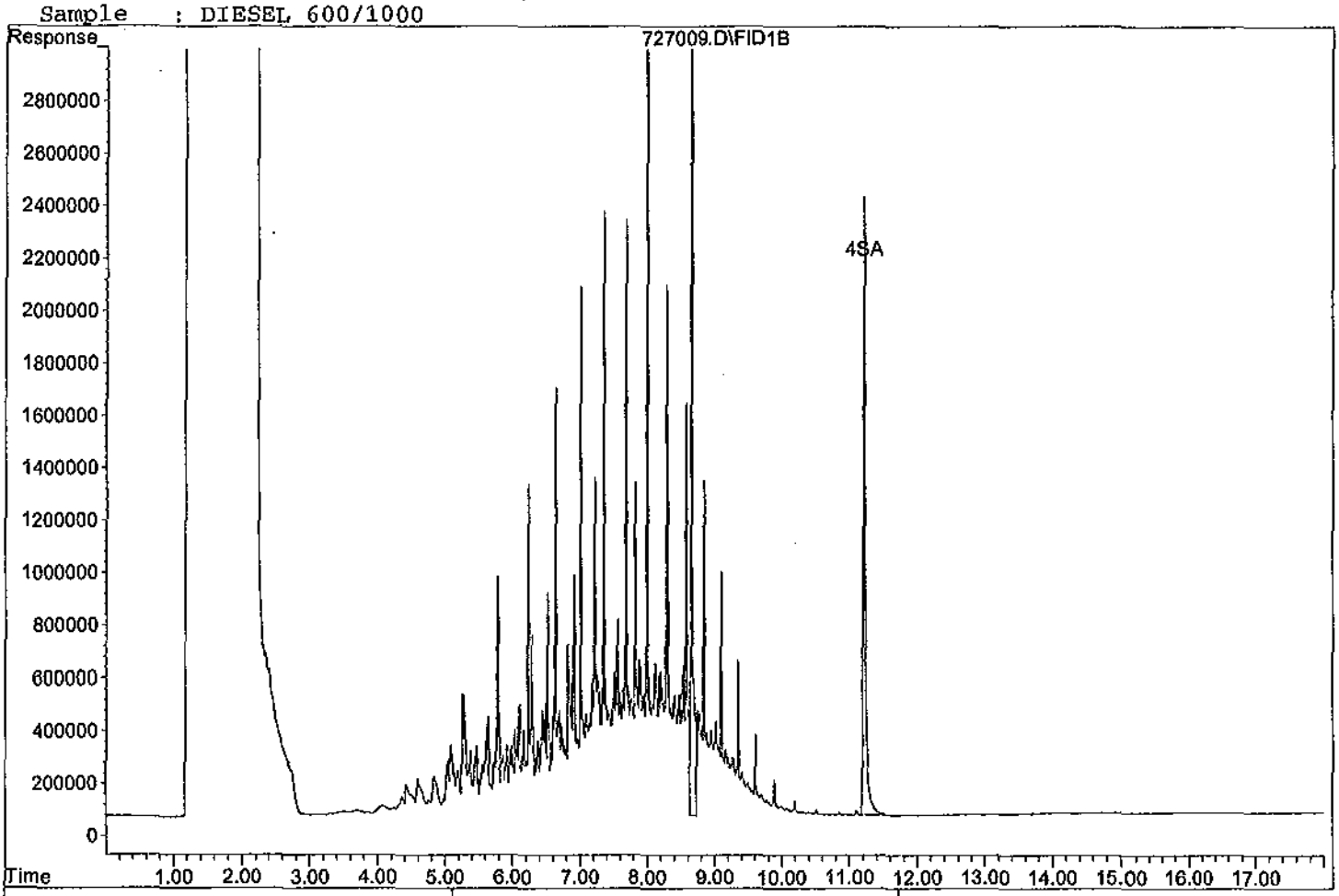
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

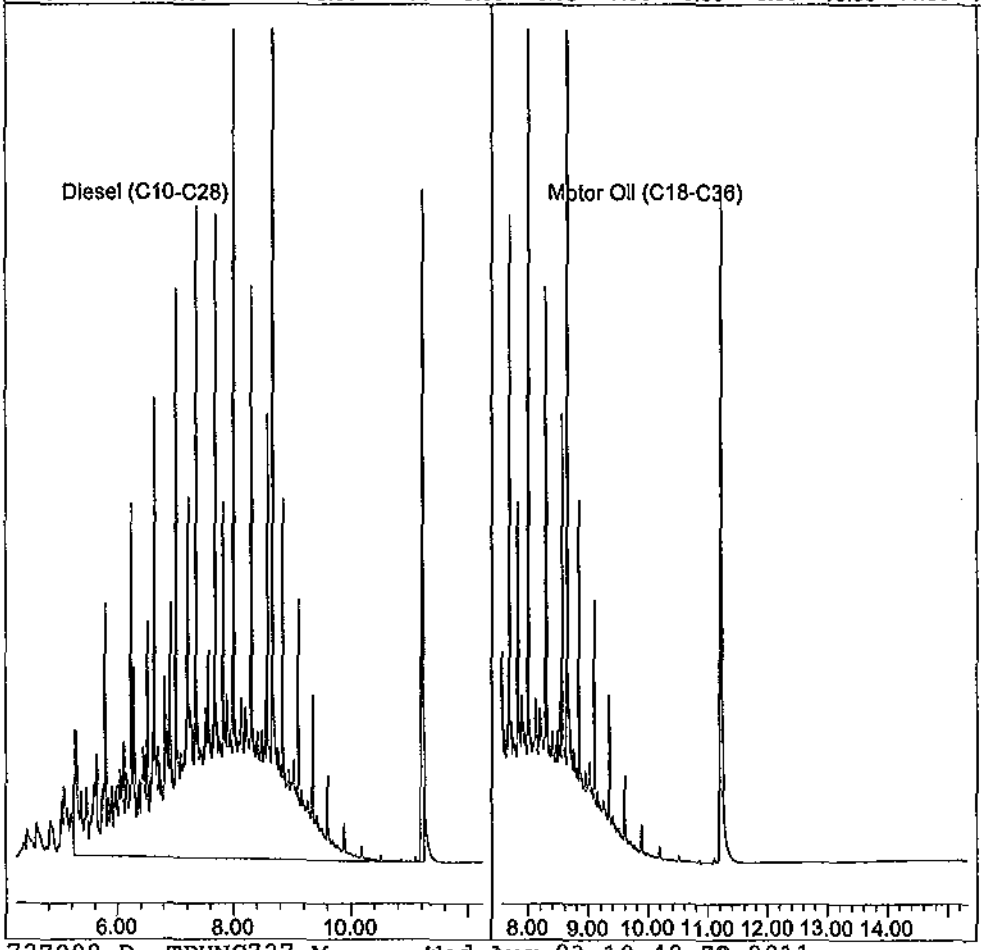
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.65	78364229	32.697 ppb
Surrogate Spike 30.000	Recovery =		108.99%
4) SA Octacosane(S)	11.22	51044217	32.706 ppb
Surrogate Spike 30.000	Recovery =		109.02%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	907332650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

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

Quantitation Report

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





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

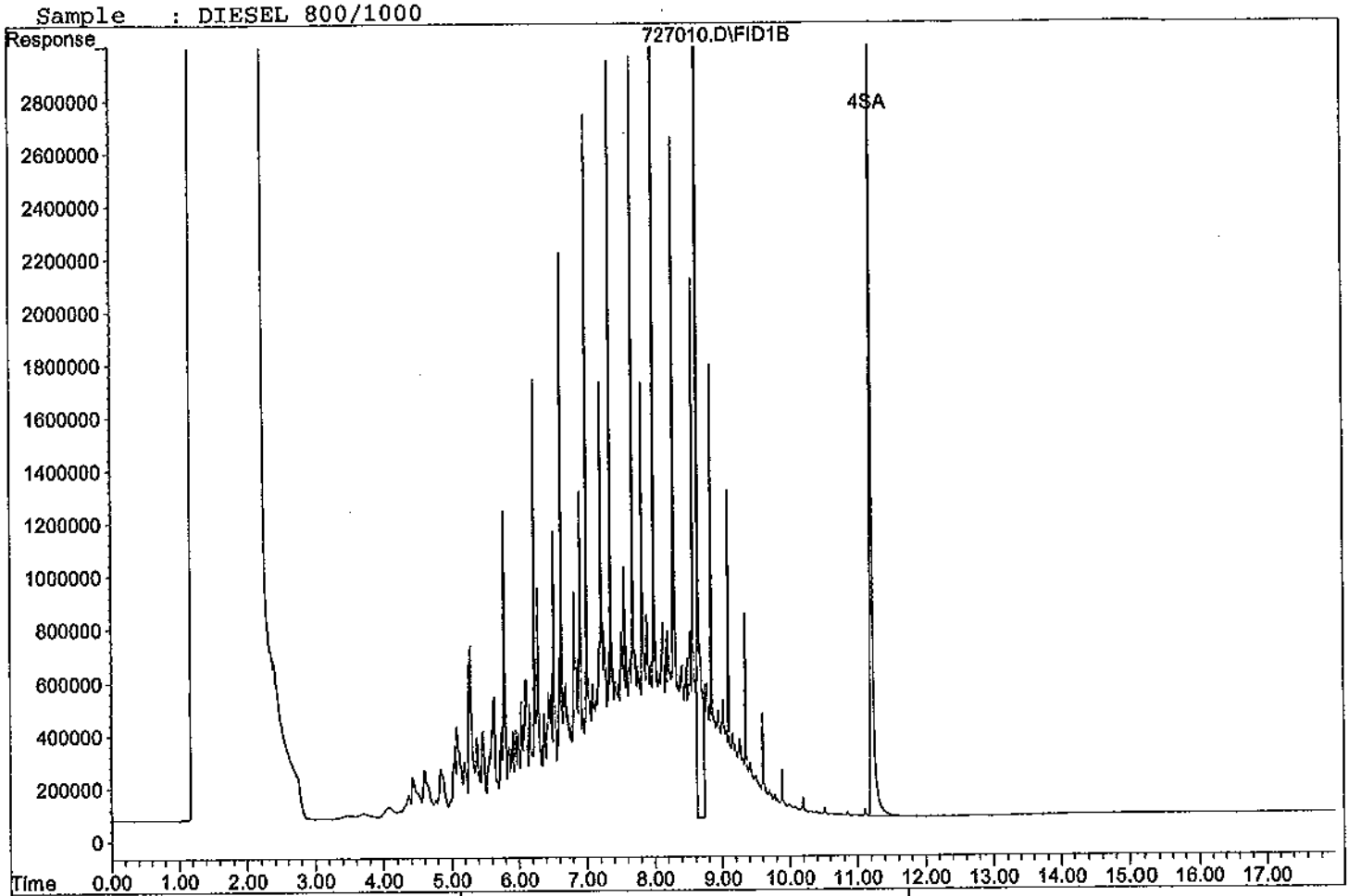
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

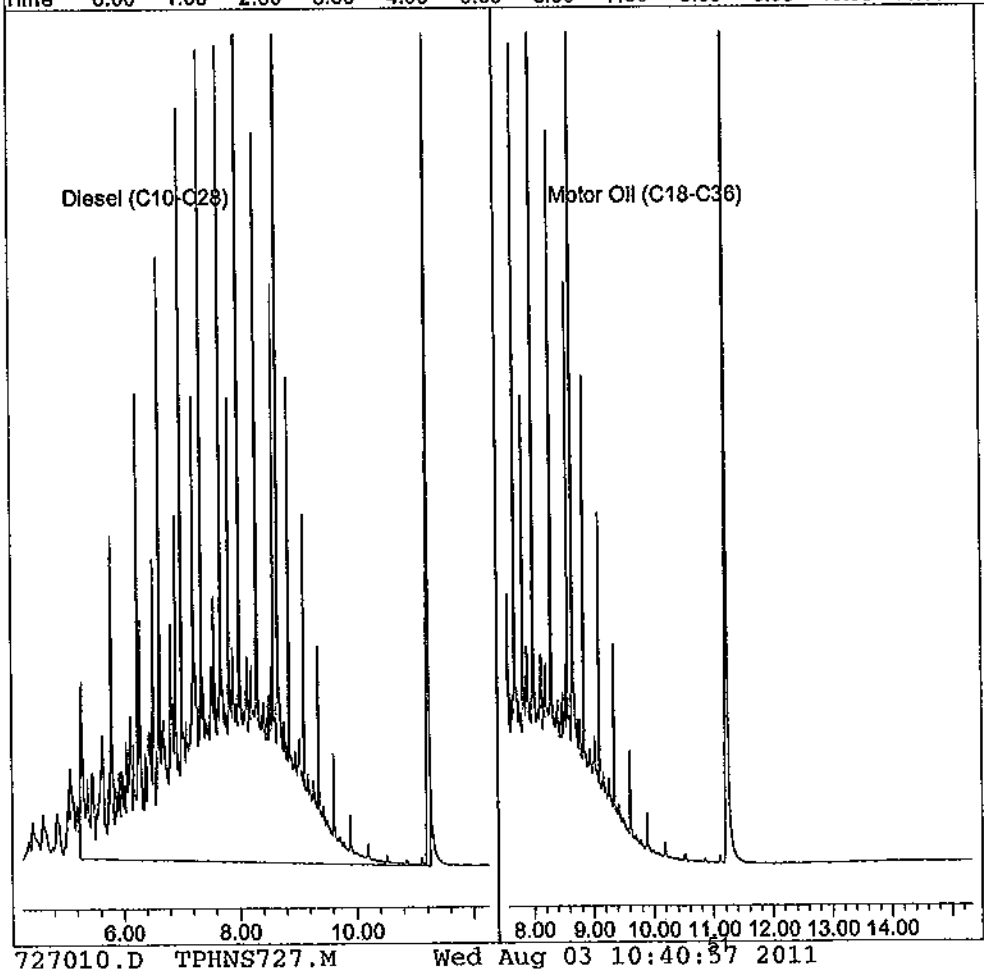
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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

Quantitation Report

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

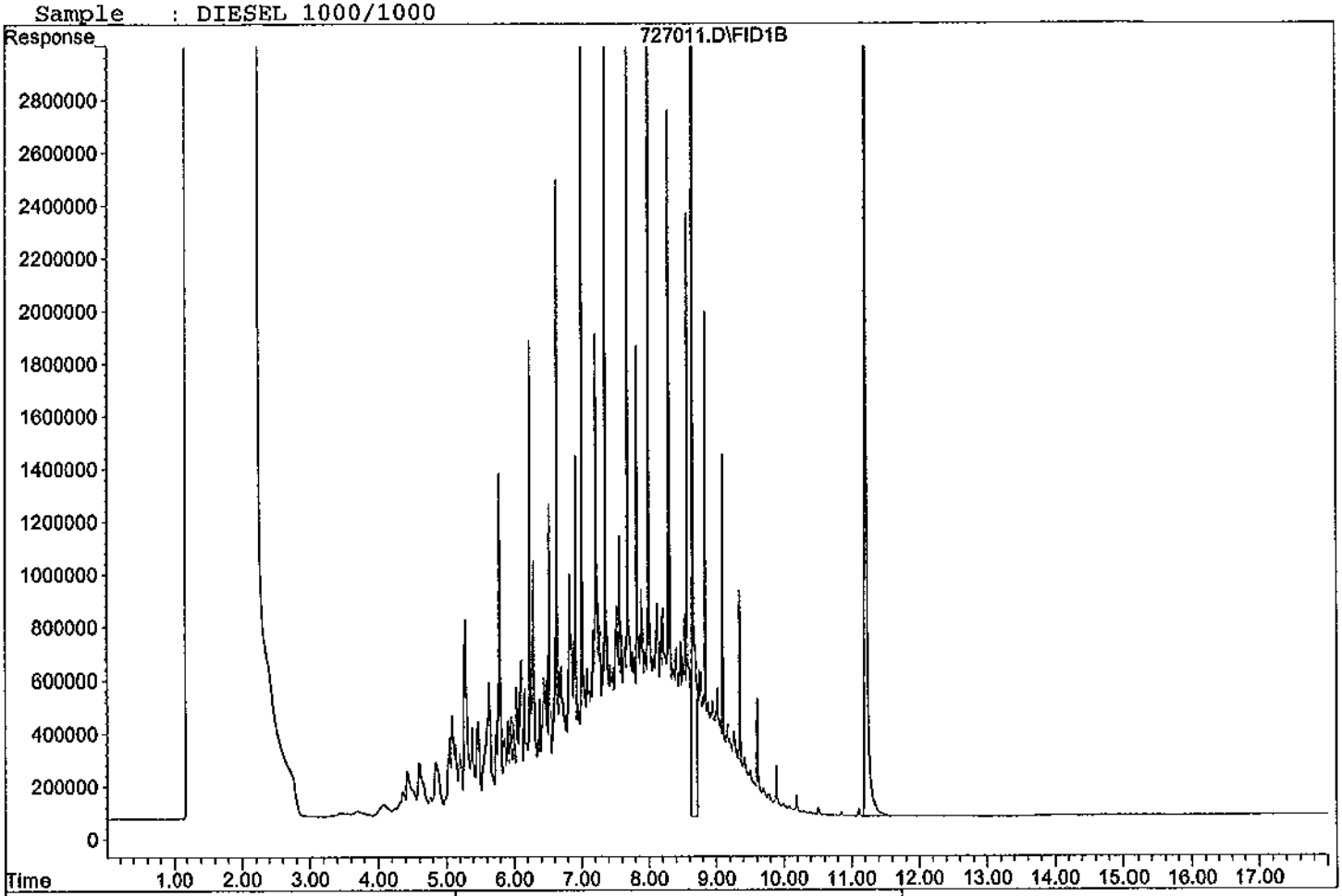
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

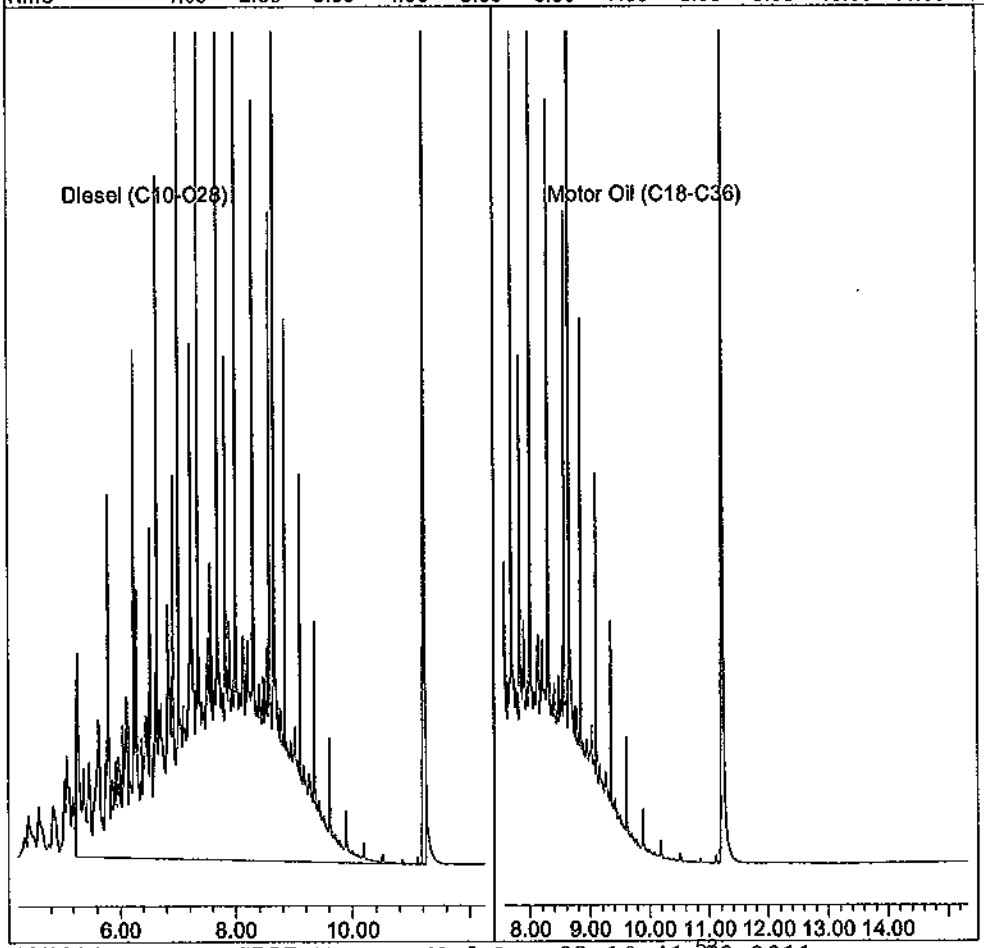
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.66	106876401	44.593 ppb
Surrogate Spike 30.000		Recovery =	148.64%
4) SA Octacosane(S)	11.22	72550485	46.487 ppb
Surrogate Spike 30.000		Recovery =	154.96%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	1289944231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

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

Quantitation Report

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

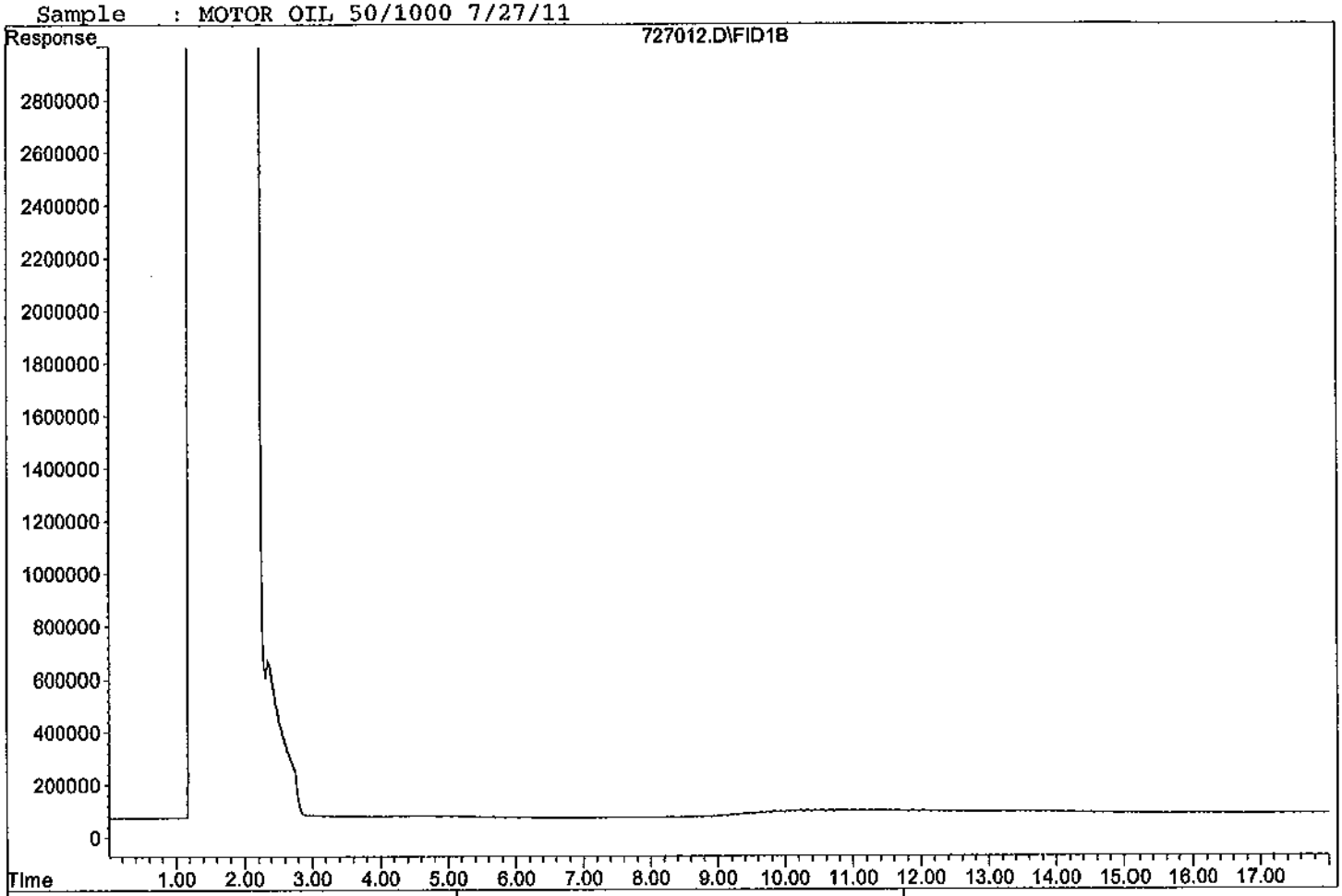
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

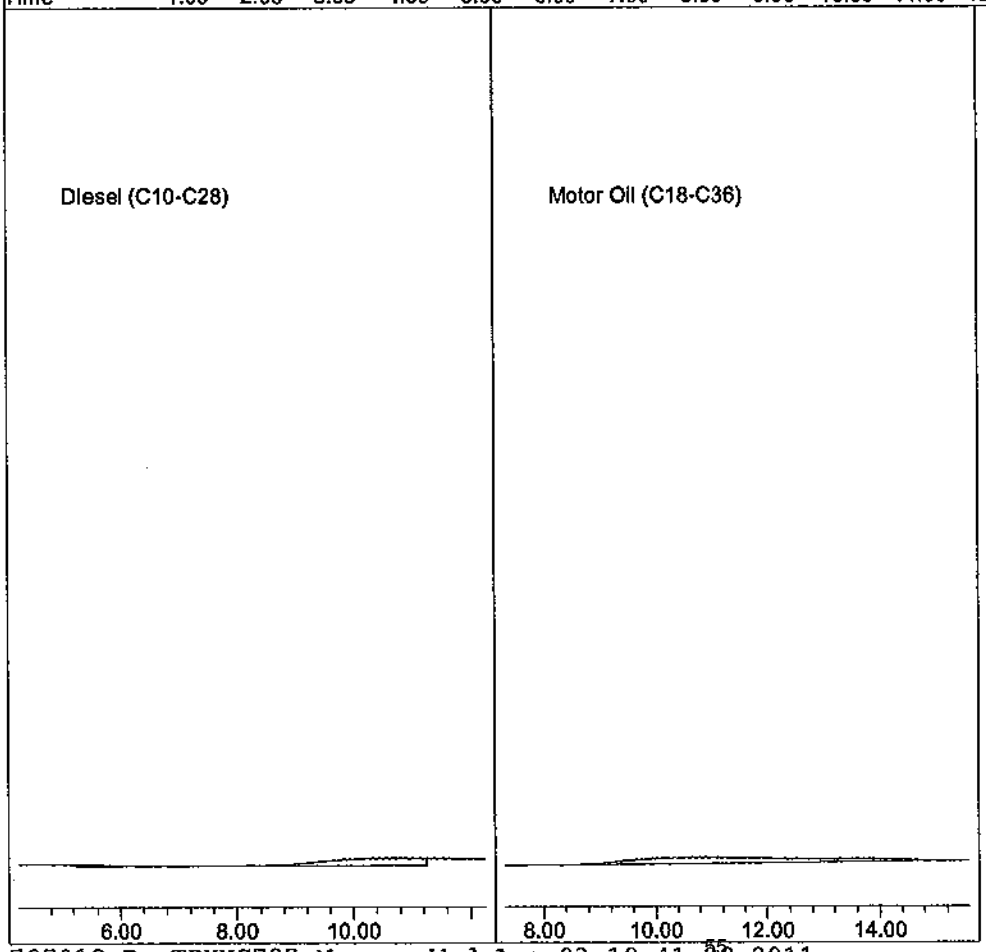
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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

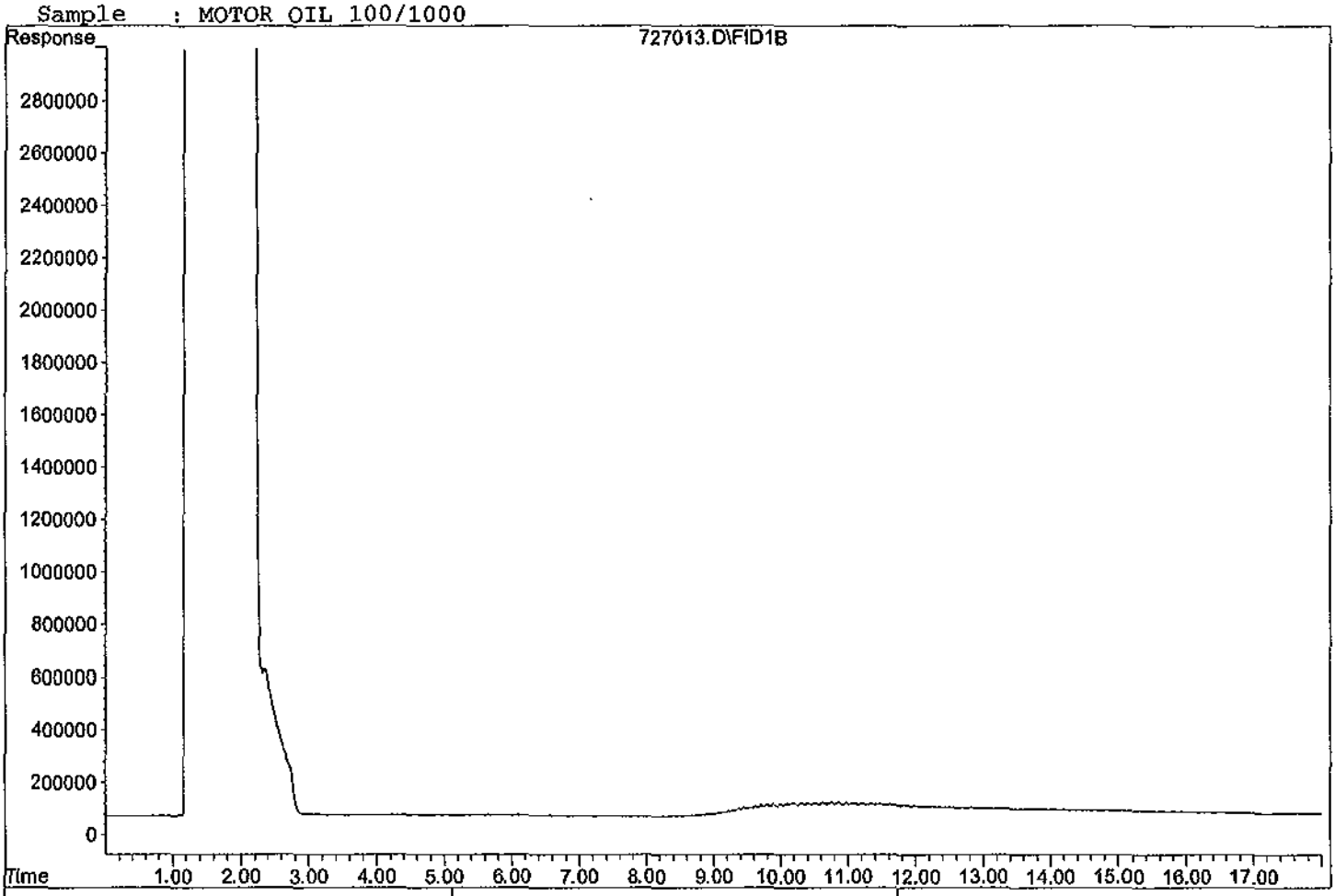
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

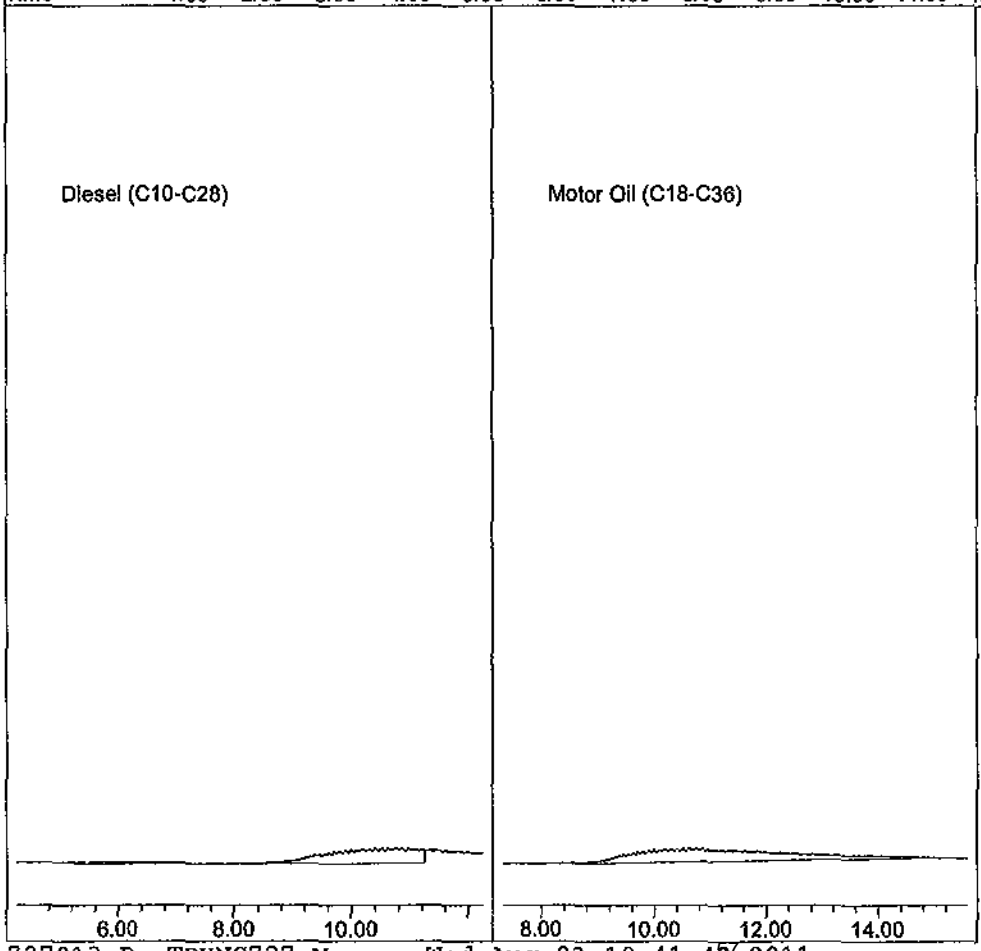
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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)

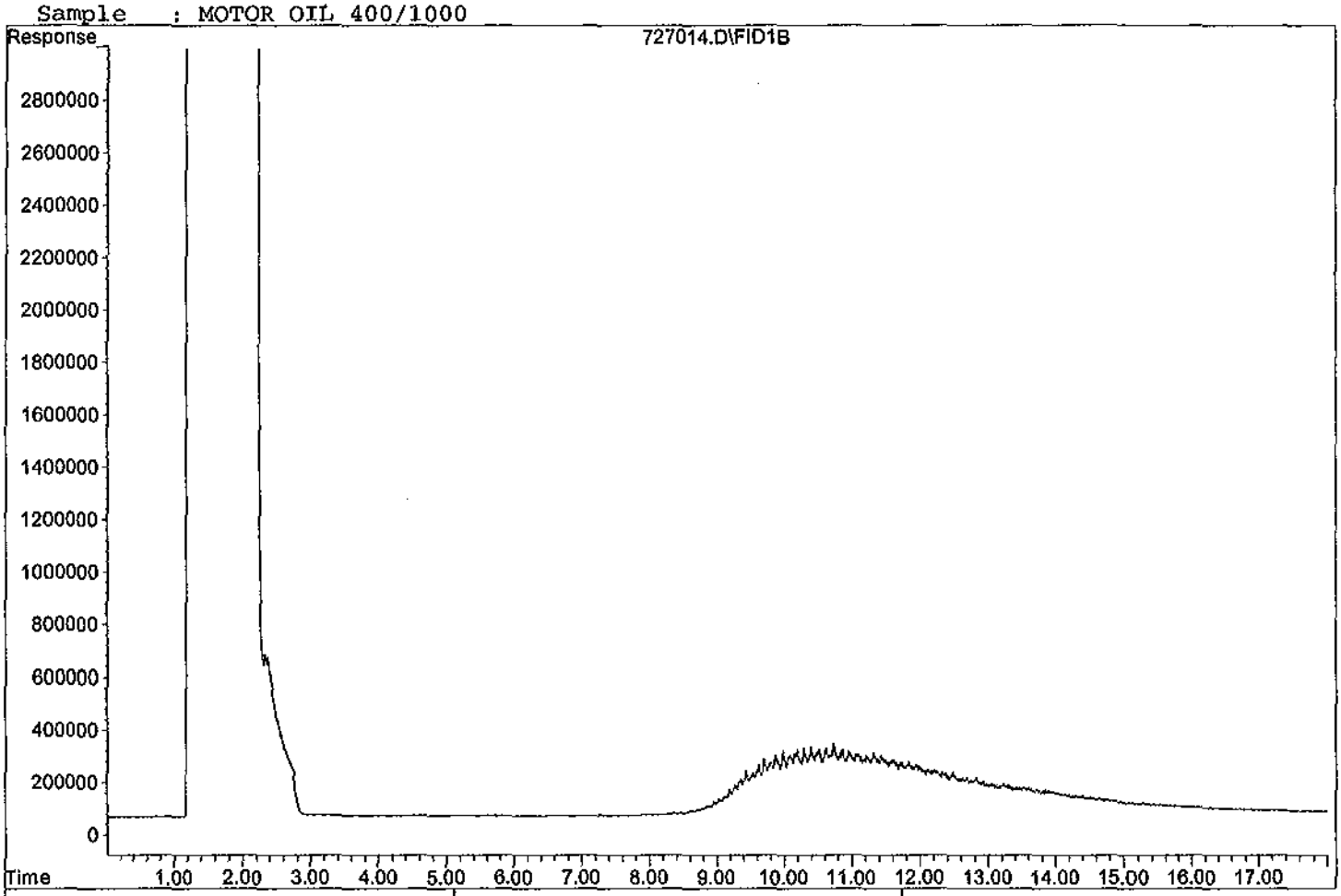
Data File : G:\APOLLO\DATA\110727\727014.D Vial: 14
Acq On : 7-27-11 17:56:35 Operator: LAC
Sample : MOTOR OIL 400/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

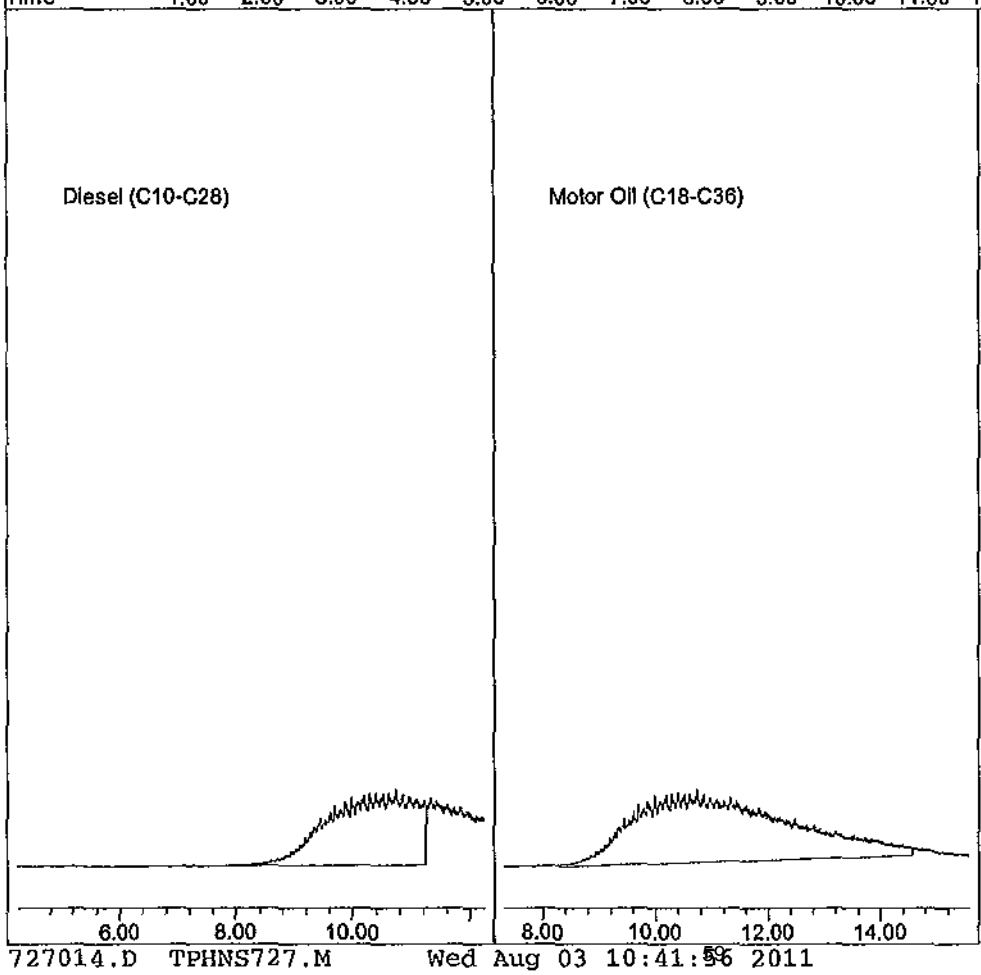
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

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)

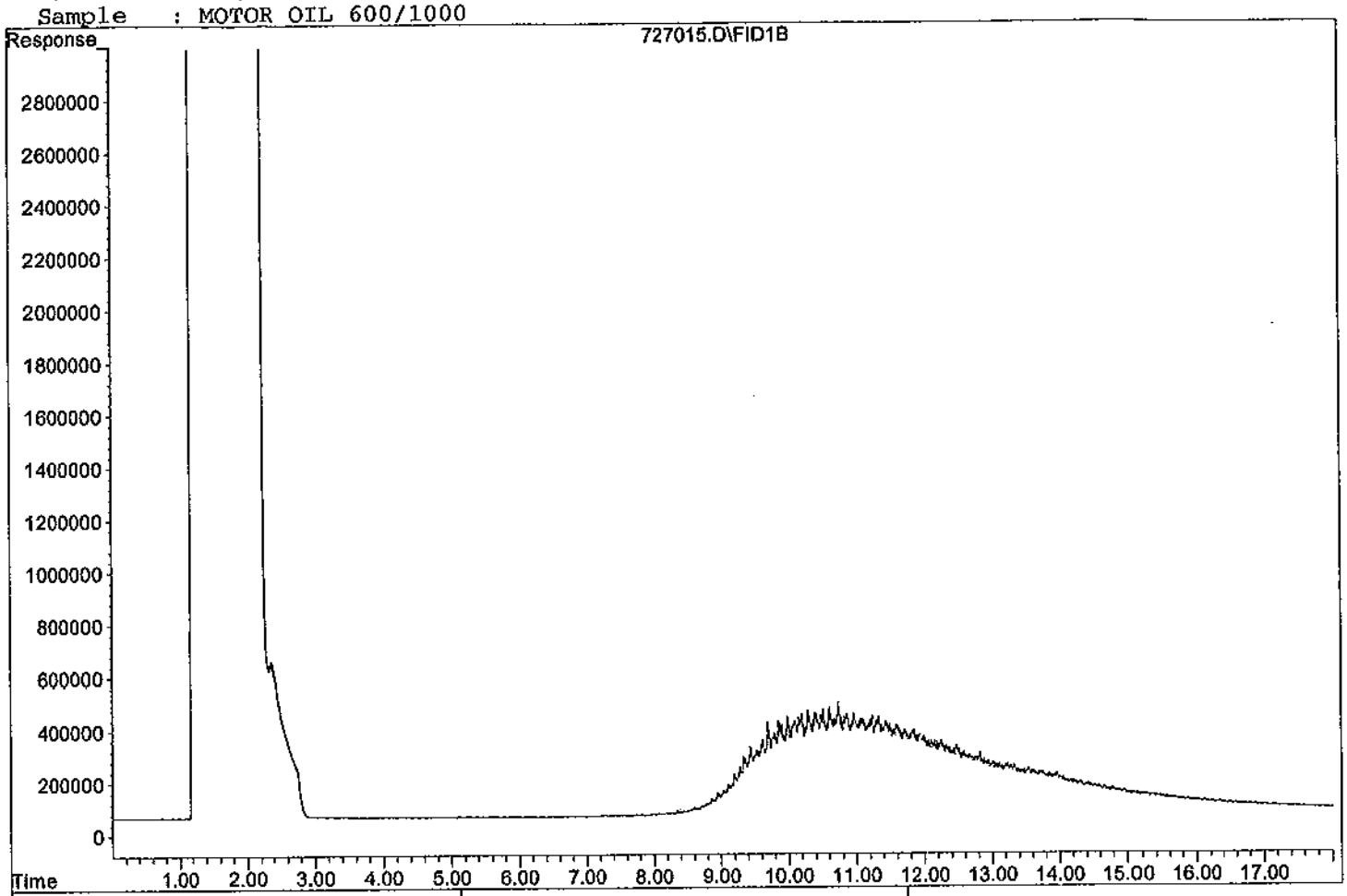
Data File : G:\APOLLO\DATA\110727\727015.D Vial: 15
Acq On : 7-27-11 18:22:34 Operator: LAC
Sample : MOTOR OIL 600/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

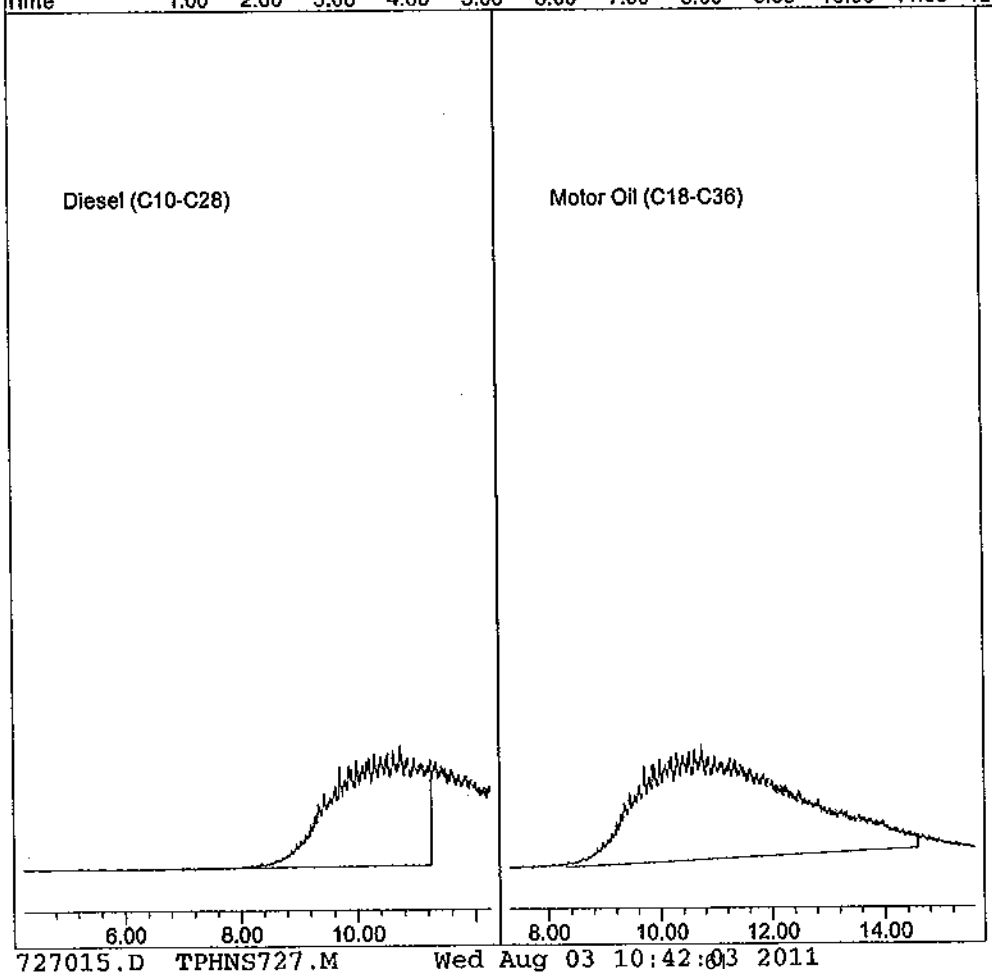
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

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

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





Quantitation Report (Not Reviewed)

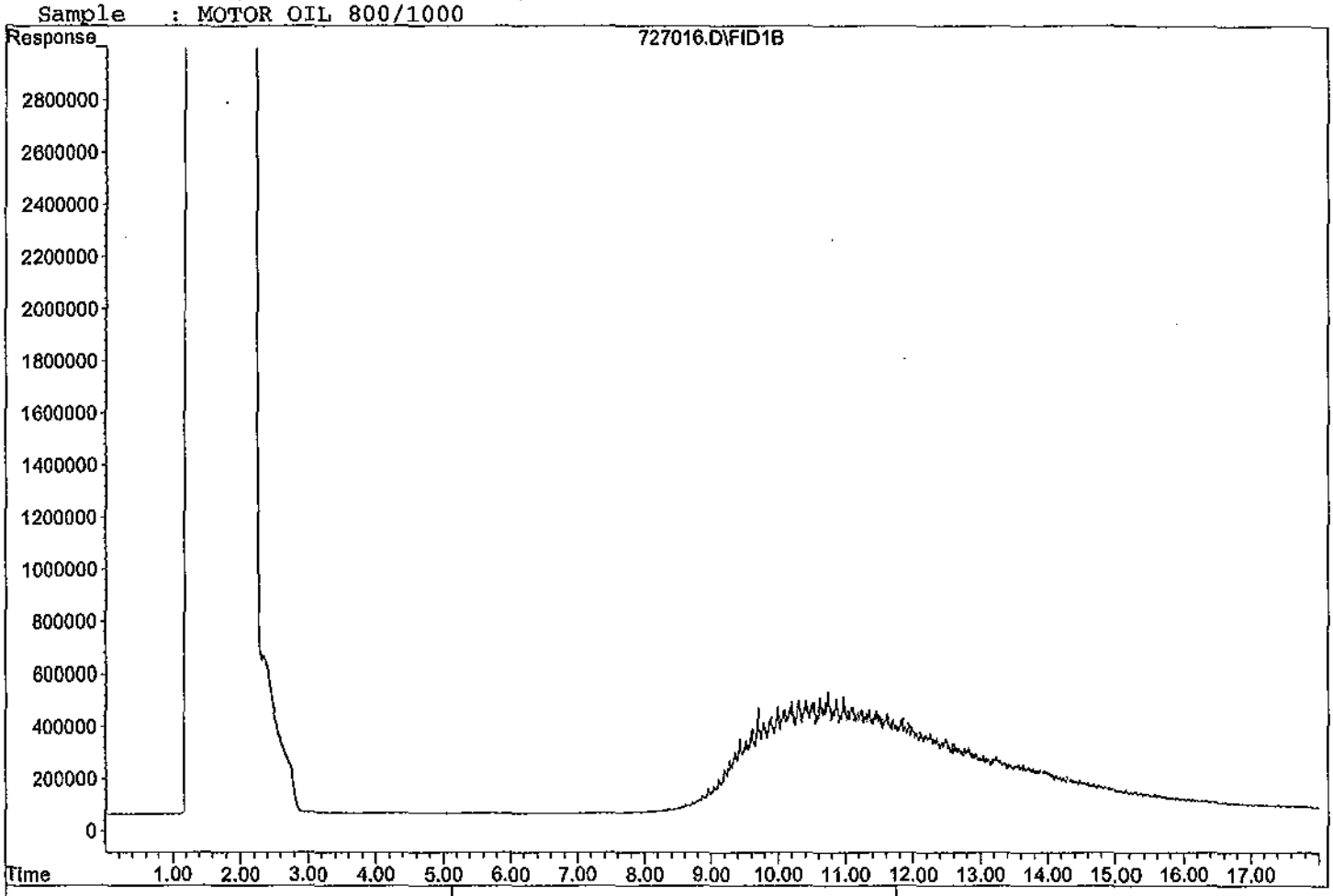
Data File : G:\APOLLO\DATA\110727\727016.D Vial: 16
Acq On : 7-27-11 18:48:14 Operator: LAC
Sample : MOTOR OIL 800/1000 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 3 10:37 2011 Quant Results File: TPHNS727.RES

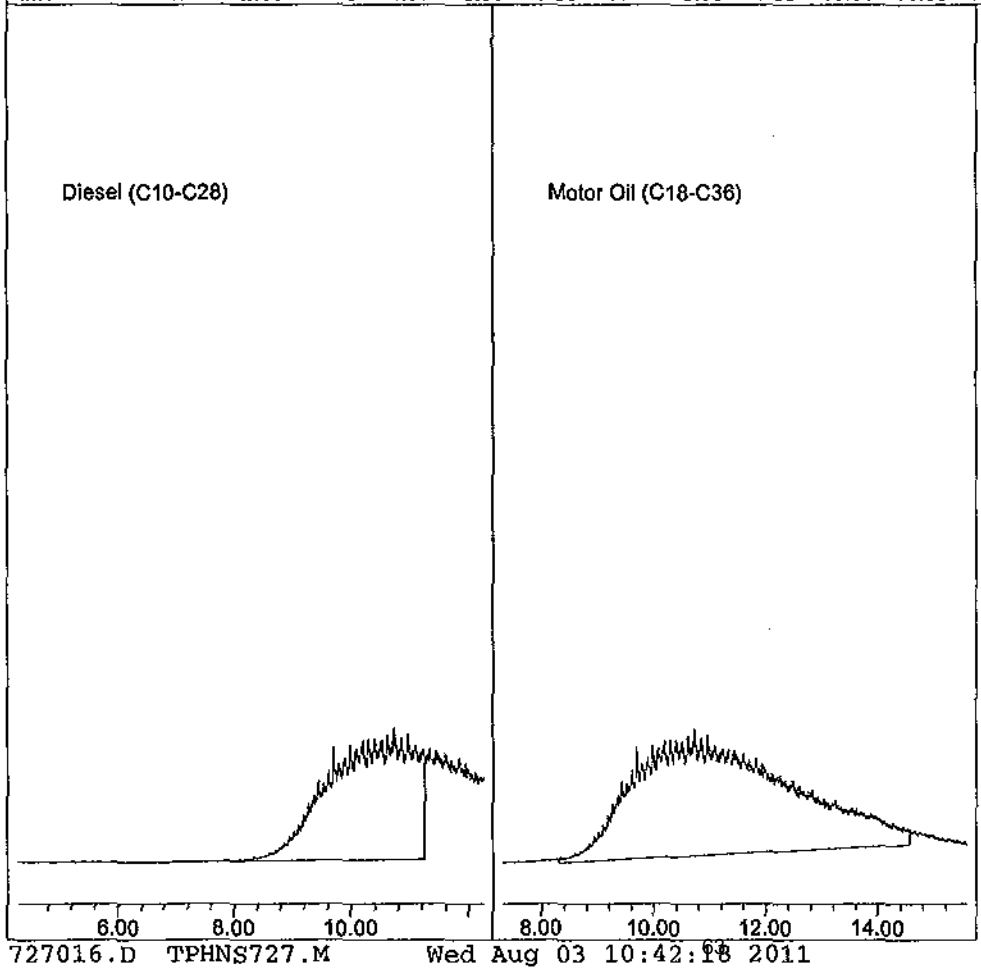
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

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

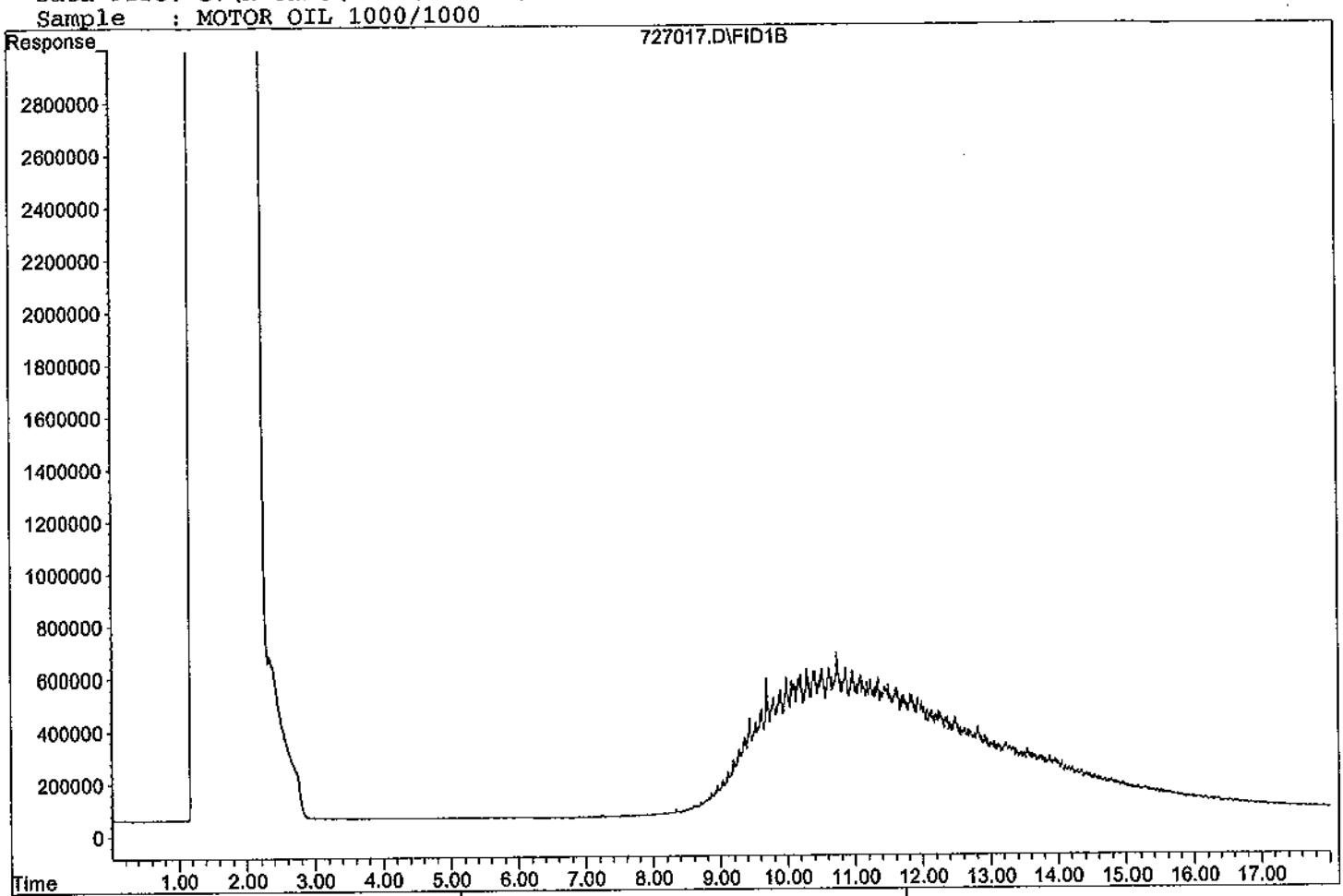
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

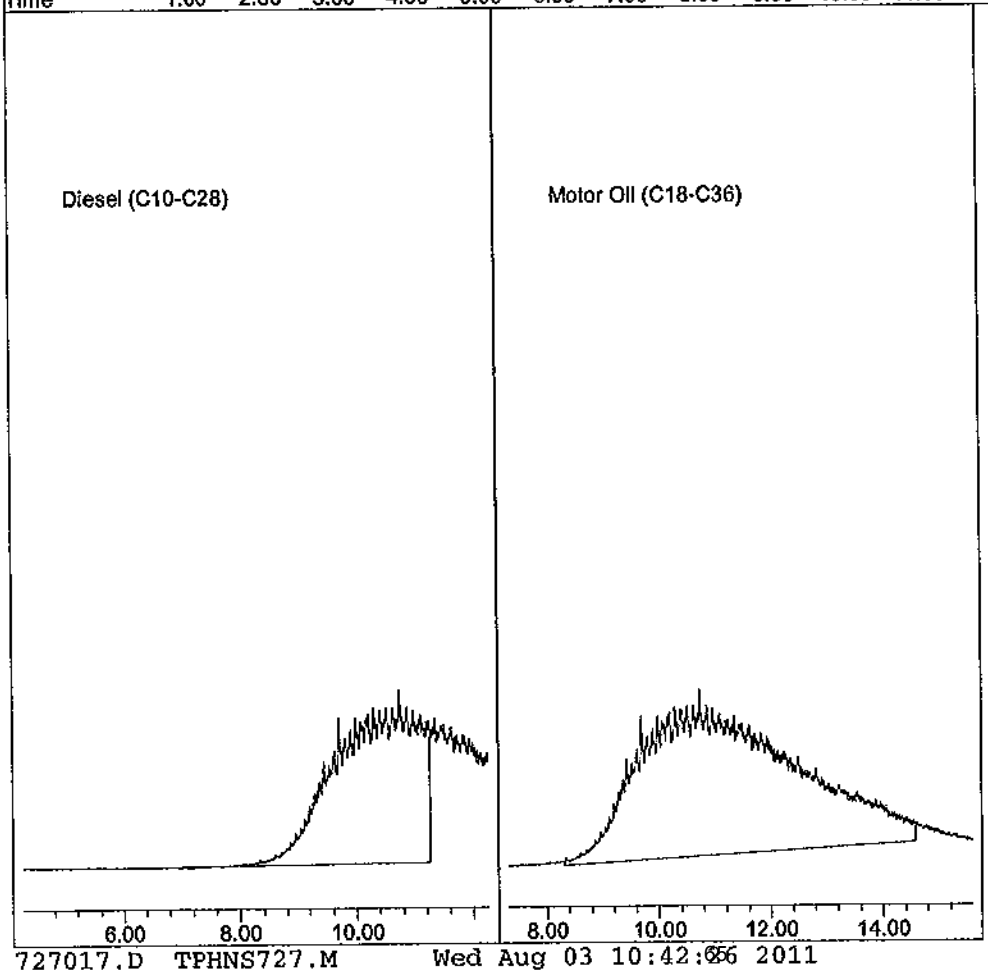
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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





727017.D TPHNS727.M Wed Aug 03 10:42:56 2011

TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65208
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							
5							
6							
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34							
35							
36							
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

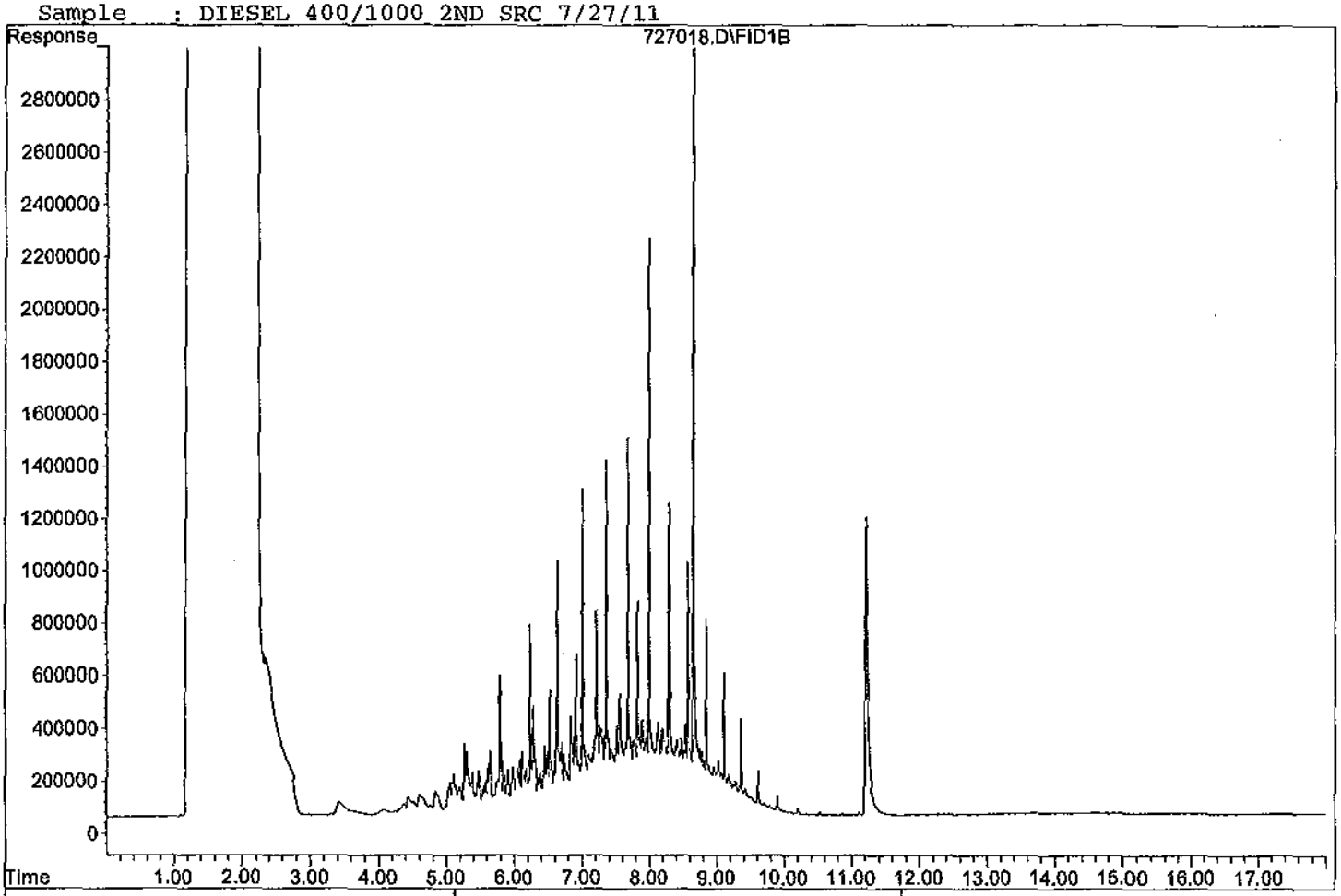
Method : G:\APOLLO\DATA\110801\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Aug 03 10:36:07 2011
Response via : Multiple Level Calibration

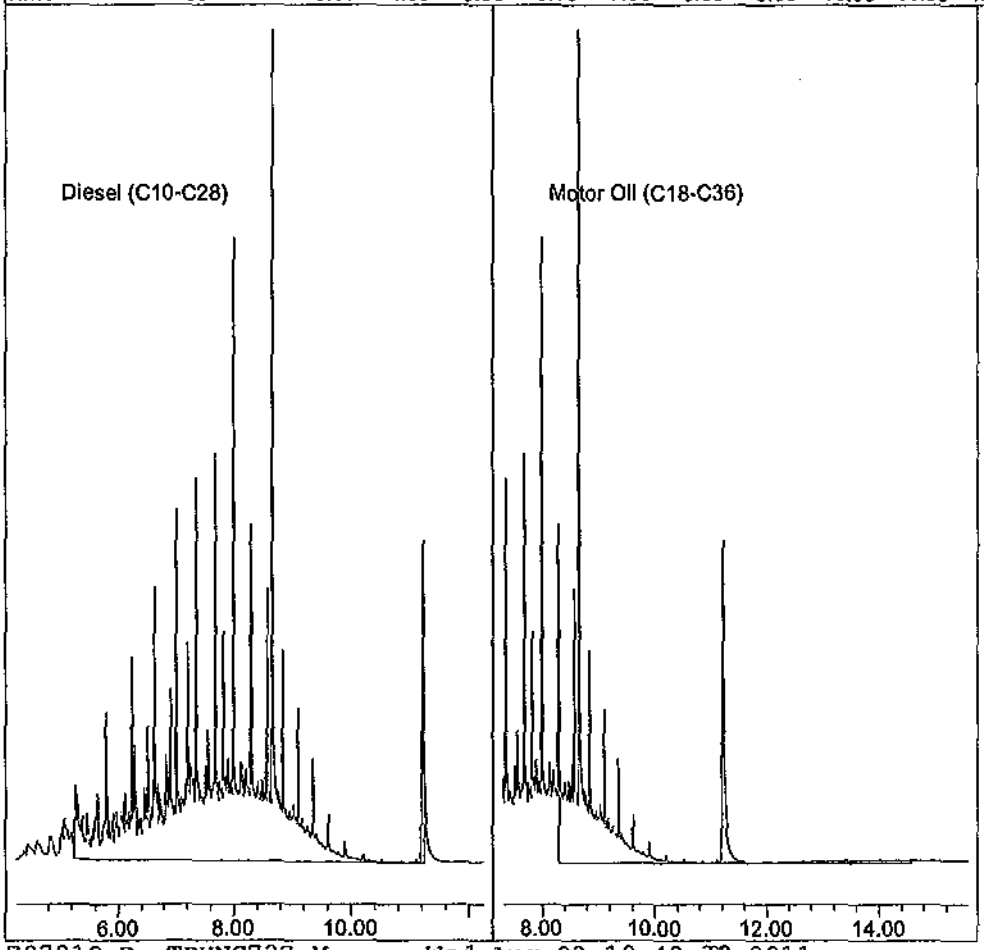
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

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: 65208
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)

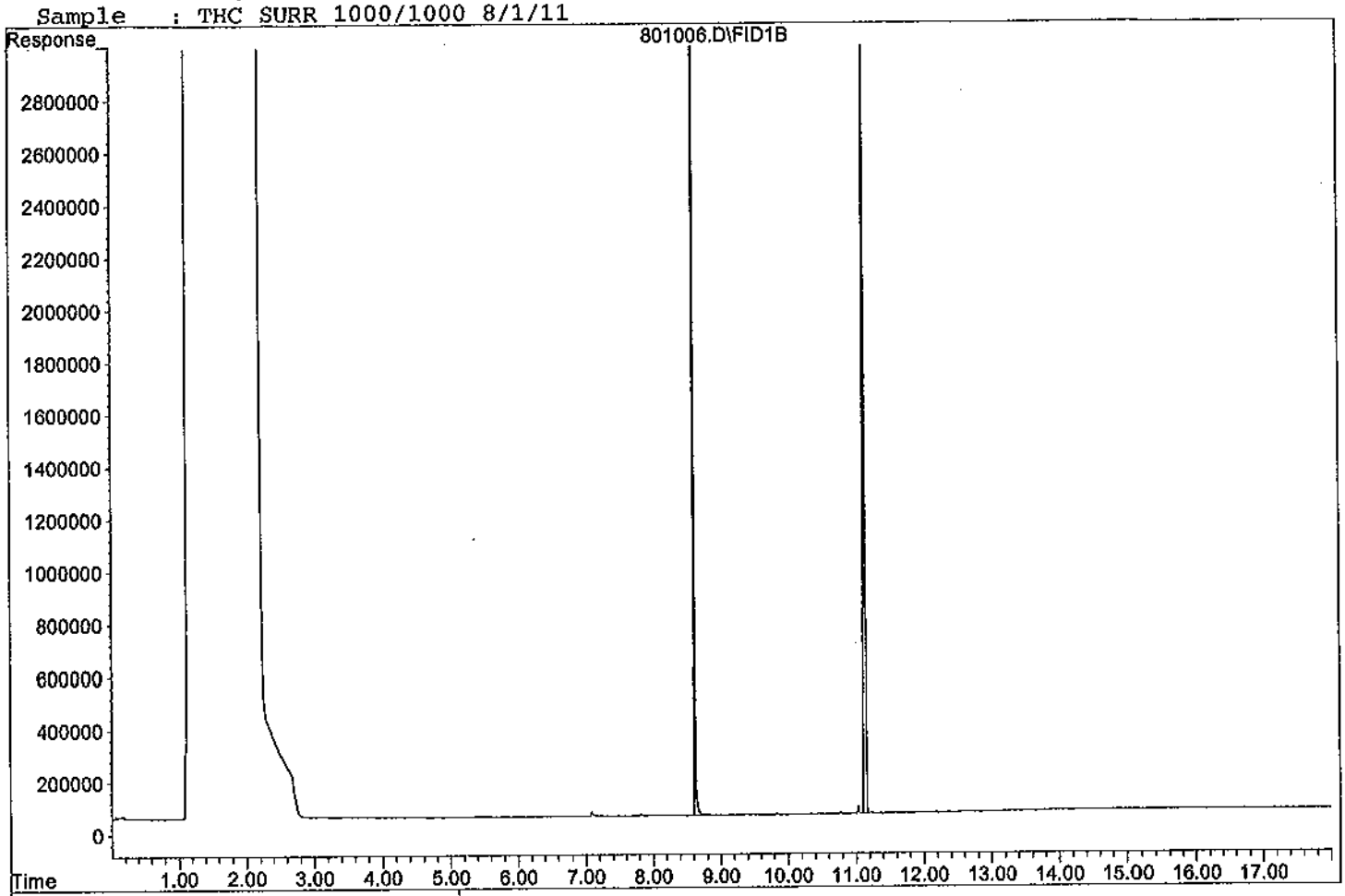
Data File : G:\APOLLO\DATA\110801\801006.D Vial: 6
Acq On : 8-1-11 11:59:38 Operator: LAC
Sample : THC SURR 1000/1000 8/1/11 Inst : Apollo
Misc : MIX(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

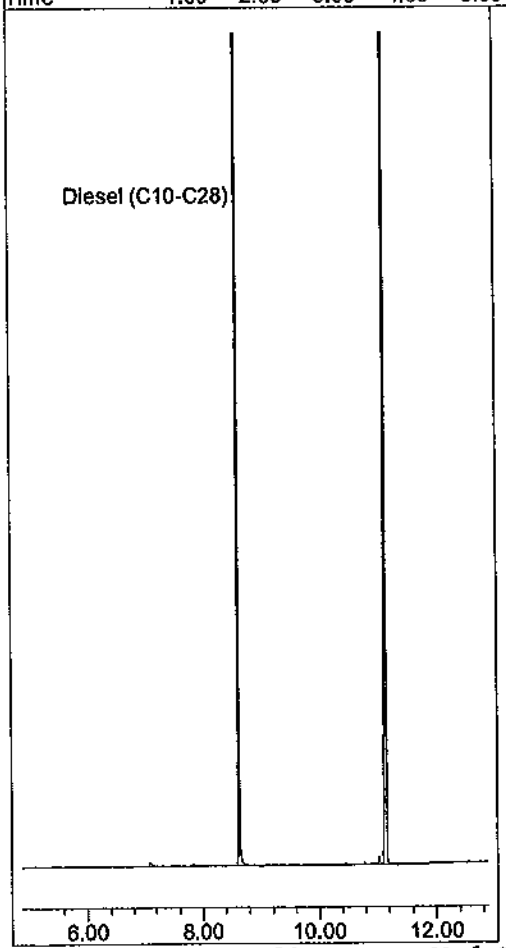
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

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			

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





Quantitation Report (Not Reviewed)

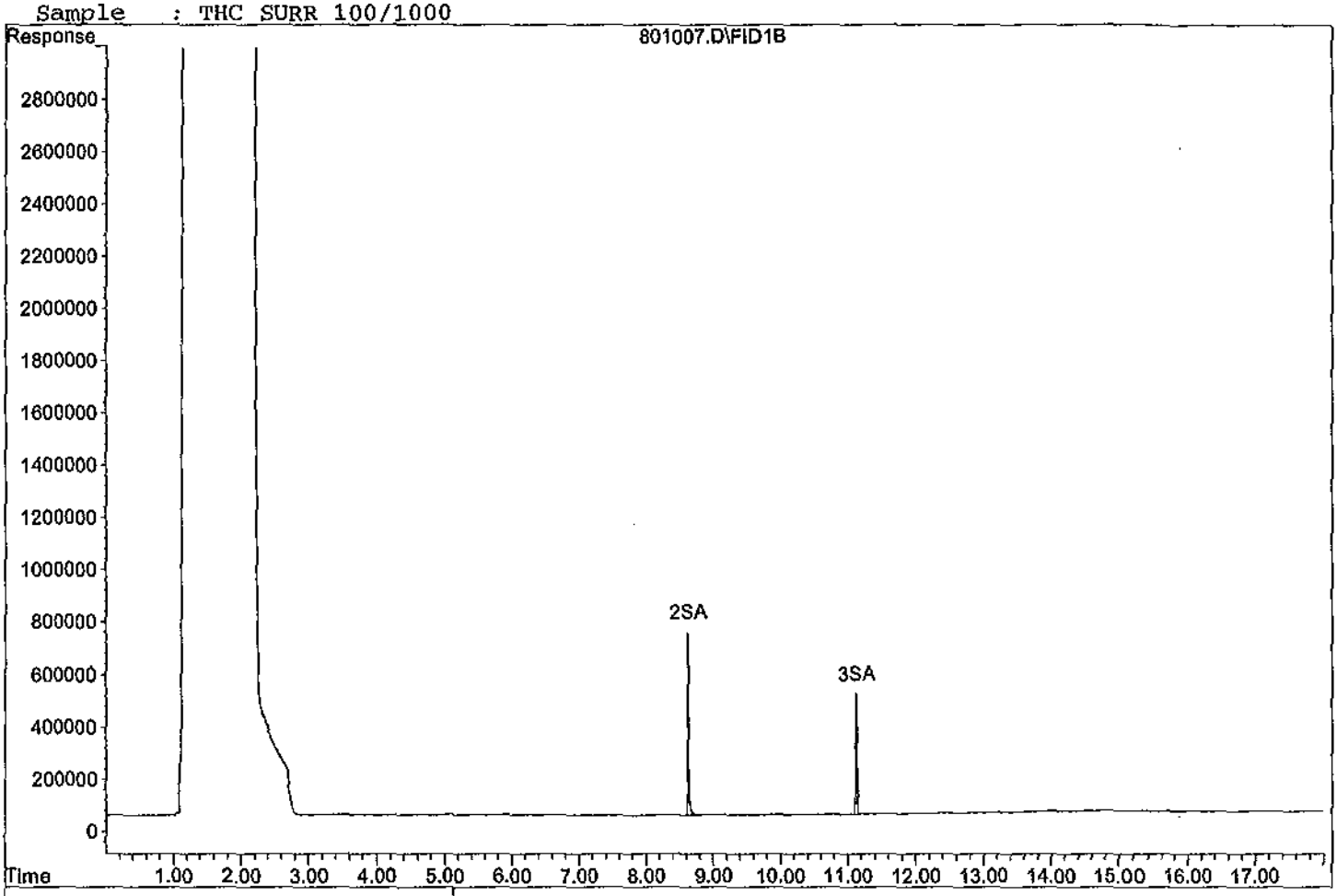
Data File : G:\APOLLO\DATA\110801\801007.D Vial: 7
Acq On : 8-1-11 12:23:50 Operator: LAC
Sample : THC SURR 100/1000 Inst : Apollo
Misc : MIX(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

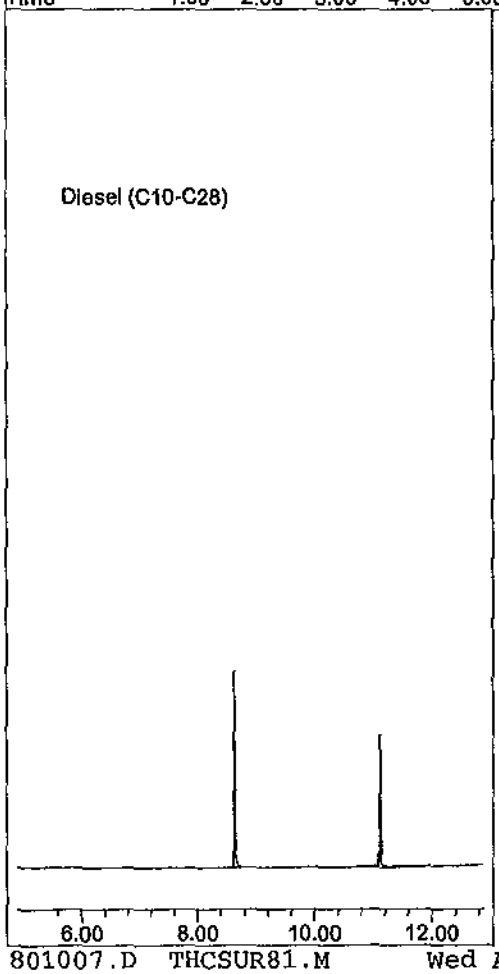
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

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)

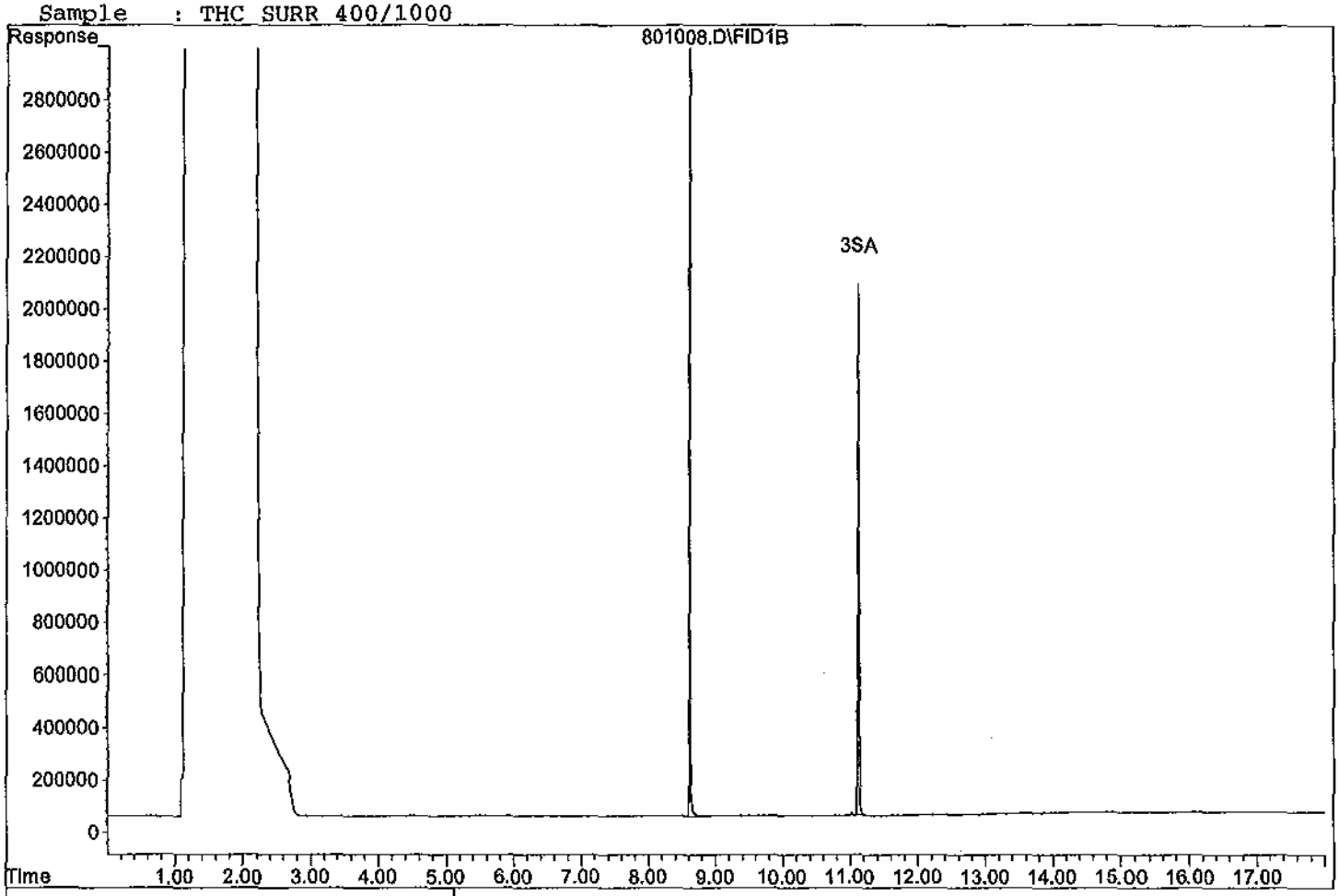
Data File : G:\APOLLO\DATA\110801\801008.D Vial: 8
Acq On : 8-1-11 12:47:56 Operator: LAC
Sample : THC SURR 400/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:39 2011 Quant Results File: THCSUR81.RES

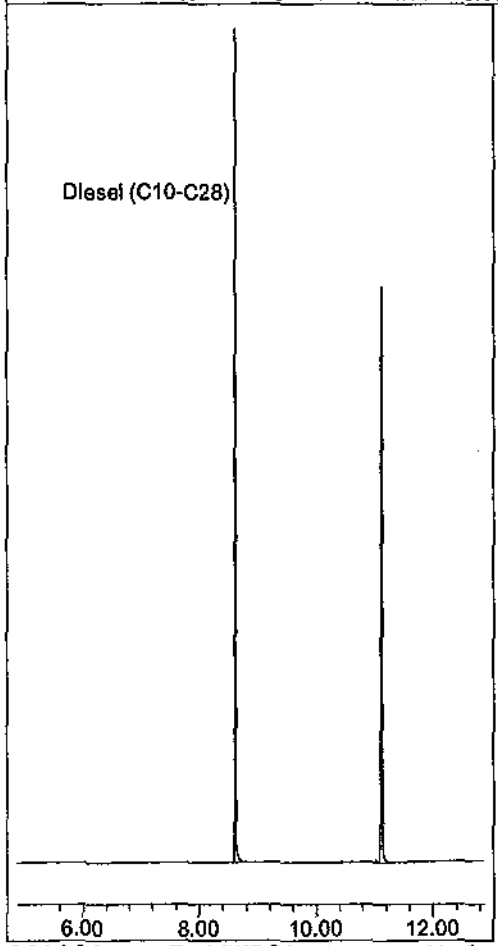
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

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			

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





Quantitation Report (Not Reviewed)

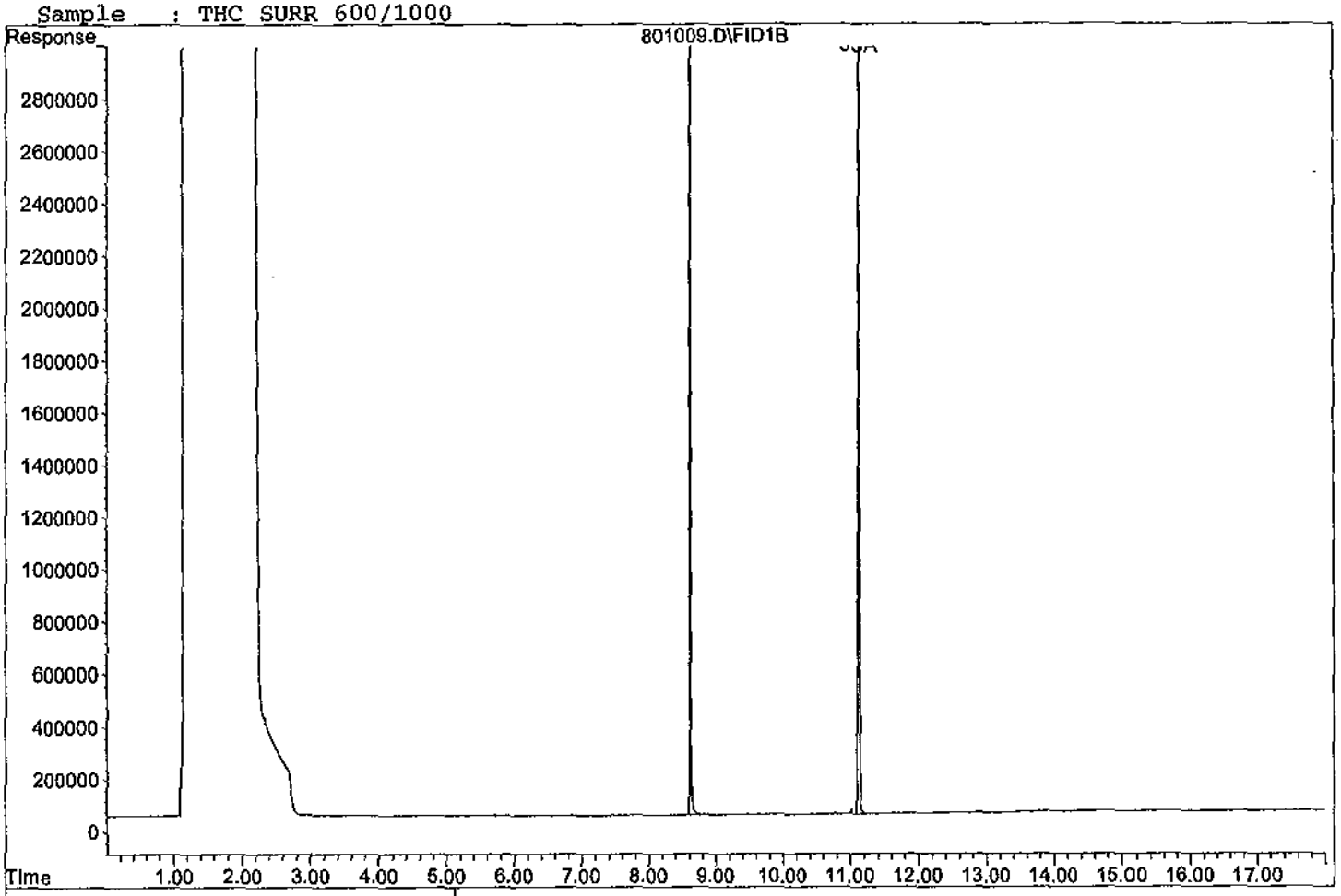
Data File : G:\APOLLO\DATA\110801\801009.D Vial: 9
Acq On : 8-1-11 13:12:04 Operator: LAC
Sample : THC SURR 600/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:40 2011 Quant Results File: THCSUR81.RES

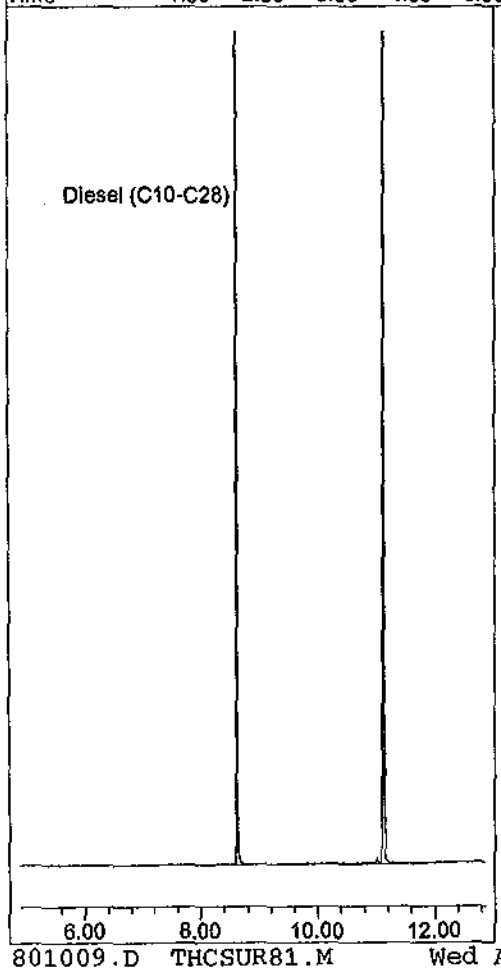
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

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			

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





Quantitation Report (Not Reviewed)

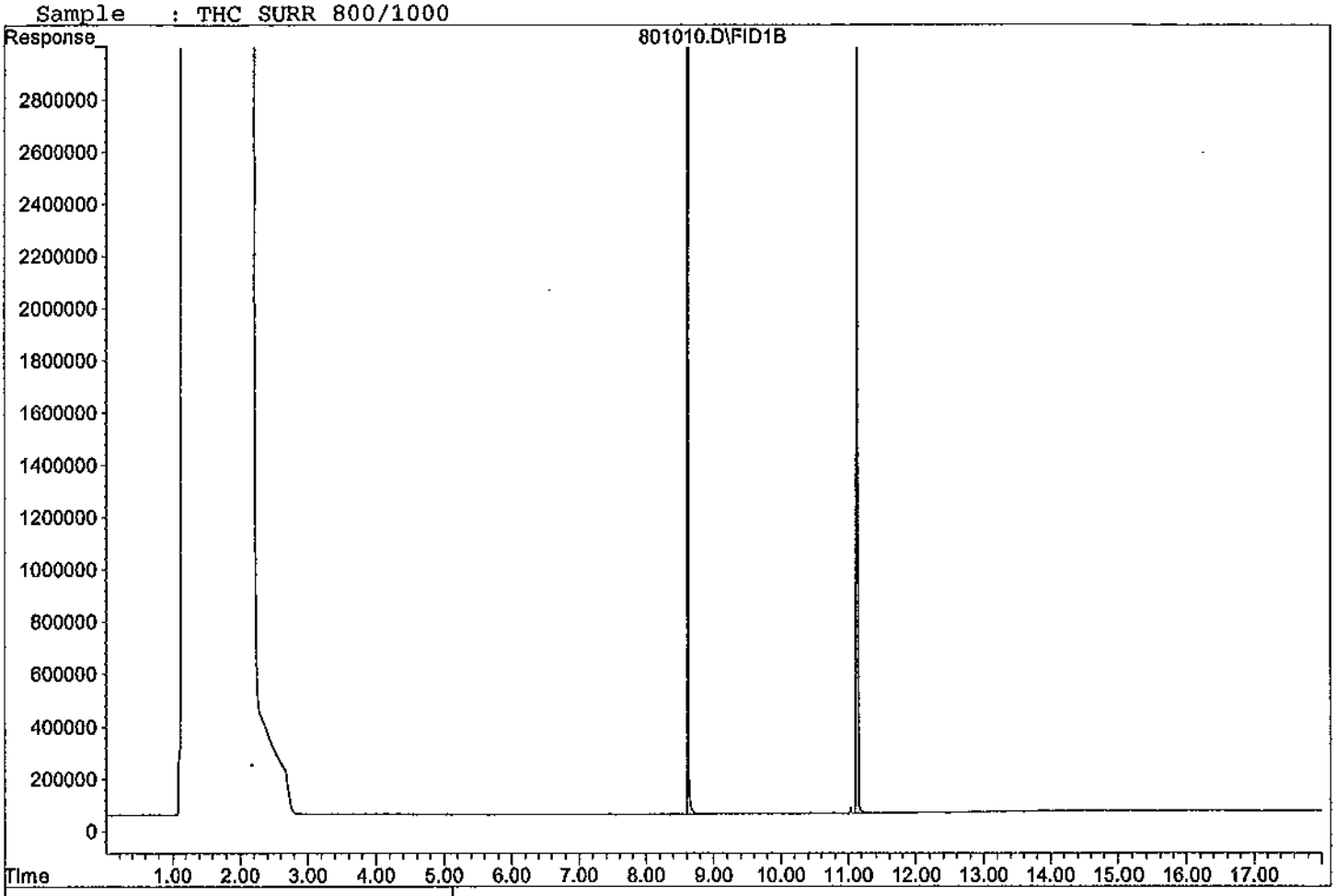
Data File : G:\APOLLO\DATA\110801\801010.D Vial: 10
Acq On : 8-1-11 13:36:15 Operator: LAC
Sample : THC SURR 800/1000 Inst : Apollo
Misc : Water Multiplr: 20.00
IntFile : events.e
Quant Time: Aug 2 15:40 2011 Quant Results File: THCSUR81.RES

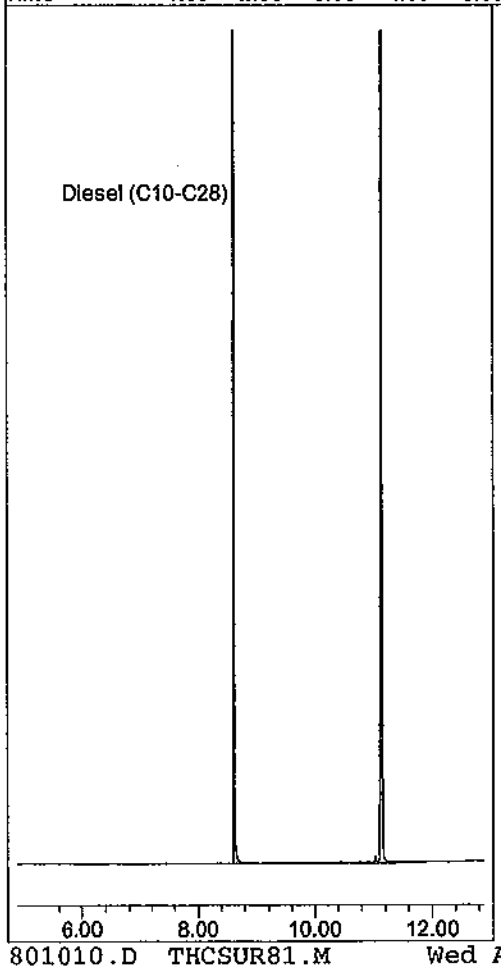
Method : G:\APOLLO\DATA\110801\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 02 10:29:12 2011
Response via : Multiple Level Calibration

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			

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: 65208
Date Analyzed: 08/11/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 811018,19.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	655356	677611	3.4	HATM	
2	HBTM	Motor Oil (C18-C36)	503145	516629	2.7	HBTM	
3							
4							
5							
6							
7							
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31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.1		

Quantitation Report (Not Reviewed)

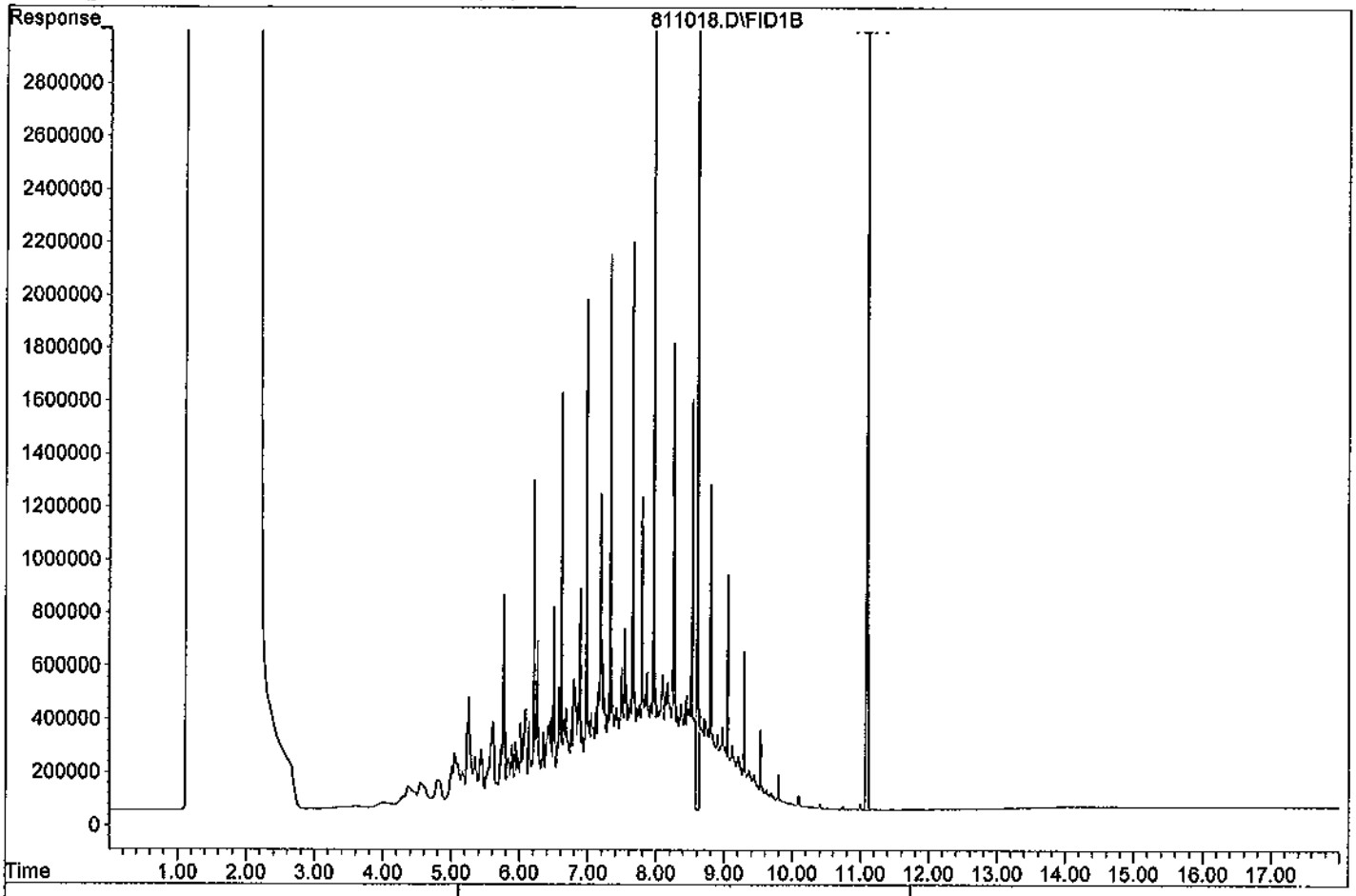
Data File : G:\APOLLO\DATA\110811\811018.D Vial: 18
Acq On : 8-11-11 23:53:02 Operator: LAC
Sample : DIESEL 600/1000 8/4/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 9 14:04 2011 Quant Results File: TPHNS727.RES

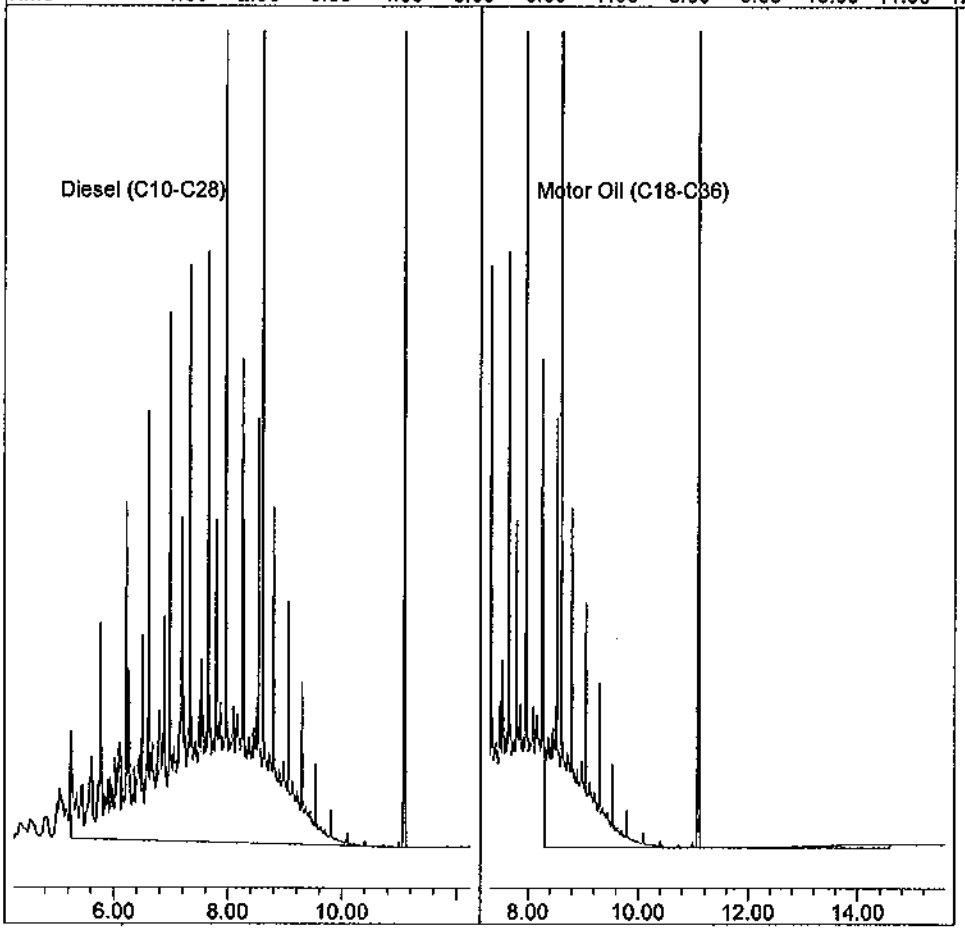
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

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	58324013	24.335	ppb
Surrogate Spike 30.000	Recovery =		81.12%	
4) SA Octacosane(S)	11.10	46810904	29.994	ppb
Surrogate Spike 30.000	Recovery =		99.98%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.25	813133302	620.376	ppb
2) HBTM Motor Oil (C18-C36)	11.45	223820438	222.422	ppb

Data File: G:\APOLLO\DATA\110811\811018.D
Sample : DIESEL 600/1000 8/4/11





Quantitation Report (Not Reviewed)

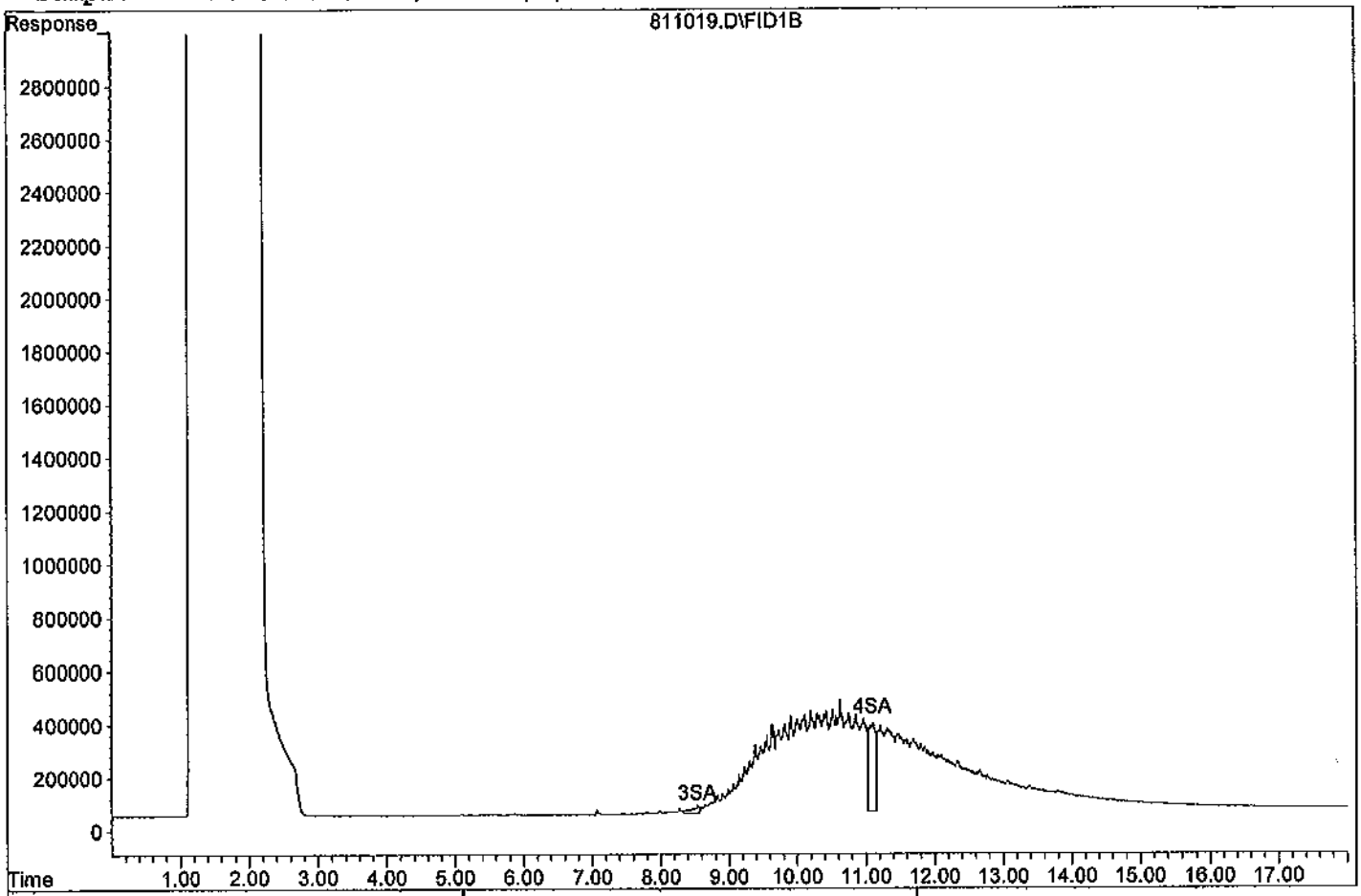
Data File : G:\APOLLO\DATA\110811\811019.D Vial: 19
Acq On : 8-12-11 0:17:34 Operator: LAC
Sample : MOTOR OIL 600/1000 8/4/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Aug 12 11:34 2011 Quant Results File: TPHNS727.RES

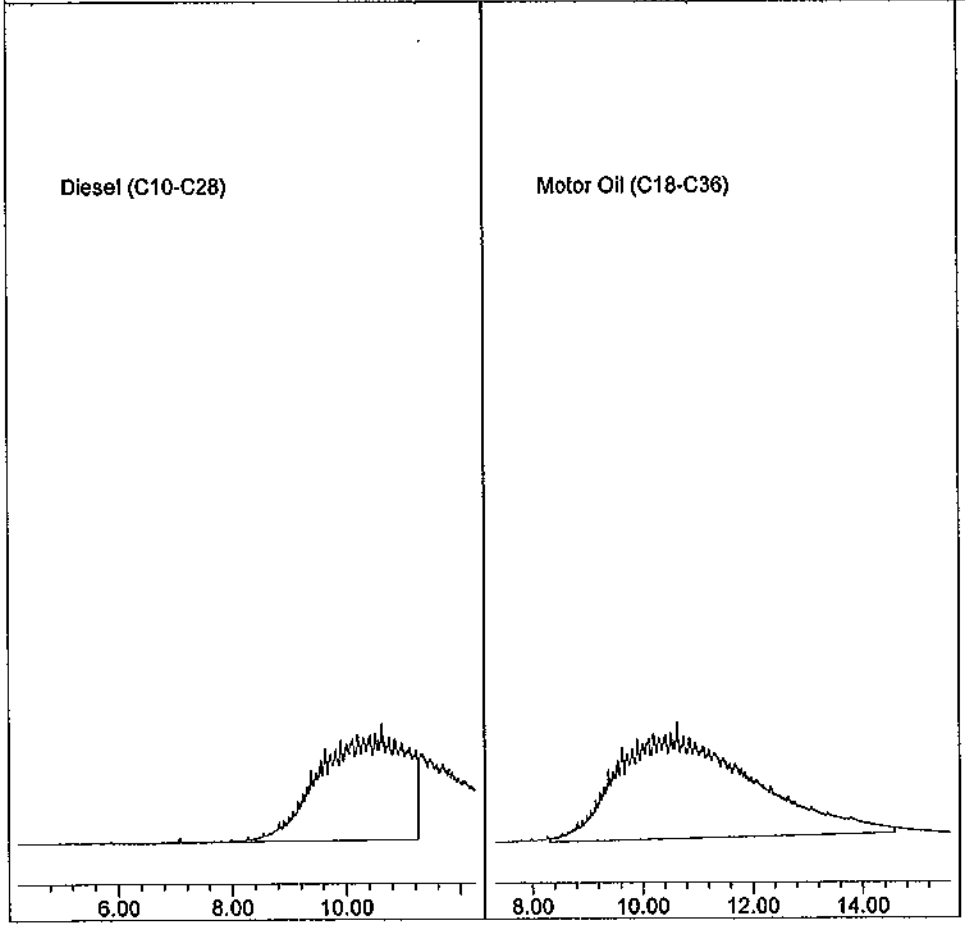
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.54f	2151532	0.898 ppb
Surrogate Spike 30.000	Recovery =		2.99%
4) SA Octacosane(S)	11.10	24497694	15.697 ppb
Surrogate Spike 30.000	Recovery =		52.32%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	372804902	284.429 ppb
2) HBTM Motor Oil (C18-C36)	11.45	619954455	616.080 ppb

Data File: G:\APOLLO\DATA\110811\811019.D
Sample : MOTOR OIL 600/1000 8/4/11





TPH Extractables
TPHNS727

Form 7

Continuing Calibration

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

SDG No: 65208
Date Analyzed: 08/12/11
Instrument: Apollo
Initial Cal. Date: 07/27/11
Data File: 811032,33.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C28)	655356	679687	3.7	HATM	
2	HBTM	Motor Oil (C18-C36)	503145	600894	19	HBTM	
3							
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35							
36							
37							
38							
39							
40							
		Average			11.4		

Quantitation Report (Not Reviewed)

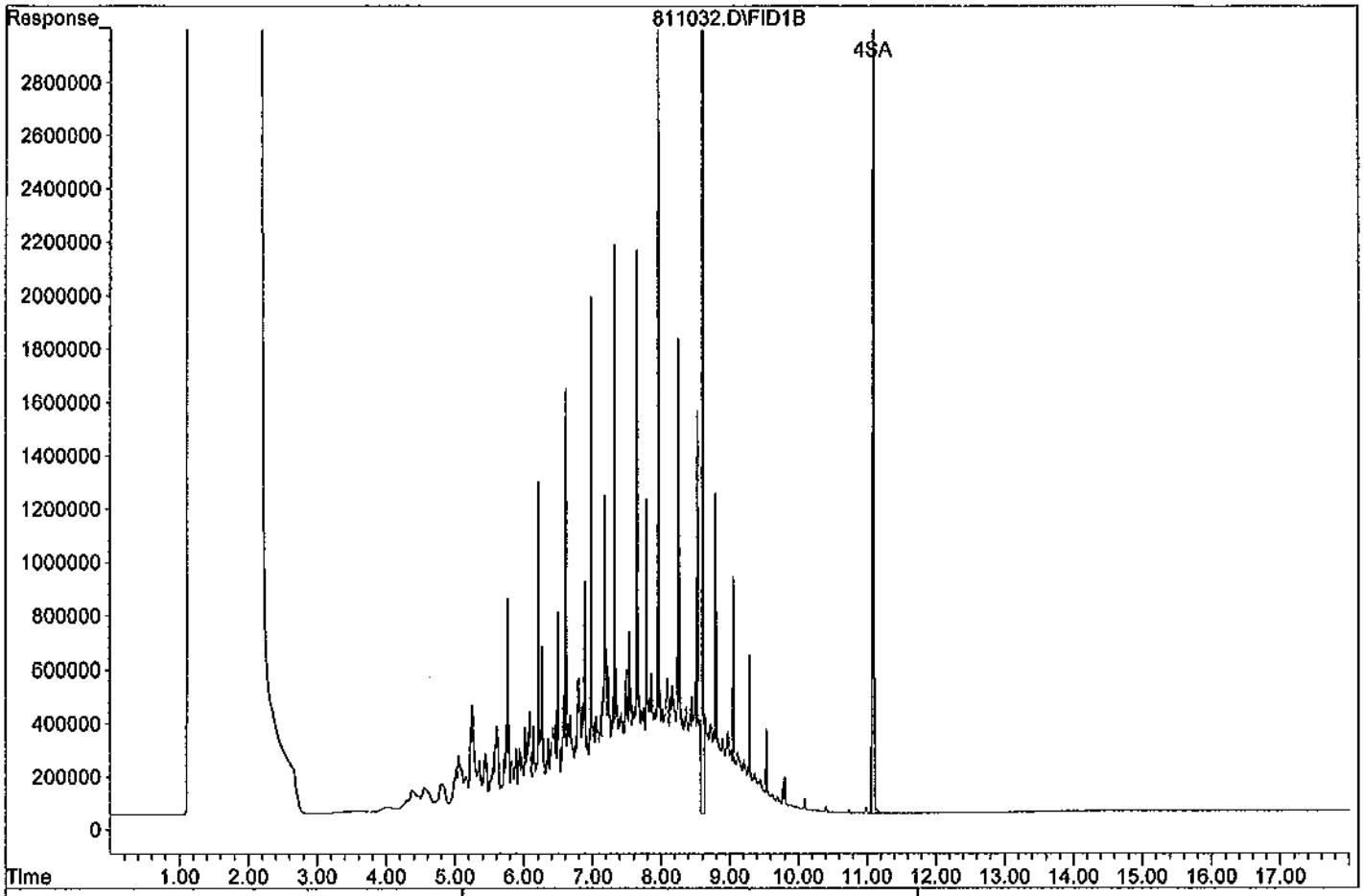
Data File : G:\APOLLO\DATA\110811\811032.D Vial: 32
Acq On : 8-12-11 5:34:15 Operator: LAC
Sample : DIESEL 600/1000 8/4/11 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 9 14:03 2011 Quant Results File: TPHNS727.RES

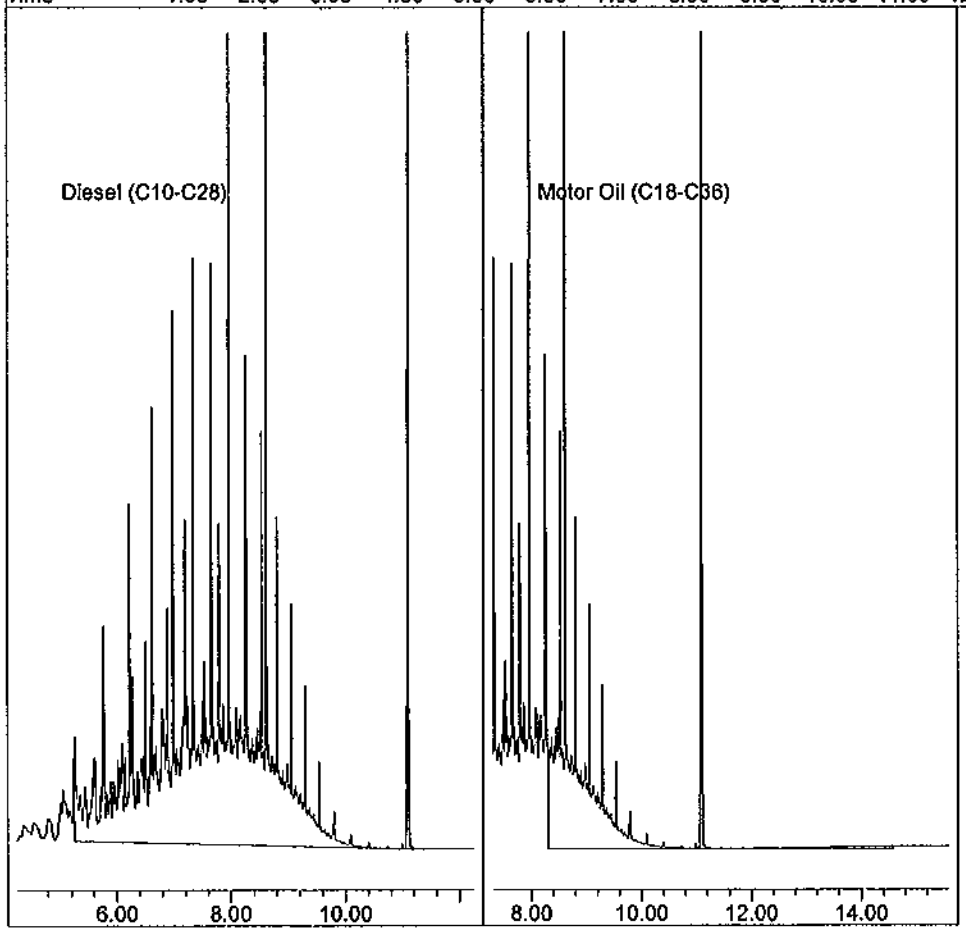
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

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	57805784	24.119 ppb
Surrogate Spike 30.000	Recovery =		80.40%
4) SA Octacosane(S)	11.10	47477238	30.421 ppb
Surrogate Spike 30.000	Recovery =		101.40%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	815623877	622.276 ppb
2) HBTM Motor Oil (C18-C36)	11.45	220317380	218.940 ppb

Data File: G:\APOLLO\DATA\110811\811032.D
Sample : DIESEL 600/1000 8/4/11





Quantitation Report (QT Reviewed)

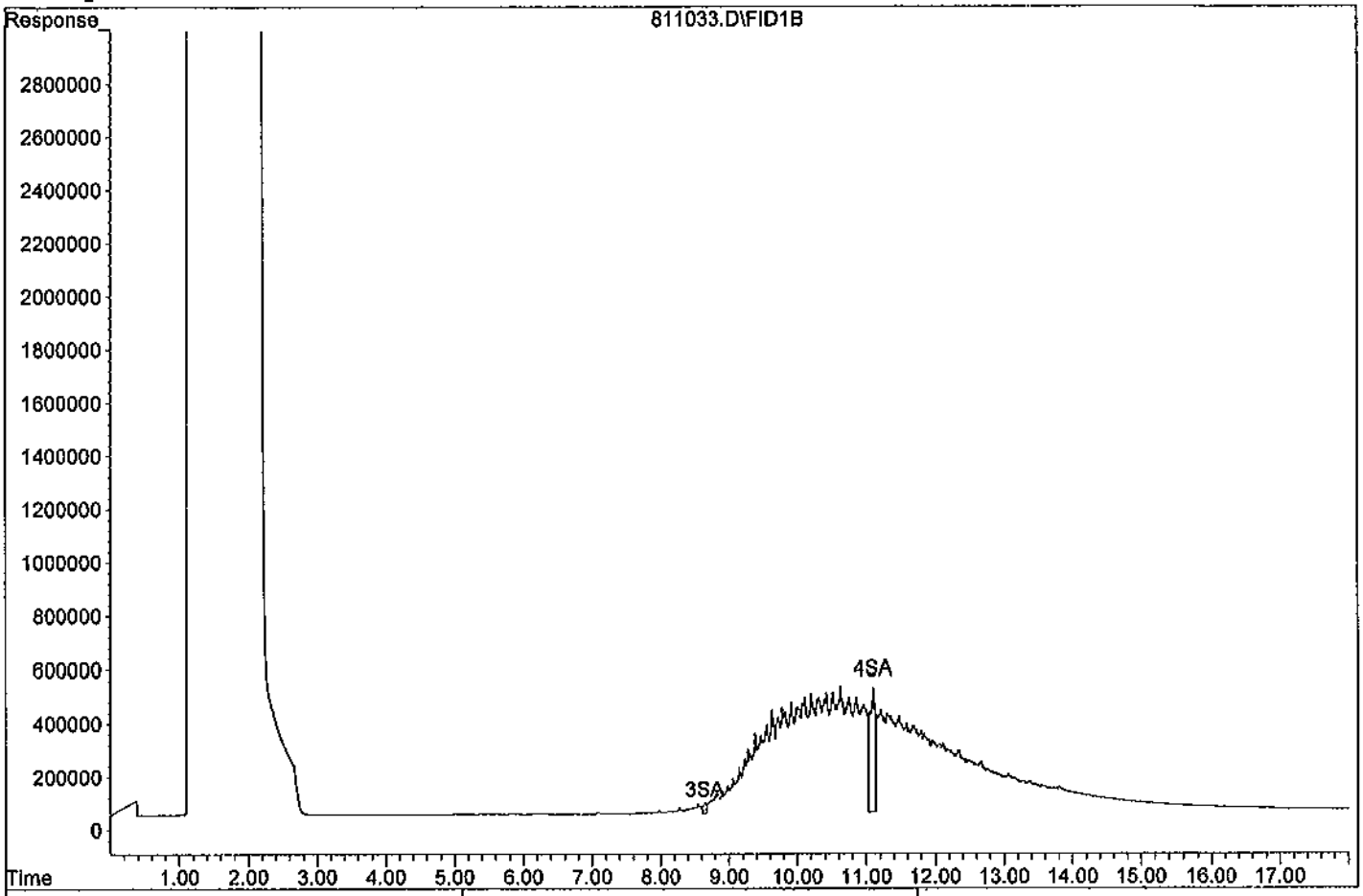
Data File : G:\APOLLO\DATA\110811\811033.D Vial: 33
Acq On : 8-12-11 5:58:31 Operator: LAC
Sample : MOTOR OIL 600/1000 8/4/11 Inst : Apollo
Misc : Mix(B) Multiplr: 1.00
IntFile : events.e
Quant Time: Sep 9 14:03 2011 Quant Results File: TPHNS727.RES

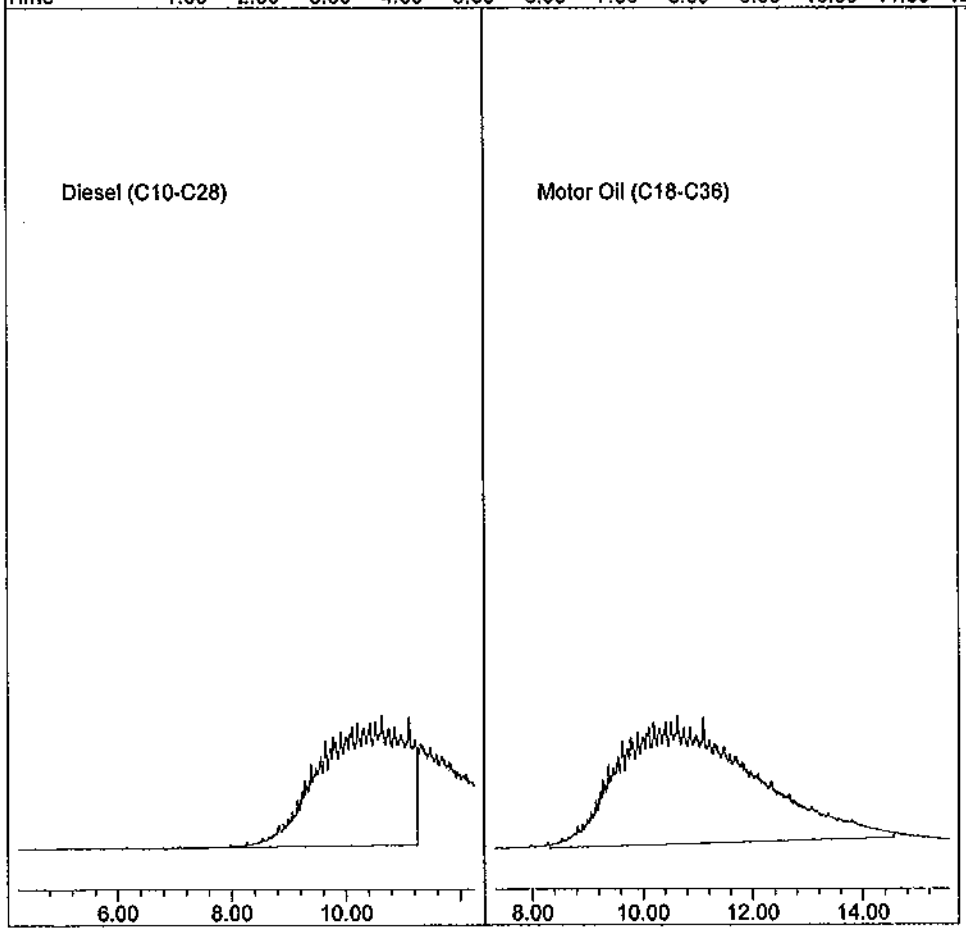
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

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	1370156	0.572 ppb
Surrogate Spike 30.000	Recovery =		1.91%
4) SA Octacosane(S)	11.10	26622985	17.059 ppb
Surrogate Spike 30.000	Recovery =		56.86%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	434783322	331.716 ppb
2) HBTM Motor Oil (C18-C36)	11.45	721073140	716.566 ppb

Data File: G:\APOLLO\DATA\110811\811033.D
Sample : MOTOR OIL 600/1000 8/4/11





EPA 8015 Modified
Total Petroleum Hydrocarbons
Raw Data

Method Blank
TPH Diesel Water

Blank Name/QCG: **110727W-42542 - 158148**
Batch ID: #TPETD-110727A

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	07/27/11	08/12/11
BLANK	LUBE OIL	212.0 U	500	212.0	106.0	ug/L	07/27/11	08/12/11
BLANK	SURROGATE: OCTACOSANE (S)	69.9	28-142			%	07/27/11	08/12/11
BLANK	SURROGATE: ORTHO-TERPHEN	66.4	57-132			%	07/27/11	08/12/11

Quant Method: TPHNS727.M
Run #: 811022
Instrument: Apollo
Sequence: 110811
Initials: LA

GC SC-Blank-REG MDLs
Printed: 08/25/11 12:42:39 PM

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110811\811022.D Vial: 22
Acq On : 8-12-11 1:30:50 Operator: LAC
Sample : 110727A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

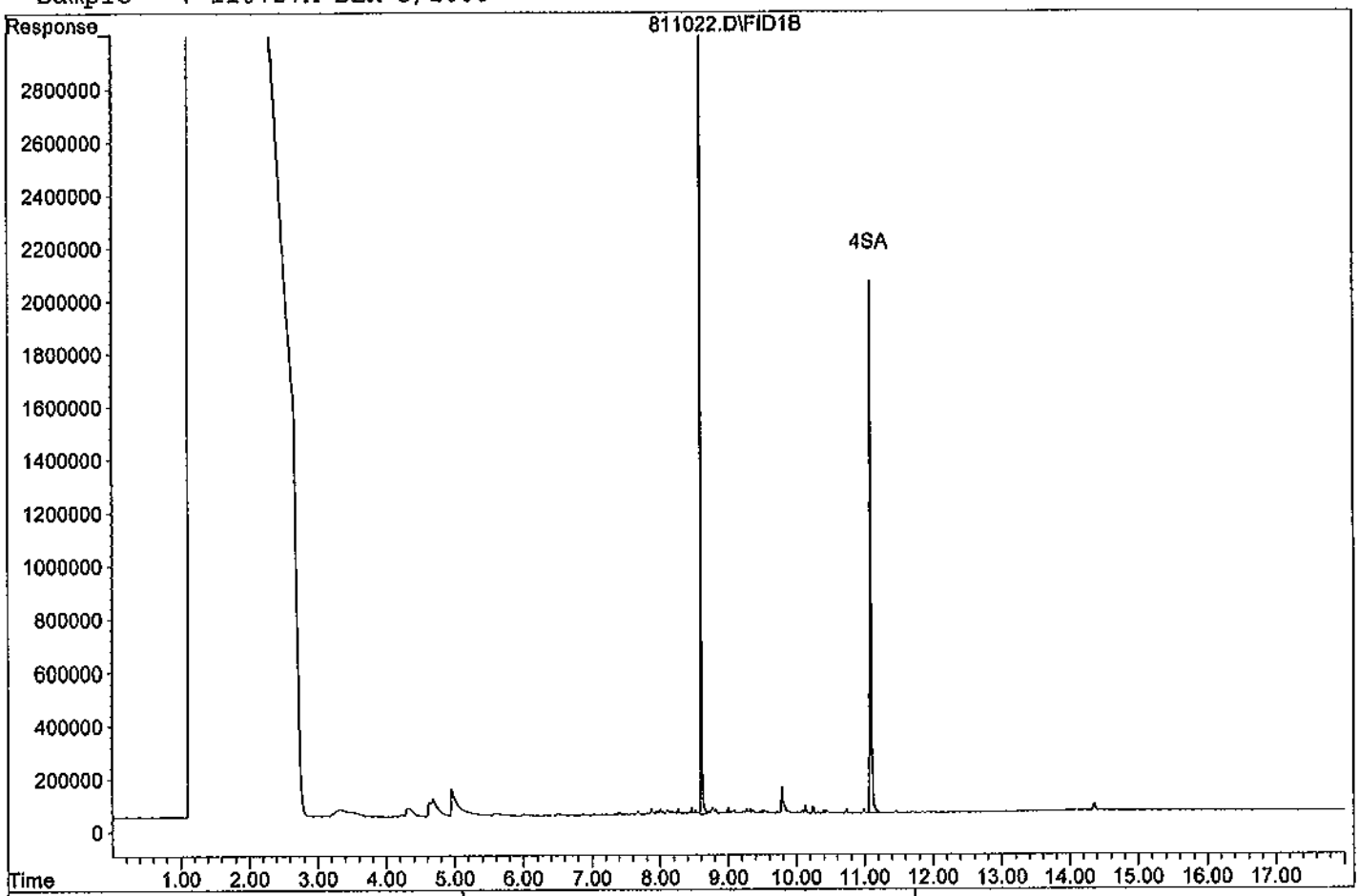
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

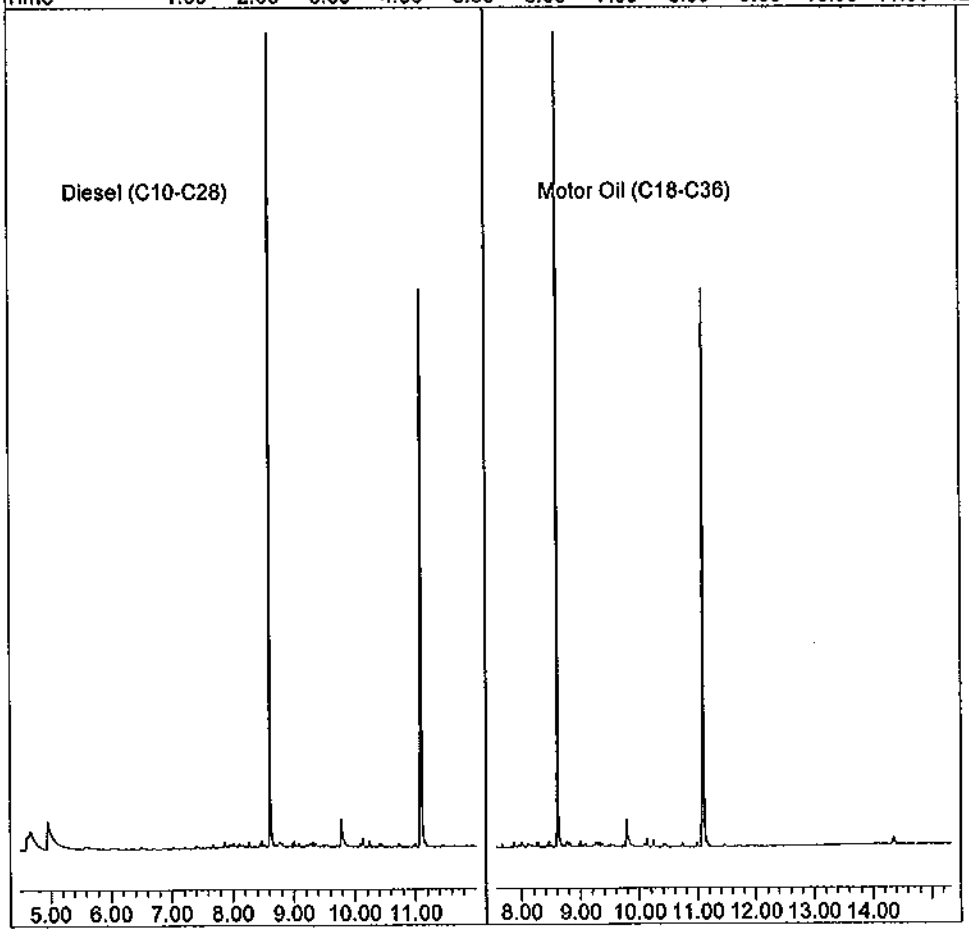
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	29028805	60.560 ppb
Surrogate Spike 150.000		Recovery =	40.37%
4) SA Octacosane(S)	11.09	30109839	96.464 ppb
Surrogate Spike 150.000		Recovery =	64.31%
Target Compounds			

Not Used
LAC 9/7/11

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

Data File: G:\APOLLO\DATA\110811\811022.D
Sample : 110727A BLK 5/1000





Quantitation Report (Not Reviewed)

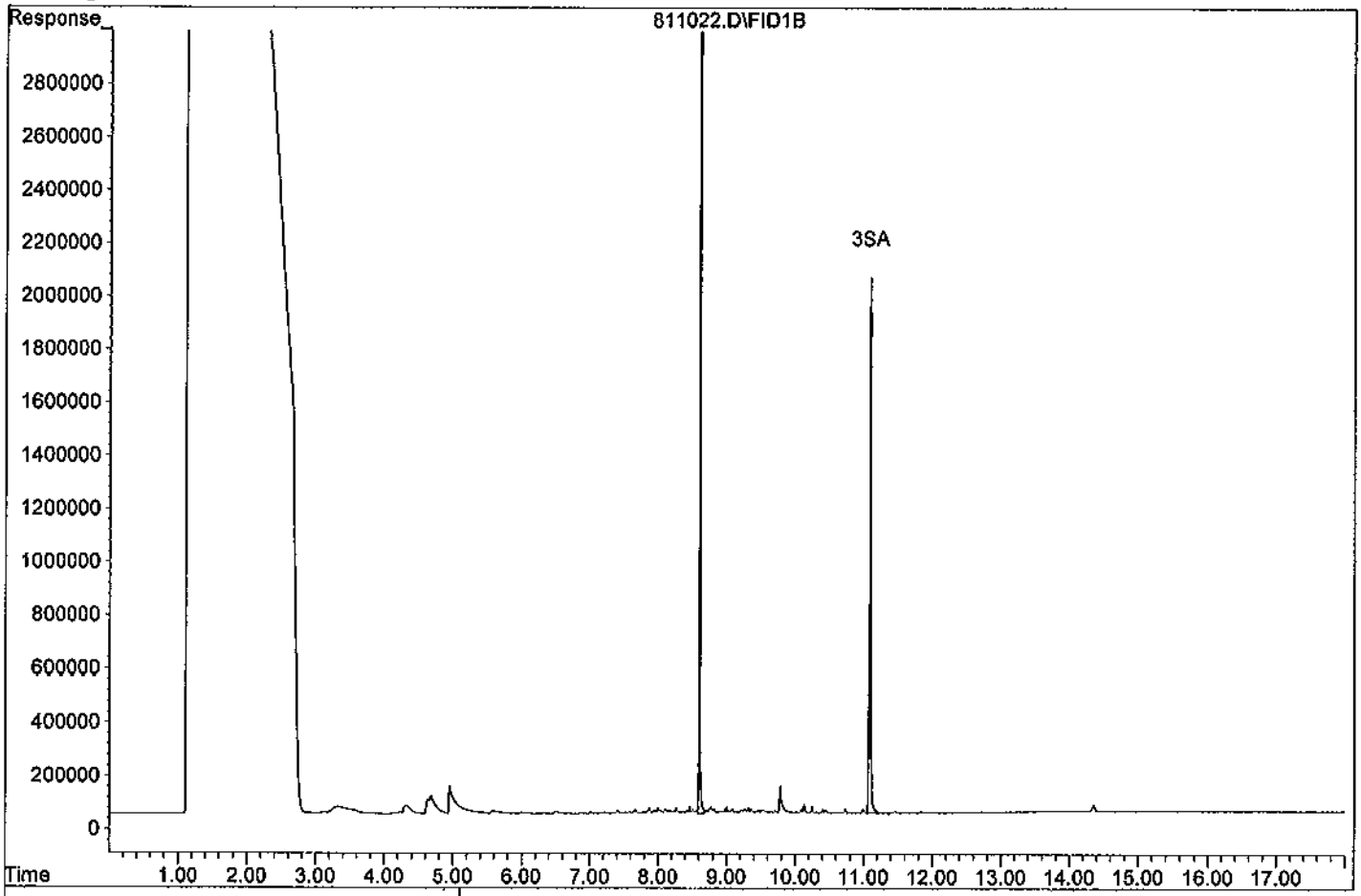
Data File : G:\APOLLO\DATA\110811\811022.D Vial: 22
Acq On : 8-12-11 1:30:50 Operator: LAC
Sample : 110727A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

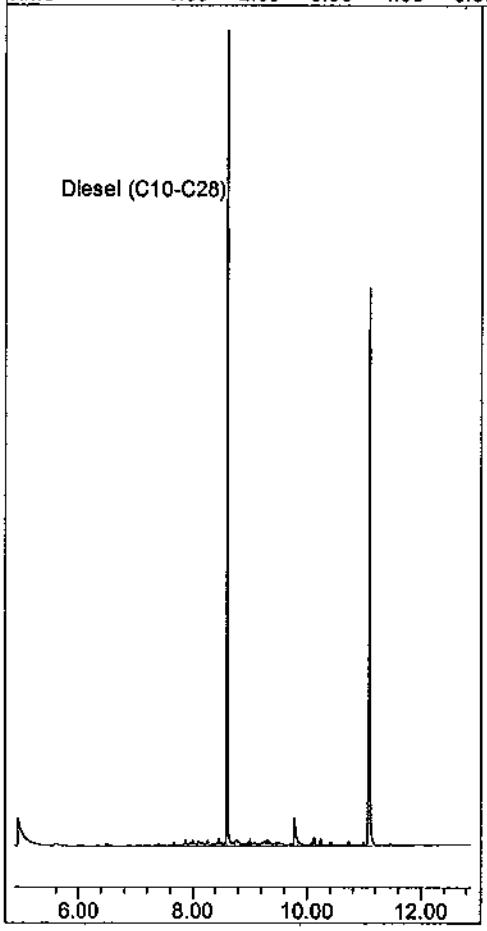
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	29028805	99.592 ppb
Surrogate Spike 150.000		Recovery =	66.39%
3) SA Octacosane(S)	11.09	30109839	104.907 ppb
Surrogate Spike 150.000		Recovery =	69.94%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811022.D
Sample : 110727A BLK 5/1000





Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **110727W-42542 LCS - 158148**
Batch ID: #TPETD-110727A

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	1400	70.0	61-143
LUBE OIL	2000	1410	70.5	61-143
SURROGATE: OCTACOSANE (S)	150	138	92.0	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	166	111	57-132

Comments:

Primary	SPK
Quant Method :	TPHNS727.M
Extraction Date :	07/27/11
Analysis Date :	08/12/11
Instrument :	Apollo
Run :	811023
Initials :	LA

Printed: 09/09/11 2:19:35 PM

APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811023.D Vial: 23
Acq On : 8-12-11 1:55:06 Operator: LAC
Sample : 110727A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:21 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

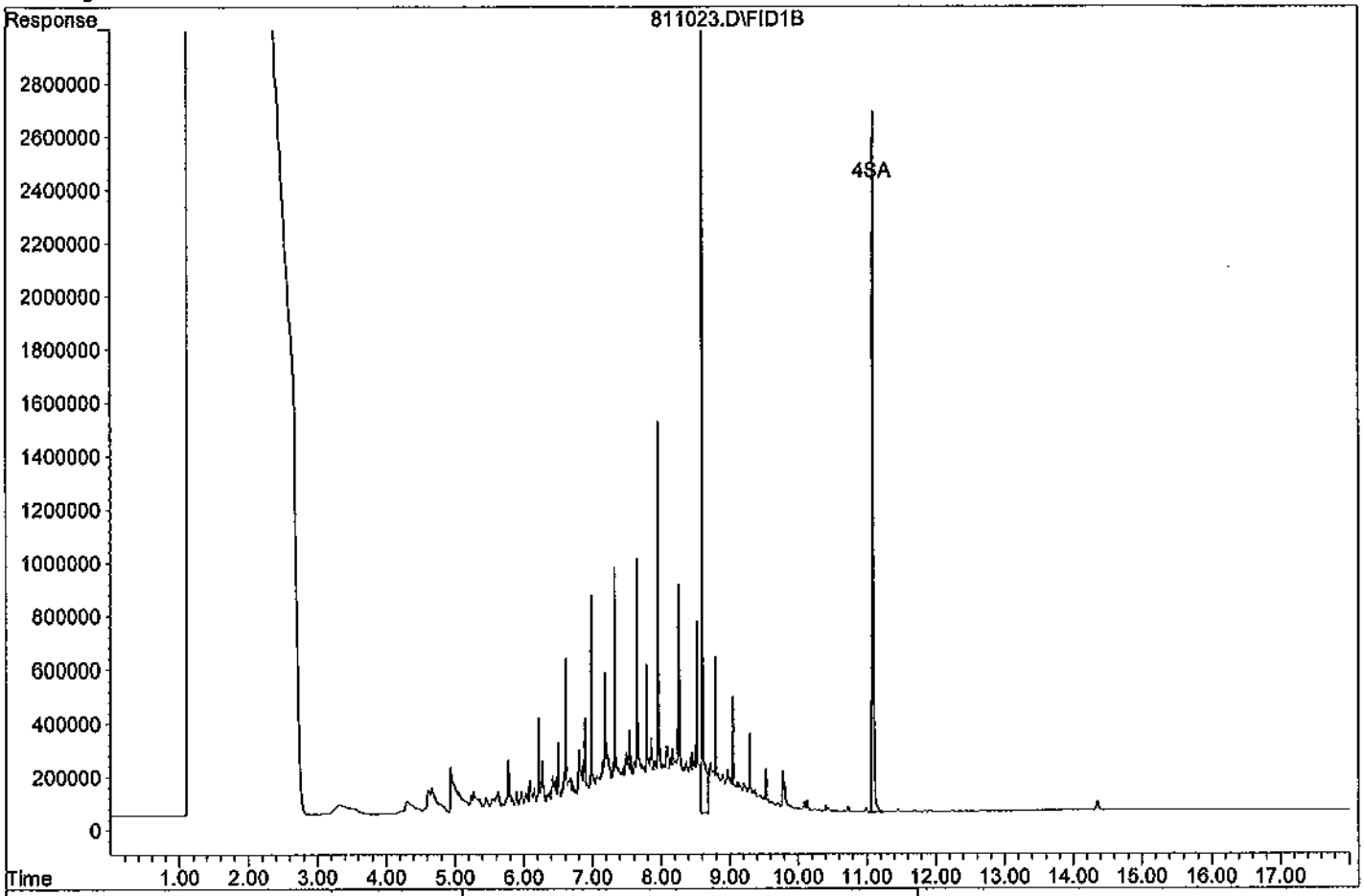
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

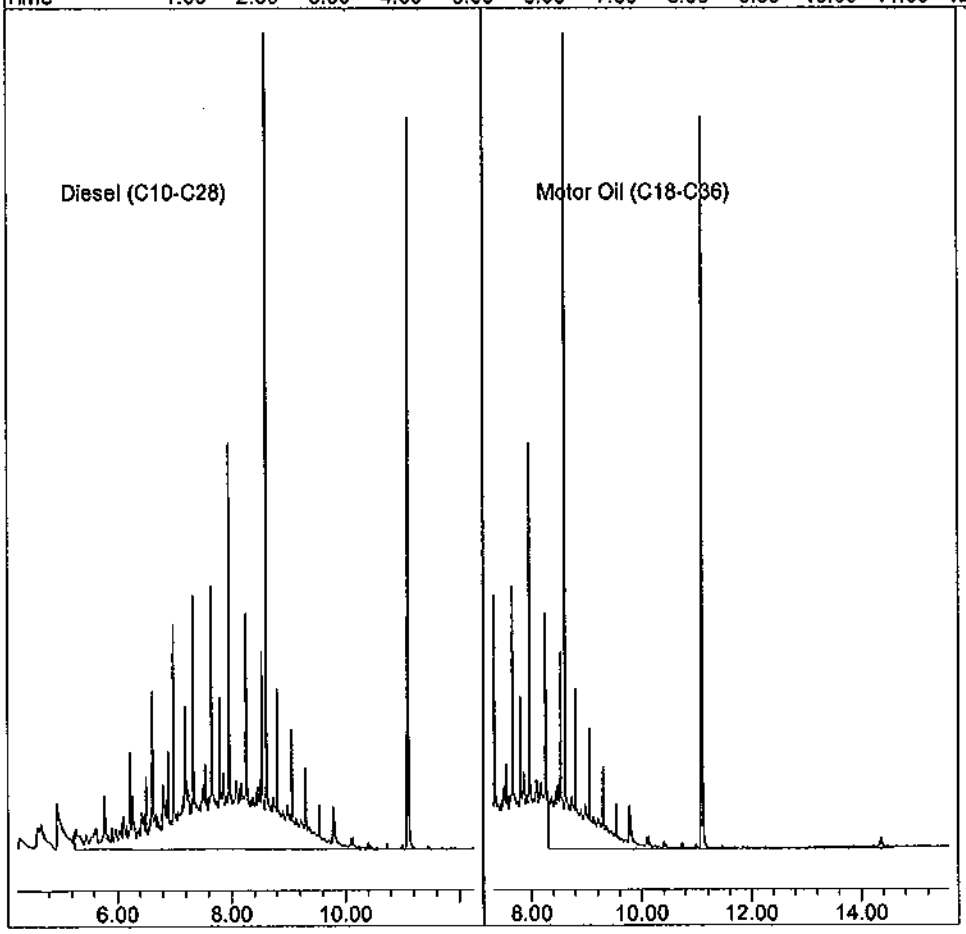
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	48413957	101.002 ppb
Surrogate Spike 150.000		Recovery =	67.33%
4) SA Octacosane(S)	11.10	39569778	126.771 ppb
Surrogate Spike 150.000		Recovery =	84.51%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	365979396	1396.110 ppb
2) HBTM Motor Oil (C18-C36)	11.45	115400182	573.395 ppb

Not Used
LAC 9/9/11

Algorithm Check: $\frac{(365979396)(5)}{(655356)(2)} = 1396.109122$
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811023.D
Sample : 110727A LCS-1 5/1000





Quantitation Report (Not Reviewed)

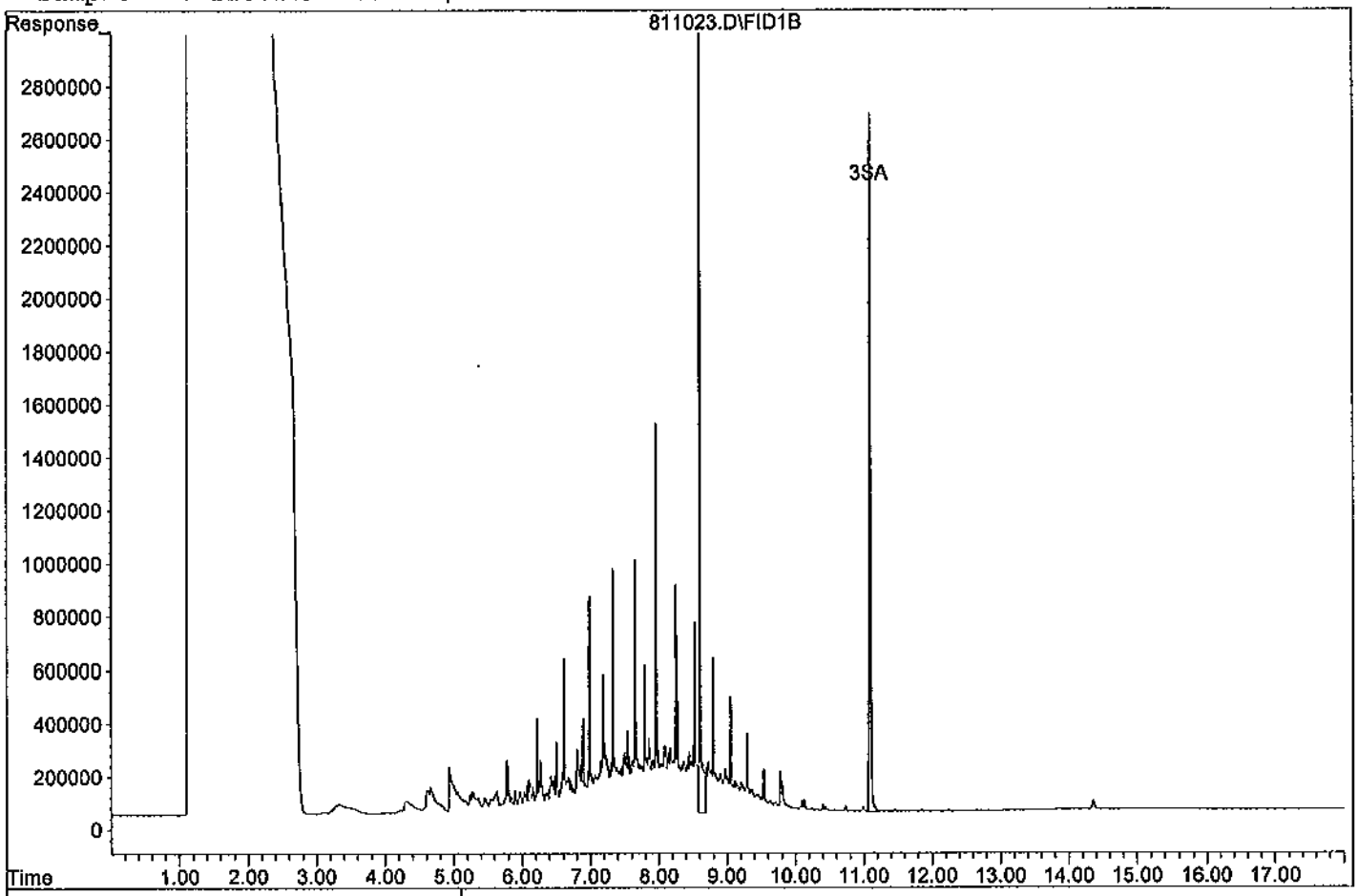
Data File : G:\APOLLO\DATA\110811\811023.D Vial: 23
Acq On : 8-12-11 1:55:06 Operator: LAC
Sample : 110727A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 15 9:26 2011 Quant Results File: THCSUR81.RES

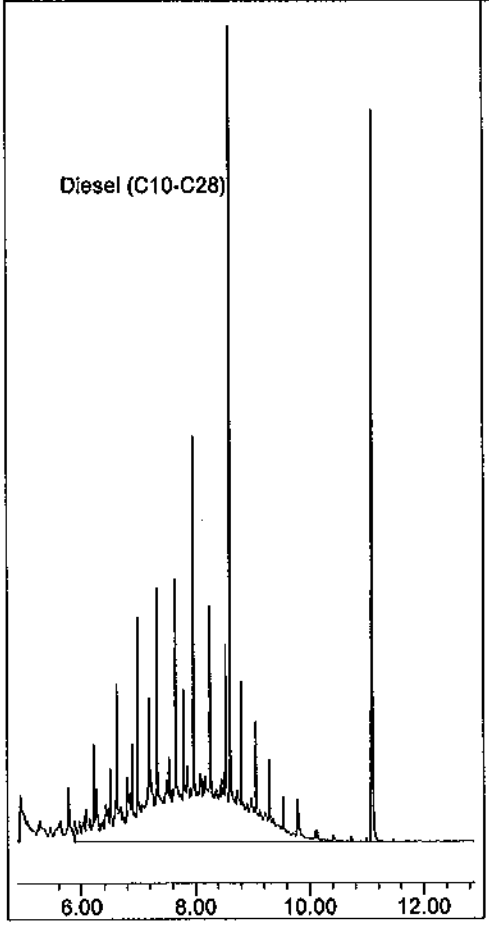
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	48413957	166.099 ppb
Surrogate Spike 150.000		Recovery =	110.73%
3) SA Octacosane(S)	11.10	39569778	137.867 ppb
Surrogate Spike 150.000		Recovery =	91.91%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811023.D
Sample : 110727A LCS-1 5/1000





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811024.D Vial: 24
Acq On : 8-12-11 2:19:34 Operator: LAC
Sample : 110727A LCS-2 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:21 2011 Quant Results File: TPHNS727.RES

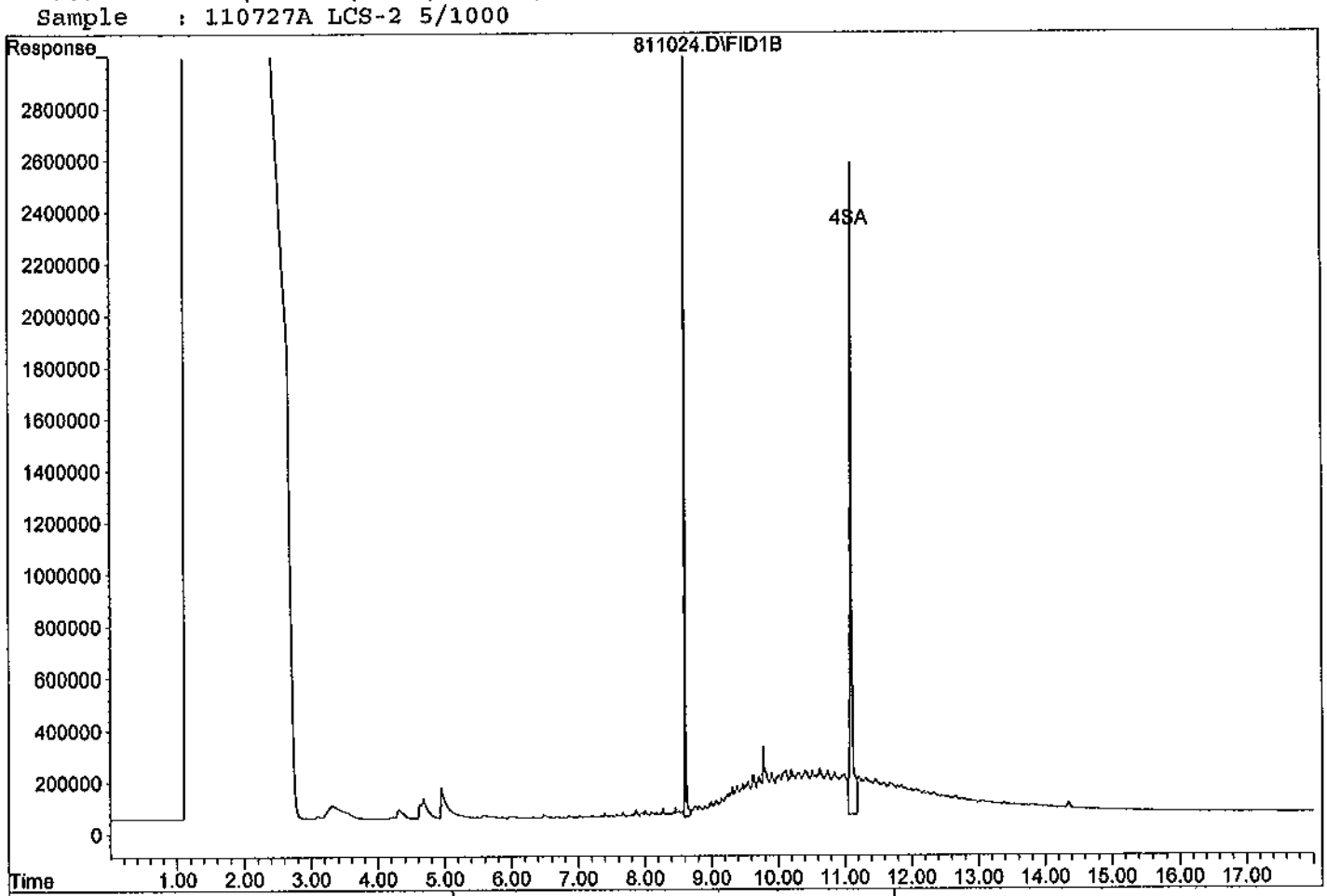
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

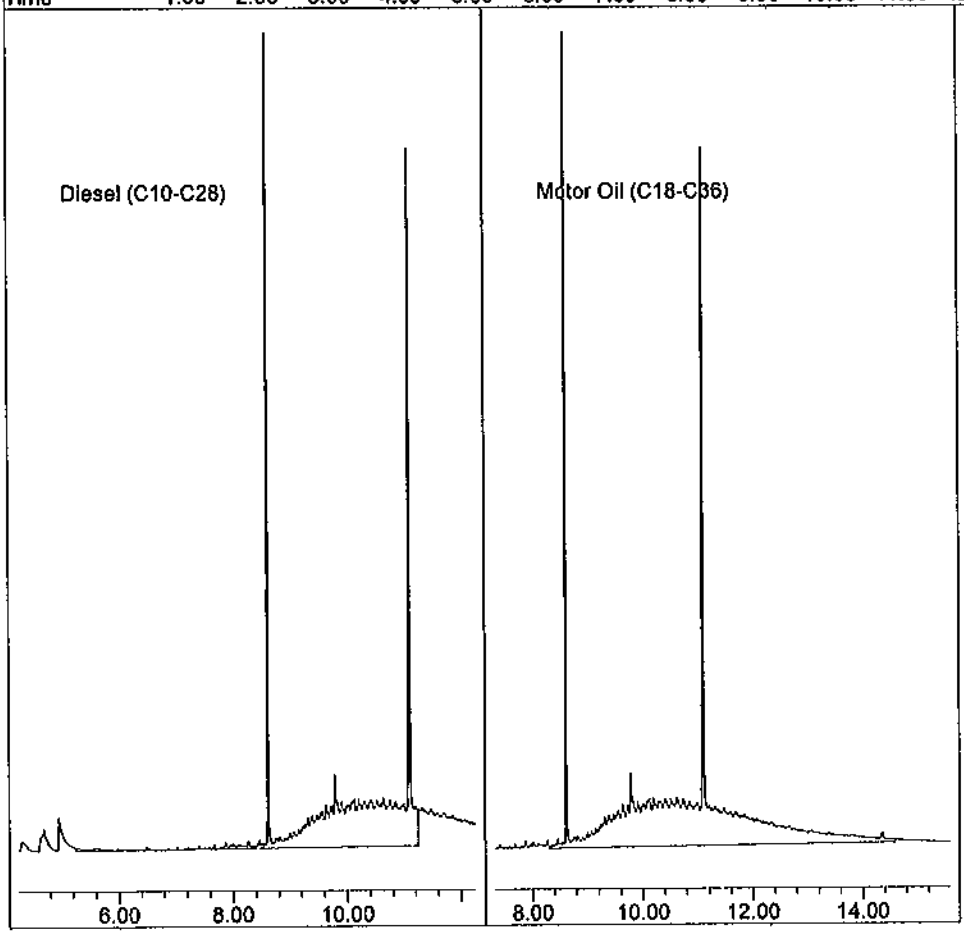
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	36144901	75.406 ppb
Surrogate Spike 150.000		Recovery =	50.27%
4) SA Octacosane(S)	11.10	46612559	149.334 ppb
Surrogate Spike 150.000		Recovery =	99.56%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	175658289	670.088 ppb
2) HBTM Motor Oil (C18-C36)	11.45	284716906	1414.687 ppb

Not Used
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811024.D
Sample : 110727A LCS-2 5/1000





Quantitation Report (Not Reviewed)

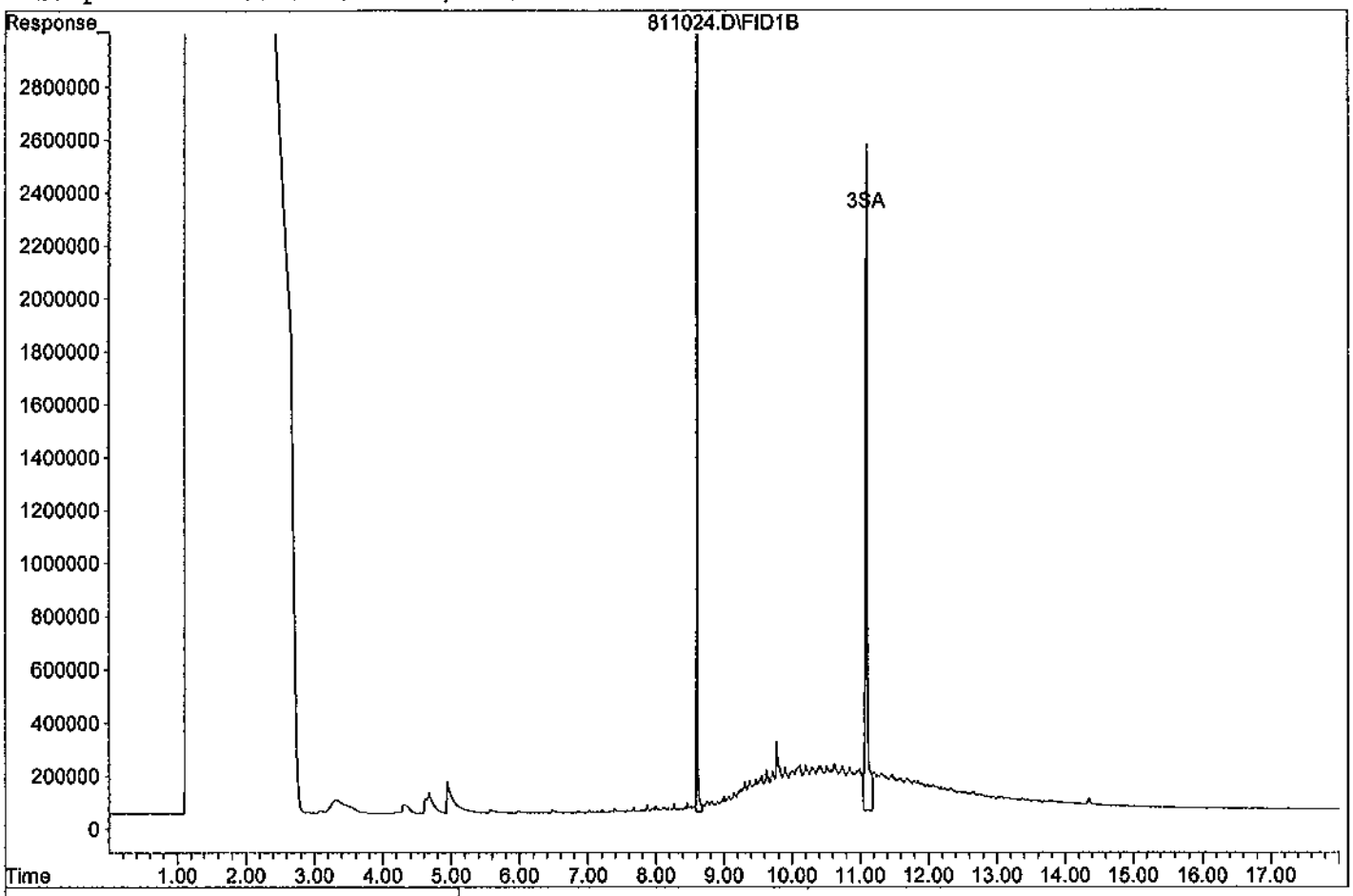
Data File : G:\APOLLO\DATA\110811\811024.D Vial: 24
Acq On : 8-12-11 2:19:34 Operator: LAC
Sample : 110727A LCS-2 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

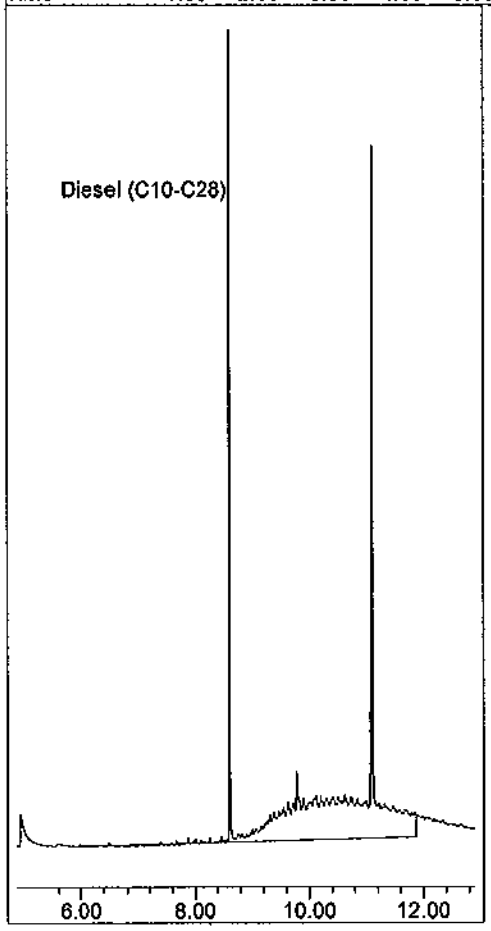
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	36144901	124.006 ppb
Surrogate Spike 150.000		Recovery =	82.67%
3) SA Octacosane(S)	11.10	46612559	162.405 ppb
Surrogate Spike 150.000		Recovery =	108.27%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811024.D
Sample : 110727A LCS-2 5/1000





Matrix Spike Recoveries
TPH Diesel Water

APPL ID: **110727W-42542 MS - 158148**
Batch ID: #TPETD-110727A
Sample ID: AY42542
Client ID: ES043

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	1130	1210	56.5 #	60.5 #	61-143	6.8	30
LUBE OIL	2000	ND	1270	1300	63.5	65.0	61-143	2.3	30
SURROGATE: OCTACOSANE (S)	150	NA	114	109	76.0	72.7	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	119	113	79.3	75.3	57-132		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	TPHNS727.M	TPHNS727.M
Extraction Date :	07/27/11	07/27/11
Analysis Date :	08/12/11	08/12/11
Instrument :	Apollo	Apollo
Run :	811027	811026
Initials :	LA	

Printed: 08/25/11 12:42:28 PM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\110811\811025.D Vial: 25
Acq On : 8-12-11 2:43:31 Operator: LAC
Sample : AY42542W19 MS-1 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 14:09 2011 Quant Results File: TPHNS727.RES

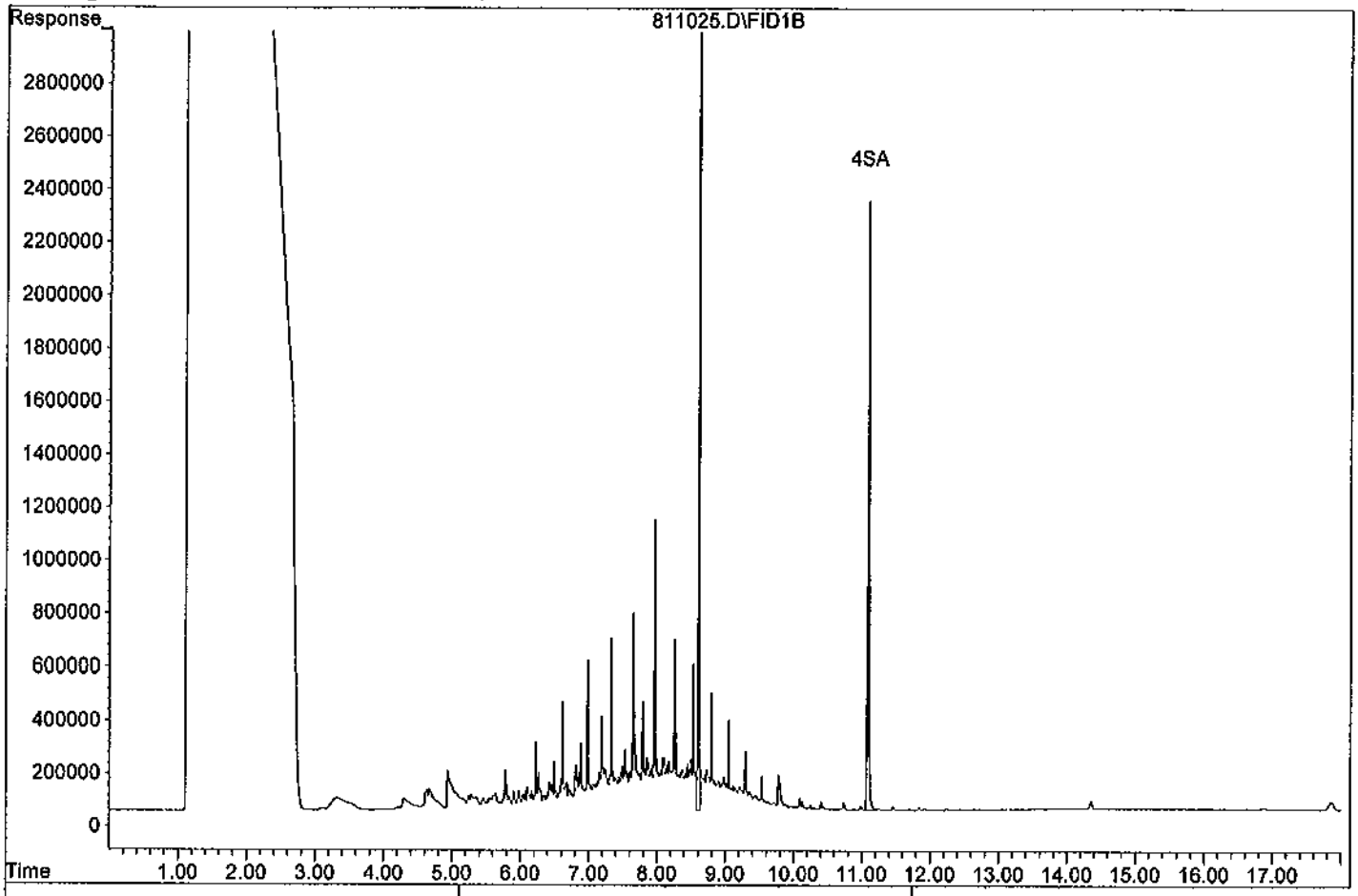
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

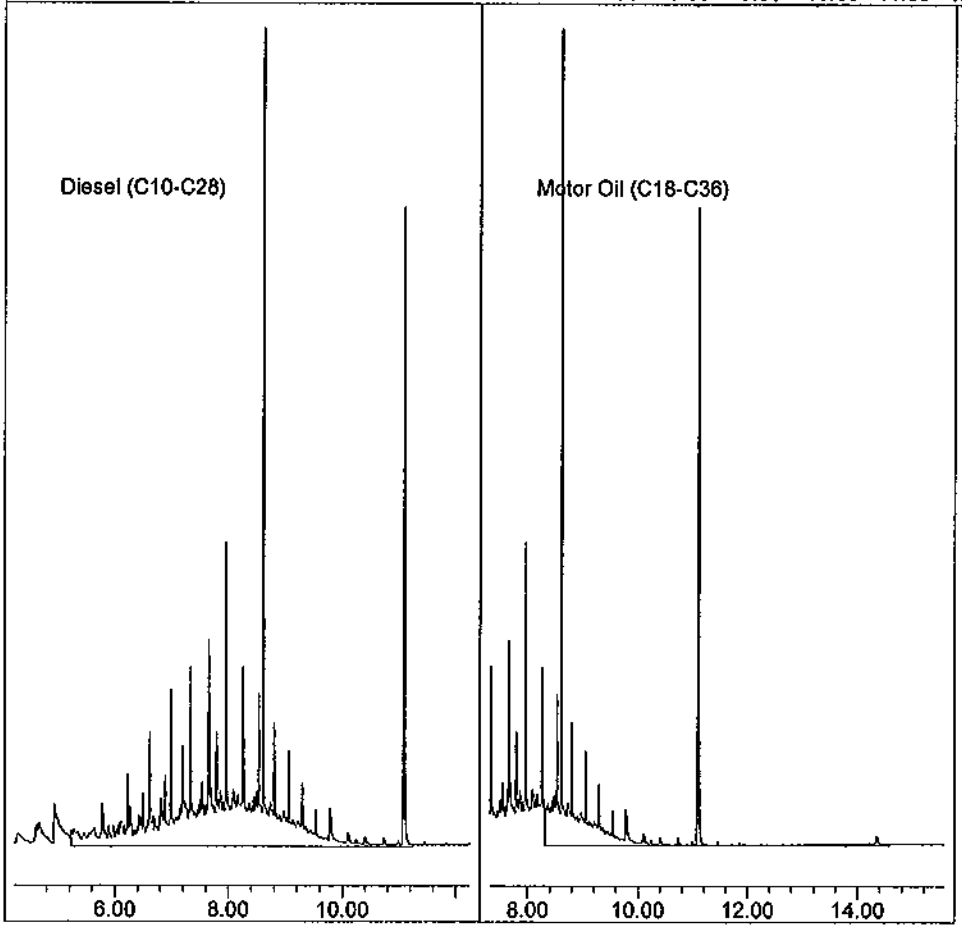
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	35990719	72.196 ppb
Surrogate Spike 144.231		Recovery =	50.06%
4) SA Octacosane(S)	11.09	34121073	105.111 ppb
Surrogate Spike 144.231		Recovery =	72.88%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	309389258	1134.840 ppb
2) HBTM Motor Oil (C18-C36)	11.45	97447230	465.568 ppb

Not Used
LAC 9/9/11

Data File: G:\APOLLO\DATA\110811\811025.D
Sample : AY42542W19 MS-1 5/1040





Quantitation Report (Not Reviewed)

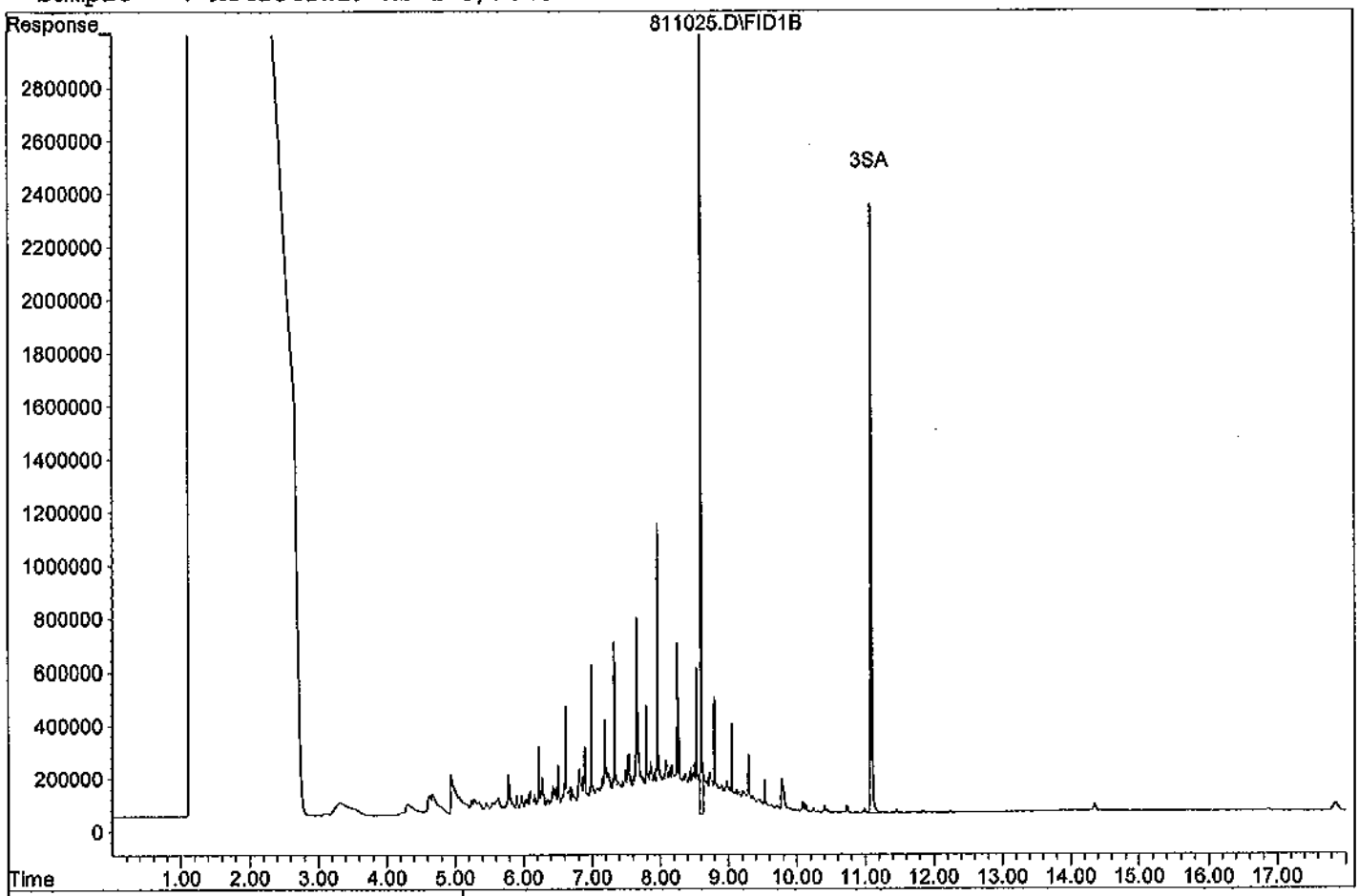
Data File : G:\APOLLO\DATA\110811\811025.D Vial: 25
Acq On : 8-12-11 2:43:31 Operator: LAC
Sample : AY42542W19 MS-1 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

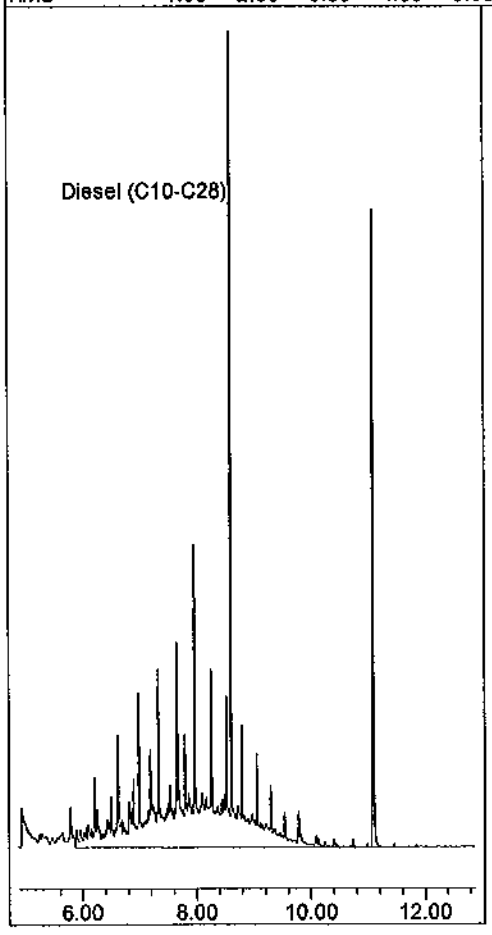
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	35990719	118.728 ppb
Surrogate Spike 144.231		Recovery =	82.32%
3) SA Octacosane(S)	11.09	34121073	114.310 ppb
Surrogate Spike 144.231		Recovery =	79.25%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811025.D
Sample : AY42542W19 MS-1 5/1040





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811026.D Vial: 26
Acq On : 8-12-11 3:07:58 Operator: LAC
Sample : AY42542W15 MSD-1 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 13:22 2011 Quant Results File: TPHNS727.RES

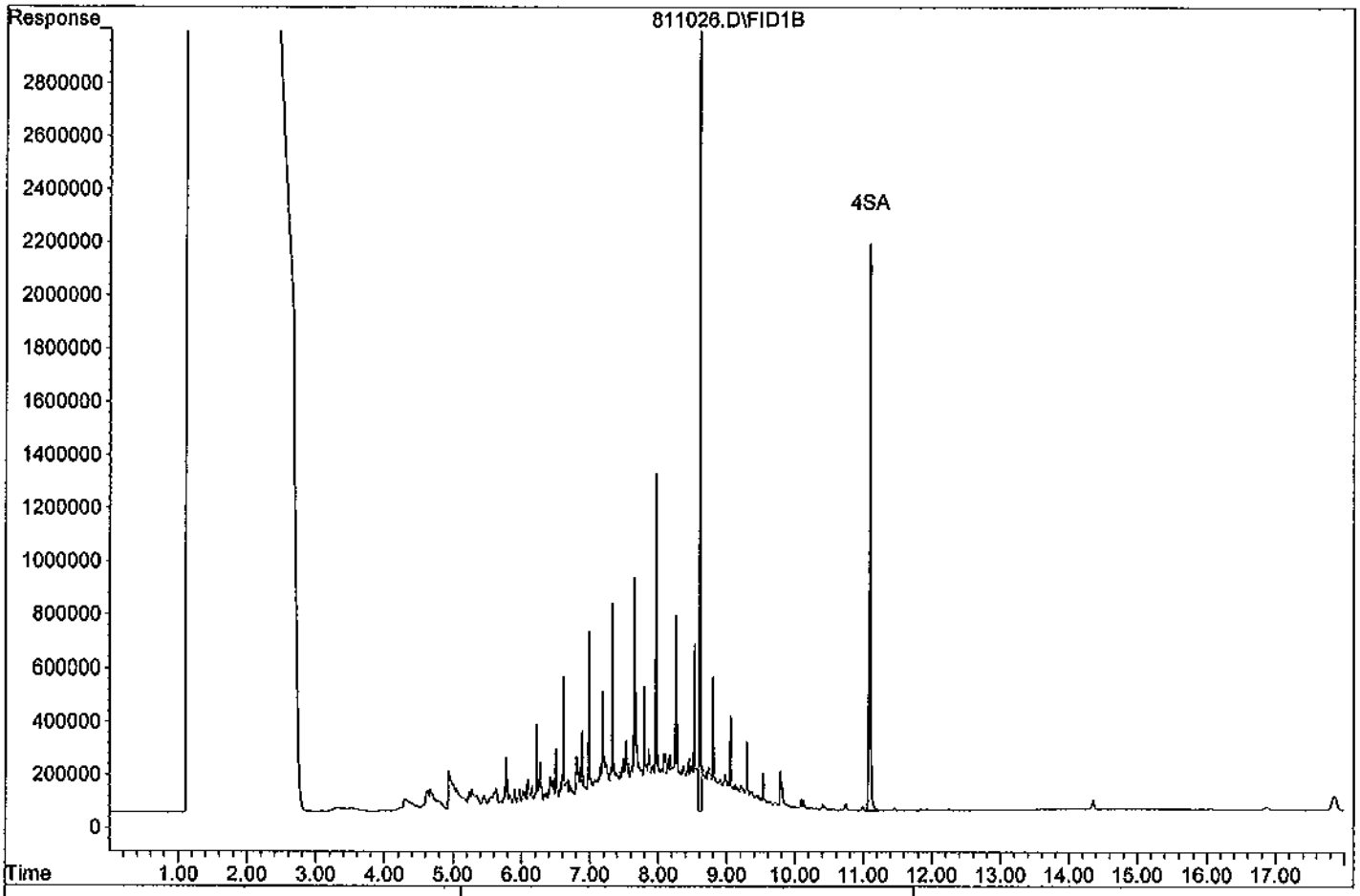
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

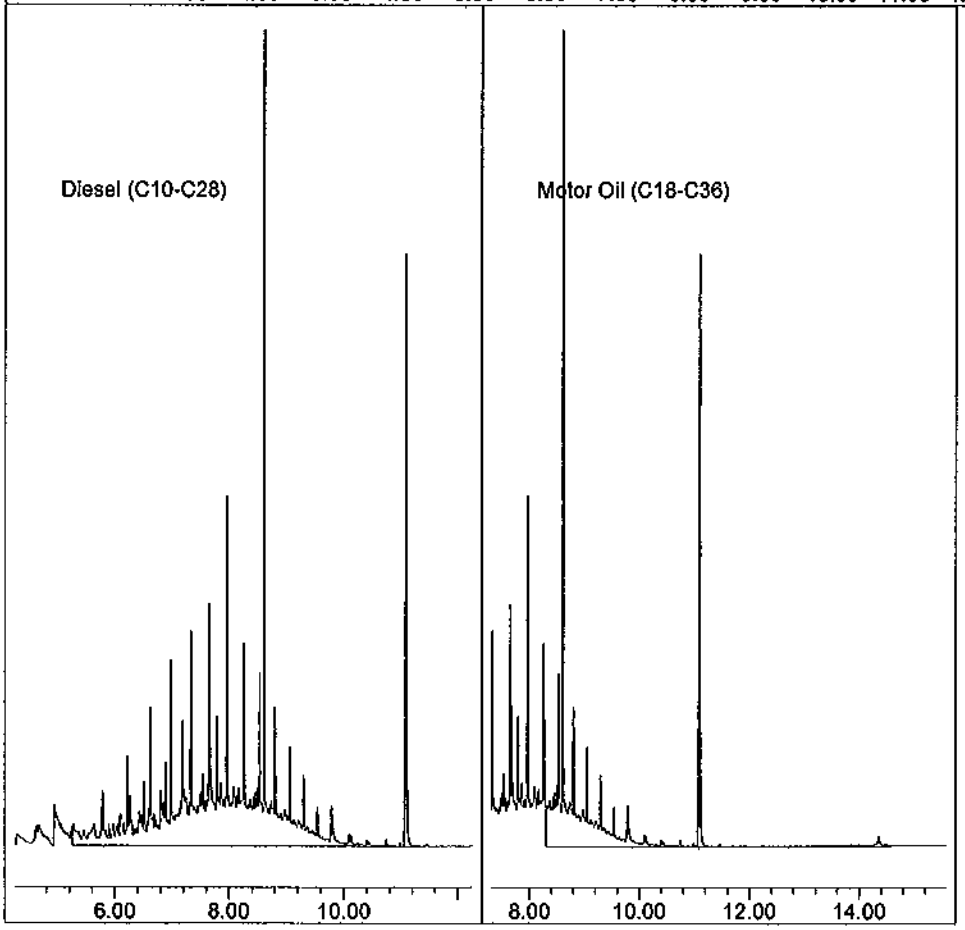
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	34376670	68.959 ppb
Surrogate Spike 144.231		Recovery =	47.81%
4) SA Octacosane(S)	11.09	32478326	100.050 ppb
Surrogate Spike 144.231		Recovery =	69.37%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	328617096	1205.368 ppb
2) HBTM Motor Oil (C18-C36)	11.45	105818686	505.564 ppb

Not Used
MC 9/9/11

Data File: G:\APOLLO\DATA\110811\811026.D
Sample : AY42542W15 MSD-1 5/1040





Quantitation Report (Not Reviewed)

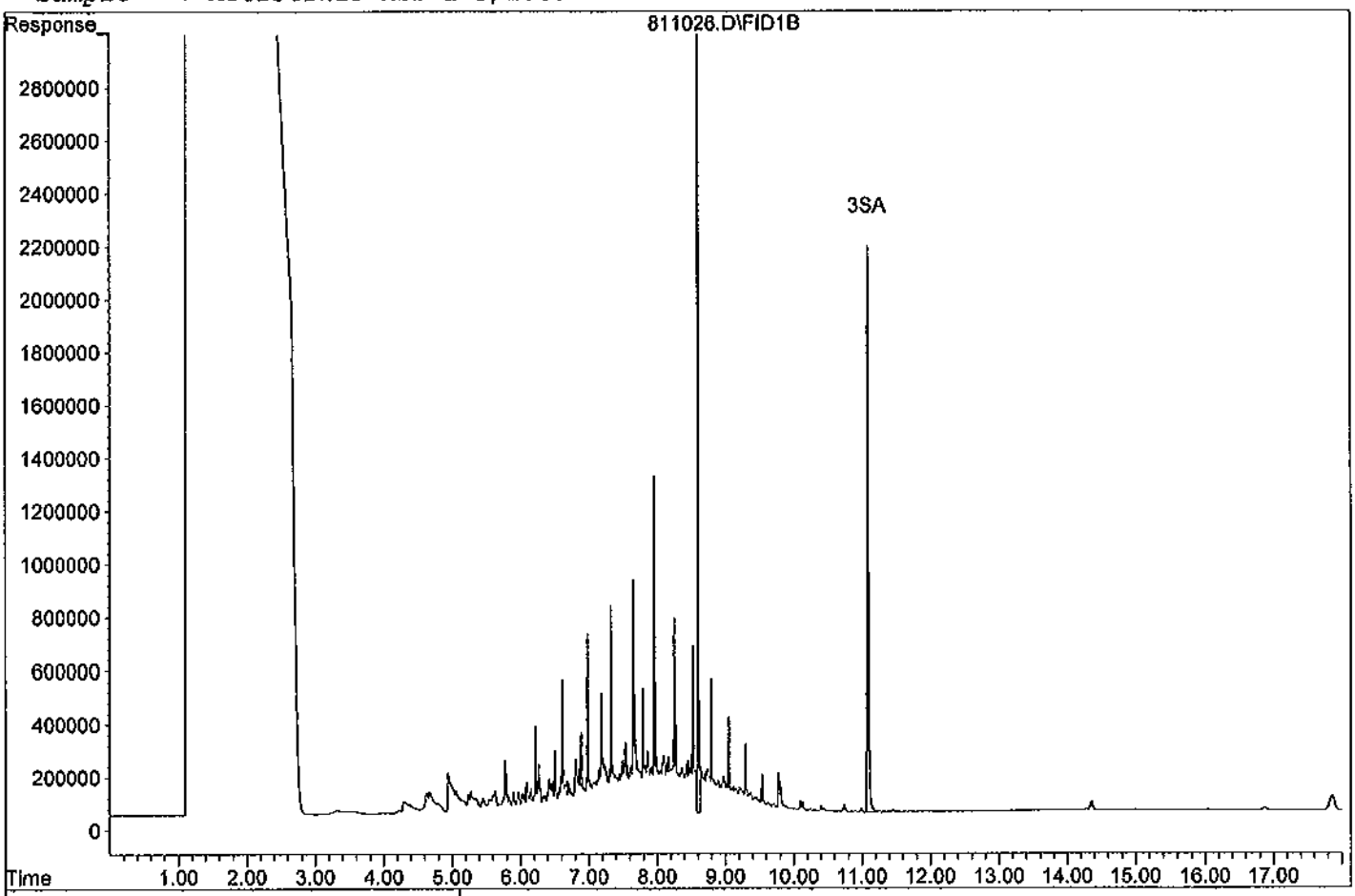
Data File : G:\APOLLO\DATA\110811\811026.D Vial: 26
Acq On : 8-12-11 3:07:58 Operator: LAC
Sample : AY42542W15 MSD-1 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

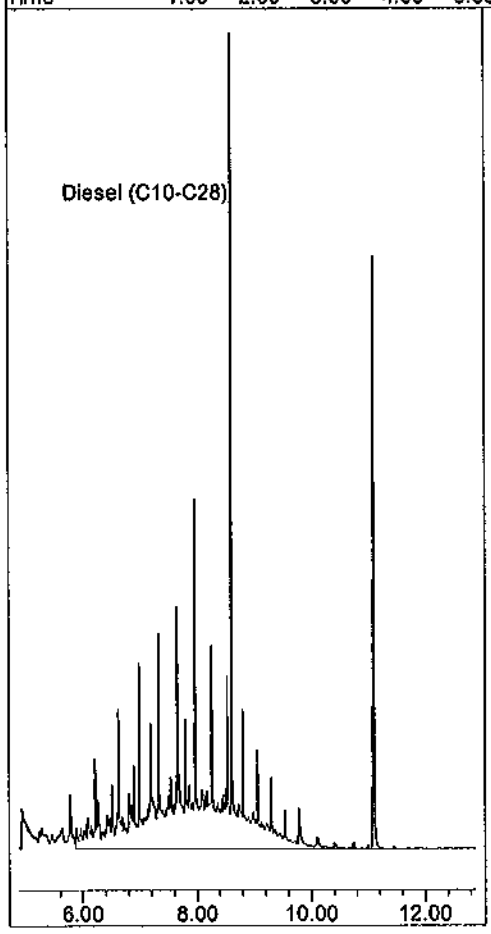
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	34376670	113.404 ppb
Surrogate Spike 144.231		Recovery =	78.63%
3) SA Octacosane(S)	11.09	32478326	108.807 ppb
Surrogate Spike 144.231		Recovery =	75.44%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811026.D
Sample : AY42542W15 MSD-1 5/1040





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811027.D Vial: 27
Acq On : 8-12-11 3:32:25 Operator: LAC
Sample : AY42542W16 MS-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:23 2011 Quant Results File: TPHNS727.RES

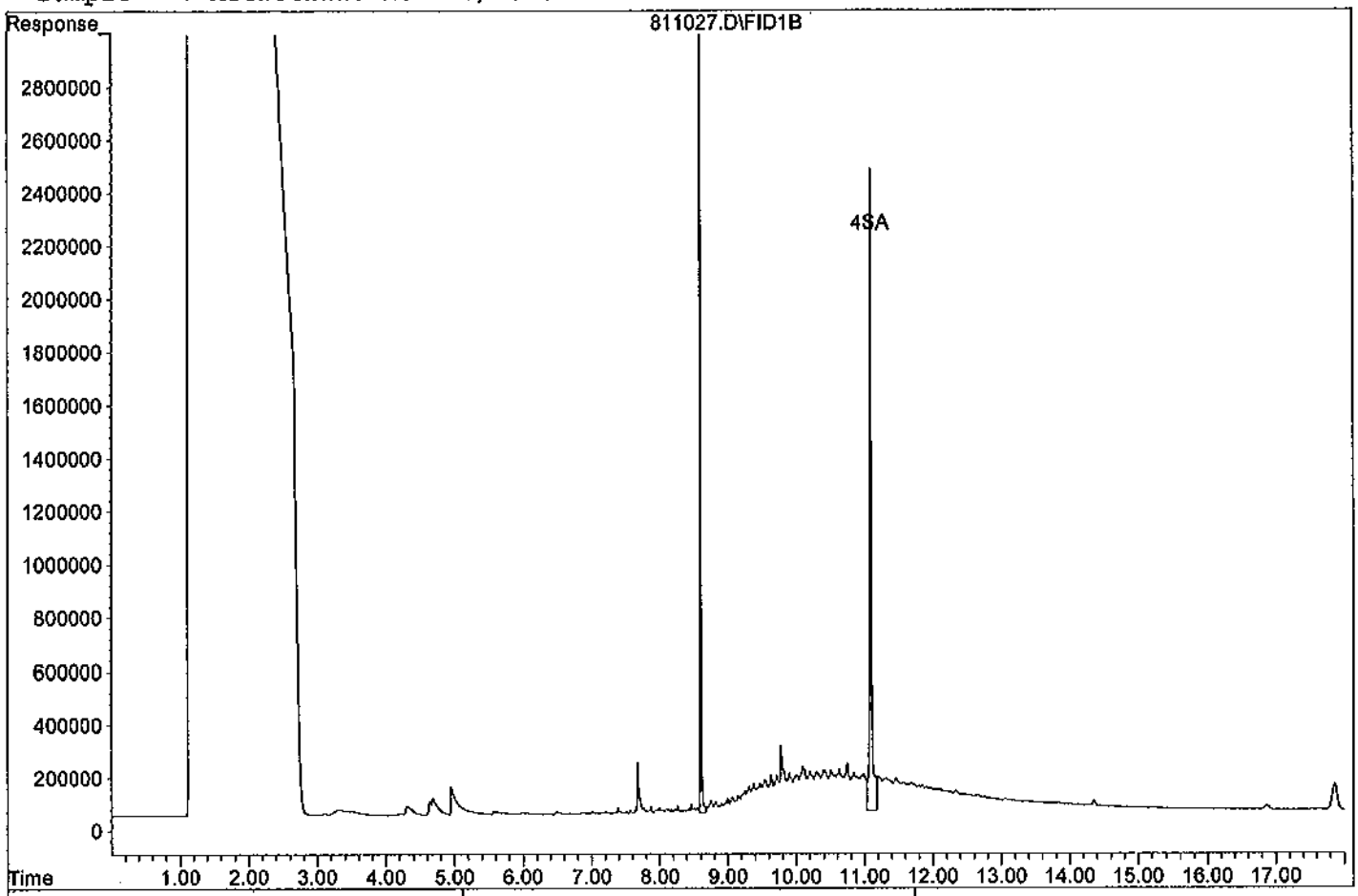
Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

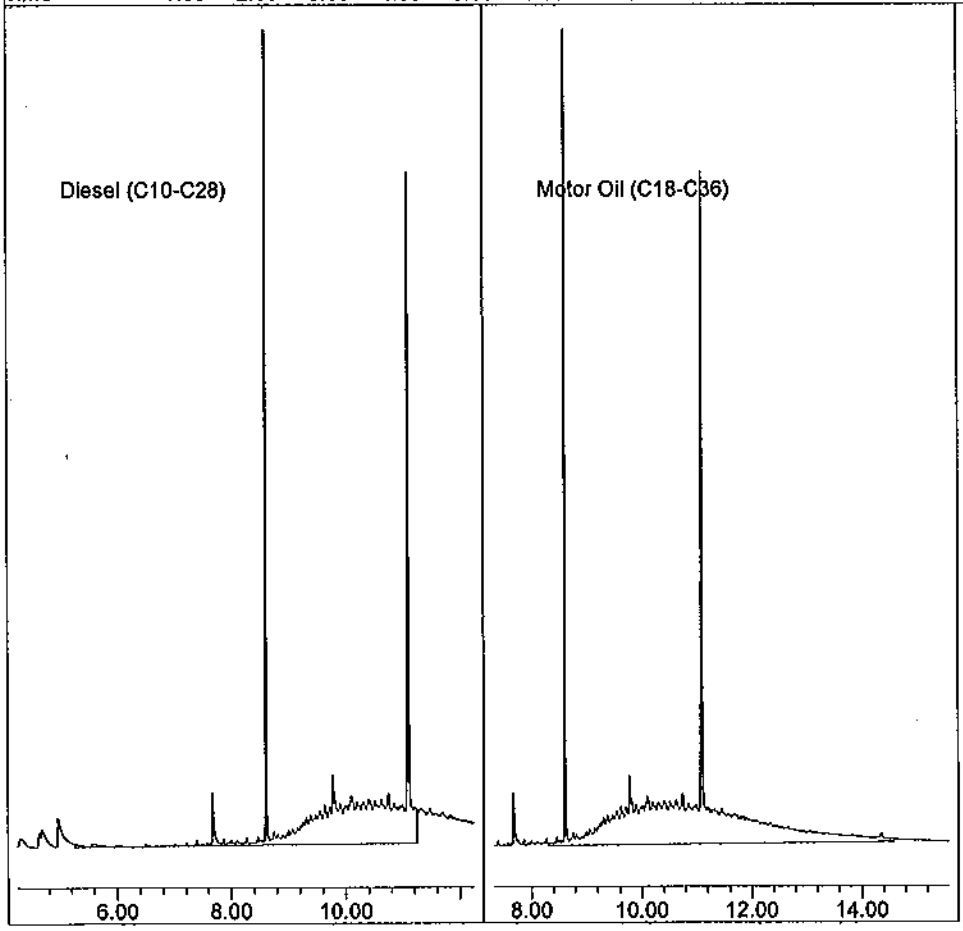
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	32730277	66.943 ppb
Surrogate Spike 147.059		Recovery =	45.52%
4) SA Octacosane(S)	11.10	43663367	137.143 ppb
Surrogate Spike 147.059		Recovery =	93.26%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	166652139	623.266 ppb
2) HBTM Motor Oil (C18-C36)	11.45	259767665	1265.412 ppb

Not Used LK 9/9/11

Data File: G:\APOLLO\DATA\110811\811027.D
Sample : AY42542W16 MS-2 5/1020





Quantitation Report (Not Reviewed)

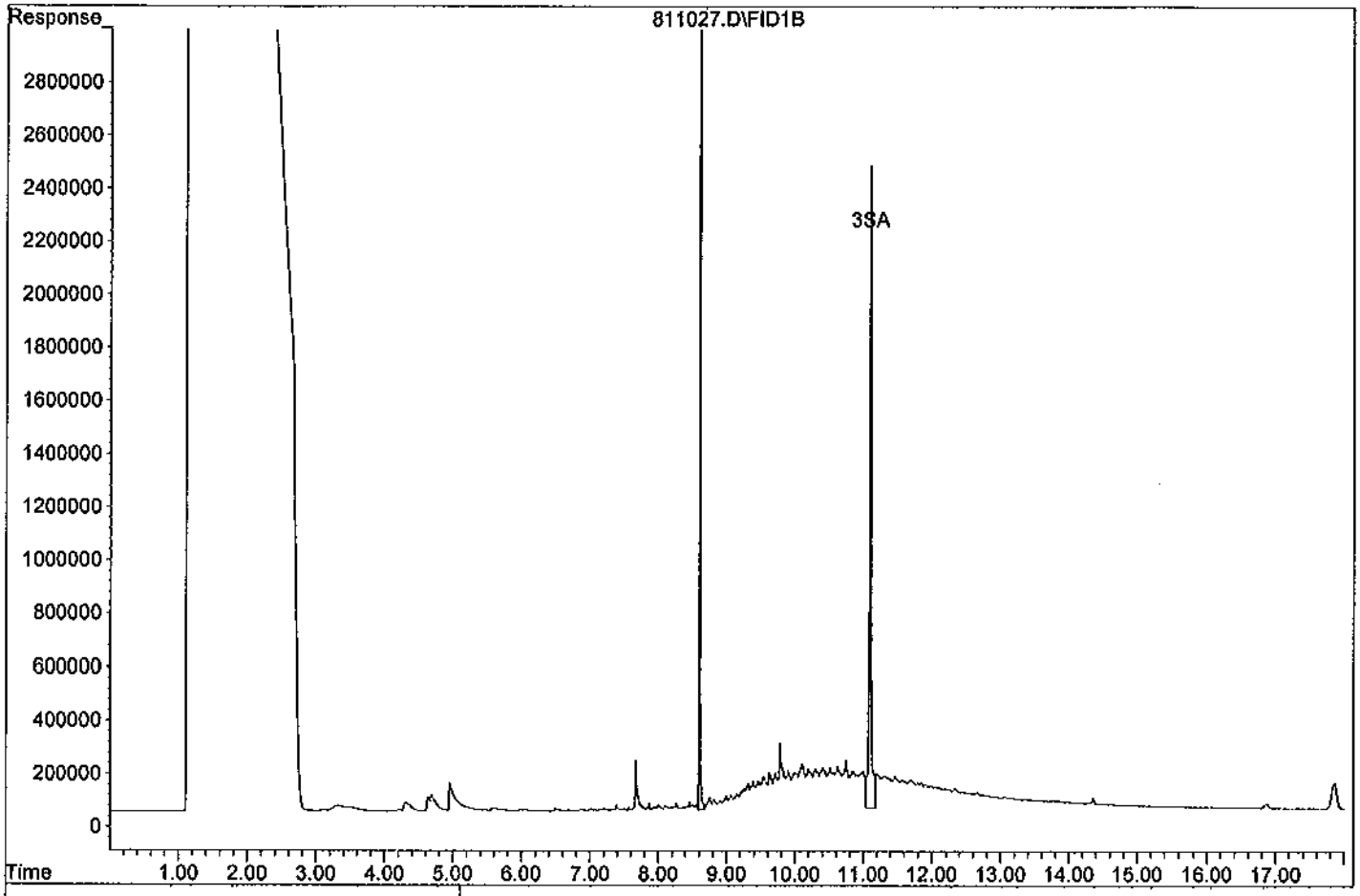
Data File : G:\APOLLO\DATA\110811\811027.D Vial: 27
Acq On : 8-12-11 3:32:25 Operator: LAC
Sample : AY42542W16 MS-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

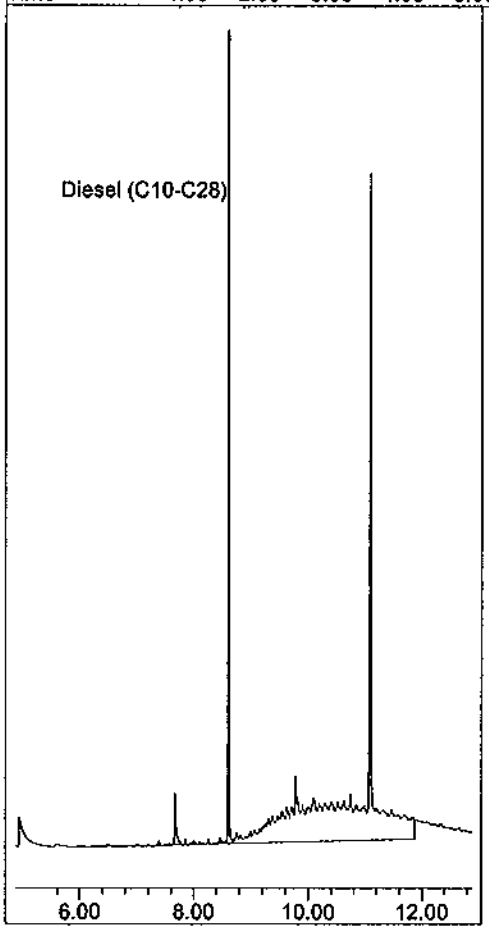
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	32730277	110.090 ppb
Surrogate Spike 147.059		Recovery =	74.86%
3) SA Octacosane(S)	11.10	43663367	149.146 ppb
Surrogate Spike 147.059		Recovery =	101.42%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811027.D
Sample : AY42542W16 MS-2 5/1020





Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\110811\811028.D Vial: 28
Acq On : 8-12-11 3:56:50 Operator: LAC
Sample : AY42542W18 MSD-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:23 2011 Quant Results File: TPHNS727.RES

Method : G:\APOLLO\DATA\110811\TPHNS727.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue Aug 09 14:29:25 2011
Response via : Multiple Level Calibration

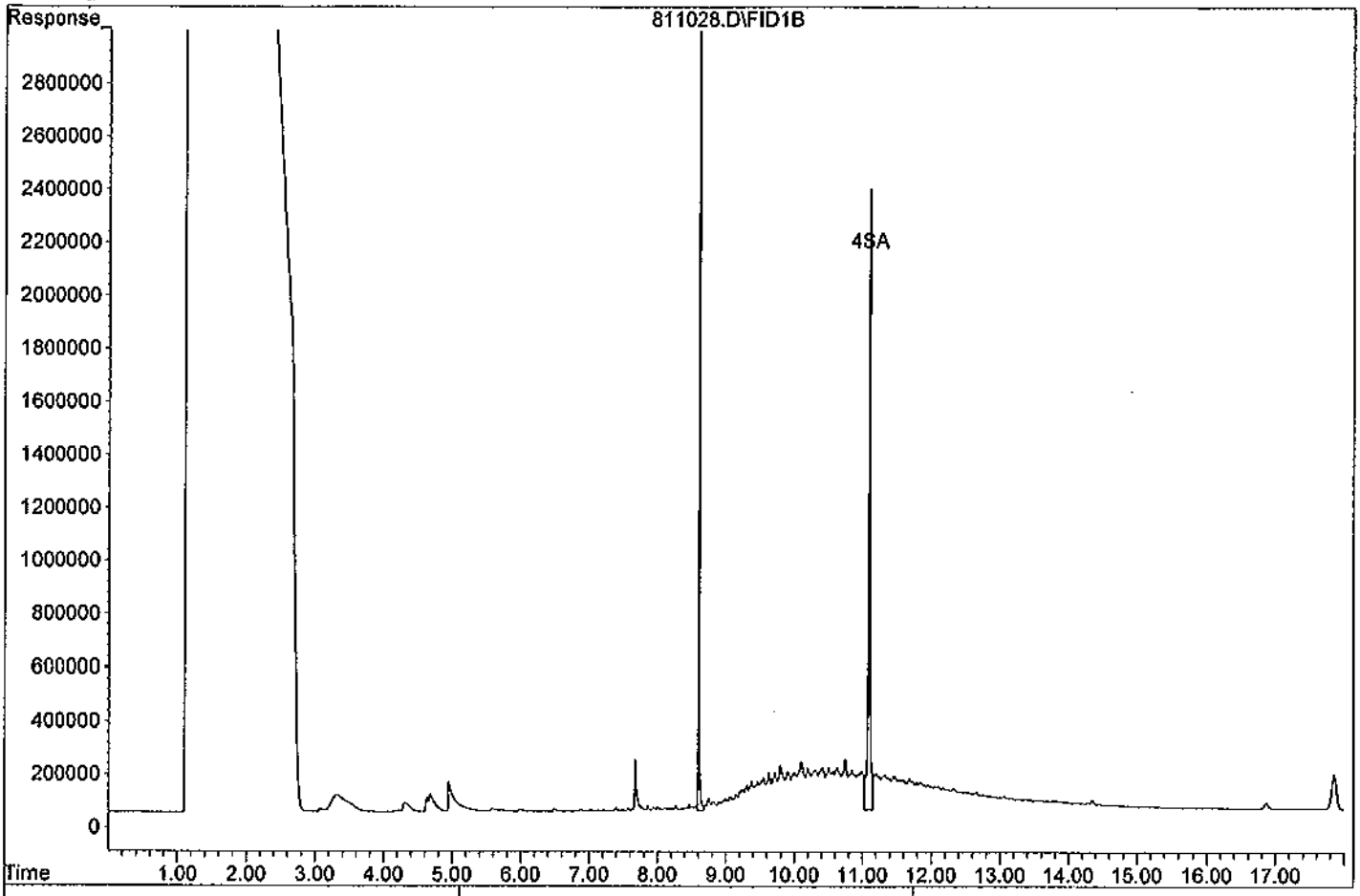
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

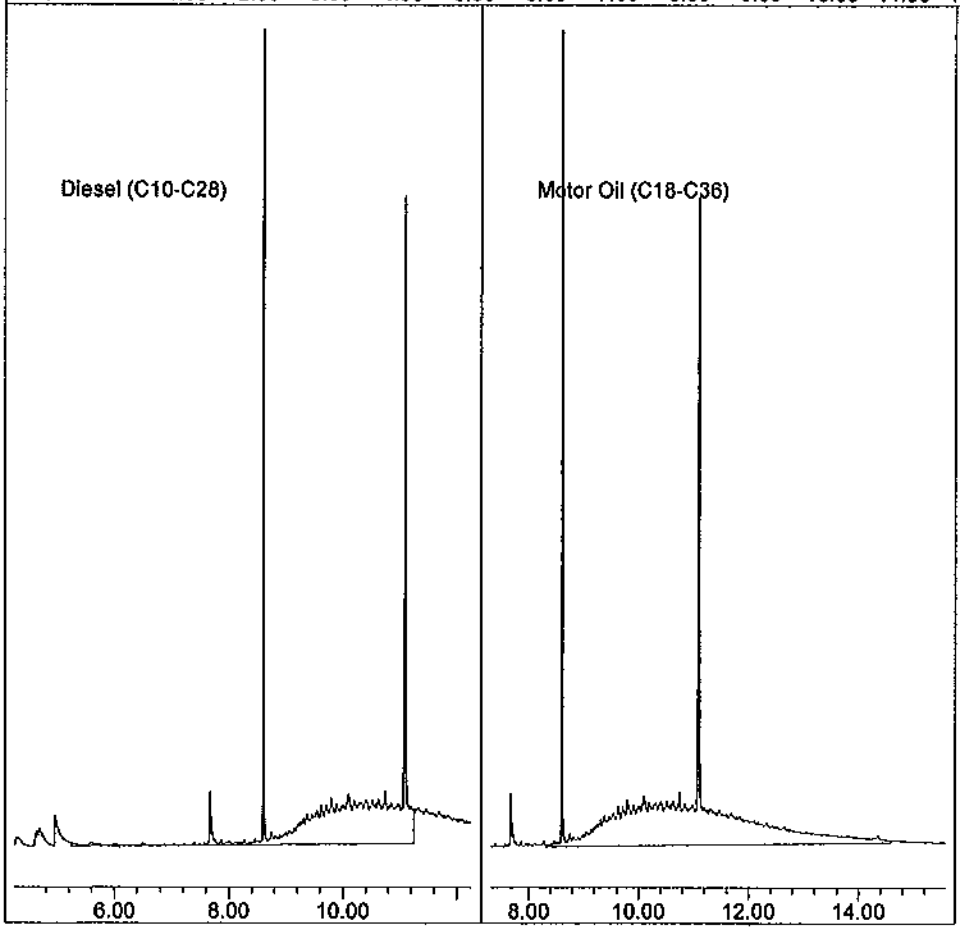
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.61	33956588	69.451 ppb
Surrogate Spike 147.059		Recovery =	47.23%
4) SA Octacosane(S)	11.10	42565196	133.694 ppb
Surrogate Spike 147.059		Recovery =	90.91%
Target Compounds			
1) HATM Diesel (C10-C28)	8.25	169343717	633.333 ppb
2) HBTM Motor Oil (C18-C36)	11.45	266828767	1299.809 ppb

Not Used LAC 9/9/11

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

Data File: G:\APOLLO\DATA\110811\811028.D
Sample : AY42542W18 MSD-2 5/1020





Quantitation Report (Not Reviewed)

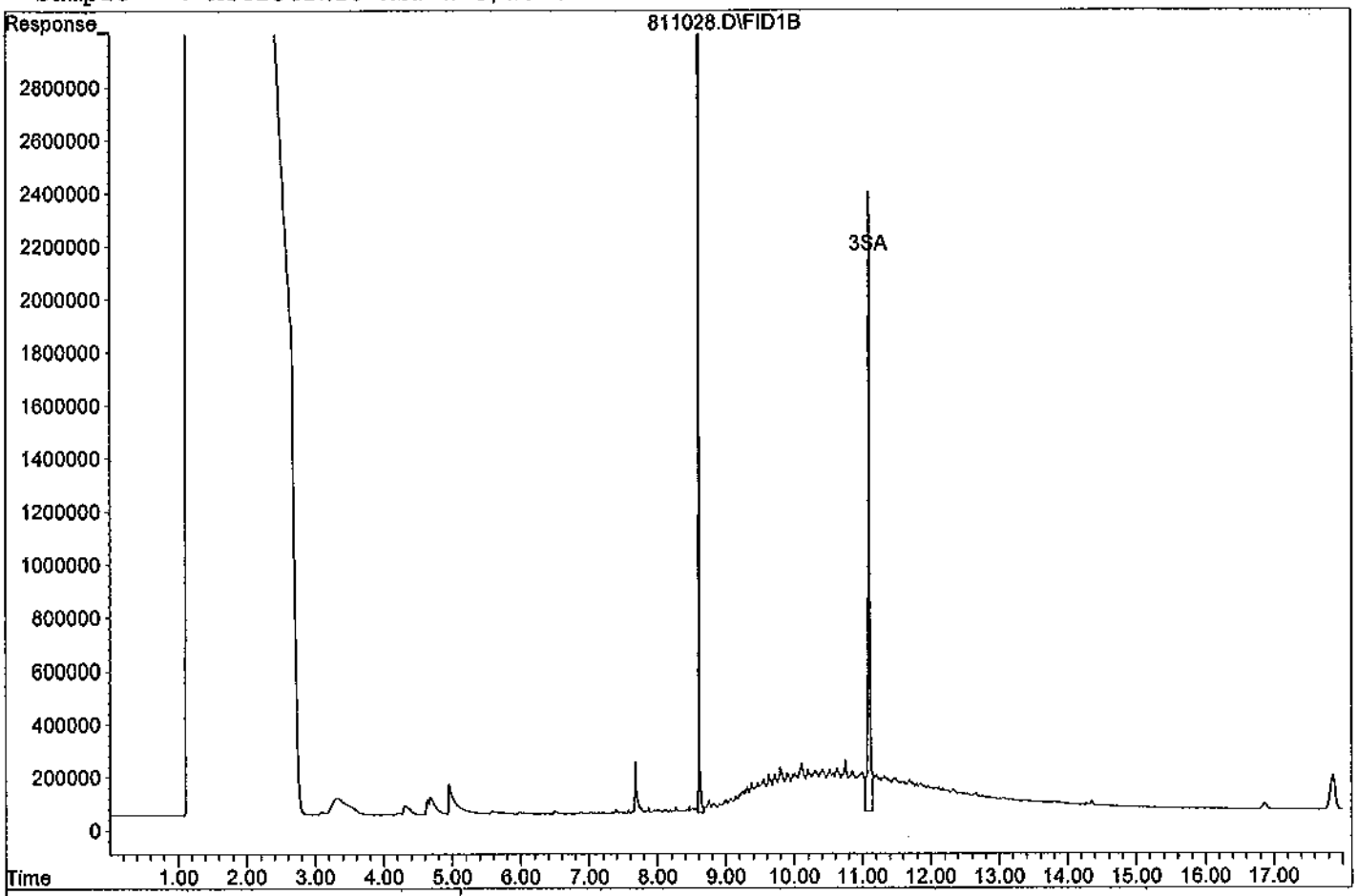
Data File : G:\APOLLO\DATA\110811\811028.D Vial: 28
Acq On : 8-12-11 3:56:50 Operator: LAC
Sample : AY42542W18 MSD-2 5/1020 Inst : Apollo
Misc : Water Multiplr: 4.90
IntFile : events.e
Quant Time: Aug 12 13:25 2011 Quant Results File: THCSUR81.RES

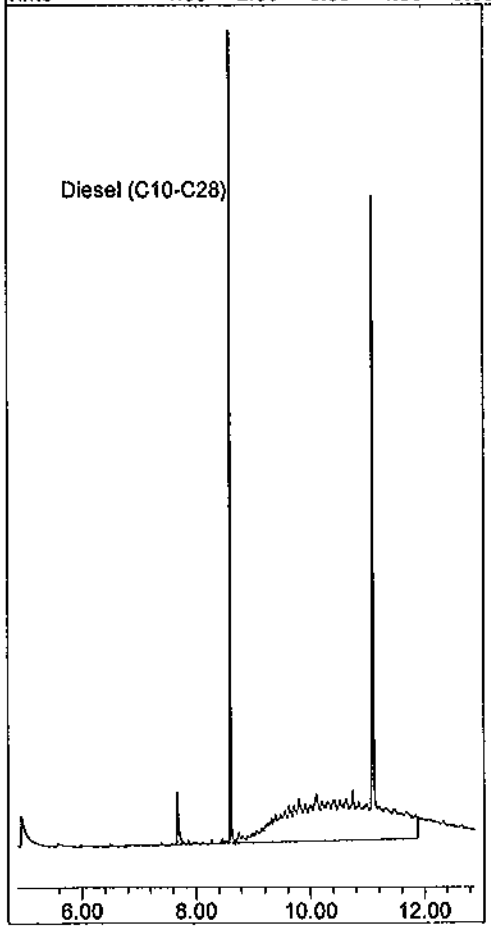
Method : G:\APOLLO\DATA\110811\THCSUR81.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Aug 08 15:30:52 2011
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) SA Ortho-Terphenyl(S)	8.61	33956588	114.214 ppb
Surrogate Spike 147.059		Recovery =	77.67%
3) SA Octacosane(S)	11.10	42565196	145.395 ppb
Surrogate Spike 147.059		Recovery =	98.87%
Target Compounds			

Data File: G:\APOLLO\DATA\110811\811028.D
Sample : AY42542W18 MSD-2 5/1020





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

DIESEL 2ND SOURCE STD

DIESEL FUEL #2	50,000ug/ml	0251	1000ml	50ml	1000ug/ml	MC #110510F	3/7/11 EX: 9/7/11
OTERPHENYL OCTACOSANE	600ug/ml	0251	4170 ml		50ug/ml		

Diesel Fuel #2 Composite
OP: 3/7/11 50,000 mg/L, 1 ml EX: 3/7/12
#11598-43
Lot # 167768 Storage 5-30 Degrees C Expiry 2/15/15
Solv: Methylene Chloride
Diesel Fuel #2 Composite
Lot #: 167768 - 28174
Rec: 1/20/11 MFR exp. 02/15/15
3/7/11

CRT: 110316-05
LOT: 164829-28058
OP: 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: Accusid	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			

AccuStandard
S-8254A-R1
Custom Herbicide Standard
Varied conc. in Hexane:Toluen
Lot: B8080038-1A OP: 3/7/11
Exp: Jul,16,2011 EX: 7/16/11

Custom Herbicide Standard
Lot #: B8080038-1A - 27782
Rec: 11/23/10 MFR exp. 07/16/11
20 comps.
FLAMMABLE
3/7/11

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

HERB 20/1000 CCV LEVEL 4

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

LAB ID 004

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

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

THE SURROGATE (*GIVEN TO EXTRACTION)

O-TERPHENYL	600ng/µl	O2SI	N/A	25mL	600ng/µl	N/A
OCTACOSANE		CAT: 110316-05				
		LOTS: 170258-				
		28808-28812				
		DP: 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	10µg/ml	OCL 2nd Src Stk	100ml	10ML	0.1µg/ml	HEXANE
ANALYTES:		prep: 6/23/11				#010711A
		Ex: 6/23/12				

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

7/8/11

TOX 2nd SRC Stock

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

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

7/8/11

TOX SECOND SOURCE

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

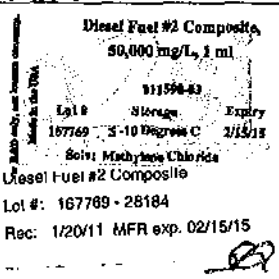
STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT LOT #	DATE INITIAL

007

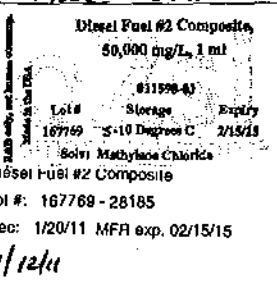
DIESEL SPIKE

DIESEL FUEL #2

50,000ug/ml 0251 2000ml 50ML 2000ug/ml MC



Diesel Fuel #2 Composite
Lot #: 167769 - 28184
Rec: 1/20/11 MFR exp. 02/15/15



Diesel Fuel #2 Composite
Lot #: 167769 - 28185
Rec: 1/20/11 MFR exp. 02/15/15

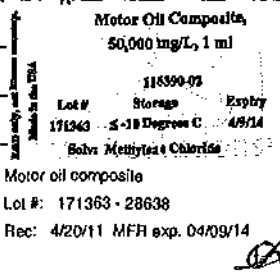
7/12/11

032811C 7/12/11
EX: 10/12/11

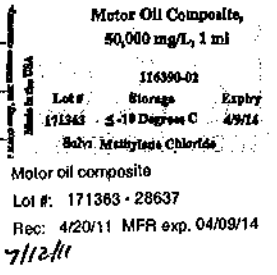
MOTOR OIL SPIKE

MOTOR OIL

50,000ug/ml 0251 2000ml 50ML 2000ug/ml MC



Motor oil composite
Lot #: 171363 - 28638
Rec: 4/20/11 MFR exp. 04/09/14



Motor oil composite
Lot #: 171363 - 28637
Rec: 4/20/11 MFR exp. 04/09/14

7/12/11

032811C 7/12/11
EX: 10/12/11

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	2000	1000	1000

7/12/11

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

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

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

EX: 12/17/11

7/20/11

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	5		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	

EX: 9/3/11

7/21/11

TNRCC CAL CURVE

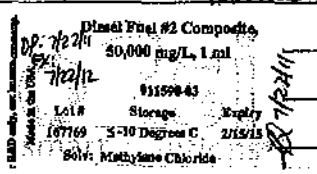
SUPPLIER	STOCK	[µg/mL]	LOT #	DATE	EXP DATE	µL	µL	µL	µL	µL	µL
	TNRCC STD.	1000		07/12/11	01/12/12	50	100	400	600	800	1000
VWR	PENTANE		J04E19			950	900	600	400	200	--
				FINAL VOLUME		1mL	1mL	1mL	1mL	1mL	1mL

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



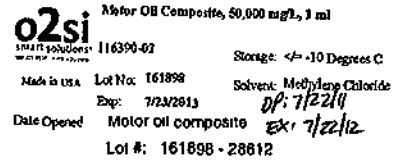
Diesel Fuel #2 Composite
Lot #: 167769 - 28186
Rec: 1/20/11 MFR exp. 02/15/15

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

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

MOTOR OIL STANDARD

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



Lot #: 161898 - 28812
Rec: 4/14/11 MFR exp. 07/23/13

TIN METHOD STANDARD 1µg/mL					
COMPOUND	CONC IN MIX	CONC OF STO	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	
7/28/11				exp. 9/21/11	

7/28/11
ex: 9/21/11

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

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
							025

TCH SURROGATE CURVE

STD ~~Std~~	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC ~~SURR/IC~~	~~600/AC~~	170258	~~7/7/2011~~	~~7/7/2012~~		100	400	600	800	1000
MC	50	032811C	8/1/11	2/1/12		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 — op: 7/7/11 — exp LAC 7/7/12 — 417µl — 5mL — 50µg/mL — MC 032811C — LAC 8/1/11 — 2/1/11

FENAMIPHOS STANDARD

FENAMIPHOS — 1000mg/mL — 025I — CAT: 031189-02 — LOT: 175443-29029 — OP: 7/20/11 — EX: 7/20/12 — 100mL — 10mL — 10mg/mL — ACETONE #0110IIC — 8/2/11 — EX: 2/2/12

PCB SOIL SPIKE

AR 1016 / AR 1260 — 1000mg/mL — 025I — 125mL — 25mL — 5mg/mL — ACETONE #0110IIC — 8/2/11 — EX: 11/2/11

Aroclor 1016 + 1260 Solution, 1,000 mg/L, 1 ml
130011-03
Lot # 163607 | Storage ≤ Ambient | Expiry 9/1/13
Solvent: Hexane
Aroclor 1016 + 1260 Lot #: 163607 - 27213
Rec: 9/10/10 MFR exp. 09/07/13
OP: 8/2/11 EX: 8/2/12
+ LOT: 163607-27214
OP: 8/2/11 EX: 8/2/12

STANDARD 028

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

LAC 8/4/11

PREP:	08/04/11										
MITC CURVE											
EXP:	12/06/11										
						1	2	3	4	5	6
SUPPLIER	ID#	ug/mL	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
	MITC STD	5		06/06/11	12/06/11	4	50	200	500	700	1000
VWR	ETHYL ACETATE		CG340			996	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000

LAC 8/4/11 EX: 12/6/11

PREP:	08/04/11					
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		102810B			500
					Final VOL.	1000

LAC 8/4/11 EX: 12/17/11

LAC 8/4/11

PREP:	08/04/11											
PAC ECO CURVE												
EXP:	10/09/11											
	ID#	(µg/mL)	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		07/26/11	10/09/11	2	10	50	200	500	700	1000
VWR	Hexane		102810B			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

LAC 8/4/11 EX: 10/9/11

LAC 8/4/11

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

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

LAC 8/4/11 EX: 1/22/12

LAC 8/4/11

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

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

LAC 8/4/11 EX: 1/22/12

LAC 8/4/11

TNRCC CCV 400UG/ML						
STANDARD	CONC.	DATE	ALIQUOT	FINAL VOL	CONC.	/LOT#
TNRCC STD	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	PENTANE
		07/12/11	01/12/12			J04E19

LAC 8/4/11 EX: 1/12/12

LAC 8/4/11

TNRCC CCV 600UG/ML						
STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
TNRCC STD	1000UG/ML	O2SI	600µL	1mL	600 µg/ml	PENTANE
		07/12/11	01/12/12			J04E19

_SEP011

Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	110727A	Extraction Method	SEP011	Units	mL

Spiked ID 1	Diesel Spike 7/12/11 EX 10/12/11		Surrogate ID 1	THC Surrogate 170258-28810	
Spiked ID 2	Motor Oil Spike 7/12/11 EX 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:	08/05/11 0:00	

pH1			W Bath Temp	80 °C
pH2				
pH3				

Spiked By: DL **Date** 07/27/11 **Witnessed By:** JL **Date** 07/27/11

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	110727A Blk				0.250	1	1000	5	7	07/27/11 9:00	
2	110727A LCS-1		1	1	0.250	1	1000	5	7	07/27/11 9:00	
3	110727A LCS-2		1	2	0.250	1	1000	5	7	07/27/11 9:00	
4	AY42542 MS-1	AY42542W19	1	1	0.250	1	1040	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
5	AY42542 MSD-1	AY42542W15	1	1	0.250	1	1040	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
6	AY42542 MS-2	AY42542W16	1	2	0.250	1	1020	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
7	AY42542 MSD-2	AY42542W18	1	2	0.250	1	1020	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
8	AY42542	AY42542W13			0.250	1	1020	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
9	AY42543	AY42543W05			0.250	1	1000	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
10	AY42544	AY42544W05			0.250	1	1000	5	7	07/27/11 9:00	65208-2 WEEK RUSH -- Amber Liter
11	AY42554	AY42554W08			0.250	1	980	5	7	07/27/11 9:00	65213 -- Amber Liter
12	AY42558	AY42558W08			0.250	1	960	5	7	07/27/11 9:00	65213 -- Amber Liter
13	AY42727	AY42727W08			0.250	1	850	5	7	07/27/11 9:00	65227 -- Amber Liter

HM 7/27/11

Solvent and Lot#	
MC	VWR 070111B
Na2SO4	0280C529

Extraction COC Transfer	
Extraction lab employee Initials	HM
GC analyst's initials	LAC
Date	7/29/11
Time	1630
Refrigerator	Hobart

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

Modified	07/27/11 8:50:25 AM

Reviewed By: HM **Date** 07/27/11

Injection Log

Directory: G:\APOLLO\DATA\110727\110801\110811

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	6	801006.D	1	THC SURR 1000/1000 8/1/11	MIX(C)	8-1-11 11:59:38
15	7	801007.D	1	THC SURR 100/1000	MIX(C)	8-1-11 12:23:50
16	8	801008.D	1	THC SURR 400/1000	Mix(C)	8-1-11 12:47:56
17	9	801009.D	1	THC SURR 600/1000	Mix(C)	8-1-11 13:12:04
18	10	801010.D	1	THC SURR 800/1000	Mix(C)	8-1-11 13:36:15
19	18	811018.D	1	DIESEL 600/1000 8/4/11	Mix(A)	8-11-11 23:53:02
20	19	811019.D	1	MOTOR OIL 600/1000 8/4/11	Mix(B)	8-12-11 0:17:34
21	22	811022.D	5	110727A BLK 5/1000	Water	8-12-11 1:30:50
22	23	811023.D	5	110727A LCS-1 5/1000	Water	8-12-11 1:55:06
23	24	811024.D	5	110727A LCS-2 5/1000	Water	8-12-11 2:19:34
24	25	811025.D	4.80769	AY42542W19 MS-1 5/1040	Water	8-12-11 2:43:31
25	26	811026.D	4.80769	AY42542W15 MSD-1 5/1040	Water	8-12-11 3:07:58
26	27	811027.D	4.90196	AY42542W16 MS-2 5/1020	Water	8-12-11 3:32:25
27	28	811028.D	4.90196	AY42542W18 MSD-2 5/1020	Water	8-12-11 3:56:50
28	29	811029.D	4.90196	AY42542W13 5/1020	Water	8-12-11 4:21:13
29	30	811030.D	5	AY42543W05 5/1000	Water	8-12-11 4:45:35
30	31	811031.D	5	AY42544W05 5/1000	Water	8-12-11 5:09:56
31	32	811032.D	1	DIESEL 600/1000 8/4/11	Mix(A)	8-12-11 5:34:15
32	33	811033.D	1	MOTOR OIL 600/1000 8/4/11	Mix(B)	8-12-11 5:58:31

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: 08/08/11 8:04:42 AM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 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
AY42542-MS	Matrix Spike	58.8	62.4
AY42542-MSD	Matrix SpikeD	52.6	58.2
AY42542	ES043	64.9	63.8
AY42543	ES044	81.5	99.6
AY42544	ES045	60.4	64.6

Comments: Batch: #SIMHC-110726A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 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
AY42542-MS	Matrix Spike	72.7
AY42542-MSD	Matrix SpikeD	67.0
AY42542	ES043	67.3
AY42543	ES044	104
AY42544	ES045	68.3

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: 08/08/11 8:04:49 AM

APPL Standard LCS

Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **110726W-42542 MS - 157858**
Batch ID: #SIMHC-110726A
Sample ID: AY42542
Client ID: ES043

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	3.88	ND	2.90	2.49	74.7	64.2	45-105	15.2	25
2-METHYLNAPHTHALENE	3.88	ND	2.60	2.30	67.0	59.3	45-105	12.2	25
ACENAPHTHENE	3.88	ND	2.79	2.54	71.9	65.5	45-110	9.4	25
ACENAPHTHYLENE	3.88	ND	3.00	2.71	77.3	69.8	50-105	10.2	25
ANTHRACENE	3.88	ND	3.18	3.20	82.0	82.5	55-110	0.63	25
BENZO(A)ANTHRACENE	3.88	ND	2.42	2.32	62.4	59.8	55-110	4.2	25
BENZO(A)PYRENE	3.88	ND	2.45	2.48	63.1	63.9	55-110	1.2	25
BENZO(B)FLUORANTHENE	3.88	ND	2.03	2.16	52.3	55.7	45-120	6.2	25
BENZO(GHI)PERYLENE	3.88	ND	2.31	2.31	59.5	59.5	40-125	0.0	25
BENZO(K)FLUORANTHENE	3.88	ND	3.81	3.67	98.2	94.6	45-125	3.7	25
CHRYSENE	3.88	ND	3.20	2.97	82.5	76.5	55-110	7.5	25
DIBENZ(A,H)ANTHRACENE	3.88	ND	2.06	2.20	53.1	56.7	40-125	6.6	25
FLUORANTHENE	3.88	ND	3.53	3.12	91.0	80.4	55-115	12.3	25
FLUORENE	3.88	ND	3.17	2.80	81.7	72.2	50-110	12.4	25
INDENO(1,2,3-CD)PYRENE	3.88	ND	2.23	2.15	57.5	55.4	45-125	3.7	25
NAPHTHALENE	3.88	ND	2.84	2.44	73.2	62.9	40-100	15.2	25
PHENANTHRENE	3.88	ND	3.10	2.73	79.9	70.4	50-115	12.7	25
PYRENE	3.88	ND	3.00	2.78	77.3	71.6	50-130	7.6	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.94	NA	1.14	1.02	58.8	52.6	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.94	NA	1.21	1.13	62.4	58.2	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.94	NA	1.41	1.30	72.7	67.0	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 :	0730L047	0730L048
Initials :	LF	

Printed: 08/08/11 8:04:52 AM
APPL MSD SCII

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 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
110726A-MS	Matrix Spike	0730L047	07/31/11 0553
110726A-MSD	Matrix SpikeD	0730L048	07/31/11 0619
AY42542	ES043	0730L049	07/31/11 0645
AY42543	ES044	0730L050	07/31/11 0710
AY42544	ES045	0730L051	07/31/11 0736

Comments: Batch: #SIMHC-110726A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 65208
Matrix: Water
ID: SVTUNE 04-14-11

SDG No: 65208
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				
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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: 65208
Matrix: Water
ID: SVTUNE 04-14-11

SDG No: 65208
Date Analyzed: 07/30/11
Instrument: Linus
Time Analyzed: 22:14

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Matrix Spike	AY42542W17 MS-1 1/10	0730L047.D	07/31/11 5:53
2	Matrix Spike Dup	AY42542W12 MSD-1 1/1	0730L048.D	07/31/11 6:19
3	ES043	AY42542W14 1/1000	0730L049.D	07/31/11 6:45
4	ES044	AY42543W07 1/1040	0730L050.D	07/31/11 7:10
5	ES045	AY42544W06 1/1020	0730L051.D	07/31/11 7:36
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	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.: 65208

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	AY42542W17 MS-1 1/1(	996	6.12	483	8.13	827	9.86
04	AY42542W12 MSD-1 1/	1320	6.12	635	8.13	1107	9.86
05	AY42542W14 1/1000	1548	6.12	741	8.13	1282	9.86
06	AY42543W07 1/1040	1836	6.12	908	8.13	1497	9.86
07	AY42544W06 1/1020	1660	6.12	798	8.13	1256	9.86
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 65208

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	AY42542W17 MS-1 1/1(	1159	12.94	940	14.56		
04	AY42542W12 MSD-1 1/	1463	12.94	1115	14.56		
05	AY42542W14 1/1000	1874	12.95	1562	14.57		
06	AY42543W07 1/1040	2025	12.94	1754	14.56		
07	AY42544W06 1/1020	1824	12.95	1509	14.57		
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = -50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

EPA METHOD 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: ES043
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42542
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)	64.9	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	63.8	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	67.3	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L049
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/08/11 8:04:57 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L049.D Vial: 49
Acq On : 31 Jul 11 6:45 Operator: LF
Sample : AY42542W14 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 11:44 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	1548	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	741	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1282	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1874	2.50000 ppb	0.01
21) Perylene-D12(IS)	14.57	264	1562	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.35	82	381	1.27555 ppb	0.01
Spiked Amount 2.000			Recovery =	63.800%	
7) Surrogate Recovery (FBP)	7.37	172	893	1.29739 ppb	0.00
Spiked Amount 2.000			Recovery =	64.850%	
17) Surrogate Recovery (TPH)	11.74	244	1278	1.34499 ppb	0.00
Spiked Amount 2.000			Recovery =	67.250%	
Target Compounds					Qvalue

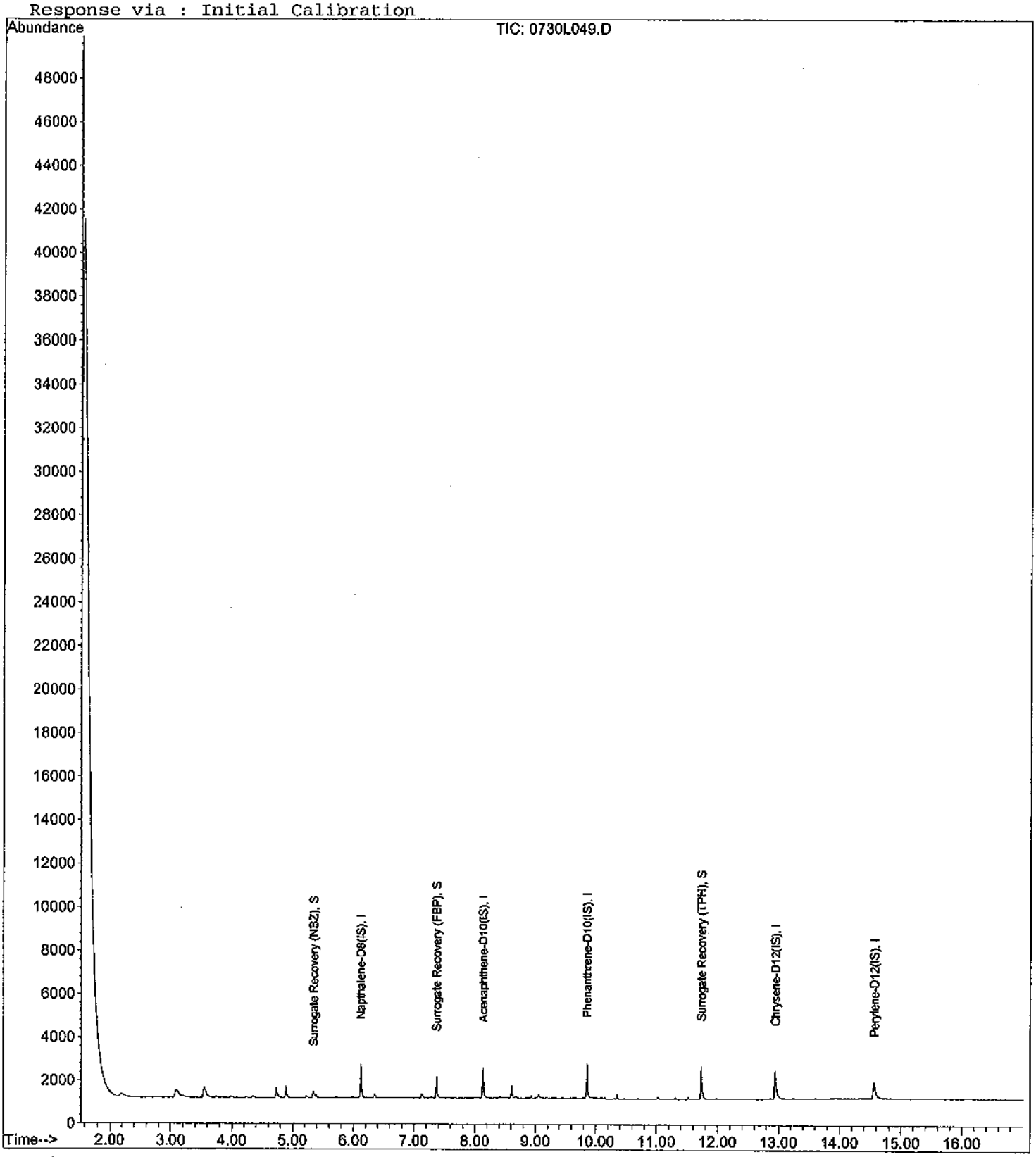
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L049.D Vial: 49
Acq On : 31 Jul 11 6:45 Operator: LF
Sample : AY42542W14 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Aug 2 11:44 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: ES044
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42543
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)	81.5	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	99.6	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	104	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L050
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/08/11 8:04:57 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L050.D Vial: 50
Acq On : 31 Jul 11 7:10 Operator: LF
Sample : AY42543W07 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: Aug 2 12:08 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	1836	2.50000 ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	908	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1497	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.94	240	2025	2.50000 ppb	0.00
21) Perylene-D12(IS)	14.56	264	1754	2.50000 ppb	0.01
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.34	82	706	1.91620 ppb	0.00
Spiked Amount 1.923			Recovery = 99.632%		
7) Surrogate Recovery (FBP)	7.37	172	1375	1.56755 ppb	0.00
Spiked Amount 1.923			Recovery = 81.536%		
17) Surrogate Recovery (TPH)	11.74	244	2138	2.00220 ppb	0.00
Spiked Amount 1.923			Recovery = 104.104%		

Target Compounds Qvalue

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

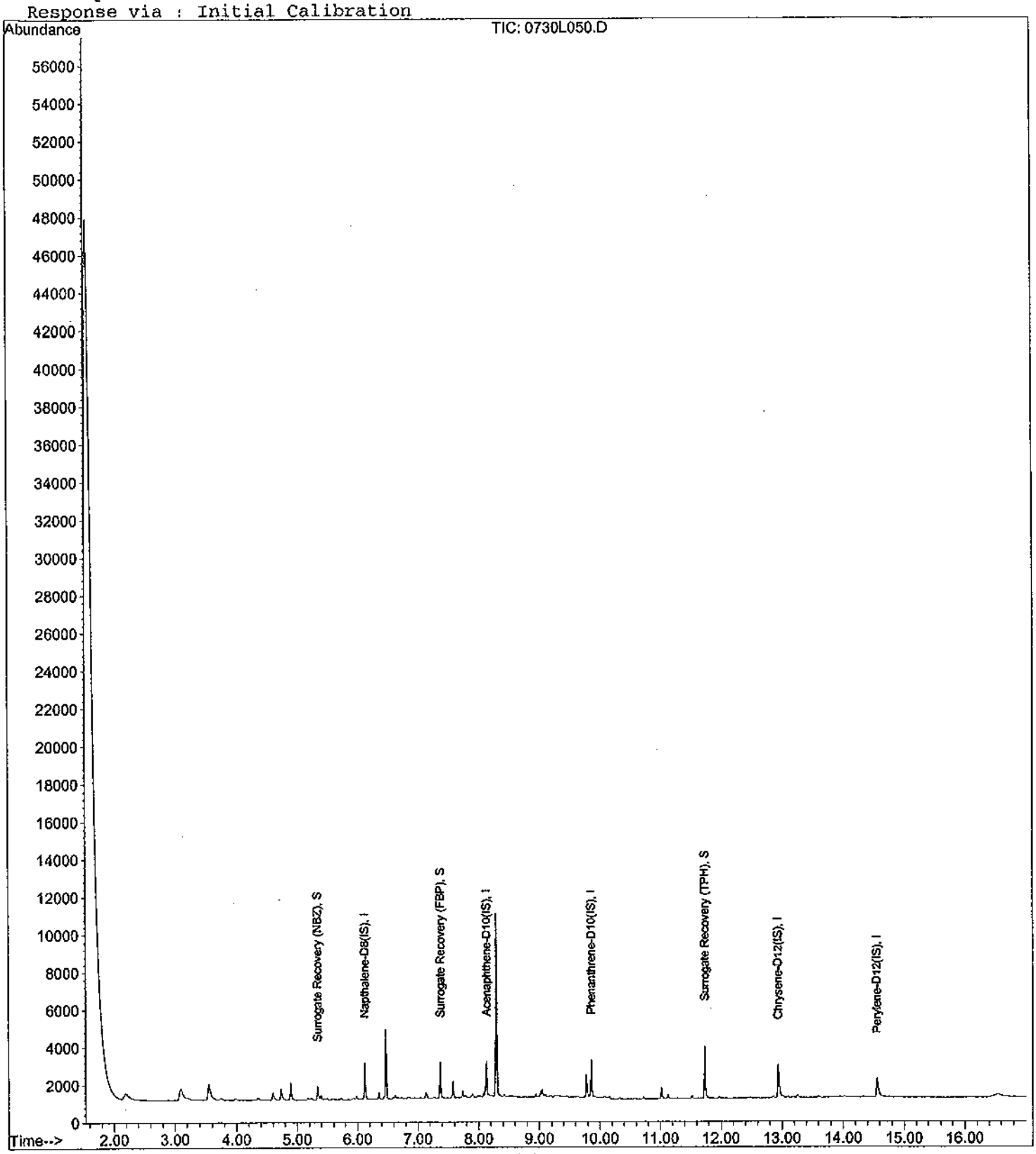
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L050.D
Acq On : 31 Jul 11 7:10
Sample : AY42543W07 1/1040
Misc :

Vial: 50
Operator: LF
Inst : Linus
Multiplr: 0.96

Quant Time: Aug 2 12:08 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: 65208

Sample ID: ES045

APPL ID: AY42544

Sample Collection Date: 07/21/11

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)	60.4	50-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	64.6	40-110			%	07/26/11	07/31/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	68.3	50-135			%	07/26/11	07/31/11

Quant Method: SIM2.M
Run #: 0730L051
Instrument: Linus
Sequence: L110621
Dilution Factor: 1
Initials: LF

Printed: 08/08/11 8:04:57 AM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L051.D Vial: 51
Acq On : 31 Jul 11 7:36 Operator: LF
Sample : AY42544W06 1/1020 Inst : Linus
Misc : Multiplr: 0.98

Quant Time: Aug 8 7:45 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	1660	2.50000	ppb	-0.01
6) Acenaphthene-D10(IS)	8.13	164	798	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	1256	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.95	240	1824	2.50000	ppb	0.01
21) Perylene-D12(IS)	14.57	264	1509	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	414	1.26717	ppb	0.00
Spiked Amount 1.961			Recovery = 64.617%			
7) Surrogate Recovery (FBP)	7.37	172	895	1.18374	ppb	0.00
Spiked Amount 1.961			Recovery = 60.384%			
17) Surrogate Recovery (TPH)	11.74	244	1263	1.33886	ppb	0.00
Spiked Amount 1.961			Recovery = 68.289%			
Target Compounds						Qvalue

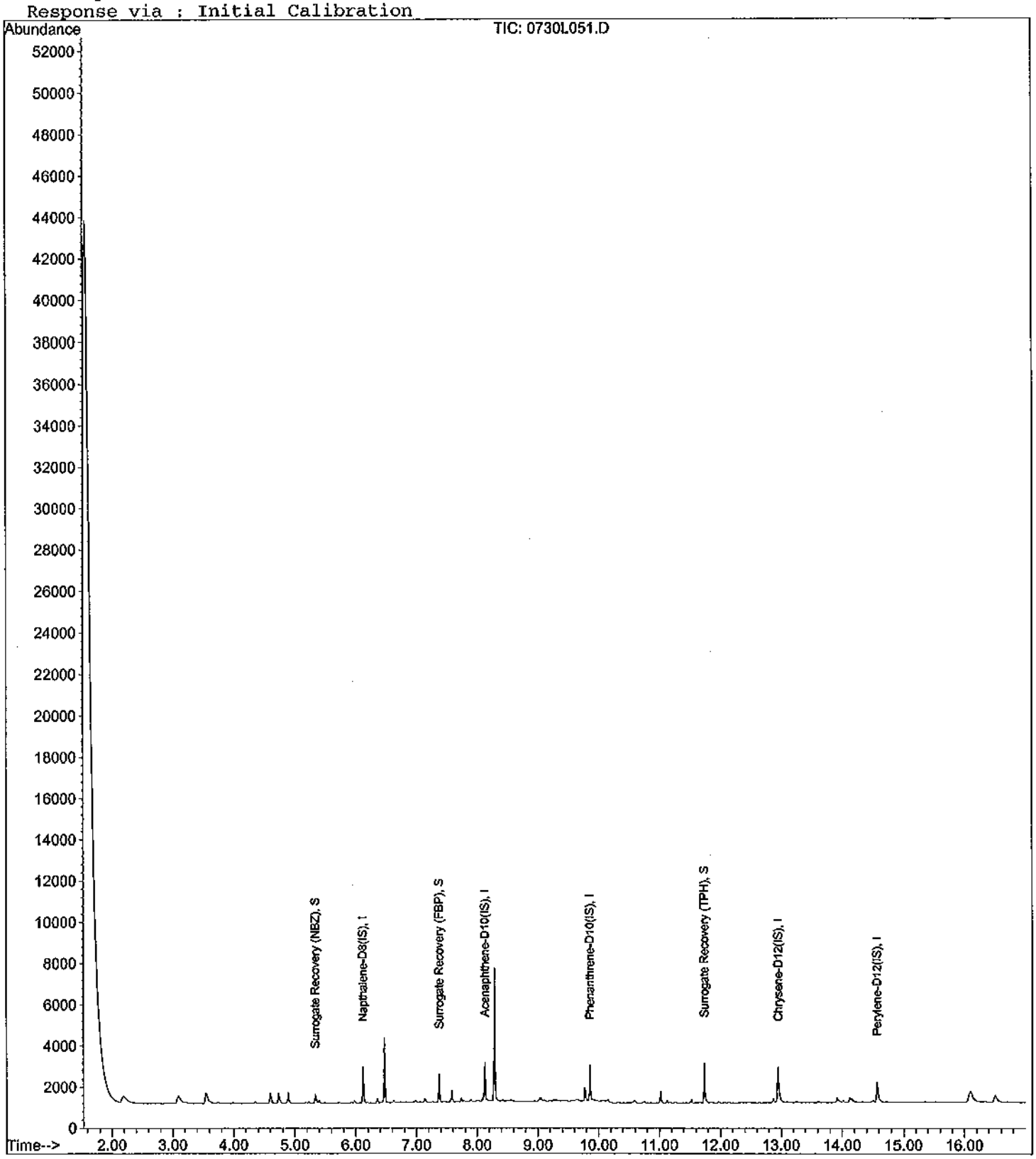
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L051.D Vial: 51
Acq On : 31 Jul 11 7:36 Operator: LF
Sample : AY42544W06 1/1020 Inst : Linus
Misc : Multiplr: 0.98

Quant Time: Aug 8 7:45 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
Calibration Data

APPL, INC.

EPA 8270C SIM

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 65208
Case No: Initial Cal. Date: 06/21/11
Matrix: Instrument: Linus
Initials:

		Compound	0621L002.D 0.1	0621L003.D 0.2	0621L004.D 0.5	0621L005.D 1	0621L006.D 5	0621L007.D 10	0621L008.D 50	0621L009.D 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 Vial: 2
Acq On : 21 Jun 11 20:15 Operator: LF
Sample : 0.1ug/ml PAH 06-21-11 Inst : Linus
Misc : 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

(#) = qualifier out of range (m) = manual integration
0621L002.D SIM2.M Wed Jun 22 11:42:58 2011 Page 1

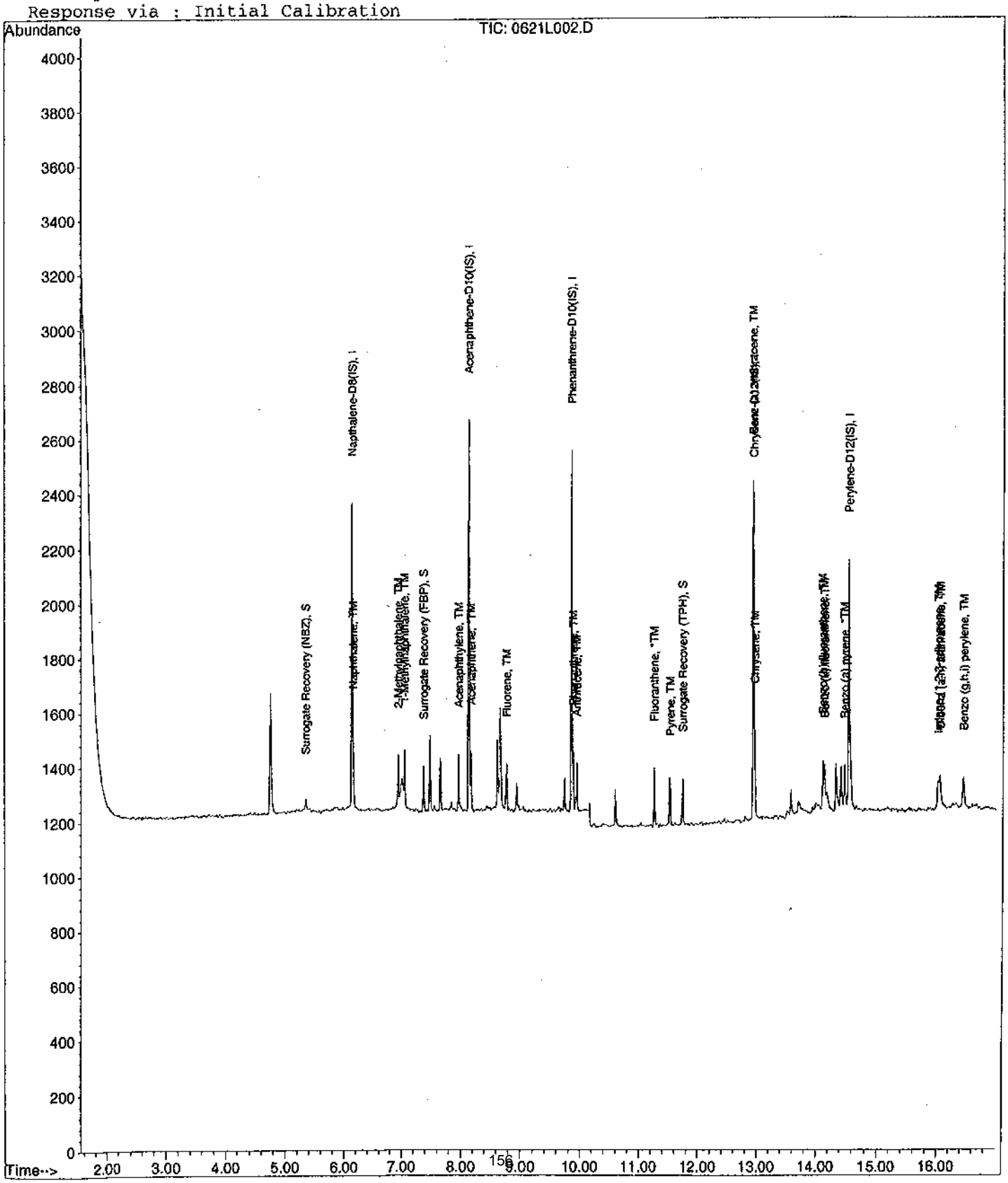
Quantitation Report

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 Vial: 3
Acq On : 21 Jun 11 20:41 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : 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

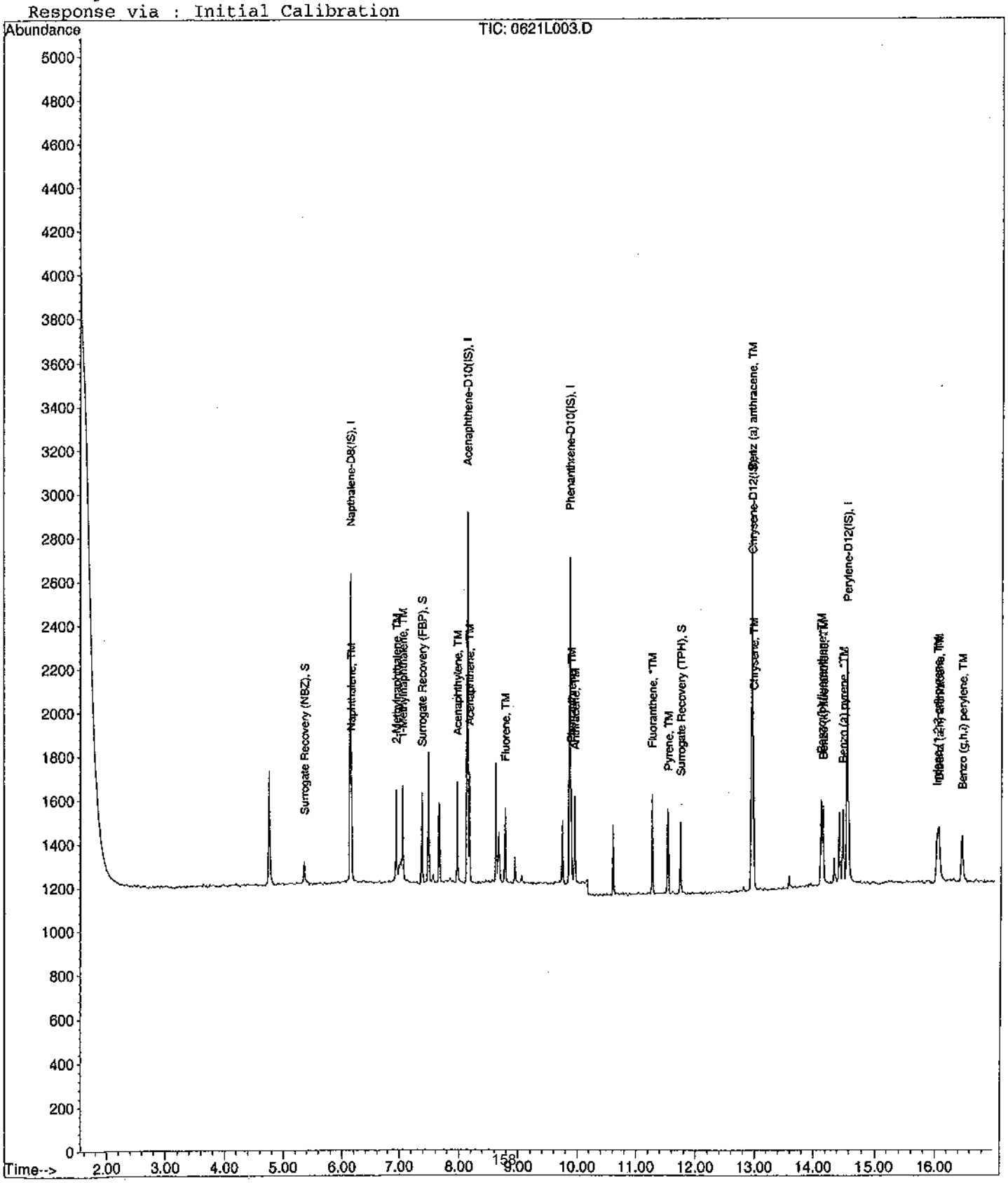
(#) = qualifier out of range (m) = manual integration
0621L003.D SIM2.M Wed Jun 22 11:42:59 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L003.D Vial: 3
Acq On : 21 Jun 11 20:41 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : 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 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

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

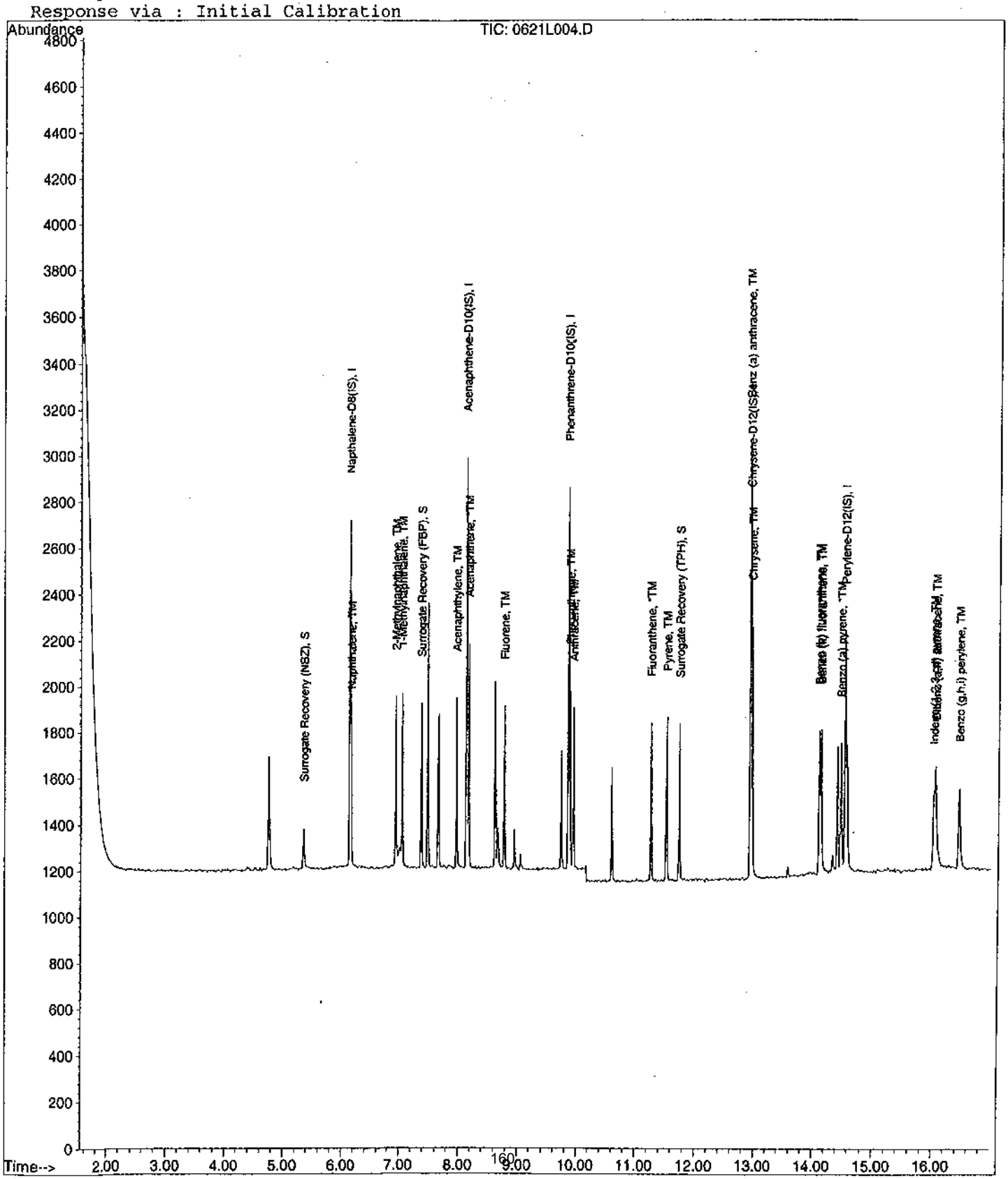
(#) = qualifier out of range (m) = manual integration
0621L004.D SIM2.M Wed Jun 22 11:43:00 2011 Page 1

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

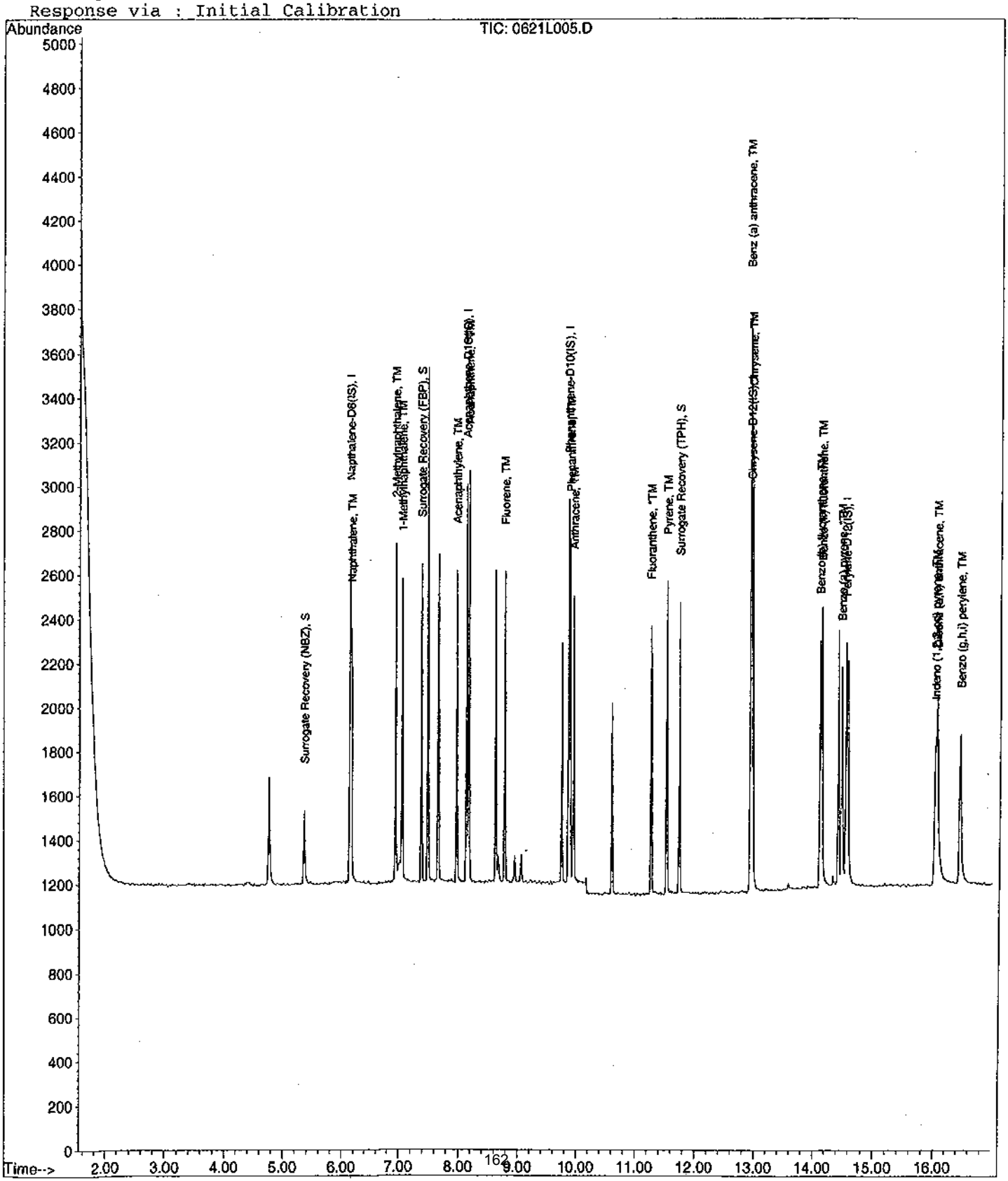
(#) = qualifier out of range (m) = manual integration
0621L005.D SIM2.M Wed Jun 22 11:43:01 2011 Page 1

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

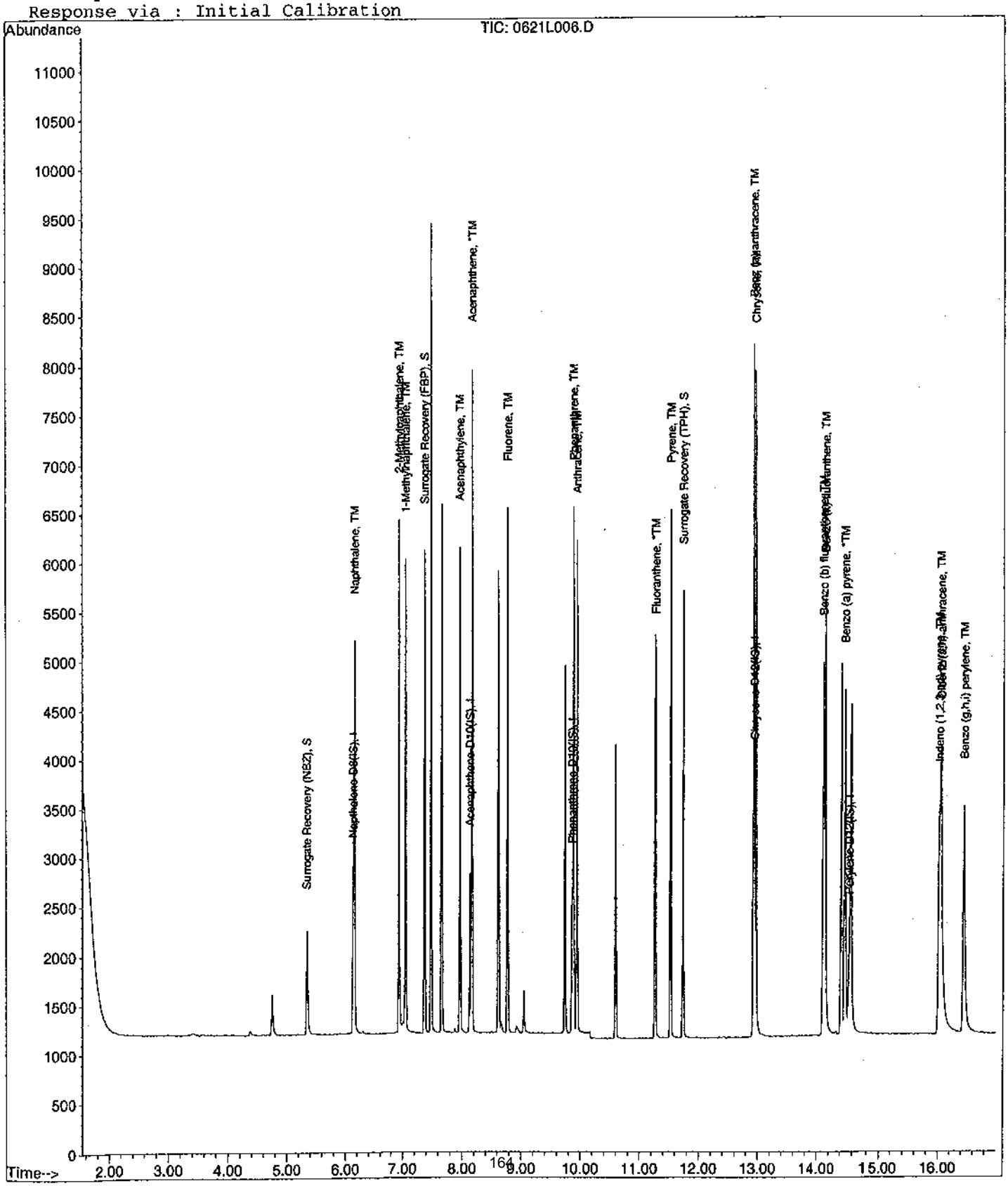
Quantitation Report

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

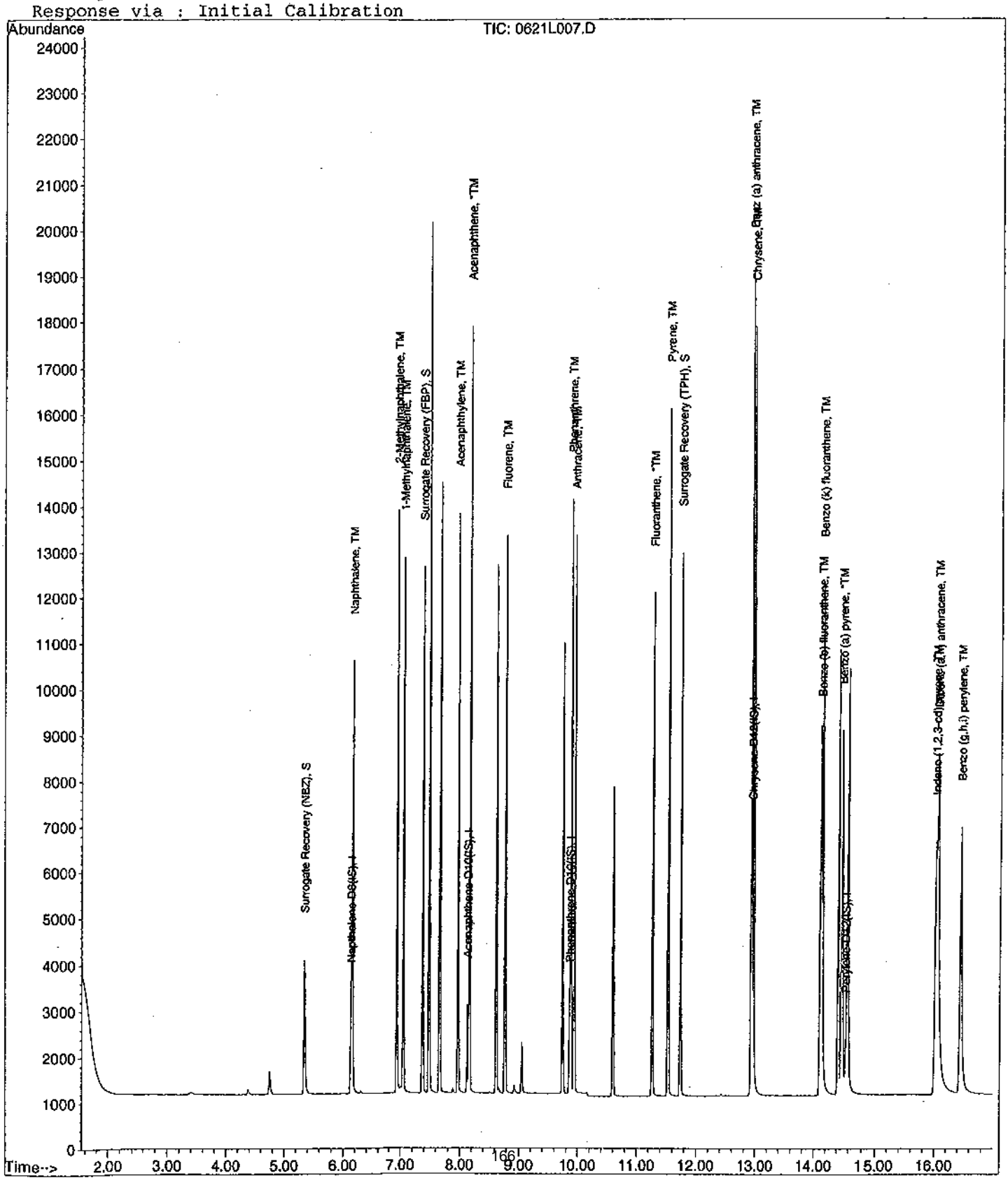
(#) = qualifier out of range (m) = manual integration
0621L007.D SIM2.M Wed Jun 22 11:43:02 2011 Page 1

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L007.D Vial: 7
Acq On : 21 Jun 11 22:26 Operator: LF
Sample : 10ug/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\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

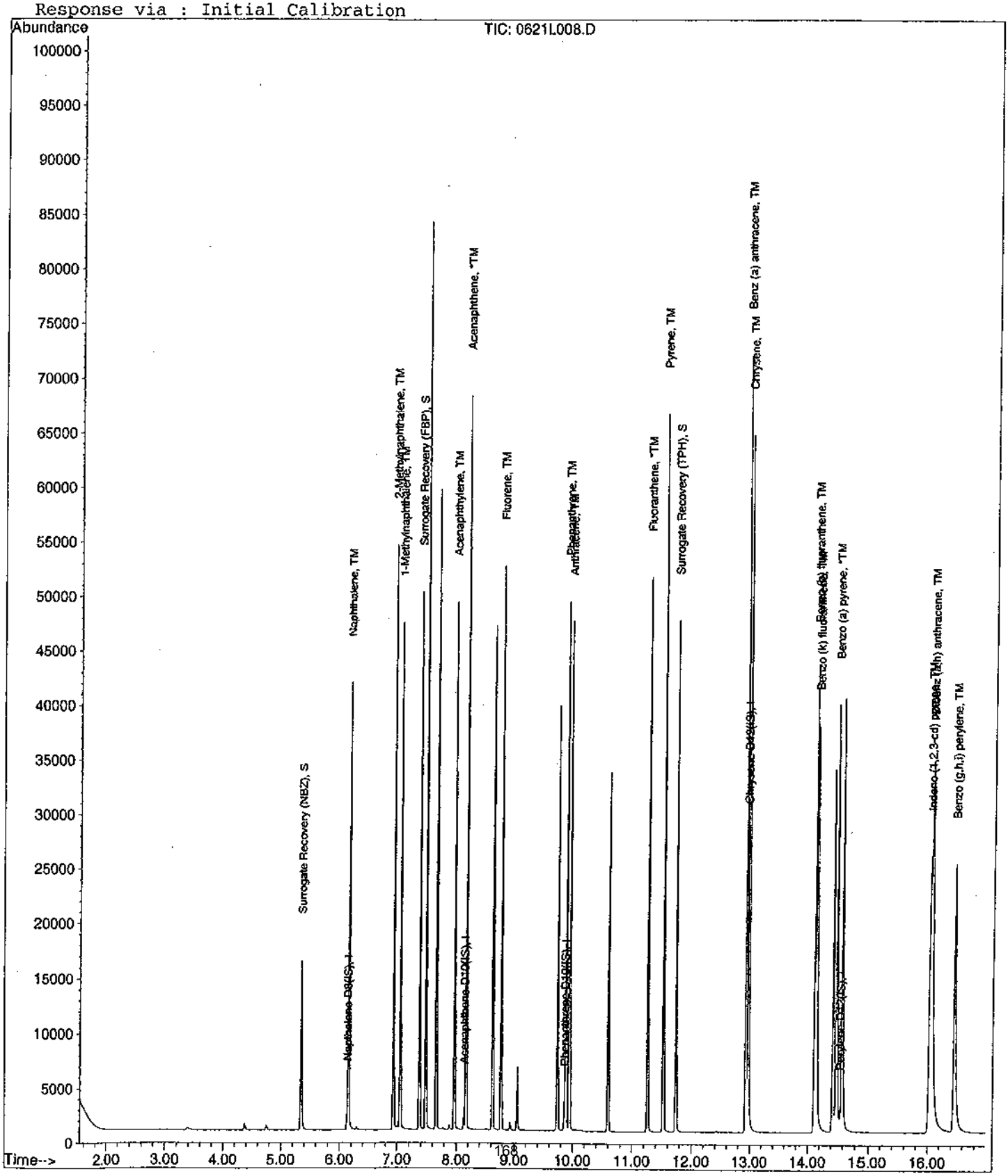
(#) = qualifier out of range (m) = manual integration
0621L008.D SIM2.M Wed Jun 22 11:43:03 2011 Page 1

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 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

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

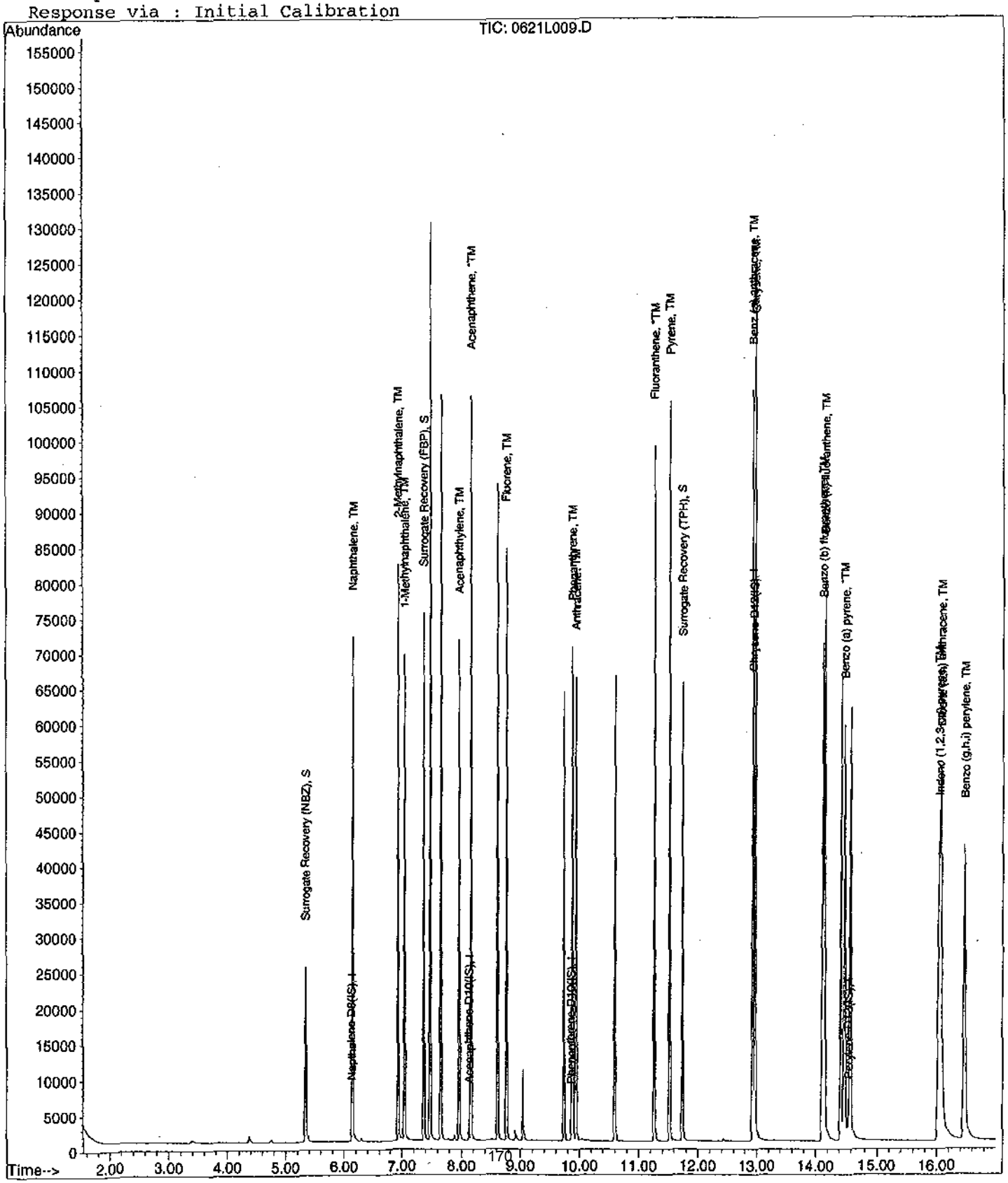
Quantitation Report

Data File : M:\LINUS\DATA\L110621\0621L009.D
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

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: 65208
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	1.566	1.399	11	TM	
3	TM	2-Methylnaphthalene	0.9811	0.8664	12	TM	
4	TM	1-Methylnaphthalene	0.8653	0.8188	7.6	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	1.565	5.3	TM	
12	*TM	Fluoranthene	2.622	2.372	9.6	*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	2.081	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

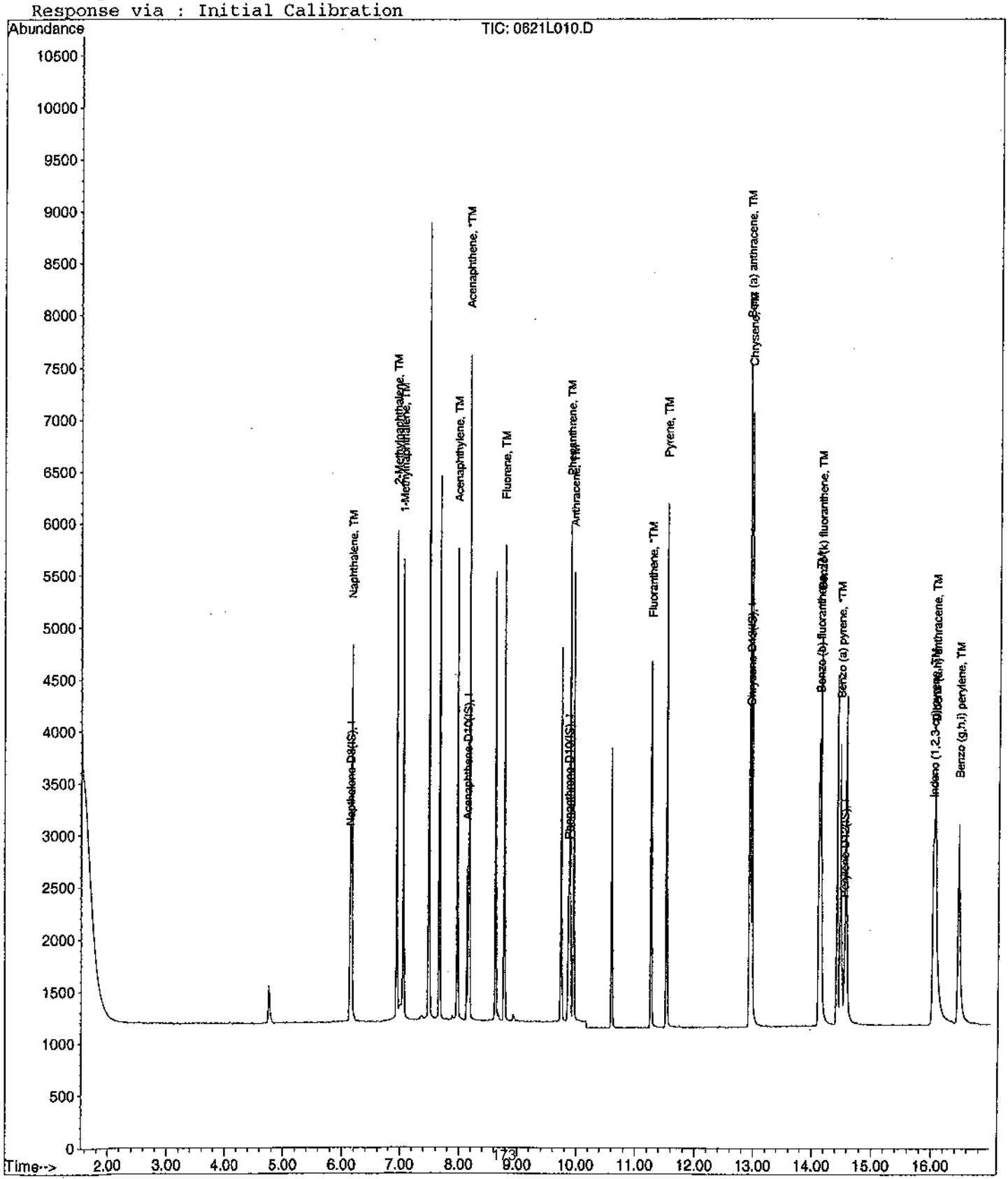
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.13	136	1344	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.13	164	549	2.50000 ppb	0.00
11) Phenanthrene-D10(IS)	9.86	188	874	2.50000 ppb	0.00
15) Chrysene-D12(IS)	12.94	240	1065	2.50000 ppb	0.00
21) Perylene-D12(IS)	14.55	264	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

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: 105108
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

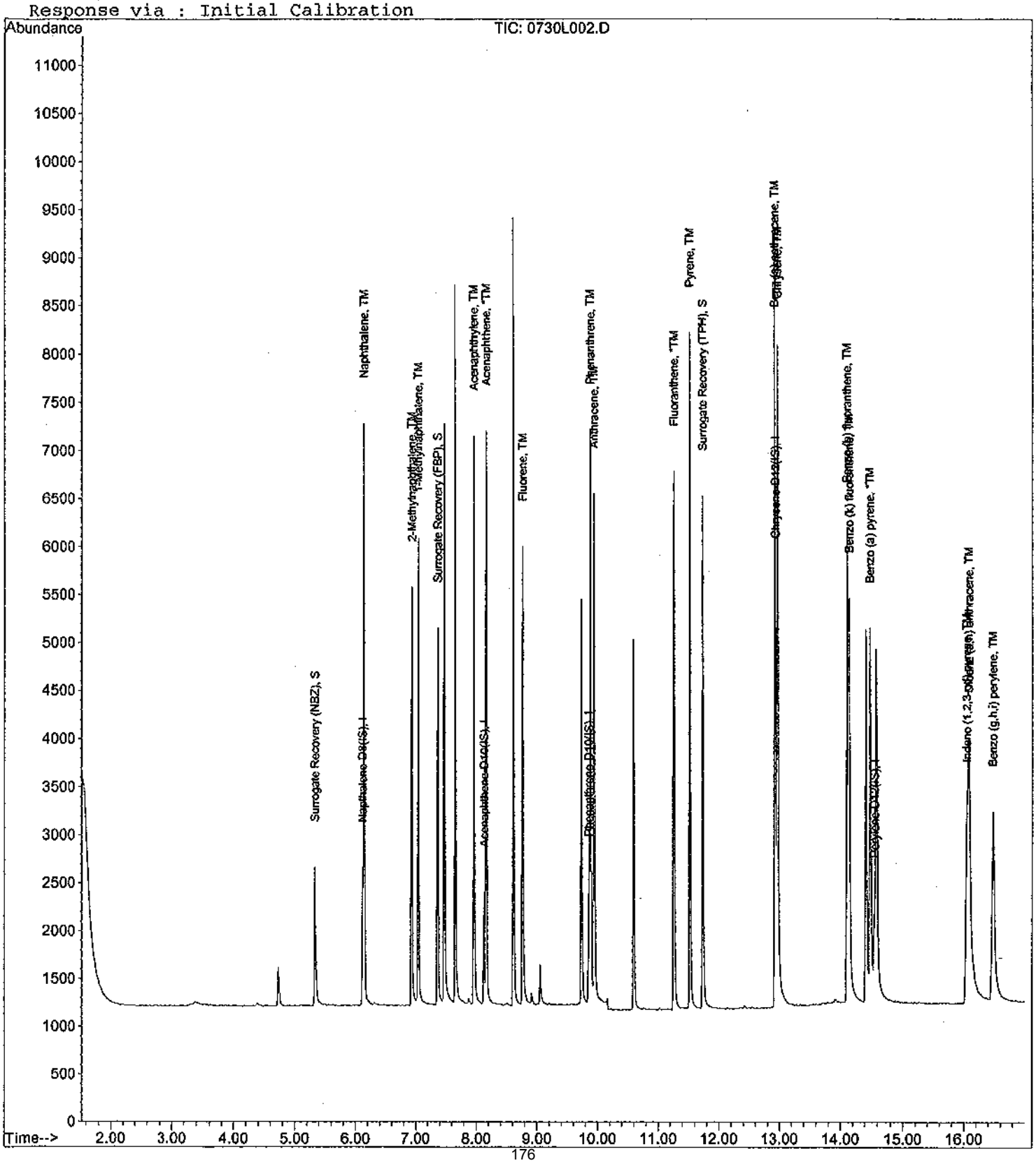
(#) = qualifier out of range (m) = manual integration

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: 65208
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	1.876	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
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

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

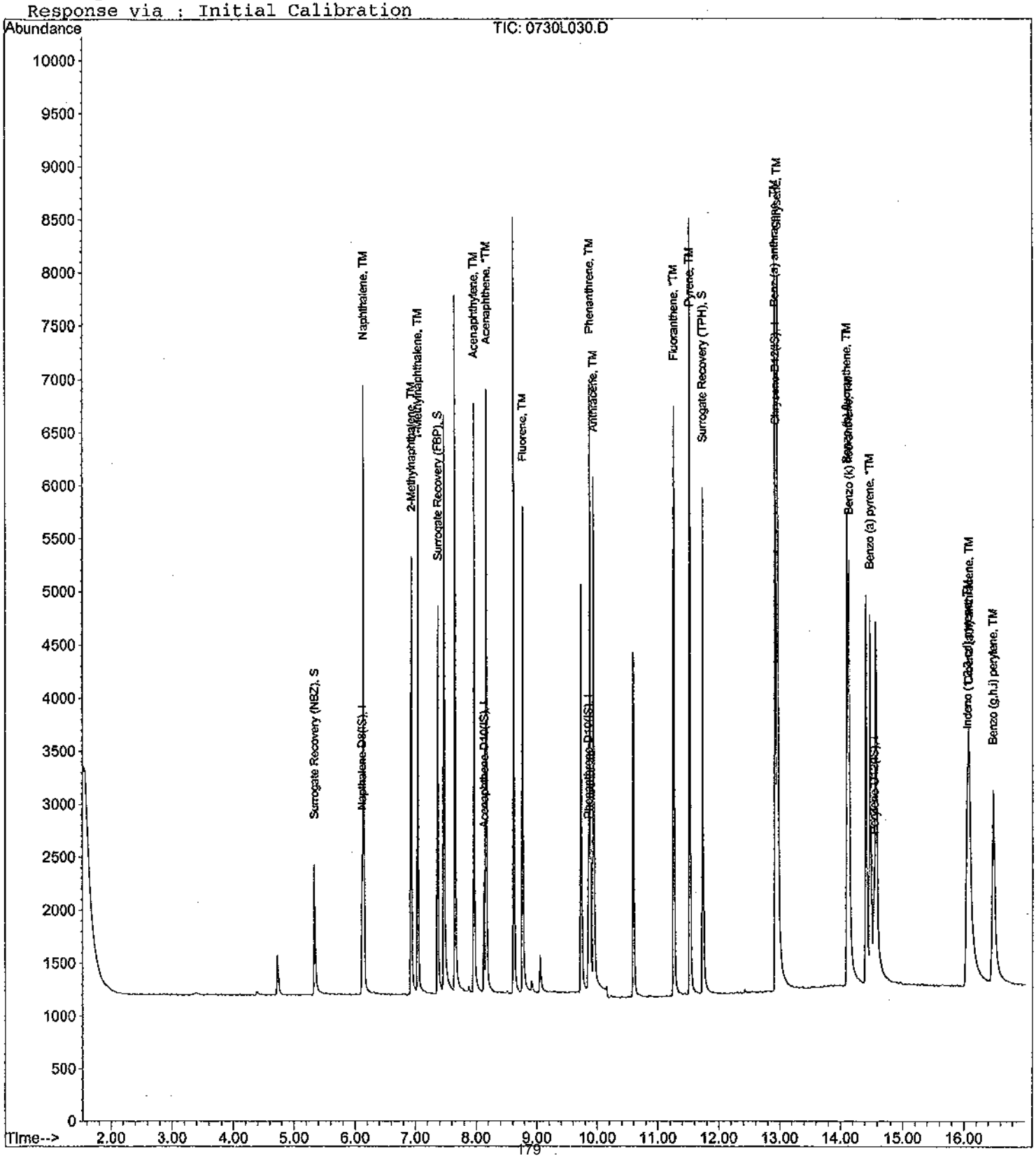
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L030.D 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

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

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

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

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: 08/08/11 8:04:58 AM

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

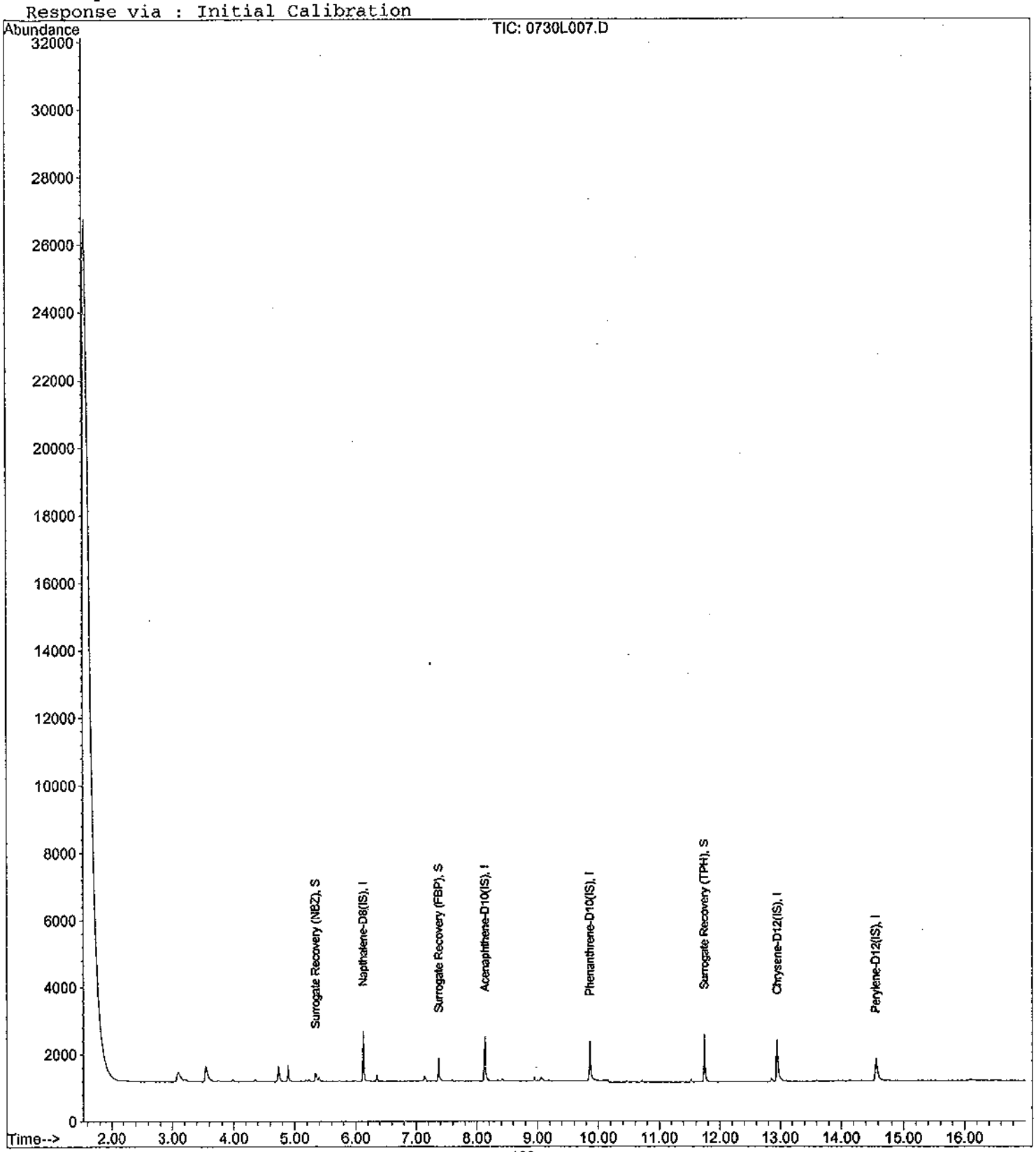
Quantitation Report

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: 08/08/11 8:05:00 AM

APPL Standard LCS

Quantitation Report (QT Reviewed)

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

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

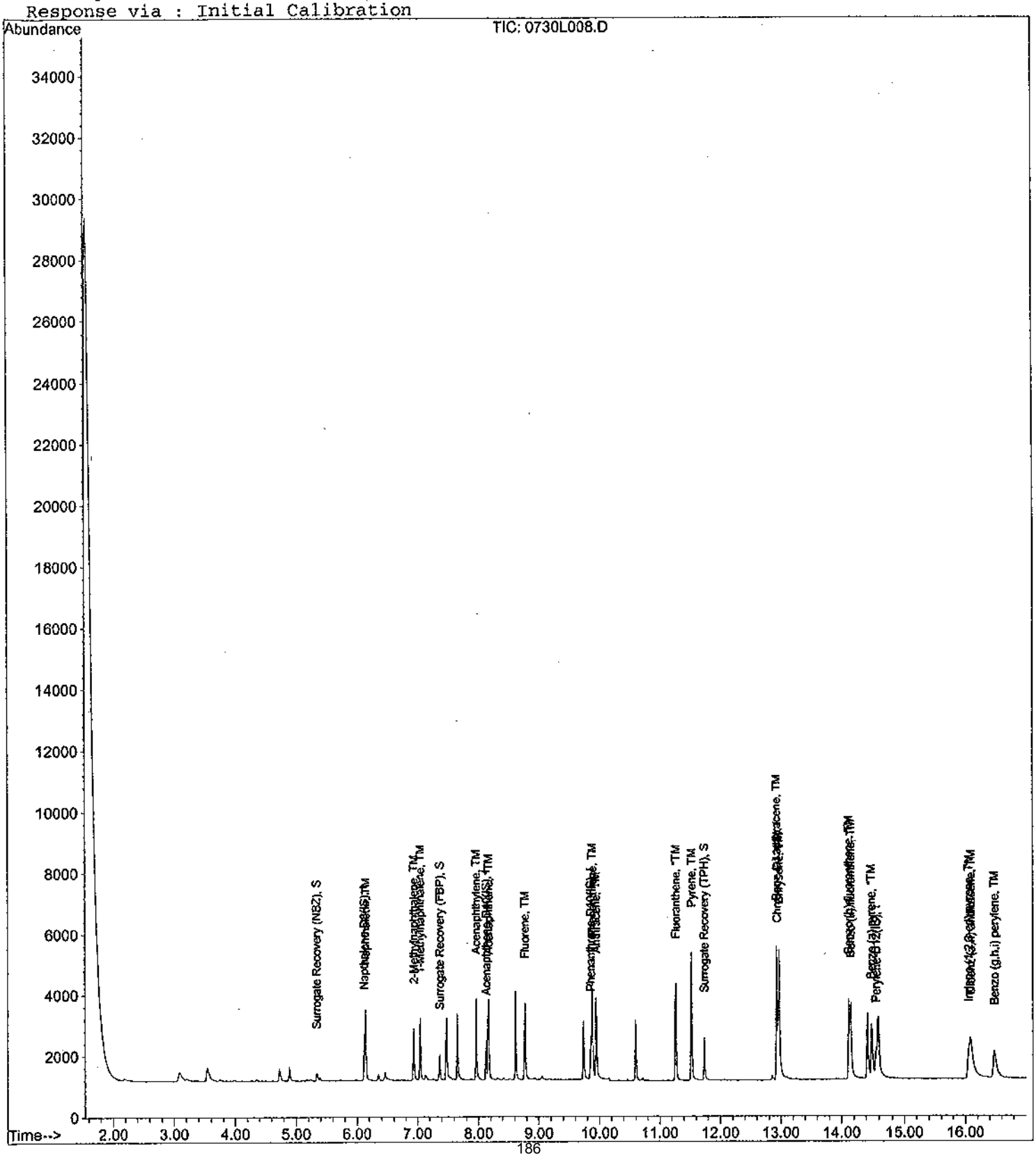
(#) = qualifier out of range (m) = manual integration

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-42542 MS - 157858**
Batch ID: #SIMHC-110726A
Sample ID: AY42542
Client ID: ES043

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	3.88	ND	2.90	2.49	74.7	64.2	45-105	15.2	25
2-METHYLNAPHTHALENE	3.88	ND	2.60	2.30	67.0	59.3	45-105	12.2	25
ACENAPHTHENE	3.88	ND	2.79	2.54	71.9	65.5	45-110	9.4	25
ACENAPHTHYLENE	3.88	ND	3.00	2.71	77.3	69.8	50-105	10.2	25
ANTHRACENE	3.88	ND	3.18	3.20	82.0	82.5	55-110	0.63	25
BENZO(A)ANTHRACENE	3.88	ND	2.42	2.32	62.4	59.8	55-110	4.2	25
BENZO(A)PYRENE	3.88	ND	2.45	2.48	63.1	63.9	55-110	1.2	25
BENZO(B)FLUORANTHENE	3.88	ND	2.03	2.16	52.3	55.7	45-120	6.2	25
BENZO(GHI)PERYLENE	3.88	ND	2.31	2.31	59.5	59.5	40-125	0.0	25
BENZO(K)FLUORANTHENE	3.88	ND	3.81	3.67	98.2	94.6	45-125	3.7	25
CHRYSENE	3.88	ND	3.20	2.97	82.5	76.5	55-110	7.5	25
DIBENZ(A,H)ANTHRACENE	3.88	ND	2.06	2.20	53.1	56.7	40-125	6.6	25
FLUORANTHENE	3.88	ND	3.53	3.12	91.0	80.4	55-115	12.3	25
FLUORENE	3.88	ND	3.17	2.80	81.7	72.2	50-110	12.4	25
INDENO(1,2,3-CD)PYRENE	3.88	ND	2.23	2.15	57.5	55.4	45-125	3.7	25
NAPHTHALENE	3.88	ND	2.84	2.44	73.2	62.9	40-100	15.2	25
PHENANTHRENE	3.88	ND	3.10	2.73	79.9	70.4	50-115	12.7	25
PYRENE	3.88	ND	3.00	2.78	77.3	71.6	50-130	7.6	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.94	NA	1.14	1.02	58.8	52.6	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.94	NA	1.21	1.13	62.4	58.2	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.94	NA	1.41	1.30	72.7	67.0	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 :	0730L047	0730L048
Initials :	LF	

Printed: 08/08/11 8:05:03 AM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L110621\0730L047.D Vial: 47
Acq On : 31 Jul 11 5:53 Operator: LF
Sample : AY42542W17 MS-1 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:43 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	996	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	483	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	827	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1159	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	940	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.35	82	240	1.21243 ppb		0.01
Spiked Amount 1.942			Recovery = 62.418%			
7) Surrogate Recovery (FBP)	7.37	172	526	1.13825 ppb		0.00
Spiked Amount 1.942			Recovery = 58.607%			
17) Surrogate Recovery (TPH)	11.74	244	856	1.41420 ppb		0.00
Spiked Amount 1.942			Recovery = 72.821%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	1822	2.83603 ppb		99
4) 2-Methylnaphthalene	6.94	142	1047	2.60071 ppb		99
5) 1-Methylnaphthalene	7.05	142	1052	2.89577 ppb		96
8) Acenaphthylene	7.97	152	1828	3.00022 ppb		99
9) Acenaphthene	8.17	154	1005	2.79084 ppb		97
10) Fluorene	8.77	166	1274	3.16593 ppb		98
12) Phenanthrene	9.88	178	1885	3.10213 ppb		99
13) Anthracene	9.94	178	1793	3.18253 ppb		98
14) Fluoranthene	11.27	202	3152	3.52859 ppb	#	93
16) Pyrene	11.53	202	3285	2.99943 ppb	#	92
18) Benz (a) anthracene	12.93	228	2240	2.42354 ppb		97
19) Chrysene	12.97	228	2895	3.20386 ppb	#	93
20) Indeno (1,2,3-cd) pyrene	16.05	276	2001	2.23105 ppb	#	96
22) Benzo (b) fluoranthene	14.12	252	1753	2.03387 ppb		97
23) Benzo (k) fluoranthene	14.15	252	2853	3.80720 ppb		100
24) Benzo (a) pyrene	14.50	252	2036	2.45002 ppb		95
25) Dibenz (a,h) anthracene	16.09	278	1500	2.06159 ppb		94
26) Benzo (g,h,i) perylene	16.48	276	1782	2.30717 ppb		96

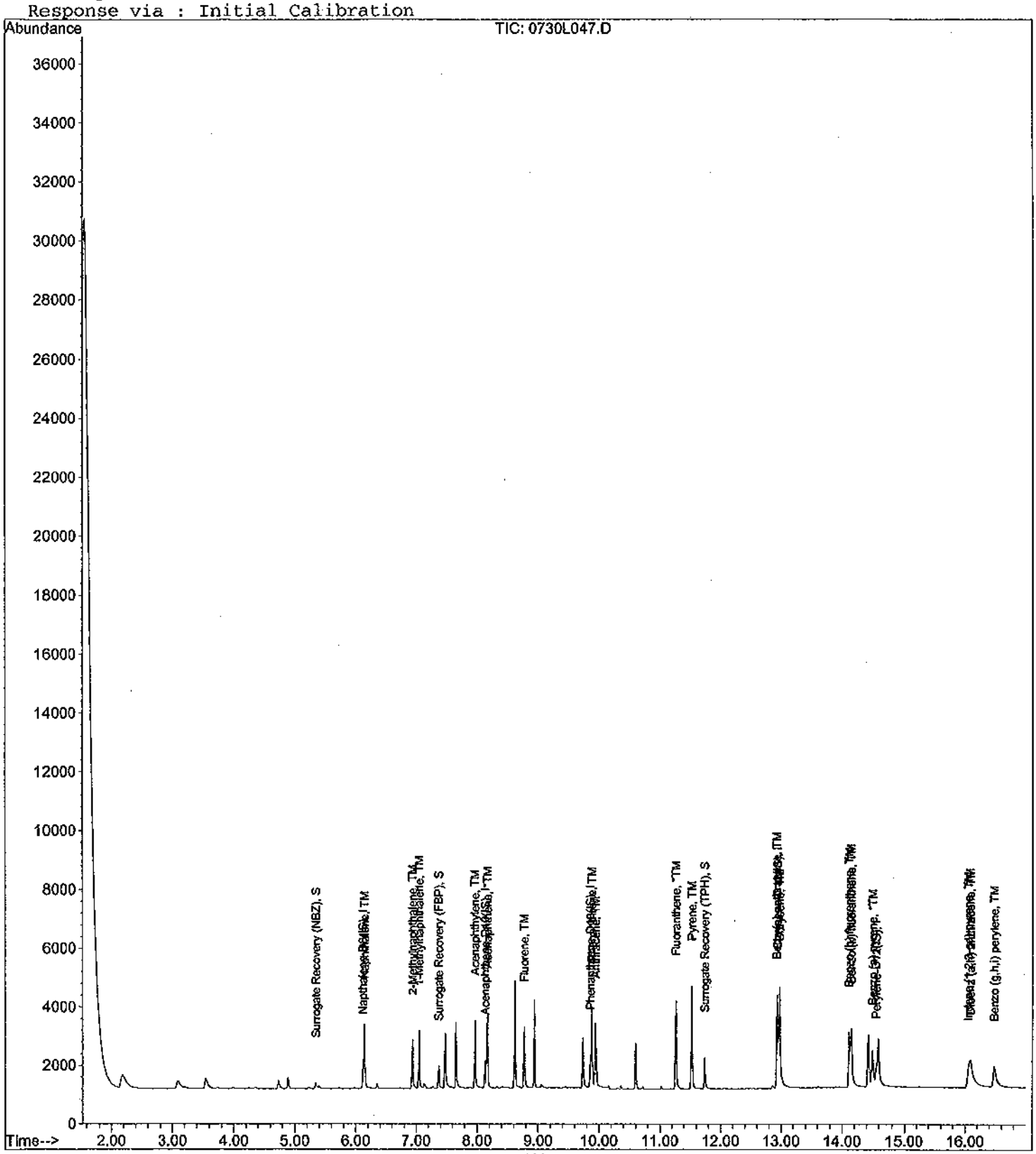
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L047.D Vial: 47
Acq On : 31 Jul 11 5:53 Operator: LF
Sample : AY42542W17 MS-1 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:43 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\0730L048.D Vial: 48
Acq On : 31 Jul 11 6:19 Operator: LF
Sample : AY42542W12 MSD-1 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:43 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	1320	2.50000 ppb		-0.01
6) Acenaphthene-D10(IS)	8.13	164	635	2.50000 ppb		0.00
11) Phenanthrene-D10(IS)	9.86	188	1107	2.50000 ppb		0.00
15) Chrysene-D12(IS)	12.94	240	1463	2.50000 ppb		0.00
21) Perylene-D12(IS)	14.56	264	1115	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.35	82	297	1.13210 ppb		0.01
Spiked Amount 1.942			Recovery = 58.298%			
7) Surrogate Recovery (FBP)	7.37	172	622	1.02380 ppb		0.00
Spiked Amount 1.942			Recovery = 52.736%			
17) Surrogate Recovery (TPH)	11.74	244	994	1.30095 ppb		0.00
Spiked Amount 1.942			Recovery = 67.001%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	2080	2.44293 ppb		99
4) 2-Methylnaphthalene	6.94	142	1225	2.29597 ppb		99
5) 1-Methylnaphthalene	7.05	142	1200	2.49239 ppb		95
8) Acenaphthylene	7.97	152	2171	2.71026 ppb		99
9) Acenaphthene	8.17	154	1203	2.54102 ppb		96
10) Fluorene	8.77	166	1480	2.79748 ppb		99
12) Phenanthrene	9.88	178	2223	2.73304 ppb		100
13) Anthracene	9.94	178	2411	3.19703 ppb		99
14) Fluoranthene	11.27	202	3731	3.12031 ppb	#	96
16) Pyrene	11.53	202	3842	2.77907 ppb		96
18) Benz (a) anthracene	12.93	228	2706	2.31936 ppb		98
19) Chrysene	12.97	228	3382	2.96509 ppb	#	92
20) Indeno (1,2,3-cd) pyrene	16.05	276	2435	2.15080 ppb	#	98
22) Benzo (b) fluoranthene	14.12	252	2205	2.15677 ppb		94
23) Benzo (k) fluoranthene	14.15	252	3266	3.67429 ppb		98
24) Benzo (a) pyrene	14.49	252	2444	2.47940 ppb		97
25) Dibenz (a,h) anthracene	16.09	278	1898	2.19918 ppb		97
26) Benzo (g,h,i) perylene	16.48	276	2118	2.31181 ppb		98

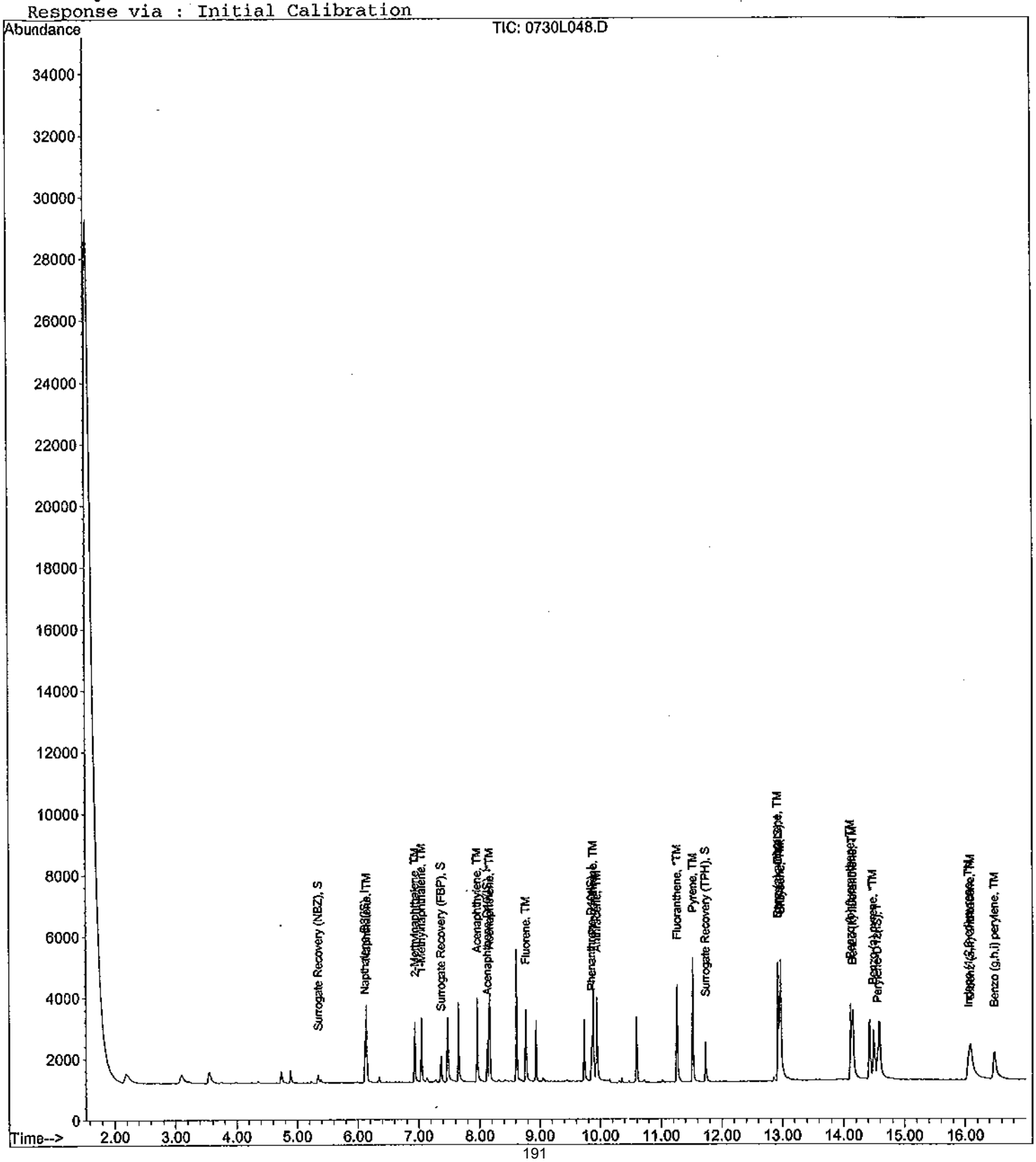
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L110621\0730L048.D Vial: 48
Acq On : 31 Jul 11 6:19 Operator: LF
Sample : AY42542W12 MSD-1 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Aug 2 11:43 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

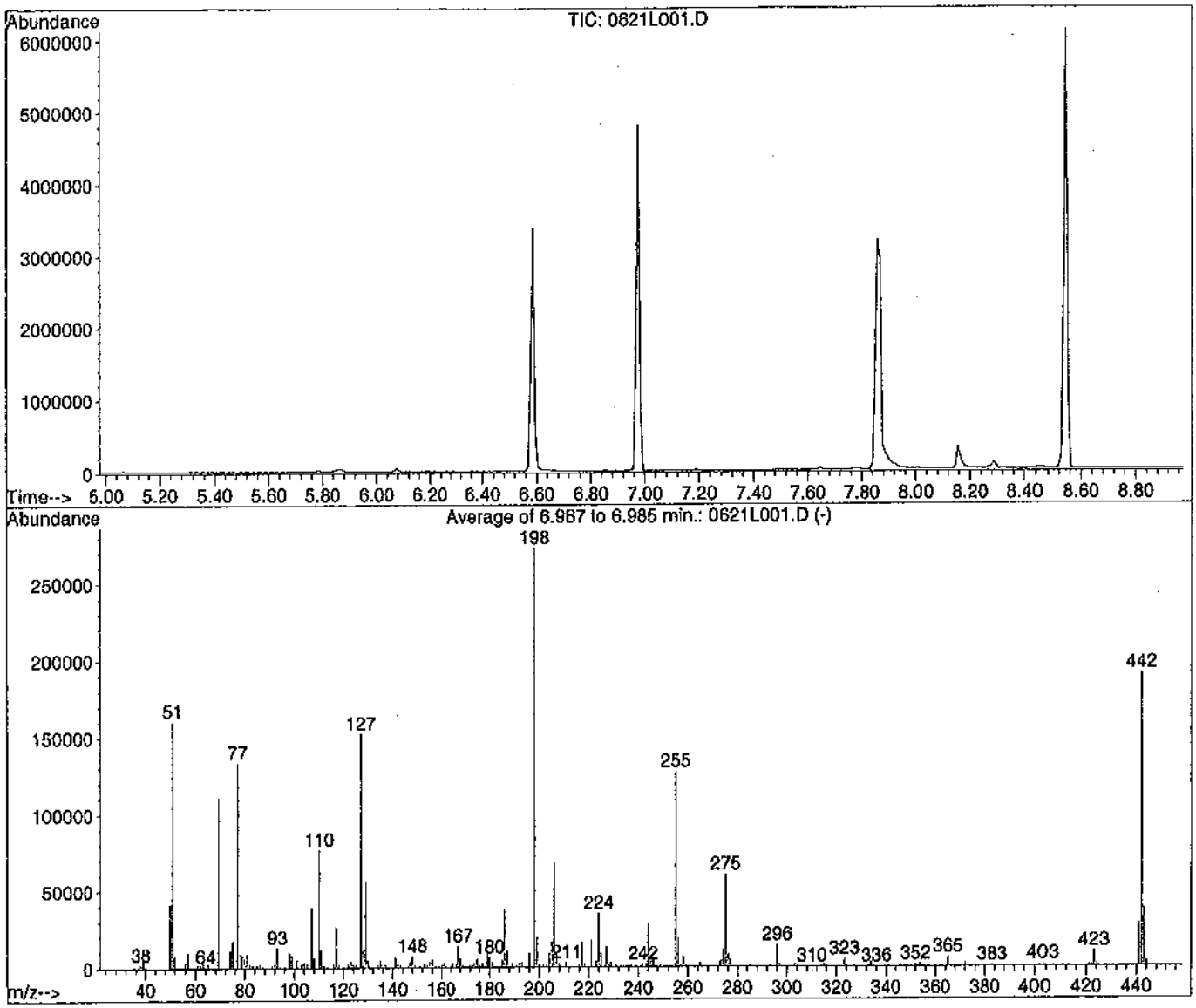


DFTPP

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



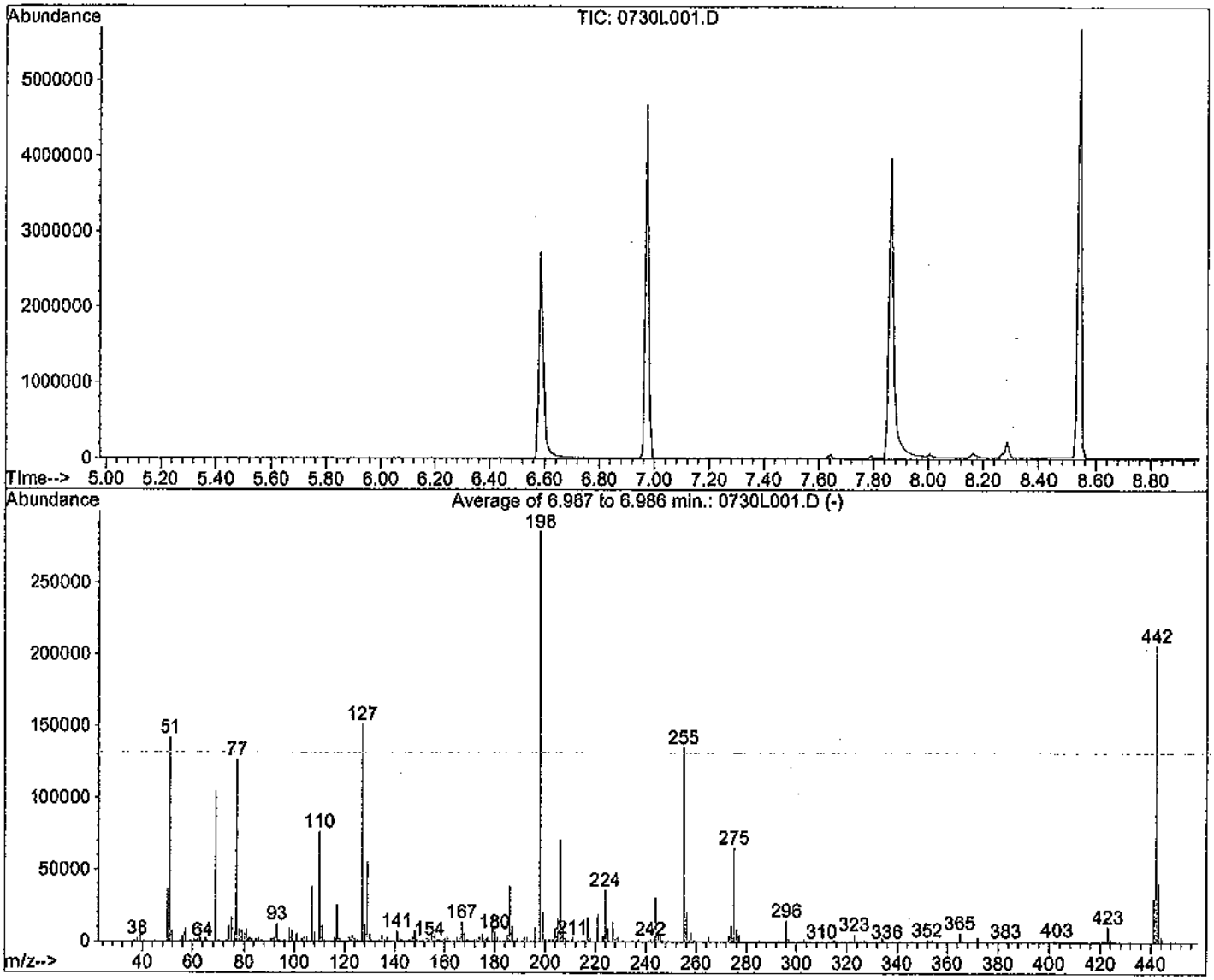
AutoFind: Scans 473, 474, 475; Background Corrected with Scan 470

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 Vial: 1
Acq On : 30 Jul 11 10:09 Operator: LF
Sample : SVTUNE 04-14-11 Inst : Linus
Misc : Multiplr: 1.00

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

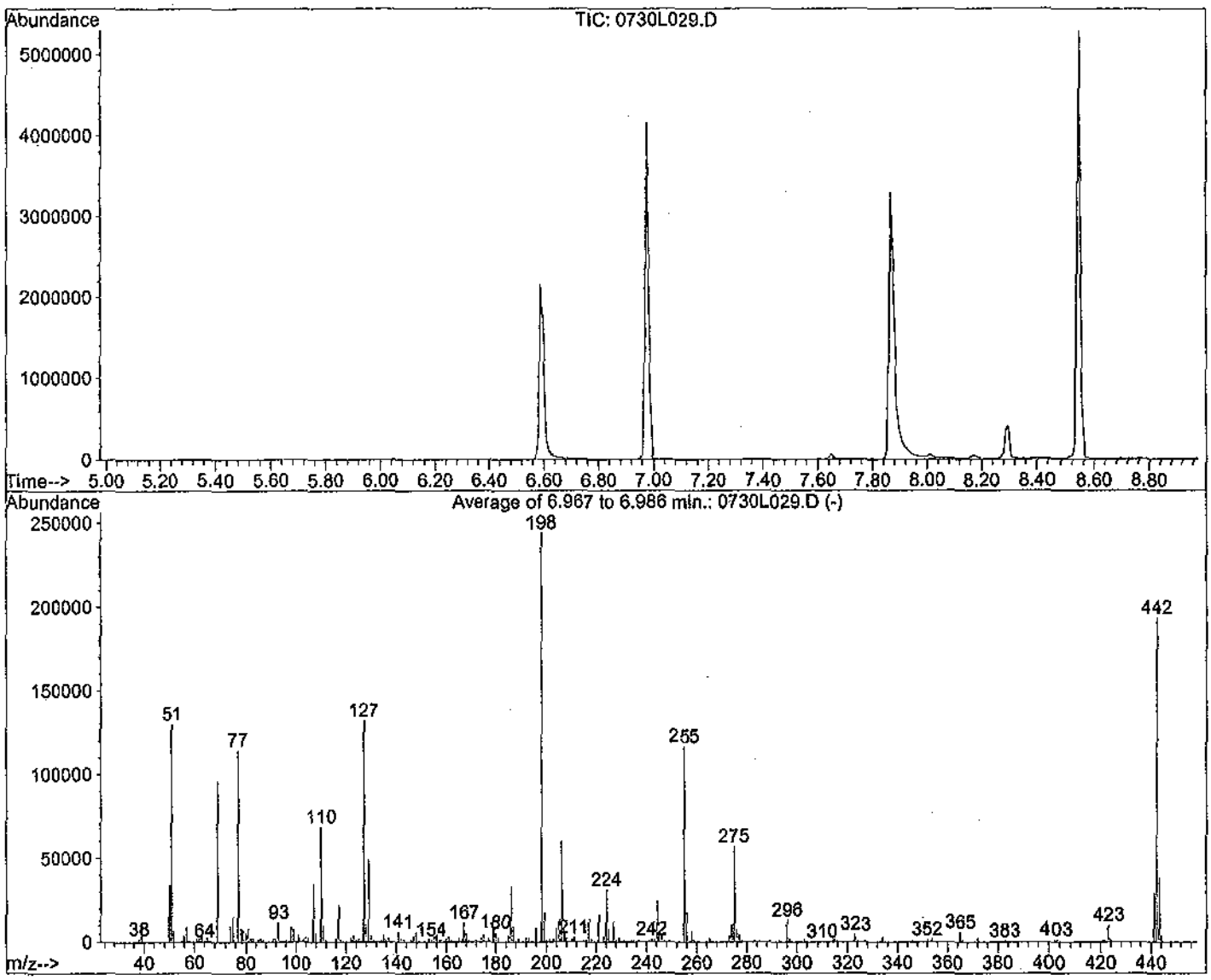


AutoFind: Scans 473, 474, 475; Background Corrected with Scan 470

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 Vial: 29
Acq On : 30 Jul 11 22:14 Operator: LF
Sample : SVTUNE 04-14-11 Inst : Linus
Misc : 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

VF 3/28/11

8270 BN:A (200:400) Surrogate Solution, 1 ml

110004-17

Storage: </=-10 Degrees C

Made in the U.S.A. Lot No 160538

Exp: 03/28/2012

Solvent: Methylene Chloride

VF exp 3/28/12

Date Opened

8270 BN:A (200:400) Surrogate Solution

Lot #: 160538 - 27574

Rec: 10/18/10 MFR exp. 06/10/12

VF 3/28/11

PREP DATE:	03-28-11																
8270T STANDARD CURVE																	
Exp:	04-27-11																
		Conc.		Date			0.1	0.2	1	5	10	20	40	50	60	80	100
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	

VF 3/28/11

PREP DATE:	03-28-11					
8270 Second Source (SS) 50ug/mL						50 VF
		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 4/18/11 exp

GCM-150-1

Lot CF-2995

Exp 08/31/2011

Semi-Volatiles GC/MS Tuning Standard

4 analyte(s) at 1000 µg/mL in dichloromethane

ULTRA 1 mL

250 Smith St, No Kingstown, RI 02852 USA

Semi-volatiles GC/MS Tuning Standard

Lot #: CF-2995 - 26131

Rec: 2/17/10 MFR exp. 08/31/11

VF exp 8/31/11

VF 4/13/11

PREP DATE:	04-13-11					
8V Tune Mix 50ug/ml						VF
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

VF 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

VF exp 4/20/12

8270D PAH SIM

Lot # 170253 - 28485

Rec 3/10/11 MFR exp 3/3/2013

VF 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

VF exp 4/20/12

8270D PAH SIM (SS)

Lot # 170256 - 28487

EA

PREP DATE:	05-31-11					
8270C Stock/Spike Standard						
Exp:	11/30/11					
		Conc.		Date	CODE:	F
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)		170256-28467	200	04/20/11	04-20-12	5
	MeCl2			Lot#47080			195
					Final Volume		200

VF 6/24/11

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 6/24/11

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 7/1/11

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 7/1/11

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 7/2/11

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 7/2/11

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 7/2/11

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 7/2/11

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	
Date	7/30/11
Time	900
Refrigerator	WDM

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

Modified	07/26/11 3:13:50 PM

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	47	0730L047.D	0.97087	AY42542W17 MS-1 1/1030		31 Jul 11 5:53
18	48	0730L048.D	0.97087	AY42542W12 MSD-1 1/1030		31 Jul 11 6:19
19	49	0730L049.D	1	AY42542W14 1/1000		31 Jul 11 6:45
20	50	0730L050.D	0.96154	AY42543W07 1/1040		31 Jul 11 7:10
21	51	0730L051.D	0.980392	AY42544W06 1/1020		31 Jul 11 7:36

EPA METHOD 8260B
Volatile Organic Compounds

APPL, INC.

EPA METHOD 8260B
Volatile Organic Compounds
QC Summary

APPL, INC.

Method Blank

EPA 8260B VOCs + Gas Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **110727W-42542 - 158166**
Batch ID: #86RHB-110727AT

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 6:32:55 PM

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110727W-42542 - 158166**
Batch ID: #86RHB-110727AT

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	106	70-120			%	07/28/11	07/28/11
BLANK	SURROGATE: 4-BROMOFLUOR	107	75-120			%	07/28/11	07/28/11
BLANK	SURROGATE: DIBROMOFLUOR	97.0	85-115			%	07/28/11	07/28/11
BLANK	SURROGATE: TOLUENE-D8 (S)	103	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 6:32:55 PM

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 Date Analyzed: 07/28/11

Matrix: WATER Instrument: THOR

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)	SURROGATE: 4-BROMOFLUOROBENZENE (S)
110727AT-LCS	Lab Control Spike	99.3	109
110727AT-BLK	Blank	106	107
AY42541	ES042	112	103
AY42542	ES043	108	97.8
AY42543	ES044	107	92.3
AY42544	ES045	106	107
AY42542-MS	Matrix Spike	99.3	116
AY42542-MSD	Matrix SpikeD	94.0	103

Comments: Batch: #86RHB-110727AT

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 Date Analyzed: 07/28/11

Matrix: WATER Instrument: THOR

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)	SURROGATE: TOLUENE-D8 (S)
110727AT-LCS	Lab Control Spike	102	103
110727AT-BLK	Blank	97.0	103
AY42541	ES042	111	104
AY42542	ES043	100	99.0
AY42543	ES044	98.0	96.9
AY42544	ES045	97.0	103
AY42542-MS	Matrix Spike	105	108
AY42542-MSD	Matrix SpikeD	98.6	102

Comments: Batch: #86RHB-110727AT

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 LCS - 158166**
Batch ID: #86RHB-110727AT

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
1,4-DICHLOROBENZENE	10.00	9.74	97.4	75-125
2-BUTANONE	10.00	9.16	91.6	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
CHLOROETHANE	10.00	9.26	92.6	60-135

Comments: _____

Primary	SPK
Quant Method :	T86DODW
Extraction Date :	07/28/11
Analysis Date :	07/28/11
Instrument :	THOR
Run :	0727T30
Initials :	DA

Printed: 08/13/11 10:26:25 AM

APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 LCS - 158166**
Batch ID: #86RHB-110727AT

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	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
Extraction Date :	07/28/11
Analysis Date :	07/28/11
Instrument :	THOR
Run :	0727T30
Initials :	DA

Printed: 08/13/11 10:26:25 AM

APPL Standard LCS

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 MS - 158166**
Batch ID: #86RHB-110727AT
Sample ID: AY42542
Client ID: ES043

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	10.2	102	102	80-130	0.0	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.41	10.0	94.1	100	65-130	6.1	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	8.16	9.14	81.6	91.4	65-130	11.3	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.95	9.71	99.5	97.1	75-125	2.4	30
1,1-DICHLOROETHANE	10.00	ND	6.83	6.62	68.3 #	66.2 #	70-135	3.1	30
1,1-DICHLOROETHENE	10.00	ND	7.40	7.74	74.0	77.4	70-130	4.5	30
1,2,3-TRICHLOROPROPANE	10.00	ND	9.07	9.47	90.7	94.7	75-125	4.3	30
1,2,4-TRICHLOROBENZENE	10.00	ND	8.52	9.74	85.2	97.4	65-135	13.4	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	8.61	8.16	86.1	81.6	50-130	5.4	30
1,2-DIBROMOETHANE	10.00	ND	10.3	9.49	103	94.9	70-130	8.2	30
1,2-DICHLOROBENZENE	10.00	ND	8.98	9.99	89.8	99.9	70-120	10.6	30
1,2-DICHLOROETHANE	10.00	ND	9.74	9.74	97.4	97.4	70-130	0.0	30
1,2-DICHLOROPROPANE	10.00	ND	10.0	10.0	100	100	75-125	0.0	30
1,3-DICHLOROBENZENE	10.00	ND	8.85	10.1	88.5	101	75-125	13.2	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	18.7	18.1	93.5	90.5	70-130	3.3	30
1,4-DICHLOROBENZENE	10.00	ND	8.99	9.95	89.9	99.5	75-125	10.1	30
2-BUTANONE	10.00	ND	7.58	8.33	75.8	83.3	30-150	9.4	30
4-METHYL-2-PENTANONE	10.00	ND	10.1	9.67	101	96.7	60-135	4.4	30
ACETONE	10.00	ND	3.31	4.81	33.1 #	48.1	40-140	36.9 #	30
BENZENE	10.00	ND	10.2	10.9	102	109	80-120	6.6	30
BROMODICHLOROMETHANE	10.00	ND	9.88	9.39	98.8	93.9	75-120	5.1	30
BROMOFORM	10.00	ND	10.5	9.86	105	98.6	70-130	6.3	30
BROMOMETHANE	10.00	ND	7.00	7.65	70.0	76.5	30-145	8.9	30
CARBON TETRACHLORIDE	10.00	ND	9.63	9.58	96.3	95.8	65-140	0.52	30
CHLOROBENZENE	10.00	ND	10.1	9.66	101	96.6	80-120	4.5	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 :	0727T55	0727T56
Initials :	DA	

Printed: 08/13/11 10:32:52 AM
APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 MS - 158166**
Batch ID: #86RHB-110727AT
Sample ID: AY42542
Client ID: ES043

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	9.59	9.68	95.9	96.8	60-135	0.93	30
CHLOROETHANE	10.00	ND	7.04	6.63	70.4	66.3	60-135	6.0	30
CHLOROFORM	10.00	ND	9.07	9.09	90.7	90.9	65-135	0.22	30
CHLOROMETHANE	10.00	ND	6.98	7.45	69.8	74.5	40-125	6.5	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.36	8.71	93.6	87.1	70-125	7.2	30
ETHYLBENZENE	10.00	ND	10.6	10.4	106	104	75-125	1.9	30
GASOLINE	300	ND	181	211	60.3 #	70.3 #	75-125	15.3	30
HEXACHLOROBUTADIENE	10.00	ND	8.90	9.63	89.0	96.3	50-140	7.9	30
METHYL TERT-BUTYL ETHER	10.00	ND	7.14	6.77	71.4	67.7	65-125	5.3	30
METHYLENE CHLORIDE	10.00	ND	8.14	7.99	81.4	79.9	55-140	1.9	30
STYRENE	10.00	ND	9.76	9.31	97.6	93.1	65-135	4.7	30
TETRACHLOROETHENE	10.00	ND	9.48	9.66	94.8	96.6	45-150	1.9	30
TOLUENE	10.00	ND	10.7	10.6	107	106	75-120	0.94	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	7.33	7.29	73.3	72.9	60-140	0.55	30
TRICHLOROETHENE	10.00	ND	10.0	9.79	100	97.9	70-125	2.1	30
VINYL CHLORIDE	10.00	ND	6.60	6.35	66.0	63.5	50-145	3.9	30
XYLENES (TOTAL)	30.0	ND	30.6	30.0	102	100	80-120	2.0	30
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	NA	27.9	26.4	99.3	94.0	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	28.2	NA	32.8	29.0	116	103	75-120		
SURROGATE: DIBROMOFLUOROMETH	30.4	NA	32.1	30.0	105	98.6	85-115		
SURROGATE: TOLUENE-D8 (S)	34.6	NA	37.4	35.2	108	102	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 :	0727T55	0727T56
Initials :	DA	

Printed: 08/13/11 10:32:52 AM
APPL MSD SCII

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 65208

Case No: 65208 Date Analyzed: 07/28/11

Matrix: WATER Instrument: THOR

Blank ID: 110727AT-BLK Time Analyzed: 0248

APPL ID.	Client Sample No.	File ID.	Date Analyzed
110727AT-LCS	Lab Control Spike	0727T30	07/28/11 2245
110727AT-BLK	Blank	0727T39	07/28/11 0248
AY42541	ES042	0727T41	07/28/11 0340
AY42542	ES043	0727T48	07/28/11 0642
AY42543	ES044	0727T49	07/28/11 0708
AY42544	ES045	0727T50	07/28/11 0734
110727AT-MS	Matrix Spike	0727T55	07/28/11 0944
110727AT-MSD	Matrix SpikeD	0727T56	07/28/11 1010

Comments: Batch: #86RHB-110727AT

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@0.5	0727T16W.D	07/27/11 16:51
9		Vol Std 07-27-11@1.0	0727T17W.D	07/27/11 17:17
10		Vol Std 07-27-11@2.0	0727T18W.D	07/27/11 17:43
11		Vol Std 07-27-11@5.0	0727T19W.D	07/27/11 18:09
12		Vol Std 07-27-11@10u	0727T20W.D	07/27/11 18:35
13		Vol Std 07-27-11@20u	0727T21W.D	07/27/11 19:01
14		Vol Std 07-27-11@40u	0727T22W.D	07/27/11 19:27
15		Vol Std 07-27-11@100	0727T23W.D	07/27/11 19:53
16				
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: 0727T29W.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11C

SDG No: 65208
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	ES042	AY42541W01	0727T41W.D	07/28/11 3:40
6	ES043	AY42542W01	0727T48W.D	07/28/11 6:42
7	ES044	AY42543W01	0727T49W.D	07/28/11 7:08
8	ES045	AY42544W01	0727T50W.D	07/28/11 7:34
9		AY42542W234 MS-1WT	0727T55W.D	07/28/11 9:44
10		AY42542W234 MSD-1WT	0727T56W.D	07/28/11 10:10
11				
12				
13				
14				
15				
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

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0811H00T.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11B

SDG No: Hewey
Date Analyzed: 08/11/11
Instrument: Hewey
Time Analyzed: 18:15

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		Vol Std 08-11-11@20u	0811H09W.D	08/11/11 23:47
2		Vol Std 08-11-11@50u	0811H10W.D	08/12/11 0:23
3		Vol Std 08-11-11@100	0811H11W.D	08/12/11 1:00
4		Vol Std 08-11-11@300	0811H12W.D	08/12/11 1:37
5		Vol Std 08-11-11@600	0811H13W.D	08/12/11 2:14
6		Vol Std 08-11-11@800	0811H14W.D	08/12/11 2:50
7		Vol Std 08-11-11@100	0811H15W.D	08/12/11 3:27
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	17.1
75	30 - 60% of mass 95	46.7
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	7.4
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	82.1
175	5 - 9% of mass 174	7.6
176	95 - 101% of mass 174	95.0
177	5 - 9% of mass 176	5.3

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0811H30W.D
Matrix: Water
ID: 20ug/ml BFB Std 07-21-11B

SDG No: 65208
Date Analyzed: 08/12/11
Instrument: Hewey
Time Analyzed: 12:40

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		Gas 300ug/L (SS)	0811H31W.D	08/12/11 13:17
2		AY42542W10 MS-1WH	0811H36W.D	08/12/11 16:24
3		AY42542W11 MSD-1WH	0811H37W.D	08/12/11 17:01
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	16.6
75	30 - 60% of mass 95	41.0
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	5.9
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	80.7
175	5 - 9% of mass 174	6.7
176	95 - 101% of mass 174	95.0
177	5 - 9% of mass 176	6.0

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 65208

Lab File ID (Standard): 0727T20W.D Date Analyzed: 07/27/11

Instrument ID: Thor Time Analyzed: 18:35

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	103280	6.73	87912	10.61	72768	12.43
	UPPER LIMIT	206560	7.23	175824	11.11	145536	12.93
	LOWER LIMIT	51640	6.23	43956	10.11	36384	11.93
	SAMPLE NO.						
01	Vol Std 07-27-11@1.0ug/L	96048	6.72	79976	10.61	54944	12.43
02	Vol Std 07-27-11@2.0ug/L	102328	6.73	73168	10.61	59144	12.43
03	Vol Std 07-27-11@5.0ug/L	104952	6.72	77296	10.61	67600	12.43
04	Vol Std 07-27-11@10ug/L	103280	6.73	87912	10.61	72768	12.43
05	Vol Std 07-27-11@20ug/L	112240	6.72	107600	10.61	73272	12.42
06	Vol Std 07-27-11@40ug/L	116736	6.73	85208	10.61	74232	12.43
07	Vol Std 07-27-11@100ug/L	113048	6.72	103800	10.61	76424	12.43
08	110727A LCS-1WT (SS)	112320	6.72	88552	10.60	65672	12.43
09	110727A BLK-1WT	106016	6.73	80304	10.61	53520	12.43
10	AY42541W01	94016	6.73	71504	10.61	51736	12.43
11	AY42542W01	98504	6.73	75824	10.61	56976	12.43
12	AY42543W01	94128	6.72	77208	10.61	56088	12.43
13	AY42544W01	95264	6.73	71184	10.61	50152	12.43
14	AY42542W234 MS-1WT	98776	6.73	75832	10.60	63312	12.43
15	AY42542W234 MSD-1WT	102944	6.73	80136	10.61	59728	12.43
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.: 65208

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	Vol Std 07-27-11@20ug/L	257027	6.72	385692	10.61	474023	12.43
02	Vol Std 07-27-11@50ug/L	268474	6.73	393382	10.61	493039	12.43
03	Vol Std 07-27-11@100ug/L	252099	6.73	309351	10.61	539608	12.43
04	Vol Std 07-27-11@300ug/L	258612	6.73	374760	10.61	525627	12.43
05	Vol Std 07-27-11@600ug/L	271179	6.73	331314	10.61	466351	12.43
06	Vol Std 07-27-11@800ug/L	265265	6.73	337159	10.61	473607	12.43
07	Vol Std 07-27-11@1000ug/L	289990	6.73	410971	10.61	573669	12.43
08	Gas 300ug/L (SS)	257896	6.73	328931	10.61	420592	12.42
09	Gas 300ug/L LCS-1WT	263950	6.73	321714	10.61	429942	12.43
10	110727A BLK-1WT	259114	6.73	303929	10.61	398312	12.43
11	AY42541W01	235639	6.73	284521	10.61	371546	12.43
12	AY42542W01	236651	6.73	292631	10.61	389475	12.43
13	AY42543W01	229615	6.73	290057	10.61	386164	12.43
14	AY42544W01	230964	6.73	275753	10.61	378142	12.43
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.: 65208

Lab File ID (Standard): 0811H12W.D Date Analyzed: 08/12/11

Instrument ID: Hewey Time Analyzed: 1:37

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	988023	11.57	1042620	16.69	1084560	20.96
	UPPER LIMIT	1976046	12.07	2085240	17.19	2169120	21.46
	LOWER LIMIT	494012	11.07	521310	16.19	542280	20.46
	SAMPLE NO.						
01	Vol Std 08-11-11@20ug/L	954874	11.57	990687	16.69	997124	20.95
02	Vol Std 08-11-11@50ug/L	961452	11.57	1040460	16.69	1056870	20.95
03	Vol Std 08-11-11@100ug/L	965043	11.57	1041170	16.69	1060680	20.95
04	Vol Std 08-11-11@300ug/L	988023	11.57	1042620	16.69	1084560	20.96
05	Vol Std 08-11-11@600ug/L	961693	11.58	1039930	16.70	1179880	20.95
06	Vol Std 08-11-11@800ug/L	1100180	11.57	1177080	16.69	1282240	20.96
07	Vol Std 08-11-11@1000ug/L	1075170	11.57	1174900	16.69	1320550	20.96
08	Gas 300ug/L (SS)	1107760	11.57	1190230	16.69	1235740	20.95
09	AY42542W10 MS-1WH	1057010	11.57	1114320	16.69	1195020	20.96
10	AY42542W11 MSD-1WH	1046430	11.58	1124770	16.70	1133110	20.95
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 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

ARF: 65208

Sample ID: ES042

APPL ID: AY42541

Sample Collection Date: 07/21/11

QCG: #86RHB-110727AT-158166

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 #: 0727T41
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:50 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: 65208

Sample ID: ES042

APPL ID: AY42541

Sample Collection Date: 07/21/11

QCG: #86RHB-110727AT-158166

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	112	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	111	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	104	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T41
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:50 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T41W.D Vial: 41
Acq On : 28 Jul 11 3:40 Operator: RP
Sample : AY42541W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:56 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	94016	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	71504	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	51736	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	44665	33.92346 ppb	0.00
Spiked Amount 30.441			Recovery	= 111.437%	
24) 1,2-DCA-D4(S)	6.34	65	80909	31.39266 ppb	0.00
Spiked Amount 28.084			Recovery	= 111.782%	
39) Toluene-D8(S)	8.79	98	143027	36.15921 ppb	0.00
Spiked Amount 34.610			Recovery	= 104.475%	
46) 4-Bromofluorobenzene(S)	11.61	95	66447	29.16093 ppb	0.00
Spiked Amount 28.184			Recovery	= 103.465%	

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T41W.D Vial: 41
Acq On : 28 Jul 11 3:40 Operator: RP
Sample : AY42541W01 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	235639	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	284521	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	371546	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

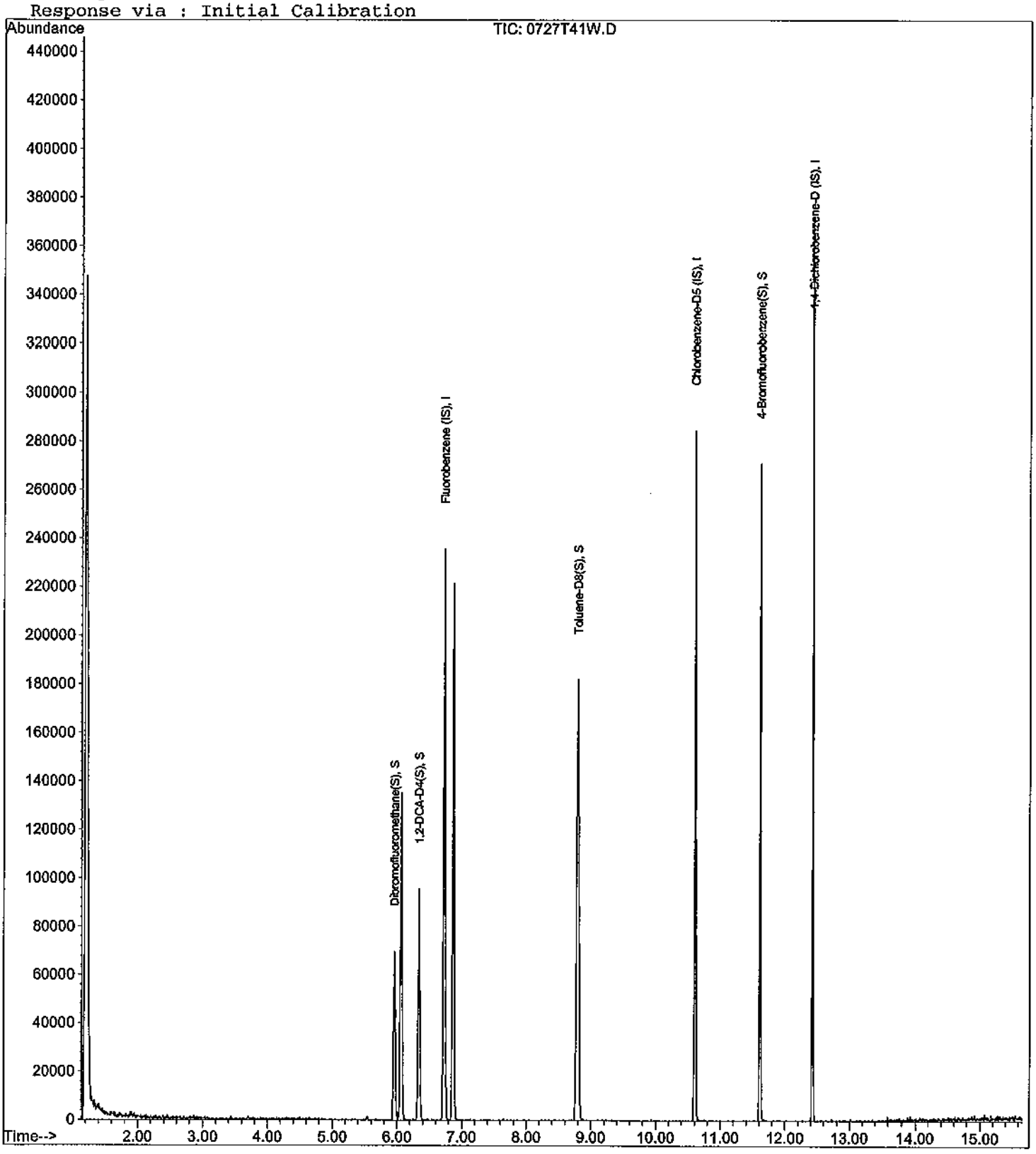
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T41W.D Vial: 41
Acq On : 28 Jul 11 3:40 Operator: RP
Sample : AY42541W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:56 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: ES043
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42542
QCG: #86RHB-110727AT-158166

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 #: 0727T48
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: 65208

Sample ID: ES043

APPL ID: AY42542

Sample Collection Date: 07/21/11

QCG: #86RHB-110727AT-158166

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	108	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	97.8	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	100	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 #: 0727T48
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:50 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T48W.D Vial: 48
Acq On : 28 Jul 11 6:42 Operator: RP
Sample : AY42542W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:02 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	98504	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	75824	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	56976	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	42009	30.45251 ppb	0.00
Spiked Amount 30.441			Recovery	= 100.038%	
24) 1,2-DCA-D4(S)	6.34	65	81676	30.24640 ppb	0.00
Spiked Amount 28.084			Recovery	= 107.698%	
39) Toluene-D8(S)	8.79	98	143757	34.27311 ppb	0.00
Spiked Amount 34.610			Recovery	= 99.026%	
46) 4-Bromofluorobenzene(S)	11.61	95	66588	27.55787 ppb	0.00
Spiked Amount 28.184			Recovery	= 97.777%	

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T48W.D Vial: 48
Acq On : 28 Jul 11 6:42 Operator: RP
Sample : AY42542W01 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	236651	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	292631	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	389475	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

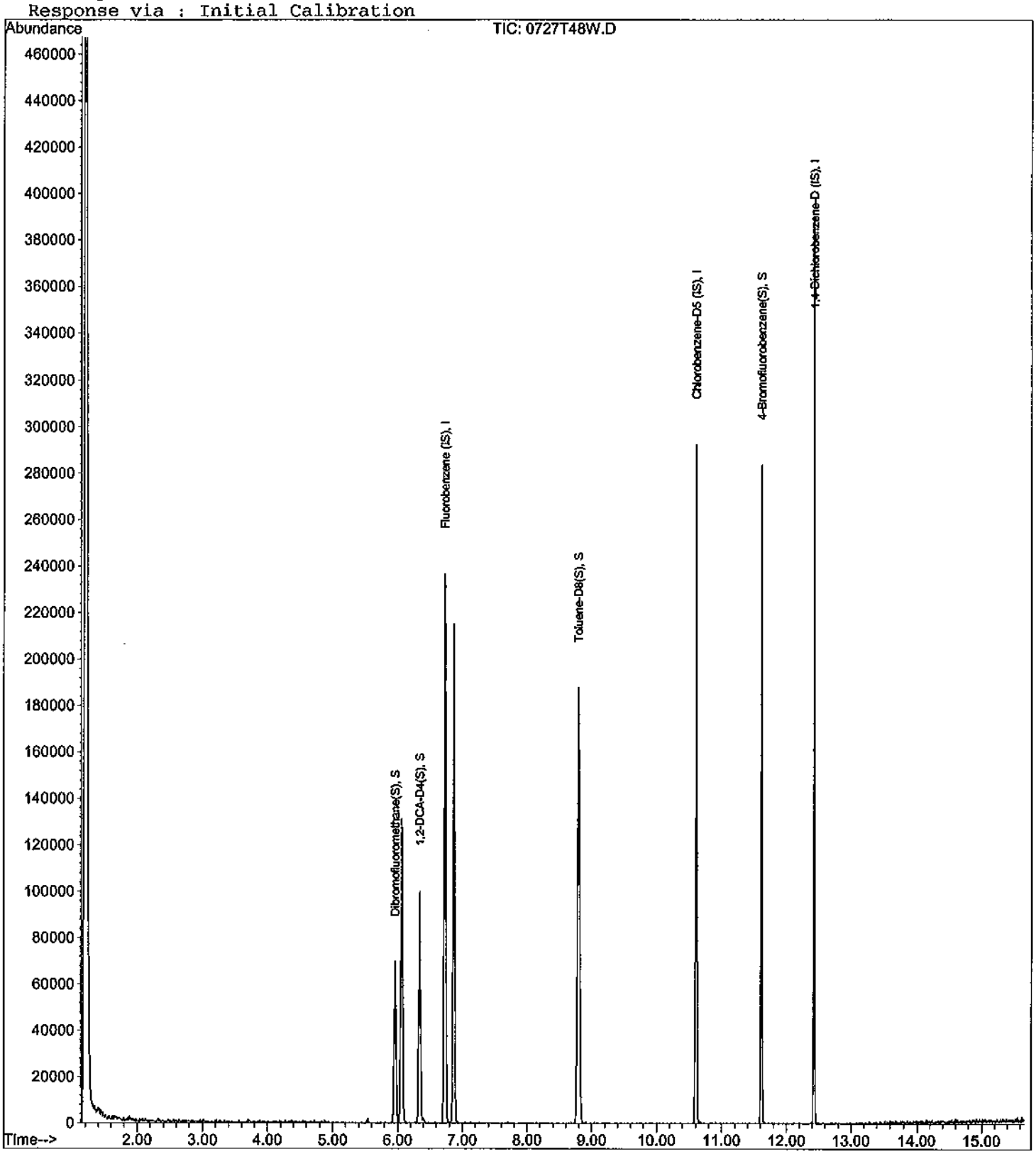
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T48W.D Vial: 48
Acq On : 28 Jul 11 6:42 Operator: RP
Sample : AY42542W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:02 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: ES044
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42543
QCG: #86RHB-110727AT-158166

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 #: 0727T49
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:50 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: 65208

Sample ID: ES044

APPL ID: AY42543

Sample Collection Date: 07/21/11

QCG: #86RHB-110727AT-158166

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	107	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	92.3	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	98.0	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	96.9	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T49
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:50 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T49W.D Vial: 49
Acq On : 28 Jul 11 7:08 Operator: RP
Sample : AY42543W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:59 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	94128	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	77208	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	56088	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	39316	29.82532 ppb	0.00
Spiked Amount 30.441			Recovery =	97.975%	
24) 1,2-DCA-D4(S)	6.34	65	77219	29.92530 ppb	0.00
Spiked Amount 28.084			Recovery =	106.555%	
39) Toluene-D8(S)	8.79	98	143236	33.53676 ppb	0.00
Spiked Amount 34.610			Recovery =	96.899%	
46) 4-Bromofluorobenzene(S)	11.61	95	64022	26.02096 ppb	0.00
Spiked Amount 28.184			Recovery =	92.324%	

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T49W.D Vial: 49
Acq On : 28 Jul 11 7:08 Operator: RP
Sample : AY42543W01 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	229615	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	290057	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	386164	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

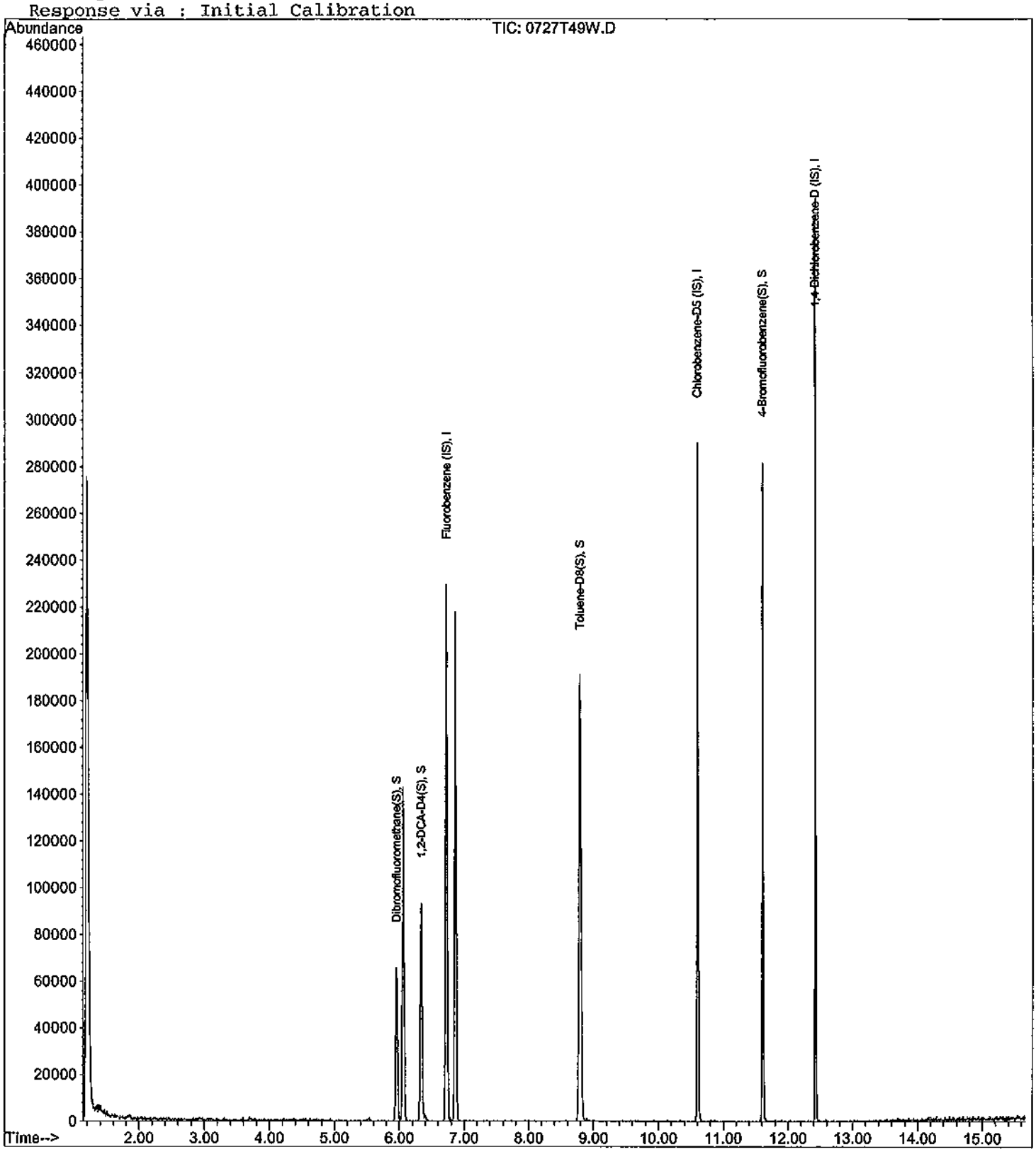
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T49W.D Vial: 49
Acq On : 28 Jul 11 7:08 Operator: RP
Sample : AY42543W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:59 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: ES045
Sample Collection Date: 07/21/11

ARF: 65208
APPL ID: AY42544
QCG: #86RHB-110727AT-158166

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 #: 0727T50
Instrument: Thor
Sequence: T110727
Dilution Factor: 1
Initials: DA

Printed: 08/12/11 6:32:51 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: 65208

Sample ID: ES045

APPL ID: AY42544

Sample Collection Date: 07/21/11

QCG: #86RHB-110727AT-158166

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	106	70-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	107	75-120			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	97.0	85-115			%	07/28/11	07/28/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	103	85-120			%	07/28/11	07/28/11

Quant Method: T86DODW.M
Run #: 0727T50
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\0727T50W.D Vial: 50
Acq On : 28 Jul 11 7:34 Operator: RP
Sample : AY42544W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 17:07 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	95264	25.00000 ppb	0.00
38) Chlorobenzene-D5 (IS)	10.61	117	71184	25.00000 ppb	0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	50152	25.00000 ppb	0.00
System Monitoring Compounds					
21) Dibromofluoromethane(S)	5.96	111	39394	29.52812 ppb	0.00
Spiked Amount 30.441			Recovery = 97.000%		
24) 1,2-DCA-D4(S)	6.34	65	77862	29.81466 ppb	0.00
Spiked Amount 28.084			Recovery = 106.163%		
39) Toluene-D8(S)	8.80	98	140146	35.59013 ppb	0.00
Spiked Amount 34.610			Recovery = 102.831%		
46) 4-Bromofluorobenzene(S)	11.61	95	68158	30.04629 ppb	0.00
Spiked Amount 28.184			Recovery = 106.605%		

Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T50W.D Vial: 50
Acq On : 28 Jul 11 7:34 Operator: RP
Sample : AY42544W01 Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:13 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	230964	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	275753	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	378142	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

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

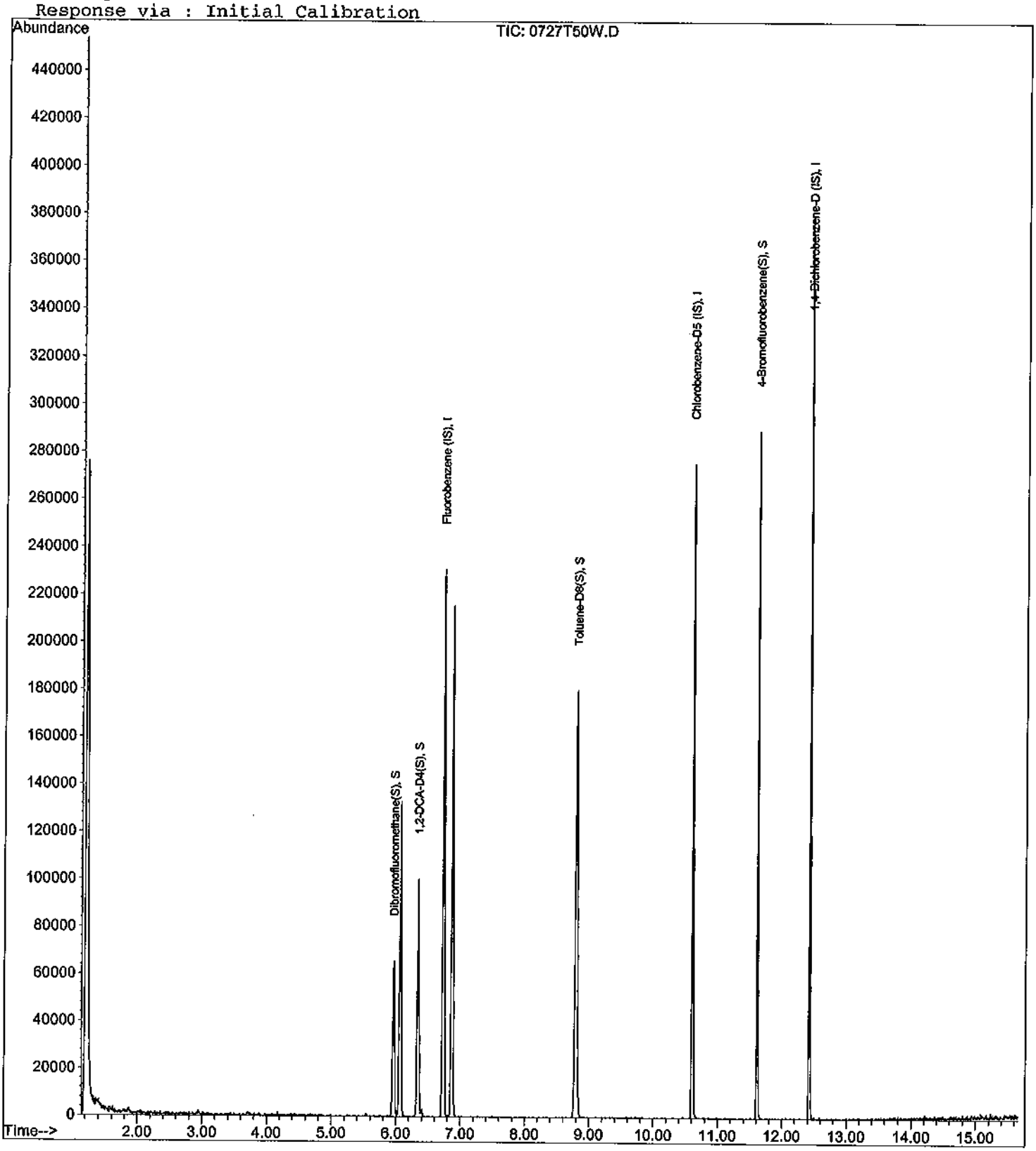
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T50W.D
Acq On : 28 Jul 11 7:34
Sample : AY42544W01
Misc : 10ml w/5ul of IS&S: 07-26-11

Vial: 50
Operator: RP
Inst : Thor
Multiplr: 1.00

Quant Time: Jul 28 17:07 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

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 65208
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	MtBK (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: 65208
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: 65208
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	
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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

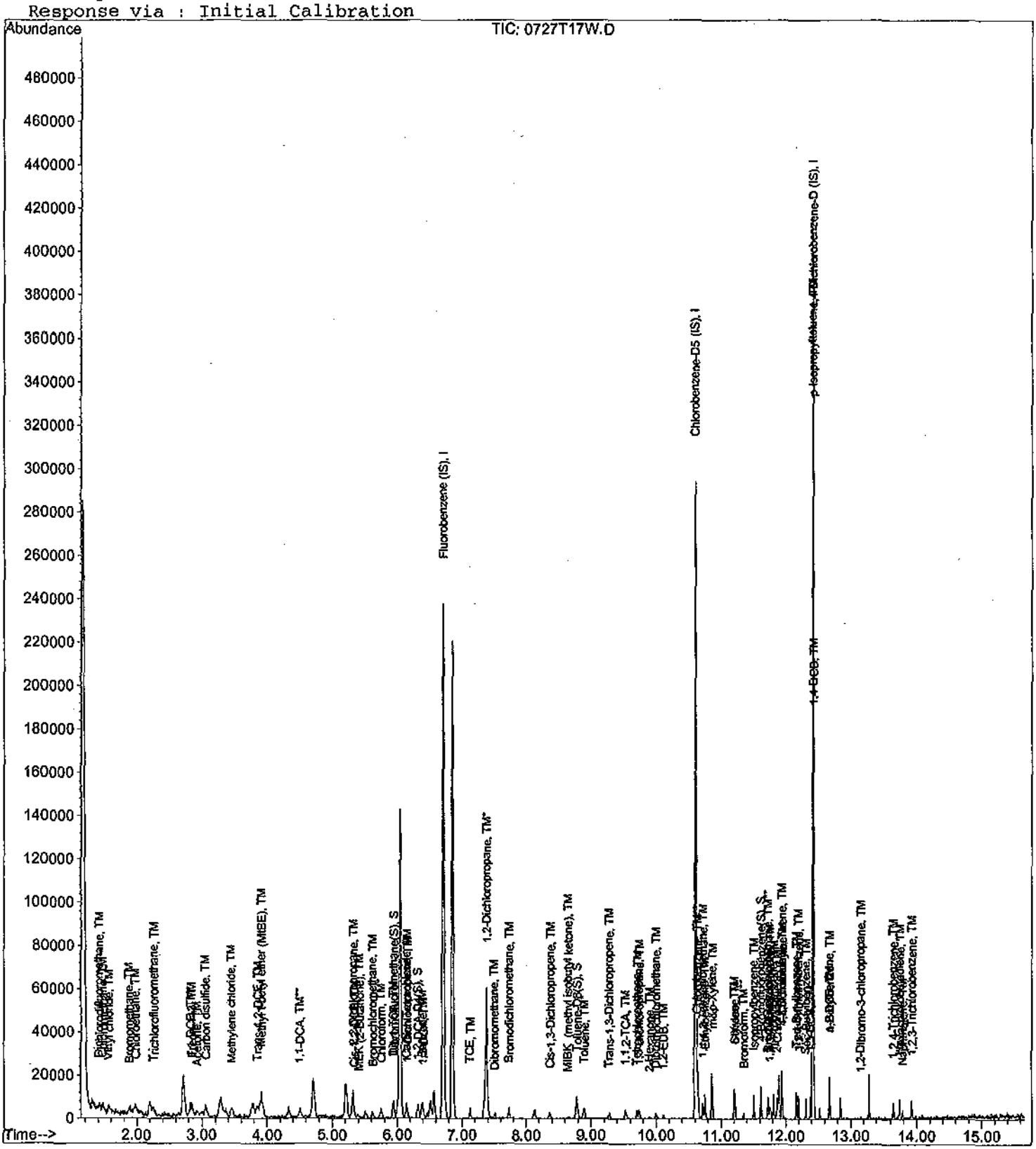
(#) = qualifier out of range (m) = manual integration

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

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

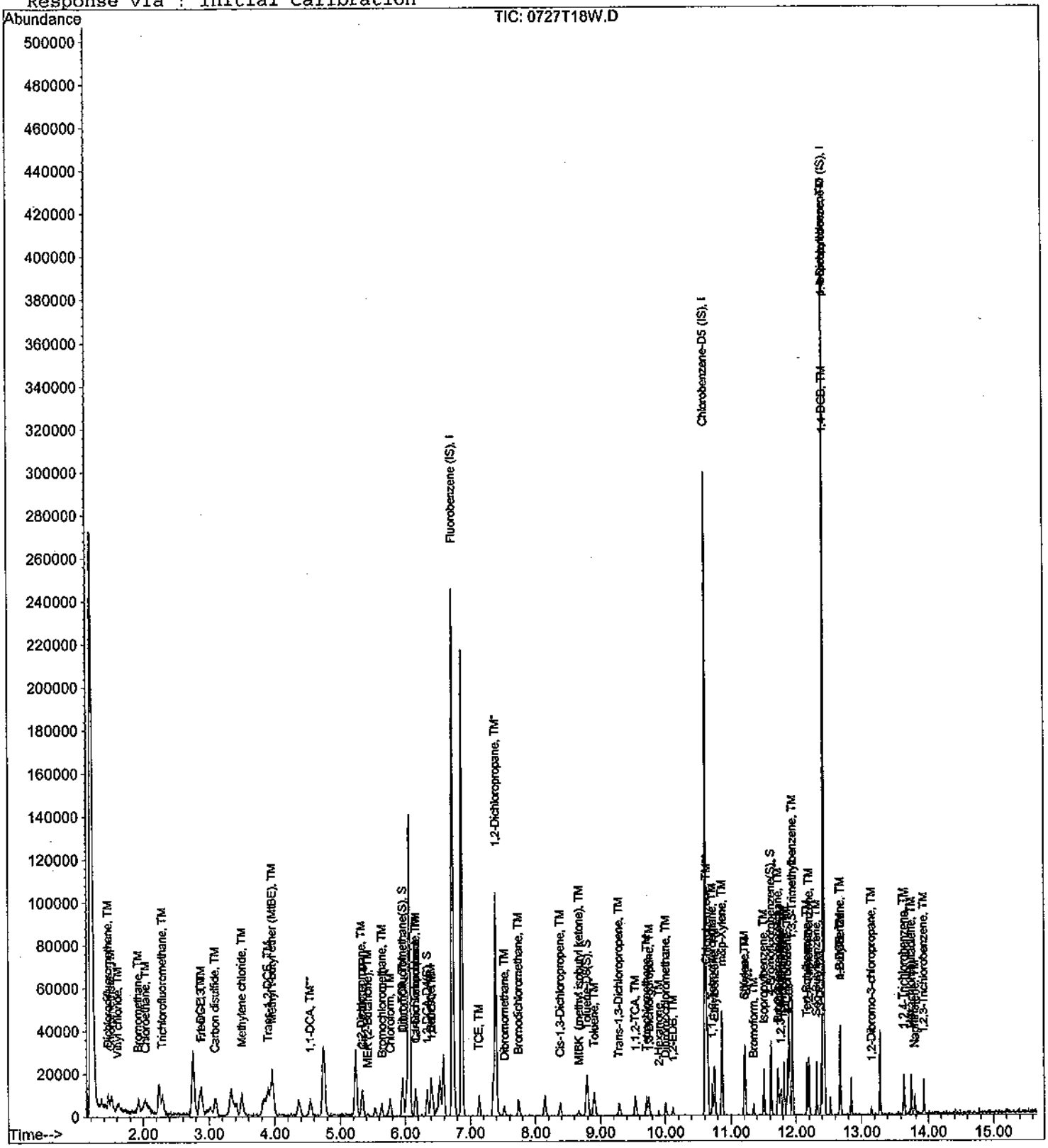
(#) = qualifier out of range (m) = manual integration

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

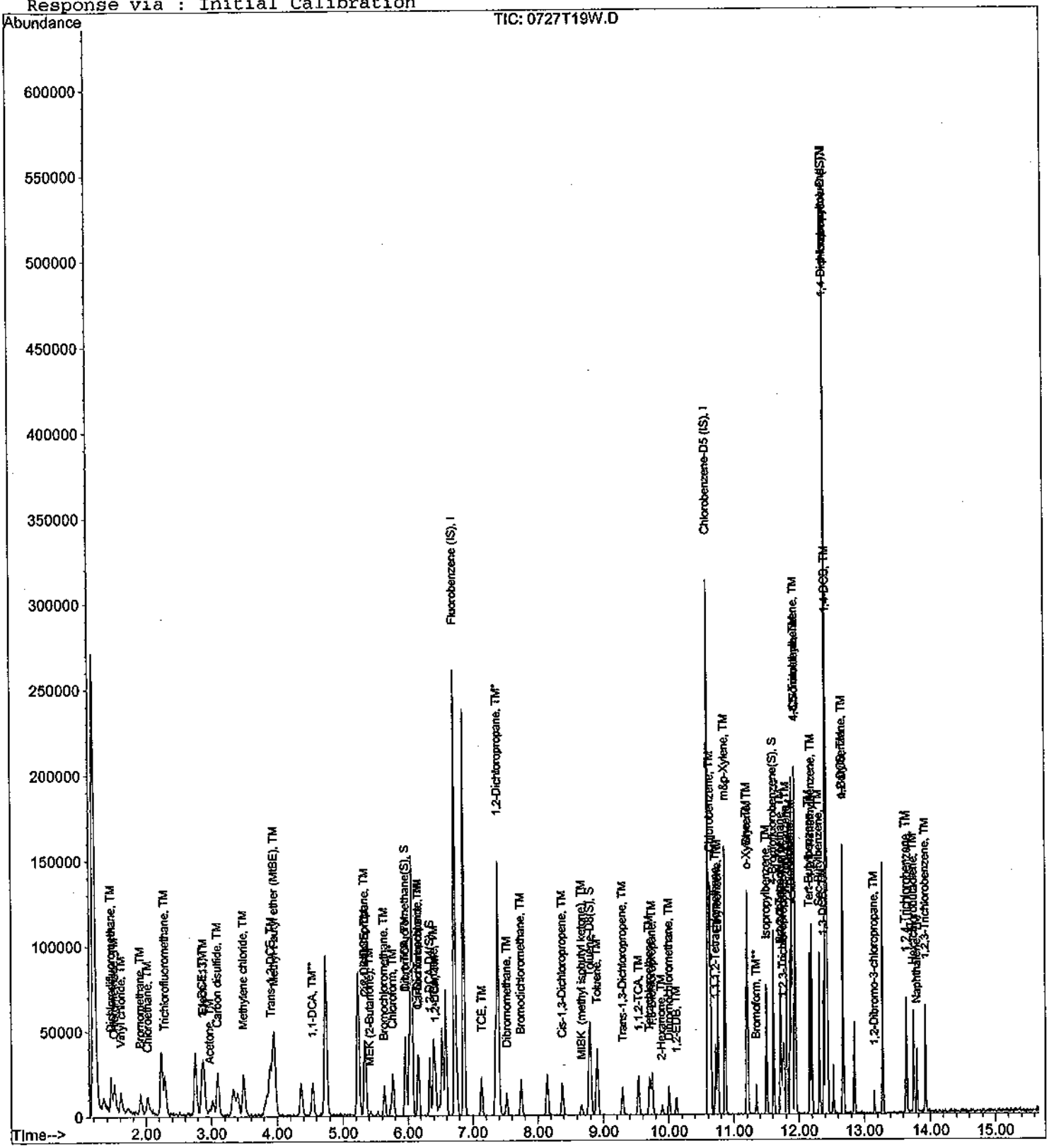
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T19W.D
Acq On : 27 Jul 11 18:09
Sample : Vol Std 07-27-11@5.0ug/L
Misc : 10ml w/5ul of IS: 07-26-11

Vial: 19
Operator: RP
Inst : Thor
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

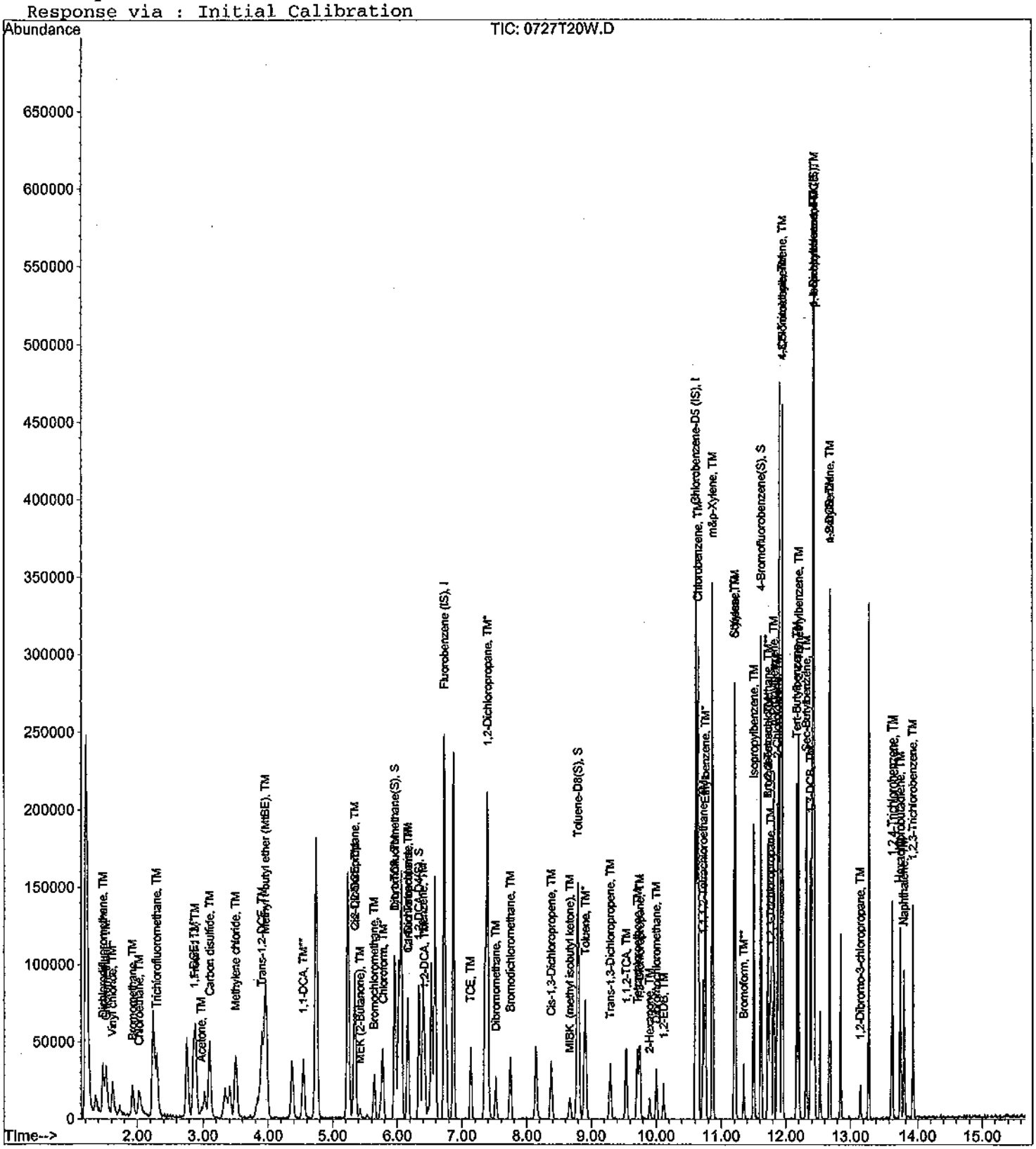
(#) = qualifier out of range (m) = manual integration

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 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

	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

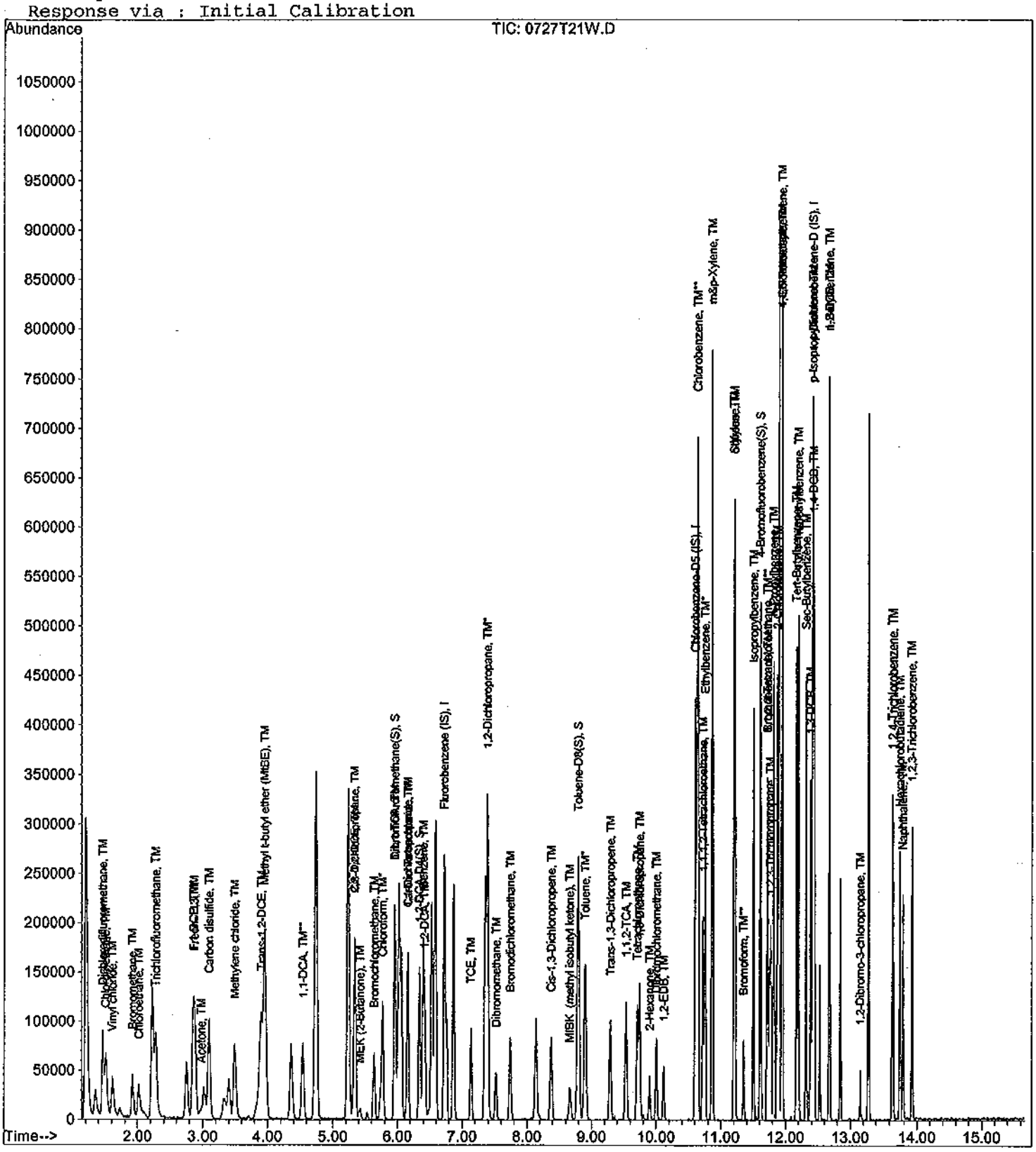
(#) = qualifier out of range (m) = manual integration

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

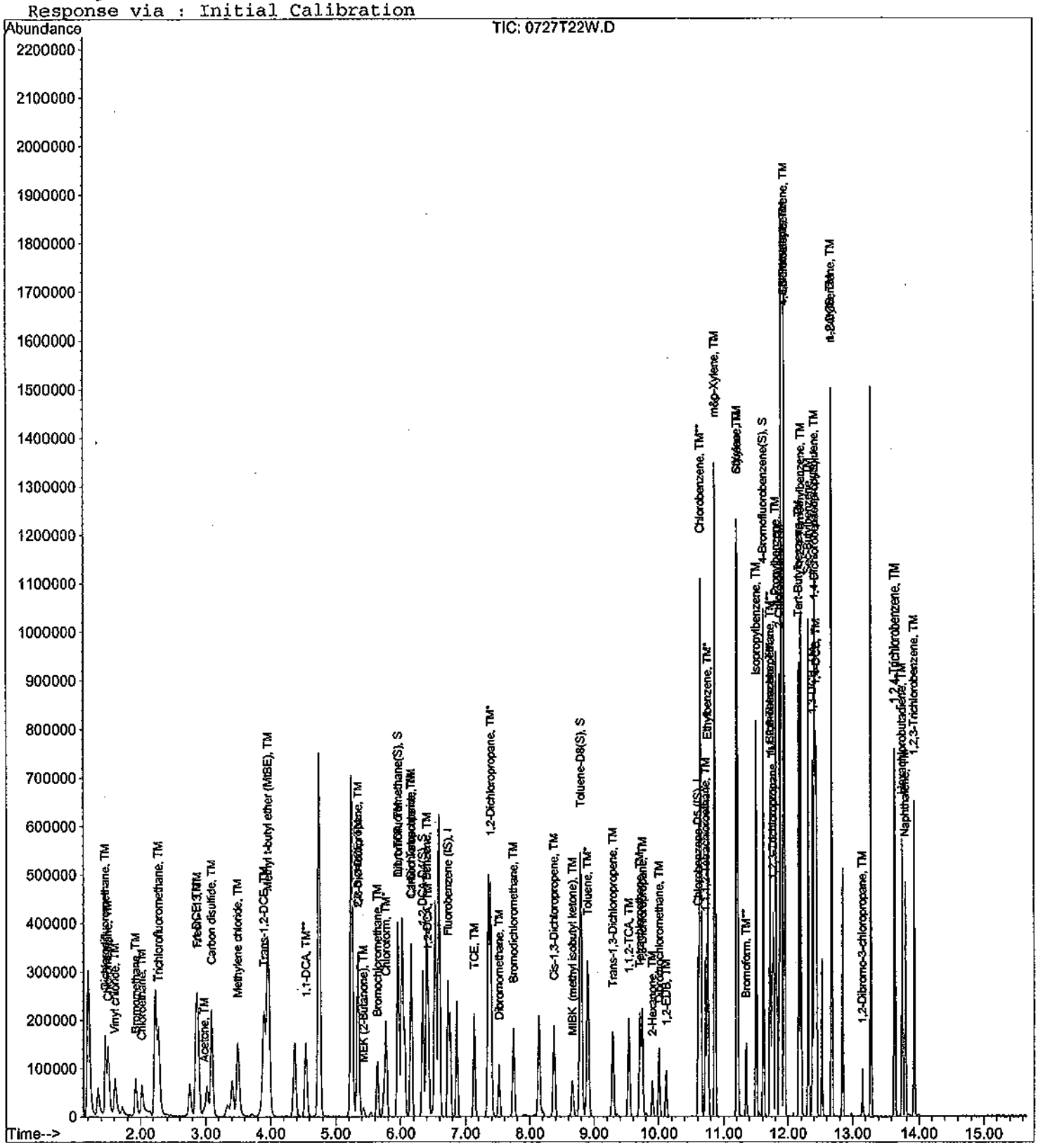
(#) = qualifier out of range (m) = manual integration

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

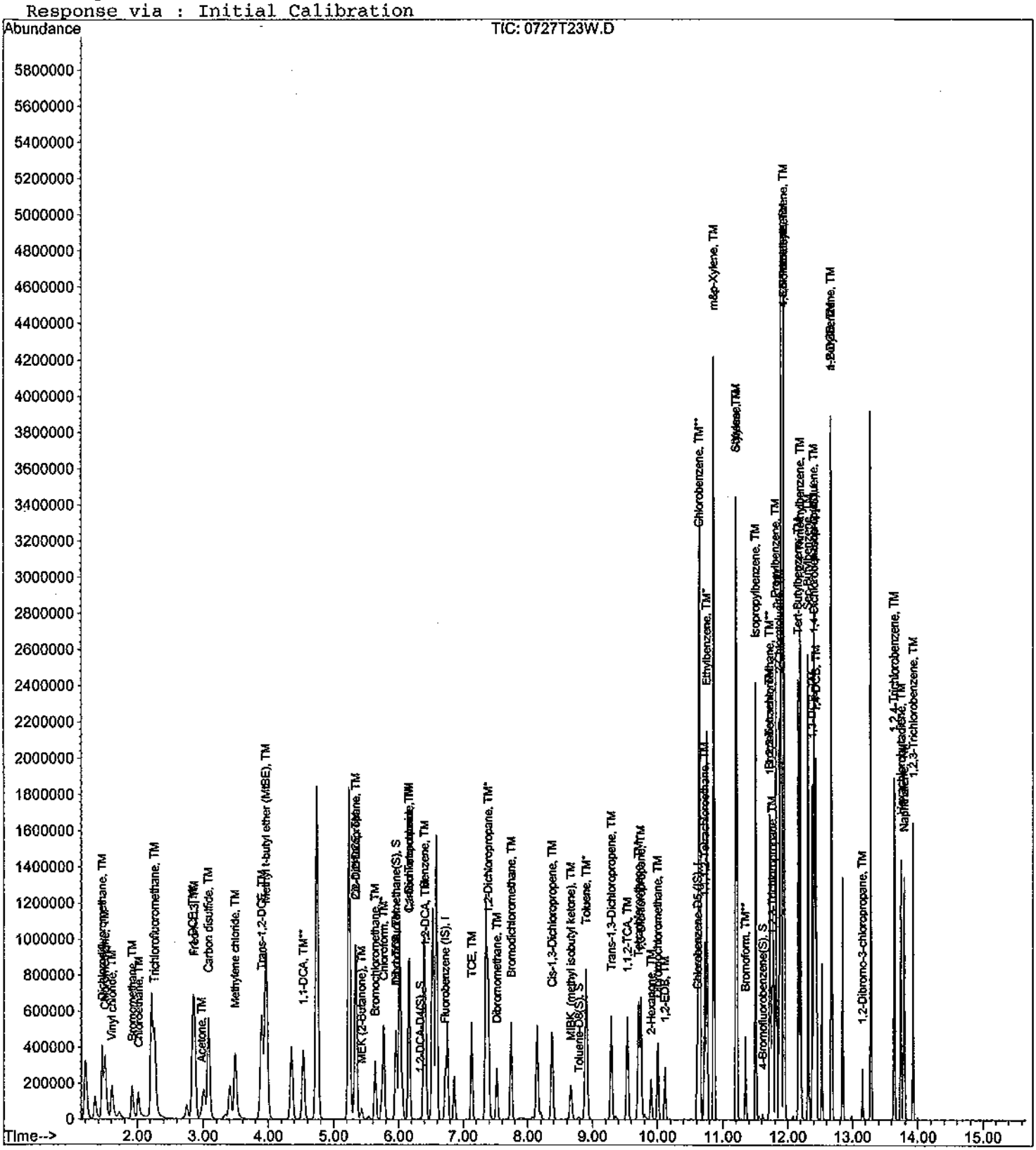
(#) = qualifier out of range (m) = manual integration

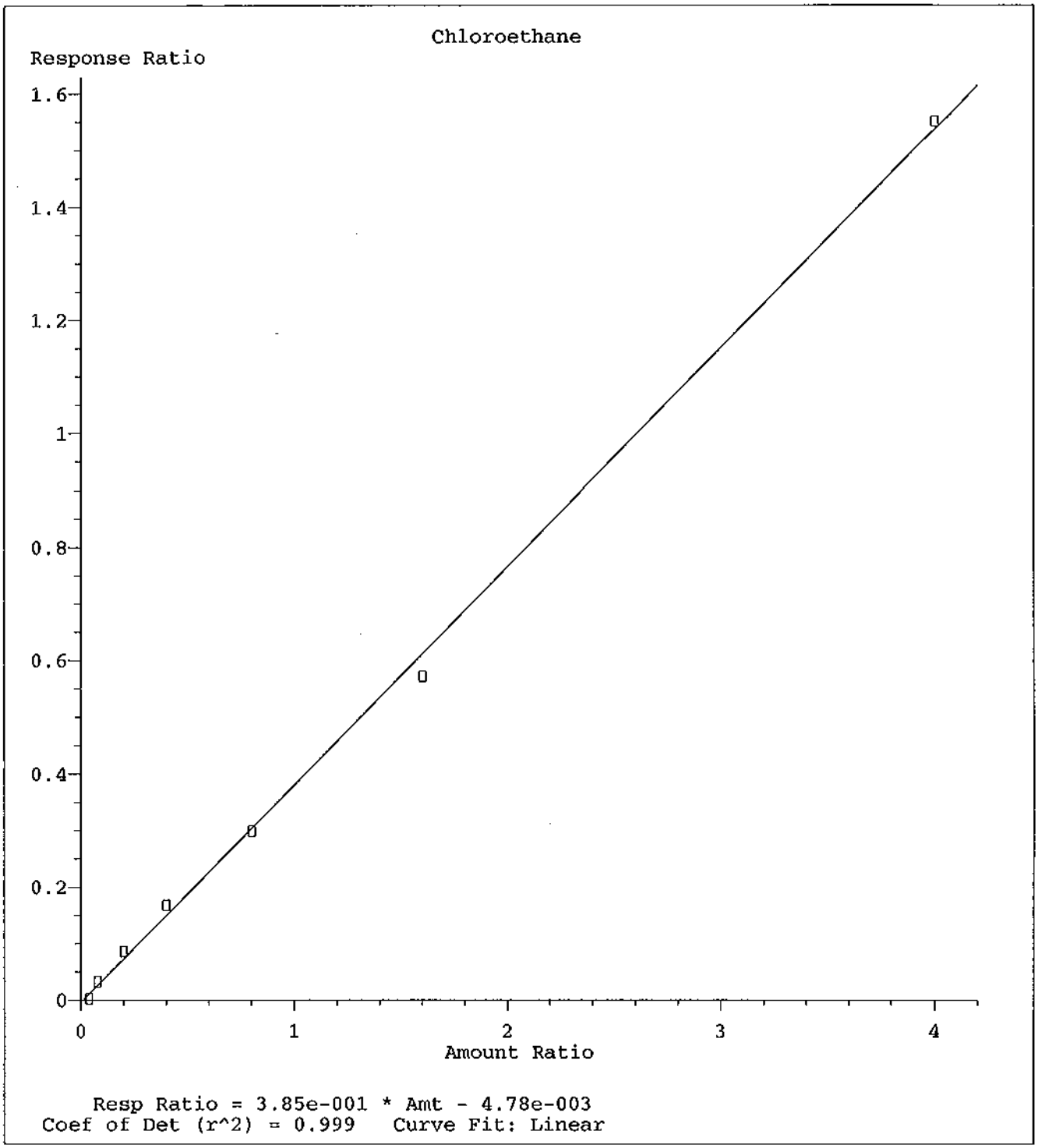
Quantitation Report

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

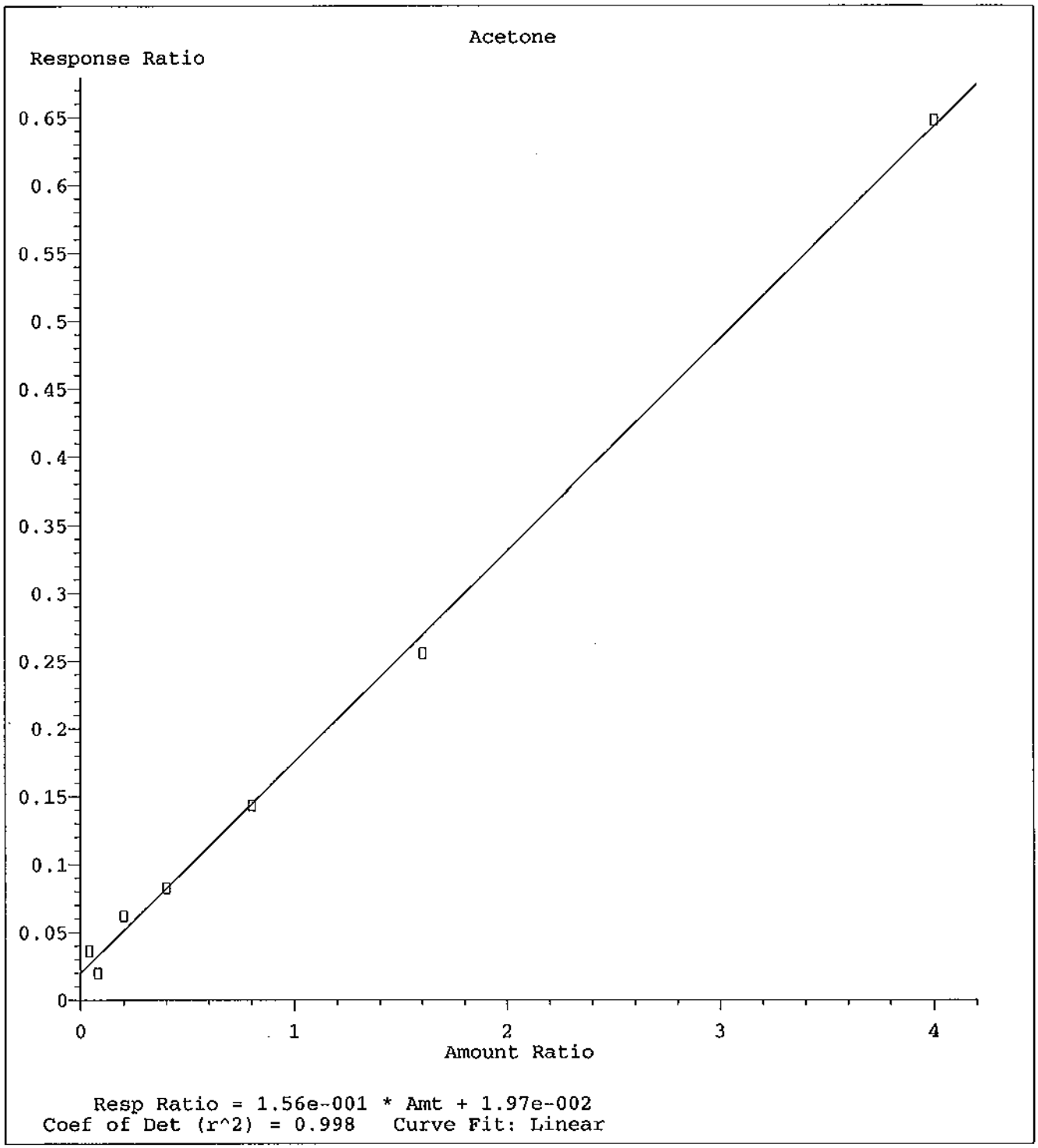
Quant Time: Jul 28 16:33 2011 Quant Results File: T86DODW.RES

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

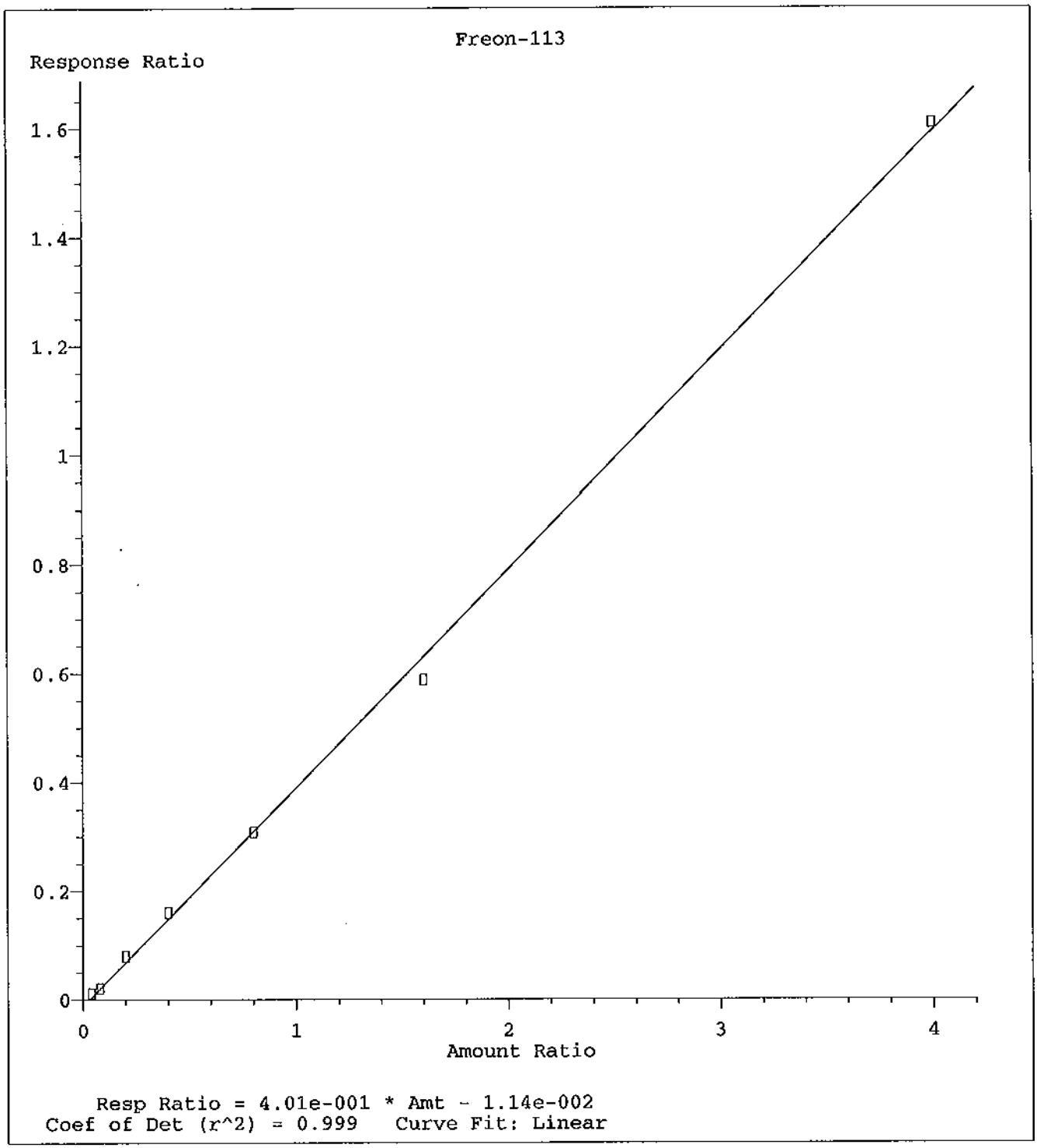




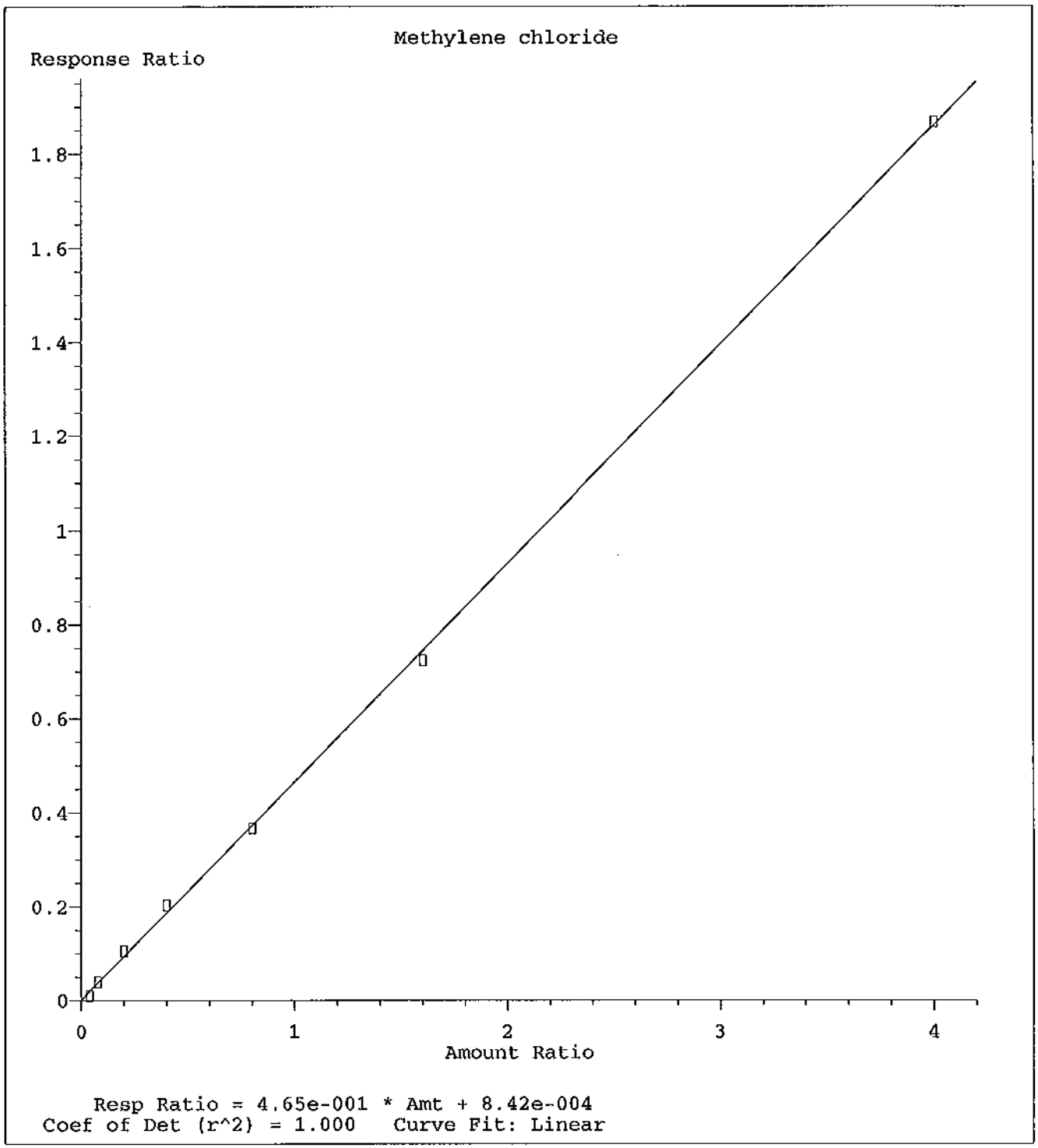
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



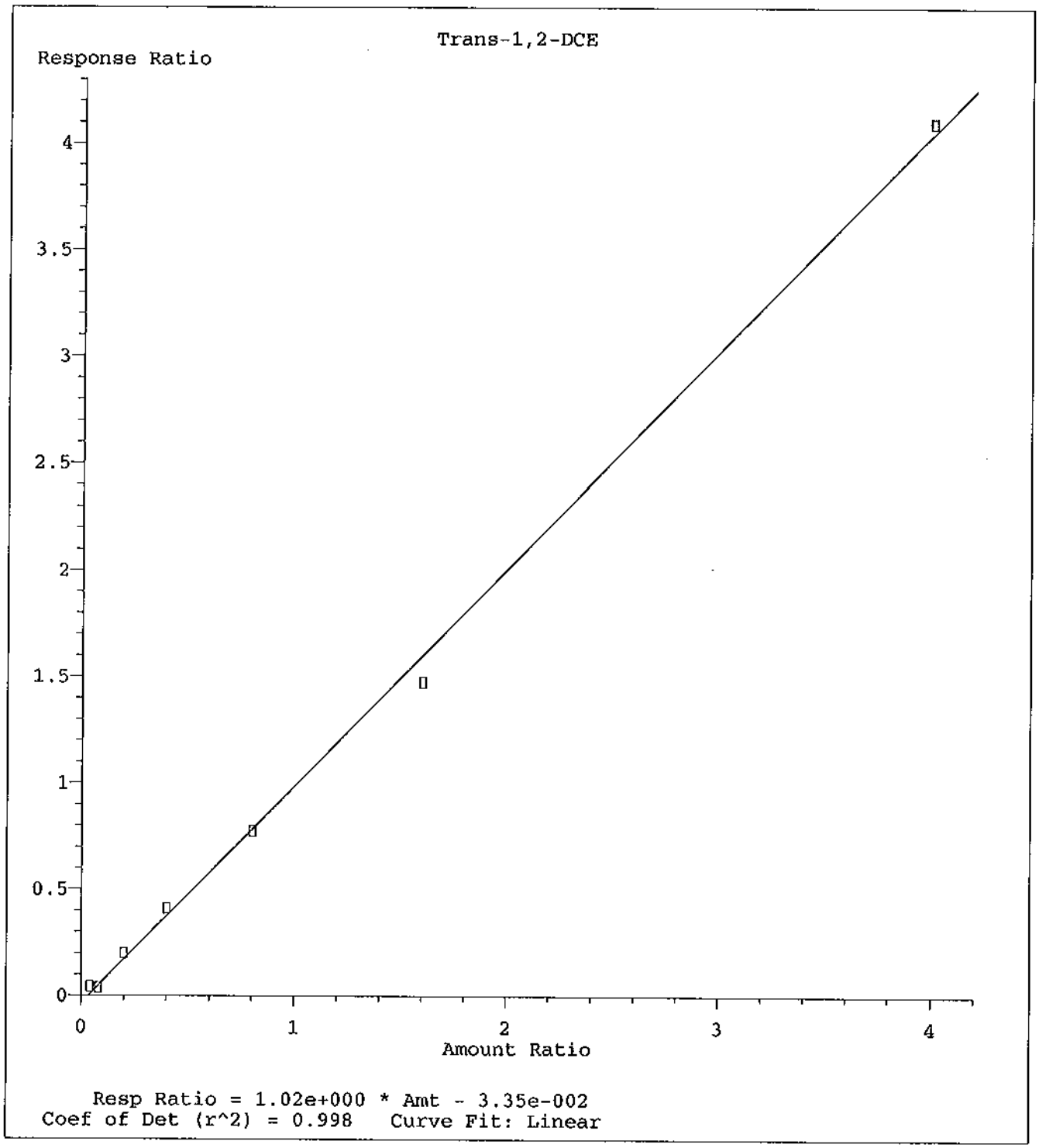
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



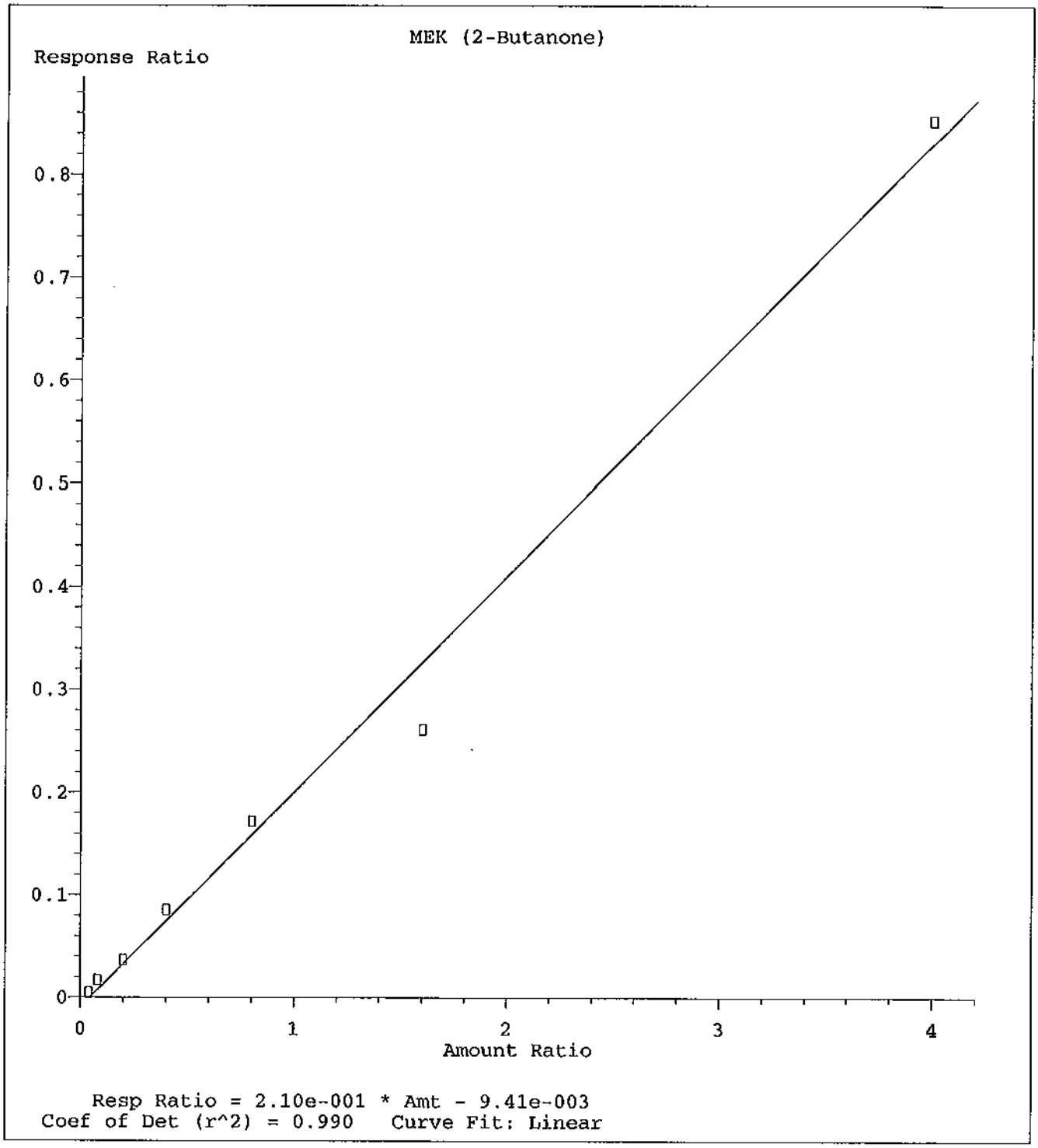
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



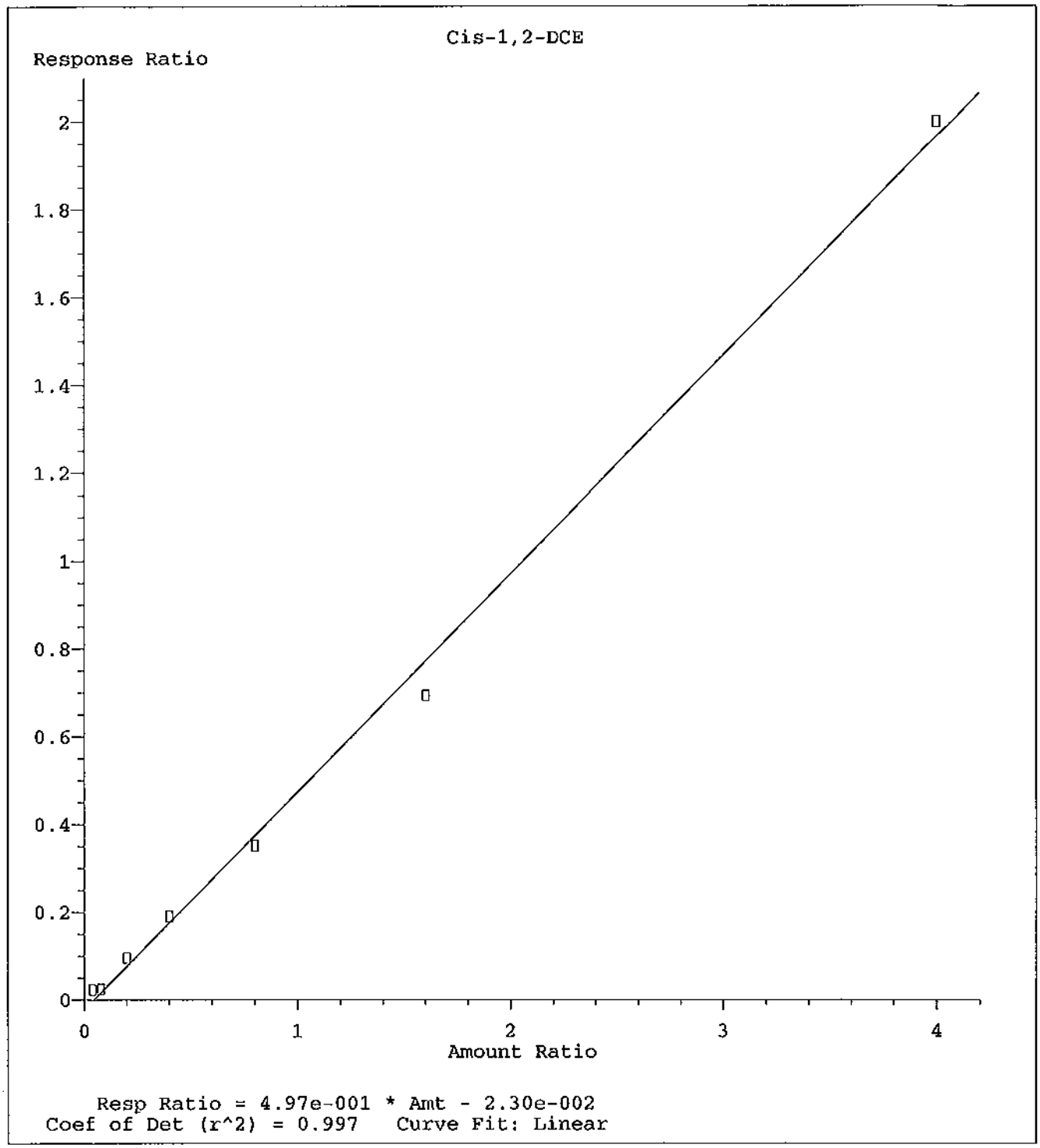
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



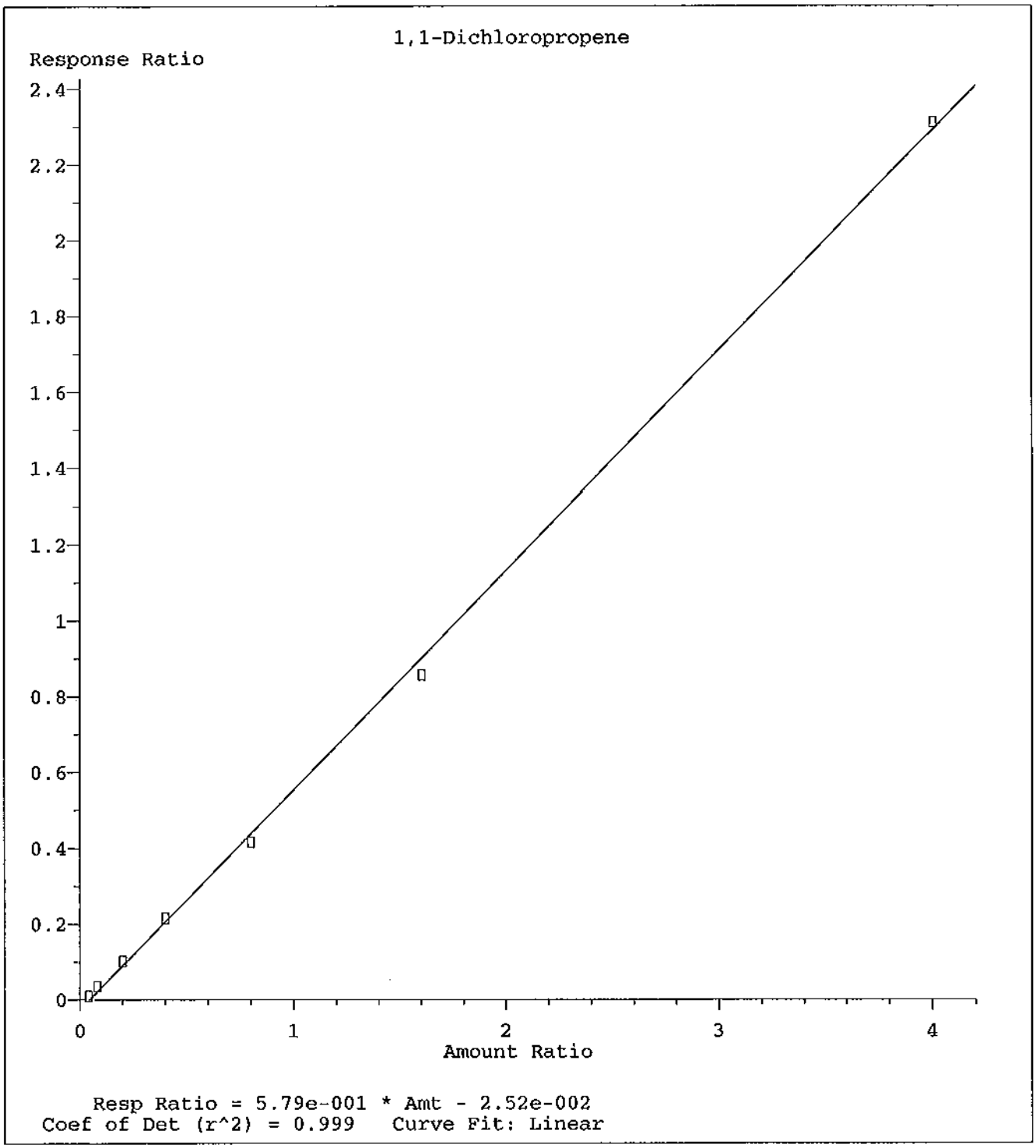
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



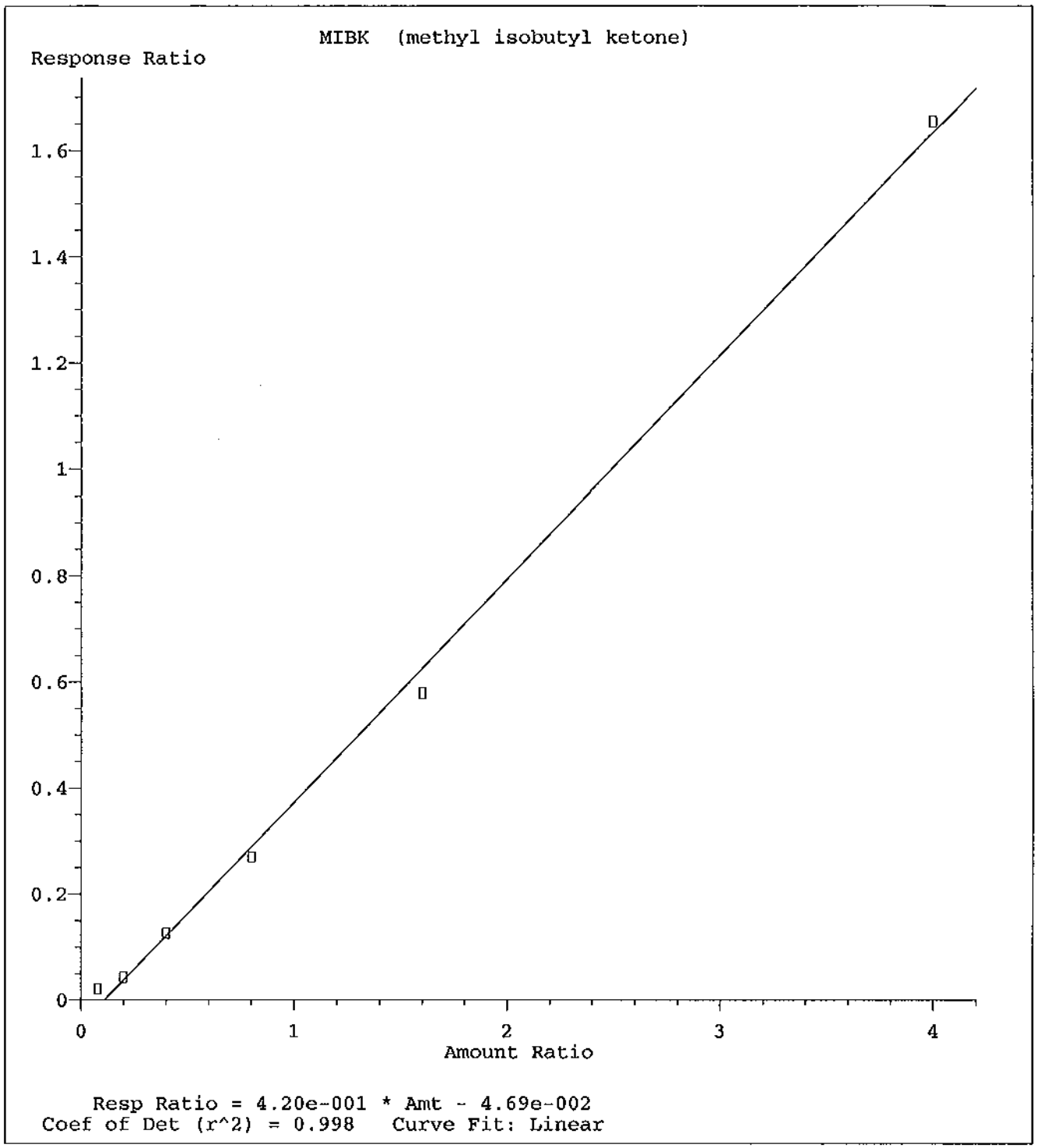
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



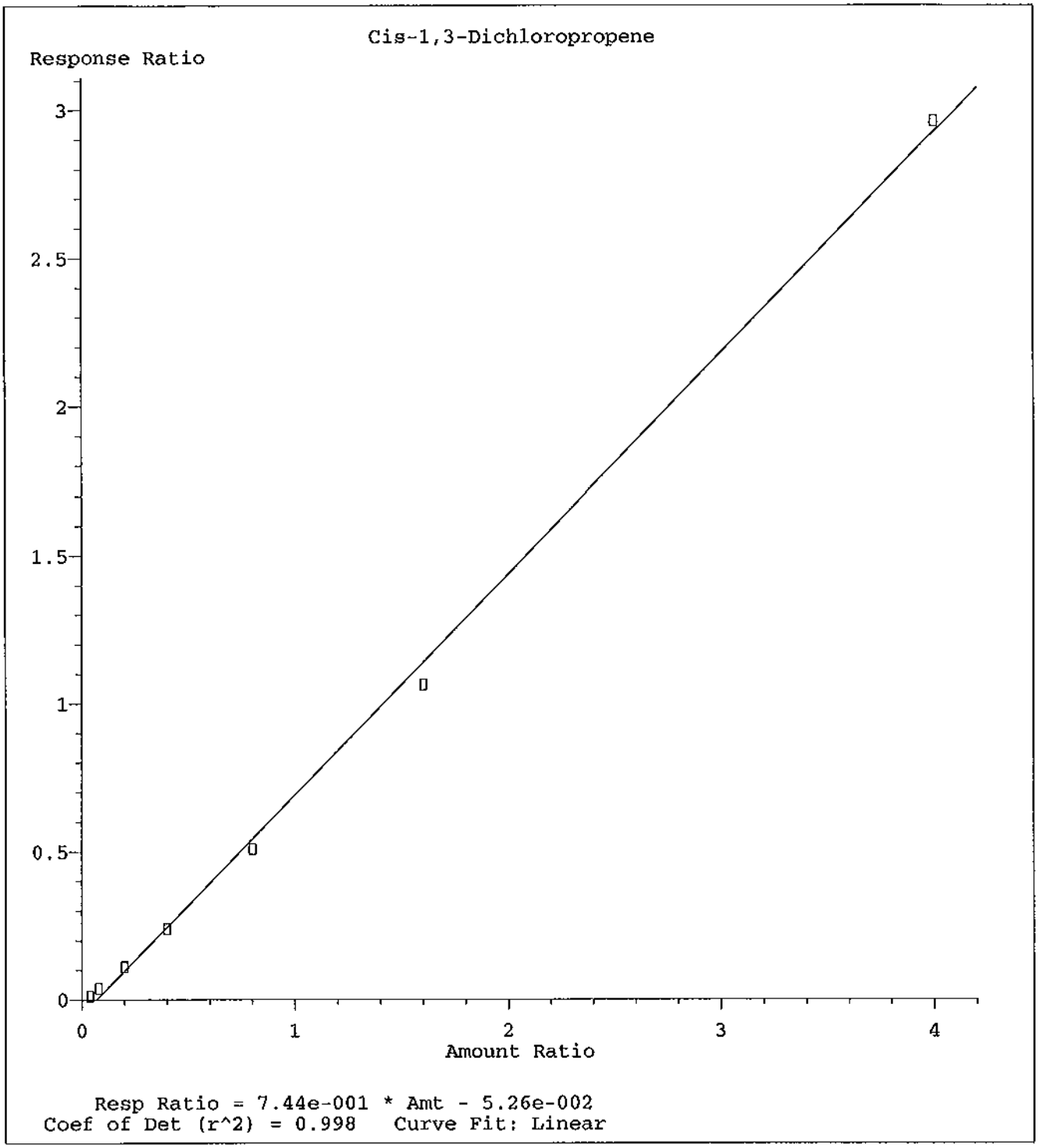
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



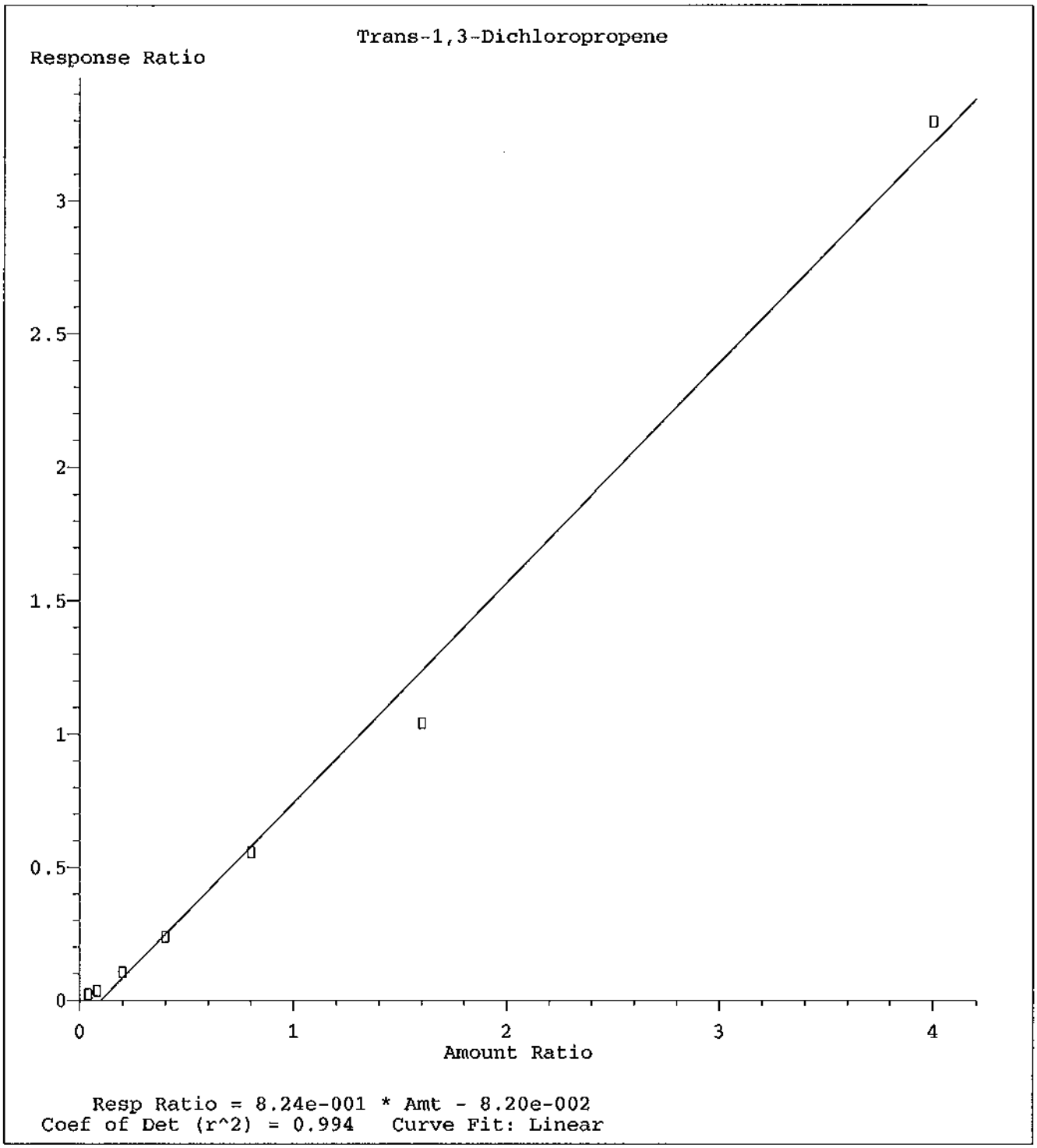
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



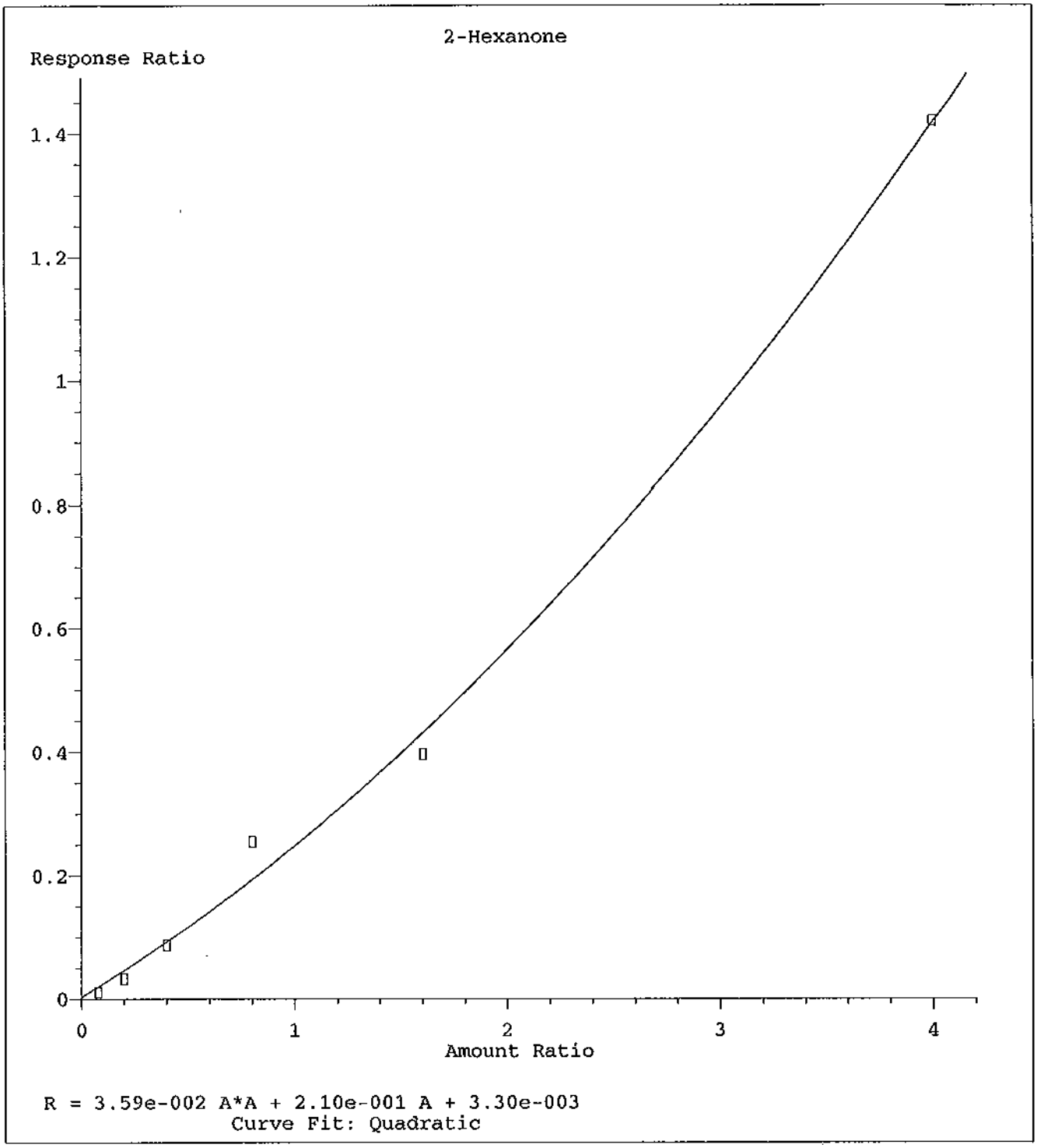
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



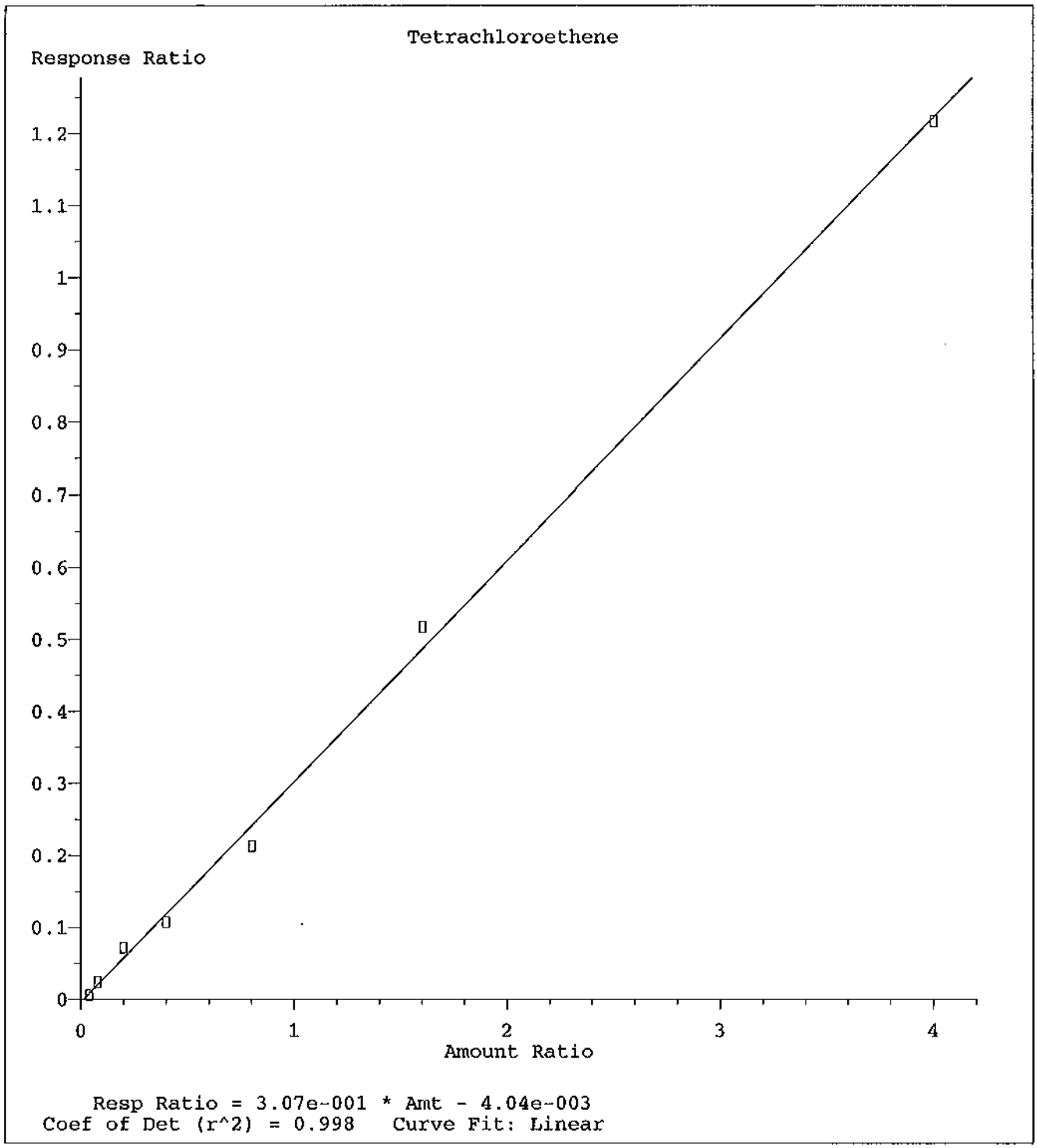
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



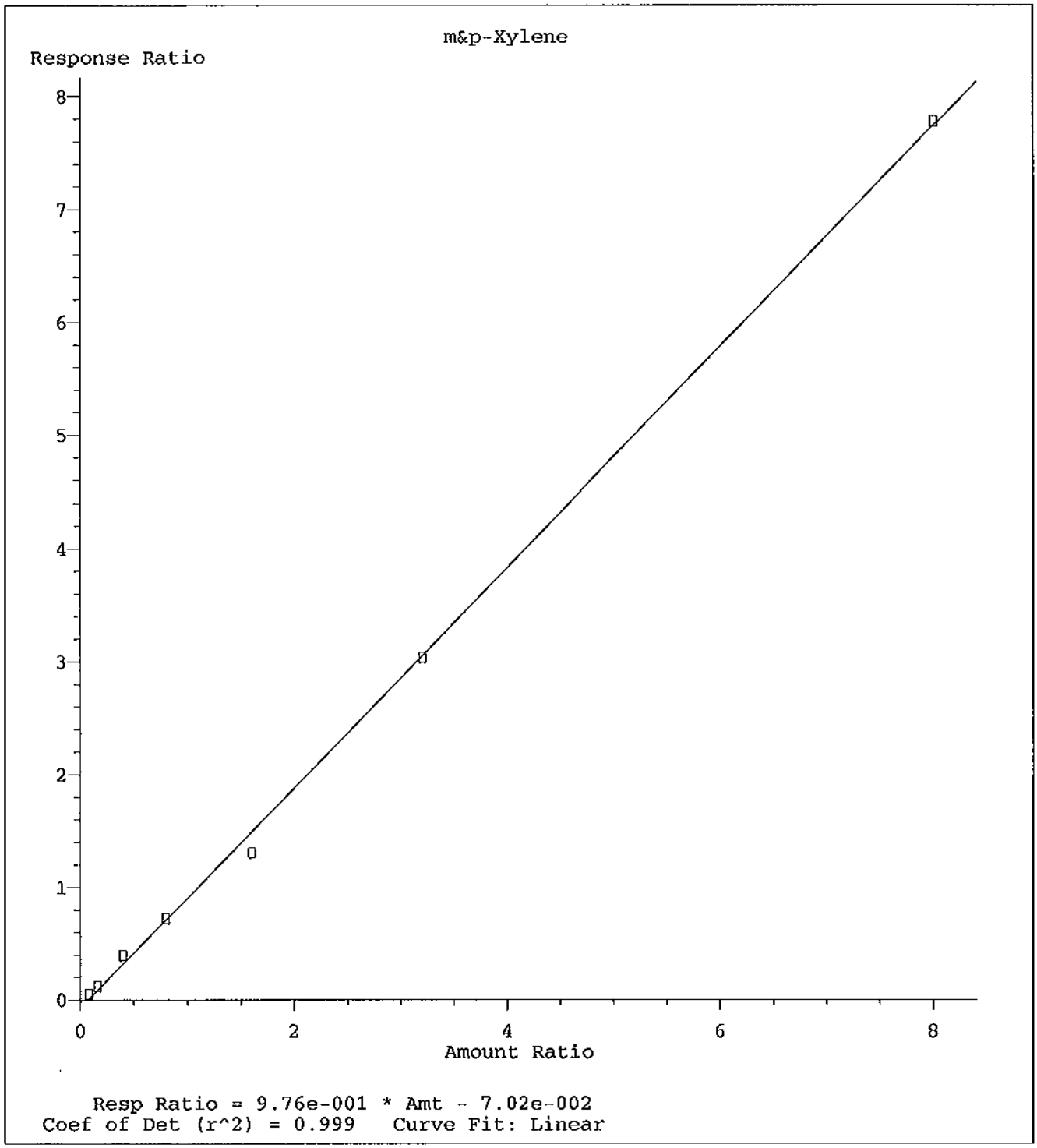
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



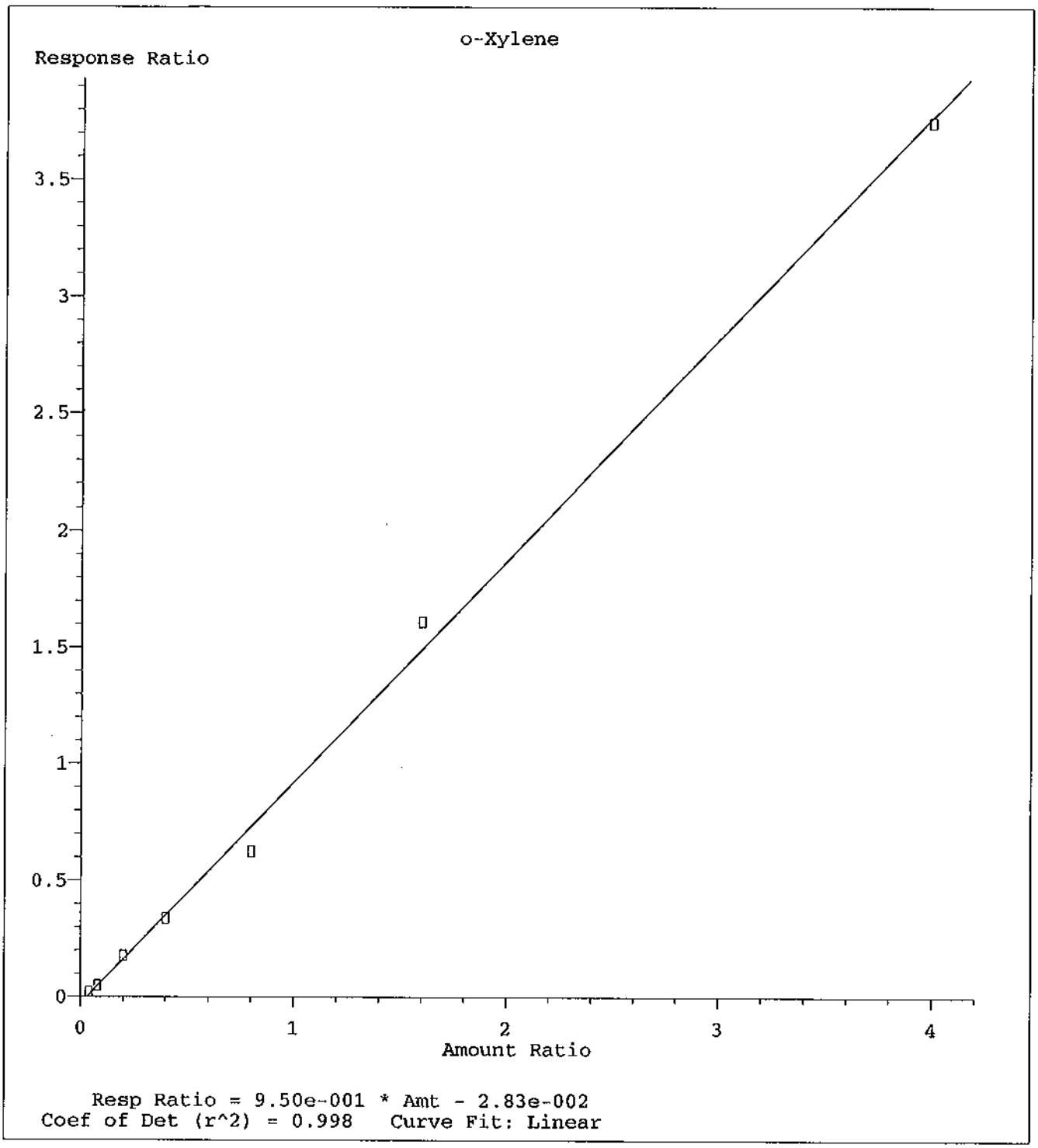
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



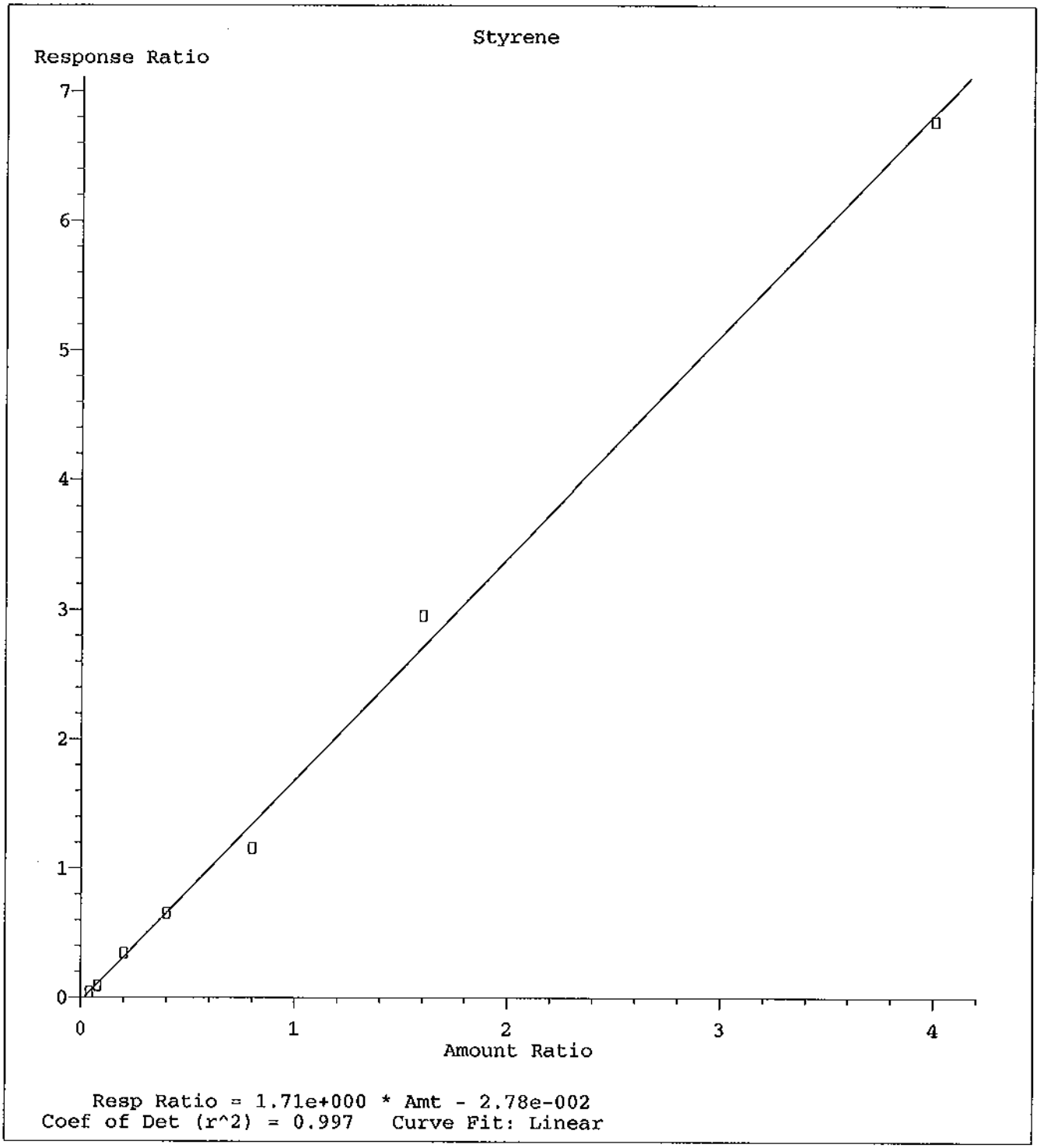
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



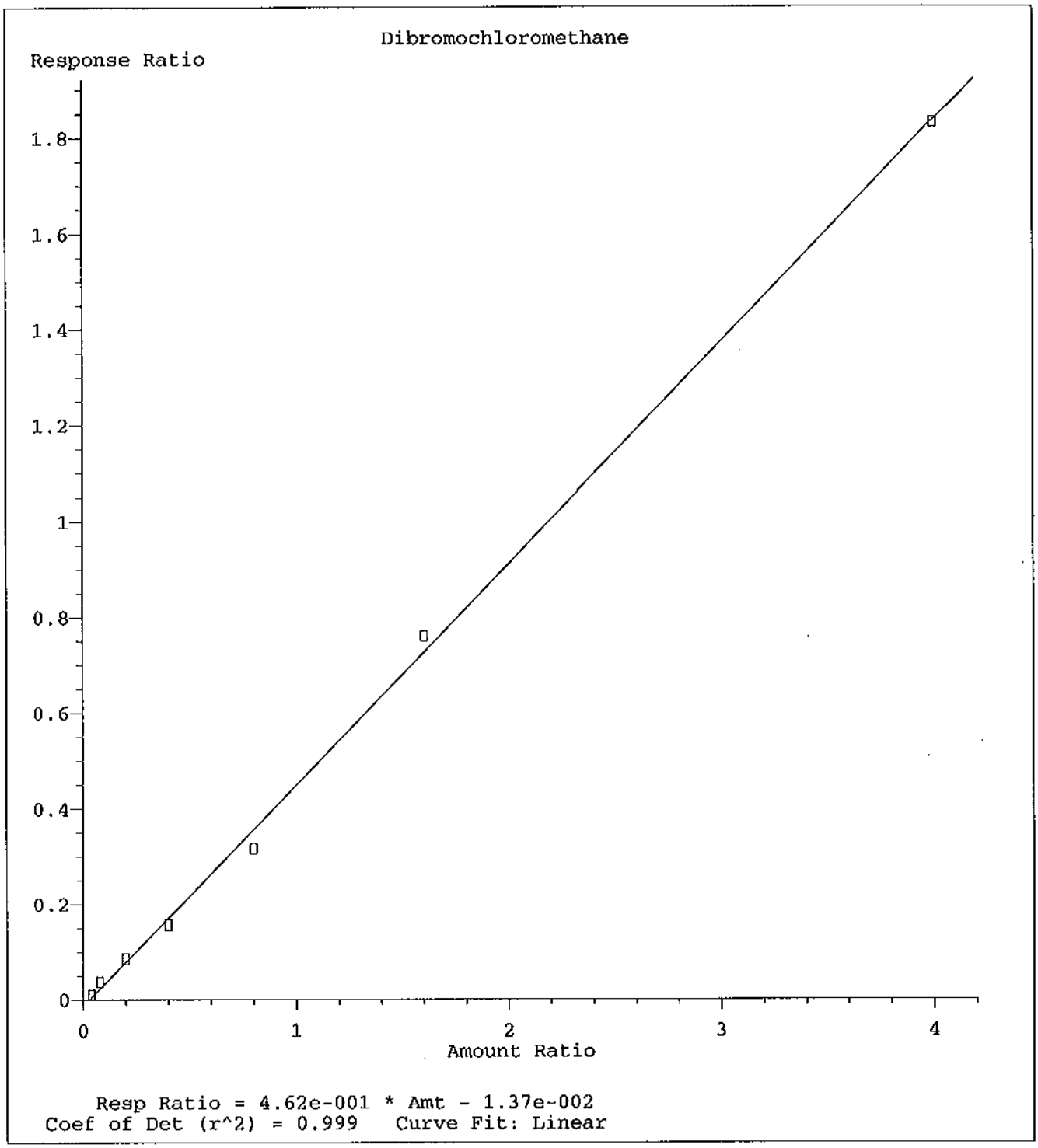
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



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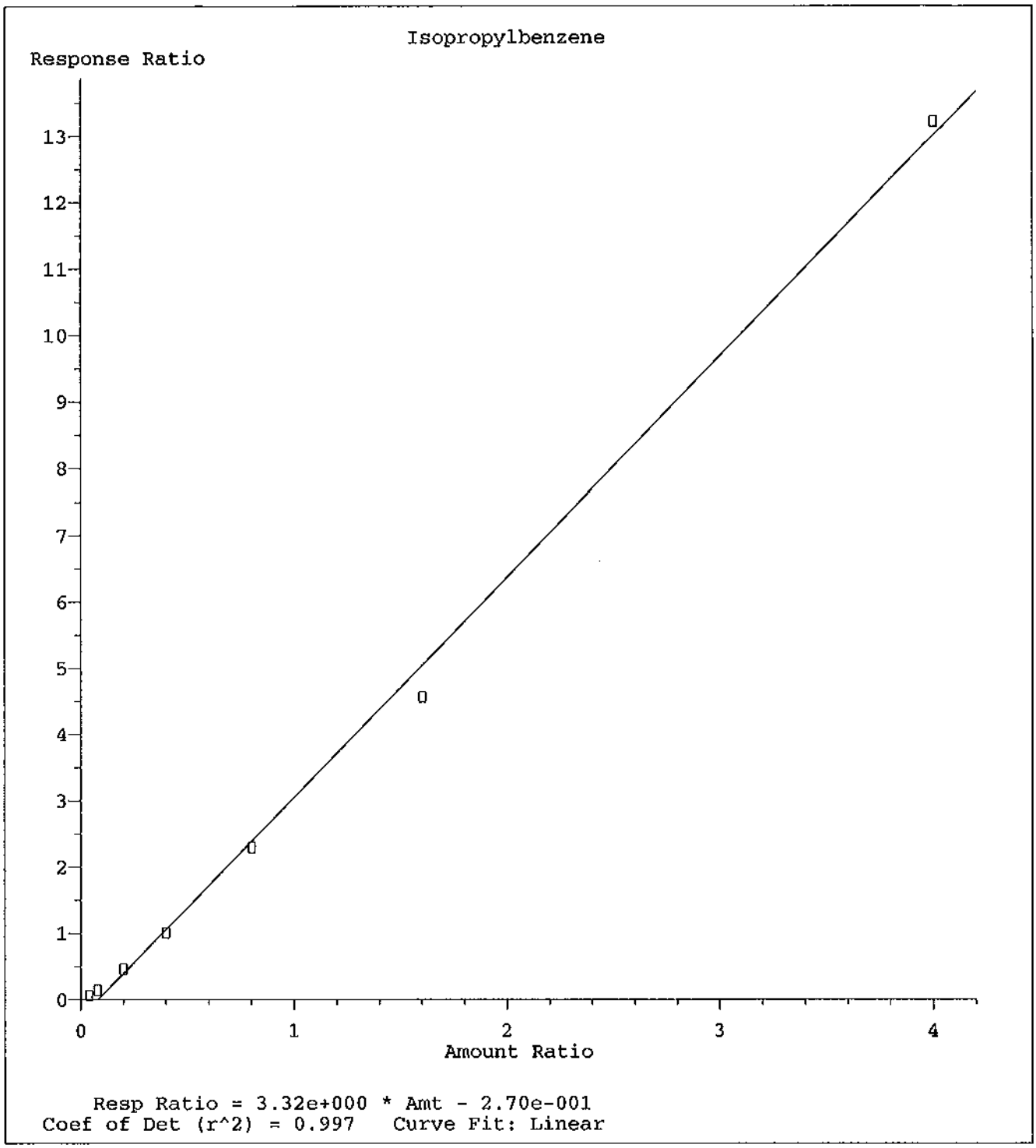
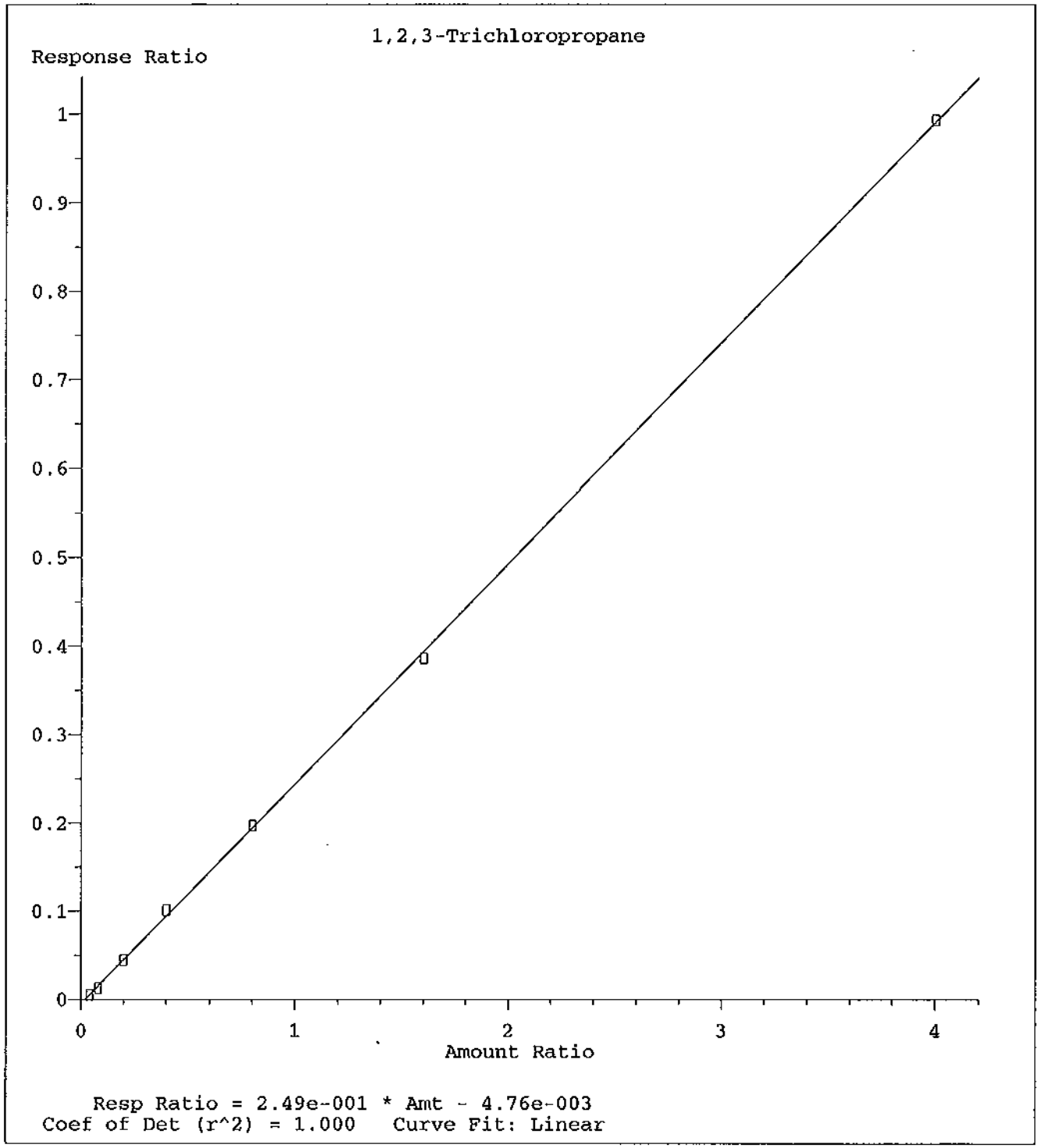
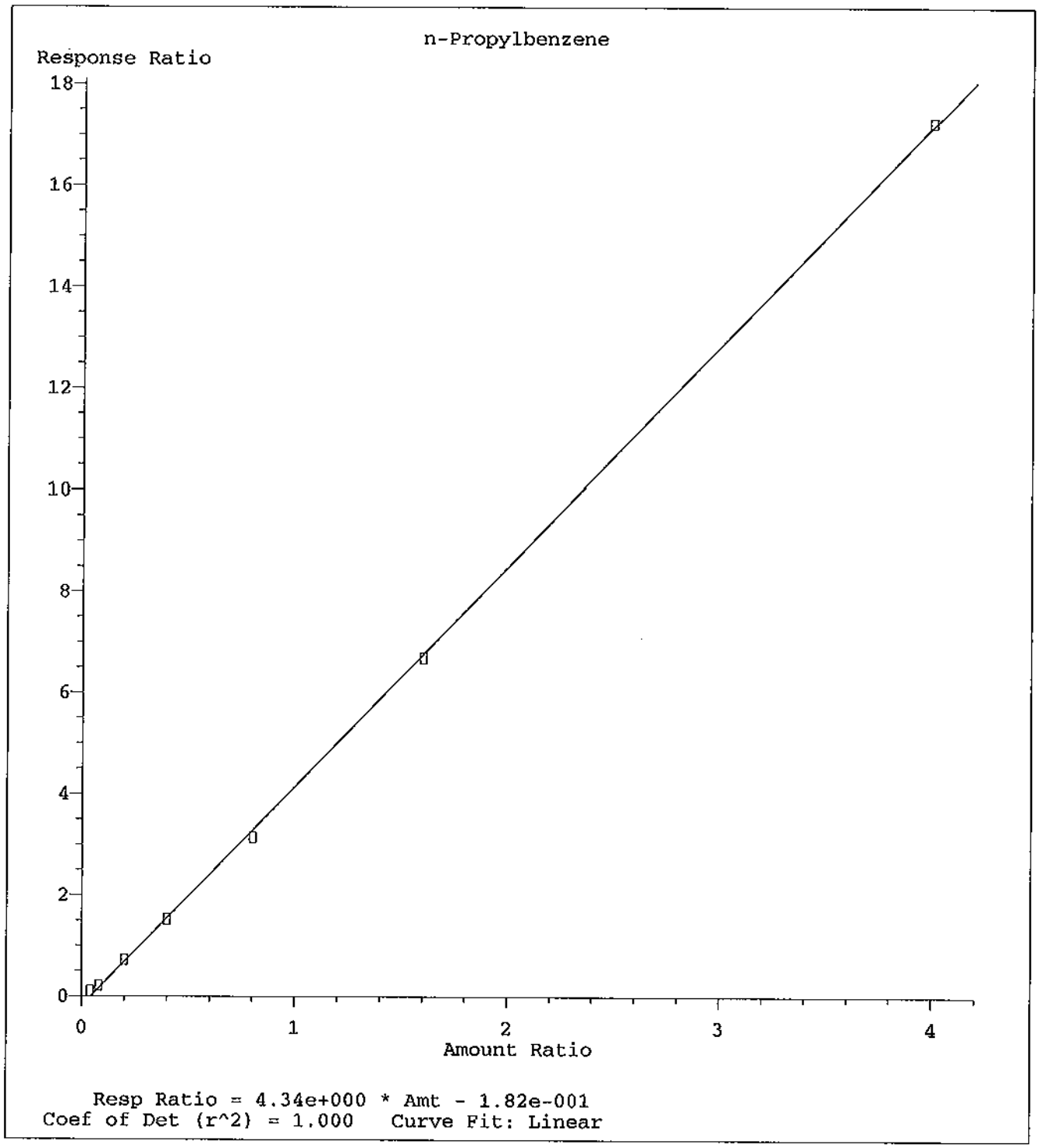
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



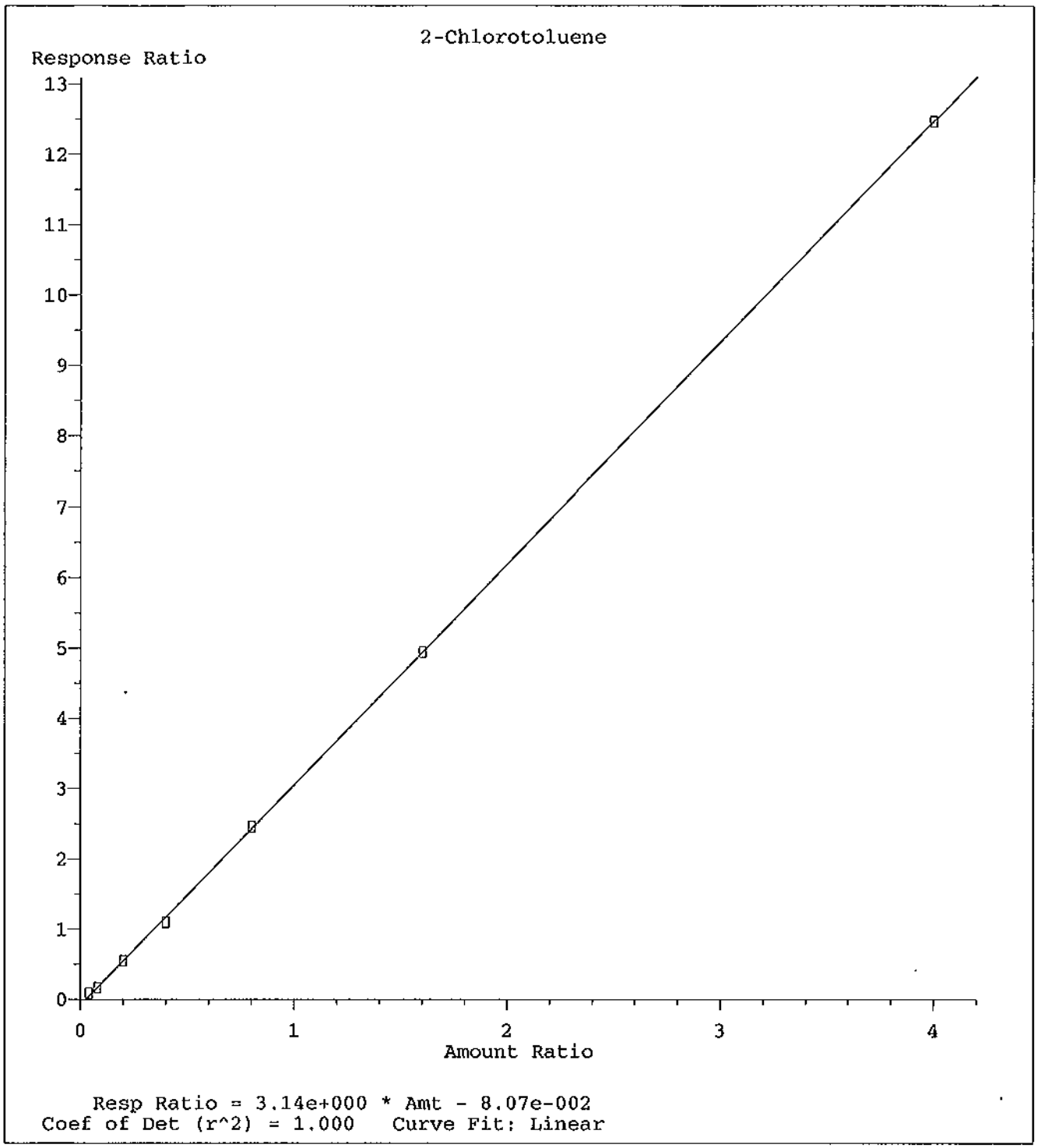
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



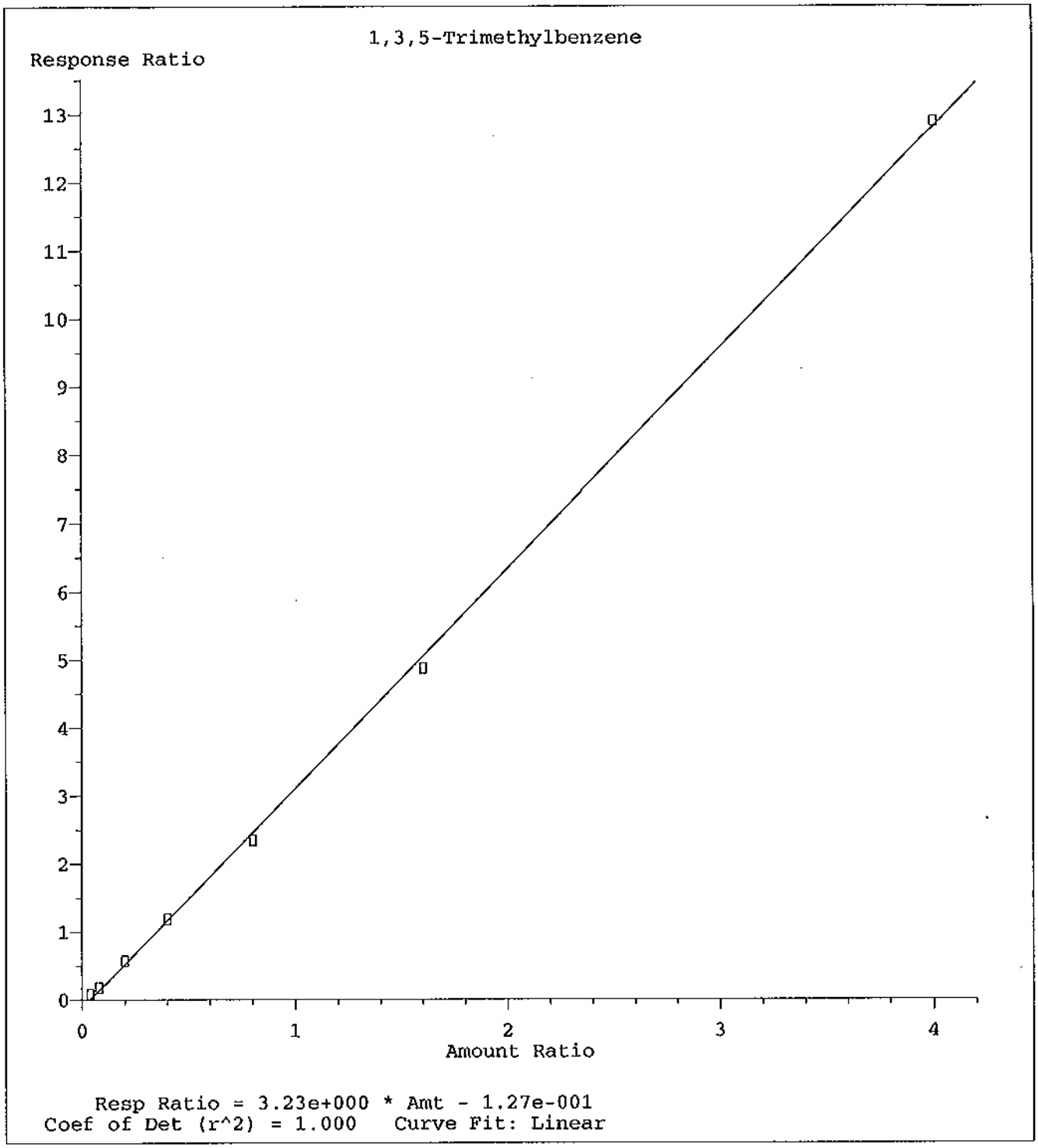
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



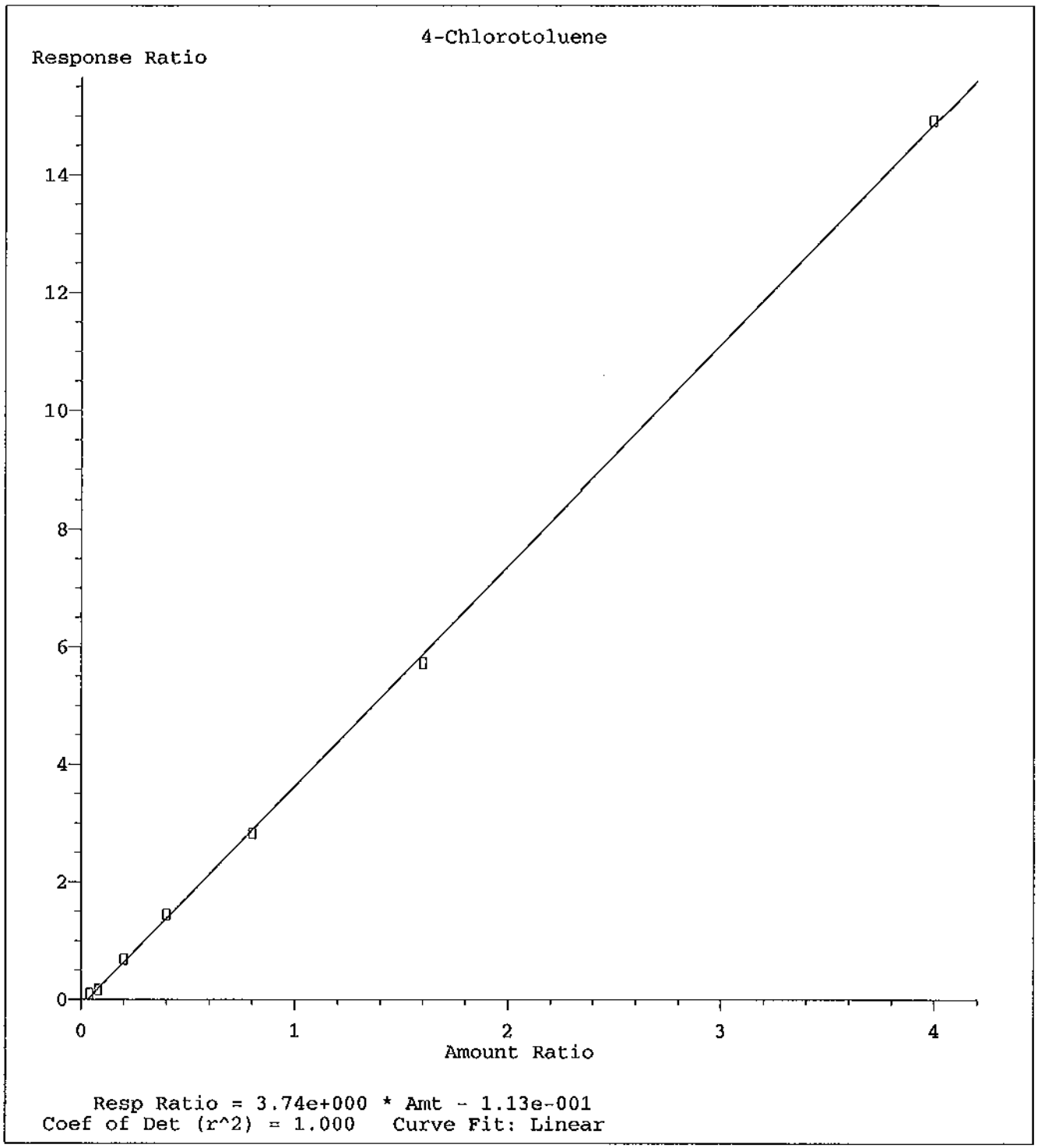
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



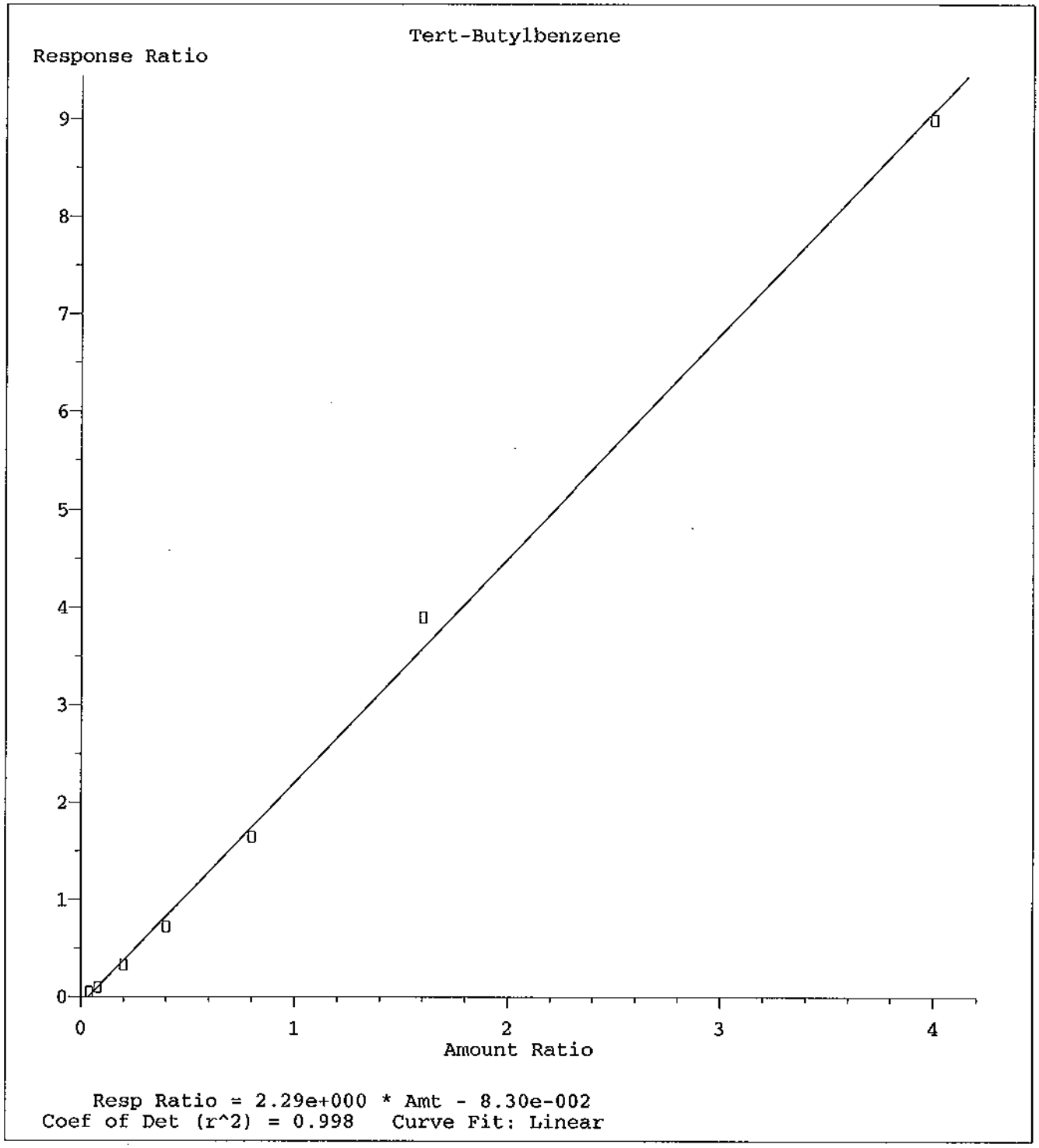
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



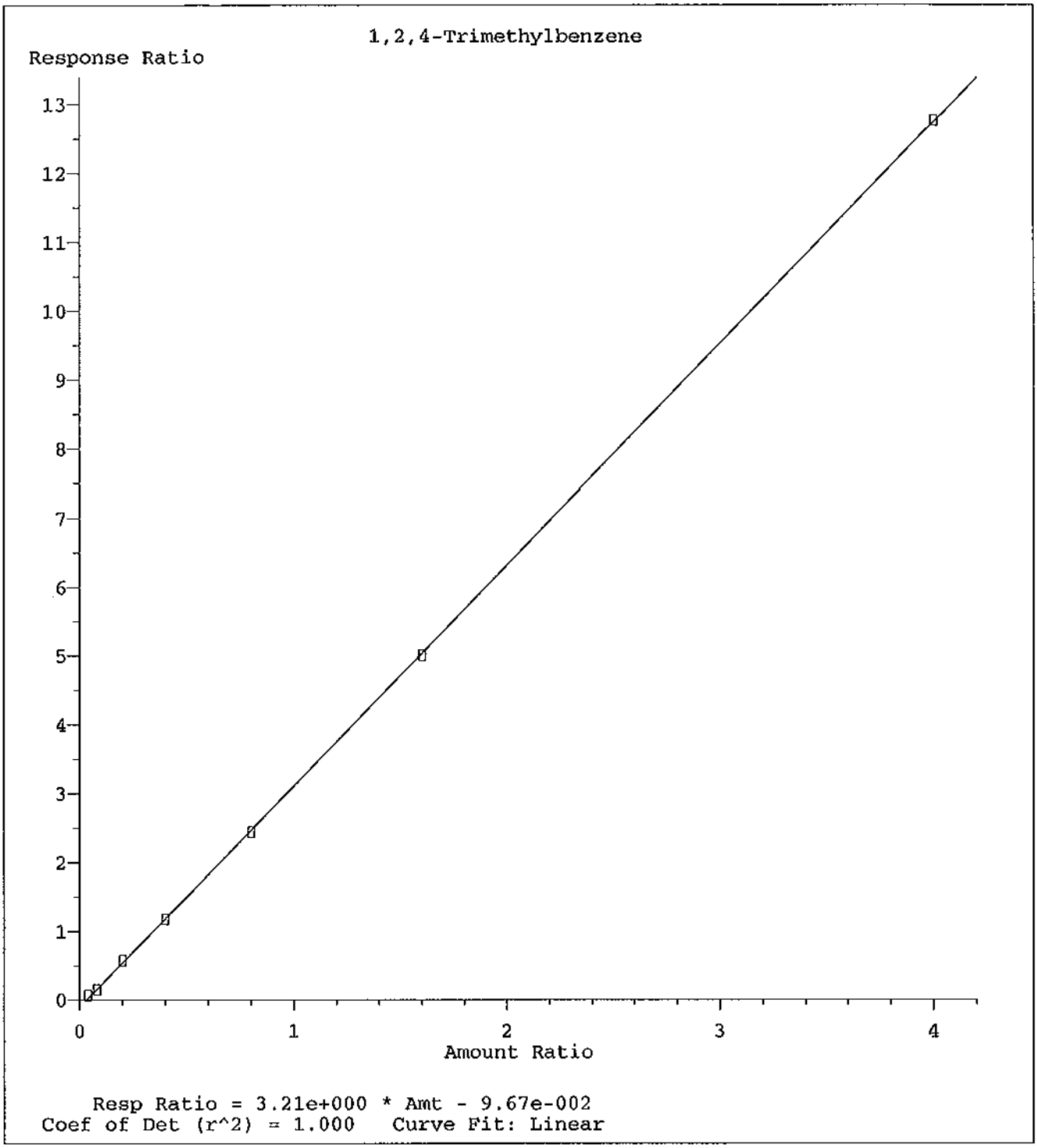
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



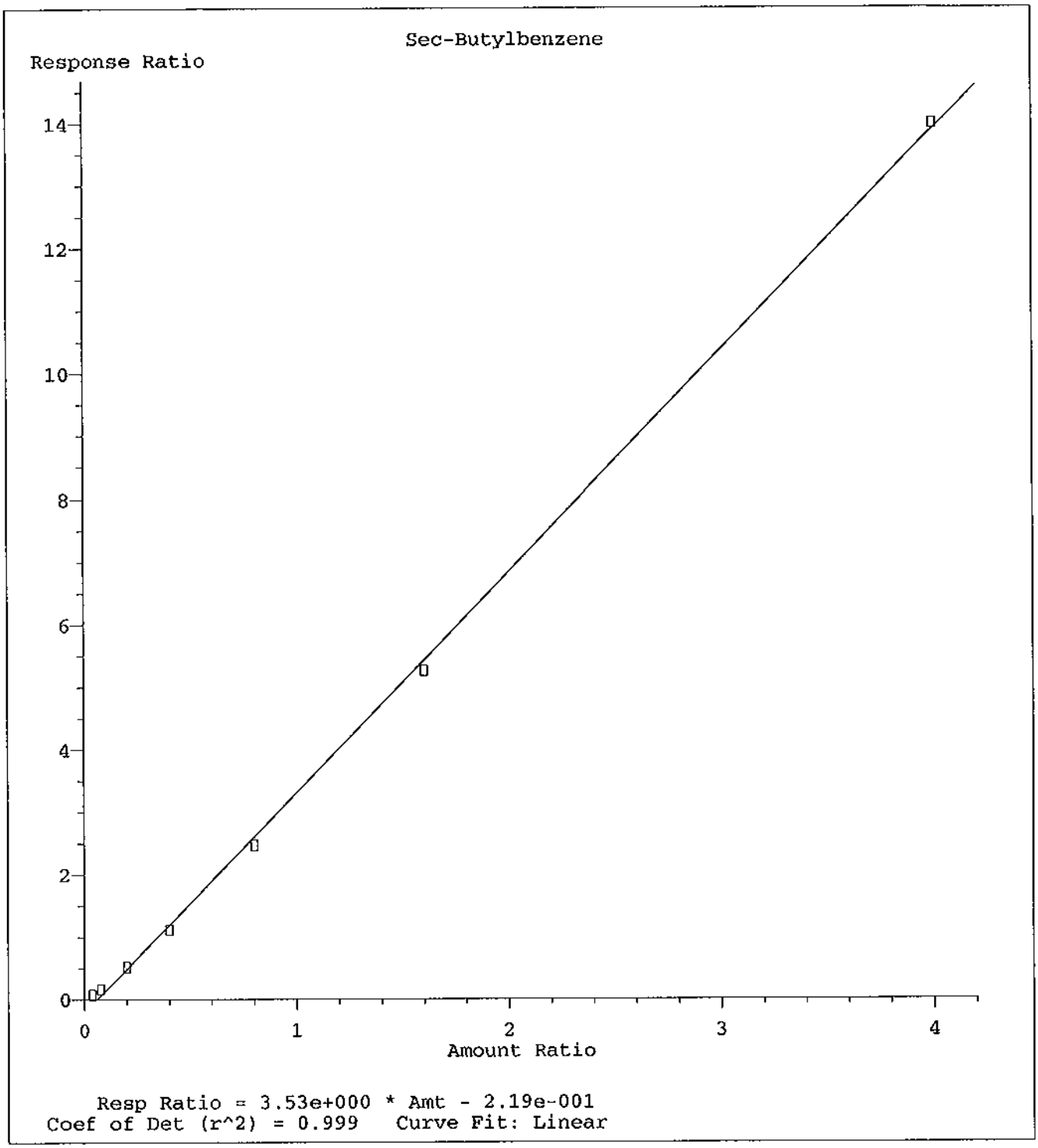
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



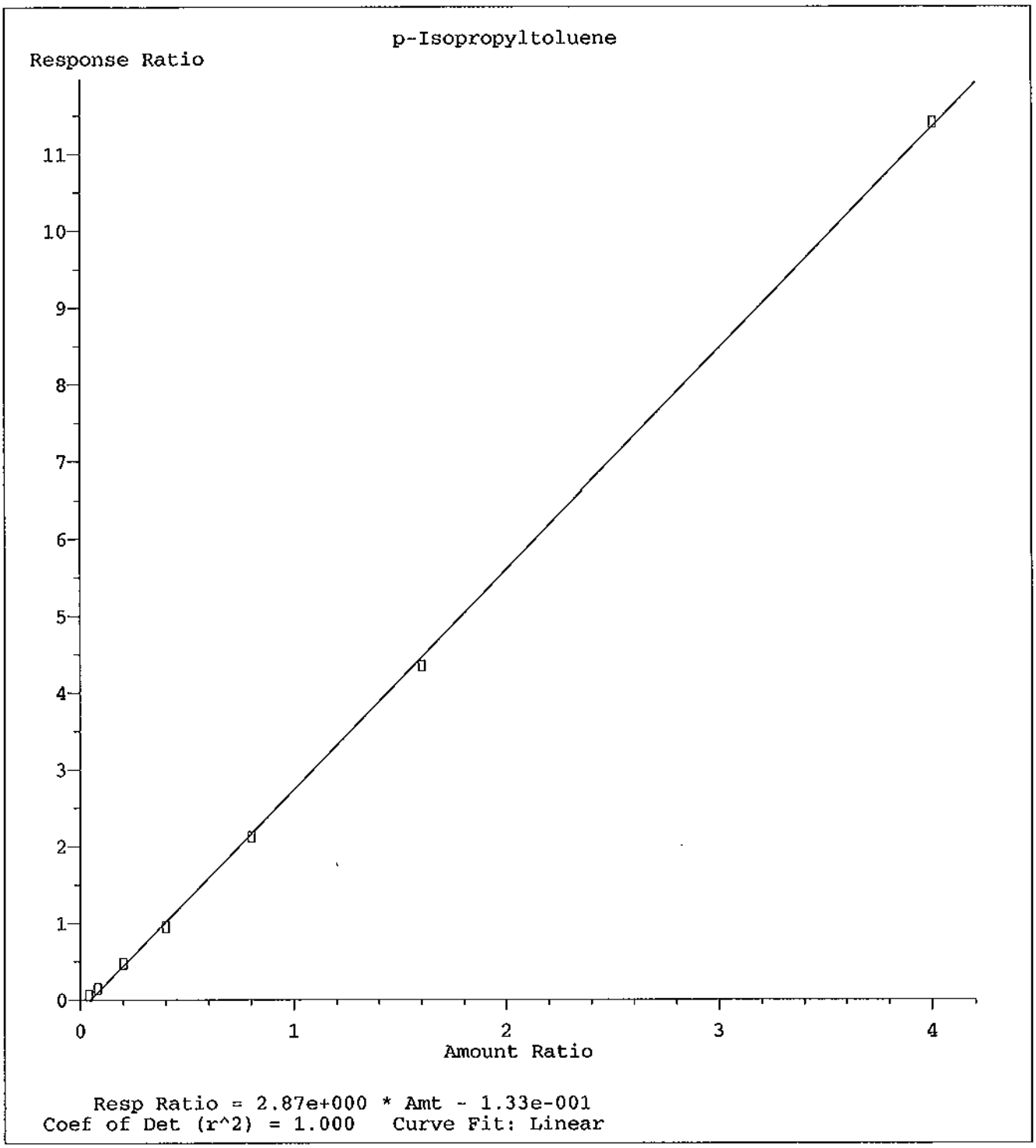
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



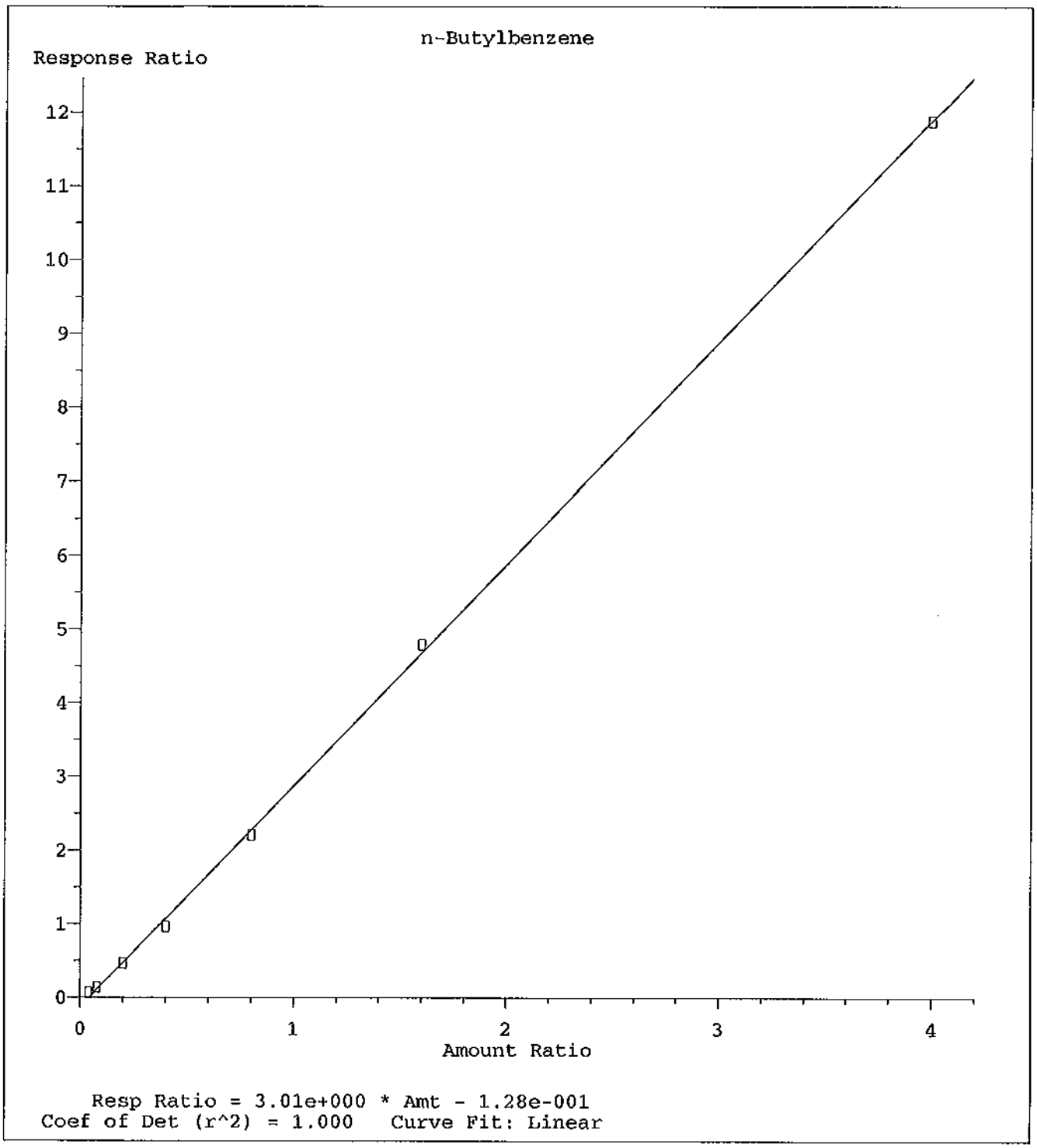
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



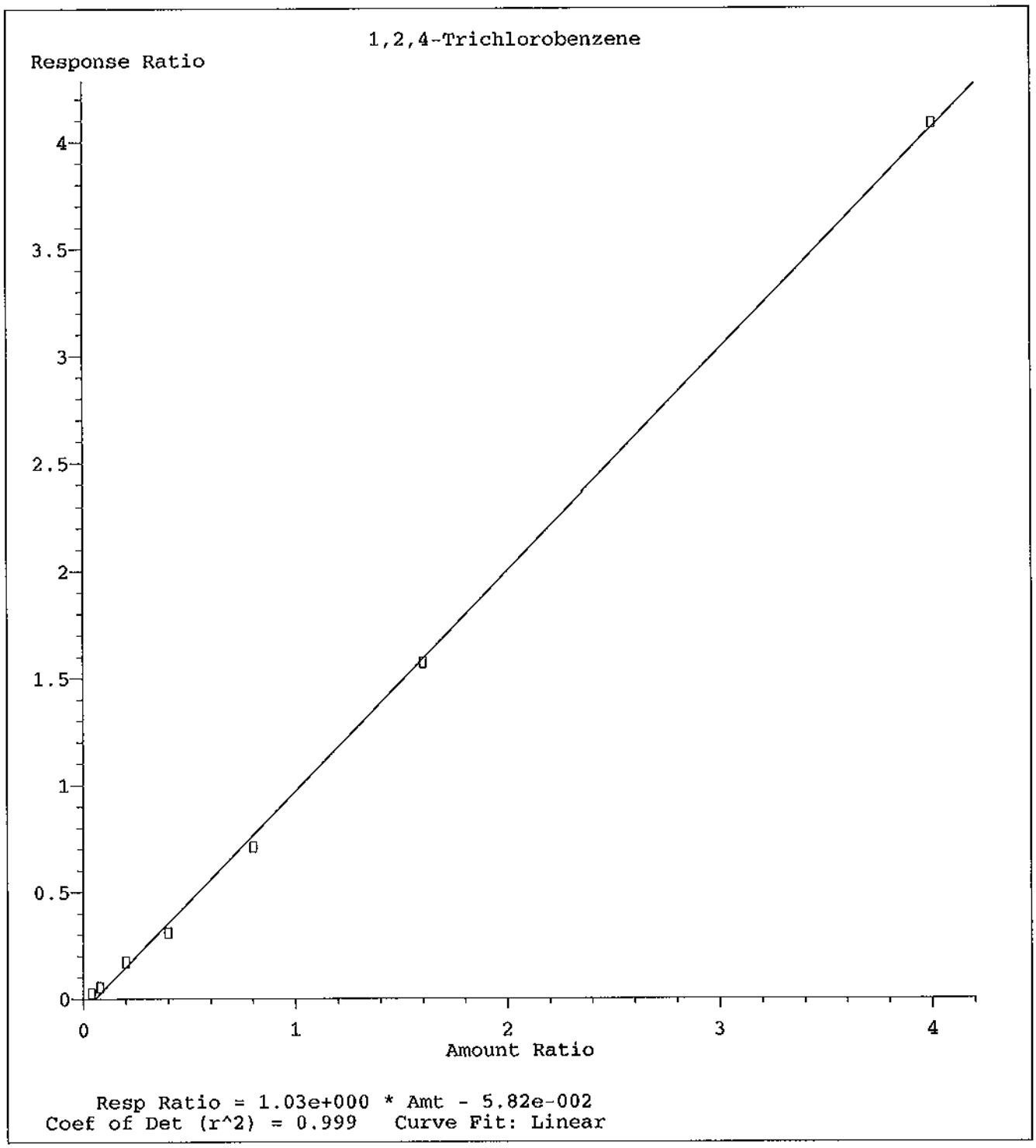
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



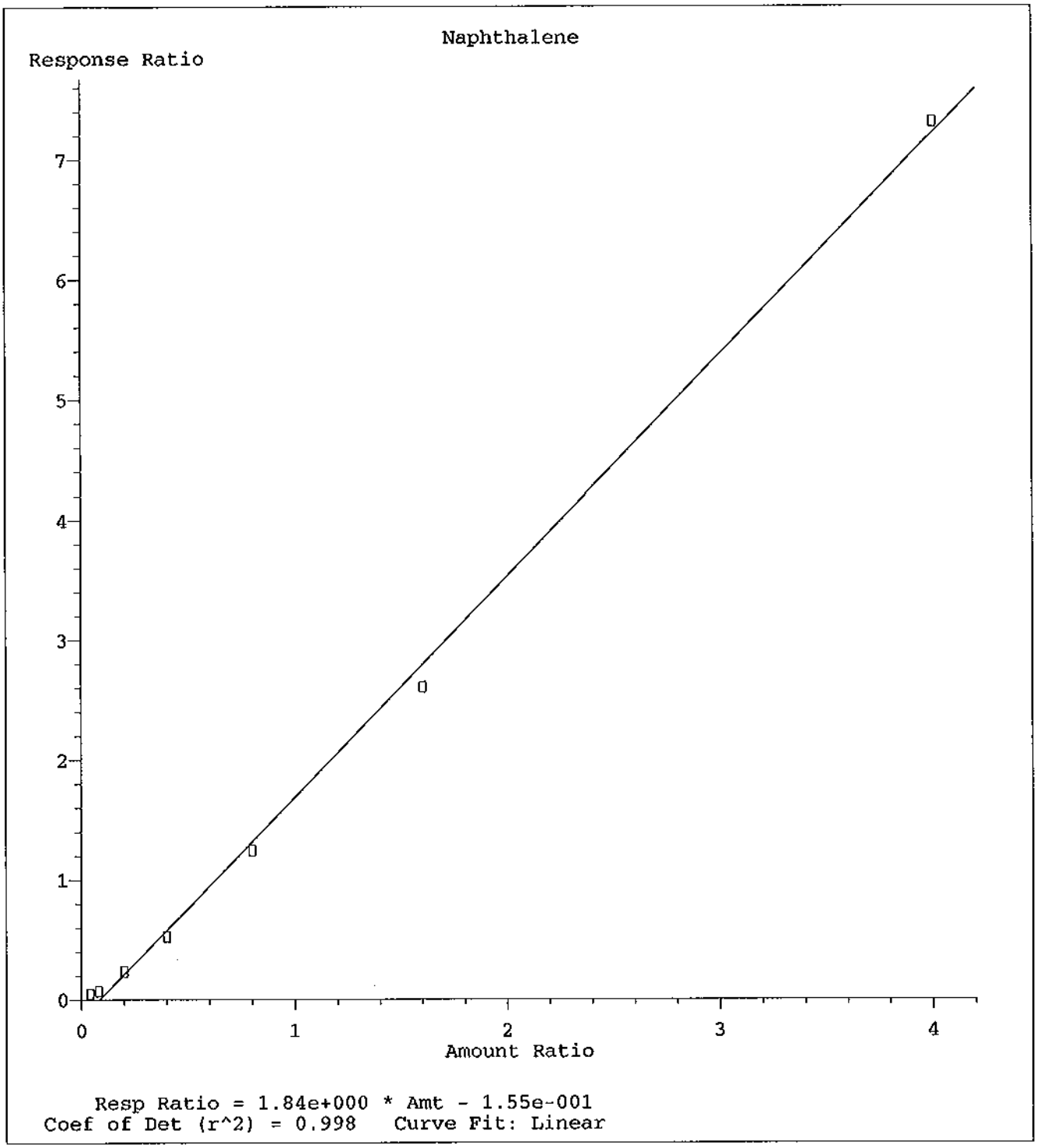
Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011



Method Name: M:\THOR\DATA\T110727\T86DODW.M
Calibration Table Last Updated: Thu Jul 28 13:43:52 2011

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

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

SDG No: 65208
Date Analyzed: 07/27/11
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.
Case No:
Matrix: Water

SDG No: 65208
Date Analyzed: 07/27/11
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 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

Algorithm Check: $\frac{(19958)(25)}{(112320)(0.575556)}(1) = 8.616364975$ ✓

(#) = 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

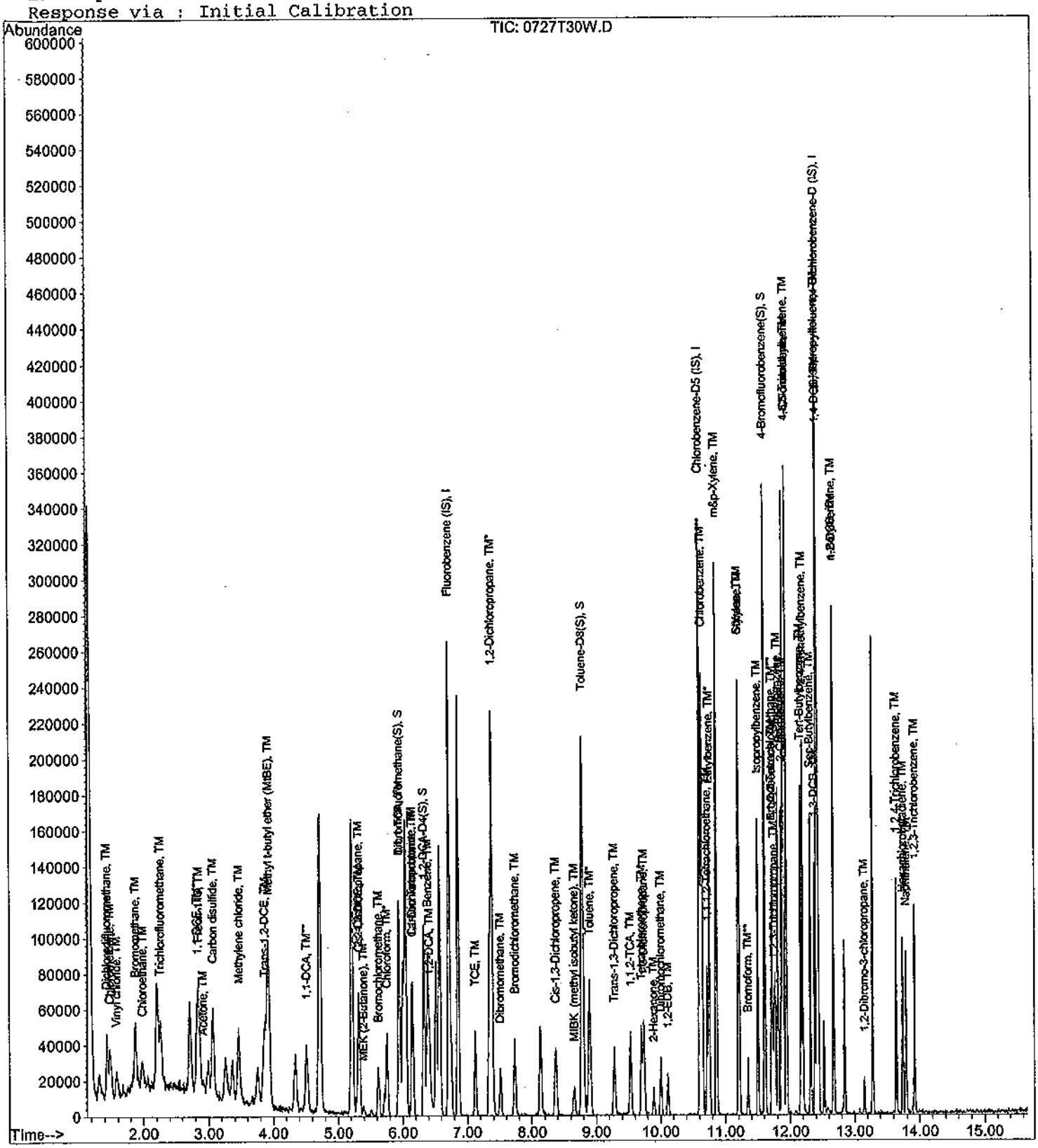
(#) = qualifier out of range (m) = manual integration

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.
Case No:
Matrix:

SDG No: 65208
Initial Cal. Date: 07/27/11
Instrument: Thor

Initials:

		Compound	20	50	100	300	600	800	1000				Avg	%RSD		
			0727T05W.D	0727T06W.D	0727T07W.D	0727T08W.D	0727T09W.D	0727T10W.D	0727T11W.D							
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																
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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

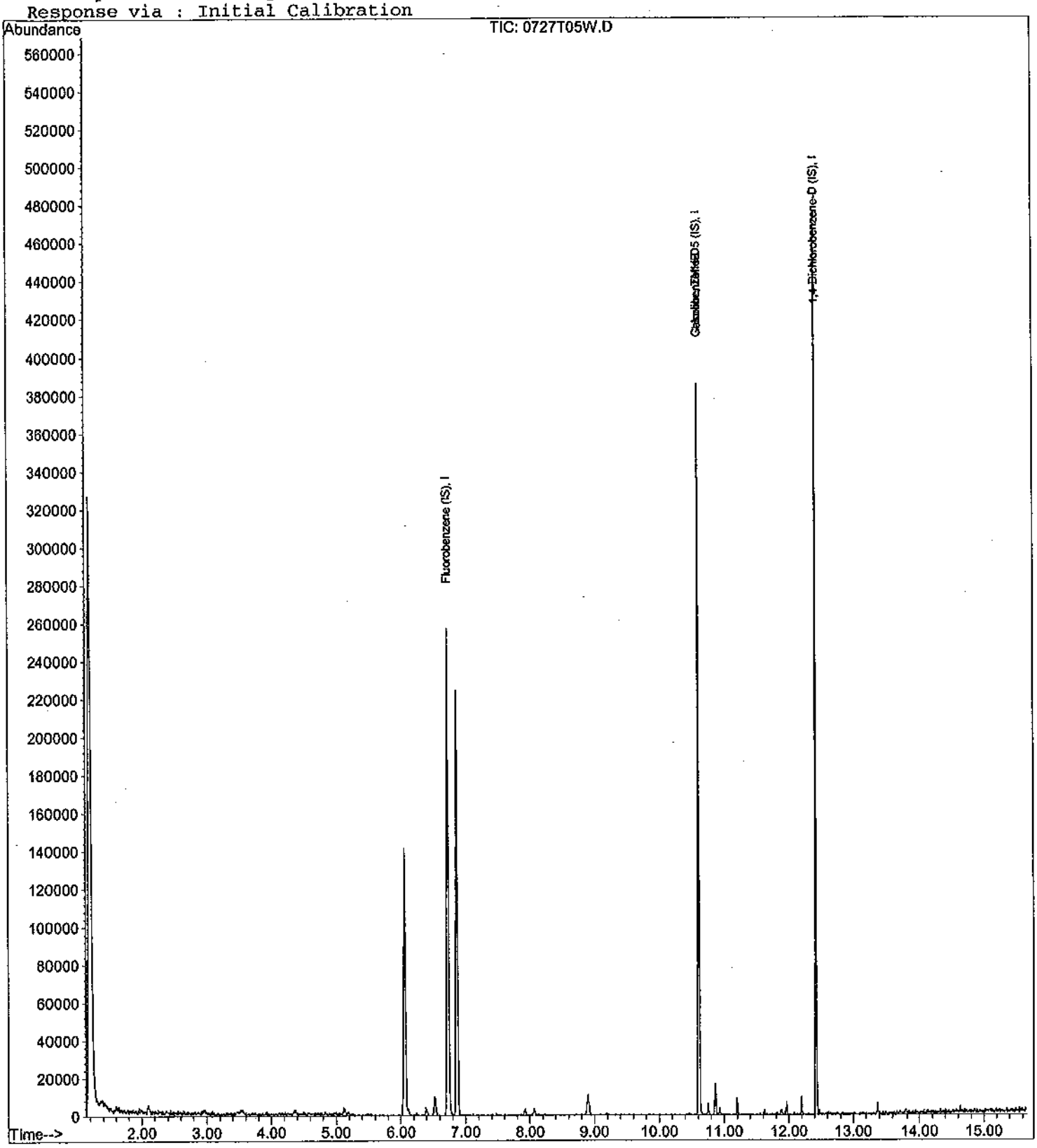
Quantitation Report

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

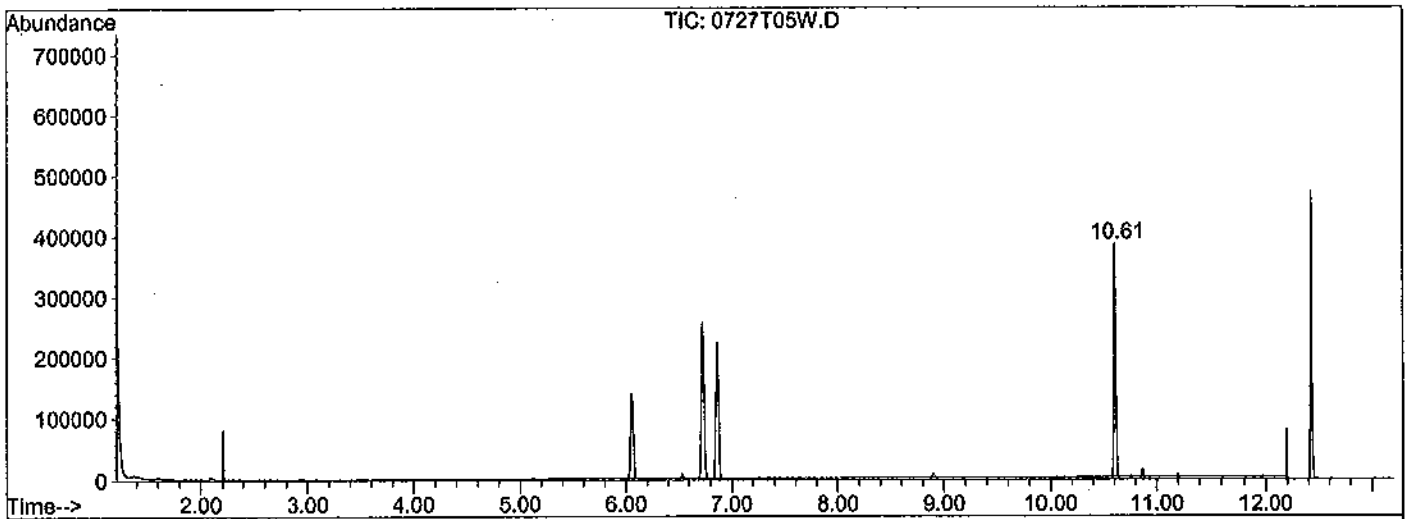
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

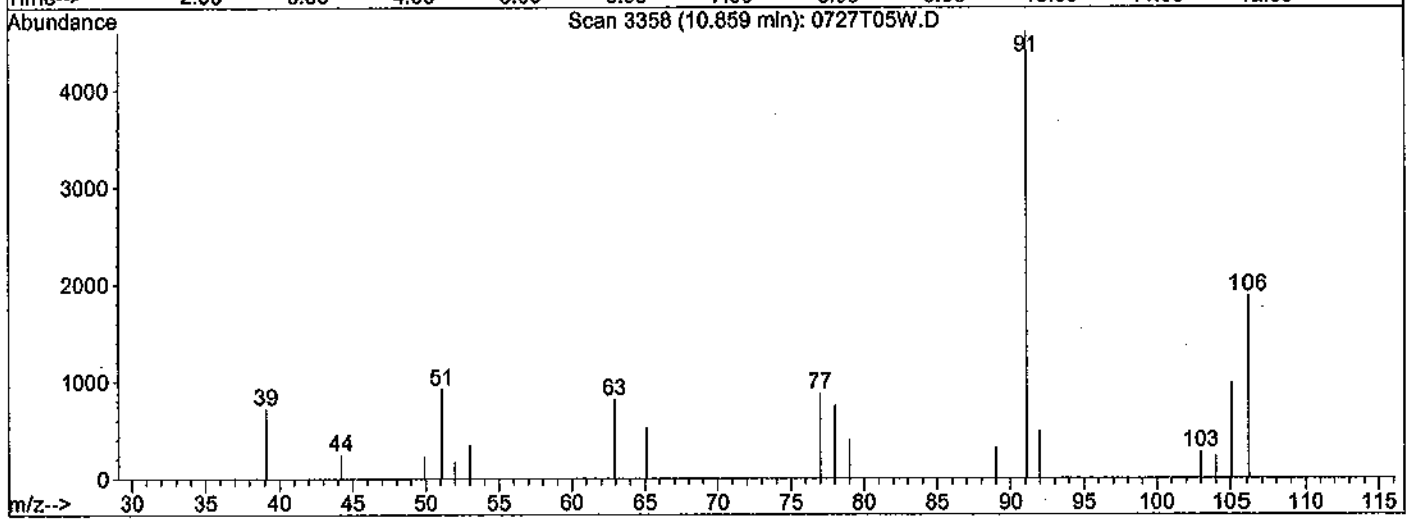


Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T05W.D 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 10:46 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: 0727T05W.D

(2) Gasoline (TMHB)

10.86min -53.0288ppb m

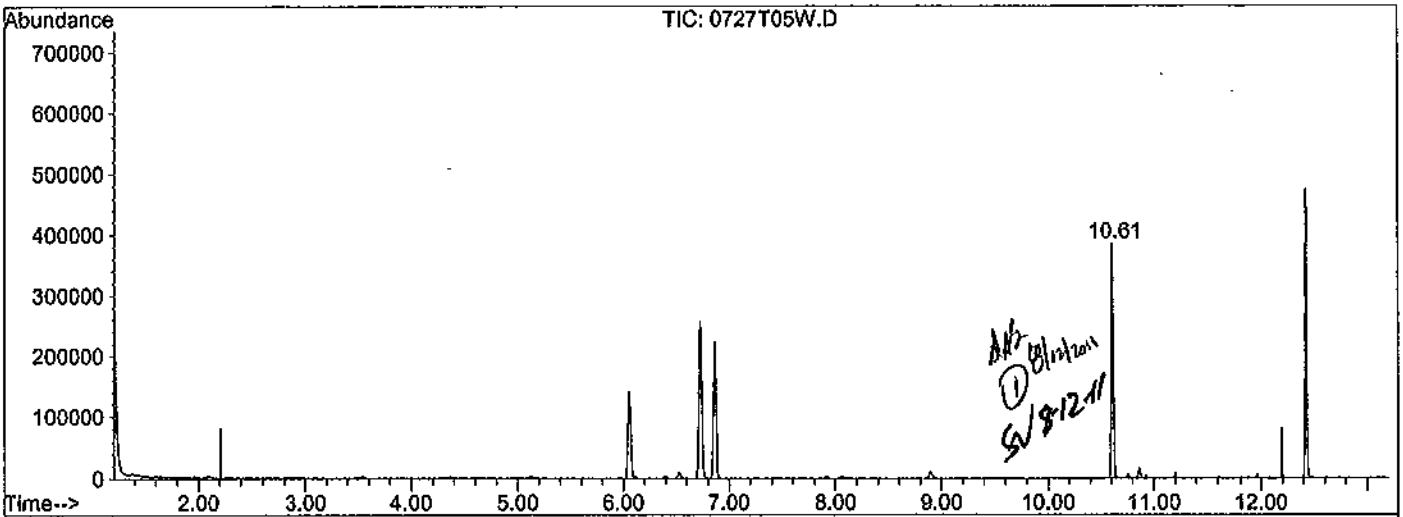
response 1090414

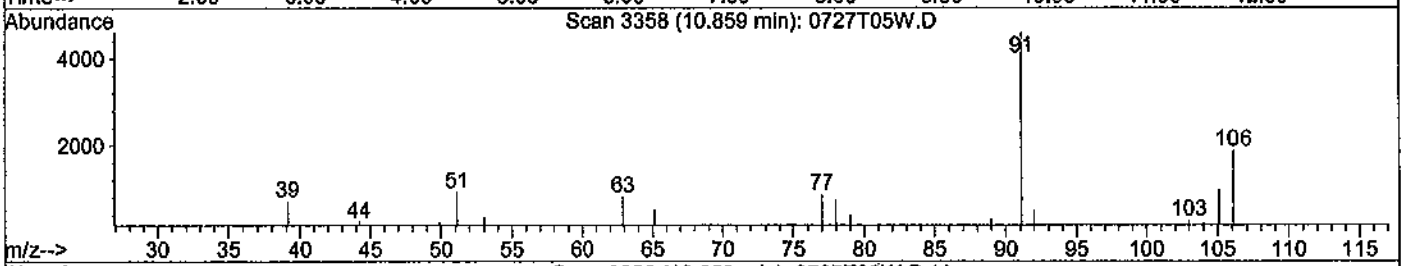
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	3.90#
0.00	0.00	8.45#
0.00	0.00	0.00

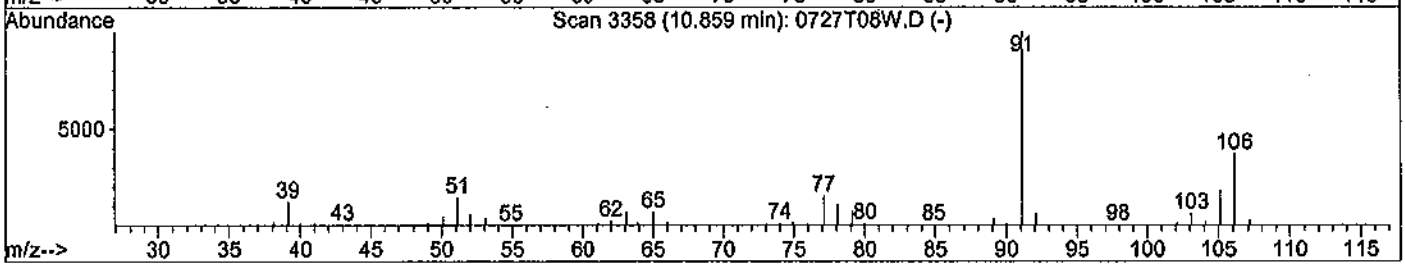
Quantitation Report

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

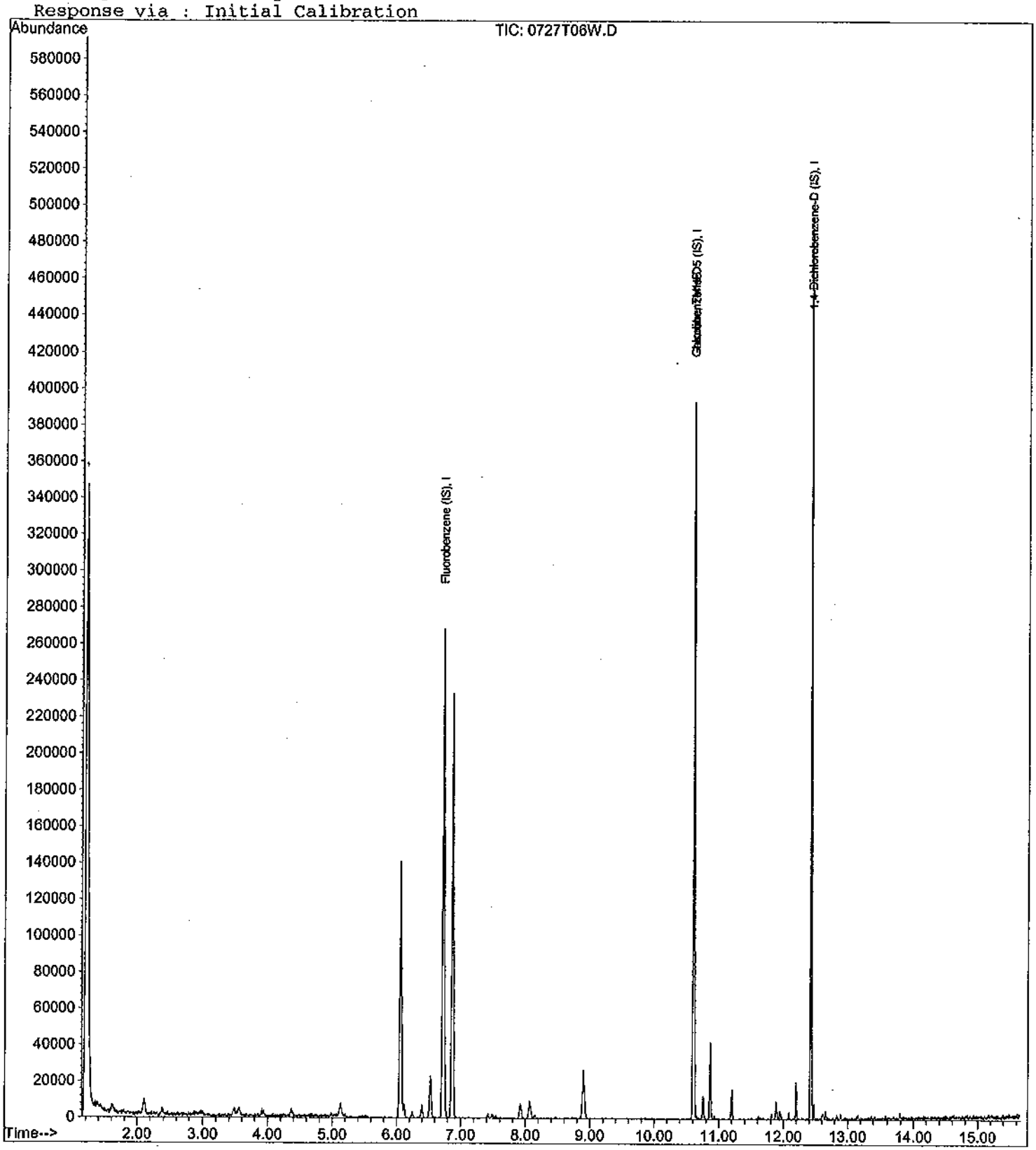
(#) = qualifier out of range (m) = manual integration
0727T06W.D TGAS.M Fri Aug 12 11:02:23 2011

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: TGAS.RES

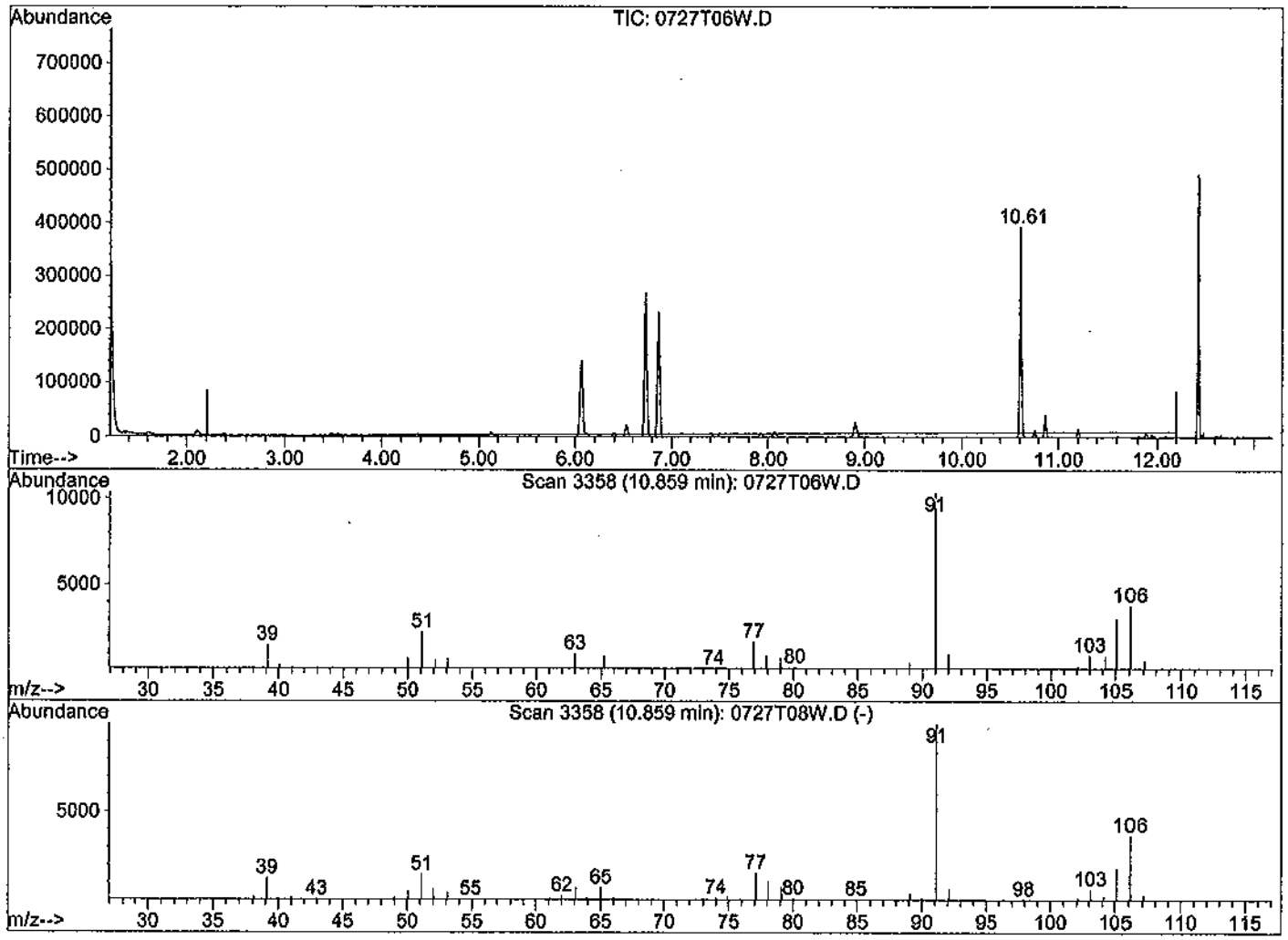
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



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

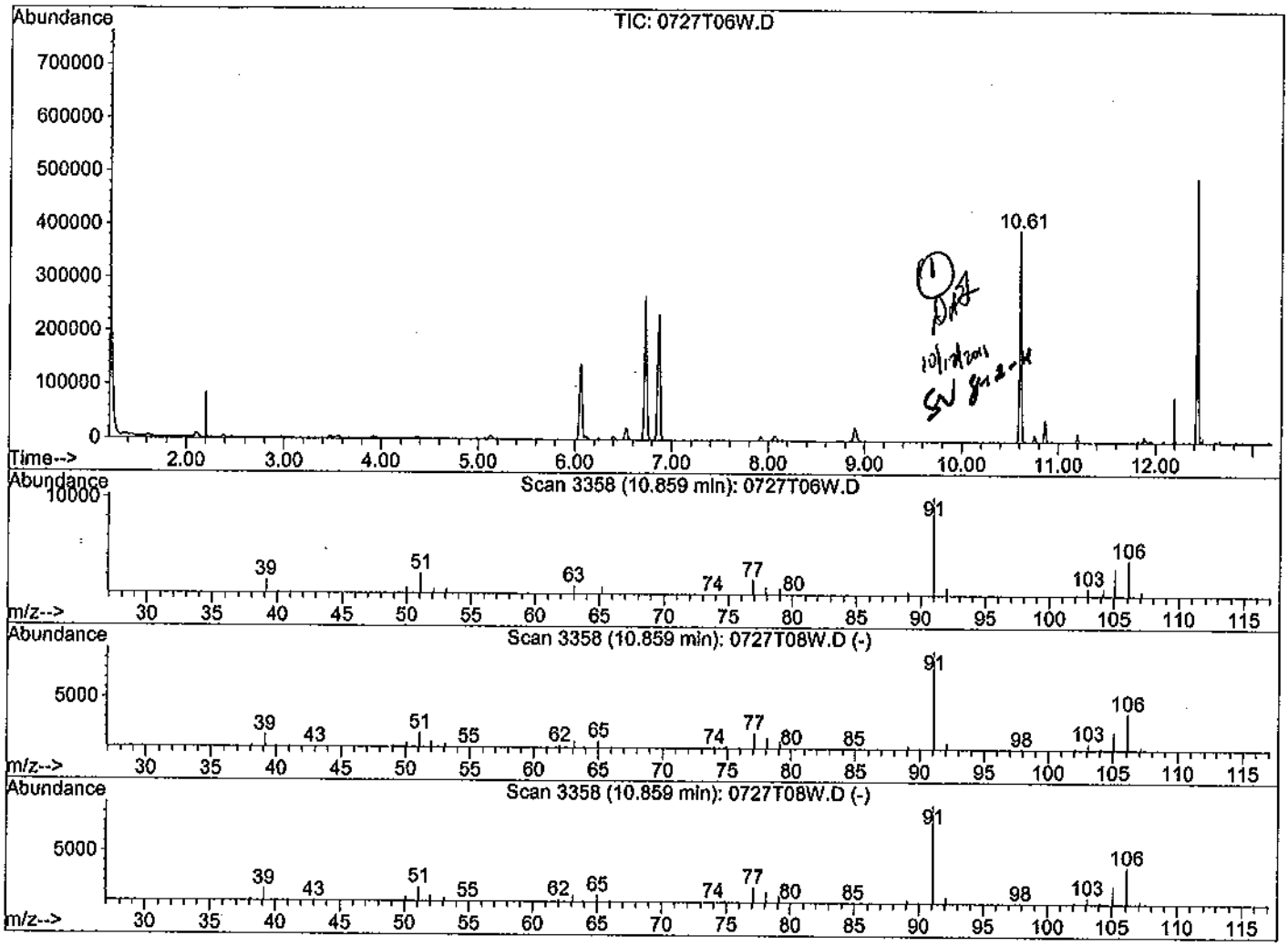
response 1320938

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	3.54#
0.00	0.00	7.27#
0.00	0.00	0.00

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

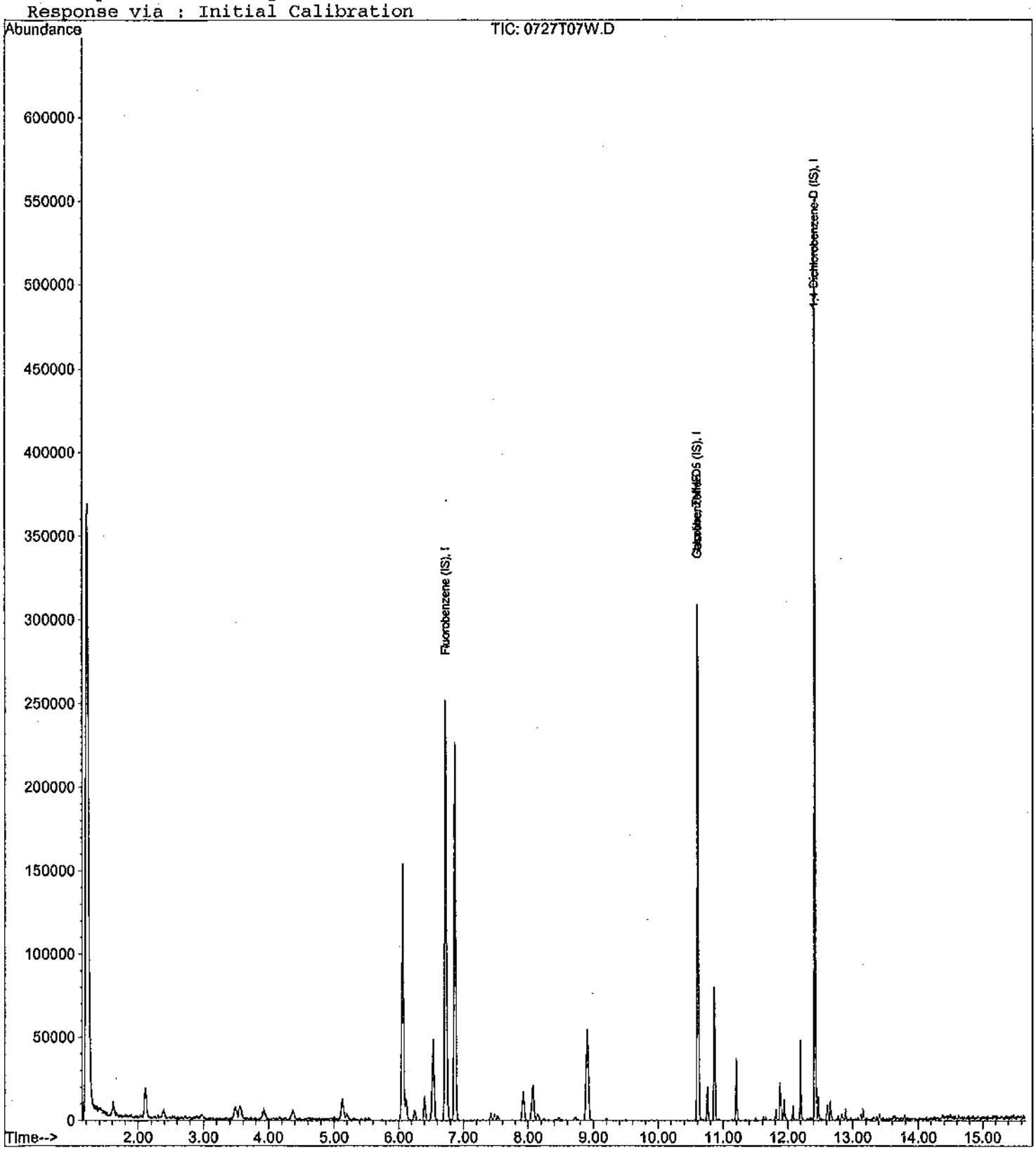
(#) = qualifier out of range (m) = manual integration

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

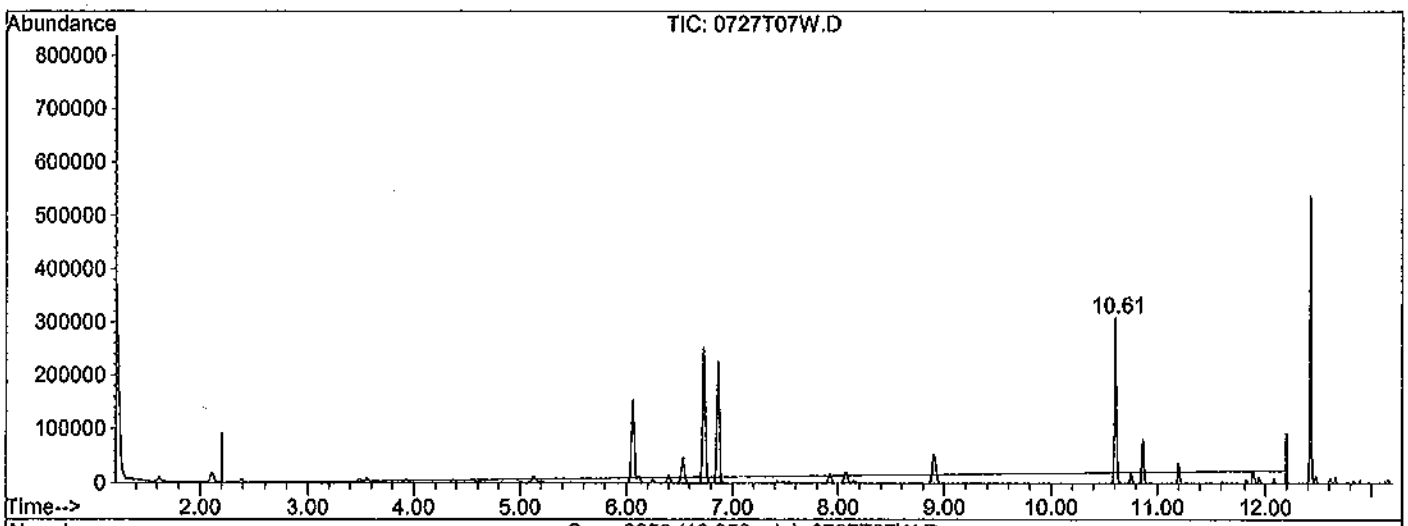
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



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

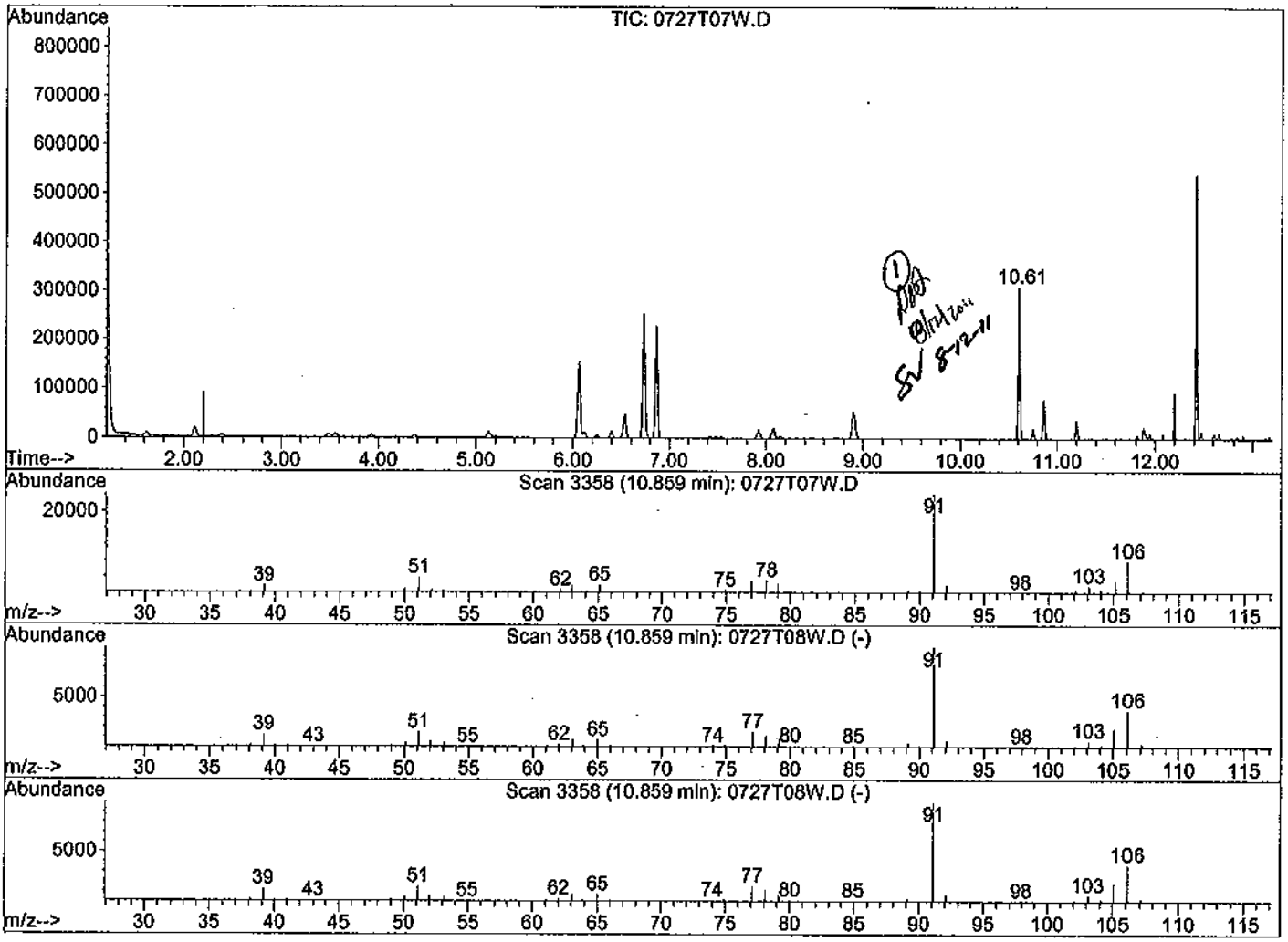
response 1764118

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	2.99#
0.00	0.00	5.91#
0.00	0.00	0.00

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

Quantitation Report (QT Reviewed)

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 10:49 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

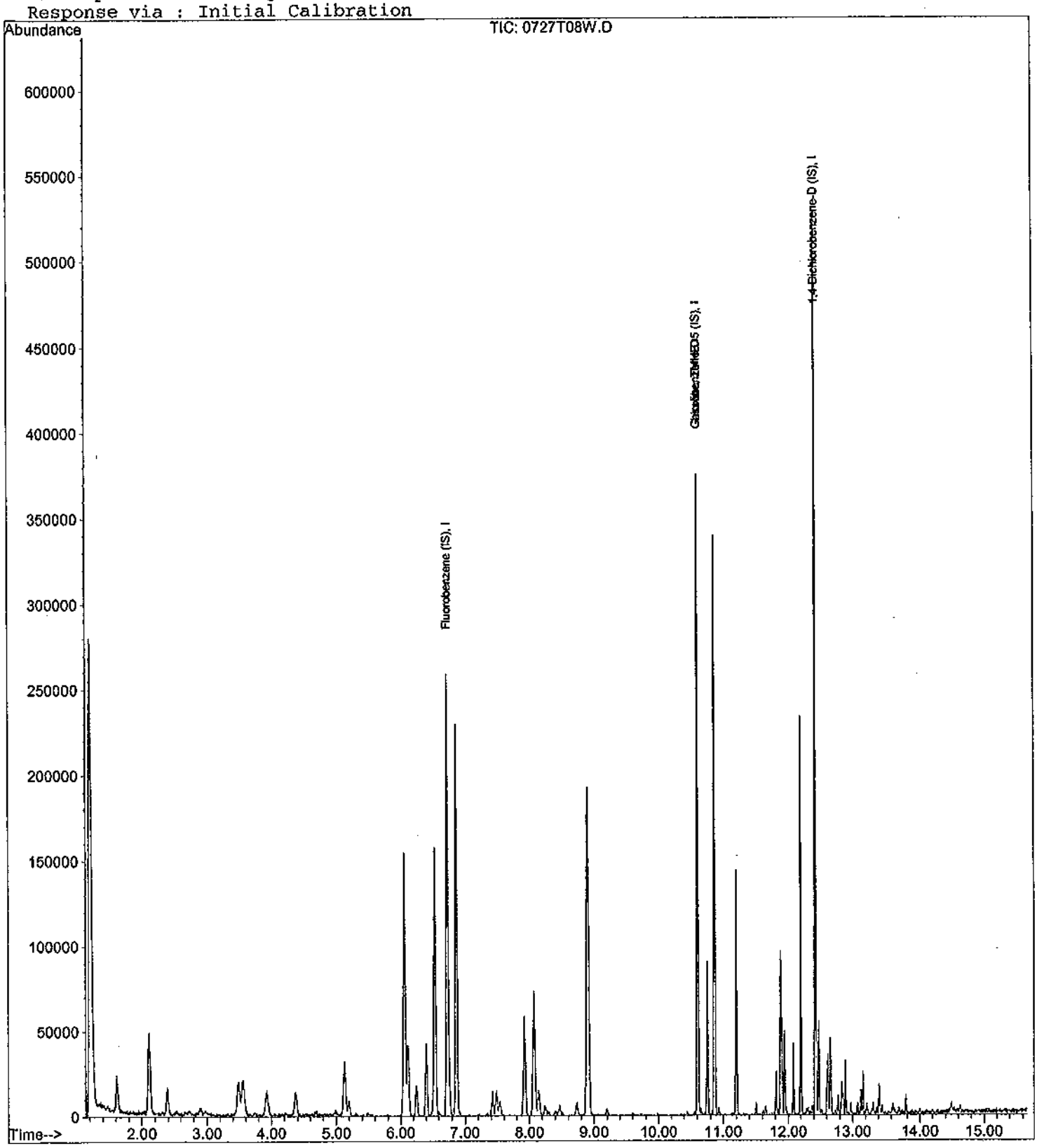
Quantitation Report

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

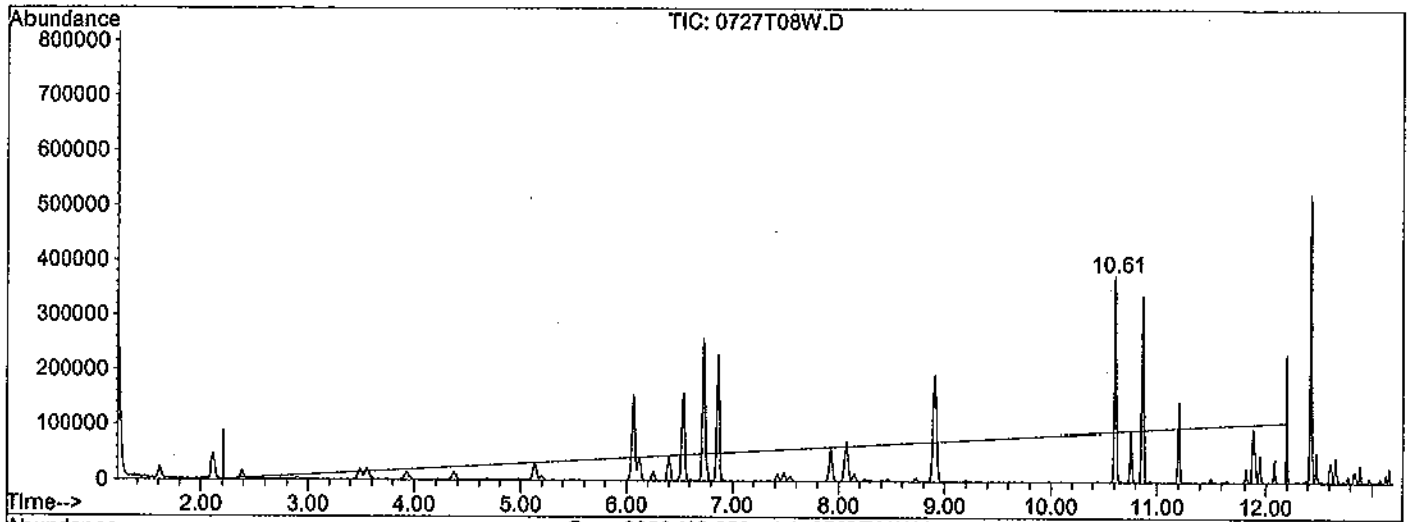
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

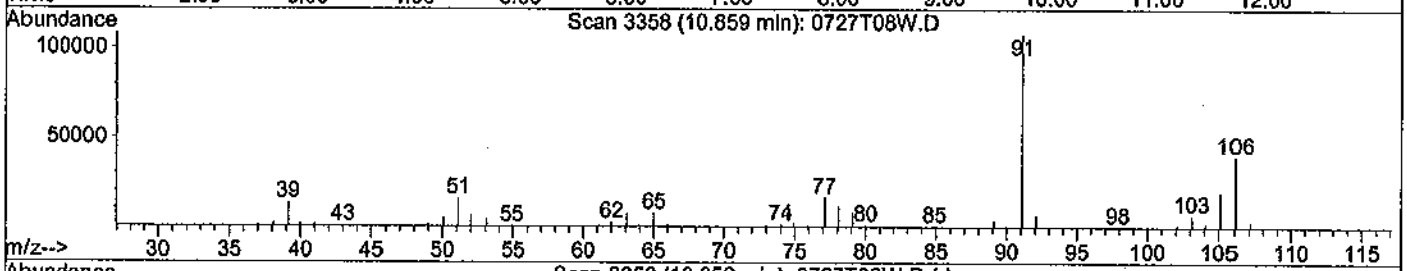


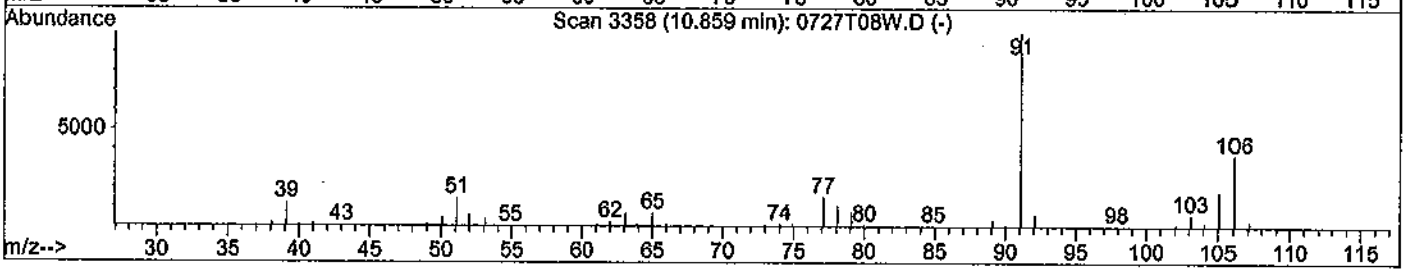
Quantitation Report

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

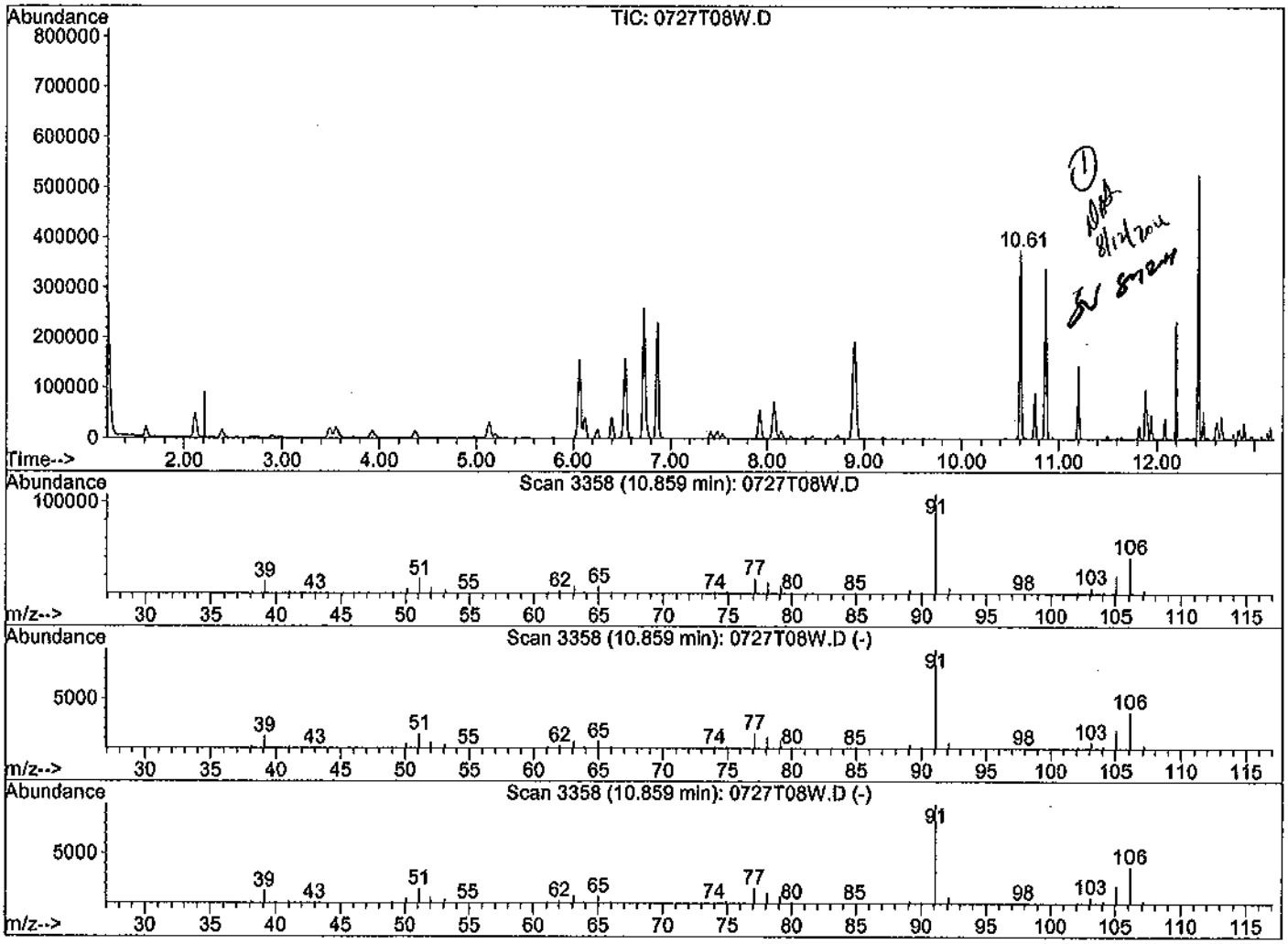
response 3792668

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	1.24#
0.00	0.00	2.71#
0.00	0.00	0.00

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 10:49 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)

10.61min 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

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

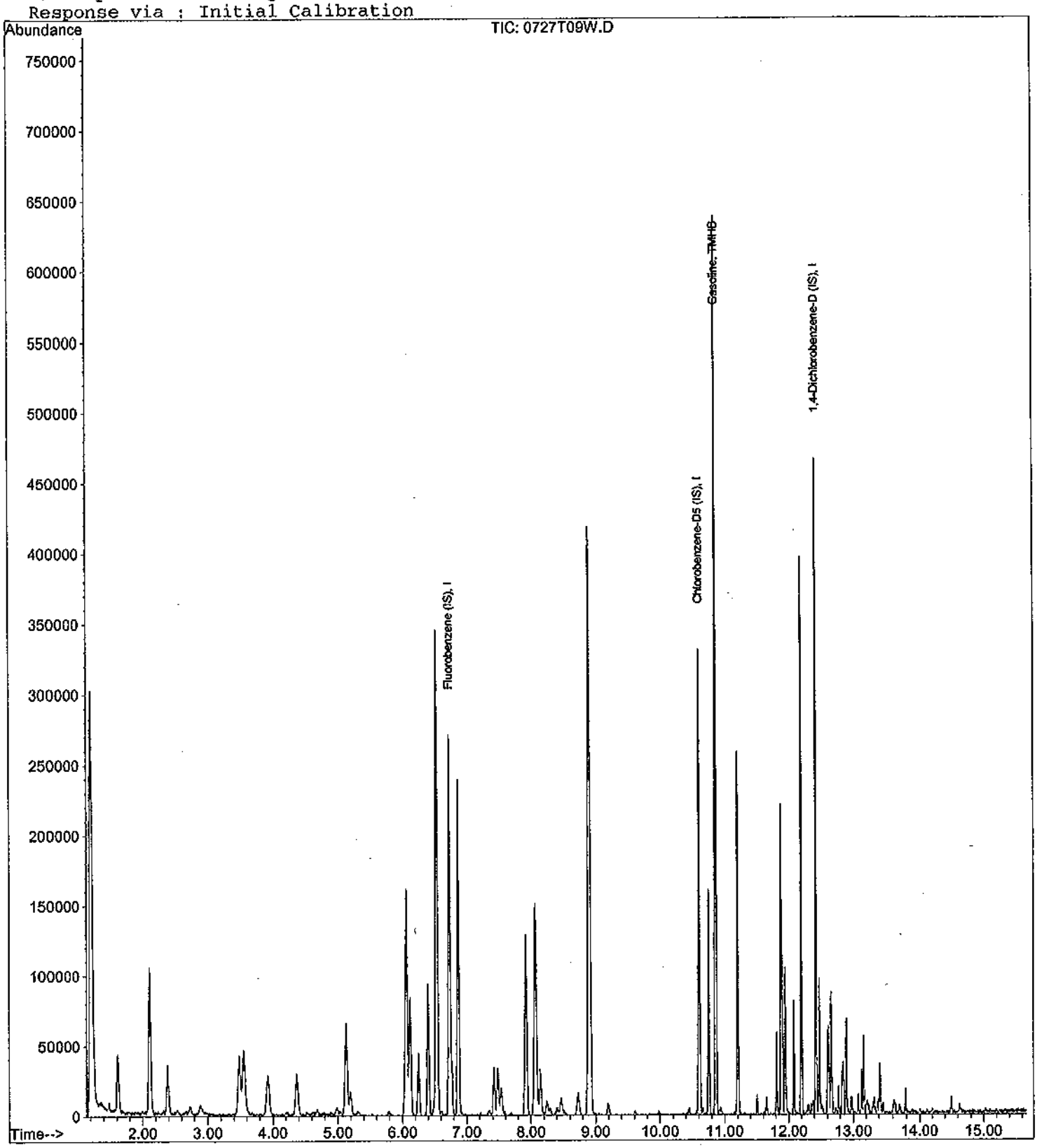
Quantitation Report

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

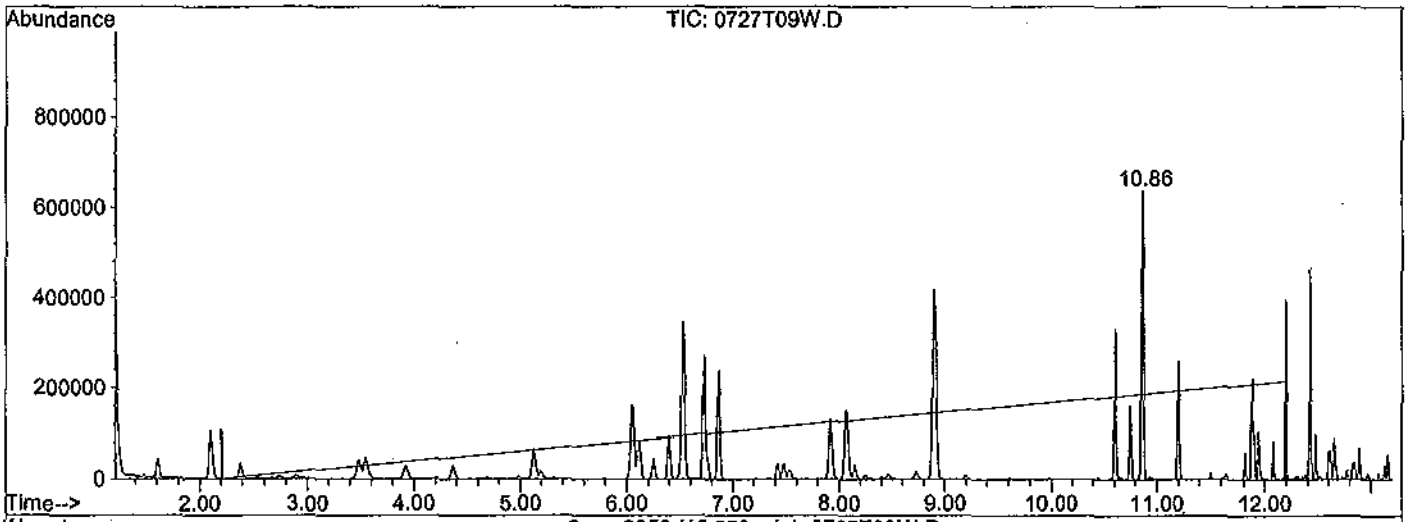
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration

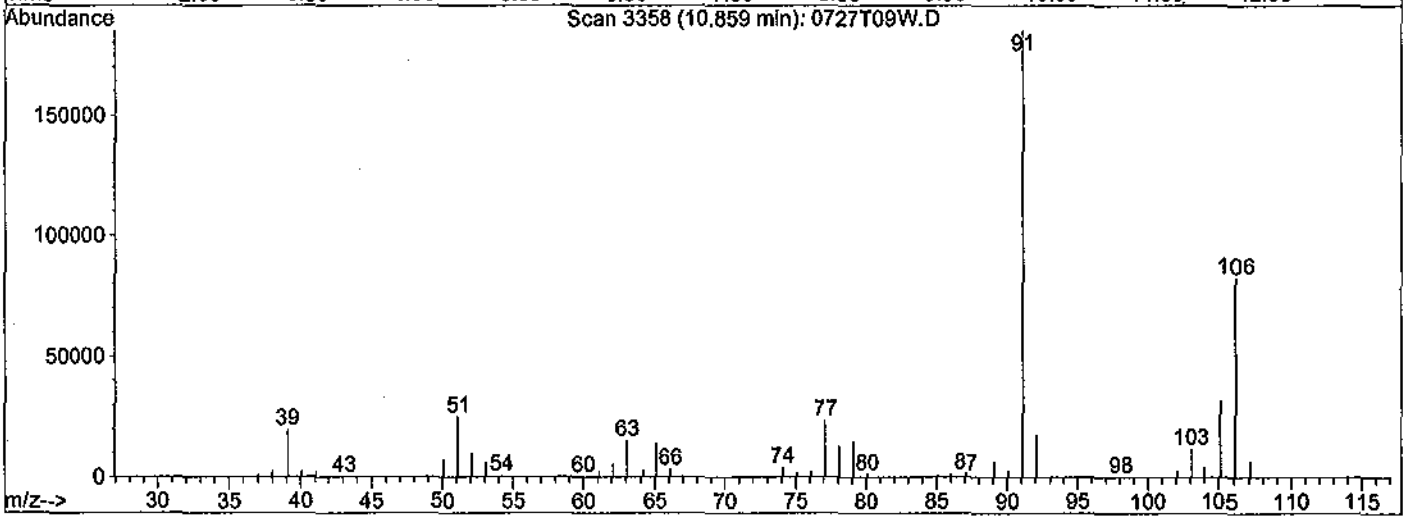


Quantitation Report

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

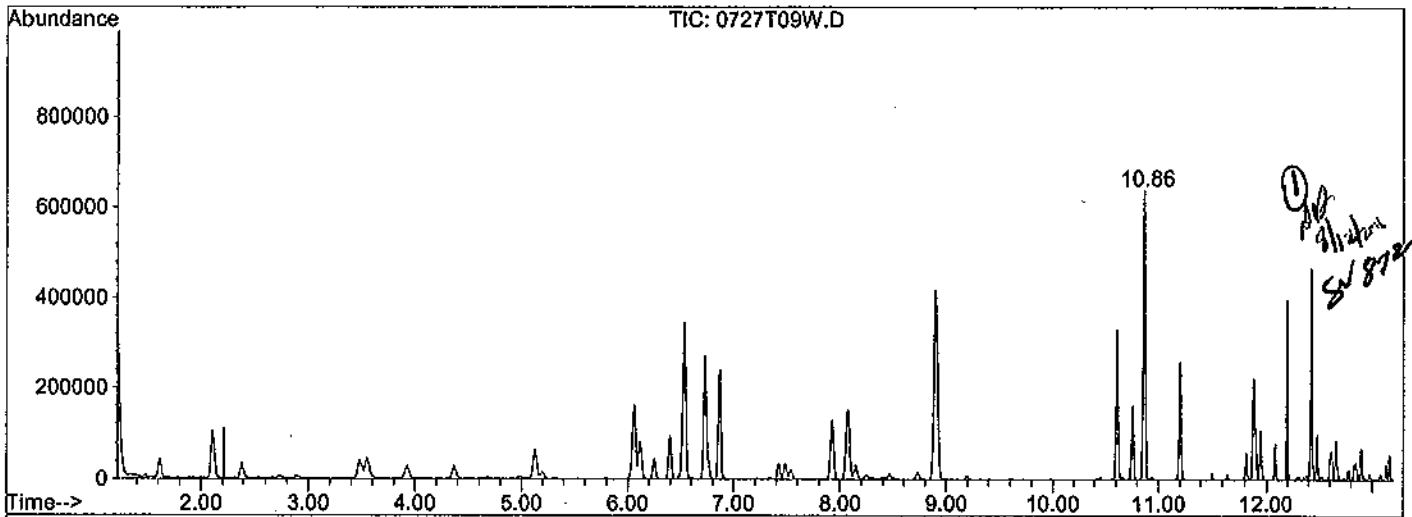
response 6955290

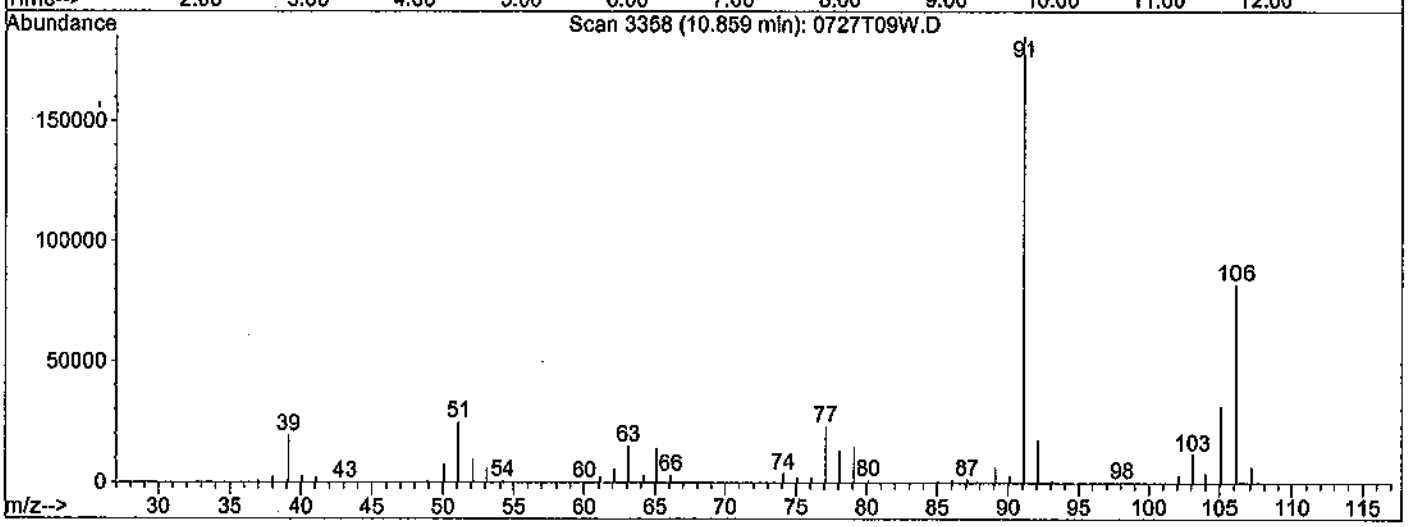
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.67#
0.00	0.00	1.32#
0.00	0.00	0.00

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

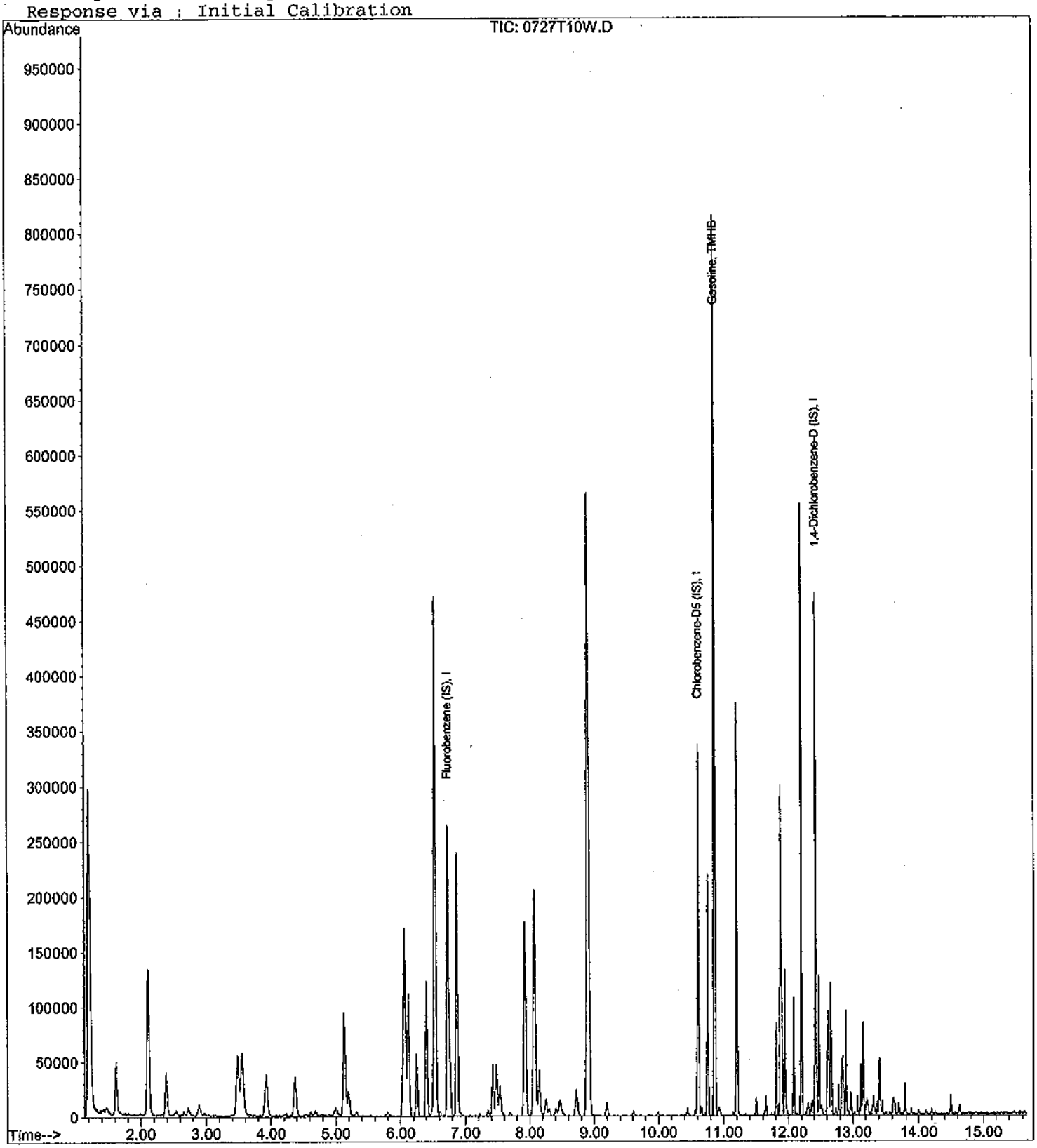
Quantitation Report

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

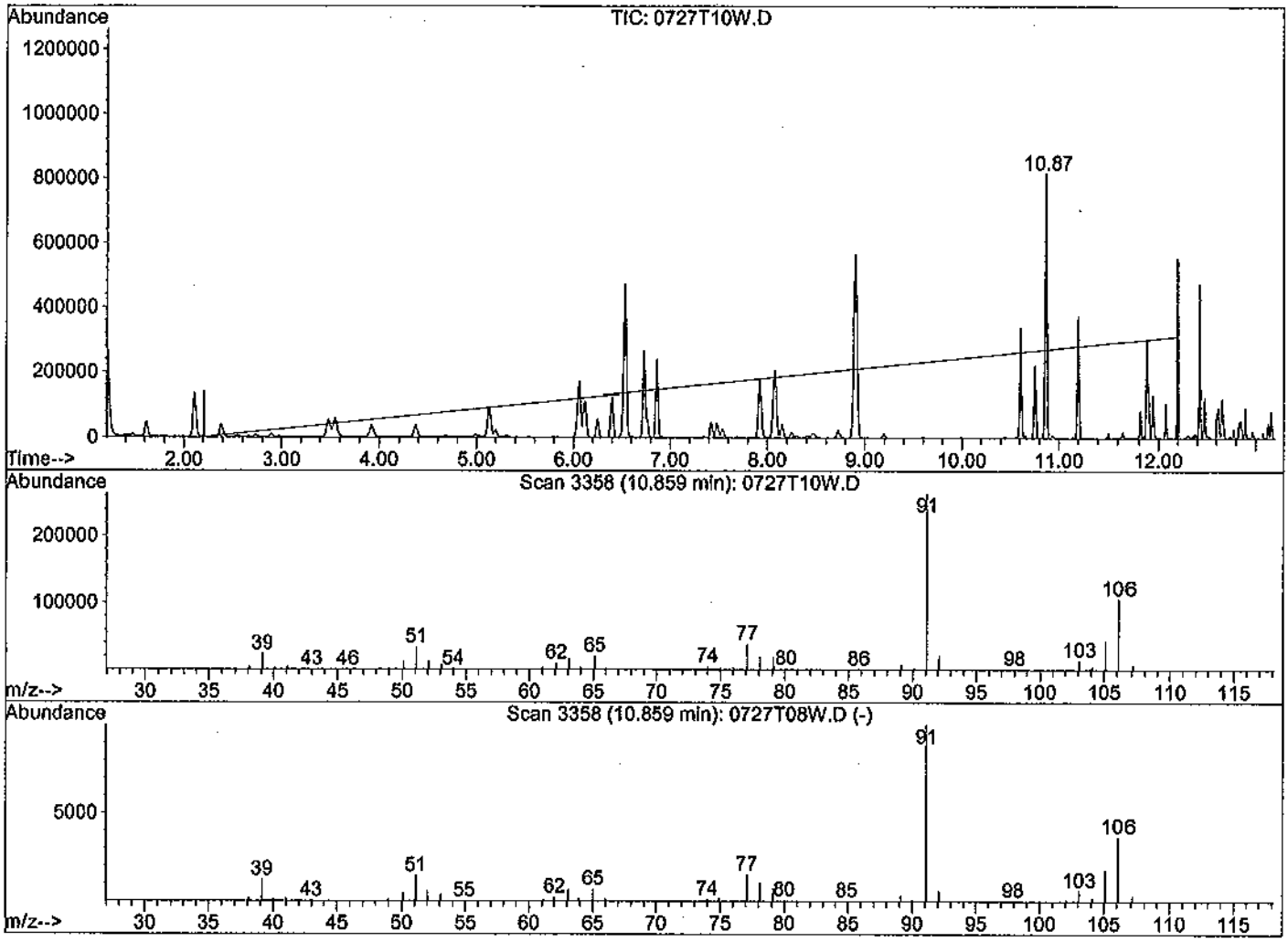
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



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

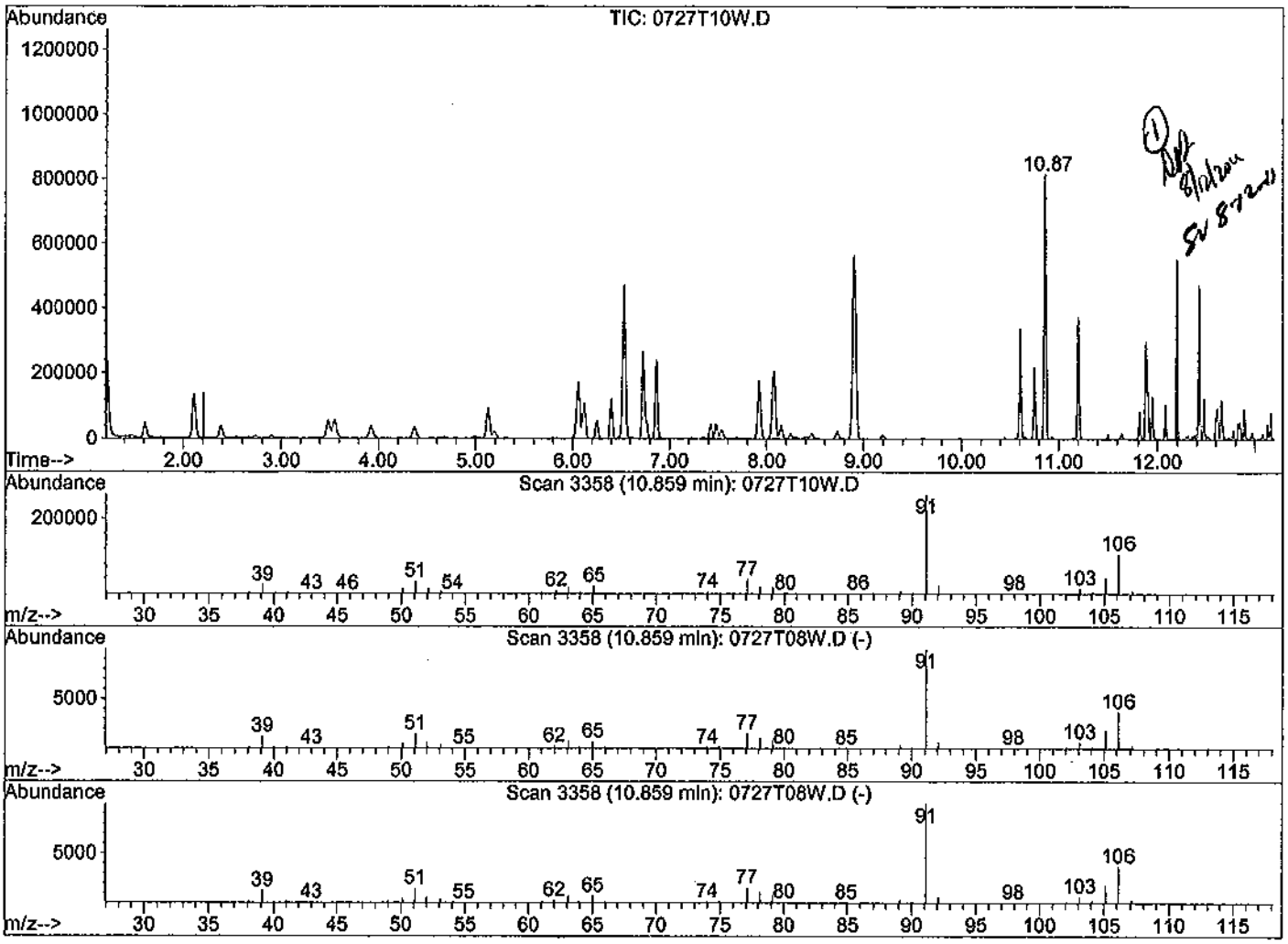
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.57#
0.00	0.00	1.12#
0.00	0.00	0.00

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

0727T10W.D TGAS.M Fri Aug 12 10:54:52 2011

Quantitation Report (QT Reviewed)

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

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

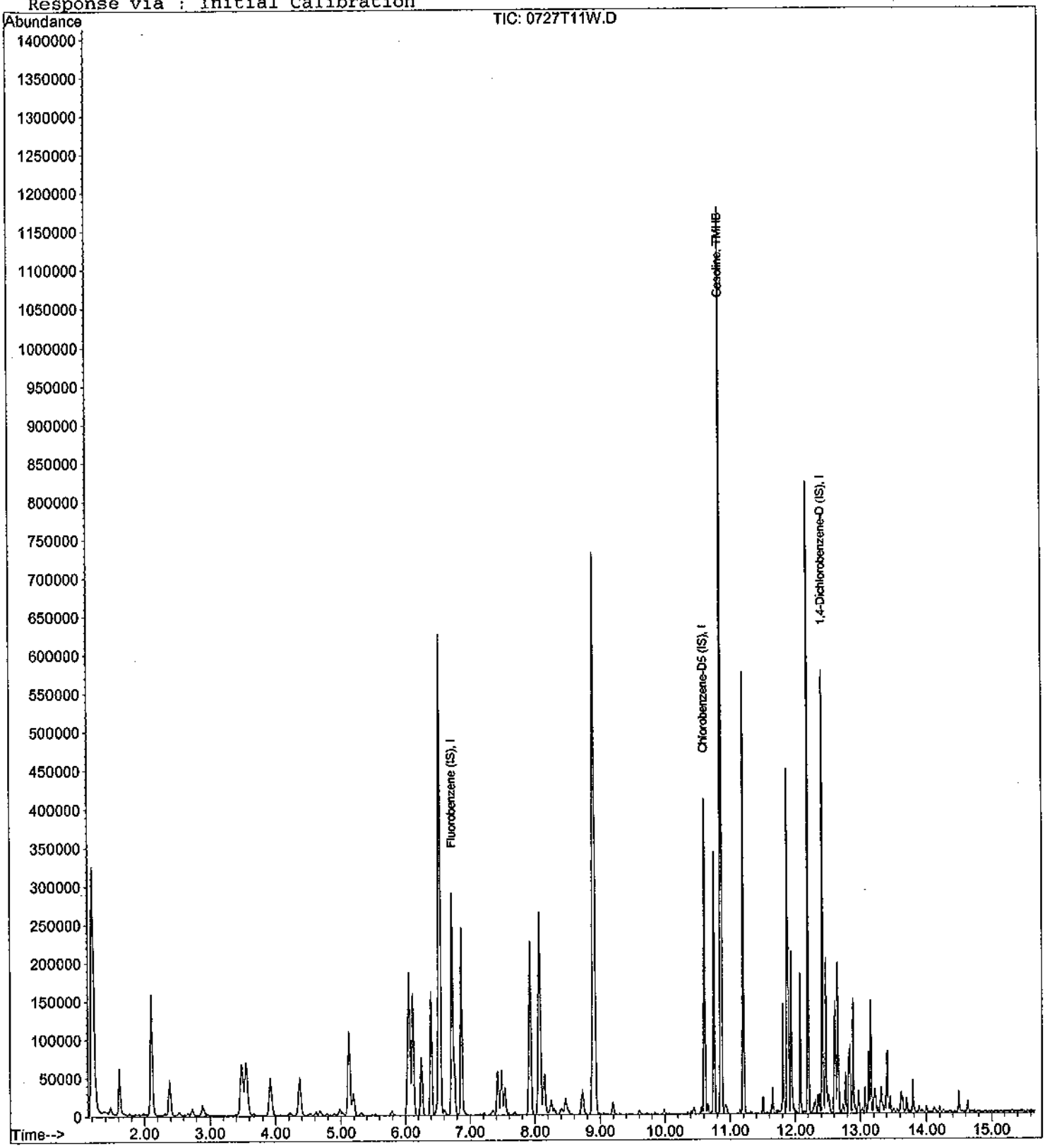
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T11W.D
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

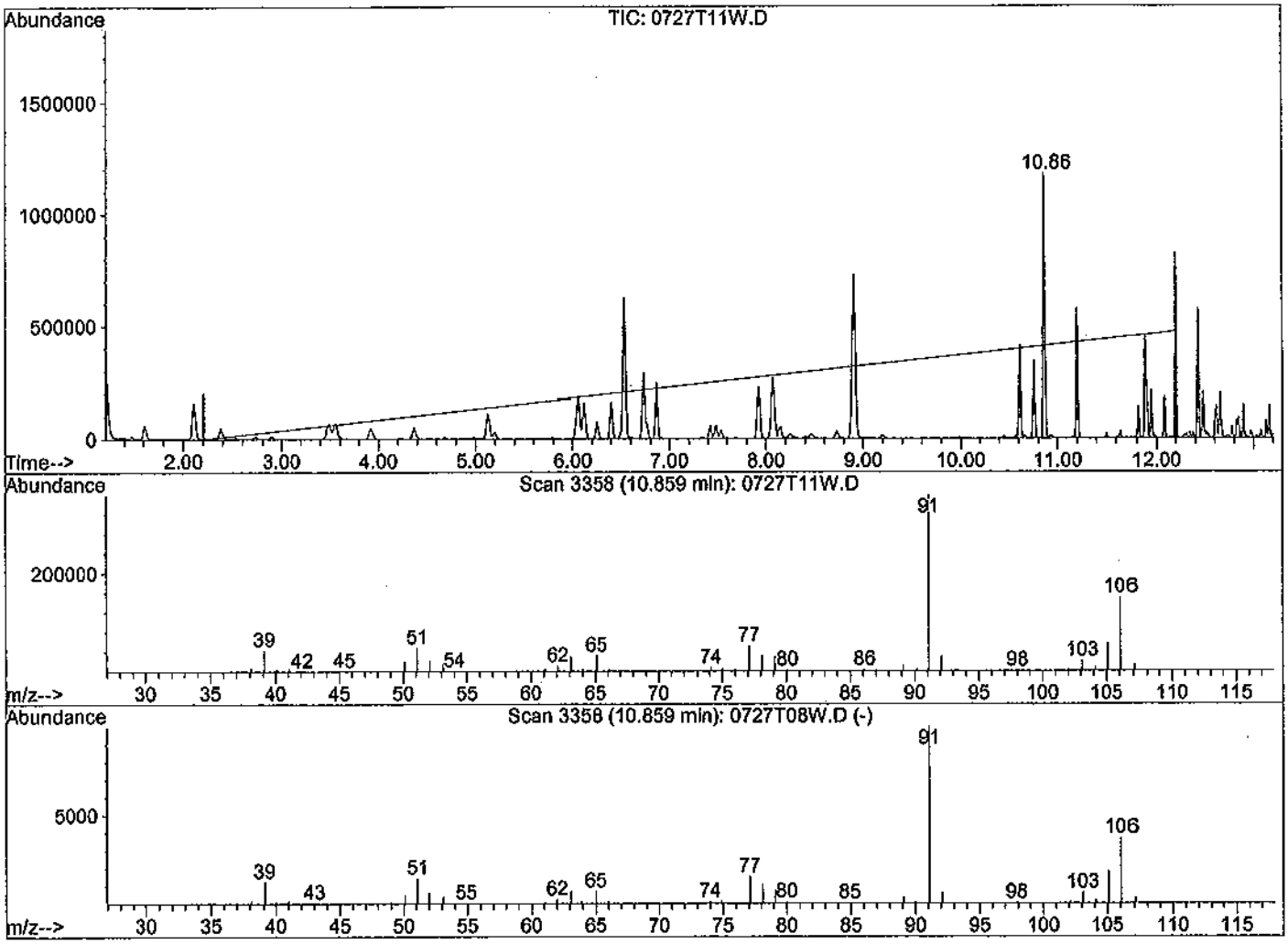
Method : M:\THOR\DATA\T110727\TGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 10:55:32 2011
Response via : Initial Calibration



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

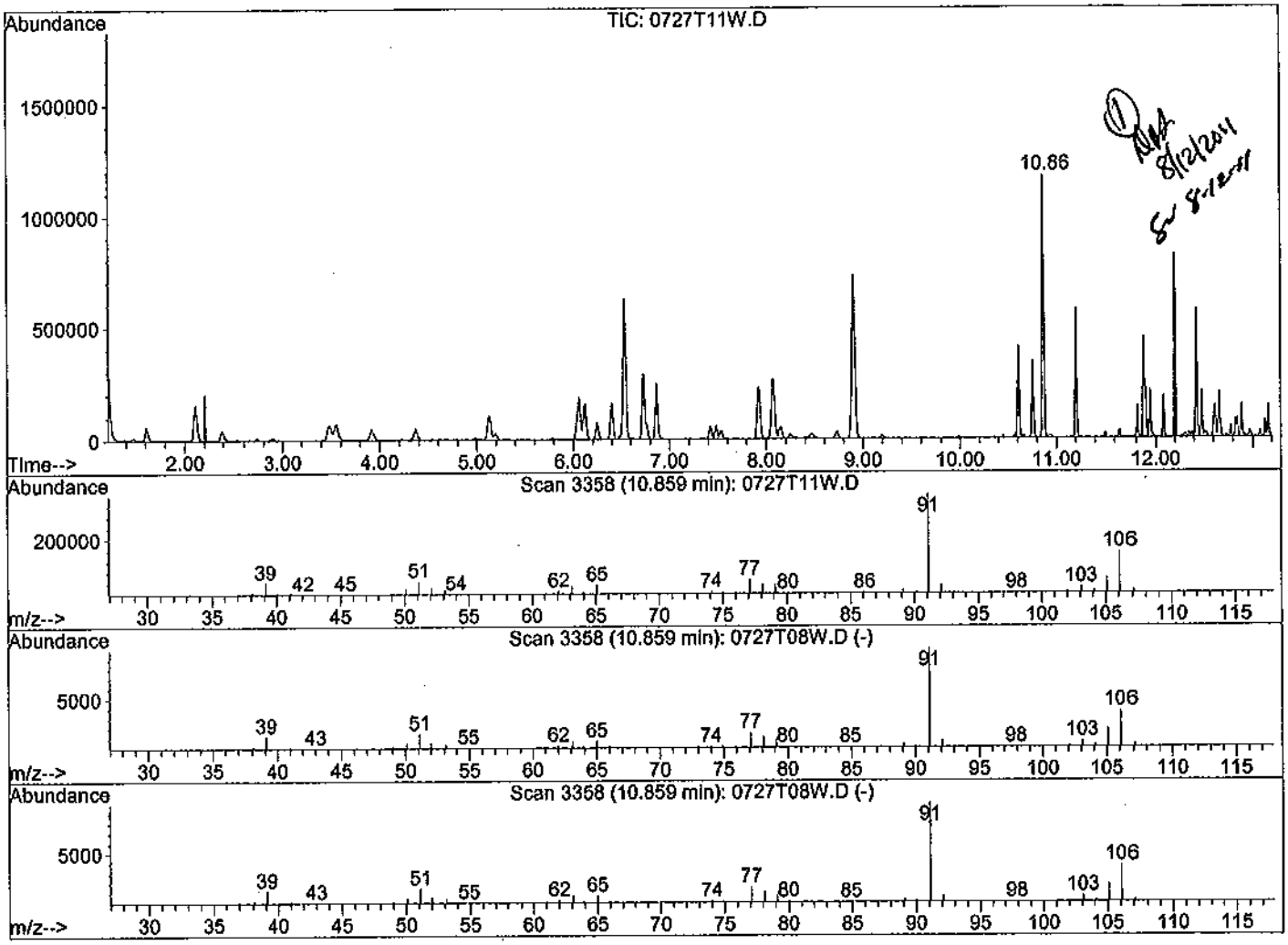
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.46#
0.00	0.00	0.90#
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T11W.D
Acq On : 27 Jul 11 14:42
Sample : Vol Std 07-27-11@1000ug/L
Misc : 10ml w/5ul of IS: 07-26-11
Quant Time: Aug 12 10:55 2011

Vial: 11
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: 0727T11W.D

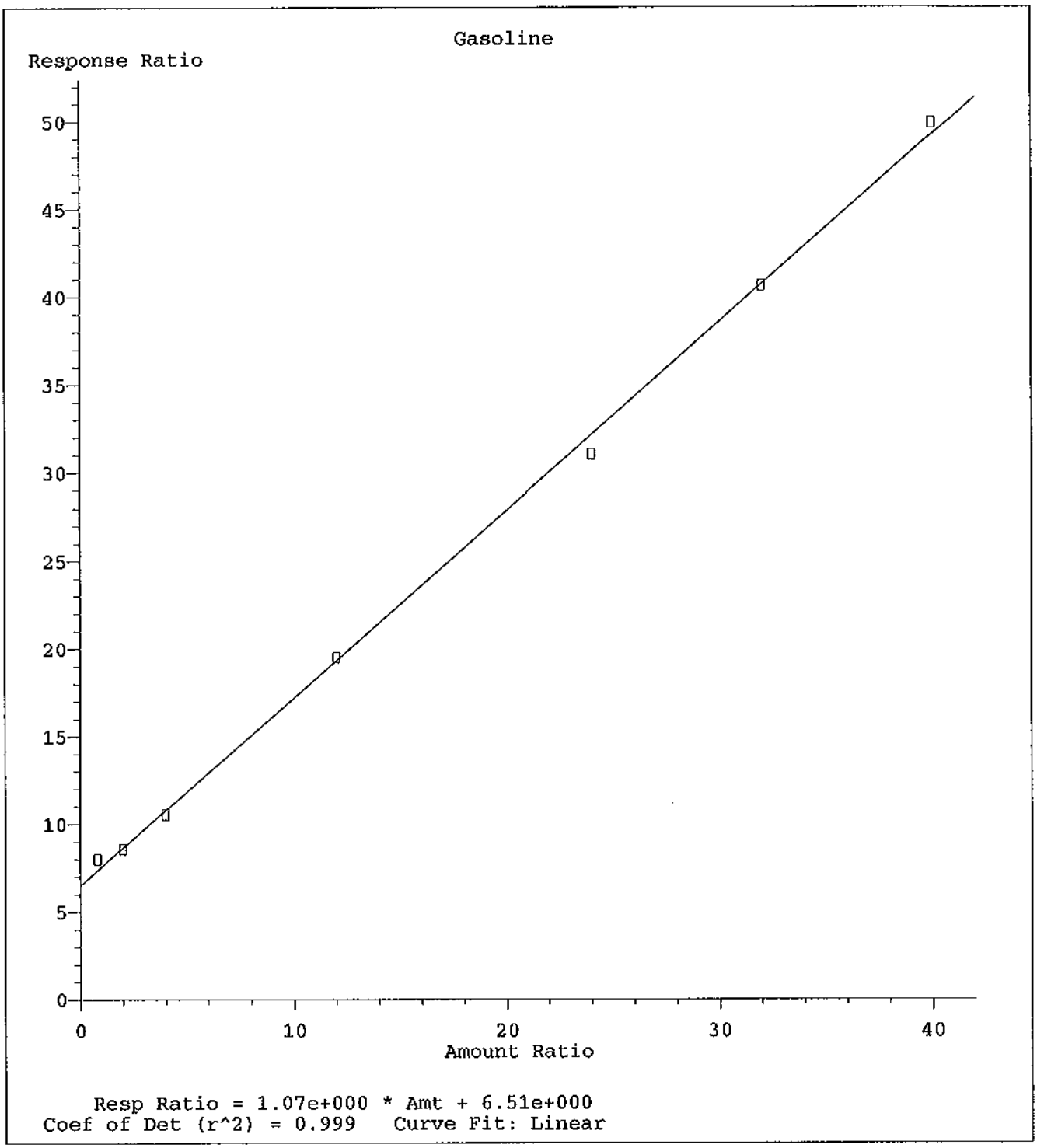
(2) Gasoline (TMHB)

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

0727T11W.D TGAS.M Fri Aug 12 10:55:17 2011



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. SDG No: 65208
Case No: Date Analyzed: 07/28/11
Matrix: Water 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							
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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

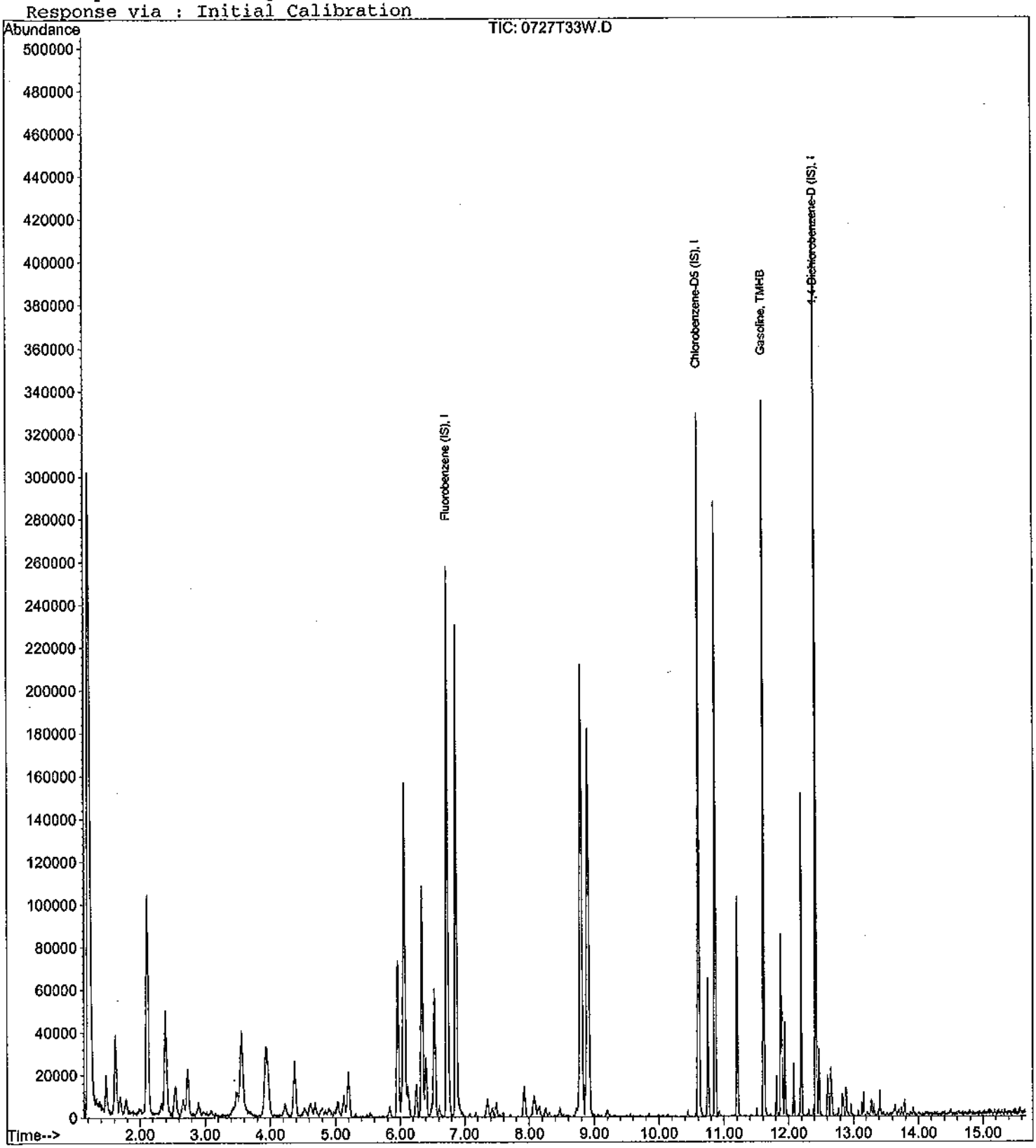
Quantitation Report

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

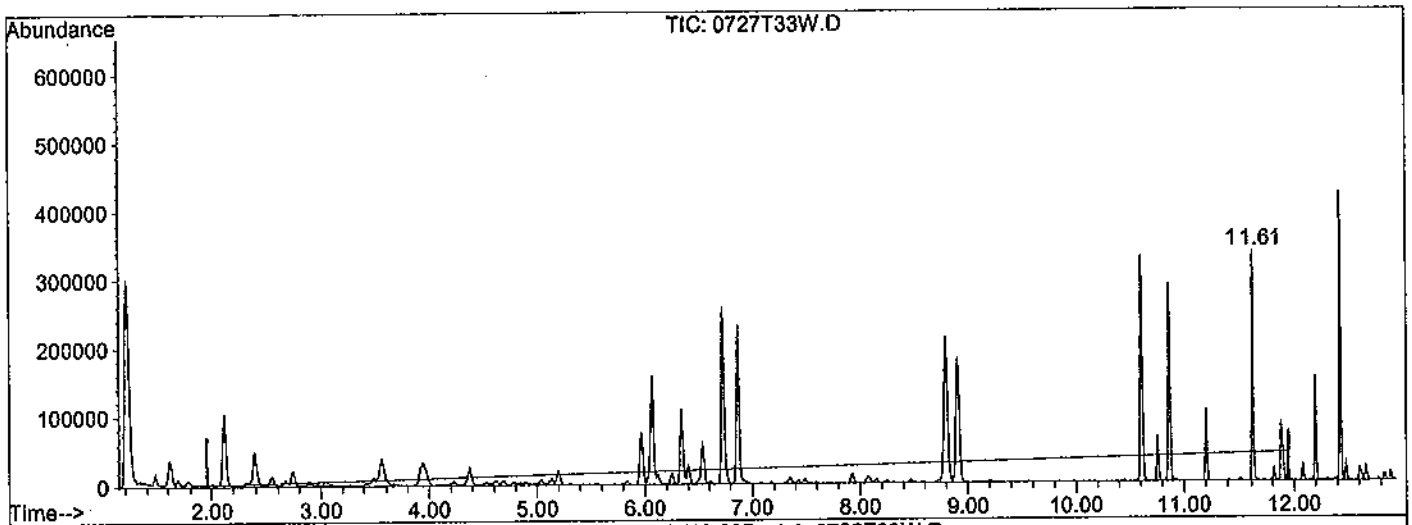


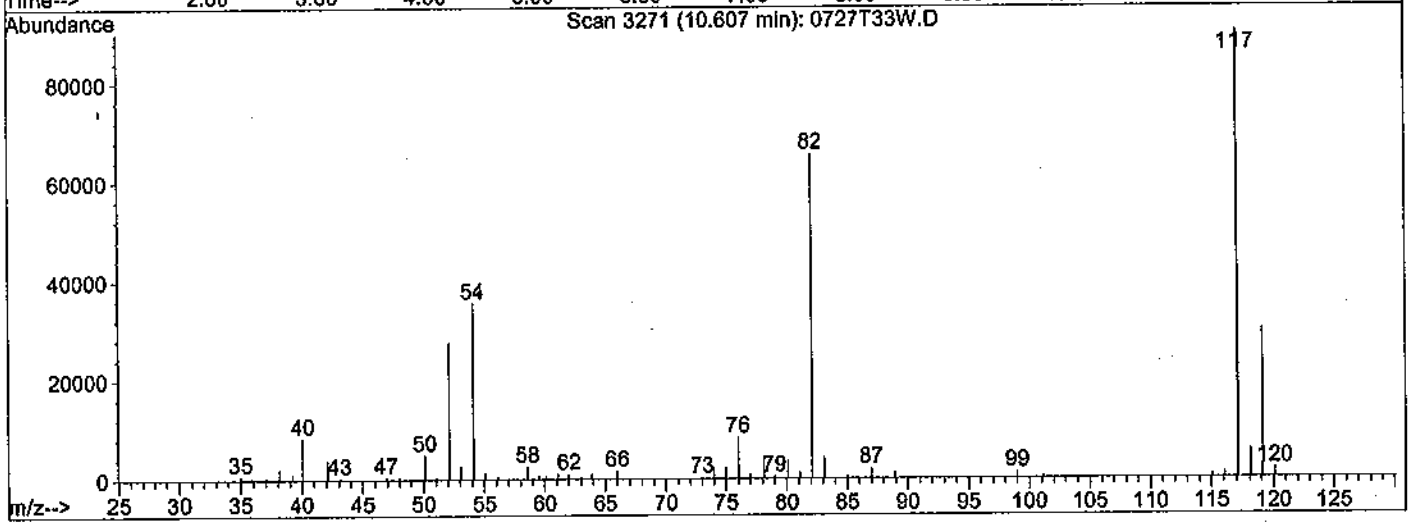
Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T33W.D
Acq On : 28 Jul 11 00:13
Sample : Gas 300ug/L (SS)
Misc : 10ml w/5ul of IS&S: 07-26-11
Quant Time: Aug 12 10:58 2011

Vial: 33
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 10:55:32 2011
Response via : Multiple Level Calibration





TIC: 0727T33W.D

(2) Gasoline (TMHB)

10.61min 277.7618ppb m

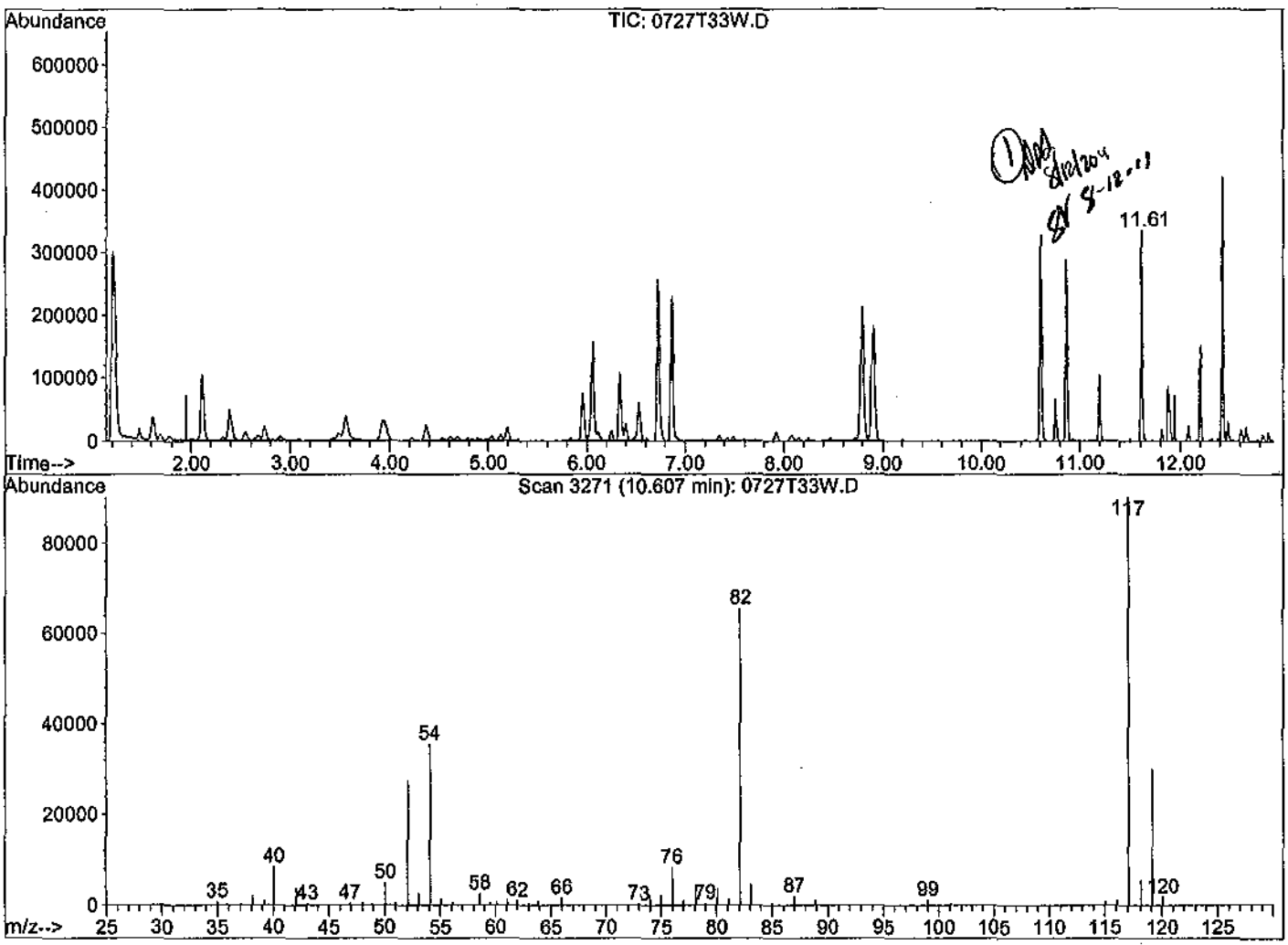
response 4739437

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

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 65208
Case No: Initial Cal. Date: 08/11/11
Matrix: Water Instrument: Hewey
Initials:

			0811H09W.D	0811H10W.D	0811H11W.D	0811H12W.D	0811H13W.D	0811H14W.D	0811H15W.D							
		Compound	20	50	100	300	600	800	1000				Avg	%RSD		
1	I	Fluorobenzene (IS)	ISTD													
2	TMHBL	Gasoline	17.5	8.327	4.982	2.518	2.287	1.980	2.104				5.7	101	TMHBL	0.992
3	I	Chlorobenzene-D5 (IS)	ISTD													
4	I	1,4-Dichlorobenzene-D (IS)	ISTD													
5																
6																
7																
8																
9																
10																
11																
12																
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35																

Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H09W.D Vial: 9
Acq On : 11 Aug 11 23:47 Operator: SV
Sample : Vol Std 08-11-11@20ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:06 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	954874	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	990687	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	997124	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	16.69	TIC	13401753m	176.10070	ppb	100

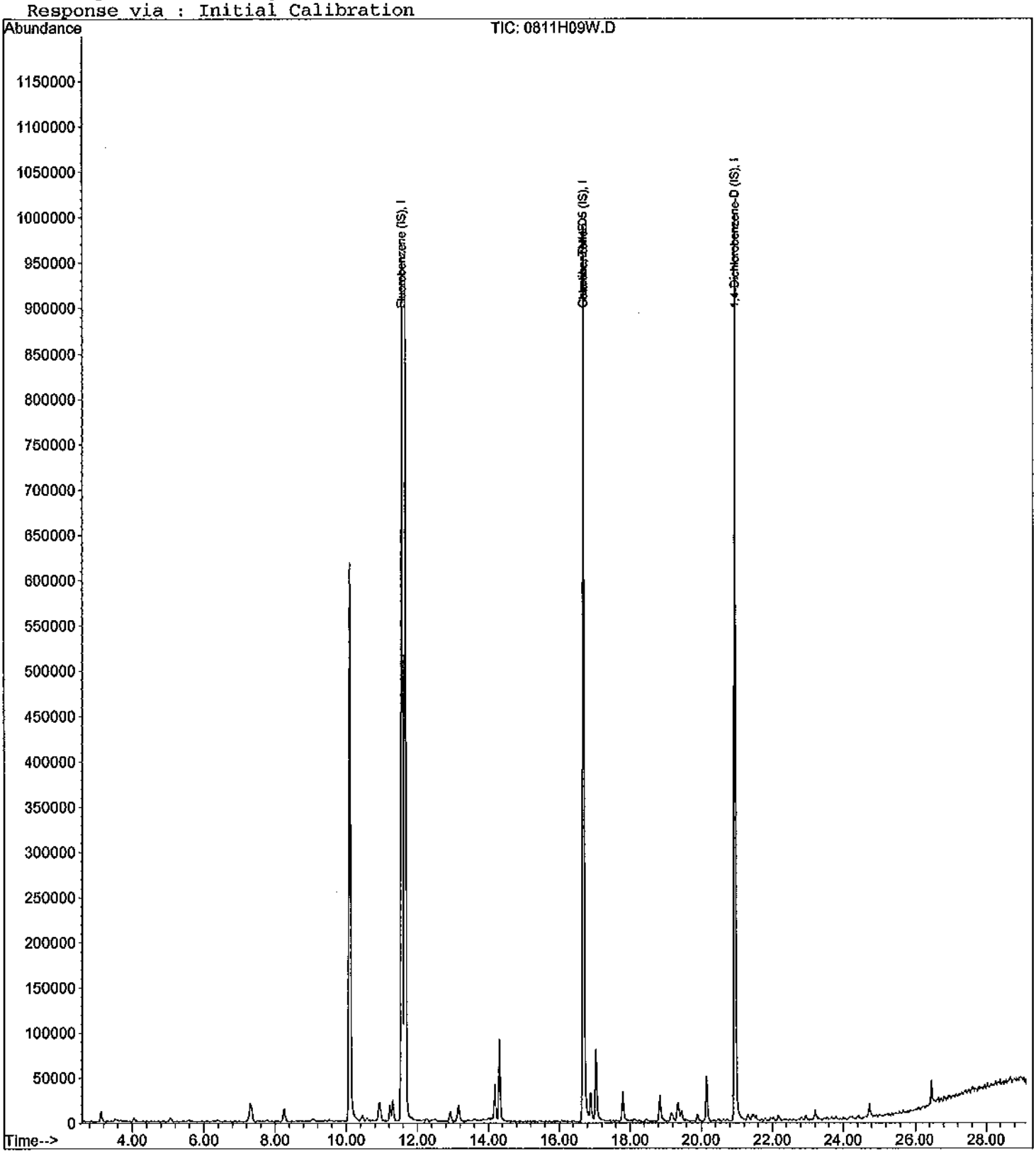
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H09W.D Vial: 9
Acq On : 11 Aug 11 23:47 Operator: SV
Sample : Vol Std 08-11-11@20ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:06 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H10W.D Vial: 10
Acq On : 12 Aug 11 00:23 Operator: SV
Sample : Vol Std 08-11-11@50ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:01 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	961452	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1040459	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	1056874	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	16.69	TIC	16012710m	237.43181	ppb	100

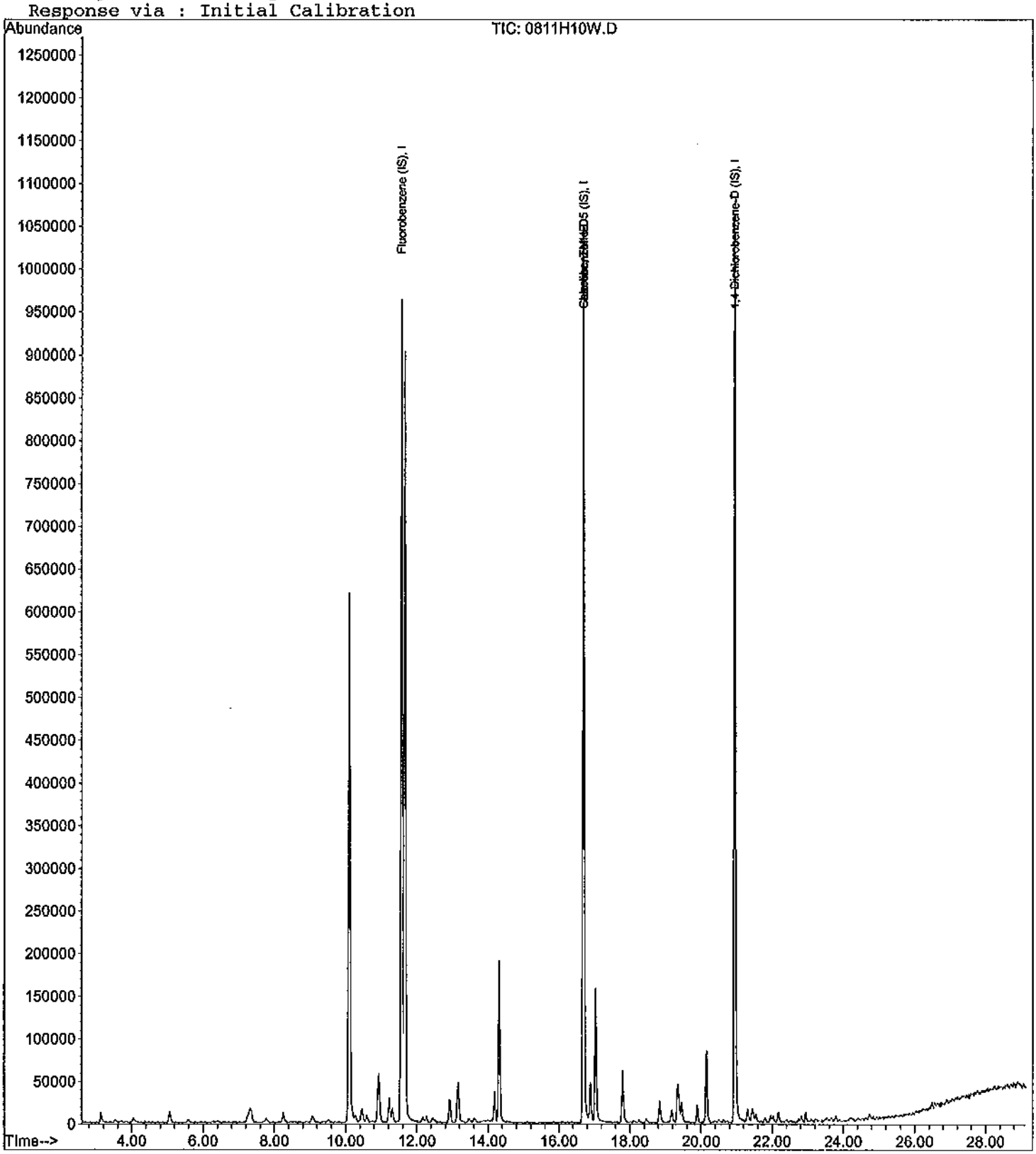
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H10W.D Vial: 10
Acq On : 12 Aug 11 00:23 Operator: SV
Sample : Vol Std 08-11-11@50ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:01 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H11W.D Vial: 11
Acq On : 12 Aug 11 1:00 Operator: SV
Sample : Vol Std 08-11-11@100ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:01 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	965043	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1041169	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	1060675	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	16.69	TIC	19233200m	314.11101	ppb	100

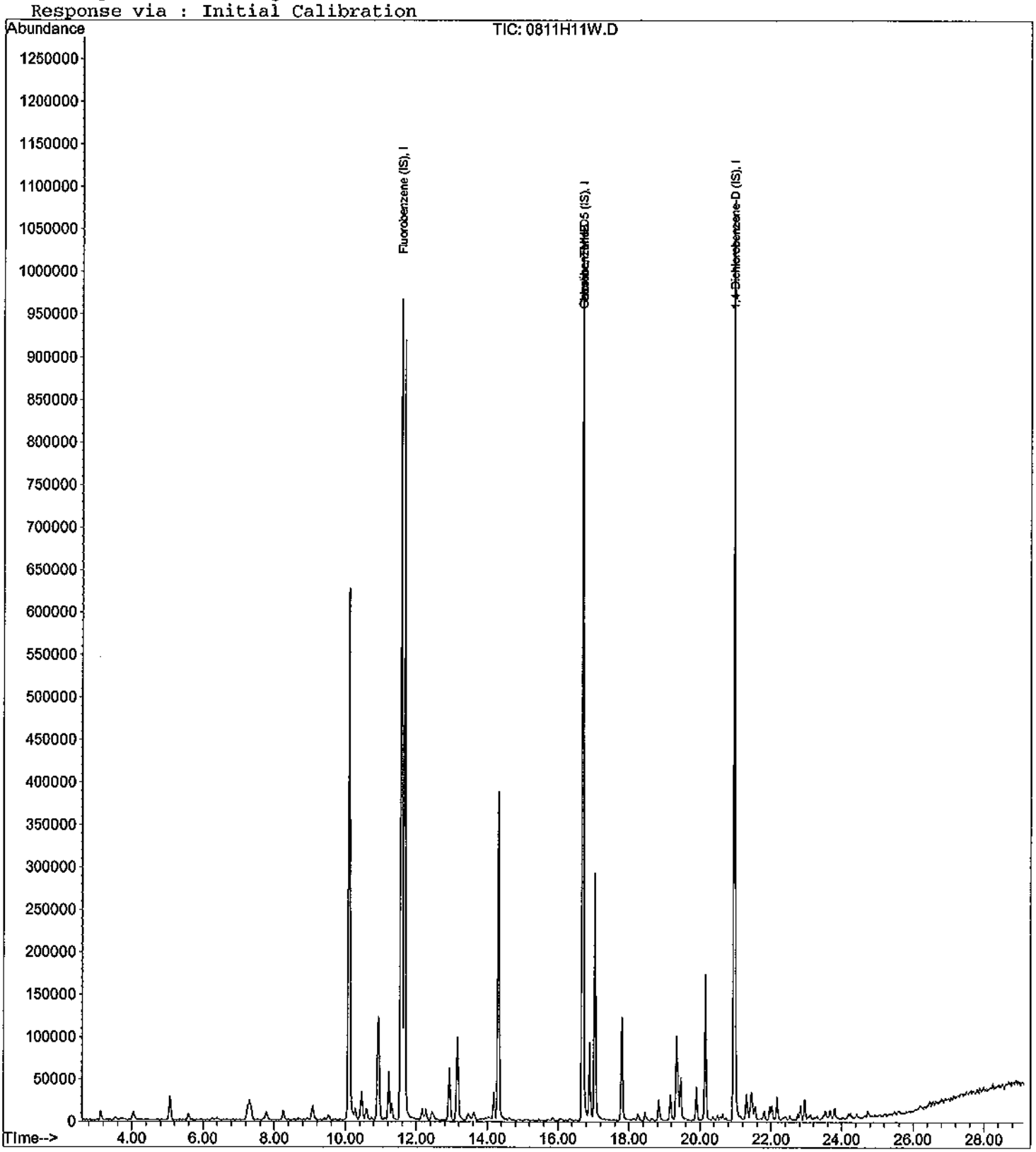
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H11W.D Vial: 11
Acq On : 12 Aug 11 1:00 Operator: SV
Sample : Vol Std 08-11-11@100ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:01 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H12W.D Vial: 12
Acq On : 12 Aug 11 1:37 Operator: SV
Sample : Vol Std 08-11-11@300ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:00 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	988023	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1042619	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.96	TIC	1084558	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.31	TIC	29857704m	555.01745	ppb	100

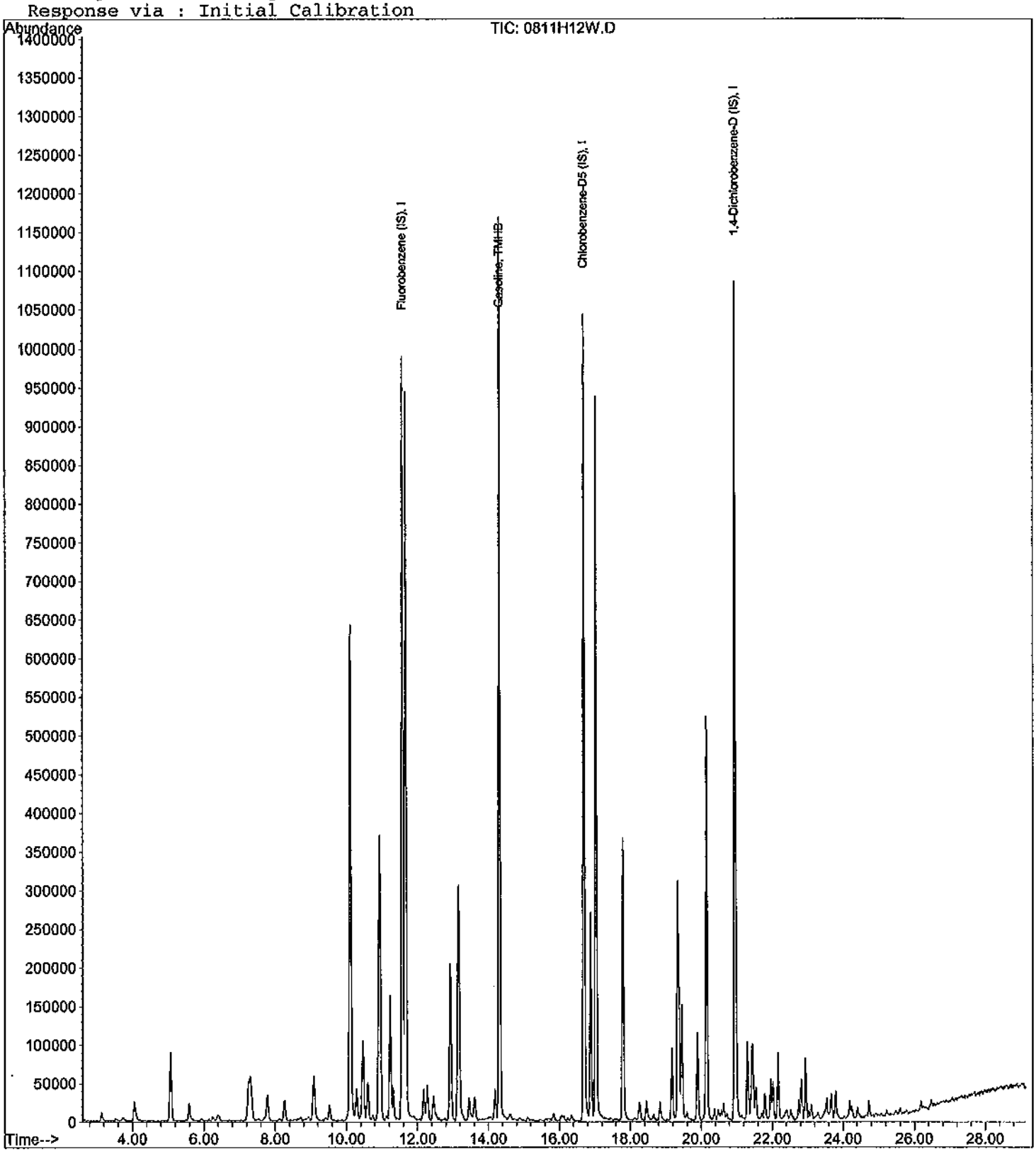
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H12W.D Vial: 12
Acq On : 12 Aug 11 1:37 Operator: SV
Sample : Vol Std 08-11-11@300ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:00 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H13W.D Vial: 13
Acq On : 12 Aug 11 2:14 Operator: SV
Sample : Vol Std 08-11-11@600ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:02 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.58	TIC	961693	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.70	TIC	1039933	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	1179878	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.31	TIC	52794680m	1132.78519	ppb	100

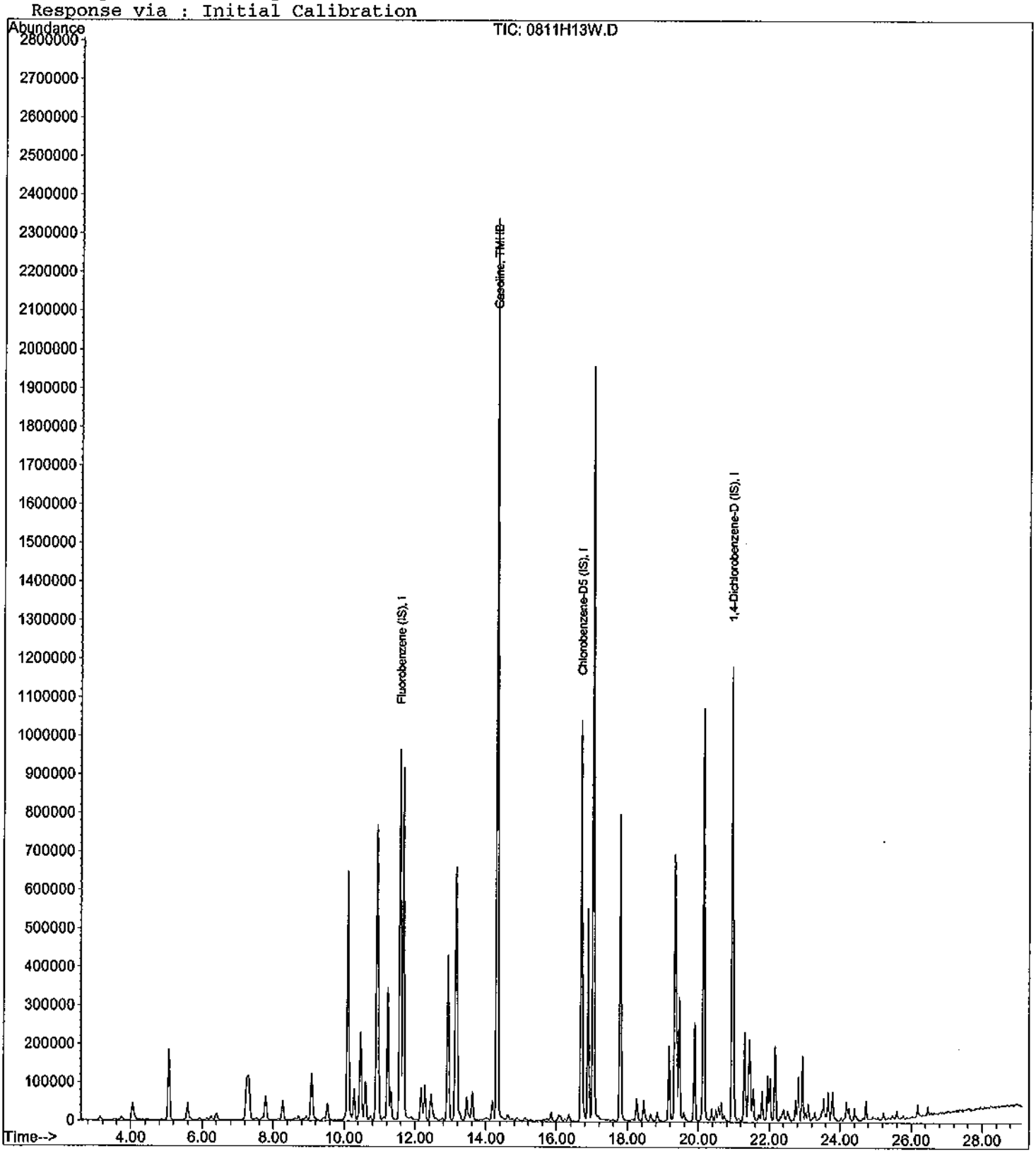
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H13W.D Vial: 13
Acq On : 12 Aug 11 2:14 Operator: SV
Sample : Vol Std 08-11-11@600ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:02 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H14W.D Vial: 14
Acq On : 12 Aug 11 2:50 Operator: SV
Sample : Vol Std 08-11-11@800ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:08 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	1100180	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1177082	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.96	TIC	1282239	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.32	TIC	69698548m	1330.71959	ppb	100

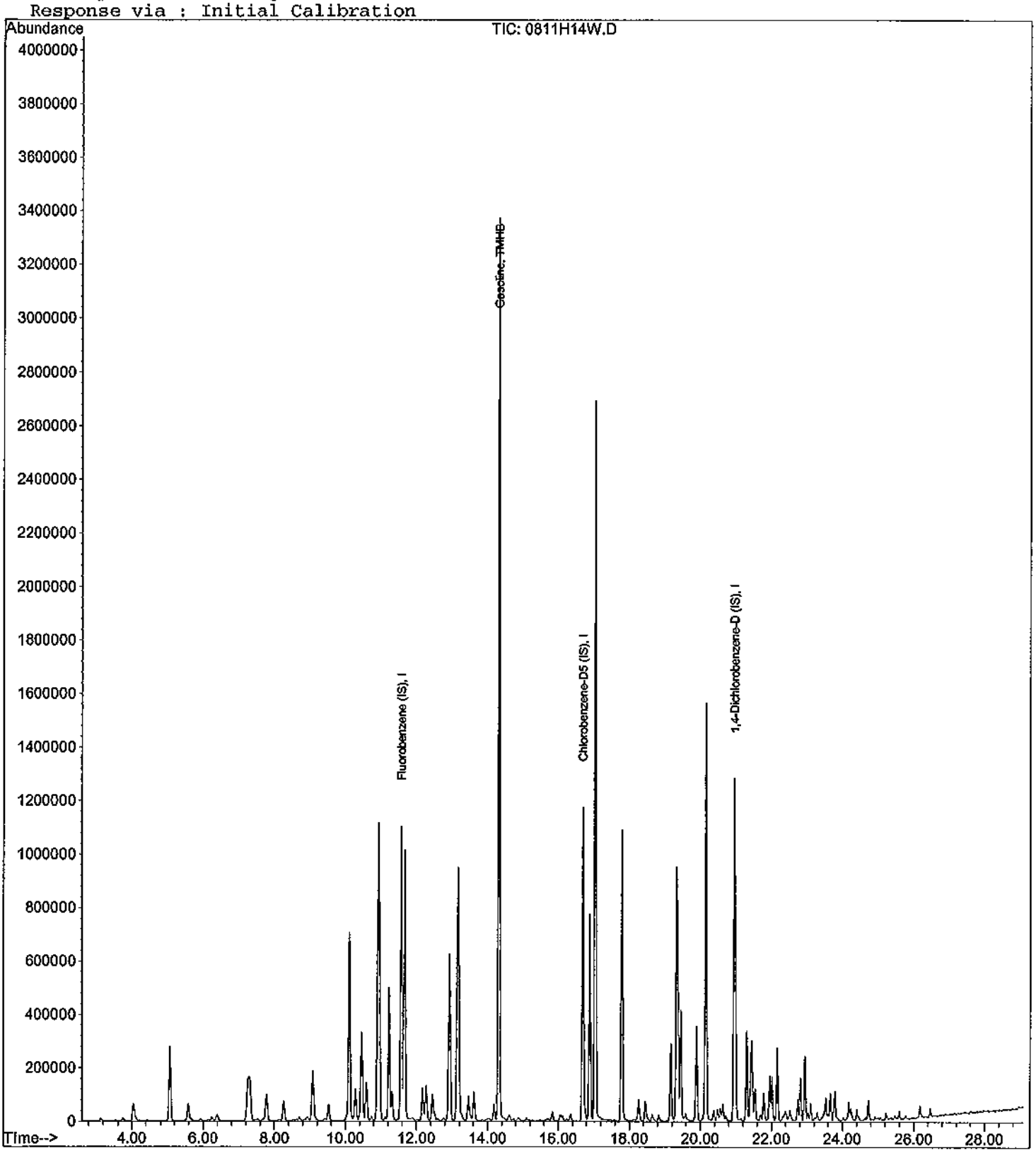
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H14W.D Vial: 14
Acq On : 12 Aug 11 2:50 Operator: SV
Sample : Vol Std 08-11-11@800ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:08 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H15W.D Vial: 15
Acq On : 12 Aug 11 3:27 Operator: SV
Sample : Vol Std 08-11-11@1000ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:03 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 12:56:06 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	1075171	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1174900	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.96	TIC	1320552	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.32	TIC	90504297m	1818.27298	ppb	100

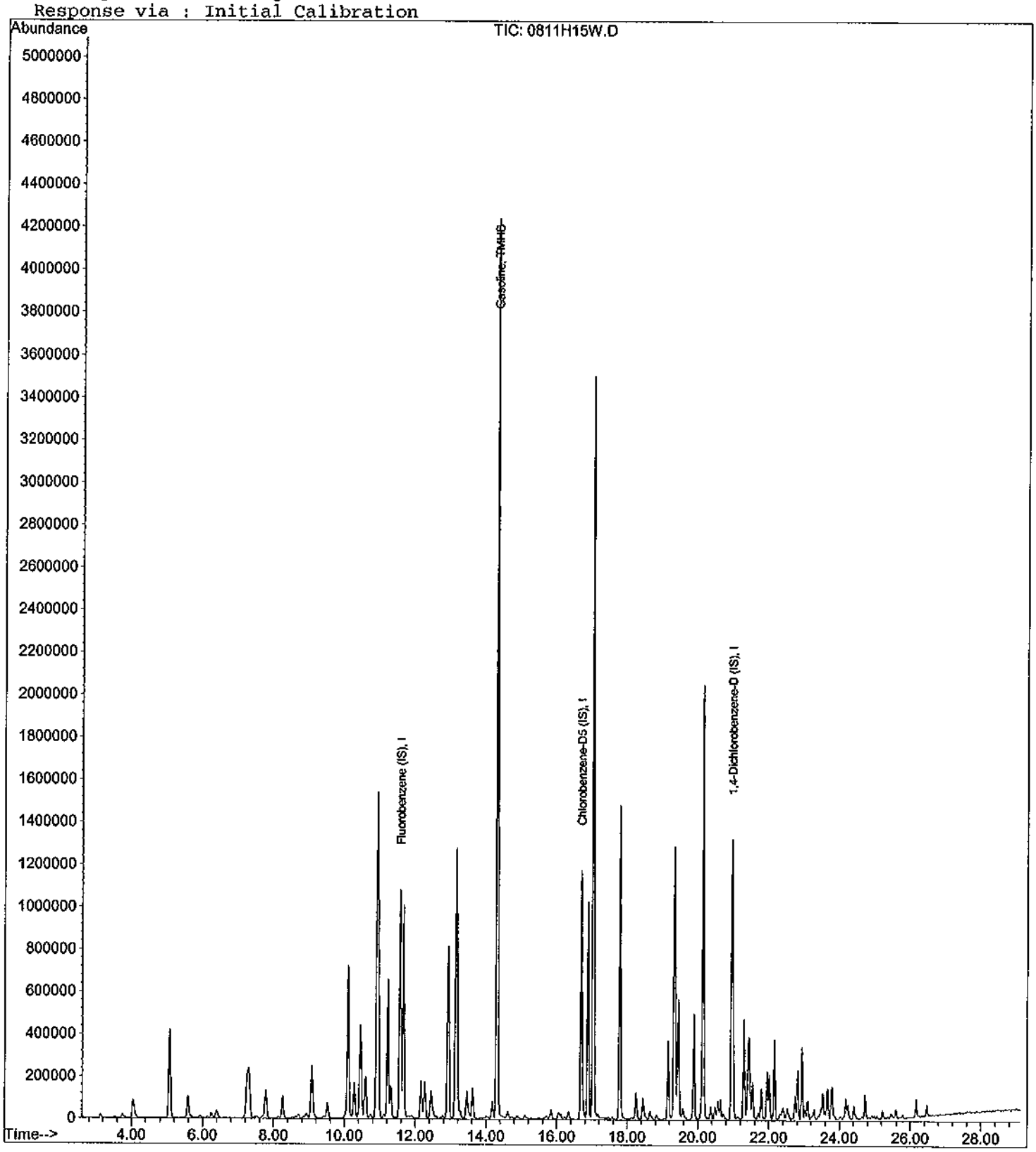
(#) = qualifier out of range (m) = manual integration

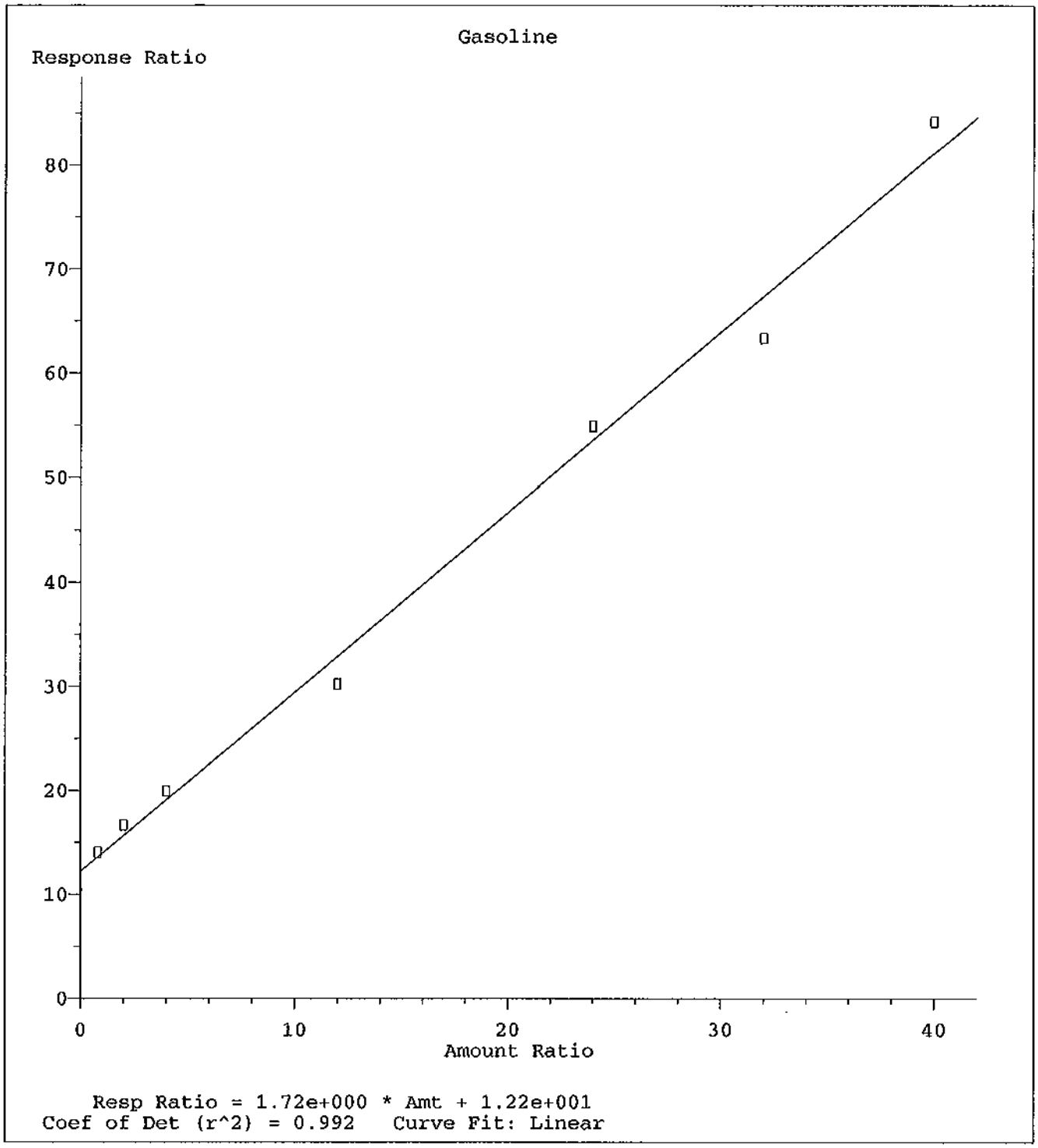
Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H15W.D Vial: 15
Acq On : 12 Aug 11 3:27 Operator: SV
Sample : Vol Std 08-11-11@1000ug/L Inst : Hewey
Misc : Water 10ml w/IS: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 13:03 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration





Method Name: M:\HEWEY\DATA\H110811\HGAS.M
Calibration Table Last Updated: Fri Aug 12 13:08:45 2011

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source/Continuing Calibration

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

SDG No: 65208
Date Analyzed: 08/12/11
Instrument: Hewey
Initial Cal. Date: 08/11/11
Data File: 0811H31W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	5.678	2.574	55	TMHBL	9.6
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
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38							
39							
40							
		Average			55.0		

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H31W.D Vial: 31
Acq On : 12 Aug 11 13:17 Operator: SV
Sample : Gas 300ug/L (SS) Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 14:44 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	1107756	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1190233	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	1235741	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.31	TIC	34220764m	271.06984	ppb	100

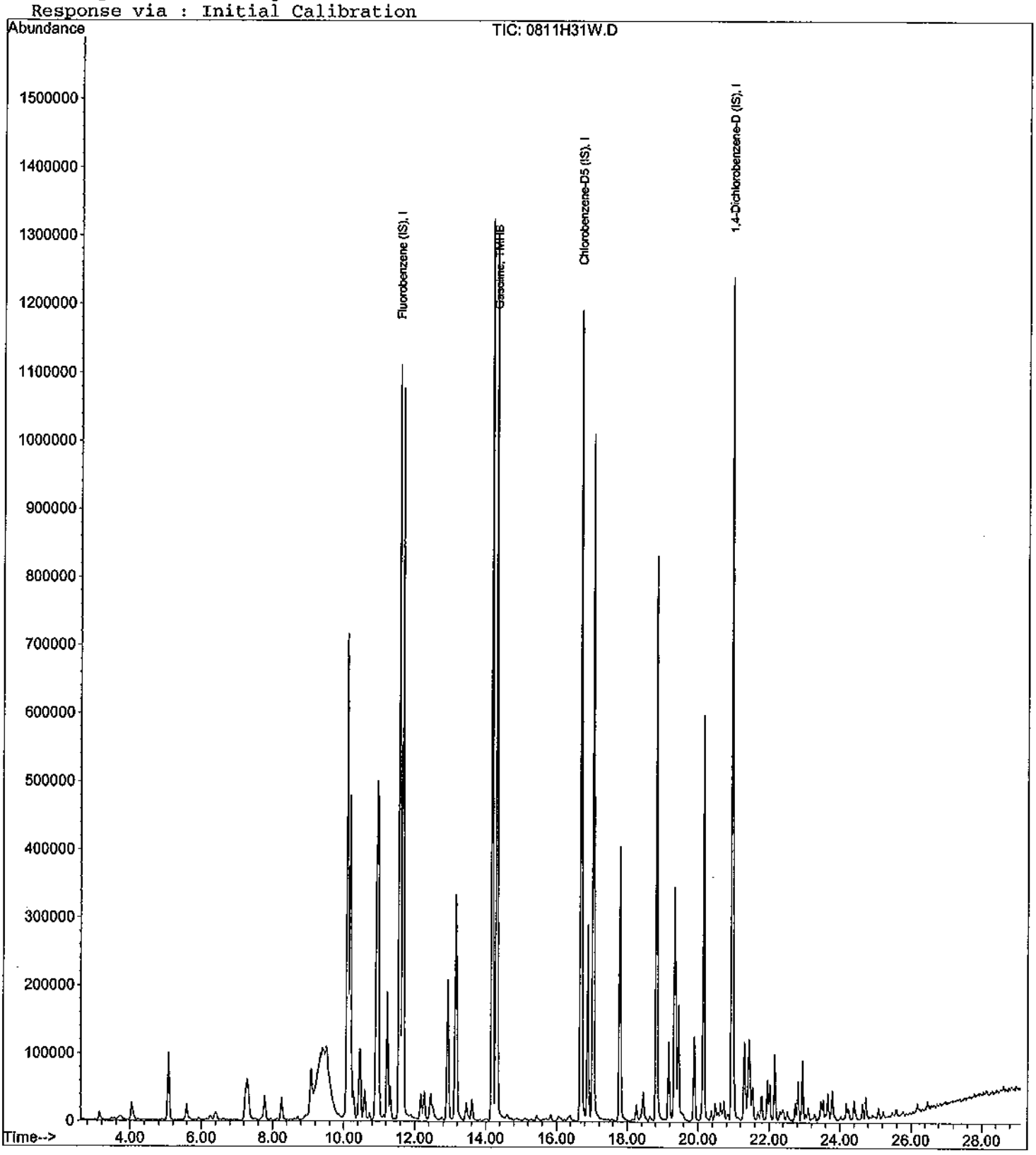
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H31W.D Vial: 31
Acq On : 12 Aug 11 13:17 Operator: SV
Sample : Gas 300ug/L (SS) Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 14:44 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



EPA METHOD 8260B
Volatile Organic Compounds
Raw Data

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110727W-42542 - 158166**
Batch ID: #86RHB-110727AT

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 6:32:56 PM

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **110727W-42542 - 158166**
Batch ID: #86RHB-110727AT

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	106	70-120			%	07/28/11	07/28/11
BLANK	SURROGATE: 4-BROMOFLUOR	107	75-120			%	07/28/11	07/28/11
BLANK	SURROGATE: DIBROMOFLUOR	97.0	85-115			%	07/28/11	07/28/11
BLANK	SURROGATE: TOLUENE-D8 (S)	103	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 6:32:56 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 : 110727A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00000
MS Integration Params: LSCINT.P
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
0727T39W.D T86DODW.M Fri Aug 12 18:37:00 2011

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T39W.D Vial: 39
Acq On : 28 Jul 11 2:48 Operator: RP
Sample : 110727A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:08 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	259114	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	10.61	TIC	303929	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	12.43	TIC	398312	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

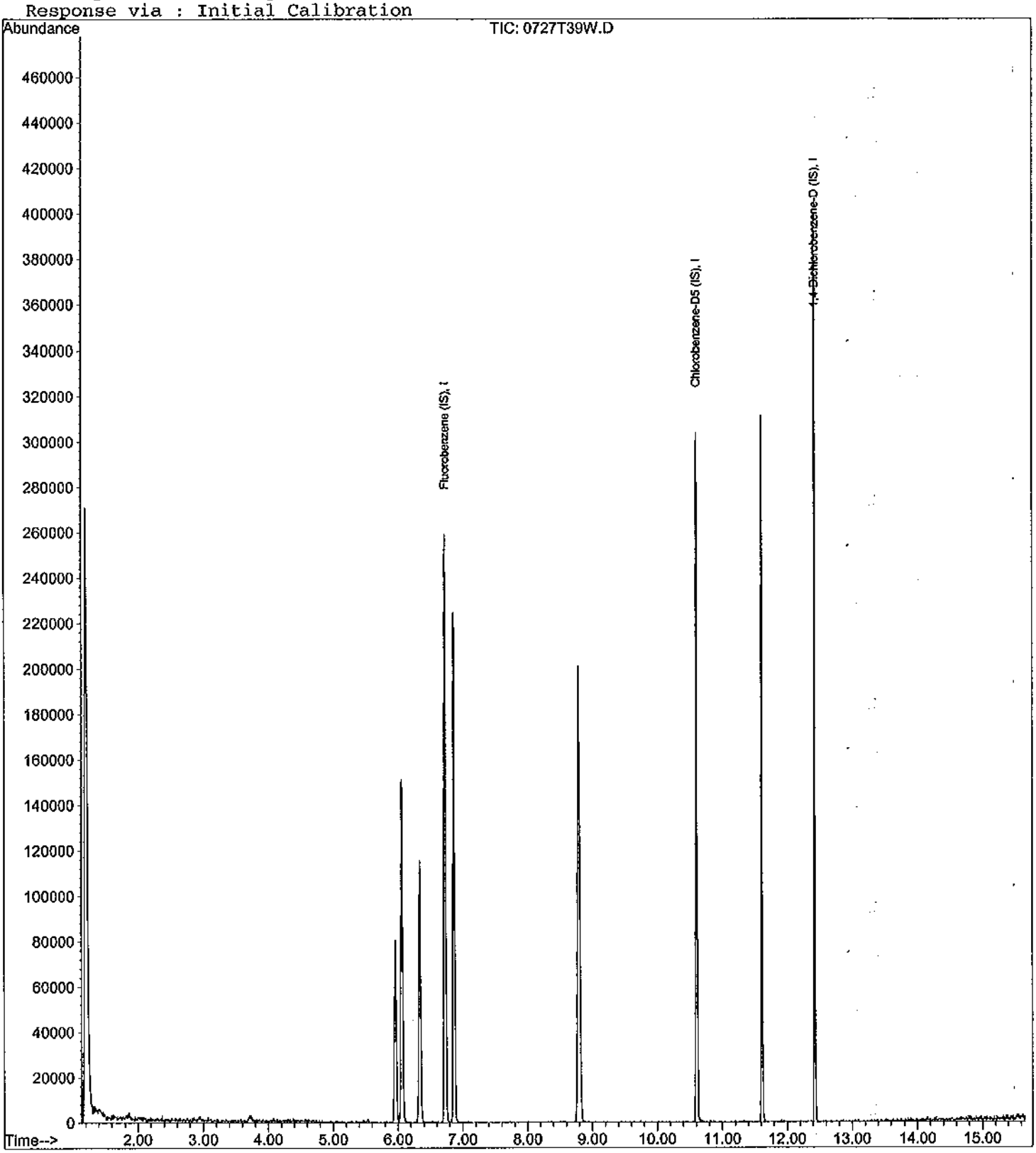
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T39W.D Vial: 39
Acq On : 28 Jul 11 2:48 Operator: RP
Sample : 110727A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 12 11:08 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



Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 LCS - 158166**
Batch ID: #86RHB-110727AT

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
1,4-DICHLOROBENZENE	10.00	9.74	97.4	75-125
2-BUTANONE	10.00	9.16	91.6	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
CHLOROETHANE	10.00	9.26	92.6	60-135

Comments:

Primary	SPK
Quant Method :	T86DODW
Extraction Date :	07/28/11
Analysis Date :	07/28/11
Instrument :	THOR
Run :	0727T30
Initials :	DA

Printed: 08/13/11 10:26:24 AM

APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 LCS - 158166**
Batch ID: #86RHB-110727AT

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	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
Extraction Date :	07/28/11
Analysis Date :	07/28/11
Instrument :	THOR
Run :	0727T30
Initials :	DA

Printed: 08/13/11 10:26:24 AM

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

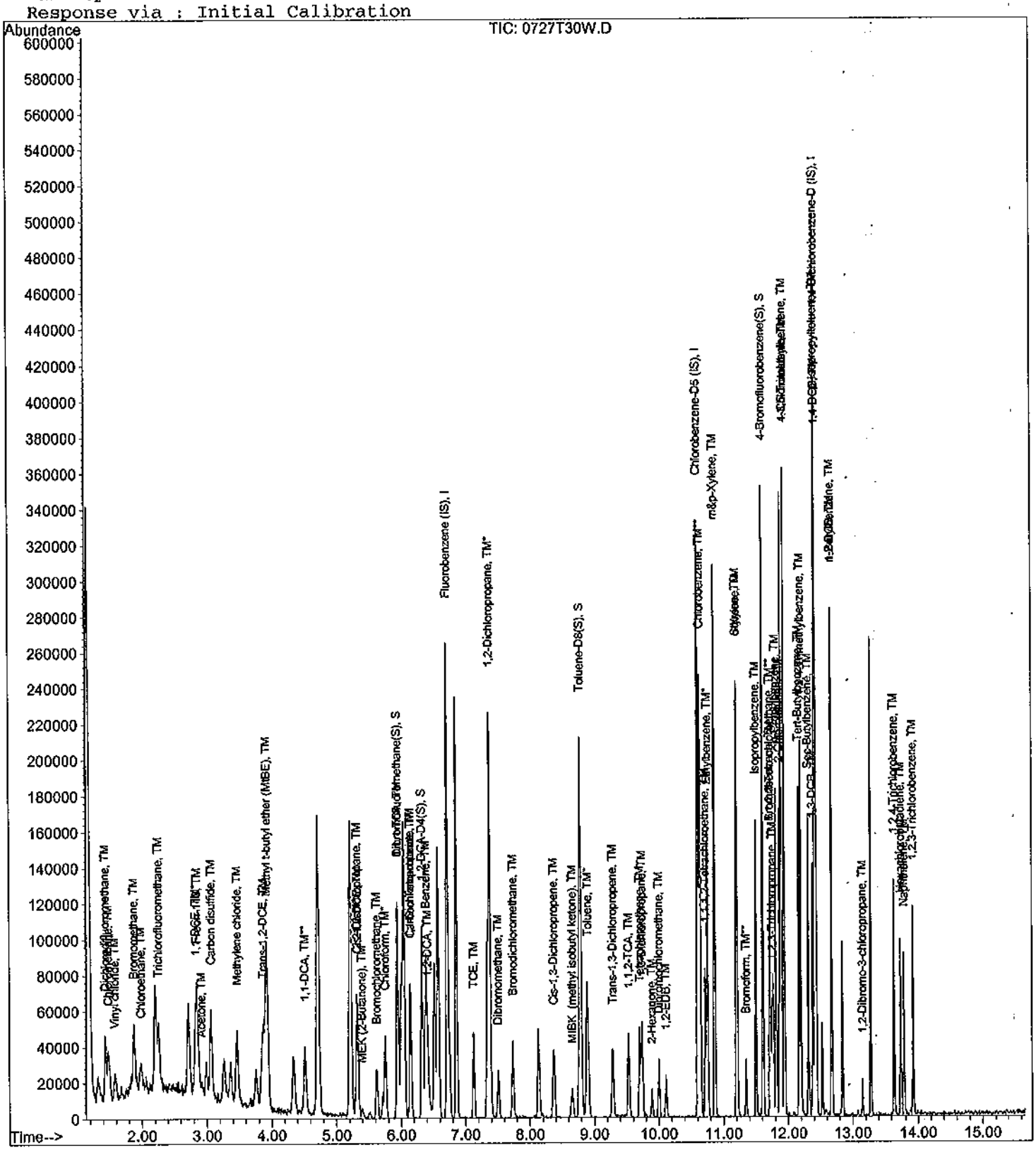
(#) = qualifier out of range (m) = manual integration

Quantitation Report

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



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

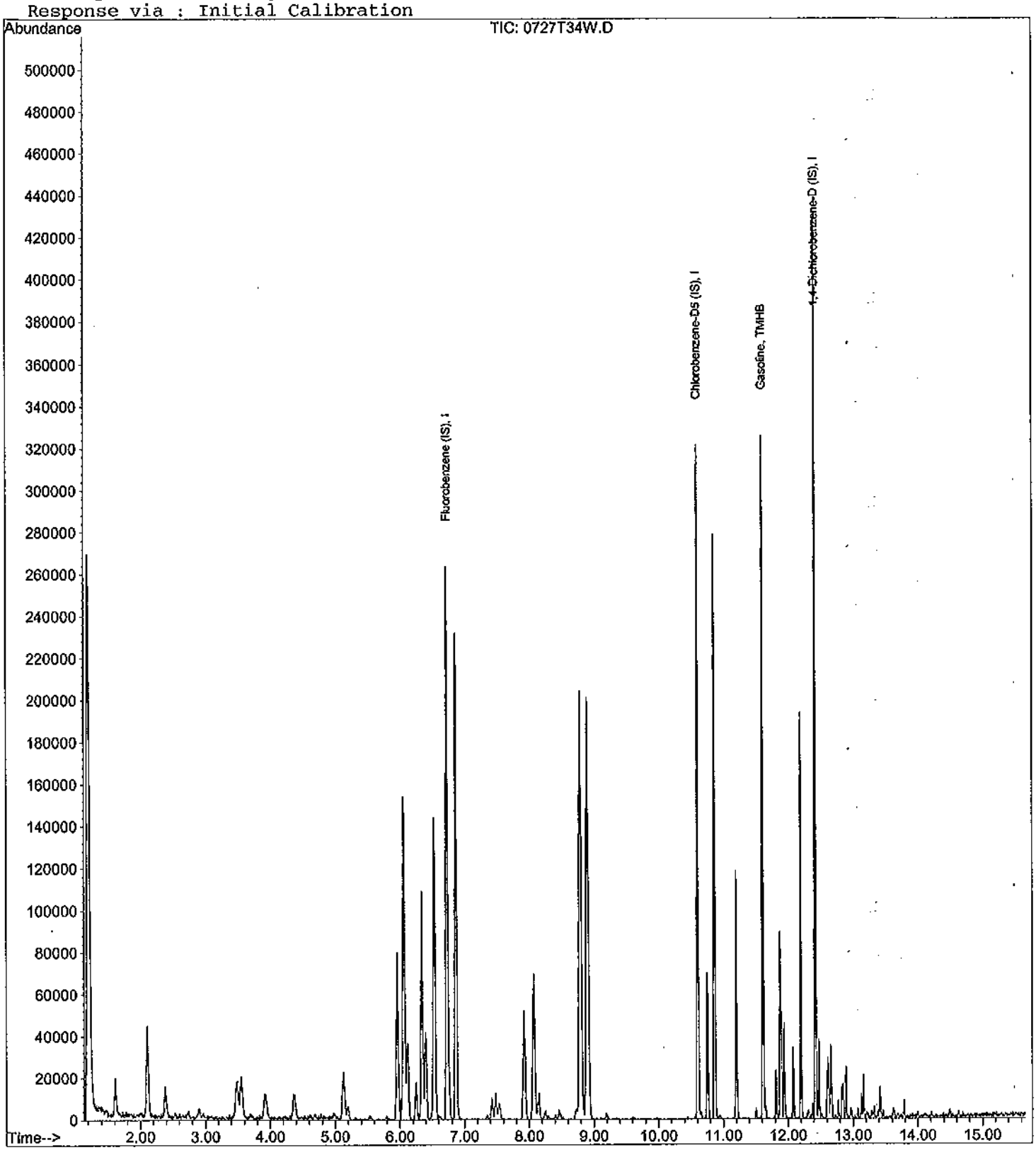
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\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

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



Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 MS - 158166**
Batch ID: #86RHB-110727AT
Sample ID: AY42542
Client ID: ES043

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	10.2	102	102	80-130	0.0	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.41	10.0	94.1	100	65-130	6.1	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	8.16	9.14	81.6	91.4	65-130	11.3	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.95	9.71	99.5	97.1	75-125	2.4	30
1,1-DICHLOROETHANE	10.00	ND	6.83	6.62	68.3 #	66.2 #	70-135	3.1	30
1,1-DICHLOROETHENE	10.00	ND	7.40	7.74	74.0	77.4	70-130	4.5	30
1,2,3-TRICHLOROPROPANE	10.00	ND	9.07	9.47	90.7	94.7	75-125	4.3	30
1,2,4-TRICHLOROBENZENE	10.00	ND	8.52	9.74	85.2	97.4	65-135	13.4	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	8.61	8.16	86.1	81.6	50-130	5.4	30
1,2-DIBROMOETHANE	10.00	ND	10.3	9.49	103	94.9	70-130	8.2	30
1,2-DICHLOROBENZENE	10.00	ND	8.98	9.99	89.8	99.9	70-120	10.6	30
1,2-DICHLOROETHANE	10.00	ND	9.74	9.74	97.4	97.4	70-130	0.0	30
1,2-DICHLOROPROPANE	10.00	ND	10.0	10.0	100	100	75-125	0.0	30
1,3-DICHLOROBENZENE	10.00	ND	8.85	10.1	88.5	101	75-125	13.2	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	18.7	18.1	93.5	90.5	70-130	3.3	30
1,4-DICHLOROBENZENE	10.00	ND	8.99	9.95	89.9	99.5	75-125	10.1	30
2-BUTANONE	10.00	ND	7.58	8.33	75.8	83.3	30-150	9.4	30
4-METHYL-2-PENTANONE	10.00	ND	10.1	9.67	101	96.7	60-135	4.4	30
ACETONE	10.00	ND	3.31	4.81	33.1 #	48.1	40-140	36.9 #	30
BENZENE	10.00	ND	10.2	10.9	102	109	80-120	6.6	30
BROMODICHLOROMETHANE	10.00	ND	9.88	9.39	98.8	93.9	75-120	5.1	30
BROMOFORM	10.00	ND	10.5	9.86	105	98.6	70-130	6.3	30
BROMOMETHANE	10.00	ND	7.00	7.65	70.0	76.5	30-145	8.9	30
CARBON TETRACHLORIDE	10.00	ND	9.63	9.58	96.3	95.8	65-140	0.52	30
CHLOROBENZENE	10.00	ND	10.1	9.66	101	96.6	80-120	4.5	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 :	0727T55	0727T56
Initials :	DA	

Printed: 08/13/11 10:32:51 AM
APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **110728W-42542 MS - 158166**
Batch ID: #86RHB-110727AT
Sample ID: AY42542
Client ID: ES043

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	9.59	9.68	95.9	96.8	60-135	0.93	30
CHLOROETHANE	10.00	ND	7.04	6.63	70.4	66.3	60-135	6.0	30
CHLOROFORM	10.00	ND	9.07	9.09	90.7	90.9	65-135	0.22	30
CHLOROMETHANE	10.00	ND	6.98	7.45	69.8	74.5	40-125	6.5	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.36	8.71	93.6	87.1	70-125	7.2	30
ETHYLBENZENE	10.00	ND	10.6	10.4	106	104	75-125	1.9	30
GASOLINE	300	ND	181	211	60.3 #	70.3 #	75-125	15.3	30
HEXACHLOROBUTADIENE	10.00	ND	8.90	9.63	89.0	96.3	50-140	7.9	30
METHYL TERT-BUTYL ETHER	10.00	ND	7.14	6.77	71.4	67.7	65-125	5.3	30
METHYLENE CHLORIDE	10.00	ND	8.14	7.99	81.4	79.9	55-140	1.9	30
STYRENE	10.00	ND	9.76	9.31	97.6	93.1	65-135	4.7	30
TETRACHLOROETHENE	10.00	ND	9.48	9.66	94.8	96.6	45-150	1.9	30
TOLUENE	10.00	ND	10.7	10.6	107	106	75-120	0.94	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	7.33	7.29	73.3	72.9	60-140	0.55	30
TRICHLOROETHENE	10.00	ND	10.0	9.79	100	97.9	70-125	2.1	30
VINYL CHLORIDE	10.00	ND	6.60	6.35	66.0	63.5	50-145	3.9	30
XYLENES (TOTAL)	30.0	ND	30.6	30.0	102	100	80-120	2.0	30
SURROGATE: 1,2-DICHLOROETHANE-D	28.1	NA	27.9	26.4	99.3	94.0	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	28.2	NA	32.8	29.0	116	103	75-120		
SURROGATE: DIBROMOFLUOROMETH	30.4	NA	32.1	30.0	105	98.6	85-115		
SURROGATE: TOLUENE-D8 (S)	34.6	NA	37.4	35.2	108	102	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 :	0727T55	0727T56
Initials :	DA	

Printed: 08/13/11 10:32:51 AM
APPL MSD SCII

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T110727\0727T55W.D Vial: 55
Acq On : 28 Jul 11 9:44 Operator: RP
Sample : AY42542W234 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:46 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	98776	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.60	117	75832	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	63312	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	44391	32.09062 ppb		0.00
Spiked Amount 30.441			Recovery = 105.419%			
24) 1,2-DCA-D4(S)	6.33	65	75609	27.92256 ppb		0.00
Spiked Amount 28.084			Recovery = 99.426%			
39) Toluene-D8(S)	8.79	98	156942	37.41260 ppb		0.00
Spiked Amount 34.610			Recovery = 108.099%			
46) 4-Bromofluorobenzene(S)	11.61	95	79203	32.77521 ppb		0.00
Spiked Amount 28.184			Recovery = 116.288%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.46	85	19339	9.49395 ppb		98
3) Chloromethane	1.51	50	12395	6.98203 ppb		91
4) Vinyl chloride	1.61	64	4374	6.60138 ppb		80
5) Bromomethane	1.92	96	8923	7.00346 ppb		90
6) Chloroethane	2.02	64	10249	7.04230 ppb	#	82
7) Trichlorofluoromethane	2.29	101	9872	5.80634 ppb		98
8) Acetone	2.98	43	3986	3.30898 ppb		89
9) 1,1-DCE	2.86	96	10316	7.39841 ppb	#	63
10) Freon-113	2.88	103	11565	8.01135 ppb		90
11) Methylene chloride	3.48	84	15020	8.13548 ppb	#	80
12) Carbon disulfide	3.09	76	61521	7.42218 ppb	#	91
13) Methyl t-butyl ether (MtBE	3.96	73	82060	7.14263 ppb		94
14) Trans-1,2-DCE	3.90	61	26237	7.32530 ppb	#	87
15) 1,1-DCA	4.54	63	31811	6.82772 ppb	#	93
16) MEK (2-Butanone)	5.42	43	5359	7.58183 ppb	#	82
17) Cis-1,2-DCE	5.34	96	16109	9.35816 ppb	#	72
18) 2,2-Dichloropropane	5.33	77	16850	5.05551 ppb	#	79
19) Chloroform	5.77	83	35166	9.07099 ppb		97
20) Bromochloromethane	5.64	49	18536	9.17171 ppb		93
22) 1,1,1-TCA	5.96	97	30444	9.40500 ppb	#	81
23) 1,1-Dichloropropene	6.16	75	20494	10.04649 ppb	#	75
25) Carbon Tetrachloride	6.15	117	22791	9.62521 ppb		92
26) 1,2-DCA	6.43	62	33127	9.74085 ppb		96
27) Benzene	6.40	78	61895	10.19641 ppb		97
28) TCE	7.13	95	14578	10.03736 ppb		89
29) 1,2-Dichloropropane	7.38	63	20756	10.01078 ppb		97
30) Bromodichloromethane	7.74	83	28847	9.88153 ppb	#	95
31) Dibromomethane	7.52	93	9434	9.59203 ppb		86
32) MIBK (methyl isobutyl ket	8.67	43	12096	10.08241 ppb	#	74
33) Cis-1,3-Dichloropropene	8.37	75	22855	9.53755 ppb		83
34) Toluene	8.90	91	61784	10.74595 ppb		96
35) Trans-1,3-Dichloropropene	9.29	75	21540	9.10064 ppb		92
36) 1,1,2-TCA	9.54	83	11278	9.95332 ppb		89
37) 2-Hexanone	9.90	43	7543	8.23903 ppb	#	82
40) 1,2-EDB	10.12	107	11499	10.25663 ppb	#	98
41) Tetrachloroethene	9.71	164	8508	9.47688 ppb	#	61
42) 1,1,1,2-Tetrachloroethane	10.72	131	15300	10.21439 ppb		95
43) m&p-Xylene	10.87	106	55873	20.67120 ppb		85
44) o-Xylene	11.20	106	26355	9.89378 ppb		93

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

Data File : M:\THOR\DATA\T110727\0727T55W.D Vial: 55
Acq On : 28 Jul 11 9:44 Operator: RP
Sample : AY42542W234 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:46 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	48627	9.75903	ppb		97
47)	1,3-Dichloropropane	9.74	76	23441	10.04912	ppb		91
48)	Dibromochloromethane	10.01	129	12407	9.59018	ppb	#	67
49)	Chlorobenzene	10.63	112	37868	10.06195	ppb		99
50)	Ethylbenzene	10.75	91	76774	10.61720	ppb		93
51)	Bromoform	11.35	173	9663	10.50079	ppb	#	71
53)	Isopropylbenzene	11.50	105	61664	9.37131	ppb		93
54)	1,1,2,2-Tetrachloroethane	11.73	83	15190	8.16121	ppb		84
55)	1,2,3-Trichloropropane	11.75	110	5417	9.06796	ppb		85
56)	Bromobenzene	11.72	156	15228	9.61939	ppb		71
57)	n-Propylbenzene	11.81	91	87087	8.97239	ppb		100
58)	2-Chlorotoluene	11.87	91	63590	8.65093	ppb		91
59)	1,3,5-Trimethylbenzene	11.94	105	67606	9.24465	ppb		93
60)	4-Chlorotoluene	11.94	91	75515	8.73009	ppb		96
61)	Tert-Butylbenzene	12.17	119	45452	8.74215	ppb		90
62)	1,2,4-Trimethylbenzene	12.20	105	68278	9.15526	ppb		99
63)	Sec-Butylbenzene	12.32	105	63116	8.62218	ppb		92
64)	p-Isopropyltoluene	12.41	119	52698	8.40634	ppb		97
65)	1,3-DCB	12.38	146	25988	8.85378	ppb		99
66)	1,4-DCB	12.44	146	27989	8.98566	ppb		91
67)	n-Butylbenzene	12.67	91	54319	8.20348	ppb		96
68)	1,2-DCB	12.68	146	25891	8.98453	ppb		87
69)	1,2-Dibromo-3-chloropropan	13.16	157	2410	8.60790	ppb		93
70)	1,2,4-Trichlorobenzene	13.64	180	18536	8.51931	ppb		93
71)	Hexachlorobutadiene	13.74	225	12462	8.89839	ppb	#	85
72)	Naphthalene	13.78	128	30638	8.67146	ppb		95
73)	1,2,3-Trichlorobenzene	13.93	180	18684	9.13575	ppb		88

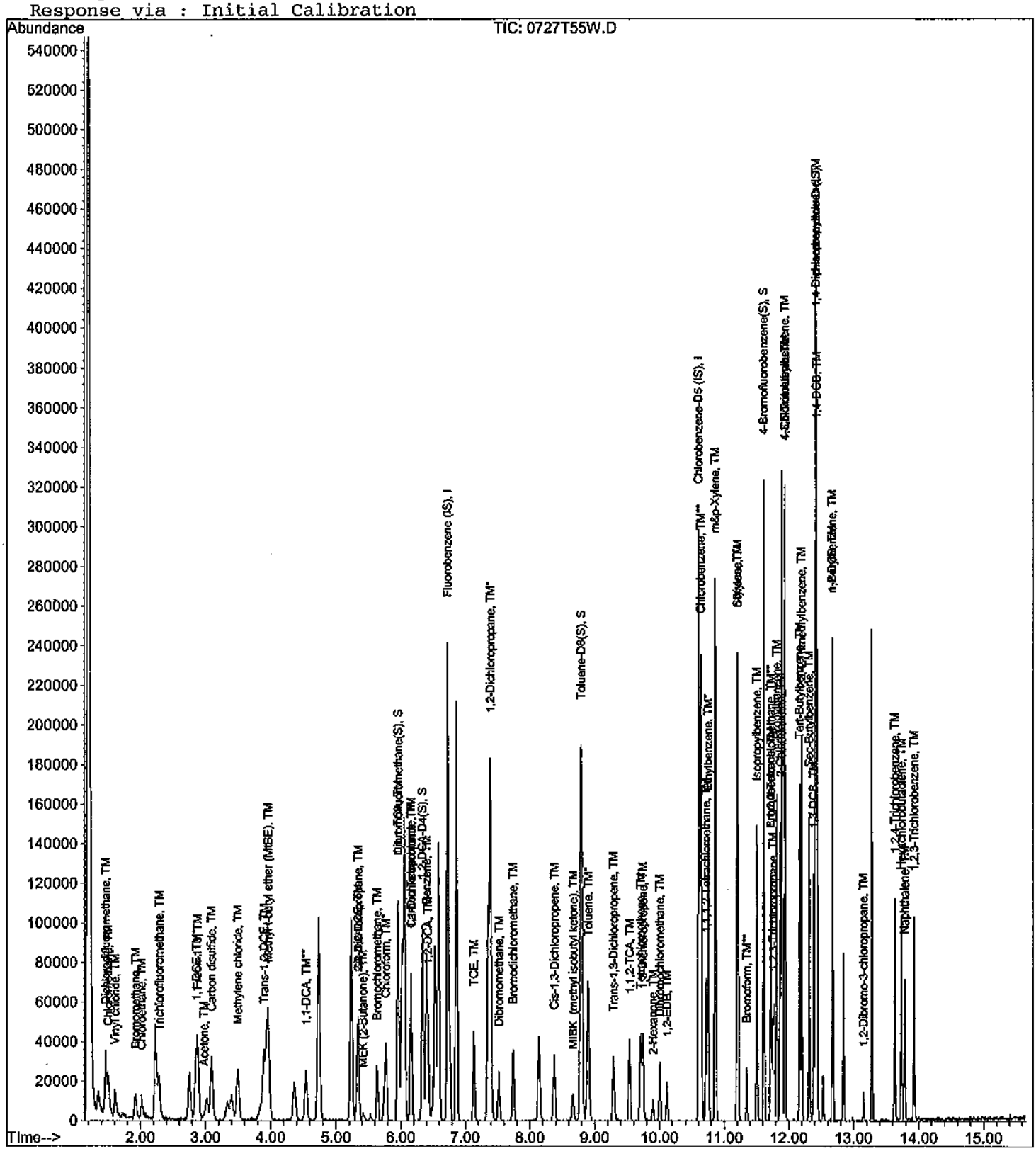
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T55W.D Vial: 55
Acq On : 28 Jul 11 9:44 Operator: RP
Sample : AY42542W234 MS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Jul 28 13:46 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:\HEWEY\DATA\H110811\0811H36W.D Vial: 36
Acq On : 12 Aug 11 16:24 Operator: SV
Sample : AY42542W10 MS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 17:41 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.57	TIC	1057009	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.69	TIC	1114323	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.96	TIC	1195024	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.31	TIC	26089081m	180.96070	ppb	100

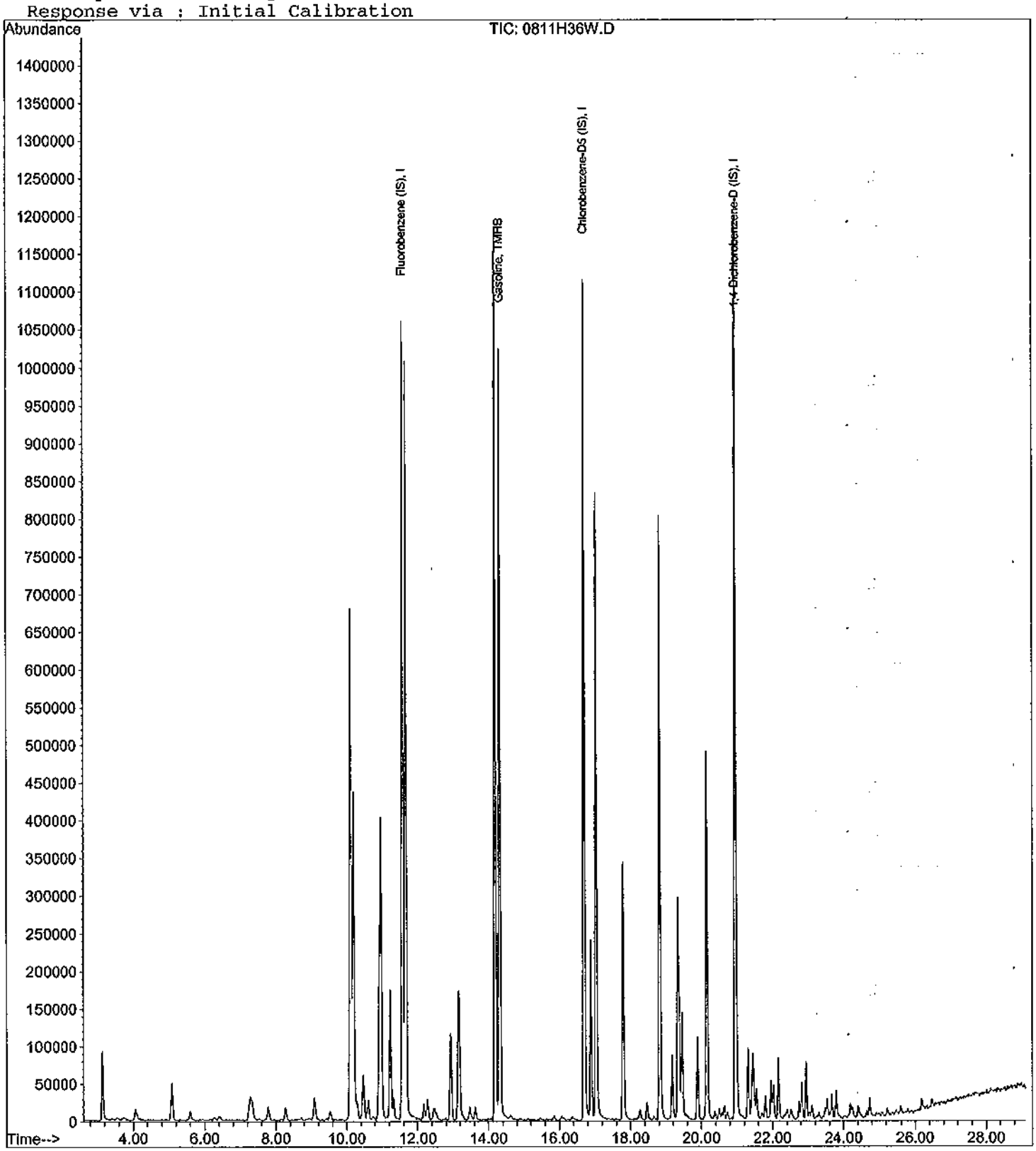
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H36W.D Vial: 36
Acq On : 12 Aug 11 16:24 Operator: SV
Sample : AY42542W10 MS-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 17:41 2011 Quant Results File: HGAS.RES

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T56W.D Vial: 56
Acq On : 28 Jul 11 10:10 Operator: RP
Sample : AY42542W234 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 13 10:30 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	102944	25.00000 ppb		0.00
38) Chlorobenzene-D5 (IS)	10.61	117	80136	25.00000 ppb		0.00
52) 1,4-Dichlorobenzene-D (IS)	12.43	152	59728	25.00000 ppb		0.00
System Monitoring Compounds						
21) Dibromofluoromethane(S)	5.96	111	43202	29.96659 ppb		0.00
Spiked Amount 30.441			Recovery = 98.442%			
24) 1,2-DCA-D4(S)	6.34	65	74416	26.36929 ppb		0.00
Spiked Amount 28.084			Recovery = 93.893%			
39) Toluene-D8(S)	8.79	98	155843	35.15530 ppb		0.00
Spiked Amount 34.610			Recovery = 101.574%			
46) 4-Bromofluorobenzene(S)	11.61	95	74023	28.98647 ppb		0.00
Spiked Amount 28.184			Recovery = 102.844%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.47	85	19557	9.21224 ppb		85
3) Chloromethane	1.52	50	13783	7.44953 ppb		89
4) Vinyl chloride	1.62	64	4388	6.35438 ppb		79
5) Bromomethane	1.93	96	10156	7.64847 ppb	#	68
6) Chloroethane	2.03	64	10028	6.63045 ppb		90
7) Trichlorofluoromethane	2.29	101	9469	5.34382 ppb		92
8) Acetone	2.99	43	5149m	4.86060 ppb		99
9) 1,1-DCE	2.87	96	11241	7.73540 ppb	#	64
10) Freon-113	2.89	103	11979	7.96654 ppb	#	83
11) Methylene chloride	3.50	84	15382	7.99344 ppb		87
12) Carbon disulfide	3.10	76	67546	7.81913 ppb		97
13) Methyl t-butyl ether (MtBE	3.96	73	81047	6.76884 ppb		93
14) Trans-1,2-DCE	3.91	61	27198	7.29054 ppb	#	85
15) 1,1-DCA	4.54	63	32144	6.61986 ppb	#	91
16) MEK (2-Butanone)	5.43	43	6229	8.32674 ppb	#	35
17) Cis-1,2-DCE	5.35	96	15465	8.71135 ppb		80
18) 2,2-Dichloropropane	5.33	77	17149	4.93690 ppb		93
19) Chloroform	5.77	83	36739	9.09304 ppb		98
20) Bromochloromethane	5.64	49	19527	9.27087 ppb		87
22) 1,1,1-TCA	5.96	97	33790	10.01603 ppb		86
23) 1,1-Dichloropropene	6.16	75	20898	9.85319 ppb		97
25) Carbon Tetrachloride	6.16	117	23632	9.57630 ppb		85
26) 1,2-DCA	6.43	62	34509	9.73638 ppb		100
27) Benzene	6.40	78	68926	10.89495 ppb	#	90
28) TCE	7.13	95	14826	9.79481 ppb		93
29) 1,2-Dichloropropane	7.39	63	21696	10.04048 ppb		98
30) Bromodichloromethane	7.74	83	28582	9.39435 ppb	#	93
31) Dibromomethane	7.52	93	9640	9.40463 ppb		87
32) MIBK (methyl isobutyl ket	8.66	43	11896	9.67158 ppb	#	87
33) Cis-1,3-Dichloropropene	8.38	75	22577	9.13223 ppb		86
34) Toluene	8.90	91	63451	10.58907 ppb		99
35) Trans-1,3-Dichloropropene	9.29	75	21931	8.94806 ppb	#	81
36) 1,1,2-TCA	9.54	83	11469	9.71207 ppb	#	83
37) 2-Hexanone	9.90	43	7822	8.19816 ppb	#	90
40) 1,2-EDB	10.11	107	11244	9.49052 ppb	#	95
41) Tetrachloroethene	9.71	164	9172	9.66115 ppb		77
42) 1,1,1,2-Tetrachloroethane	10.72	131	16199	10.23373 ppb		85
43) m&p-Xylene	10.86	106	58649	20.54488 ppb		82
44) o-Xylene	11.21	106	26587	9.47859 ppb		100

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T110727\0727T56W.D Vial: 56
Acq On : 28 Jul 11 10:10 Operator: RP
Sample : AY42542W234 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 13 10:30 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	48893	9.30509 ppb	#	92
47)	1,3-Dichloropropane	9.75	76	24200	9.81730 ppb	#	67
48)	Dibromochloromethane	10.01	129	13243	9.67914 ppb		78
49)	Chlorobenzene	10.64	112	38415	9.65907 ppb		87
50)	Ethylbenzene	10.76	91	79104	10.35188 ppb		92
51)	Bromoform	11.35	173	9593	9.86482 ppb		94
53)	Isopropylbenzene	11.50	105	62783	9.95252 ppb	#	88
54)	1,1,2,2-Tetrachloroethane	11.73	83	16041	9.13558 ppb		94
55)	1,2,3-Trichloropropane	11.75	110	5349	9.46910 ppb		80
56)	Bromobenzene	11.72	156	15861	10.62046 ppb		81
57)	n-Propylbenzene	11.81	91	87755	9.51223 ppb		95
58)	2-Chlorotoluene	11.87	91	66584	9.53109 ppb		90
59)	1,3,5-Trimethylbenzene	11.94	105	66339	9.57623 ppb		88
60)	4-Chlorotoluene	11.95	91	79362	9.63908 ppb		98
61)	Tert-Butylbenzene	12.17	119	44620	9.06031 ppb		95
62)	1,2,4-Trimethylbenzene	12.20	105	68512	9.68996 ppb		98
63)	Sec-Butylbenzene	12.32	105	69150	9.76245 ppb		97
64)	p-Isopropyltoluene	12.41	119	58774	9.72758 ppb		93
65)	1,3-DCB	12.38	146	27886	10.07048 ppb		96
66)	1,4-DCB	12.44	146	29245	9.95227 ppb	#	86
67)	n-Butylbenzene	12.67	91	56992	9.00387 ppb		94
68)	1,2-DCB	12.68	146	27165	9.99227 ppb		88
69)	1,2-Dibromo-3-chloropropan	13.16	157	2155	8.15897 ppb		92
70)	1,2,4-Trichlorobenzene	13.64	180	20495	9.74197 ppb		85
71)	Hexachlorobutadiene	13.73	225	12717	9.62535 ppb	#	80
72)	Naphthalene	13.78	128	33249	9.65839 ppb		99
73)	1,2,3-Trichlorobenzene	13.92	180	20120	10.42822 ppb		81

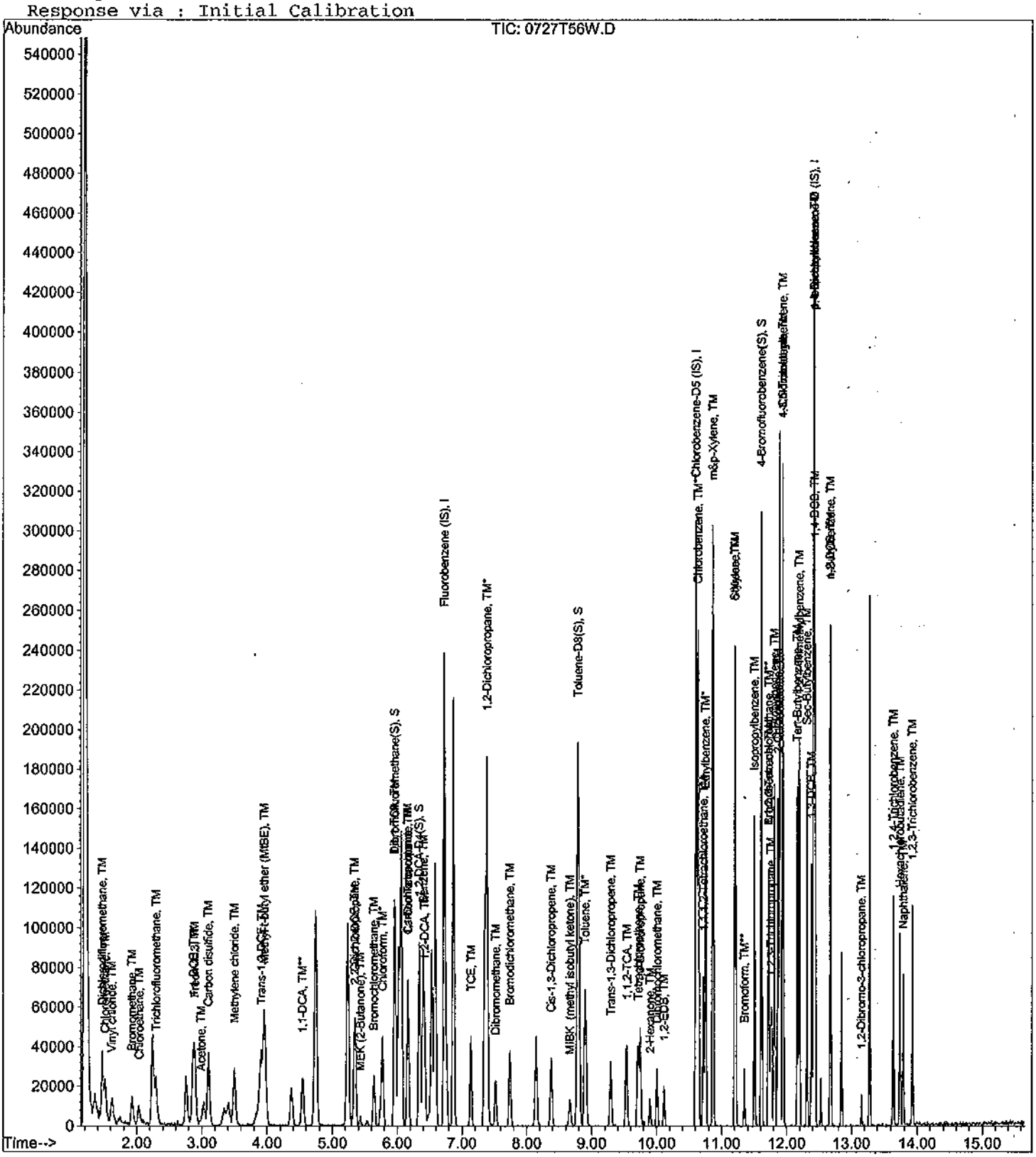
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T56W.D Vial: 56
Acq On : 28 Jul 11 10:10 Operator: RP
Sample : AY42542W234 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00

Quant Time: Aug 13 10:30 2011 Quant Results File: T86DODW.RES

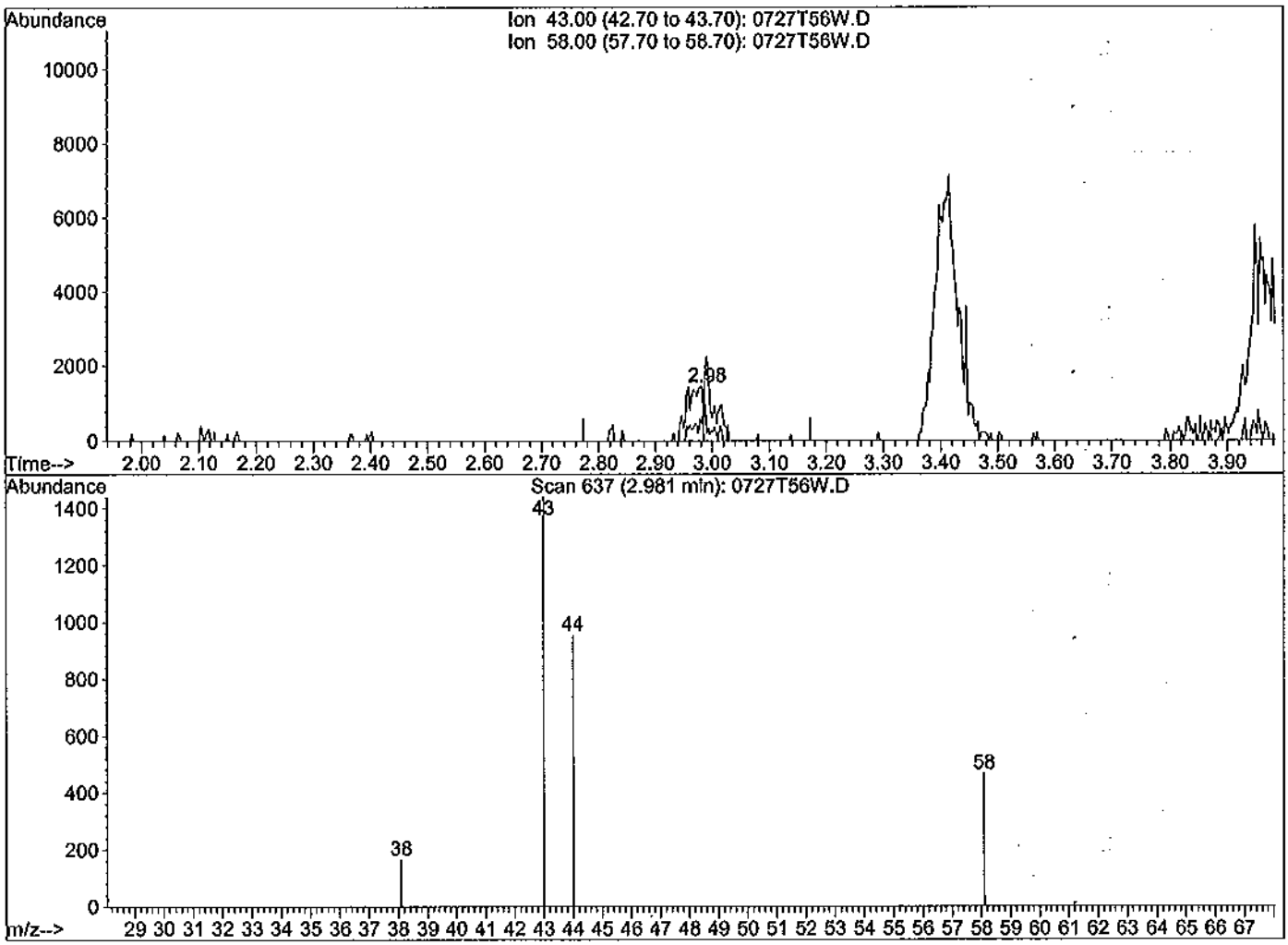
Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Initial Calibration



Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T56W.D Vial: 56
Acq On : 28 Jul 11 10:10 Operator: RP
Sample : AY42542W234 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Jul 28 13:46 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Single Level Calibration



TIC: 0727T56W.D

(8) Acetone (TM)

2.98min 1.0580ppb

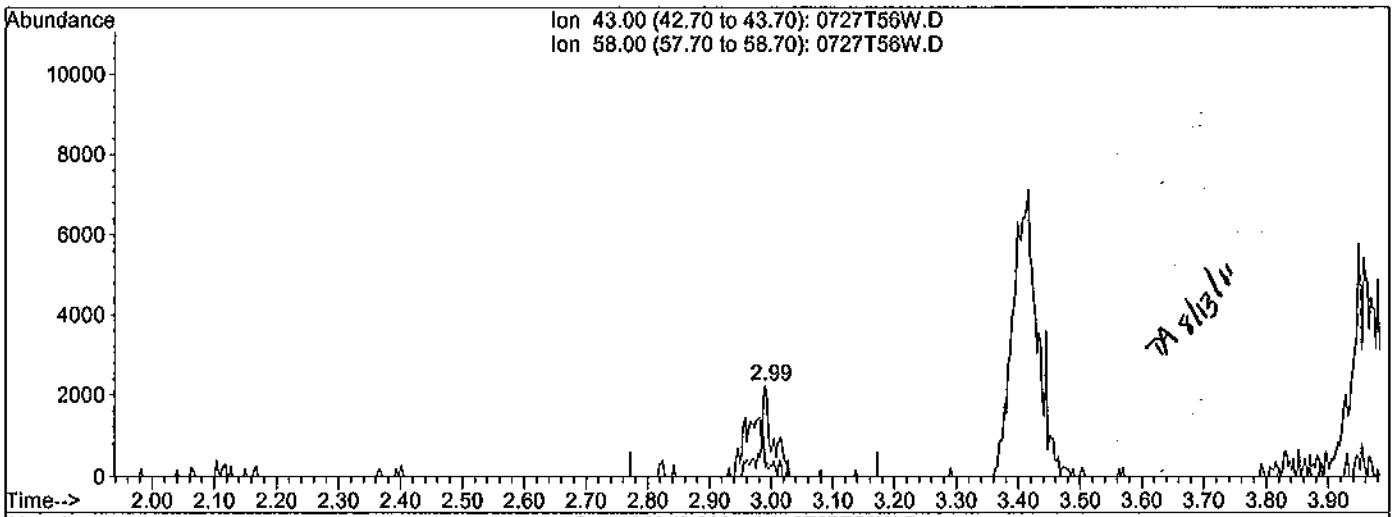
response 2711

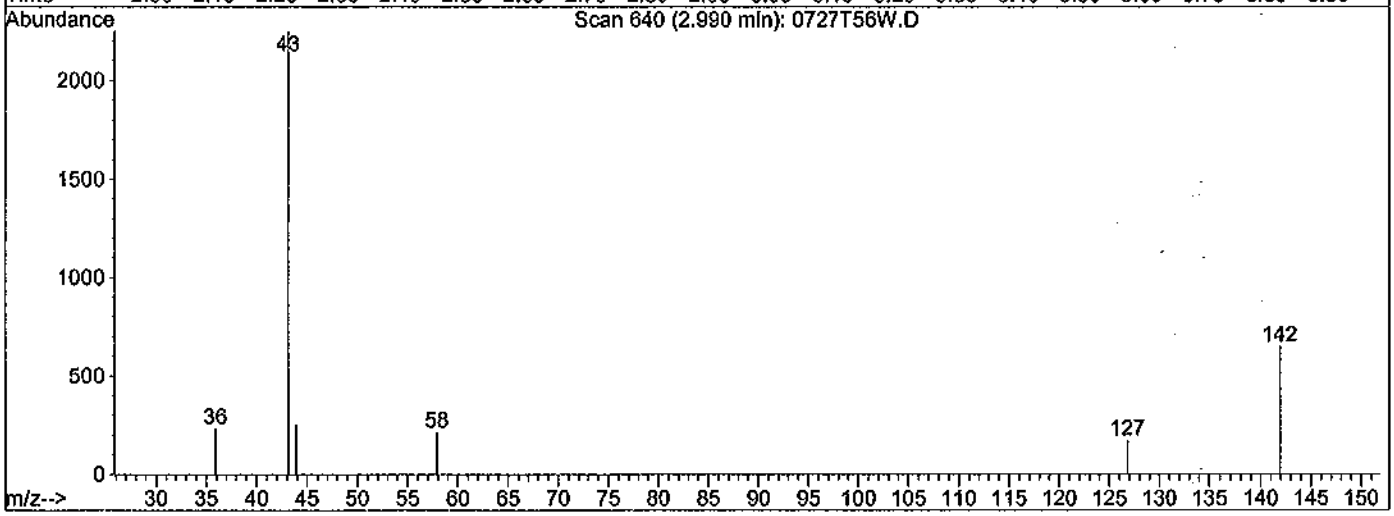
Ion	Exp%	Act%
43.00	100	100
58.00	32.10	32.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T110727\0727T56W.D Vial: 56
Acq On : 28 Jul 11 10:10 Operator: RP
Sample : AY42542W234 MSD-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 07-26-11 Multiplr: 1.00
Quant Time: Aug 13 10:30 2011 Quant Results File: temp.res

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jul 28 13:43:52 2011
Response via : Single Level Calibration





TIC: 0727T56W.D

(8) Acetone (TM)

2.99min 4.8606ppb m

response 5149

Ion	Exp%	Act%
43.00	100	100
58.00	32.10	9.52#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\HEWEY\DATA\H110811\0811H37W.D Vial: 37
Acq On : 12 Aug 11 17:01 Operator: SV
Sample : AY42542W11 MSD-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 17:41 2011 Quant Results File: HGAS.RES

Quant Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration
DataAcq Meth : PH8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	11.58	TIC	1046430	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	16.70	TIC	1124769	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	20.95	TIC	1133113	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	14.31	TIC	27982160m	210.83186	ppb	100

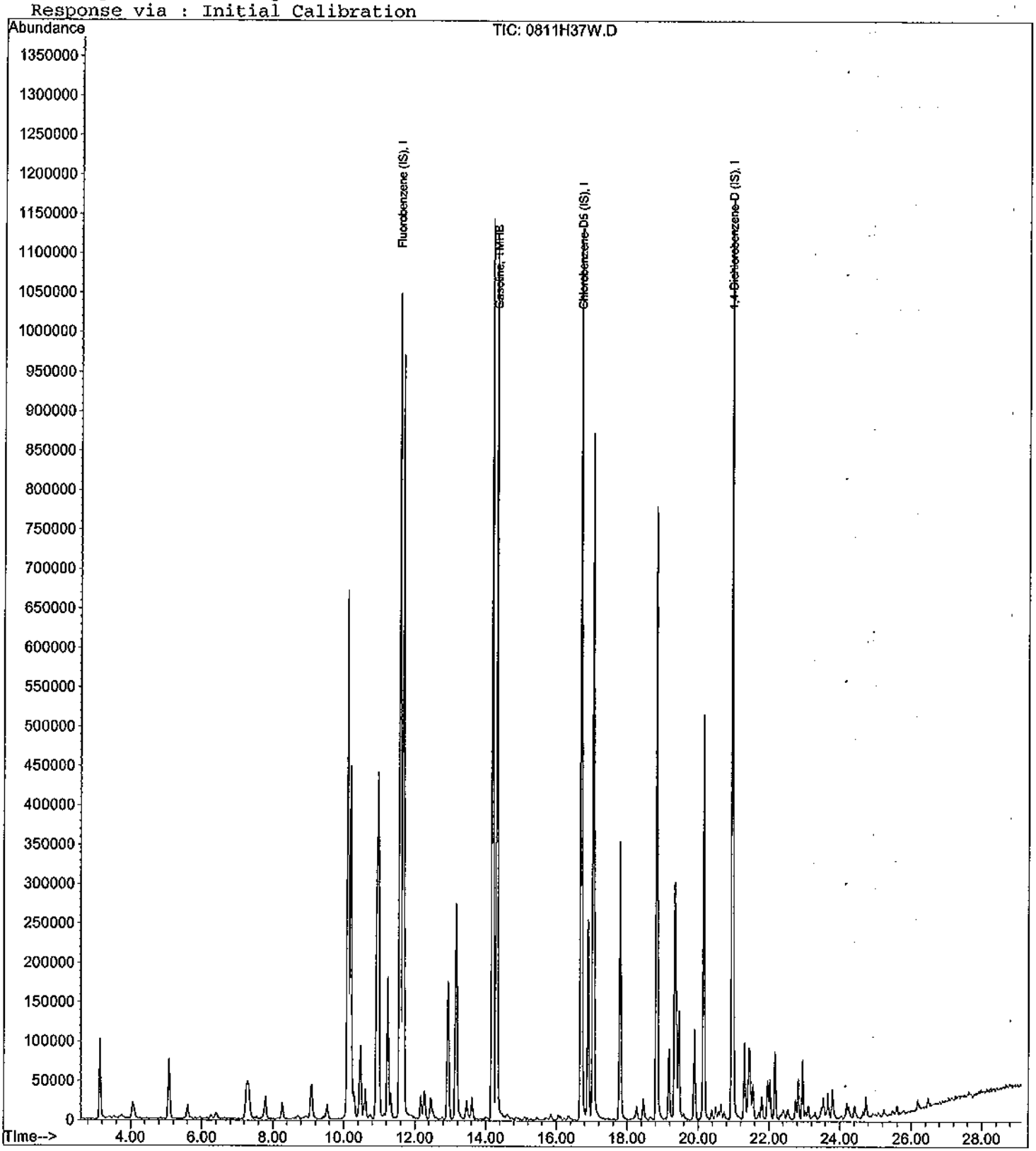
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\HEWEY\DATA\H110811\0811H37W.D Vial: 37
Acq On : 12 Aug 11 17:01 Operator: SV
Sample : AY42542W11 MSD-1WH Inst : Hewey
Misc : Water 10ml w/IS&S: 07-21-11 Multiplr: 1.00

Quant Time: Aug 12 17:41 2011 Quant Results File: HGAS.RES

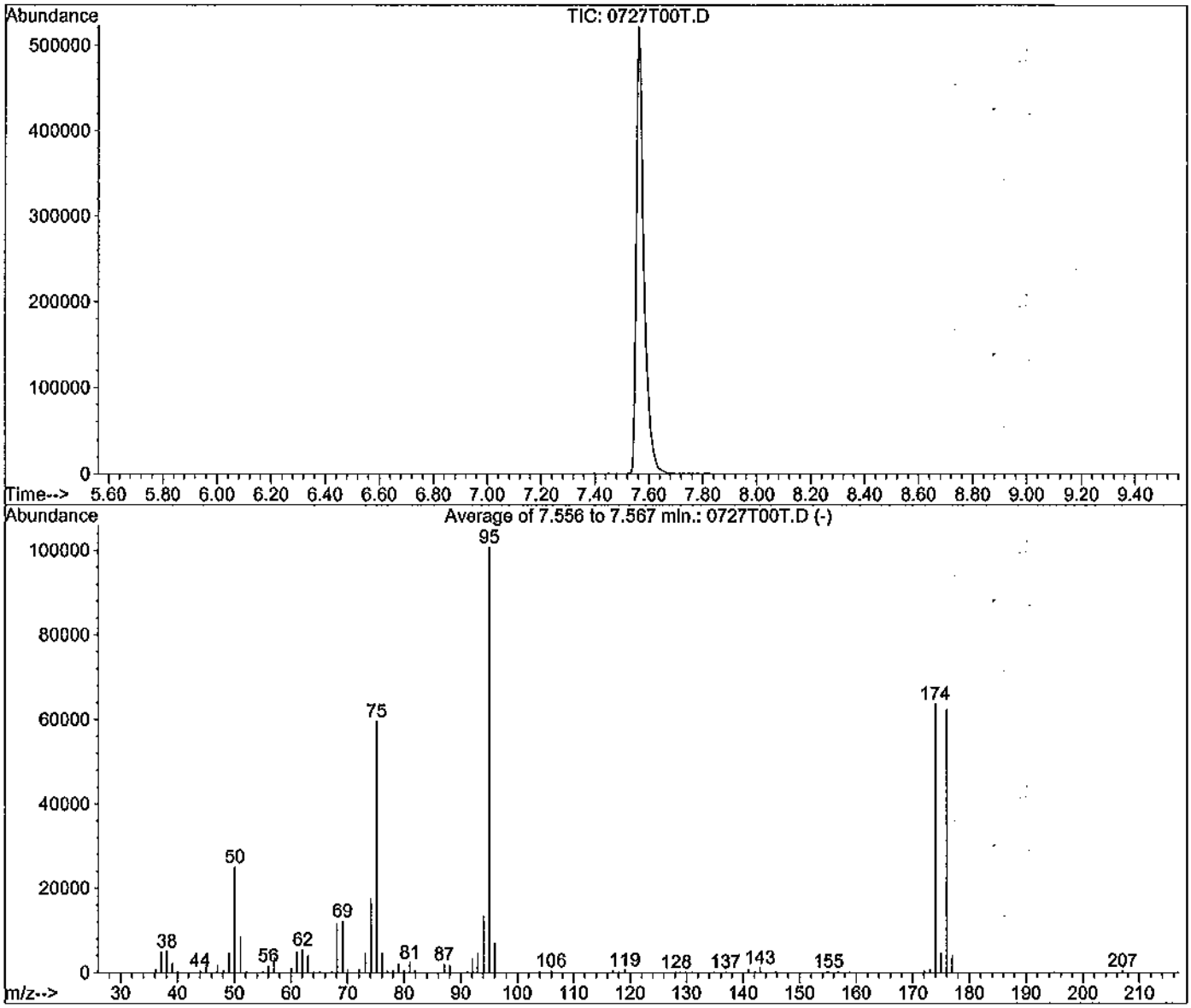
Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Aug 12 13:08:45 2011
Response via : Initial Calibration



Data File : M:\THOR\DATA\T110727\0727T00T.D
Acq On : 27 Jul 11 10:05
Sample : 20ug/ml BFB Std 07-21-11C
Misc : 2uL

Vial: 1
Operator: RP
Inst : Thor
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.

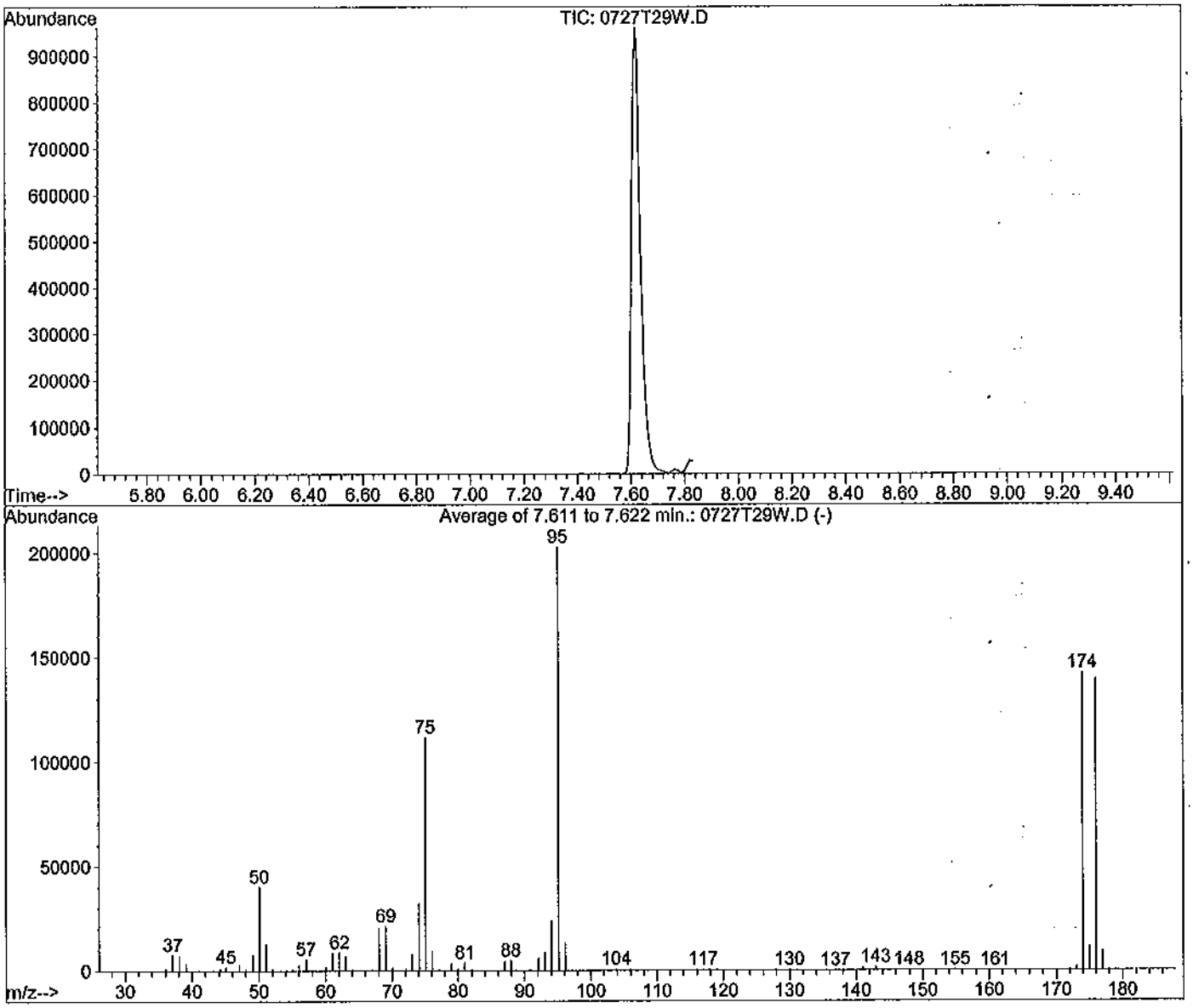
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.9	25083	PASS
75	95	30	60	59.1	59600	PASS
95	95	100	100	100.0	100792	PASS
96	95	5	9	6.8	6856	PASS
173	174	0.00	2	1.2	735	PASS
174	95	50	100	63.2	63672	PASS
175	174	5	9	7.2	4597	PASS
176	174	95	101	97.9	62347	PASS
177	176	5	9	6.5	4076	PASS

BFB

Data File : M:\THOR\DATA\T110727\0727T29W.D
Acq On : 27 Jul 11 22:29
Sample : 20ug/ml BFB Std 07-21-11C
Misc : 2uL

Vial: 29
Operator: RP
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T110727\T86DODW.M (RTE Integrator)
Title : METHOD 8260B



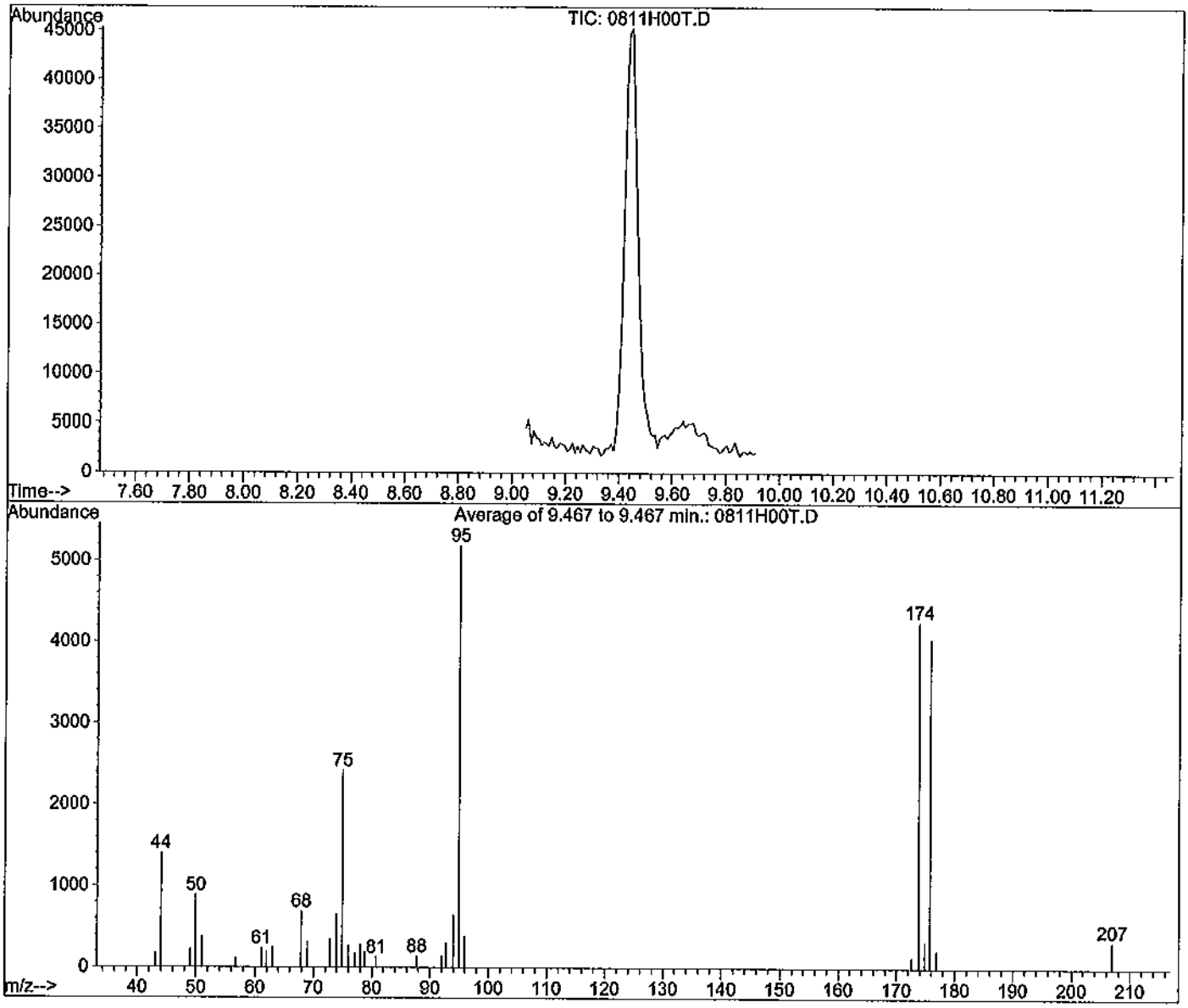
Spectrum Information: Average of 7.611 to 7.622 min.

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

Data File : M:\HEWEY\DATA\H110811\0811H00T.D
Acq On : 11 Aug 11 18:15
Sample : 20ug/ml BFB Std 07-21-11B
Misc : 2ul

Vial: 1
Operator: SV
Inst : Hewey
Multiplr: 1.00

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B



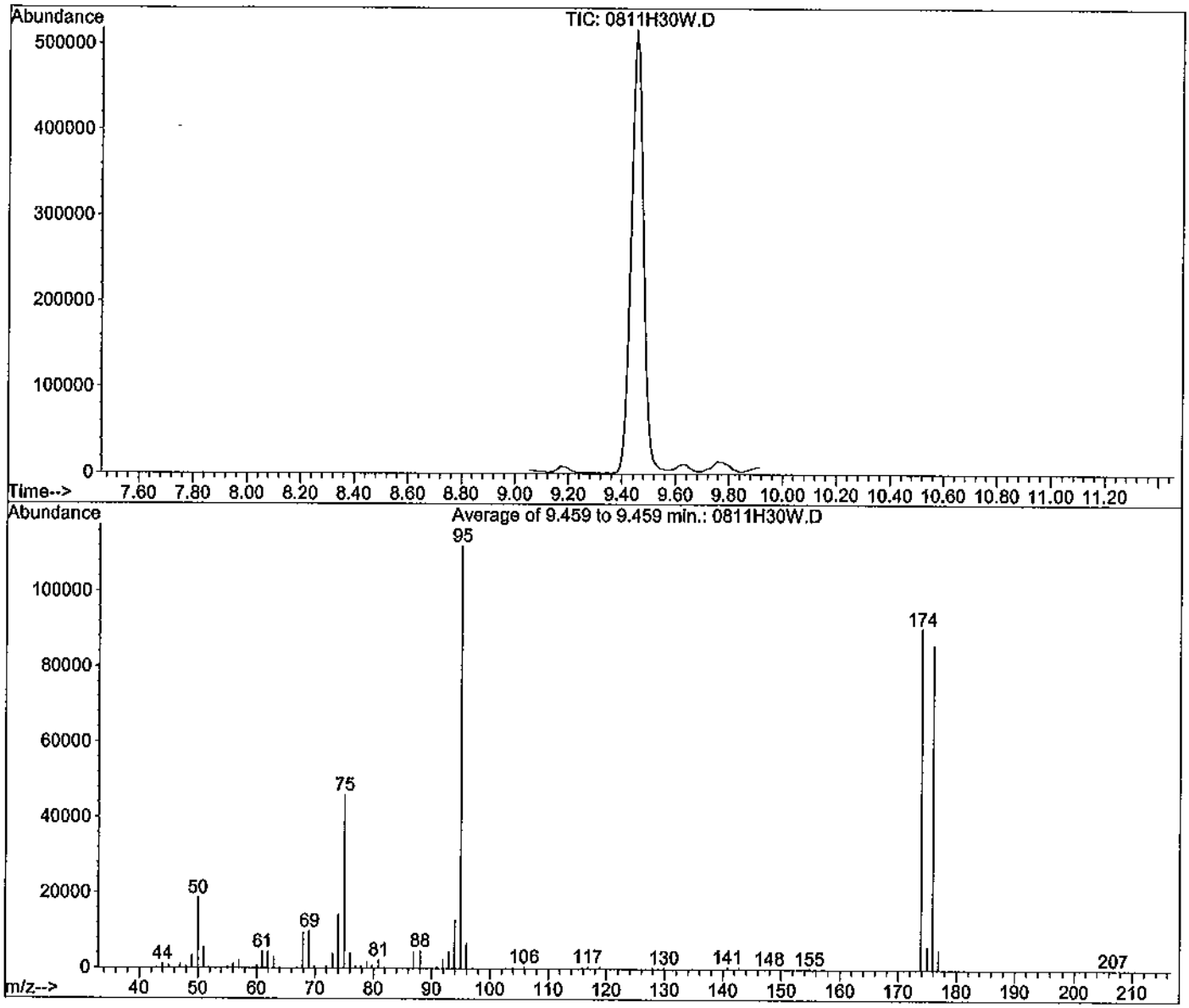
Spectrum Information: Average of 9.467 to 9.467 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	888	PASS
75	95	30	60	46.7	2423	PASS
95	95	100	100	100.0	5189	PASS
96	95	5	9	7.4	383	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.1	4262	PASS
175	174	5	9	7.6	322	PASS
176	174	95	101	95.0	4051	PASS
177	176	5	9	5.3	216	PASS

Data File : M:\HEWEY\DATA\H110811\0811H30W.D
Acq On : 12 Aug 11 12:40
Sample : 20ug/ml BFB Std 07-21-11B
Misc : 2ul

Vial: 30
Operator: SV
Inst : Hewey
Multiplr: 1.00

Method : M:\HEWEY\DATA\H110811\HGAS.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 9.459 to 9.459 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.6	18656	PASS
75	95	30	60	41.0	45984	PASS
95	95	100	100	100.0	112096	PASS
96	95	5	9	5.9	6666	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.7	90504	PASS
175	174	5	9	6.7	6096	PASS
176	174	95	101	95.0	86016	PASS
177	176	5	9	6.0	5184	PASS

092

GC/MS STANDARD PREPARATION BOOK # 57 PAGE

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-CHICO

	Expiration Date:		06/25/11								
		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.	06-23-11J	06-23-11M	06-23-11F	06-23-11H	06-23-11N	06-23-11K	06-23-11G	06-23-11I	06-23-11L
Code	µg/L	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	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	5	n/a	n/a	5
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	5	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

250ug/mL TAPO 06-23-11O Exp:06-30-11	Final Vol w/PT H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

6-24-11 RS

6-24-11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-NEO

	Expiration Date:		06/26/11								
		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.	06-23-11J	06-23-11M	06-23-11F	06-23-11H	06-23-11N	06-23-11K	06-23-11G	06-23-11I	06-23-11L
Code	µg/L	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	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

250ug/mL TBA 06-23-11O Exp:06-30-11	Final Vol w/PT H2O mL
1	5
2	5
3	5
4	5
6	5
8	5
7	5

6-25-11 RS

6-25-11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-NEO

	Expiration Date:		06/27/11								
		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.	06-23-11J	06-23-11M	06-23-11F	06-23-11H	06-23-11N	06-23-11K	06-23-11G	06-23-11I	06-23-11L
Code	µg/L	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	Exp:06-30-11	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

250ug/mL TBA 06-23-11O Exp:06-30-11	Final Vol w/PT H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
8	5
7	5

6-26-11 RS

6-27-11 RS.

6-27-11 RS.

4-Bromofluorobenzene Solution, 2,500 mg/L, 1 ml

02si

Cat. No: 020135-03
Lot No: 143634

sm: 4-Bromofluorobenzene

Fiber Fax: Lot #: 143634 - 27080

Rec: 8/27/10 MFR exp. 02/25/12

Exp: 2/25/2012
Storage: <= -10 Deerees C
Solvent: P/T Methanol
For Research Use Only

s: _____

RS

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	09/26/11	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	08/26/11	1980

6-27-11 RS.

6-27-11 RS.

7-13-11 RS

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

7-13-11 RS

07-13-11I							
250ug/ml 8260 Surrogate - Neway			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		K07E34-00534	07/08/11	12/14/11	3500

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-NEWEY

Expiration Date: 07/14/11

Date Code	Conc. ug/L	5ug/mL Vol Std #9 07-12-11Q Exp:07-19-11	5ug/mL Surr 07-12-11U Exp:07-19-11	50ug/mL Vol Std #7 07-12-11M Exp:07-19-11	50ug/mL Vol Std #8 07-12-11O Exp:07-19-11	50ug/mL Surr 07-12-11T Exp:07-19-11	5ug/mL Vol Std #10 07-12-11R Exp:07-19-11	50ug/mL Vol Std #6 07-12-11N Exp:07-19-11	50ug/mL Vol Std #2 07-12-11P Exp:07-19-11	5ug/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

250ug/mL TAPD 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

7-13-11 RS

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

7-13-11 RS

Fluorobenzene Solution, 2,000 mg/L, 1 ml

020132-02

Lot # 162971 | Storage ≤ 6 Degrees C | Expiry 6/12/13

Solv: P/T Methanol

Fluorobenzene

Lot #: 162971 - 27548

Rec: 10/12/10 MFR exp. 08/12/13

7-13-11 RS

Sweetpea 07-13-11U							
250ug/ml 8260 Internal Standard - Sweatpea			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
[illegible]	120302-03	Internal Standard Mix	2000	166255-27946	07-13-11S	09/10/11	500
[illegible]	020132-02	Fluorobenzene Standard	2000	162971-27548	07-13-11T	09/10/11	500
[illegible]		Purge & Trap MeOH		H45B36-00534	07/08/11	10/14/12	3000

Sweetpea's 8260 H2O curve on pg. 114 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
02SI	120016-03-SS	8260 Gases(SS)	2000	160736-27912	07-12-11I	08/04/11	50
02SI	020145-02-02-S	2-CEVE	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#6							
Exp:07/26/11							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120023-03-SS	VOC's 54 COMP.	2000	161271-27772	07-12-11J	11/14/11	50
02SI	120296-01	Custom 8260 Solution	2000	166038-27770	07-12-11K	11/14/11	50
02SI	020232-02-SS	Vinyl Acetate(SS)	2000	163177-28334	07-12-11L	08/29/11	50
02SI	020620-02-SS	n-HEXANE	1000	150529-27171	04-16-11O	09/02/11	100
02SI	020069-02-SS	HEXACHLOROETHANE	1000	154535-25914	04-16-11P	12/29/11	100
02SI	020546-02-SS	Heptane(SS)	1000	142226-23594	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 #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01-SS	VOC MIX 4-2 (SS)	2000	152531-25467	06-17-11O	11/03/11	250
02SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	174435-28925	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:		07/26/11								
		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.	07-19-11I	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	n/a	5	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	

250µg/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 Cat. No: 120302-03
Lot No: 153416
Exp: 11/24/2011
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only

Method 8260 Internal Standard
Lot #: 153416 - 27786
Rec: 11/24/10 MFR exp. 11/24/11

Fluorobenzene Solution, 2,000 mg/L, 1 ml

020132-02
Lot # 161971 Storage ≤6 Degrees C Expiry 8/11/13
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

7.20.11 RS

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	164585-28362	07-12-11H	07/13/11
J.T Baker		Purge & Trap MeOH		K07E34-00535	07/20/11	10/10/11

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
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 in wP&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Hewey

07-21-11A

250ug/ml 8260 Internal Standard - Hewey			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	5ug/mL Vol Std #2	50ug/mL Vol Std #11
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	6
07-21-11C	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	10
07-21-11D	1	10	20	n/a	n/a	n/a	10	n/a	n/a	20
07-21-11E	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a
07-21-11F	5	n/a	n/a	5	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 wP&T H2O mL
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

GC/MS STANDARD PREPARATION BOOK # 57 PAGE

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-NEO

	Expiration Date:		07/26/11							
		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 #3
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
07-25-11AQ	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	10	
07-25-11AW	20	n/a	n/a	20	20	40	n/a	20	20	
07-26-11AX	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

250µg/mL TAPD	Final Vol
07-25-11G	
Exp:08-02-11	
3	
5	
10	
15	
20	
25	
30	
35	
40	

7-25-11 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

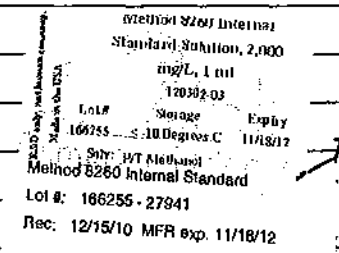
	Expiration Date:		07/26/11								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	5µg/mL Vol Std #2	50µg/mL Vol Std #3	
Date	Conc.	07-25-11L	07-25-11P	07-25-11H	07-25-11J	07-25-11O	07-25-11M	07-25-11I	07-25-11K	07-25-11N	
Code	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		
07-26-11AZ	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.

250µg/mL TBA	Final Vol
07-26-11O	
Exp:08-02-11	
1	
2	
3	
4	
5	
6	
7	

7-26-11 RS.

A-

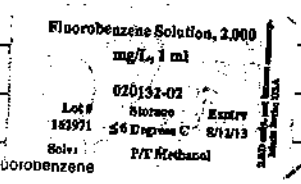


RS.

Method 8260 Internal Standard
Lot #: 166255 - 27941
Rec: 12/15/10 MFR exp. 11/18/12

7-26-11 RS.

B-

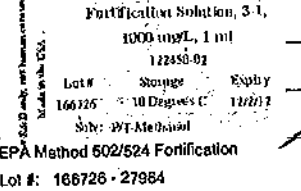


RS.

Fluorobenzene
Lot #: 162971 - 27550
Rec: 10/12/10 MFR exp. 08/12/13

7-26-11 RS.

C-



RS.

EPA Method 502/524 Fortification
Lot #: 166726 - 27984
Rec: 12/15/10 MFR exp. 12/02/12

7-26-11 RS.

Thor

07-26-11D

50ug/ml 8260 Internal Standard

Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
O2SI	120302-03	Internal Standard Mix	2000	166255-27941	07-26-11A	12/13/11	375
O2SI	020132-02	Fluorobenzene Standard	2000	162971-27550	07-26-11B	12/13/11	375
J.T Baker		Purge & Trap MeOH		K07834-00537	07/26/11	06/10/12	14250

CHICO

07-26-11E

50ug/ml 524 Internal Standard w/ Surrogate

			Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
O2SI	122450-02	524 Fortification Sol	1000	166726-27964	07-26-11C	09/10/11	200
J&T Baker		Purge & Trap MeOH		K07834-00537	02/09/11	10/22/12	3800

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

Expiration Date: 07/27/11

Date	Conc.	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
Code	ug/L	07-25-11L Exp:08-02-11	07-25-11P Exp:08-02-11	07-25-11H Exp:08-02-11	07-25-11J Exp:08-02-11	07-25-11O Exp:08-02-11	07-25-11M Exp:08-02-11	07-25-11I Exp:08-02-11	07-25-11K Exp:08-02-11	07-25-11N 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

250ug/mL TBA 07-25-11Q Exp:08-02-11	Final Vol wP&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

Date	Conc.	5ug/mL Vol Std #9	50ug/mL Vol Std #7	50ug/mL Vol Std #8	250ug/mL TAPD	Final Vol
Code	ug/L	07-25-11L Exp:08-02-11	07-25-11H Exp:08-02-11	07-25-11J Exp:08-02-11	07-25-11Q Exp:08-02-11	wP&T H2O 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)-MED

Expiration Date: 07/27/11

Date	Conc.	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
Code	ug/L	07-25-11L Exp:08-02-11	07-25-11P Exp:08-02-11	07-25-11H Exp:08-02-11	07-25-11J Exp:08-02-11	07-25-11O Exp:08-02-11	07-25-11M Exp:08-02-11	07-25-11I Exp:08-02-11	07-25-11K Exp:08-02-11	07-25-11N Exp:08-02-11
07-26-11U	0.3	3	8	n/a	n/a	n/a	3	n/a	n/a	3
07-26-11V	0.6	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	60	n/a	40	40	n/a
07-26-11AC	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 wP&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

Date	Conc.	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
Code	ug/L	07-25-11L Exp:08-02-11	07-25-11P Exp:08-02-11	07-25-11H Exp:08-02-11	07-25-11J Exp:08-02-11	07-25-11O Exp:08-02-11	07-25-11M Exp:08-02-11	07-25-11I Exp:08-02-11	07-25-11K Exp:08-02-11	07-25-11N 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
07-26-11AI	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

250ug/mL TBA 07-25-11Q Exp:08-02-11	Final Vol wP&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.

Restek
Catalog # 30205
Unleaded Gasoline Composite Standard
50,000 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

7-27-11 B- RS.

Unleaded gasoline composite
Lot #: A041961 - 18071
Rec: 7/6/06 APPL exp. _____
Unleaded Gasoline Composite Standard
50,000 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		X07E34-00537	07/26/11	03/02/12	1800
07/27/11D							
2000ug/ml Unleaded Gasoline						APPL	
			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	UL
Supelco	30205	Unleaded Gasoline	50,000	A041961-18071	07-27-11B	11/30/12	80
J&T Brand		Purge & Trap MeOH		X07E34-00537	07/26/11	03/02/12	1920

7-27-11 RS.

7-27-11 E- RS.

Method 8260B Surrogate
Solution, 2,000 mg/L, 1ml
120002-01
Lot # Storage Expiry
164585 -10 Degrees C 10/12/13
Solv: P/T Methanol
Method 8260B Surrogate
Lot #: 164585 - 28726
Rec: 4/20/11 MFR exp. 10/12/13

GC/MS STANDARD PREPARATION BOOK # 58 PAGE # 001

RS

07-27-11P							
50ug/ml 8260B Surrogate-Thor			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	8260B Surr	Surrogate Standards	2000	164585-28726	07-27-11B	12/13/11	375
J.T Baker		Purge & Trap MeOH		K07B34-00537	07/26/11	06/10/12	14625

7-27-11
RS.

Gasoline Curve Preparation for 100mL Purge (water)-THOR

	Expiration Date:		07/28/11
		1ug/mL Gasoline	Final Vol
Date	Conc.	07-27-11C	w/P&T H2O
Code	ug/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

RS.

7-27-11
RS.

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-THOR

	Expiration Date:		07/28/11								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #3	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	5ug/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	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	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

RS

250ug/mL TAPD	Final Vol
07-25-11Q	w/P&T H2O
Exp:08-02-11	mL
1	50
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								
		5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #3	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	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	Exp:08-02-11
07-27-11W	2	2	2	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

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# 166255 Storage ≤ -10 Degrees C Expiry 11/18/12
Solv: P/T Methanol

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 # 161971 Storage ≤ 6 Degrees C Expiry 8/12/13
Solv: P/T Methanol

RS.

Fluorobenzene
Lot #: 162971 - 27339
Rec: 9/21/10 MFR exp. 08/12/13

7-28-11 A-
RS

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml
120015-83
Lot # 167931 Storage ≤-10 Degrees C Expiry 1/17/14
Solv: P/T Methanol
Made only and shipped from the USA
RS
Method 8260 Gases
Lot #: 167931 - 28281
Rec: 2/17/11 MFR exp. 01/17/14

Exp. Date	uL
2/13/11	500
2/13/11	500
0/10/12	19000

7-28-11 B-
RS

Volatile Mix, 20-29, 2,000 mg/L, 1 ml
122039-02
Lot # 163374 Storage ≤-10 Degrees Expiry 8/29/11
Solv: P/T Methanol
Made only and shipped from the USA
RS
Volatile Mix, 20-29
Lot #: 163374 - 27139
Rec: 9/2/10 MFR exp. 08/29/12

Exp. Date	uL
2/13/11	500
0/10/12	1950

7-28-11 C-
RS

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
Made only and shipped from the USA
RS
Method 8260B Surrogate
Lot #: 164585 - 28725
Rec: 4/20/11 MFR exp. 10/12/13

7-28-11 D-
RS

Acrolein Solution, 10,000 mg/L, 2 X 0.6 ml
020329-09-01
Lot # 175935 Storage ≤6 Degrees C Expiry 8/22/11
Solv: Water
Made only and shipped from the USA
RS
Acrolein solution
Lot #: 175935 - 29033
Rec: 7/15/11 MFR exp. 08/22/11

7-28-11 E-
RS

VOC Mix 4-3, 2,000 mg/L, 1 ml
130166-01
Lot # 171714 Storage ≤6 Degrees C Expiry 4/11/13
Solv: P/T Methanol
Made only and shipped from the USA
RS
VOC Mix 4-3, 2000mg/L
Lot #: 171714 - 28697
Rec: 4/20/11 MFR exp. 04/11/13

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7-28-11 F. RS.

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot# 168038 Storage ≤-10 Degrees C Expiry 1/21/14
Solv: P/T Methanol
Method 8260 Gases (SS)
Lot #: 168038 - 28704
Rec: 4/20/11 MFR exp. 01/21/14

RS

7-28-11 RS.

7-28-11 RS.

7-28-11 RS.

7-28-11 RS.

07-28-11O							
50ug/ml Vol Work Std #7							
Exp:08/04/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	167931-28281	07-28-11A	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		K07E34-00537	07/26/12	10/14/11	3500
07-28-11H							
50ug/ml Vol Work Std #1							
Exp:08/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVS	2000	160092-25632	07-12-11B	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07E34-00537	07/26/12	10/14/11	1950
07-28-11I							
50ug/ml Vol Work Std #8							
Exp:08/04/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122019-02	Volatile Mix, 20-29	2000	158406-27113	07-28-11B	09/14/11	100
02SI	120023-03	VOC'S-54 COMP	2000	161805-25624	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		K07E34-00537	07/26/12	10/14/11	3300
07-28-11J							
50ug/ml Vol Work Std #2							
Exp:08/04/11							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL-S-Ketone Solution	2000	169173-28303	07-25-11E	09/07/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00537	07/26/12	10/14/11	3900
		07-28-11K	Exp:	08/04/11			
		5ug/ml Vol Work Std #9					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		07-28-11G	05/02/11	200	
		50ug/ml Vol Work Std #8		07-28-11I	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1600	
		07-28-11L	Exp:	08/04/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		07-28-11H	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	
		07-28-11M	Exp:	08/04/11			
		5ug/ml Vol Work Std #12					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		07-28-11J	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	
07-28-11N							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:08/04/11			ug/ml	Lot #	Code	Date	uL
02SI	120002-01	8260B Surr Solution	2000	164585-28725	07-28-11C	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00537	07/26/12	10/14/11	3900
07-28-11O			Exp:	08/04/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		07-28-11N	05/02/11	200	
J&T Brand		Purge & Trap MeOH		07/08/12	06/08/12	1800	

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07-28-11P
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P
Exp:08/04/11

Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	APPL Exp. Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	171214-28697	07-28-11E	09/17/11	500
02SI	020229-09	Acrolein	10000	175935-29033	07-26-11D	08/22/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	3400

7-28-11
RS.

07-28-11Q
50ug/ml VOC Std#5
Exp:08/04/11

Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
02SI	120016-03-SS	6260 Gases(SS)	2000	168038-28704	07-28-11F	09/04/11	50
02SI	020145-02-02-S	2-CBVE	2000	152530-25456	06-17-11N	11/03/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	1900

07-28-11R
50ug/ml VOC Std#6
Exp:08/04/11

	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120023-03-SS	VOC'S 54 COMP.	2000	161271-27772	07-12-11J	11/14/11	50
02SI	120236-01	Custom #260 Solution	2000	166038-27770	07-12-11K	11/14/11	50
02SI	020232-02-SS	Vinyl Acetate(SS)	2000	167177-28134	07-12-11L	08/29/11	50
02SI	020520-02-SS	n-HEXANE	1000	150529-27171	04-16-11O	09/02/11	100
02SI	020049-02-SS	HEXACHLOROETHANE	1000	154515-25914	04-16-11P	12/29/11	100
02SI	020546-02-SS	Heptane(SS)	1000	142276-23594	04-16-11Q	09/19/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	1550

07-28-11S
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P
Exp:08/04/11

Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	APPL Exp. Date	uL
02SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	152531-25467	06-17-11O	11/03/11	250
02SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	174435-28926	06-17-11L	07/23/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	1700

7-28-11
RS.

07-28-11T
50ug/ml Vol Work Std #7
Exp:08/04/11

Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
02SI	120016-03	Gas Mix	2000	167911-28281	07-28-11A	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		K07B34-00537	07/26/12	10/14/11	3500

07-28-11U
50ug/ml Vol Work Std #1
Exp:08/04/11

Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CBVE	2000	160092-26612	07-12-11E	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	1950

7-28-11
RS.

07-28-11V
50ug/ml Vol Work Std #3
Exp:08/04/11

Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	158406-27139	07-28-11B	09/14/11	100
02SI	120023-03	VOC'S-54 COMP	2000	161805-25624	07-05-11D	10/14/11	100
02SI	020232-02	Vinyl Acetate	2000	173776-28847	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		K07B34-00537	07/26/12	10/14/11	3300

07-28-11W
50ug/ml Vol Work Std #2
Exp:08/04/11

Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL's-Ketone Solution	2000	169173-28303	07-25-11E	09/07/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00537	07/26/12	10/14/11	3900

07-28-11X	Exp:	08/04/11			
5ug/ml Vol Work Std #3					
SOURCES	Lot	APPL Code	APPL Exp Date	ul	
50ug/ml Vol Work Std #7		07-28-11T	05/02/11	200	
50ug/ml Vol Work Std #8		07-28-11V	05/02/11	200	
J&T Brand		07/08/12	06/08/12	1600	

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		07-28-11Y	Exp:	08/04/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		07-28-11U	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	
		07-28-11z	Exp:	08/04/11			
		5ug/ml Vol Work Std #12					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		07-28-11W	05/02/11	200	
		J&T Brand		07/08/12	06/08/12	1800	
07-28-11AA							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:08/04/11			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-28725	07-28-11C	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00537	07/26/12	10/14/11	3900
07-28-11AB			Exp:	08/04/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		07-28-11AA	05/02/11	200	
J&T Brand		Purge & Trap MeOH		07/08/12	06/08/12	1800	
07-28-11AC							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:08/04/11			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	171714-28697	07-28-11E	09/17/11	500
O2SI	020229-09	Acrolein	10000	175935-29033	07-28-11D	08/22/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00537	07/26/12	10/14/11	3400

7-28-11 RS.

7-28-11 RS

7-28-11 RS.

7-28-11 AD-

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
Made in the USA. For R&D only, not for human consumption.

RS.

Method 8260 Internal Standard
Lot #: 166255 - 27943
Rec: 12/15/10 MFR exp. 11/18/12

7-29-11 RS.

7-28-11 AE-

Fluorobenzene Solution, 2,000 mg/L, 1 ml
020132-02
Lot# 162971 Storage ≤ 6 Degrees C Expiry 8/12/13
Solv: P/T Methanol
Fluorobenzene
Made in the USA. For R&D only, not for human consumption.

RS.

Lot #: 162971 - 27551
Rec: 10/12/10 MFR exp. 08/12/13

7-30-11 RS

RS.

CHICO							
07-28-11AF							
250ug/ml 8260 Internal Standard - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120302-03	Internal Standard Mix	2000	166255-27943	07-28-11AD	10/23/11	500
O2SI	020132-02	Fluorobenzene Standard	2000	162971-27551	07-28-11AE	10/23/11	500
J&T Baker		Purge & Trap MeOH		K07E34-00537	07/26/11	11/14/12	3000
07-28-11AG							
250ug/ml 8260 Surrogate - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	Surrogate Standard	2000	164585-28726	07-27-11E	10/23/11	500
J&T Baker		Purge & Trap MeOH		K07E34-00537	07/26/11	11/14/12	3500

1-28-11 RS

8-1-11 ARS

Neo							
08-01-11A							
10ug/ml Neo-524 Internal Standard w/ Surrogate			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27984	07-26-11C	09/10/11	200
J.T.Baker		Purge & Trap MeOH		X07E34-00537	02/09/11	10/22/12	19800

ARS

8-1-11 ARS

Volatile Standard Curve Preparation for 10mL Purge (524 water)-NEO

	Expiration Date:		08/02/11			
		5µg/mL Vol Std #9	50µg/mL Vol Std #7	50µg/mL Vol Std #8	250µg/mL TAPD	Final Vol
Date	Conc.	07-28-11L	07-28-11H	07-28-11J	07-28-11Q	w/P&T H2O
Code	µg/L	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	mL
08-01-11H	0.2	2	n/a	n/a	2	50
08-01-11I	0.5	5	n/a	n/a	5	50
08-01-11J	1	10	n/a	n/a	10	50
08-01-11K	2	20	n/a	n/a	16	50
08-01-11L	5	n/a	5	5	20	50
08-01-11M	10	n/a	10	10	25	50
08-01-11N	20	n/a	20	20	30	50
08-01-11O	40	n/a	40	40	35	50

ARS

8-2-11 ARS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-MAX

	Expiration Date:		08/03/11							
		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
Date	Conc.	07-28-11K	07-28-11O	07-28-11G	07-28-11I	07-28-11N	07-28-11L	07-28-11H	07-28-11J
Code	µg/L	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11
08-02-11A	2	2	2	n/a	n/a	n/a	2	n/a	2
08-02-11B	5	5	5	n/a	n/a	n/a	5	n/a	5
08-02-11C	10	10	10	n/a	n/a	n/a	10	n/a	10
08-02-11D	20	20	20	n/a	n/a	n/a	20	n/a	20
08-02-11E	50	n/a	n/a	5	5	5	n/a	5	n/a
08-02-11F	100	n/a	n/a	10	10	10	n/a	10	n/a
08-02-11G	200	n/a	n/a	20	20	20	n/a	20	n/a

50µg/mL Vol Std #12	250µg/mL TBA	Final Vol
07-28-11M	07-28-11P	w/P&T H2O
Exp:08-04-11	Exp:08-04-11	mL
n/a	1	5
n/a	2	5
n/a	3	5
n/a	4	5
5	5	5
10	6	5
20	7	5

ARS

8-2-11 ARS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR

	Expiration Date:		08/03/11							
		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
Date	Conc.	07-28-11K	07-28-11O	07-28-11G	07-28-11I	07-28-11N	07-28-11L	07-28-11H	07-28-11J
Code	µg/L	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11
08-02-11H	2	2	2	n/a	n/a	n/a	2	n/a	2
08-02-11I	5	5	5	n/a	n/a	n/a	5	n/a	5
08-02-11J	10	10	10	n/a	n/a	n/a	10	n/a	10
08-02-11K	20	20	20	n/a	n/a	n/a	20	n/a	20
08-02-11L	50	n/a	n/a	5	5	5	n/a	5	n/a
08-02-11M	100	n/a	n/a	10	10	10	n/a	10	n/a
08-02-11N	200	n/a	n/a	20	20	20	n/a	20	n/a

50µg/mL Vol Std #12	250µg/mL TBA	Final Vol
07-28-11M	07-28-11P	w/P&T H2O
Exp:08-04-11	Exp:08-04-11	mL
n/a	1	5
n/a	2	5
n/a	3	5
n/a	4	5
5	5	5
10	5	5
20	7	5

ARS

8-2-11 ARS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-HEWEY

	Expiration Date:		08/03/11							
		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
Date	Conc.	07-28-11K	07-28-11O	07-28-11G	07-28-11I	07-28-11N	07-28-11L	07-28-11H	07-28-11J
Code	µg/L	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11	Exp:08-04-11
08-02-11O	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a
08-02-11P	0.6	5	10	n/a	n/a	n/a	6	n/a	n/a
08-02-11Q	1	10	20	n/a	n/a	n/a	10	n/a	n/a
08-02-11R	2	20	40	n/a	n/a	n/a	20	n/a	n/a
08-02-11S	5	n/a	n/a	5	5	10	n/a	5	5
08-02-11T	10	n/a	n/a	10	10	25	n/a	10	10
08-02-11U	20	n/a	n/a	20	20	40	n/a	20	20
08-02-11V	40	n/a	n/a	40	40	60	n/a	40	40
08-02-11W	100	n/a	n/a	100	100	n/a	n/a	100	100

5µg/mL Vol Std #12	250µg/mL TAPD	Final Vol
07-28-11M	07-28-11P	w/P&T H2O
Exp:08-04-11	Exp:08-04-11	mL
3	3	50
5	5	50
10	10	50
20	16	50
n/a	20	50
n/a	25	50
n/a	30	50
n/a	35	50
n/a	40	50

ARS

012

GC/MS STANDARD PREPARATION BOOK # 58 PAGE # ~~~

8-04-11 RS

A -

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml

120015-03

Lot #	Storage	Expiry
167931	≤-10 Degrees C	1/17/14

Solvt: P/T Methanol

Made in the USA

Method 8260 Gases

Lot #: 167931 - 28279

Rec: 2/17/11 MFR exp. 01/17/14

8-04-11 RS

8-04-11 RS

B -

Hexachloroethane Solution, 1000 mg/L, 1 ml

020049-02

Lot #	Storage	Expiry
164816	≤-10 Degrees C	10/14/12

Solvt: P/T Methanol

Made in the USA

Hexachloroethane

Lot #: 164816 - 28690

Rec: 4/20/11 MFR exp. 10/14/12

8-04-11 RS

8-04-11 RS

C -

Benzyl Chloride Solution, 1000 mg/L, 1 ml

020228-02

Lot #	Storage	Expiry
163373	≤-10 Degrees	8/29/12

Solvt P/T Methanol

Made in the USA

Benzyl Chloride

Lot #: 163373 - 27862

Rec: 12/15/10 MFR exp. 08/29/12

8-04-11 RS

8-04-11 RS

D -

2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml

o2si

Cat. No: 020145-02-02
Lot No: 160092

Exp: 5/27/2012
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only

Date Opened: _____

2-Chloroethyl vinyl ether

Lot #: 160092 - 28633

Rec: 6/4/10 MFR exp. 05/27/12

8-04-11 RS

8-04-11 RS.

E -

Volatile Mix, 20-29, 2,000 mg/L, 1 ml

o2si smart solutions

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 - 27133

Rec: 9/2/10 MFR exp. 04/20/12

8-04-11 RS.

8-04-11 RS.

F -

Method 8260 VOC Liquids, 54 Compounds, 2,000 mg/L, 1 ml

o2si smart solutions

Cat. No: 120023-03
Lot No: 151805

Exp: 10/15/2011
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only

Date Opened: _____

8260 VOC Liquids, 54 Comp.

Lot #: 151805 - 25625

Rec: 12/3/09 MFR exp. 10/15/11

8-04-11 RS.

B-

8-04-11
RS.

n-Hexane Solution, 1,000 mg/L, 1 ml
020620-02
Lot # 163378 Storage ≤-10 Degrees Expiry 8/29/15
Solv: P/T Methanol
n-Hexane, 1000mg/L
Lot #: 163378 - 27887
Rec: 12/15/10 MFR exp. 08/29/15

RS

H-

8-04-11
RS.

o2si
Heptane Solution, 1000 mg/L, 1 ml
Cat. No: 020546-02
Lot No: 149236
Exp: 8/2/2012
Storage: <= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only
Opened: _____
Heptane Solution
Lot #: 149236 - 28331
Rec: 2/17/11 MFR exp. 08/02/12

RS

I-

8-04-11
RS.

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 - 28344
Rec: 2/17/11 MFR exp. 10/12/13

RS

J-

8-04-11
RS

Acrolein Solution, 10,000 mg/L, 2 x 0.6 ml
120219-09-01
Lot # 175935 Storage ≤6 Degrees C Expiry 8/22/11
Acrolein solution
Lot #: 175935 - 29032
Rec: 7/15/11 MFR exp. 08/22/11

RS

K-

8-04-11
RS.

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 171714 Storage ≤6 Degrees C Expiry 4/11/13
Solv: P/T Methanol
VOC Mix 4-3, 2000mg/L
Lot #: 171714 - 28696
Rec: 4/20/11 MFR exp. 04/11/13

RS

L-

8-04-11
RS.

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 168038 Storage ≤-10 Degrees C Expiry 1/21/14
Solv: P/T Methanol
Method 8260 Gases (SS)
Lot #: 168038 - 28705
Rec: 4/20/11 MFR exp. 01/21/14

RS

8-04-11 M-
RS.

2-Chloroethyl Vinyl Ether Solution (Second Source), 2,000 mg/L, 2 X 0.6 ml
o2si smart solutions
Cat. No: 020145-02-02-SS Lot No: 152530
Exp: 11/3/2011
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only
2-Chloroethyl vinyl ether (SS)
Lot #: 152530 - 25443
Rec: 11/6/09 MFR exp. 11/03/11
Opened: _____

8-04-11 N-
RS

Hexachloroethane (Second Source) Solution, 1000 mg/L, 1 ml
o2si smart solutions
Cat. No: 020049-02-SS Lot No: 154535
Exp: 12/29/2011
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only
Hexachloroethane (SS)
Lot #: 154535 - 25913
Rec: 1/5/10 MFR exp. 12/29/11
Opened: _____

8-04-11 O-
RS

n-Hexane Solution (Second Source), 1,000 mg/L, 1 ml
o2si smart solutions
Cat. No: 020620-02-SS Lot No: 150529
Exp: 9/2/2011
Storage:
Solvent: P/T Methanol
For Research Use Only
n-Hexane (SS) 1000mg/L
Lot #: 150529 - 25150
Rec: 9/10/09 MFR exp. 09/02/11
Opened: _____

8/04/11
RS.

8-04-11 P-
RS

Heptane Solution (Second Source), 1000 mg/L, 1 ml
o2si smart solutions
Cat. No: 020546-02-SS Lot No: 142276
Exp: 1/19/2012
Storage: </= -10 Degrees C
Solvent: P/T Methanol
For Research Use Only
Heptane Solution (SS)
Lot #: 142276 - 23593
Rec: 1/16/09 MFR exp. 01/19/12
Opened: _____

8-04-11 Q-
RS.

VOC Mix 4-3 (second source), 2,000 mg/L, 1 ml
o2si smart solutions
Cat. No: 120166-01-SS Lot No: 152531
Exp: 11/3/2011
Storage: </= 6 Degrees C
Solvent: P/T Methanol
For Research Use Only
VOC Mix 4-3 (SS)
Lot #: 152531 - 26242
Rec: 3/3/10 MFR exp. 11/03/11
Opened: _____

8-04-11 R-
RS.

Acrolein Solution (Second Source), 10,000 mg/L, 2 x 0.6 ml
010219-09-02-SS
Lot # 175936 Storage ≤ 6 Degrees C Expiry 8/22/11
Acrolein Solution SS
Lot #: 175936 - 29034
Rec: 7/15/11 MFR exp. 08/22/11

08-04-11S							
50ug/ml Vol Work Std #7							
Exp:08/11/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03	Gas Mix	2000	167931-28279	08-04-11A	09/04/11	100
O2SI	020049-02	HEXACHLOROETHANE	1000	164816-28690	08-04-11B	09/14/11	200
O2SI	020228-02	Benzyl Chloride	1000	163373-27862	08-04-11C	09/14/11	200
J&T Brand		Purge & Trap MeOH		K07E24-00540	08/04/12	10/14/11	3500
08-04-11T							
50ug/ml Vol Work Std #1							
Exp:08/11/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	020145-02-02	2-C6VE	2000	160092-26633	08-04-11D	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07E24-00540	08/04/12	10/14/11	1950
08-04-11U							
50ug/ml Vol Work Std #8							
Exp:08/11/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	122039-02	Volatile Mix, 20-29	2000	158405-27133	08-04-11E	09/14/11	100
O2SI	120023-03	VOC'S-54 COMP	2000	151805-25625	08-04-11F	10/14/11	100
O2SI	020232-02	Vinyl Acetate	2000	173776-28867	07-05-11E	08/29/11	100
O2SI	020620-02	n-Hexane	1000	163378-27867	08-04-11G	09/14/11	200
O2SI	020546-02	Heptane	1000	149236-28331	08-04-11H	09/14/11	200
J&T Brand		Purge & Trap MeOH		K07E14-00540	08/04/12	10/14/11	3300
08-04-11V							
50ug/ml Vol Work Std #2							
Exp:08/11/11							
Supplier	ID #	ID	ug/ml				
O2SI	121020-05	HSL'S-Ketone Solution	2000	169173-28303	07-25-11E	09/07/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00540	08/04/12	10/14/11	3900
		08-04-11W	Exp:	08/11/11			
		5ug/ml Vol Work Std #9					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		08-04-11S	09/02/11	200	
		50ug/ml Vol Work Std #8		08-04-11U	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1600	
		08-04-11X	Exp:	08/11/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		08-04-11T	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1800	
		08-04-11Y	Exp:	08/11/11			
		5ug/ml Vol Work Std #12					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		08-04-11V	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1800	
08-04-11Z							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:08/11/11			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-28344	08-04-11I	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	3900
08-04-11AA			Exp:	08/11/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		08-04-11Z	09/02/11	200	
J&T Brand		Purge & Trap MeOH		08/05/12	06/08/12	1800	
08-04-11AB							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:08/11/11			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	171714-28696	08-04-11K	12/17/11	500
O2SI	020229-05	Acrolein	10000	175915-29032	08-04-11J	08/22/11	100
J&T Brand		Purge & Trap MeOH		K07E14-00540	08/04/12	10/14/11	3400

8/04/11 RS.

RS

8/04/11 RS

08-04-11AC							
50ug/ml VOC Std#5							
Exp:08/11/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	168038-28705	08-04-11L	09/04/11	50
O2SI	020145-02-02-S	2-CEVE	2000	152530-25443	08-04-11M	11/03/11	50
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	1900
08-04-11AD							
50ug/ml VOC Std#6							
Exp:08/11/11							
	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	166038-27770	07-12-11K	11/14/11	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	167177-28334	07-12-11L	08/29/11	50
O2SI	020620-02-SS	n-HEXANE	1000	150529-25150	08-04-11O	09/02/11	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	154535-25933	08-04-11N	12/29/11	100
O2SI	020546-02-SS	Heptane(SS)	1000	142276-23593	08-04-11P	12/19/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	1550
08-04-11AE							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:08/11/11			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	ul
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	152531-26242	08-04-11Q	11/03/11	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	175936-29034	08-04-11R	08/22/11	50
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	1700

8/04/11 RS.

08-04-11AF							
50ug/ml Vol Work Std #7							
Exp:08/11/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03	Gas Mix	2000	167931-28279	08-04-11A	09/04/11	100
O2SI	020049-02	HEXACHLOROETHANE	1000	164816-28690	08-04-11B	08/14/11	200
O2SI	020228-02	Benzyl Chloride	1000	163173-27862	08-04-11C	08/14/11	200
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	3500
08-04-11AG							
50ug/ml Vol Work Std #1							
Exp:08/11/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	020145-02-02	2-CEVE	2000	160092-26631	08-04-11D	09/07/11	50
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	1950
08-04-11AH							
50ug/ml Vol Work Std #8							
Exp:08/11/11							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120019-02	Volatile Mix, 20-29	2000	158406-27113	08-04-11E	09/14/11	100
O2SI	120023-03	VOC'S-54 COMP	2000	151805-25625	08-04-11P	10/14/11	100
O2SI	020232-02	Vinyl Acetate	2000	173796-28887	07-05-11E	08/29/11	100
O2SI	020620-02	n-Hexane	1000	163378-27887	08-04-11G	09/14/11	200
O2SI	020546-02	Heptane	1000	149236-28331	08-04-11H	09/14/11	200
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	3300
08-04-11AI							
50ug/ml Vol Work Std #2							
Exp:08/11/11							
Supplier	ID #	ID	ug/ml				
O2SI	121020-05	HSL'S-Ketone Solution	2000	169171-28303	07-25-11E	09/07/11	100
J&T Brand		Purge & Trap MeOH		K07E34-00540	08/04/12	10/14/11	3900
		08-04-11AJ	Exp:	08/11/11			
		5ug/ml Vol Work Std #9					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		08-04-11AF	09/02/11	200	
		50ug/ml Vol Work Std #8		08-04-11AH	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1600	
		08-04-11AK	Exp:	08/11/11			
		5ug/ml Vol Work Std #10					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		08-04-11AG	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1800	

		08-04-11AL	Exp:	08/11/11			
		5ug/ml Vol Work Std #12					
		SOURCES	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		08-04-11AI	09/02/11	200	
		J&T Brand		08/05/12	06/08/12	1800	
08-04-11AM							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:08/11/11			ug/ml	Lot #	Code	Date	uL
02SI	120002-01	8260B Surr Solution	2000	164585-28344	08-04-11I	09/14/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00540	08/04/12	10/14/11	1900
08-04-11AN			Exp:	08/11/11			
5.0ug/ml 8260 Surrogate			Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		08-04-11AM	09/02/11	200	
J&T Brand		Purge & Trap MeOH		08/05/12	06/08/12	1800	
08-04-11AO							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:08/11/11			Conc.		Date	Exp.	
Supplier	IO #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	171714-28696	08-04-11K	12/17/11	500
02SI	020229-09	Acrolein	10000	175935-29032	08-04-11J	08/22/11	100
J&T Brand		Purge & Trap MeOH		K07B34-00540	08/04/12	10/14/11	3400

8/04/11 RS.

RS

RS

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	41	0727T41W.D	1	AY42541W01	10ml w/5ul of IS&S: 07-2	07/28/2011 03:40
23	48	0727T48W.D	1	AY42542W01	10ml w/5ul of IS&S: 07-2	07/28/2011 06:42
24	49	0727T49W.D	1	AY42543W01	10ml w/5ul of IS&S: 07-2	07/28/2011 07:08
25	50	0727T50W.D	1	AY42544W01	10ml w/5ul of IS&S: 07-2	07/28/2011 07:34
26	55	0727T55W.D	1	AY42542W234 MS-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 09:44
27	56	0727T56W.D	1	AY42542W234 MSD-1WT	10ml w/5ul of IS&S: 07-2	07/28/2011 10:10

Injection Log

Directory: M:\HEWEY\DATA\H110811

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0811H00T.D	1	20ug/ml BFB Std 07-21-11B	2ul	08/11/2011 18:15
2	9	0811H09W.D	1	Vol Std 08-11-11@20ug/L	Water 10ml w/IS: 07-21-1	08/11/2011 23:47
3	10	0811H10W.D	1	Vol Std 08-11-11@50ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 00:23
4	11	0811H11W.D	1	Vol Std 08-11-11@100ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 01:00
5	12	0811H12W.D	1	Vol Std 08-11-11@300ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 01:37
6	13	0811H13W.D	1	Vol Std 08-11-11@600ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 02:14
7	14	0811H14W.D	1	Vol Std 08-11-11@800ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 02:50
8	15	0811H15W.D	1	Vol Std 08-11-11@1000ug/L	Water 10ml w/IS: 07-21-1	08/12/2011 03:27
9	30	0811H30W.D	1	20ug/ml BFB Std 07-21-11B	2ul	08/12/2011 12:40
10	31	0811H31W.D	1	Gas 300ug/L (SS)	Water 10ml w/IS&S: 07-2	08/12/2011 13:17
11	36	0811H36W.D	1	AY42542W10 MS-1WH	Water 10ml w/IS&S: 07-2	08/12/2011 16:24
12	37	0811H37W.D	1	AY42542W11 MSD-1WH	Water 10ml w/IS&S: 07-2	08/12/2011 17:01

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 12:25:36 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

408

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **110802W-42542 MS - 158181**

Sample ID: AY42542

Client ID: ES043

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	0.12	240	233	96.0	93.2	3.0	20	80-120	8/2/2011	8/13/2011	8/2/2011	8/13/2011	158181	AY42542

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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

ARF: 65208

Sample ID: ES043

APPL ID: AY42542

Sample Collection Date: 7/21/2011

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.12 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

J = Estimated value.

Printed: 8/15/2011 12:25:32 PM

APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\026SMPL.D\026SMPL.D#
Date Acquired: Aug 13 2011 01:44 pm
Operator: SDM
Sample Name: AY42542W21
Misc Info: 110802A-3015
Vial Number: 3108
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	0.10	1000	
11 B	40.72 ug/l	45.24	1.04	1000	
23 Na	49060.00 ug/l	54505.66	0.82	25000	>Cal
24 Mg	13510.00 ug/l	15009.61	0.52	50000	
27 Al	-11.35 ug/l	-12.61	4.73	20000	
39 K	681.00 ug/l	756.59	1.65	20000	
44 Ca	13500.00 ug/l	14998.50	1.35	50000	
47 Ti	0.09 ug/l	0.10	68.09	1000	
51 V	0.11 ug/l	0.12	6.41	1000	
52 Cr	0.06 ug/l	0.07	26.04	1000	
55 Mn	334.00 ug/l	371.07	0.38	1000	
56 Fe	3750.00 ug/l	4166.25	0.85	20000	
59 Co	-0.08 ug/l	-0.09	7.35	1000	
60 Ni	1.01 ug/l	1.12	0.96	1000	
63 Cu	0.21 ug/l	0.23	3.55	1000	
65 Cu	0.19 ug/l	0.21	15.43	1000	
66 Zn	10.88 ug/l	12.09	4.52	1000	
75 As	-0.02 ug/l	-0.02	137.77	1000	
78 Se	-0.27 ug/l	-0.31	0.58	1000	
78 Se	-0.34 ug/l	-0.37	45.41	1000	
88 Sr	127.10 ug/l	141.21	1.63	1000	
88 Sr	134.20 ug/l	149.10	2.07	1000	
95 Mo	-1.49 ug/l	-1.65	2.13	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	-0.10 ug/l	-0.11	1.88	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	-0.09 ug/l	-0.10	22.20	1000	
118 Sn	0.71 ug/l	0.78	5.96	1000	
121 Sb	-0.61 ug/l	-0.68	1.42	1000	
137 Ba	3.25 ug/l	3.61	4.58	1000	
205 Tl	-0.05 ug/l	-0.05	2.43	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	0.10 ug/l	0.12	11.79	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5218453.50	0.98	5314145.50	98.2	70 - 120	
45 Sc	1007682.70	3.61	854699.00	117.9	70 - 120	
45 Sc	52975.45	2.19	51738.40	102.4	70 - 120	
45 Sc	2116334.80	2.66	1799310.60	117.6	70 - 120	
72 Ge	179744.92	3.60	178160.53	100.9	70 - 120	
72 Ge	17543.01	1.23	18616.22	94.2	70 - 120	
72 Ge	269094.78	1.66	275015.22	97.8	70 - 120	
115 In	1368179.80	2.80	1386546.60	98.7	70 - 120	
159 Tb	1771326.00	1.27	1710816.90	103.5	70 - 120	
165 Ho	1780086.50	1.38	1691823.60	105.2	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: ES044
Sample Collection Date: 7/21/2011

ARF: 65208
APPL ID: AY42543

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.27 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

J = Estimated value.

Printed: 8/15/2011 12:25:32 PM

APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\031SMPL.D\031SMPL.D#
Date Acquired: Aug 13 2011 02:14 pm
Operator: SDM
Sample Name: AY42543W08
Misc Info: 110802A-3015
Vial Number: 3109
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	0.40	1000	
11 B	27.83	ug/l	30.92	1.42	1000	
23 Na	228800.00	ug/l	254196.80	0.50	25000	>Cal
24 Mg	36100.00	ug/l	40107.10	0.96	50000	
27 Al	-12.18	ug/l	-13.53	17.64	20000	
39 K	5958.00	ug/l	6619.34	1.54	20000	
44 Ca	211900.00	ug/l	235420.90	1.00	50000	>Cal
47 Ti	-0.08	ug/l	-0.09	216.67	1000	
51 V	0.07	ug/l	0.08	29.19	1000	
52 Cr	24.81	ug/l	27.56	1.06	1000	
55 Mn	0.45	ug/l	0.50	9.46	1000	
56 Fe	4.66	ug/l	5.18	4.45	20000	
59 Co	4.62	ug/l	5.14	1.19	1000	
60 Ni	15.38	ug/l	17.09	2.39	1000	
63 Cu	1.13	ug/l	1.25	3.40	1000	
65 Cu	1.19	ug/l	1.32	1.41	1000	
66 Zn	7.17	ug/l	7.96	5.33	1000	
75 As	0.06	ug/l	0.07	0.72	1000	
78 Se	1.78	ug/l	1.98	1.02	1000	
78 Se	1.70	ug/l	1.89	4.57	1000	
88 Sr	4610.00	ug/l	5121.71	0.76	1000	>Cal
88 Sr	4952.00	ug/l	5501.67	0.64	1000	>Cal
95 Mo	-0.67	ug/l	-0.75	9.29	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	-0.09	ug/l	-0.10	5.28	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	-0.08	ug/l	-0.09	8.55	1000	
118 Sn	0.37	ug/l	0.41	7.01	1000	
121 Sb	-0.35	ug/l	-0.39	8.79	1000	
137 Ba	193.60	ug/l	215.09	1.26	1000	
205 Tl	-0.04	ug/l	-0.04	2.19	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.24	ug/l	0.27	5.28	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5011540.00	1.56	5314145.50	94.3	70 - 120	
45 Sc	889924.81	2.35	854699.00	104.1	70 - 120	
45 Sc	53115.60	4.00	51738.40	102.7	70 - 120	
45 Sc	1861252.40	1.18	1799310.60	103.4	70 - 120	
72 Ge	160623.17	0.74	178160.53	90.2	70 - 120	
72 Ge	16831.46	3.14	18616.22	90.4	70 - 120	
72 Ge	264240.59	1.16	275015.22	96.1	70 - 120	
115 In	1336296.30	1.58	1386546.60	96.4	70 - 120	
159 Tb	1679276.40	0.05	1710816.90	98.2	70 - 120	
165 Ho	1665749.60	0.77	1691823.60	98.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

4 :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: ES045
Sample Collection Date: 7/21/2011

ARF: 65208
APPL ID: AY42544

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.43 J	0.5	0.22	0.11	ug/L	1	8/2/2011	8/13/2011

J = Estimated value.

Printed: 8/15/2011 12:25:32 PM
APPL-F1-SC-NoMC-REG MDLs

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\032SMPL.D\032SMPL.D#
Date Acquired: Aug 13 2011 02:20 pm
Operator: SDM
Sample Name: AY42544W08
Misc Info: 110802A-3015
Vial Number: 3110
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	0.22	1000	
11 B	26.19 ug/l	29.10	0.82	1000	
23 Na	253500.00 ug/l	281638.50	1.04	25000	>Cal
24 Mg	93350.00 ug/l	103711.85	0.25	50000	>Cal
27 Al	-13.99 ug/l	-15.54	2.06	20000	
39 K	6101.00 ug/l	6778.21	0.22	20000	
44 Ca	136200.00 ug/l	151318.20	0.59	50000	>Cal
47 Ti	-0.15 ug/l	-0.17	42.86	1000	
51 V	0.12 ug/l	0.13	4.31	1000	
52 Cr	18.06 ug/l	20.06	0.69	1000	
55 Mn	0.54 ug/l	0.60	5.04	1000	
56 Fe	17.29 ug/l	19.21	0.96	20000	
59 Co	2.89 ug/l	3.21	1.44	1000	
60 Ni	10.28 ug/l	11.42	1.32	1000	
63 Cu	0.65 ug/l	0.73	3.83	1000	
65 Cu	0.66 ug/l	0.73	8.94	1000	
66 Zn	12.86 ug/l	14.29	2.51	1000	
75 As	-0.01 ug/l	-0.02	234.21	1000	
78 Se	1.97 ug/l	2.19	2.87	1000	
78 Se	1.99 ug/l	2.21	11.61	1000	
88 Sr	2961.00 ug/l	3289.67	2.08	1000	>Cal
88 Sr	3066.00 ug/l	3406.33	0.45	1000	>Cal
95 Mo	-0.51 ug/l	-0.56	4.01	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	-0.09 ug/l	-0.10	2.16	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	-0.10 ug/l	-0.11	11.23	1000	
118 Sn	0.30 ug/l	0.33	7.97	1000	
121 Sb	-0.52 ug/l	-0.58	3.68	1000	
137 Ba	134.30 ug/l	149.21	1.05	1000	
205 Tl	-0.04 ug/l	-0.05	5.24	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	0.39 ug/l	0.43	1.95	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5122612.50	0.33	5314145.50	96.4	70 - 120	
45 Sc	952972.00	1.39	854699.00	111.5	70 - 120	
45 Sc	56890.27	3.51	51738.40	110.0	70 - 120	
45 Sc	1930199.10	0.66	1799310.60	107.3	70 - 120	
72 Ge	173759.84	1.02	178160.53	97.5	70 - 120	
72 Ge	18099.63	1.40	18616.22	97.2	70 - 120	
72 Ge	280863.13	0.54	275015.22	102.1	70 - 120	
115 In	1390268.90	0.78	1386546.60	100.3	70 - 120	
159 Tb	1737494.10	0.49	1710816.90	101.6	70 - 120	
165 Ho	1699881.10	0.31	1691823.60	100.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

5 :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
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: 65208 SDG: 65208

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: 65208 SDG: 65208

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.: 65208 SDG: 65208

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.: 65208 SDG: 65208

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: 65208 SDG: 65208

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.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 65208 SDG: 65208

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 15:21	%R(1)	True	Found	%R(1)	
Lead (Pb)	100	95.89	95.9	50	47.85	95.7				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.: 65208 SDG: 65208

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		15:33				
Lead (Pb)	.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.:	65208	SDG:	65208
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

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

ES043

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 65208 SDG: 65208

Analysis Date: 8/13/2011 Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Lead (Pb)	75-125	246.753		0.116106		277.500	88.9		

Comments:

8/13/2011 13:44 AY42542W21

8/13/2011 14:38 AY42542W21-A

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\035SMPL.D\035SMPL.D#
Date Acquired: Aug 13 2011 02:38 pm
Operator: SDM
Sample Name: AY42542W21-A
Misc Info: 110802A-3015
Vial Number: 3201
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	38.96	ug/l	43.28	8.89	1000	
11 B	221.90	ug/l	246.53	1.58	1000	
23 Na	70220.00	ug/l	78014.42	0.13	25000	>Cal
24 Mg	35340.00	ug/l	39262.74	0.55	50000	
27 Al	1961.00	ug/l	2178.67	0.37	20000	
39 K	5008.00	ug/l	5563.89	1.67	20000	
44 Ca	37890.00	ug/l	42095.79	0.71	50000	
47 Ti	237.00	ug/l	263.31	0.74	1000	
51 V	253.40	ug/l	281.53	0.59	1000	
52 Cr	243.30	ug/l	270.31	0.30	1000	
55 Mn	569.20	ug/l	632.38	0.80	1000	
56 Fe	4572.00	ug/l	5079.49	0.80	20000	
59 Co	239.00	ug/l	265.53	1.10	1000	
60 Ni	226.40	ug/l	251.53	0.93	1000	
63 Cu	234.00	ug/l	259.97	0.19	1000	
65 Cu	233.00	ug/l	258.86	0.55	1000	
66 Zn	398.40	ug/l	442.62	0.74	1000	
75 As	218.20	ug/l	242.42	0.73	1000	
78 Se	189.40	ug/l	210.42	1.04	1000	
78 Se	186.80	ug/l	207.53	1.68	1000	
88 Sr	383.90	ug/l	426.51	0.67	1000	
88 Sr	375.30	ug/l	416.96	0.74	1000	
95 Mo	246.80	ug/l	274.19	1.46	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	########	
107 Ag	42.45	ug/l	47.16	5.74	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	########	
111 Cd	46.34	ug/l	51.48	0.31	1000	
118 Sn	229.20	ug/l	254.64	0.80	1000	
121 Sb	216.50	ug/l	240.53	0.68	1000	
137 Ba	253.30	ug/l	281.42	1.02	1000	
205 Tl	223.80	ug/l	248.64	1.04	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	########	
207 (Pb)	--------	ug/l	#VALUE!	--------	########	
208 Pb	222.30	ug/l	246.98	1.40	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4894310.50	1.88	5314145.50	92.1	70 - 120	
45 Sc	1051546.30	2.94	854699.00	123.0	70 - 120	IS Fai
45 Sc	54451.07	2.01	51738.40	105.2	70 - 120	
45 Sc	2127774.00	1.93	1799310.60	118.3	70 - 120	
72 Ge	184049.89	1.63	178160.53	103.3	70 - 120	
72 Ge	18210.14	1.36	18616.22	97.8	70 - 120	
72 Ge	280654.03	1.85	275015.22	102.1	70 - 120	
115 In	1448326.30	1.24	1386546.60	104.5	70 - 120	
159 Tb	1868223.00	1.16	1710816.90	109.2	70 - 120	
165 Ho	1847043.60	1.07	1691823.60	109.2	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

A.P.P.L. INC.

9

ICP SERIAL DILUTION

CLIENT SAMPLE NO.

ES043

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 65208 SDG: 65208

Matrix: water

Analysis Date: 8/13/2011 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Lead (Pb)	0.116106		-0.1333844		NA		

Comments:

8/13/2011 13:44 AY42542W21

8/13/2011 14:44 AY42542W21-1/5

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\036SMPL.D\036SMPL.D#
Date Acquired: Aug 13 2011 02:44 pm
Operator: SDM
Sample Name: AY42542W21-1/5
Misc Info: 110802A-3015
Vial Number: 3202
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: 5.56
Total Dil Factor: 5.56

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	-0.28	ug/l	-1.56	0.34	1000	
11 B	11.73	ug/l	65.17	0.46	1000	
23 Na	10100.00	ug/l	56115.60	0.39	25000	
24 Mg	2877.00	ug/l	15984.61	1.68	50000	
27 Al	-16.69	ug/l	-92.73	2.45	20000	
39 K	130.10	ug/l	722.84	5.50	20000	
44 Ca	2808.00	ug/l	15601.25	1.75	50000	
47 Ti	0.06	ug/l	0.32	68.15	1000	
51 V	0.21	ug/l	1.14	5.08	1000	
52 Cr	0.00	ug/l	0.03	259.24	1000	
55 Mn	69.85	ug/l	388.09	0.25	1000	
56 Fe	801.90	ug/l	4455.36	0.29	20000	
59 Co	-0.22	ug/l	-1.22	0.76	1000	
60 Ni	0.08	ug/l	0.45	28.67	1000	
63 Cu	-0.10	ug/l	-0.55	11.15	1000	
65 Cu	-0.09	ug/l	-0.51	11.05	1000	
66 Zn	3.21	ug/l	17.82	1.38	1000	
75 As	0.17	ug/l	0.93	34.07	1000	
78 Se	-0.08	ug/l	-0.42	36.23	1000	
78 Se	-0.14	ug/l	-0.79	71.04	1000	
88 Sr	25.55	ug/l	141.96	1.18	1000	
88 Sr	29.45	ug/l	163.62	1.17	1000	
95 Mo	-1.46	ug/l	-8.11	3.47	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	########	
107 Ag	-0.06	ug/l	-0.34	6.45	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	########	
111 Cd	-0.11	ug/l	-0.59	10.20	1000	
118 Sn	0.91	ug/l	5.05	5.98	1000	
121 Sb	1.15	ug/l	6.40	6.32	1000	
137 Ba	0.64	ug/l	3.55	3.37	1000	
205 Tl	-0.05	ug/l	-0.28	5.26	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	########	
207 (Pb)	--------	ug/l	#VALUE!	--------	########	
208 Pb	-0.02	ug/l	-0.13	30.03	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5187164.00	0.67	5314145.50	97.6	70 - 120	
45 Sc	934732.00	0.67	854699.00	109.4	70 - 120	
45 Sc	52498.36	2.05	51738.40	101.5	70 - 120	
45 Sc	1875164.40	1.23	1799310.60	104.2	70 - 120	
72 Ge	186578.75	1.63	178160.53	104.7	70 - 120	
72 Ge	18502.72	1.39	18616.22	99.4	70 - 120	
72 Ge	277060.47	0.76	275015.22	100.7	70 - 120	
115 In	1422346.50	1.04	1386546.60	102.6	70 - 120	
159 Tb	1791243.50	1.49	1710816.90	104.7	70 - 120	
165 Ho	1792983.30	1.33	1691823.60	106.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.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

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\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\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	26.91	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	2969461.30	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	331611.59	P	2534.00	0.76	0.6044
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\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\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	28590.00	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)	5998.15	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	1033625.30	105.8	70 -	120	
72 Ge	92074.23	0.98	87046.85	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\METHOD8\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 110808
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	0.33	

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\METHODS\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	2548.00	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	140240.30	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	1872560.40	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
95 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	44324.85	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	40.80	
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#

0 :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	96.8	80 - 120	
88 Sr	72	2	1.26	5.41	---		-	
88 Sr	72	3	1.36	1.08	---		-	
98 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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\042_CCV.D\042_CCV.D#
Date Acquired: Aug 13 2011 03:21 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	49.93 ug/l	0.57	50.00	90 - 110	
11 B	58.50 ug/l	1.50	50.00	90 - 110	Fail
23 Na	1301.00 ug/l	1.34	1250.00	90 - 110	
24 Mg	2481.00 ug/l	0.97	2500.00	90 - 110	
27 Al	982.40 ug/l	2.27	1000.00	90 - 110	
39 K	1027.00 ug/l	1.87	1000.00	90 - 110	
44 Ca	2506.00 ug/l	2.05	2500.00	90 - 110	
47 Ti	50.10 ug/l	1.65	50.00	90 - 110	
51 V	51.46 ug/l	1.45	50.00	90 - 110	
52 Cr	50.07 ug/l	0.87	50.00	90 - 110	
55 Mn	47.95 ug/l	1.79	50.00	90 - 110	
56 Fe	977.50 ug/l	0.73	1000.00	90 - 110	
59 Co	51.44 ug/l	0.60	50.00	90 - 110	
60 Ni	50.50 ug/l	0.90	50.00	90 - 110	
63 Cu	50.85 ug/l	1.92	50.00	90 - 110	
65 Cu	50.93 ug/l	1.55	50.00	90 - 110	
66 Zn	48.82 ug/l	1.54	50.00	90 - 110	
75 As	50.35 ug/l	3.55	50.00	90 - 110	
78 Se	50.23 ug/l	1.48	50.00	90 - 110	
78 Se	47.71 ug/l	1.29	50.00	90 - 110	
88 Sr	48.37 ug/l	0.83	50.00	90 - 110	
88 Sr	54.42 ug/l	0.20	50.00	90 - 110	
95 Mo	48.32 ug/l	0.75	50.00	90 - 110	
106 (Cd)	-------- ug/l	--------	50.00	90 - 110	
107 Ag	24.75 ug/l	1.00	25.00	90 - 110	
108 (Cd)	-------- ug/l	--------	50.00	90 - 110	
111 Cd	49.22 ug/l	0.50	50.00	90 - 110	
118 Sn	50.75 ug/l	0.76	50.00	90 - 110	
121 Sb	50.98 ug/l	0.94	50.00	90 - 110	
137 Ba	49.88 ug/l	0.53	50.00	90 - 110	
205 Tl	47.77 ug/l	0.78	50.00	90 - 110	
206 (Pb)	-------- ug/l	--------	50.00	90 - 110	
207 (Pb)	-------- ug/l	--------	50.00	90 - 110	
208 Pb	47.85 ug/l	0.48	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4964180.00	0.79	5314145.50	93.4	70 - 120	
45 Sc	875742.75	0.41	854699.00	102.5	70 - 120	
45 Sc	47771.70	0.58	51738.40	92.3	70 - 120	
45 Sc	1664894.10	0.86	1799310.60	92.5	70 - 120	
72 Ge	174440.56	0.42	178160.53	97.9	70 - 120	
72 Ge	16451.72	1.04	18616.22	88.4	70 - 120	
72 Ge	254816.48	1.28	275015.22	92.7	70 - 120	
115 In	1335522.10	0.68	1386546.60	96.3	70 - 120	
159 Tb	1752213.00	0.31	1710816.90	102.4	70 - 120	
165 Ho	1759605.90	0.33	1691823.60	104.0	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

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\044_CCB.D\044_CCB.D#
Date Acquired: Aug 13 2011 03:33 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	0.17	0.12	
11 B	0.67 ug/l	12.93	15.00	
23 Na	19.87 ug/l	5.21	77.10	
24 Mg	-23.07 ug/l	0.65	7.50	
27 Al	-19.10 ug/l	0.52	3.96	
39 K	-23.08 ug/l	8.94	19.20	
44 Ca	-14.26 ug/l	4.97	90.00	
47 Ti	-0.41 ug/l	0.00	0.78	
51 V	-0.03 ug/l	57.34	0.21	
52 Cr	-0.05 ug/l	3.07	0.12	
55 Mn	1.10 ug/l	4.64	0.18	Fail
56 Fe	-10.86 ug/l	0.32	40.80	
59 Co	-0.23 ug/l	1.31	0.09	
60 Ni	-0.11 ug/l	6.39	0.48	
63 Cu	-0.12 ug/l	19.67	0.39	
65 Cu	-0.12 ug/l	32.97	0.39	
66 Zn	0.27 ug/l	25.00	6.90	
75 As	-0.13 ug/l	12.34	0.27	
78 Se	-0.29 ug/l	3.06	0.30	
78 Se	-0.40 ug/l	49.89	0.30	
88 Sr	0.00 ug/l	6032.90	0.03	
88 Sr	0.01 ug/l	11.68	0.03	
95 Mo	-1.91 ug/l	0.11	0.21	
106 (Cd)	-------- ug/l	--------	#VALUE!	
107 Ag	-0.10 ug/l	2.04	0.09	
108 (Cd)	-------- ug/l	--------	#VALUE!	
111 Cd	-0.11 ug/l	12.84	0.06	
118 Sn	0.57 ug/l	100.74	0.30	Fail
121 Sb	-0.72 ug/l	0.87	0.03	
137 Ba	-0.03 ug/l	13.16	0.12	
205 Tl	-0.04 ug/l	3.49	0.03	
206 (Pb)	-------- ug/l	--------	#VALUE!	
207 (Pb)	-------- ug/l	--------	#VALUE!	
208 Pb	-0.07 ug/l	5.74	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4716295.00	1.14	5314145.50	88.7	70 - 120	
45 Sc	867301.31	1.78	854699.00	101.5	70 - 120	
45 Sc	51569.78	0.72	51738.40	99.7	70 - 120	
45 Sc	1712127.00	0.72	1799310.60	95.2	70 - 120	
72 Ge	182056.77	1.65	178160.53	102.2	70 - 120	
72 Ge	18757.13	0.59	18616.22	100.8	70 - 120	
72 Ge	275310.53	0.46	275015.22	100.1	70 - 120	
115 In	1437211.80	0.16	1386546.60	103.7	70 - 120	
159 Tb	1829260.60	1.12	1710816.90	106.9	70 - 120	
165 Ho	1816444.80	1.44	1691823.60	107.4	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

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

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

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: 3502
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-42542 MS - 158181**

Sample ID: AY42542

Client ID: ES043

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	0.12	240	233	96.0	93.2	3.0	20	80-120	8/2/2011	8/13/2011	8/2/2011	8/13/2011	158181	AY42542

Comments:

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\033SMPL.D\033SMPL.D#
Date Acquired: Aug 13 2011 02:26 pm
Operator: SDM
Sample Name: AY42542W23 MS
Misc Info: 110802A-3015
Vial Number: 3111
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	41.38 ug/l	45.97	2.32	1000	
11 B	215.70 ug/l	239.64	1.42	1000	
23 Na	70850.00 ug/l	78714.35	0.72	25000	>Cal
24 Mg	35050.00 ug/l	38940.55	0.18	50000	
27 Al	1909.00 ug/l	2120.90	0.88	20000	
39 K	4822.00 ug/l	5357.24	1.10	20000	
44 Ca	37470.00 ug/l	41629.17	0.91	50000	
47 Ti	229.60 ug/l	255.09	1.98	1000	
51 V	243.70 ug/l	270.75	0.25	1000	
52 Cr	235.40 ug/l	261.53	0.31	1000	
55 Mn	564.90 ug/l	627.60	0.53	1000	
56 Fe	4721.00 ug/l	5245.03	1.08	20000	
59 Co	230.40 ug/l	255.97	0.46	1000	
60 Ni	220.90 ug/l	245.42	0.66	1000	
63 Cu	226.80 ug/l	251.97	0.88	1000	
65 Cu	226.30 ug/l	251.42	1.24	1000	
66 Zn	383.20 ug/l	425.74	0.66	1000	
75 As	210.80 ug/l	234.20	0.82	1000	
78 Se	185.00 ug/l	205.54	0.78	1000	
78 Se	181.60 ug/l	201.76	1.14	1000	
88 Sr	374.50 ug/l	416.07	0.15	1000	
88 Sr	368.20 ug/l	409.07	2.43	1000	
95 Mo	237.00 ug/l	263.31	2.19	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	45.71 ug/l	50.78	0.05	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	44.52 ug/l	49.46	0.34	1000	
118 Sn	220.80 ug/l	245.31	0.32	1000	
121 Sb	215.60 ug/l	239.53	0.33	1000	
137 Ba	246.50 ug/l	273.86	0.37	1000	
205 Tl	215.50 ug/l	239.42	1.70	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	215.90 ug/l	239.86	1.78	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4922764.00	1.66	5314145.50	92.6	70 - 120	
45 Sc	1036587.00	1.80	854699.00	121.3	70 - 120	IS Fai
45 Sc	55199.58	2.04	51738.40	106.7	70 - 120	
45 Sc	2160050.30	2.39	1799310.60	120.0	70 - 120	IS Fai
72 Ge	181509.48	1.01	178160.53	101.9	70 - 120	
72 Ge	18550.58	2.41	18616.22	99.6	70 - 120	
72 Ge	280877.84	1.94	275015.22	102.1	70 - 120	
115 In	1440208.00	1.04	1386546.60	103.9	70 - 120	
159 Tb	1849044.10	2.52	1710816.90	108.1	70 - 120	
165 Ho	1846269.80	2.84	1691823.60	109.1	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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11H13100.B\034SMPL.D\034SMPL.D#
Date Acquired: Aug 13 2011 02:32 pm
Operator: SDM
Sample Name: AY42542W23 MSD
Misc Info: 110802A-3015
Vial Number: 3112
Current Method: C:\ICPCHEM\1\METHOD8\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	38.18 ug/l	42.42	6.98	1000	
11 B	210.90 ug/l	234.31	1.44	1000	
23 Na	68830.00 ug/l	76470.13	0.95	25000	>Cal
24 Mg	33840.00 ug/l	37596.24	0.42	50000	
27 Al	1879.00 ug/l	2087.57	0.92	20000	
39 K	4715.00 ug/l	5238.37	0.93	20000	
44 Ca	36600.00 ug/l	40662.60	1.14	50000	
47 Ti	218.20 ug/l	242.42	1.10	1000	
51 V	234.90 ug/l	260.97	1.22	1000	
52 Cr	227.20 ug/l	252.42	1.17	1000	
55 Mn	553.30 ug/l	614.72	0.83	1000	
56 Fe	4632.00 ug/l	5146.15	0.74	20000	
59 Co	222.60 ug/l	247.31	1.05	1000	
60 Ni	212.50 ug/l	236.09	1.04	1000	
63 Cu	216.70 ug/l	240.75	1.44	1000	
65 Cu	216.50 ug/l	240.53	0.74	1000	
66 Zn	371.50 ug/l	412.74	1.02	1000	
75 As	202.50 ug/l	224.98	0.94	1000	
78 Se	180.50 ug/l	200.54	0.91	1000	
78 Se	175.10 ug/l	194.54	2.15	1000	
88 Sr	362.50 ug/l	402.74	1.22	1000	
88 Sr	358.80 ug/l	398.63	0.97	1000	
95 Mo	230.40 ug/l	255.97	1.71	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	########	
107 Ag	46.74 ug/l	51.93	1.30	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	########	
111 Cd	42.75 ug/l	47.50	0.31	1000	
118 Sn	217.50 ug/l	241.64	2.67	1000	
121 Sb	205.70 ug/l	228.53	1.92	1000	
137 Ba	234.60 ug/l	260.64	2.27	1000	
205 Tl	210.10 ug/l	233.42	0.73	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	########	
207 (Pb)	-------- ug/l	#VALUE!	--------	########	
208 Pb	209.50 ug/l	232.75	0.62	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4876672.50	0.33	5314145.50	91.8	70 - 120	
45 Sc	1025797.30	1.95	854699.00	120.0	70 - 120	IS Fai
45 Sc	54555.83	2.16	51738.40	105.4	70 - 120	
45 Sc	2125861.30	1.55	1799310.60	118.1	70 - 120	
72 Ge	181028.52	2.39	178160.53	101.6	70 - 120	
72 Ge	18274.28	1.32	18616.22	98.2	70 - 120	
72 Ge	277560.16	0.60	275015.22	100.9	70 - 120	
115 In	1443391.00	2.17	1386546.60	104.1	70 - 120	
159 Tb	1829563.40	0.57	1710816.90	106.9	70 - 120	
165 Ho	1817997.30	0.82	1691823.60	107.5	70 - 120	

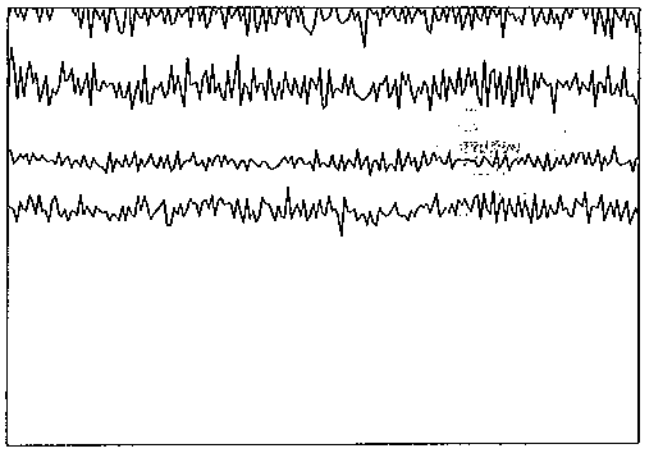
ISTD Ref File : C:\ICPCHEM\1\DATA\11H13100.B\018CALB.D\018CALB.D#

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

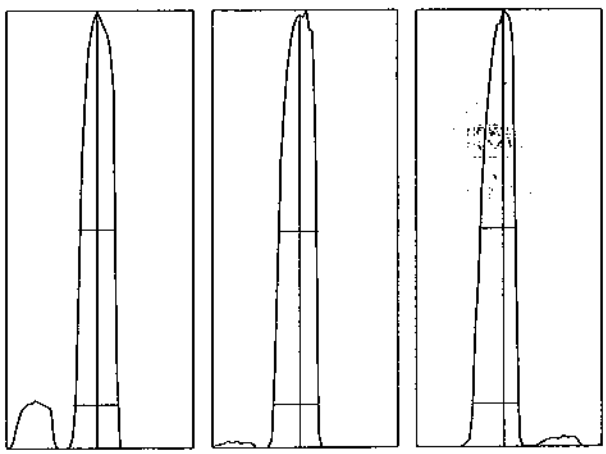
Tune Report

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	:	--- %

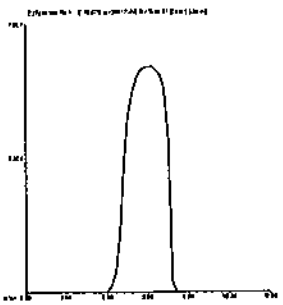
Generated : Aug 09, 2011 09:46:31
Printed : Aug 09, 2011 09:46:35

200.8 QC Tune Report

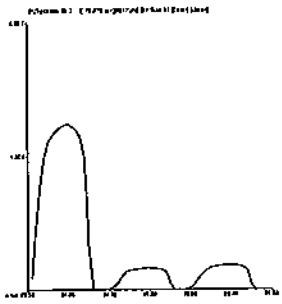
Data File: C:\ICPCHEM\1\DATA\11H09j00.B\001TUNE.D
Date Acquired: Aug 9 2011 09:59 am
Acq. Method: TN200_8.M
Operator: SDM
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

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:

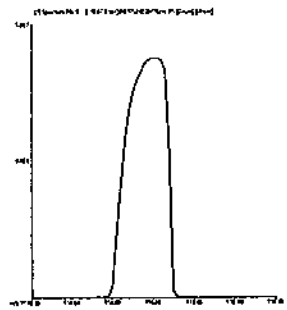
59 Co

Mass Calib.

Actual:	58.95		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



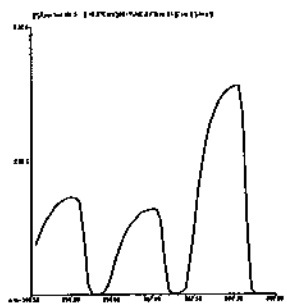
115 In

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:			

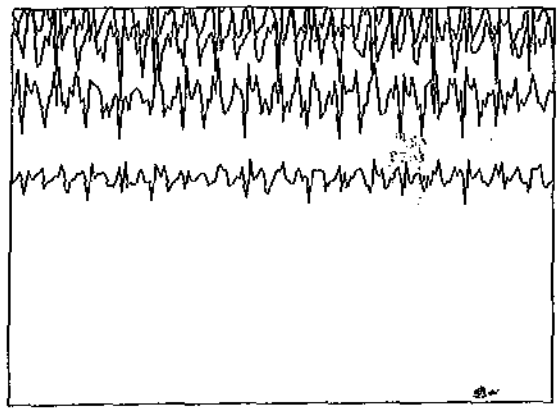
Peak Width

Actual:	0.55		
Required:	0.80		
Flag:			

Tune Result: Pass

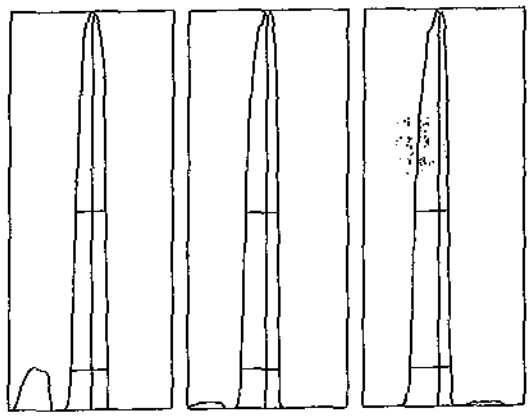
Tune Report

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	:	--- %

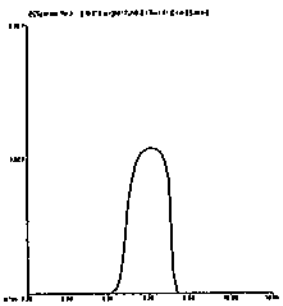
Generated : Aug 13, 2011 11:07:42
Printed : Aug 13, 2011 11:07:47

200.8 QC Tune Report

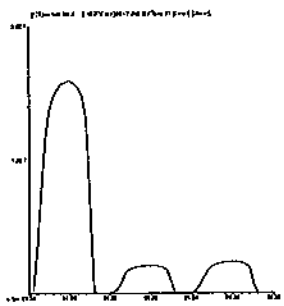
Data File: C:\ICPCHEM\1\DATA\11H13100.B\001TUNE.D
Date Acquired: Aug 13 2011 11:12 am
Acq. Method: TN200_8.M
Operator: SDM
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

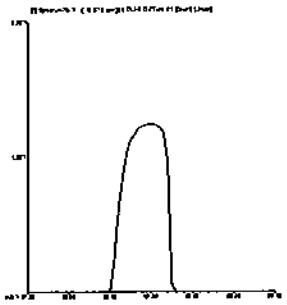
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	57022141	56739812	56954416	57199572	57053324	57163580	**0.37**	5.00	
24 Mg	89654242	88183504	89697960	89953680	90711768	89724296	**0.97**	5.00	
59 Co	73309373	72453248	73336984	73740008	74016296	73000328	**1.14**	5.00	
115 In	81471184	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:



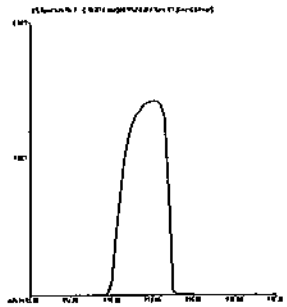
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



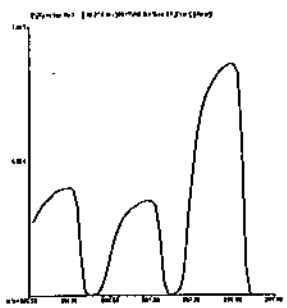
115 In

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.....

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	MBS
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: [signature] **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.
83	13 Aug 2011	13:44	AY42542W21		110813A	1.
85	13 Aug 2011	13:56	CCV 110808		110813A	1.
86	13 Aug 2011	14:08	CCB 110808		110813A	1.
87	13 Aug 2011	14:14	AY42543W08		110813A	1.
88	13 Aug 2011	14:20	AY42544W08		110813A	1.
89	13 Aug 2011	14:26	AY42542W23 MS		110813A	1.
90	13 Aug 2011	14:32	AY42542W23 MSD		110813A	1.
91	13 Aug 2011	14:38	AY42542W21-A		110813A	1.
92	13 Aug 2011	14:44	AY42542W21-1/5		110813A	5.
98	13 Aug 2011	15:21	CCV 110808		110813A	1.
99	13 Aug 2011	15:33	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.
62	09 Aug 2011	19:04	CCV 110808		110813A	1.
63	09 Aug 2011	19:10	CCB 110808		110813A	1.